NOISE IMPACT ANALYSIS

BANNING GENERAL PLAN AMENDMENT

CITY OF BANNING, CALIFORNIA

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LSA

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APPENDIX D

NOISE STUDY ANALYSIS

TABLE OF CONTENTS

APPENDIX

FIGURES AND TABLES

FIGURES

TABLES

INTRODUCTION

This noise impact analysis has been prepared to evaluate the potential noise impacts and mitigation measures for the proposed project. This report is intended to satisfy the City of Banning's (City) requirement for a project-specific final noise impact analysis by examining the short-term and long-term impacts on the project site and by evaluating the effectiveness of mitigation measures incorporated as part of the project design.

PROJECT DESCRIPTION

Project Location

The City is located in the non-desert portion of Riverside County. The City is located in the San Gorgonio Pass Area and is served by Interstate 10 (I–10), as well as a network of arterial roadways and local streets (Figures 1 and 2). I–10 is an eight-lane divided freeway that runs through Banning, bisecting it into south and north communities. Malki Road (formerly Fields Road), Ramsey Street, Hargrave Street, 8th Street, 22nd Street, Sunset Avenue, and Highland Springs Avenue are the access streets that provide interchange access to I–10.

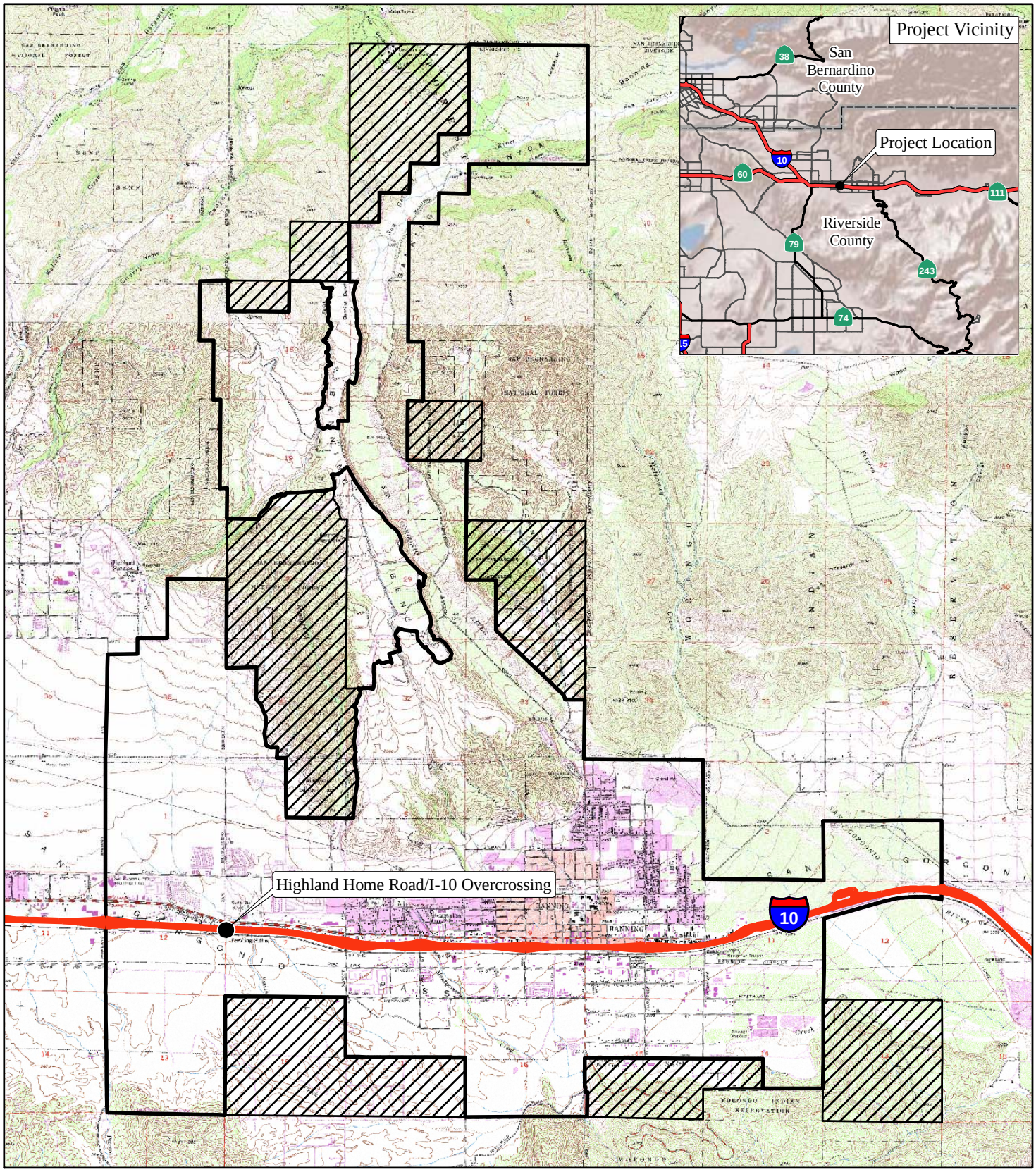
The proposed project is generally a policy change in regard to the City's adopted Level of Service (LOS) standards and the replacement of the future planned I–10/Highland Home Road interchange with an intersection. Unlike a typical development project, this type of policy change does not have the potential to result in physical changes to a specific project location.

