AMADOR COUNTY COMMUNITY DEVELOPMENT AGENCY
PLANNING DEPARTMENT

PHONE: (209) 223-6380
FAX: (209) 257-6254
WEBSITE: www.amadorgov.org
E-MAIL: planning@amadorgov.org

COUNTY ADMINISTRATION CENTER • 810 COURT STREET • JACKSON, CA 95642-2132

EARLY CONSULTATION REVIEW

TO:

Amador Air District	Caltrans, District 10
Building Department	CDFW, Region 2
County Counsel	Amador LAFCO
Environmental Health Department	Shingle Springs Band of Miwok Indians**
Surveying Department	Calaveras Band of Mi-Wuk Indians**
Transportation and Public Works Department	Chicken Ranch Rancheria of Me-Wuk Indians**
Waste Management	Jackson Rancheria Band of Miwuk Indians**
Sheriff's Office	United Auburn Indian Community**
AFPD	Nashville Enterprise Miwok- Maidu-Nishinam Tribe**
ACTC	Washoe Tribe of Nevada and California**
Amador Transit	Ione Band of Miwok Indians**
Cal Fire	Buena Vista Band of Me-Wuk Indians**
	Amador Water Agency
	CHP

DATE: August 21, 2023
FROM: Chuck Beatty, Planning Director
PROJECT: **REVISED REQUEST** from George Reed, Inc./Jackson Valley Quarry for an amendment to Use Permit # UP-06;9-2 to modify Condition of Approval ("COA") #15 of the Jackson Valley Quarry Use Permit to amend the hours of operation for operational / reclamation activities (e.g., excavation, processing/crushing, load-out, and hauling) shown below. Proposed additional text is underlined and proposed deleted text is shown in ~~strikeout~~.

"Hours of operation, other than maintenance and repair work, shall be limited to the hours of 6:00 a.m. and ~~6:00 p.m~~. 10:00 p.m. Days of operation, other than maintenance and repair work, shall be limited to Monday through Friday. Maintenance and repair work of a low noise level may be made outside the foregoing working hours and days of operations. The noise level for maintenance and repair work conducted outside normal working hours and days shall not exceed 45 dBA at the property line. The above limitations on working hours and days may, in case of emergency, be temporarily waived by the Chairman of the Board of Supervisors, or his/her designee, until such time as the matter may be heard by the Board of Supervisors for a final determination.

Notwithstanding the above, the following limitations to hours of operation apply, unless temporarily waived by the County Planning Department in case of emergency:

1. Mining of the outer areas of the quarry are limited to the hours of 6:00 am – 6:00 pm, Mon – Fri, until mining has progressed to a depth of at least one bench height (~20 ft.) as delineated in the noise report (Bollard; May 2023).
2. Use of excavator-mounted hydraulic rock breakers are limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.
3. Load out of rip-rap is limited to the hours of 6:00 am – 6:00 pm, Mon – Fri."

No change to the approved hours of operation for site preparation activities or blasting are requested. The Project will not modify the existing production levels, materials to be mined, area of disturbance, equipment types or mining methods, number of employees, or otherwise expand or intensify the existing use.

Owner/Applicant: The Reed Leasing Company/George Reed, Inc. (Tom Ferrell, Representative)
Supervisorial District: 2
Location: 3421 Jackson Valley Road, Ione, CA 95640 (APN 005-230-018)

REVIEW: As part of the early consultation process, this project is referred to State, Tribal, and local agencies for review and comment. The Amador County Technical Advisory Committee (TAC) will review the application for completeness during its regular meeting on **Thursday, September 7, 2023, at 1:00 p.m.** in the Board Chambers at the County Administration Building, 810 Court Street, Jackson, California as well as via teleconference.

***In accordance with Public Resources Code Section 21080.3.1, this notice constitutes formal notification to those tribes requesting project notification. This notification begins the 30-day time period in which California Native American tribes have to request consultation.*

PROJECT DESCRIPTION AND APPLICATION SUPPLEMENT

AMENDMENT TO USE PERMIT (UP-06; 9-2) TO ALLOW FOR MODIFIED HOURS OF OPERATION

GEORGE REED, INC.

