



September 24, 2021

Job # S210306

County of San Diego
Planning & Development Services
Attention: Souphalak Sakdarak
5510 Overland Avenue, Suite 110
San Diego, California 92123

Subject: Response to Second Iteration Noise Issues for Good Shepherd Cemetery Major Use Permit (MUP), County of San Diego Record ID PDS2020-MUP-20-004, Environmental Log No. PDS2020-ER-20-08-006

This letter is in response to the County of San Diego's Planning & Development Services (PDS) second iteration comments for the Good Shepherd Cemetery Major Use Permit (Record ID PDS2020-MUP-20-004). Comments are found in the project issue checklist and are dated September 10, 2021. These comments have been addressed in a revised version of the report, dated September 24, 2021, and this letter will reference the location of each comment response or requested changes in the revised report. Italics are added to indicate County of San Diego staff comments.

20-9 *Please verify is the grave digging operation a continuous (as needed) operation on the site or will there be a mass grave digging in the areas modeled in the report. If the grave digging occurs as a as-needed basis, why would that be evaluated as construction noise (8 hours average 75) versus operational noise (one hour average 50 or 45, depending on hours of operation)?*

RESPONSE: While grave digging would occur on an as-needed basis, construction equipment is defined within the County Noise Ordinance through reference to the California Vehicle Code to include excavation equipment, and excavation of graves would be considered a construction operation in the California Code of Regulations. In addition, once a grave has been excavated, the equipment will not operate at that exact location again, hence making its operation a temporary source. The duration of the equipment operation will also be extremely brief as a backhoe would be able to quick excavate a plot and then be finished. With all of these factors in mind, construction noise limits were considered more appropriate for application to grave digging operations. This explanation has been incorporated into Section 3.3 of the report.

20-10 *Please confirm, will there be any crowds gathering for services within areas that were modeled for the grave digging? Would the noise level from the gathering/service result in exceedance of the noise threshold?*

RESPONSE: As specified in Section 3.2 of the report, no amplified live music or amplified speech will be allowed for graveside services, and as such, the only noise source present would be expected to be very low levels of noise from individuals conversing at the graveside. Without amplified speech or music and with services limited to the daytime hours, these noise impacts would not be expected to exceed the applicable hourly noise limit at off-site receivers.

20-11 *Please confirm, will there be any blasting?*

RESPONSE: No blasting will be required at the project site. A statement to this effect has been added to Section 3.4.

**SDC PDS RCVD 11-23-21
MUP20-004**

Please call if you have any questions or require additional information.

A handwritten signature in black ink, appearing to read "Amy Hool". The signature is fluid and cursive, with the first name "Amy" written in a larger, more prominent script than the last name "Hool".

Amy Hool, INCE
President/CEO



Eilar Associates, Inc.
Acoustical and Environmental Consulting Services

Focused Noise Analysis for Good Shepherd Cemetery

County of San Diego Record ID: PDS2020-MUP-20-004;
Environmental Log No.: PDS2020-ER-20-08-006

Lead Agency:

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Planning and Development Services
Attention: Souphalak Sakdarak
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Prepared by:

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Project Proponent:

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Attention: Mario Deblasio
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San Diego, California 92117

Job # S210306

Original Report: June 7, 2021
Second Iteration Review: September 24, 2021

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Glossary of Terms and Acronyms

Ambient Sound: The combination of all near and far sounds in a given environment, none of which is particularly dominant.

Attenuation: The reduction in sound pressure level as sound is transmitted from one point to another.

Average Sound Level (L_{EQ}): Also known as equivalent sound level and expressed in dBA. The A-weighted sound level of a steady state sound which has the same sound energy as that contained in the actual time-varying sound being measured over a specific time period.

A-weighted Sound Level (dBA): Designed to approximate the response of the human ear to sound. A sound pressure level which has been filtered or weighted to quantitatively reduce the effect of low frequency noise.

Community Noise Equivalent Level (CNEL): The 24-hour weighted average noise level calculated as A-weighted sound pressure levels with different weighting factors for the noise levels occurring during the evening and nighttime periods. This weighting is applied to account for an individual's increased sensitivity to noise during these times. Sound levels during evening hours of 7 p.m. to 10 p.m. have an added 5 dB weighting, and sound levels during nighttime hours of 10 p.m. to 7 a.m. have an added 10 dB weighting.

Day-Night Average Sound Level (L_{DN}): A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to the sound levels occurring during nighttime hours (10 p.m. to 7 a.m.).

Decibel (dB): The primary unit of sound measurement; used to quantify both sound pressure level and sound power level. In acoustics, equal to ten times the logarithm of the ratio of one sound and a lower-intensity reference sound.

Frequency: The number of oscillations per second; generally expressed in hertz (Hz) or cycles per second (cps).

Insertion Loss: The sound level reduction at a receiver that occurs when a sound-attenuating device, such as a silencer or barrier, is inserted in the path between source and receiver. Expressed in decibels at a specific frequency octave band.

Sound Level Meter: An instrument, usually handheld, that is used to measure sound pressure levels with averaging capabilities and standard frequency-weighting.

Sound Pressure Level (L_P or SPL): The level of sound energy, measured in dB, at a specific location. In order to be meaningful, a sound pressure level measurement must be accompanied by a reference distance at which the sound source was measured.

Executive Summary

The proposed project, Good Shepherd Cemetery, consists of the conversion of an existing plant nursery to a cemetery. The project site is located at 1505 Buena Vista Drive in the North County Metropolitan Community Planning Area, County of San Diego, California.

According to information provided by project representatives, a project traffic study would not be necessary for the project. Project-generated traffic volumes were provided to determine whether the addition of vehicle trips associated with the project would have a direct noise impact on traffic noise levels in the vicinity of the project. As the proposed project is anticipated to result in fewer trips than the existing conditions, project-generated traffic noise is expected to be less than significant impact at nearby receivers.

Noise from proposed activity and equipment operation on site has been evaluated to determine whether noise from operation of these sources will exceed the noise standards of the County of San Diego Noise Ordinance. Calculations show that noise impacts from HVAC equipment and shuttle operation are expected to comply with the noise limits set within the County of San Diego Noise Ordinance, the City of Vista Municipal Code, and the City of Oceanside Municipal Code at surrounding property lines during daytime hours. No mitigation is required. In the event that HVAC equipment with substantially higher noise levels is proposed, supplemental equipment calculations may be needed to verify compliance.

It is determined that typical construction activities will not exceed the County of San Diego temporary construction noise limit of 75 dBA at adjacent property lines during the construction activity. General good practice measures should be followed to ensure that noise levels remain below the County of San Diego construction noise limits, including reasonable maintenance of equipment, conservative planning of simultaneous equipment operation, and using equipment with effective mufflers. Equipment operation must also be limited to the allowable hours of operation set by the County of San Diego. With these recommendations, it is expected that construction equipment noise levels will be at or below an average eight-hour equivalent noise level of 75 dBA, in compliance with County of San Diego regulations. Construction noise impacts are also expected to comply with City of Vista and City of Oceanside noise limits.

1.0 Introduction

This acoustical analysis report is submitted to satisfy the acoustical requirements of the County of San Diego for major use permit approval. Its purpose is to assess noise impacts from on-site operational and construction noise sources to identify project features or requirements necessary to remain in compliance with County of San Diego noise regulations, as well as to address project-generated traffic noise. As the project is located immediately adjacent to City of Vista and City of Oceanside limits, the noise regulations of both the City of Vista Municipal Code and the City of Oceanside Municipal Code have also been considered.

All noise level or sound level values presented herein are expressed in terms of decibels, with A-weighting to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ} for a specified duration. Further explanation can be provided upon request.

1.1 Project Description

The proposed project, Good Shepherd Cemetery, consists of the conversion of an existing plant nursery to a cemetery. The total area for the parcel is approximately 14.5 acres. The site is currently occupied by an existing plant nursery, including a single-story residence to the south to be converted into an office building, an existing residence to the north to remain, and other minor structures to be removed. The anticipated hours of operation

for on-site activity are 8 a.m. to 4:30 p.m. Additional information is provided in the project plans, included as Appendix A.

The subject property is zoned Agricultural, A70. All adjacent properties to the north, northwest, and east are also zoned A70. The properties to the south and southwest are located within the City of Vista and the properties to the west-southwest and west are located within the City of Oceanside. The property directly to the south is zoned R-M 10 (Multi-Family Residential) and the property to the southwest is zoned HD (High Density Residential). The property to the west-southwest is zoned CG-PBD-3 (General Commercial-Planned Block Development).

1.2 Environmental Settings and Existing Conditions

1.2.1 Project Location

The project site is located at 1505 Buena Vista Drive the North County Metropolitan Community Planning Area of the County of San Diego, California. The Assessor’s Parcel Numbers (APNs) for the property are 169-210-02, 169-220-01, 169-220-02, and 169-220-03. The project location is shown on the Vicinity Map, Figure 1, following this report. An Assessor’s Parcel Map, Satellite Aerial Photograph, and Topographic Map of this area are also provided as Figures 2 through 4.

1.2.2 Measured Noise Level

An on-site inspection was conducted the morning of Wednesday, March 31, 2021. The weather conditions were as follows: winds at 7 mph, sunny skies, low humidity, and temperatures in the low 80s. The sound level measurement was performed with a sound level meter using A-weighting and a “slow” response time. An ambient noise measurement was taken approximately 16 feet west of the Buena Vista Drive centerline and approximately 18 feet south of the Keys Place centerline for a duration of 15 minutes, paused for aircraft. The microphone position was approximately five feet above the existing grade. The measured noise level and related weather conditions can be found in Table 1. The primary sources of noise during the measurement were traffic noise on Buena Vista Drive. The short-term measurement location is shown in Figure 3.

Table 1. On-Site Noise Measurement Conditions and Results	
Date	Wednesday, March 31, 2021
Time	11:37 a.m. – 11:52 a.m.
Conditions	Sunny skies, wind at 7 mph, temperature in the low 80s with low humidity
Measured Noise Level	62.4 dBA L _{EQ}

1.3 Methodology and Equipment

1.3.1 Roadway Noise Calculation

The Traffic Noise Model (TNM) calculation protocol in CadnaA Version 2021 (based on the methodology used in TNM Version 2.5, released in February 2004 by the U.S. Department of Transportation) was used for all traffic modeling in the preparation of this report. Using the TNM protocol, the CNEL is calculated as 0.092 times the ADT for surrounding roadways, based on the studies made by Wyle Laboratories (see reference). Future CNEL is calculated for desired receptor locations using future road alignment, elevations, lane

configurations, projected traffic volumes, estimated truck mixes, and vehicle speeds. Noise attenuation methods may be analyzed, tested, and planned with TNM, as required.

1.3.2 CadnaA Noise Modeling

Modeling of the outdoor noise environment to determine project-related noise impacts is accomplished using CadnaA Version 2021, which is a model-based computer program developed by DataKustik for predicting noise impacts in a wide variety of conditions. CadnaA (Computer Aided Noise Abatement) assists in the calculation, presentation, assessment, and mitigation of noise exposure. It allows for the input of project information such as noise source data, barriers, structures, and topography to create a detailed model and uses the most up-to-date calculation standards to predict outdoor noise impacts. Noise standards used by CadnaA that are particularly relevant to this analysis include ISO 9613 (Attenuation of sound during propagation outdoors). CadnaA provides results that are in line with basic acoustical calculations for distance attenuation and barrier insertion loss.

1.3.3 Measurement Equipment

Some or all of the following equipment was used at the site to measure existing noise levels:

- Larson Davis Model LxT Type 1 Sound Level Meter, Serial # 4084
- Larson Davis Model CA200 Type 1 Calibrator, Serial # 16454

The sound level meter was field-calibrated immediately prior to the noise measurement and checked afterward to ensure accuracy. All sound level measurements conducted and presented in this report, in accordance with the regulations, were made with a sound level meter that conforms to the American National Standards Institute specifications for sound level meters (ANSI S1.4). All instruments are maintained with National Bureau of Standards traceable calibration, per the manufacturers' standards.

2.0 Noise-Sensitive Land Uses Affected by Airborne Noise

2.1 Guidelines for Determination of Significance

The County of San Diego Noise Report Format and Content Requirements detail the guidelines for the determination of significance for project-generated traffic noise levels. Direct noise impacts can be determined by comparing existing traffic versus existing traffic plus project-generated traffic. If project-generated traffic more than doubles the existing sound energy (an increase of 3 dB), this is considered to be a direct noise impact.

2.2 Potential Project-Generated Traffic Noise Impacts

According to the Site Access Review prepared by Linscott, Law & Greenspan, Engineers (see reference), the existing nursery and single family land uses are anticipated to generate approximately 176 Average Daily Trips (ADT), combined. The proposed project is anticipated to generate approximately 138 ADT, resulting in a decrease of approximately 38 ADT on nearby roadways. As the proposed project is anticipated to result in fewer trips than the existing conditions, traffic noise levels at off-site sensitive receivers would be expected to remain the same or be reduced marginally. Project-generated traffic is therefore expected to have less than significant impacts at nearby receivers.

3.0 Project-Generated Airborne Noise

3.1 Guidelines for Determination of Significance

The County of San Diego Municipal Code states that noise levels from stationary sources shall not exceed 50 dBA between the hours of 7 a.m. and 10 p.m. and 45 dBA between the hours of 10 p.m. and 7 a.m. at properties zoned A70.

Additionally, the City of Vista Municipal Code states that noise levels shall not exceed 50 dBA between the hours of 7 a.m. and 10 p.m. and 45 dBA between the hours of 10 p.m. and 7 a.m. at residential properties with a density of less than 11 dwelling units per acre or 55 dBA between the hours of 7 a.m. and 10 p.m. and 50 dBA between the hours of 10 p.m. and 7 a.m. at residential properties with a density of 11 or more dwelling units per acre.

The City of Oceanside Municipal Code states that noise levels shall not exceed 65 dBA between the hours of 7 a.m. and 10 p.m. and 60 dBA between the hours of 10 p.m. and 7 a.m. at properties zoned commercial.

Additionally, Section 36.409 of the County of San Diego Noise Ordinance states it is unlawful to operate construction equipment that exceeds an average sound level of 75 dBA for an eight-hour period, between 7 a.m. and 7 p.m. when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received. In addition, according to Section 36.408 of the ordinance, construction activities must be limited to the hours of 7 a.m. to 7 p.m., Monday through Saturday (except legal holidays). No construction activity is permitted on Sunday. Section 36.410 provides noise limits for impulsive noise, which is defined as a high peak noise level of short duration (one second or less). Impulsive activity includes blasting and the use of equipment such as a rock crusher, hoe ram, pile driver, or drill rig. Impulsive noise limits are provided for both residential and agricultural properties.

Similarly, the City of Vista Municipal Code states that construction equipment should not exceed 75 dBA for an eight-hour period, and prohibits construction during the hours of 7 p.m. to 7 a.m. and on Sundays or legal holidays. The City of Oceanside Noise Element to the General Plan prohibits the use of construction equipment within 500 feet of any residential zone between the hours of 8 p.m. and 7 a.m. Additionally, the City of Oceanside prohibits construction equipment that exceeds 85 dBA at 100 feet from the source. As the County of San Diego construction noise limits are the strictest, these limits have been evaluated herein.

Pertinent sections of the applicable regulations are provided in Appendix B.

3.2 Potential Operational Noise Impacts

Anticipated operational noise sources at the proposed project site will primarily consist of a small electric shuttle and small HVAC equipment at the administration building. As no amplified live music or amplified speech will be present, noise from funeral services is expected to be limited to very low noise levels of individuals speaking, which would be expected to be less than significant at off-site receivers. The hours of operation are anticipated to be limited to the daytime hours of 8 a.m. to 4:30 p.m.

HVAC equipment is currently unknown, but it is assumed to be necessary. It is assumed that a small five-ton split system unit or an equivalent will service the administration building and will be located at ground level at the rear (south side) of the building. For purposes of this analysis, it is assumed that the unit will be a five-ton Mitsubishi PUMY-P60NKMU, which produces a sound power level of 67.9 dBA. Manufacturer data sheets are provided as Appendix C.

Noise levels of HVAC and shuttle operation have been calculated using CadnaA, assuming four shuttle trips per hour, at surrounding receivers considering shielding that would be provided by the proposed building structures. Noise impacts have been compared to the applicable daytime noise limits. Results are shown in Table 2. More information is provided in Appendix D: CadnaA Analysis Data and Results, and a graphical representation of noise source and receiver locations are provided as Figure 5.

