

City of El Cajon

Planning Commission Agenda Tuesday, November 1, 2022 Meeting 7:00 PM

DARRIN MROZ, Chair REBECCA POLLACK-RUDE, Vice Chair PAUL CIRCO ANTHONY SOTTILE ELIZABETH VALLES

Meeting Location: City Council Chambers, 200 Civic Center Way, El Cajon, CA, 92020

Please note that, pursuant to State and County Health Orders, in-person meetings have resumed. The public is welcome to attend and participate.

The meeting will be live-streamed through the City website at: https://www.elcajon.gov/your-government/city-meetings-with-agendas-and-minutes-all.

To submit written comments on an item on this agenda, or a Public Comment, please e-mail the comments with Planning Commission in the subject line to planning@elcajon.gov before 5 p.m. on Tuesday, October 18, 2022. Comments will be limited to 300 words and will be entered into the official Commission Meeting Record.

The City of El Cajon is endeavoring to be in total compliance with the Americans with Disabilities Act. If you require assistance or auxiliary aids in order to participate at the Commission meeting, please contact our office at 619-441-1742, option 3, as soon as possible.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

CHAIRPERSON'S WELCOME

PUBLIC COMMENT

This is the opportunity for the public to address the Commission on any item of business within the jurisdiction of the Commission that is not on the agenda. Under state law no action can be taken on items brought forward under Public Comment except to refer the item to staff for administrative action or to place it on a future agenda. Non-agenda public comments must be submitted before the end of public comment during the meeting.

CONSENT

Agenda Item:	1	
	Planning Commission minutes of October 18, 2022	

PUBLIC HEARINGS

Agenda Item:	2		
Project Name:	Hyunday Auto Dealership		
Request:	Auto Dealership		
CEQA Recommendation:	Exempt		
STAFF RECOMMENDATION:	RECOMMEND CITY COUNCIL APPROVAL		
Project Number(s):	Specific Plan (SP) No. 2022-0001, an Amendment to Specific		
	Plan No. 452)		
Location:	1155 Graves Avenue		
Applicant:	John P. Kiefer; JKC Graves, LLC; 541-915-6091;		
	j.kiefer@gokiefer.com		
Project Planner:	Mike Viglione; 619-441-1773; mviglione@elcajon.gov		
City Council Hearing Required?	Yes December 13, 2022		
Recommended Actions:	1. Conduct the public hearing; and		
	2. MOVE to adopt the next resolutions in order,		
	recommending City Council approval of the CEQA		
	determination, and SP-2022-0001, an Amendment to		
	Specific Plan No. 452, subject to conditions.		

4. OTHER ITEMS FOR CONSIDERATION

5. STAFF COMMUNICATIONS

6. COMMISSIONER REPORTS/COMMENTS

7. ADJOURNMENT

This Planning Commission meeting is adjourned to November 15, 2022 at 7 p.m.



MINUTES PLANNING COMMISSION MEETING October 18, 2022

The meeting of the El Cajon Planning Commission was called to order at 7:00 p.m.

PLEDGE OF ALLEGIANCE & MOMENT OF SILENCE.

COMMISSIONERS PRESENT: Rebecca POLLACK-RUDE (Vice Chair)

Paul CIRCO

Anthony SOTTILE Elizabeth VALLES

COMMISSIONERS ABSENT: Darrin MROZ (Chair)

STAFF PRESENT: Noah ALVEY, Deputy Director of Community Development

Barbara LUCK, Staff Attorney Mike VIGLIONE, Senior Planner

Roxana GUZMAN, Administrative Secretary

Vice Chair POLLACK-RUDE opened the Planning Commission meeting explaining the rules of conduct.

PUBLIC COMMENT:

There was no public comment.

CONSENT CALENDAR:

Agenda Item:	1	
	Planning Commission minutes of October 4, 2022	

Motion was made by CIRCO, seconded by SOTTILE, to approve the October 4, 2022 minutes; motion carried 4-0, with MROZ absent.

PUBLIC HEARING ITEM:

Agenda Item:	2		
Project Name:	7-Eleven Off-Sale Alcohol Sales		
Request:	Add off-sale alcohol (Type 20 ABC License) to an existing		
	convenience store		
CEQA Recommendation:	Exempt		
STAFF RECOMMENDATION:	DENY		
Project Number	Conditional Use Permit (CUP) No. 2022-0013		
Location:	500 N. Second St.		
Applicant:	R. Bruce Evans; bevans@ssjlaw.com		
Project Planner:	Noah Alvey; 619-441-1795; nalvey@elcajon.gov		
City Council Hearing Required?	No		
Recommended Actions:	1. Conduct the public hearing; and		
	2. MOVE to adopt the next resolution in order DENYING		
	the request to add off-sale alcohol to an existing		
	convenience store		

ALVEY summarized the staff report through a PowerPoint presentation.

COMMISSIONERS asked questions with ALVEY providing answers.

POLLACK-RUDE opened the public hearing.

Applicant, Bruce EVANS, and business owner, Kashmira BHARUCHA, spoke in opposition of staff recommendations.

Motion was made by CIRCO, seconded by VALLES, to close the public hearing; motion carried 4-0, with MROZ absent.

COMMISSIONERS discussed the item.

<u>Motion was made by SOTTILE, seconded by CIRCO</u>, to deny the request to add off-sale alcohol to an existing convenience store; motion carried 4-0, with MROZ absent.

Agenda Item:	3
Project Name:	Melody Lane Townhomes
Request:	29-Unit Townhomes
CEQA Recommendation:	Exempt
STAFF RECOMMENDATION:	RECOMMEND CITY COUNCIL APPROVAL
Project Number:	Specific Plan (SP) No. 2022-0002, and Tentative
	Subdivision Map (TSM) No. 2021-0007

Location:	Melody Lane between East Main Street & Comet Lane			
Applicant:	Karen Alves; City Ventures Homebuilding, LLC; 949-258-7515;			
	kalves@cityventures.com			
Project Planner:	Mike Viglione; 619-441-1773; mviglione@elcajon.gov			
City Council Hearing Required?	Yes November 8, 2022			
Recommended Actions:	3. Conduct the public hearing; and			
	4. MOVE to adopt the next resolutions in order,			
	recommending City Council approval of the CEQA			
	determination, SP-2022-0002 and TSM-2021-0007,			
	subject to conditions.			

VIGLIONE summarized the staff report through a PowerPoint presentation and announced that a public comment was received prior to Planning Commission Meeting, which was presented to the commissioners at the dais.

COMMISSIONERS asked questions with VIGLIONE providing answers.

POLLACK-RUDE opened the public hearing.

Karen KENRICK spoke in opposition of the project.

COMMISSIONERS asked questions with VIGLIONE and SANCHEZ providing answers.

Rachel MCCLELLAN spoke in opposition of the project.

Applicant, Karen ALVES, spoke in support of the project.

COMMISSIONERS asked questions with VIGLIONE, ALVEY, and SANCHEZ providing answers.

COMMISSIONERS asked questions with ALVES providing answers.

Motion was made by CIRCO, seconded by POLLACK-RUDE, to close the public hearing; motion carried 4-0, with MROZ absent.

COMMISSIONERS discussed the item.

Motion was made by SOTTILE, seconded by VALLES, to adopt next resolutions in order, recommending City Council approval of the CEQA determination, SP-2022-0002 and TSM-2021-0007, and requesting that the applicant investigate the feasibility of adding a second emergency vehicle access point for the project, subject to conditions; motion carried 4-0, with MROZ absent.

OTHER ITEMS FOR CONSIDERATION:

STAFF COMMUNICATIONS	STAF	F C	OMN	ИUNI	CAT	IONS	
----------------------	------	-----	-----	------	-----	------	--

COMMISSIONER REPORTS/COMMENTS:

ADJOURNMENT:

Motion was made by CIRCO, seconded by POLLACK-RUDE, to adjourn the meeting of the El Cajon Planning Commission at 8:20 p.m. this 18th day of October, 2022, until 7:00 p.m., Tuesday, November 1, 2022; motion carried 4-0, with MROZ absent.

	Rebecca POLLACK-RUDE, Vice Chair
ATTEST:	
Noah ALVEY, Secretary	



Community Development Department PLANNING COMMISSION AGENDA REPORT

Agenda Item:	2		
Project Name:	Hyundai Auto Dealership		
Request:	Auto Dealership		
CEQA Recommendation:	Exempt		
STAFF RECOMMENDATION:	RECOMMEND CITY COUNCIL APPROVAL		
Project Number:	Specific Plan (SP) No. 2022-0001, an Amendment to		
	Specific Plan No. 452		
Location:	1155 Graves Avenue		
Applicant:	John P. Kiefer; JKC Graves, LLC; 541-915-6091;		
	j.kiefer@gokiefer.com		
Project Planner:	Mike Viglione; 619-441-1773; mviglione@elcajon.gov		
City Council Hearing Required?	Yes December 13, 2022		
Recommended Actions:	1. Conduct the public hearing; and		
	2. MOVE to adopt the next resolutions in order,		
	recommending City Council approval of the CEQA		
	determination, and SP-2022-0001, an Amendment to		
	Specific Plan No. 452, subject to conditions.		

PROJECT DESCRIPTION

This project proposes an amendment to Specific Plan No. 452 to authorize a 36,989 square foot automobile dealership, inclusive of all typical uses such as service, at a site previously developed with a recreational facility (Boomers Amusement Center). The project includes reuse of access and parking improvements and proposes to redevelop the portions of the site occupied by recreational facility structures.

BACKGROUND

General Plan:	Regional Commercial (RC)
Specific Plan:	No. 452
Conditional Use Permit:	No. 1538, No. 1557
Zone:	C-R (Regional Commercial)
Other City Plan(s):	None
Regional and State Plan(s):	None
Notable State Law(s):	None

Project Site & Constraints

The approximately 4.6 acre project site consists of seven (7) Assessor Parcel Numbers located at the southeast corner of Hart Drive and Graves Avenue. The site is just east of State Route 67 and is situated along the boundary of the City of El Cajon and County of San Diego at Hart Drive. The site is approximately three quarters of a mile to the southeast of Gillespie Field and is within Safety Zone 6 of the Airport Land Use Compatibility Plan. The site is also identified as being within the 100 year flood plain in the Flood Insurance Rate Map produced by the Federal Emergency Management Agency.

The site was previously developed with a recreational facility pursuant to the approved Specific Plan No. 452 and Conditional Use Permit No. 1538 and the recreational facility improvements have been demolished. The project scope involves redevelopment of the portions of the site previously occupied by the former recreational facility buildings with new access improvements and car dealership facilities.

Surrounding Context

Properties surrounding the site are developed and zoned as follows:

Direction	Zones	Land Uses
North	Residential – Urban (County)	Multi-family Residential
South	C-R	Regional Commercial
East	PRD-Low-Med	Single Family Residential
West	Not Applicable	Transportation (Graves, SR 67, N Magnolia)

General Plan

The project site is designated Regional Commercial (RC) on the General Plan Land Use Map. The RC land use designation is intended for large shopping centers but may also include other major uses. The RC designation recognizes that such uses are very important for sales tax generation and indicates that they should be closely linked to transportation and transit facilities. The RC designation is consistent with the C-R zone as shown in the Zoning Consistency Chart.

Zoning Code

The subject site is zoned C-R which provides for community and regional scale commercial centers that typically serve large areas of the city and surrounding community. An automobile dealership may be established in the C-R zone with the approval of a Conditional Use Permit.

The Zoning Code also includes regulations for the preparation of a specific plan in particular portions of the City where circumstances require a more detailed framework of development than the General Plan, and more detailed standards than the general provisions of the Zoning Code. A specific plan effectively establishes a link between implementing policies of the General Plan and the individual development proposals in a defined area. Circumstances which may warrant a specific plan include size and shape

of the property, relation to surroundings, and unusual conditions pertaining to the property requiring special consideration for access, utilities or fire protection. Zoning Code section 17.125.060 further prohibits the construction of any buildings or structures across property lines unless approved as a part of a specific plan.

Specific Plan No. 452

Specific Plan No. 452 was approved by City Council Ordinance No. 4387 on January 19, 1993. This Specific Plan primarily consolidates the separate parcels for purposes of the zoning code to provide a single unit for development purposes and increases the height limit of the subject property to 41 feet. The Specific Plan however also includes language limiting permissible land use to a recreational facility as shown in the architectural drawing unless further environmental analysis is conducted.

DISCUSSION

Land Use

Amendment of existing Specific Plan No. 452 is an appropriate process for the proposed redevelopment of the recreational facility with an automobile dealership. As previously noted, the site remains composed of separate parcels and therefore use of the Specific Plan is mandated by the Zoning Code to treat them as a single unit for development. Moreover the Specific Plan's directive to require additional environmental analysis with another land use is honored through the standard assessment of the project pursuant to the California Environmental Quality Act (CEQA).

The proposed automobile dealership is further consistent with the C-R zone land use permissions and would otherwise be requested through a Conditional Use Permit, as previously stated. An automobile dealership also aligns with the intent of the regional commercial General Plan Land Use and Zoning designations as it establishes a locally important, community scale commercial use in close proximity to State Route 67. General Plan Goal 9, along with its objectives and policies, also encourage the cultivation and retention of a strong, competitive region-wide commercial base. In fact, Policy 9-3.4 states that the "City shall assist in the relocation of expansion of successful local businesses so they may be retained locally" while Policy 9-4.11 indicates that "removal of outdated, nuisance, or incompatible buildings shall be encouraged to…make room for new uses compatible with the General Plan."

Project

The proposed automobile dealership is comprised of two structures, off-street parking, vehicle display and inventory storage areas, landscaping and other required improvements. The redevelopment proposes reuse of approximately one third of the previous site improvements including the southerly project access off Graves Avenue, as well as the drive aisles, parking stalls, and landscape that bordered the former recreational facility building to its south and east along property lines.

The primary dealership building situated near the center of the site is 36,989 square feet in area and includes facilities for sales, service, and all back office functions. On the north side of the building are reception and express lube bays that align with a new 30 foot wide commercial driveway which also serves as customer vehicle drop off for next day service appointments. A detached 1,232 square foot carwash building is similarly aligned with the service bays approximately half way between the building and the easterly property line. A fire lane, beginning at the existing 40 foot wide driveway opening to the south, circumnavigates the proposed structures and provides access to 136 off-street parking stalls and the trash enclosure.

Design and Structure

Development projects are typically evaluated for conformance with the Architectural Guidelines in ECMC Chapter 17.180. These guidelines outline basic design principles to improve the appearance of buildings in the community, using quality and compatibility with surroundings as primary considerations. These guidelines also provide specific guidance related to: height, bulk, and mass; design creativity; visual interest; continuation of design; rooftop equipment screening; variation of wall plans; entry features; and proportionality. While a specific plan may propose project specific design requirements, the proposed project is consistent with ECMC Chapter 17.180.

The commercial building is contemporary in design and includes extensive glazing facing Graves Avenue at the showroom and includes Hyundai brand patterned bronze metal paneling along the parapet. The building exterior is otherwise finished with an exterior cladding system similar in appearance to stucco, and features a coordinated bronze accent band around the base of the building. Though largely rectangular, attached service reception and express lube bays break up the building mass while repeated horizontal aluminum "reveals" are intentionally rhythmic.

The proposed structure, as stated in the preceding constraints section, is also within the 100 year flood plain and Safety Zone 6 of the Airport Land Use Compatibility Plan. Conditions of approval are incorporated into the Specific Plan that require compliance with chapter 15.14 Flood Damage Prevention provisions and the Airport Land Use Commission (ALUC) Consistency Determination to ensure safety for occupants and compatibility with adjacent uses. Chapter 15.14 will require that structures are appropriately flood proofed or elevated at least one foot above flood elevations while the ALUC Consistency Determination requires confirmation from the Federal Aviation Administration, or an appropriately licensed professional, that the project is not a hazard to air navigation.

Development Standards

Typically, new projects would adhere to the development standards in the underlying zone. However, this project proposes an automobile dealership by specific plan and may therefore propose different development standards than would normally be

required by the Zoning Code. Consequently existing permitted conditions would also be considered to be consistent with the existing provisions of Specific Plan No. 452.

Development Standard	C-R Regulations	Amended Specific Plan
Building Setbacks	10 ft. exterior, 10 ft. from residential	Min. 60 ft. exterior, 168 ft. side, 174 ft. rear
Building Height	35 feet	28 feet
Lot Coverage	No Requirement	15%
Parking	Determined through discretionary review	136 Stalls
Required Landscape	Exterior yards areas; 10 sf per required stall	Exterior yard along Graves Ave.; 31 sf per required stall
Trash Enclosure	Min. 16 ft. by 5 ft. required	19.25 ft. by 5.75 ft. proposed
Fences/Walls/Gates	6 feet in height outside exterior setbacks; Gates permitted	8.5 feet max within required setbacks

Lighting

ECMC section 17.130.150 requires that adequate lighting be provided to ensure pedestrian and vehicular safety but prohibits the creation of nuisance conditions on adjacent properties. Lights must be of an appropriate size and intensity and must be directed downward and hooded to prevent casting glare upon adjacent properties. While lighting is shown in the Specific Plan exhibits, conditions included therein require the submittal of a lighting plan prior to building permit issuance that clearly indicates final location of all onsite lighting and details that demonstrate how the lights are shielded to ensure nuisance conditions do not arise on adjacent properties.

Fencing

The existing concrete masonry wall bordering the site along Hart Drive, the easterly property line, and the southerly property line is proposed to be preserved with the project. The wall was permitted with the recreational facility and measures up to 8.5 feet from lower adjacent grades along Hart Drive at the tallest portions. There is also a chain link fence atop the Hart Drive portions, approximately 5 feet in height. Lastly, it should also be noted that the Specific Plan authorized this wall to encroach into C-R zone exterior yards at heights exceeding 42" consistent with its existing condition.

Despite these heights, the wall ranges between four (4) and six (6) feet as measured on the property and consequently may fail to provide effective screening of the commercial land use from adjacent residences. The applicant proposes a five (5) foot high chain link fence with slats, similar to the existing condition, to ensure that privacy is maintained. Staff have included a condition of approval in the Specific Plan limiting this chain link

fence extension to the portions along Hart Drive and instead requiring that the landscape areas along the easterly and southerly property lines to be refurbished consistent with Landscape Ordinance requirements to include screening landscaping where appropriate.

Signage

The applicant's proposal includes wall signs, a "brand" sign, and a "future sign, under separate permit" which is understood to be a pole sign. Proposed signage in the City is generally regulated by the Sign Ordinance in chapter 17.190 of the El Cajon Municipal Code. In accordance with the Sign Ordinance, the subject property would be eligible for wall signs up with a cumulative area not to exceed four (4) square feet of building face and up to two (2) freestanding signs.

The subject property is within 660 feet of State Route 67 and is larger than 2 acres would thus be eligible for a freeway oriented sign pursuant to sections 17.190.210(E) and 17.190.190. Signs in such instances may be permitted administratively up to 65 feet in height with 2 square feet per foot of frontage.

The proposed "brand sign" is a monument sign, which is limited to 48 square feet with a maximum height of eight (8) feet. The proposed brand sign does not comply with these size limitations but, if constructed as a pole sign, would be subject to the more permissive standards described above.

Staff have included a recommended condition in the Specific Plan generally requiring appropriate permits and compliance pursuant to the Sign Ordinance. Staff have, however, further qualified this condition so as to require a proposed pole sign in excess of 15 feet to demonstrate that it will not cast shadows on adjacent residential properties. Freestanding signs will also be prohibited along Hart Drive.

Noise

The proposed project includes accessory uses, such as the carwash, which could create noise related nuisances on adjacent properties. Consequently, the application includes a noise analysis prepared by a Roma Environmental, an acoustical consultant, to assess potential noise impacts. This report finds that construction impacts would be less than significant without mitigation during the day and that the existing performance standards in section 17.115.130(C) would preclude the operation of construction equipment during the noise sensitive hours of 7 pm to 7 am. The report similarly finds that automobile dealership operations would be within the 60 decibel limit at property lines and that no impacts would occur. However, to ensure compliance with the Zoning Code, staff have included a condition in the Specific Plan limiting car wash use to the hours between 7 am and 7 pm.

Transportation/Parking

Engineering and Storm Water staff reviewed the proposed project, as well as the traffic analysis prepared by Darnell and Associates, and concluded that the adjacent circulation system, which includes Graves Avenue, Hart Drive, Broadway, and State Route 67, would operate safely with required improvements. Among the conditions incorporated into the Specific Plan are requirements to:

- Reconstruct the curb and pedestrian ramp at the southeast corner of Graves Avenue and Hart Drive to provide for ADA compliant access.
- Place a bus bench at the MTS Route 833 Northbound stop at the southeast corner
- Provide minimum 24-foot-wide City Standard commercial driveways.
- Extend the two way left-turn lane to Hart Drive.
- Extend the northbound bicycle lane along the project frontage to Hart Drive.

The proposed amendment would add 867 average daily trips to adjacent roadways including, 68 am and 80 pm peak hour trips. Pursuant to the Institute of Transportation Engineer Guidelines for Transportation Impact Studies in the San Diego Region, projects which are consistent with the General Plan and generate fewer than 1,000 trips are presumed to have less than a significant impact. Similarly the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA*, states that retail stores less than 50,000 square feet in area may be considered locally serving.

Despite these exemptions, staff recognize that Hart Drive is a local residential street. Consequently a condition prohibiting the proposed dealership from conducting commercial activities on Hart Drive is included in the Specific Plan.

The subject project will be required to provide sufficient parking onsite for all employees, customers, vehicles awaiting service, vehicle display and inventory. The Site Plan currently includes 136 off-street parking spaces based on application of the general retail commercial use rate and the outdoor sales display rate identified in section 17.185.190 to the structures and identified display areas respectively. That said, the dealership operator would be obliged to adjust their operations as necessary to accommodate additional parking.

FINDINGS

The following findings must be made to approve a specific plan.

A. The proposed specific plan serves the public interest.

The proposed project will redevelop an existing site located adjacent to the City's regional commercial district whereby expanding opportunities for local job creation and synergistic compatibility with surrounding community scale commercial uses. Furthermore, it will construct a modern facility that will add economic and visual

quality to the City's tax base and built environment. Moreover, the specific plan includes development standards and ongoing conditions attached as Exhibit A to ensure a compatible neighborhood operation with the existing and planned land uses in the vicinity.

B. The proposed specific plan will systematically implement the City's General Plan.

The project focuses on a particular portion of the City where special circumstances require a more detailed framework of development than the General Plan, and more detailed standards than the general provisions of the Zoning Code. It effectively establishes a link between implementing policies of the General Plan and the individual development proposals in a defined area. A specific plan remains an appropriate entitlement for the subject properties given that the Zoning Code, which implements the General Plan, explicitly requires a Specific Plan to construct across property lines. Moreover, the proposed amendment is consistent with General Plan Goal 9, which encourages the creation and retention of a strong, competitive region-wide commercial base, as well as specific implementing Policies 9-3.4 and 9-4.11.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The proposed project is exempt from the California Environmental Quality Act ("CEQA") pursuant to section 15332 (In-fill Development Projects). The following measuring criteria for a Class 32 exemption apply: the project is consistent with the General Plan designation; the proposal is within the city limits on a site less than five acres, surrounded by substantially urban uses; the project site has no value as natural habitat; approval would not result in significant effects related to traffic, noise, air, or water quality; and, the site can be adequately served by required utilities. Therefore, section 15332 is an appropriate exemption for this project.

PUBLIC NOTICE & INPUT

Notice of this public hearing was mailed on October 21, 2022, to all property owners within 300 feet of the project site and to anyone who requested such notice in writing, and was similarly published in The Daily Transcript the same day in compliance with Government Code sections 65090, 65091, and 65092, as applicable. Additionally, as a public service, the notice was posted in the kiosk at City Hall and was also mailed to the two public libraries in the City of El Cajon, located at 201 East Douglas Avenue and 576 Garfield Avenue.

City staff did not receive any comments in response to the Notice of Public Hearing prior to preparation of this report. Comments received after publication will be presented to the Planning Commission at the hearing.

RECOMMENDATION

Staff recommends Planning Commission adopt resolutions recommending the City Council conditionally approve SP-2022-0001, an Amendment to Specific Plan No. 452, subject to conditions and the accompanying CEQA determination for an automobile dealership. The project will redevelop an existing commercial site consistent with the General Plan regional commercial purpose and intent of expanding opportunities for local job creation and synergistic compatibility with surrounding dealerships while adding economic and visual quality to the City's tax base and built environment. Furthermore, good neighbor policies have been incorporated in the specific plan as conditions of approval and ongoing conditions to ensure the dealership is compatible with the adjacent land uses.

PREPARED BY:

REVIEWED BY:

APPROVED BY:

Mike Viglione SENIOR

PLANNER

Noah Alvey

DEPUTY

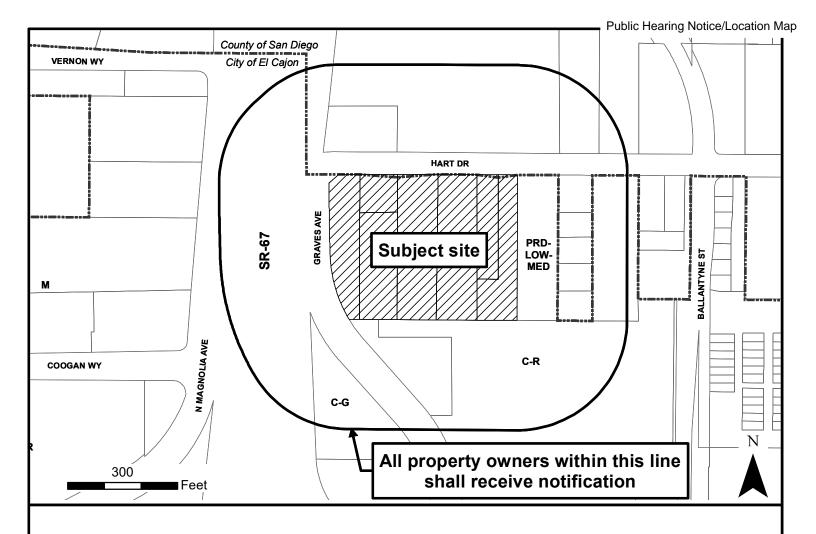
DIRECTOR OF

COMMUNITY DEVELOPMENT Anthony Shute DIRECTOR OF COMMUNITY

DEVELOPMENT

ATTACHMENTS

- 1. Public Hearing Notice/Location Map
- 2. Proposed Resolution RECOMMENDING APPROVAL of the CEQA determination
- 3. Proposed Resolution RECOMMENDING APPROVAL of SP No. 2022-0001
- 4. Aerial Image of Subject Site
- 5. Application & Disclosure Statement
- 6. Traffic Study
- 7. Noise Study
- 8. Specific Plan No. 2022-0001
- 9. Zoning Consistency Chart



NOTICE OF PROPOSED AMENDMENT TO SPECIFIC PLAN NO. 452 FOR AN AUTO DEALERSHIP

NOTICE IS HEREBY GIVEN that the El Cajon Planning Commission will hold a public hearing at 7:00 p.m., Tuesday, November 1, 2022, and the City Council will hold a public hearing at 7:00 p.m., Tuesday, December 13, 2022, to consider:

<u>SP-2022-0001, AN AMENDMENT TO SPECIFIC PLAN NO. 452,</u> as submitted by JKC GRAVES, LLC, requesting redevelopment of the former recreational facility with a new automobile dealership. The subject properties are addressed as 1155 Graves Avenue. This project is exempt from the California Environmental Quality Act (CEQA).

The public is invited to attend and participate in this public hearing. The agenda report for this project will be available 72 hours prior to the Planning Commission meeting at https://www.elcajon.gov/your-government/city-meetings-with-agendas-and-minutes-all. In an effort to reduce the City's carbon footprint, paper copies will not be provided at the public hearing, but will be available at City Hall in the Project Assistance Center upon request.

If you challenge the matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the Commission, or prior to, the public hearing. The City of El Cajon encourages the participation of disabled individuals in the services, activities, and programs provided by the City. Individuals with disabilities who require reasonable accommodation in order to participate in the public hearing should contact Planning at 619-441-1742. More information about planning and zoning in El Cajon is available at http://www.elcajon.gov/your-government/departments/community-development/planning-division.

If you have any questions, or wish any additional information, please contact <u>MICHAEL VIGLIONE</u> at 619-441-1773 or via email at mviglione@elcajon.gov and reference "1155 Graves" in the subject line.

PROPOSED PLANNING COMMISSION RESOLUTION NO.

A RESOLUTION RECOMMENDING CITY COUNCIL APPROVAL OF CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) CATEGORICAL EXEMPTION 15332 (IN-FILL DEVELOPMENT) FOR SPECIFIC PLAN NO. 2022-0001, AN AMENDMENT TO SPECIFIC PLAN NO. 452

WHEREAS, the El Cajon Planning Commission held a duly advertised public hearing on November 1, 2022, to consider Specific Plan No. 2022-0001, an amendment to Specific Plan No. 452, for the future development of an automobile dealership at the southeast corner of Graves Avenue and Hart Drive at Assessor Parcel Number (APNs) 483-090-15-00; 483-090-16-00; 483-090-24-00; 483-090-25-00; 483-090-26-00; 483-090-42-00; and 483-090-41-00; and

WHEREAS, the proposed project would involve redevelopment of disturbed land historically used as a recreational facility with a 36,989 square foot automobile dealership, 1,232 square foot carwash, and appurtenant access, landscape and street improvements; and

WHEREAS, in accordance with CEQA Guidelines section 15061(b)(2), and prior to making a recommendation to the City Council, the Planning Commission reviewed and considered the information contained in the project staff report; and

WHEREAS, it is proposed that the project is categorically exempt from the environmental review requirements of CEQA pursuant to section 15332 (*In-fill Development*) of the CEQA Guidelines, which allows for in-fill development in urbanized areas, as the record of proceedings contains evidence to support the determination that the Class 32 Categorical Exemption applies;

WHEREAS, no evidence was presented in proceedings that any of the conditions exist to provide exceptions to categorical exemptions as described in CEQA Guidelines section 15300.2, exist; and

WHEREAS, after considering evidence and facts, the Planning Commission considered Categorical Exemption, section 15332 as presented at its meeting; and

NOW, THEREFORE, BE IT RESOLVED by the El Cajon Planning Commission as follows:

Section 1. That the foregoing recitals are true and correct, and are findings of fact of the El Cajon Planning Commission in regard to the proposed exemptions for Specific Plan No. 2022-0001, an Amendment to

Specific Plan No. 452.

- Section 2. The El Cajon Planning Commission hereby further finds that the record in this proceeding includes evidence to support the following:
 - A. The project site is designated Regional Commercial on the General Plan Land Use Map which is intended for large shopping centers but may also include other major uses important for sales tax generation. The proposed amendment is further consistent with General Plan Goal 9, along with its objectives and policies, which encourage the creation and retention of a strong, competitive region-wide commercial base as well as specific General Plan Policies 9-3.4 and Policy 9-4.11. The Zoning Code further requires a Specific Plan for construction of any buildings or structures across property lines and therefore the Specific Plan remains appropriate for the site.
 - B. The project site is located within city limits, has a usable site area of less than five acres, and is surrounded by urban uses, including multiple-family residences, single-family residences, shopping centers, and transportation land uses.
 - C. The subject site was previously developed with a recreational facility and remains in a disturbed condition from this historical use. There are no extant habitats on site for use by endangered, rare, or threatened species.
 - D. The proposed amendment would result in an additional 867 average daily trips on adjacent roadways. Pursuant to the Institute Transportation Engineer Guidelines Transportation Impact Studies in the San Diego Region, used by the City of El Cajon to assess traffic related impacts, projects which are consistent with the General Plan and generate fewer than 1,000 trips are presumed to have less than a significant impact. Similarly the Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, states that retail stores less than 50,000 square feet in area may be considered locally serving. All land uses are subject to El Cajon Municipal Code (ECMC) Chapter 17.115 performance standards for noise and air quality and therefore related impacts are avoided through their application to project design and land use operations. Similarly, the proposed project is a Priority Development Project under ECMC Chapter 16.60 and will thus be required to comply with Standard Urban Storm Water Mitigation Plan requirements and all applicable storm water regulations of the aforementioned chapter.

- E. All required utilities and public services are already extended to the subject site by virtue of its recent, previous use as a recreational facility and are expected to adequately serve the project. Furthermore, the proposed project will not result in any specific or general exceptions to the use of the categorical exemption as detailed under State CEQA Guidelines section 15300.2 which might otherwise preclude use of the exemption. Cumulative effects from successive projects are unlikely occur given that the project is proposes a use anticipated under the General Plan and its accompanying environmental analysis. The project does not involve any other unusual circumstances that could potentially have a significant effect on the environment. No impacts to scenic highways will occur as Interstate 8 is not designated as a CalTrans scenic highway. The project site is not a hazardous waste site nor is it identified in any list compiled pursuant to Government Code section 65962.5, such as the Department of Toxic Substances Control EnviroStor database or the State Water Resources Control Board GeoTracker tool. Historic resources will not be impacted as the project site is not included in the City of El Cajon Historic Preservation Inventory and occurs on disturbed property.
- Section 3. That based upon said findings of fact, the El Cajon Planning Commission hereby RECOMMENDS City Council APPROVAL of the proposed CEQA exemption for Specific Plan No. 2022-0001, an amendment to Specific Plan No. 452.

PASSED AND ADOPTED b	by the El Cajon Planning Commission at a re	gular
meeting held November 1, 2022 by t	the following vote:	
AYES:		
NOES:		
ABSENT:		
	Darrin MROZ, Chair	
ATTEST:		
Noah ALVEY, Secretary		

PLANNING COMMISSION RESOLUTION NO.

A RESOLUTION RECOMMENDING CITY COUNCIL APPROVAL OF SPECIFIC PLAN NO. 2022-0001, AN AMENDMENT TO SPECIFIC PLAN NO. 452, AT 1155 GRAVES AVENUE IN THE REGIONAL COMMERCIAL (RC) GENERAL PLAN DESIGNATION AND THE C-R (REGIONAL COMMERCIAL) ZONE; ASSESSOR PARCEL NUMBERS (APNS) 483-090-15-00; 483-090-16-00; 483-090-24-00; 483-090-25-00; 483-090-26-00; 483-090-41-00.

WHEREAS, the El Cajon Planning Commission held a duly advertised public hearing on November 1, 2022, to consider Specific Plan No. 2022-0001, an amendment to Specific Plan No. 452, for the future development of an automobile dealership at the southeast corner of Graves Avenue and Hart Drive; and

WHEREAS, the Planning Commission adopted the next resolution in order recommending City Council approval of the California Environmental Quality Act (CEQA) determination that the project is categorically exempt from the environmental review requirements of CEQA pursuant to section 15332 (*In-fill Development*) of the CEQA Guidelines; and

WHEREAS, at the public hearing the Planning Commission received evidence through public testimony and comment in the form of verbal and written communications, and reports prepared and presented to the Planning Commission, including (but not limited to) evidence such as the following:

- A. The proposed project will redevelop an existing underutilized site located adjacent to the City's regional commercial district whereby expanding opportunities for local job creation and synergistic compatibility with surrounding community scale commercial uses. Furthermore, it will construct a modern facility that will add economic and visual quality to the City's tax base and built environment. Moreover, the specific plan includes development standards and ongoing conditions attached as Exhibit A to ensure a compatible neighborhood operation with the existing and planned land uses in the vicinity.
- B. The project focuses on a particular portion of the City where special circumstances require a more detailed framework of development than the General Plan, and more detailed standards than the general provisions of the Zoning Code. It effectively establishes a link between implementing policies of the General Plan and the individual development proposals in a defined area. A specific plan remains an appropriate entitlement for the subject properties given that the Zoning Code, which implements the General Plan, explicitly requires a Specific Plan to construct across property lines. Moreover, the proposed amendment is

Planning Commission Resolution No.

consistent with General Plan Goal 9, which encourages the creation and retention of a strong, competitive region-wide commercial base, as well as specific implementing Policies 9-3.4 and 9-4.11.

NOW, THEREFORE, BE IT RESOLVED by the El Cajon Planning Commission as follows:

Section 1. That the foregoing recitals are true and correct, and are findings of fact of the El Cajon Planning Commission in regard to Specific Plan No. 2022-0001.

Section 2. That based upon said findings of fact, the El Cajon Planning Commission hereby RECOMMENDS City Council APPROVAL of Specific Plan No. 2022-0001, in accordance with the attached Exhibit "A".

{The remainder of this page intentionally left blank}

Planning Commission Resolution No.

PASSED AND ADOPTED by the El Cajon City Planning Commission at a regular meeting held November 1, 2022, by the following vote:

AYES:	
NOES:	
ABSENT:	
	Darrin MROZ, Chair
ATTEST:	
	_
Noah ALVEY, Secretary	_

Site Aerial





Project Assistance Center **PLANNING PERMIT APPLICATION**

AZP	CUP	LLA	MA			
Administrative Zoning	Conditional Use Permit	Lot Line Adjus	stment Minor Amendment			
Permit						
MUP	PRD	PUD PUD	SDP			
Minor Use Permit	Planned Residential	Planned Unit				
	Development	Development				
SP	SCR	TPM	TSM			
Specific Plan	Substantial	Tentative Par				
	Conformance Review		Map			
VAR	□ ZR	X Other: Am	nendment to Specific Plan No. 528			
Variance	Zone Reclassification	<u> </u>				
roject Location Parcel Number (APN): 4	483-090-15, 16, 24, ,25,	26, 41 - 42				
, ,						
Address:	1155 GRAVES AVE., EL CAJ	ON, CA 92021				
Nearest Intersection: (GRAVES AVE & HART DRIV	Ε				
roject Description (or a	attach separate narrative)					
NEW 36,989 SQFT, TW	O STORY, FULL SERVICE	E AUTO DEALE	ERSHIP (SHOWROOM,			
SERVICE WORKSHOP,	DETAIL BAYS, PARTS/TI	RE STORAGE	AND OFFICES) WITH SEPARTE			
1,232 SQFT, SINGLE ST	TORY CAR WASH. SITE \	WORK TO INCL	LUDE TWO DRIVEWAYS FORM			
GRAVES AVE.						
Project Screening Que		•	es, please describe:			
Existing use?	☐ No		MMERCIAL			
Modification of use?	☐ No	Yes NEW	N AUTO SALES AND SERVICE USE			
New development or a	ddition? No	Yes NEW	NEW BUILDING ON SITE			
Evicting Structures?	□No	Yes Age	Age of the structures:			

Demolition or substa modification propose		☐ No	Yes	
improvements or structures?				
Tenant improvements proposed?		☐ No	Yes	
Existing vegetation of		■ No	Yes	
proposed for remova	·I?			December of subsection fill
Proposed grading?		☐ No	Yes	Proposed quantities of cut and/or fill.
Applicant Information				carry out the project; not for consultants)
Company Name:	JKC GR	RAVE	S LLC	
Contact Name:	JOHN K	IEFE	R	
Mailing Address:	1600 VA	LLEY	RIVE	R DRIVE, SUITE 209
Phone:	541-915	-609	1 Email:	j.kiefer@gokiefer.com
Interest in Property:	■ Own		Lease	Option
Project Representativ	<u>e Information</u> (if differen	t than appli	icant; consultant information here)
Company Name:	see abo	ve		
Contact Name:			License	:
Mailing Address:				
Phone:			Email:	
Property Owner Infor	mation (if differ	ent than a	pplicant)	
Company Name:	see abo	ve		
Contact Name:				
Mailing Address:	-			
Phone:			Email:	<u> </u>

Hazardous Waste and Substances Statement

Section 65962.5(f) of the State of California Government Code requires that before the City of El Cajon accepts as complete an application for any discretionary project, the applicant submit a signed statement indicating whether or not the project site is identified on the State of California Hazardous Waste and Substances Sites List. This list identifies known sites that have been subject to releases of hazardous

box and if applicable, provide the necessary information:
The development project and any alternatives proposed in this application: is/are NOT contained on the lists compiled pursuant to Government Code Section 65962.5. is/are contained on the lists compiled pursuant to Government Code Section 65962.5. If yes, provide Regulatory Identification Number: Date of List:
<u>Authorization</u>
Applicant Signature ¹ : Date: 00-01-202
Property Owner Signature ² : Date: 00-01-2022
1. Applicant's Signature: I certary that I have read this application and state that the above information is correct, and that I am the property owner, authorized agent of the property owner, or other person having a legal right, interest, or entitlement to the use of the property that is the subject of this application. I understand that the applicant is responsible for knowing and complying with the governing policies and regulations applicable to the proposed development or permit. The City is not liable for any damages or loss resulting from the actual or alleged failure to inform the applicant of any applicable laws or regulations, including before or during final inspections. City approval of a permit application, including all related plans and documents, is not a grant of approval to violate any applicable policy or regulation, nor does it constitute a waiver by the City to pursue any remedy, which may be available to enforce and correct violations of the applicable policies and regulations. I authorize representatives of the City to enter the subject property for inspection purposes.
2. Property Owner's Signature: If not the same as the applicant, property owner must also sign. A signed, expressed letter of consent to this application may be provided separately instead of signing this application form. By signing, property owner acknowledges and consents to all authorizations, requirements, conditions and notices described in this application. Notice of Restriction: property owner further acknowledges and consents to a Notice of Restriction being recorded on the title to their property related to approval of the requested permit. A Notice of Restriction runs with the land and binds any successors in interest.
Pre-application Conference
The purpose of a pre-application conference is to provide you an opportunity to review your project with City staff in a preliminary form to finalize submittal requirements and receive a cursory identification of potential issues. A pre-application is required unless waived by staff.
Conference date:
Application Submittal
To submit your application, it must be done by appointment scheduled in advance for all Level 3, 4, & 5 project reviews, unless waived by staff. It is recommended for projects that will subsequently meet the criteria for a Level 1-C review through Level 2.
Appointment date:

 $chemicals, and is available \ at \ \underline{http://www.calepa.ca.gov/sitecleanup/corteselist/}. \ Check \ the \ appropriate$



Disclosure Statement

This statement is intended to identify and avoid potential conflicts of interest that may exist between the project proponents and the decision makers; including City staff, Planning Commissioners, and City Council members.