Background and History

City of Banning – General Plan Circulation Element. The City General Plan Circulation Element standard provides that LOS C is the upper limit of satisfactory operations except for intersections along Ramsey Street, where LOS D is considered satisfactory. Mitigation is required for any intersections where any project traffic causes the intersection to deteriorate from satisfactory to unsatisfactory operation. The City does not have an adopted criterion that defines significant impact at an existing deficient intersection; therefore, a conservative criterion was developed to address this potential condition. If an intersection is already operating at an unsatisfactory LOS, any increase in delay due to the addition of one or more cars would constitute a significant project impact. This criterion was applied to study intersections in the jurisdictions of the City of Banning, City of Beaumont, and the County of Riverside.

Circulation Element Amendment Characteristics

The City is proposing to amend the General Plan Circulation Element. The proposed project includes a change to the acceptable LOS for roadway operating conditions from LOS C to LOS D. Additionally, the City is proposing to replace the future planned I-10/Highland Home Road interchange, identified in Exhibit III-6 of the Circulation Element, with an overcrossing The future extension of Highland Home Road as an overcrossing at the I-10 would remain in the Circulation Element. The objectives for the proposed project include the following:



LSA

FIGURE 1

LEGEND

- Highland Home Road/I-10 Overcrossing
- City of Banning Limits
- City of Banning Sphere of Influence

N

0 3000 6000

FEET

Banning General Plan Ammendment

Project Location

SOURCE: USGS 7.5' Quad - Beaumont (1988), Cabazon (1988), Forest Falls (1994), CA; Riverside LAFCO (2006); SCAG (2008)

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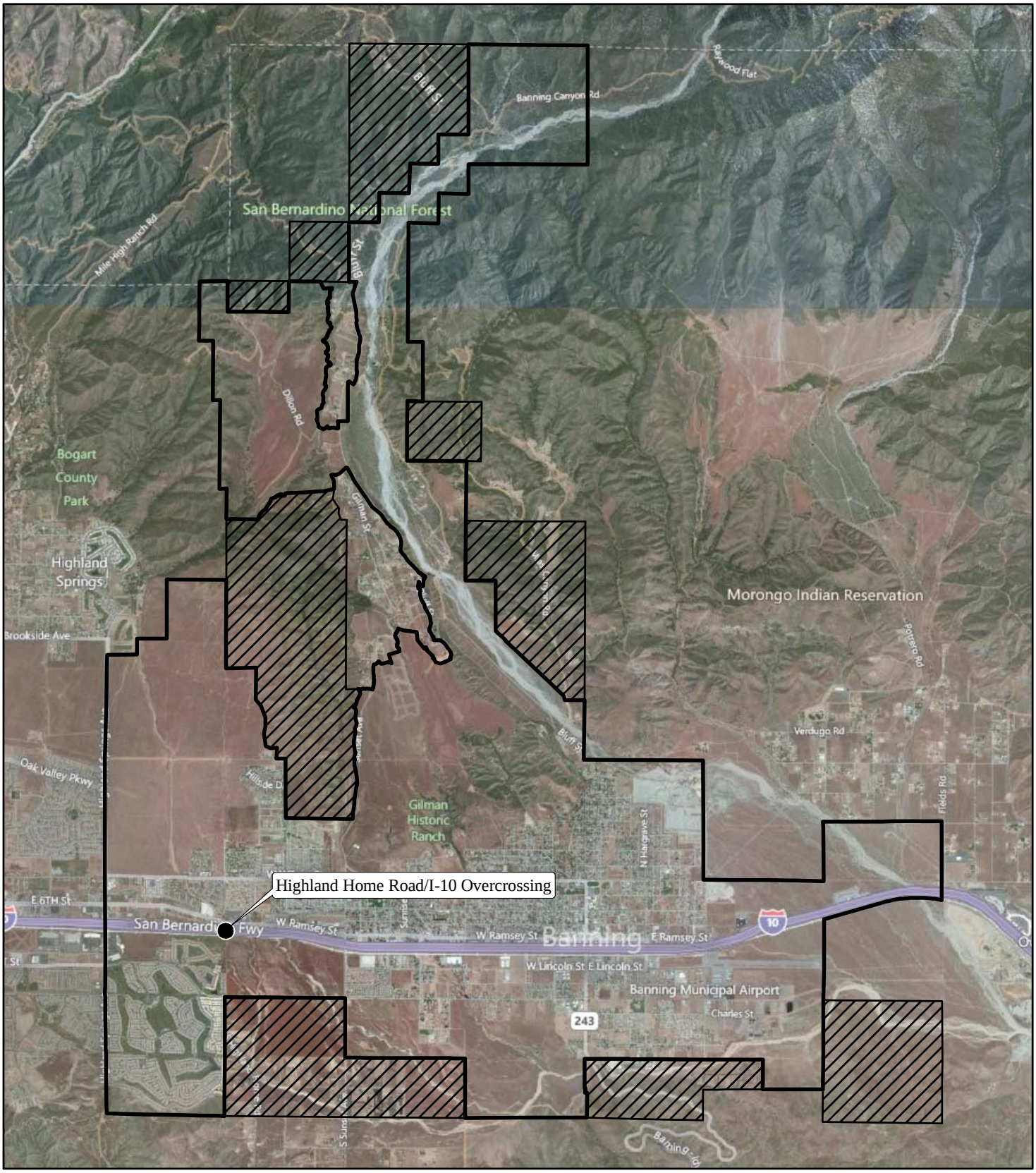