JACKSON VALLEY QUARRY

(CA MINE ID NO. 91-03-0020)

AMADOR COUNTY, CALIFORNIA

Applicant:

George Reed, Inc.
140 Empire Avenue
Modesto, CA 95354

Prepared by:

Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

COMPASS LAND GROUP

August 2023

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FIGURES

APPENDICES

1.0 INTRODUCTION

Section 1.0 of this document provides an overview and project description, including purpose and need for the proposed amendment to Use Permit (UP-06; 9-2). Section 2.0 is a supplement to the County of Amador's Environmental Information Form and contains responses to questions that require more text than the space provided on the form would allow.

1.1 Project Title

George Reed, Inc. Jackson Valley Quarry – Amendment to Use Permit (UP-06; 9-2) to Allow for Modified Hours of Operation.

1.2 Names and Addresses of Applicant's Representatives

Applicant:
Attn: Tom Ferrell
George Reed, Inc.
140 Empire Avenue
Modesto, CA 95354

Agent:
Attn: Jordan Main
Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

1.3 Project Location

The Project site is an existing hard rock quarry located on the south side of State Route 88, approximately ½ mile east of the most westerly junction of Jackson Valley Road and SR 88 in the Ione area of Amador County (see ***Figure 1, Plot Plan***).

1.4 Assessor Parcels, Ownership, and Land Use Designations

The Project site's current assessor parcel numbers, acreage, ownership, zoning and General Plan land use designations are as follows (see ***Appendix A, Grant Deed***, and ***Appendix B, Assessor Plat Map***):

TABLE 1
ASSESSOR PARCELS, ACREAGE, OWNERSHIP, ZONING AND GENERAL PLAN DESIGNATIONS

Current APN	Acreage	Ownership	Zoning	General Plan
005-230-018	159.66 ac.	The Reed Leasing Group, LLC[1]	Special Use (X)	Mineral Resource Zone (MRZ) and Agricultural General (AG)

[1] The Reed Leasing Group, LLC is an affiliate company of George Reed, Inc. See ***Appendix C, Property Owner Consent Letter***.

1.5 Project Description

1.5.1 Background

The existing Jackson Valley Quarry ("JVQ") Use Permit (UP-06; 9-2) was approved by Amador County in 2013 in connection with a project involving a geographic expansion and production increase ("JVQ Expansion Project"). The JVQ Expansion Project underwent environmental review pursuant to the California Environmental Quality Act ("CEQA"), including preparation of an Environmental Impact Report ("EIR"). The EIR assessed potential impacts from project activities, and prescribed mitigations where impacts were found to be potentially significant.

With respect to hours of operation, the EIR assumed typical quarry operations would occur Monday through Friday from 6:00 a.m. to 6:00 p.m., with sporadic extended hours to meet customer demands. As described below, the EIR limited hours of operation for certain site activities based on potentially significant noise impacts:

EIR Analysis - Site Preparation Activities

The EIR described site preparation activities as those involving removal of vegetation, topsoil, and overburden, as well as grading. The EIR found that site preparation activities would exceed the County's noise thresholds at the nearest receptor to the north, and therefore, imposed a mitigation limiting site preparation activities to the daytime hours of 8:00 a.m. – 5:00 p.m., Monday through Friday.

EIR Analysis - Operational / Reclamation Activities

The EIR described operational / reclamation activities as those involving excavation, earth movement, and loading operations. The EIR utilized similar assumptions for operational / reclamation activities as those that were utilized for site preparation activities, so the anticipated noise levels at the nearest sensitive receptors were identical, and a similar finding was made that, without mitigation, operational / reclamation activities would exceed the County's noise thresholds at the nearest receptor to the north. As mitigation, the EIR required that a 7-foot earthen berm be constructed along a portion of the northern edge of the project site to attenuate noise. With installation of the noise control berm, the EIR determined that resulting noise levels would be below the applicable significance thresholds.

Currently Permitted Hours of Operation

Based on the project description and EIR analysis for the JVQ Expansion Project, the Use Permit (UP-06; 9-2) currently restricts hours of operation to the following:

1. Site preparation activities: 8:00 a.m. – 5:00 p.m., Monday through Friday (COA 44.a)
2. Operational / reclamation activities (other than site preparation): 6:00 a.m. – 6:00 p.m., Monday through Friday (COA 15)

3. Maintenance and repair work: no restriction as long as activities do not exceed 45 dBA at the property line (COA 15)
4. Blasting: 11:30 a.m. – 2:30 p.m., Monday through Friday (COA 16)

1.5.2 Description of Project (Purpose and Need)

George Reed, Inc. ("GRI") proposes to modify Condition of Approval ("COA") #15 of the JVQ Use Permit (UP-06; 9-2) to allow operational / reclamation activities to occur during modified hours of operation: 6:00 a.m. – 10:00 p.m. Monday through Friday, with limitations for activities allowed between the hours of 6:00 p.m. and 10:00 p.m.[2] ("Project"). No change to the approved hours of operation for site preparation activities or blasting are requested. See ***Table 1,***

Comparison of Existing vs. Proposed Hours of Operation.

