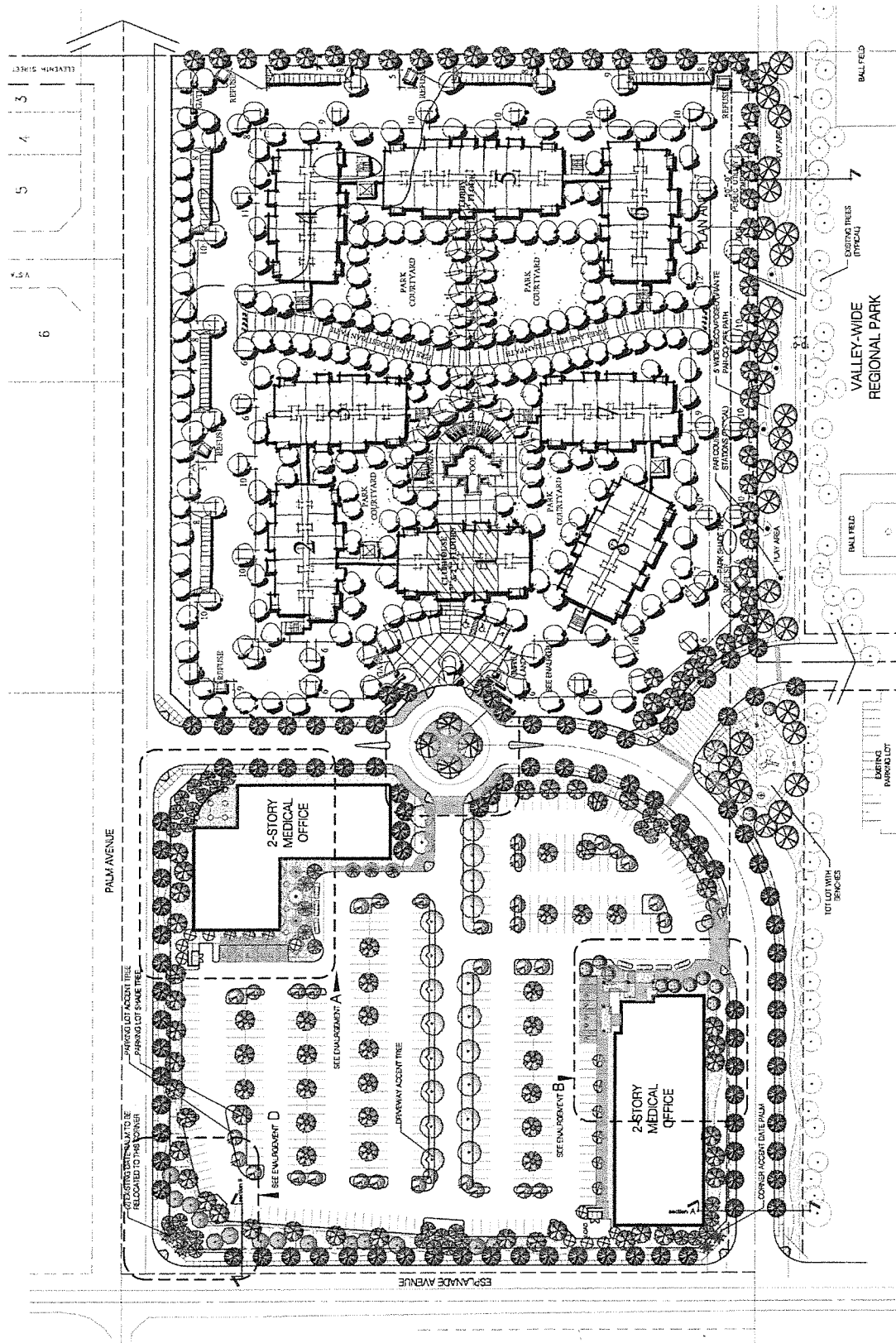


# PARKSIDE PRELIMINARY ACOUSTICAL STUDY San Jacinto, California



March 20, 2006

Mr. Steve Delson  
DBN PARKSIDE, LLC  
27032 Rocking Horse Lane  
Laguna Hills, CA 92753

**Subject: Parkside Preliminary Acoustical Study**

Dear Mr. Delson:

RK ENGINEERING GROUP, INC. (RK) is pleased to provide the attached preliminary acoustical study for the Parkside project, located in the City of San Jacinto. This study has been prepared in response to City requirements for tentative tract maps, and should be sufficient to obtain acoustical approval of the proposed project.

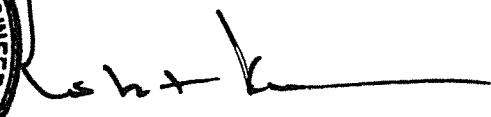
The attached study indicates that the proposed mixed land use (residential and medical) is compatible with the site from a noise standpoint, if the mitigation measures detailed in this study are implemented. Mitigation measures would be limited to "windows closed" conditions, necessitating mechanical fresh-air ventilation; however a final noise study should be prepared prior to obtaining building permits for the project. By utilizing more precise grading plans in conjunction with detailed building design and construction information, the final noise study will be used to confirm the recommendations made in this preliminary study and determine more accurate interior noise levels and possible mitigation.

RK appreciates this opportunity to work with DBN Parkside, LLC and looks forward to working with you on future projects. If you have any questions regarding this study, or would like further review, please do not hesitate to call us at (949) 474-0809.

Sincerely,  
RK ENGINEERING GROUP, INC.



Mike Rosa  
Senior Transportation/ Acoustical Planner



Robert Kahn, P.E.  
Principal

Attachments

MR:RK:ym/RK4566  
JN:1512-05-08

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**PARKSIDE  
PRELIMINARY ACOUSTICAL STUDY  
SAN JACINTO, CALIFORNIA**

**Prepared for:**

DBN PARKSIDE, LLC  
27032 Rocking Horse Lane  
Laguna Hills, CA 92753

**Prepared by:**

RK ENGINEERING GROUP, INC.  
20201 S.W. Birch Street, Suite 250  
Newport Beach, CA 92660

Mike Rosa  
Robert Kahn, P.E.



March 20, 2006

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## **1.0 Executive Summary**

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A detailed acoustical analysis has been completed to determine noise exposure and necessary mitigation measures for the Parkside project. As shown on Exhibit A, the proposed project is located on the north side of Esplanade Avenue, between Palm Avenue and Valley Wide Regional Park, in the City of San Jacinto; the site plan was prepared by CDPC, and is shown on Exhibit B. Future motor vehicle noise, emanating from Esplanade Avenue and Palm Avenue will represent the principle source of community noise that will impact the site; however, these noise impacts can be adequately mitigated with the noise control measures detailed later in this study.

The Parkside project will consist of 8 residential (senior housing) and 2 medical office buildings; of the 8 residential buildings only 3 are adjacent to a noise source (Palm Avenue); of the 2 planned medical office buildings 1 is adjacent to Palm Avenue and the other is adjacent to Esplanade Avenue. The results of this analysis indicate that the projected exterior noise levels, under worst-case conditions, will not exceed the City of San Jacinto's exterior noise standard of 65 dBA CNEL for residential land uses. There are no exterior livable spaces included as part of the medical office buildings; hence the 65 dBA CNEL medical building exterior noise standard does not apply. Potential noise impacts emanating from the Regional Park on the east side of the project will not be an adverse noise source (as concluded in the focused "Parkside San Jacinto Acoustical Study" performed by RK, dated September 7, 2005). Exposed exterior livable areas within the project are limited to unit patios/balconies that are adjacent to Palm Avenue, as all other exterior livable areas are sufficiently shielded by the planned structures.

It is expected that the City of San Jacinto's interior noise standard of 45 dBA CNEL for residential/medical uses will be met by incorporating "windows closed" conditions at all units/rooms that are adjacent to and facing Palm Avenue and Esplanade Avenue. The "windows closed" conditions will necessitate the inclusion of mechanical fresh-air ventilation systems that will be further detailed later in this study.

A comprehensive list of required noise control measures is presented in the Summary of Mitigation Requirements section of this study and is graphically illustrated on Exhibit C. The acoustical analysis and mitigation measures contained in this study are intended to satisfy City of San Jacinto acoustical requirements for residential land uses.

## **2.0 Mitigation Requirements**

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### **2.1 Exterior Area Noise Exposure Control**

City of San Jacinto noise standards for residential development require that outdoor living areas have a CNEL no greater than 65 dBA; qualifying exterior areas for this project are limited to the residential buildings' patios/balconies as there are no identified exterior livable spaces as part of the medical office buildings. The findings of this analysis indicate that maximum future unmitigated noise impacts to this site will not exceed the 65 dBA CNEL exposure limit at the proposed residential units.

To meet the City of San Jacinto's exterior noise standard of 65 dBA CNEL, noise control barriers are not required for the residential building's patios/balconies. Table 1 specifies the anticipated unmitigated noise levels within the patios/balconies.

### **2.2 Interior Area - Noise Exposure Control**

An analysis has been completed to determine the anticipated interior noise levels within the project site. As shown in Table 2, the results of the analysis indicate exterior noise levels at the building facades, for buildings adjacent to Palm Avenue, will range from 59.2 to 66.3 dBA CNEL, and the medical office building adjacent to Esplanade Avenue will range from 69.7 to 71.8 dBA CNEL.

Typical preliminary noise study assumptions indicate "windows closed" conditions will be required for the residential units and medical office building rooms that are adjacent to Palm Avenue and Esplanade Avenue in order to attain an interior noise level equal to or less than the City of San Jacinto's required 45 dBA CNEL standard. Each building/unit requiring the "windows closed" condition will also be required to include a mechanical fresh-air ventilation systems to ensure proper aeration per UBC and CBC requirements (see §2.2.1 for specifics). A summary of preliminary interior noise mitigation measures is shown on Exhibit C.



## **2.3 Unit Ventilation**

When an operable door or window is open, it is expected that the interior 45 dBA CNEL intrusion limit for residential units and medical office building rooms adjacent to Esplanade Avenue and Palm Avenue will be exceeded; therefore, a "windows closed" condition is applicable to these units/rooms, and a means of mechanical fresh-air ventilation is required to meet the interior noise standard. This mechanical fresh-air ventilation system shall supply two (2) air changes per hour for each habitable room, with a minimum of 15 cubic feet per minute or 7 L/s (liters per second) of outside air per occupant. The fresh air inlet duct shall be of sound attenuating construction and shall consist of a minimum of ten (10) feet of straight or curved duct, or six (6) feet plus one sharp 90° bend.

For units and rooms adjacent to Esplanade Avenue and Palm Avenue, all attic vents facing Esplanade Avenue and Palm Avenue must be supplemented with acoustical baffles to prevent vehicle noise intrusion through said vents; or an equally effective option would be to fully insulate the attics including any attic access panels (Exhibit D shows a typical attic vent acoustical baffle detail).

## **2.4 Building Shell Design**

The interior noise exposure standard will be met by using a "windows closed" condition for units/rooms facing Esplanade Avenue and Palm Avenue, as detailed on Exhibit C. This condition requires a means of mechanical fresh-air ventilation for these units/buildings to ensure satisfactory ventilation. For proper acoustical performance, all exterior windows, doors and sliding glass doors within the Parkside project must have a positive seal, and leaks and cracks must be kept to a minimum.

## **3.0 Introduction**

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This study presents the results of a preliminary acoustical analysis for the Parkside project, located in the City of San Jacinto. Included in this study is a discussion of the expected exterior community noise environment and mitigation measures needed to control excessive noise impacts to useable exterior and interior areas.

The project is located on the north side of Esplanade Avenue, between Palm Avenue and Valley Wide Regional Park, as shown on the Location Map (Exhibit A). The site plan used in the analysis was prepared by CDPC, and is shown on Exhibit B.

In the following sections, noise exposures expected within the planned site are reviewed and compared to the applicable noise standards. Design recommendations necessary to comply with the noise standards have been presented in the Summary of Mitigation Requirements section of this study.

### **3.1 Noise Standards**

The City of San Jacinto Noise Element of the General Plan includes guidelines for community noise impacts for different land uses. The project's residential and medical land uses are considered "noise sensitive land uses," for both of which City standards require exterior noise not to exceed 65 dBA CNEL in outdoor living areas, and interior noise levels not to exceed 45 dBA CNEL in all habitable rooms.

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## **4.0 Exterior Noise Environmental Analysis**

It is expected that the primary source of noise impacts to the site will be traffic noise emanating from Esplanade Avenue and Palm Avenue. The proximity of the roadways to the site is shown on the Site Plan (Exhibit B). Other local roads are not expected to contribute to the noise impacts for this project due to their distance from the project, lower volume/speed, and/or shielding by building structures between the site and these streets. Railroad lines do not exist and are not planned in the vicinity of the site.

As mentioned in the Executive Summary, potential noise impacts emanating from the Regional Park on the east side of the project will not be an adverse noise source (as concluded in the focused "Parkside San Jacinto Acoustical Study" performed by RK, dated September 7, 2005).

The expected future roadway noise impacts were projected using a version of the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108), together with several key roadway and site parameters. The key inputs include roadway classification (e.g., Urban Arterial, Major, Secondary or Collector); roadway active width (the distance between the center of the outer most travel lanes on each side of the roadway); roadway buildout Average Daily Traffic (ADT) (see following paragraph); travel speed; percentages of automobiles, medium trucks and heavy trucks in the roadway volume; roadway grade; angle of view; site conditions ("hard" or "soft"); and percent of total average daily traffic (ADT) which flows each hour throughout a 24-hour period.

Buildout ADT volumes used in this study were sourced from the *San Jacinto General Plan Update*, Exhibit K "Proposed Buildout (Post 2050) Daily Traffic Volumes," prepared by Urban Crossroads, dated March 15, 2002 (see Appendix B). Based on this information, Esplanade Avenue is classified as a Major Highway and was analyzed using an ADT volume of 38,400 traveling at 45 MPH; whereas Palm Avenue is classified as a Secondary Highway and was analyzed using an ADT volume of 10,300 traveling at 45 MPH. Both hard and

soft site conditions were utilized depending on various factors; see Appendix E for computer calculation printouts.