LSA

LEGEND

- Highland Home Road/I-10 Overcrossing
- City of Banning Limits
- City of Banning Sphere of Influence

0 3000 6000
FEET

FIGURE 2

Banning General Plan Ammendment

Project Aerial

SOURCE: Bing Maps (c.2010), Riverside LAFCO (2006), SCAG (2008)

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- Update the City's General Plan Circulation Element to be consistent with adjacent jurisdictions' LOS D standards to more efficiently manage the operation of arterials, particularly where roadways are under multiple local jurisdictions.
- Provide consistency between the City's General Plan Circulation Element and the County's General Plan – Circulation Element relative to I-10/Highland Home Road.

METHODOLOGY RELATED TO NOISE IMPACT ASSESSMENT

Evaluation of noise impacts associated with a proposed mixed-use project typically includes the following:

- Determine the noise impacts associated with short-term construction and long-term operation of the proposed project on adjacent uses.
- Determine the long-term traffic and aircraft noise impacts on on-site noise sensitive uses.
- Determine the required mitigation measures to reduce short-term and long-term noise impacts.

This noise impact analysis utilizes the City's noise standards, including the City's Noise Element and Municipal Code, as thresholds against which potential noise impacts are evaluated.

CHARACTERISTICS OF SOUND

Sound is increasing in the environment and can affect quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound and describes a noisy or quiet environment; it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves, combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

MEASUREMENT OF SOUND

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units, such as inches or pounds, decibels are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 decibels (dB) are 10 times more intense than 1 dB, 20 dB are 100 times more intense, and 30 dB are 1,000 times more intense. Thirty decibels (30 dB) represent 1,000 times as much acoustic energy as 1 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source, noise in a relatively flat environment with absorptive vegetation, decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and community noise equivalent level (CNEL) or the day-night average level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours. The City uses the CNEL noise scale for long-term noise impact assessments.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Another noise scale often used together with the L_{max} in noise ordinances for enforcement purposes is noise standards in terms of percentile noise levels. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first is audible impacts, which refers to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dBA or greater, since this level has been found to be barely perceptible in exterior

environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dBA. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise level of less than 1.0 dBA, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

PSYCHOLOGICAL AND PHYSIOLOGICAL EFFECTS OF NOISE

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions and thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160–165 dBA will result in dizziness or loss of equilibrium.

The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less-developed areas.

Table A lists "Definitions of Acoustical Terms," and Table B shows "Common Sound Levels and Their Sources."

SETTING

Thresholds of Significance

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the criteria in the City's Noise Element of the General Plan and Municipal Code.

City of Banning Noise Standards

Noise Element of the General Plan. The Noise Element of the General Plan contains noise standards to prevent the degradation of the noise environment from land use intensification and to minimize the adverse effects of currently existing noise sources, particularly from vehicular traffic in the City. The exterior noise standard for sensitive land uses, such as residences, schools, hotels, motels, churches, and hospitals is 65 dBA CNEL.