Table 2. Operational Equipment Noise Levels at Surrounding Receivers			
Receiver	Location	Daytime Noise Limit (dBA)	Equipment Noise Level (dBA)
R1	West	50	13.2
R2	North	50	22.8
R4	East (Across Buena Vista Drive)	50	17.6
R5	South (Vista)	50	23.0
R6	Southwest (Vista)	55	24.6
R7	North	50	25.7
R10	Southwest (Oceanside)	65	20.9
R11	South (Vista)	50	44.6

As shown above, noise levels from HVAC and shuttle operation on site are expected to meet the noise limits set within the County of San Diego Noise Ordinance, City of Vista Municipal Code, and City of Oceanside Municipal Code at surrounding properties during daytime hours without additional mitigation. In the event that HVAC equipment with substantially higher noise levels is proposed, supplemental equipment calculations may be needed to verify compliance.

3.3 Potential General Construction Noise Impacts

3.3.1 Potential Temporary Construction Noise Impacts

According to the County of San Diego Noise Ordinance, temporary construction noise must be adequately controlled at occupied properties. Construction noise limits for the City of Vista and City of Oceanside are equivalent to or less restrictive, respectively, than those of the County of San Diego, therefore, County of San Diego noise limits have been applied at all residential property lines.

No mass grading is proposed, so it is anticipated that grading work at the outset of the project will primarily consist of grading and subsequent paving of the on-site roadway. Grading quantities are estimated at 13,100 cubic yards with approximately 5,300 cubic yards of cut and 7,800 cubic yards of fill with approximately 2,500 cubic yards of import.

Although gravesites will be developed over time based on need and funding after the project has opened, noise from the excavation of gravesites has been evaluated using construction noise limits rather than operational noise limits considering the fact that the backhoe would be considered “construction equipment” as defined

by Section 36.402(d) of the County of San Diego Noise Ordinance, through reference to the California Vehicle Code Section 565 “Special Construction Equipment” (see reference). The act of excavation is also defined in Title 8 of the California Code of Regulations (see reference) as a construction operation, defining excavation as “Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.” In addition to the classification of equipment as construction equipment and the activity as a construction operation, once a gravesite has been excavated, the equipment will not operate at this exact location again, hence making its operation a temporary source which will only be present for a brief period of time while the backhoe quickly excavates a plot. For these reasons, the construction noise limit is considered appropriate for this noise source.

Detailed equipment information was not available for the grading and paving stages, so typical anticipated construction activity has been evaluated. A Case Model 580 backhoe will be the only heavy equipment used for grave digging. No impulsive activity is anticipated on site. The anticipated construction activities are shown in Table 3.

Table 3. Anticipated Construction Activities	
Stage	Anticipated Large Equipment
Grading	Grader, Dozer, Backhoe, Dump Truck
Paving	Paver, Roller
Grave Digging	Backhoe

Please refer to Table 4 for typical noise levels of construction equipment expected to be used on site, as described above. Unless otherwise noted, construction equipment noise levels were obtained from noise measurements made by Eilar Associates on March 25, 2010 for Brutoco Engineering & Construction, Inc. for the Orange Line Extension Project, Metro Contract #C0943, City of Los Angeles, California. Duty cycles have been obtained from the Federal Highway Administration (see reference).

Table 4. Typical Construction Equipment Noise Levels		
Stage	Duty Cycle (%)	Calculated Noise Level at 50 Feet (dBA)
Grader	40	70
Dozer	40	74
Backhoe ¹	40	64
Dump Truck ¹	40	74
Paver ¹	50	71
Roller	20	74

¹Source: DEFRA Construction Noise Database (see reference).

Noise levels were calculated at the nearest receivers in each direction. The noise sources were placed near the center of each of the primary areas of construction on the site, to evaluate worst-case impacts to the surrounding receivers as equipment moves around each of these areas, with the exception of the evaluation of grave digging noise impacts, which are calculated in worst-case locations around the project site where equipment would be

closest to noise-sensitive property lines. Noise calculations consider typical duty cycles of equipment, to account for periods of activity and inactivity on the site.

Noise levels of construction at each of the locations described above are shown in Table 5. Detailed calculations can be found in Appendix D. A graphical representation of source and receiver locations is provided as Figure 5.

Table 5. Temporary Construction Noise Levels at Neighboring Properties			
Stage	Receiver Location	Distance to Receiver (ft)	8-Hour Average Noise Level (dBA)
Grading	R1	285	57.9
	R2	238	61.0
	R3	191	62.8
	R4	216	61.4
	R5	57	72.6
	R6	86	68.9
Paving	R1	285	54.5
	R2	238	57.6
	R3	191	59.4
	R4	216	58.0
	R5	57	69.0
	R6	86	65.3
Grave Digging	R1	112	52.8
	R2	31	65.5
	R7	33	64.7
	R4	52	59.8
	R8	35	63.2
	R9	31	63.9

3.3.2 Design Considerations

As shown above, worst-case noise levels from temporary construction activity are expected to be in compliance with the County of San Diego eight-hour average equivalent noise limit of 75 dBA for all stages of construction.

For any project in which construction activity will take place near occupied residential properties, the following “good practice” recommendations should be adhered to whenever possible:

1. Turn off equipment when not in use.
2. Equipment used in construction should be maintained in proper operating condition, and all loads should be properly secured to prevent rattling and banging.
3. Use equipment with effective mufflers.
4. Minimize the use of backup alarms.
5. Equipment staging areas should be placed at locations away from noise-sensitive (occupied) receivers.

These general recommendations, in addition to limiting construction equipment operation to the allowable hours detailed in the County of San Diego Noise Ordinance, will assist in maintaining the comfort of neighboring sensitive receivers during the construction of this site.

3.4 Potential Impulsive Noise Impacts

There is no anticipated need for blasting or any other impulsive construction activity on site; and therefore, this noise source has not been included in this analysis.

4.0 Project-Generated Groundborne Noise and Vibration

Proposed construction phases for this project are not expected to include any significant vibration inducing equipment, such as pile driving or heavy soil compaction. As these types of equipment will not be present, excessive levels of groundborne vibration and groundborne levels are not expected to be received by any persons. Construction vibration is therefore anticipated to be less than significant from activity at the project site.

5.0 Conclusion

According to information provided by project representatives, a project traffic study would not be necessary for the project. Project-generated traffic volumes were provided to determine whether the addition of vehicle trips associated with the project would have a direct noise impact on traffic noise levels in the vicinity of the project. As the proposed project is anticipated to result in fewer trips than the existing conditions, project-generated traffic noise is expected to be less than significant impact at nearby receivers.

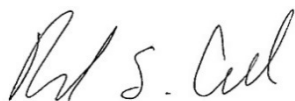
Calculations show that noise impacts from HVAC equipment and shuttle operation are expected to comply with the noise limits set within the County of San Diego Noise Ordinance, the City of Vista Municipal Code, and the City of Oceanside Municipal Code at surrounding property lines during daytime hours. No mitigation is required. In the event that HVAC equipment with substantially higher noise levels is proposed, supplemental equipment calculations may be needed to verify compliance.

It is determined that typical construction activities will not exceed the County of San Diego temporary construction noise limit of 75 dBA at adjacent property lines during the construction activity. General good practice measures should be followed to ensure that noise levels remain below the County of San Diego construction noise limits, including reasonable maintenance of equipment, conservative planning of simultaneous equipment operation, and using equipment with effective mufflers. Equipment operation must also be limited to the allowable hours of operation set by the County of San Diego. With these recommendations, it is expected that construction equipment noise levels will be at or below an average eight-hour equivalent noise level of 75 dBA, in compliance with County of San Diego regulations. Construction noise impacts are also expected to comply with City of Vista and City of Oceanside noise limits.

6.0 Certification

All recommendations for noise control are based on the best information available at the time our consulting services are provided. However, as there are many factors involved in sound transmission, and Eilar Associates has no control over the construction, workmanship, or materials, Eilar Associates is specifically not liable for final results of any recommendations or implementation of the recommendations.

This report is based on the related project information received and measured noise levels, and represents a true and factual analysis of the acoustical impact issues associated with the proposed Good Shepherd Cemetery, located at 1505 Buena Vista Drive in the North County Metropolitan Community Planning Area of the County of San Diego, California. This report was prepared by Rachael Cowell and Amy Hool.



Rachael S. Cowell, INCE
Acoustical Consultant



Amy Hool, INCE
President/CEO

7.0 References

County of San Diego Noise Ordinance, Sections 36.402, 36.408, 36.409, and 36.410.

City of Vista Municipal Code, Section 8.32.040.

City of Oceanside Noise Ordinances, Section 38.12.

City of Oceanside Noise Element to the General Plan.

Linscott, Law & Greenspan, Engineers, Site Access Review – Good Shepherd Cemetery, October 26, 2020.

DataKustik, CadnaA (Computer Aided Noise Abatement), Version 2021.

Federal Highway Administration, Traffic Noise Model Version 2.5.

Wyle Laboratories, Development of Ground Transportation Systems Noise Contours for the San Diego Region, December 1973.

Federal Highway Administration, Highway Traffic Noise: Analysis and Abatement Guide, December 2011.

2021 California Vehicle Code, Division 1, Section 565 – “Special construction equipment” defined.

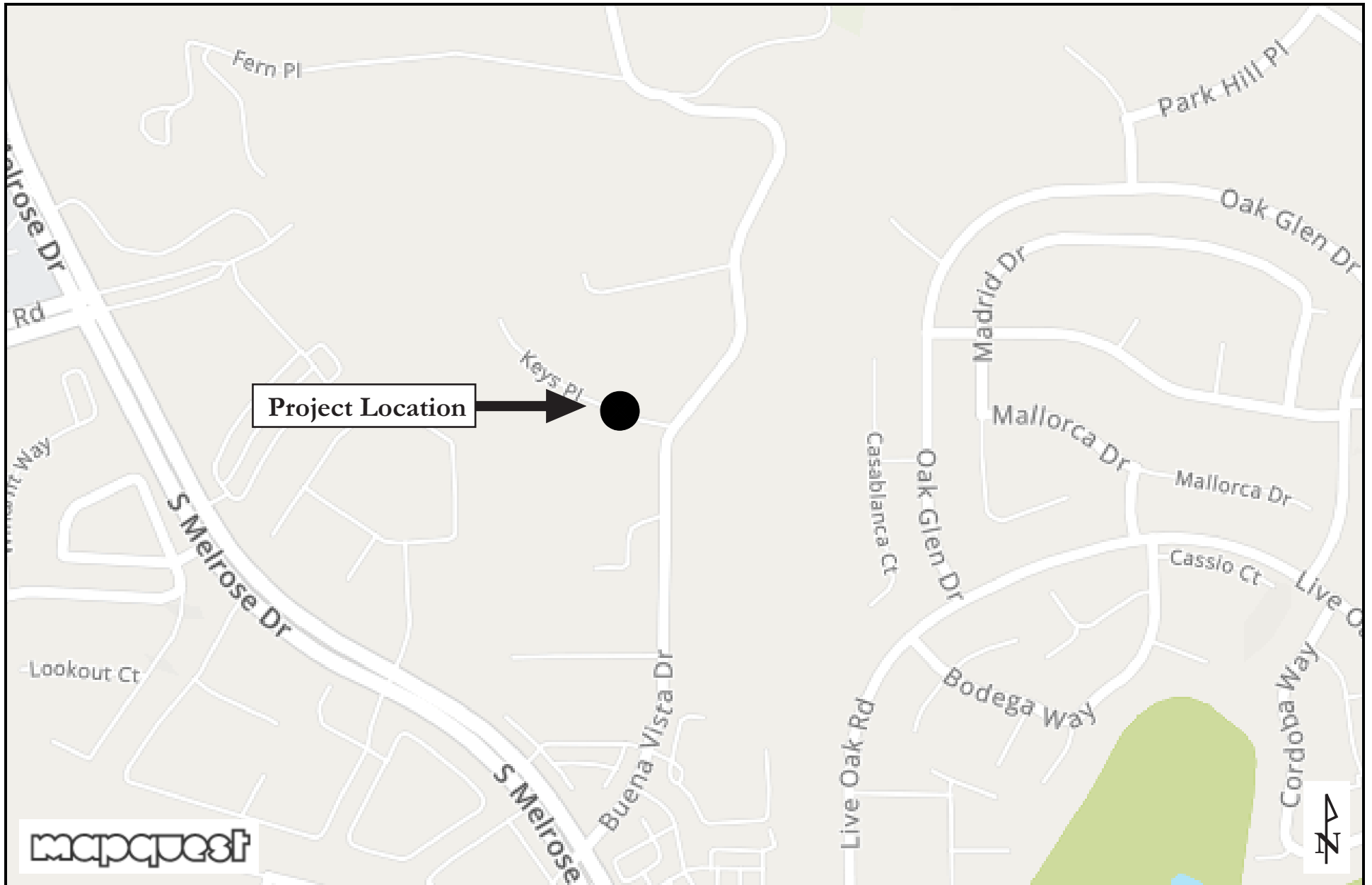
California Code of Regulations, Title 8 – Industrial Relations, Division 1 – Department of Industrial Relations, Chapter 4 – Division of Industrial Safety, Subchapter 4 – Construction Safety Orders, Article 6 – Excavations.

UK Department for Environment, Food, and Rural Affairs (DEFRA) Construction Noise Database.

U.S. Department of Transportation Federal Highway Administration, Construction Noise Handbook, Construction Equipment Noise Levels and Ranges.



Figures



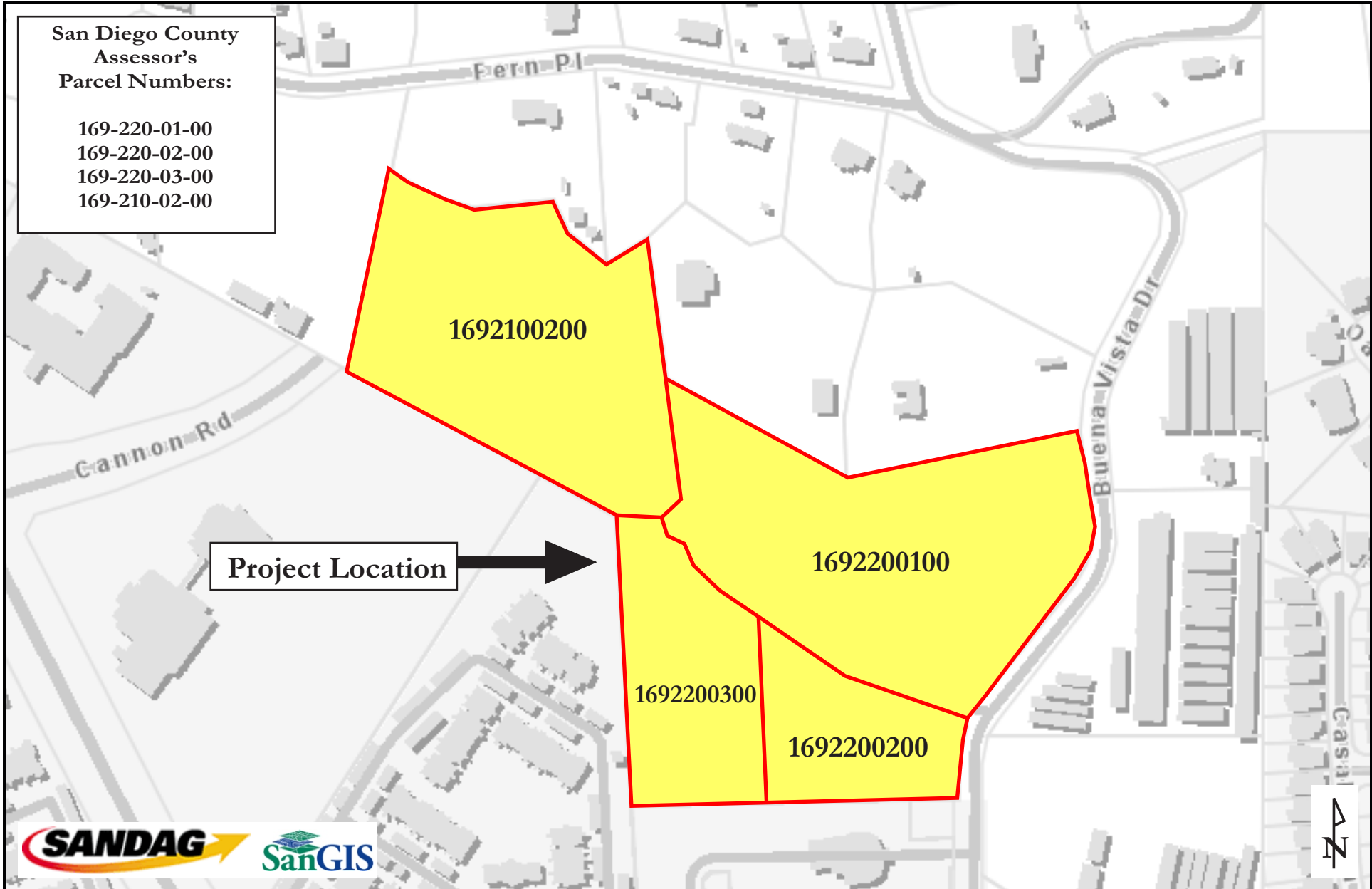
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Vicinity Map
Job # S210306