A summary of the roadway parameters and vehicle distribution (see Appendix A) information used in this analysis is shown on Table 4, and reflect the City of San Jacinto's required parameters.

## **5.0 Exterior Area Noise Exposure Analysis and Control**

City of San Jacinto standards for new residential and medical construction require that noise exposure in all usable outdoor areas not exceed 65 dBA CNEL. Analysis and recommendations for control of motor vehicle noise impacts to outdoor living areas are presented in this section.

Using the FHWA-RD-77-108 Traffic Noise Prediction Model and parameters outlined in Table 3, calculations of potential "worst-case" traffic noise impacts were completed. The computer printouts of the calculations used to determine specific site's impacts are included in Appendix C. Applicable portions of the grading plan used in the analysis are included in Appendix D.

Determinations of maximum future noise impacts to exterior useable areas were developed using the assumptions in Table 4 and site plan for the project. Calculations were made using road and pad grades indicated on the plans (provided by CDPC) and previously specified parameters.

The site exposure analysis indicates projected future unmitigated noise impacts will not exceed the 65 dBA CNEL limit at any of the residential building's patios/balconies in the project (there are no identified livable exterior spaces planned as part of the medical office buildings). A barrier analysis has been performed to determine acoustical shielding requirements, which could be necessary to reduce expected roadway noise impacts to below 65 dBA CNEL for the affected outdoor useable areas. This barrier analysis was completed using a version of the FHWA-RD-77-108 Traffic Noise Prediction Model. The key input data for these barrier performance equations includes relative source-barrier-receiver horizontal separations; relative source-barrier-receiver vertical separations; typical noise source spectra; and barrier transmission loss. Following are the general assumptions used in determining the source and receiver geometry:

### *Receiver Geometry*

Horizontal Geometry: Distance behind top-of-slope barrier: 10 feet (3 feet in the case of patios/balconies due to depth constraints).

Vertical Geometry: Height above pad for ground level receivers:  
Exterior Noise: 5 feet above ground  
1st Floor Interior: 5 feet above finished floor  
2nd Floor Interior: 15 feet above finished floor  
3rd Floor Interior: 25 feet above finished floor

### *Source Assumptions*

Horizontal Geometry: For roadways with grades no greater than 2%, all vehicles are located at the single-lane equivalent acoustical center of the full roadway. For roadways with over 2% grade, vehicle count is divided in half and is located at the single-lane acoustical equivalent for each side of the roadway.

Vertical Geometry: Height above road grade:  
Autos: 0.0 feet  
Medium Trucks: 2.3 feet  
Heavy Trucks: 8.0 feet

These assumptions, the site plan (Exhibit B), and the grading plan (Appendix D) were used to fix the horizontal and vertical geometry used in the barrier analysis. For the purposes of this study, the FHWA traffic noise spectra assumptions were used in the barrier analysis.

Noise control barriers are not required for any exterior livable areas within the project (residential patios/balconies) to meet the City of San Jacinto exterior noise standard of 65 dBA CNEL for residential/medical land uses.

## **6.0 Interior Area Noise Exposure Analysis and Control**

The interior noise exposure level is the difference between the projected exterior dBA CNEL noise impact level at the structure's facade and the noise reduction effects of the structure (including but not limited to the exterior and interior building and finishing materials). Typical California residential building construction will provide a conservative 12 dBA noise level reduction under "windows open" conditions, and a very conservative 20 dBA noise level reduction under "windows closed" conditions. The two planned medical office buildings within the project will attain at least the same attenuation affects as the aforementioned residential buildings; however this will have to be confirmed in a final noise study that will analyze architectural plans to confirm said assumptions.

The results of this preliminary analysis indicate that some residential buildings adjacent to Palm Avenue will require noise reductions of up to 18.4 dBA CNEL, requiring "windows closed" conditions necessitating a means of mechanical fresh-air ventilation. Upgraded windows are not anticipated for the residential buildings within this project; however the final acoustical study will confirm this assumption. It is assumed that the medical office building windows offer substantially higher STC ratings than typical California residential construction windows hence will offer equal or greater attenuation; again this will need to be determined in the final acoustical study once more building material information is available.

Final interior noise exposure levels for this project will be determined at the time building permits are being applied for, when a final noise study will likely need to be prepared. Said final noise study will evaluate the affects of precise building placement, specific plan design, and materials used in each unit's construction; in addition, recommendations for any necessary building upgrades or other requirements will be made so as to meet the 45 dBA CNEL interior noise standard.



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## **7.0 Conclusions**

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An acoustical analysis and design has been completed for the Parkside project, located in the City of San Jacinto. This analysis indicates that the future noise environment is expected to be dominated by vehicle noise emanating from Esplanade Avenue and Palm Avenue. The noise control findings contained in this study show the 65 dBA CNEL outdoor noise exposure limit is expected to be met without the construction of noise control barriers around the identified exterior livable areas. Compliance with the 45 dBA CNEL interior noise exposure limit and the California Noise Insulation standards should be met with the implementation of the "windows closed" conditions (and obligatory mechanical fresh-air ventilation systems) recommended in this study, however this will need to be verified in a final noise study.

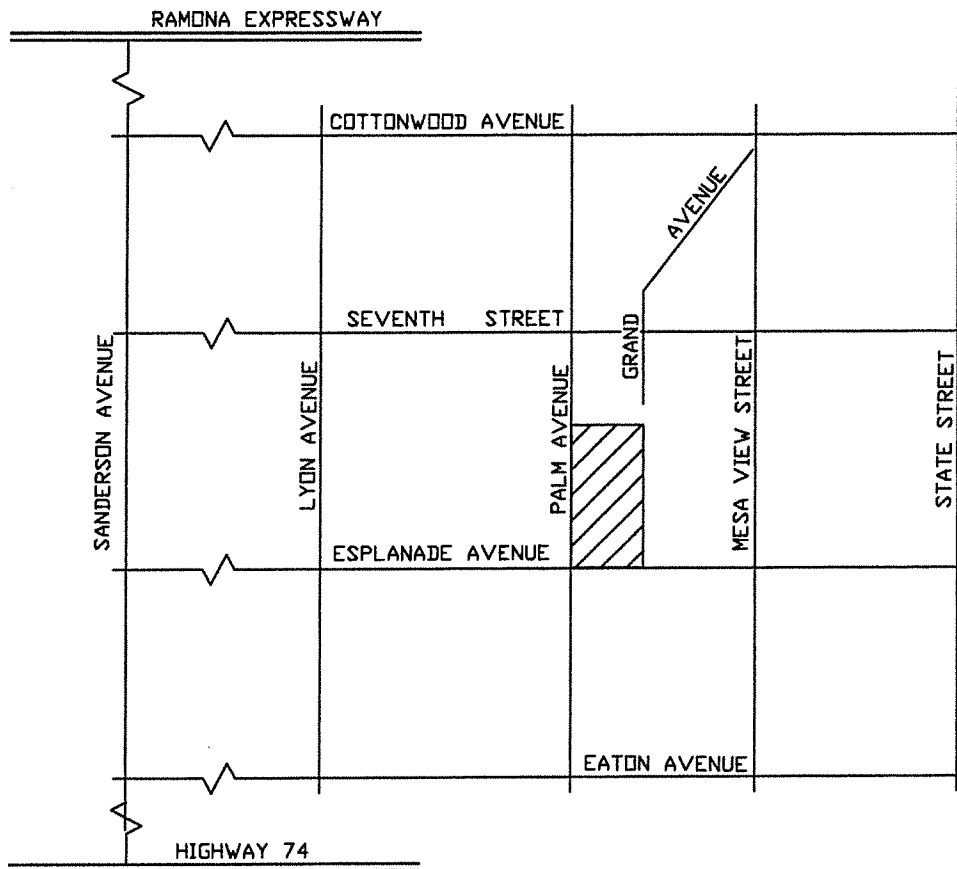
The analysis and design presented in this study comply with applicable City of San Jacinto requirements for control of community noise impacts to exterior/interior living areas for residential/medical land uses.

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# Exhibits

Exhibit A  
Location Map

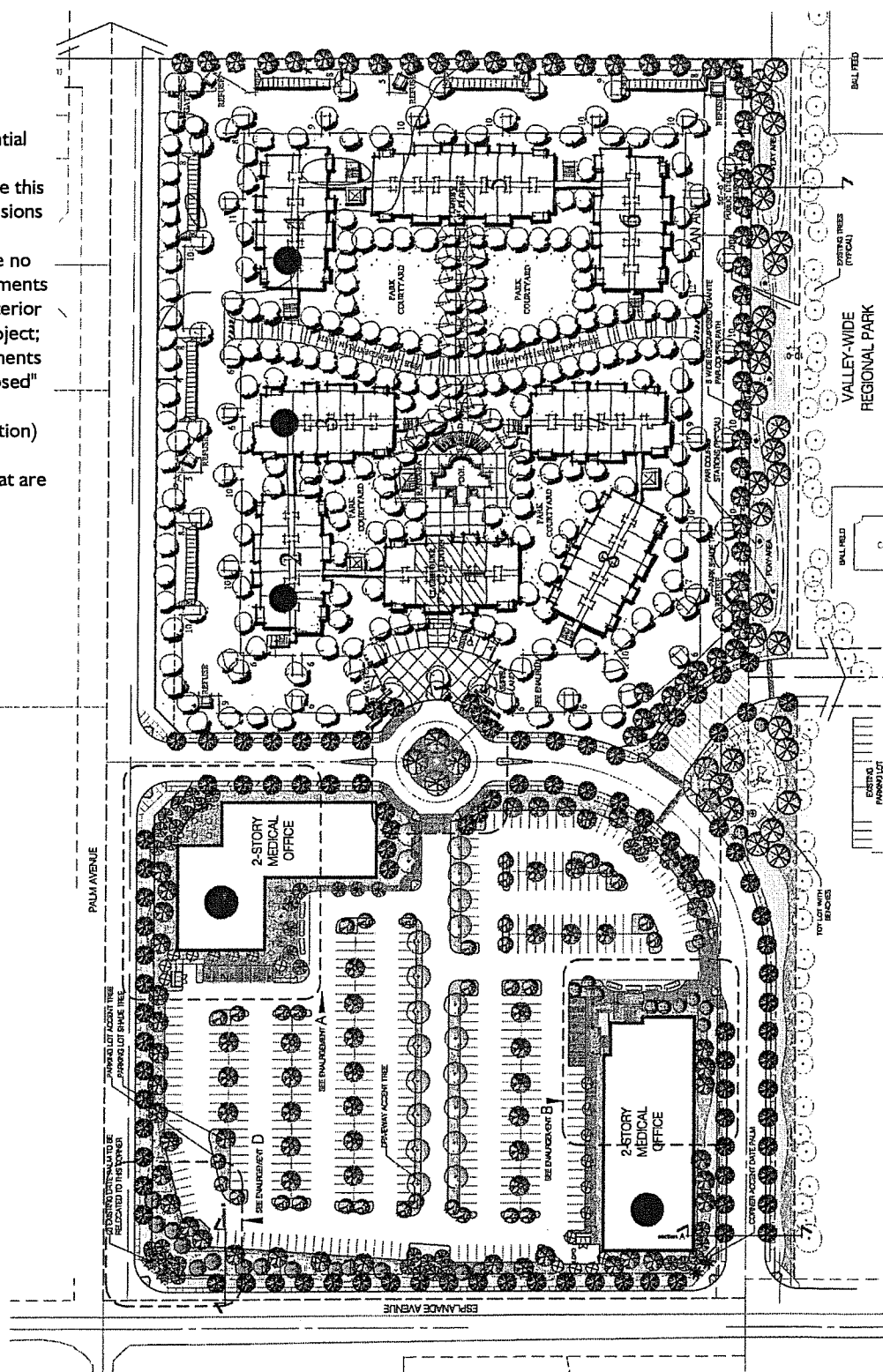




## Required Noise Mitigation Measures

**NOTE:**

The planned senior residential buildings were still in a conceptual stage at the time this study was prepared; dimensions were taken from the latest version available. There are no exterior mitigation requirements for any of the qualifying exterior livable spaces in the the project; interior mitigation requirements are limited to "windows closed" conditions (necessitating mechanical fresh-air ventilation) for all residential units and medical buildings' rooms that are adjacent to the subject roadways.



**NOTE:** This exhibit is NOT drawn to any particular scale and is conceptual ONLY. This exhibit is NOT to be used as construction plans. Please refer to the text portion of this study for noise control barrier positioning and construction-materials specifics.

