

APPENDIX F
Acoustical Analysis Report

June 20, 2016

9233

Mr. Greg L. Waite
The Gateway Grand Project Owner, LLC
a Delaware limited liability company
2235 Encinitas Boulevard, Suite 216
Encinitas, California 92024

Subject: Gateway Grand Project (700 West Grand Avenue, Escondido) Acoustical Analysis Report

Dear Mr. Waite:

Dudek has completed this Acoustical Analysis Report for the Gateway Grand project located in the City of Escondido, California.

In summary, this report concludes that the future traffic noise levels from the adjacent roadways (West Valley Parkway and West Grand Avenue) would result in exceedance of the City's maximum exterior noise level criterion of 65 decibel (dB) Community Noise Equivalent Level (CNEL) corresponding to "normally acceptable" noise exposure for multi-family and mixed-use residential land uses. The maximum traffic noise levels (up to 68 dB CNEL) would correspond to a "conditionally acceptable" noise exposure. Consequently, the proposed rooftop deck would require noise mitigation in the form of a noise barrier. With inclusion of this mitigation measure, the resultant noise level would be below the City's noise standard. Future noise levels at other proposed outdoor use areas would comply with the City's standards without mitigation. To comply with the City and State's 45 dB CNEL interior noise standard, the dwelling units with a view of West Valley Parkway and West Grand Avenue would require an interior noise analysis prior to issuance of building permits.

1 PROJECT SETTING AND DESCRIPTION

The 2.6-acre project site, formerly the location of the City police station, is located on the south side of West Valley Parkway, north of West Grand Avenue and approximately 500 feet west of North Quince Street in the City of Escondido (Figures 1 and 2). The project is bounded by West Valley Parkway and the Escondido Transit Center to the north, office commercial land uses to the east, West Grand Avenue and industrial land uses to the south, and an Atchison, Topeka and Santa Fe (AT & SF) rail line to the west.

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The proposed project consists of 126 multifamily residential units and 1,000 square feet of flex space (Figure 3). Per the City of Escondido Land Use Element, the project site is within Specific Plan Area (SPA) #9, and is zoned as mixed-use overlay.

1.1 City Noise Criteria

General Plan Noise Element. The City of Escondido General Plan Community Protection Element (Section G, Noise) indicates that the maximum normally acceptable¹ noise level for new multi-family residential developments is a CNEL of 65 dB (City of Escondido May 2012). The range considered by the City to be conditionally acceptable² for multi-family residential developments is 60 to 70 dB CNEL. The City typically applies the noise criterion of 65 dB CNEL at the common outdoor usable space areas of multi-family and similar type facilities. Pursuant to Figure VI-13 of the Community Protection element, patios and balconies are not subject to the 65 dB CNEL exterior noise requirement. The City of Escondido and the State Building Code (Part 2, Title 24, CCR) require that the interior noise level not exceed 45 dB CNEL for multi-family units.

The CNEL is a 24-hour average equivalent A-weighted sound level with a 10 dB “penalty” added to noise during the hours of 10:00 p.m.–7:00 a.m., and a 5 dB penalty added to the evening hours of 7:00 p.m.–10:00 p.m. The 5 and 10 dB penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The A-weighted scale measures noise levels corresponding to the human hearing frequency response. All sound levels in this report are A-weighted. Definitions of acoustical terms used in this report are provided in Attachment 1.

Municipal Code. The City of Escondido Noise Ordinance (Municipal Code Article 12, Noise Abatement and Control) contains regulations restricting land use related noise-generating activities and operations, so as to avoid noise nuisance in the community. Section 17-229 establishes the maximum allowable exterior noise limits, based upon the classification of the receiving land use. These standards typically apply to stationary sources such as noise from mechanical equipment (including mechanical ventilation and air condition noise, pool pump noise) or event noise, as opposed to traffic noise. For instance, a school, commercial enterprise,

¹ The city classifies a “normally acceptable” noise exposure as follows: “Specified land use is satisfactory, based upon the assumption that buildings involved are of normal conventional construction, without any special requirements.”

² The city classifies a “conditionally acceptable” noise exposure as follows: “New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will usually suffice.”

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or industrial operation must not generate noise that exceeds a certain specified noise level at any property boundary where an adjacent residential use exists. The property-line noise standards are presented in Table 1.

Table 1
City of Escondido Exterior Property-Line Noise Limits

Receiving Land Use Category	Noise Level [dB(A)]	
	10 p.m. to 7 a.m. (Weekdays)	7 a.m. to 10 p.m. (Weekdays)
	10 p.m. to 8 a.m. (Weekends)	8 a.m. to 10 p.m. (Weekends)
All residential (except multiple dwelling)	45	50
Multiple dwelling residential	50	55
Commercial	55	60
Light industrial / Industrial park zones	70	70
General industrial	75	75

Section 17-234 regulates construction noise in the City. The pertinent portions of Section 17-234 are summarized below:

- **Section 17-234 (a)** It shall be unlawful for any person, including the City of Escondido, to operate construction equipment at any construction site, except on Monday through Friday during a week between the hours of seven (7) a.m. and six (6) p.m. and on Saturdays between the hours of nine (9) a.m. and five (5) p.m., and provided that the operation of such construction equipment complies with the requirements of subsection (d) of this section.
- **Section 17-234 (b)** It shall be unlawful for any person, including the City of Escondido, to operate construction equipment at any construction site on Sundays and on days designated by the president, governor or city council as public holidays.
- **Section 17-234 (d)** No construction equipment or combination of equipment, regardless of age or date of acquisition, shall be operated so as to cause noise in excess of a one-hour average sound level limit of seventy-five (75) dB at any time, unless a variance has been obtained in advance from the city manager.
- **Section 17-234 (e)** Persons engaged in construction for profit or as a business shall post signs at conspicuous places on a construction site, indicating hours of work as prescribed by this article or authorized by permit and the applicable noise level limits. (Ord. No. 90-8, § 2, 3-28-90)

2 EXISTING CONDITIONS

Traffic on West Valley Parkway and West Grand Avenue are the primary sources of noise in the vicinity of the project. The existing peak-hour traffic volume along West Valley Parkway adjacent to the project site is approximately 1,246 vehicles per hour (vph), and along West Grand Avenue the peak-hour traffic volume is approximately 1,512 vph (Michael Baker International 2016). Other noise sources in the project vicinity include the transit center to the north, commercial/industrial land uses to the south, and the AT&SF rail line to the west.

2.1 Ambient Noise Monitoring

Noise measurements were conducted on-site and at nearby noise-sensitive land uses to characterize the existing noise levels. The measurements were made with a calibrated SoftdB Piccolo digital integrating sound level meter. This sound level meter meets the current American National Standards Institute standard for a Type 2 general purpose sound level meter. For all measurements, the sound level meter was positioned on a tripod at a height of approximately five feet above the ground and fitted with a windscreen.

Four short-term noise measurements were conducted on Thursday, October 8, 2015, at the locations shown in Figure 4. Noise measurements were conducted at three locations on-site (M1, at the approximate location of the proposed recreation area on the west side of the project site; M2, near the proposed northernmost facades of the project facing West Valley Parkway; and M3, near the proposed southernmost facades of the project facing West Grand Avenue). Additionally a noise measurement (M4) was conducted at a residential area west of the project site. With the exception of at M1 (because of the lack of a clear view of the roadways), traffic volumes were counted concurrently with the noise measurements in order to validate the accuracy of the subsequent traffic noise modeling. The measured average noise levels (in L_{eq}) and the concurrent traffic volumes are presented in Table 2.

Table 2
Measured Noise Levels and Traffic Volumes

Site	Description	Date/Time	L_{eq} (dBA) ¹	Cars	MT ²	HT ³	B ⁴	MC ⁵
M1	West side of project site	10/8/2015 1:30 p.m. to 1:50 p.m.	58.3	n/a	n/a	n/a	n/a	n/a
M2	North side of project site	10/8/2015 2:00 p.m. to 2:20 p.m.	68.1	504	9	4	2	0
M3	South side of project site	10/8/2015 1:00 p.m. to 1:20 p.m.	66.9	534	7	6	0	0

Table 2
Measured Noise Levels and Traffic Volumes

Site	Description	Date/Time	L _{eq} (dBA) ¹	Cars	MT ²	HT ³	B ⁴	MC ⁵
M4	Residences to the west of project site	10/8/2015 12:30 p.m. to 12:50 p.m.	65.4	523	4	3	1	1

Notes:

¹ Equivalent Continuous Sound Level (Time-Average Sound Level) using A-weighted decibels (dBA)

² Medium Trucks

³ Heavy Trucks

⁴ Buses

⁵ Motorcycles

n/a – Counts not conducted at this location because the view of traffic was obstructed by buildings.

2.2 Noise Modeling

The Federal Highway Administration's TNM 2.5 traffic noise prediction model was used to model noise generated by traffic along West Valley Parkway and West Grand Avenue (FHWA 2004). The TNM 2.5 traffic noise prediction model was calibrated first, using the measured average noise levels and the concurrently counted traffic volumes previously shown in Table 2. The same traffic volumes and vehicle composition ratios counted during the noise measurements were used to calibrate the model and verify the input used in the noise model. The modeled L_{eq,s} for the monitoring locations were within two decibels of the measured noise levels. This result confirms the assumptions used in the noise model; noise modeling data is included as Attachment 2.

3 FUTURE CONDITIONS

The site would primarily be affected from traffic noise along West Valley Parkway and West Grand Avenue. The proposed project would generate an estimated 955 trips per day, according to the traffic report prepared for the project (Michael Baker International 2016). The cumulative condition with project traffic volumes along West Valley Parkway and West Grand Avenue adjacent to the project site in the peak-traffic hour are projected to be approximately 1,458 and 1,811 vph respectively (Michael Baker International 2016).

3.1 Exterior Traffic Noise Impact

The future CNEL noise levels were modeled based on the future traffic volume assumptions described in Section 3.0. The truck mix along West Valley Parkway and West Grand Avenue used for the future vehicle noise analysis was two percent medium trucks and one percent heavy trucks,

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and a vehicle speed of 35 mph. On-site noise sensitive receptor locations consisted of the 2nd, 3rd and 4th floor building facades³ and balconies, the two proposed recreation areas, and the rooftop deck on the 2nd floor. Additionally, a traffic noise model receiver was located at the existing residential land use west of the project site (the same location as measurement site M4), in order to predict potential off-site project-related traffic noise impacts.

The noise modeling results are presented in Table 3. The results of the noise modeling indicate that on-site noise levels at the facades fronting West Valley Parkway and West Grand Avenue would range from 66 to 68 dB CNEL. These noise levels are within the City of Escondido's Noise/Land Use Compatibility category of "conditionally acceptable", i.e.,:

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

Because the project's proposed balconies are not subject to the 65 dB CNEL noise standard pursuant to Figure VI-13 of the Community Protection element, no noise mitigation is required for the balconies. The rooftop deck, because it is considered a common outdoor usable space, would be subject to the City's 65 dB CNEL noise standard. A noise barrier with a minimum height of 5.5 feet should be constructed along the length of the north side of the deck, with a right-angle "return" along at least 20 feet of the west side of the deck. The noise barrier may be constructed of a material such as tempered glass, acrylic glass, or any masonry material (or a combination of these) with a surface density of at least three pounds per square foot. The noise barrier should have no openings or cracks. With inclusion of this mitigation measure, the resultant noise level would be below the City's noise standard of 65 dB CNEL and thus would be less than significant.

The future noise level at the ground-level recreation areas would be 55 to 58 dB CNEL, and thus would meet the City's exterior noise level criterion. Therefore, no mitigation would be required.

³ The 1st floors of the proposed buildings would consist of garage and entry areas, and would not have habitable rooms.