Figure 1

San Diego County
Assessor's
Parcel Numbers:

- 169-220-01-00
- 169-220-02-00
- 169-220-03-00
- 169-210-02-00



Project Location



Eilar Associates, Inc.
210 South Juniper Street, Suite 100
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Assessor's Parcel Map
Job # S210306

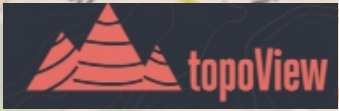
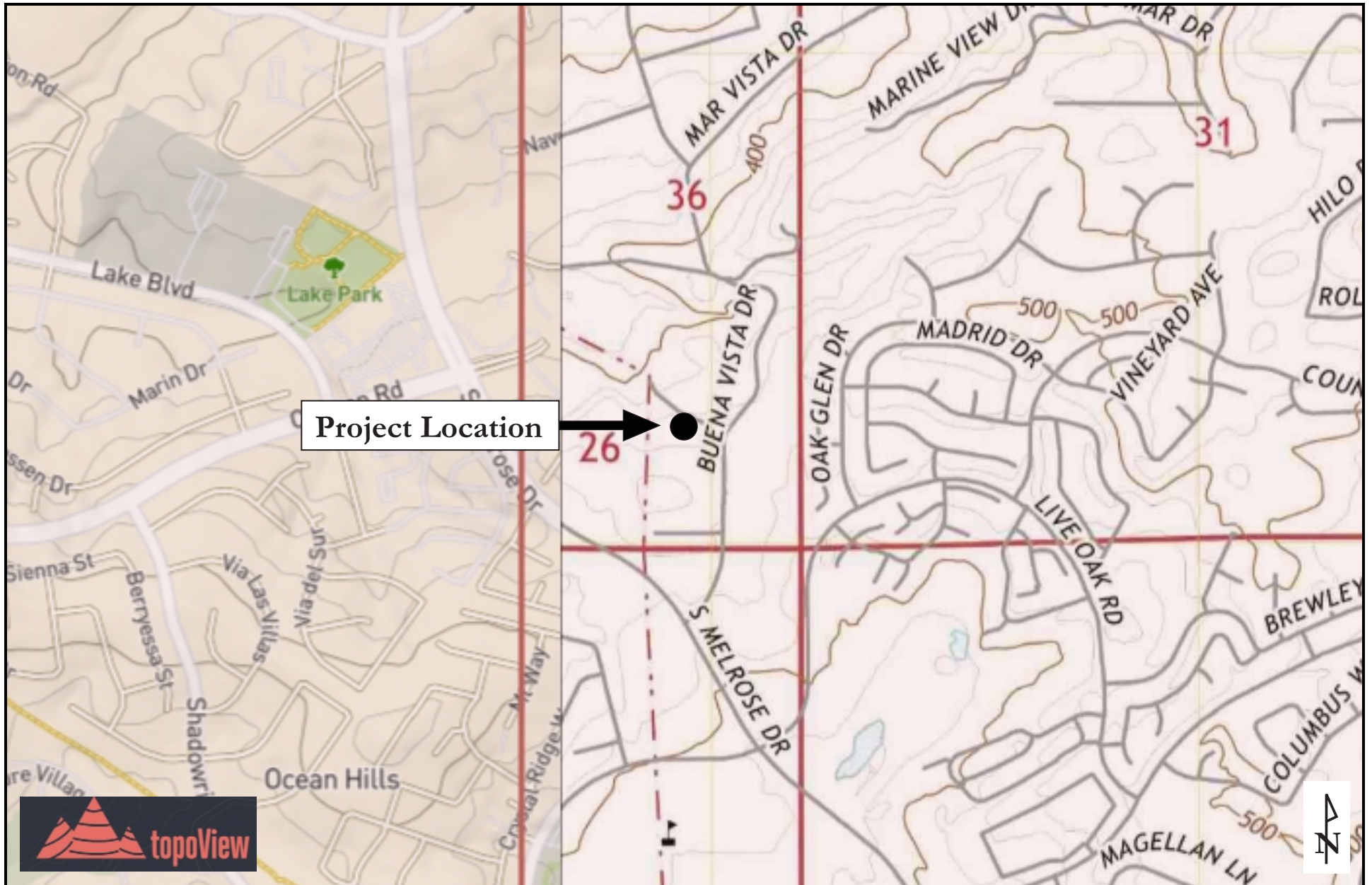
Figure 2



Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025
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Satellite Aerial Photograph Showing Noise Measurement Location
Job # S210306

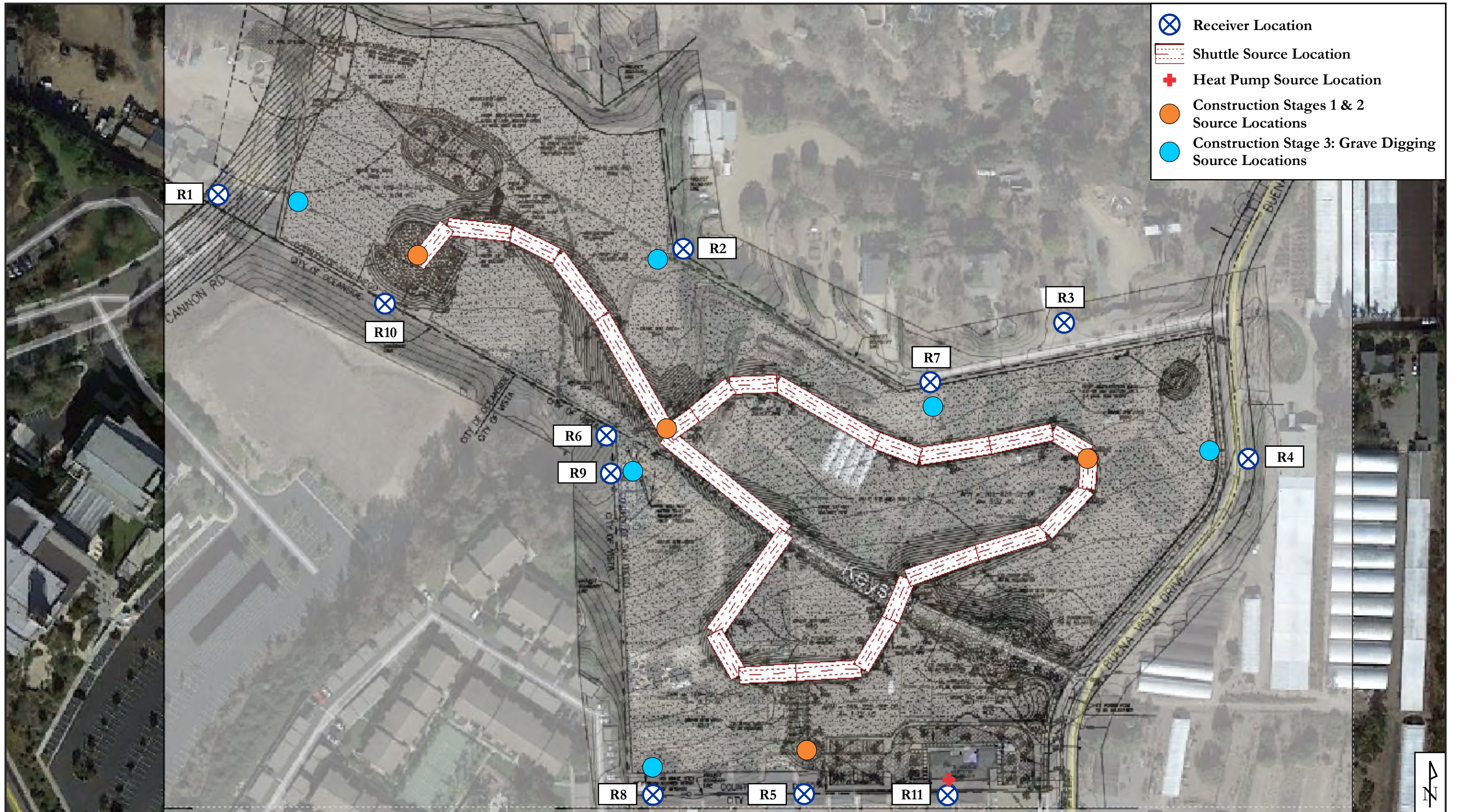
Figure 3



Eilar Associates, Inc.
210 South Juniper Street, Suite 100
Escondido, California 92025
760-738-5570

Topographic Map
Job # S210306

Figure 4



Eilar Associates, Inc.
 210 South Juniper Street, Suite 100
 Escondido, California 92025
 760-738-5570

Site Plan Showing Operational and Construction Noise Source and Receiver Locations
 Job # S210306

Figure 5



Appendix A

Project Plans

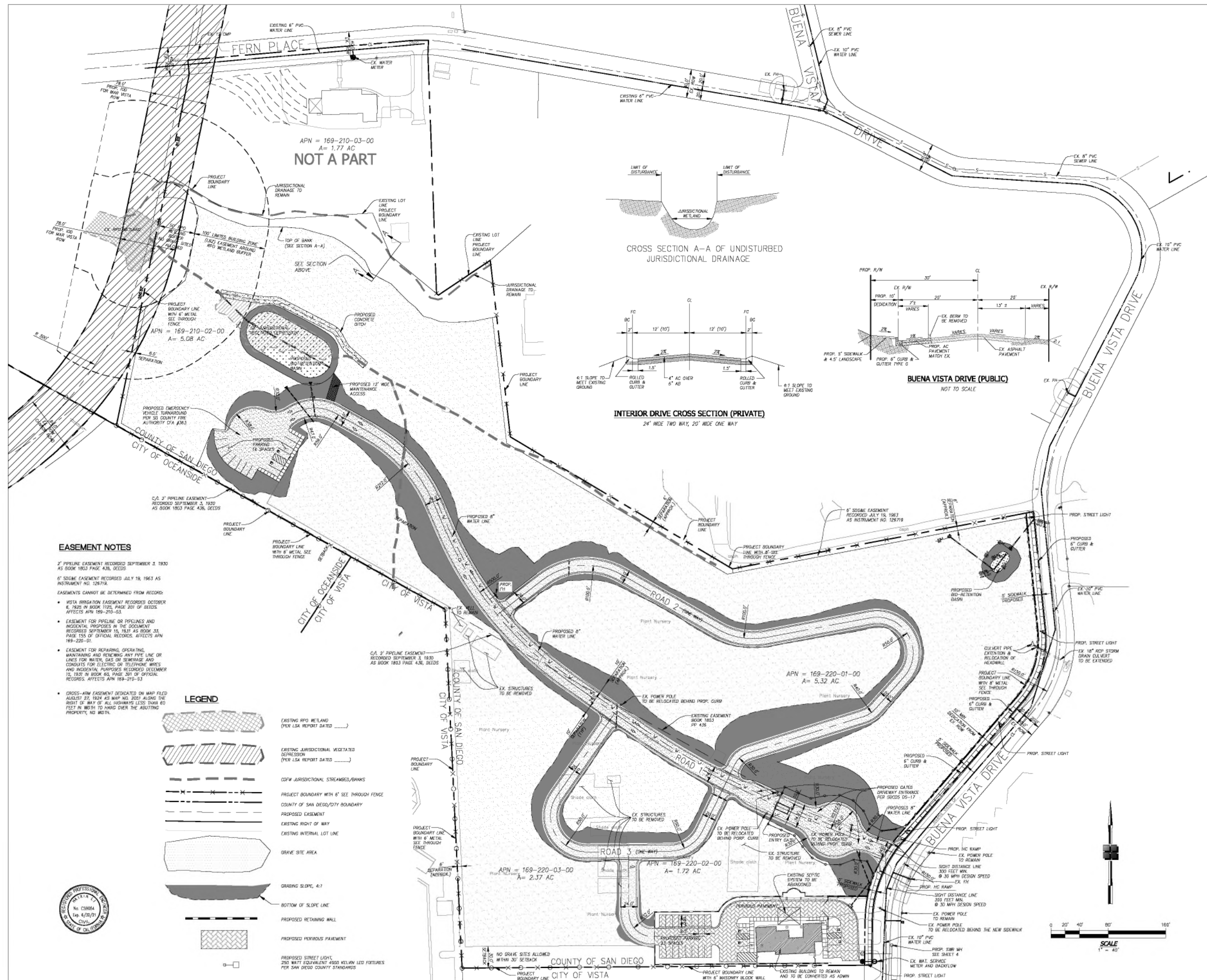
PLANNING CASE NO.
DATE 05/01/2021
SCALE: 1" = 40'
DRAWN: HL
JOB NO. CEME

PROJECT NAME
**GOOD SHEPHERD
CATHOLIC CEMETERY**
COUNTY OF SAN DIEGO, CA

Hofman
Planning + Engineering
3152 Lionshead Avenue
Carlsbad, CA 92010
(760) 692-4100
www.hofmanplanning.com

SHEET TITLE
**MAJOR USE PERMIT
EXHIBIT
PROPOSED SITE PLAN**

REVISIONS
REVISED 01/17/2019



EASEMENT NOTES

- 2" PIPELINE EASEMENT RECORDED SEPTEMBER 3, 1930 AS BOOK 1803 PAGE 436, DEEDS
- 6" SIDEWALK EASEMENT RECORDED JULY 19, 1963 AS INSTRUMENT NO. 128719.
- EASEMENTS CANNOT BE DETERMINED FROM RECORDS:
 - VISTA IRRIGATION EASEMENT RECORDED OCTOBER 6, 1925 IN BOOK 1725, PAGE 201 OF DEEDS. AFFECTS APN 169-210-01.
 - EASEMENT FOR PIPELINE OR PRELINES AND INCIDENTAL PURPOSES IN THE DOCUMENT RECORDED SEPTEMBER 15, 1931 AS BOOK 35, PAGE 155 OF OFFICIAL RECORDS. AFFECTS APN 169-220-01.
 - EASEMENT FOR REPAIRING, OPERATING, MAINTAINING AND RENEWING ANY PIPE LINE OR LINES FOR WATER, GAS OR SEWERAGE AND CONDUITS FOR ELECTRIC OR TELEPHONE WIRES AND INCIDENTAL PURPOSES RECORDED DECEMBER 15, 1931 IN BOOK 60, PAGE 391 OF OFFICIAL RECORDS. AFFECTS APN 169-210-03.
 - CROSS-ARM EASEMENT DEDICATED ON MAP FILED AUGUST 27, 1924 AS MAP NO. 2021 ALONG THE RIGHT OF WAY OF ALL HIGHWAYS LESS THAN 40 FEET IN WIDTH TO HANG OVER THE ADJUTING PROPERTY, NO WIDTH.