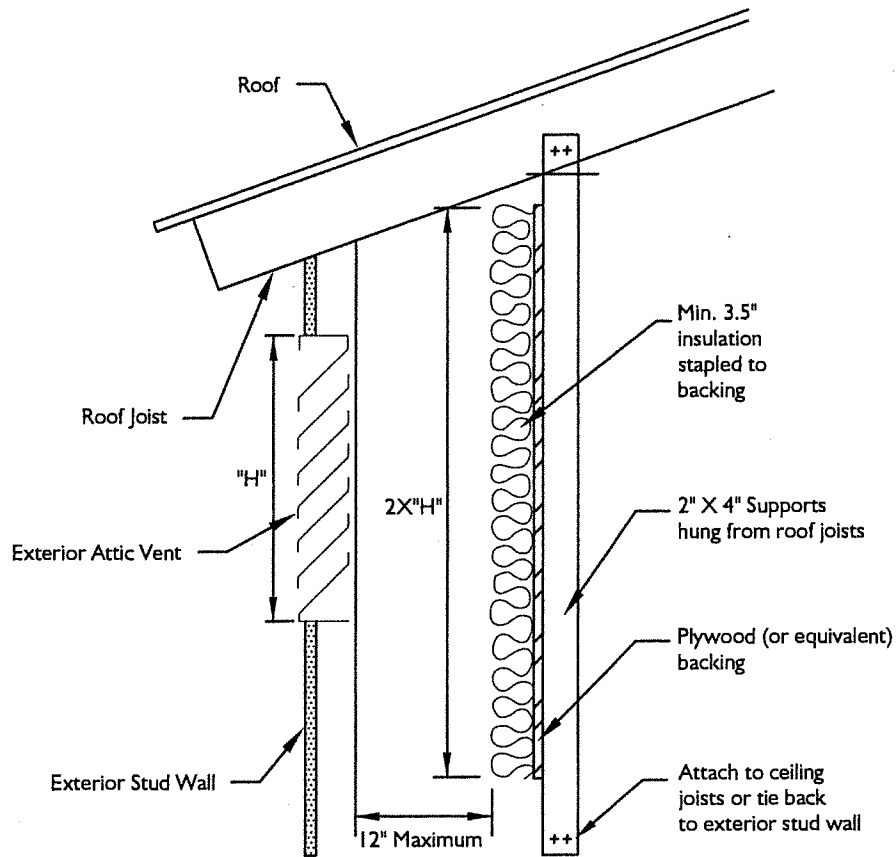
**Legend:**

- = "Windows closed" condition requiring a means of mechanical ventilation per UBC requirements

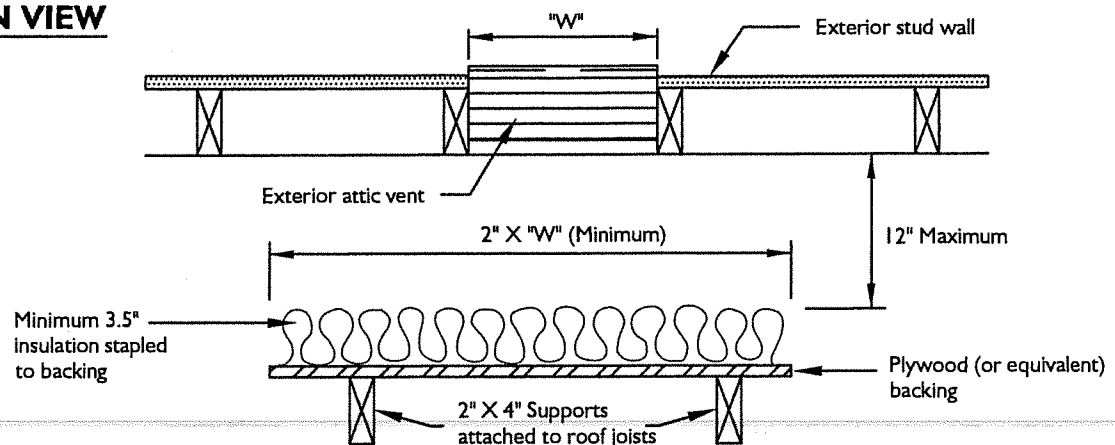
Exhibit D

# Attic Vent Acoustical Baffle Detail

## SECTION



## PLAN VIEW





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# Tables

**TABLE 1**  
**Future Exterior Noise Levels and Noise Barrier Requirements (dBA CNEL)<sup>1</sup>**

Building <sup>2</sup>	Floor	Unmitigated Exterior Noise Impacts From <sup>3</sup>		Minimum Required Noise Barrier Height (in feet)
		Esplanade Avenue	Palm Avenue	
Residential Building 2	1	--	59.7	--
	2	--	63.3	--
	3	--	63.2	--
Residential Building 3	1	--	56.1	--
	2	--	59.8	--
	3	--	59.8	--
Residential Building 4	1	--	59.7	--
	2	--	63.3	--
	3	--	63.2	--

<sup>1</sup> Exterior noise levels calculated 3 feet in from balcony perimeter, perpendicular to subject roadway, as balconies are only 5 feet deep..

<sup>2</sup> The medical buildings have no exterior livable areas, hence their absence on Table 1.

<sup>3</sup> "--" Indicates no noise impacts from corresponding roadway.

**TABLE 2**  
**Future Interior Noise Levels (dBA CNEL)**

Lot	Floor	Noise Impact at Facade from		Minimum Required Interior Noise Reduction	Projected Noise Level Using Standard California Construction Windows (STC $\geq$ 25)	
		Palm Avenue	Esplanade Avenue		"Windows Open"	"Windows Closed"
Residential Building 2	1	59.2	--	14.2	47.2	39.2
	2	62.9	--	17.9	50.9	42.9
	3	62.9	--	17.9	50.9	42.9
residential Building 3	1	59.8	--	14.8	47.8	39.8
	2	63.4	--	18.4	51.4	43.4
	3	63.3	--	18.3	51.3	43.3
residential Building 4	1	59.2	--	14.2	47.2	39.2
	2	62.9	--	17.9	50.9	42.9
	3	62.9	--	17.9	50.9	42.9
Medical Building (west)	1	64.4	--	19.4	52.4	44.4
	2	66.3	--	21.3	54.3	46.3
Medical Building (east)	1	--	69.7	24.7	57.7	49.7
	2	--	71.8	26.8	59.8	51.8

<sup>1</sup> Indicated noise level includes noise attenuation provided by the recommended sound wall.

**TABLE 3**  
**Roadway Parameters and Vehicle Distribution**

Roadway	Classification	Lanes	Buildout (ADT) <sup>1</sup>	Speed (MPH)	Site Conditions
Esplanade Avenue	Major Hwy.	4	38,400	45	Soft/Hard
Palm Avenue	Secondary Hwy.	4	10,300	45	Soft/Hard

**Vehicle Distribution (Truck Mix)**

Motor-Vehicle Type	Daytime % (7 AM to 7 PM)	Evening % (7 PM to 10 PM)	Night % (10 PM to 7 AM)	Total % of Traffic Flow
Automobiles	77.5	12.9	9.6	97.42
Medium Trucks	84.8	4.9	10.3	1.84
Heavy Trucks	86.5	2.7	10.8	0.74

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<sup>1</sup> Source: San Jacinto General Plan Update - 00025:37, prepared by Urban Crossroads, dated 03/15/02. ADT traffic volumes sourced from Exhibit K "Proposed General Plan Buildout (Post 2050) Daily Traffic Volumes".

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# Appendices

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## **Appendix A**

City of San Jacinto  
Acoustical Parameters

**SAN  
JACINTO**

facsimile transmittal

City of San Jacinto  
Community Development  
248 E. Main Street  
San Jacinto, CA 92583  
(951) 487-7330  
(951) 487-6779 fax

To: Mike Fax: 949-474-0902  
From: Sunny Date: 2/8/05  
Re: Noise Control Pages: 6 including  
Cover Letter

.....



8.40.010

**Chapter 8.40****NOISE CONTROL****Sections:**

<b>8.40.010</b>	<b>Purpose.</b>
<b>8.40.020</b>	<b>Definitions.</b>
<b>8.40.030</b>	<b>Exemptions.</b>
<b>8.40.040</b>	<b>General noise regulations.</b>
<b>8.40.050</b>	<b>General noise standards.</b>
<b>8.40.060</b>	<b>Amplified sound.</b>
<b>8.40.070</b>	<b>Sound-amplifying equipment— Use.</b>
<b>8.40.080</b>	<b>Appeals.</b>
<b>8.40.090</b>	<b>Fees.</b>
<b>8.40.100</b>	<b>Violation—Penalty.</b>
<b>8.40.110</b>	<b>Violations—Additional remedies—Injunctions.</b>

**8.40.010 Purpose.**

It is the purpose of this chapter to prohibit unnecessary, excessive and annoying noises from all sources subject to the city's jurisdiction and police power. At certain levels noises are detrimental to the health and welfare of the citizenry and in the public interest shall be systematically proscribed. (Ord. 1043 § 1, 1997)

**8.40.020 Definitions.**

As used in this chapter, unless the context otherwise clearly indicates, the words and phrases used in this chapter are defined as follows:

"Commercial purpose" means and includes the use, operation or maintenance of any sound-amplifying equipment for the purpose of advertising any business, or any goods, or any services, or for the purpose of attracting the attention of the public to, or advertising for, or soliciting patronage or customers to or for any performance, show, entertainment, exhibition or event.

"Motor vehicle" includes, but is not limited to, motorcycles, trail bikes, motor scooters, mini-bikes, go carts, and dune buggies.

"Noncommercial purpose" means the use, operation or maintenance of any sound equipment for

other than a commercial purpose. "Noncommercial purpose" means and includes, but is not limited to, philanthropic, political, patriotic and charitable purposes.

"Person" means a person, firm, association, co-partnership, joint venture, corporation, or any entity, public or private in nature.

"Sound-amplifying equipment" means any machine or device for the reproduction or amplification of the human voice, music or any other sound, but shall not include standard automobile radios or other sound-reproducing devices when used or heard only by the occupants of the vehicle in which installed, nor any warning or alerting devices on authorized emergency vehicles or horns or other warning devices on any vehicle used only for traffic safety purposes.

"Sound truck" means any motor vehicle, or any other vehicle or conveyance regardless of motive power, whether in motion or stationary, having mounted thereon, attached thereto or carrying any sound-amplifying equipment, excepting trucks or other vehicles of any public agency or public utility when in use by such public agency or public utility. (Ord. 1043 § 2, 1997)

**8.40.030 Exemptions.**

A. Noise created by and emanating from equipment operated in the public interest or for emergency or safety purposes is specifically exempt from the provisions of this chapter. Such equipment includes, but is not limited to, sirens, street sweepers, spray rigs, garbage trucks, or public utility equipment.

B. Noise created by and emanating during the conduct and operation of any public event, whether commercial or noncommercial in nature, which has been authorized by permit lawfully issued by the city, is specifically excluded from the restrictions of this chapter.

C. Noise created by and emanating during the conduct of religious services is specifically excluded from the restrictions of this chapter. Such noise includes, but is not limited to, music, chimes, bells and carillon.



D. Noise created by and emanating during the conduct of any authorized school activity upon school grounds; authorized activities being conducted in public parks, public playgrounds and/or public or private school grounds is specifically excluded from the restrictions of this chapter. (Ord. 1043 § 7, 1997)

#### 8.40.040 General noise regulations.

A. Construction Noise. It is unlawful to create and emit noise from equipment operated during construction activities, whether on private property or within the public right of way between the hours of seven p.m. of one day and seven a.m. of the following day, and at any time on Sunday. Emergency construction activities or emergency repairs resulting from an unforeseen occurrence are specifically exempt from the provisions of this chapter. Such equipment includes, but is not limited to, trucks, road graders, tractors, power saws, power drills, and generators.

B. Residential Noise. It is unlawful to create and emit noise created or generated within or adjacent to residential property which is necessary and normally associated with residential living between the hours of nine p.m. of one day and seven a.m. of the following day. Residential noise includes, but is not limited to, noise created by power mowers, leaf blowers, trimmers, home appliances, home workshops, personal vehicle repairs and maintenance, and home construction projects.

C. Recreational Noise. It is unlawful to create and emit noise from motorized or mechanical equipment or devices used in sporting, recreational and hobby activities between the hours of nine p.m. of one day and seven a.m. of the following day. The operation of such equipment or devices shall not be performed within three hundred (300) feet of residential uses. Recreational noise includes, but is not limited to, noise created by motor-equipped minibikes, go-carts, motorcycles operating off public rights-of-way, drag races, model planes and cars.

D. Unnecessary/Unnatural/Unusual Noise. It is unlawful for any person to make or cause, or permit to be made or caused, upon any public or private

property, or upon any public street, road, lane, alley or thoroughfare, any unnecessary, unnatural or unusual noise. Unnecessary, unnatural or unusual noises include, but are not limited to, those sounds created by means of human voice or animal outcry, or by any other means or methods which are so annoying, or which are so harsh or prolonged, as to be injurious to the health, peace and comfort of any reasonable person of normal sensitiveness residing in the area.

E. Agricultural Noise. It is unlawful to emit noise from cannon simulators between the hours of midnight and six a.m., unless a permit is issued by the director of community development. The permit shall be subject to following terms and conditions:

1. Cannon shall be set at the lowest charge setting.
2. There shall be no more than one cannon for every twenty (20) acres.

In the event ten or more written complaints are received, staff shall contact the farmers in an attempt to reduce the impacts from the cannons. If no resolution can be achieved, the farming committee shall be convened to determine a solution. (Ord. 1047 § 1, 1998; Ord. 1043 § 6, 1997)

#### 8.40.050 General noise standards.

The standard which shall be considered in determining whether a violation of the provisions of this code exists shall include, but shall not be limited to, the following:

- A. The volume and intensity of the noise;
- B. The number of persons affected by the noise;
- C. The volume and intensity of the background noise, if any;
- D. The use and zoning of the area within which the noise emanates;
- E. The time of the day or night the noise occurs;
- F. Whether the nature of the noise is usual or unusual;
- G. The proximity of the noise to residential sleeping facilities;
- H. The density of the inhabitation of the area within which the noise emanates;

## 8.40.050

I. Whether the origin of the noise is natural or unnatural;

J. The duration of the noise;

K. Whether the noise is recurrent, intermittent or constant;

L. Whether the noise is produced by a commercial or a noncommercial activity. (Ord. 1043 § 8, 1997)

## 8.40.060 Amplified sound.

A. While recognizing that the use of sound-amplifying equipment is protected by the constitutional rights of freedom of speech and assembly, the city council nevertheless feels obligated to reasonably regulate the use of sound-amplifying equipment in order to protect the correlative constitutional rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary noise.

B. It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate within the city a loud-speaker or sound-amplifying equipment in a fixed or movable position or mounted upon any sound truck for the purposes of giving instructions, directions, talks, addresses or lectures, or transmitting music to any persons or assemblages of persons in or upon any street, alley, sidewalks, park, place or public property without first filing a registration statement and obtaining approval thereof as set forth in this chapter, except that the provisions of this section shall not apply to sound-amplification systems installed on church buildings for emission of the sound of chimes, bells, carillon or music when used in conjunction with religious services.