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Table 3
Summary of On-Site Future Unmitigated Traffic Noise Levels

Receiver	Noise Level (dB CNEL)
<i>North Side of Project Site</i>	
2nd floor façade/balconies fronting on West Valley Parkway	66
3rd floor façade/balconies fronting on West Valley Parkway	66
4th floor façade/balconies fronting on West Valley Parkway	66
2nd floor façade/balconies northwest side	61-62
3rd floor façade/balconies northwest side	61-62
4th floor façade/balconies northwest side	61
2nd floor façade/balconies northeast side	57-62
3rd floor façade/balconies northeast side	57-62
4th floor façade/balconies northeast side	57-62
Rooftop deck	66
<i>South Side of Project Site</i>	
2nd floor façade/balconies fronting on West Grand Avenue	67-68
3rd floor façade/balconies fronting on West Grand Avenue	67
4th floor façade/balconies fronting on West Grand Avenue	66-67
2nd floor façade/balconies southwest side	59-62
3rd floor façade/balconies southwest side	59-62
4th floor façade/balconies southwest side	59-62
2nd floor façade/balconies southeast side	61-67
3rd floor façade/balconies southeast side	61-67
4th floor façade/balconies southeast side	60-66
4: Recreation area (middle of project site)	55
<i>Interior of Project Site</i>	
2nd floor façade/balconies facing interior of project site	45-60
3rd floor façade/balconies facing interior of project site	47-62
4th floor façade/balconies facing interior of project site way	48-62
Recreation area (middle of project site)	55
Recreation area (west side of project site)	58

3.2 Interior Noise Impact

The City and the State require that interior noise levels not exceed a CNEL of 45 dB within residences. Typically, with the windows open, building shells provide approximately 15 dB of noise reduction. Therefore, rooms exposed to an exterior CNEL greater than 60 dB could result in an interior CNEL greater than 45 dB. The State Building Code recognizes this relationship

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and, therefore requires interior noise studies when the exterior noise level is projected to exceed 60 dB CNEL.

The data shown in Table 3 indicate that the future noise levels would range up to 66 dB CNEL at the facades of the residences adjacent to West Valley Parkway and up to 68 dB CNEL at the facades of the residences adjacent to West Grand Avenue. Thus, the unmitigated interior noise level within the habitable rooms of these dwelling units could exceed the 45 dB CNEL noise criterion. Dwelling units which are oriented such that the doors and windows are interior to the project site (i.e., do not have a direct view of either West Valley Parkway or West Grand Avenue) would have traffic noise level exposures of less than 60 dB CNEL.

3.3 Off-Site Traffic Noise Impact

The TNM noise model and the project's traffic report were used to assess the potential off-site project-related noise impact at the nearest noise-sensitive land uses (Location M4, residences to the west of the project site). As shown in Table 4, the proposed project would not result in a noticeable⁴ increase in traffic noise levels, nor would it cause or exacerbate an exceedance in City traffic noise standards. Therefore, the project's effects on offsite traffic noise would be less than significant. No mitigation is required.

Table 4
Summary of Off-Site Future Unmitigated Traffic Noise Levels

Receiver	Noise Level (dB CNEL)			
	Existing	Existing with Project	Cumulative Without Project	Cumulative with Project
M4	67	67	67	68

3.4 Rail Noise

Rail use exists in proximity to the proposed project. The eastern terminus of the North Coast Transit District (NCTD) SPRINTER light rail line is located approximately 100 feet north of the project site. Current service to and from the Escondido Transit Center occurs every 30 minutes, from approximately 4 a.m. to 9:30 p.m. Monday through Sunday, with late-night service until 12:30 a.m. on Fridays and Saturdays. According to the Escondido General Plan's Downtown

⁴ A change in noise levels of less than 3 decibels in the community environment (i.e., not in a listening lab or other controlled conditions) is typically not audible to the average human listener.

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Specific Plan and Climate Action Plan EIR (Atkins, 2012), the 60 dBA L_{dn} ⁵ noise contour for the SPRINTER rail line is 50 feet from the track. Based upon on-site noise measurements and observations, the noise from the Escondido Transit Center (including the SPRINTER operations) is minimal at the project site, and is not generally noticeable because of the traffic noise along the intervening West Valley Parkway.

The adjacent rail line to the west of the project site is used for occasional freight deliveries to the neighboring industrial area. According to the Escondido General Plan's Downtown Specific Plan and Climate Action Plan EIR (Atkins, 2012) the rail line is used by AT&SF for freight approximately 1 round trip daily, 3 days a week. Because of the frequency of usage, the 60 dBA L_{dn} ⁶ contour for the freight line is within the railroad right-of-way (City of Escondido, 2000). Therefore, on-site noise impacts from rail noise would be less than significant. No mitigation is required.

3.5 Rail Vibration

As detailed in Section 3.4, the adjacent rail line is used by AT&SF for freight approximately 1 round trip daily, 3 days a week. Using Federal Transit Administration criteria (FTA, 2006), the level of activity is classified as infrequent usage, for which the impact criteria for Category 2 (residential land use) is 80 VdB. Based upon a General Assessment approach, and adjusting for an assumed maximum train speed in this area of 10 miles per hour (based upon the fact that the rail line is terminating in this locale, and the rail/roadway crossings are only partially gate-guarded), the estimated vibration level at the closest proposed project dwellings would be 74 to 76 VdB, which would be barely perceptible and below the FTA standard. Therefore, on-site vibration impacts from rail noise would be less than significant. No mitigation is required.

3.6 Construction Noise

As detailed in Section 1.1, the City restricts the times of day when construction may occur (i.e., 7 a.m. to 6 p.m. Mondays through Fridays, 9 a.m. to 5 p.m. on Saturdays and not at all on Sundays or on public holidays) and has a maximum one-hour average construction noise limit of 75 dB at noise-sensitive land uses, unless a variance has been obtained in advance from the city manager.

Construction of the proposed project would take place within the hours specified in Section 17-234 of the City's Municipal Code. No special construction techniques (i.e., pile driving or

⁵ L_{dn} is equivalent, for these purposes, to CNEL.

⁶ L_{dn} is equivalent, for these purposes, to CNEL.

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blasting) are anticipated to be necessary for this project. Routine noise levels from conventional construction activities (with a typical number of three to four pieces of equipment operational on the site) range from 75 to 86 dBA L_{eq} at a distance of 50 feet. Due to improvements in construction equipment silencing technology, these sound levels are 3 decibel (dB) lower than the noise levels reported in the 1971 reference study (U.S. EPA, 1971). The typically quietest phase of building site construction for similar projects (i.e., multi-family residences) is that associated with constructing foundations (75 dBA L_{eq} at a distance of 50 feet), and the typically loudest phases, producing 86 dBA L_{eq} at 50 feet, are those associated with grading and finishing activities. Noise levels from construction activities generally decrease at a rate of 6 dB per doubling of distance away from the activity.

The nearest noise-sensitive land uses (residences) are located approximately 300 feet west of the project site. At a distance of 300 feet, construction noise levels would range from 59 to 70 dBA L_{eq} . Noise levels from construction would be less than significant. No mitigation measures are required.

3.7 Construction Vibration

The heavier pieces of construction equipment used at this site could include bulldozers, graders, loaded trucks, water trucks, and pavers. Groundborne vibration information related to construction activities has been collected by the California Department of Transportation (Caltrans) (Caltrans 2004). Based on published vibration data, the anticipated construction equipment would generate a peak particle velocity of approximately .09 inch/second or less at a distance of 25 feet (FTA 2006). Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch/second begin to annoy people. Groundborne vibration is typically attenuated over short distances. The closest existing residences are approximately 300 feet or more from the construction area. At this distance and with the anticipated construction equipment, the peak particle velocity would be approximately 0.002 inch/second. Therefore, construction activities are anticipated to result in continuous vibration below levels that typically annoy people, and well below damage criteria (approximately 0.5 inch/second or greater for buildings of reinforced-concrete, steel or timber construction). Construction vibration impacts would be less than significant. No mitigation measures are required.

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4 MITIGATION

4.1 Exterior Noise

To comply with the City's 65 dB CNEL exterior noise standard for multi-family common outdoor use areas, the proposed rooftop deck would require a noise barrier with a minimum height of 5.5 feet along the sides of the deck with a direct view of West Valley Parkway.

4.2 Interior Noise

To comply with the City and State's 45 dB CNEL interior noise standard, the dwelling units adjacent to and with oblique (side) views of West Valley Parkway and West Grand Avenue would most likely require mechanical ventilation system or air conditioning system and possibly sound-rated windows. An interior noise analysis will be required for these dwelling units prior to issuance of building permits.

This completes our Acoustical Assessment Report for the Gateway Grand project. Should you have any questions regarding the above information, please call me at 949.373.8317.

Sincerely,



Mike Greene
Environmental Specialist/Acoustician

Att.: *Figures 1–4*
Attachment 1 – Definitions
Attachment 2 – Noise Modeling Input and Output Results

REFERENCES

Atkins. 2012. Escondido General Plan Update, Downtown Specific Plan Update, and Climate Action Plan Environmental Impact Report. April 22.

City of Escondido. 2000. Escondido General Plan Update Final Environmental Impact Report. Prepared by Cotton/Beland/Associates, Inc. August.

City of Escondido. 2012. City of Escondido General Plan Community Protection Element (Section G, Noise). May.

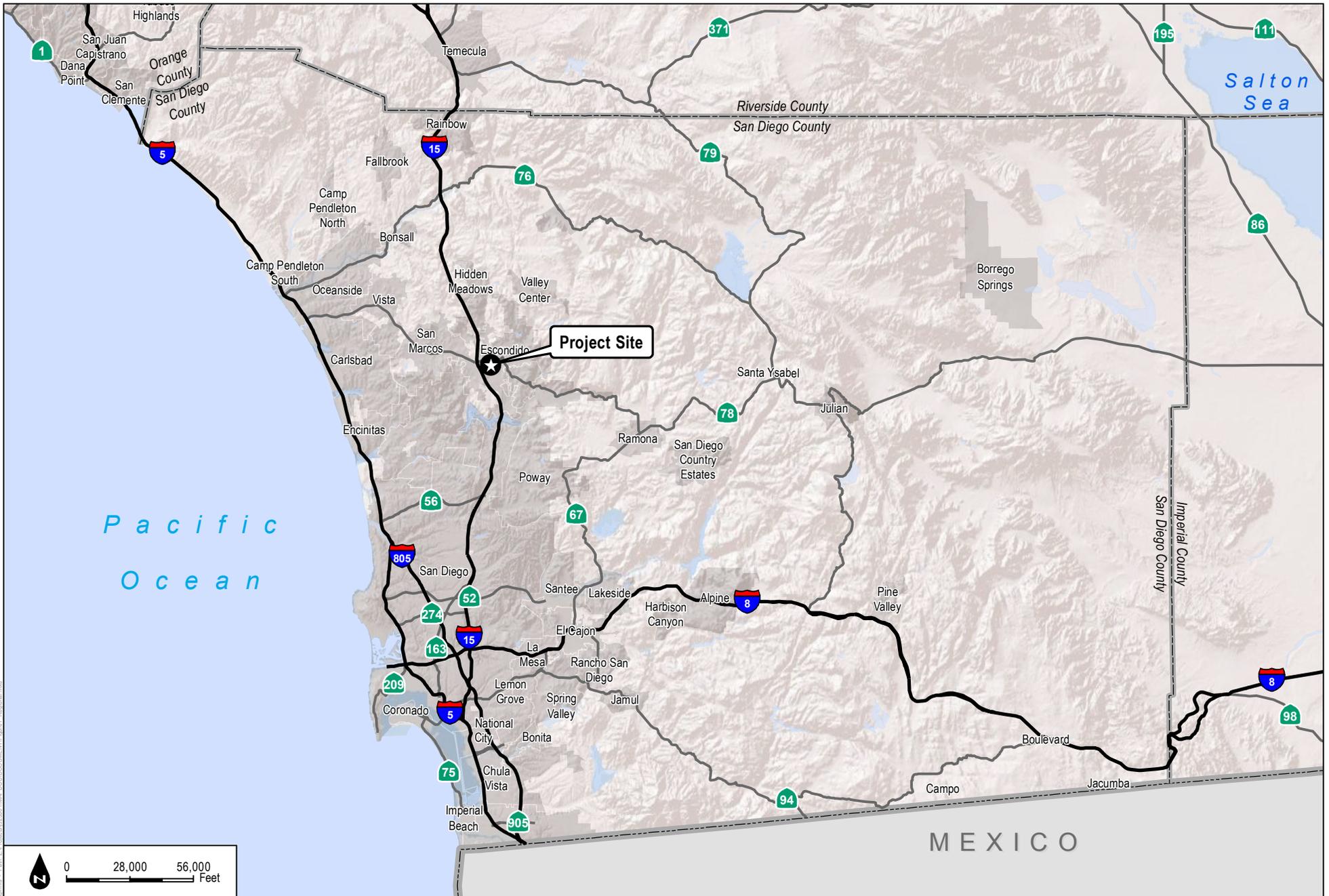
City of Escondido. 1990. City of Escondido Municipal Code Article 12, Noise Abatement and Control.

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Analysis Report*

Federal Highway Administration (FHWA). 2004. FHWA Traffic Noise Model User's Guide
(Version 2.5 Addendum). April.

Michael Baker International. 2016. Gateway Grand, Traffic Impact Analysis Report. June 8.