The following information must be disclosed:

1.		persons having a financial interest in the
	application.	1000 VALLEY PIVER DRIVE, #290
	JOHN P. HETER	EUCIEME OR 97401
	COPIUNE KIETER	1600 VILLEY PIVER DRIVE, #290 EN GENE, UR 97-10
		ersons having any ownership interest in the
	property involved.	1400 VINEY PNER DPIVE TREGO
	JOHN P. KIEFER	1400 VINEY PHER DRIVE, TREGO ENGENE OR 97401
		160 YALLEY PINOR DENE #290
	CORINE KIEFER	FIGURE, OR 9770
2.	If any person identified pursuant to (1) names and addresses of all individuals corporation or owning any partnership TOHN P. KIETER CORNNE KETER	above is a corporation or partnership, list the sowning more than 10% of the shares in the interest in the partnership. IVOO VALLEY PREP DRIVE THESE DRIVE THESE OF 9 THESE T
3.	If any person identified pursuant to (1) any person serving as trustee or benefi	above is a trust, list the name and address of ciary or trustor of the trust.
		(200

4.	Have you or your agents transacted more than \$500.00 worth of business with any member of City staff, Boards, Commissions, Committees and Council within the past 12 months or \$1,000.00 with the spouse of any such person? Yes No					
	If yes, please indicate person(s), dates, and amounts of such transactions or gifts.					
synd	son" is defined as "Any individual, proprietorship, firm, partnership, joint venture, licate, business trust, company, corporation, association, committee, and any other nization or group of persons acting in concert." Gov't Code §82047.					
_	JOHN P. KHER					
Signa	ature of applicant / date (5.04-2022) Print or type name of applicant					
NOT	E: Attach appropriate names on additional pages as necessary.					

Darnell & ASSOCIATES

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

August 25, 2022

Bryan Mac Dermott, Wagner Architecture Group 2124 El Camino Real, Suite 200 Oceanside, CA. 9205421

D&A Ref. No: 220503

Subject: Vehicle Miles Traveled (VMT) and Local Mobility Assessment (LMA) for the proposed Hyundai of El Cajon Auto Dealership at 1155 Graves Avenue, El Cajon.

Dear Mr. Mac Dermott,

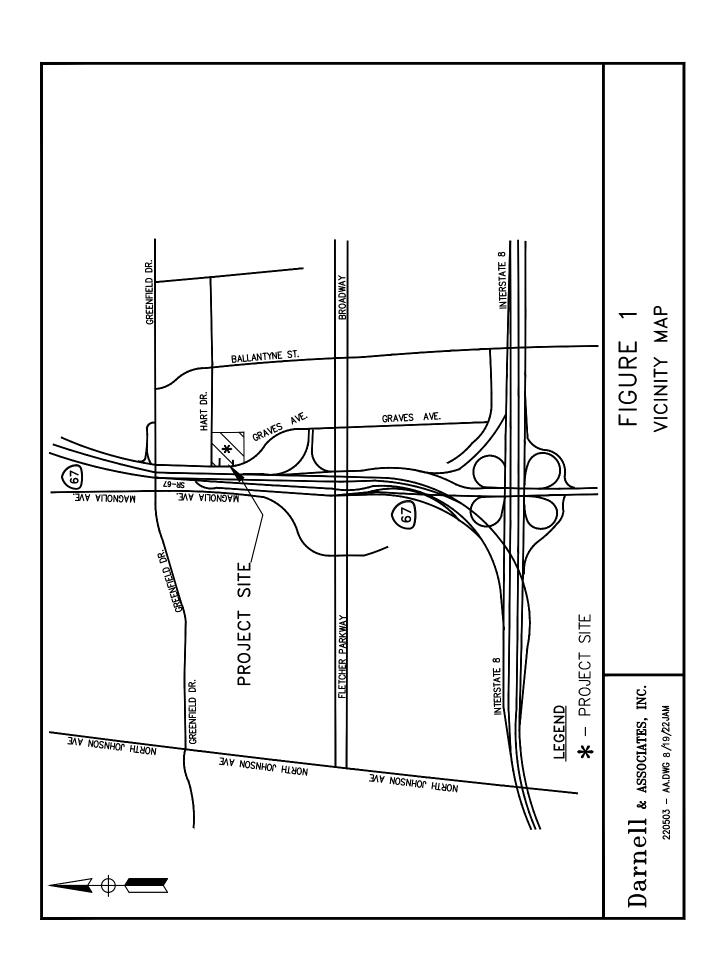
Darnell & Associates, (D&A) has prepared this report to identify if additional Vehicle Miles Traveled (VMT) and Local Mobility Assessment (LMA) analysis is required. **Figure 1** is a vicinity map showing the Project location and the Project site plan is presented on **Figure 2**. The following outlines key assumptions for the Vehicle Miles Traveled (VMT) and Local Mobility Assessment (LMA) analysis requirement identified in the Institute of Traffic Engineers (ITE) Guidelines dated May 2019 used by the City of El Cajon.

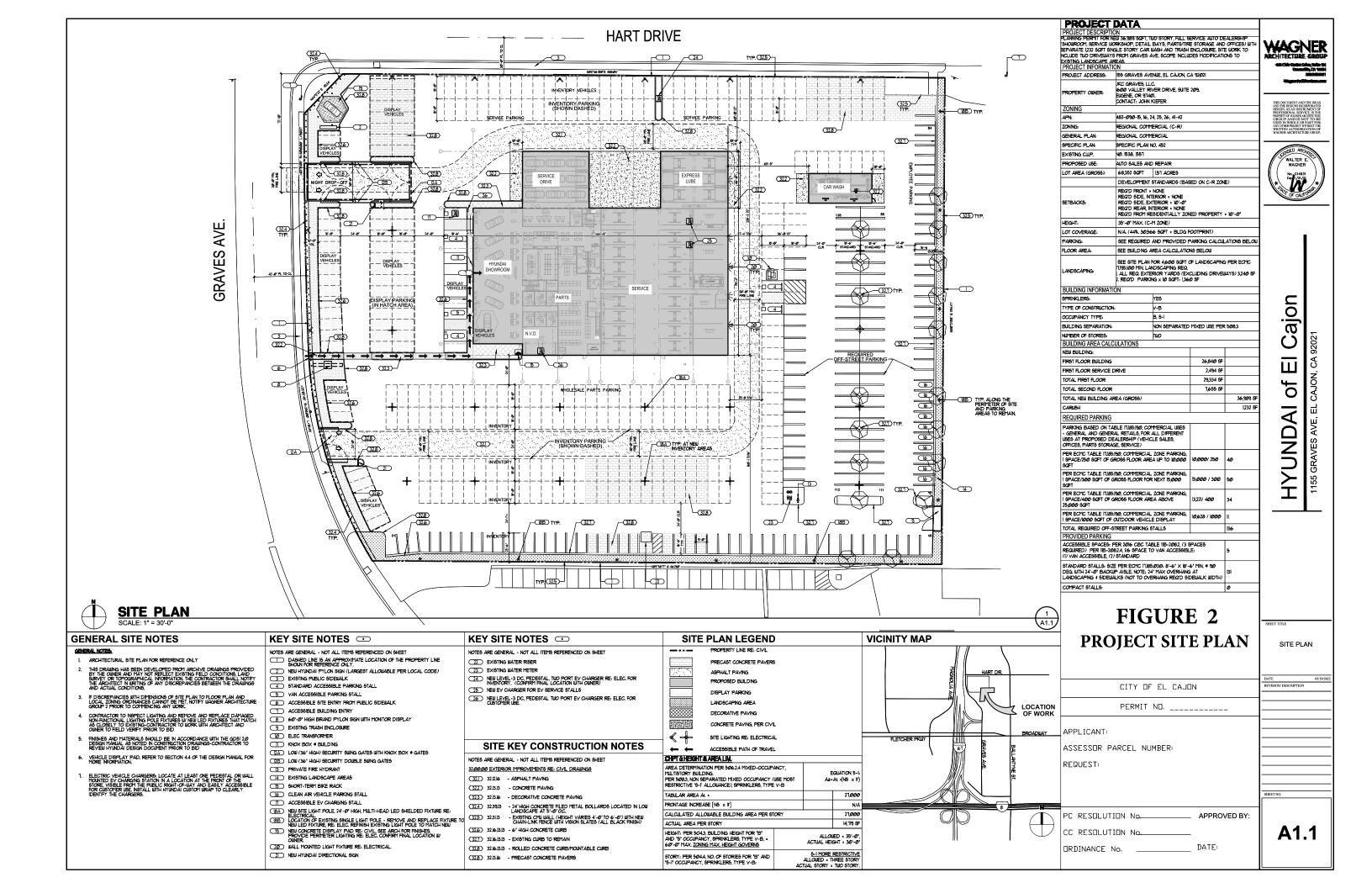
PROJECT DESCRIPTION

The Project proposes to develop the Hyundai of El Cajon Facility at 1155 Graves Avenue in the City of El Cajon. The site plan for the Project proposes construction of the 38,221 square foot Auto Sales and Repair Services Facility, Car Wash and the required parking, display parking and inventory parking shown on **Figure 2**. The Project site has two (2) driveways on Graves Avenue south of Hart Drive. Based on my professional experience, there will be a credit for trip generation for the existing 1.87 Acre Recreation Amusement Park presented on **Figure 3**. The Recreation Amusement Park is to be removed from the site and is to be credited to the proposed project trip generation.

PROJECT TRIP GENERATION

The trip generation rate for the Project is based on the "Not so Brief Guide" of Vehicular Traffic Generation Rates for the San Diego Region Land Use code 840 for Automotive Sale (New). A copy of the Land Use Code 840 trip generate rates are presented in Appendix A. . Table 1 summarizes the proposed trip generation for the proposed Project and existing Recreation Amusement Park.







source: Google Earth

FIGURE 3 - 1.84 ACRE RECREATION AMUSEMENT PARK LOCATION

Table 1 –Trip Generation Summary								
Trip Generation rates (a)								
ITE Land Use	AM	Peak	PM Peak					
ITE Land Use (Code)	Daily (Trips/KSF)	ADT%	In/Out Ratio	ADT%	In/Out Ratio			
Existing: Recreation Amusement Park	90(Trips/KSF)	2%	50% - 50%	6%	50% - 50%			
Proposed: Automotive Sales(NEW) 840	28.65(KSF)- 29.45	1.87%	73% - 27%	1.80%	40% - 60%			

Hyundai of El Cajon Trip Generation

		Trip Generation AM Peak PM Peak						
Land Use							ak	
	Density	Daily	In	Out	Total	In	Out	Total
Proposed:								
Automotive	38,221 S.F.	1,035	53	19	72	36	54	90
Sales(NEW) 840								
Existing:								
Recreation	1.87 Acre	168	2	2	4	5	5	10
Amusement Park								
New No	et Increase Total	867	51	17	68	31	49	80

Source: The "Not so Brief Guide" of Vehicular Traffic Generation Rates for the San Diego Region.

KSF = Thousand Square Feet

Daily Trips = 28.65 x Thousand Square Feet (KSF) of project -29.45

VEHICLE MILES TRAVELED (VMT) ASSESSMENT

Senate Bill 743 (SB 743) was approved in 2013 and changed the way transportation impacts are measured under the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of Vehicle Miles Travelled (VMT) as the required metric to replace the automobile delay-based LOS. According to the *ITE Guidelines*, a Project is required to evaluate transportation impacts under CEQA using the VMT metric.

Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 6

VMT SCREENING

Based on the screening criteria for performing a detailed VMT analysis, the Project may be presumed to have a less than significant VMT impact, based on the Project is a "Locally Serving Retail Project", defined as having 100,000 square feet gross floor area or less as stipulated in Senate Bill 743.

Since the Project is a "Locally Serving Retail Project" with less than 100,000 square feet, the Project is presumed to have a less than significant VMT impact per SB 743, therefore additional VMT analysis is not required.

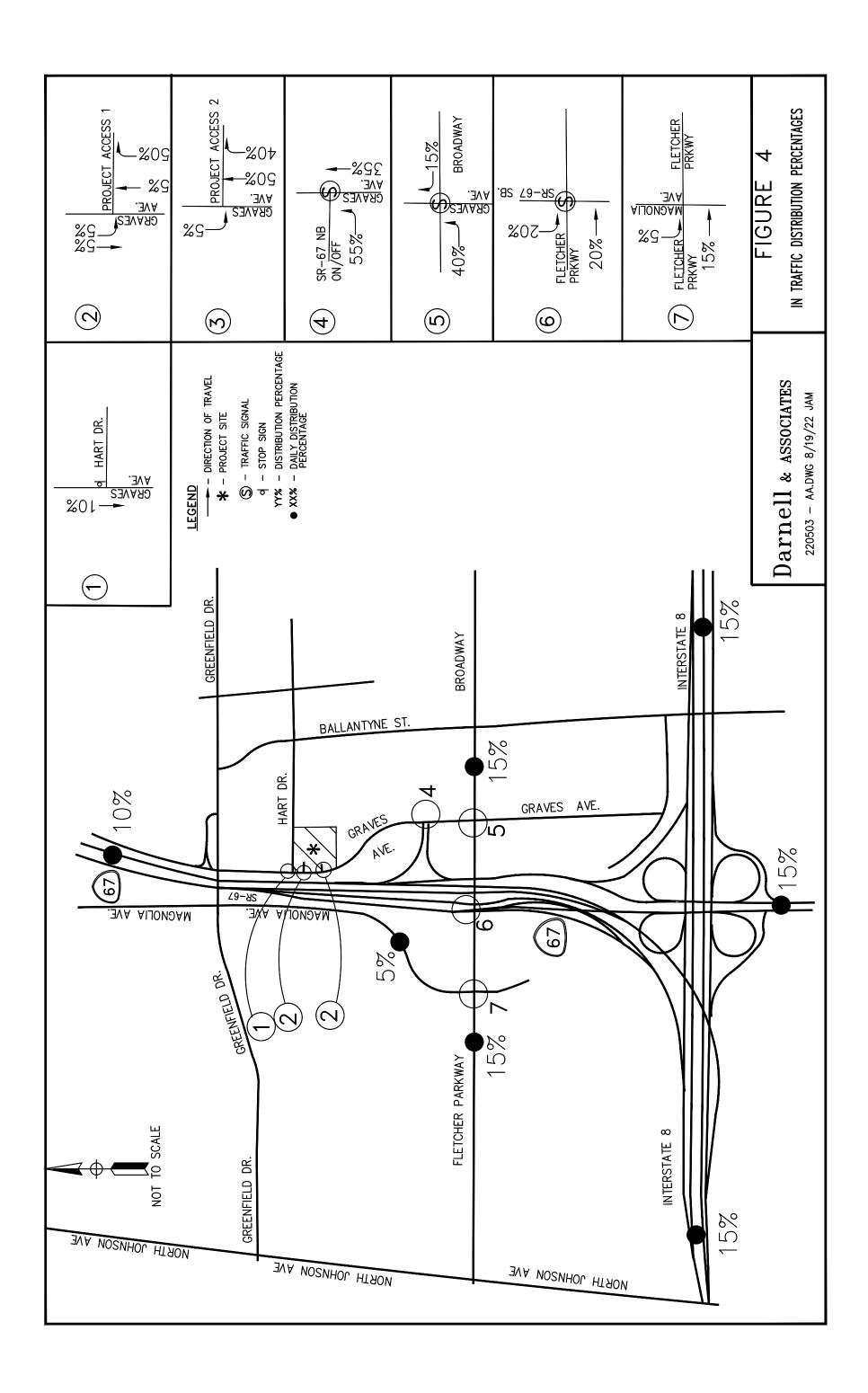
LOCAL MOBILITY ASSESSMENT ANALYSIS (LMA) SCREENING

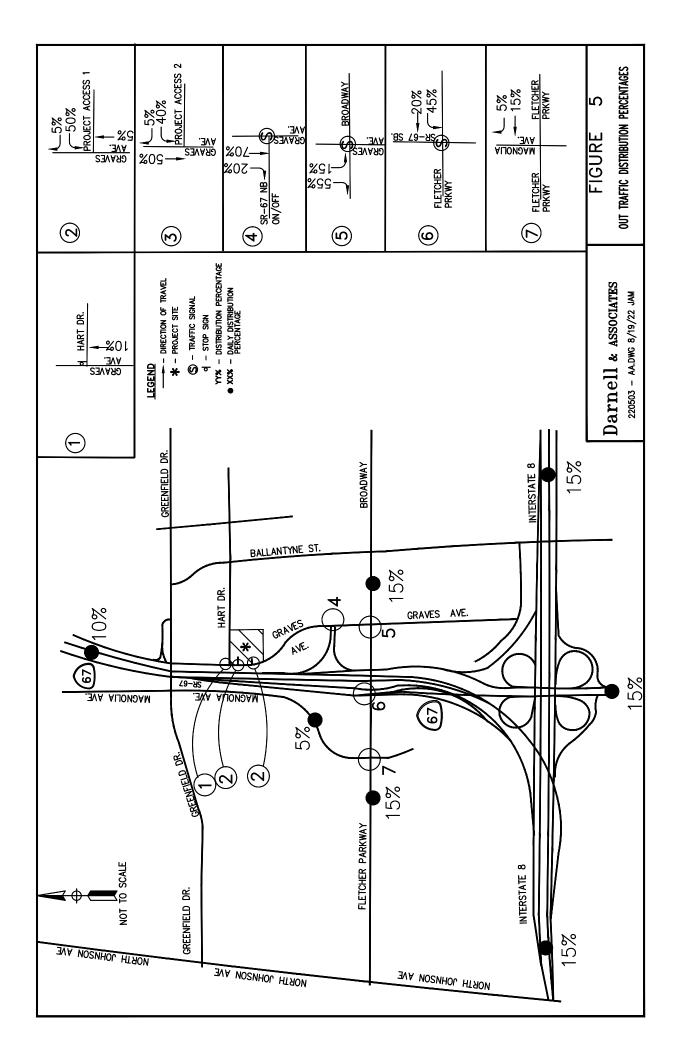
Based on the screening criteria for Local Mobility Analysis (LMA), contained in the *ITE Guidelines*, the Project would be screened out from completing a LMA if the Project's land use is consistent with the Community Plan/Zoning designation and the Project is expected to generate less than 1,000 daily driveway trips with the credit for the existing Recreational Amusement Park Use and/or less than 100 peak hour trips. Review of *Table 1* shows the project will generate less than 100 peak hour in the AM and PM peak hour periods.

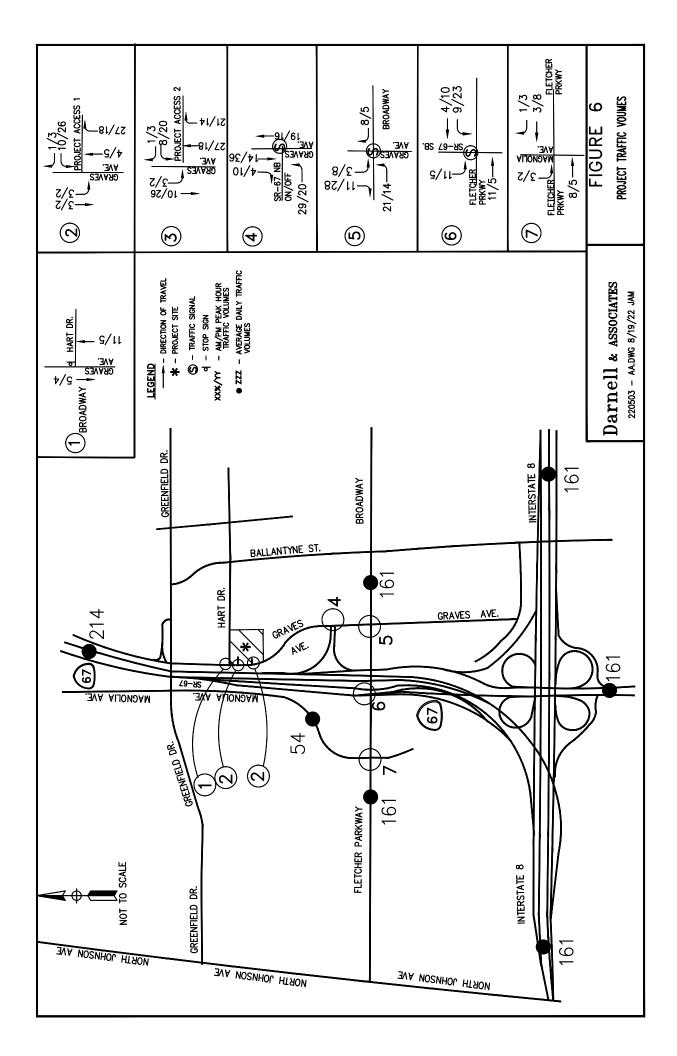
The next step in the LMA was review of project traffic presented on *Table 1* was assigned to the surrounding roadways, **Figures 4** and **5** present the trip distribution percentages and **Figure 6** presents the Project traffic volumes.

Removal of the 1.87 Acre Recreational Amusement Park generates 187 daily, 68 AM peak hour trips and 80 PM peak hour trips, resulting in the proposed Project traffic being reduced to 848 daily trips which is less than the average 1,000 daily trips.

The Project trip generation of 867 daily trips identifies a focused traffic assessment is not required. However the Graves Avenue/SR-67 intersection will be analyzed for existing conditions plus project traffic.







Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 10

EXISTING PLUS PROJECT CONDITIONS

The next step in the project assessment analysis, we reviewed existing traffic volumes at the Graves Avenue/SR-67 On/Off Ramps. The AM/PM peak hour volumes were analyzed for existing conditions and existing plus project traffic conditions. **Figure 7** presents the following conditions at the Graves Avenue/SR-67 on/off ramps.

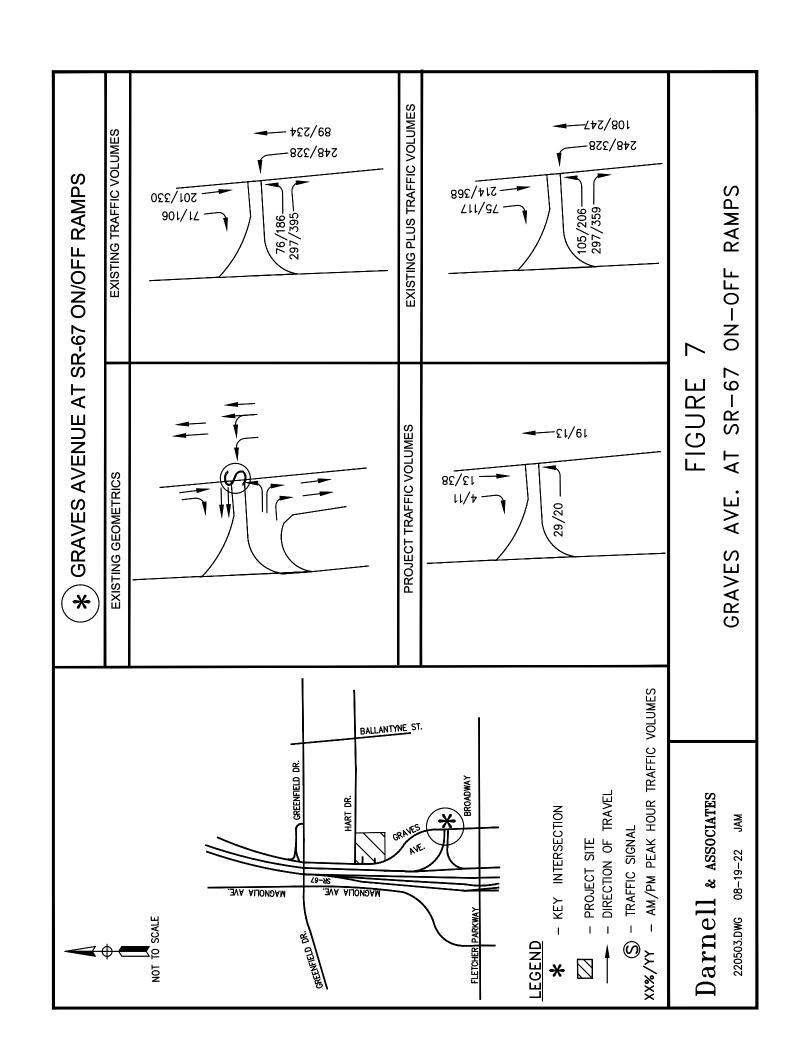
- Existing Roadway Geometrics
- Existing AM/PM Peak Hour Traffic Volumes
- Project AM/PM Traffic Volumes
- Existing Plus Project AM/PM Peak Hour Traffic Volumes

The traffic volumes for existing conditions and existing plus project traffic volumes at the Graves Avenue / SR-67 on/off ramp were analyzed. Table 2 summarizes the analysis.

		Table	2 – Ex	isting P	lus Pr	oject Int	tersect	tion Ana	lysis			
		Existing Conditions				Existing plus Project Conditions						
	Critical	AM Peak		PM Peak		AM Peak			PM Peak			
Intersection	Critical Move.	Delay veh/sec	LOS	Delay veh/sec	LOS	Delay veh/sec	LOS	Δ Delay veh/sec	Delay veh/sec	LOS	Δ Delay veh/sec	SIG.
Graves Avenue at SR-67	Inter.	9.0	A	10.0	A	9.2	A	0.2	11.5	В	0.6	no

Notes: (a)Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections. (b) LOS calculations are based on the methodology outlined in the 2010 Highway Capacity Manual (HCM6). LOS = Level of Service, Critical Move. = Critical Movement, SIG. = Significant Impact, Inter. = Intersection

Review of **Table 2** shows existing Graves Avenue / SR-67 intersection is currently operating at LOS A in the AM and PM peak hour. The addition of project traffic go the Graves Avenue / SR-67 intersection will continue to operate at LOS A in the AM peak hour with the addition of project traffic and will operate at LOS B in the PM peak hour. Therefore no additional intersection analysis is required. Copies of the Existing and Existing plus Project Synchro worksheets are presented in Appendix B.



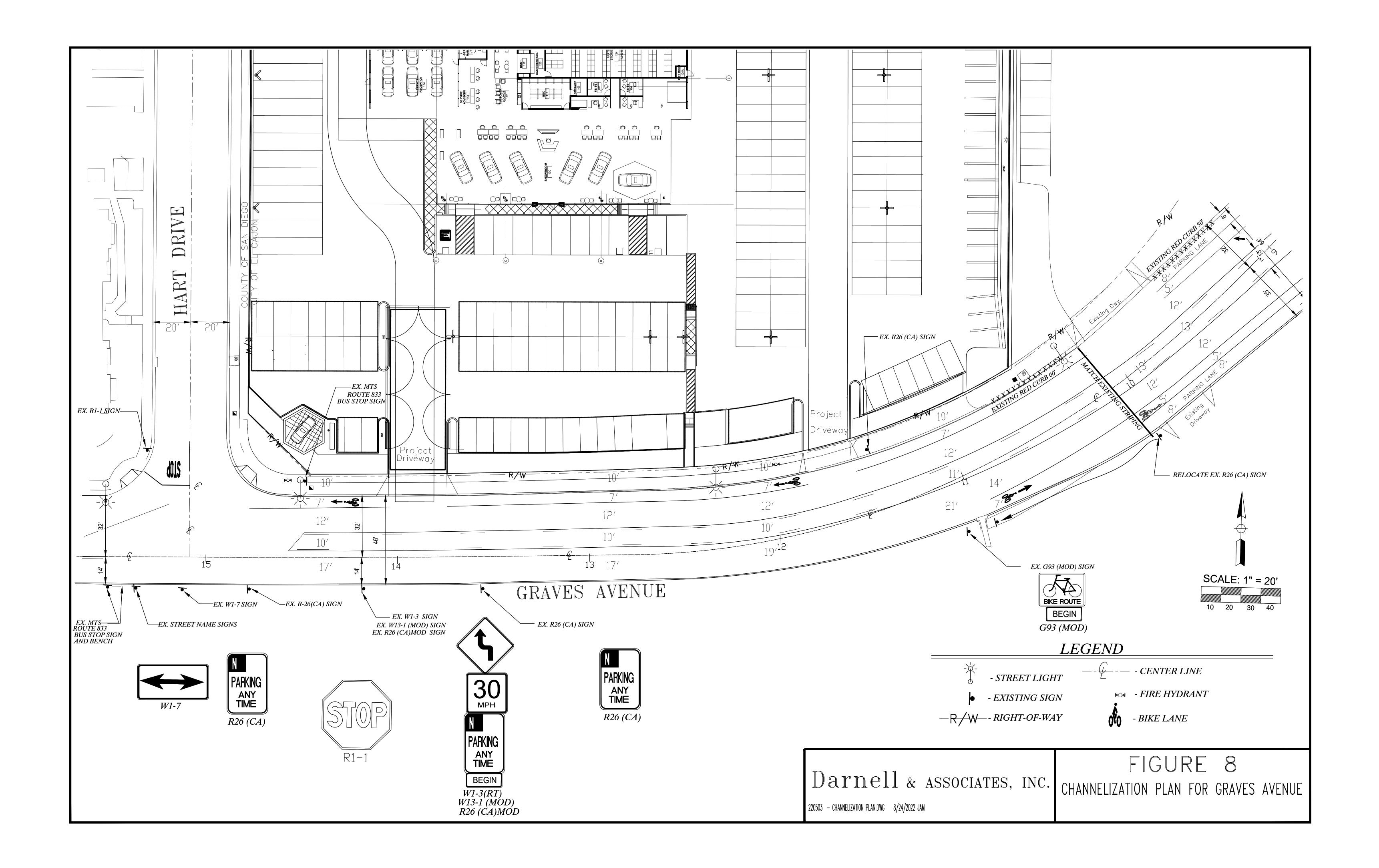
Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 12

The final step in our analysis, we reviewed Graves Avenue adjacent to the project pedestrian, transit access and striping to identify the following recommended improvements on Graves Avenue south of Hart:

- Place bus bench at the MTS Route 833 Northbound stop at the southeast corner of the intersection of Graves Avenue at Hart Drive.
- To enhance access to/from the project driveways revise the Graves Avenue existing channelization from Hart Drive to south of the project to provide the channelization improvements shown on Figure 8.

The proposed improvements will provide:

- Two-way left turn access on Graves Avenue at the project driveways.
- Revisions to the existing channelization on Graves Avenue will be revised to extend the northbound bike lane on Graves Avenue to Hart Drive.
- The implementation of the recommended Graves Avenue channelization including the extension of the northbound bike lane adjacent to the project site will enhance site access and;
- The existing parking restrictions adjacent to project site and the proposed northbound bike lane will also enhance corner sight distance at the projects two driveways.



Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 14

SUMMARY

- The proposed Project would generate 1,035 daily trips, 72 AM peak hour trips and 90 PM peak hour trips to be added to the surrounding roadways. However, removal of the existing 1.87 Acre Recreational Amusement Park that generates 187 daily, 68 AM peak hour trips and 80 PM peak hour trips, will result in the proposed Project traffic being reduced to 848 daily trips, which is less than the average 1,000 daily trips. This amount of traffic can be considered to comply with the City of El Cajon requirements and not require additional traffic analysis.
- The Project is considered a "Locally Serving Retail Project" and therefore satisfy's screening criteria to not require additional VMT analysis.
- Analysis of Graves Avenue/ SR-67 on/off ramp found the intersection to operate at LOS A in the AM peak hour and LOS B in the PM peak. Therefore no additional Local Mobility Analysis (LMA) is required.
- Implementation of the Graves Avenue channelization improvements shown on Figure 6 will provide the following:
 - Revise the channelization on Graves Avenue to extend the existing center two way left-turn lane to Hart Drive.
 - Extend the northbound bike lane on Graves Avenue immediately south of along the project site to Hart Drive.
 - The proposed channelization will accommodate the future addition of a southbound bike lane from Hart Drive to the existing bike lane south of the project site, when the County of San Diego adds bike lanes on Graves Avenue north of Hart Drive. The proposed improvements are designed to add the southbound bike lane in the future.
 - The existing parking restrictions on Graves Avenue and the addition of the northbound bike lane enhances sight distance exiting the projects two driveways.

Sincerely,

DARNELL & ASSOCIATES,

Bill E. Darnell, P.E.

RCE: 22338

BED/jam

220502 - Revised Hyundai of El Cajon Traffic Analysis 8.25.22

Date: 8/25/2022

OR OF ESSION

	Attachment A
	eration Manual 10th
Institute of Transportation Engineers (ITE) Trip Gene Edition Land Use code 840 for Auto	

Land Use: 840 Automobile Sales (New)

Description

A new automobile sales dealership is typically located along a major arterial street characterized by abundant commercial development. The sale or leasing of new cars is the primary business at these facilities; however, automobile services, parts sales, and used car sales may also be available. Some dealerships also include leasing options, truck sales, and servicing. Automobile sales (used) (Land Use 841) and recreational vehicle sales (Land Use 842) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:15 a.m. and 12:15 p.m. and 1:45 and 2:45 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, Georgia, Indiana, New York, North Carolina, Oregon, Texas, Vermont, and Virginia.

Source Numbers

260, 271, 280, 328, 414, 424, 427, 438, 440, 507, 571, 583, 612, 715, 728, 880, 881, 936, 974, 975



Automobile Sales (New)

(840)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

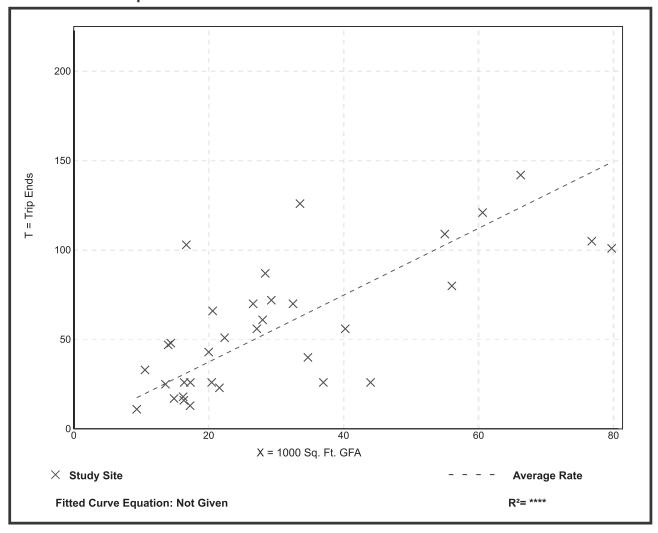
Number of Studies: 34 1000 Sq. Ft. GFA: 31

Directional Distribution: 73% entering, 27% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.87	0.59 - 6.17	0.95

Data Plot and Equation





Automobile Sales (New)

(840)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

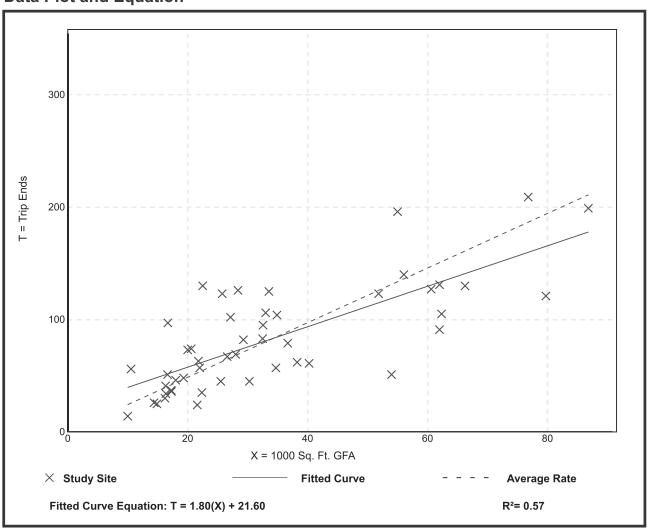
Number of Studies: 49 1000 Sq. Ft. GFA: 34

Directional Distribution: 40% entering, 60% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.43	0.94 - 5.81	0.99

Data Plot and Equation





Automobile Sales (New)

(840)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

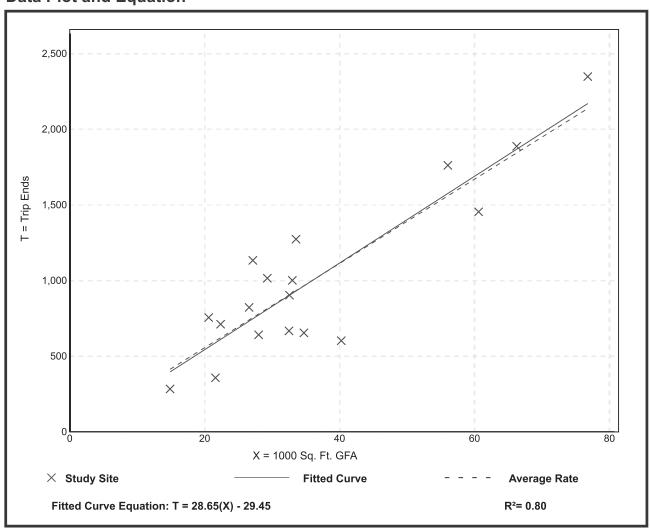
Number of Studies: 18 1000 Sq. Ft. GFA: 36

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
27.84	14.98 - 41.78	7.01

Data Plot and Equation





Attachment B

• TRAFFIC COUNTS

• GRAVES AVENUE AT SR-67 SYNCHRO WORKSHEETS:

> Existing Traffic Conditions

> Existing plus Project Traffic Conditions

Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878 (951)268-6268

City of El Cajon N/S: Graves Avenue E/W: SR-67 Northbound Ramps

Weather: Clear

File Name : 01_ECJ_Graves_67N AM Site Code : 23522559 Start Date : 6/9/2022 Page No : 1

Groups Printed- Total Volume

				roups Print	<u>ea- rotai vo</u>	oiume				
	Gra	aves Aven	ue	G	raves Aven	ue	SR-67 N	Northbound	l Ramps	
	S	outhbound	d		Northbound					
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	40	13	53	59	10	69	10	59	69	191
07:15 AM	53	25	78	76	23	99	19	66	85	262
07:30 AM	50	14	64	58	25	83	16	68	84	231
07:45 AM	63	17	80	65	19	84	21	94	115	279
Total	206	69	275	258	77	335	66	287	353	963
08:00 AM	35	15	50	49	22	71	20	69	89	210
08:15 AM	61	15	76	49	28	77	18	67	85	238
08:30 AM	58	18	76	49	30	79	26	69	95	250
08:45 AM	55	11	66	48	38	86	23	84	107	259
Total	209	59	268	195	118	313	87	289	376	957
- 1						1			1	
Grand Total	415	128	543	453	195	648	153	576	729	1920
Apprch %	76.4	23.6		69.9	30.1		21	79		
Total %	21.6	6.7	28.3	23.6	10.2	33.8	8	30	38	

	G	raves Aven	ue	G	raves Aver	nue	SR-67	d Ramps			
		Southbound	d	Northbound			Eastbound				
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total	
Peak Hour Analysis Fr	om 07:00 AN	I to 08:45 A	AM - Peak 1 d	of 1				_			
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	53	25	78	76	23	99	19	66	85	262	
07:30 AM	50	14	64	58	25	83	16	68	84	231	
07:45 AM	63	17	80	65	19	84	21	94	115	279	
08:00 AM	35	15	50	49	22	71	20	69	89	210	
Total Volume	201	71	272	248	89	337	76	297	373	982	
% App. Total	73.9	26.1		73.6	26.4		20.4	79.6			
PHF	.798	.710	.850	.816	.890	.851	.905	.790	.811	.880	

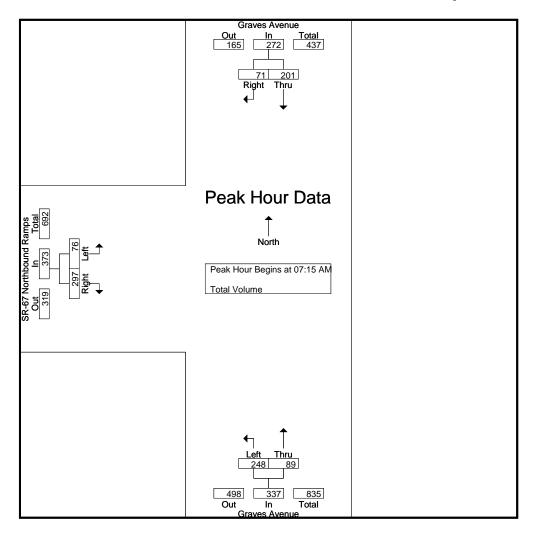
City of El Cajon N/S: Graves Avenue

E/W: SR-67 Northbound Ramps

Weather: Clear

File Name : 01_ECJ_Graves_67N AM Site Code : 23522559

Start Date : 6/9/2022 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

PEAK HOULIOLEACH AL	privacii begi	iio ai.							
	07:45 AM			07:15 AM			07:45 AM		
+0 mins.	63	17	80	76	23	99	21	94	115
+15 mins.	35	15	50	58	25	83	20	69	89
+30 mins.	61	15	76	65	19	84	18	67	85
+45 mins.	58	18	76	49	22	71	26	69	95
Total Volume	217	65	282	248	89	337	85	299	384
% App. Total	77	23		73.6	26.4		22.1	77.9	
PHF	.861	.903	.881	.816	.890	.851	.817	.795	.835

Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878 (951)268-6268

City of El Cajon N/S: Graves Avenue E/W: SR-67 Northbound Ramps

Weather: Clear

File Name : 01_ECJ_Graves_67N PM Site Code : 23522559 Start Date : 6/9/2022 Page No : 1

Groups Printed- Total Volume

 				roups Prin	<u>tea- rotai v</u>	olume				
	Gı	raves Aven	ue	G	Fraves Aven	ue	SR-67 I	Northbound	l Ramps	
	Ç	Southbound	d		Northbound	t				
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	60	23	83	90	53	143	38	95	133	359
04:15 PM	87	36	123	65	54	119	57	102	159	401
04:30 PM	73	18	91	93	62	155	37	84	121	367
 04:45 PM	79	24	103	74	62	136	55	92	147	386
 Total	299	101	400	322	231	553	187	373	560	1513
05:00 PM	91	28	119	96	56	152	37	81	118	389
05:15 PM	80	22	102	100	72	172	37	87	124	398
05:30 PM	80	16	96	81	57	138	36	82	118	352
 05:45 PM	54	15	69	68	50	118	24	98	122	309
 Total	305	81	386	345	235	580	134	348	482	1448
Grand Total	604	182	786	667	466	1133	321	721	1042	2961
Apprch %	76.8	23.2		58.9	41.1		30.8	69.2		
Total %	20.4	6.1	26.5	22.5	15.7	38.3	10.8	24.3	35.2	

	G	raves Aven	ue	G	raves Aver	nue	SR-67 I	d Ramps				
		Southbound	d	Northbound			Eastbound					
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total		
Peak Hour Analysis Fr	om 04:00 PN	I to 05:45 F	PM - Peak 1 o	of 1				_				
Peak Hour for Entire In	Hour for Entire Intersection Begins at 04:15 PM											
04:15 PM	87	36	123	65	54	119	57	102	159	401		
04:30 PM	73	18	91	93	62	155	37	84	121	367		
04:45 PM	79	24	103	74	62	136	55	92	147	386		
05:00 PM	91	28	119	96	56	152	37	81	118	389		
Total Volume	330	106	436	328	234	562	186	359	545	1543		
% App. Total	75.7	24.3		58.4	41.6		34.1	65.9				
PHF	.907	.736	.886	.854	.944	.906	.816	.880	.857	.962		