LEGEND

- EXISTING WFO WETLAND (PER LSA REPORT DATED _____)
- EXISTING JURISDICTIONAL VEGETATED DEPRESSION (PER LSA REPORT DATED _____)
- COFW JURISDICTIONAL STREAMBEDS/BANKS
- PROJECT BOUNDARY WITH 6" SEE THROUGH FENCE
- COUNTY OF SAN DIEGO/CITY BOUNDARY
- PROPOSED EASEMENT
- EXISTING RIGHT OF WAY
- EXISTING INTERNAL LOT LINE
- GRAVE SITE AREA
- GRADING SLOPE, 4:1
- BOTTOM OF SLOPE LINE
- PROPOSED RETAINING WALL
- PROPOSED PERVIOUS PAVEMENT
- PROPOSED STREET LIGHT, 250 WATT EQUIVALENT 4500 KELVIN LED FIXTURES PER SAN DIEGO COUNTY STANDARDS

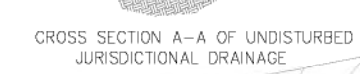
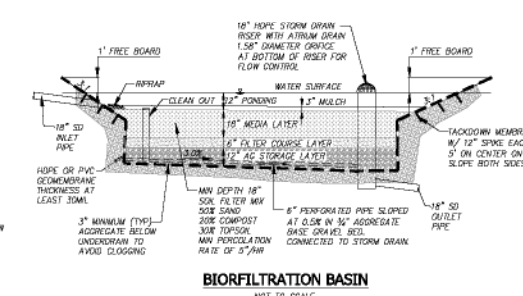
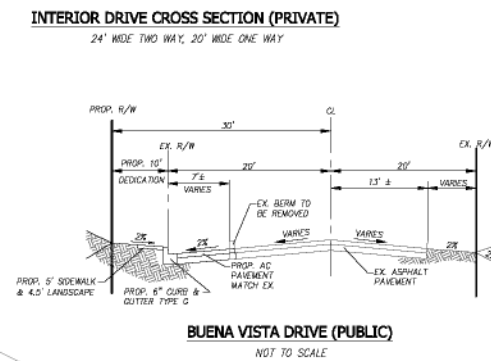
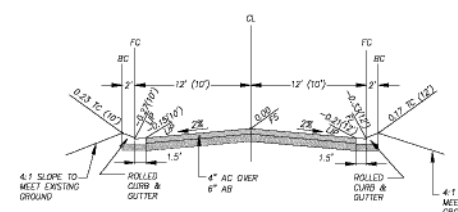
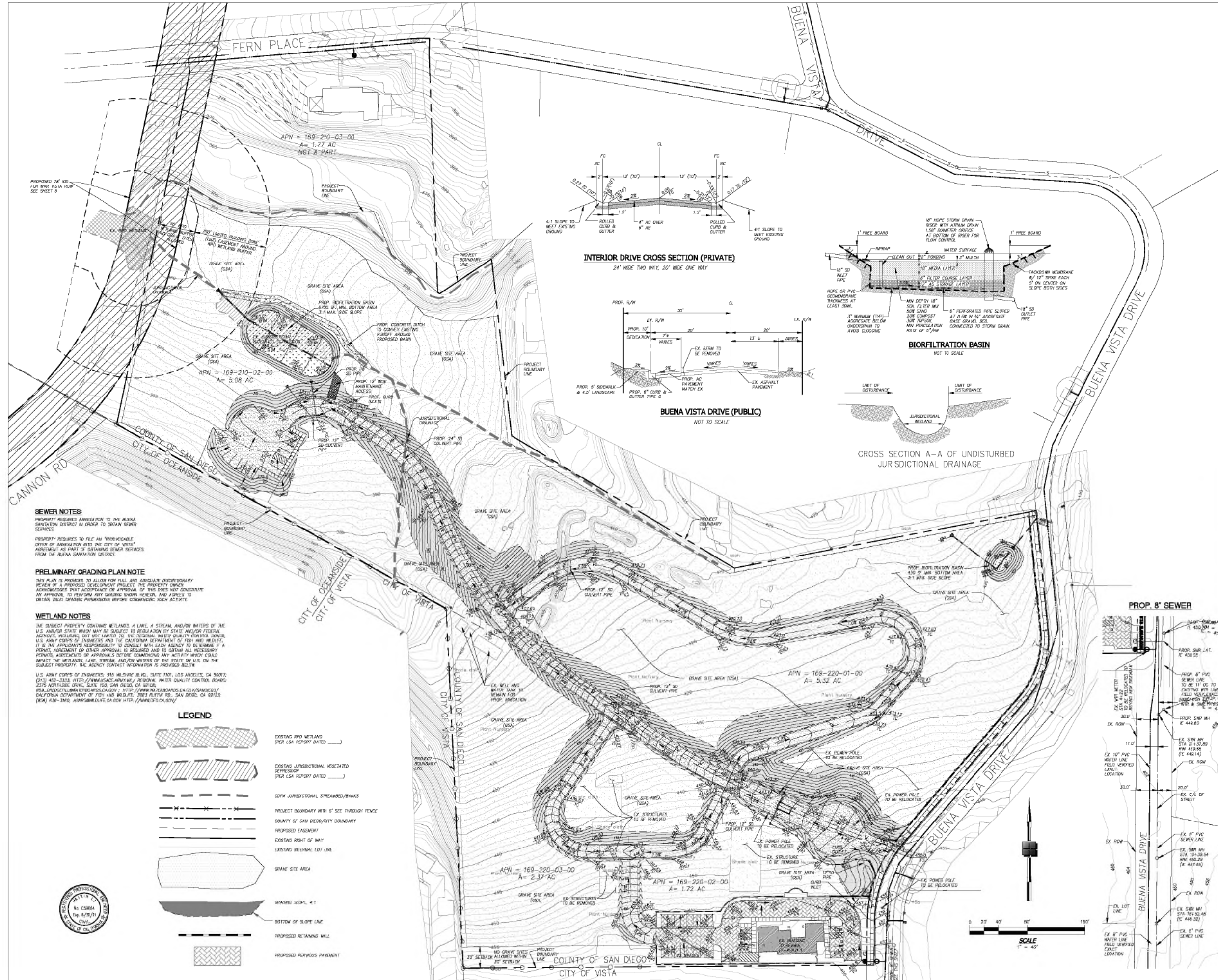


PROJECT NAME
**GOOD SHEPHERD
 CATHOLIC CEMETERY**
 COUNTY OF SAN DIEGO, CA

Hofman
 Planning + Engineering
 www.hofmanplanning.com
 3152 Lionshead Avenue
 Carlsbad, CA 92010
 (760) 692-4100

SHEET TITLE
**MAJOR USE PERMIT
 PROPOSED
 GRADING AND UTILITY PLAN**

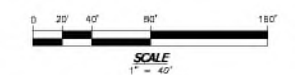
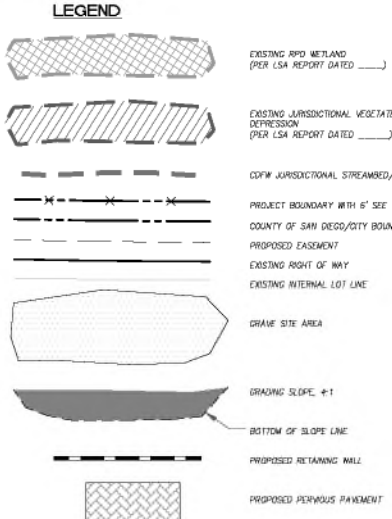
REVISIONS



SEWER NOTES
 PROPERTY REQUIRES ANNECTION TO THE BUENA SANITATION DISTRICT IN ORDER TO OBTAIN SEWER SERVICES.
 PROPERTY REQUIRES TO FILE AN "IRREVOCABLE OFFER OF ANNECTION AND THE CITY OF VISTA" AGREEMENT AS PART OF OBTAINING SEWER SERVICES FROM THE BUENA SANITATION DISTRICT.

PRELIMINARY GRADING PLAN NOTE
 THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING WORK HEREON AND AGREES TO OBTAIN VALID GRADING PERMITS BEFORE COMMENCING SUCH ACTIVITY.

WETLAND NOTES
 THE SUBJECT PROPERTY CONTAINS WETLANDS, A LAKE, A STREAM, AND/OR WATERS OF THE U.S. AND/OR STATE WHICH MAY BE SUBJECT TO REGULATION BY STATE AND/OR FEDERAL AGENCIES, INCLUDING BUT NOT LIMITED TO: THE REGIONAL WATER QUALITY CONTROL BOARD, U.S. ARMY CORPS OF ENGINEERS AND THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE. IT IS THE APPLICANT'S RESPONSIBILITY TO CONSULT WITH EACH AGENCY TO DETERMINE IF A PERMIT, AGREEMENT OR APPROVAL IS REQUIRED AND TO OBTAIN ALL NECESSARY PERMITS, AGREEMENTS OR APPROVALS BEFORE COMMENCING ANY ACTIVITY WHICH COULD IMPACT THE WETLANDS, LAKE, STREAM, AND/OR WATERS OF THE STATE OR U.S. ON THE SUBJECT PROPERTY. THE AGENCY CONTACT INFORMATION IS PROVIDED BELOW:
 U.S. ARMY CORPS OF ENGINEERS: 915 MILWAUKEE BLVD., SUITE 1101, LOS ANGELES, CA 90017, (213) 452-3333. HTTP://WWW.USACE.ARMY.MIL/ REGIONAL WATER QUALITY CONTROL BOARD: 2275 NORTHBIRD DRIVE, SUITE 100, SAN DIEGO, CA 92108. RWQ.DISTRICT@WATERBOARDS.CA.GOV / HTTP://WWW.WATERBOARDS.CA.GOV/SANDEGO/ CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE: 3003 RUFFIN RD., SAN DIEGO, CA 92123. (619) 438-3160. WDFW@CALIFORNIA.DEMO.HTTP://WWW.DFWO.CA.GOV/





Appendix B

Pertinent Sections of Applicable Noise Regulations

Cross reference(s)--Definitions, § 12.101 et seq.

SEC. 36.403. SOUND LEVEL MEASUREMENT.

(a) A sound level measurement made pursuant to this chapter shall be measured with a sound level meter using A-weighting and a "slow" response time, as these terms are used in ANSI S1.1-1994 or its latest revision.

(b) Each measurement shall be conducted at the boundary line of the property on which the noise source is located or any place on the affected property, but no closer than five feet from the noise source.

(c) The sound level meter shall be calibrated and adjusted by means of an acoustical calibrator of the coupler-type to assure meter accuracy within the tolerances in the ANSI specifications for sound level meters, ANSI S1.4-1983 or its latest revision. The sound level meter shall be used as provided in the manufacturer's instructions.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.404. GENERAL SOUND LEVEL LIMITS.

(a) Except as provided in section 36.409 of this chapter, it shall be unlawful for any person to cause or allow the creation of any noise, which exceeds the one-hour average sound level limits in Table 36.404, when the one-hour average sound level is measured at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise.

**TABLE 36.404
SOUND LEVEL LIMITS IN DECIBELS (dBA)**

ZONE	TIME	ONE-HOUR AVERAGE SOUND LEVEL LIMITS (dBA)
(1) RS, RD, RR, RMH, A70, A72, S80, S81, S90, S92, RV, and RU with a General Plan Land Use Designation density of less than 10.9 dwelling units per acre.	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
(2) RRO, RC, RM, S86, V5, RV and RU with a General Plan Land Use Designation density of 10.9 or more dwelling units per acre.	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
(3) S94, V4, and all commercial zones.	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
(4) V1, V2	7 a.m. to 7 p.m.	60
V1, V2	7 p.m. to 10 p.m.	55
V1	10 p.m. to 7 a.m.	55
V2	10 p.m. to 7 a.m.	50
V3	7 a.m. to 10 p.m.	70
	10 p.m. to 7 a.m.	65
(5) M50, M52, and M54	Anytime	70

(6)	S82, M56, and M58.	Anytime	75
(7)	S88 (see subsection (c) below)		

(b) Where a noise study has been conducted and the noise mitigation measures recommended by that study have been made conditions of approval of a Major Use Permit, which authorizes the noise-generating use or activity and the decision making body approving the Major Use Permit determined that those mitigation measures reduce potential noise impacts to a level below significance, implementation and compliance with those noise mitigation measures shall constitute compliance with subsection (a) above.

(c) S88 zones are Specific Planning Areas which allow different uses. The sound level limits in Table 36.404 above that apply in an S88 zone depend on the use being made of the property. The limits in Table 36.404, subsection (1) apply to property with a residential, agricultural or civic use. The limits in subsection (3) apply to property with a commercial use. The limits in subsection (5) apply to property with an industrial use that would only be allowed in an M50, M52 or M54 zone. The limits in subsection (6) apply to all property with an extractive use or a use that would only be allowed in an M56 or M58 zone.

(d) If the measured ambient noise level exceeds the applicable limit in Table 36.404, the allowable one-hour average sound level shall be the one-hour average ambient noise level, plus three decibels. The ambient noise level shall be measured when the alleged noise violation source is not operating.

(e) The sound level limit at a location on a boundary between two zones is the arithmetic mean of the respective limits for the two zones. The one-hour average sound level limit applicable to extractive industries, however, including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone in which the extractive industry is located.

(f) A fixed-location public utility distribution or transmission facility located on or adjacent to a property line shall be subject to the sound level limits of this section measured at or beyond six feet from the boundary of the easement upon which the facility is located.

(Amended by Ord. No. 7094 (N.S.), effective 3-25-86; amended by Ord. No. 9478 (N.S.), effective 7-19-02; amended by Ord. No. 9621 (N.S.), effective 1-9-04; amended by Ord. No. 9962 (N.S.), effective 1-9-09; amended by Ord. No. 10211 (N.S.), effective 6-1-12)

SEC. 36.405. REPAIRING, REBUILDING OR TESTING MOTOR VEHICLES.

It shall be unlawful for any person to repair, rebuild or test any motor vehicle in such a manner as to cause a disturbing, excessive or offensive noise as defined in section 36.402 of this chapter.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.406. POWERED MODEL VEHICLES.

It shall be unlawful for any person to operate a powered model vehicle between 9 p.m. and 7 a.m. A powered model vehicle operated in a County park shall meet the daytime sound level standards for an RS zone measured at a point 100 feet from the park property line or 100 feet from where the model vehicle is being operated, whichever is less.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.407. REFUSE VEHICLES & PARKING LOT SWEEPERS.

No person shall operate or allow to be operated, a refuse compacting, processing, or collection vehicle or a parking lot sweeper between the hours of 10 p.m. to 6 a.m., in or within 100 feet of a residential zone.

(Amended by Ord. No. 7428 (N.S.), effective 2-4-88; amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.408. HOURS OF OPERATION OF CONSTRUCTION EQUIPMENT.

Except for emergency work, it shall be unlawful for any person to operate or cause to be operated, construction equipment:

(a) Between 7 p.m. and 7 a.m.

(b) On a Sunday or a holiday. For purposes of this section, a holiday means January 1st, the last Monday in May, July 4th, the first Monday in September, December 25th and any day appointed by the President as a special national holiday or the Governor of the State as a special State holiday. A person may, however, operate construction equipment on a Sunday or holiday between the hours of 10 a.m. and 5 p.m. at the person's residence or for the purpose of constructing a residence for himself or herself, provided that the operation of construction equipment is not carried out for financial consideration or other consideration of any kind and does not violate the limitations in sections 36.409 and 36.410.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.409. SOUND LEVEL LIMITATIONS ON CONSTRUCTION EQUIPMENT.

Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 decibels for an eight-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

(Amended by Ord. No. 9700 (N.S.), effective 2-4-05; amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.410. SOUND LEVEL LIMITATIONS ON IMPULSIVE NOISE.

In addition to the general limitations on sound levels in section 36.404 and the limitations on construction equipment in section 36.409, the following additional sound level limitations shall apply:

(a) Except for emergency work or work on a public road project, no person shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in Table 36.410A, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period, as described in subsection (c) below. The maximum sound level depends on the use being made of the occupied property. The uses in Table 36.410A are as described in the County Zoning Ordinance.

**TABLE 36.410A.
MAXIMUM SOUND LEVEL (IMPULSIVE) MEASURED AT OCCUPIED PROPERTY IN DECIBELS (dBA)**

OCCUPIED PROPERTY USE	DECIBELS (dBA)
Residential, village zoning or civic use	82
Agricultural, commercial or industrial use	85

(b) Except for emergency work, no person working on a public road project shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in Table 36.410B, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period, as described in subsection (c) below. The maximum sound level depends on the use being made of the occupied property. The uses in Table 36.410B are as described in the County Zoning Ordinance.

Chapter 8.32

Noise Control

Sections:

- 8.32.010 Prima Facie Noise Violations**
- 8.32.020 Enforcement of Prima Facie Violations**
- 8.32.030 Violation of Section 8.32.010 - Penalty**
- 8.32.040 Adoption of County Regulations Relating to Noise Control**
- 8.32.050 Violation of Section 8.32.040 - Penalty**
- 8.32.060 Additional Remedy**

Section 8.32.010 Prima Facie Noise Violations

Any of the following constitutes prima facie evidence of a violation of this section:

A. The operation of any such sound production or reproduction device, radio receiving set, musical instrument, drum, phonograph, television set, loudspeaker and sound amplifier or similar machine or device between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to be plainly audible at a distance of 50 feet from the building, structure or vehicle in which it is located.

B. The operation of any sound amplifier, at any time of day or night, which is part of, or connected to, any radio, stereo, receiver, compact disc player, cassette tape player or other similar device, when operated in such a manner as to be plainly audible at a distance of 50 feet and when operated in such a manner as to cause a person to be aware of vibration accompanying the sound at a distance of 50 feet from the source.

(Prior Code 19-7.7; Ord. No. 89-41, Amended 1/8/90)

Section 8.32.020 Enforcement of Prima Facie Violations

Any peace officer, as defined in Chapter 4.5 (commencing with Section 830) of the Penal Code, who encounters prima facie evidence of a violation of Section 8.32.010 is empowered to enforce these provisions.

