3.4 Noise

An Acoustical and Vibration Assessment Report was prepared for the Project by Investigative Science and Engineering, dated September 27, 2007. A copy of the technical report is included as Appendix F to this SEIR.

3.4.1 Existing Conditions

Noise is generally defined as unwanted or annoying sound that is typically associated with human activity and which interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance. The response of individuals to similar noise events is diverse and influenced by the type of noise, the perceived importance of the noise and its appropriateness in the setting, the time of day, and the sensitivity of the individual hearing the sound. The minimum change in sound level that the human ear can detect is approximately 3 decibels (dB). A change in sound level of 10 dB is usually perceived by the average person as a doubling (or halving) of the sound's loudness.

The method commonly used to quantify environmental sounds consists of determining all of the frequencies of a sound according to a weighting system that reflects the nonlinear response characteristics of the human ear. This is called "A" weighting, and the decibel level measured is called the A-weighted sound level (or dBA). The sound measure employed by the State of California and the County of San Diego is known as the Community Noise Equivalence Level (CNEL) which is defined as the "A" weighted average sound level for a 24-hour day. It is calculated by adding a 5-decibel penalty to sound levels in the evening (7:00 p.m. to 10:00 p.m.), and a 10-decibel penalty to sound levels in the night (10:00 p.m. to 7:00 a.m.) to compensate for the increased sensitivity to noise during the quieter evening and nighttime hours.

To determine existing noise levels at the Highlands Ranch property under existing conditions, two sound level meters were used (refer to Figure 3-7, *Noise Monitoring Locations*). One meter was placed near the center of the project site and the other meter was placed at the project site's northeastern edge. The measurements were performed on July 11, 2003, during typical afternoon traffic conditions. The results of the sound level monitoring are shown below in *Table 3-14, Measured Ambient Sound Levels*. The values for the equivalent sound level (Leq-h), the maximum and minimum measured sound levels (Lmax and Lmin), and the statistical indicators L10, L50, and L90, are given for each monitoring location. The observed existing dominant noise source was from nearby residential activities and infrequent distant sound sources.

Table 3-14 MEASURED AMBIENT SOUND LEVELS

		1-Hour Noise Level Descriptors in dBA					
Site	**Start Time**	**Leq**	**Lmax**	**Lmin**	**L10**	**L50**	**L90**
ML 1	3:00 p.m.	44.6	57.8	36.2	47.4	40.5	37.6
ML 2	3:25 p.m.	46.8	62.7	38.4	49.2	43.0	40.5

ML 1: Northeastern portion of project along Barcelona Street - GPS 32° 43.605 x 116° 59.008
ML 2: Eastern potion of project area facing Jamacha Blvd. - GPS 32° 43.489 x 116° 59.375
Measurements performed by ISE on July 11, 2003. Estimated Position Error (EPE) = 16 feet.
SOURCE: Investigative Science and Engineering; September 27, 2007

3.4.2 Guidelines for the Determination of Significance

The Project would have a significant adverse noise impact if any of the following would occur as a result of a Project-related component. Would the Project:

- Expose on- or off-site noise sensitive land uses (including biological open space) to a substantial permanent increase in ambient noise levels that could exceed the allowable limits of Policy 4b of the County of San Diego General Plan Noise Element [i.e., exterior (60 dBA CNEL) and interior (45 dBA CNEL)].

- Result in exposure, on- or off-site, to an existing Noise sensitive land use (NSLU) to noise 10 dB CNEL over existing noise levels and County General Plan noise standards are not exceeded.

- In cases where existing noise levels already exceed the applicable noise guideline, would the Project: a) generate noise that would increase noise levels at or beyond the property line by 1 dB; or b) expose on- or off-site, existing and planned noise sensitive land uses (NSLU) to road, railroad, airport, or heliport noise 3 dB CNEL over existing noise levels that are not to exceed 65 dB CNEL.

- Result in non-transportation noise generated by the project exceeding the standards listed under the San Diego County Code of Regulatory Ordinances, Section 36.404, Sound Level Limits at or beyond the property line.

- Result in construction noise exceeding the construction equipment standards listed in the San Diego County Code of Regulatory Ordinances, Section 36.410, Construction Equipment.

3.4.3 Analysis of Project Effects and Determination as to Significance

- ***Would the Project expose on- or off-site noise sensitive land uses (including biological open space) to a substantial permanent increase in ambient noise levels that could exceed the allowable limits of Policy 4b of the County of San Diego General Plan Noise Element [i.e., exterior (60 dBA CNEL) and interior (45 dBA CNEL)] or any other applicable State/Federal noise regulations?***

The Project proposes residential development which would not generate noise sources loud enough to significantly impact noise sensitive land uses. Construction noise that would be generated by the Project is regulated by the USFWS and the CDFG for its effect on federally endangered least Bell's and other bird species, including but not limited to, the coastal California gnatcatcher and the California least tern. Construction within the proposed Project area would be permitted to occur between the hours of 7 a.m. and 7 p.m. Monday through Friday in accordance with County Noise Ordinance (Section 36.410) operational requirements. As a condition of Project approval, on-site residential occupancy permits would not be issued until completion of mass grading activities; therefore, future on-site residents would not be subject to adverse noise impacts resulting from construction activities.