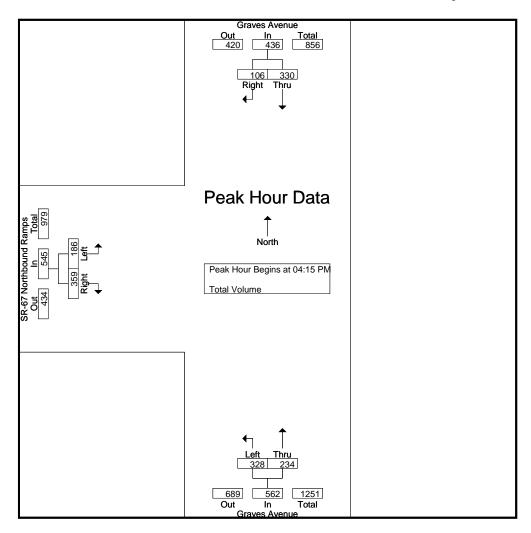
City of El Cajon N/S: Graves Avenue

E/W: SR-67 Northbound Ramps

Weather: Clear

File Name: 01_ECJ_Graves_67N PM

Site Code : 23522559 Start Date : 6/9/2022 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

Feak Hour for Each Ap	privacii begii	15 al.							
	04:15 PM			04:30 PM			04:00 PM		
+0 mins.	87	36	123	93	62	155	38	95	133
+15 mins.	73	18	91	74	62	136	57	102	159
+30 mins.	79	24	103	96	56	152	37	84	121
+45 mins.	91	28	119	100	72	172	55	92	147
Total Volume	330	106	436	363	252	615	187	373	560
% App. Total	75.7	24.3		59	41		33.4	66.6	
PHF	.907	.736	.886	.908	.875	.894	.820	.914	.881

Site Code: 999-22559

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Graves Avenue
B/ State Route 67 Northbound Ramps - Broadway 24 Hour Directional Volume Count

Start	07-Jun-22		bound		Totals		bound		Totals		ed Totals
Time 12:00	Tue	Morning 17	Afternoon 140	Morning	Afternoon	Morning 10	Afternoon 150	Morning	Afternoon	Morning	Afternoon
12:15		9	123			15	197				
12:30		8	157			9	164				
12:45		8	137	42	557	4	151	38	662	80	1219
01:00		6	127	72	007	9	153	00	002	00	1210
01:15		2	132			5	165				
01:30		6	123			4	166				
01:45		7	105	21	487	5	160	23	644	44	1131
02:00		3	131			6	160				
02:15		5	138			3	149				
02:30		5	144			3	127				
02:45		9	135	22	548	4	169	16	605	38	1153
03:00		2	148			4	169				
03:15		5	129			7	162				
03:30		9	147			9	166				
03:45		9	137	25	561	17	155	37	652	62	1213
04:00		4	138			14	181				
04:15		13	141			13	149				
04:30		23	151			15	156				
04:45		17	125	57	555	23	160	65	646	122	1201
05:00		17	143			23	129	-	0.10		
05:15		40	133			39	132				
05:30		37	124			47	128				
05:45		48	119	142	519	79	144	188	533	330	1052
06:00		39	111			63	103				
06:15		67	124			76	118				
06:30		69	113			81	107				
06:45		67	91	242	439	93	106	313	434	555	873
07:00		97	98			94	103				
07:15		98	90			117	86				
07:30		110	98			124	102				
07:45		118	83	423	369	130	88	465	379	888	748
08:00		85	91			121	86				
08:15		89	87			104	75				
08:30		97	88			126	74				
08:45		90	74	361	340	146	58	497	293	858	633
09:00		81	59			134	49				
09:15		113	54			125	51				
09:30		99	57			141	39				
09:45		110	37	403	207	158	43	558	182	961	389
10:00		111	31			151	46				
10:15		116	26			150	36				
10:30		123	32			162	33				
10:45		119	27	469	116	185	20	648	135	1117	251
11:00		130	23			179	17				
11:15		133	18			187	24				
11:30		114	17	405	2.	181	13			400=	
11:45		115	23	492	4770	168	10	715	64	1207	145
Total		2699	4779	2699	4779	3563	5229	3563	5229	6262	10008
Combined		74	78	74	78	87	92	87	92	162	270
Total AM Peak		10:30				10·4F					
AM Peak Vol.	-	505	-	-	-	10:45 732	-	-	-	-	-
P.H.F.	-	0.949	-	-	-	0.979	-	-	-	-	-
P.n.r. PM Peak	-	0.545	03:45	-	_	0.979	02:45	=	-	=	=
Vol.	-	-	567	-	<u>-</u>	<u>-</u>	666	<u>-</u>	-	<u>-</u>	-
P.H.F.	-	-	0.939	-	-	_	0.985	_	-	_	-
1 .11.17.			0.333				0.900				
Percentag e		36.1%	63.9%			40.5%	59.5%				
ADT/AADT	Δ	DT 16,270	ΔΔ	DT 16,270							
, 10 1, AAD 1	^	21 10,210	77.7								

Site Code: 999-22559

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Hart Drive E/ Graves Avenue 24 Hour Directional Volume Count

Site Code: 999-22559

Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Graves Avenue
N/ State Route 67 Northbound Ramps 24 Hour Directional Volume Count

Start	07-Jun-22	North	oound	Hour	Totals	South	bound	Hour	Totals	Combine	ed Totals
Time	Tue	Morning	Afternoon		Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	
12:00		10	51	_		2	47	_		_	
12:15		6	37			5	51				
12:30		6	51			3	53				
12:45		0	43	22	182	2	72	12	223	34	405
01:00		4	47			3	46				
01:15		5	55			2 2	63				
01:30		3	57	45	040	2	48	40	000	0.5	405
01:45		3	60	15	219	3	49	10	206	25	425
02:00		1	52			0	47 57				
02:15 02:30		3 4	55 70			0 4	57 53				
02:45		2	58	10	235		64	7	221	17	456
03:00		0	67		200	3 3 2	69	•	22 1	.,	400
03:15		ĭ	52			2	68				
03:30		1	71			6	68				
03:45		1	79	3	269	6	64	17	269	20	538
04:00		1	67			4	70				
04:15		1	54			5	62				
04:30		4	55			11	79				
04:45		4	46	10	222	10	66	30	277	40	499
05:00		2	67			12	66				
05:15		5	69			24	55				
05:30		6	56			24	50				
05:45		15	45	28	237	16	44	76	215	104	452
06:00		9	50			23	42				
06:15		12	50			22	30				
06:30		14	30			34	34				
06:45		29	34	64	164	38	43	117	149	181	313
07:00		14	32			46	31				
07:15		23	36			57 65	30				
07:30		31	35	400	404	65 60	21	007	404	242	000
07:45		38	31	106	134	69 67	22	237	104	343	238
08:00 08:15		26 28	40			47	29 20				
08:30		26 29	36 26			53	26				
08:45		23	27	106	129	36	17	203	92	309	221
09:00		23	23	100	120	41	23	200	02	000	221
09:15		33	28			30	14				
09:30		29	32			38	18				
09:45		51	28	136	111	56	12	165	67	301	178
10:00		39	19			45	17				
10:15		44	12			37	13				
10:30		41	17			52	7				
10:45		47	18	171	66	56	10	190	47	361	113
11:00		52	6			57	7				
11:15		62	4			45	7				
11:30		32	10			53	2				
11:45		42	14	188	34	58	3	213	19	401	53
Total		859	2002	859	2002	1277	1889	1277	1889	2136	3891
Combined		286	61	28	61	31	66	31	66	60:	27
Total AM Peak	_	10:30	_			07:15				_	
Vol.	_	202	-	-	-	258	<u>-</u>	-	-	-	- -
P.H.F.	_	0.815	-	-	-	0.935	_	_	-	-	-
PM Peak	_	-	03:30	_	-	5.555 -	04:00	_	_	_	_
Vol.	_	-	271	_	-	_	277	_	_	_	_
P.H.F.			0.858				0.877				
Percentag		30.0%	70.0%			40.3%	59.7%				
e				ADT 0 00=		.0.070	55.1 /0				
ADT/AADT	4	ADT 6,027	А	ADT 6,027							

Site Code: 999-22559

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Graves Avenue N/ Hart Drive 24 Hour Directional Volume Count

• GRAVES AVENUE AT SR-67 SYNCHRO WORKSHEETS:

➤ Existing Traffic Conditions

➤ Existing plus Project Traffic Conditions

	۶	•	4	†	ļ	1
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	*	77	7	414	^	7
Traffic Volume (veh/h)	76	297	248	89	201	71
Future Volume (veh/h)	76	297	248	89	201	71
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	338	282	101	228	81
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	354	1087	681	357	640	285
Arrive On Green	0.20	0.20	0.19	0.19	0.18	0.18
Sat Flow, veh/h	1781	2790	3563	1870	3647	1585
Grp Volume(v), veh/h	86	338	282	101	228	81
Grp Sat Flow(s), veh/h/ln	1781	1395	1781	1870	1777	1585
Q Serve(g_s), s	1.1	2.3	1.9	1.3	1.6	1.2
Cycle Q Clear(g_c), s	1.1	2.3	1.9	1.3	1.6	1.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	354	1087	681	357	640	285
V/C Ratio(X)	0.24	0.31	0.41	0.28	0.36	0.28
Avail Cap(c_a), veh/h	1214	2434	2555	1341	2421	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	5.9	9.9	9.6	10.0	9.9
Incr Delay (d2), s/veh	0.4	0.2	0.4	0.4	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7	0.6	0.4	0.5	0.3
Unsig. Movement Delay, s/vel		0.1	0.0	0.7	0.0	0.0
LnGrp Delay(d),s/veh	9.8	6.1	10.3	10.1	10.4	10.4
LnGrp LOS	9.0 A	Α	10.3 B	В	10.4 B	10.4 B
-	424	^	D		309	В
Approach Vol, veh/h				383		
Approach Delay, s/veh	6.8			10.2	10.4	
Approach LOS	Α			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		9.3		9.5		9.0
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		19.0		19.0
Max Q Clear Time (g_c+l1), s		3.9		4.3		3.6
Green Ext Time (p_c), s	<u>'</u>	1.4		1.4		1.5
· · · · ·		1.7		1.7		1.0
Intersection Summary						
HCM 6th Ctrl Delay			9.0			
HCM 6th LOS			Α			
Notes						

EXAM.syn Synchro 11 Report 07/27/2022

Traffic Volume (veh/h) 186 359 328 23 Future Volume (veh/h) 186 359 328 23 Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.00	1 1 1 1 1 1 1 1 1 1	^	SBD
Lane Configurations 1 2 1 1 2 1 2 2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3	1 1 1 1 1 1 1 1 1 1	^	וטכ
Traffic Volume (veh/h) 186 359 328 23 Future Volume (veh/h) 186 359 328 23 Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No No No	234 330		7
Future Volume (veh/h) 186 359 328 23 Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No No No			106
Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No No No			106
Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.00 Work Zone On Approach No No	0 0		0
Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No N			1.00
Work Zone On Approach No N	.00 1.00		1.00
• • • • • • • • • • • • • • • • • • • •	No No		1.00
7 taj Odi 10 to 10 10 10 10 10 10 10 10 10 10 10 10 10			870
Adj Flow Rate, veh/h 194 374 342 24	244 344		110
	.96 0.96		0.96
Percent Heavy Veh, % 2 2 2	2 2		2
	47 734		327
Arrive On Green 0.21 0.21 0.24 0.2			0.21
Sat Flow, veh/h 1781 2790 3563 187			585
1 17	244 344		110
Grp Sat Flow(s), veh/h/ln 1781 1395 1781 187			585
10— /·	3.9 2.9		2.0
, (O-),	3.9 2.9		2.0
Prop In Lane 1.00 1.00 1.00			1.00
Lane Grp Cap(c), veh/h 369 1245 852 44	47 734	734 32	327
V/C Ratio(X) 0.53 0.30 0.40 0.5	.55 0.47	0.47 0.3	0.34
Avail Cap(c_a), veh/h 980 2201 2062 108			872
$1 \times 2 \times 7$.00 1.00		1.00
	.00 1.00		1.00
	1.5 12.0		11.7
	1.0 12.0		0.6
• • • • • • • • • • • • • • • • • • • •	0.0 0.0		0.0
	1.4 1.0		0.6
	1.4	1.0 0.	0.0
Unsig. Movement Delay, s/veh LnGrp Delay(d),s/veh 13.4 6.3 11.4 12	0.5 10.5	10.5 10	12.3
1 3(),	2.5 12.5		
LnGrp LOS B A B	B B		В
11	86 454		
	1.9 12.5		
Approach LOS A	B B	В	
Timer - Assigned Phs 2	4		6
	1.2		11.1
, , , , , , , , , , , , , , , , , , ,	4.0		4.0
	9.0		19.0
	5.3		4.9
()	1.8		2.2
u = 7·	1.0	Ζ.	Z.Z
Intersection Summary			
HCM 6th Ctrl Delay 10.9			
HCM 6th LOS B			
Notes			

EXPM.syn Synchro 11 Report 07/27/2022

	٨	7	1	1	ļ	1
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	*	77	7	414	^	7
Traffic Volume (veh/h)	105	297	248	108	214	75
Future Volume (veh/h)	105	297	248	108	214	75
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		•	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	338	282	123	243	85
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0.00	0.00	0.00	0.00	0.00	0.00
	358	1098	686	360	656	293
Cap, veh/h						
Arrive On Green	0.20	0.20	0.19	0.19	0.18	0.18
Sat Flow, veh/h	1781	2790	3563	1870	3647	1585
Grp Volume(v), veh/h	119	338	282	123	243	85
Grp Sat Flow(s),veh/h/ln	1781	1395	1781	1870	1777	1585
Q Serve(g_s), s	1.6	2.4	2.0	1.6	1.7	1.3
Cycle Q Clear(g_c), s	1.6	2.4	2.0	1.6	1.7	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	358	1098	686	360	656	293
V/C Ratio(X)	0.33	0.31	0.41	0.34	0.37	0.29
Avail Cap(c_a), veh/h	1189	2400	2503	1314	2372	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.7	6.0	10.1	9.9	10.2	10.0
Incr Delay (d2), s/veh	0.5	0.0	0.4	0.6	0.3	0.5
	0.0	0.2	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh						
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.6	0.5	0.5	0.4
Unsig. Movement Delay, s/veh		0.4	40.5	40 =	40.5	40 =
LnGrp Delay(d),s/veh	10.3	6.1	10.5	10.5	10.5	10.5
LnGrp LOS	В	A	В	В	В	В
Approach Vol, veh/h	457			405	328	
Approach Delay, s/veh	7.2			10.5	10.5	
Approach LOS	Α			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		9.5		9.7		9.3
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		19.0		19.0
Max Q Clear Time (g_c+l1), s		4.0		4.4		3.7
Green Ext Time (p_c), s		1.5		1.5		1.6
Intersection Summary						
HCM 6th Ctrl Delay			9.2			
HCM 6th LOS			Α.Δ			
Notes						

EXWPAM.syn Synchro 11 Report 07/27/2022

are Configurations raffic Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 20 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1		٨	7	4	1	ļ	1
are Configurations raffic Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 20 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	Movement	EBL	EBR	NBL	NBT	SBT	SBR
raffic Volume (veh/h)							
tuture Volume (veh/h)							
Initial Q (Qb), veh							
Ped-Bike Adj(A_pbT)	. ,						
Arriving Bus, Adj						· ·	
Nork Zone On Approach dig Sat Flow, veh/h/ln No No No dig Sat Flow, veh/h/ln 1870					1 00	1.00	
dij Sat Flow, veh/h/ln			1.00	1.00			1.00
Adj Flow Rate, veh/h			1870	1870			1870
leak Hour Factor	•						
Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2							
Rap, veh/h 380 1267 858 450 769 343 Agrive On Green 0.21 0.21 0.24 0.24 0.22 0.22 Bat Flow, veh/h 1781 2790 3563 1870 3647 1585 Bry Volume(v), veh/h 215 374 342 257 383 122 Bry Sat Flow(s), veh/h 1781 1395 1781 1870 1777 1585 Reve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Sycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Brop In Lane 1.00 1.00 1.00 1.00 1.00 Jord In Lane 1.00 1.00 1.00 1.00 1.00 Jord In Lane 1.00 1.00 1.00 1.00 1.00 Jord In Lane 1.00 1.00 1.00 1.00 1.00 1.00 Jord In Lane 1.00 1.00 1.00							
Arrive On Green							
that Flow, veh/h that Jago 4.4 that See See See See See See See See See Se							
Gry Volume(v), veh/h 215 374 342 257 383 122 Gry Sat Flow(s),veh/h/ln 1781 1395 1781 1870 1777 1585 Q Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), veh/h 380 1267 858 450 769 343 C/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Wail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00							
Sirp Sat Flow(s), veh/h/ln 1781 1395 1781 1870 1777 1585 Q Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), veh/h 380 1267 858 450 769 343 L/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 L/C Ratio(<u> </u>						
Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 929 2126 1955 1027 1853 826 Cycle Q Clear(s), veh/h 929 2126 1955 1027 1853 826 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear Time (g_c+I1), veh/h 1.4 1.1 0.9 1.6 1.1 0.7 Cycle Q Clear Time (g_c+I1), veh/h 1.5 1.5 1.5 1.5 Cycle Q Clear Time (g_c+I1), veh/h 1.5 1.5 1.5 Cycle Q Clear Time (g_c+I1), veh/h 1.5 1.5 1.5 Cycle Q Clear Time (g_c+I1), veh/h 1.5 1.5 Cycl	Grp Volume(v), veh/h						
Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4	Grp Sat Flow(s),veh/h/ln						
Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Prop In Lane 1.00 1.00 1.00 1.00 ane Grp Cap(c), veh/h 380 1267 858 450 769 343 I/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00	Q Serve(g_s), s	3.9	3.1	2.9	4.4	3.4	2.4
1.00 1.00	Cycle Q Clear(g_c), s	3.9	3.1	2.9	4.4	3.4	2.4
ane Grp Cap(c), veh/h 380 1267 858 450 769 343 7/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Prop In Lane						1.00
I/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Ipstream Filter(I) 1.00 <td></td> <td></td> <td></td> <td></td> <td>450</td> <td>769</td> <td></td>					450	769	
Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 1000 1000 1.000							
CM Platoon Ratio							
Destream Filter(I)							
Iniform Delay (d), s/veh 12.8 6.3 11.6 12.2 12.5 12.1 ncr Delay (d2), s/veh 1.3 0.1 0.3 1.1 0.5 0.6 nitial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.							
ncr Delay (d2), s/veh ncr Delay (d2), s/veh ncr Delay (d3),s/veh ncr Del	,						
nitial Q Delay(d3),s/veh 0.0 10.0 12.7 12.5 13.0 12.7 12.7 12.5 13.0 12.7 12.5 13.0 12.7 12.5 13.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Sile BackOfQ(50%),veh/ln 1.4 1.1 0.9 1.6 1.1 0.7 Insig. Movement Delay, s/veh 14.1 6.4 11.9 13.3 13.0 12.7 InGrp LOS B A B </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Insig. Movement Delay, s/veh Id.1 Id.1 Id.1 Id.2 Id.3 Id.3 Id.4 Id.5							
### Indept Delay(d),s/veh ### 14.1		1.4	1.1	0.9	1.6	1.1	0.7
B A B B B B B B B B					10.5	16.5	4.5 =
Spproach Vol, veh/h S89 S99 S05 Spproach Delay, s/veh 9.2 12.5 13.0 Spproach LOS A B B Simer - Assigned Phs 2 4 6 Shs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+I1), s 6.4 5.9 5.4 Streen Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
Part	LnGrp LOS		A	B			<u>B</u>
B B B B B Cimer - Assigned Phs 2 4 6 6 6 6 6 6 6 6 6	Approach Vol, veh/h	589			599	505	
Simer - Assigned Phs 2 4 6 Phs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 11.5 ICM 6th LOS B B	Approach Delay, s/veh	9.2			12.5	13.0	
Simer - Assigned Phs 2 4 6 Phs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 11.5 ICM 6th LOS B B	Approach LOS						
Phs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 ICM 6th Ctrl Delay 11.5 ICM 6th LOS B			2		1		6
Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 11.5 11.5 ICM 6th LOS B B 11.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
Max Q Clear Time (g_c+I1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
Creen Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
ICM 6th LOS B 11.5							
ICM 6th Ctrl Delay 11.5 ICM 6th LOS B	Green Ext Time (p_c), s		2.4		1.9		2.4
ICM 6th LOS B	Intersection Summary						
ICM 6th LOS B	HCM 6th Ctrl Delay			11.5			
loton	HCM 6th LOS						
	Notes						

EXWPPM.syn Synchro 11 Report 07/27/2022

Noise Impact Analysis for Hyundai of El Cajon

Located in the City of El Cajon, California

Prepared for:

El Cajon Hyundai Mr. John Keifer 1385 East Main Street El Cajon, CA 92021

Prepared by:

Roma Stromberg, M.S.

Roma Environmental

CEQA, NEPA, Noise and Air Quality roma@romaenvironmental.com 951-544-3170

August 17, 2022

Table of Contents

nd Setting	
and Objectives	1
ocation	1
d Project	1
Noise Receptors	1
ration Fundamentals	4
nd Noise	4
escriptors	6
n Fundamentals	8
Environment	9
Land Uses and Sensitive Receptors	
Noise Measurements	9
tting	11
Cajon General Plan	
Cajon Municipal Code	
of San Diego	
thodology and Impact Analysis	14
ology	14
is and Findings	16
	26
	sis and rindings

Appendix A – Larson Davis LxT Output Data

Appendix B – SoundPLAN Input/Output

Appendix C – Construction Noise Calculations

Appendix D – Groundborne Vibration Calculations

List of Tables

Table 1.	Typical Noise Levels	7
Table 2.	Noise Measurement Results	9
Table 3.	City of El Cajon Noise Standards	12
Table 4.	Guideline Vibration Annoyance Potential Criteria	13
Table 5.	Guideline Vibration Damage Potential Criteria	13
Table 6.	Equipment Noise Emissions and Acoustical Usage Factor	17
Table 7.	Construction Noise at Sensitive Receptors North of the Project Site	19
Table 8.	Construction Noise at Receptors East of the Project Site	20
List of	Figures	
Figure 1.	Project Location Map	2
Figure 2.	Site Plan	3
Figure 3.	Common Noise Sources	5
Figure 4.	Noise Measurement Locations and Ambient Noise Levels	10
Figure 5.	Operational Noise Levels (dBA, Leq)	23
Figure 6.	Operational Noise Contours (dBA, Leq)	24
Figure 7.	Gillespie Field Noise Contour Map	25

I. Introduction and Setting

A. Purpose and Objectives

The purpose of this report is to provide an assessment of the noise and vibration impacts that may occur with the development of the proposed car dealership and to identify mitigation measures that may be necessary to reduce those impacts. The objectives of the study include:

- documentation of existing noise conditions
- discussion of noise modeling methodology and procedures
- analysis of noise and vibration generated by the construction of the project
- analysis and discussion of potential traffic noise impacts to the proposed project
- analysis of noise affecting nearby sensitive receptors due to increased traffic produced by the project
- recommendations for mitigation measures

B. Project Location

The project site is located at 1155 Graves Avenue in the City of El Cajon. The vicinity map showing the project location is provided on Figure 1.

C. Proposed Project

The 1.6-acre project site is proposed to be developed with a Hyundai dealership. The proposed 36,989 square foot building will include a showroom, offices, a parts department, a service department, a service drive, and an express lube. Express lube doors will be used for vehicle access but will be kept closed. No impact equipment or air compressors will be utilized in the express lube area. A car wash is proposed in a separate building. Figure 2 illustrates the project site plan. The proposed site plan is shown in Figure 2.

D. <u>Sensitive Noise Receptors</u>

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas. The nearest sensitive receptors to the project site are single-family residential properties located to the north and east of the project site.

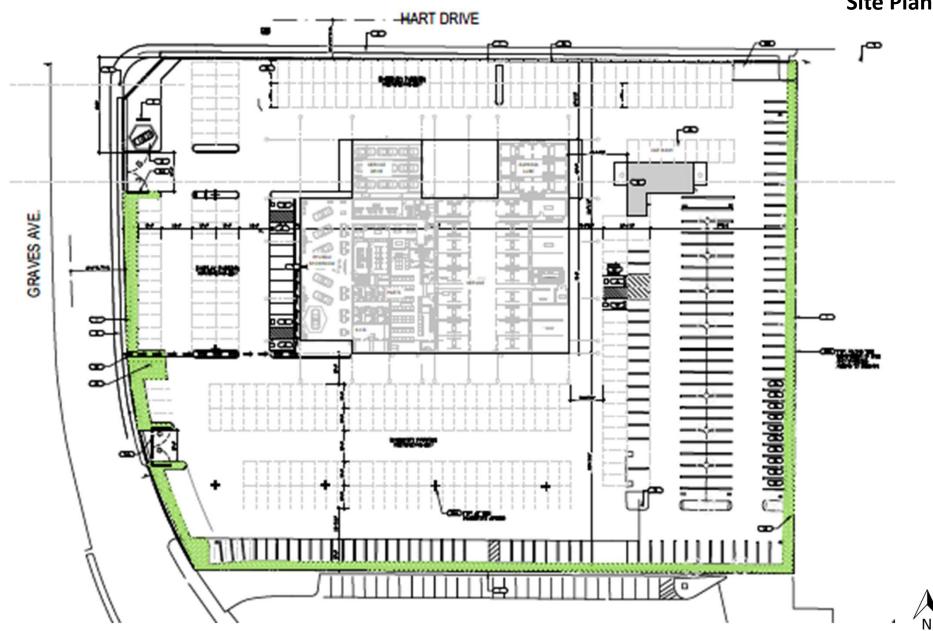
Figure 1
Project Location





Figure 2

Site Plan



II. Noise and Vibration Fundamentals

A. Sound and Noise

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. Common noise sources and their associated noise levels are shown in Figure 3.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound, with associated factors summarized below.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness), with a low-frequency sound perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz). A frequency of 250 cycles per second, for example, is referred to as 250 Hz), with higher frequencies sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 and 20,000 Hz (or 20 kHz).

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa), with one mPa representing approximately one hundred billionth of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of audible sound is about 0 dB for a healthy human ear, which corresponds to 20 mPa.

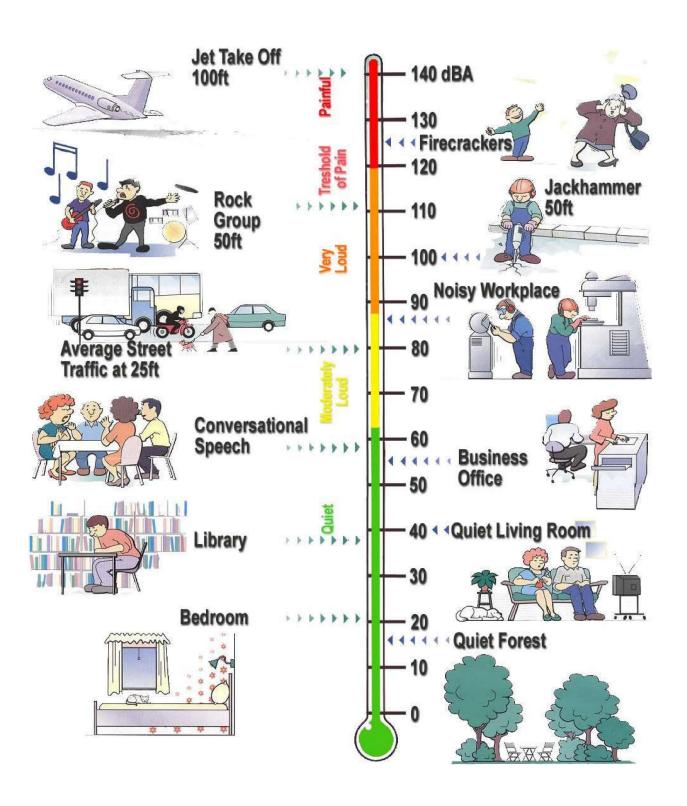
Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of six dB for each doubling of distance from a point source. Sound levels from a line source attenuate at a rate of three dB for each doubling of distance.

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense/deep woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver

Figure 3

Common Noise Levels



will typically result in at least five dB of noise reduction, with taller barriers providing increased noise reduction. Vegetation, such as highway landscaping, between the source and receiver is rarely effective in reducing noise, as it does not create a solid barrier.

Human Perception of Noise

The decibel scale alone does not adequately characterize how humans perceive noise, as the dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited in the range of audible frequencies, as well as in the way it perceives the SPL within that range. In general, people are most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. An "Aweighted" sound level (expressed in units of dBA) can then be calculated from this information. Noise levels are typically reported in terms of A-weighted decibels or dBA. Table 1, Typical A-weighted Noise Levels, describes levels for various noise sources.

B. Noise Descriptors

Noise in the daily human environment fluctuates over time; these changes can be minor or substantial, depending on individual factors. Specifically, noise fluctuations can be influenced by conditions such as: (1) whether noise levels occur in regular or random patterns; (2) if noise level fluctuations are rapid or slow; and (3) if noise levels vary widely or are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels, with the following noise descriptors most commonly used in transportation noise analysis.

Equivalent Sound Level (Leq)

Leq represents an average of the sound energy occurring over a specified period. In effect, Leq is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The one-hour A-weighted equivalent sound level (Leq[h]), for example, is the energy average of A-weighted sound levels occurring during a one-hour period. One hour is the normal (default) assumed time period for Leq unless stated otherwise.

Percentile-Exceeded Sound Level (Lxx)

 L_{XX} represents the sound level exceeded for a given percentage of a specified period. For example, L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time.

Maximum Sound Level (Lmax)

Lmax is the maximum sound level measured during a specified time period with "slow/1-second" time-averaging.

Day-Night Level (Ldn)

Ldn is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 PM and 7 AM

Community Noise Equivalent Level (CNEL)

Similar to Ldn, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10 PM and 7 AM, and a 5-dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 PM and 10 PM.

Table 1. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet fly-over at 1,000 feet		
	100	
Gas lawn mower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph*		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: California Department of Transportation, 2013.

C. Vibration Fundamentals

The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Raleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. Compression waves, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. Shear waves, or S-waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation".

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal in inches per second. The RMS of a signal is the average of the squared amplitude of the signal in vibration decibels (VdB), ref one micro-inch per second. The Federal Railroad Administration uses the abbreviation "VdB" for vibration decibels to reduce the potential for confusion with sound decibel.

PPV is appropriate for evaluating the potential of building damage and VdB is commonly used to evaluate human response. Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors, L_{eq} and L_{max} can be used to describe the average vibration and the maximum vibration level observed during a single vibration measurement interval.

III. Existing Noise Environment

A. Existing Land Uses and Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple family residential, including transient lodging, motels and hotel uses make up the majority of these areas. Sensitive receptors that may be affected by project generated noise include the single-family residential dwelling units located east of the project site and multiple family residential units located north of the project site.

B. Ambient Noise Measurements

An American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model LxT sound level meter was used to document existing ambient noise levels at six locations in the project vicinity (see Figure 4).

As shown in Table 2, existing noise levels in the project vicinity range between 58.5 and 65.6 dBA $L_{\rm eq}$. Noise measurement field sheets and data are provided in Appendix A.

Existing Ambient Noise Levels (dBA) Name **Time Period** L_{eq} L_{25} L_{50} L_{max} L_2 L₈ NM1 2:41 -2:46 PM 65.6 80.9 74.2 67.5 64.7 63.2 NM2 3:02-3:17 PM 61.4 80.1 68.8 64.4 59.7 57.7 NM3 3:23-3:38 PM 58.5 73.0 66.8 62.4 57.2 55.6 NM4 3:45-4:00 PM 59.5 74.0 68.0 63.7 57.6 55.0 77.1 NM₅ 4:16-4:33 PM 61.6 71.2 66.8 58.4 55.1 NM6 4:57-5:12 PM 62.7 83.0 68.0 63.5 61.3 59.9

Table 2. Noise Measurement Results

Figure 4
Noise Measurement Locations



NM = Short Term Noise Measurement (##.#) = Noise level in dBA, Leq

IV. Regulatory Setting

The proposed project may impact sensitive receptors located within the jurisdiction of the City of El Cajon (single family residences located east of the project site) as well as sensitive receptors located within the County of San Diego (multiple family residences located north of the project site).

A. City of El Cajon General Plan

General Plan Policy 8-3.8 states that the City may require site design considerations such as increased setbacks, sound attenuating walls and landscaping, and may also require building design considerations such as type of construction, insulation, and orientation of building openings in order to minimize noise impacts from noise sources.

B. City of El Cajon Municipal Code

1. Construction Noise

Per section 17.115130(C)(3) of the City of El Cajon Municipal Ordinance it is unlawful for any person within any residential zone, or within a radius of five hundred (500) feet from any residential zone, to operate equipment or perform any outside construction, maintenance or repair work on buildings, structures, landscapes or related facilities, or to operate any pile driver, power shovel, pneumatic hammer, power hoist, leaf blower, mower, or any other mechanical device, between the hours of 7 p.m. of one (1) day and 7 a.m. of the next day in such a manner that a reasonable person of normal sensitivities residing in the area is caused discomfort or annoyance.

The ordinance above does not specify a noise level limit at which a reasonable person of normal sensitivities would experience discomfort or annoyance. For purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2006) criteria will be used to establish significance thresholds. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA Leq averaged over an 8-hour period (Leq (8-hr); and the nighttime noise threshold is 70 dBA Leq (8-hr). For commercial uses, the daytime and nighttime noise threshold is 85 dBA Leq (8-hr). In compliance with the City's Code discussed in the previous paragraph, it is assumed that construction would not occur during the noise-sensitive nighttime hours.

2. Operational Noise

The City's Municipal Code section 9.44.010, Noise, prohibits loud and disturbing noises. It specifies that no person shall make, continue or cause to be made or continued, within the limits of the City, any loud, disturbing, or unusual noise which injures or endangers the health, peace, or safety of persons of reasonable sensibilities: provided, that this section shall not in any way affect, restrict or prohibit any activities incidental to scientific or industrial research or manufacturing, construction or repairing conducted in areas zoned for such purposes.

Per Table 3, the project is prohibited from causing noise levels to exceed 50 dBA Leq between 7:00 AM and 7:00 PM, 55 dBA Leq between the hours of 7:00 PM and 10:00 PM and 50 dBA Leq between the hours of 10:00 PM and 7:00 AM at the property line of the existing single-family residences located east of the project site.

Table 3. City of El Cajon Noise Standards

Zone	Time of Day	On-Hour Average Sound Level Decibel (Leq)
	7:00 AM to 7:00 PM	60
All residentially zoned properties	7:00 PM to 10:00 PM	55
	10:00 PM to 7:00 AM	50
All M-U and commercially zoned	7:00 AM to 7:00 PM	65
properties, except the C-M zoned	7:00 PM to 10:00 PM	60
properties	10:00 PM to 7:00 AM	55
All C-M and industrially zoned	Anytime	75
properties	Conditionally ¹	80

 $Source: City\ of\ El\ Cajon\ Municipal\ Ordinance\ 17.115.130 (C)\ Performance\ Standards.$

Notes:

3. Groundborne Vibration

City of El Cajon Municipal Ordinance Section 17.115.130(D), Performance Standards prohibits operations that could generate groundborne vibration that is harmful or injurious to the use or development of surrounding properties. Specifically, No vibration shall be permitted which is perceptible without instruments at any use along the property line on which such use is located. For the purpose of this determination, the boundary is the property line. This standard is prohibitive for use several commonly used pieces of construction equipment which may be perceptible if used within 75 feet of a property line. It is our professional opinion that this ordinance applies to operational vibration sources, i.e., generators, Heating and Ventilation (HVAC) equipment and pumps.

Caltrans has prepared one of the most comprehensive manuals (Caltrans 2020) regarding the analysis of groundborne vibration. It contains reasonable standards for both the potential to be annoying and the potential to result in structural damage. As shown in Table 4, vibration is considered to be distinctly perceptible at a PPV of 0.04 in/second and strongly perceptible at 0.10 peak particle velocity (PPV). Table 5 shows that the threshold at which there is a risk to "architectural" damage to historic and some older buildings is a peak particle velocity (PPV) of 0.25 in/sec, at older residential structures a PPV of 0.3 in/sec, and at new residential structures and modern commercial/industrial buildings a PPV of 0.5 in/sec.

Therefore, impacts would be significant if construction activities result in groundborne vibration of 0.3 PPV or higher at residential structures and/or a PPV of 0.5 or higher at commercial structures. Annoyance is temporary in nature and is not considered significant unless it is strongly perceptible and disturbs sleep or the use of sensitive equipment (approximately 0.1 PPV).

¹ Where outdoor noise levels are higher, additional noise attenuation measures, i.e., earphones for workers, increased insulation, double-pane glass, may make noise levels acceptable.

Table 4. Guideline Vibration Annoyance Potential Criteria

	Maximum PPV (in/sec)				
Human Response	Transient Sources	Continuous/Frequent Intermittent Sources			
Barely perceptible	0.04	0.01			
Distinctly perceptible	0.25	0.04			
Strongly perceptible	0.9	0.10			
Severe	2.0	0.4			

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 20, April 2020.

Notes:

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

Table 5. Guideline Vibration Damage Potential Criteria

	Maximum PPV (in/sec)		
Structure Condition	Transient Sources	Continuous/Frequent Intermittent Sources	
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08	
Fragile buildings	0.2	0.1	
Historic and some old buildings	0.5	0.25	
Older residential structures	0.5	0.3	
New residential structures	1.0	0.5	
Modern industrial/commercial buildings	2.0	0.5	

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 19, April 2020.

Notes:

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

C. County of San Diego

The properties located north of the project site are currently developed with multiple family residential dwelling units. The property has a zoning of Urban Residential (RU). The County of San Diego has adopted a guidance document¹ for the preparation of noise studies which establishes exterior noise level limits that apply to the transmission of noise from one property to another. The daytime noise standard (7:00 AM to 10:00 PM) to avoid impacts to properties zoned RU is 50 dBA Leq and the nighttime noise standard (10:00 PM to 7:00 AM) is 45 dBA Leq.

¹ Noise Guidelines and Report Formats. January 27,2009

V. Analytical Methodology and Impact Analysis

A. Methodology

1. FTA Construction Noise Calculations

Noise levels at nearby sensitive receptors due to project construction noise were calculated utilizing methodology presented in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) together with key construction parameters including: distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the project site. Distances to receptors were based on the acoustical center of the proposed construction activity. Construction noise levels were calculated for each phase.

2. SoundPLAN

The SoundPLAN acoustical modeling software was utilized to model project operational worst-case stationary noise impacts from the proposed project to adjacent sensitive uses (e.g., residences). SoundPLAN is capable of evaluating stationary noise sources (e.g., parking lots, drive-thru menus, carwash equipment, vacuums, etc.) and much more. The SoundPLAN software utilizes algorithms (based on the inverse square law) to calculate noise level projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. In addition to the information provided below, noise modeling input and outputs assumptions are provided in Appendix B.

Peak hour operational noise levels were modeled utilizing representative sound levels in the SoundPLAN model. Modeled noise sources include the parking lot noise, heating, and ventilation (HVAC) equipment and car wash noise. All noise sources were modeled to be in full operation for an entire hour. This is a conservative modeling effort, given that in actuality, several noise sources are not in operation continuously for an entire hour.

For the purposes of the modeling, it was assumed that the proposed dealership will not have outdoor amplification of music or voice, and all car maintenance and repair related stalls will be enclosed inside the proposed building. Express lube doors will be used for vehicle access but will be kept closed. No impact equipment or air compressors will be utilized in the express lube area. Other modeling assumptions are discussed below.

Car Wash Equipment Noise

The car wash drying system is by far the loudest noise source associated with the car wash tunnel. A sound power level representative sound pressure level of 103 dBA Leq at a distance of 10 (provided by the car wash manufacturer) was used to model car wash dryer noise. A point noise source was placed five feet from the opening of the end of the car wash tunnel at a height of eight feet to represent dryer noise. The dryer system was assumed to be operational for the entire period.

Parking Lots

Parking lot noise was calculated using SoundPLAN methodology. Specifically, the traffic volume of the parking lot is entered with the number of moves per parking bay, the hour, and the number of parking bays. The user defines whether the parking lots are for automobiles, motorcycles, or trucks, and the emission level of a parking lot is automatically adjusted accordingly. The values for the number of parking moves for each time slice is the number of parking moves per reference unit (most often per parking bay), averaged for the hour².

SoundPLAN utilizes parking lot noise emission levels from the 6th revised edition of the parking lot study "Recommendations for the Calculation of Sound Emissions of Parking Areas, Motorcar Centers and Bus Stations as well as of Multi-Story Car Parks and Underground Car Parks" published by the Bavarian Landesamt für Umwelt provides calculation methods to determine the emissions of parking lots.

The parking lot emission table documents the reference level (Lw,ref) from the parking lot study.

Lw, ref = Lw0 + KPA + KI + KD + KStrO + $10 \log(B) [dB(A)]$

With the following parameters:

Lw0 = Basic sound power, sound power level of one motion/per hour on P+R areas = 63 dB(A)

KPA = Surcharge parking lot type

KI = Surcharge for impulse character

KD = Surcharge for the traffic passaging and searching for parking bays in the driving lanes $2.5 * \lg (f * B-9)$

f = Parking bays per unit of the reference value

B = Reference value

KStrO = Surcharge for the road surface

HVAC

A rooftop HVAC plan is not available at the time of this analysis so the exact location and number of units per building were estimated. A noise reference level for a 5-Ton Carrier Heating and Cooling (HVAC) unit was utilized to represent rooftop 5 Ton Carrier HVAC units. HVAC units were assumed to be evenly spaced across the rooftop. The noise source height for each HVAC unit was assumed at 0.1 meter above the roof top. An average roof top height of thirty-five feet was utilized for modeling purposes.

3. Caltrans Transportation and Construction Vibration Guidance Manual

Groundborne vibration associated with project construction, at nearby sensitive receptors was modeled using methodologies and source amplitudes provided in the Caltrans Transportation and Construction Vibration Guidance Manual (2020).

Roma Environmental romaenvironmental.com

roma@romaenvironmental.com 951-544-3170

² SoundPLAN Essential 4.0 Manual. SoundPLAN International, LLC. May 2016.