C. Registration Statements—Filing. Every user of sound-amplifying equipment shall file a registration statement with the city manager, using a form to be furnished by that officer, three days prior to the date on which the sound-amplifying equipment is intended to be used, which statement shall contain the following information:

1. The name, address and telephone number of both the owner and the user of the sound-amplifying equipment;

2. The location at which the sound-amplifying equipment will be placed, and the license registration number if a sound truck is to be used;

3. A description of the purpose for which the sound-amplification equipment will be used, including a statement as to whether the purpose is commercial or noncommercial;

4. The exact dates and hours of the proposed operation;

5. A general description of the sound-amplifying equipment, including power output and the approximate distance for which sound from the equipment will be audible;

6. A statement of public liability insurance coverage, including the name of the insurance carrier, policy limits and expiration date of policy;

7. License number and name of the licensee of the San Jacinto business.

D. Registration Statements—Approval. The city manager shall return to the applicant within twenty-four (24) hours an approved certified copy of the registration statement unless he or she finds that:

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

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

3. The registration statement required reveals that the applicant would violate the provisions set forth in subsection B of this section or any other provisions of this code.

E. Registration Statements—Disapproval. In the event the registration statement is disapproved, the city manager shall endorse upon the statement his or her reasons for disapproval and return it within twenty-four (24) hours to the applicant. (Ord. 1043 § 9, 1997)

## 8.40.070 Sound-amplifying equipment—Use.

The commercial and noncommercial use of sound-amplifying equipment shall be subject to the following regulations:

8.40.070

A. The only sounds permitted shall be music or human speech, or both.

B. Hours of operation of sound equipment shall be between eight a.m. and ten p.m. Operation before eight a.m. or after ten p.m. is permitted only at the location of a public event or affair of general public interest or as otherwise permitted by the sound-amplification permit.

C. Sound-amplification systems shall not be operated within three hundred fifty (350) feet of hospitals, schools, churches, courthouses, public libraries or mortuaries when the same are in use, unless otherwise permitted by the sound-amplification permit.

D. No operating sound truck shall traverse any one block in the city more than four times in any one calendar day.

E. Amplified human speech and music shall not be unreasonably loud, raucous, jarring or disturbing to persons of normal sensitiveness within the area of audibility, nor louder than permitted in subsection F and G of this section.

F. When the sound truck is in motion the volume of sound shall be controlled so that it will not be audible for a distance in excess of four hundred fifty (450) feet from its source, provided that when the sound truck is stopped by traffic, the sound-amplifying equipment shall not be operated for longer than one minute at such stop.

G. In all cases where sound-amplifying equipment remains at one location or when the sound truck is not in motion, the volume of sound shall not be audible for a distance in excess of three hundred fifty (350) feet from the periphery of the attendant audience, unless otherwise authorized specifically in the sound-amplification permit for public gatherings.

H. No loudspeaker equipment mounted on sound trucks in motion shall be operated unless the axis of the center of the equipment used shall be parallel to the direction of travel of the sound truck; provided, however, that any sound reproducing equipment may be so placed upon the sound truck as to not vary more than fifteen (15) degrees either side of the radial; nondirectional type of loudspeakers may

be used on the sound trucks either alone or in conjunction with sound-reproducing equipment placed within fifteen (15) degrees of the centerline of the direction of travel. (Ord. 1043 § 12, 1997)

#### 8.40.080 Appeals.

Any person aggrieved by disapproval of a registration statement may appeal by filing a written notice of appeal with the city clerk within five days of receipt by the applicant of disapproval of the registration statement. The city council shall hold a hearing within ten days after the filing of the notice of appeal, at which hearing the applicant and any other interested persons shall have the right to present evidence as to the facts upon which the city manager based the refusal to issue the requested permit, and any other facts which may aid the city council in determining whether this chapter has been violated, whereupon the council may sustain the action of the city manager in refusing to issue the requested permit or may order that such permit be issued forthwith. The city council shall not vary or depart from any of the substantive provisions of this chapter. (Ord. 1043 § 10, 1997)

#### 8.40.090 Fees.

Prior to the issuance of the registration statement, a fee in an amount to be fixed by the city council by resolution shall be paid to the city, if the loud-speaker or sound-amplifying equipment is to be used for commercial purposes. No fees shall be required for the operation of a loud-speaker or sound-amplifying equipment for noncommercial purposes. (Ord. 1043 § 11, 1997)

#### 8.40.100 Violation—Penalty.

Any person violating or failing to comply with any of the provisions of this chapter shall be guilty of an infraction and upon conviction thereof shall be punishable by:

A. A fine not exceeding fifty dollars (\$50.00) for the first violation;

B. A fine not exceeding one hundred dollars (\$100.00) for the second violation within one year,

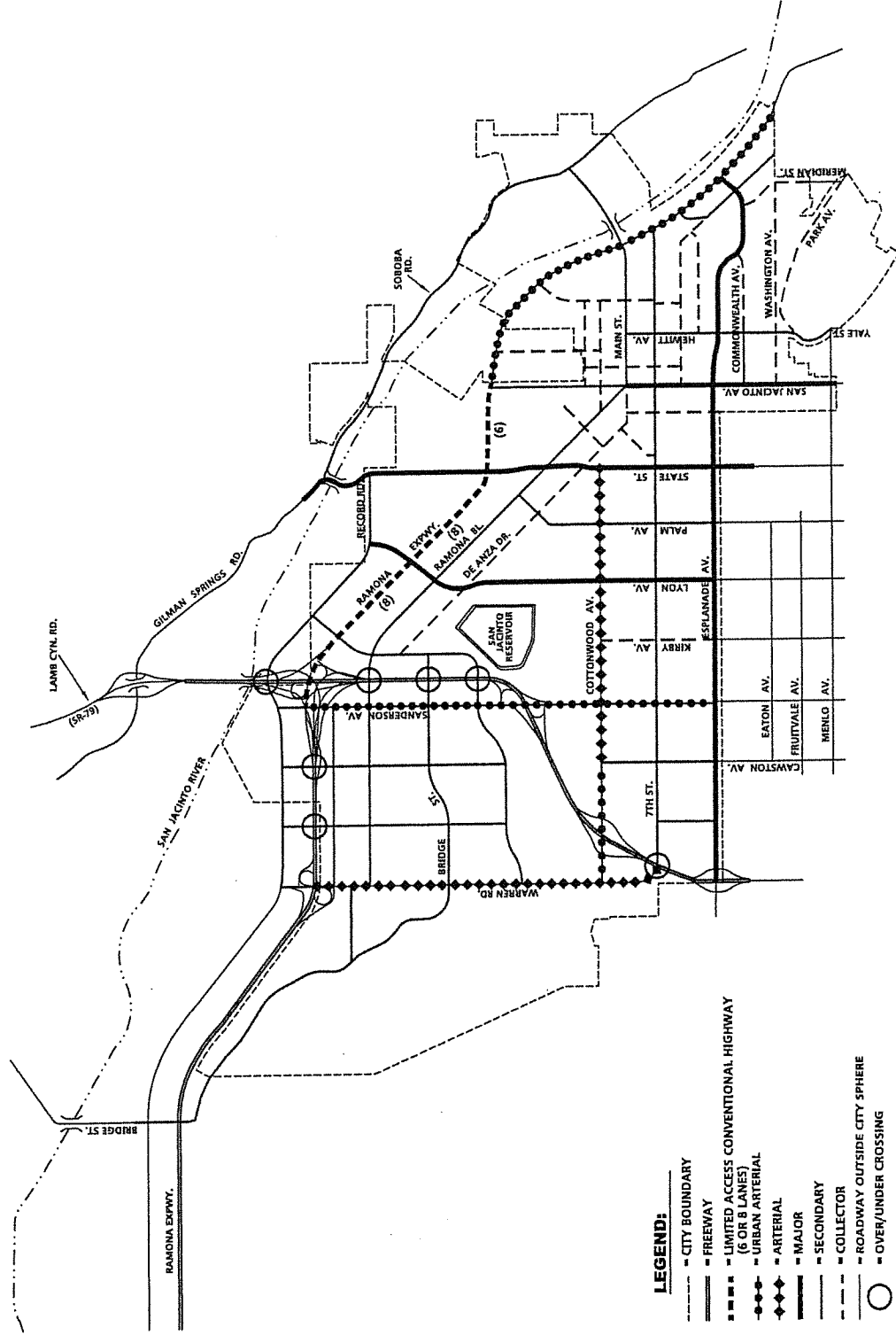
**8.40.100**

C. A fine not exceeding two hundred fifty dollars (\$250.00) each additional violation within one year. (Ord. 1043 § 3, 1997)

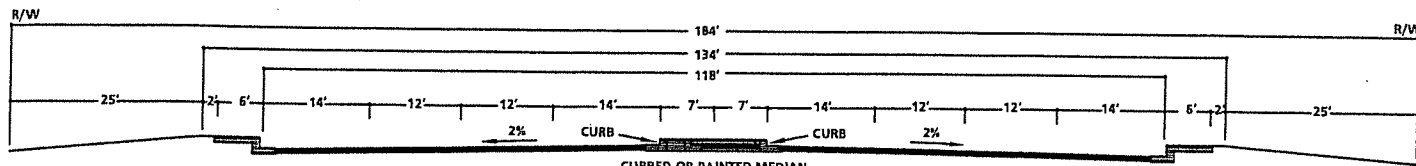
**8.40.110 Violations—Additional remedies—Injunctions.**

As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provision of this chapter, which operation or maintenance causes discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, repose, health or peace of residents in the area, shall be deemed, and is declared to be, a public nuisance and may be subject to abatement by an injunction issued by a court of competent jurisdiction. (Ord. 1043 § 4, 1997)

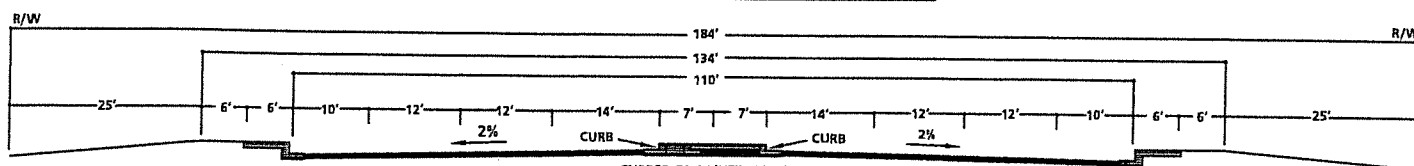
# EXHIBIT I PROPOSED CITY OF SAN JACINTO GENERAL PLAN NETWORK



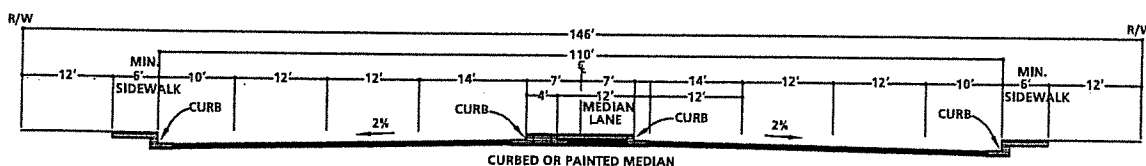
# CITY OF SAN JACINTO GENERAL PLAN ROADWAY CROSS-SECTIONS



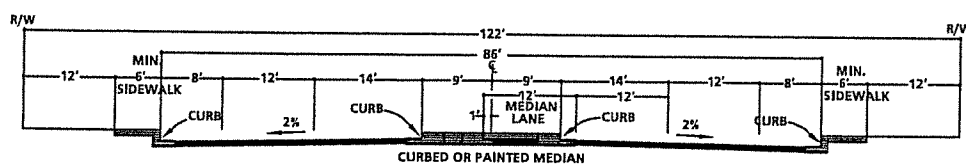
**LIMITED ACCESS CONVENTIONAL HIGHWAY - 8 LANES**



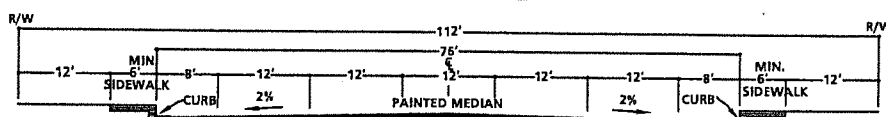
**LIMITED ACCESS CONVENTIONAL HIGHWAY - 6 LANES**



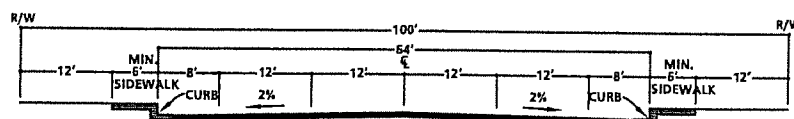
**URBAN ARTERIAL HIGHWAY**



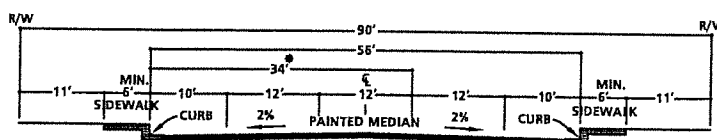
**ARTERIAL HIGHWAY**



**MAJOR HIGHWAY**

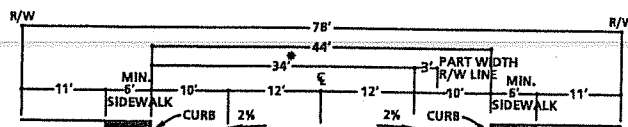


**SECONDARY HIGHWAY**



**INDUSTRIAL COLLECTOR**

\* PART WIDTH STREET SECTION FOR AN INTERIOR COMMERCIAL OR INDUSTRIAL STREET



**COLLECTOR**

\* PART WIDTH STREET SECTION FOR ALL COLLECTOR STREET - 34' IMPROVEMENTS ON 48' R/W

Esplanade Ave

Palm Ave.