Project Site

DUDEK

Gateway Escondido Project

FIGURE 1
Regional Map

Date: 01/14/2015 - Last saved by: amccombs - Path: Z:\projects\1502200\MAPS\DOCUMENTS\FIGURE1 - Regional.mxd

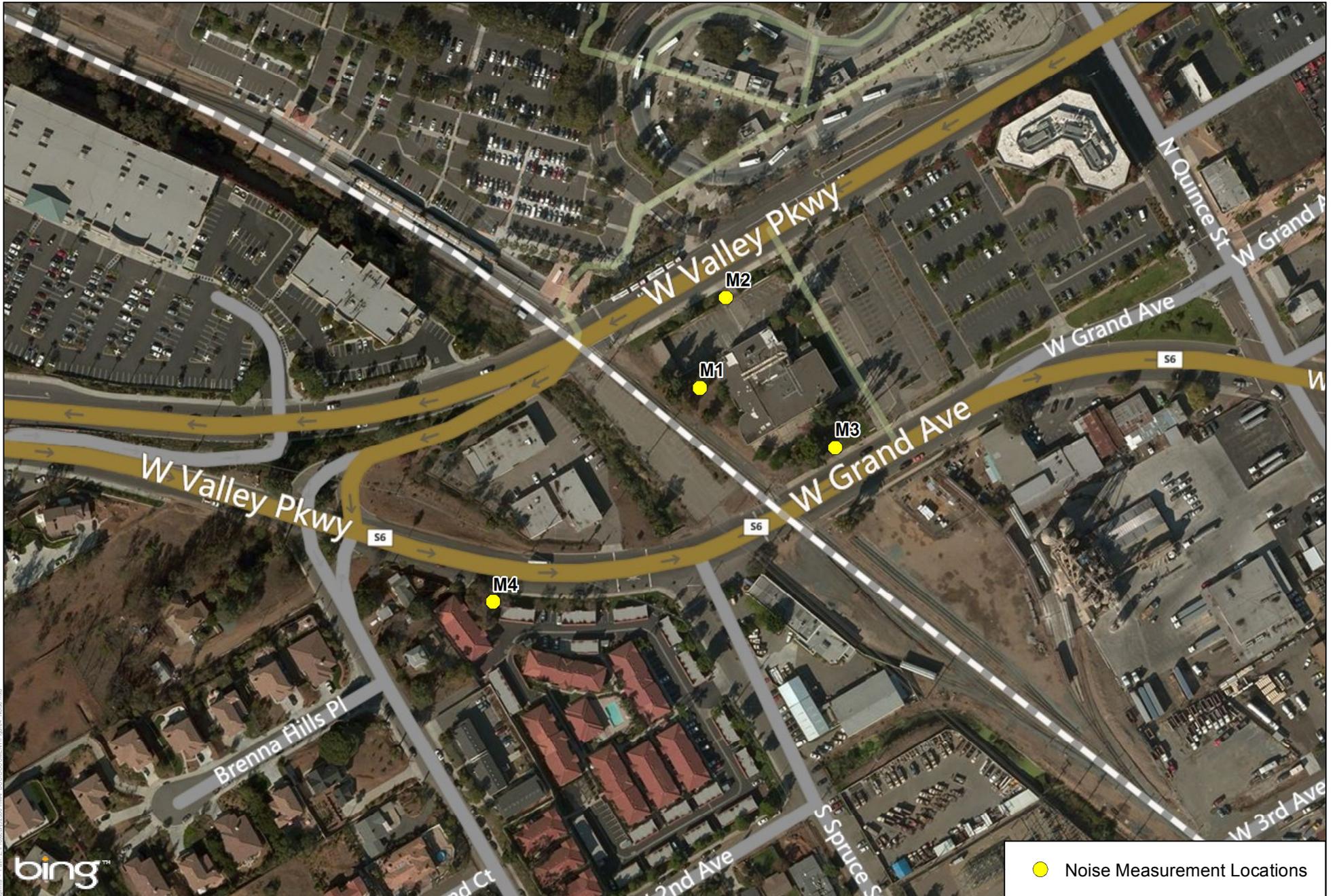


SOURCER: Lundstrom Engineering and Surveying, Inc., 2016.

DUDEK

Gateway Escondido Project

FIGURE 3
Site Plan



● Noise Measurement Locations

SOURCE: Bing Maps 2015

DUDEK

Gateway Escondido Project

FIGURE 4
Noise Measurement Locations

ATTACHMENT 1
Definitions

ATTACHMENT 1

Definitions

Term	Definition
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
A-Weighted Sound Level, (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with
Community Equivalent Sound Level (CNEL)	CNEL is the A-weighted equivalent continuous sound exposure (CNEL) level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during the nighttime hours (10 p.m.–7 a.m.) and 5 dB added to the sound during the evening hours (7 p.m.–10 p.m.).
Decibel, (dB)	A unit for measuring sound pressure level and is equal to 10 times the logarithm to the base 10 of the ratio of the measured sound pressure squared to a reference pressure, which is 20 micropascals.
Time-Average Sound Level	The sound level corresponding to a steady state level containing the same total energy as a time varying signal over a given sample period. TAV is designed to average all of the loud and quiet sound levels occurring over a time period.

ATTACHMENT 1 (Continued)

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ATTACHMENT 2

Noise Modeling Input and Output Results

INPUT: ROADWAYS**9233**

		point26	26	37,702,088.0	12,022,050.0	650.00				Average	
		point2	2	37,702,168.0	12,022,048.0	650.00					

INPUT: TRAFFIC FOR LAeq1h Percentages**9233**

	point24	24	1641	98	40	1	40	1	40	0	0	0	0
	point25	25	1641	98	40	1	40	1	40	0	0	0	0
	point26	26	1641	98	40	1	40	1	40	0	0	0	0
	point2	2											

Dudek										14 October 2015										
M Greene										TNM 2.5										
INPUT: BARRIERS																				
PROJECT/CONTRACT:		9233																		
RUN:		Escondido Gateway Project - CalRun1																		
Barrier										Points										
Name	Type	Height		If Wall	If Berm	Add'tnl			Name	No.	Coordinates (bottom)			Height	Segment			On	Important	
		Min	Max	\$ per Unit Area	\$ per Unit Vol.	Top Width	Run:Rise	\$ per Unit Length			X	Y	Z	at Point	Seg Ht	Perturbs	#Up	#Dn	Struct?	Reflec-tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft					
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	37,701,504.0	12,022,178.0	650.00	6.00	0.00	0	0			
									point2	2	37,701,324.0	12,022,070.0	650.00	6.00	0.00	0	0			
									point3	3	37,701,356.0	12,022,018.0	650.00	6.00	0.00	0	0			
									point4	4	37,701,536.0	12,022,126.0	650.00	6.00						
Barrier2	W	0.00	99.99	0.00				0.00	point5	5	37,701,500.0	12,022,091.0	650.00	20.00	0.00	0	0			
									point6	6	37,701,412.0	12,022,037.0	650.00	20.00	0.00	0	0			
									point7	7	37,701,460.0	12,021,957.0	650.00	20.00	0.00	0	0			
									point8	8	37,701,456.0	12,021,937.0	650.00	20.00	0.00	0	0			
									point9	9	37,701,472.0	12,021,910.0	650.00	20.00	0.00	0	0			
									point10	10	37,701,616.0	12,021,996.0	650.00	20.00	0.00	0	0			
									point11	11	37,701,572.0	12,022,063.0	650.00	20.00	0.00	0	0			
									point12	12	37,701,532.0	12,022,037.0	650.00	20.00	0.00	0	0			
									point13	13	37,701,504.0	12,022,088.0	650.00	20.00						

INPUT: RECEIVERS

9233

							14 October 2015				
Dudek											
M Greene							TNM 2.5				
INPUT: RECEIVERS											
PROJECT/CONTRACT:		9233									
RUN:		Escondido Gateway Project - CalRun1									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'I dB	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	2	1	37,701,388.0	12,022,001.0	650.00	5.00	58.30	65	10.0	8.0	Y
M2	3	1	37,701,412.0	12,022,144.0	650.00	5.00	68.10	65	10.0	8.0	Y
M3	4	1	37,701,592.0	12,021,918.0	650.00	5.00	66.90	65	10.0	8.0	Y
M4	5	1	37,701,052.0	12,021,681.0	660.00	5.00	65.40	65	10.0	8.0	Y

INPUT: TRAFFIC FOR LAeq1h Percentages

9233

	point2	2												
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Dudek										14 October 2015									
M Greene										TNM 2.5									
INPUT: BARRIERS																			
PROJECT/CONTRACT:		9233																	
RUN:		Escondido Gateway Project - Existing																	
Barrier										Points									
Name	Type	Height		If Wall		If Berm		Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment			On	Important
		Min	Max	\$ per Unit Area	\$ per Unit Vol.	Top Width	Run:Rise				\$ per Unit Length	X	Y		Z	at Point	Seg Ht		
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft	ft			
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	37,701,504.0	12,022,178.0	650.00	6.00	0.00	0	0		
									point2	2	37,701,324.0	12,022,070.0	650.00	6.00	0.00	0	0		
									point3	3	37,701,356.0	12,022,018.0	650.00	6.00	0.00	0	0		
									point4	4	37,701,536.0	12,022,126.0	650.00	6.00					
Barrier2	W	0.00	99.99	0.00				0.00	point5	5	37,701,500.0	12,022,091.0	650.00	20.00	0.00	0	0		
									point6	6	37,701,412.0	12,022,037.0	650.00	20.00	0.00	0	0		
									point7	7	37,701,460.0	12,021,957.0	650.00	20.00	0.00	0	0		
									point8	8	37,701,456.0	12,021,937.0	650.00	20.00	0.00	0	0		
									point9	9	37,701,472.0	12,021,910.0	650.00	20.00	0.00	0	0		
									point10	10	37,701,616.0	12,021,996.0	650.00	20.00	0.00	0	0		
									point11	11	37,701,572.0	12,022,063.0	650.00	20.00	0.00	0	0		
									point12	12	37,701,532.0	12,022,037.0	650.00	20.00	0.00	0	0		
									point13	13	37,701,504.0	12,022,088.0	650.00	20.00					

INPUT: RECEIVERS

9233

							14 October 2015				
Dudek											
M Greene							TNM 2.5				
INPUT: RECEIVERS											
PROJECT/CONTRACT:		9233									
RUN:		Escondido Gateway Project - Existing									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact LAeq1h	Criteria Sub'I	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	37,701,388.0	12,022,001.0	650.00	5.00	0.00	66	10.0	8.0	Y
M2	2	1	37,701,412.0	12,022,144.0	650.00	5.00	0.00	66	10.0	8.0	Y
M3	3	1	37,701,592.0	12,021,918.0	650.00	5.00	0.00	66	10.0	8.0	Y
M4	4	1	37,701,052.0	12,021,681.0	660.00	5.00	0.00	66	10.0	8.0	Y
R1	5	1	37,700,428.0	12,021,829.0	660.00	5.00	0.00	66	10.0	8.0	Y

INPUT: ROADWAYS

9233

Dudek					13 April 2016					
M Greene					TNM 2.5					
INPUT: ROADWAYS										
PROJECT/CONTRACT:	9233								Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA	
RUN:	Escnddo Gtwy Proj-Exw Prj Rev041216									

Roadway Name	Width	Points			Coordinates (pavement)			Flow Control			Segment		
		Name	No.		X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?	
	ft				ft	ft	ft		mph	%			
Valley Pkwy WB	55.0	point1	1		37,701,956.0	12,022,530.0	650.00					Average	
		point3	3		37,701,208.0	12,022,080.0	650.00					Average	
		point4	4		37,701,024.0	12,021,999.0	650.00					Average	
		point5	5		37,700,832.0	12,021,953.0	650.00					Average	
		point6	6		37,700,628.0	12,021,953.0	650.00					Average	
		point7	7		37,700,328.0	12,021,966.0	650.00					Average	
		point8	8		37,700,168.0	12,021,960.0	650.00					Average	
		point9	9		37,700,040.0	12,021,940.0	650.00					Average	
		point10	10		37,699,840.0	12,021,863.0	650.00					Average	
		point11	11		37,699,736.0	12,021,803.0	650.00						
		Valley Pkwy EB / W Grand Ave	60.0	point28	28		37,699,764.0	12,021,761.0	650.00				
point13	13				37,699,856.0	12,021,816.0	650.00					Average	
point14	14				37,700,052.0	12,021,896.0	650.00					Average	
point15	15				37,700,176.0	12,021,904.0	650.00					Average	
point16	16				37,700,332.0	12,021,904.0	650.00					Average	
point17	17				37,700,600.0	12,021,854.0	650.00					Average	
point18	18				37,700,796.0	12,021,803.0	650.00					Average	
point19	19				37,700,956.0	12,021,754.0	650.00					Average	
point20	20				37,701,104.0	12,021,717.0	650.00					Average	
point21	21				37,701,236.0	12,021,713.0	650.00					Average	
point22	22				37,701,376.0	12,021,741.0	650.00					Average	
point23	23				37,701,488.0	12,021,794.0	650.00					Average	
point24	24				37,701,640.0	12,021,891.0	650.00					Average	
point25	25				37,701,908.0	12,022,041.0	650.00					Average	
point26	26		37,702,088.0	12,022,050.0	650.00					Average			
RxR	12.0	point2	2		37,702,168.0	12,022,048.0	650.00						
		point35	35		37,701,256.0	12,022,039.0	0.00					Average	