VI. Impact Analysis and Findings

1. Construction Noise

The existing residential uses located north and east of the project site may be affected by short-term noise impacts associated with construction noise. Construction noise will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work. Construction phases will include demolition, site preparation, building construction, paving and architectural coating. Noise levels at nearby sensitive receptors due to project construction noise were calculated utilizing methodology presented in the FTA Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters (see Appendix C). Typical noise levels and usage factors associated with a variety of construction is presented in Table 6. Tables 7 and 8 present cumulative noise levels associated with each phase of construction at receptors located north and east of the proposed project.

As discussed previously, the City of El Cajon has not established a specific noise level limit at which a reasonable person of normal sensitivities would experience discomfort or annoyance. Therefore, for purposes of this analysis, the FTA criteria was used. For impacts to residential land uses, the daytime noise threshold is eighty dBA Leq averaged over an 8-hour period (Leq (8-hr); and the nighttime noise threshold is 70 dBA Leq (8-hr). As shown in Tables 7 and 8, construction noise is expected to range between 62.6 and 74.5 dBA Leq at the southern property line of the multiple family residences located north of the project site and between 59.6 to 71.5 dBA Leq at the western property line of the existing single family residential uses east of the project site and will not exceed the FTA daytime 80 dBA (8-hour) noise criteria. Impacts related to construction would be less than significant. In compliance with the City's Code discussed in the previous paragraph, it is assumed that construction would not occur during the noise-sensitive nighttime hours. Impacts would be less than significant. No mitigation is required.

Table 6. Equipment Noise Emissions and Acoustical Usage Factor

	Impact	Acoustical	Spec. Lmax @ 50ft	50ft (dBA,	No. of Actual Data Samples
Equipment Description	Device?	Use Factor (%)	(dBA, slow)	·	(Count)
All Other Equipment > 5 HP	No	50	85	-N/A-	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	-N/A-	0
Blasting	Yes	-N/A-	94	-N/A-	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-N/A-	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Forklift ^{2,3}	No	50	n/a	61	n/a
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	-N/A-	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydr. Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	-N/A-	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact hammer (hoe ram)	Yes	20	90	90	212

Table 6. Equipment Noise Emissions and Acoustical Usage Factor

				Actual	No. of
				Measured	Actual
	lman a st	Aggustical	Spec. Lmax		Data
Equipment Description	Impact Device?	Acoustical Use Factor (%)	@ 50ft (dBA, slow)	50ft (dBA, slow)	Samples (Count)
Pavement Scarafier	No.	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	50	85	77	9
Paving Equipment	No	50	85	77	9
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/chipping gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (Single Nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Shears (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	-N/A-	0
Tractor	No	40	84	-N/A-	0
Vacuum Excavator (Vac-truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5
Notes:	•		•		

Notes:

⁽¹⁾ Source: FHWA Roadway Construction Noise Model User's Guide January 2006.

⁽²⁾ Warehouse & Forklift Noise Exposure - NoiseTesting.info Carl Stautins, November 4, 2014 http://www.noisetesting.info/blog/carl-strautins/page-3/

⁽³⁾ Data provided Leq as measured at the operator. Sound Level at 50 feet is calculated using Inverse Square Law.

Table 7. Construction Noise at Sensitive Receptors North of the Project Site

Equipment Item	Noise Level at Property Line (Leq, dBA)
Demolition	
Sawzall	72.2
Excavators	71.3
Dozers	70.6
	74.5
Site Preparation	
Dozers	72.3
Tractors/Loaders/Backhoes	72.6
	72.6
Building Construction	
Cranes	61.6
Forklifts	49.3
Generator Sets	64.5
Welders	56.6
Tractors/Loaders/Backhoes	71.3
	72.7
Paving	
Cement and Mortar Mixers	64.6
Pavers	63.6
Rollers	62.6
	68.4
Architectural Coating	
Air Compressors	62.6

Table 8. Construction Noise at Receptors East of the Project Site

Equipment Item	Noise Level at Property Line (Leq, dBA)
Demolition	1
Sawzall	69.2
Excavators	68.4
Dozers	67.6
	71.5
Site Preparation	
Dozers	69.4
Tractors/Loaders/Backhoes	69.7
	69.7
Building Construction	
Cranes	58.7
Forklifts	46.4
Generator Sets	61.6
Welders	53.6
Tractors/Loaders/Backhoes	68.4
	69.7
Paving	
Cement and Mortar Mixers	61.6
Pavers	60.6
Rollers	59.6
	65.5
Architectural Coating	
Air Compressors	59.6

2. Operational Noise

Operational noise was modeled using the SoundPLAN noise model. The results shown in Figures 5 and 6, show that operational noise is expected to range between 38.6 to 58.0 at nearby sensitive receptor property lines and will not exceed the City of El Cajon Noise Ordinance standard of 60 dBA Leq. These findings are based on a specific car wash drying system (one fixed nozzle with a noise level of 88.5 dBA Leq at a distance of ten feet) (See Appendix B), or if an equivalent or a quieter system is utilized. This impact would be less than significant. No mitigation is required.

3. Groundborne Vibration

The most vibratory pieces of equipment expected to be utilized on the project site include a vibratory roller and a larger bulldozer. It is anticipated that the existing parking lot will be re-purposed and tools necessary for asphalt removal will not be used. The use of a vibratory roller and/or a large bulldozer however may be used as close as 105 feet to the multiple family residential land use property line to the north and as close as line 120 to the single-family property line to the east.

Groundborne vibration levels associated with the use of a vibratory roller could reach up to 0.02 PPV at the property line associated with the multiple family residential land uses to the north and up to 0.10 PPV at the property line pof the single-family residential land uses to the east. Groundborne associated with the large bulldozer would be less (see Appendix D).

As stated previously, vibration is considered to be distinctly perceptible at a PPV of 0.04 in/second and strongly perceptible at 0.10 peak particle velocity (PPV); and the threshold at which there is a risk to "architectural" damage to historic and some older buildings is a peak particle velocity (PPV) of 0.25 in/sec, at older residential structures a PPV of 0.3 in/sec, and at new residential structures and modern commercial/industrial buildings a PPV of 0.5 in/sec.

Groundborne vibration associated with project construction will not be perceptible at nearby sensitive receptors and will not occur during nighttime hours or affect sensitive equipment. Furthermore, project construction will not result in groundborne vibration levels that come close to the threshold for potential damage to structures. This impact would be less than significant. No mitigation is required.

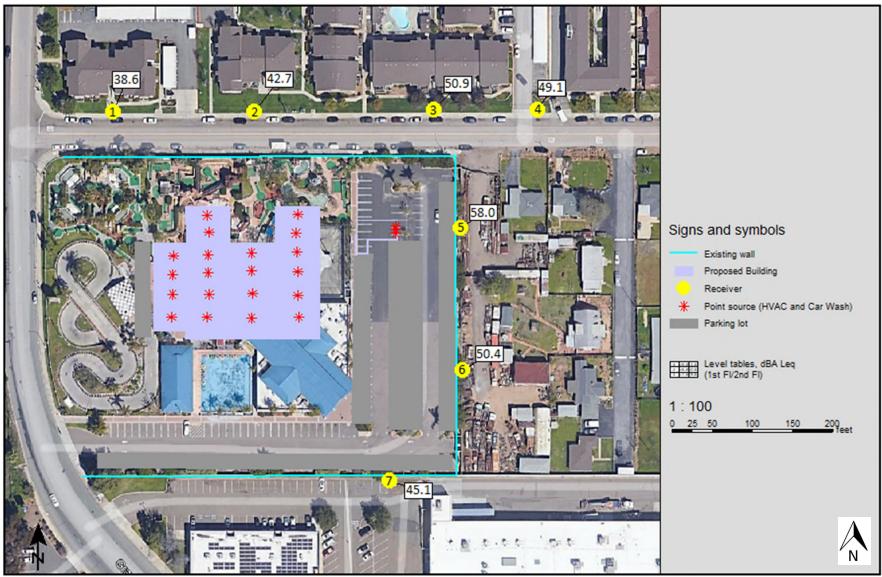
4. Airport/Aircraft Noise

The project site is located approximately 3,580 feet southwest of the Gillespie Field. As shown in Figure 7 the project site is not located within a 60 dBA CNEL or any louder noise contour associated with this airfield. However, the site is located within the airfield's avigation easement and overflight notification areas. Visitors and employees at the project site will occasionally be subject to aircraft overflight. However, review of data provided in

the Flight Aware online application³ indicates that aircraft in the vicinity of the project site would be at least 1,000 ft above mean sea level (AMSL). Impacts would be less than significant.

³ https://flightaware.com

Figure 5
Operational Noise Levels
dBA, Leq

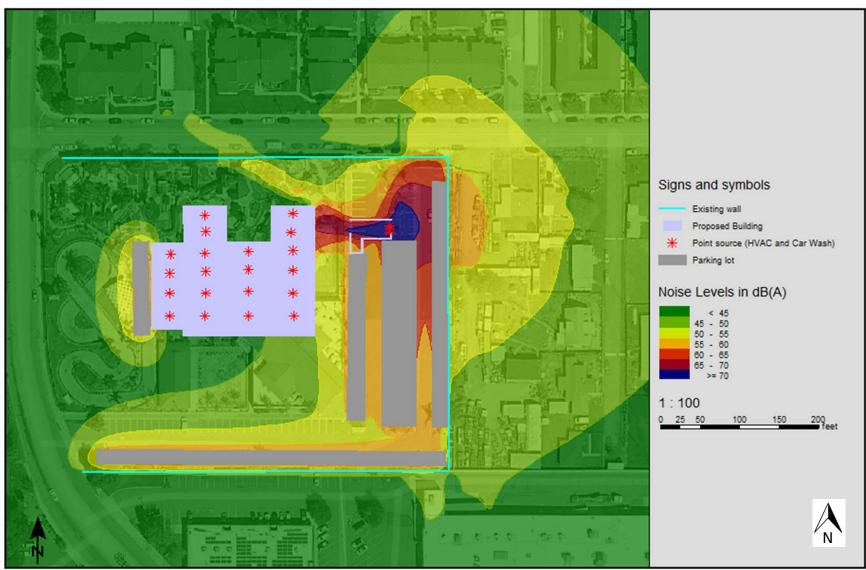


Roma Environmental

Figure 6

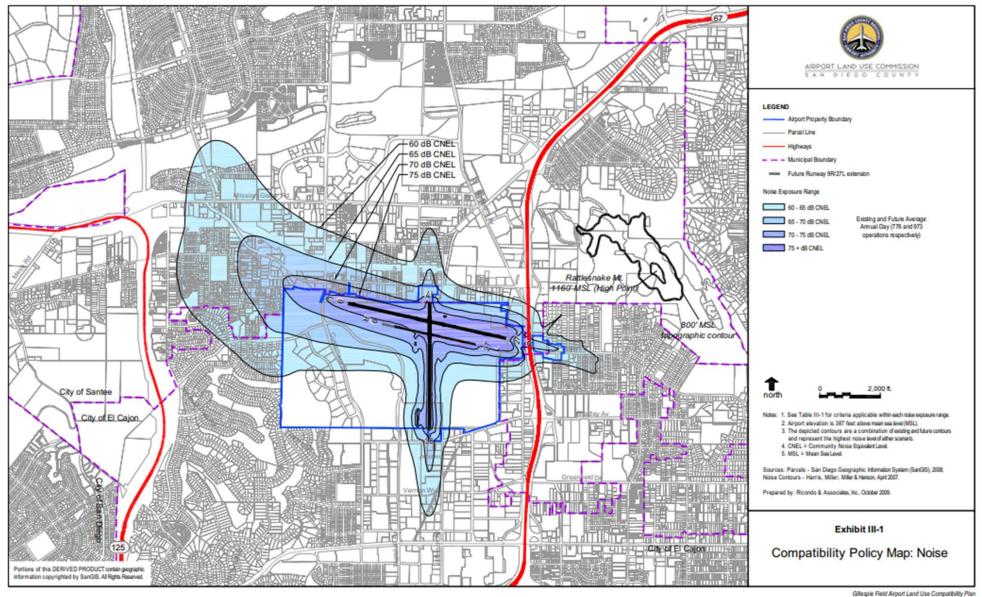
Operational Noise Contours

dBA, Leq



Roma Environmental

Figure 7 **Gillespie Field Noise Contour Map**



V. References

Airport Land Use Commission San Diego County

2010 Gillespie Field Airport Land Use Compatibility Plan

California Department of Transportation

Technical Noise Supplement to the Traffic Noise Analysis Protocol
 Transportation and Construction Vibration Guidance Manual

Cyril M. Harris

1991 Handbook of Acoustical Measurement and Noise Control.

El Cajon, City of

2000 General Plan

Zoning Ordinance

San Diego, County of

2011 San Diego County General Plan

APPENDIX A

Larson Davis 820 Noise Measurement Data

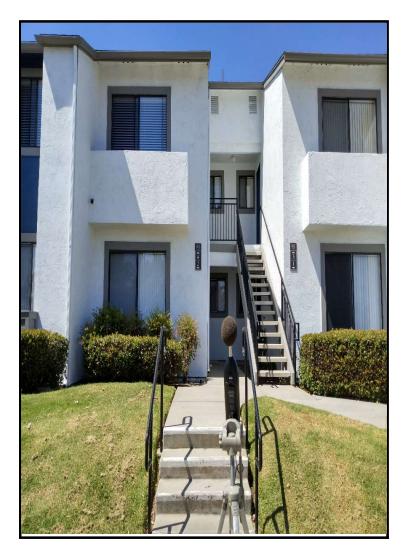
Noise Measurement Field Data

Project Name: Hyundai, City of El Cajon. RE 224				Date: May 13, 2022		
Project #:		224				
Noise Measurement #: NM1				Technician: lan Gallagher		
Nearest Address or Cross Street: 162 Hart Drive, El Cajon, California 92021		92021				
Site Description (Ty	pe of Existing La	and Use and any other notable feature	es):	On-site: Demolished amusemer	nt park, soil, brok	en concrete. Asphalt parking lot
Adjacent: Resident	ial N & E, 67 Free	eway running N,S immediately W of sit	e. Commerci	al S & W of site.		
Weather: Clear blue skies, sunshine.			_	Settings:	SLOW FAST	
Temperature:	83 deg F	Wind:	8 mph	Humidity: 16%	_ Terrain: _	Flat
Start Time:	2:41 PM	End Time:	2:56 PM	-	Run Time: 1	1 x 15 minutes
Leq	: 65.6	dB Primary N	loise Source:	Traffic noise from 20 vehicles p	assing microphon	ne travelling along Hart Drive
Lmax	80.9	_dB		during 15 minute measuremnt.		
L2	2 74.2	dB Secondary No	oise Sources:	Bird song, breeze rustling veget	ation & leaves, re	esidential ambiance, 67 Freeway
LE	67.5	_dB		traffic ambiance Pedestrians.		
L25	64.7	_dB				
L50	63.2	_dB				
NOISE METER:	SoundTrack LXT	Γ Class 1		CALIBRATOR:	Larson Davis CA	.L250
MAKE:	Larson Davis			- MAKE:	Larson Davis	
MODEL:	LXT1			MODEL:	Cal 250	
SERIAL NUMBER: 3099		SERIAL NUMBER:	2723			
FACTORY CALIBRA	TION DATE:	11/17/2021		FACTORY CALIBRATION DATE:	11/18/2021	
FIELD CALIBRATION	N DATE:	5/13/2022				

Roma Environmental

Noise Measurement Field Data

PHOTOS:



NM1 looking N at multifamily residence 162 Hart Dr, El Cajon



NM1 looking W along Hart Dr towards Graves Ave intersection & 67 Freeway beyond that (40 yards).

Measurement Report

Report Summary

Meter's File Name LxT_Data.039.s LxT_0003099-20220513 144138-LxT_Data.039.ldbin Computer's File Name

0003099 Meter LxT1

Firmware 2.404

User Ian Edward Gallagher Location NM1 32°48'41.76"N 116°57'40.20"W

Job Description 15 minute noise measurement (1 x 15 minutes)

Roma Env, Hyundai El Cajon RE224

End Time 2022-05-13 14:56:38 Run Time 0:15:00.0 Pause Time 0:00:00.0

Results

_	11 6 4		
Overa	II M	letri	ICS.
Overa	11 11	ieu i	ı

LA _{eq}	65.6 dB		
LAE	95.1 dB	SEA	dB
EA	363.3 µPa²h	LAFTM5	70.0 dB
EA8	11.6 mPa²h		
EA40	58.1 mPa²h		
LZ _{peak}	105.6 dB	2022-05-13 14:48:53	
LAS _{max}	80.9 dB	2022-05-13 14:54:01	
LAS _{min}	57.8 dB	2022-05-13 14:56:07	
LA _{eq}	65.6 dB		
LC_{eq}	77.7 dB	LC _{eq} - LA _{eq}	12.1 dB
LAI _{eq}	67.3 dB	${\rm LAI}_{\rm eq}$ - ${\rm LA}_{\rm eq}$	1.7 dB
Exceedances	Count	Duration	
LAS > 65.0 dB	26	0:05:26.7	
LAS > 85.0 dB	0	0:00:00.0	
LZpeak > 135.0 dB	0	0:00:00.0	
LZpeak > 137.0 dB	0	0:00:00.0	
LZpeak > 140.0 dB	0	0:00:00.0	
Community Noise	LDN	LDay	LNigh
	ID.	ID.	0.0.15

Community Noise	LDN	LDay	LNight
	dB	dB	0.0 dB

LDEN LDay LEve LNight --- dB --- dB --- dB --- dB

A D = b =	Λ.	_	7
Any Data	A		_

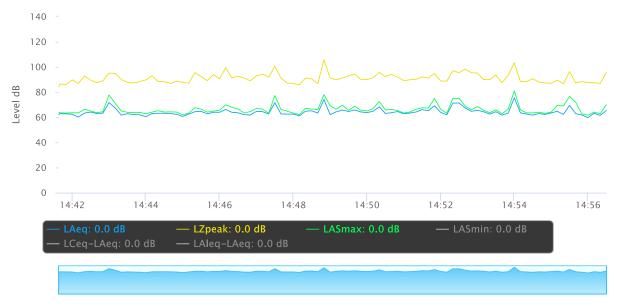
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	65.6 dB		77.7 dB		dB	
Ls _(max)	80.9 dB	2022-05-13 14:54:01	dB		dB	
LS _(min)	57.8 dB	2022-05-13 14:56:07	dB		dB	
L _{Peak(max)}	dB		dB		105.6 dB	2022-05-13 14:48:53

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

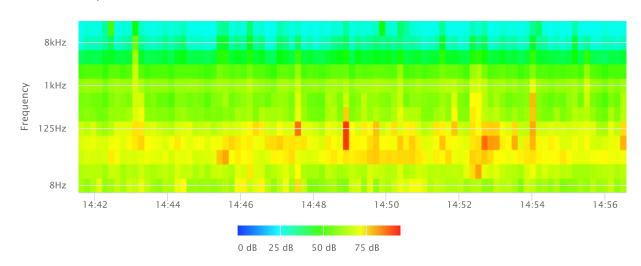
Statistics

LAS 2.0	74.2 dB
LAS 8.0	67.5 dB
LAS 25.0	64.7 dB
LAS 50.0	63.2 dB
LAS 66.6	62.5 dB
LAS 90.0	61.2 dB

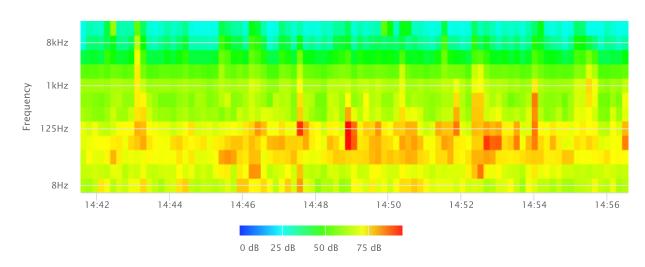
Time History



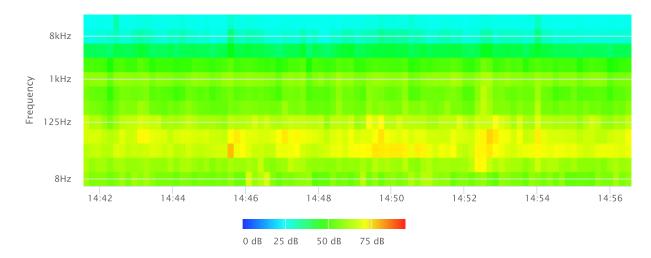
OBA 1/1 Leq



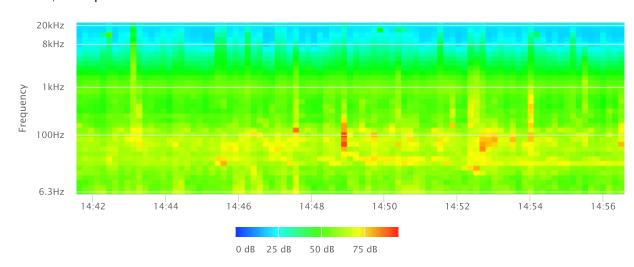
OBA 1/1 Lmax



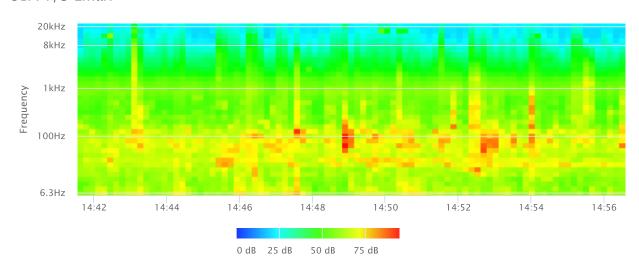
OBA 1/1 Lmin



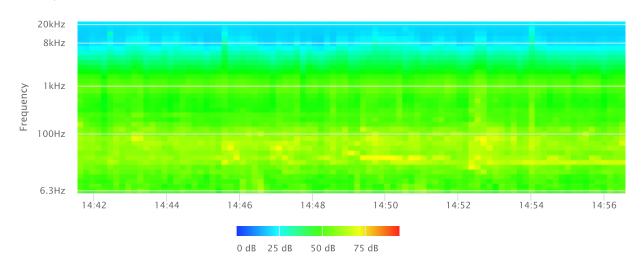
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



Noise Measurement Field Data

Project Name:		Hyundai, City of El Cajon. RE 224					Date: May 13, 2022	
Project #:		224						
Noise Measuremer	nt #:	NM2				Technician:	Ian Gallagher	
Nearest Address or Cross Street: 446 Hart Drive, El Cajon, California 92021								
Site Description (Ty	pe of Existing La	nd Use and any other notable feature	s):	On-site: Demolished amusemer	nt park, soil, brok	en concrete. A	sphalt parking lot	
Adjacent: Residenti	al N & E, 67 Free	way running N,S immediately W of site	. Commercia	al S & W of site.				
Weather:	Clear blue skies	, sunshine.		_	Settings:	SLOW	FAST	
Temperature:	83 deg F	Wind: _	8 mph	Humidity: 16%	Terrain:	Flat		
Start Time:	3:02 PM	End Time:	3:17 PM	-	Run Time:	1 x 15 minutes		
Leq	61.4	_ dB Primary No	oise Source:	Traffic noise from 36 vehicles p	assing microphor	ne travelling al	ong Hart Drive	
Lmax	80.1	_dB		during 15 minute measuremnt.				
L2	68.8	_ dB Secondary No	ise Sources:	Bird song, breeze rustling veget	ation & leaves, r	esidential amb	iance, 67 Freeway	
L8	64.4	_dB		traffic ambiance Pedestrians.				
L25	59.7	_dB						
L50	57.7	_dB						
NOISE METER:	SoundTrack LXT	Class 1		CALIBRATOR:	Larson Davis CA	AL250		
MAKE:	Larson Davis			MAKE:	Larson Davis			
MODEL:	LXT1			MODEL:	Cal 250			
SERIAL NUMBER:	3099			SERIAL NUMBER:	2723			
FACTORY CALIBRAT	TION DATE:	11/17/2021		FACTORY CALIBRATION DATE:	11/18/2021			
FIELD CALIBRATION DATE: 5/13/2022								

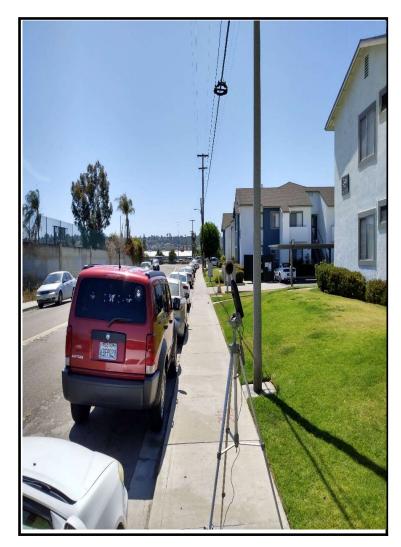
Roma Environmental

Noise Measurement Field Data

PHOTOS:



NM2 looking NW at multifamily residence 446 Hart Dr, El Cajon



NM2 looking W along Hart Dr towards Graves Ave intersection & 67 Freeway beyond that (100 yards).

Measurement Report

Report Summary

Meter's File Name LxT_Data.040.s LxT_0003099-20220513 150246-LxT_Data.040.ldbin Computer's File Name

Meter LxT1 0003099

Firmware 2.404

User Ian Edward Gallagher Location NM2 32°48'41.76"N 116°57'38.16"W

Job Description 15 minute noise measurement (1 x 15 minutes)

Roma Env, Hyundai El Cajon RE224 Start Time 2022-05-13 15:02:46 Duration 0:15:00.0

End Time 2022-05-13 15:17:46 Run Time 0:15:00.0 Pause Time 0:00:00.0

Results

Overal	I Metrics

LA _{eq}	61.4 dB		
LAE	90.9 dB	SEA	dB
EA	136.8 µPa²h	LAFTM5	67.2 dB
EA8	4.4 mPa²h		
EA40	21.9 mPa²h		
LZ _{peak}	105.3 dB	2022-05-13 15:12:54	
LAS _{max}	80.1 dB	2022-05-13 15:05:25	
LAS _{min}	53.7 dB	2022-05-13 15:03:52	
LA _{eq}	61.4 dB		
LC_{eq}	72.3 dB	LC _{eq} - LA _{eq}	11.0 dB
LAI _{eq}	63.9 dB	${\rm LAI}_{\rm eq}$ - ${\rm LA}_{\rm eq}$	2.5 dB
Exceedances	Count	Duration	
LAS > 65.0 dB	25	0:01:23.7	
LAS > 85.0 dB	0	0:00:00.0	
LZpeak > 135.0 dB	0	0:00:00.0	
LZpeak > 137.0 dB	0	0:00:00.0	
LZpeak > 140.0 dB	0	0:00:00.0	
Community Noise	LDN	LDay	LNigh
	dB	dB	0.0 df

Community Noise	LDN	LDay	LNight
		15	0.0.15

LDEN LDay LEve LNight --- dB --- dB --- dB --- dB

Any Data С Ζ

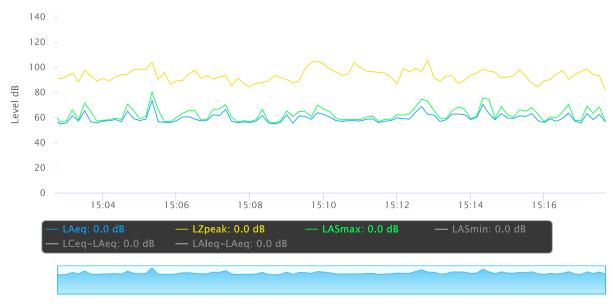
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	61.4 dB		72.3 dB		dB	
Ls _(max)	80.1 dB	2022-05-13 15:05:25	dB		dB	
LS _(min)	53.7 dB	2022-05-13 15:03:52	dB		dB	
L _{Peak(max)}	dB		dB		105.3 dB	2022-05-13 15:12:54

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

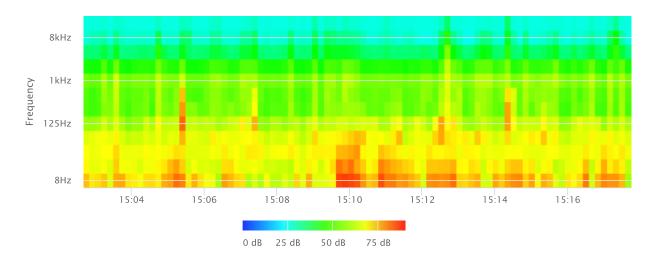
Statistics

LAS 2	2.0	68.8	dΒ
LAS 8	3.0	64.4	dΒ
LAS 2	25.0	59.7	dΒ
LAS 5	50.0	57.7	dΒ
LAS 6	56.6	56.9	dΒ
LAS 9	90.0	55.6	dΒ

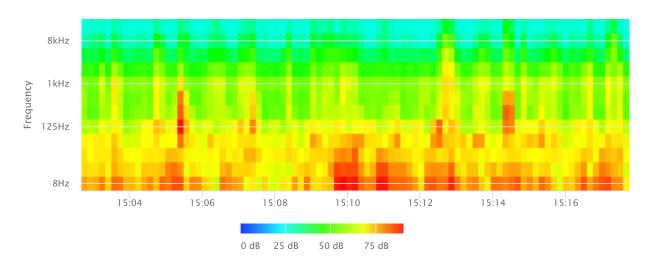
Time History



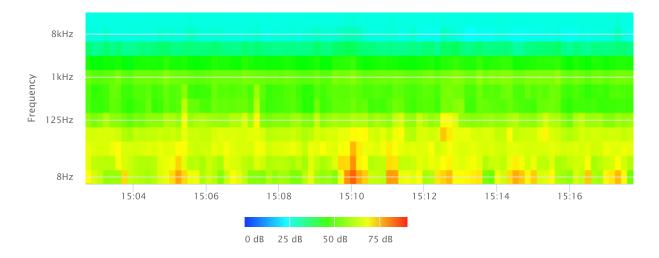
OBA 1/1 Leq



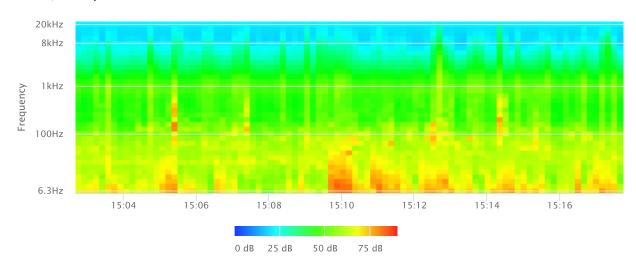
OBA 1/1 Lmax



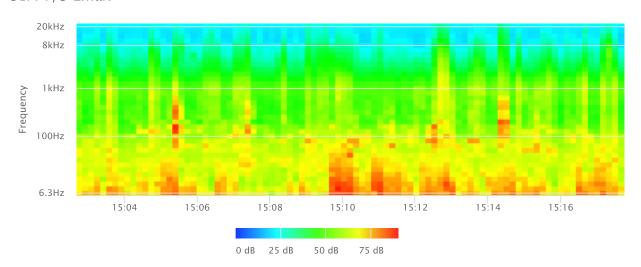
OBA 1/1 Lmin



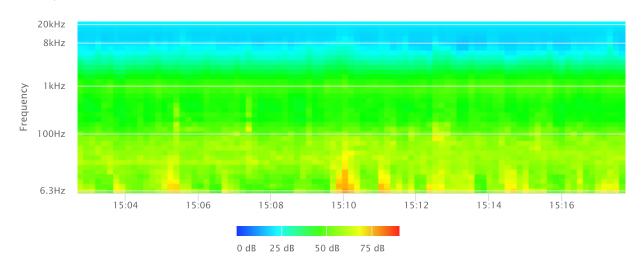
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin

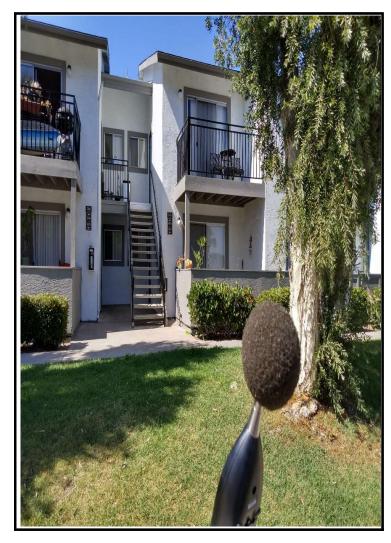


Noise Measurement Field Data

Project Name:		Hyundai, City of El Cajon. RE 224		Date: May 13, 2022	
Project #:		224			
Noise Measuremer	nt #:	NM3		Technician: lan Gallagher	
Nearest Address or	Cross Street:	246 Hart Drive, El Cajon, California 92021			
Site Description (Ty	pe of Existing La	and Use and any other notable features):	On-site: Demolished amusemer	nt park, soil, broken concrete. Asphalt parking lot	
Adjacent: Residenti	al N & E, 67 Free	way running N,S immediately W of site. Commerc	ial S & W of site.		
Weather:	Clear blue skies	, sunshine.	_	Settings: SLOW FAST	
Temperature:	83 deg F	Wind: 8 mph	Humidity: 16%	Terrain: Flat	
Start Time:	3:23 PM	End Time: 3:38 PM	_	Run Time: 1 x 15 minutes	
Leq	58.5	_ dB Primary Noise Source	: Traffic noise from 28 vehicles pa	assing microphone travelling along Hart Drive	
Lmax	73	_dB	during 15 minute measuremnt.		
L2	66.8	_dB Secondary Noise Sources	: Bird song, breeze rustling veget	ation & leaves, residential ambiance, 67 Freeway	
L8	62.4	_dB	traffic ambiance Pedestrians.		
L25	57.2	_dB			
L50	55.6	_dB			
NOISE METER:	SoundTrack LX	Class 1	CALIBRATOR:	Larson Davis CAL250	
MAKE:	Larson Davis		MAKE:	Larson Davis	
MODEL:	LXT1		MODEL:	Cal 250	
SERIAL NUMBER:	3099		_ SERIAL NUMBER:	2723	
FACTORY CALIBRAT	TION DATE:	11/17/2021	FACTORY CALIBRATION DATE:	11/18/2021	
FIELD CALIBRATION	I DATE:	5/13/2022			

Roma Environmental

PHOTOS:



NM3 looking N towards multifamily residence 246 Hart Drive, El Cajon.



NM3 looking down Hart Dr towards Graves Ave intersection (175 yards).

Measurement Report

Report Summary

Meter's File Name LxT_Data.041.s LxT_0003099-20220513 152342-LxT_Data.041.ldbin Computer's File Name

Meter LxT1 0003099

Firmware 2.404

Ian Edward Gallagher Location NM3 32°48'41.78"N 116°57'35.43"W

Job Description 15 minute noise measurement (1 x 15 minutes)

Roma Env, Hyundai El Cajon RE224

End Time 2022-05-13 15:38:42 Run Time 0:15:00.0 Pause Time 0:00:00.0

Results

Overal	l Metrics

LA _{eq}	58.5 dB		
LAE	88.1 dB	SEA	dB
EA	71.2 µPa²h	LAFTM5	63.6 dB
EA8	2.3 mPa²h		
EA40	11.4 mPa²h		
LZ _{peak}	103.6 dB	2022-05-13 15:24:44	
LAS _{max}	73.0 dB	2022-05-13 15:38:06	
LAS _{min}	50.8 dB	2022-05-13 15:32:10	
LA _{eq}	58.5 dB		
LC_{eq}	70.2 dB	LC _{eq} - LA _{eq}	11.7 dB
LAI _{eq}	60.6 dB	LAI _{eq} - LA _{eq}	2.0 dB
Exceedances	Count	Duration	
LAS > 65.0 dB	14	0:00:54.7	
LAS > 85.0 dB	0	0:00:00.0	
LZpeak > 135.0 dB	0	0:00:00.0	
LZpeak > 137.0 dB	0	0:00:00.0	
LZpeak > 140.0 dB	0	0:00:00.0	
Community Noise	LDN	LDay	LNigl
	dB	dB	0.0 dl

Community Noise	LDN	LDay	LNight

LDay LDEN LEve LNight --- dB --- dB --- dB --- dB

C Z Any Data

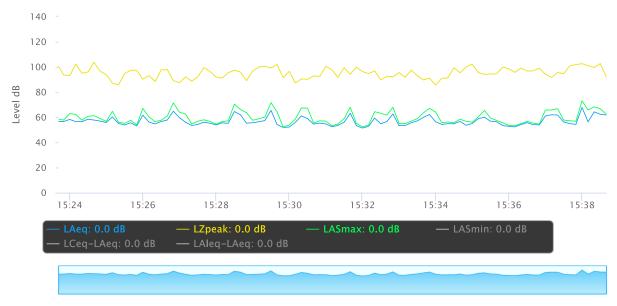
L _{eq} 58.5 dB 70.2 dB dB Ls _(max) 73.0 dB 2022-05-13 15:38:06 dB dB	
Ls _(max) 73.0 dB 2022-05-13 15:38:06 dB dB	
LS _(min) 50.8 dB 2022-05-13 15:32:10 dB dB	
L _{Peak(max)} dB dB 103.6 dB 2022-05-13	15:24:44

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

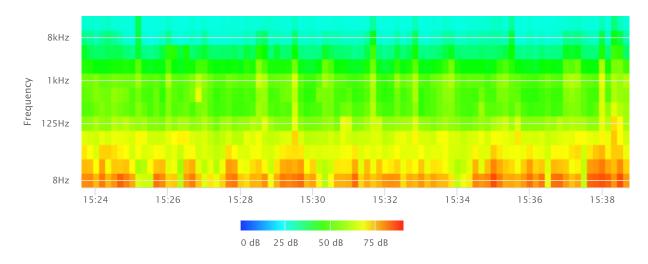
Statistics

LAS 2.0	66.8 dB
LAS 8.0	62.4 dB
LAS 25.0	57.2 dB
LAS 50.0	55.6 dB
LAS 66.6	54.5 dB
LAS 90.0	53.0 dB

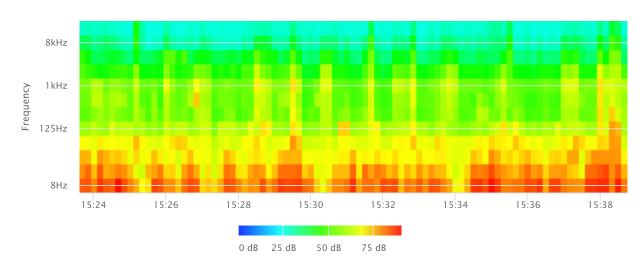
Time History



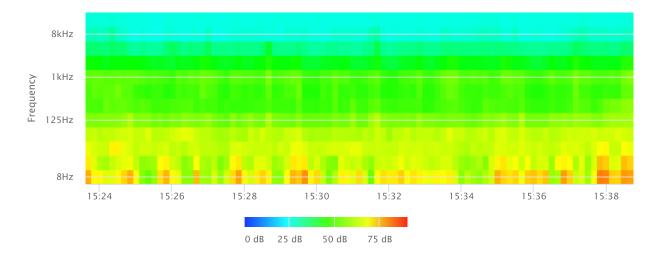
OBA 1/1 Leq



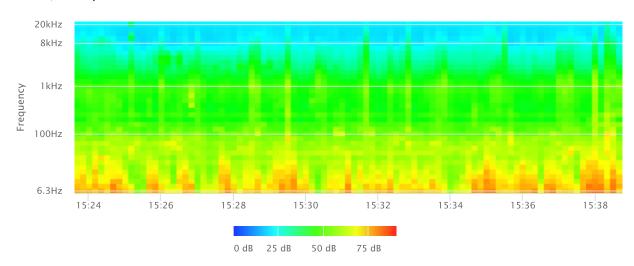
OBA 1/1 Lmax



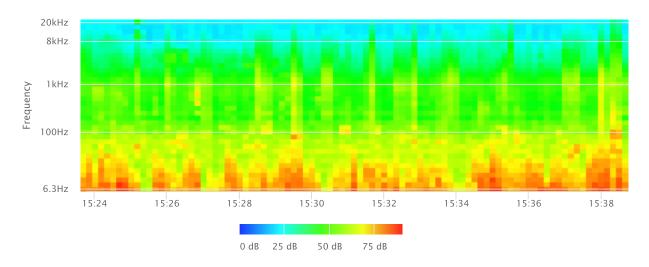
OBA 1/1 Lmin



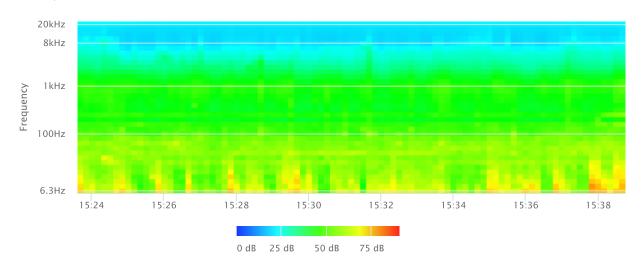
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



Noise Measurement Field Data

Project Name:		Hyundai, City of El Cajon. RE 224				Date: May 13, 2022
Project #:		224				
Noise Measureme	nt #:	NM4				Technician: Ian Gallagher
Nearest Address o	r Cross Street:	316 Hart Drive, El Cajon, California 920	021			
Site Description (Ty	pe of Existing La	and Use and any other notable features):	On-site: Demolished amusemer	nt park, soil, brok	en concrete. Asphalt parking lot
Adjacent: Resident	ial N & E, 67 Free	eway running N,S immediately W of site.	Commercia	al S & W of site.	-	
Weather:	Clear blue skies	s, sunshine.		-	Settings:	SLOW FAST
Temperature:	83 deg F	Wind:	8 mph	Humidity: 16%	Terrain: _	Flat
Start Time:	3:45 PM	End Time:	4:00 PM	-	Run Time: 1	x 15 minutes
Leq	: 59.5	dB Primary No	ise Source:	Traffic noise from 27 vehicles p	assing microphor	e travelling along Hart Drive
Lmax	κ <u>74</u>	_dB		during 15 minute measuremnt.		
L2	68.0	dB Secondary Nois	se Sources:	Bird song, breeze rustling veget	ation & leaves, re	esidential ambiance, 67 Freeway
LE	63.7	_dB		traffic ambiance Pedestrians.		
L25	57.6	_dB				
L50	55.0	_dB				
NOISE METER:	SoundTrack LX	Γ Class 1		CALIBRATOR:	Larson Davis CA	.L250
MAKE:	Larson Davis			MAKE:	Larson Davis	
MODEL:	LXT1			MODEL:	Cal 250	
SERIAL NUMBER:	3099			SERIAL NUMBER:	2723	
FACTORY CALIBRA	TION DATE:	11/17/2021		FACTORY CALIBRATION DATE:	11/18/2021	
FIELD CALIBRATION	N DATE:	5/13/2022				

Roma Environmental

PHOTOS:



NM4 looking N towards multifamily residence 316 Hart Drive, El Cajon.