(Prior Code 19-7.8; Ord. No. 89-41, Amended 1/8/90)

Section 8.32.030 Violation of Section 8.32.010 - Penalty

A. Any person violating Section 8.32.010 is deemed guilty of a misdemeanor and shall have a mandatory court appearance, and upon conviction thereof is punishable according to the provisions of Section 1.16.010 of this code. Each day such violation is committed or permitted to continue constitutes a separate offense and is punishable as such.

B. Notwithstanding the penalty provisions of subsection (A) of this section, following the conviction of a defendant for any prima facie violations of Section 8.32.010, the prosecutor or city attorney may bring a motion requesting the court to order the confiscation and the destruction of any or all of the components amplifying or transmitting the sound.

(Prior Code 19-7.9; Ord. No. 89-41, Amended 1/8/90)

Section 8.32.040 Adoption of County Regulations Relating to Noise Control

A. There is adopted by the City Council, for the purpose of controlling noise, that certain code known as the San Diego County Code of Regulatory Ordinances, Chapter 4 of Division 6 of Title 3, relating to control of noise, excepting therefrom the table set out in Section 36.404 and replacing it with the following:

**Table 8.32.040
APPLICABLE EXTERIOR PROPERTY LINE NOISE LIMITS**

Zone	Time	Applicable Limit One-hour Average Sound Level (Decibels)
A-1, E-1, O & OSR	7:00 a.m.--10:00 p.m.	50
R-1B, MHP	10:00 p.m.--7:00 a.m.	45
R-M	7:00 a.m.--10:00 p.m.	55
	10:00 p.m.--7:00 a.m.	50
C-1, C-2, O-3, C-T, OP, M-U and Downtown Specific Plan	7:00 a.m.--10:00 p.m.	60
	10:00 p.m.--7:00 a.m.	55
M-1, I-P, all areas of the Vista Business Park Specific Plan and Specific Plan 14	Any time	70

B. The one-hour average sound level limit specified in paragraph A shall be reduced by five decibels for a noise which, in the judgment of the noise control officer, constitutes a whine, screech, hum, or a repetitive noise such as hammering or riveting.

C. One copy of the County Code is filed in the Office of the City Clerk, and it is adopted and incorporated as though fully set out at length in this chapter. From the date on which the ordinance codified in this section takes effect, the provisions thereof are controlling within the limits of the city.

D. The provisions of Section 8.32.010 and paragraph A of this Section are not applicable to entertainment conducted under a valid permit issued pursuant to Chapter 5.24 when the entertainment satisfies all conditions for sound generation and sound attenuation imposed by Section 5.24.110 and the applicable permit, including operating hours of the entertainment. Failure to satisfy the noise generation or attention conditions imposed by an entertainment permit or this Chapter constitutes a violation of this Chapter.

E. Except as limited by paragraph D, all provisions in this Chapter apply to any noise or sound generated by activities on premises holding an entertainment permit, including noise generated by activities not qualifying as an entertainment, noise generated by entertainment occurring outside of the hours authorized in the entertainment permit, and noise generated by forms of entertainment not authorized under an entertainment permit.
(Prior Code 19-40; Ord. No. 83-13, Amended 4/11/83; Ord. No. 83-29, Amended 6/16/83; Ord. No. 89-41, Amended 1/8/90; Ord. No. 90-16, Amended, 5/29/90; Ord. No. 2014-7, Amended and Added, 3/25/14)

Section 8.32.050 Violation of Section 8.32.040-Penalty

Any person violating any of the provisions of Section 8.32.040 is deemed guilty of a misdemeanor and upon conviction thereof shall be punishable according to the provisions of Section 1.16.010 of this code. Each day such violation is committed or permitted to continue constitutes a separate offense and is punishable as such.
(Prior Code 19-40; Ord. No. 90-16, Amended, 5/29/90)

Section 8.32.060 Additional Remedy

As an additional remedy, the operation or maintenance of any device, instrument, vehicle, machinery or other item in violation of any provision of this chapter for which operation or maintenance causes discomfort or annoyance to persons of normal sensitivity or which endangers the comfort, repose, health or peace of residents in the area, is deemed and is

Sec. 38.6. - Emergency work.

Emergency work shall mean work made necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from imminent exposure to danger or damage or work by public or private utilities when restoring utility service.

(Ord. No. 90-21, § 2, 5-23-90)

Sec. 38.7. - Sound level.

Sound level shall mean the weighted sound pressure level obtained by the use of a sound level meter and frequency weighing network as specified in American National Standards Institute specifications for sound level meters (ANSI S1.4-1971, or the latest revision thereof). If the frequency weighting employed is not indicated, the A-weighting is implied.

(Ord. No. 90-21, § 2, 5-23-90)

Sec. 38.8. - Sound level meter.

Sound level meter shall mean an instrument, including a microphone, an amplifier, readout, and frequency weighting networks for the measurement of sound levels which meets or exceeds the requirements pertinent for type S2A meters in the latest revision of the American National Standards Institute Specification for sound level meters.

(Ord. No. 90-21, § 2, 5-23-90)

Sec. 38.9. - Nuisance.

Nuisance shall be that condition constituting a "public nuisance" as defined by state law.

(Ord. No. 90-21, § 2, 5-23-90)

Sec. 38.10. - Base district.

Base district shall mean those land use regulations as similarly referenced in the Oceanside Zoning Ordinance.

(Ord. No. 90-21, § 2, 5-23-90)

ARTICLE III. - SOUND LEVEL LIMITS

Sec. 38.11. - Sound level measurement.

The city shall establish appropriate standards and procedures to ensure the accuracy of sound level measurements. Any such measurements shall be made consistent with these standards and procedures.

(Ord. No. 90-21, § 2, 5-23-90)

Sec. 38.12. - General sound level limits.

(a) Except for exempted activities and sounds as provided in this chapter or exempted properties as referenced

in section 38.15, it shall be unlawful for any person to cause or allow the creation of any noise to the extent that the one-hour average sound level, at any point on or beyond the boundaries of the property in the applicable base district zone on which the sound is produced exceeds the applicable limits set forth below:

Sound Level Limits (Decibels)

Base District Zone	7:00 a.m. to 9:59 p.m.	10:00 p.m. to 6:59 a.m.
(1) Residential Districts:		
RE (Residential Estate)	50	45
RS (Single-Family)	50	45
RM (Medium Density)	50	45
RH (High Density)	55	50
RT (Residential Tourist)	55	50
(2) C (Commercial)	65	60
(3) I (Industrial)	70	65
(4) D (Downtown)	65	55
(5) A (Agricultural)	50	45
(6) OS (Open Space)	50	45

(b) Limits for planned developments. In addition to the sound level limits established above, there is hereby established sound level limits for PD (planned development) base district zones.

For any residential land use within a PD zone, the sound level limit is that limit which would be otherwise applicable in the residential district zone (RE, RS, RM, RH or RT) corresponding to density of the residential development in that PD zone.

For any nonresidential land use within a PD zone, the sound level limit is that limit corresponding to the C (commercial) or I (industrial) zone which would be applicable to that use if not subject to the PD zone. For the purposes of this section, a land use shall be that use shown on a duly approved planned development plan or specific plan.

(c) Limits for joint boundaries. When property lines form the joint boundary of two (2) base district zones, the sound level limit shall be the arithmetic mean of the limit applicable to each of the two (2) zones.

(Ord. No. 90-21, § 2, 5-23-90)

Sec. 38.13. - Noncompliance with sound level limits; extensions; variations.

If the noise resulting from any activity, event, or enterprise in any nonresidential base district zone shall exceed the applicable area sound level limit prescribed in section 38.12 on three (3) or more days during any thirty-day period, the code enforcement division shall serve a notice of noncompliance on the owner of the property which produces the

Construction Noise

1. It should be unlawful for any person within any residential zone or 500' therefrom to operate any pile driver, power shovel, pneumatic, power hoist, or other construction equipment between 8 PM and 7 AM generating an ambient noise level of 50dBA at any property line, unless an emergency exists.
2. It should be unlawful for any person to operate any construction equipment at a level in excess of 85dBA at 100' from the source.
3. It should be unlawful for any person to engage in construction activities between 6 PM and 7 AM when such activities exceed the ambient noise level by 5dBA. A special permit may be granted by the Director of Public Works if extenuating circumstances exist.

Amplified Sound

(Although the use of amplifying equipment is protected by constitutional rights, it may be reasonably regulated to protect the public welfare.)

1. Curfews for use of amplifiers should be established at reasonable times such as 9 PM to 9 AM. Noise levels should not be audible at a distance of 300 feet from the amplifying equipment and should not be audible within any hospitals, rest home, or convalescent hospital and shall not exceed an ambient noise level of 55dBA at any property line for "R" zoned properties. Special permits to exceed the above curfew hours may be issued by the Chief of Police for temporary events sponsored or conducted by nonprofit organizations.

Noise Making Apparatus

1. Noise making apparatus should include radios, television sets, phonographs, and similar devices. Ordinances have been or may be created to prohibit the use of such devices if such use disturbs the quiet and comfort of a neighboring resident. Curfews may be established whereby no operation between 10 PM and 8 AM is permitted if sound is audible at 50' from the source. Provisions may be adopted prohibiting any noise source extending the ambient noise level at the property line of any "R" zoned property by more than five (5) decibels which shall be prima facie evidence of a violation.
2. Machinery, circulation devices, fans, and other such equipment should not be permitted to operate when a noise level is created at the property line exceeding 5dBA above the ambient level.
3. Sound trucks used for commercial purposes should be required to receive permits from the noise control officer of the City.



Appendix C

Manufacturer Data Sheets

Job Name:

Schedule Reference:

Date:

OUTDOOR VRF SYSTEM FEATURES

- Single-phase outdoor unit with variable refrigerant flow (VRF) zoning technology
- Inverter-driven (variable speed) compressor
- Total refrigerant piping length of 492' (150 m)
- Connects up to 12 indoor units
- Uses CITY MULTI indoor units and Controls Network

UNIT OPTION

- Standard Model.....PUMY-P60NKMU
- Sea Coast (BS) Model.....PUMY-P60NKMU-BS

OPTIONAL PARTS

- Joint Kit.....for details see Pipe Accessories Submittal
 - Header Kit.....for details see Pipe Accessories Submittal
 - Air Outlet Guide (One Piece)**.....PAC-SH96SG-E
 - Wind Baffle (One Piece)**.....WB-PA3
 - Drain Pan.....PAC-SH97DP-E
 - Drain Socket.....PAC-SH71DS-E
- **PUMY requires two outlet guides and wind baffles for installation.

Specifications		Model Name
Unit Type		PUMY-P60NKMU (-BS)
Nominal Cooling Capacity (208/230V)	Btu/h	60,000
Nominal Heating Capacity (208/230V)	Btu/h	66,000
Operating Temperature Range	Cooling (Outdoor) *1	23° F ~ 115° F (-5° ~ +46° C) DB
	Heating (Outdoor)	-4° F ~ +60° F (-20° ~ +15° C) WB
External Dimensions (H x W x D)	In. / mm	52-11/16 x 41-5/16 x 13 (+1-3/16) / 1,338 x 1050 x 330 (+30)
External finish		Precoated Galvanized-steel Sheets
Net Weight	Lbs. / kg	313 / 142
Electrical Power Requirements	Voltage, Phase, Hertz	208 / 230V, 1-phase, 60Hz
Minimum Circuit Ampacity (MCA)	A	35
Recommended Fuse/Breaker Size	A	40
Maximum Fuse Size	A	42
Piping Diameter (Flared) (In. / mm)	Liquid (High Pressure)	3/8 / 9.52
	Gas (Low Pressure)	3/4 / 19.05
Indoor Unit	Total Capacity	50 to 130% of Outdoor Unit Capacity
	Model / Quantity	P06 to P72 / 1 to 12
Sound Pressure Levels	dB(A)	58/59
Fan		
Type x Quantity	Propeller Fan x 2	
Airflow Rate	CFM	4,940
Compressor Operating Range	Cooling	38% to 100%
	Heating	29% to 100%
Compressor Type x Quantity		INVERTER-driven Scroll Hermetic x 1
Compressor Motor Output	kW	3.0
Refrigerant		R410A
Lubricant		FV50S
High-pressure Protection Device		High Pressure Switch
Compressor / Fan Protection Device		Compressor Thermo / Overcurrent Detection
Inverter Protection Device		Overheat / Voltage Protection
AHRI Ratings Ducted (06 + 06 + 06 + 18 + 24) / Non-Ducted (24 + 24 + 06 + 06)	EER	11.3 / 12.5
	SEER	16.5 / 16.7
	COP	3.70 / 3.14
Blue Fin Anti-corrosion Protection: Cellulose- and polyurethane-resin coating treatment applied to condenser coil that protects it from air contaminants; ≥1µm thick; Salt Spray Test Method - no unusual rust development to 960 hours.		

NOTES:

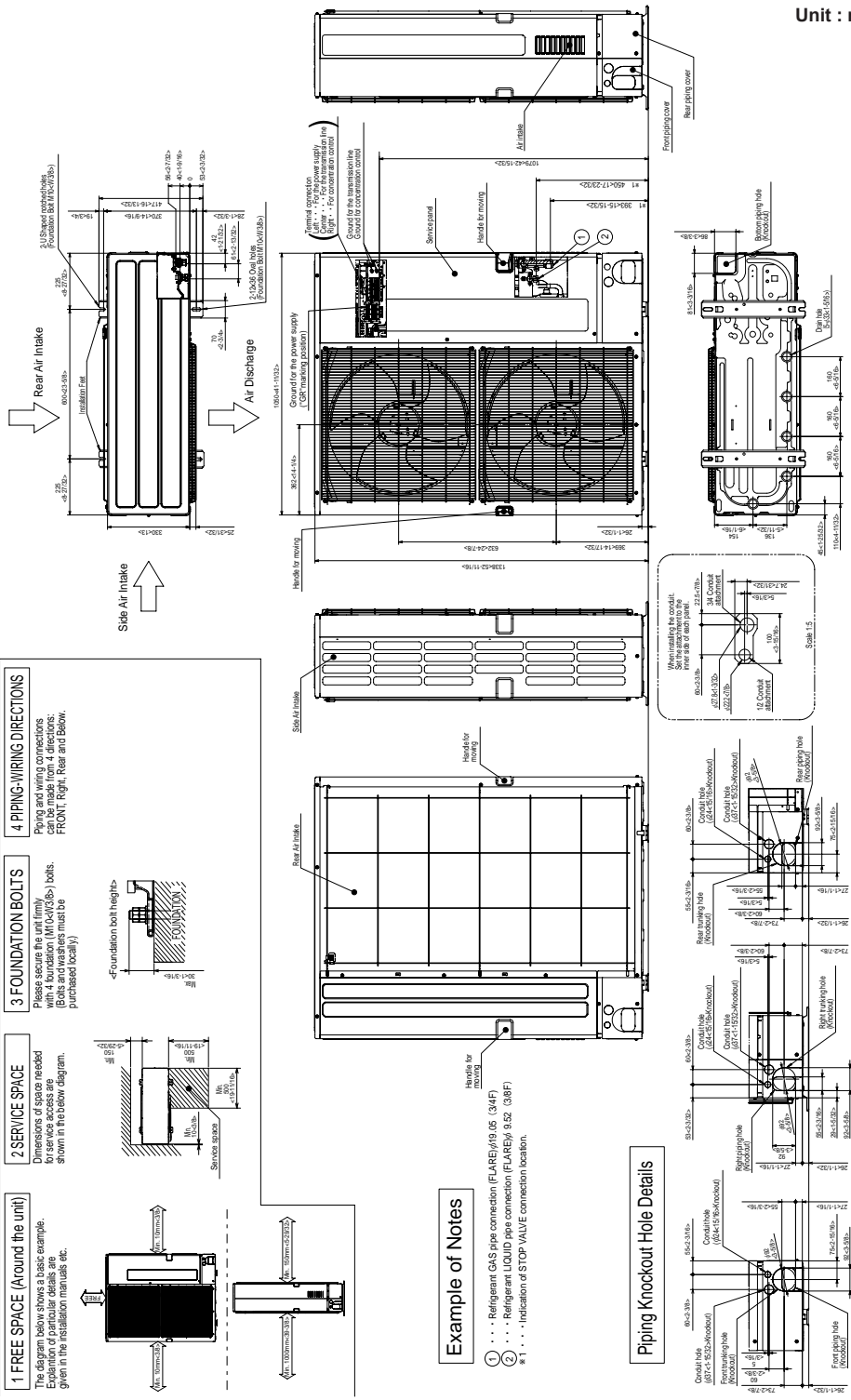
*1. If PKFY-P06/08 indoor units are connected, then range is 50° F ~ 115° F (10° C ~ 46° C).