Sensitive avian habitat was found onsite and adjacent to the project site boundaries as documented in the project's biological technical report (see Appendix E). As discussed in EIR Section 3.2,

Biological Resources, raptors have been observed on the Project site within the Eucalyptus woodland in the northwestern corner of the site. During Project construction activities, the on-site eucalyptus woodland area could be exposed to noise levels up to 83.6 decibels as a result of blasting operations which is regarded as a significant impact (**Significant Indirect Impact 3.4-A).**

California gnatcatchers onsite also could experience indirect impacts from construction-related high noise levels. Construction equipment operation, haul truck pass-by, and blasting noise levels could be as high as 95.6 decibels, which would result in a significant indirect impact (**Significant Indirect Impact 3.4-A)**. In addition, rock crushing operations can generate potential noise levels up to 86.5 decibels at 50 feet and therefore could exceed 60 decibels beyond the Project disturbance footprint, resulting in a significant indirect impact to avian habitat (**Significant Direct and Indirect Impact 3.4-B)**. Other intermittent loud noises that may be above 60 decibels would be considered adverse but not significant as long as the hourly average is not above 60 decibels. Based on the California gnatcatcher's apparent tolerance of noise, noise impacts outside the breeding season are not expected to be significant. Nonetheless, the potential exists for significant indirect impacts to the California gnatcatcher during the breeding season.

- ***Would the Project result in exposure, on- or off-site, to an existing Noise sensitive land use (NSLU) to noise 10 dB CNEL over existing noise levels and County General Plan noise standards are not exceeded?***

Transportation noise levels in the County of San Diego are governed under Policy 4b in the Noise Element of the County's General Plan. Exterior noise standards are typically applied to areas within a proposed development that would be classified as "Noise sensitive land uses", which includes the building site of any residence, hospital, school, library, or similar facility where quiet is an important attribute of the environment. The County General Plan noise standard for residential areas and other Noise sensitive land uses is 60 decibels CNEL.

The San Diego County Noise Ordinance Section 36.404 governs fixed source and/or operational noise. The applicable sound levels are a function of the time of day and the land use zone. The relevant limits for residential areas and other noise sensitive land uses are 50.0 dBA Leq-h during the hours of 7 a.m. to 10 p.m. and 45.0 dBA Leq-h during the hours of 10 p.m. to 7 a.m. The analysis of potential noise impacts resulting from the proposed Project considers short-term construction noise and long-term operational (stationary and vehicular) noise.

A. Short-Term Construction Noise

The estimated construction equipment noise levels are provided below in Table 3-15, *Predicted Construction Noise Levels*, for the typical construction activities identified for the proposed Project. The construction activities at the site would include rough grading (i.e., clearing, grubbing, and general pad and road alignment formation), which typically consists of three distinct phases: mobilization, scraper hauls/finishing, and additional site finishing work. In addition, if blasting is required, rock drills would be utilized. Construction would typically occur between the hours of 7 a.m. and 7 p.m. Monday through Friday in accordance with County operational requirements. As depicted on Figure 3-9, *Residential Receptors,* the nearest residential receptor would be located over 160-feet distant from any proposed construction activities. The point-source attenuation between this receptor and any construction would be slightly over 10.1 dBA. As a condition of Project approval, on-site residential occupancy permits would not be issued until completion of mass grading

activities; therefore, future on-site residents would not be subject to adverse noise impacts resulting from grading activities. Given this, no significant noise impacts from normal construction noise are expected at nearby sensitive receptors.

Table 3-15 PREDICTED CONSTRUCTION NOISE LEVELS (NO DRILLS)

Equipment Type	Qty. Used	Duty Cycle (Hrs. / day)	Source Level @ 50 Feet (dBA)	Cumulative Effect @ 50 Feet (dBA Leq-8h)
ROUGH GRADING OPERATIONS				
Dozer – D8 Cat	2	8	75	76.2
Loader	2	8	70	71.2
Water Truck	1	8	70	68.2
Scraper	2	8	75	76.2
			Worst-Case Aggregate Sum @ 50 Ft. (Σ):	80.1
			Average Sum @ Closest Receptor (160 feet Distant) (Σ):	**70.1**

SOURCE: Investigative Science and Engineering; September 27, 2007

Table 3-16 PREDICTED CONSTRUCTION NOISE LEVELS (WITH DRILLS)

Equipment Type	Qty. Used	Duty Cycle (Hrs. / day)	Source Level @ 50 Feet (dBA)	Cumulative Effect @ 50 Feet (dBA Leq-8h)
ROUGH GRADING OPERATIONS				
Dozer – D8 Cat	2	8	75	76.2
Loader	2	8	70	71.2
Water Truck	1	8	70	68.2
Rock Drill	2	8	85	86.2
Haul Truck	4	8	70	74.3
Scraper	1	8	75	73.2
			Worst-Case Aggregate Sum @ 50 Ft. (Σ):	87.2
			Average Sum @ Closest Receptor (160 feet Distant)* (Σ):	**75.7**

* Rock drills would operate at 200 feet from closest receptor.
SOURCE: Investigative Science and Engineering; September 27, 2007

In addition to noise generated by construction equipment, trucks utilized to haul earth materials around the site also have the potential to create significant noise impacts on noise sensitive land uses. Based on the Project-specific analysis (refer to Appendix F), it was determined that the maximum noise impacts to the closest noise sensitive receptor (i.e., residences) that could result from haul truck activities would be 62 dBA. This level is below the County's 75 dBA threshold for construction activities. Consequently, no direct noise impacts due to truck operations are expected.