Municipal Code. Section 8.44 of the City's Noise Ordinance lists the noise ordinance limits. Exterior noise levels from stationary sources are not permitted to exceed the levels listed in Table C, plus the following limits:

Table A: Definitions of Acoustical Terms

Term	Definition
Decibel, dB	A unit of level that denotes the ratio between two quantities proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. 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 subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L_{02}, L_{08}, L_{50}, L_{90}	The fast A-weighted noise levels equaled or exceeded by a fluctuating sound level at 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control 1991.

Table B: Common Sound Levels and Their Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	
Near Freeway Auto Traffic	70	Moderately Loud	Reference Level
Average Office	60	Quiet	½ as loud
Suburban Street	55	Quiet	
Light Traffic; Soft Radio Music in Apartment	50	Quiet	¼ as loud
Large Transformer	45	Quiet	
Average Residence without Stereo Playing	40	Faint	⅛ as loud
Soft Whisper	30	Faint	
Rustling Leaves	20	Very Faint	
Human Breathing	10	Very Faint	Threshold of Hearing
	0	Very Faint	

Source: Compiled by LSA Associates, Inc. 2002.

Table C: Exterior Noise Limits (dBA)

Land Use	Time	Limit
Residential	10:00 p.m. to 7:00 a.m.	45
	7:00 a.m. to 10:00 p.m.	55
Industrial and Commercial	Anytime	75

Source: City of Banning, 2007.
dBA = A-weighted decibels

- Basic noise level for a cumulative period of not more than 30 minutes in any 1 hour (L_{50}); or
- Basic noise level plus 5 dBA for a cumulative period of not more than 15 minutes in any 1 hour (L_{25}); or
- Basic noise level plus 10 dBA for a cumulative period of not more than 5 minutes in any 1 hour (L_{8}); or
- Basic noise level plus 15 dBA for a cumulative period of not more than 1 minute in any 1 hour (L_{2}); or
- Basic noise level plus 20 dBA for any period of time (L_{max}).

Construction activities are permitted to exceed the permitted noise levels between the hours of 7:00 a.m. and 6:00 p.m.

PROJECT IMPACTS

Construction Noise

The purpose of the proposed project is to change the design LOS at local intersections from LOS C to LOS D. In addition, the proposed project would replace the future planned I-10/Highland Home Road interchange with an overcrossing. The proposed project does not include any specific construction activities within the City. Therefore, noise impacts from construction activities were not calculated.

Long-Term Traffic Noise Impacts

The purpose of the proposed project is to change the design LOS at local intersections from LOS C to LOS D and to replace the future planned I-10/Highland Home Road interchange with an overcrossing. The proposed project would not generate new vehicular traffic trips since it would not construct new homes or businesses. However, there is a possibility that the proposed project would affect the traffic flow within the City. Therefore, the potential impact of the proposed project on regional vehicle noise was calculated. The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate highway traffic-related noise conditions along Wilson Street, Highland Home Road, Ramsey Street, and other roadways in the City. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The existing average daily traffic (ADT) volumes in the area were taken from the *Traffic Impact Analysis* prepared for the project (LSA, March 2012). The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values.

Table D lists the traffic noise levels that are expected if the I-10/Highland Home Road interchange were to be built, as is currently planned in the City's General Plan. Table E lists the traffic noise levels that are expected if the I-10/Highland Home Road overcrossing were to be built. Table F lists the traffic noise levels that are expected if neither an interchange nor an overcrossing were to be built, or rather, no road connection. The results of the traffic noise modeling are included in Appendix A. The change in the design LOS from C to D, which is planned as part of the proposed project, would not change the roadway ADTs. Therefore, the noise levels listed in Tables D, E, and F are representative of both the LOS C and LOS D scenarios.