SEACOAST PROTECTION

- External Panel Base, External Front Panel, Pillar: Alloyed galvanized-steel sheets with thermoset polyester-resin coating on internal and external surfaces
- Compressor Cover: Galvanized-aluminum sheets with thermoset polyester-resin coating on internal and external surfaces
- Electrical Parts Box: Galvanized-aluminum sheets with thermoset polyester-resin coating on external surface
- Fan Motor Support: Galvanized-steel sheets with thermoset polyester-resin coating on internal and external surfaces
- Printed Circuit Board: Epoxy resin with polyurethane-coating on external surface

Model: PUMY-P60NKMU (-BS) – DIMENSIONS

Unit : mm <inch>



INVERTER



COOLING & HEATING

1340 Satellite Boulevard
Suwanee, GA 30024
Toll Free: 800-433-4822
www.mehvac.com



Appendix D

CadnaA Analysis Data and Results

Eilar Associates, Inc.

210 South Juniper Street, Suite 100

Escondido, California 92025-4230

Phone: (760) 738-5570

Date: 12 Apr 2021

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	1000.00
Min. Length of Section (#(Unit,LEN))	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

Receivers

Name	M.	ID	Level Lr		Limit. Value		Land Use			Height (m)	Coordinates			
			Day (dBA)	Night (dBA)	Day (dBA)	Night (dBA)	Type	Auto	Noise Type		X (m)	Y (m)	Z (m)	
R1			13.2	-9.4	0.0	0.0		x	Total	1.52	r	375.07	731.27	117.07
R2			22.8	-8.3	0.0	0.0		x	Total	1.52	r	565.79	708.52	119.84
R4			17.6	-4.9	0.0	0.0		x	Total	1.52	r	802.12	621.81	133.89
R5			23.0	20.0	0.0	0.0		x	Total	1.52	r	618.72	482.80	142.56
R6			24.6	-4.3	0.0	0.0		x	Total	1.52	r	535.87	631.41	123.29
R7			25.7	-4.8	0.0	0.0		x	Total	1.52	r	670.37	653.22	128.65
R10			20.9	-7.4	0.0	0.0		x	Total	1.52	r	444.59	686.08	117.85
R11			44.6	44.6	0.0	0.0		x	Total	1.52	r	678.57	484.15	141.71

Point Sources

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height	Coordinates			
			Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night					X	Y	Z	
			(dBA)	(dBA)	(dBA)																(m)	(m)	(m)	(m)	
Heat Pump			67.9	67.9	67.9	Lw	AC1		0.0	0.0	0.0							0.0		(none)	0.75	r	678.44	488.72	140.70

Roads

Name	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection			
			Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.	
			(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(km/h)	(km/h)								(dB)
Shuttle			27.4	0.0	0.0			4.0	0.0	0.0	0.0	0.0	0.0	24		3.66	0.0	1	0.0	0.0			

Geometry - Roads

Name	Height		Coordinates				Dist (m)	LSlope (%)
	Begin (m)	End (m)	x (m)	y (m)	z (m)	Ground (m)		
Shuttle	0.00	r	560.80	630.93	123.97	123.97		
			610.82	590.99	129.70	129.70		
			580.98	549.38	132.97	132.97		
			591.49	531.72	135.24	135.24		
			615.03	532.98	136.04	136.04		
			641.93	534.66	136.13	136.13		
			654.12	554.84	134.50	134.50		
			661.27	572.07	133.29	133.29		
			690.27	582.58	132.59	132.59		
			718.44	590.99	131.69	131.69		
			735.67	609.07	130.93	130.93		
			736.51	623.78	130.03	130.03		
			721.38	632.61	129.46	129.46		
			695.32	627.14	128.87	128.87		
			666.31	622.52	128.39	128.39		
			648.24	629.24	127.83	127.83		
			607.04	652.78	124.97	124.97		
			587.70	651.94	124.97	124.97		
			572.99	639.75	124.34	124.34		
			562.06	632.19	123.99	123.99		
			534.32	680.53	117.84	117.84		
			515.82	705.75	115.82	115.82		
			496.91	715.00	114.30	114.30		
			470.42	717.94	114.30	114.30		
			457.81	702.39	114.60	114.60		

Buildings

Name	M.	ID	RB	Residents	Absorption	Height
						Begin
						(m)
			x	0		3.66 r

Geometry - Buildings

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
						Begin	x	y	z	Ground
						(m)	(m)	(m)	(m)	(m)
			x	0		3.66 r	670.39	499.96	143.01	139.35
							679.42	499.96	143.01	139.36
							679.52	498.28	143.01	139.45
							684.77	498.28	143.01	139.46
							684.77	494.60	143.01	139.65
							690.13	494.60	143.01	139.66
							690.23	501.64	143.01	139.27
							697.48	501.64	143.01	139.26
							697.58	493.97	143.01	139.69
							694.12	493.97	143.01	139.69
							694.01	488.62	143.01	139.98
							679.73	488.72	143.01	139.95
							679.42	489.46	143.01	139.91
							670.91	489.25	143.01	139.91

Terrain Contours

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						328.29	678.45	119.00
						346.29	647.21	121.00
						387.58	602.21	125.00
						411.41	616.50	126.00
						432.06	592.68	127.00
						340.46	462.43	129.00
						303.93	500.55	129.00
						334.64	551.91	127.00
						379.11	593.73	125.00
						488.77	410.47	141.00
						492.48	350.11	140.00
						479.77	313.05	136.00
						203.40	538.06	118.00
						145.16	504.71	120.00
						114.45	452.82	121.00
						111.80	425.82	123.00
						122.39	363.35	125.00
						146.22	369.17	126.00
						266.93	350.64	129.00
						287.58	358.05	129.00
						278.05	331.05	131.00
						251.58	300.34	133.00
						129.81	307.75	133.00
						108.10	286.05	134.00
						301.88	417.35	130.00
						276.99	406.76	127.00
						237.28	484.06	125.00
						184.87	458.12	126.00
						170.04	413.11	126.00
						270.11	405.17	127.00
						283.34	370.76	129.00
						744.13	690.83	127.00
						737.51	708.04	127.00
						738.04	717.04	127.00
						731.42	727.10	126.00
						585.82	734.25	121.00
						593.50	746.16	121.00
						603.56	753.31	121.00
						623.15	755.96	121.00
						635.85	750.13	121.00
						653.59	763.10	119.00
						643.00	778.46	120.00
						635.33	777.93	117.00
						630.56	787.72	119.00
						618.65	786.93	117.00

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						613.88	793.02	118.00
						608.85	802.81	120.00
						592.70	808.64	120.00
						569.41	821.61	118.00
						771.39	769.72	126.00
						797.60	772.63	126.00
						795.75	751.98	127.00
						787.81	730.54	127.00
						771.39	734.25	126.00
						772.72	750.93	126.00
						771.92	766.54	126.00
						687.74	772.63	123.00
						688.80	782.43	126.00
						711.04	789.05	125.00
						714.74	820.28	128.00
						354.04	715.41	118.00
						338.49	730.54	117.00
						318.74	728.02	117.00
						274.19	696.08	116.00
						242.68	693.98	115.00
						207.38	719.61	115.00
						184.69	745.25	113.00
						161.57	735.16	112.00
						373.06	760.20	113.00
						348.05	776.21	114.00
						342.04	801.90	112.00
						338.37	824.91	110.00
						327.70	843.59	111.00
						303.35	862.60	110.00
						301.02	879.94	110.00
						296.01	890.95	110.00
						286.34	887.28	110.00
						284.67	874.61	109.00
						287.68	853.59	109.00
						287.34	836.25	108.00
						272.00	830.25	108.00
						245.32	832.58	108.00
						214.97	837.58	108.00
						177.37	841.82	107.00
						394.85	862.40	117.00
						369.43	860.29	116.00
						304.84	881.46	112.00
						363.26	667.60	126.00
						390.99	689.03	126.00
						432.18	660.88	126.00
						470.42	651.63	125.00
						440.58	607.51	126.00

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						415.79	628.52	126.00
						393.52	620.54	126.00
						362.42	662.14	126.00
						736.60	442.27	141.00
						767.83	422.42	139.00
						794.31	405.48	137.00
						827.13	387.47	134.00
						861.28	372.12	131.00
						882.46	363.91	130.00
						872.14	327.38	129.00
						856.25	326.32	131.00
						846.99	364.44	133.00
						817.07	384.03	135.00
						795.37	395.68	136.00
						761.75	401.24	138.00
						737.66	404.68	140.00
						738.18	378.74	140.00
						758.83	372.12	138.00
						755.66	355.97	138.00
						775.78	354.65	137.00
						775.25	330.29	136.00
						786.37	323.68	136.00
						848.58	324.73	132.00
						738.45	479.46	140.00
						771.80	477.87	139.00
						801.45	472.05	138.00
						834.54	469.40	136.00
						853.87	465.96	135.00
						861.28	476.55	135.00
						863.66	518.91	137.00
						869.55	624.80	139.00
						868.49	662.66	140.00
360				109.73		405.10	811.62	109.73
						411.10	816.54	109.73
						417.77	820.04	109.73
						424.52	819.20	109.73
						434.52	814.45	109.73
						442.86	808.62	109.73
						448.94	806.30	109.73
						456.02	804.45	109.73
						463.43	803.46	109.73
						473.42	803.86	109.73
						479.04	804.52	109.73
						483.54	803.39	109.73
						494.92	803.06	109.73
						500.80	801.48	109.73
						494.19	801.08	109.73

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						487.90	801.34	109.73
						479.83	802.67	109.73
						474.21	802.27	109.73
						470.31	800.09	109.73
						464.62	799.03	109.73
						458.53	800.78	109.73
						451.53	800.94	109.73
						442.53	803.28	109.73
						437.61	805.78	109.73
						429.28	809.86	109.73
						426.20	808.86	109.73
						426.61	805.11	109.73
						429.28	797.03	109.73
						431.86	789.75	109.73
						432.52	785.32	109.73
						433.18	781.42	109.73
						435.60	775.53	109.73
						439.90	771.07	109.73
						432.34	774.96	109.73
						430.82	775.32	109.73
						426.52	774.33	109.73
						419.95	774.80	109.73
						415.66	778.34	109.73
						412.82	782.71	109.73
						410.17	792.76	109.73
						405.08	796.67	109.73
						402.03	798.65	109.73
365				111.25		408.50	826.96	111.25
						416.71	824.98	111.25
						427.42	836.75	111.25
						432.18	836.09	111.25
						438.54	831.06	111.25
						445.94	829.21	111.25
						450.05	832.12	111.25
						474.12	825.64	111.25
						480.87	821.41	111.25
						481.80	808.97	111.25
						488.28	806.32	111.25
						499.66	805.27	111.25
						508.92	802.22	111.25
						517.65	783.70	111.25
						525.33	775.63	111.25
						518.45	778.94	111.25
						512.09	784.89	111.25
						506.27	788.99	111.25
						494.23	795.08	111.25
						483.52	796.00	111.25

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						477.43	796.14	111.25
						470.55	787.54	111.25
						465.13	782.25	111.25
						464.33	772.06	111.25
						463.80	762.53	111.25
						466.75	758.23	111.25
						464.96	754.87	111.25
						463.49	751.82	111.25
						462.44	748.04	111.25
						452.57	748.15	111.25
						446.37	748.57	111.25
						437.87	752.14	111.25
						426.42	756.13	111.25
						419.07	760.01	111.25
						411.09	763.58	111.25
						409.31	776.50	111.25
						408.68	785.21	111.25
						403.22	791.30	111.25
						396.07	794.24	111.25
370				112.78		414.29	843.86	112.78
						424.35	842.28	112.78
						433.47	845.19	112.78
						440.62	842.41	112.78
						446.04	837.78	112.78
						460.20	833.68	112.78
						467.61	830.24	112.78
						482.43	827.19	112.78
						497.24	824.28	112.78
						512.59	822.83	112.78
						520.40	820.71	112.78
						523.70	817.54	112.78
						525.03	811.71	112.78
						524.63	807.48	112.78
						523.57	803.25	112.78
						531.64	792.40	112.78
						534.68	784.72	112.78
						537.46	781.42	112.78
						540.77	781.28	112.78
						543.02	777.71	112.78
						556.91	783.00	112.78
						563.66	791.08	112.78
370				112.78		392.73	762.38	112.78
						399.74	763.17	112.78
						400.93	760.26	112.78
						406.36	761.05	112.78
						408.61	748.62	112.78
						425.94	739.75	112.78

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						431.23	738.69	112.78
						434.54	734.86	112.78
						449.62	725.07	112.78
						453.54	725.23	112.78
						457.79	725.82	112.78
						462.62	725.23	112.78
						465.46	724.07	112.78
						469.04	724.48	112.78
						472.96	726.82	112.78
						477.21	727.40	112.78
						484.88	727.57	112.78
						488.78	727.63	112.78
						496.06	726.24	112.78
						498.74	724.98	112.78
						498.63	730.13	112.78
						502.67	736.80	112.78
						504.25	736.27	112.78
						506.35	738.84	112.78
						498.37	746.04	112.78
						492.59	758.53	112.78
						489.97	768.51	112.78
						493.06	772.55	112.78
						501.52	781.95	112.78
						505.56	782.53	112.78
						511.23	778.78	112.78
						518.65	772.86	112.78
						530.04	764.41	112.78
						537.23	763.67	112.78
						543.95	764.83	112.78
						549.41	767.35	112.78
						552.67	772.81	112.78
						554.40	776.17	112.78
						561.02	780.84	112.78
						565.38	786.09	112.78
						568.89	791.55	112.78
375				114.30		414.17	855.08	114.30
						431.90	855.22	114.30
						448.30	848.87	114.30
						461.67	838.68	114.30
						469.21	832.73	114.30
						479.79	830.61	114.30
						492.76	827.04	114.30
						515.25	825.05	114.30
						523.45	822.41	114.30
						526.36	817.64	114.30
						527.02	812.62	114.30
						531.65	808.65	114.30

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						534.70	800.18	114.30
						542.37	786.82	114.30
						547.93	786.68	114.30
						555.73	789.20	114.30
						558.51	791.32	114.30
375				114.30		385.80	739.32	114.30
						395.36	734.91	114.30
						402.92	734.81	114.30
						404.18	729.24	114.30
						417.52	724.20	114.30
						427.91	718.43	114.30
						440.62	712.55	114.30
						441.77	710.13	114.30
						445.97	710.45	114.30
						448.49	716.96	114.30
						454.69	720.84	114.30
						463.72	718.85	114.30
						468.34	717.59	114.30
						475.17	722.42	114.30
						481.89	724.10	114.30
						494.80	721.16	114.30
						503.10	716.64	114.30
						513.81	715.28	114.30
						514.44	724.20	114.30
						516.02	727.56	114.30
						524.42	726.83	114.30
						523.36	735.29	114.30
						527.86	744.82	114.30
						523.34	755.43	114.30
						524.60	763.51	114.30
						530.27	761.83	114.30
						532.79	760.99	114.30
						542.77	762.67	114.30
						548.75	763.20	114.30
						555.37	768.13	114.30
						558.31	774.01	114.30
						566.29	783.26	114.30
						573.54	790.19	114.30
375				114.30		475.02	702.38	114.30
						487.19	704.13	114.30
						497.19	708.71	114.30
380				115.82		416.23	859.41	115.82
						429.59	861.00	115.82
						441.10	860.87	115.82
						444.54	859.41	115.82
						455.52	852.66	115.82
						462.93	846.45	115.82

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						471.80	838.90	115.82
						479.60	835.73	115.82
						496.14	833.48	115.82
						511.49	832.29	115.82
						519.36	830.50	115.82
						523.98	826.41	115.82
						532.59	818.95	115.82
						534.06	815.07	115.82
						546.56	804.15	115.82
						545.30	799.42	115.82
						549.39	794.28	115.82
						557.27	799.32	115.82
380				115.82		394.78	715.25	115.82
						405.07	711.68	115.82
						419.66	705.48	115.82
						428.49	699.28	115.82
						437.52	691.93	115.82
						445.71	687.21	115.82
						454.00	684.06	115.82
						465.76	684.16	115.82
						471.96	684.58	115.82
						493.92	685.11	115.82
						505.83	682.60	115.82
						516.89	682.91	115.82
						516.42	676.11	115.82
						519.06	679.95	115.82
						520.91	694.77	115.82
						524.35	702.44	115.82
						531.50	706.55	115.82
						538.91	717.53	115.82
						544.07	717.39	115.82
						543.54	725.07	115.82
						546.85	732.08	115.82
						545.26	741.21	115.82
						542.74	748.35	115.82
						546.11	755.29	115.82
						551.36	758.75	115.82
						558.29	763.58	115.82
						560.39	768.52	115.82
						562.17	774.29	115.82
						565.64	778.70	115.82
						570.78	784.16	115.82
						574.77	786.47	115.82
380				115.82		518.11	680.32	115.82
						515.87	691.56	115.82
						509.78	703.94	115.82
						513.75	708.83	115.82