Blasting is proposed within the project site and is necessitated by the presence of large granitic rock masses throughout the site. Rock drills utilized for blasting shall be constrained to operate no closer than 200 feet from any existing residence. Based on the Project specific analysis (refer to Appendix F), it was determined that potential blasting impacts to nearby sensitive receptors (i.e., residences) would not exceed an average receptor noise level of 75 dBA, and no acoustical impacts to adjacent residences would occur as a result of blasting operations. As described in EIR Section 1.1.2, other impulsive noise sources (i.e., hoe rams or jack hammers) are not anticipated to be used during blasting operations on individual residential pads.

Finally, onsite rock crushing may be necessary as part of grading operations. The rock crusher would be located within the area proposed as the eastern park site, and would be surrounded by a 16-foot-high berm enclosure. By utilizing a 16-foot-high berm, noise levels exceeding 60 dBA would not occur beyond areas proposed for direct impacts by project grading, as shown on Figure 3-7, *Anticipated Noise Contours from Rock Crushing Operations*. However, without a 16-foot berm surrounding the rock crusher, the potential exists for significant noise impacts beyond the Project's footprint, and this is regarded as a significant impact (**Significant Direct and Indirect Impact 3.4-B)**

B. Long Term Operational Noise

Onsite operational noise sources would be generated from pedestrians and activities associated with the proposed private parks. These activities are similar to typical recreational activities of other projects measured to produce average levels of short-term events between 50 to 55 dBA at 50 feet from the source. Pursuant to the Major Use Permit P02-023, and as specified by the Highlands Ranch Specific Plan Amendment, recreational activities would be restricted to daytime hours. Proposed park amenities include passive play areas, tot lots, one tennis court, and shade structures. Noise levels from recreational use would be below the threshold of significance.

Several sewer lift stations are proposed as part of the Project; however, pursuant to the Major Use Permit P02-023, all sewer lift stations would be located underground, and no noise would be audible above-ground, regardless of the underground location. Any standby generators or related above-ground equipment for the lift stations would require a modification of the Major Use Permit P02-023 to demonstrate compliance to County noise regulations. Therefore, less than significant impacts from this type of use are expected.

The primary source of future noise near the project site would be from vehicular traffic, on and off-site. The results of onsite acoustical modeling are shown below in Table 3-17, *Onsite Transportation Noise Levels*, and are depicted on Figure 3-8, *Proposed 60 dBA CNEL Ground Trace Contours.* Table 3-17 summarizes the modeling results for selected lots within the proposed development area that have rear yards facing or adjacent to the proposed extension of Pointe Parkway. For each lot number examined, the unmitigated ground floor (outdoor pad), and the upper (second story) noise level are presented. Based upon the site configuration and future limits of the 60 dBA noise contour (Figure 3-8), more than 10% of the net lot area for lots fronting on Pointe Parkway could be exposed to noise levels in excess of 60 dBA CNEL, which represents a potential conflict with General Plan Noise Element Policy 4b (**Significant Direct Impact 3.4-C**). In addition, and as shown in Table 3-17, upper story building facades within the Project facing the extension of Pointe Parkway would have noise exposure levels exceeding the County Noise Element Policy 4b noise abatement threshold of 45 dBA (**Significant Direct Impact 3.4-C**).

The results showing the effect of off-site traffic noise increases on the various servicing roadway segments associated with existing and near term cumulative conditions (for both with- and without the proposed project) are presented in the Noise Report included as Appendix F to this SEIR (see Tables 5a – e, pgs. 18 -22). For each roadway segment examined, the worst case average daily traffic volume (ADT) and observed/predicted speeds were considered. Based upon the findings, which are summarized on *Table 3-18, Project-Related Offsite Traffic Noise Increases*, the largest

Table 3-17 ONSITE TRANSPORTATION NOISE LEVELS

Lot No.	Unmitigated Ground Level	Unmitigated Second Level	Lot No.	Unmitigated Ground Level	Unmitigated Second Level
136	57.8	59.6	75	58.1	60.0
125	57.9	59.7	74	58.0	59.9
149	57.8	59.6	211	60.0	61.8
118	58.4	60.4	73	58.3	60.2
116	56.3	58.2	72	58.4	60.3
Park 1	57.9		71	58.4	60.3
101	57.6	59.4	Park 2	56.7	
92	57.4	59.3	29	58.9	60.8
209	59.6	61.5	54	58.4	60.2
77	57.7	59.6	55	55.9	57.8
76	58.4	60.3	42	55.3	57.3
210	59.7	61.6	43	55.6	57.6