**Table 5.10-5  
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
<b>BRIDGE STREET</b>												
North of Ramona Expwy.	6	55	AT	1.8%	0.7%	11,200	68.5	235	100	—	—	—
South of Ramona Expwy.	6	45	AT	1.8%	0.7%	16,800	68.5	235	100	—	—	—
North of unnamed B Street	6	45	AT	1.8%	0.7%	16,500	68.5	235	100	—	—	—
Unnamed B Street to Warren	6	45	AT	1.8%	0.7%	13,400	67.5	200	83	—	—	—
Warren to Sanderson	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
Sanderson to SR-79	6	45	AT	1.8%	0.7%	15,900	68.0	215	90	—	—	—
SR-79 to Ramona Blvd.	6	45	AT	1.8%	0.7%	10,700	66.5	170	69	—	—	—
Ramona Blvd. to Ramona Expwy.	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
Ramona Expwy. to Record	6	45	AT	1.8%	0.7%	10,800	66.5	170	69	—	—	—
<b>BRINTON STREET</b>												
State to Main	2	40	AT	1.8%	0.7%	12,700	67.5	200	83	—	—	—
<b>CAWSTON AVENUE</b>												
Esplanade to 7th	6	45	AT	1.8%	0.7%	13,600	67.5	200	83	—	—	—
7th to Cottonwood	6	45	AT	1.8%	0.7%	9,200	66.0	155	62	—	—	—
Unnamed A Street to Record	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
<b>COTTONWOOD AVENUE</b>												
West of Warren	6	50	AT	1.8%	0.7%	8,800	66.5	170	69	—	—	—
Warren to SR-79	6	50	AT	1.8%	0.7%	21,600	70.5	320	143	56	—	—
SR-79 to Cawston	6	50	AT	1.8%	0.7%	52,300	74.5	560	278	120	—	—
Cawston to Sanderson	6	50	AT	1.8%	0.7%	36,900	73.0	460	215	90	—	—
Sanderson to Kirby	6	50	AT	1.8%	0.7%	42,500	73.5	490	235	100	—	—
Kirby to Lyon	6	50	AT	1.8%	0.7%	33,700	72.5	428	200	83	—	—
Lyon to Palm	6	50	AT	1.8%	0.7%	34,700	72.5	428	200	83	—	—
Palm to State	6	50	AT	1.8%	0.7%	27,600	71.5	368	170	69	—	—
<b>ESPLANADE AVENUE</b>												
West of SR-79	6	50	AT	1.8%	0.7%	4,900	64.5	120	—	—	—	—
SR-79 to Odell	6	50	AT	1.8%	0.7%	23,800	71.0	340	155	62	—	—
Odell to Cawston	6	50	AT	1.8%	0.7%	24,000	71.0	340	155	62	—	—
Cawston to Sanderson	6	50	AT	1.8%	0.7%	34,700	72.5	428	200	83	—	—
Sanderson to Kirby	6	50	AT	1.8%	0.7%	39,400	73.0	460	215	90	—	—
Kirby to Lyon	6	50	AT	1.8%	0.7%	40,900	73.5	490	235	100	—	—
Lyon to Palm	6	45	AT	1.8%	0.7%	41,400	72.5	428	200	83	—	—
Palm to State	6	45	AT	1.8%	0.7%	38,400	72.0	395	185	75	—	—

**Table 5.10-5  
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
State to Santa Fe	6	45	AT	1.8%	0.7%	47,100	73.0	460	215	90	—	—
Santa Fe to San Jacinto	6	45	AT	1.8%	0.7%	44,700	73.0	460	215	90	—	—
San Jacinto to Hewitt	5	40	AT	1.8%	0.7%	46,000	72.0	395	185	75	—	—
Hewitt to Commonwealth	5	40	AT	1.8%	0.7%	22,800	69.0	255	110	—	—	—
Commonwealth to Ramona Expwy.	5	40	AT	1.8%	0.7%	27,400	69.5	278	120	—	—	—
GILMAN SPRINGS ROAD												
West of SR-79	6	55	AT	3.7%	3.6%	26,100	74.0	520	255	110	—	—
SR-79 to State	6	55	AT	3.7%	3.6%	8,900	69.5	278	120	—	—	—
HEWITT STREET												
Shaver to 7th	4	30	AT	1.8%	0.7%	18,100	65.5	143	56	—	—	—
7th to Main	4	30	AT	1.8%	0.7%	15,100	65.0	130	50	—	—	—
KIRBY AVENUE												
Esplanade to 7th	2	40	AT	1.8%	0.7%	11,100	66.5	170	69	—	—	—
7th to Cottonwood	2	40	AT	1.8%	0.7%	10,400	66.5	170	69	—	—	—
LYON AVENUE												
Esplanade to 7th	6	50	AT	1.8%	0.7%	24,500	71.0	340	155	62	—	—
7th to Cottonwood	6	50	AT	1.8%	0.7%	18,700	70.0	300	130	50	—	—
Cottonwood to De Anza	6	50	AT	1.8%	0.7%	28,700	72.0	395	185	75	—	—
De Anza to Ramona Blvd.	6	50	AT	1.8%	0.7%	21,600	70.5	320	143	56	—	—
Ramona Blvd. to Ramona Expwy.	6	50	AT	1.8%	0.7%	24,000	71.0	340	155	62	—	—
Ramona Expwy. to Record	6	50	AT	1.8%	0.7%	15,900	69.0	255	110	—	—	—
MAIN STREET												
Ramona Blvd. to Cam. Los Banos	5	40	AT	1.8%	0.7%	15,600	67.0	185	75	—	—	—
Cam. Los Banos to Ramona Expwy.	5	40	AT	1.8%	0.7%	16,700	67.5	200	83	—	—	—
Ramona Expwy. to Soboba	5	40	AT	1.8%	0.7%	8,000	64.5	120	—	—	—	—
MERIDIAN STREET												
Park to Washington	2	40	AT	1.8%	0.7%	18,500	69.0	255	110	—	—	—
Washington to Esplanade	2	40	AT	1.8%	0.7%	17,700	69.0	255	110	—	—	—
ODELL AVENUE												
Esplanade to 7th	6	45	AT	1.8%	0.7%	10,900	66.5	170	69	—	—	—
Unnamed A Street to Record	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
PALM AVENUE												
Esplanade to 7th	4	35	AT	1.8%	0.7%	10,300	64.0	110	—	—	—	—
7th to Cottonwood	4	35	AT	1.8%	0.7%	9,300	64.0	110	—	—	—	—



**Table 5.10-5  
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
Cottonwood to De Anza	4	35	AT	1.8%	0.7%	8,000	63.0	90	—	—	—	—
<b>PARK AVENUE</b>												
Hewitt to Meridian	2	40	AT	1.8%	0.7%	5,800	64.0	110	—	—	—	—
<b>RAMONA BOULEVARD</b>												
Warren to Odell	6	45	AT	1.8%	0.7%	9,800	66.0	155	62	—	—	—
Odell to Cawston	6	45	AT	1.8%	0.7%	10,800	66.5	170	69	—	—	—
Cawston to Sanderson	6	45	AT	1.8%	0.7%	15,300	68.0	215	90	—	—	—
Sanderson to Bridge	6	45	AT	1.8%	0.7%	21,000	69.5	278	120	—	—	—
Bridge to Lyon	6	45	AT	1.8%	0.7%	25,800	70.5	320	143	56	—	—
Lyon to Palm	6	45	AT	1.8%	0.7%	27,800	70.5	320	143	56	—	—
Palm to State	6	45	AT	1.8%	0.7%	21,800	69.5	278	120	—	—	—
State to San Jacinto	5	40	AT	1.8%	0.7%	26,700	69.5	278	120	—	—	—
<b>RAMONA EXPRESSWAY</b>												
West of Bridge	8	55	AT	1.8%	0.7%	112,100	78.5	905	490	235	100	—
Bridge to Warren	8	55	AT	1.8%	0.7%	92,100	77.5	810	428	200	83	—
Warren to Sanderson	8	55	AT	1.8%	0.7%	87,900	77.5	810	428	200	83	—
Sanderson to SR-79	8	55	AT	1.8%	0.7%	71,800	76.5	720	368	170	69	—
SR-79 to Bridge	8	55	AT	1.8%	0.7%	81,800	77.0	760	395	185	75	—
Bridge to Lyon	8	55	AT	1.8%	0.7%	74,800	76.5	720	368	170	69	—
Lyon to State	8	55	AT	1.8%	0.7%	71,500	76.5	720	368	170	69	—
State to San Jacinto	7	55	AT	1.8%	0.7%	66,100	75.5	640	320	143	56	—
East of San Jacinto	6	55	AT	1.8%	0.7%	47,500	75.0	600	300	130	50	—
North of Main	6	55	AT	1.8%	0.7%	40,800	74.5	560	278	120	—	—
Main to 7th	6	55	AT	1.8%	0.7%	48,800	75.0	600	300	130	50	—
7th to Esplanade	6	55	AT	1.8%	0.7%	46,300	75.0	600	300	130	50	—
South of Esplanade	6	55	AT	1.8%	0.7%	39,500	74.0	520	255	110	—	—
<b>RECORD ROAD</b>												
Bridge to Cawston	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
Cawston to Sanderson	6	45	AT	1.8%	0.7%	18,900	69.0	255	110	—	—	—
Sanderson to SR-79	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
SR-79 to Bridge	6	45	AT	1.8%	0.7%	12,500	67.0	185	75	—	—	—
Bridge to Lyon	6	45	AT	1.8%	0.7%	9,900	66.0	155	62	—	—	—
Lyon to State	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
<b>SAN JACINTO AVENUE</b>												

**Table 5.10-5  
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
Washington to Commonwealth Commonwealth to Esplanade Esplanade to 7th 7th to Main Main to Ramona Expwy.	6	45	AT	1.8%	0.7%	23,100	70.0	300	130	50	—	—
	6	45	AT	1.8%	0.7%	39,000	72.0	395	185	75	—	—
	6	45	AT	1.8%	0.7%	43,800	72.5	428	200	83	—	—
	6	45	AT	1.8%	0.7%	35,800	72.0	395	185	75	—	—
	6	45	AT	1.8%	0.7%	15,300	68.0	215	90	—	—	—
	SANDERSON AVENUE											
Eaton to Esplanade Esplanade to 7th 7th to Cottonwood Cottonwood to SR-79 SR-79 to unnamed Street A Unnamed Street A to Bridge Bridge to Ramona Blvd.	6	50	AT	1.8%	0.7%	42,800	73.5	490	235	100	—	—
	6	50	AT	1.8%	0.7%	44,500	74.0	520	255	110	—	—
	6	50	AT	1.8%	0.7%	48,300	74.0	520	255	110	—	—
	6	50	AT	1.8%	0.7%	49,800	74.5	560	278	120	—	—
	6	50	AT	1.8%	0.7%	53,900	74.5	560	278	120	—	—
	6	50	AT	1.8%	0.7%	32,500	72.5	428	200	83	—	—
Ramona Blvd. to Ramona Expwy. Ramona Expwy. to Record	6	50	AT	1.8%	0.7%	25,600	71.5	368	170	69	—	—
	6	50	AT	1.8%	0.7%	22,800	71.0	340	155	62	—	—
	6	60	AT	1.8%	0.7%	22,200	72.5	428	200	83	—	—
7TH STREET												
SR-79 to Cawston Cawston to Sanderson Sanderson to Kirby Kirby to Lyon Lyon to Palm Palm to State State to San Jacinto San Jacinto to Hewitt Hewitt to Ramona Expwy. SOBOBA ROAD State to Main SR-79 Gilman Springs to Ramona Expwy. Ramona Expwy. to Sanderson Sanderson to Cottonwood Cottonwood to Esplanade South of Esplanade STATE STREET	4	35	AT	1.8%	0.7%	10,800	64.5	120	—	—	—	—
	4	35	AT	1.8%	0.7%	8,000	63.0	90	—	—	—	—
	4	35	AT	1.8%	0.7%	9,400	64.0	110	—	—	—	—
	4	35	AT	1.8%	0.7%	9,900	64.0	110	—	—	—	—
	4	35	AT	1.8%	0.7%	9,700	64.0	110	—	—	—	—
	4	35	AT	1.8%	0.7%	12,800	65.0	130	50	—	—	—
	4	35	AT	1.8%	0.7%	19,100	67.0	185	75	—	—	—
	4	25	AT	1.8%	0.7%	14,800	62.5	83	—	—	—	—
	4	25	AT	1.8%	0.7%	12,000	62.0	75	—	—	—	—
	SOBOBA ROAD											
	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
	SR-79											
Gilman Springs to Ramona Expwy. Ramona Expwy. to Sanderson Sanderson to Cottonwood Cottonwood to Esplanade South of Esplanade STATE STREET	8	65	AT	4.8%	4.7%	128,500	82.5	1,400	810	428	200	83
	8	65	AT	4.8%	4.7%	99,800	81.5	1,200	720	368	170	69
	8	65	AT	4.8%	4.7%	88,400	81.0	1,150	680	340	155	62
	8	65	AT	4.8%	4.7%	114,900	82.0	1,250	760	395	185	75
STATE STREET												

**Table 5.10-5  
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet					
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB	
Menlo to Esplanade	5	40	AT	1.8%	0.7%	31,500	70.0	300	130	50	—	—	
	Esplanade to 7th	5	40	AT	1.8%	0.7%	45,000	72.0	395	185	75	—	
7th to Cottonwood	5	40	AT	1.8%	0.7%	38,700	71.0	340	155	62	—	—	
Cottonwood to Ramona Blvd.	6	50	AT	1.8%	0.7%	40,600	73.5	490	235	100	—	—	
Ramona Blvd. to Ramona Expwy.	6	50	AT	1.8%	0.7%	38,500	73.0	460	215	90	—	—	
Ramona Expwy. to Record	6	50	AT	1.8%	0.7%	15,600	69.0	255	110	—	—	—	
Record to Gilman Springs	6	55	AT	1.8%	0.7%	10,900	68.5	235	100	—	—	—	
UNNAMED A STREET													
Warren to Odell	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—	
Odell to Cawston	6	45	AT	1.8%	0.7%	10,600	66.5	170	69	—	—	—	
Cawston to Sanderson	6	45	AT	1.8%	0.7%	8,900	66.0	155	62	—	—	—	
Sanderson to SR-79	6	45	AT	1.8%	0.7%	14,000	67.5	200	83	—	—	—	
UNNAMED B STREET													
Bridge to Warren	6	45	AT	1.8%	0.7%	19,400	69.0	255	110	—	—	—	
UNNAMED C STREET													
Warren to Sanderson	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—	
WARREN ROAD													
SR-79 to Cottonwood	6	55	AT	1.8%	0.7%	11,100	68.5	235	100	—	—	—	
Cottonwood to unnamed Street A	6	55	AT	1.8%	0.7%	28,000	72.5	428	200	83	—	—	
Unnamed Street A to Bridge	6	55	AT	1.8%	0.7%	27,500	72.5	428	200	83	—	—	
Bridge to Ramona Blvd.	6	55	AT	1.8%	0.7%	17,000	70.5	320	143	56	—	—	
Ramona Blvd. to unnamed Street B	6	55	AT	1.8%	0.7%	23,100	72.0	395	185	75	—	—	
Unnamed Street B to Ramona Expwy.	6	55	AT	1.8%	0.7%	25,500	72.5	428	200	83	—	—	
Ramona Expwy. to Record	6	55	AT	1.8%	0.7%	8,000	67.5	200	83	—	—	—	
WASHINGTON AVENUE													
Hewitt to Meridian	2	40	AT	1.8%	0.7%	3,400	61.5	69	—	—	—	—	

\* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph;

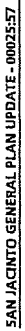
6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes: 'AT', 'ABOVE', and 'BELOW' refer to the elevation of the arterial relative to the surrounding area.