NM4 looking down Hart Dr towards Graves Ave intersection (240 yards).

Measurement Report

Report Summary

Meter's File Name LxT_Data.042.s LxT_0003099-20220513 154525-LxT_Data.042.ldbin Computer's File Name

Meter LxT1 0003099

Firmware 2.404

User Ian Edward Gallagher Location NM4 32°48'41.75"N 116°57'33.06"W

Job Description 15 minute noise measurement (1 x 15 minutes)

Roma Env, Hyundai El Cajon RE224 Start Time 2022-05-13 15:45:25 Duration 0:15:00.0

End Time 2022-05-13 16:00:25 Run Time 0:15:00.0 Pause Time 0:00:00.0

Results

LA _{eq}	59.5 dB		
LAE	89.1 dB	SEA	dB
EA	89.8 µPa²h	LAFTM5	64.5 dB
EA8	2.9 mPa²h		
EA40	14.4 mPa²h		
LZ _{peak}	105.1 dB	2022-05-13 15:50:35	
LAS _{max}	74.0 dB	2022-05-13 15:54:41	
LAS _{min}	51.1 dB	2022-05-13 15:58:17	
LA _{eq}	59.5 dB		
LC _{eq}	70.8 dB	LC _{eq} - LA _{eq}	11.3 dB
LAI _{eq}	61.9 dB	${\sf LAI}_{\sf eq}$ - ${\sf LA}_{\sf eq}$	2.4 dB
Exceedances	Count	Duration	
LAS > 65.0 dB	18	0:01:09.2	
LAS > 85.0 dB	0	0:00:00.0	
LZpeak > 135.0 dB	0	0:00:00.0	
LZpeak > 137.0 dB	0	0:00:00.0	
LZpeak > 140.0 dB	0	0:00:00.0	
Community Noise	LDN	LDay	LNigl
	dB	dB	0.0 dl

Community Noise	LDN	LDay	LNight
		100	0.0.15

LDEN LDay LEve LNight --- dB --- dB --- dB --- dB

Any Data C

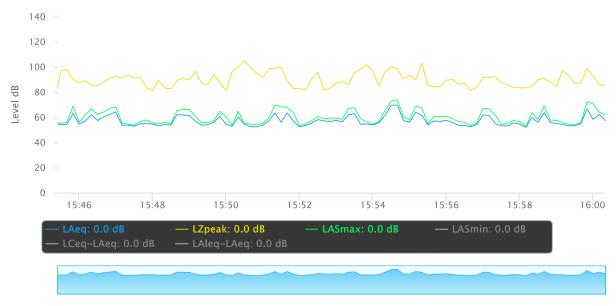
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	59.5 dB		70.8 dB		dB	
Ls _(max)	74.0 dB	2022-05-13 15:54:41	dB		dB	
LS _(min)	51.1 dB	2022-05-13 15:58:17	dB		dB	
$L_{Peak(max)}$	dB		dB		105.1 dB	2022-05-13 15:50:35

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

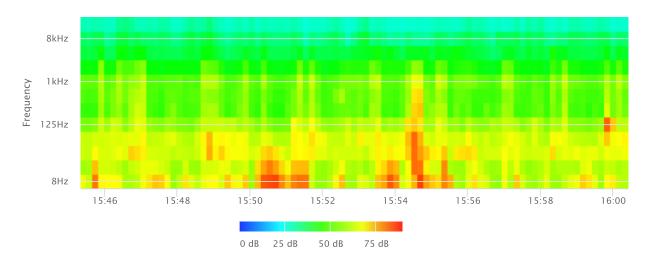
Statistics

LAS 2.0	68.0 dB
LAS 8.0	63.7 dB
LAS 25.0	57.6 dB
LAS 50.0	55.0 dB
LAS 66.6	54.2 dB
LAS 90.0	52.8 dB

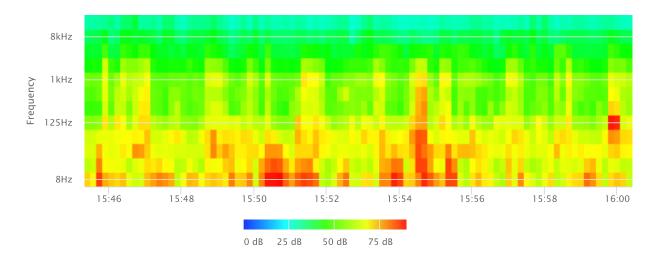
Time History



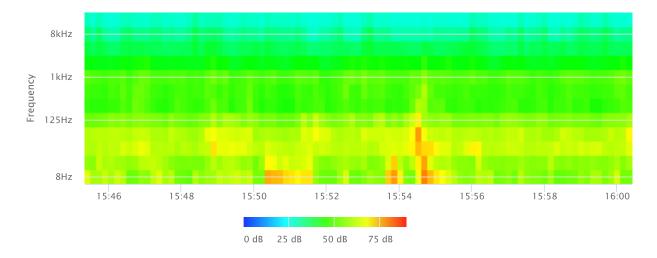
OBA 1/1 Leq



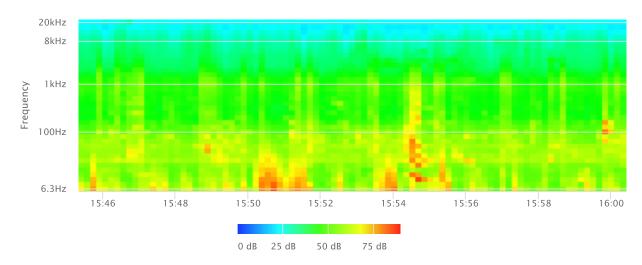
OBA 1/1 Lmax



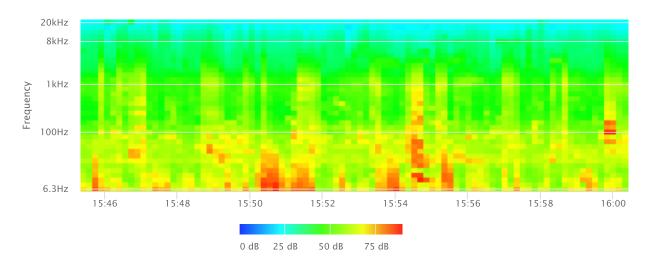
OBA 1/1 Lmin



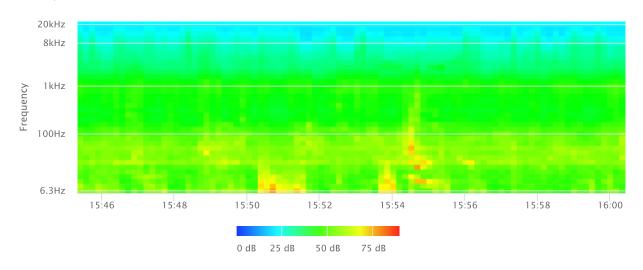
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin

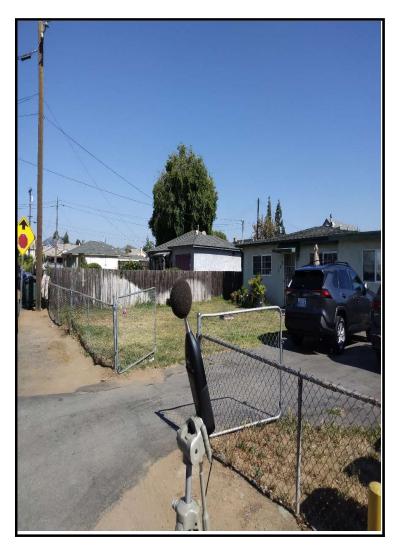


Noise Measurement Field Data

Project Name:		Hyundai, City of El Cajon. RE 224		Date: May 13, 2022
Project #:		224		
Noise Measuremer	nt #:	NM5		Technician: lan Gallagher
Nearest Address or	Cross Street:	303 Hart Drive, El Cajon, California 92021		
Site Description (Ty	pe of Existing La	nd Use and any other notable features):	On-site: Demolished amusemer	nt park, soil, broken concrete. Asphalt parking lot
Adjacent: Residenti	al N & E, 67 Free	way running N,S immediately W of site. Commerc	ial S & W of site.	
Weather:	Clear blue skies	, sunshine.	_	Settings: SLOW FAST
Temperature:	83 deg F	Wind: 8 mph	Humidity: 16%	Terrain: Flat
Start Time:	4:16 PM	End Time: 4:33 PM	_	Run Time: 1 x 15 minutes
Leq	61.6	_ dB Primary Noise Source	: Traffic noise from 25 vehicles p	assing microphone travelling along Hart Drive
Lmax	77.1	_dB	during 15 minute measuremnt.	
L2	71.2	_dB Secondary Noise Sources	: Bird song, breeze rustling veget	ation & leaves, residential ambiance, 67 Freeway
L8	66.8	_dB	traffic ambiance Pedestrians.	
L25	58.4	_dB		
L50	55.1	_dB		
NOISE METER:	SoundTrack LXT	Class 1	CALIBRATOR:	Larson Davis CAL250
MAKE:	Larson Davis		MAKE:	Larson Davis
MODEL:	LXT1		MODEL:	Cal 250
SERIAL NUMBER:	3099		_ SERIAL NUMBER:	2723
FACTORY CALIBRAT	TION DATE:	11/17/2021	_ FACTORY CALIBRATION DATE:	11/18/2021
FIELD CALIBRATION	I DATE:	5/13/2022		

Roma Environmental

PHOTOS:



NM5 looking SE towards frontyard of residence 303 Hart Drive, El Cajon.



NM5 looking N across Hart Drive towards multifamily residence 246 Hart Drive, El Cajon.

Measurement Report

Report Summary

Meter's File Name LxT_Data.043.s LxT_0003099-20220513 161802-LxT_Data.043.ldbin Computer's File Name

Meter LxT1 0003099

Firmware 2.404

User Ian Edward Gallagher Location NM5 32°48'41.20"N 116°57'34.46"W

Job Description 15 minute noise measurement (1 x 15 minutes)

Roma Env, Hyundai El Cajon RE224

End Time 2022-05-13 16:33:02 Run Time 0:15:00.0 Pause Time 0:00:00.0

Results

Overal	Metrics	

o veran i recines			
LA _{eq}	61.6 dB		
LAE	91.1 dB	SEA	dB
EA	143.0 µPa²h	LAFTM5	67.6 dB
EA8	4.6 mPa²h		
EA40	22.9 mPa²h		
LZ _{peak}	104.0 dB	2022-05-13 16:30:47	
LAS _{max}	77.0 dB	2022-05-13 16:26:42	
LAS _{min}	50.5 dB	2022-05-13 16:28:46	
LA _{eq}	61.6 dB		
LC_{eq}	73.1 dB	LC _{eq} - LA _{eq}	11.5 dB
LAI _{eq}	64.2 dB	${\rm LAI}_{\rm eq}$ - ${\rm LA}_{\rm eq}$	2.7 dB
Exceedances	Count	Duration	
LAS > 65.0 dB	22	0:01:52.5	
LAS > 85.0 dB	0	0:00:00.0	
LZpeak > 135.0 dB	0	0:00:00.0	
LZpeak > 137.0 dB	0	0:00:00.0	
LZpeak > 140.0 dB	0	0:00:00.0	
Community Noise	LDN	LDay	LNigh
	4D	4D	0 0 41

Community Noise	LDN	LDay	LNight
	dB	dB	0.0 dB

LDEN LDay LEve LNight --- dB --- dB --- dB --- dB

Z Any Data С

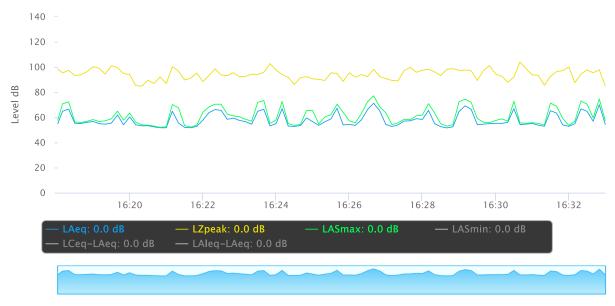
Leq 61.6 dB 73.1 dB dB Ls(max) 77.0 dB 2022-05-13 16:26:42 dB dB LS(min) 50.5 dB 2022-05-13 16:28:46 dB dB Lpeak(max) dB dB 104.0 dB 2022-05-13 16:28:46	ime Stamp	Level	Time Stamp	Level	
LS _(min) 50.5 dB 2022-05-13 16:28:46 dB dB		73.1 dB		61.6 dB	L_{eq}
,, ID		dB	2022-05-13 16:26:42	77.0 dB	Ls _(max)
LBook(may) dB dB 104.0 dB 2022-05-13.16		dB	2022-05-13 16:28:46	50.5 dB	LS _(min)
-reak(max)		dB		dB	$L_{Peak(max)}$

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

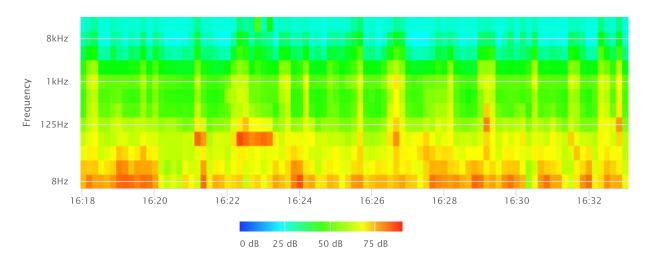
Statistics

LAS 2.0	/1.2 dB
LAS 8.0	66.8 dB
LAS 25.0	58.4 dB
LAS 50.0	55.1 dB
LAS 66.6	53.9 dB
LAS 90.0	52.4 dB

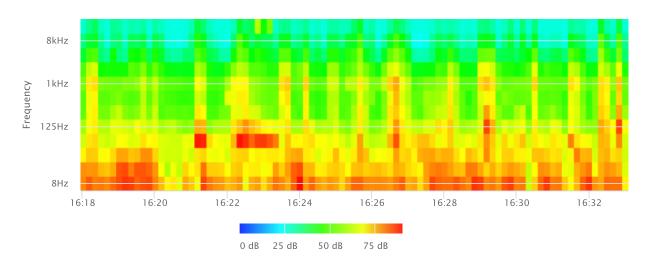
Time History



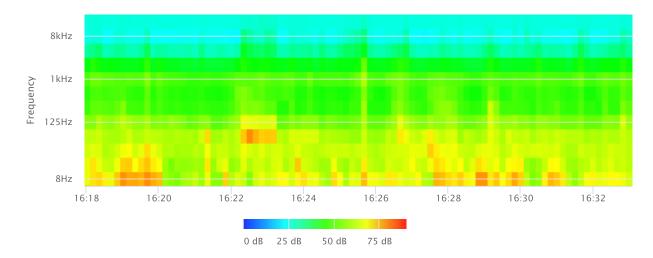
OBA 1/1 Leq



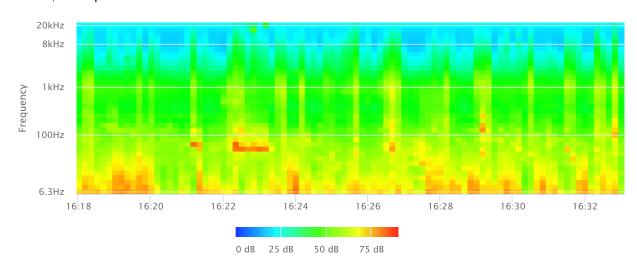
OBA 1/1 Lmax



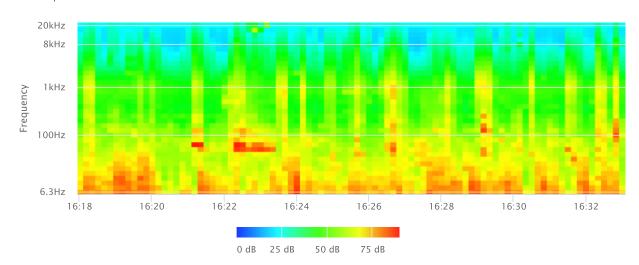
OBA 1/1 Lmin



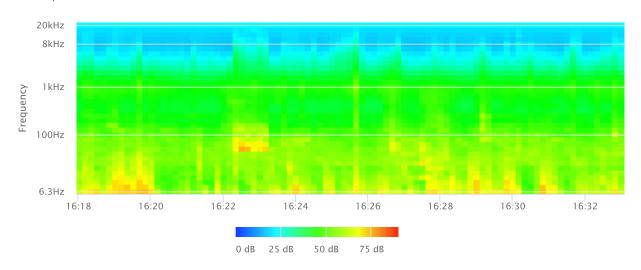
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



Noise Measurement Field Data

Project Name: Hyundai, City of El Cajon. RE 224							Date:	May 13, 2022
Project #:		224						
Noise Measureme	nt #:	NM6					Technician:	Ian Gallagher
Nearest Address or	r Cross Street:	1069 Graves Ave #2	100, El Cajon, Calif	ornia 92021				
Site Description (Ty	pe of Existing L	and Use and any othe	er notable features	s):	On-site: Demolished amuseme	nt park, soil, brok	en concrete. A	Asphalt parking lot
Adjacent: Resident	ial N & E, 67 Free	eway running N,S imn	nediately W of site	. Commerci	al S & W of site.			
Weather:	Clear blue skie	s, sunshine.			-	Settings:	SLOW	FAST
Temperature:	83 deg F	_	Wind: _	8 mph	Humidity: 16%	Terrain:	Flat	
Start Time:	4:57 PM	_	End Time:	5:12 PM	-	Run Time:	1 x 15 minutes	5
Leq	:62.7	_dB	Primary No	oise Source:	Traffic noise from Graves Aven	ue, Broadway, Ba	alantyne St &	67 Freeway
Lmax	c <u>83</u>	dB						
L2	68.0	dB	Secondary No	ise Sources:	Bird song, breeze rustling vege	tation & leaves, p	edestrians.	
LE	63.5	dB						
L25	61.3	dB						
L50	59.9	_dB						
NOISE METER:	SoundTrack LX	T Class 1			CALIBRATOR:	Larson Davis CA	AL250	
MAKE:	Larson Davis				MAKE:	Larson Davis		
MODEL:	LXT1				MODEL:	Cal 250		
SERIAL NUMBER:	3099				_ SERIAL NUMBER:	2723		
FACTORY CALIBRA	TION DATE:	11/17/2021			FACTORY CALIBRATION DATE:	11/18/2021		
FIELD CALIBRATION	N DATE:	5/13/2022						

Roma Environmental

PHOTOS:



NM6 looking S towards Broadway (300 yards), 1069 Graves Ave #100, El Cajon on the right.



NM6 looking W towards Graves Avenue & 67 Freeway (120 yards).

Measurement Report

Report Summary

Meter's File Name LxT_Data.044.s Computer's File Name LxT_0003099-20220513 165731-LxT_Data.044.ldbin

Meter LxT1 0003099

Firmware 2.404

User Ian Edward Gallagher Location NM7 32°48'37.10"N 116°57'36.87"W

Job Description 15 minute noise measurement (1 x 15 minutes)

Roma Env, Hyundai El Cajon RE224 Start Time 2022-05-13 16:57:31 Duration 0:15:00.0

End Time 2022-05-13 17:12:31 Run Time 0:15:00.0 Pause Time 0:00:00.0

Results

1etrics

LA _{eq}	62.7 dB		
LAE	92.2 dB	SEA	dB
EA	185.8 µPa²h	LAFTM5	67.1 dB
EA8	5.9 mPa²h		
EA40	29.7 mPa²h		
LZ _{peak}	104.4 dB	2022-05-13 17:02:20	
LAS _{max}	83.0 dB	2022-05-13 17:02:21	
LAS _{min}	56.0 dB	2022-05-13 17:06:09	
LA _{eq}	62.7 dB		
LC_{eq}	74.2 dB	LC _{eq} - LA _{eq}	11.5 dB
LAI _{eq}	64.5 dB	${\rm LAI}_{\rm eq}$ - ${\rm LA}_{\rm eq}$	1.8 dB
Exceedances	Count	Duration	
LAS > 65.0 dB	11	0:01:01.9	
LAS > 85.0 dB	0	0:00:00.0	
LZpeak > 135.0 dB	0	0:00:00.0	
LZpeak > 137.0 dB	0	0:00:00.0	
LZpeak > 140.0 dB	0	0:00:00.0	
Community Noise	LDN	LDay	LNigh

Community Noise	LDN	LDay	LNight	
	dB	dB	0.0 dB	

LDEN LDay LEve LNight --- dB --- dB --- dB --- dB

Any Data	Λ	C	7
Any Data	A		_

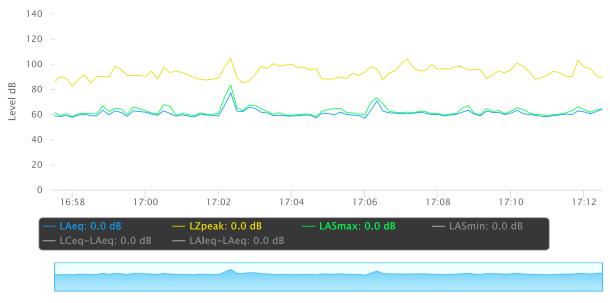
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	62.7 dB		74.2 dB		dB	
Ls _(max)	83.0 dB	2022-05-13 17:02:21	dB		dB	
LS _(min)	56.0 dB	2022-05-13 17:06:09	dB		dB	
L _{Peak(max)}	dB		dB		104.4 dB	2022-05-13 17:02:20

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

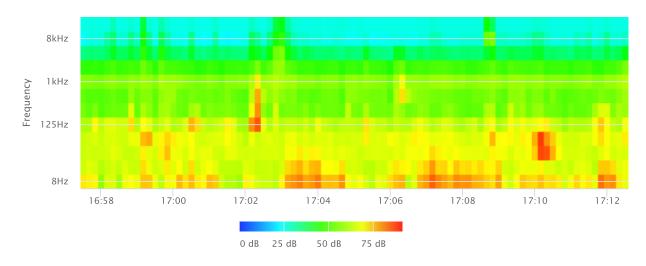
Statistics

LAS 2.0	68.0 dB
LAS 8.0	63.5 dB
LAS 25.0	61.3 dB
LAS 50.0	59.9 dB
LAS 66.6	59.2 dB
LAS 90.0	58.1 dB

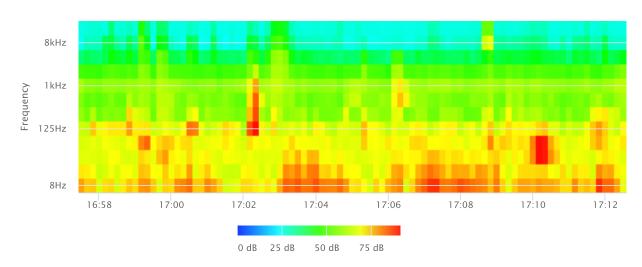
Time History



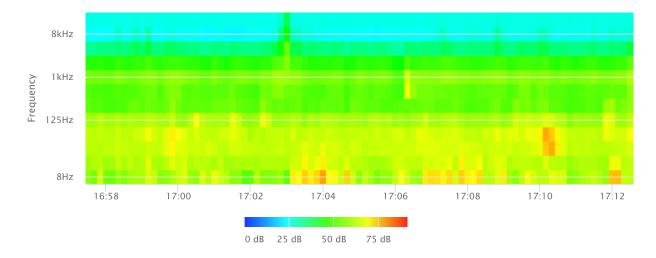
OBA 1/1 Leq



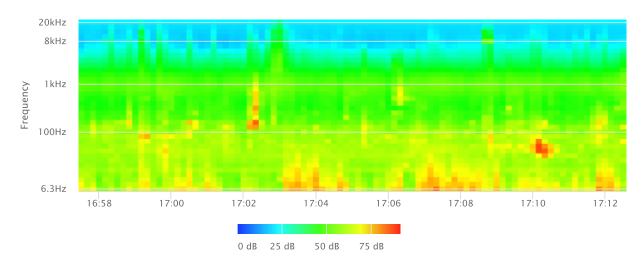
OBA 1/1 Lmax



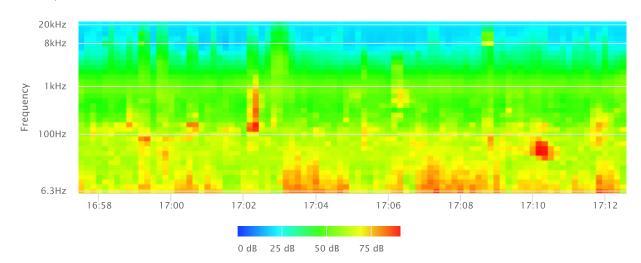
OBA 1/1 Lmin



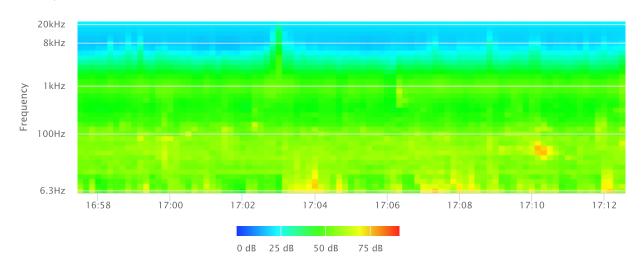
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



APPENDIX B

SoundPLAN Input/Output

Noise emissions of industry sources

							Freque	ncy spe	ectrum	dB(A)]				Corre	ection	ıS
Source name	Reference	L	.evel	31	63	125	250	500	1	2	4	8	16	Cwall	CI	СТ
			dB(A)	Hz	Hz	Hz	Hz	Hz	kHz	kHz	kHz	kHz	kHz	dB	dB	dB
Dryer 1	Lw/unit	Day	96.5	-	67.2	77.0	89.9	92.3	89.7	88.2	82.0	72.8	-	•	-	-
Dryer 2	Lw/unit	Day	96.5	-	67.2	77.0	89.9	92.3	89.7	88.2	82.0	72.8	-	1	-	-
Dryer 3	Lw/unit	Day	96.5	-	67.2	77.0	89.9	92.3	89.7	88.2	82.0	72.8	-	1	-	-
HVAC1	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC2	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC3	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC4	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC5	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC6	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC7	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC8	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	•	-	
HVAC9	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC10	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC11	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC12	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC13	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-
HVAC14	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC15	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC16	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC17	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC18	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	
HVAC19	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	_
HVAC20	Lw/unit	Day	78.7	42.5	46.5	59.5	64.5	58.5	69.5	71.5	70.5	72.5	72.5	-	-	-

Noise emissions of parking lot traffic

	Parking bays	Move	Movements Corrections Lev		Corrections		vel
Name		Day	Lmax	Parking lot type		Day	Night
					dB(A)	dB(A)	dB(A)
1	37.0	0.300	0.000	Car parking lots	0.0	47.5	0.0
2	52.0	0.300	0.000	Car parking lots	0.0	48.9	0.0
3	17.0	0.300	0.000	Car parking lots	0.0	44.1	0.0
4	45.0	0.300	0.000	Car parking lots	0.0	48.3	0.0
5	11.0	0.300	0.000	Car parking lots	0.0	42.2	0.0

Receiver list

		Building		Limit	Level	Conflict
No.	Receiver name	side	Floor	Day	Day	Day
				dB(A)	dB(A)	dB
1	1	-	EG	-	38.6	-
2	2	-	EG	-	42.7	-
3	3	-	EG	-	50.9	-
4	4	-	EG	-	49.1	-
5	5	-	EG	-	58.0	-
6	6	-	EG	-	50.4	-
7	8	-	EG	-	45.1	-

Configuration: -- 30hp, Three (3) Fixed Nozzles

Readings without Silencers

Distance	Noise Level (DbA)	
0 ft.	100.0	
10 ft.	96.5	
20 ft.	95.0	
30 ft.	94.0	
40 ft.	88.0	
50 ft.	84.0	
60 ft.	81.0	
70 ft.	78.0	
80 ft.	77.0	
90 ft.	75.5	
100 ft.	75.5	

	Distance	Noise Level (DbA)
	0 ft.	97.0
End of Building	10 ft.	94.5
	20 ft.	92.5
	30 ft.	91.0
	40 ft.	85.0
	50 ft.	81.0
	60 ft.	78.0
	70 ft.	76.0
	80 ft.	74.0
₩	90 ft.	73.0
	100 ft.	72.0
'		·

Configuration: -- 50hp, Five (5) Fixed Nozzles

Readings without Silencers

Distance	Noise Level (DbA)
0 ft.	102.0
10 ft.	100.0
20 ft.	98.5
30 ft.	96.5
40 ft.	91.5
50 ft.	87.5
60 ft.	84.5
70 ft.	82.5
80 ft.	80.5
90 ft.	79.0
100 ft.	78.5

	Distance	Noise Level (DbA)
	0 ft.	100.5
End of Building	10 ft.	97.0
	20 ft.	96.0
	30 ft.	93.5
	40 ft.	88.5
	50 ft.	84.5
	60 ft.	81.5
	70 ft.	79.0
	80 ft.	77.0
\	90 ft.	76.0
	100 ft.	75.0

Configuration: -- 70hp, Seven (7) Fixed Nozzles

Readings without Silencers

Distance	Noise Level (DbA)	
0 ft.	103.0	
10 ft.	102.0	
20 ft.	100.5	
30 ft.	98.5	
40 ft.	93.0	
50 ft.	89.0	
60 ft.	86.5	
70 ft.	85.0	
80 ft.	83.0	
90 ft.	82.0	
100 ft.	81.5	

	Distance	Noise Level (DbA)
	0 ft.	101.0
End of Building	10 ft.	100.0
	20 ft.	97.0
	30 ft.	95.5
	40 ft.	90.0
	50 ft.	86.0
	60 ft.	83.5
	70 ft.	81.0
	80 ft.	79.0
\rightarrow	90 ft.	78.0
	100 ft.	76.5

Configuration: -- One (1) Fixed Nozzle, Top Center of 1st Arch

Readings without Silencers

Distance	Noise Level (DbA)	
0 ft.	92.5	
10 ft.	89.5	
20 ft.	88.5	
30 ft.	86.0	
40 ft.	81.0	
50 ft.	77.0	
60 ft.	74.5	
70 ft.	72.0	
80 ft.	70.0	
90 ft.	69.0	
100 ft.	67.0	

Distance	Noise Level (DbA)
0 ft.	92.0
10 ft.	88.5
20 ft.	87.5
30 ft.	86.0
40 ft.	80.5
50 ft.	76.0
60 ft.	73.0
70 ft.	71.0
80 ft.	69.0
90 ft.	68.0
100 ft.	68.0
	0 ft. 10 ft. 20 ft. 30 ft. 40 ft. 50 ft. 60 ft. 70 ft. 80 ft. 90 ft.

Configuration: - Two (2) Fixed Nozzles, Top of 1st Arch

Readings without Silencers

Distance	Noise Level (DbA)
0 ft.	97.5
10 ft.	94.5
20 ft.	93.0
30 ft.	91.0
40 ft.	85.5
50 ft.	81.5
60 ft.	78.5
70 ft.	76.5
80 ft.	75.0
90 ft.	73.5
100 ft.	72.5

Distance	Noise Level (DbA)
0 ft.	95.0
10 ft.	92.0
20 ft.	91.0
30 ft.	89.0
40 ft.	83.0
50 ft.	79.0
60 ft.	76.5
70 ft.	74.0
80 ft.	73.0
90 ft.	72.0
100 ft.	71.0
	0 ft. 10 ft. 20 ft. 30 ft. 40 ft. 50 ft. 60 ft. 70 ft. 80 ft.

Configuration: -- Four (4) Fixed Nozzles, 1st & 2nd Arch

Readings without Silencers

Distance	Noise Level (DbA)	
0 ft.	101.0	
10 ft.	99.0	
20 ft.	98.0	
30 ft.	96.0	
40 ft.	91.0	
50 ft.	86.5	
60 ft.	83.5	
70 ft.	81.5	
80 ft.	79.0	
90 ft.	78.5	
100 ft.	77.5	

	Distance	Noise Level (DbA)
	0 ft.	99.0
End of Building	10 ft.	96.0
	20 ft.	95.0
	30 ft.	93.0
	40 ft.	87.0
	50 ft.	83.0
	60 ft.	80.0
	70 ft.	77.5
	80 ft.	76.0
\	90 ft.	75.5
	100 ft.	75.0

Configuration: -- Six (6) Fixed Nozzles, 1st, 2nd & 3rd Arch

Readings without Silencers

Distance	Noise Level (DbA)		
0 ft.	102.0		
10 ft.	101.0		
20 ft.	100.0		
30 ft.	98.0		
40 ft.	93.0		
50 ft.	88.5		
60 ft.	86.5		
70 ft.	84.5		
80 ft.	82.5		
90 ft.	82.0		
100 ft.	81.0		

0 ft. 10 ft.	101.0 98.5
10 ft.	08.5
	3 0.3
20 ft.	96.5
30 ft.	94.5
40 ft.	89.5
50 ft.	85.5
60 ft.	82.5
70 ft.	81.0
80 ft.	78.5
90 ft.	77.5
100 ft.	76.0
	30 ft. 40 ft. 50 ft. 60 ft. 70 ft. 80 ft. 90 ft.

Configuration: -- Eight (8) Fixed Nozzles, 1st, 2nd & 3rd Arch

Readings without Silencers

Distance	Noise Level (DbA)		
0 ft.	103.0		
10 ft.	102.5		
20 ft.	101.0		
30 ft.	98.5		
40 ft.	94.0		
50 ft.	89.5		
60 ft.	87.0		
70 ft.	84.5		
80 ft.	83.0		
90 ft.	82.0		
100 ft.	81.5		

	Distance	Noise Level (DbA)
	0 ft.	101.0
End of Building	10 ft.	100.5
	20 ft.	98.0
	30 ft.	96.0
	40 ft.	90.0
	50 ft.	86.5
	60 ft.	84.0
	70 ft.	82.0
	80 ft.	80.0
\undersignarray	90 ft.	78.5
	100 ft.	77.5

Configuration: -- Nine (9) Fixed Nozzles, 1st, 2nd & 3rd Arch

Readings without Silencers

Distance	Noise Level (DbA)
0 ft.	103.5
10 ft.	103.0
20 ft.	102.0
30 ft.	99.5
40 ft.	94.0
50 ft.	90.0
60 ft.	87.5
70 ft.	86.0
80 ft.	84.0
90 ft.	83.0
100 ft.	82.0

	Distance	Noise Level (DbA)
	0 ft.	101.5
End of Building	10 ft.	102.0
	20 ft.	98.5
	30 ft.	96.5
	40 ft.	91.0
	50 ft.	87.0
	60 ft.	84.0
	70 ft.	82.0
	80 ft.	80.0
\	90 ft.	78.5
	100 ft.	78.0

APPENDIX C

Construction Noise Calculations

Receptor - Residential Property Line to the North

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA ¹	Distance to Receptor ²	Item Usage Percent	Receptor Item Leq, dBA
Demolition					
Sawzall	1	90	235	40	72.2
Excavators	3	84	235	40	71.3
Dozers	2	85	235	40	70.6
					74.5
Site Preparation					
Dozers	3	85	235	40	72.3
Tractors/Loaders/Backhoes	4	84	235	40	72.6
				•	72.6
Building Construction					
Cranes	1	83	235	16	61.6
Forklifts	3	61	235	50	49.3
Generator Sets	1	81	235	50	64.5
Welders	1	74	235	40	56.6
Tractors/Loaders/Backhoes	3	84	235	40	71.3
					72.7
Paving					
Cement and Mortar Mixers	2	79	235	40	64.6
Pavers	2	77	235	50	63.6
Rollers	2	80	235	20	62.6
	-		*		68.4
Architectural Coating					
Air Compressors	1	80	235	40	62.6
					62.6

Notes:

⁽¹⁾ Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018) and the FHWA Roadway Construction Noise Model User's Guide (January (2) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to nearest sensitive use (property line).

Receptor - Residential Property Line to the East

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA ¹	Distance to Receptor ²	Item Usage Percent	Receptor Item Leq, dBA
Demolition					
Sawzall	1	90	330	40	69.2
Excavators	3	84	330	40	68.4
Dozers	2	85	330	40	67.6
					71.5
Site Preparation					
Dozers	3	85	330	40	69.4
Tractors/Loaders/Backhoes	4	84	330	40	69.7
				,	69.7
Building Construction				•	
Cranes	1	83	330	16	58.7
Forklifts	3	61	330	50	46.4
Generator Sets	1	81	330	50	61.6
Welders	1	74	330	40	53.6
Tractors/Loaders/Backhoes	3	84	330	40	68.4
	-				69.7
Paving					
Cement and Mortar Mixers	2	79	330	40	61.6
Pavers	2	77	330	50	60.6
Rollers	2	80	330	20	59.6
					65.5
Architectural Coating					·
Air Compressors	1	80	330	40	59.6
					59.6

Notes:

⁽¹⁾ Source: Referenced noise levels from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (September 2018) and the FHWA Roadway Construction Noise Model User's Guide (January (2) Distance to receptor calculated from center of site. Construction noise projected from the center of the project site to nearest sensitive use (property line).

APPENDIX D

Groundborne Vibration Calculations/

	VIBRA	TION LEVEL IMPACT
Project:	Hyundai	Date: 1/28/16
Source:	Vibratory Roller	
Scenario:	Unmitigated	
Location:	Project Site	
Address:	Project Site	
PPV = PPVr	PPV = PPVref(5/D)^n (in/sec)	

Equipment = Type	1	Vibratory Roller INPUT SECTION IN BLUE	
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	105.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on r	Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.		

PPV = 0.024 IN/SEC	OUTPUT IN RED
---------------------------	---------------

	VIBRA	TION LEVEL IMPACT
Project:	Hyundai	Date: 1/28/16
Source:	Vibratory Roller	
Scenario:	Unmitigated	
Location:	Project Site	
Address:	Project Site	
PPV = PPVr	PPV = PPVref(5/D)^n (in/sec)	

Equipment = Type	1	Vibratory Roller INPUT SECTION IN BLUE	
PPVref =	0.21	Reference PPV (in/sec) at 25 ft.	
D =	120.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on r	Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.		

PPV =	0.020	IN/SEC	OUTPUT IN RED

	VIBRA	TION LEVEL IMPACT
Project:	Hyundai	Date: 1/28/16
Source:	Large Bulldozer	
Scenario:	Unmitigated	
Location:	Project Site	
Address:	Project Site	
PPV = PPVr	PPV = PPVref(5/D)^n (in/sec)	

Equipment = Type	2	Large Bulldozer INPUT SECTION IN BLUE	
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	105.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on r	Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.		

PPV =	0.010	IN/SEC	OUTPUT IN RED
-------	-------	--------	---------------

		VIBRATION LEVEL IMPACT
Project:	Hyundai	Date: 1/28/16
Source:	Large Bulldozer	
Scenario:	Unmitigated	
Location:	Project Site	
Address:	Project Site	
PPV = PPVre	PPV = PPVref(5/D)^n (in/sec)	

Equipment = Type	2	Large Bulldozer INPUT SECTION IN BLUE	
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	120.00	Distance from Equipment to Receiver (ft)	
n =	1.50	Vibration attenuation rate through the ground	
Note: Based on r	Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.		

PPV =	0.008	IN/SEC	OUTPUT IN RED
-------	-------	--------	---------------

AMENDED SPECIFIC PLAN NO. 452

Section 1. Purpose and Intent

The goal of Specific Plan No. 452, as amended herein, is to program land uses, development standards, amendment procedures, and compatibility performance measures. This Specific Plan implements General Plan policies that require sound design standards while encouraging the creation and retention of a strong, competitive region wide commercial base consistent with General Plan Goal 9.

Section 2. Specific Plan Area

The Specific Plan governs the project site located at the southeast corner of Graves Avenue and Hart Drive addressed as 1155 Graves and includes Assessor Parcel Numbers 483-090-15-00; 483-090-16-00; 483-090-24-00; 483-090-25-00; 483-090-26-00; 483-090-42-00; and 483-090-41-00. It consists of approximately 4.6 acres according to the Specific Plan Architectural Drawings attached hereto and marked Exhibit A.1.

Section 3. Authority and Scope

This Specific Plan is established by the El Cajon City Council in accordance with Chapter 17.70 of the El Cajon Municipal Code ("ECMC"), which establishes Specific Plans as an authorized mechanism for regulating land use and development in the City; and as enabled by the State of California Government Code Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457.

This Specific Plan implements the broad policies established in *The City of El Cajon General Plan* to guide growth and change in El Cajon, and is consistent with the General Plan. The planning permit process, development and design standards, and permitted uses contained within this Specific Plan replaces all previous land uses and development regulations contained within the ECMC for an automobile dealership on the subject site.

Section 4. California Environmental Quality Act (CEQA)

The proposed project is exempt from the California Environmental Quality Act ("CEQA") pursuant to section 15332 (In-fill Development Projects). The following measuring criteria for a Class 32 exemption apply: the project is consistent with the General Plan designation; the proposal is within the city limits on a site less than five acres, surrounded by substantially urban uses; the project site has no value as natural habitat; approval would not result in significant effects related to traffic, noise, air, or water quality; and, the site can be adequately served by required utilities. Therefore, section 15332 is an appropriate exemption for this project.

Section 5. Amendments to this Specific Plan

Specific plan amendments shall be made through the provisions found in the ECMC; specifically, Chapters 17.57, 17.63 and 17.70. The City Council may at any time, after holding a properly noticed public hearing, at which time the applicant may appear and object under applicable law to any potential repeal or modification of the conditions of approval, and after considering testimony as to the operation of the approved uses, repeal this specific plan, or modify the plan with additional conditions as it deems necessary to ensure that the approved uses continue to be compatible with surrounding properties and continue to be operated in a manner that is in the best interest of public convenience and necessity and will not be contrary to the public health, safety or welfare.

Section 6. Appeal

Any decision by the Director of Community Development, or designee, may be appealed to the Planning Commission, upon receipt of a written request for a hearing, in accordance with the provisions of ECMC Chapter 17.30. The Director of Community Development, or designee shall schedule any appeal for the next available Planning Commission meeting based on notice times and agenda availability.

Section 7. Severability

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have adopted the Specific Plan and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more of the sections, subsections, sentences, clauses, or phrases may be declared invalid.