Table D: Existing General Plan Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Outermost Lane
Wilson Street west of Highland Springs Avenue	19,700	59	119	252	68.3
Wilson Street between Highland Springs Avenue and Highland Home Road	31,000	77	160	341	70.3
Wilson Street between Highland Home Road and Sunset Avenue	35,000	83	173	369	70.8
Wilson Street east of Sunset Avenue	25,700	69	141	301	69.5
6th Street west of Highland Springs Avenue	27,100	71	146	311	69.7
Ramsey Street between Highland Springs Avenue and Highland Home Road	29,200	74	153	327	70.0
Ramsey Street between Highland Home Road and Sunset Avenue	28,400	73	151	321	69.9
Ramsey Street east of Sunset Avenue	26,100	70	143	304	69.5
1st Street west of Highland Springs Avenue	26,600	70	144	308	69.6
Sun Lakes Boulevard between Highland Springs Avenue and Highland Home Road	29,800	75	155	332	70.1
Westward Avenue between Highland Home Road and Sunset Avenue	14,200	< 50	78	167	66.6
Westward Avenue east of Sunset Avenue	1,400	< 50	< 50	< 50	56.5
Highland Springs Avenue north of Wilson Street	31,400	78	161	343	70.3
Highland Springs Avenue between Wilson Street and Ramsey Street	30,700	77	159	338	70.3
Highland Springs Avenue between Ramsey Street and I-10	37,100	86	179	384	71.1
Highland Springs Avenue between I-10 and Sun Lake Boulevard	31,100	77	160	341	70.3
Highland Springs Avenue south of Sun Lake Boulevard	27,900	72	149	318	69.8
Highland Home Road north of Wilson Street	30,600	76	158	338	70.2
Highland Home Road between Wilson Street and Ramsey Street	28,200	73	150	320	69.9
Highland Home Road between Ramsey Street and I-10	34,100	82	170	363	70.7
Highland Home Road between I-10 and Sun Lake Boulevard	12,900	< 50	91	191	66.5
Highland Home Road south of Sun Lake Boulevard	7,000	< 50	63	128	63.8
Sunset Avenue north of Wilson Street	22,600	< 50	107	227	68.1
Sunset Avenue between Wilson Street and Ramsey Street	24,500	55	112	240	68.4
Sunset Avenue between Ramsey Street and I-10	35,500	68	143	307	70.0
Sunset Avenue between I-10 and Lincoln Street	22,200	< 50	105	225	68.0
Sunset Avenue between Lincoln Street and Westward Avenue	7,900	< 50	55	114	63.5
Sunset Avenue south of Westward Avenue	5,900	< 50	< 50	94	62.2

Source: LSA Associates, Inc., April 2012.
ADT = average daily trips
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibel
ft = foot/feet

Table E: Highland Home Road Overcrossing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Outermost Lane	Change from Existing General Plan Level (dBA)
Wilson Street west of Highland Springs Avenue	16,300	< 50	106	223	67.5	-0.8
Wilson Street between Highland Springs Avenue and Highland Home Road	26,400	70	144	306	69.6	-0.7
Wilson Street between Highland Home Road and Sunset Avenue	33,300	80	167	357	70.6	-0.2
Wilson Street east of Sunset Avenue	26,800	71	145	309	69.7	0.2
6th Street west of Highland Springs Avenue	23,800	66	134	286	69.1	-0.6
Ramsey Street between Highland Springs Avenue and Highland Home Road	27,600	72	148	315	69.8	-0.2
Ramsey Street between Highland Home Road and Sunset Avenue	33,000	80	166	355	70.6	0.7
Ramsey Street east of Sunset Avenue	27,000	71	146	311	69.7	0.2
1st Street west of Highland Springs Avenue	23,300	65	133	282	69.1	-0.5
Sun Lakes Boulevard between Highland Springs Avenue and Highland Home Road	32,700	80	165	353	70.5	0.4
Westward Avenue between Highland Home Road and Sunset Avenue	14,500	< 50	79	169	66.6	0.0
Westward Avenue east of Sunset Avenue	1,400	< 50	< 50	< 50	56.5	0.0
Highland Springs Avenue north of Wilson Street	33,700	81	168	360	70.7	0.4
Highland Springs Avenue between Wilson Street and Ramsey Street	33,000	80	166	355	70.6	0.3
Highland Springs Avenue between Ramsey Street and I-10	43,400	95	199	426	71.8	0.7
Highland Springs Avenue between I-10 and Sun Lake Boulevard	27,700	72	148	316	69.8	-0.5
Highland Springs Avenue south of Sun Lake Boulevard	25,000	68	139	295	69.4	-0.4
Highland Home Road north of Wilson Street	30,100	76	156	334	70.2	0.0
Highland Home Road between Wilson Street and Ramsey Street	23,200	65	132	281	69.0	-0.9
Highland Home Road between Ramsey Street and I-10	7,700	< 50	67	136	64.2	-6.5
Highland Home Road between I-10 and Sun Lake Boulevard	9,400	< 50	75	155	65.1	-1.4
Highland Home Road south of Sun Lake Boulevard	5,000	< 50	< 50	104	62.4	-1.4
Sunset Avenue north of Wilson Street	20,400	< 50	100	212	67.6	-0.5
Sunset Avenue between Wilson Street and Ramsey Street	22,800	< 50	107	229	68.1	-0.3
Sunset Avenue between Ramsey Street and I-10	36,100	69	145	310	70.1	0.1
Sunset Avenue between I-10 and Lincoln Street	20,700	< 50	101	214	67.7	-0.3
Sunset Avenue between Lincoln Street and Westward Avenue	7,500	< 50	54	110	63.3	-0.2
Sunset Avenue south of Westward Avenue	4,300	< 50	< 50	77	60.9	-1.3