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						523.98	708.32	115.82
385				117.35		556.49	818.69	117.35
						552.00	817.37	117.35
						543.66	819.75	117.35
						534.00	828.22	117.35
						530.17	833.78	117.35
						521.17	834.70	117.35
						509.00	836.03	117.35
						495.77	837.35	117.35
						482.54	838.01	117.35
						475.79	839.33	117.35
						469.18	847.40	117.35
						467.72	853.75	117.35
						462.16	861.16	117.35
						457.00	862.22	117.35
						438.88	866.85	117.35
						443.91	872.80	117.35
						437.42	874.26	117.35
						424.46	876.11	117.35
385				117.35		524.64	662.15	117.35
						524.38	676.63	117.35
						522.59	689.87	117.35
						523.78	689.40	117.35
						527.55	694.43	117.35
						539.66	686.36	117.35
385				117.35		379.62	716.63	117.35
						389.34	711.14	117.35
						405.88	703.33	117.35
						429.05	692.24	117.35
						439.56	685.41	117.35
						448.39	680.24	117.35
						457.98	676.16	117.35
						472.06	670.57	117.35
						479.21	667.73	117.35
						485.89	666.47	117.35
						496.80	667.07	117.35
						503.49	665.54	117.35
						511.95	667.26	117.35
						515.99	661.11	117.35
						523.86	661.71	117.35
385				117.35		539.92	686.51	117.35
						541.67	695.85	117.35
						553.84	706.43	117.35
						560.39	706.56	117.35
						562.11	721.58	117.35
						563.96	734.88	117.35
						562.91	761.34	117.35

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						563.86	765.54	117.35
						566.48	773.73	117.35
						566.80	777.93	117.35
						575.20	782.87	117.35
390				118.87		554.84	828.86	118.87
						548.64	829.18	118.87
						528.69	844.40	118.87
						521.34	845.14	118.87
						514.31	853.54	118.87
						511.16	854.06	118.87
						510.42	858.79	118.87
						496.56	860.89	118.87
						477.76	862.46	118.87
						472.83	865.93	118.87
						466.34	870.10	118.87
						456.13	877.75	118.87
						457.38	883.75	118.87
390				118.87		374.46	700.68	118.87
						387.55	707.27	118.87
						396.30	703.76	118.87
						418.47	693.68	118.87
						430.72	687.18	118.87
						439.31	681.68	118.87
						462.56	670.42	118.87
						481.65	662.67	118.87
						491.57	659.59	118.87
						502.32	655.50	118.87
						515.49	645.92	118.87
						518.74	645.42	118.87
						516.99	650.25	118.87
						517.91	655.42	118.87
						520.24	655.67	118.87
						527.32	653.55	118.87
						530.36	653.09	118.87
						531.16	673.33	118.87
						533.16	672.75	118.87
						539.83	676.59	118.87
						544.16	673.17	118.87
						545.08	682.25	118.87
						549.25	695.26	118.87
						563.17	699.87	118.87
						572.68	701.12	118.87
						569.18	705.45	118.87
						568.01	721.96	118.87
						568.17	737.30	118.87
						567.34	760.13	118.87
						569.01	769.47	118.87

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						574.18	773.30	118.87
						577.34	773.47	118.87
395				120.40		554.29	837.99	120.40
						540.22	847.23	120.40
						535.50	847.86	120.40
						528.15	853.85	120.40
						522.69	854.90	120.40
						518.49	864.35	120.40
						498.22	864.45	120.40
						486.77	871.07	120.40
						488.56	877.26	120.40
						481.31	879.15	120.40
						481.63	893.65	120.40
395				120.40		377.84	697.32	120.40
						388.24	703.51	120.40
						398.11	699.94	120.40
						418.27	690.17	120.40
						435.70	679.57	120.40
						446.94	673.48	120.40
						458.19	668.72	120.40
						477.37	661.39	120.40
						489.12	655.14	120.40
						490.04	648.64	120.40
						489.12	641.55	120.40
						496.87	639.80	120.40
						510.62	633.88	120.40
						519.29	625.30	120.40
						522.14	624.11	120.40
						523.46	628.87	120.40
						526.44	637.93	120.40
						532.66	638.93	120.40
						529.22	644.42	120.40
						533.05	648.45	120.40
						536.49	646.80	120.40
						536.76	662.61	120.40
						538.74	661.62	120.40
						543.77	666.98	120.40
						556.28	656.92	120.40
						558.46	655.53	120.40
						561.11	658.31	120.40
						565.98	667.18	120.40
						564.30	670.12	120.40
						570.82	675.37	120.40
						574.18	695.54	120.40
						584.68	699.95	120.40
						581.11	704.15	120.40
						577.33	709.19	120.40

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						575.23	715.50	120.40
						578.38	723.48	120.40
						583.63	722.43	120.40
400				121.92		552.82	849.65	121.92
						545.47	855.53	121.92
						538.12	856.47	121.92
						527.62	863.40	121.92
						522.48	863.93	121.92
						520.27	867.39	121.92
						512.50	866.97	121.92
						507.15	874.11	121.92
						507.88	878.52	121.92
						503.47	879.47	121.92
						502.52	890.60	121.92
400				121.92		522.36	617.84	121.92
						529.29	620.57	121.92
						535.39	630.13	121.92
						538.96	632.23	121.92
						541.79	638.22	121.92
						543.69	640.21	121.92
						543.16	650.82	121.92
						544.11	650.19	121.92
						550.20	653.87	121.92
						557.66	649.67	121.92
						561.12	650.72	121.92
						564.90	653.34	121.92
						571.22	659.34	121.92
						573.09	657.39	121.92
						575.72	688.98	121.92
						578.37	691.50	121.92
						587.63	688.19	121.92
						595.84	685.01	121.92
						600.20	684.49	121.92
						604.44	681.04	121.92
						606.29	685.28	121.92
						608.67	686.21	121.92
						609.07	690.97	121.92
						603.78	706.85	121.92
405				123.44		553.24	857.10	123.44
						549.36	857.84	123.44
						549.15	866.13	123.44
						536.34	875.69	123.44
						539.70	878.63	123.44
						537.49	882.51	123.44
						547.15	892.60	123.44
405				123.44		522.17	611.23	123.44
						530.78	602.49	123.44

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						533.42	602.89	123.44
						540.17	609.77	123.44
						545.86	619.30	123.44
						552.48	627.64	123.44
						552.74	630.94	123.44
						549.83	639.28	123.44
						556.98	644.31	123.44
						564.79	645.37	123.44
						572.07	649.47	123.44
						575.92	654.05	123.44
						577.11	663.76	123.44
						579.49	661.71	123.44
						583.48	661.82	123.44
						585.48	663.71	123.44
						585.79	668.65	123.44
						587.26	673.06	123.44
						590.83	676.31	123.44
						594.40	676.63	123.44
						596.50	676.31	123.44
						597.55	674.84	123.44
						597.34	672.85	123.44
						595.87	671.27	123.44
						594.51	670.85	123.44
						592.30	670.96	123.44
						590.73	669.07	123.44
						590.62	665.92	123.44
						592.30	665.18	123.44
						594.30	665.60	123.44
						596.40	666.97	123.44
						598.71	669.38	123.44
						598.82	670.85	123.44
						599.03	672.74	123.44
						600.39	673.58	123.44
						601.65	673.16	123.44
						604.07	673.48	123.44
						606.38	674.84	123.44
						607.32	678.10	123.44
						617.41	673.37	123.44
						616.57	677.26	123.44
						620.35	677.58	123.44
						621.15	680.02	123.44
						620.40	682.77	123.44
						618.48	686.68	123.44
						616.81	690.60	123.44
						614.56	696.52	123.44
						613.64	700.36	123.44
						613.48	702.44	123.44

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
410				124.97		601.10	671.54	124.97
						617.80	665.03	124.97
						617.80	661.25	124.97
						614.44	661.46	124.97
						600.89	667.87	124.97
						601.21	671.44	124.97
410				124.97		522.01	606.37	124.97
						537.66	589.88	124.97
						546.48	595.97	124.97
						555.20	604.58	124.97
						565.91	617.50	124.97
						573.16	627.59	124.97
						579.36	636.83	124.97
						582.41	638.19	124.97
						582.93	644.08	124.97
						585.87	650.48	124.97
						587.03	666.87	124.97
						588.18	669.08	124.97
						588.60	664.67	124.97
						588.81	657.63	124.97
						589.65	651.33	124.97
						589.34	646.28	124.97
						589.13	641.87	124.97
						587.76	637.46	124.97
						590.70	637.67	124.97
						595.01	640.51	124.97
						600.16	644.50	124.97
						602.05	647.12	124.97
						599.53	650.27	124.97
						601.42	652.38	124.97
						604.36	651.33	124.97
						611.82	655.32	124.97
						618.65	657.52	124.97
						627.89	661.62	124.97
						631.67	665.19	124.97
						635.77	663.60	124.97
						627.97	669.43	124.97
						627.30	672.07	124.97
						631.27	672.20	124.97
						630.88	678.69	124.97
						626.25	680.81	124.97
						619.23	692.45	124.97
						617.11	702.64	124.97
415				126.49		586.10	643.93	126.49
						584.38	641.68	126.49
						584.31	640.09	126.49
						585.57	639.76	126.49

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						586.96	641.88	126.49
						586.10	644.00	126.49
415				126.49		582.20	634.93	126.49
						579.88	633.47	126.49
						577.96	629.17	126.49
						578.49	626.73	126.49
						580.28	627.52	126.49
						582.40	631.42	126.49
						582.73	633.87	126.49
						582.20	635.13	126.49
415				126.49		521.96	601.38	126.49
						539.29	583.38	126.49
						549.22	586.02	126.49
						564.57	595.29	126.49
						577.41	605.74	126.49
						580.19	611.17	126.49
						591.57	615.80	126.49
						604.94	622.42	126.49
						607.27	628.92	126.49
						618.94	636.42	126.49
						625.28	639.76	126.49
						625.95	642.43	126.49
						628.11	643.76	126.49
						627.11	645.26	126.49
						635.95	642.59	126.49
						638.95	644.26	126.49
						633.78	647.60	126.49
						633.12	652.60	126.49
						641.62	650.26	126.49
						647.29	647.26	126.49
						651.29	648.10	126.49
						651.13	650.26	126.49
						655.63	650.26	126.49
						659.13	651.43	126.49
						645.79	660.60	126.49
						650.96	660.77	126.49
						656.46	657.10	126.49
						656.63	660.77	126.49
						651.46	663.94	126.49
						648.29	666.27	126.49
						646.79	672.11	126.49
						641.29	677.44	126.49
						634.62	687.45	126.49
						633.62	693.79	126.49
420				128.02		522.28	597.39	128.02
						537.76	579.66	128.02
						540.67	573.57	128.02

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						545.97	572.78	128.02
						555.10	577.14	128.02
						573.76	588.39	128.02
						587.13	597.66	128.02
						591.10	600.17	128.02
						597.18	603.88	128.02
						612.14	607.19	128.02
						621.49	608.97	128.02
						631.78	618.11	128.02
						645.12	620.63	128.02
						650.48	623.78	128.02
						650.48	627.99	128.02
						654.16	629.88	128.02
						661.51	626.30	128.02
						679.68	637.44	128.02
						698.80	646.47	128.02
						706.15	649.20	128.02
						712.46	656.24	128.02
						718.34	654.04	128.02
						746.66	654.43	128.02
						756.32	660.92	128.02
						764.13	668.99	128.02
						768.23	670.84	128.02
						767.84	680.77	128.02
						782.92	686.46	128.02
						787.42	700.09	128.02
420				128.02		658.24	681.54	128.02
						659.69	676.24	128.02
						675.84	670.42	128.02
						688.81	664.06	128.02
						698.47	664.06	128.02
						700.06	660.09	128.02
						710.92	662.87	128.02
						714.23	668.43	128.02
						718.99	672.01	128.02
						720.45	685.64	128.02
425				129.54		521.11	594.69	129.54
						534.87	578.93	129.54
						541.91	563.59	129.54
						560.29	569.69	129.54
						598.06	589.95	129.54
						622.16	594.53	129.54
						669.01	605.12	129.54
						674.69	606.38	129.54
						687.19	609.43	129.54
						717.86	622.56	129.54
						723.22	627.29	129.54

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						721.96	631.38	129.54
						724.27	634.43	129.54
						733.93	632.43	129.54
						741.81	633.17	129.54
						750.53	637.16	129.54
						758.20	641.05	129.54
						760.40	637.58	129.54
						765.86	637.79	129.54
						766.28	651.45	129.54
						772.38	651.87	129.54
						775.32	656.80	129.54
						779.52	657.54	129.54
						783.51	674.14	129.54
						781.31	678.86	129.54
						787.14	684.37	129.54
						791.64	698.87	129.54
425				129.54		683.78	680.08	129.54
						691.33	672.80	129.54
						698.47	676.24	129.54
						698.34	685.64	129.54
430				131.06		523.45	582.53	131.06
						543.51	552.06	131.06
						558.74	557.11	131.06
						583.64	568.98	131.06
						607.69	576.12	131.06
						620.72	581.16	131.06
						630.17	585.05	131.06
						660.52	587.47	131.06
						712.73	597.02	131.06
						729.75	608.58	131.06
						740.67	605.32	131.06
						740.99	605.53	131.06
						756.11	612.47	131.06
						769.77	613.94	131.06
						782.90	619.71	131.06
						788.05	639.15	131.06
						791.30	641.25	131.06
						795.19	648.29	131.06
						799.81	651.54	131.06
						802.95	678.79	131.06
						807.75	686.65	131.06
						805.25	696.66	131.06
						807.42	704.16	131.06
435				132.59		522.64	578.52	132.59
						533.88	563.08	132.59
						542.49	542.70	132.59
						545.01	538.82	132.59

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						555.31	542.28	132.59
						566.76	547.53	132.59
						574.84	550.69	132.59
						598.79	560.35	132.59
						606.36	565.60	132.59
						616.55	569.70	132.59
						627.20	571.22	132.59
						634.22	570.63	132.59
						639.91	574.86	132.59
						655.45	573.50	132.59
						660.71	579.06	132.59
						671.00	583.32	132.59
						703.35	588.99	132.59
						699.97	587.03	132.59
						701.43	585.49	132.59
						701.23	581.94	132.59
						704.19	582.48	132.59
						688.84	574.81	132.59
						679.01	570.31	132.59
						682.92	569.39	132.59
						697.18	571.23	132.59
						708.77	573.48	132.59
						722.03	580.32	132.59
						736.00	586.30	132.59
						745.24	588.82	132.59
						759.32	589.88	132.59
						774.76	593.24	132.59
						791.57	601.33	132.59
						794.93	597.86	132.59
						799.45	601.33	132.59
						804.91	609.10	132.59
						805.33	622.55	132.59
						807.88	640.40	132.59
						812.12	647.63	132.59
440				134.11		522.18	572.45	134.11
						532.27	560.26	134.11
						541.83	533.58	134.11
						544.45	524.44	134.11
						563.99	531.69	134.11
						581.85	538.51	134.11
						600.97	546.18	134.11
						616.94	552.17	134.11
						627.13	555.53	134.11
						642.63	558.53	134.11
						651.89	559.37	134.11
						664.31	562.95	134.11
						666.65	568.79	134.11