INPUT: ROADWAYS

9233

		point36	36	37,701,496.0	12,021,835.0	0.00					
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INPUT: TRAFFIC FOR LAeq1h Percentages

9233

	point2	2											
RxR	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point36	36											

INPUT: RECEIVERS

9233

						13 April 2016					
Dudek						TNM 2.5					
M Greene											
INPUT: RECEIVERS											
PROJECT/CONTRACT:		9233									
RUN:		Escnddo Gtwy Proj-Exw Prj Rev041216									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			NR Goal	Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact LAeq1h	Criteria Sub'I		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 / R51	1	1	37,701,388.0	12,022,001.0	650.00	5.00	0.00	66	10.0	8.0	Y
M2	2	1	37,701,412.0	12,022,145.0	650.00	5.00	0.00	66	10.0	8.0	Y
M4	4	1	37,701,052.0	12,021,681.0	660.00	5.00	0.00	66	10.0	8.0	Y
R1	5	1	37,701,292.0	12,022,074.0	650.00	15.00	0.00	66	10.0	8.0	Y
R2	8	1	37,701,336.0	12,022,100.0	650.00	15.00	0.00	66	10.0	8.0	Y
R3	9	1	37,701,384.0	12,022,128.0	650.00	15.00	0.00	66	10.0	8.0	Y
R4	10	1	37,701,408.0	12,022,143.0	650.00	15.00	0.00	66	10.0	8.0	Y
R5	11	1	37,701,484.0	12,022,188.0	650.00	15.00	0.00	66	10.0	8.0	Y
R6	12	1	37,701,528.0	12,022,214.0	650.00	15.00	0.00	66	10.0	8.0	Y
R7	13	1	37,701,580.0	12,022,246.0	650.00	15.00	0.00	66	10.0	8.0	Y
R8	14	1	37,701,620.0	12,022,270.0	650.00	15.00	0.00	66	10.0	8.0	Y
R9	15	1	37,701,508.0	12,021,857.0	650.00	15.00	0.00	66	10.0	8.0	Y
R10	16	1	37,701,540.0	12,021,877.0	650.00	15.00	0.00	66	10.0	8.0	Y
R11	17	1	37,701,572.0	12,021,898.0	650.00	15.00	0.00	66	10.0	8.0	Y
R12	18	1	37,701,604.0	12,021,918.0	650.00	15.00	0.00	66	10.0	8.0	Y
R13	19	1	37,701,636.0	12,021,939.0	650.00	15.00	0.00	66	10.0	8.0	Y
R14	20	1	37,701,664.0	12,021,956.0	650.00	15.00	0.00	66	10.0	8.0	Y
R15	21	1	37,701,696.0	12,021,976.0	650.00	15.00	0.00	66	10.0	8.0	Y
R16	22	1	37,701,728.0	12,021,997.0	650.00	15.00	0.00	66	10.0	8.0	Y
R17	23	1	37,701,708.0	12,022,028.0	650.00	15.00	0.00	66	10.0	8.0	Y
R18	24	1	37,701,684.0	12,022,054.0	650.00	15.00	0.00	66	10.0	8.0	Y
R19	25	1	37,701,652.0	12,022,035.0	650.00	15.00	0.00	66	10.0	8.0	Y
R20	26	1	37,701,620.0	12,022,016.0	650.00	15.00	0.00	66	10.0	8.0	Y
R21	27	1	37,701,592.0	12,021,998.0	650.00	15.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS

9233

R22	28	1	37,701,560.0	12,021,976.0	650.00	15.00	0.00	66	10.0	8.0	Y
R23	29	1	37,701,528.0	12,021,956.0	650.00	15.00	0.00	66	10.0	8.0	Y
R24	30	1	37,701,496.0	12,021,935.0	650.00	15.00	0.00	66	10.0	8.0	Y
R25	31	1	37,701,468.0	12,021,916.0	650.00	15.00	0.00	66	10.0	8.0	Y
R26	32	1	37,701,488.0	12,021,885.0	650.00	15.00	0.00	66	10.0	8.0	Y
R27	33	1	37,701,308.0	12,022,044.0	650.00	15.00	0.00	66	10.0	8.0	Y
R28	34	1	37,701,328.0	12,022,013.0	650.00	15.00	0.00	66	10.0	8.0	Y
R29	35	1	37,701,352.0	12,022,027.0	650.00	15.00	0.00	66	10.0	8.0	Y
R30	36	1	37,701,372.0	12,022,039.0	650.00	15.00	0.00	66	10.0	8.0	Y
R31	37	1	37,701,400.0	12,022,027.0	650.00	15.00	0.00	66	10.0	8.0	Y
R32	38	1	37,701,416.0	12,022,004.0	650.00	15.00	0.00	66	10.0	8.0	Y
R33	39	1	37,701,432.0	12,021,981.0	650.00	15.00	0.00	66	10.0	8.0	Y
R34	40	1	37,701,464.0	12,022,000.0	650.00	15.00	0.00	66	10.0	8.0	Y
R35	41	1	37,701,492.0	12,022,020.0	650.00	15.00	0.00	66	10.0	8.0	Y
R36	42	1	37,701,476.0	12,022,047.0	650.00	15.00	0.00	66	10.0	8.0	Y
R37	44	1	37,701,452.0	12,022,084.0	650.00	15.00	0.00	66	10.0	8.0	Y
R38	45	1	37,701,432.0	12,022,117.0	650.00	15.00	0.00	66	10.0	8.0	Y
R39	46	1	37,701,500.0	12,022,159.0	650.00	15.00	0.00	66	10.0	8.0	Y
R40	47	1	37,701,520.0	12,022,125.0	650.00	15.00	0.00	66	10.0	8.0	Y
R41	48	1	37,701,560.0	12,022,148.0	650.00	15.00	0.00	66	10.0	8.0	Y
R42	49	1	37,701,616.0	12,022,144.0	650.00	15.00	0.00	66	10.0	8.0	Y
R43	50	1	37,701,632.0	12,022,119.0	650.00	15.00	0.00	66	10.0	8.0	Y
R44	51	1	37,701,648.0	12,022,092.0	650.00	15.00	0.00	66	10.0	8.0	Y
R45	53	1	37,701,680.0	12,022,110.0	650.00	15.00	0.00	66	10.0	8.0	Y
R46	55	1	37,701,704.0	12,022,129.0	650.00	15.00	0.00	66	10.0	8.0	Y
R47	57	1	37,701,688.0	12,022,158.0	650.00	15.00	0.00	66	10.0	8.0	Y
R48	58	1	37,701,668.0	12,022,194.0	650.00	15.00	0.00	66	10.0	8.0	Y
R49	60	1	37,701,648.0	12,022,228.0	650.00	15.00	0.00	66	10.0	8.0	Y
R50	62	1	37,701,632.0	12,022,252.0	650.00	15.00	0.00	66	10.0	8.0	Y
R52- Community Rec Area Grnd Flr	66	1	37,701,540.0	12,022,106.0	650.00	5.00	0.00	66	10.0	8.0	Y
R53 - Addl Offsite Rcvr	70	1	37,700,428.0	12,021,829.0	660.00	5.00	0.00	66	10.0	8.0	Y
R54	72	1	37,701,292.0	12,022,074.0	650.00	25.00	0.00	66	10.0	8.0	Y
R55	73	1	37,701,336.0	12,022,100.0	650.00	25.00	0.00	66	10.0	8.0	Y
R56	74	1	37,701,384.0	12,022,128.0	650.00	25.00	0.00	66	10.0	8.0	Y
R57	75	1	37,701,408.0	12,022,143.0	650.00	25.00	0.00	66	10.0	8.0	Y
R58	76	1	37,701,528.0	12,022,214.0	650.00	25.00	0.00	66	10.0	8.0	Y
R59	78	1	37,701,580.0	12,022,246.0	650.00	25.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS

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R60	79	1	37,701,620.0	12,022,270.0	650.00	25.00	0.00	66	10.0	8.0	Y
R61	80	1	37,701,508.0	12,021,857.0	650.00	25.00	0.00	66	10.0	8.0	Y
R62	81	1	37,701,540.0	12,021,877.0	650.00	25.00	0.00	66	10.0	8.0	Y
R63	82	1	37,701,572.0	12,021,898.0	650.00	25.00	0.00	66	10.0	8.0	Y
R64	83	1	37,701,604.0	12,021,918.0	650.00	25.00	0.00	66	10.0	8.0	Y
R65	84	1	37,701,636.0	12,021,939.0	650.00	25.00	0.00	66	10.0	8.0	Y
R66	85	1	37,701,664.0	12,021,956.0	650.00	25.00	0.00	66	10.0	8.0	Y
R67	86	1	37,701,696.0	12,021,976.0	650.00	25.00	0.00	66	10.0	8.0	Y
R68	87	1	37,701,728.0	12,021,997.0	650.00	25.00	0.00	66	10.0	8.0	Y
R69	88	1	37,701,708.0	12,022,028.0	650.00	25.00	0.00	66	10.0	8.0	Y
R70	89	1	37,701,684.0	12,022,054.0	650.00	25.00	0.00	66	10.0	8.0	Y
R71	90	1	37,701,652.0	12,022,035.0	650.00	25.00	0.00	66	10.0	8.0	Y
R72	91	1	37,701,620.0	12,022,016.0	650.00	25.00	0.00	66	10.0	8.0	Y
R73	92	1	37,701,592.0	12,021,998.0	650.00	25.00	0.00	66	10.0	8.0	Y
R74	93	1	37,701,560.0	12,021,976.0	650.00	25.00	0.00	66	10.0	8.0	Y
R75	94	1	37,701,528.0	12,021,956.0	650.00	25.00	0.00	66	10.0	8.0	Y
R76	95	1	37,701,496.0	12,021,935.0	650.00	25.00	0.00	66	10.0	8.0	Y
R77	96	1	37,701,468.0	12,021,916.0	650.00	25.00	0.00	66	10.0	8.0	Y
R78	97	1	37,701,488.0	12,021,885.0	650.00	25.00	0.00	66	10.0	8.0	Y
R79	98	1	37,701,308.0	12,022,044.0	650.00	25.00	0.00	66	10.0	8.0	Y
R80	99	1	37,701,328.0	12,022,013.0	650.00	25.00	0.00	66	10.0	8.0	Y
R81	100	1	37,701,352.0	12,022,027.0	650.00	25.00	0.00	66	10.0	8.0	Y
R82	102	1	37,701,372.0	12,022,039.0	650.00	25.00	0.00	66	10.0	8.0	Y
R83	103	1	37,701,400.0	12,022,027.0	650.00	25.00	0.00	66	10.0	8.0	Y
R84	104	1	37,701,416.0	12,022,004.0	650.00	25.00	0.00	66	10.0	8.0	Y
R85	105	1	37,701,432.0	12,021,981.0	650.00	25.00	0.00	66	10.0	8.0	Y
R86	106	1	37,701,464.0	12,022,000.0	650.00	25.00	0.00	66	10.0	8.0	Y
R87	107	1	37,701,492.0	12,022,020.0	650.00	25.00	0.00	66	10.0	8.0	Y
R88	108	1	37,701,476.0	12,022,047.0	650.00	25.00	0.00	66	10.0	8.0	Y
R89	109	1	37,701,452.0	12,022,084.0	650.00	25.00	0.00	66	10.0	8.0	Y
R90	111	1	37,701,432.0	12,022,117.0	650.00	25.00	0.00	66	10.0	8.0	Y
R91	112	1	37,701,500.0	12,022,159.0	650.00	25.00	0.00	66	10.0	8.0	Y
R92	113	1	37,701,520.0	12,022,125.0	650.00	25.00	0.00	66	10.0	8.0	Y
R93	114	1	37,701,560.0	12,022,148.0	650.00	25.00	0.00	66	10.0	8.0	Y
R94	115	1	37,701,616.0	12,022,144.0	650.00	25.00	0.00	66	10.0	8.0	Y
R95	116	1	37,701,632.0	12,022,119.0	650.00	25.00	0.00	66	10.0	8.0	Y
R96	117	1	37,701,648.0	12,022,092.0	650.00	25.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS

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R97	118	1	37,701,680.0	12,022,110.0	650.00	25.00	0.00	66	10.0	8.0	Y
R98	119	1	37,701,704.0	12,022,129.0	650.00	25.00	0.00	66	10.0	8.0	Y
R99	121	1	37,701,688.0	12,022,158.0	650.00	25.00	0.00	66	10.0	8.0	Y
R100	122	1	37,701,668.0	12,022,194.0	650.00	25.00	0.00	66	10.0	8.0	Y
R101	123	1	37,701,648.0	12,022,228.0	650.00	25.00	0.00	66	10.0	8.0	Y
R102	124	1	37,701,632.0	12,022,252.0	650.00	25.00	0.00	66	10.0	8.0	Y
R103	125	1	37,701,292.0	12,022,074.0	650.00	35.00	0.00	66	10.0	8.0	Y
R104	126	1	37,701,336.0	12,022,100.0	650.00	35.00	0.00	66	10.0	8.0	Y
R105	127	1	37,701,384.0	12,022,128.0	650.00	35.00	0.00	66	10.0	8.0	Y
R106	128	1	37,701,408.0	12,022,143.0	650.00	35.00	0.00	66	10.0	8.0	Y
R107	130	1	37,701,528.0	12,022,214.0	650.00	35.00	0.00	66	10.0	8.0	Y
R108	131	1	37,701,580.0	12,022,246.0	650.00	35.00	0.00	66	10.0	8.0	Y
R109	132	1	37,701,620.0	12,022,270.0	650.00	35.00	0.00	66	10.0	8.0	Y
R110	133	1	37,701,508.0	12,021,857.0	650.00	35.00	0.00	66	10.0	8.0	Y
R111	134	1	37,701,540.0	12,021,877.0	650.00	35.00	0.00	66	10.0	8.0	Y
R112	135	1	37,701,572.0	12,021,898.0	650.00	35.00	0.00	66	10.0	8.0	Y
R113	136	1	37,701,604.0	12,021,918.0	650.00	35.00	0.00	66	10.0	8.0	Y
R114	137	1	37,701,636.0	12,021,939.0	650.00	35.00	0.00	66	10.0	8.0	Y
R115	138	1	37,701,664.0	12,021,956.0	650.00	35.00	0.00	66	10.0	8.0	Y
R116	139	1	37,701,696.0	12,021,976.0	650.00	35.00	0.00	66	10.0	8.0	Y
R117	140	1	37,701,728.0	12,021,997.0	650.00	35.00	0.00	66	10.0	8.0	Y
R118	141	1	37,701,708.0	12,022,028.0	650.00	35.00	0.00	66	10.0	8.0	Y
R119	142	1	37,701,684.0	12,022,054.0	650.00	35.00	0.00	66	10.0	8.0	Y
R120	143	1	37,701,652.0	12,022,035.0	650.00	35.00	0.00	66	10.0	8.0	Y
R121	144	1	37,701,620.0	12,022,016.0	650.00	35.00	0.00	66	10.0	8.0	Y
R122	145	1	37,701,592.0	12,021,998.0	650.00	35.00	0.00	66	10.0	8.0	Y
R123	146	1	37,701,560.0	12,021,976.0	650.00	35.00	0.00	66	10.0	8.0	Y
R124	147	1	37,701,528.0	12,021,956.0	650.00	35.00	0.00	66	10.0	8.0	Y
R125	148	1	37,701,496.0	12,021,935.0	650.00	35.00	0.00	66	10.0	8.0	Y
R126	70	1	37,701,468.0	12,021,916.0	650.00	35.00	0.00	66	10.0	8.0	Y
R127	149	1	37,701,488.0	12,021,885.0	650.00	35.00	0.00	66	10.0	8.0	Y
R128	150	1	37,701,308.0	12,022,044.0	650.00	35.00	0.00	66	10.0	8.0	Y
R129	151	1	37,701,328.0	12,022,013.0	650.00	35.00	0.00	66	10.0	8.0	Y
R130	153	1	37,701,352.0	12,022,027.0	650.00	35.00	0.00	66	10.0	8.0	Y
R131	154	1	37,701,372.0	12,022,039.0	650.00	35.00	0.00	66	10.0	8.0	Y
R132	155	1	37,701,400.0	12,022,027.0	650.00	35.00	0.00	66	10.0	8.0	Y
R133	156	1	37,701,416.0	12,022,004.0	650.00	35.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS**9233**

R134	157	1	37,701,432.0	12,021,981.0	650.00	35.00	0.00	66	10.0	8.0	Y
R135	158	1	37,701,464.0	12,022,000.0	650.00	35.00	0.00	66	10.0	8.0	Y
R136	159	1	37,701,492.0	12,022,020.0	650.00	35.00	0.00	66	10.0	8.0	Y
R137	160	1	37,701,476.0	12,022,047.0	650.00	35.00	0.00	66	10.0	8.0	Y
R138	161	1	37,701,452.0	12,022,084.0	650.00	35.00	0.00	66	10.0	8.0	Y
R139	163	1	37,701,432.0	12,022,117.0	650.00	35.00	0.00	66	10.0	8.0	Y
R140	164	1	37,701,500.0	12,022,159.0	650.00	35.00	0.00	66	10.0	8.0	Y
R141	165	1	37,701,520.0	12,022,125.0	650.00	35.00	0.00	66	10.0	8.0	Y
R142	166	1	37,701,560.0	12,022,148.0	650.00	35.00	0.00	66	10.0	8.0	Y
R143	167	1	37,701,616.0	12,022,144.0	650.00	35.00	0.00	66	10.0	8.0	Y
R144	168	1	37,701,632.0	12,022,119.0	650.00	35.00	0.00	66	10.0	8.0	Y
R145	169	1	37,701,648.0	12,022,092.0	650.00	35.00	0.00	66	10.0	8.0	Y
R146	170	1	37,701,680.0	12,022,110.0	650.00	35.00	0.00	66	10.0	8.0	Y
R147	171	1	37,701,704.0	12,022,129.0	650.00	35.00	0.00	66	10.0	8.0	Y
R148	172	1	37,701,688.0	12,022,158.0	650.00	35.00	0.00	66	10.0	8.0	Y
R149	173	1	37,701,668.0	12,022,194.0	650.00	35.00	0.00	66	10.0	8.0	Y
R150	174	1	37,701,648.0	12,022,228.0	650.00	35.00	0.00	66	10.0	8.0	Y
R151	175	1	37,701,632.0	12,022,252.0	650.00	35.00	0.00	66	10.0	8.0	Y

Dudek M Greene										13 April 2016 TNM 2.5										
INPUT: BARRIERS																				
PROJECT/CONTRACT: 9233																				
RUN: Escnddo Gtwy Proj-Exw Prj Rev041216																				
Barrier										Points										
Name	Type	Height		If Wall	If Berm	Run:Rise		Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment			On	Important	
		Min	Max	\$ per Unit Area	\$ per Unit Vol.	Top Width	ft:ft	\$ per Unit Length			X	Y	Z	at Point	Seg Ht	Perturbs	#Up	#Dn	Struct?	Reflec-tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft	ft				
Building 1	W	0.00	99.99	0.00				0.00	point43	43	37,701,292.0	12,022,073.0	650.00	60.00	0.00	0	0			
									point46	46	37,701,328.0	12,022,014.0	650.00	60.00	0.00	0	0			
									point48	48	37,701,388.0	12,022,050.0	650.00	60.00	0.00	0	0			
									point49	49	37,701,432.0	12,021,982.0	650.00	60.00	0.00	0	0			
									point50	50	37,701,492.0	12,022,019.0	650.00	60.00	0.00	0	0			
									point62	62	37,701,412.0	12,022,144.0	650.00	60.00	0.00	0	0			
									point63	63	37,701,292.0	12,022,073.0	650.00	60.00	0.00	0	0			
Building 2	W	0.00	99.99	0.00				0.00	point54	54	37,701,620.0	12,022,269.0	650.00	60.00	0.00	0	0			
									point56	56	37,701,704.0	12,022,128.0	650.00	60.00	0.00	0	0			
									point58	58	37,701,648.0	12,022,094.0	650.00	60.00	0.00	0	0			
									point59	59	37,701,600.0	12,022,172.0	650.00	60.00	0.00	0	0			
									point60	60	37,701,556.0	12,022,148.0	650.00	60.00	0.00	0	0			
									point38	38	37,701,520.0	12,022,208.0	650.00	60.00	0.00	0	0			
									point39	39	37,701,620.0	12,022,269.0	650.00	60.00	0.00	0	0			
Building 3	W	0.00	99.99	0.00				0.00	point80	80	37,701,688.0	12,022,054.0	650.00	60.00	0.00	0	0			
									point76	76	37,701,728.0	12,021,998.0	650.00	60.00	0.00	0	0			
									point78	78	37,701,508.0	12,021,858.0	650.00	60.00	0.00	0	0			
									point72	72	37,701,468.0	12,021,915.0	650.00	60.00	0.00	0	0			
									point73	73	37,701,688.0	12,022,054.0	650.00	60.00	0.00	0	0			
Barrier42	W	0.00	99.99	0.00				0.00	point84	84	37,701,520.0	12,022,208.0	650.00	15.00	0.00	0	0			
									point85	85	37,701,484.0	12,022,186.0	650.00	15.00	0.00	0	0			
									point86	86	37,701,520.0	12,022,126.0	650.00	15.00	0.00	0	0			
									point87	87	37,701,556.0	12,022,148.0	650.00	15.00	0.00	0	0			

RESULTS: SOUND LEVELS

9233

R23	29	1	0.0	54.2	66	54.2	10	----	54.2	0.0	8	-8.0
R24	30	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R25	31	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
R26	32	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
R27	33	1	0.0	61.6	66	61.6	10	----	61.6	0.0	8	-8.0
R28	34	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
R29	35	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
R30	36	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0
R31	37	1	0.0	55.6	66	55.6	10	----	55.6	0.0	8	-8.0
R32	38	1	0.0	57.2	66	57.2	10	----	57.2	0.0	8	-8.0
R33	39	1	0.0	57.9	66	57.9	10	----	57.9	0.0	8	-8.0
R34	40	1	0.0	53.9	66	53.9	10	----	53.9	0.0	8	-8.0
R35	41	1	0.0	52.1	66	52.1	10	----	52.1	0.0	8	-8.0
R36	42	1	0.0	53.9	66	53.9	10	----	53.9	0.0	8	-8.0
R37	44	1	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0
R38	45	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
R39	46	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
R40	47	1	0.0	57.0	66	57.0	10	----	57.0	0.0	8	-8.0
R41	48	1	0.0	45.9	66	45.9	10	----	45.9	0.0	8	-8.0
R42	49	1	0.0	44.5	66	44.5	10	----	44.5	0.0	8	-8.0
R43	50	1	0.0	45.5	66	45.5	10	----	45.5	0.0	8	-8.0
R44	51	1	0.0	56.3	66	56.3	10	----	56.3	0.0	8	-8.0
R45	53	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
R46	55	1	0.0	59.5	66	59.5	10	----	59.5	0.0	8	-8.0
R47	57	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0
R48	58	1	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
R49	60	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
R50	62	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
R52- Community Rec Area Grnd Flr	66	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
R53 - Addl Offsite Rcvr	70	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
R54	72	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
R55	73	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
R56	74	1	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
R57	75	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
R58	76	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
R59	78	1	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
R60	79	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
R61	80	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
R62	81	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
R63	82	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
R64	83	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
R65	84	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0

RESULTS: SOUND LEVELS

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R66	85	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
R67	86	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
R68	87	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
R69	88	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
R70	89	1	0.0	50.4	66	50.4	10	----	50.4	0.0	8	-8.0
R71	90	1	0.0	49.7	66	49.7	10	----	49.7	0.0	8	-8.0
R72	91	1	0.0	50.5	66	50.5	10	----	50.5	0.0	8	-8.0
R73	92	1	0.0	51.7	66	51.7	10	----	51.7	0.0	8	-8.0
R74	93	1	0.0	53.5	66	53.5	10	----	53.5	0.0	8	-8.0
R75	94	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R76	95	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R77	96	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0
R78	97	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
R79	98	1	0.0	61.4	66	61.4	10	----	61.4	0.0	8	-8.0
R80	99	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
R81	100	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
R82	102	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0
R83	103	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
R84	104	1	0.0	57.1	66	57.1	10	----	57.1	0.0	8	-8.0
R85	105	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
R86	106	1	0.0	53.6	66	53.6	10	----	53.6	0.0	8	-8.0
R87	107	1	0.0	52.5	66	52.5	10	----	52.5	0.0	8	-8.0
R88	108	1	0.0	54.3	66	54.3	10	----	54.3	0.0	8	-8.0
R89	109	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
R90	111	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
R91	112	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
R92	113	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
R93	114	1	0.0	47.2	66	47.2	10	----	47.2	0.0	8	-8.0
R94	115	1	0.0	46.5	66	46.5	10	----	46.5	0.0	8	-8.0
R95	116	1	0.0	48.1	66	48.1	10	----	48.1	0.0	8	-8.0
R96	117	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0
R97	118	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
R98	119	1	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
R99	121	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
R100	122	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
R101	123	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
R102	124	1	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0
R103	125	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
R104	126	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
R105	127	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
R106	128	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
R107	130	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0