Source: LSA Associates, Inc., April 2012.
ADT = Average Daily Traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Table F: No Road Connection Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Outermost Lane	Change from Existing General Plan Level (dBA)
Wilson Street west of Highland Springs Avenue	16,300	< 50	106	223	67.5	-0.8
Wilson Street between Highland Springs Avenue and Highland Home Road	26,400	70	144	306	69.6	-0.7
Wilson Street between Highland Home Road and Sunset Avenue	33,300	80	167	357	70.6	-0.2
Wilson Street east of Sunset Avenue	26,800	71	145	309	69.7	0.2
6th Street west of Highland Springs Avenue	23,800	66	134	286	69.1	-0.6
Ramsey Street between Highland Springs Avenue and Highland Home Road	27,600	72	148	315	69.8	-0.2
Ramsey Street between Highland Home Road and Sunset Avenue	33,000	80	166	355	70.6	0.7
Ramsey Street east of Sunset Avenue	27,000	71	146	311	69.7	0.2
1st Street west of Highland Springs Avenue	23,500	65	133	283	69.1	-0.5
Sun Lakes Boulevard between Highland Springs Avenue and Highland Home Road	31,100	77	160	341	70.3	0.2
Westward Avenue between Highland Home Road and Sunset Avenue	13,000	< 50	74	157	66.2	-0.4
Westward Avenue east of Sunset Avenue	1,400	< 50	< 50	< 50	56.5	0.0
Highland Springs Avenue north of Wilson Street	34,900	83	172	368	70.8	0.5
Highland Springs Avenue between Wilson Street and Ramsey Street	35,300	83	174	371	70.9	0.6
Highland Springs Avenue between Ramsey Street and I-10	47,500	100	211	452	72.1	1.0
Highland Springs Avenue between I-10 and Sun Lake Boulevard	31,800	78	162	346	70.4	0.1
Highland Springs Avenue south of Sun Lake Boulevard	27,600	72	148	315	69.8	0.0
Highland Home Road north of Wilson Street	27,500	72	148	315	69.8	-0.4
Highland Home Road between Wilson Street and Ramsey Street	19,100	58	117	247	68.2	-1.7
Highland Home Road between Ramsey Street and I-10	50	< 50	< 50	< 50	42.4	-28.3
Highland Home Road between I-10 and Sun Lake Boulevard	1,800	< 50	< 50	56	57.9	-8.6
Highland Home Road south of Sun Lake Boulevard	4,900	< 50	< 50	102	62.3	-1.5
Sunset Avenue north of Wilson Street	21,800	< 50	104	222	67.9	-0.2
Sunset Avenue between Wilson Street and Ramsey Street	24,700	55	113	241	68.5	0.1
Sunset Avenue between Ramsey Street and I-10	39,600	73	154	330	70.5	0.5
Sunset Avenue between I-10 and Lincoln Street	24,200	54	112	238	68.4	0.4
Sunset Avenue between Lincoln Street and Westward Avenue	8,900	< 50	59	123	64.0	0.5
Sunset Avenue south of Westward Avenue	5,700	< 50	< 50	92	62.1	-0.1

Source: LSA Associates, Inc., April 2012.
ADT = Average Daily Traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

As shown in Table E, the largest increase in noise that is associated with replacement of the future planned interchange with an overcrossing is 0.7 dBA along Ramsey Street between Highland Home Road and Sunset Avenue. This noise level increase is small and not perceptible by the human ear. Therefore, project-related long-term traffic noise impact would be small and less than significant.

As shown in Table F, the largest increase in noise that is associated with no road connection is 1.0 dBA along Highland Springs Avenue between Ramsey Street and the I-10. This noise level increase is small and not perceptible by the human ear. Therefore, project-related long-term traffic noise impact would be small and less than significant.

Long-Term Operational Noise Impacts

The purpose of the proposed project is to change the design LOS at local intersections from LOS C to LOS D and to replace the future planned I-10/Highland Home Road interchange with an overcrossing. The proposed project does not include the construction of any specific developments within the City. Therefore, long-term operational noise impacts were not calculated.