SOURCE: Investigative Science and Engineering; September 27, 2007

Table 3-18 PROJECT RELATED OFFSITE TRAFFIC NOISE INCREASE

Roadway Segment Name		Existing (SPL)	Existing plus Project (SPL)	Project Related Difference (SPL)	Near Term plus Cumulative (SPL)	Near Term plus Cumulative plus Project (SPL)	Project Related Difference (SPL)
Jamacha Blvd.	Grand Ave. to La Presa St.	72.6	72.8	0.2	74.2	74.3	0.1
	La Presa St. to Omega St.	72.3	72.4	0.1	74.0	74.0	0.0
	Omega St. to Jamacha Rd.	72.0	72.1	0.1	73.7	73.8	0.1
	Jamacha Rd. to Whitestone Rd.	72.0	72.1	0.1	73.7	73.8	0.1
	Whitestone Rd. to Pointe Pkwy.	72.8	72.9	0.1	75.0	75.1	0.1
	Pointe Pkwy. to Sweetwater Springs	73.5 (N/A)	73.7 (73.5)	0.2 (N/A)	75.8 (N/A)	75.9 (75.8)	0.1 (N/A)
	Sweetwater Springs to Calavo Dr.	71.5 (N/A)	71.6 71.5	0.1 (N/A)	72.7 (N/A)	72.8 (72.8)	0.1 (N/A)
	Calavo Dr. to Campo Rd	75.0 (N/A)	75.1 (75.0)	0.1 (N/A)	75.8 (N/A)	75.8 (N/A)	0.0 (N/A)
Barcelona Street	north of Austin Dr	61.2 (N/A)	61.2 (61.5)	0.0 (N/A)	61.6 (N/A)	61.6 (61.9)	0.0 (N/A)
	south of Austin Dr.	58.7	58.7	0.0	59.0	59.0	0.0
Austin Drive	Barcelona St. to Sweetwater Springs	64.8 (N/A)	64.8 65.6	0.0 (N/A)	65.6 (N/A)	65.6 66.2	0.0 (N/A)
Sweetwater Springs	Del Rio to Austin Dr.	73.3	73.5	0.2	75.2	75.3	0.1
	Austin Dr. to Jamacha Blvd.	71.2 (N/A)	71.4 71.2	0.2 (N/A)	73.8 (N/A)	74.0 73.8	0.2 (N/A)

SPL = Sound Pressure Level in dBA at 50-feet from the road edge. CNEL = Community Noise Exposure Level.
All values given in dBA CNEL. Contours assumed to be line-of-sight perpendicular (⊥) distance.
Values in parentheses indicate segment changes due to proposed Ivy Street Alternative scenario (refer to EIR Section 5.0).
N/A indicates a non-applicable scenario condition.
SOURCE: Investigative Science and Engineering; September 27, 2007

Project-related traffic noise increase would equal to 0.2 dBA. This would not be considered a significant noise impact.

- ***In cases where existing noise levels already exceed the applicable noise guideline, would the Project: a) generate noise that would increase noise levels at or beyond the property line by 1 dB; or b) expose on- or off-site, existing and planned noise sensitive land uses (NSLU) to road, railroad, airport, or heliport noise 3 dB CNEL over existing noise levels that are not to exceed 65 dB CNEL.***

As specified in the analysis above and as documented in *Table 3-18, Project-Related Offsite Traffic Noise Increases,* the largest Project-related traffic noise increase would equal to 0.2 dBA. This would not be considered a significant noise impact.

- ***Would the Project result in construction noise exceeding the construction equipment standards listed in the San Diego County Code of Regulatory Ordinances, Section 36.410, Construction Equipment?***

The County of San Diego Noise Ordinance Section 36.410 governs construction noise emissions, which restricts average construction noise levels to 75 dBA and imposes timing restrictions on construction activities. As previously discussed, the estimated construction equipment noise levels are provided in *Table 3-15, Predicted Construction Noise Levels,* for the typical construction activities identified for the proposed Project. The construction activities would roughly be divided into the following phases: rough grading, underground utility construction and paving activities. Construction would typically occur between the hours of 7 a.m. and 7 p.m. Monday through Friday in accordance with County operational requirements. The nearest residential receptor would be located over 160-feet distant from any proposed construction activities (refer to Figure 3-9). The point-source attenuation between this receptor and any construction would be slightly over 12.0 dBA. Given this, no significant impacts from normal construction noise are expected at nearby sensitive receptors. The maximum noise impacts to the closest noise sensitive receptor (i.e., residences) that could result from haul truck activities would be 62 dBA, which is below the County's Noise Ordinance requirement of 75 dBA. During blasting, noise impacts to nearby sensitive receptors (i.e., residences) would not exceed an eight-hour receptor noise level of 75 dBA, and would not be regarded as significant. Finally, rock crushing activities could result in a significant off-site noise impact prior to construction of a physical barrier surrounding the rock crusher, and this is regarded as a significant impact (**Significant Direct Impact 3.4-B)**

3.4.4 Cumulative Impact Analysis

As discussed in the above analysis, Project implementation has the potential for direct impacts to off-site noise sensitive land uses during construction activities, but these impacts would not be cumulatively significant due to the lack of noise associated with other construction activities in the Project's noise impact area. Therefore, during construction activities (near-term) the proposed Project would not impact any Noise sensitive land uses on a cumulative basis.