Section 8. Permitted Uses

- 8.1 Auto Dealership
 - a) Vehicle sales
 - b) Outdoor vehicle display
 - c) Vehicle repair and servicing (including overnight drop-off for next day appointments but exclusive of auto body and paint)
 - d) Vehicle testing
 - e) Part sales
 - f) Auto detailing and preparation
 - g) Identification (signage)
 - h) Special events (e.g. community gatherings, employee appreciation, other promotional activities)

Section 9. Development Standards

9.1 Site Plan

- a) The site plan design authorized by this specific plan allows for a multi-story auto dealership, vehicle display and service areas, customer and employee parking, product and supply delivery/pick up areas, landscaping, fencing, walls, and entry gates as generally indicated on the site plan shown in attached Exhibit A.1.
- b) Landscape areas along the easterly property line shall include screening landscaping so as to adequately screen the automobile dealership from the residential property to the adjacent east. Additional screening shall not be permitted atop the masonry wall along the easterly and southerly property lines.
- c) Bicycle Parking and/or storage with capacity equivalent to 10% of the required off-street parking stalls shall be maintained on site.
- d) Vehicle Display pads shall not be permitted within 10 feet of the Graves Avenue Right-of-Way unless otherwise permitted in the Zoning Code.
- e) Improvements, refinements, or modifications to the approved site plan may be approved by minor amendment or substantial conformance review in accordance with ECMC Chapters 17.57 and 17.63 respectively.
- f) Modifications to the site plan that are not eligible for review and approval under ECMC Chapters 17.57 and 17.63 may be approved by a Site Development Plan Permit in accordance with ECMC Chapter 17.65.

9.2 *Elevations, Architecture and Identification*

- a) The attached building elevations as shown on attached Exhibit A.1 set the basic design framework for a future automobile dealership. As with all projects, the City Council expects building design to be high quality. Any modifications to the elevations in this specific plan must be in concert with the City Council vision for the City of El Cajon.
- b) Rooftop equipment shall be screened from public view by a parapet wall or decorative screen that shall complement the theme of the building.
- c) Signs authorized in the Regional Commercial zone may be permitted in in accordance with ECMC Chapter 17.190 without a formal amendment of this specific plan provided that any pole sign in excess of 15 feet demonstrate that it will not cast shadows on adjacent residential properties. Freestanding signs shall not be permitted along Hart Drive.
- d) The design of accessory structures shall be consistent with the primary structure.

- g) Improvements, refinements, or modifications to the approved elevations and identification may be approved by minor amendment or substantial conformance review in accordance with ECMC Chapters 17.57 and 17.63 respectively.
- h) Modifications to the elevations that are not eligible for review and approval under ECMC Chapters 17.57 and 17.63 may be approved by a Site Development Plan Permit in accordance with ECMC Chapter 17.65.

9.3 Post Dealership Construction, Additions and Exterior Renovations

Alterations to completed structures approved pursuant to this Specific Plan shall be eligible for Substantial Conformance Review, Minor Amendment, or formal Amendment in accordance with Planning Division Policies A-17 and A-18, as amended, on file in the Community Development Department. Proposed exterior improvements shall be subject to architectural guidelines governing regional commercial structures in effect at the time of application

9.4 Circulation and Parking

- a) Parking areas, circulation and driveway locations shall be generally developed as shown on the specific plan site plan (Exhibit A.1) and be designed to accommodate all dealership functions. Changes to the circulation design, off-street parking and driveway locations may be approved by Substantial Conformance Review, Minor Amendment, or formal Amendment in accordance with Planning Division Policies A-17 and A-18, as amended, on file in the Community Development Department.
- b) The number of parking spaces for the dealership shall be sufficient to accommodate all employees, customers, visitors, deliveries, vehicle display and inventory, and service queuing.
- c) Circulation and driveways shall be designed to accommodate vehicle inventory deliveries.

9.5 Lighting

All lighting fixtures shall be shielded from neighboring properties. Moreover, the submittal of lighting plans shall be required for all improvements with light standard heights, intensities, locations, and include light reduction strategies to eliminate light spilling onto adjacent properties. Additionally, all lighting elements must be designed in concert with the overall project theme.

9.6 Building Height

a) The maximum approved building height is 35 feet.

- b) Rooftop equipment screens and architectural projections may exceed the maximum building height as provided in ECMC section 17.130.115.
- c) Development standards not specifically mentioned in Section 9, are as identified in Exhibit A.1 attached to this specific plan.

Section 10. Conditions of Approval

- a) All other land use entitlements benefitting the property subject to his Specific Plan as shown in Exhibit A.1 shall be null and void upon adoption of said Specific Plan.
- b) Prior to the second reading of this specific plan the applicant shall submit and obtain approval of a revised, digital copy of the site plan and elevations that reflects the following specific notes and changes:
 - i. The revised site plan shall reflect applicable comments and include required notes from Engineering and Storm Water listed in section 10(h).
 - ii. The revised site plan shall remove inapplicable Key Site Note "7" from Hart Drive near the northeast corner of the plan view.
 - iii. The revised site plan shall remove inapplicable Key Site Note "12A" from the landscape area to the north of the southerly driveway in the plan view.
- c) Construction permit applications and plans shall be required pursuant to all governing codes, statutes, and ordinances in effect at such time prior to commencement of any use authorized by this Specific Plan.
- d) Comply with the Standard Conditions of Development from Planning Commission Resolution No. 10649, as applicable, which are attached as Exhibit A.2.
- e) Prior to the issuance of building permits, or as otherwise determined by the Director of Community Development, the following shall be completed:
 - i. The applicant shall provide a determination of no hazard to air navigation from the Federal Aviation Administration (FAA) or certification that no notice of construction to the FAA is required pursuant to ECMC chapter 17.260.
 - ii. The applicant shall comply with Flood Damage Prevention regulations in ECMC chapter 15.14.
 - iii. Submit a lighting plan in accordance with ECMC section 17.130.150. The plan shall include the location of all external lighting elements and their respective design. Planning approval is required before building permit issuance.

- iv. The building material types and colors of all exterior elevations shall be shown on the construction drawings submitted for building permits and shall be in substantial conformance with the governing entitlements.
- v. Construction within proposed easements, property rights reservation areas, or other encumbrances is prohibited unless authorized by an encroachment agreement or similar instrument to be reviewed by the Director of Community Development, or designee.
- vi. Comply with all of the development comments included in this specific plan to the satisfaction of the City Engineer and the Director of Community Development.
- vii. Obtain approval of a Landscape Documentation Package (LDP) in conformance with the requirements of Chapter 17.195 of the Zoning Code and consistent with the guidelines provided in the City of El Cajon Landscape Design Manual. The LDP shall include refurbishment of the landscape areas along the easterly and southerly property lines consistent with Specific Plan and Zoning Code requirements.
- viii. Specifications related to the carwash shall be provided and confirmed to be compliant with the assumptions of the noise study prepared by Roma Environmental. Proposed changes shall require additional noise analysis via Substantial Conformance Review, Minor Amendment, or formal Amendment in accordance with Planning Division Policies A-17 and A-18, as amended.
- f) Prior to the granting of occupancy or as otherwise determined by the Director of Community Development, all on-site improvements shall be completed or guaranteed in accordance with the approved specific plan site plan. In addition, the following items shall be completed and/or inspected:
 - i. Complete the installation of the approved landscaping and irrigation system and obtain approval of a Certificate of Completion.
 - ii. Color coat the northerly wall exterior face with graffiti resistant paint and consistent with the project theme.
 - iii. Satisfy all requirements of the City of El Cajon.

g) Engineering

a. The driveway(s) on Graves Avenue shall be in accordance with San Diego Regional Standard Drawings G-26, including 2:1 sidewalk transitions for ADA compliance. Repair all damaged concrete curb and gutter and sidewalk in accordance with El Cajon Standards. Prior to issuance of Building Permit and Encroachment Permit, the applicant or contractor shall prepare a detailed scaled drawing with dimensions of the proposed

driveway and sidewalk installation showing the location of the public street right-of-way, property lines, face of curb, all physical obstructions, including but not limited to, utility poles, telephone and cable TV equipment, fencing, etc. along with any required offsets in accordance with San Diego Regional Standard Drawings (SDRSD) G-15 and G-16.

- b. Public improvements shall be required pursuant to the Traffic Analysis by Darnell & Associates Transportation Planning & Traffic Engineering, D&A Ref. No: 220503, dated August 25, 2022; sheets 12 and 13 (Fig 8 Channelization Plan for Graves Avenue). The Traffic Analysis is attached hereto as Exhibit A.3.
- c. Close all unused existing driveways and replace with full height curb and gutter and PCC sidewalk pursuant to City Standards.
- d. Stub any new underground utility services out at the property line.
- e. A cut-off wall will be required at every location where pervious pavers are adjacent to the public right-of-way.
- f. Submit a preliminary soils report prepared by a Civil or Geotechnical Engineer registered in the state of California, along with adequate test borings.
- Submit a Drainage Study and a Grading and Drainage Plan, along with an Erosion Control Plan, prepared by a Civil Engineer, registered in the State of California. These plans shall be based on the preliminary soils report and in conformance with the City of El Cajon Jurisdictional Runoff Management Program (JRMP) and Standard Urban Storm Water Mitigation Plan Ordinance (SUSMP). The Drainage Study shall include all related tributary areas and adequately address the impacts to the surrounding properties and to the City drainage system. The developer shall provide any needed public and private drainage facilities, including off site drainage facilities (as determined by the study). If public drainage facilities are required, the required improvements need to be included in improvement plans prepared by a Civil Engineer, registered in the State of California, and submitted to the City for approval. If the Drainage Study indicates the existing downstream drainage system is inadequate for the proposed project, a reduction in project size and/or hard surface coverage of the project may be required.
- h. Sanitary sewer and private lateral requirements:
 - a. Conduct a video inspection of the existing sewer lateral in accordance with ECMC section 13.37.040, and submit the inspection report to the City for review. The sewer lateral video must clearly show the entire length of the private sewer lateral from at least the

building to the connection with the City sewer main. The plumbing contractor must submit a copy of the video inspection (on USB flash drive) and the completed 3-page inspection report that the City will retain permanently. The report form is available on the City website.

b. The project shall use the existing sewer laterals. If a repair or new sewer lateral is required, the Building Permit plans must include the location, length, and description of the proposed repairs. Additionally, the installation of a double clean out will be required at the property line in accordance with ECMC section 13.20.060. Questions about these requirements may be directed to the Public Works Department, Sewer Lateral Coordinator at publicworks@elcajon.gov or 619-441-1653.

h) Storm Water

- ii. Storm Water Intake Forms I-1 & I-2 were received and reviewed by staff, and in accordance with the ECMC Chapter 16.60, this project is a Priority Development Project and is subject to the requirements listed below.
 - a. Submit a Storm Water Mitigation Plan (SWMitP) prepared by a Registered Civil Engineer in the State of California.
 - b. Trash enclosures are to be constructed in accordance with El Cajon Trash Enclosure Attachment No. 2 guidelines (the guidelines are available to the public through the City's website).
 - c. Add the following note to the Amendment to Specific Plan (SP) 452 site plan:

"All operations shall comply with the City's Jurisdictional Runoff Management Program (JRMP) and the City's Storm Water Ordinance (ECMC Chapters 13.10 and 16.60) to minimize or eliminate discharges of pollutants to the storm drain system. Operations shall include implementation of industrial Best Management Practices (BMPs) in accordance with Appendix C (Minimum BMPs)."

Section 11. Performance Standards

- a) All lighting elements shall be directed downward and shielded from adjacent properties.
- b) The testing of vehicles, either for service or test drives, shall be conducted on commercial streets and freeways. Vehicle testing on residential streets, including but not limited to Hart Drive, shall be prohibited at all times.
- c) A sufficient number of parking spaces shall be provided onsite to accommodate employees, customers, visitors, deliveries, vehicle display and inventory, and service queuing. Employees shall not park on adjacent residential streets.

- d) All vehicle delivery operations, either to or from the site, shall be conducted entirely on the dealership property. At no time shall such activity be conducted within the public right-of-way.
- e) Customer vehicles stored for next day service appointments in the area identified as "Night Drop-Off" in the Exhibit A.1 site plan shall not be permitted to encroach into the public right-of-way. Complaints and nuisance violations related to encroachment shall be cause for Code Enforcement action.
- f) There shall be no use of a public announcement (PA) system or other amplified notification system.
- g) All landscaped areas shall be sufficiently watered and periodically fertilized to establish and maintain healthy growth, and shall be maintained in a neat, litter and weed free condition. All plants shall be pruned and trimmed as necessary, and upon notification by Planning, all plant materials that have died or have failed to show healthy growth shall be replaced by plants of the same or similar species. Replacement by more drought resistant plants may also be approved. Landscape maintenance shall include regular inspection, adjustment, and repair of the irrigation system, including making seasonal changes to the irrigation controller.
- h) The carwash shall not be operated before 7 am or past 7 pm.
- i) All uses under this specific plan shall be operated in a manner that complies at all times with the performance standards listed in ECMC section 17.115.130.
- j) The northerly wall parallel to Hart Drive shall be routinely inspected for graffiti. Any graffiti shall be removed within 72 hours.
- k) All service uses, other than customer drop-off and queuing, shall occur indoors.

Section 12. Applicability

Where this specific plan is silent in terms of the use and development standards for the project site, the underlying zoning district and applicable general zoning regulations shall govern. Furthermore, where a conflict exists between this specific plan and the ECMC, this Specific Plan shall prevail.

Section 13. Attachments

EXHIBIT A.1 - Specific Plan Architectural Drawings

EXHIBIT A.2 - Standard Conditions of Development

EXHIBIT A.3 - Traffic Analysis by Darnell & Associates Transportation Planning & Traffic Engineering, D&A Ref. No: 220503, dated August 25, 2022



HYUNDAI OF EL CAJON

1155 GRAVES AVE., EL CAJON, CA 92021

PLANNING SUBMITTAL

09/05/2022



EXTERIOR RENDERING - NORTH VIEW ALONG GRAVES

SCALE:



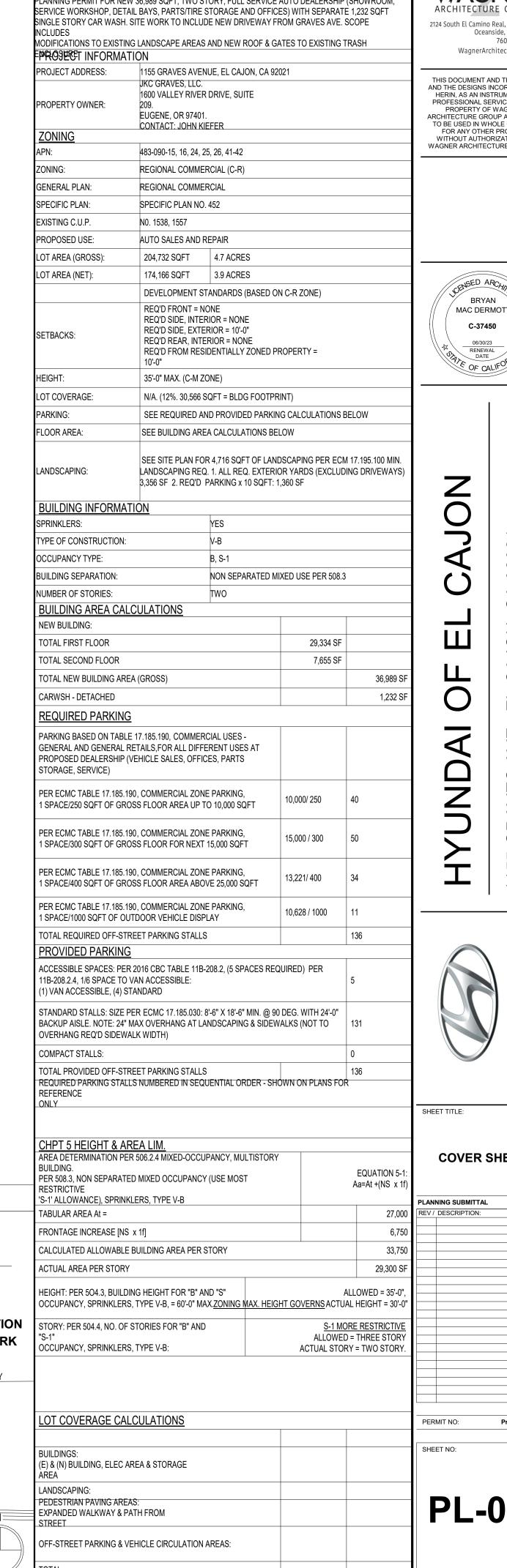


EXTERIOR RENDERING - SOUTH ALONG GRAVES



VICINITY MAP

FLETCHER PKWY



PROJECT DATA

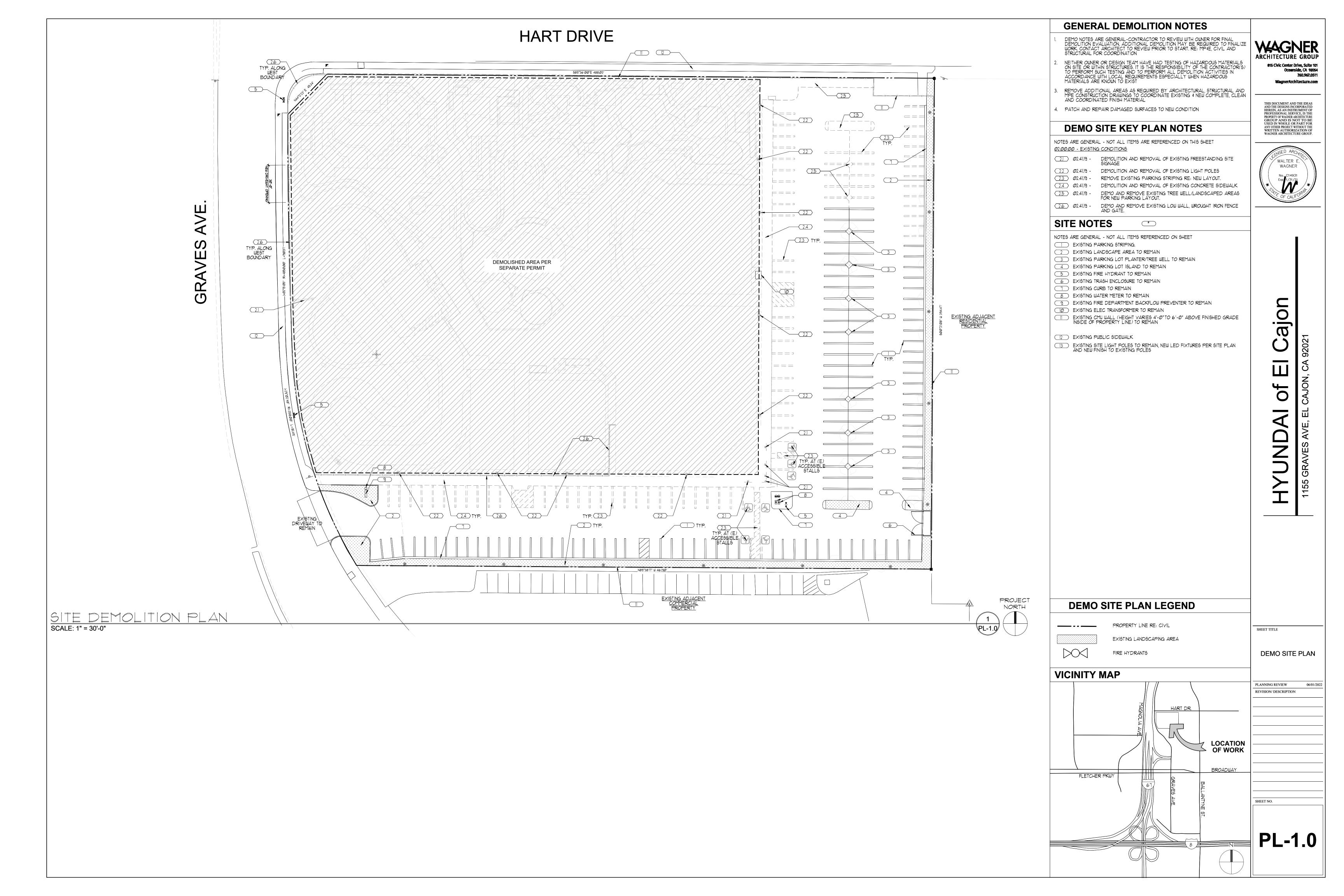
PROJECT DESCRIPTION

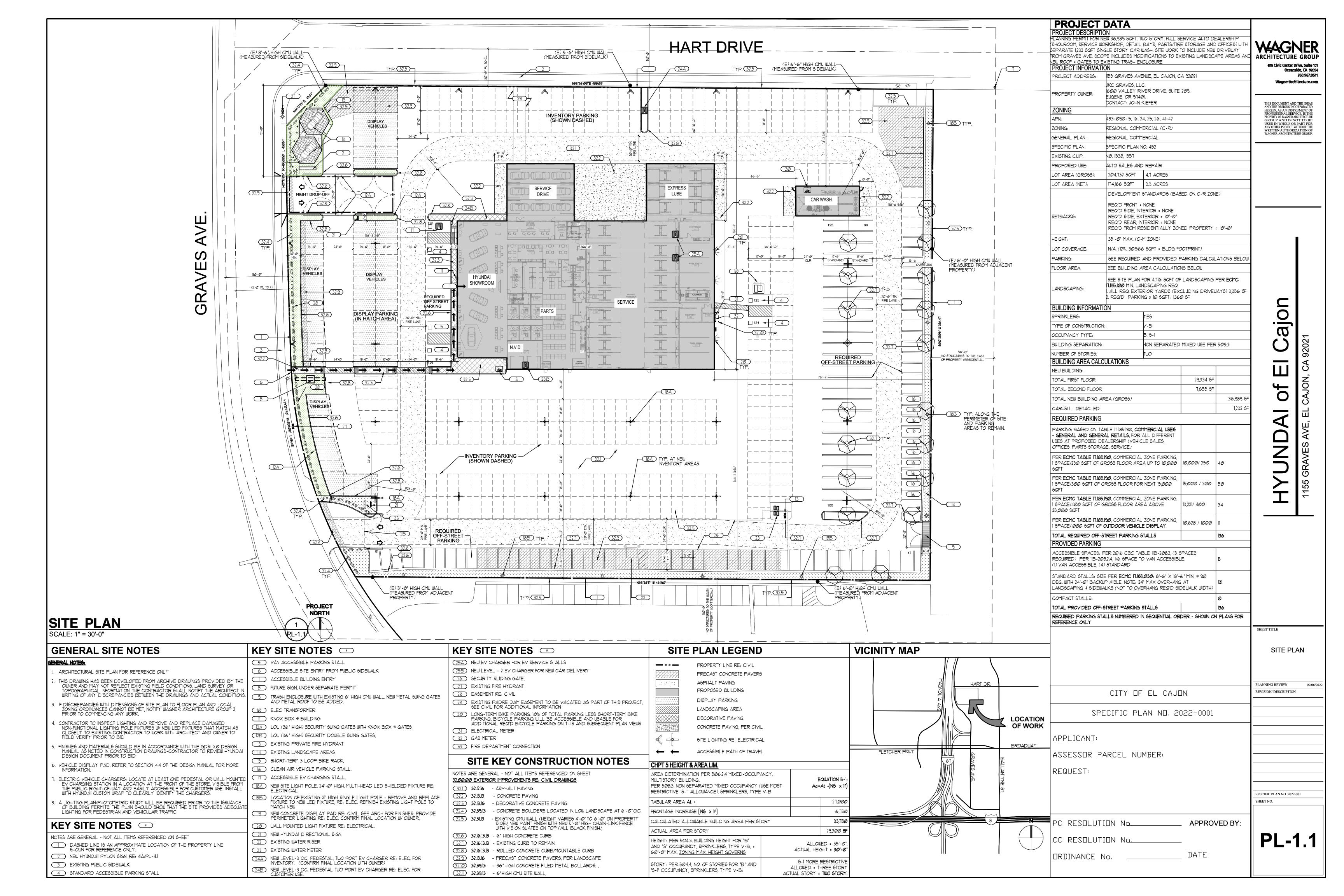
WAGNER Oceanside, CA 92054 760.967.0511 WagnerArchitecture.com

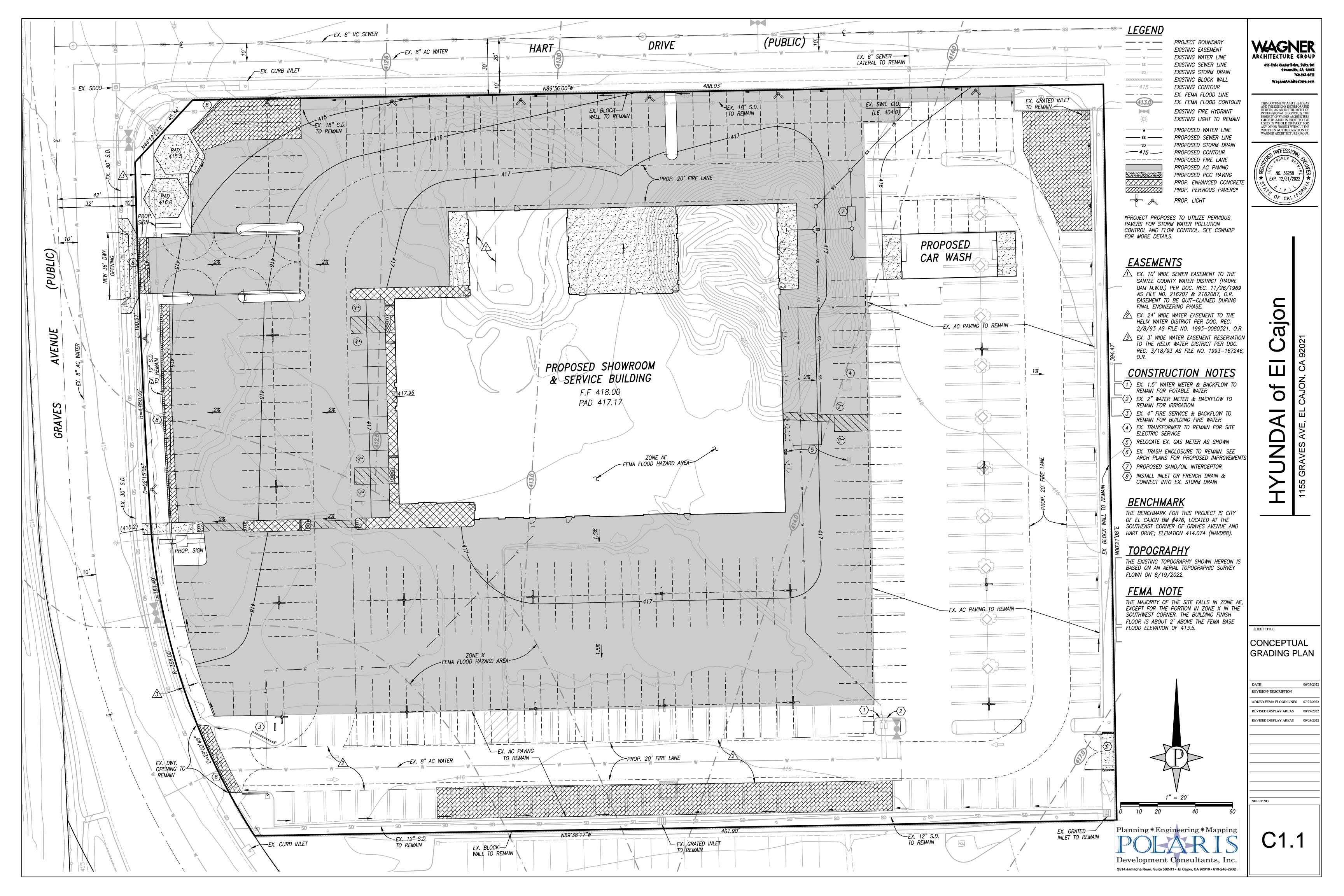
AND THE DESIGNS INCORPORATED HERIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE ARCHITECTURE GROUP AND IS NOT TO BE USED IN WHOLE OR PART FOR ANY OTHER PROJECT WITHOUT AUTHORIZATION OF WAGNER ARCHITECTURE GROUP 2

MAC DERMOTT

COVER SHEET







CITY STORM WATER NOTES

ALL OPERATIONS SHALL COMPLY WITH THE CITY'S JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM (JRMP) AND THE CITY'S STORM WATER ORDINANCE (MUNICIPAL CODE 13.10 AND 16.60) TO MINIMIZE OR ELIMINATE DISCHARGES OF POLLUTANTS TO THE STORM DRAIN SYSTEM. OPERATIONS SHALL INCLUDE IMPLEMENTATION OF VEHICLE SERVICES BEST MANAGEMENT PRACTICES (BMPs) AS FOLLOWS:

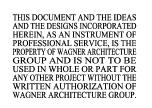
- a) ONLY RAIN IS PERMITTED TO ENTER THE STORM DRAIN SYSTEM. DISCHARGES (DIRECT OR BY CONVEYANCE) OF TRASH, DEBRIS, VEHICLE FLUIDS, OR WASTEWATER (INCLUDING WASHING FLUIDS) TO THE STORM DRAIN SYSTEM ARE STRICTLY
- b) SWEEP OR VACUUM TO CLEAN OUTDOOR AREAS (TRASH ENCLOSURES, SIDEWALKS AND PARKING LOTS). POWER WASHING IN OUTDOOR AREAS IS STRICTLY PROHIBITED.
- c) MAINTAIN PARKING AREA TO BE FREE FROM TRASH AND PETROLEUM LEAKS.
- d) PROVIDE SUFFICIENT TRASH RECEPTACLES. e) DISPOSE OF WASTES PROPERLY.
- f) ALL DUMPSTERS USED BY THIS PROJECT SHALL HAVE LOCKABLE LIDS. ALL LIDS ON ALL DUMPSTERS SHALL REMAIN CLOSED WHILE DUMPSTER IS NOT DIRECTLY IN USE AND LOCKED AFTER BUSINESS HOURS. ALL DUMPSTERS SHALL BE PROPERLY STORED INSIDE OF A BUILDING OR IN A COVERED TRASH ENCLOSURE.
- g) ALL TRASH ENCLOSURES MUST BE SECURED, COVERED WITH AN IMPERVIOUS ROOF, AND CONSTRUCTED WITH A GRADE—BREAK ACROSS THE ENTIRE ENTRANCE IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLIC WORKS STORM WATER ATTACHMENT NO. 2 (AVAILABLE TO THE PUBLIC THROUGH THE CITY WEBSITE). THE DESIGN OF THE ENCLOSURE SHOULD ACCOMMODATE A RECYCLING GREASE BIN IF ONE WILL BE USED AND STORED OUTDOORS.
- h) VEHICLE WASHING LIQUIDS MUST BE CONTAINED AND DISPOSED OF IN THE SANITARY SEWER. VEHICLES MUST BE WASHED ONLY IN A COVERED AND CONTAINED WASH AREA (CAR WASH) THAT DRAINS THROUGH AN APPROVED PRETREATMENT SYSTEM, SUCH AS A SAND AND OIL SEPARATOR SYSTEM THAT IS CONNECTED TO THE SANITARY SEWER. NO WATER OR LIQUIDS SHALL BE DISCHARGED TO SURROUNDING AREAS OTHER THAN THE MINOR AMOUNT OF CLEAN RINSE WATER THAT IS INCIDENTAL TO VEHICLES EXITING FROM THE CAR WASH. ANY SEWER CONNECTION SHALL BE PROTECTED FROM RAINWATER, EITHER DIRECT OR INDIRECT.
- i) ALL MAINTENANCE ACTIVITIES MUST BE CONDUCTED IN A COVERED AND CONTAINED BUILDING THAT IS PROTECTED FROM RAINWATER, EITHER DIRECT OR INDIRECT.

 MAINTENANCE AREAS SHALL DRAIN TO A SELF—CONTAINED SUMP OR THROUGH AN APPROVED PRE—TREATMENT SYSTEM, SUCH AS A SAND AND OIL SEPARATOR SYSTEM, THAT IS CONNECTED TO THE SANITARY SEWER.
- j) PROVIDE SPILL RESPONSE KITS FOR VEHICLE FLUID LEAKS AND OIL SPILLS. THE SPILL RESPONSE KIT MUST BE AVAILABLE AND QUICKLY ACCESSIBLE TO EMPLOYEES. SIGNAGE MUST BE POSTED TO CLEARLY DENOTE THE LOCATION OF THE KIT.
- k) ALL MATERIALS, INCLUDING VEHICLE FLUIDS, MUST BE STORED IN A PROPERLY COVERED AND CONTAINED AREA THAT WILL NOT BE EXPOSED TO RAINWATER, EITHER DIRECTLY OR INDIRECTLY.
- I) ALL STORM WATER RUNOFF TREATMENT CONTROL MECHANISMS (CATCH BASINS, INLET HYDROCARBON FILTERS, LOW IMPACT DEVELOPMENT (LID) BMPs) EMPLOYED IN THE PARKING LOTS USED BY THE BUSINESS SHALL BE MAINTAINED TO BE IN GOOD WORKING ORDER AND REPLACED AS NECESSARY. SEE MANUFACTURER'S RECOMMENDATONS FOR MAINTENANCE AND REPLACEMENT.
- m) ALL "NO DUMPING" SIGNAGE SHALL BE MAINTAINED TO BE LEGIBLE AND REPLACED AS NECESSARY. A TEMPLATE FOR PAINTING THE CONCRETE OR ASPHALT AROUND INLETS AND CATCH BASINS CAN BE PROVIDED BY THE CITY UPON REQUEST.
- FOR PUBLIC WORKS REQUIREMENTS ON THIS PLANNING ACTION, PLEASE REFER TO THE CONDITIONS OF APPROVAL. THIS SITE PLAN MAY NOT CLEARLY SHOW EXISTING OR PROPOSED IMPROVEMENTS IN THE PUBLIC RIGHT—OF—WAY AND SHOULD NOT BE USED FOR PUBLIC IMPROVEMENT CONSTRUCTION PURPOSES.

ARCHITECTURE GROUP

818 Clivic Center Brive, Suite 101

9 ceanoide, 4A 92084
760.967.0811





JAI of El Cajon

EET TITLE

CONCEPTUAL GRADING PLAN

REVISION/ DESCRIPTION

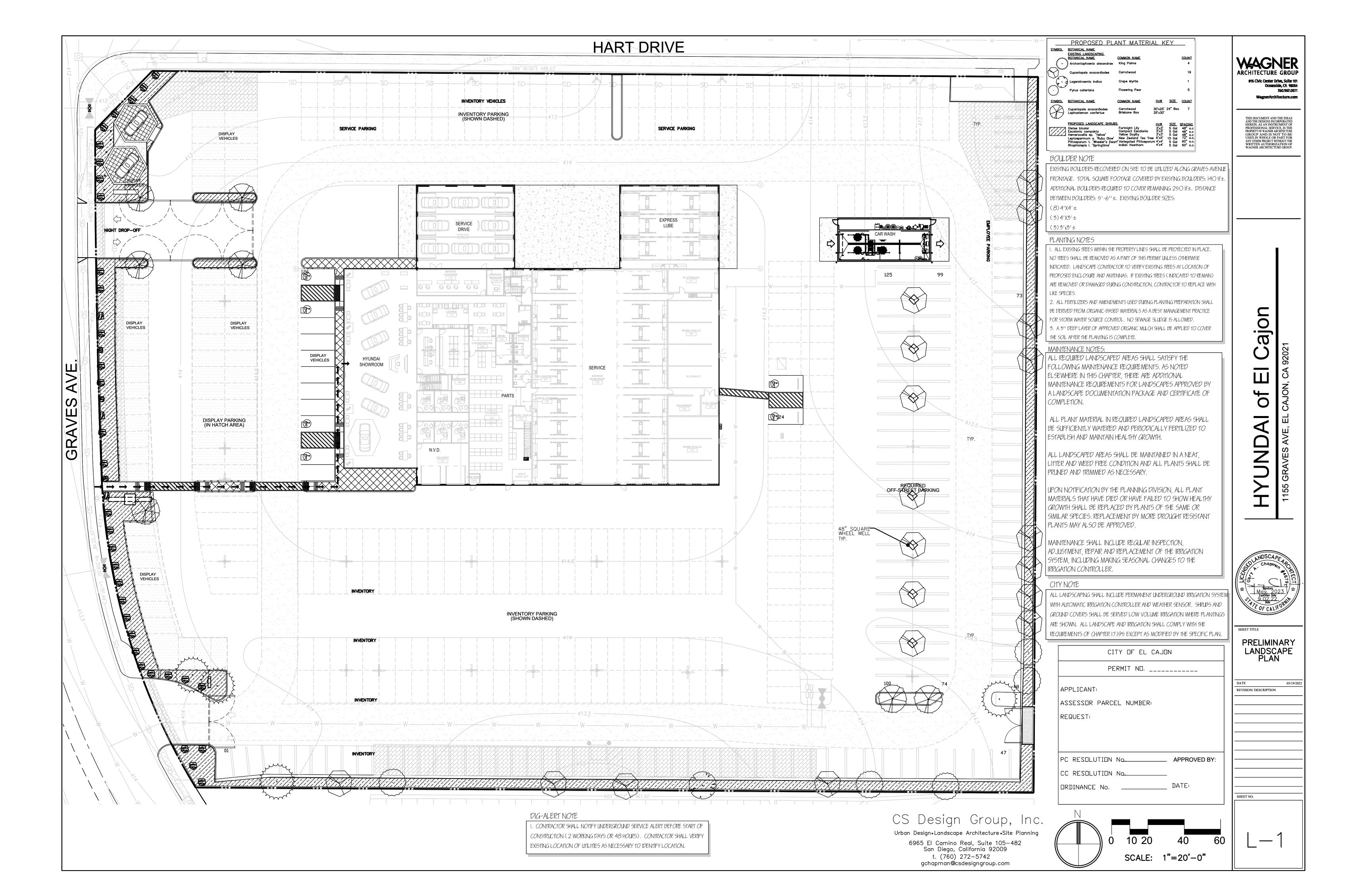
ADDED FEMA FLOOD LINES 07/27/2022

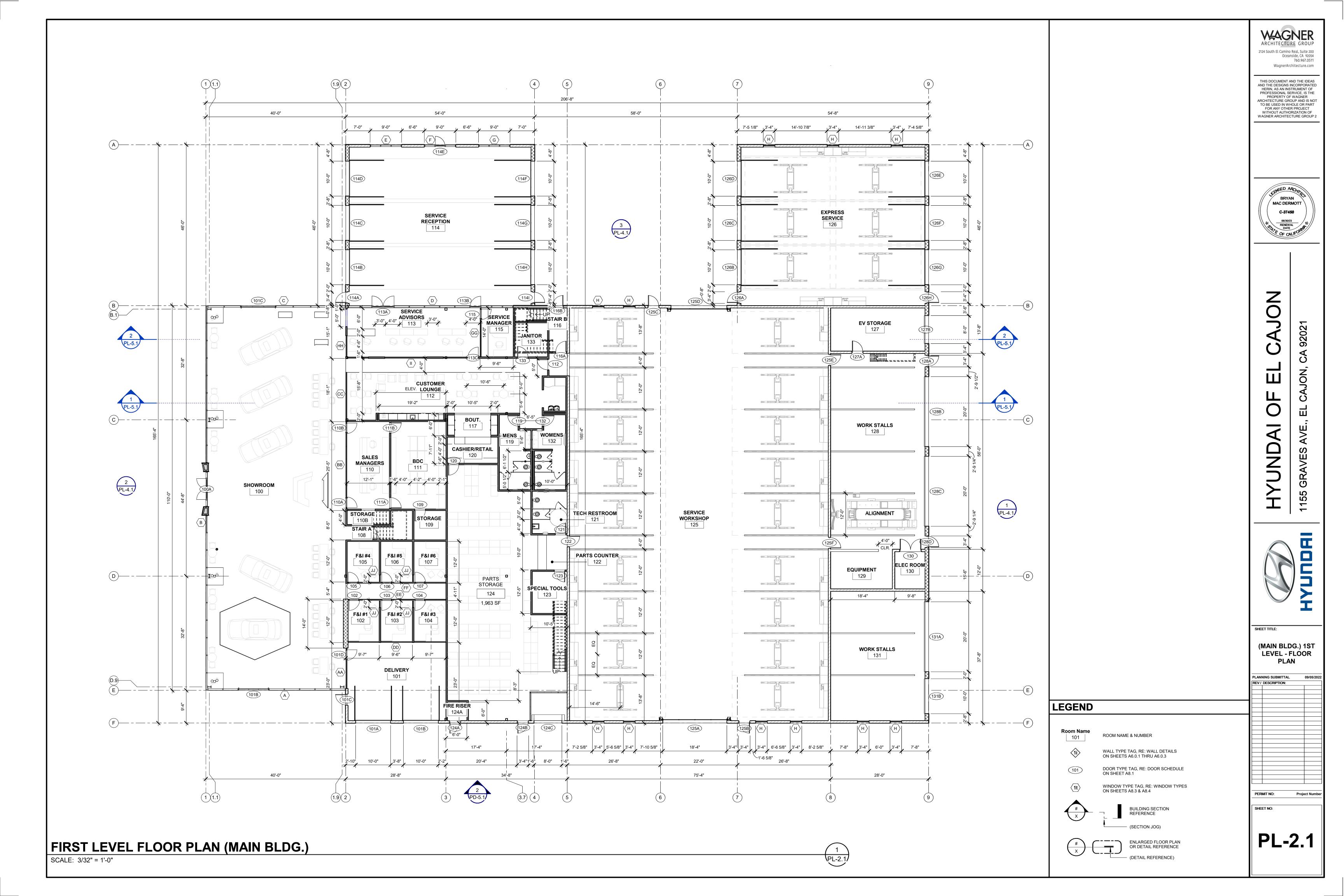
ADDED SHEET 2 & NOTES 08/29/2022

Planning * Engineering * Mapping
POLARIS

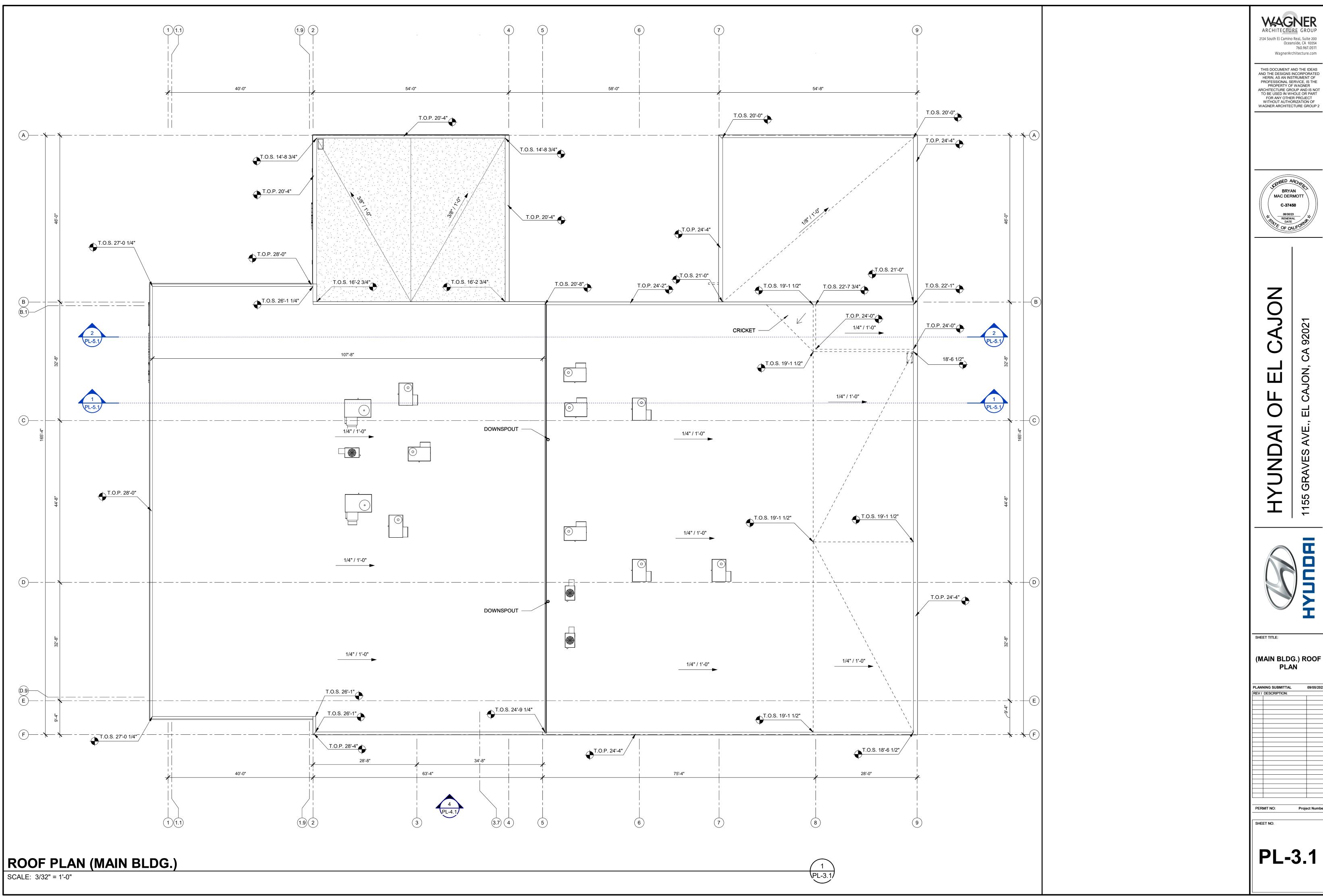
Development Consultants, Inc.