MITIGATION MEASURES

The proposed project would not result in any short-term construction or long-term operational noise impacts. Therefore, mitigation measures are not required.

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APPENDIX A

FHWA TRAFFIC NOISE MODEL PRINTOUTS

TABLE Existing Generap Plan-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson West of Highland Springs
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
59.2	119.0	252.2	541.4

TABLE Existing Generap Plan-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
77.0	159.5	340.5	732.1

TABLE Existing Generap Plan-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 35000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
82.9	172.7	369.1	793.7

TABLE Existing Generap Plan-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson East of Sunset
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.48

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
68.9	141.2	300.7	646.2

TABLE Existing Generap Plan-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey West of Highland Springs
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.1	146.2	311.5	669.4

TABLE Existing Generap Plan-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
74.3	153.4	327.3	703.5

TABLE Existing Generap Plan-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.91

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
73.1	150.7	321.3	690.6

TABLE Existing Generap Plan-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey East of Sunset
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
69.6	142.6	303.8	652.9

TABLE Existing Generap Plan-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: 1st West of Highland Springs
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.63

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.3	144.4	307.7	661.2

TABLE Existing Generap Plan-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sun Lakes Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
75.2	155.5	331.7	713.1

TABLE Existing Generap Plan-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Westward Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14200 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	78.1	166.7	358.4

TABLE Existing Generap Plan-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Westward East of Sunset
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1400 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	77.4

TABLE Existing Generap Plan-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs North of Wilson
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
77.6	160.9	343.4	738.4

TABLE Existing Generap Plan-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 30700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
76.6	158.5	338.4	727.4

TABLE Existing Generap Plan-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 37100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.07

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
85.9	179.4	383.7	825.1

TABLE Existing Generap Plan-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw I-10 and Sun Lake
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
77.2	159.9	341.3	733.7

TABLE Existing Generap Plan-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs South of Sun Lake
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.84

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
72.3	149.0	317.6	682.5

TABLE Existing Generap Plan-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home North of Wilson
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 30600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.24

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
76.4	158.2	337.6	725.8

TABLE Existing Generap Plan-19
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
72.8	150.0	319.8	687.4

TABLE Existing Generap Plan-20
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 34100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
81.6	169.8	362.8	780.1

TABLE Existing Generap Plan-21
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw I-10 and Sun Lake
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	91.1	190.9	408.6

TABLE Existing Generap Plan-22
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home South of Sun Lake
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	63.2	128.3	272.4

TABLE Existing Generap Plan-23
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset North of Wilson
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22600 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.08

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	106.7	227.3	488.4

TABLE Existing Generap Plan-24
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 24500 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
54.6	112.4	239.7	515.2

TABLE Existing Generap Plan-25
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 35500 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
68.4	143.2	306.6	659.6

TABLE Existing Generap Plan-26
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw I-10 and Lincoln
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22200 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	105.5	224.6	482.6

TABLE Existing Generap Plan-27
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Lincoln and Westward
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7900 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	55.2	113.9	242.8

TABLE Existing Generap Plan-28
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset South of Westward
NOTES: Banning General Plan Amendment - Existing Generap Plan

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5900 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	94.3	200.2

TABLE Highland Home Overcrossing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson West of Highland Springs
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16300 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	105.5	222.6	477.4

TABLE Highland Home Overcrossing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.0	143.7	306.1	657.8

TABLE Highland Home Overcrossing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
80.5	167.1	357.1	767.8

TABLE Highland Home Overcrossing-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson East of Sunset
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.66

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.6	145.1	309.2	664.5

TABLE Highland Home Overcrossing-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey West of Highland Springs
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
65.9	134.4	285.8	614.0

TABLE Highland Home Overcrossing-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.9	147.9	315.3	677.6

TABLE Highland Home Overcrossing-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.57

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
80.0	166.2	355.0	763.2

TABLE Highland Home Overcrossing-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey East of Sunset
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	71.0	145.8	310.7	667.8

TABLE Highland Home Overcrossing-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: 1st West of Highland Springs
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.05

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
65.1	132.6	281.8	605.4

TABLE Highland Home Overcrossing-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sun Lakes Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 32700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.53

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
79.6	165.2	352.8	758.6

TABLE Highland Home Overcrossing-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Westward Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14500 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.65

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	79.2	169.1	363.5

TABLE Highland Home Overcrossing-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Westward East of Sunset
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1400 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	77.4

TABLE Highland Home Overcrossing-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs North of Wilson
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.66

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
81.0	168.4	359.9	774.0

TABLE Highland Home Overcrossing-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.57