Moreover, as shown in *Table 3-18, Project-Related Offsite Traffic Noise Increases,* Project implementation would not lead to a long-term cumulatively considerable increase in noise impacts to Noise sensitive land uses. As shown in *Table 3-18,* the Project would not result in increases in noise levels of more than 1 dBA at the property line, nor would it result in the increase of 3 dBA at any off-

site locations as the largest Project-related contribution would equal only 0.2 dBA. Therefore, implementation of the proposed Project would not result in any cumulatively considerable impacts due to increases in noise levels in either the near-term or long-term scenarios.

3.4.5 Mitigation Measures

Significant Indirect Impact 3.4-A: *During project construction, nesting raptors and breeding California Gnatcatchers in the vicinity my be exposed to noise levels from blasting operations ranging up to 95.6 decibels at 50 feet and from normal construction activities including drilling ranging up to 87.2 decibels at 50 feet. The following mitigation measures shall be required to avoid or to reduce potential indirect noise impacts to less than significant levels for the eucalyptus woodland habitat of nesting raptors between February 15 and July 15 and for the coastal sage scrub habitat of California gnatcatchers between March 1 and August 15:*

3.4-A(1): Implementation of Mitigation Measure No. 3.2-R which includes a prohibition on grading or clearing within 500 feet of the eucalyptus habitat between February 15 and July 15 (unless waived by the Planning Director if pre-grading surveys are negative), would mitigate potential indirect impacts to nesting raptors to below a level of significance.

3.4-A(2) The following requirement shall be imposed if construction is planned to occur between March 1 and August 15, the breeding season of the coastal California gnatcatcher: Prior to initiating construction activity, a qualified biological monitor shall survey and map all California gnatcatchers onsite. The biological monitor shall meet with the construction foreman and a County approved acoustical consultant to determine appropriate noise avoidance measures, if any. This may include avoidance or implementation of suitable noise reduction features such as temporary attenuation barriers constructed from hay bales or ¾-inch think exterior plywood. If gnatcatchers are identified, start up noise monitoring shall be conducted at appropriate boundary locations and weekly noise monitoring shall be conducted at the edge of occupied habitat by a County approved acoustical consultant and documentation for the monitoring shall be submitted to the County to verify that noise levels within occupied habitat do not exceed 60 dBA hourly average. The effective 60 decibel noise contour from construction activities in a worst case scenario for indirect impacts to sensitive avian habitat is approximately 1100 feet in radius. If noise levels exceed 60 decibels Leq hourly, the monitor shall notify the contractor, and construction activities in the area shall cease until adequate attenuation can be achieved as directed by the qualified acoustician or until the end of the breeding season (August 16).

Significant Direct and Indirect Impact 3.4-B: *In the event that on-site rock crushing is necessary during project grading operations, a significant noise impact to off-site areas, including sensitive habitat occupied by raptors and/or the California gnatcatcher, could occur as a result of exposing these areas to noise levels up to 86.5 dBA at 50 feet.*

3.4-B(1): Pursuant to the Major Use Permit 02-023, the applicant shall:

1. Be prohibited from operating portable hoe rams and jackhammers on the project site during mass grading and blasting operations.

2. Be prohibited from operating rock drills within 200 feet of any occupied residential property.

3. For any on-site rock-crushing and related materials handling operations, provide evidence to the satisfaction of the Director of the Department of Planning Land Use that:

   a) Specifies one Kobelco 309 brake-horse power unit or an equivalently sized rock crusher producing no more than 87 decibels (A) at a reference distance of 50 feet.
   b) Specifies the location of any rock-crushing equipment and related materials handling activities shall be conducted on Lot 870 of the project site.
   c) Prior to the onset of mass grading and blasting activities, construct a temporary open enclosure for noise reduction purposes on Lot 870 for both rock crushing and materials handling equipment on the project site. The minimum height of this earthen berm enclosure shall be 16 feet tall with respect to the level of the crusher pad. The configuration of the enclosure for this crusher pad is shown on Figure 9 of the Acoustical and Vibration Site Assessment (#03-068) by Investigative Science and Engineering, Inc. dated February 28, 2007.
   d) Specify that the above applicable conditions be implemented prior to the onset of mass grading and blasting activities and will remain in place until they are completed subject to final inspected by the County of San Diego.

3.4-B(2): Pursuant to the Major Use Permit 02-023, the applicant shall not be issued any Certificates of Occupancy for any phase of this development prior to the completion of all mass grading activities and their final inspection by the County of San Diego.

Significant Direct Impact 3.4-C: *As shown on EIR Figure 3-8, Proposed 60 dBA CNEL Ground Trace Contours, the 60-dBA CNEL contour is projected to be 84 feet from the centerline of Pointe Parkway. Accordingly, future interior noise levels could exceed the County Noise Element Policy 4b noise abatement threshold of 45 dBA. In addition, more than 10% of the net lot area for lots fronting on Pointe Parkway could be exposed to exterior noise levels in excess of 60 dBA, which also would exceed the County Noise Element Policy 4b noise abatement requirements.*

3.4-C: Prior to recordation of any Final Map, a Noise Protection Easement shall be granted to the County of San Diego over the entire area of Lots 29-54, 71-92, 99-101, 116-118, 125-128, 136-149, and 190-211 of Tentative Map 5299RPL6. This easement is for the mitigation of present and anticipated future excess noise levels including traffic flow on Pointe Parkway for residential use of these affected Lots. The easement shall require the following:

Prior to the issuance of any building permit for any residential use within the Noise Protection Easement, the applicant shall:

1. *Complete to the satisfaction of the Director of the Department of Planning and Land Use, an acoustical analysis performed by a County approved acoustical engineer, demonstrating that the present and anticipated future noise levels for the exterior and interior noise sensitive land uses will not exceed the allowable sound level limit of the Noise Element of the San Diego County General Plan [exterior (60 dBA CNEL) and interior (45 dBA CNEL)].*

2. *Incorporate to the satisfaction of the Director of the Department of Planning and Land Use all of the recommendations or mitigation measures of the acoustical analysis into the Project design and building plans.*

3.4.6 Conclusions

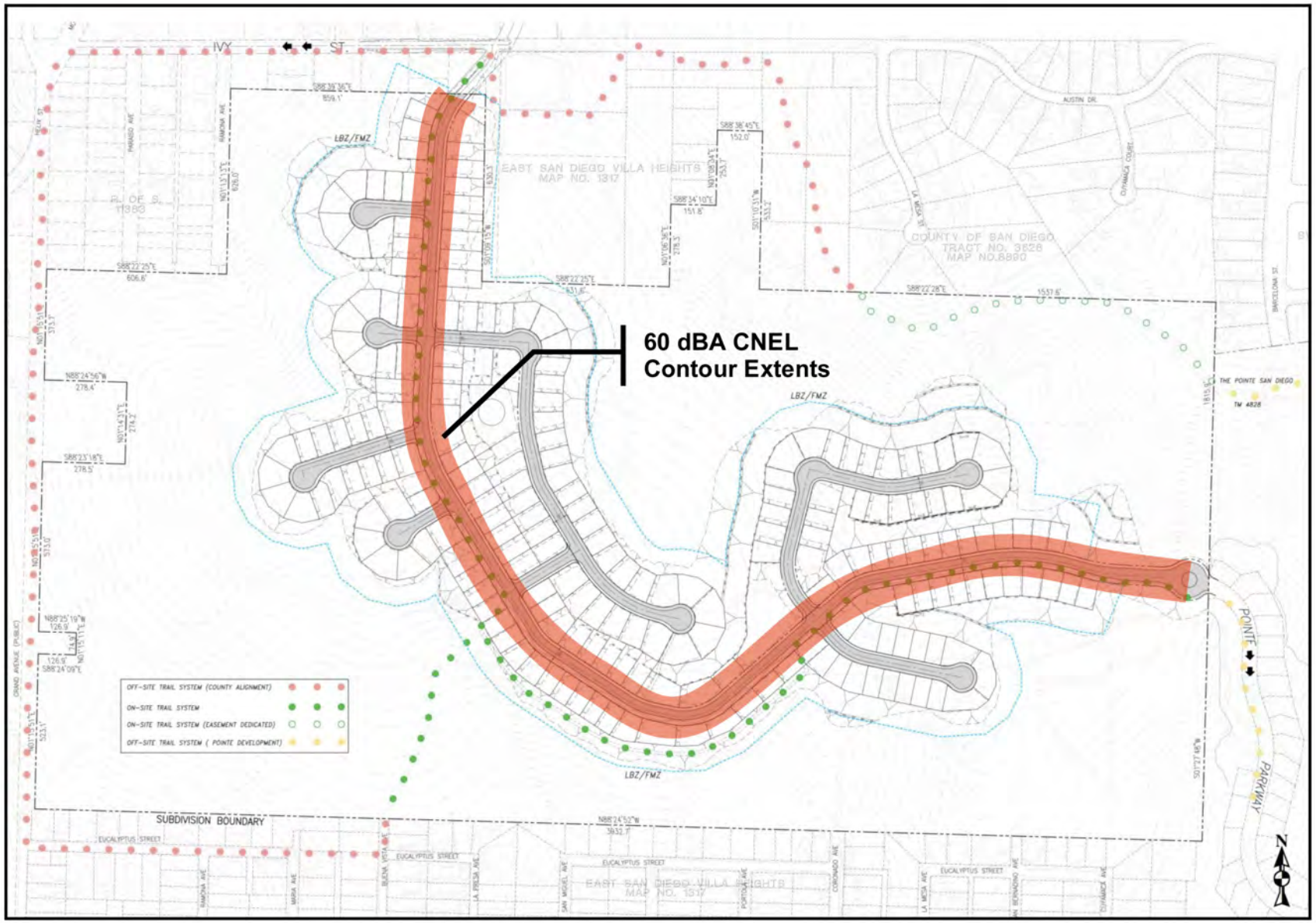
Significant Indirect Impact 3.4-A: Implementation of Mitigation Measures 3.2-R and 3.4-A(2) would place restrictions on construction activities if sensitive avian species are detected in pre-construction surveys, unless measures are taken (e.g., construction of temporary noise barriers, weekly monitoring of noise levels, etc.) to reduce noise levels on sensitive avian habitat to below 60 dB CNEL. Therefore, with application of the required mitigation, significant indirect noise impacts on sensitive avian habitat would not occur with implementation of the proposed Project.