Source: Weiland Associates, Inc

## **Appendix B**

San Jacinto General Plan Update  
Buildout (Post 2050) Daily Traffic Volumes



## **Appendix C**

Traffic Noise Impact  
Computer Printouts

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 2 - 1st Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	148		
DIST N/F=	36	AUTO SLE DISTANCE =	146.90
DT WALL=	145	MED TRUCK SLE DIST=	146.90
DT W/OB=	3	HVY TRUCK SLE DIST=	146.99
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		

ROADWAY VIEW:      LF ANGLE=    -90  
                         RT ANGLE=    90  
                         DF ANGLE=    180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15		
MEDIUM TRUCKS =	15	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1525.0	EL AUTOMOBILES =	1529.0
ROAD EL =	1527.0	EL MEDIUM TRUCKS=	1531.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1535.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	59.2	57.3	55.5	49.5	58.7
MEDIUM TRUCKS LEQ	50.2	48.7	42.4	40.8	49.5
HEAVY TRUCKS LEQ	50.8	49.4	40.3	41.6	50.1

VEHICULAR NOISE	60.2	58.4	55.9	50.6	59.7
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**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	60.2	58.4	55.9	50.6	59.7

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	60.2	60.2
MIT PK HR LEQ WITH TOPO AND BARRIER =	60.2	60.2
CNEL WITHOUT TOPO AND BARRIER =	59.7	59.7
MIT CNEL WITH TOPO AND BARRIER =	59.7	59.7

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 2 - 2nd Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	148		
DIST N/F=	36	AUTO SLE DISTANCE =	147.31
DT WALL=	145	MED TRUCK SLE DIST=	147.18
DT W/OB=	3	HVY TRUCK SLE DIST=	146.99
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		

ROADWAY VIEW:

LF ANGLE=	-90
RT ANGLE=	90
DF ANGLE=	180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1525.0	EL AUTOMOBILES =	1529.0
ROAD EL =	1527.0	EL MEDIUM TRUCKS=	1531.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1535.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.8	60.9	59.1	53.0	62.3
MEDIUM TRUCKS LEQ	53.8	52.3	45.9	44.4	53.1
HEAVY TRUCKS LEQ	54.4	53.0	43.9	45.2	53.6
VEHICULAR NOISE	63.8	62.0	59.4	54.2	63.3

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.8	62.0	59.4	54.2	63.3

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.8	63.8
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.8	63.8
CNEL WITHOUT TOPO AND BARRIER =	63.3	63.3
MIT CNEL WITH TOPO AND BARRIER =	63.3	63.3



**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 2 - 3rd Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	148		
DIST N/F=	36	AUTO SLE DISTANCE =	148.39
DT WALL=	145	MED TRUCK SLE DIST=	148.12
DT W/OB=	3	HVY TRUCK SLE DIST=	147.66
HTH WALL=	0.0	*****	
OBS HTH=	25.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1525.0	EL AUTOMOBILES =	1529.0
ROAD EL =	1527.0	EL MEDIUM TRUCKS=	1531.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1535.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.7	60.8	59.1	53.0	62.2
MEDIUM TRUCKS LEQ	53.8	52.3	45.9	44.4	53.1
HEAVY TRUCKS LEQ	54.4	52.9	43.9	45.1	53.6
VEHICULAR NOISE	63.8	62.0	59.4	54.1	63.2

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.8	62.0	59.4	54.1	63.2

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.8	63.8
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.8	***** 63.8
CNEL WITHOUT TOPO AND BARRIER =	63.2	63.2
MIT CNEL WITH TOPO AND BARRIER =	63.2	***** 63.2

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 2 - 1st Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	160		
DIST N/F=	36	AUTO SLE DISTANCE =	158.99
DT WALL=	160	MED TRUCK SLE DIST=	158.99
DT W/OB=	0	HVY TRUCK SLE DIST=	159.06
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		

ROADWAY VIEW:            LF ANGLE=     -90  
                               RT ANGLE=     90  
                               DF ANGLE=    180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15		
MEDIUM TRUCKS =	15	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1525.0	EL AUTOMOBILES =	1529.0
ROAD EL =	1527.0	EL MEDIUM TRUCKS=	1531.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1535.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	58.7	56.8	55.0	49.0	58.2
MEDIUM TRUCKS LEQ	49.7	48.2	41.9	40.3	49.0
HEAVY TRUCKS LEQ	50.3	48.9	39.8	41.1	49.6
VEHICULAR NOISE	59.7	57.9	55.3	50.1	59.2

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	59.7	57.9	55.3	50.1	59.2

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	59.7	59.7
MIT PK HR LEQ WITH TOPO AND BARRIER =	59.7	59.7
CNEL WITHOUT TOPO AND BARRIER =	59.2	59.2
MIT CNEL WITH TOPO AND BARRIER =	59.2	59.2

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 2 - 2nd Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	160		
DIST N/F=	36	AUTO SLE DISTANCE =	159.36
DT WALL=	160	MED TRUCK SLE DIST=	159.24
DT W/OB=	0	HVY TRUCK SLE DIST=	159.06
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1525.0	EL AUTOMOBILES =	1529.0
ROAD EL =	1527.0	EL MEDIUM TRUCKS=	1531.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1535.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.4	60.5	58.8	52.7	61.9
MEDIUM TRUCKS LEQ	53.5	52.0	45.6	44.0	52.7
HEAVY TRUCKS LEQ	54.0	52.6	43.6	44.8	53.3
VEHICULAR NOISE	63.5	61.7	59.1	53.8	62.9

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.5	61.7	59.1	53.8	62.9

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.5	63.5
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.5	***** 63.5
CNEL WITHOUT TOPO AND BARRIER =	62.9	62.9
MIT CNEL WITH TOPO AND BARRIER =	62.9	***** 62.9

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 2 - 3rd Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	160		
DIST N/F=	36	AUTO SLE DISTANCE =	160.37
DT WALL=	160	MED TRUCK SLE DIST=	160.12
DT W/OB=	0	HVY TRUCK SLE DIST=	159.69
HTH WALL=	0.0	*****	
OBS HTH=	25.0		
AMBIENT=	0.0		

ROADWAY VIEW:            LF ANGLE=     -90  
                              RT ANGLE=        90  
                              DF ANGLE=       180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10		
MEDIUM TRUCKS =	10	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1525.0	EL AUTOMOBILES =	1529.0
ROAD EL =	1527.0	EL MEDIUM TRUCKS=	1531.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1535.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.4	60.5	58.7	52.7	61.9
MEDIUM TRUCKS LEQ	53.4	51.9	45.6	44.0	52.7
HEAVY TRUCKS LEQ	54.0	52.6	43.6	44.8	53.3
VEHICULAR NOISE	63.4	61.6	59.1	53.8	62.9

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.4	61.6	59.1	53.8	62.9

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.4	63.4
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.4	63.4
CNEL WITHOUT TOPO AND BARRIER =	62.9	62.9
MIT CNEL WITH TOPO AND BARRIER =	62.9	62.9

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	20-Mar-06
LOCATION:	Residential Bldg 3 - 1st Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	163		
DIST N/F=	36	AUTO SLE DISTANCE =	162.01
DT WALL=	160	MED TRUCK SLE DIST=	162.01
DT W/OB=	3	HVY TRUCK SLE DIST=	162.08
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		

ROADWAY VIEW:      LF ANGLE=    -90  
                         RT ANGLE=      0  
                         DF ANGLE=     90

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15		
MEDIUM TRUCKS =	15	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1528.0
ROAD EL =	1526.0	EL MEDIUM TRUCKS=	1530.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1534.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	55.6	53.7	51.9	45.8	55.1
MEDIUM TRUCKS LEQ	46.6	45.1	38.7	37.2	45.9
HEAVY TRUCKS LEQ	47.2	45.7	36.7	38.0	46.4
VEHICULAR NOISE	56.6	54.8	52.2	47.0	56.1

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	56.6	54.8	52.2	47.0	56.1

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	56.6	56.6
MIT PK HR LEQ WITH TOPO AND BARRIER =	56.6	***** 56.6
CNEL WITHOUT TOPO AND BARRIER =	56.1	56.1
MIT CNEL WITH TOPO AND BARRIER =	56.1	***** 56.1

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)**  
**CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	20-Mar-06
LOCATION:	Residential Bldg 3 - 2nd Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	163		
DIST N/F=	36	AUTO SLE DISTANCE =	162.38
DT WALL=	160	MED TRUCK SLE DIST=	162.25
DT W/OB=	3	HVY TRUCK SLE DIST=	162.08
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		

ROADWAY VIEW:      LF ANGLE=      -90  
                          RT ANGLE=      0  
                          DF ANGLE=      90

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1528.0
ROAD EL =	1526.0	EL MEDIUM TRUCKS=	1530.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1534.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	59.3	57.4	55.7	49.6	58.8
MEDIUM TRUCKS LEQ	50.4	48.9	42.5	41.0	49.6
HEAVY TRUCKS LEQ	50.9	49.5	40.5	41.7	50.2
VEHICULAR NOISE	60.4	58.6	56.0	50.7	59.8

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	60.4	58.6	56.0	50.7	59.8

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	60.4	60.4
MIT PK HR LEQ WITH TOPO AND BARRIER =	60.4	60.4
CNEL WITHOUT TOPO AND BARRIER =	59.8	59.8
MIT CNEL WITH TOPO AND BARRIER =	59.8	59.8

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	20-Mar-06
LOCATION:	Residential Bldg 3 - 3rd Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	163		
DIST N/F=	36	AUTO SLE DISTANCE =	163.36
DT WALL=	160	MED TRUCK SLE DIST=	163.11
DT W/OB=	3	HVY TRUCK SLE DIST=	162.70
HTH WALL=	0.0	*****	
OBS HTH=	25.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	0	
	DF ANGLE=	90	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10		
MEDIUM TRUCKS =	10	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1528.0
ROAD EL =	1526.0	EL MEDIUM TRUCKS=	1530.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1534.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	59.3	57.4	55.6	49.6	58.8
MEDIUM TRUCKS LEQ	50.3	48.8	42.5	40.9	49.6
HEAVY TRUCKS LEQ	50.9	49.5	40.5	41.7	50.2
VEHICULAR NOISE	60.3	58.5	56.0	50.7	59.8

NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	60.3	58.5	56.0	50.7	59.8

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	60.3	60.3
MIT PK HR LEQ WITH TOPO AND BARRIER =	60.3	60.3
CNEL WITHOUT TOPO AND BARRIER =	59.8	59.8
MIT CNEL WITH TOPO AND BARRIER =	59.8	59.8

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	20-Mar-06
LOCATION:	Residential Bldg 3 - 1st Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	145		
DIST N/F=	36	AUTO SLE DISTANCE =	143.89
DT WALL=	145	MED TRUCK SLE DIST=	143.88
DT W/OB=	0	HVY TRUCK SLE DIST=	143.95
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		

ROADWAY VIEW:      LF ANGLE=      -90  
                                  RT ANGLE=      90  
                                  DF ANGLE=      180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	15		
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1524.5	EL AUTOMOBILES =	1528.0
ROAD EL =	1526.0	EL MEDIUM TRUCKS=	1530.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1534.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	59.3	57.4	55.7	49.6	58.8
MEDIUM TRUCKS LEQ	50.4	48.9	42.5	41.0	49.7
HEAVY TRUCKS LEQ	50.9	49.5	40.5	41.7	50.2
VEHICULAR NOISE	60.4	58.6	56.0	50.7	59.8

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	60.4	58.6	56.0	50.7	59.8

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	60.4	60.4
MIT PK HR LEQ WITH TOPO AND BARRIER =	60.4	60.4
CNEL WITHOUT TOPO AND BARRIER =	59.8	59.8
MIT CNEL WITH TOPO AND BARRIER =	59.8	59.8



**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	20-Mar-06
LOCATION:	Residential Bldg 3 - 2nd Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	145		
DIST N/F=	36	AUTO SLE DISTANCE =	144.34
DT WALL=	145	MED TRUCK SLE DIST=	144.19
DT W/OB=	0	HVY TRUCK SLE DIST=	143.98
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10		
MEDIUM TRUCKS =	10	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1524.5	EL AUTOMOBILES =	1528.0
ROAD EL =	1526.0	EL MEDIUM TRUCKS=	1530.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1534.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.8	61.0	59.2	53.1	62.4
MEDIUM TRUCKS LEQ	53.9	52.4	46.0	44.5	53.2
HEAVY TRUCKS LEQ	54.5	53.0	44.0	45.3	53.7
VEHICULAR NOISE	63.9	62.1	59.5	54.3	63.4

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.9	62.1	59.5	54.3	63.4

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.9	63.9
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.9	***** 63.9
CNEL WITHOUT TOPO AND BARRIER =	63.4	63.4
MIT CNEL WITH TOPO AND BARRIER =	63.4	***** 63.4

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	20-Mar-06
LOCATION:	Residential Bldg 3 - 3rd Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	145		
DIST N/F=	36	AUTO SLE DISTANCE =	145.48
DT WALL=	145	MED TRUCK SLE DIST=	145.19
DT W/OB=	0	HVY TRUCK SLE DIST=	144.71
HTH WALL=	0.0	*****	
OBS HTH=	25.0		
AMBIENT=	0.0		

ROADWAY VIEW:

LF ANGLE=	-90
RT ANGLE=	90
DF ANGLE=	180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1524.5	EL AUTOMOBILES =	1528.0
ROAD EL =	1526.0	EL MEDIUM TRUCKS=	1530.0
GRADE =	0.1 %	EL HEAVY TRUCKS =	1534.0

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.8	60.9	59.1	53.1	62.3
MEDIUM TRUCKS LEQ	53.9	52.4	46.0	44.4	53.1
HEAVY TRUCKS LEQ	54.4	53.0	44.0	45.2	53.7
VEHICULAR NOISE	63.9	62.1	59.5	54.2	63.3

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.9	62.1	59.5	54.2	63.3

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.9	63.9
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.9	63.9
CNEL WITHOUT TOPO AND BARRIER =	63.3	63.3
MIT CNEL WITH TOPO AND BARRIER =	63.3	63.3

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 4 - 1st Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	148		
DIST N/F=	36	AUTO SLE DISTANCE =	146.91
DT WALL=	145	MED TRUCK SLE DIST=	146.90
DT W/OB=	3	HVY TRUCK SLE DIST=	146.97
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	15		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1527.5
ROAD EL =	1525.5	EL MEDIUM TRUCKS=	1529.5
GRADE =	0.1 %	EL HEAVY TRUCKS =	1533.5

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	59.2	57.3	55.5	49.5	58.7
MEDIUM TRUCKS LEQ	50.2	48.7	42.4	40.8	49.5
HEAVY TRUCKS LEQ	50.8	49.4	40.3	41.6	50.1
VEHICULAR NOISE	60.2	58.4	55.9	50.6	59.7

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	60.2	58.4	55.9	50.6	59.7

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	60.2	60.2
MIT PK HR LEQ WITH TOPO AND BARRIER =	60.2	***** 60.2
CNEL WITHOUT TOPO AND BARRIER =	59.7	59.7
MIT CNEL WITH TOPO AND BARRIER =	59.7	***** 59.7

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 4 - 2nd Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	148		
DIST N/F=	36	AUTO SLE DISTANCE =	147.35
DT WALL=	145	MED TRUCK SLE DIST=	147.21
DT W/OB=	3	HVY TRUCK SLE DIST=	147.00
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		

ROADWAY VIEW:

LF ANGLE=	-90
RT ANGLE=	90
DF ANGLE=	180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10		
MEDIUM TRUCKS =	10	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1527.5
ROAD EL =	1525.5	EL MEDIUM TRUCKS=	1529.5
GRADE =	0.1 %	EL HEAVY TRUCKS =	1533.5

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.8	60.9	59.1	53.0	62.3
MEDIUM TRUCKS LEQ	53.8	52.3	45.9	44.4	53.1
HEAVY TRUCKS LEQ	54.4	53.0	43.9	45.2	53.6
VEHICULAR NOISE	63.8	62.0	59.4	54.2	63.3

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.8	62.0	59.4	54.2	63.3

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.8	63.8
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.8	63.8
CNEL WITHOUT TOPO AND BARRIER =	63.3	63.3
MIT CNEL WITH TOPO AND BARRIER =	63.3	63.3

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 4 - 3rd Floor Patio (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	148		
DIST N/F=	36	AUTO SLE DISTANCE =	148.47
DT WALL=	145	MED TRUCK SLE DIST=	148.19
DT W/OB=	3	HVY TRUCK SLE DIST=	147.72
HTH WALL=	0.0	*****	
OBS HTH=	25.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1527.5
ROAD EL =	1525.5	EL MEDIUM TRUCKS=	1529.5
GRADE =	0.1 %	EL HEAVY TRUCKS =	1533.5

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.7	60.8	59.1	53.0	62.2
MEDIUM TRUCKS LEQ	53.8	52.3	45.9	44.4	53.1
HEAVY TRUCKS LEQ	54.4	52.9	43.9	45.1	53.6
VEHICULAR NOISE	63.8	62.0	59.4	54.1	63.2

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.8	62.0	59.4	54.1	63.2

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.8	63.8
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.8	63.8
CNEL WITHOUT TOPO AND BARRIER =	63.2	63.2
MIT CNEL WITH TOPO AND BARRIER =	63.2	63.2

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 4 - 1st Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	160		
DIST N/F=	36	AUTO SLE DISTANCE =	158.99
DT WALL=	160	MED TRUCK SLE DIST=	158.99
DT W/OB=	0	HVY TRUCK SLE DIST=	159.05
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		

ROADWAY VIEW:

LF ANGLE=	-90
RT ANGLE=	90
DF ANGLE=	180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	15		
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1527.5
ROAD EL =	1525.5	EL MEDIUM TRUCKS=	1529.5
GRADE =	0.1 %	EL HEAVY TRUCKS =	1533.5

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	58.7	56.8	55.0	49.0	58.2
MEDIUM TRUCKS LEQ	49.7	48.2	41.9	40.3	49.0
HEAVY TRUCKS LEQ	50.3	48.9	39.8	41.1	49.6
VEHICULAR NOISE	59.7	57.9	55.3	50.1	59.2

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	59.7	57.9	55.3	50.1	59.2

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	59.7	59.7
MIT PK HR LEQ WITH TOPO AND BARRIER =	59.7	*****
CNEL WITHOUT TOPO AND BARRIER =	59.2	59.2
MIT CNEL WITH TOPO AND BARRIER =	59.2	*****

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 4 - 2nd Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	160		
DIST N/F=	36	AUTO SLE DISTANCE =	159.40
DT WALL=	160	MED TRUCK SLE DIST=	159.27
DT W/OB=	0	HVY TRUCK SLE DIST=	159.08
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10		
MEDIUM TRUCKS =	10	GRADE ADJUSTMENT=	0.00
HEAVY TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1527.5
ROAD EL =	1525.5	EL MEDIUM TRUCKS=	1529.5
GRADE =	0.1 %	EL HEAVY TRUCKS =	1533.5

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.4	60.5	58.8	52.7	61.9
MEDIUM TRUCKS LEQ	53.5	52.0	45.6	44.0	52.7
HEAVY TRUCKS LEQ	54.0	52.6	43.6	44.8	53.3
VEHICULAR NOISE	63.5	61.7	59.1	53.8	62.9

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.5	61.7	59.1	53.8	62.9

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.5	63.5
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.5	***** 63.5
CNEL WITHOUT TOPO AND BARRIER =	62.9	62.9
MIT CNEL WITH TOPO AND BARRIER =	62.9	***** 62.9

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Residential Bldg 4 - 3rd Floor Facade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	160		
DIST N/F=	36	AUTO SLE DISTANCE =	160.43
DT WALL=	160	MED TRUCK SLE DIST=	160.18
DT W/OB=	0	HVY TRUCK SLE DIST=	159.74
HTH WALL=	0.0	*****	
OBS HTH=	25.0		
AMBIENT=	0.0		

ROADWAY VIEW:

LF ANGLE=	-90
RT ANGLE=	90
DF ANGLE=	180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1524.0	EL AUTOMOBILES =	1527.5
ROAD EL =	1525.5	EL MEDIUM TRUCKS=	1529.5
GRADE =	0.1 %	EL HEAVY TRUCKS =	1533.5

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	62.4	60.5	58.7	52.7	61.9
MEDIUM TRUCKS LEQ	53.4	51.9	45.6	44.0	52.7
HEAVY TRUCKS LEQ	54.0	52.6	43.6	44.8	53.3
VEHICULAR NOISE	63.4	61.6	59.1	53.8	62.9

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	63.4	61.6	59.1	53.8	62.9

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	63.4	63.4
MIT PK HR LEQ WITH TOPO AND BARRIER =	63.4	***** 63.4
CNEL WITHOUT TOPO AND BARRIER =	62.9	62.9
MIT CNEL WITH TOPO AND BARRIER =	62.9	***** 62.9



**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Medical Building W - 1st Floor Façade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	74		
DIST N/F=	36	AUTO SLE DISTANCE =	71.96
DT WALL=	74	MED TRUCK SLE DIST=	71.84
DT W/OB=	0	HVY TRUCK SLE DIST=	71.78
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	15		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1532.9	EL AUTOMOBILES =	1532.8
ROAD EL =	1530.8	EL MEDIUM TRUCKS=	1534.8
GRADE =	0.1 %	EL HEAVY TRUCKS =	1538.8

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	63.8	61.9	60.2	54.1	63.4
MEDIUM TRUCKS LEQ	54.9	53.4	47.0	45.5	54.2
HEAVY TRUCKS LEQ	55.5	54.0	45.0	46.3	54.7
VEHICULAR NOISE	64.9	63.1	60.5	55.3	64.4

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	64.9	63.1	60.5	55.3	64.4

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	64.9	64.9
MIT PK HR LEQ WITH TOPO AND BARRIER =	64.9	***** 64.9
CNEL WITHOUT TOPO AND BARRIER =	64.4	64.4
MIT CNEL WITH TOPO AND BARRIER =	64.4	***** 64.4

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Palm Avenue	DATE:	27-Feb-06
LOCATION:	Medical Building W - 2nd Floor Façade (no wall)	BY:	Mike Rosa

ADT =	10,300	PK HR VOL =	1,030
SPEED =	45		
PK HR % =	10		
CTL DIST=	74		
DIST N/F=	36	AUTO SLE DISTANCE =	73.35
DT WALL=	74	MED TRUCK SLE DIST=	72.96
DT W/OB=	0	HVY TRUCK SLE DIST=	72.35
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		

ROADWAY VIEW:

LF ANGLE=	-90
RT ANGLE=	90
DF ANGLE=	180

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL,1=BERM)		
PAD EL =	1532.9	EL AUTOMOBILES =	1532.8
ROAD EL =	1530.8	EL MEDIUM TRUCKS=	1534.8
GRADE =	0.1 %	EL HEAVY TRUCKS =	1538.8

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	65.8	63.9	62.1	56.1	65.3
MEDIUM TRUCKS LEQ	56.9	55.3	49.0	47.4	56.1
HEAVY TRUCKS LEQ	57.5	56.0	47.0	48.2	56.7
VEHICULAR NOISE	66.8	65.0	62.5	57.2	66.3

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	66.8	65.0	62.5	57.2	66.3

	W/O AMBIENT	W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =	66.8	66.8
MIT PK HR LEQ WITH TOPO AND BARRIER =	66.8	66.8
CNEL WITHOUT TOPO AND BARRIER =	66.3	66.3
MIT CNEL WITH TOPO AND BARRIER =	66.3	66.3

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)  
CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Esplanade Avenue	DATE:	27-Feb-06
LOCATION:	Medical Building E - 1st Floor Façade (no wall)	BY:	Mike Rosa

ADT =	38,400	PK HR VOL =	3,840
SPEED =	45		
PK HR % =	10		
CTL DIST=	80		
DIST N/F=	48	AUTO SLE DISTANCE =	76.54
DT WALL=	80	MED TRUCK SLE DIST=	76.41
DT W/OB=	0	HVY TRUCK SLE DIST=	76.32
HTH WALL=	0.0	*****	
OBS HTH=	5.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	15	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	15	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	15		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1531.6	EL AUTOMOBILES =	1530.8
ROAD EL =	1528.8	EL MEDIUM TRUCKS=	1532.8
GRADE =	2.2 %	EL HEAVY TRUCKS =	1536.8

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	69.2	67.3	65.5	59.4	68.7
MEDIUM TRUCKS LEQ	60.2	58.7	52.3	50.8	59.5
HEAVY TRUCKS LEQ	60.8	59.4	50.3	51.6	60.1
VEHICULAR NOISE	70.2	68.4	65.8	60.6	69.7

**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	70.2	68.4	65.8	60.6	69.7
			W/O AMBIENT		W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =			70.2		70.2
MIT PK HR LEQ WITH TOPO AND BARRIER =			70.2	*****	70.2
CNEL WITHOUT TOPO AND BARRIER =			69.7		69.7
MIT CNEL WITH TOPO AND BARRIER =			69.7	*****	69.7

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)**  
**CITY OF SAN JACINTO (OCmix)**

PROJECT:	Parkside Preliminary	JOB #:	1512-05-08
ROADWAY:	Esplanade Avenue	DATE:	27-Feb-06
LOCATION:	Medical Building E - 2nd Floor Façade (no wall)	BY:	Mike Rosa

ADT =	38,400	PK HR VOL =	3,840
SPEED =	45		
PK HR % =	10		
CTL DIST=	80		
DIST N/F=	48	AUTO SLE DISTANCE =	77.93
DT WALL=	80	MED TRUCK SLE DIST=	77.55
DT W/OB=	0	HVY TRUCK SLE DIST=	76.94
HTH WALL=	0.0	*****	
OBS HTH=	15.0		
AMBIENT=	0.0		
ROADWAY VIEW:	LF ANGLE=	-90	
	RT ANGLE=	90	
	DF ANGLE=	180	

SITE CONDITIONS (10=HARD SITE, 15=SOFT SITE)

AUTOMOBILES =	10	GRADE ADJUSTMENT=	0.00
MEDIUM TRUCKS =	10	(ADJUSTMENT TO HEAVY TRUCKS)	
HEAVY TRUCKS =	10		
BARRIER =	0 (0=WALL, 1=BERM)		
PAD EL =	1531.6	EL AUTOMOBILES =	1530.8
ROAD EL =	1528.8	EL MEDIUM TRUCKS=	1532.8
GRADE =	2.2 %	EL HEAVY TRUCKS =	1536.8