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
80.0	166.2	355.0	763.2

TABLE Highland Home Overcrossing-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 43400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	94.7	198.8	425.8	916.0

TABLE Highland Home Overcrossing-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw I-10 and Sun Lake
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
72.0	148.3	316.0	679.2

TABLE Highland Home Overcrossing-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs South of Sun Lake
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
67.8	138.7	295.3	634.4

TABLE Highland Home Overcrossing-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home North of Wilson
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 30100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
75.7	156.5	333.9	717.9

TABLE Highland Home Overcrossing-19
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
64.9	132.2	281.0	603.6

TABLE Highland Home Overcrossing-20
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	66.8	136.4	290.2

TABLE Highland Home Overcrossing-21
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw I-10 and Sun Lake
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	75.1	155.2	331.2

TABLE Highland Home Overcrossing-22
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home South of Sun Lake
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.37

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	103.5	218.2

TABLE Highland Home Overcrossing-23
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset North of Wilson
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20400 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	99.9	212.4	456.2

TABLE Highland Home Overcrossing-24
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22800 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	107.3	228.6	491.2

TABLE Highland Home Overcrossing-25
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 36100 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
69.1	144.8	310.1	667.0

TABLE Highland Home Overcrossing-26
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw I-10 and Lincoln
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20700 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.70

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	100.8	214.4	460.6

TABLE Highland Home Overcrossing-27
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Lincoln and Westward
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7500 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES		
DAY	EVENING	NIGHT
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AUTOS		
75.51	12.57	9.34
M-TRUCKS		
1.56	0.09	0.19
H-TRUCKS		
0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	53.5	110.1	234.6

TABLE Highland Home Overcrossing-28
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset South of Westward
NOTES: Banning General Plan Amendment - Highland Home Overcrossing

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	77.1	162.5

TABLE No Interchange-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson West of Highland Springs
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	105.5	222.6	477.4

TABLE No Interchange-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.0	143.7	306.1	657.8

TABLE No Interchange-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
80.5	167.1	357.1	767.8

TABLE No Interchange-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Wilson East of Sunset
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.66

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.6	145.1	309.2	664.5

TABLE No Interchange-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey West of Highland Springs
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
65.9	134.4	285.8	614.0

TABLE No Interchange-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.9	147.9	315.3	677.6

TABLE No Interchange-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.57

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
80.0	166.2	355.0	763.2

TABLE No Interchange-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Ramsey East of Sunset
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.0	145.8	310.7	667.8

TABLE No Interchange-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: 1st West of Highland Springs
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
65.4	133.3	283.4	608.8

TABLE No Interchange-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sun Lakes Btw Highland Springs and Highland Home
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
77.2	159.9	341.3	733.7

TABLE No Interchange-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Westward Btw Highland Home and Sunset
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13000 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	73.8	157.3	338.0

TABLE No Interchange-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Westward East of Sunset
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1400 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	77.4

TABLE No Interchange-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs North of Wilson
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 34900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
82.8	172.3	368.4	792.2

TABLE No Interchange-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 35300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
83.4	173.6	371.2	798.2

TABLE No Interchange-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 47500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 72.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
100.2	211.0	452.1	972.8

TABLE No Interchange-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs Btw I-10 and Sun Lake
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 31800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
78.2	162.2	346.3	744.6

TABLE No Interchange-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Springs South of Sun Lake
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.9	147.9	315.3	677.6

TABLE No Interchange-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home North of Wilson
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.77

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
71.7	147.6	314.5	676.0

TABLE No Interchange-19
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
58.2	116.7	247.1	530.4

TABLE No Interchange-20
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 50 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 42.37

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

TABLE No Interchange-21
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home Btw I-10 and Sun Lake
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	56.3	112.4

TABLE No Interchange-22
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Highland Home South of Sun Lake
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	102.2	215.3

TABLE No Interchange-23
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset North of Wilson
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 21800 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	104.3	221.9	476.8

TABLE No Interchange-24
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Wilson and Ramsey
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 24700 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
54.8	113.0	241.0	518.0

TABLE No Interchange-25
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Ramsey and I-10
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 39600 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
73.2	153.9	329.7	709.4

TABLE No Interchange-26
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw I-10 and Lincoln
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 24200 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
54.2	111.5	237.8	511.0

TABLE No Interchange-27
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset Btw Lincoln and Westward
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8900 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	59.3	123.1	262.8

TABLE No Interchange-28
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/25/2012
ROADWAY SEGMENT: Sunset South of Westward
NOTES: Banning General Plan Amendment - No Interchange

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5700 SPEED (MPH): 40 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES			
	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.10

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	92.2	195.7