Significant Direct and Indirect Impact 3.4-B: Incorporation of a proposed 16-foot berm around the rock crushing site, as required by Mitigation Measures 3.4-B(1) and 3.4-B(2), would ensure that rock crushing operations do not expose on-site sensitive avian habitat to noise levels exceeding 60 decibels (as shown on Figure 3-10, *Anticipated Noise Contours from Rock Crushing Operations),* thereby reducing impacts to a level below significance.

Significant Direct Impact 3.4-C: Implementation of Mitigation Measure 3.4-C would ensure that interior noise levels do not exceed the County General Plan Noise Element interior thresholds of 45 dB CNEL, thereby reducing impacts to a level below significance.

Source: Investigative Science and Engineering Inc.

Figure 3-7
NOISE MONITORING LOCATIONS



Source: Investigative Science and Engineering Inc.

Figure 3-8
PROPOSED 60 dBA CNEL GROUND TRACE CONTOURS

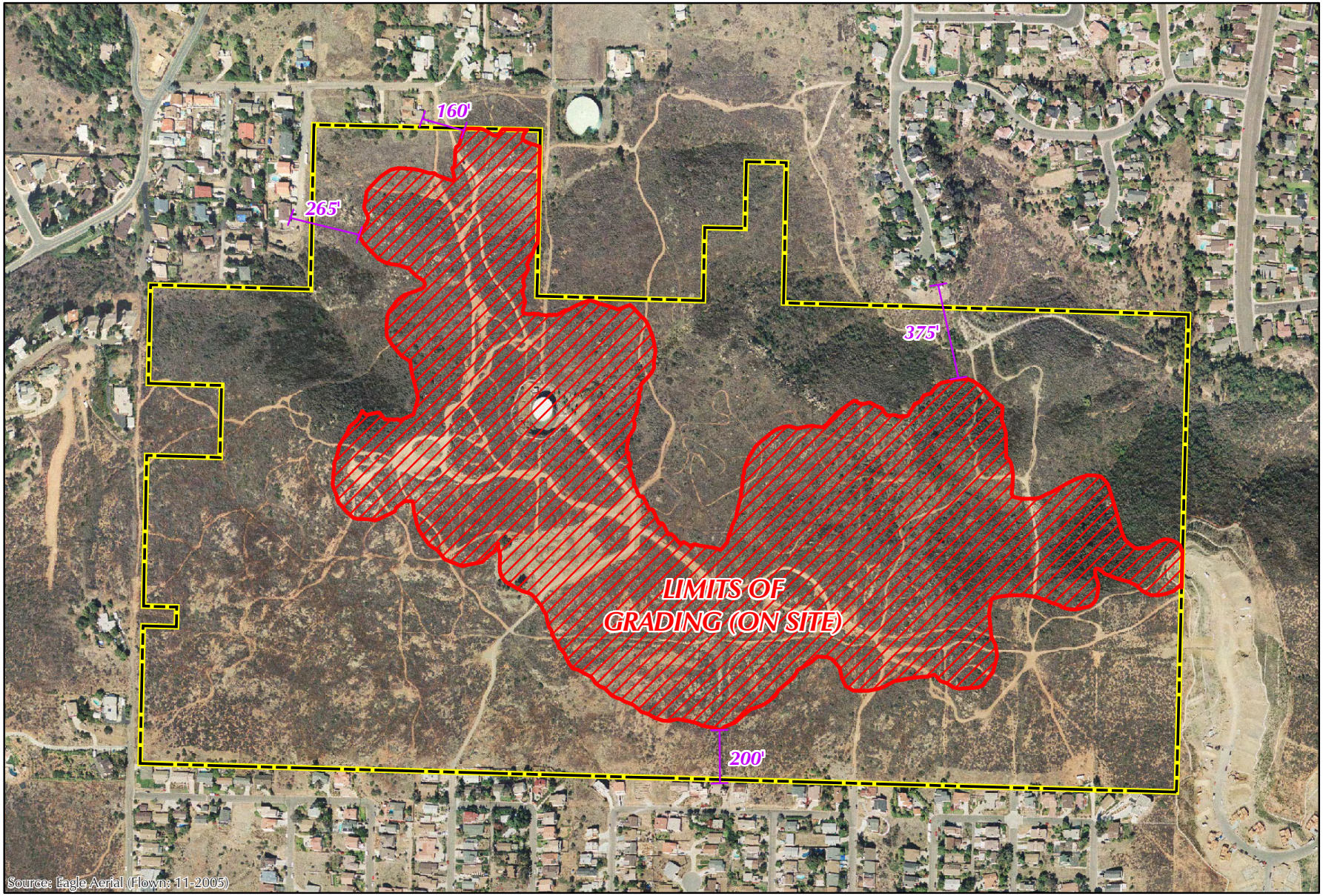
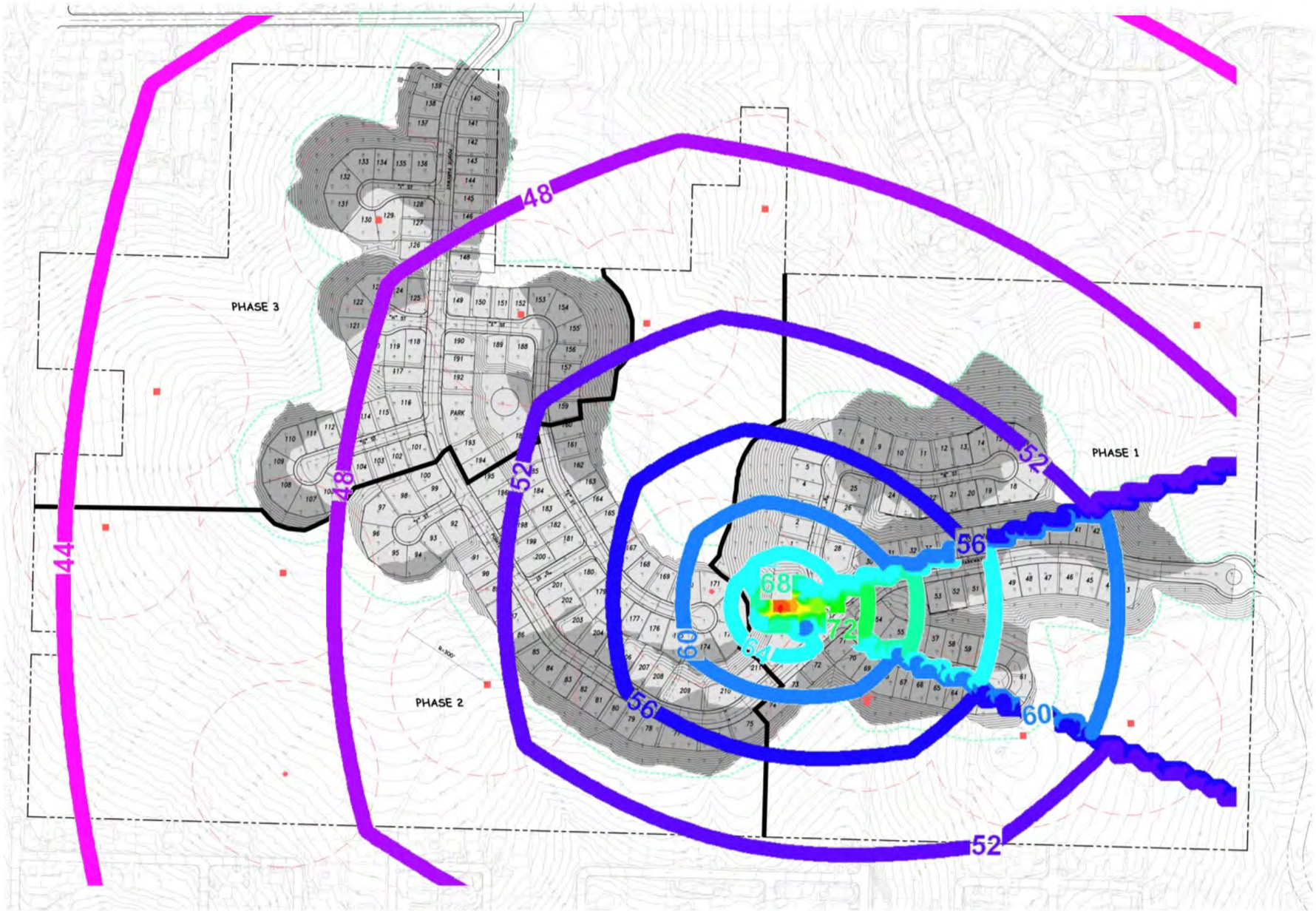
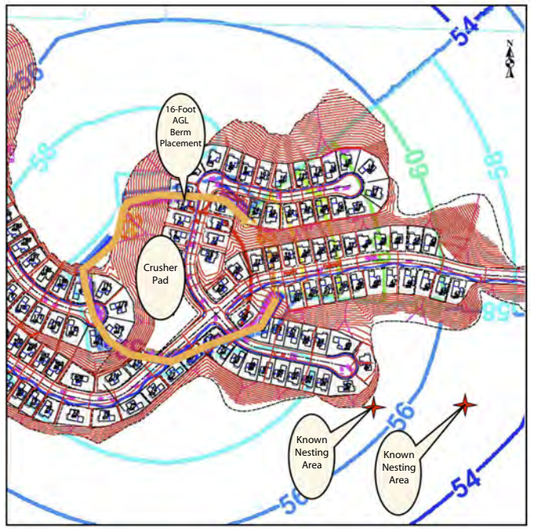


Figure 3-9
RESIDENTIAL RECEPTORS





HIGHLANDS RANCH

	NO. LOTS	OVERALL EARTHWORK (CUT + CY)	ROCK EARTHWORK	CAPPING MATERIAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
PHASE 1	53	520 000 CY (BALANCE)	300 000 CY	185 000 CY																			
PHASE 2	97	220 000 CY (BALANCE)	105 000 CY	95 000 CY																			
PHASE 3	64	280 000 CY (BALANCE)	185 000 CY	105 000 CY																			
GNATCATCHER BREEDING SEASON																							
RAINY SEASON																							

CALIFORNIA GNATCATCHER – SINGLE
CALIFORNIA GNATCATCHER – PAIR
CALIFORNIA GNATCATCHER – FAMILY OF FOUR

REC Consultants, Inc.

SCALE: 1"= 100'

Source: REC Environmental; Investigative Science and Engineering Inc.

Figure 3-10
ANTICIPATED NOISE CONTOURS FROM ROCK CRUSHING OPERATIONS