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						672.32	570.71	134.11
						676.07	566.12	134.11
						694.16	560.20	134.11
						706.67	563.95	134.11
						716.42	561.70	134.11
						727.10	566.12	134.11
						739.91	569.27	134.11
						755.88	573.16	134.11
						762.81	573.16	134.11
						774.68	577.78	134.11
						776.26	574.21	134.11
						776.36	569.59	134.11
						794.01	576.21	134.11
						806.83	595.12	134.11
						809.87	618.12	134.11
						815.02	624.32	134.11
445				135.64		523.88	567.15	135.64
						542.72	524.96	135.64
						545.56	512.79	135.64
						561.40	514.79	135.64
						578.07	520.29	135.64
						594.92	528.96	135.64
						595.08	536.30	135.64
						636.10	538.97	135.64
						643.85	541.88	135.64
						647.22	542.94	135.64
						650.47	539.43	135.64
						655.50	540.22	135.64
						665.16	542.34	135.64
						671.05	542.67	135.64
						682.89	542.14	135.64
						680.80	557.81	135.64
						694.30	554.72	135.64
						703.06	557.95	135.64
						710.87	558.09	135.64
						721.06	552.79	135.64
						722.38	547.63	135.64
						727.15	548.16	135.64
						733.76	550.81	135.64
						743.19	554.64	135.64
						751.77	557.89	135.64
						759.69	558.56	135.64
						761.53	552.22	135.64
						776.62	555.06	135.64
450				137.16		524.13	544.12	137.16
						531.47	539.78	137.16
						539.30	527.61	137.16

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						544.47	512.10	137.16
						544.14	501.93	137.16
						557.65	501.09	137.16
						573.66	503.93	137.16
						593.67	513.77	137.16
						603.01	518.60	137.16
						624.52	520.60	137.16
						645.70	522.44	137.16
						658.20	522.44	137.16
						671.17	523.76	137.16
						686.53	525.22	137.16
						695.40	527.87	137.16
						702.81	528.00	137.16
						706.78	528.26	137.16
						713.13	528.79	137.16
						716.57	530.91	137.16
						728.76	539.73	137.16
						740.94	538.37	137.16
						742.94	532.17	137.16
						758.59	532.91	137.16
450				137.16		695.98	528.65	137.16
						708.15	551.66	137.16
						707.32	555.33	137.16
						714.91	550.50	137.16
						718.66	545.41	137.16
						724.58	541.91	137.16
						733.50	543.08	137.16
455				138.68		525.77	518.71	138.68
						528.60	518.51	138.68
						528.42	530.88	138.68
						532.66	530.22	138.68
						539.80	522.02	138.68
						541.79	513.15	138.68
						543.38	502.82	138.68
						544.30	491.18	138.68
						561.11	491.71	138.68
						576.07	493.16	138.68
						585.47	496.47	138.68
						590.76	497.26	138.68
						601.58	502.10	138.68
						607.68	504.72	138.68
						619.86	505.67	138.68
						630.16	507.14	138.68
						642.24	507.35	138.68
						651.11	507.88	138.68
						655.14	508.21	138.68
						659.84	512.51	138.68

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
						716.12	512.09	138.68
						724.63	515.26	138.68
						728.88	515.18	138.68
						733.88	511.51	138.68
						738.64	509.76	138.68
						745.97	510.93	138.68
460				140.21		529.27	490.19	140.21
						533.37	488.33	140.21
						534.96	491.77	140.21
						541.44	494.55	140.21
						541.84	497.86	140.21
						545.02	483.04	140.21
						564.47	482.77	140.21
						573.09	480.25	140.21
						580.65	483.30	140.21
						601.45	484.98	140.21
						601.56	496.54	140.21
						613.01	496.43	140.21
						615.85	492.23	140.21
						618.93	490.56	140.21
						626.35	490.98	140.21
						655.03	490.14	140.21
						658.87	483.14	140.21
						702.23	484.47	140.21
						707.90	478.80	140.21
Buena Vista						739.09	828.02	128.00
						763.77	818.69	127.00
						799.12	817.35	125.00
						819.80	813.35	124.00
						829.14	792.00	126.00
						828.47	769.32	127.00
						815.80	742.64	130.00
						801.12	712.63	131.00
Cannon						94.58	620.52	115.00
						190.81	648.68	117.00
						307.62	682.29	119.00
						349.65	702.47	118.00
Fern						554.98	874.72	125.00
						693.73	850.04	128.00
						721.08	835.36	128.00
						755.09	839.36	130.00
						789.11	870.72	132.00
						823.13	886.72	135.00
						866.49	890.06	137.00
						879.83	900.07	139.00
						880.50	919.41	141.00
						848.48	934.75	142.00

S210306 - Good Shepherd Cemetery - Operational Model

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin (m)	End (m)	x (m)	y (m)	z (m)
Melrose						89.38	910.62	110.00
						114.73	807.22	110.00
						191.44	648.47	117.00
						238.80	562.42	121.00
						302.84	447.02	127.00
						353.54	376.98	132.00
						419.57	326.28	135.00
						470.94	302.93	136.00
						510.96	278.25	136.00
Res						726.70	471.81	140.00
						724.05	456.46	140.00
						587.46	454.87	144.00
						575.81	444.81	145.00
						577.40	406.16	147.00
						589.05	398.22	148.00
						725.11	396.63	141.00
						726.17	451.16	140.00
Res						724.05	377.04	141.00
						725.64	325.69	139.00
						587.99	323.04	145.00
Res						506.71	531.79	139.00
						464.88	558.79	137.00
						419.88	516.44	139.00
						394.47	475.14	141.00
						460.12	430.67	141.00
						477.59	423.25	142.00
						535.30	428.02	145.00
						534.24	479.37	142.00

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
5-ton Heat pump	AC1	Lw (c)	A	48.9	57.5	62.5	61.4	61.6	58.3	51.6	46.5	67.9	78.6	Manufacturer

S210306 - Good Shepherd Cemetery - Stage 1 Grading

Eilar Associates, Inc.

210 South Juniper Street, Suite 100

Escondido, California 92025-4230

Phone: (760) 738-5570

Date: 12 Apr 2021

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	1000.00
Min. Length of Section (#(Unit,LEN))	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

Receivers

Name	M.	ID	Level Lr		Limit. Value		Land Use			Height (m)	Coordinates			
			Day (dBA)	Night (dBA)	Day (dBA)	Night (dBA)	Type	Auto	Noise Type		X (m)	Y (m)	Z (m)	
R1			57.9	-80.2	0.0	0.0		x	Total	1.52	r	375.07	731.27	117.07
R2			61.0	-80.2	0.0	0.0		x	Total	1.52	r	568.46	708.18	120.30
R3			62.8	-80.2	0.0	0.0		x	Total	1.52	r	725.95	678.36	129.26
R4			61.4	-80.2	0.0	0.0		x	Total	1.52	r	802.12	621.81	133.89
R5			72.6	-80.2	0.0	0.0		x	Total	1.52	r	618.72	482.80	142.56
R6			68.9	-80.2	0.0	0.0		x	Total	1.52	r	535.87	631.41	123.29

Point Sources

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
			Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value	norm. dB(A)	Day dB(A)	Evening dB(A)	Night dB(A)	R	Area (m²)		Day (min)	Special (min)	Night (min)				(dB)	(Hz)	(m)		X (m)
Grader			100.9	100.9	100.9	Lw	L1		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	561.91	634.29	125.38
Dozer			107.6	107.6	107.6	Lw	L2		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	561.83	634.28	125.38
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	561.78	634.28	125.37
Dump Truck			110.1	110.1	110.1	Lw	L4		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	561.94	634.28	125.38
Grader			100.9	100.9	100.9	Lw	L1		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	458.46	706.19	115.87
Dozer			107.6	107.6	107.6	Lw	L2		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	458.46	706.19	115.87
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	458.46	706.19	115.87
Dump Truck			110.1	110.1	110.1	Lw	L4		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	458.46	706.19	115.87
Grader			100.9	100.9	100.9	Lw	L1		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	736.37	621.48	131.69
Dozer			107.6	107.6	107.6	Lw	L2		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	736.37	621.48	131.69
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	736.37	621.48	131.69
Dump Truck			110.1	110.1	110.1	Lw	L4		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	736.37	621.48	131.69
Grader			100.9	100.9	100.9	Lw	L1		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	619.73	499.95	140.78
Dozer			107.6	107.6	107.6	Lw	L2		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	619.73	499.95	140.78
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	619.73	499.95	140.78
Dump Truck			110.1	110.1	110.1	Lw	L4		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	619.73	499.95	140.78

Buildings

Name	M.	ID	RB	Residents	Absorption	Height
						Begin
						(m)
			x	0		3.66 r

Geometry - Buildings

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
						Begin	x	y	z	Ground
						(m)	(m)	(m)	(m)	(m)
			x	0		3.66 r	670.39	499.96	143.01	139.35
							679.42	499.96	143.01	139.36
							679.52	498.28	143.01	139.45
							684.77	498.28	143.01	139.46
							684.77	494.60	143.01	139.65
							690.13	494.60	143.01	139.66
							690.23	501.64	143.01	139.27
							697.48	501.64	143.01	139.26
							697.58	493.97	143.01	139.69
							694.12	493.97	143.01	139.69
							694.01	488.62	143.01	139.98
							679.73	488.72	143.01	139.95
							679.42	489.46	143.01	139.91
							670.91	489.25	143.01	139.91

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Grader	L1	Lw (c)		101.8	101.6	95.3	96.7	96.4	94.2	89.7	80.0	100.9	106.6	Eilar
Dozer	L2	Lw (c)		106.0	112.0	106.0	105.0	102.0	100.0	94.0	90.0	107.6	114.7	Eilar Meas
Backhoe	L3	Lw (c)		105.0	97.0	95.0	95.0	94.0	91.0	90.0	81.0	98.8	106.8	DEFRA
Dump Truck	L4	Lw (c)		116.0	105.0	109.0	104.0	104.0	105.0	98.0	94.0	110.1	117.8	DEFRA

S210306 - Good Shepherd Cemetery - Stage 2 Paving

Eilar Associates, Inc.

210 South Juniper Street, Suite 100

Escondido, California 92025-4230

Phone: (760) 738-5570

Date: 12 Apr 2021

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	1000.00
Min. Length of Section (#(Unit,LEN))	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

Receivers

Name	M.	ID	Level Lr		Limit. Value		Land Use			Height (m)	Coordinates			
			Day (dBA)	Night (dBA)	Day (dBA)	Night (dBA)	Type	Auto	Noise Type		X (m)	Y (m)	Z (m)	
R1			54.5	-80.2	0.0	0.0		x	Total	1.52	r	375.07	731.27	117.07
R2			57.6	-80.2	0.0	0.0		x	Total	1.52	r	568.46	708.18	120.30
R3			59.4	-80.2	0.0	0.0		x	Total	1.52	r	725.95	678.36	129.26
R4			58.0	-80.2	0.0	0.0		x	Total	1.52	r	802.12	621.81	133.89
R5			69.0	-80.2	0.0	0.0		x	Total	1.52	r	618.72	482.80	142.56
R6			65.3	-80.2	0.0	0.0		x	Total	1.52	r	535.87	631.41	123.29

Point Sources

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				(m)		X	Y	Z
			(dBA)	(dBA)	(dBA)				dB(A)	dB(A)	dB(A)		(m ²)		(min)	(min)	(min)				(dB)	(Hz)	(m)		(m)
Paver			105.6	105.6	105.6	Lw	L5		0.0	0.0	0.0				30.00	0.00	0.00	0.0		(none)	1.52	r	458.46	706.19	115.87
Roller			108.0	108.0	108.0	Lw	L6		0.0	0.0	0.0				12.00	0.00	0.00	0.0		(none)	1.52	r	458.46	706.19	115.87
Paver			105.6	105.6	105.6	Lw	L5		0.0	0.0	0.0				30.00	0.00	0.00	0.0		(none)	1.52	r	561.91	634.29	125.38
Roller			108.0	108.0	108.0	Lw	L6		0.0	0.0	0.0				12.00	0.00	0.00	0.0		(none)	1.52	r	561.83	634.28	125.38
Paver			105.6	105.6	105.6	Lw	L5		0.0	0.0	0.0				30.00	0.00	0.00	0.0		(none)	1.52	r	619.73	499.95	140.78
Roller			108.0	108.0	108.0	Lw	L6		0.0	0.0	0.0				12.00	0.00	0.00	0.0		(none)	1.52	r	619.73	499.95	140.78
Paver			105.6	105.6	105.6	Lw	L5		0.0	0.0	0.0				30.00	0.00	0.00	0.0		(none)	1.52	r	736.37	621.48	131.69
Roller			108.0	108.0	108.0	Lw	L6		0.0	0.0	0.0				12.00	0.00	0.00	0.0		(none)	1.52	r	736.37	621.48	131.69

Buildings

Name	M.	ID	RB	Residents	Absorption	Height
						Begin
						(m)
			x	0		3.66 r

Geometry - Buildings

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
						Begin	x	y	z	Ground
						(m)	(m)	(m)	(m)	(m)
			x	0		3.66 r	670.39	499.96	143.01	139.35
							679.42	499.96	143.01	139.36
							679.52	498.28	143.01	139.45
							684.77	498.28	143.01	139.46
							684.77	494.60	143.01	139.65
							690.13	494.60	143.01	139.66
							690.23	501.64	143.01	139.27
							697.48	501.64	143.01	139.26
							697.58	493.97	143.01	139.69
							694.12	493.97	143.01	139.69
							694.01	488.62	143.01	139.98
							679.73	488.72	143.01	139.95
							679.42	489.46	143.01	139.91
							670.91	489.25	143.01	139.91

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Paver	L5	Lw (c)		108.0	107.0	102.0	102.0	101.0	99.0	92.0	86.0	105.6	112.2	DEFRA
Roller	L6	Lw (c)		121.1	104.7	105.6	98.8	104.5	100.6	96.7	88.4	108.0	121.5	Eilar

S210306 - Good Shepherd Cemetery - Stage 3 Grave Digging

Eilar Associates, Inc.

210 South Juniper Street, Suite 100

Escondido, California 92025-4230

Phone: (760) 738-5570

Date: 12 Apr 2021

Calculation Configuration

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (#(Unit,LEN))	2000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (#(Unit,LEN))	1000.00
Min. Length of Section (#(Unit,LEN))	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	960.00
Reference Time Night (min)	480.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	6.00
Night-time Penalty (dB)	10.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (#(Unit,TEMP))	10
rel. Humidity (%)	70
Ground Absorption G	0.50
Wind Speed for Dir. (#(Unit,SPEED))	3.0
Roads (TNM)	
Railways (Schall 03 (1990))	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

Receivers

Name	M.	ID	Level Lr		Limit. Value		Land Use			Height (m)	Coordinates			
			Day (dBA)	Night (dBA)	Day (dBA)	Night (dBA)	Type	Auto	Noise Type		X (m)	Y (m)	Z (m)	
R1			52.8	-80.2	0.0	0.0		x	Total	1.52	r	375.07	731.27	117.07
R2			65.5	-80.2	0.0	0.0		x	Total	1.52	r	565.79	708.52	119.84
R7			64.7	-80.2	0.0	0.0		x	Total	1.52	r	670.37	653.22	128.65
R4			59.8	-80.2	0.0	0.0		x	Total	1.52	r	802.12	621.81	133.89
R8			63.2	-80.2	0.0	0.0		x	Total	1.52	r	555.28	482.17	141.82
R9			63.9	-80.2	0.0	0.0		x	Total	1.52	r	538.18	616.50	124.43

Point Sources

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
			Day (dBA)	Evening (dBA)	Night (dBA)	Type	Value	norm. dB(A)	Day dB(A)	Evening dB(A)	Night dB(A)	R	Area (m²)		Day (min)	Special (min)	Night (min)				(dB)	(Hz)	(m)		X (m)
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	555.68	492.77	140.00
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	547.99	616.47	125.28
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	671.92	642.95	128.96
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	557.21	704.39	119.35
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	786.78	624.66	132.76
Backhoe			98.8	98.8	98.8	Lw	L3		0.0	0.0	0.0				24.00	0.00	0.00	0.0		(none)	1.52	r	408.89	728.59	115.82

Buildings

Name	M.	ID	RB	Residents	Absorption	Height
						Begin
						(m)
			x	0		3.66 r

Geometry - Buildings

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
						Begin	x	y	z	Ground
						(m)	(m)	(m)	(m)	(m)
			x	0		3.66 r	670.39	499.96	143.01	139.35
							679.42	499.96	143.01	139.36
							679.52	498.28	143.01	139.45
							684.77	498.28	143.01	139.46
							684.77	494.60	143.01	139.65
							690.13	494.60	143.01	139.66
							690.23	501.64	143.01	139.27
							697.48	501.64	143.01	139.26
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							694.12	493.97	143.01	139.69
							694.01	488.62	143.01	139.98
							679.73	488.72	143.01	139.95
							679.42	489.46	143.01	139.91
							670.91	489.25	143.01	139.91

Sound Level Spectra

Name	ID	Type	1/3 Oktave Spectrum (dB)											Source
			Weight.	63	125	250	500	1000	2000	4000	8000	A	lin	
Backhoe	L3	Lw (c)		105.0	97.0	95.0	95.0	94.0	91.0	90.0	81.0	98.8	106.8	DEFRA