RESULTS: SOUND LEVELS

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R108	131	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
R109	132	1	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
R110	133	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
R111	134	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
R112	135	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
R113	136	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
R114	137	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
R115	138	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
R116	139	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
R117	140	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
R118	141	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
R119	142	1	0.0	51.0	66	51.0	10	----	51.0	0.0	8	-8.0
R120	143	1	0.0	50.2	66	50.2	10	----	50.2	0.0	8	-8.0
R121	144	1	0.0	50.9	66	50.9	10	----	50.9	0.0	8	-8.0
R122	145	1	0.0	51.9	66	51.9	10	----	51.9	0.0	8	-8.0
R123	146	1	0.0	53.7	66	53.7	10	----	53.7	0.0	8	-8.0
R124	147	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R125	148	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R126	70	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
R127	149	1	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0
R128	150	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0
R129	151	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
R130	153	1	0.0	55.3	66	55.3	10	----	55.3	0.0	8	-8.0
R131	154	1	0.0	54.9	66	54.9	10	----	54.9	0.0	8	-8.0
R132	155	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
R133	156	1	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0
R134	157	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
R135	158	1	0.0	53.8	66	53.8	10	----	53.8	0.0	8	-8.0
R136	159	1	0.0	52.7	66	52.7	10	----	52.7	0.0	8	-8.0
R137	160	1	0.0	54.5	66	54.5	10	----	54.5	0.0	8	-8.0
R138	161	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
R139	163	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
R140	164	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
R141	165	1	0.0	58.0	66	58.0	10	----	58.0	0.0	8	-8.0
R142	166	1	0.0	47.5	66	47.5	10	----	47.5	0.0	8	-8.0
R143	167	1	0.0	47.3	66	47.3	10	----	47.3	0.0	8	-8.0
R144	168	1	0.0	50.2	66	50.2	10	----	50.2	0.0	8	-8.0
R145	169	1	0.0	57.0	66	57.0	10	----	57.0	0.0	8	-8.0
R146	170	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
R147	171	1	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
R148	172	1	0.0	59.0	66	59.0	10	----	59.0	0.0	8	-8.0
R149	173	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0

RESULTS: SOUND LEVELS

9233

R150	174	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
R151	175	1	0.0	61.5	66	61.5	10	----	61.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		153	0.0	0.0	0.0							
All Impacted		32	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: TRAFFIC FOR LAeq1h Percentages

9233

	point2	2												
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INPUT: RECEIVERS

9233

							14 October 2015				
Dudek											
M Greene							TNM 2.5				
INPUT: RECEIVERS											
PROJECT/CONTRACT:		9233									
RUN:		Escondido Gateway Project - Future									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact LAeq1h	Criteria Sub'I	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	37,701,388.0	12,022,001.0	650.00	5.00	0.00	66	10.0	8.0	Y
M2	2	1	37,701,412.0	12,022,144.0	650.00	5.00	0.00	66	10.0	8.0	Y
M3	3	1	37,701,592.0	12,021,918.0	650.00	5.00	0.00	66	10.0	8.0	Y
M4	4	1	37,701,052.0	12,021,681.0	660.00	5.00	0.00	66	10.0	8.0	Y
R1	5	1	37,700,428.0	12,021,829.0	660.00	5.00	0.00	66	10.0	8.0	Y

Dudek										14 October 2015									
M Greene										TNM 2.5									
INPUT: BARRIERS																			
PROJECT/CONTRACT:		9233																	
RUN:		Escondido Gateway Project - Future																	
Barrier										Points									
Name	Type	Height		If Wall		If Berm		Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment			On	Important
		Min	Max	\$ per Unit Area	\$ per Unit Vol.	Top Width	Run:Rise				\$ per Unit Length	X	Y		Z	at Point	Seg Ht		
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft	ft			
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	37,701,504.0	12,022,178.0	650.00	6.00	0.00	0	0		
									point2	2	37,701,324.0	12,022,070.0	650.00	6.00	0.00	0	0		
									point3	3	37,701,356.0	12,022,018.0	650.00	6.00	0.00	0	0		
									point4	4	37,701,536.0	12,022,126.0	650.00	6.00					
Barrier2	W	0.00	99.99	0.00				0.00	point5	5	37,701,500.0	12,022,091.0	650.00	20.00	0.00	0	0		
									point6	6	37,701,412.0	12,022,037.0	650.00	20.00	0.00	0	0		
									point7	7	37,701,460.0	12,021,957.0	650.00	20.00	0.00	0	0		
									point8	8	37,701,456.0	12,021,937.0	650.00	20.00	0.00	0	0		
									point9	9	37,701,472.0	12,021,910.0	650.00	20.00	0.00	0	0		
									point10	10	37,701,616.0	12,021,996.0	650.00	20.00	0.00	0	0		
									point11	11	37,701,572.0	12,022,063.0	650.00	20.00	0.00	0	0		
									point12	12	37,701,532.0	12,022,037.0	650.00	20.00	0.00	0	0		
									point13	13	37,701,504.0	12,022,088.0	650.00	20.00					

INPUT: ROADWAYS

9233

Dudek					13 April 2016					
M Greene					TNM 2.5					
INPUT: ROADWAYS										
PROJECT/CONTRACT:	9233								Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA	
RUN:	Escondido Gateway Proj - Fut w Prj									

Roadway Name	Width	Points		Coordinates (pavement)			Flow Control			Segment	
		Name	No.	X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Valley Pkwy WB	55.0	point1	1	37,701,956.0	12,022,530.0	650.00				Average	
		point3	3	37,701,208.0	12,022,080.0	650.00				Average	
		point4	4	37,701,024.0	12,021,999.0	650.00				Average	
		point5	5	37,700,832.0	12,021,953.0	650.00				Average	
		point6	6	37,700,628.0	12,021,953.0	650.00				Average	
		point7	7	37,700,328.0	12,021,966.0	650.00				Average	
		point8	8	37,700,168.0	12,021,960.0	650.00				Average	
		point9	9	37,700,040.0	12,021,940.0	650.00				Average	
		point10	10	37,699,840.0	12,021,863.0	650.00				Average	
		point11	11	37,699,736.0	12,021,803.0	650.00					
		Valley Pkwy EB / W Grand Ave	60.0	point28	28	37,699,764.0	12,021,761.0	650.00			
point13	13			37,699,856.0	12,021,816.0	650.00				Average	
point14	14			37,700,052.0	12,021,896.0	650.00				Average	
point15	15			37,700,176.0	12,021,904.0	650.00				Average	
point16	16			37,700,332.0	12,021,904.0	650.00				Average	
point17	17			37,700,600.0	12,021,854.0	650.00				Average	
point18	18			37,700,796.0	12,021,803.0	650.00				Average	
point19	19			37,700,956.0	12,021,754.0	650.00				Average	
point20	20			37,701,104.0	12,021,717.0	650.00				Average	
point21	21			37,701,236.0	12,021,713.0	650.00				Average	
point22	22			37,701,376.0	12,021,741.0	650.00				Average	
point23	23			37,701,488.0	12,021,794.0	650.00				Average	
point24	24			37,701,640.0	12,021,891.0	650.00				Average	
point25	25			37,701,908.0	12,022,041.0	650.00				Average	
point26	26			37,702,088.0	12,022,050.0	650.00				Average	
RxR	12.0	point2	2	37,702,168.0	12,022,048.0	650.00					
		point35	35	37,701,256.0	12,022,039.0	0.00				Average	

INPUT: ROADWAYS

9233

		point36	36	37,701,496.0	12,021,835.0	0.00					
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INPUT: TRAFFIC FOR LAeq1h Percentages**9233**

	point2	2											
RxR	point35	35	0	0	0	0	0	0	0	0	0	0	0
	point36	36											

INPUT: RECEIVERS

9233

Dudek						13 April 2016					
M Greene						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:		9233									
RUN:		Escondido Gateway Proj - Fut w Prj									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria			NR Goal	Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact LAeq1h	Criteria Sub'l		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1 / R51	1	1	37,701,388.0	12,022,001.0	650.00	5.00	0.00	66	10.0	8.0	Y
M2	2	1	37,701,412.0	12,022,145.0	650.00	5.00	0.00	66	10.0	8.0	Y
M4	4	1	37,701,052.0	12,021,681.0	660.00	5.00	0.00	66	10.0	8.0	Y
R1	5	1	37,701,292.0	12,022,074.0	650.00	15.00	0.00	66	10.0	8.0	Y
R2	8	1	37,701,336.0	12,022,100.0	650.00	15.00	0.00	66	10.0	8.0	Y
R3	9	1	37,701,384.0	12,022,128.0	650.00	15.00	0.00	66	10.0	8.0	Y
R4	10	1	37,701,408.0	12,022,143.0	650.00	15.00	0.00	66	10.0	8.0	Y
R5	11	1	37,701,484.0	12,022,188.0	650.00	15.00	0.00	66	10.0	8.0	Y
R6	12	1	37,701,528.0	12,022,214.0	650.00	15.00	0.00	66	10.0	8.0	Y
R7	13	1	37,701,580.0	12,022,246.0	650.00	15.00	0.00	66	10.0	8.0	Y
R8	14	1	37,701,620.0	12,022,270.0	650.00	15.00	0.00	66	10.0	8.0	Y
R9	15	1	37,701,508.0	12,021,857.0	650.00	15.00	0.00	66	10.0	8.0	Y
R10	16	1	37,701,540.0	12,021,877.0	650.00	15.00	0.00	66	10.0	8.0	Y
R11	17	1	37,701,572.0	12,021,898.0	650.00	15.00	0.00	66	10.0	8.0	Y
R12	18	1	37,701,604.0	12,021,918.0	650.00	15.00	0.00	66	10.0	8.0	Y
R13	19	1	37,701,636.0	12,021,939.0	650.00	15.00	0.00	66	10.0	8.0	Y
R14	20	1	37,701,664.0	12,021,956.0	650.00	15.00	0.00	66	10.0	8.0	Y
R15	21	1	37,701,696.0	12,021,976.0	650.00	15.00	0.00	66	10.0	8.0	Y
R16	22	1	37,701,728.0	12,021,997.0	650.00	15.00	0.00	66	10.0	8.0	Y
R17	23	1	37,701,708.0	12,022,028.0	650.00	15.00	0.00	66	10.0	8.0	Y
R18	24	1	37,701,684.0	12,022,054.0	650.00	15.00	0.00	66	10.0	8.0	Y
R19	25	1	37,701,652.0	12,022,035.0	650.00	15.00	0.00	66	10.0	8.0	Y
R20	26	1	37,701,620.0	12,022,016.0	650.00	15.00	0.00	66	10.0	8.0	Y
R21	27	1	37,701,592.0	12,021,998.0	650.00	15.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS

9233

R22	28	1	37,701,560.0	12,021,976.0	650.00	15.00	0.00	66	10.0	8.0	Y
R23	29	1	37,701,528.0	12,021,956.0	650.00	15.00	0.00	66	10.0	8.0	Y
R24	30	1	37,701,496.0	12,021,935.0	650.00	15.00	0.00	66	10.0	8.0	Y
R25	31	1	37,701,468.0	12,021,916.0	650.00	15.00	0.00	66	10.0	8.0	Y
R26	32	1	37,701,488.0	12,021,885.0	650.00	15.00	0.00	66	10.0	8.0	Y
R27	33	1	37,701,308.0	12,022,044.0	650.00	15.00	0.00	66	10.0	8.0	Y
R28	34	1	37,701,328.0	12,022,013.0	650.00	15.00	0.00	66	10.0	8.0	Y
R29	35	1	37,701,352.0	12,022,027.0	650.00	15.00	0.00	66	10.0	8.0	Y
R30	36	1	37,701,372.0	12,022,039.0	650.00	15.00	0.00	66	10.0	8.0	Y
R31	37	1	37,701,400.0	12,022,027.0	650.00	15.00	0.00	66	10.0	8.0	Y
R32	38	1	37,701,416.0	12,022,004.0	650.00	15.00	0.00	66	10.0	8.0	Y
R33	39	1	37,701,432.0	12,021,981.0	650.00	15.00	0.00	66	10.0	8.0	Y
R34	40	1	37,701,464.0	12,022,000.0	650.00	15.00	0.00	66	10.0	8.0	Y
R35	41	1	37,701,492.0	12,022,020.0	650.00	15.00	0.00	66	10.0	8.0	Y
R36	42	1	37,701,476.0	12,022,047.0	650.00	15.00	0.00	66	10.0	8.0	Y
R37	44	1	37,701,452.0	12,022,084.0	650.00	15.00	0.00	66	10.0	8.0	Y
R38	45	1	37,701,432.0	12,022,117.0	650.00	15.00	0.00	66	10.0	8.0	Y
R39	46	1	37,701,500.0	12,022,159.0	650.00	15.00	0.00	66	10.0	8.0	Y
R40	47	1	37,701,520.0	12,022,125.0	650.00	15.00	0.00	66	10.0	8.0	Y
R41	48	1	37,701,560.0	12,022,148.0	650.00	15.00	0.00	66	10.0	8.0	Y
R42	49	1	37,701,616.0	12,022,144.0	650.00	15.00	0.00	66	10.0	8.0	Y
R43	50	1	37,701,632.0	12,022,119.0	650.00	15.00	0.00	66	10.0	8.0	Y
R44	51	1	37,701,648.0	12,022,092.0	650.00	15.00	0.00	66	10.0	8.0	Y
R45	53	1	37,701,680.0	12,022,110.0	650.00	15.00	0.00	66	10.0	8.0	Y
R46	55	1	37,701,704.0	12,022,129.0	650.00	15.00	0.00	66	10.0	8.0	Y
R47	57	1	37,701,688.0	12,022,158.0	650.00	15.00	0.00	66	10.0	8.0	Y
R48	58	1	37,701,668.0	12,022,194.0	650.00	15.00	0.00	66	10.0	8.0	Y
R49	60	1	37,701,648.0	12,022,228.0	650.00	15.00	0.00	66	10.0	8.0	Y
R50	62	1	37,701,632.0	12,022,252.0	650.00	15.00	0.00	66	10.0	8.0	Y
R52- Community Rec Area Grnd Flr	66	1	37,701,540.0	12,022,106.0	650.00	5.00	0.00	66	10.0	8.0	Y
R53 - Addl Offsite Rcvr	70	1	37,700,428.0	12,021,829.0	660.00	5.00	0.00	66	10.0	8.0	Y
R54	72	1	37,701,292.0	12,022,074.0	650.00	25.00	0.00	66	10.0	8.0	Y
R55	73	1	37,701,336.0	12,022,100.0	650.00	25.00	0.00	66	10.0	8.0	Y
R56	74	1	37,701,384.0	12,022,128.0	650.00	25.00	0.00	66	10.0	8.0	Y
R57	75	1	37,701,408.0	12,022,143.0	650.00	25.00	0.00	66	10.0	8.0	Y
R58	76	1	37,701,528.0	12,022,214.0	650.00	25.00	0.00	66	10.0	8.0	Y
R59	78	1	37,701,580.0	12,022,246.0	650.00	25.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS

9233

R60	79	1	37,701,620.0	12,022,270.0	650.00	25.00	0.00	66	10.0	8.0	Y
R61	80	1	37,701,508.0	12,021,857.0	650.00	25.00	0.00	66	10.0	8.0	Y
R62	81	1	37,701,540.0	12,021,877.0	650.00	25.00	0.00	66	10.0	8.0	Y
R63	82	1	37,701,572.0	12,021,898.0	650.00	25.00	0.00	66	10.0	8.0	Y
R64	83	1	37,701,604.0	12,021,918.0	650.00	25.00	0.00	66	10.0	8.0	Y
R65	84	1	37,701,636.0	12,021,939.0	650.00	25.00	0.00	66	10.0	8.0	Y
R66	85	1	37,701,664.0	12,021,956.0	650.00	25.00	0.00	66	10.0	8.0	Y
R67	86	1	37,701,696.0	12,021,976.0	650.00	25.00	0.00	66	10.0	8.0	Y
R68	87	1	37,701,728.0	12,021,997.0	650.00	25.00	0.00	66	10.0	8.0	Y
R69	88	1	37,701,708.0	12,022,028.0	650.00	25.00	0.00	66	10.0	8.0	Y
R70	89	1	37,701,684.0	12,022,054.0	650.00	25.00	0.00	66	10.0	8.0	Y
R71	90	1	37,701,652.0	12,022,035.0	650.00	25.00	0.00	66	10.0	8.0	Y
R72	91	1	37,701,620.0	12,022,016.0	650.00	25.00	0.00	66	10.0	8.0	Y
R73	92	1	37,701,592.0	12,021,998.0	650.00	25.00	0.00	66	10.0	8.0	Y
R74	93	1	37,701,560.0	12,021,976.0	650.00	25.00	0.00	66	10.0	8.0	Y
R75	94	1	37,701,528.0	12,021,956.0	650.00	25.00	0.00	66	10.0	8.0	Y
R76	95	1	37,701,496.0	12,021,935.0	650.00	25.00	0.00	66	10.0	8.0	Y
R77	96	1	37,701,468.0	12,021,916.0	650.00	25.00	0.00	66	10.0	8.0	Y
R78	97	1	37,701,488.0	12,021,885.0	650.00	25.00	0.00	66	10.0	8.0	Y
R79	98	1	37,701,308.0	12,022,044.0	650.00	25.00	0.00	66	10.0	8.0	Y
R80	99	1	37,701,328.0	12,022,013.0	650.00	25.00	0.00	66	10.0	8.0	Y
R81	100	1	37,701,352.0	12,022,027.0	650.00	25.00	0.00	66	10.0	8.0	Y
R82	102	1	37,701,372.0	12,022,039.0	650.00	25.00	0.00	66	10.0	8.0	Y
R83	103	1	37,701,400.0	12,022,027.0	650.00	25.00	0.00	66	10.0	8.0	Y
R84	104	1	37,701,416.0	12,022,004.0	650.00	25.00	0.00	66	10.0	8.0	Y
R85	105	1	37,701,432.0	12,021,981.0	650.00	25.00	0.00	66	10.0	8.0	Y
R86	106	1	37,701,464.0	12,022,000.0	650.00	25.00	0.00	66	10.0	8.0	Y
R87	107	1	37,701,492.0	12,022,020.0	650.00	25.00	0.00	66	10.0	8.0	Y
R88	108	1	37,701,476.0	12,022,047.0	650.00	25.00	0.00	66	10.0	8.0	Y
R89	109	1	37,701,452.0	12,022,084.0	650.00	25.00	0.00	66	10.0	8.0	Y
R90	111	1	37,701,432.0	12,022,117.0	650.00	25.00	0.00	66	10.0	8.0	Y
R91	112	1	37,701,500.0	12,022,159.0	650.00	25.00	0.00	66	10.0	8.0	Y
R92	113	1	37,701,520.0	12,022,125.0	650.00	25.00	0.00	66	10.0	8.0	Y
R93	114	1	37,701,560.0	12,022,148.0	650.00	25.00	0.00	66	10.0	8.0	Y
R94	115	1	37,701,616.0	12,022,144.0	650.00	25.00	0.00	66	10.0	8.0	Y
R95	116	1	37,701,632.0	12,022,119.0	650.00	25.00	0.00	66	10.0	8.0	Y
R96	117	1	37,701,648.0	12,022,092.0	650.00	25.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS

9233

R97	118	1	37,701,680.0	12,022,110.0	650.00	25.00	0.00	66	10.0	8.0	Y
R98	119	1	37,701,704.0	12,022,129.0	650.00	25.00	0.00	66	10.0	8.0	Y
R99	121	1	37,701,688.0	12,022,158.0	650.00	25.00	0.00	66	10.0	8.0	Y
R100	122	1	37,701,668.0	12,022,194.0	650.00	25.00	0.00	66	10.0	8.0	Y
R101	123	1	37,701,648.0	12,022,228.0	650.00	25.00	0.00	66	10.0	8.0	Y
R102	124	1	37,701,632.0	12,022,252.0	650.00	25.00	0.00	66	10.0	8.0	Y
R103	125	1	37,701,292.0	12,022,074.0	650.00	35.00	0.00	66	10.0	8.0	Y
R104	126	1	37,701,336.0	12,022,100.0	650.00	35.00	0.00	66	10.0	8.0	Y
R105	127	1	37,701,384.0	12,022,128.0	650.00	35.00	0.00	66	10.0	8.0	Y
R106	128	1	37,701,408.0	12,022,143.0	650.00	35.00	0.00	66	10.0	8.0	Y
R107	130	1	37,701,528.0	12,022,214.0	650.00	35.00	0.00	66	10.0	8.0	Y
R108	131	1	37,701,580.0	12,022,246.0	650.00	35.00	0.00	66	10.0	8.0	Y
R109	132	1	37,701,620.0	12,022,270.0	650.00	35.00	0.00	66	10.0	8.0	Y
R110	133	1	37,701,508.0	12,021,857.0	650.00	35.00	0.00	66	10.0	8.0	Y
R111	134	1	37,701,540.0	12,021,877.0	650.00	35.00	0.00	66	10.0	8.0	Y
R112	135	1	37,701,572.0	12,021,898.0	650.00	35.00	0.00	66	10.0	8.0	Y
R113	136	1	37,701,604.0	12,021,918.0	650.00	35.00	0.00	66	10.0	8.0	Y
R114	137	1	37,701,636.0	12,021,939.0	650.00	35.00	0.00	66	10.0	8.0	Y
R115	138	1	37,701,664.0	12,021,956.0	650.00	35.00	0.00	66	10.0	8.0	Y
R116	139	1	37,701,696.0	12,021,976.0	650.00	35.00	0.00	66	10.0	8.0	Y
R117	140	1	37,701,728.0	12,021,997.0	650.00	35.00	0.00	66	10.0	8.0	Y
R118	141	1	37,701,708.0	12,022,028.0	650.00	35.00	0.00	66	10.0	8.0	Y
R119	142	1	37,701,684.0	12,022,054.0	650.00	35.00	0.00	66	10.0	8.0	Y
R120	143	1	37,701,652.0	12,022,035.0	650.00	35.00	0.00	66	10.0	8.0	Y
R121	144	1	37,701,620.0	12,022,016.0	650.00	35.00	0.00	66	10.0	8.0	Y
R122	145	1	37,701,592.0	12,021,998.0	650.00	35.00	0.00	66	10.0	8.0	Y
R123	146	1	37,701,560.0	12,021,976.0	650.00	35.00	0.00	66	10.0	8.0	Y
R124	147	1	37,701,528.0	12,021,956.0	650.00	35.00	0.00	66	10.0	8.0	Y
R125	148	1	37,701,496.0	12,021,935.0	650.00	35.00	0.00	66	10.0	8.0	Y
R126	70	1	37,701,468.0	12,021,916.0	650.00	35.00	0.00	66	10.0	8.0	Y
R127	149	1	37,701,488.0	12,021,885.0	650.00	35.00	0.00	66	10.0	8.0	Y
R128	150	1	37,701,308.0	12,022,044.0	650.00	35.00	0.00	66	10.0	8.0	Y
R129	151	1	37,701,328.0	12,022,013.0	650.00	35.00	0.00	66	10.0	8.0	Y
R130	153	1	37,701,352.0	12,022,027.0	650.00	35.00	0.00	66	10.0	8.0	Y
R131	154	1	37,701,372.0	12,022,039.0	650.00	35.00	0.00	66	10.0	8.0	Y
R132	155	1	37,701,400.0	12,022,027.0	650.00	35.00	0.00	66	10.0	8.0	Y
R133	156	1	37,701,416.0	12,022,004.0	650.00	35.00	0.00	66	10.0	8.0	Y