2514 Jamacha Road, Suite 502-31 • El Cajon, CA 92019 • 619-248-2932

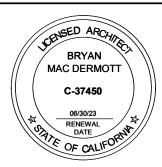


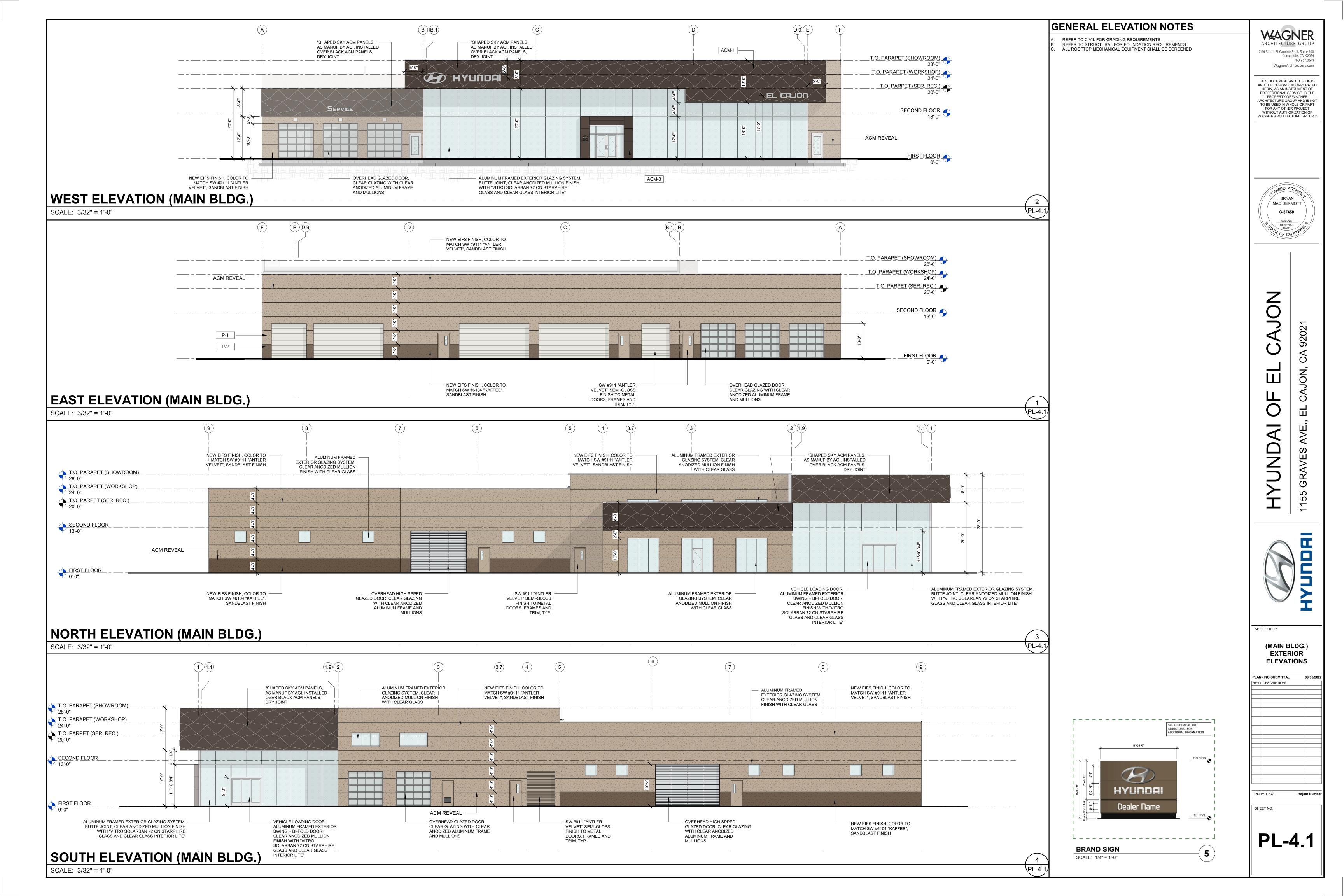


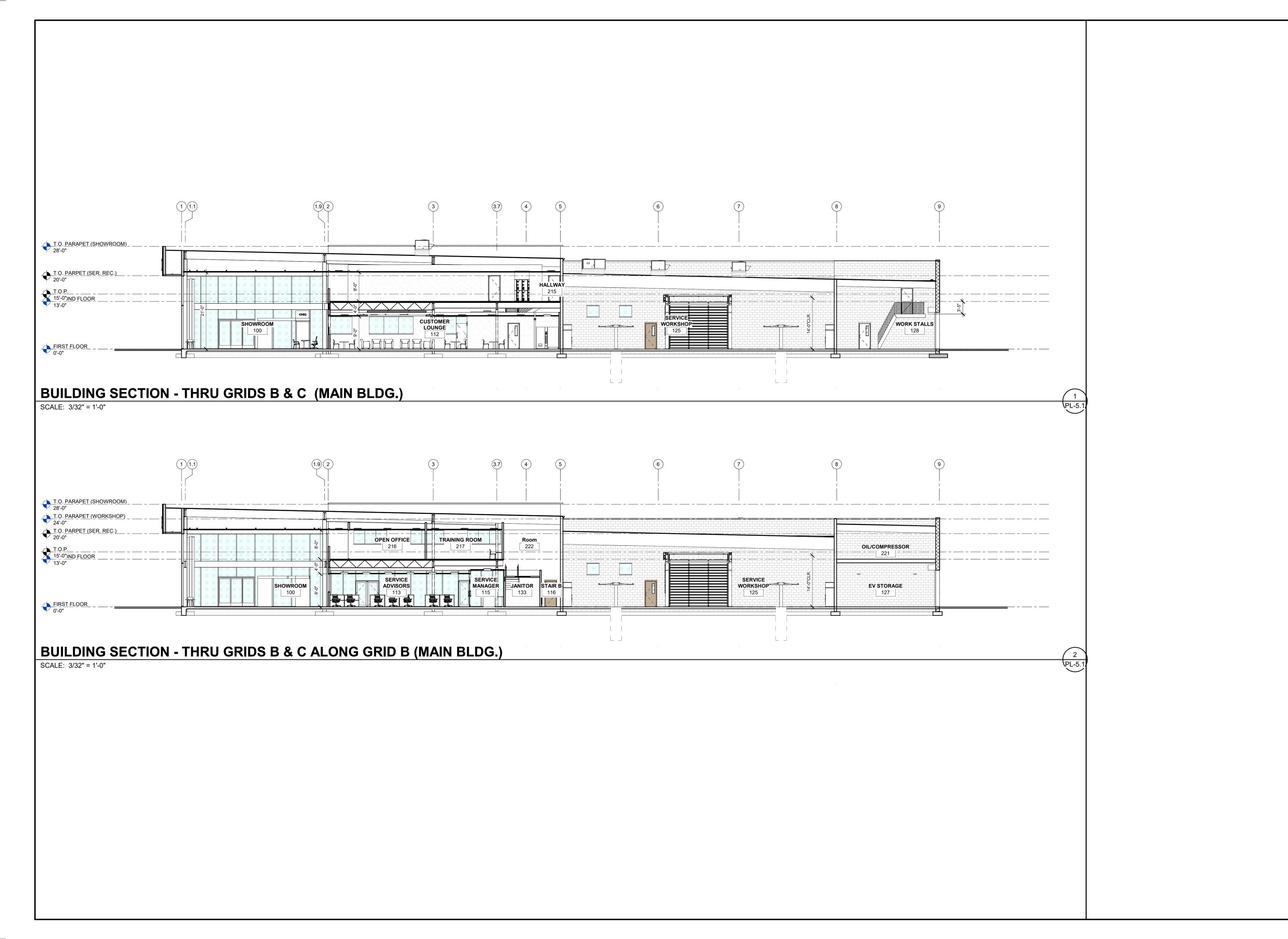




WAGNER 2124 South El Camino Real, Suite 200 Oceanside, CA 92054 760.967.0511 WagnerArchitecture.com

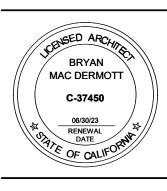






2124 South El Camino Real, Suite 200 Oceanside, CA 92054 760.967.0511 WagnerArchitecture.com

THIS DOCUMENT AND THE IDEAS
AND THE DESIGNS INCORPORATED
HERIN, AS AN INSTRUMENT OF
PROFESSIONAL SERVICE, IS THE
PROPERTY OF WAGNER
ARCHITECTURE GROUP AND IS NOT
TO BE USED IN WHOLE OR PART
FOR ANY OTHER PROJECT
WITHOUT AUTHORIZATION OF
WAGNER ARCHITECTURE GROUP 2



OF EL CAJON

(MAIN BLDG.) BUILDING SECTIONS

PLANNING SUBMITTAL
REV / DESCRIPTION:

PERMIT NO: Project Nu

SHEET NO:

PL-5.1

STANDARD CONDITIONS OF DEVELOPMENT

(Planning Commission Resolution No. 10649)

All projects approved by the Planning Commission shall comply with the following standard conditions, unless specifically exempted by the Commission or Council.

A. GENERAL

- 1. The applicant shall comply with the school impact fee requirements of the Grossmont Union High School Districts, Cajon Valley, and La Mesa-Spring Valley School Districts when applicable.
- 2. For projects that require a grading permit and excavate more than three feet into native soils, and prior to the issuance of a Building Permit, the applicant shall submit a letter to the Planning Manager agreeing to suspend construction in the vicinity of a cultural resource encountered during development of the site, and leave the resource in place until a qualified archaeologist can examine them and determine appropriate mitigation measures. All fees and expenses for the retaining of a qualified archaeologist shall be paid by the applicant and shall not be at City expense. The applicant shall agree to comply with mitigation measures recommended by the archaeologist and approved by the Planning Manager.

B. PROJECT SITE

- 1. The applicant shall comply with all regulations and code requirements of the Building and Fire Safety Division, Public Works Department, the Police Department and any other agencies requiring review of the project. If required, these agencies shall be supplied copies of the final building and site plans.
- 2. All landscape areas that adjoin parking spaces, driveways, vehicular circulation areas, or the public right-of-way shall be protected from encroachment by vehicles in a manner that also complies with state storm water regulations, which require storm water to be discharged to landscaped areas in order to reduce or eliminate the discharge of pollutants. The method of protection shall be determined by the Deputy Director of Public Works. The approved method may include six-inch high curb segments, wheel stops, decorative rock bands, or other methods determined to be acceptable by the Deputy Director of Public Works.
- Environmental and engineering studies, as directed by the Planning Manager, must be complete and on file prior to commencement to plan checking. Developer shall install off-street improvements determined necessary by the City Engineer to provide safe traffic conditions.
- 4. Developer shall underground existing and required on and off-site utilities as specified in Chapter 15 of the Municipal Code, or as deemed necessary by the City Engineer.

- All development projects shall comply with Title 12 (Streets and Sidewalks), and Title 13 (Water, Sewers, Grading, Erosion and Storm Water) of the El Cajon Municipal Code as determined by the City Engineer.
- 6. All retaining walls visible from public right-of-ways shall include decorative elements, subject to approval by the Planning Division.
- 7. The design of any masonry sound wall shall be approved by the Planning Division. Such walls shall match or be architecturally compatible with existing sound walls of neighboring projects along that street. All masonry walls shall have a trim cap.

C. ARCHITECTURE

- 1. All exterior materials and colors used in this project shall be in conformance with the materials and color samples approved as a part of this application.
- 2. All mechanical, and/or roof mounted equipment shall be architecturally screened from public view.
- 3. All trash/recycling enclosures shall be constructed of masonry material with view-obscuring doors. The enclosure shall include materials and colors consistent with the primary building and meet appropriate Storm Water Division requirements. Required roofs shall match elements of the primary building and shall include a fascia trim.
- 4. All vents, gutters, downspouts, flashing, electrical conduits, etc., shall be painted or finished to match the color of the adjacent surface, unless otherwise directed by the Planning Commission.
- 5. Soffits and other architectural elements visible from view but not detailed on the plans shall be finished in a manner that is architecturally compatible with the exterior of the building.
- 6. Finish quality of approved exterior design elements shall be subject to approval of the Planning Division prior to issuance of Certificate of Occupancy.
- 7. Any decorative elements around the base of a building (stone veneer or tile, etc.) shall be finished with a decorative cap or trim piece.

D. LANDSCAPING

- Specific landscaping for screening shall have an appearance of mature growth subject to a field check and approval by the Planning Division prior to the issuance of a Certificate of Occupancy.
- 2. All existing trees to remain shall be shown on the grading plan.

- 3. The area under the drip line of all existing trees that are to remain shall be protected during construction by a fence or other acceptable means. Grading shall be restricted under the trees to prevent soil compaction and to prevent root damage.
- 4. All sloped banks greater than three (3) feet in vertical height and 2:1 or greater slope shall be landscaped and irrigated for erosion control and to soften their appearance as follows: deep-rooting grasses, ground cover and shrubs. Shrubbery shall be a minimum one-gallon size and shall have a minimum separation of one (1) times the mature width and on slopes of 10 feet or more in vertical height shall include, a minimum of one (1) tree for every 600 square feet of the total slope area. Trees shall be a minimum five-gallon size and shall be spaced a minimum of 30 feet apart. Trees and shrubs shall be planted in staggered clusters to soften and vary the slope plane. Slope planting required by this condition shall include a permanent irrigation system to be installed by the developer prior to occupancy.
- 5. All landscaping shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, mowing, weeding, cleaning of debris and trash, fertilizing and regular watering. Whenever necessary, dead or dying plants shall be replaced with other plant materials to ensure continued compliance with applicable landscaping requirements. Required irrigation systems shall be fully maintained in sound operating condition with heads periodically cleaned and replaced when missing to ensure continued regular watering of landscape areas, and health and vitality of landscape materials.

E. MISCELLANEOUS

- Final occupancy shall not be granted until all construction and landscaping is complete
 in accordance with all approved plans. Under certain circumstances, a temporary
 occupancy may be granted prior to final inspection.
- 2. It is the responsibility of the applicant or developer to check with each agency for requirements that may pertain to their project.
- 3. All signs shall be submitted to the Planning Division for review and approval per Section 17.190.060 of the El Cajon Municipal Code.
- 4. The site shall be maintained in a neat and clean manner free of trash and debris.
- Certain outdoor equipment, such as satellite dishes and back-flow prevention devices shall be visually screened or painted to match surroundings upon installation subject to the approval of the Planning Division. Screening devices shall be shown on construction and/or landscape plans.
- 6. Water backflow protection for new residential and modified residential projects shall include a protection device at the fire service point of connection, or an internal passive purge system. Annual testing is required for protection devices. Contact Helix Water District at 619.466.0585 for additional information.

- 7. All exterior light fixtures shall be shown on a lighting plan and made part of construction drawings subject to staff review and approval. All lights attached to buildings shall provide a soft "wash" of light against the wall. All building, parking, and yard lights shall conform to the City General Development Standards 17.130.150 and Performance Standards 17.115.130 (G) and shall complement the site and building architecture.
- 8. The removal of trees shall not take place during the bird-nesting (breeding) season (February 1 through August 15), unless written authorization from a qualified biologist to proceed with tree removal is submitted to the Planning Division. If clearing is proposed to take place during the breeding season, a survey shall be conducted by the qualified biologist to determine if nests are present, or nest building or other breeding/nesting behavior is occurring. If nesting is not occurring (which includes nest building or other breeding/nesting behavior) within this area, clearing shall be allowed to proceed. If nesting is occurring (or breeding/nesting behavior is occurring), tree removal shall be postponed until a qualified biologist determines that all nesting (or breeding/nesting behavior) has ceased or until after August 15.
- 9. The placement of bollards within parking areas and driveways shall only be permitted when no other alternative design (curbs or landscaping) is feasible and accepted by the Building Official.



TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

August 25, 2022

Bryan Mac Dermott, Wagner Architecture Group 2124 El Camino Real, Suite 200 Oceanside, CA. 9205421

D&A Ref. No: 220503

Subject: Vehicle Miles Traveled (VMT) and Local Mobility Assessment (LMA) for the proposed Hyundai of El Cajon Auto Dealership at 1155 Graves Avenue, El Cajon.

Dear Mr. Mac Dermott,

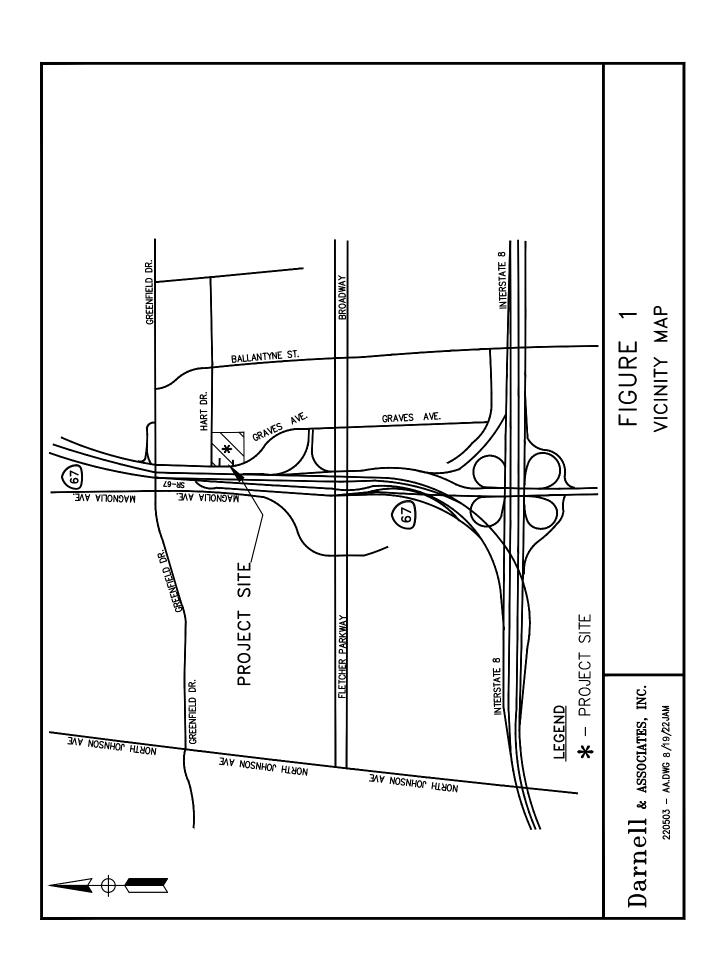
Darnell & Associates, (D&A) has prepared this report to identify if additional Vehicle Miles Traveled (VMT) and Local Mobility Assessment (LMA) analysis is required. **Figure 1** is a vicinity map showing the Project location and the Project site plan is presented on **Figure 2**. The following outlines key assumptions for the Vehicle Miles Traveled (VMT) and Local Mobility Assessment (LMA) analysis requirement identified in the Institute of Traffic Engineers (ITE) Guidelines dated May 2019 used by the City of El Cajon.

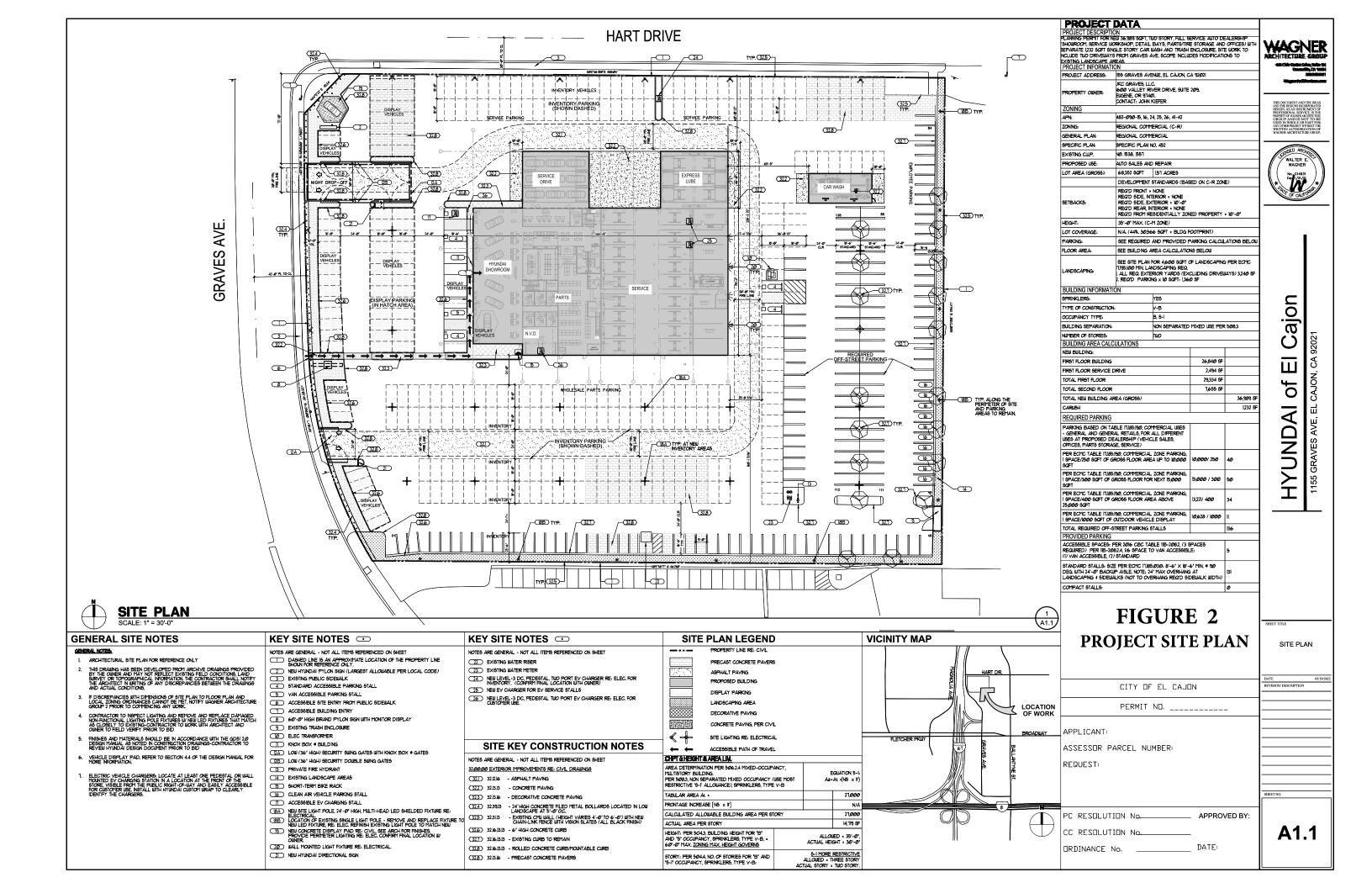
PROJECT DESCRIPTION

The Project proposes to develop the Hyundai of El Cajon Facility at 1155 Graves Avenue in the City of El Cajon. The site plan for the Project proposes construction of the 38,221 square foot Auto Sales and Repair Services Facility, Car Wash and the required parking, display parking and inventory parking shown on **Figure 2**. The Project site has two (2) driveways on Graves Avenue south of Hart Drive. Based on my professional experience, there will be a credit for trip generation for the existing 1.87 Acre Recreation Amusement Park presented on **Figure 3**. The Recreation Amusement Park is to be removed from the site and is to be credited to the proposed project trip generation.

PROJECT TRIP GENERATION

The trip generation rate for the Project is based on the "Not so Brief Guide" of Vehicular Traffic Generation Rates for the San Diego Region Land Use code 840 for Automotive Sale (New). A copy of the Land Use Code 840 trip generate rates are presented in Appendix A. . Table 1 summarizes the proposed trip generation for the proposed Project and existing Recreation Amusement Park.







source: Google Earth

FIGURE 3 - 1.84 ACRE RECREATION AMUSEMENT PARK LOCATION

Table 1 –Trip Generation Summary										
Trip Generation rates (a)										
ITE Land Use	Do!l-r	AM	Peak	PM Peak						
ITE Land Use (Code)	Daily (Trips/KSF)	ADT%	In/Out Ratio	ADT%	In/Out Ratio					
Existing: Recreation Amusement Park	90(Trips/KSF)	2%	50% - 50%	6%	50% - 50%					
Proposed: Automotive Sales(NEW) 840	28.65(KSF)- 29.45	1.87%	73% - 27%	1.80%	40% - 60%					

Hyundai of El Cajon Trip Generation

		Trip Generation							
Land Use	Density	Daily	AM Peak			PM Peak			
			In	Out	Total	In	Out	Total	
Proposed:									
Automotive	38,221 S.F.	1,035	53	19	72	36	54	90	
Sales(NEW) 840									
Existing:									
Recreation	1.87 Acre	168	2	2	4	5	5	10	
Amusement Park									
New No	867	51	17	68	31	49	80		

Source: The "Not so Brief Guide" of Vehicular Traffic Generation Rates for the San Diego Region.

KSF = Thousand Square Feet

Daily Trips = 28.65 x Thousand Square Feet (KSF) of project -29.45

VEHICLE MILES TRAVELED (VMT) ASSESSMENT

Senate Bill 743 (SB 743) was approved in 2013 and changed the way transportation impacts are measured under the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of Vehicle Miles Travelled (VMT) as the required metric to replace the automobile delay-based LOS. According to the *ITE Guidelines*, a Project is required to evaluate transportation impacts under CEQA using the VMT metric.

Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 6

VMT SCREENING

Based on the screening criteria for performing a detailed VMT analysis, the Project may be presumed to have a less than significant VMT impact, based on the Project is a "Locally Serving Retail Project", defined as having 100,000 square feet gross floor area or less as stipulated in Senate Bill 743.

Since the Project is a "Locally Serving Retail Project" with less than 100,000 square feet, the Project is presumed to have a less than significant VMT impact per SB 743, therefore additional VMT analysis is not required.

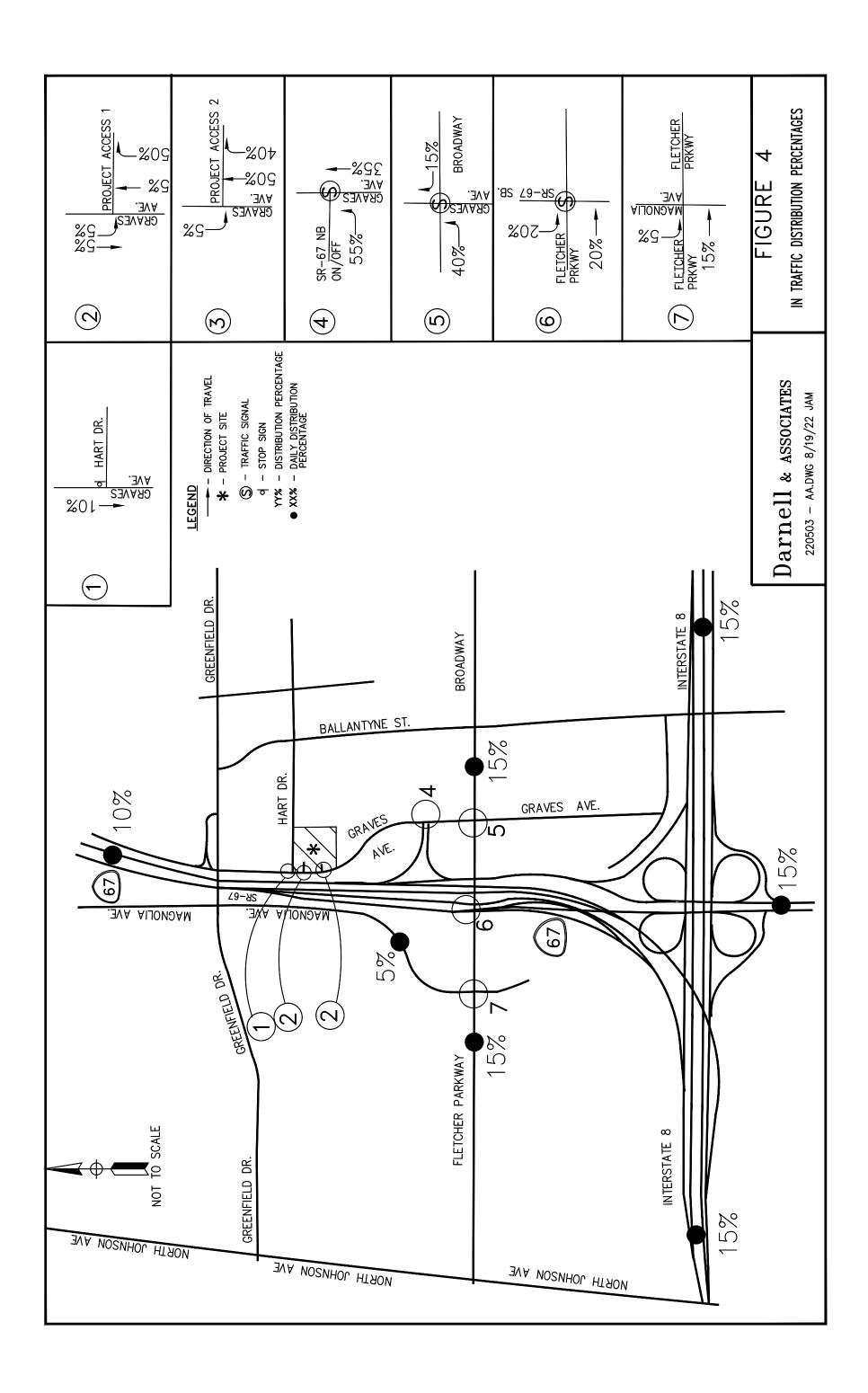
LOCAL MOBILITY ASSESSMENT ANALYSIS (LMA) SCREENING

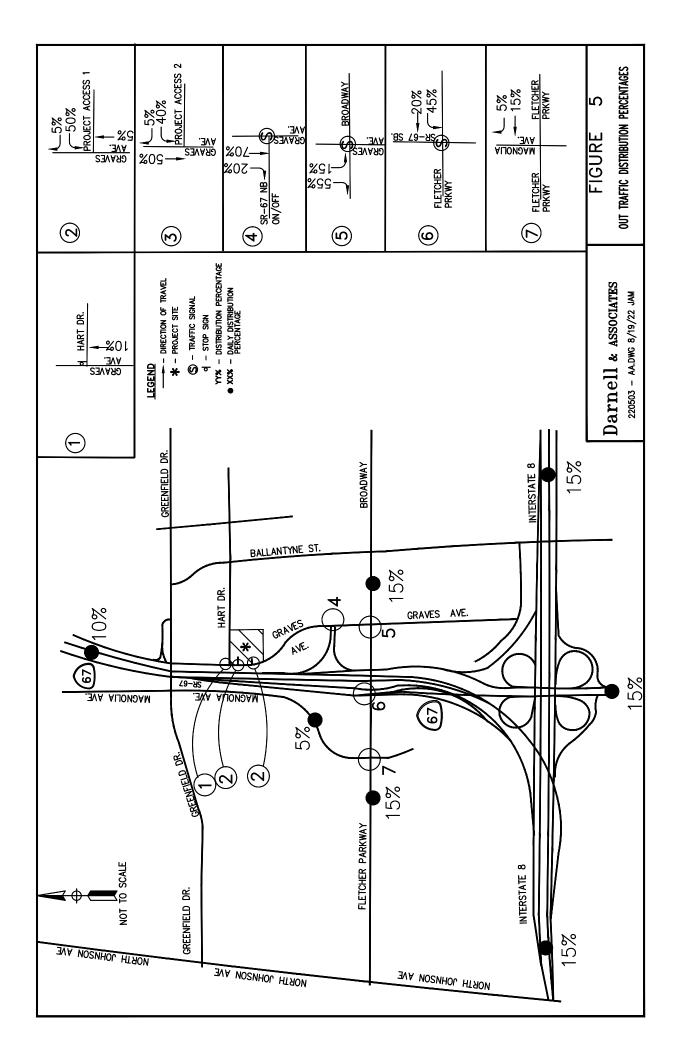
Based on the screening criteria for Local Mobility Analysis (LMA), contained in the *ITE Guidelines*, the Project would be screened out from completing a LMA if the Project's land use is consistent with the Community Plan/Zoning designation and the Project is expected to generate less than 1,000 daily driveway trips with the credit for the existing Recreational Amusement Park Use and/or less than 100 peak hour trips. Review of *Table 1* shows the project will generate less than 100 peak hour in the AM and PM peak hour periods.

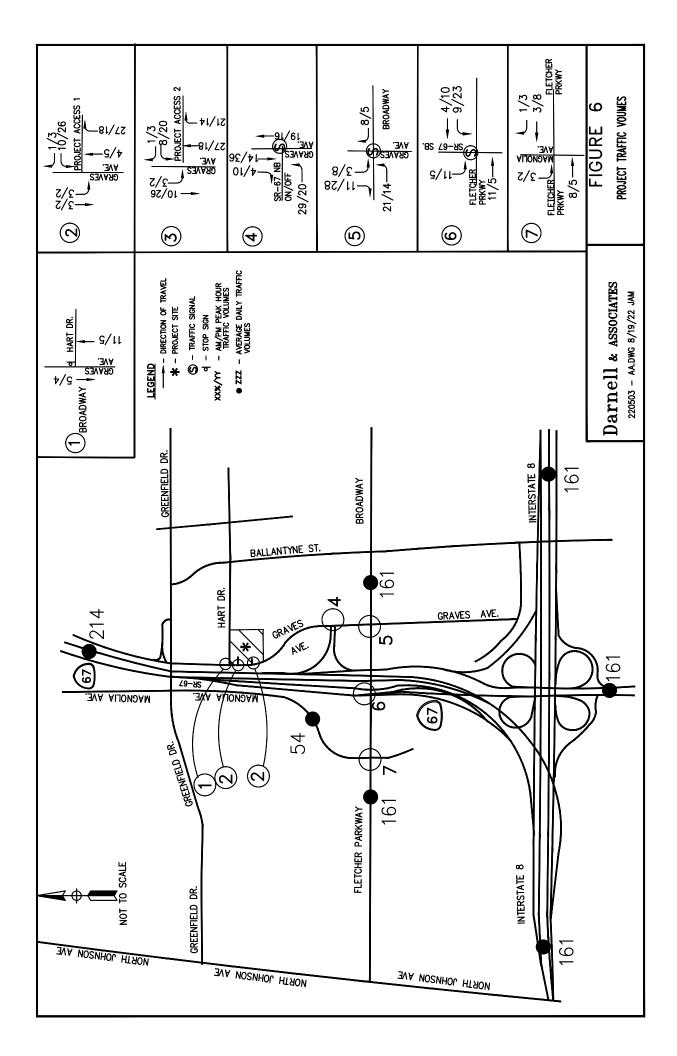
The next step in the LMA was review of project traffic presented on *Table 1* was assigned to the surrounding roadways, **Figures 4** and **5** present the trip distribution percentages and **Figure 6** presents the Project traffic volumes.

Removal of the 1.87 Acre Recreational Amusement Park generates 187 daily, 68 AM peak hour trips and 80 PM peak hour trips, resulting in the proposed Project traffic being reduced to 848 daily trips which is less than the average 1,000 daily trips.

The Project trip generation of 867 daily trips identifies a focused traffic assessment is not required. However the Graves Avenue/SR-67 intersection will be analyzed for existing conditions plus project traffic.







Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 10

EXISTING PLUS PROJECT CONDITIONS

The next step in the project assessment analysis, we reviewed existing traffic volumes at the Graves Avenue/SR-67 On/Off Ramps. The AM/PM peak hour volumes were analyzed for existing conditions and existing plus project traffic conditions. **Figure 7** presents the following conditions at the Graves Avenue/SR-67 on/off ramps.

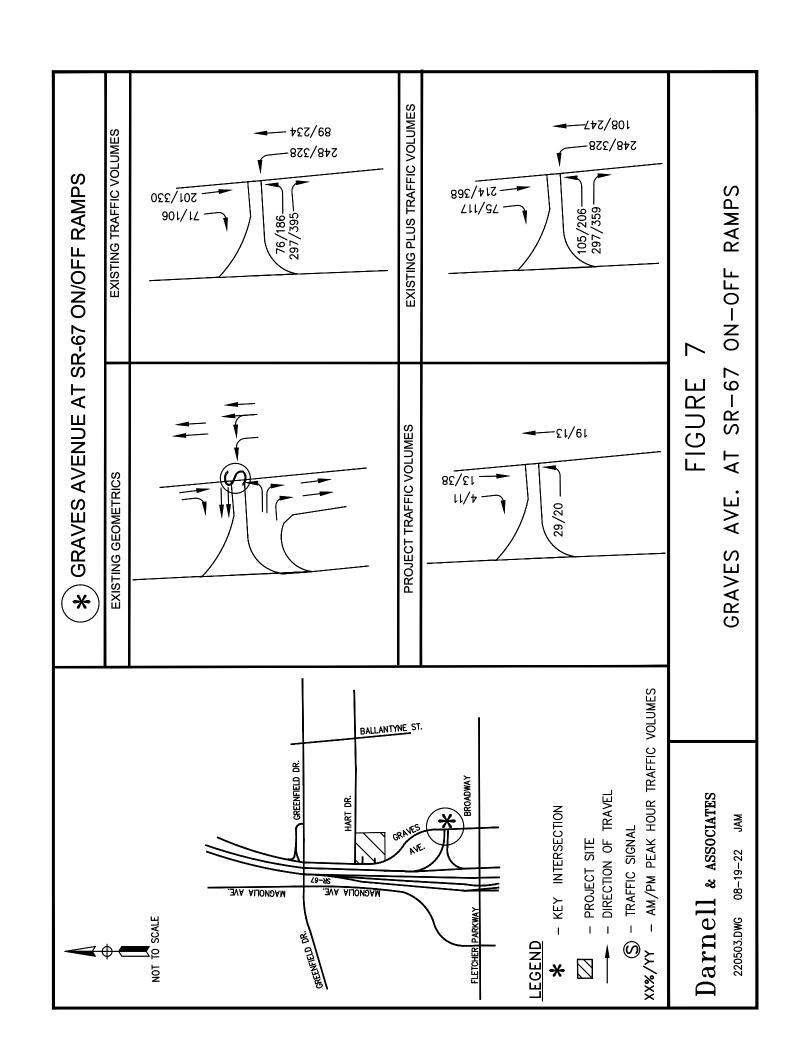
- Existing Roadway Geometrics
- Existing AM/PM Peak Hour Traffic Volumes
- Project AM/PM Traffic Volumes
- Existing Plus Project AM/PM Peak Hour Traffic Volumes

The traffic volumes for existing conditions and existing plus project traffic volumes at the Graves Avenue / SR-67 on/off ramp were analyzed. Table 2 summarizes the analysis.

		Table	2 – Ex	isting P	lus Pr	oject Int	tersect	tion Ana	lysis			
		Existing Conditions				Existing plus Project Conditions						
	Critical	AM Peak		PM Peak		AM Peak			PM Peak			
Intersection	Critical Move.	Delay veh/sec	LOS	Delay veh/sec	LOS	Delay veh/sec	LOS	Δ Delay veh/sec	Delay veh/sec	LOS	Δ Delay veh/sec	SIG.
Graves Avenue at SR-67	Inter.	9.0	A	10.0	A	9.2	A	0.2	11.5	В	0.6	no

Notes: (a)Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections. (b) LOS calculations are based on the methodology outlined in the 2010 Highway Capacity Manual (HCM6). LOS = Level of Service, Critical Move. = Critical Movement, SIG. = Significant Impact, Inter. = Intersection

Review of **Table 2** shows existing Graves Avenue / SR-67 intersection is currently operating at LOS A in the AM and PM peak hour. The addition of project traffic go the Graves Avenue / SR-67 intersection will continue to operate at LOS A in the AM peak hour with the addition of project traffic and will operate at LOS B in the PM peak hour. Therefore no additional intersection analysis is required. Copies of the Existing and Existing plus Project Synchro worksheets are presented in Appendix B.