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

**NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING**

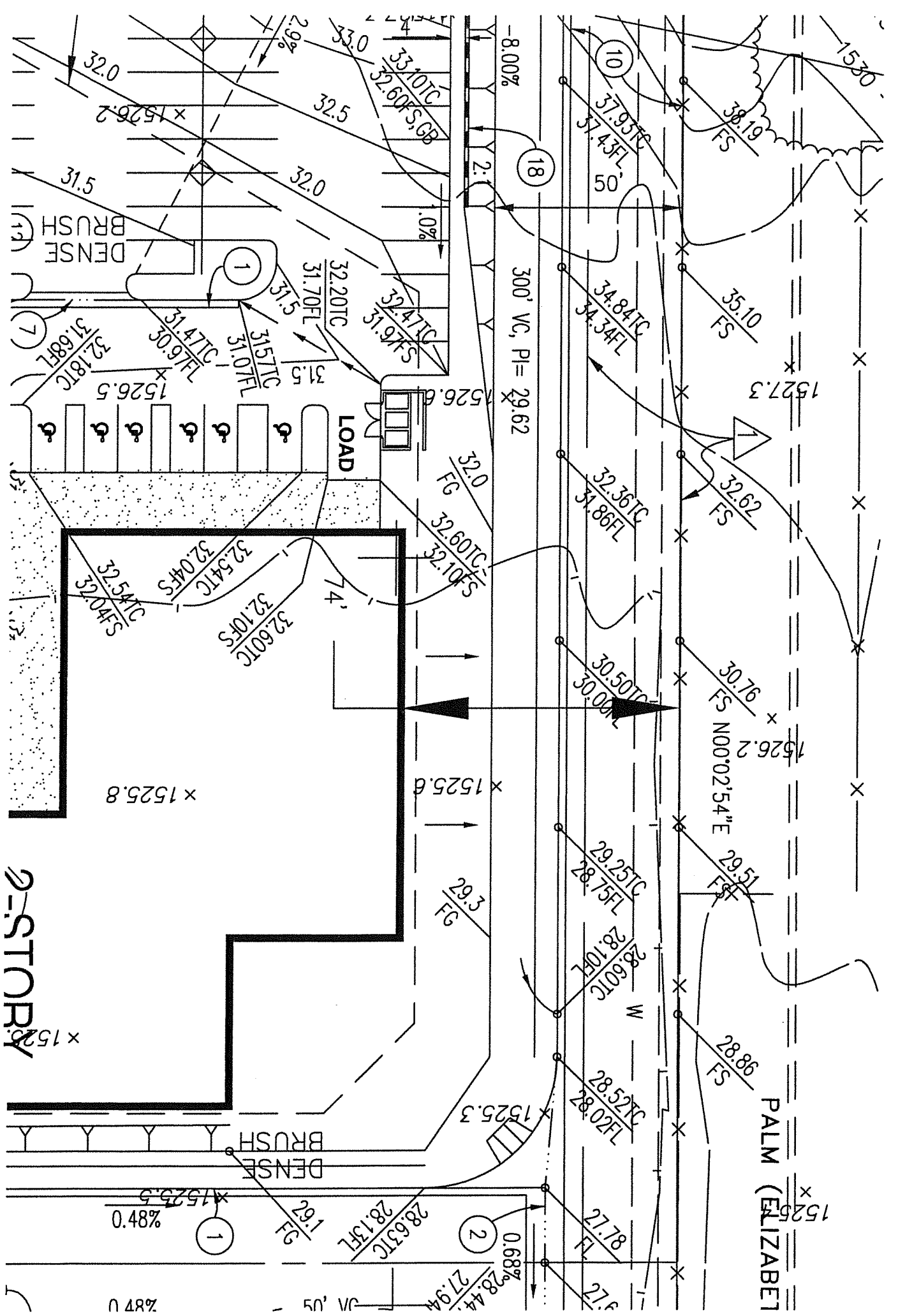
	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
AUTOMOBILES LEQ	71.2	69.3	67.6	61.5	70.7
MEDIUM TRUCKS LEQ	62.3	60.8	54.4	52.9	61.6
HEAVY TRUCKS LEQ	62.9	61.5	52.4	53.7	62.2
VEHICULAR NOISE	72.3	70.5	67.9	62.7	71.8

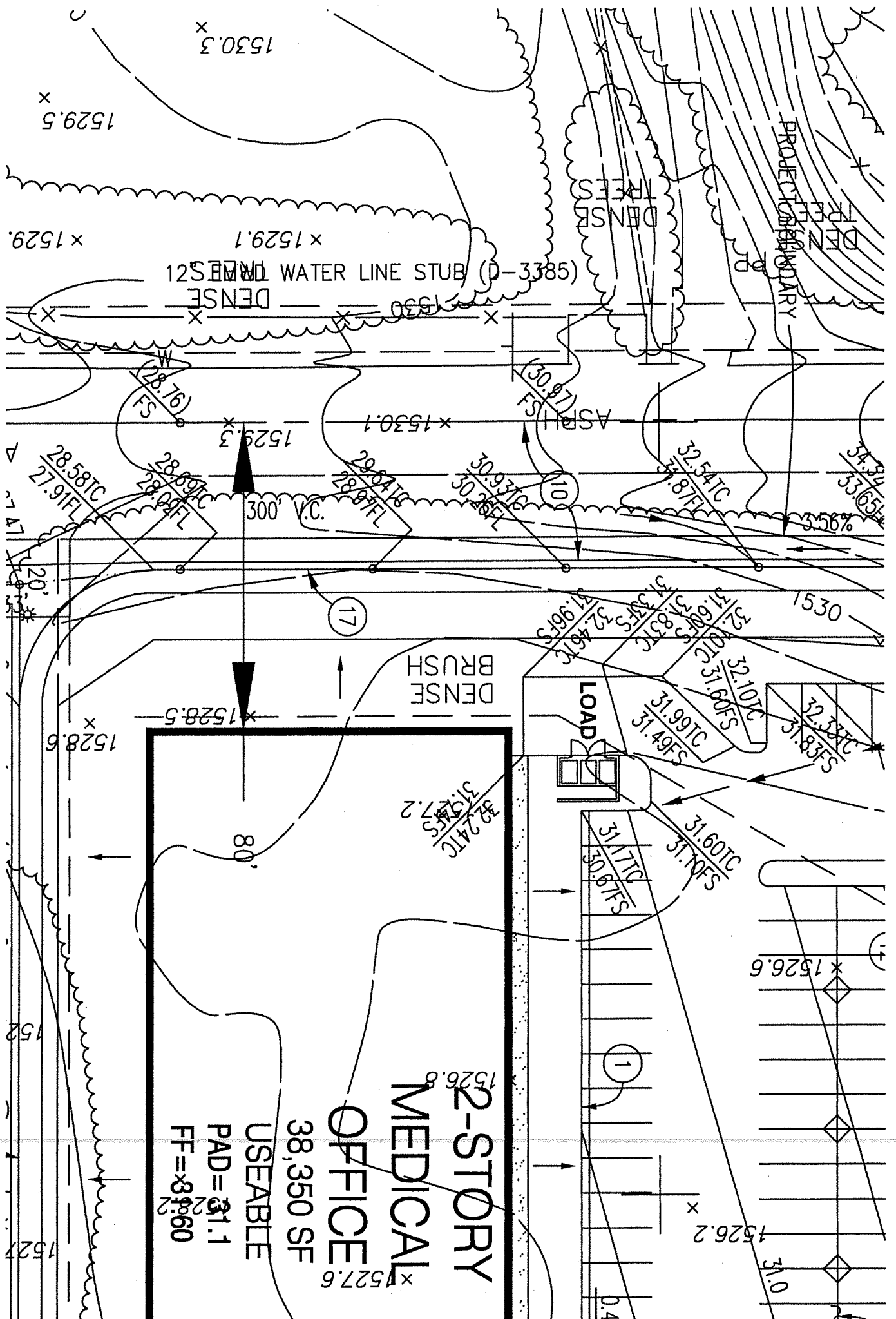
**NOISE IMPACTS WITH TOPO AND BARRIER SHIELDING**

	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	CNEL
VEHICULAR NOISE	72.3	70.5	67.9	62.7	71.8
			W/O AMBIENT		W/ AMBIENT
PK HR LEQ WITHOUT TOPO OR BARRIER =			72.3		72.3
MIT PK HR LEQ WITH TOPO AND BARRIER =			72.3	*****	72.3
CNEL WITHOUT TOPO AND BARRIER =			71.8		71.8
MIT CNEL WITH TOPO AND BARRIER =			71.8	*****	71.8

## **Appendix D**

### Grading Plan





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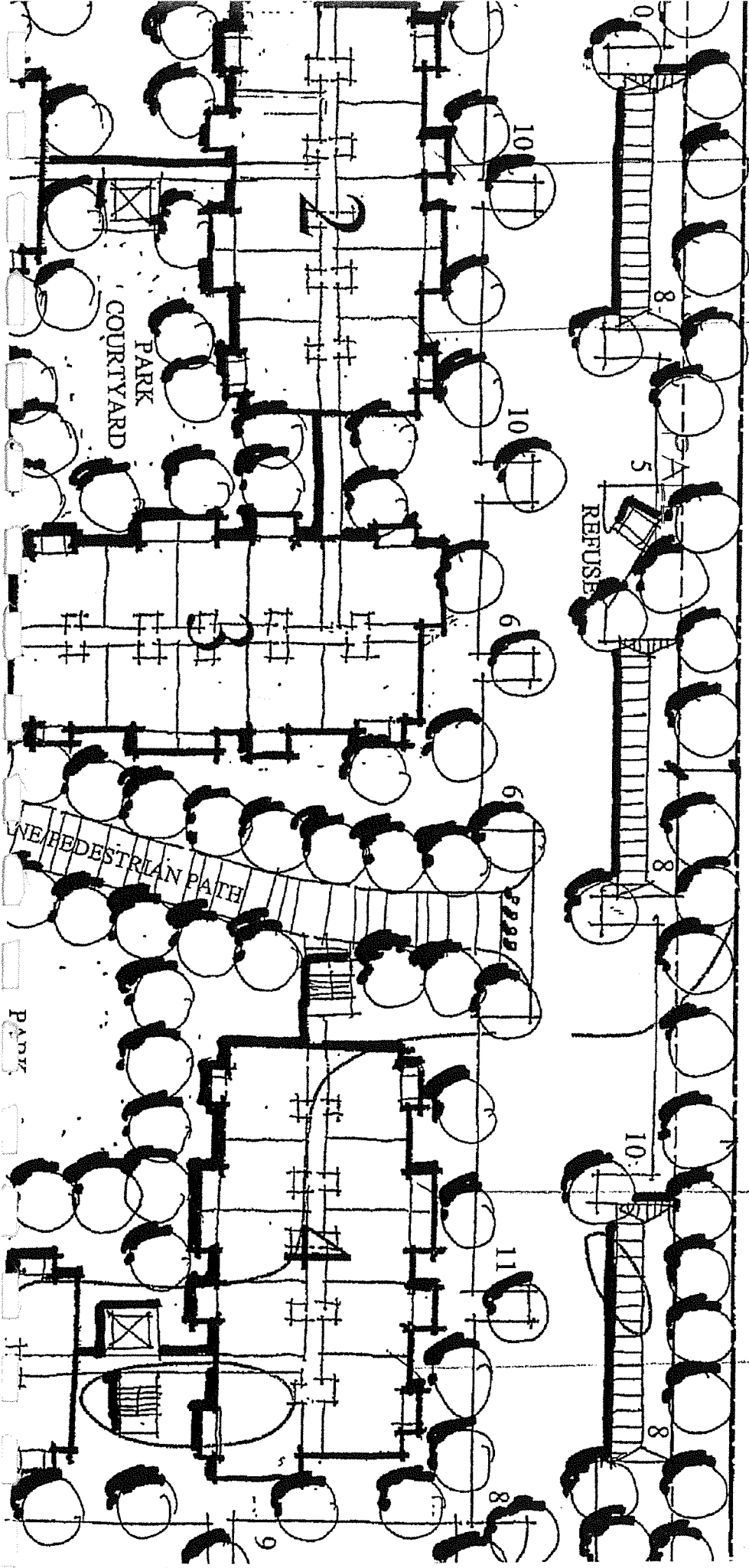
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## **Appendix E**

Hard/Soft Site Condition  
Analysis Computer Printouts

# Hard/Soft Site Condition Evaluation

3/20/2006

**Project:** Parkside Preliminary Acoustical Study

**Location:** San Jacinto

**Receiver:** Residential Building 2 - 1st Floor Patio

**Source:** Palm Avenue

Centerline to Observer Distance (ft) = 148  
 Centerline to Wall Distance (ft) = 145  
 Centerline to Toe-of-Slope Distance (ft) = 50  
 Pad Elevation (ft) = 25.0  
 Roadway Elevation (ft) = 27.0  
 Height of the Observer (ft) = 5

	Automobiles	Medium Trucks	Heavy Trucks
Area (square feet)	323.0	493.2	915.0
Length (ft)	148.0	148.0	148.0
Average Height (ft)	2.2	3.3	6.2
<b>Site Conditions to be Used -----&gt;</b>	<b>SOFT</b>	<b>SOFT</b>	<b>SOFT</b>

**Receiver:** Residential Building 3 - 1st Floor Patio

**Source:** Palm Avenue

Centerline to Observer Distance (ft) = 163  
 Centerline to Wall Distance (ft) = 160  
 Centerline to Toe-of-Slope Distance (ft) = 50  
 Pad Elevation (ft) = 24.0  
 Roadway Elevation (ft) = 26.0  
 Height of the Observer (ft) = 5

	Automobiles	Medium Trucks	Heavy Trucks
Area (square feet)	360.5	548.0	1012.5
Length (ft)	148.0	148.0	148.0
Average Height (ft)	2.4	3.7	6.8
<b>Site Conditions to be Used -----&gt;</b>	<b>SOFT</b>	<b>SOFT</b>	<b>SOFT</b>

# Hard/Soft Site Condition Evaluation

3/20/2006

**Project:** Parkside Preliminary Acoustical Study

**Location:** San Jacinto

**Receiver:** Residential Building 4 - 1st Floor Patio

**Source:** Palm Avenue

Centerline to Observer Distance (ft) = 148

Centerline to Wall Distance (ft) = 145

Centerline to Toe-of-Slope Distance (ft) = 50

Pad Elevation (ft) = 24.0

Roadway Elevation (ft) = 25.5

Height of the Observer (ft) = 5

	Automobiles	Medium Trucks	Heavy Trucks
Area (square feet)	334.8	505.0	926.8
Length (ft)	148.0	148.0	148.0
Average Height (ft)	2.3	3.4	6.3
Site Conditions to be Used ----->	<b>SOFT</b>	<b>SOFT</b>	<b>SOFT</b>