INPUT: RECEIVERS**9233**

R134	157	1	37,701,432.0	12,021,981.0	650.00	35.00	0.00	66	10.0	8.0	Y
R135	158	1	37,701,464.0	12,022,000.0	650.00	35.00	0.00	66	10.0	8.0	Y
R136	159	1	37,701,492.0	12,022,020.0	650.00	35.00	0.00	66	10.0	8.0	Y
R137	160	1	37,701,476.0	12,022,047.0	650.00	35.00	0.00	66	10.0	8.0	Y
R138	161	1	37,701,452.0	12,022,084.0	650.00	35.00	0.00	66	10.0	8.0	Y
R139	163	1	37,701,432.0	12,022,117.0	650.00	35.00	0.00	66	10.0	8.0	Y
R140	164	1	37,701,500.0	12,022,159.0	650.00	35.00	0.00	66	10.0	8.0	Y
R141	165	1	37,701,520.0	12,022,125.0	650.00	35.00	0.00	66	10.0	8.0	Y
R142	166	1	37,701,560.0	12,022,148.0	650.00	35.00	0.00	66	10.0	8.0	Y
R143	167	1	37,701,616.0	12,022,144.0	650.00	35.00	0.00	66	10.0	8.0	Y
R144	168	1	37,701,632.0	12,022,119.0	650.00	35.00	0.00	66	10.0	8.0	Y
R145	169	1	37,701,648.0	12,022,092.0	650.00	35.00	0.00	66	10.0	8.0	Y
R146	170	1	37,701,680.0	12,022,110.0	650.00	35.00	0.00	66	10.0	8.0	Y
R147	171	1	37,701,704.0	12,022,129.0	650.00	35.00	0.00	66	10.0	8.0	Y
R148	172	1	37,701,688.0	12,022,158.0	650.00	35.00	0.00	66	10.0	8.0	Y
R149	173	1	37,701,668.0	12,022,194.0	650.00	35.00	0.00	66	10.0	8.0	Y
R150	174	1	37,701,648.0	12,022,228.0	650.00	35.00	0.00	66	10.0	8.0	Y
R151	175	1	37,701,632.0	12,022,252.0	650.00	35.00	0.00	66	10.0	8.0	Y

Dudek M Greene										13 April 2016 TNM 2.5										
INPUT: BARRIERS																				
PROJECT/CONTRACT: 9233																				
RUN: Esccondido Gateway Proj - Fut w Prj																				
Barrier										Points										
Name	Type	Height		If Wall	If Berm	Run:Rise		Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment			On	Important	
		Min	Max	\$ per Unit Area	\$ per Unit Vol.	Top Width	ft:ft	\$ per Unit Length			X	Y	Z	at Point	Seg Ht	Perturbs	#Up	#Dn	Struct?	Reflec-tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft	ft				
Building 1	W	0.00	99.99	0.00				0.00	point43	43	37,701,292.0	12,022,073.0	650.00	60.00	0.00	0	0			
									point46	46	37,701,328.0	12,022,014.0	650.00	60.00	0.00	0	0			
									point48	48	37,701,388.0	12,022,050.0	650.00	60.00	0.00	0	0			
									point49	49	37,701,432.0	12,021,982.0	650.00	60.00	0.00	0	0			
									point50	50	37,701,492.0	12,022,019.0	650.00	60.00	0.00	0	0			
									point62	62	37,701,412.0	12,022,144.0	650.00	60.00	0.00	0	0			
									point63	63	37,701,292.0	12,022,073.0	650.00	60.00	0.00	0	0			
Building 2	W	0.00	99.99	0.00				0.00	point54	54	37,701,620.0	12,022,269.0	650.00	60.00	0.00	0	0			
									point56	56	37,701,704.0	12,022,128.0	650.00	60.00	0.00	0	0			
									point58	58	37,701,648.0	12,022,094.0	650.00	60.00	0.00	0	0			
									point59	59	37,701,600.0	12,022,172.0	650.00	60.00	0.00	0	0			
									point60	60	37,701,556.0	12,022,148.0	650.00	60.00	0.00	0	0			
									point38	38	37,701,520.0	12,022,208.0	650.00	60.00	0.00	0	0			
									point39	39	37,701,620.0	12,022,269.0	650.00	60.00	0.00	0	0			
Building 3	W	0.00	99.99	0.00				0.00	point80	80	37,701,688.0	12,022,054.0	650.00	60.00	0.00	0	0			
									point76	76	37,701,728.0	12,021,998.0	650.00	60.00	0.00	0	0			
									point78	78	37,701,508.0	12,021,858.0	650.00	60.00	0.00	0	0			
									point72	72	37,701,468.0	12,021,915.0	650.00	60.00	0.00	0	0			
									point73	73	37,701,688.0	12,022,054.0	650.00	60.00	0.00	0	0			
Barrier42	W	0.00	99.99	0.00				0.00	point84	84	37,701,520.0	12,022,208.0	650.00	15.00	0.00	0	0			
									point85	85	37,701,484.0	12,022,186.0	650.00	15.00	0.00	0	0			
									point86	86	37,701,520.0	12,022,126.0	650.00	15.00	0.00	0	0			
									point87	87	37,701,556.0	12,022,148.0	650.00	15.00	0.00	0	0			

RESULTS: SOUND LEVELS

9233

Dudek M Greene										13 April 2016 TNM 2.5 Calculated with TNM 2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		9233												
RUN:		Escondido Gateway Proj - Fut w Prj												
BARRIER DESIGN:		INPUT HEIGHTS								Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH												

Receiver													
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing			Type	With Barrier LAeq1h	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact		Calculated	Goal	Calculated	Goal
							Sub'l Inc						minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
M1 / R51	1	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8		-8.0
M2	2	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8		-8.0
M4	4	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8		-8.0
R1	5	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8		-8.0
R2	8	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8		-8.0
R3	9	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8		-8.0
R4	10	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8		-8.0
R5	11	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8		-8.0
R6	12	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8		-8.0
R7	13	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8		-8.0
R8	14	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8		-8.0
R9	15	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8		-8.0
R10	16	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8		-8.0
R11	17	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8		-8.0
R12	18	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8		-8.0
R13	19	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8		-8.0
R14	20	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8		-8.0
R15	21	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8		-8.0
R16	22	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8		-8.0
R17	23	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8		-8.0
R18	24	1	0.0	50.5	66	50.5	10	----	50.5	0.0	8		-8.0
R19	25	1	0.0	49.8	66	49.8	10	----	49.8	0.0	8		-8.0
R20	26	1	0.0	50.9	66	50.9	10	----	50.9	0.0	8		-8.0
R21	27	1	0.0	52.0	66	52.0	10	----	52.0	0.0	8		-8.0
R22	28	1	0.0	53.8	66	53.8	10	----	53.8	0.0	8		-8.0

RESULTS: SOUND LEVELS

9233

R23	29	1	0.0	54.7	66	54.7	10	----	54.7	0.0	8	-8.0
R24	30	1	0.0	54.6	66	54.6	10	----	54.6	0.0	8	-8.0
R25	31	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
R26	32	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
R27	33	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
R28	34	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0
R29	35	1	0.0	55.8	66	55.8	10	----	55.8	0.0	8	-8.0
R30	36	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
R31	37	1	0.0	56.0	66	56.0	10	----	56.0	0.0	8	-8.0
R32	38	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
R33	39	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0
R34	40	1	0.0	54.3	66	54.3	10	----	54.3	0.0	8	-8.0
R35	41	1	0.0	52.6	66	52.6	10	----	52.6	0.0	8	-8.0
R36	42	1	0.0	54.4	66	54.4	10	----	54.4	0.0	8	-8.0
R37	44	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
R38	45	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0
R39	46	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
R40	47	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
R41	48	1	0.0	46.3	66	46.3	10	----	46.3	0.0	8	-8.0
R42	49	1	0.0	45.0	66	45.0	10	----	45.0	0.0	8	-8.0
R43	50	1	0.0	46.0	66	46.0	10	----	46.0	0.0	8	-8.0
R44	51	1	0.0	56.7	66	56.7	10	----	56.7	0.0	8	-8.0
R45	53	1	0.0	57.9	66	57.9	10	----	57.9	0.0	8	-8.0
R46	55	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
R47	57	1	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
R48	58	1	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
R49	60	1	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0
R50	62	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
R52- Community Rec Area Grnd Flr	66	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
R53 - Addl Offsite Rcvr	70	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
R54	72	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
R55	73	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
R56	74	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
R57	75	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
R58	76	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
R59	78	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
R60	79	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
R61	80	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
R62	81	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
R63	82	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
R64	83	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
R65	84	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0

RESULTS: SOUND LEVELS

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R66	85	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
R67	86	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
R68	87	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
R69	88	1	0.0	60.7	66	60.7	10	----	60.7	0.0	8	-8.0
R70	89	1	0.0	50.8	66	50.8	10	----	50.8	0.0	8	-8.0
R71	90	1	0.0	50.1	66	50.1	10	----	50.1	0.0	8	-8.0
R72	91	1	0.0	51.0	66	51.0	10	----	51.0	0.0	8	-8.0
R73	92	1	0.0	52.2	66	52.2	10	----	52.2	0.0	8	-8.0
R74	93	1	0.0	54.0	66	54.0	10	----	54.0	0.0	8	-8.0
R75	94	1	0.0	54.6	66	54.6	10	----	54.6	0.0	8	-8.0
R76	95	1	0.0	54.5	66	54.5	10	----	54.5	0.0	8	-8.0
R77	96	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
R78	97	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
R79	98	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
R80	99	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0
R81	100	1	0.0	55.8	66	55.8	10	----	55.8	0.0	8	-8.0
R82	102	1	0.0	55.3	66	55.3	10	----	55.3	0.0	8	-8.0
R83	103	1	0.0	55.9	66	55.9	10	----	55.9	0.0	8	-8.0
R84	104	1	0.0	57.5	66	57.5	10	----	57.5	0.0	8	-8.0
R85	105	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
R86	106	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R87	107	1	0.0	53.0	66	53.0	10	----	53.0	0.0	8	-8.0
R88	108	1	0.0	54.8	66	54.8	10	----	54.8	0.0	8	-8.0
R89	109	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
R90	111	1	0.0	61.1	66	61.1	10	----	61.1	0.0	8	-8.0
R91	112	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
R92	113	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
R93	114	1	0.0	47.7	66	47.7	10	----	47.7	0.0	8	-8.0
R94	115	1	0.0	46.9	66	46.9	10	----	46.9	0.0	8	-8.0
R95	116	1	0.0	48.6	66	48.6	10	----	48.6	0.0	8	-8.0
R96	117	1	0.0	56.9	66	56.9	10	----	56.9	0.0	8	-8.0
R97	118	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
R98	119	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
R99	121	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
R100	122	1	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
R101	123	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0
R102	124	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
R103	125	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
R104	126	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
R105	127	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
R106	128	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
R107	130	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0

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R108	131	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
R109	132	1	0.0	66.1	66	66.1	10	Snd Lvl	66.1	0.0	8	-8.0
R110	133	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
R111	134	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
R112	135	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
R113	136	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
R114	137	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
R115	138	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
R116	139	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
R117	140	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
R118	141	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
R119	142	1	0.0	51.5	66	51.5	10	----	51.5	0.0	8	-8.0
R120	143	1	0.0	50.7	66	50.7	10	----	50.7	0.0	8	-8.0
R121	144	1	0.0	51.4	66	51.4	10	----	51.4	0.0	8	-8.0
R122	145	1	0.0	52.4	66	52.4	10	----	52.4	0.0	8	-8.0
R123	146	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
R124	147	1	0.0	54.6	66	54.6	10	----	54.6	0.0	8	-8.0
R125	148	1	0.0	54.5	66	54.5	10	----	54.5	0.0	8	-8.0
R126	70	1	0.0	58.7	66	58.7	10	----	58.7	0.0	8	-8.0
R127	149	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
R128	150	1	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0
R129	151	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
R130	153	1	0.0	55.8	66	55.8	10	----	55.8	0.0	8	-8.0
R131	154	1	0.0	55.3	66	55.3	10	----	55.3	0.0	8	-8.0
R132	155	1	0.0	55.9	66	55.9	10	----	55.9	0.0	8	-8.0
R133	156	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
R134	157	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
R135	158	1	0.0	54.2	66	54.2	10	----	54.2	0.0	8	-8.0
R136	159	1	0.0	53.2	66	53.2	10	----	53.2	0.0	8	-8.0
R137	160	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
R138	161	1	0.0	58.1	66	58.1	10	----	58.1	0.0	8	-8.0
R139	163	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0
R140	164	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
R141	165	1	0.0	58.5	66	58.5	10	----	58.5	0.0	8	-8.0
R142	166	1	0.0	47.9	66	47.9	10	----	47.9	0.0	8	-8.0
R143	167	1	0.0	47.7	66	47.7	10	----	47.7	0.0	8	-8.0
R144	168	1	0.0	50.7	66	50.7	10	----	50.7	0.0	8	-8.0
R145	169	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
R146	170	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
R147	171	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
R148	172	1	0.0	59.5	66	59.5	10	----	59.5	0.0	8	-8.0
R149	173	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0

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R150	174	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
R151	175	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		153	0.0	0.0	0.0							
All Impacted		45	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