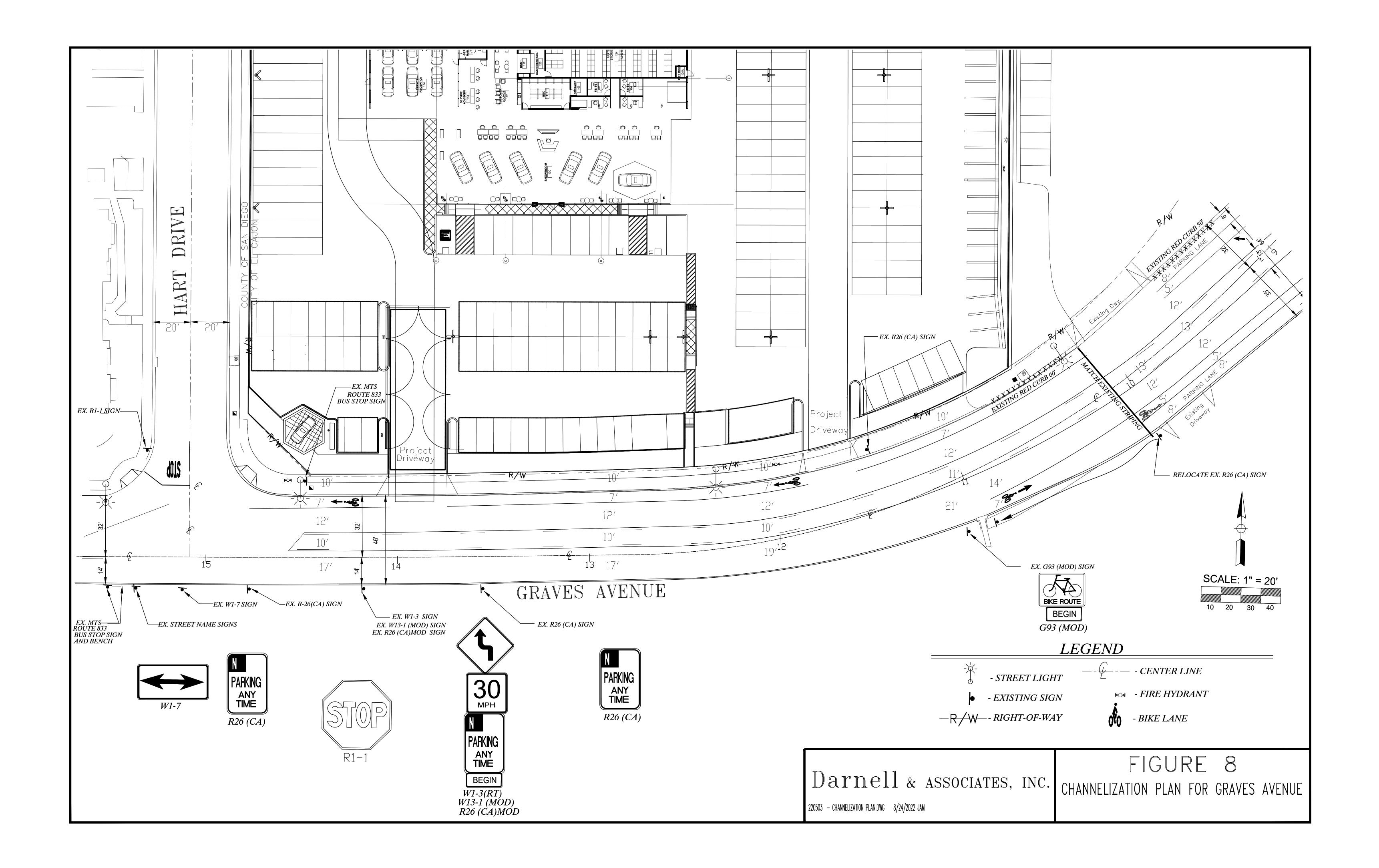
Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 12

The final step in our analysis, we reviewed Graves Avenue adjacent to the project pedestrian, transit access and striping to identify the following recommended improvements on Graves Avenue south of Hart:

- Place bus bench at the MTS Route 833 Northbound stop at the southeast corner of the intersection of Graves Avenue at Hart Drive.
- To enhance access to/from the project driveways revise the Graves Avenue existing channelization from Hart Drive to south of the project to provide the channelization improvements shown on Figure 8.

The proposed improvements will provide:

- Two-way left turn access on Graves Avenue at the project driveways.
- Revisions to the existing channelization on Graves Avenue will be revised to extend the northbound bike lane on Graves Avenue to Hart Drive.
- The implementation of the recommended Graves Avenue channelization including the extension of the northbound bike lane adjacent to the project site will enhance site access and;
- The existing parking restrictions adjacent to project site and the proposed northbound bike lane will also enhance corner sight distance at the projects two driveways.



Bryan Mac Dermott, Wagner Architecture Group August 25, 2022 Page 14

SUMMARY

- The proposed Project would generate 1,035 daily trips, 72 AM peak hour trips and 90 PM peak hour trips to be added to the surrounding roadways. However, removal of the existing 1.87 Acre Recreational Amusement Park that generates 187 daily, 68 AM peak hour trips and 80 PM peak hour trips, will result in the proposed Project traffic being reduced to 848 daily trips, which is less than the average 1,000 daily trips. This amount of traffic can be considered to comply with the City of El Cajon requirements and not require additional traffic analysis.
- The Project is considered a "Locally Serving Retail Project" and therefore satisfy's screening criteria to not require additional VMT analysis.
- Analysis of Graves Avenue/ SR-67 on/off ramp found the intersection to operate at LOS A in the AM peak hour and LOS B in the PM peak. Therefore no additional Local Mobility Analysis (LMA) is required.
- Implementation of the Graves Avenue channelization improvements shown on Figure 6 will provide the following:
 - Revise the channelization on Graves Avenue to extend the existing center two way left-turn lane to Hart Drive.
 - Extend the northbound bike lane on Graves Avenue immediately south of along the project site to Hart Drive.
 - The proposed channelization will accommodate the future addition of a southbound bike lane from Hart Drive to the existing bike lane south of the project site, when the County of San Diego adds bike lanes on Graves Avenue north of Hart Drive. The proposed improvements are designed to add the southbound bike lane in the future.
 - The existing parking restrictions on Graves Avenue and the addition of the northbound bike lane enhances sight distance exiting the projects two driveways.

Sincerely,

DARNELL & ASSOCIATES,

Bill E. Darnell, P.E.

RCE: 22338

BED/jam

220502 - Revised Hyundai of El Cajon Traffic Analysis 8.25.22

Date: 8/25/2022

OR OF ESSION

	Attachment A
	eration Manual 10th
Institute of Transportation Engineers (ITE) Trip Gene Edition Land Use code 840 for Auto	

Land Use: 840 Automobile Sales (New)

Description

A new automobile sales dealership is typically located along a major arterial street characterized by abundant commercial development. The sale or leasing of new cars is the primary business at these facilities; however, automobile services, parts sales, and used car sales may also be available. Some dealerships also include leasing options, truck sales, and servicing. Automobile sales (used) (Land Use 841) and recreational vehicle sales (Land Use 842) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:15 a.m. and 12:15 p.m. and 1:45 and 2:45 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, Georgia, Indiana, New York, North Carolina, Oregon, Texas, Vermont, and Virginia.

Source Numbers

260, 271, 280, 328, 414, 424, 427, 438, 440, 507, 571, 583, 612, 715, 728, 880, 881, 936, 974, 975



Automobile Sales (New)

(840)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

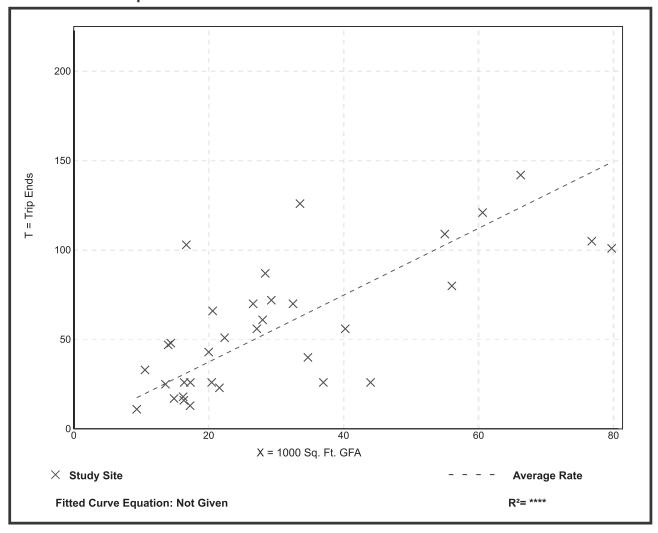
Number of Studies: 34 1000 Sq. Ft. GFA: 31

Directional Distribution: 73% entering, 27% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.87	0.59 - 6.17	0.95

Data Plot and Equation





Automobile Sales (New)

(840)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

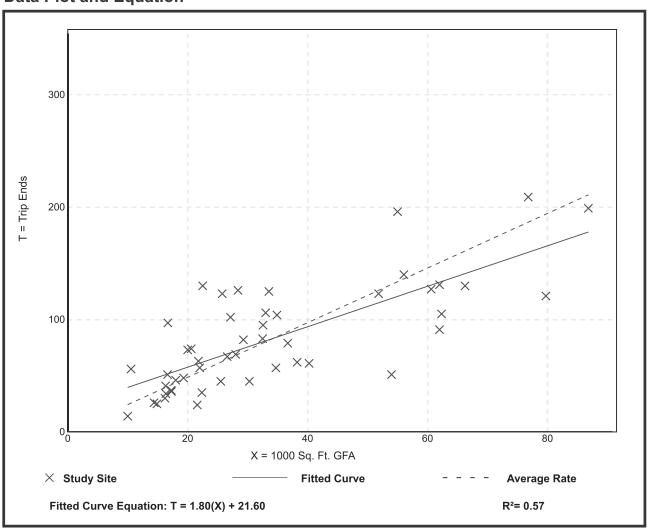
Number of Studies: 49 1000 Sq. Ft. GFA: 34

Directional Distribution: 40% entering, 60% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.43	0.94 - 5.81	0.99

Data Plot and Equation





Automobile Sales (New)

(840)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

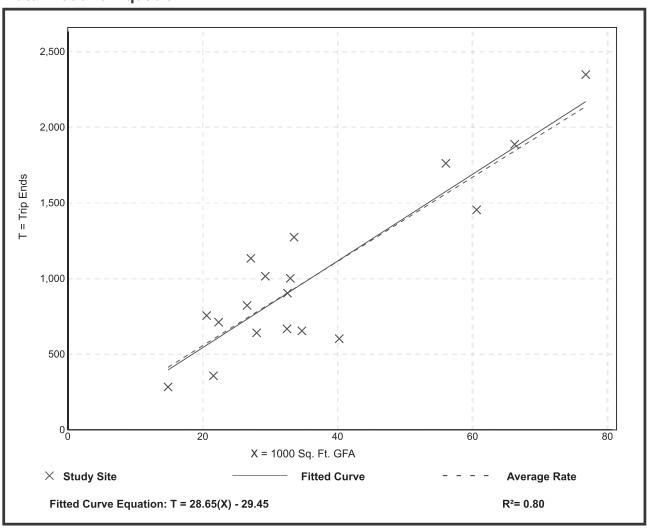
Number of Studies: 18 1000 Sq. Ft. GFA: 36

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
27.84	14.98 - 41.78	7.01

Data Plot and Equation





Attachment B

• TRAFFIC COUNTS

• GRAVES AVENUE AT SR-67 SYNCHRO WORKSHEETS:

> Existing Traffic Conditions

> Existing plus Project Traffic Conditions

Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878 (951)268-6268

City of El Cajon N/S: Graves Avenue E/W: SR-67 Northbound Ramps

Weather: Clear

File Name : 01_ECJ_Graves_67N AM Site Code : 23522559 Start Date : 6/9/2022 Page No : 1

Groups Printed- Total Volume

				roups Print	<u>ea- rotai vo</u>	oiume				
	Gra	aves Aven	ue	G	raves Aven	ue	SR-67 N	Northbound	l Ramps	
	S	outhbound	d		Northbound					
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	40	13	53	59	10	69	10	59	69	191
07:15 AM	53	25	78	76	23	99	19	66	85	262
07:30 AM	50	14	64	58	25	83	16	68	84	231
07:45 AM	63	17	80	65	19	84	21	94	115	279
Total	206	69	275	258	77	335	66	287	353	963
08:00 AM	35	15	50	49	22	71	20	69	89	210
08:15 AM	61	15	76	49	28	77	18	67	85	238
08:30 AM	58	18	76	49	30	79	26	69	95	250
08:45 AM	55	11	66	48	38	86	23	84	107	259
Total	209	59	268	195	118	313	87	289	376	957
- 1						1			1	
Grand Total	415	128	543	453	195	648	153	576	729	1920
Apprch %	76.4	23.6		69.9	30.1		21	79		
Total %	21.6	6.7	28.3	23.6	10.2	33.8	8	30	38	

	G	raves Aven	ue	G	raves Aver	nue	SR-67	d Ramps			
		Southbound	d	Northbound			Eastbound				
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total	
Peak Hour Analysis Fr	om 07:00 AN	I to 08:45 A	AM - Peak 1 c	of 1				_			
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	53	25	78	76	23	99	19	66	85	262	
07:30 AM	50	14	64	58	25	83	16	68	84	231	
07:45 AM	63	17	80	65	19	84	21	94	115	279	
08:00 AM	35	15	50	49	22	71	20	69	89	210	
Total Volume	201	71	272	248	89	337	76	297	373	982	
% App. Total	73.9	26.1		73.6	26.4		20.4	79.6			
PHF	.798	.710	.850	.816	.890	.851	.905	.790	.811	.880	

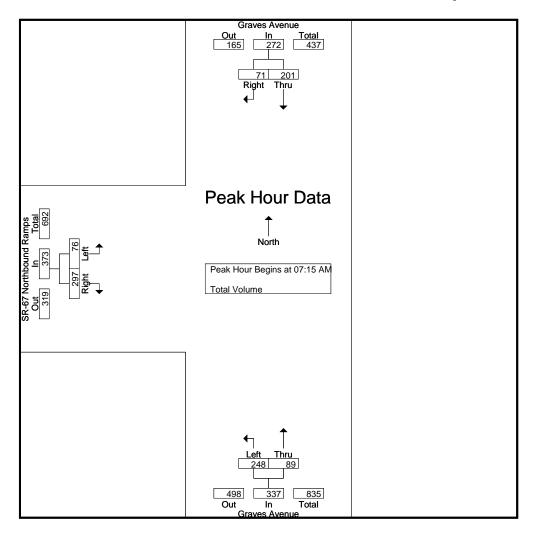
City of El Cajon N/S: Graves Avenue

E/W: SR-67 Northbound Ramps

Weather: Clear

File Name : 01_ECJ_Graves_67N AM Site Code : 23522559

Start Date : 6/9/2022 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

PEAK HOULIOLEACH AL	privacii begi	iio ai.							
	07:45 AM			07:15 AM			07:45 AM		
+0 mins.	63	17	80	76	23	99	21	94	115
+15 mins.	35	15	50	58	25	83	20	69	89
+30 mins.	61	15	76	65	19	84	18	67	85
+45 mins.	58	18	76	49	22	71	26	69	95
Total Volume	217	65	282	248	89	337	85	299	384
% App. Total	77	23		73.6	26.4		22.1	77.9	
PHF	.861	.903	.881	.816	.890	.851	.817	.795	.835

Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878 (951)268-6268

City of El Cajon N/S: Graves Avenue E/W: SR-67 Northbound Ramps

Weather: Clear

File Name : 01_ECJ_Graves_67N PM Site Code : 23522559 Start Date : 6/9/2022 Page No : 1

Groups Printed- Total Volume

 				roups Prin	<u>tea- rotai v</u>	olume				
	Gı	raves Aven	ue	G	Fraves Aven	ue	SR-67 I	Northbound	l Ramps	
	Ç	Southbound	d		Northbound	t				
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	60	23	83	90	53	143	38	95	133	359
04:15 PM	87	36	123	65	54	119	57	102	159	401
04:30 PM	73	18	91	93	62	155	37	84	121	367
 04:45 PM	79	24	103	74	62	136	55	92	147	386
 Total	299	101	400	322	231	553	187	373	560	1513
05:00 PM	91	28	119	96	56	152	37	81	118	389
05:15 PM	80	22	102	100	72	172	37	87	124	398
05:30 PM	80	16	96	81	57	138	36	82	118	352
 05:45 PM	54	15	69	68	50	118	24	98	122	309
 Total	305	81	386	345	235	580	134	348	482	1448
Grand Total	604	182	786	667	466	1133	321	721	1042	2961
Apprch %	76.8	23.2		58.9	41.1		30.8	69.2		
Total %	20.4	6.1	26.5	22.5	15.7	38.3	10.8	24.3	35.2	

	G	raves Aven	ue	G	raves Aver	nue	SR-67 I	d Ramps				
		Southbound	d	Northbound			Eastbound					
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total		
Peak Hour Analysis Fr	om 04:00 PN	I to 05:45 F	PM - Peak 1 o	of 1				_				
Peak Hour for Entire In	Hour for Entire Intersection Begins at 04:15 PM											
04:15 PM	87	36	123	65	54	119	57	102	159	401		
04:30 PM	73	18	91	93	62	155	37	84	121	367		
04:45 PM	79	24	103	74	62	136	55	92	147	386		
05:00 PM	91	28	119	96	56	152	37	81	118	389		
Total Volume	330	106	436	328	234	562	186	359	545	1543		
% App. Total	75.7	24.3		58.4	41.6		34.1	65.9				
PHF	.907	.736	.886	.854	.944	.906	.816	.880	.857	.962		

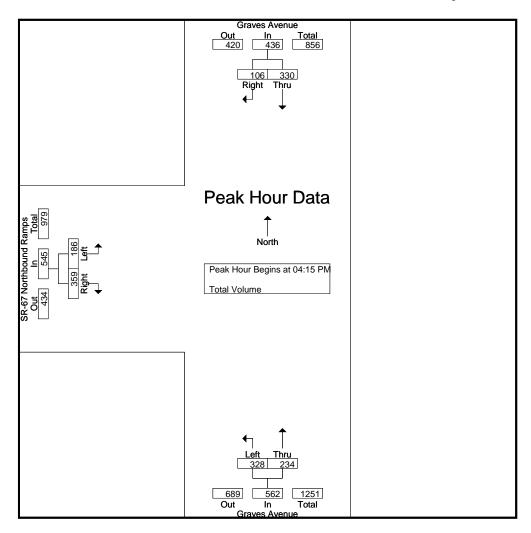
City of El Cajon N/S: Graves Avenue

E/W: SR-67 Northbound Ramps

Weather: Clear

File Name: 01_ECJ_Graves_67N PM

Site Code : 23522559 Start Date : 6/9/2022 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

Feak Hour for Each Ap	privacii begii	15 al.							
	04:15 PM			04:30 PM			04:00 PM		
+0 mins.	87	36	123	93	62	155	38	95	133
+15 mins.	73	18	91	74	62	136	57	102	159
+30 mins.	79	24	103	96	56	152	37	84	121
+45 mins.	91	28	119	100	72	172	55	92	147
Total Volume	330	106	436	363	252	615	187	373	560
% App. Total	75.7	24.3		59	41		33.4	66.6	
PHF	.907	.736	.886	.908	.875	.894	.820	.914	.881

Site Code: 999-22559

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Graves Avenue
B/ State Route 67 Northbound Ramps - Broadway 24 Hour Directional Volume Count

Start	07-Jun-22		bound		Totals		bound		Totals		ed Totals
Time 12:00	Tue	Morning 17	Afternoon 140	Morning	Afternoon	Morning 10	Afternoon 150	Morning	Afternoon	Morning	Afternoon
12:15		9	123			15	197				
12:30		8	157			9	164				
12:45		8	137	42	557	4	151	38	662	80	1219
01:00		6	127	72	007	9	153	00	002	00	1210
01:15		2	132			5	165				
01:30		6	123			4	166				
01:45		7	105	21	487	5	160	23	644	44	1131
02:00		3	131			6	160				
02:15		5	138			3	149				
02:30		5	144			3	127				
02:45		9	135	22	548	4	169	16	605	38	1153
03:00		2	148			4	169				
03:15		5	129			7	162				
03:30		9	147			9	166				
03:45		9	137	25	561	17	155	37	652	62	1213
04:00		4	138			14	181				
04:15		13	141			13	149				
04:30		23	151			15	156				
04:45		17	125	57	555	23	160	65	646	122	1201
05:00		17	143			23	129	-	0.10		
05:15		40	133			39	132				
05:30		37	124			47	128				
05:45		48	119	142	519	79	144	188	533	330	1052
06:00		39	111			63	103				
06:15		67	124			76	118				
06:30		69	113			81	107				
06:45		67	91	242	439	93	106	313	434	555	873
07:00		97	98			94	103				
07:15		98	90			117	86				
07:30		110	98			124	102				
07:45		118	83	423	369	130	88	465	379	888	748
08:00		85	91			121	86				
08:15		89	87			104	75				
08:30		97	88			126	74				
08:45		90	74	361	340	146	58	497	293	858	633
09:00		81	59			134	49				
09:15		113	54			125	51				
09:30		99	57			141	39				
09:45		110	37	403	207	158	43	558	182	961	389
10:00		111	31			151	46				
10:15		116	26			150	36				
10:30		123	32			162	33				
10:45		119	27	469	116	185	20	648	135	1117	251
11:00		130	23			179	17				
11:15		133	18			187	24				
11:30		114	17	405	2.	181	13			400=	
11:45		115	23	492	4770	168	10	715	64	1207	145
Total		2699	4779	2699	4779	3563	5229	3563	5229	6262	10008
Combined		74	78	74	78	87	92	87	92	162	270
Total AM Peak		10:30				10·4F					
AM Peak Vol.	-	505	-	-	-	10:45 732	-	-	-	-	-
P.H.F.	-	0.949	-	-	-	0.979	-	_	-	-	-
P.n.r. PM Peak	-	0.545	03:45	-	_	0.979	02:45	=	-	=	=
Vol.	-	-	567	-	<u>-</u>	<u>-</u>	666	<u>-</u>	-	<u>-</u>	-
P.H.F.	-	-	0.939	-	-	_	0.985	_	-	_	-
1 .11.17.			0.333				0.900				
Percentag e		36.1%	63.9%			40.5%	59.5%				
ADT/AADT	Δ	DT 16,270	ΔΔ	DT 16,270							
, 10 1, AAD 1	^	21 10,210	77.7								

Site Code: 999-22559

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Hart Drive E/ Graves Avenue 24 Hour Directional Volume Count

Site Code: 999-22559

Counts Unlimited, Inc. PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Graves Avenue
N/ State Route 67 Northbound Ramps 24 Hour Directional Volume Count

Start	07-Jun-22	North	oound	Hour	Totals	South	bound	Hour	Totals	Combined Totals				
Time	Tue	Morning	Afternoon		Afternoon	Morning	Afternoon	Morning	Afternoon	Morning				
12:00		10	51	_		2	47	_		_				
12:15		6	37			5	51							
12:30		6	51			3	53							
12:45		0	43	22	182	2	72	12	223	34	405			
01:00		4	47			3	46							
01:15		5	55			2 2	63							
01:30		3	57	45	040	2	48	40	200	0.5	405			
01:45		3	60	15	219	3	49	10	206	25	425			
02:00		1	52			0	47 57							
02:15 02:30		3 4	55 70			0 4	57 53							
02:45		2	58	10	235		64	7	221	17	456			
03:00		0	67		200	3 3 2	69	•	22 1	.,	400			
03:15		ĭ	52			2	68							
03:30		1	71			6	68							
03:45		1	79	3	269	6	64	17	269	20	538			
04:00		1	67			4	70							
04:15		1	54			5	62							
04:30		4	55			11	79							
04:45		4	46	10	222	10	66	30	277	40	499			
05:00		2	67			12	66							
05:15		5	69			24	55							
05:30		6	56			24	50							
05:45		15	45	28	237	16	44	76	215	104	452			
06:00		9	50			23	42							
06:15		12	50			22	30							
06:30		14	30			34	34							
06:45		29	34	64	164	38	43	117	149	181	313			
07:00		14	32			46	31							
07:15		23	36			57 65	30							
07:30		31	35	400	404	65 60	21	007	404	242	000			
07:45		38	31	106	134	69 67	22	237	104	343	238			
08:00 08:15		26 28	40			47	29 20							
08:30		26 29	36 26			53	26							
08:45		23	27	106	129	36	17	203	92	309	221			
09:00		23	23	100	120	41	23	200	02	000	221			
09:15		33	28			30	14							
09:30		29	32			38	18							
09:45		51	28	136	111	56	12	165	67	301	178			
10:00		39	19			45	17							
10:15		44	12			37	13							
10:30		41	17			52	7							
10:45		47	18	171	66	56	10	190	47	361	113			
11:00		52	6			57	7							
11:15		62	4			45	7							
11:30		32	10			53	2							
11:45		42	14	188	34	58	3	213	19	401	53			
Total		859	2002	859	2002	1277	1889	1277	1889	2136	3891			
Combined		286	61	28	61	31	66	31	66	60:	27			
Total AM Peak	_	10:30	_			07:15				_				
Vol.	_	202	-	-	-	258	<u>-</u>	-	-	-	- -			
P.H.F.	_	0.815	-	-	-	0.935	_	_	-	-	-			
PM Peak	_	-	03:30	_	-	5.555 -	04:00	_	_	_	_			
Vol.	_	-	271	_	-	_	277	_	_	_	-			
P.H.F.			0.858				0.877							
Percentag		30.0%	70.0%			40.3%	59.7%							
e				ADT 0 00=		.0.070	55.1 /0							
ADT/AADT	4	ADT 6,027	Α	ADT 6,027										

Site Code: 999-22559

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of El Cajon Graves Avenue N/ Hart Drive 24 Hour Directional Volume Count

• GRAVES AVENUE AT SR-67 SYNCHRO WORKSHEETS:

➤ Existing Traffic Conditions

➤ Existing plus Project Traffic Conditions

	۶	•	4	†	ļ	1
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	*	77	7	414	^	7
Traffic Volume (veh/h)	76	297	248	89	201	71
Future Volume (veh/h)	76	297	248	89	201	71
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	338	282	101	228	81
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	354	1087	681	357	640	285
Arrive On Green	0.20	0.20	0.19	0.19	0.18	0.18
Sat Flow, veh/h	1781	2790	3563	1870	3647	1585
Grp Volume(v), veh/h	86	338	282	101	228	81
Grp Sat Flow(s), veh/h/ln	1781	1395	1781	1870	1777	1585
Q Serve(g_s), s	1.1	2.3	1.9	1.3	1.6	1.2
Cycle Q Clear(g_c), s	1.1	2.3	1.9	1.3	1.6	1.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	354	1087	681	357	640	285
V/C Ratio(X)	0.24	0.31	0.41	0.28	0.36	0.28
Avail Cap(c_a), veh/h	1214	2434	2555	1341	2421	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	5.9	9.9	9.6	10.0	9.9
Incr Delay (d2), s/veh	0.4	0.2	0.4	0.4	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7	0.6	0.4	0.5	0.3
Unsig. Movement Delay, s/vel		0.1	0.0	0.7	0.0	0.0
LnGrp Delay(d),s/veh	9.8	6.1	10.3	10.1	10.4	10.4
LnGrp LOS	9.0 A	Α	10.3 B	В	10.4 B	10.4 B
-	424	^	D		309	В
Approach Vol, veh/h				383		
Approach Delay, s/veh	6.8			10.2	10.4	
Approach LOS	Α			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		9.3		9.5		9.0
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		19.0		19.0
Max Q Clear Time (g_c+l1), s		3.9		4.3		3.6
Green Ext Time (p_c), s	<u>'</u>	1.4		1.4		1.5
· · · · ·		1.7		1.7		1.0
Intersection Summary						
HCM 6th Ctrl Delay			9.0			
HCM 6th LOS			Α			
Notes						

EXAM.syn Synchro 11 Report 07/27/2022

Traffic Volume (veh/h) 186 359 328 23 Future Volume (veh/h) 186 359 328 23 Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.00	1 1 1 1 1 1 1 1 1 1	^	SBD
Lane Configurations 1 2 1 1 2 1 1 2 1 1 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1 1	^	וטכ
Traffic Volume (veh/h) 186 359 328 23 Future Volume (veh/h) 186 359 328 23 Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No No No	234 330		7
Future Volume (veh/h) 186 359 328 23 Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No No No			106
Initial Q (Qb), veh 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No No No			106
Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 Parking Bus, Adj 1.00 1.00 1.00 1.00 Work Zone On Approach No No	0 0		0
Parking Bus, Adj 1.00 1.00 1.00 1.0 Work Zone On Approach No N			1.00
Work Zone On Approach No N	.00 1.00		1.00
• • • • • • • • • • • • • • • • • • • •	No No		1.00
7 taj Odi 10 to 10 10 10 10 10 10 10 10 10 10 10 10 10			870
Adj Flow Rate, veh/h 194 374 342 24	244 344		110
	.96 0.96		0.96
Percent Heavy Veh, % 2 2 2	2 2		2
	47 734		327
Arrive On Green 0.21 0.21 0.24 0.2			0.21
Sat Flow, veh/h 1781 2790 3563 187			585
1 17	244 344		110
Grp Sat Flow(s), veh/h/ln 1781 1395 1781 187			585
10— /·	3.9 2.9		2.0
, (O-),	3.9 2.9		2.0
Prop In Lane 1.00 1.00 1.00			1.00
Lane Grp Cap(c), veh/h 369 1245 852 44	47 734	734 32	327
V/C Ratio(X) 0.53 0.30 0.40 0.5	.55 0.47	0.47 0.3	0.34
Avail Cap(c_a), veh/h 980 2201 2062 108			872
$1 \times 2 \times 7$.00 1.00		1.00
	.00 1.00		1.00
	1.5 12.0		11.7
	1.0 12.0		0.6
• • • • • • • • • • • • • • • • • • • •	0.0 0.0		0.0
	1.4 1.0		0.6
	1.4	1.0 0.	0.0
Unsig. Movement Delay, s/veh LnGrp Delay(d),s/veh 13.4 6.3 11.4 12	0.5 10.5	10.5 10	12.3
1 3(),	2.5 12.5		
LnGrp LOS B A B	B B		В
11	86 454		
	1.9 12.5		
Approach LOS A	B B	В	
Timer - Assigned Phs 2	4		6
	1.2		11.1
, , , , , , , , , , , , , , , , , , ,	4.0		4.0
	9.0		19.0
	5.3		4.9
()	1.8		2.2
u = 7·	1.0	Ζ.	Z.Z
Intersection Summary			
HCM 6th Ctrl Delay 10.9			
HCM 6th LOS B			
Notes			

EXPM.syn Synchro 11 Report 07/27/2022

	٨	7	1	1	ļ	1
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	*	77	7	414	^	7
Traffic Volume (veh/h)	105	297	248	108	214	75
Future Volume (veh/h)	105	297	248	108	214	75
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		•	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	338	282	123	243	85
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0.00	0.00	0.00	0.00	0.00	0.00
	358	1098	686	360	656	293
Cap, veh/h						
Arrive On Green	0.20	0.20	0.19	0.19	0.18	0.18
Sat Flow, veh/h	1781	2790	3563	1870	3647	1585
Grp Volume(v), veh/h	119	338	282	123	243	85
Grp Sat Flow(s),veh/h/ln	1781	1395	1781	1870	1777	1585
Q Serve(g_s), s	1.6	2.4	2.0	1.6	1.7	1.3
Cycle Q Clear(g_c), s	1.6	2.4	2.0	1.6	1.7	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	358	1098	686	360	656	293
V/C Ratio(X)	0.33	0.31	0.41	0.34	0.37	0.29
Avail Cap(c_a), veh/h	1189	2400	2503	1314	2372	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.7	6.0	10.1	9.9	10.2	10.0
Incr Delay (d2), s/veh	0.5	0.0	0.4	0.6	0.3	0.5
	0.0	0.2	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh						
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.6	0.5	0.5	0.4
Unsig. Movement Delay, s/veh		0.4	40.5	40 =	40.5	40 =
LnGrp Delay(d),s/veh	10.3	6.1	10.5	10.5	10.5	10.5
LnGrp LOS	В	A	В	В	В	В
Approach Vol, veh/h	457			405	328	
Approach Delay, s/veh	7.2			10.5	10.5	
Approach LOS	Α			В	В	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		9.5		9.7		9.3
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		19.0		19.0
Max Q Clear Time (g_c+l1), s		4.0		4.4		3.7
Green Ext Time (p_c), s		1.5		1.5		1.6
Intersection Summary						
HCM 6th Ctrl Delay			9.2			
HCM 6th LOS			A			
Notes						

EXWPAM.syn Synchro 11 Report 07/27/2022

are Configurations raffic Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 20 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1		٨	7	4	1	ļ	1
are Configurations raffic Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 206 359 328 247 368 117 uture Volume (veh/h) 20 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	Movement	EBL	EBR	NBL	NBT	SBT	SBR
raffic Volume (veh/h)							
tuture Volume (veh/h)							
Initial Q (Qb), veh							
Ped-Bike Adj(A_pbT)	. ,						
Arriving Bus, Adj						· ·	
Nork Zone On Approach dig Sat Flow, veh/h/ln No No No dig Sat Flow, veh/h/ln 1870					1 00	1.00	
dij Sat Flow, veh/h/ln			1.00	1.00			1.00
Adj Flow Rate, veh/h			1870	1870			1870
leak Hour Factor	•						
Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2							
Rap, veh/h 380 1267 858 450 769 343 Agrive On Green 0.21 0.21 0.24 0.24 0.22 0.22 Bat Flow, veh/h 1781 2790 3563 1870 3647 1585 Bry Volume(v), veh/h 215 374 342 257 383 122 Bry Sat Flow(s), veh/h/In 1781 1395 1781 1870 1777 1585 Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Sycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Orgo In Lane 1.00 1.00 1.00 1.00 1.00 are Grap Cap(c), veh/h 380 1267 858 450 769 343 I/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 vail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platon Ratio <							
Arrive On Green							
that Flow, veh/h that Jane Jane Jane Jane Jane Jane Jane Jane							
Gry Volume(v), veh/h 215 374 342 257 383 122 Gry Sat Flow(s),veh/h/ln 1781 1395 1781 1870 1777 1585 Q Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), veh/h 380 1267 858 450 769 343 C/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Wail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00							
Sirp Sat Flow(s), veh/h/ln 1781 1395 1781 1870 1777 1585 Q Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), veh/h 380 1267 858 450 769 343 L/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 L/C Ratio(<u> </u>						
Serve(g_s), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Cycle Q Clear(g_c), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 380 1267 858 450 769 343 Cycle Q Clear(s), veh/h 929 2126 1955 1027 1853 826 Cycle Q Clear(s), veh/h 929 2126 1955 1027 1853 826 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear(s), veh/h 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Cycle Q Clear Time (g_c+I1), veh/h 1.4 1.1 0.9 1.6 1.1 0.7 Cycle Q Clear Time (g_c+I1), veh/h 1.5 1.5 1.5 1.5 Cycle Q Clear Time (p_c), veh/h 1.5 1.5 1.5 Cycle Q Clear Time (p_c), veh/h 1.5 1.5 1.5 Cycle Q Clear Time (p_c), veh/h	Grp Volume(v), veh/h						
Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4	Grp Sat Flow(s),veh/h/ln						
Cycle Q Clear(g_c), s 3.9 3.1 2.9 4.4 3.4 2.4 Prop In Lane 1.00 1.00 1.00 1.00 ane Grp Cap(c), veh/h 380 1267 858 450 769 343 I/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00	Q Serve(g_s), s	3.9	3.1	2.9	4.4	3.4	2.4
1.00 1.00	Cycle Q Clear(g_c), s	3.9	3.1	2.9	4.4	3.4	2.4
ane Grp Cap(c), veh/h 380 1267 858 450 769 343 7/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Prop In Lane						1.00
I/C Ratio(X) 0.57 0.30 0.40 0.57 0.50 0.36 Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 ICM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Ipstream Filter(I) 1.00 <td></td> <td></td> <td></td> <td></td> <td>450</td> <td>769</td> <td></td>					450	769	
Avail Cap(c_a), veh/h 929 2126 1955 1027 1853 826 1000 1000 1.000							
CM Platoon Ratio							
Destream Filter(I)							
Iniform Delay (d), s/veh 12.8 6.3 11.6 12.2 12.5 12.1 ncr Delay (d2), s/veh 1.3 0.1 0.3 1.1 0.5 0.6 nitial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.							
ncr Delay (d2), s/veh ncr Delay (d2), s/veh ncr Delay (d3),s/veh ncr Del	,						
nitial Q Delay(d3),s/veh 0.0 10.0 12.7 12.5 13.0 12.7 12.7 12.5 13.0 12.7 12.5 13.0 12.7 12.5 13.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Sile BackOfQ(50%),veh/ln 1.4 1.1 0.9 1.6 1.1 0.7 Insig. Movement Delay, s/veh 14.1 6.4 11.9 13.3 13.0 12.7 InGrp LOS B A B </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Insig. Movement Delay, s/veh Id.1 Id.1 Id.1 Id.2 Id.3 Id.3 Id.4 Id.5							
### Indept Delay(d),s/veh ### 14.1		1.4	1.1	0.9	1.6	1.1	0.7
B A B B B B B B B B					10.5	16.5	4.5 =
Spproach Vol, veh/h S89 S99 S05 Spproach Delay, s/veh 9.2 12.5 13.0 Spproach LOS A B B Simer - Assigned Phs 2 4 6 Shs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+I1), s 6.4 5.9 5.4 Streen Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
Part	LnGrp LOS		A	B			<u>B</u>
B B B B B Cimer - Assigned Phs 2 4 6 6 6 6 6 6 6 6 6	Approach Vol, veh/h	589			599	505	
Simer - Assigned Phs 2 4 6 Phs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 11.5 ICM 6th LOS B B	Approach Delay, s/veh	9.2			12.5	13.0	
Simer - Assigned Phs 2 4 6 Phs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 11.5 ICM 6th LOS B B	Approach LOS						
Phs Duration (G+Y+Rc), s 12.8 11.8 11.9 Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 ICM 6th Ctrl Delay 11.5 ICM 6th LOS B			2		1		6
Change Period (Y+Rc), s 4.0 4.0 4.0 Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary 11.5 11.5 11.5 ICM 6th LOS B B 11.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Max Green Setting (Gmax), s 20.0 19.0 19.0 Max Q Clear Time (g_c+l1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
Max Q Clear Time (g_c+I1), s 6.4 5.9 5.4 Green Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
Creen Ext Time (p_c), s 2.4 1.9 2.4 Intersection Summary ICM 6th Ctrl Delay 11.5 ICM 6th LOS B							
ICM 6th LOS B 11.5							
ICM 6th Ctrl Delay 11.5 ICM 6th LOS B	Green Ext Time (p_c), s		2.4		1.9		2.4
ICM 6th LOS B	Intersection Summary						
ICM 6th LOS B	HCM 6th Ctrl Delay			11.5			
loton	HCM 6th LOS						
	Notes						

EXWPPM.syn Synchro 11 Report 07/27/2022

City of El Cajon Zoning Consistency Chart – Adopted by City Council on July 13, 2010 – Resolution No. 94-10

	O-S	PRD	RS- 40	RS- 20	RS- 14	RS-9	RS-6	RM - 6000	RM- 4300	RM- 2500	RM- 2200	RM- 1500	M-HR	M-U	О-Р	Р	C-N	C-G	C-R	С-М	М	H ^A
Industrial Park																X				•	X	-
Light Industrial																X				X	■ C	
Regional Commercial														X		X			X			
General Commercial														X		X		X				
Neighborhood Commercial														X	x	X	x	•				
Office/ Non-Retail															X	X						
Low Low Residential	■B	X	X	X																		•
Low Residential		X		■ ^B	X	X	X															•
Low Medium Residential		X					■B		X	X												
Medium Residential									■B	■ B	X											
High Residential										■B	■B	X		X								
Open Space	X																					

LEGEND: X – Consistent with General Plan

■ – May be found consistent with applicable general plan land use designation

Footnotes:

- A. Rezoning to add hillside overlay may be found consistent, if at least 50% of the lot has an average natural slope of 10% or more.
- B. May be found consistent with applicable General Plan land use designation, if property owner makes such a request and there is no public purpose in requiring a more intense use.
- C. May be found consistent with Light Industrial land use designation under unique and unusual circumstances such finding enables the property to be used for all purposes and uses authorized by the M zoning district.

General Notes: 1. All zones may be found consistent with General Plan public institution, school, and park land use designations.

2. All zones may be found consistent with special development areas, if found to further the provisions of the particular special development area.

HISTORICAL NOTES

Originally adopted 12/26/79, pursuant to Resolution No. 640-79.

Amended on 12/20/80, pursuant to Resolution No. 509-83 to show "M" zone consistent with "Light Industrial" under unique and unusual circumstances.

Amended on 12/18/84, pursuant to Resolution No. 519-84 to show "R-P" zone consistent with "Medium Density Residential" under unique and unusual circumstances; also added language to the symbol for consistency under unique and unusual circumstances as follows:

"The finding of 'unique and unusual circumstances' which enables a property to conform to the General Plan and to retain the property's existing zoning, enables the property to be used for all purposes and uses authorized by the existing zoning and does not in any way limit the uses of the property to the specific uses engaged in at the time of the finding of unique and unusual circumstances."

Amended on 1/8/91, pursuant to Resolution No. 10-91 to add the "Low Medium Residential" designation and to revise zoning consistency for residential zones to reflect lower density ranges resulting from Ordinance No. 4212 (12/89) and GPA 1990-01. Also amended to show PRD Low Low zone consistent with the "Open Space" designation under unique and unusual circumstances, and to remove the "General Industrial" classification and the G-M zone from the matrix.

Amended on 3/17/92, pursuant to Resolution No. 96-92 to show R-2 consistent with the "Low Residential" designation under unique and unusual circumstances.

Amended on 8/10/93, pursuant to Resolution No. 300-93 to add the "General Industrial" classification, and show that it is consistent with the P, M, and G-M zones, and consistent under unique and unusual circumstances with the H zone.

Amended on 2/28/95, pursuant to Resolution No. 75-95 to delete the "General Industrial" classification and the L-M and G-M zones.