The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. Through modification of COA #15, GRI will be able to better serve regional market demands, optimize electrical power supply management, and come closer to achieving parity with its largest local competitor who has similar (but less restrictive) operating hours to those being requested.

[2] GRI proposes the following text change to COA #15:

> *Hours of operation, other than maintenance and repair work, shall be limited to the hours of 6:00 a.m. and 10:00 p.m. Days of operation, other than maintenance and repair work, shall be limited to Monday through Friday. Maintenance and repair work of a low noise level may be made outside the foregoing working hours and days of operations. The noise level for maintenance and repair work conducted outside normal working hours and days shall not exceed 45 dBA at the property line. The above limitations on working hours and days may, in case of emergency, be temporarily waived by the Chairman of the Board of Supervisors, or his/her designee, until such time as the matter may be heard by the Board of Supervisors for a final determination.*
>
> *Notwithstanding the above, the following limitations to hours of operation apply, unless temporarily waived by the County Planning Department in case of emergency:*
>
> 1. *Mining of the outer areas of the quarry are limited to the hours of 6:00 am – 6:00 pm, Mon – Fri, until mining has progressed to a depth of at least one bench height (~20 ft.) as delineated in the noise report (Bollard; May 2023).*
> 2. *Use of excavator-mounted hydraulic rock breakers are limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.*
> 3. *Load out of rip-rap is limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.*

Table 1
Comparison of Existing vs. Proposed Hours of Operation

Activity	Existing Approved	Proposed
Site Preparation	Mon – Fri, 8 am – 5 pm	No change
Operational / Reclamation	Mon – Fri, 6 am – 6 pm	Mon – Fri, 6 am – 10 pm[1]
Maintenance & Repair Work	Anytime	No change
Blasting	Mon – Fri, 11:30 am – 2:30 pm	No change

[1] *Proposed Limitations to Updated Hours*

- *Mining of the outer areas of the quarry will remain limited to the hours of 6:00 am – 6:00 pm, Mon – Fri, until mining has progressed to a depth of at least one bench height (~20 ft.) as delineated in the noise report (Bollard; May 2023).*
- *Use of excavator-mounted hydraulic rock breakers will remain limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.*
- *Load out of rip-rap will be limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.*

1.5.2 Technical Review

Impacts from operational / reclamation activities were fully analyzed in the 2013 EIR, and mitigation measures were adopted as conditions of approval by the County Board of Supervisors to adequately mitigate potential impacts from site activities. Relevant to the proposed Project, the existing Use Permit (UP-06; 9-2) contains conditions of approval for noise (COAs #44-#49), lighting (COA #23), and biological resources (COAs #50-#53) that will be maintained and adhered to. In order to analyze potential impacts from the proposed Project, updated technical analyses related to noise and vibration, lighting, and biological impacts were prepared, and new avoidance, minimization, and mitigation measures have been integrated into the proposed Project.

Noise and Vibration

A noise and vibration assessment has been prepared for the proposed Project to evaluate potential impacts to nearby receptors and compliance with current Amador County noise standards during modified hours of operation. The noise and vibration assessment evaluated 24-hour unmitigated (worst-case) conditions, then determined appropriate mitigation measures to ensure that the modified hours of operations do not adversely affect sensitive receptors located in the Project vicinity.

No adverse vibration impacts were identified for the proposed Project; however, the assessment reveals that, without implementation of mitigation measures, noise generated during nighttime activities could exceed acceptable levels at certain discrete sensitive receptors in the Project vicinity. Following preparation of the noise study, the project description was revised to remove nighttime activities (i.e., after 10:00 p.m.). Notwithstanding, the noise consultant developed, and GRI incorporated as project elements, noise reduction measures that could be implemented to reduce the potential for adverse public reaction to extended hours of operation at the quarry.

1. Replacement of traditional, tonal, backup warning devices with advanced, broad-band, backup warning devices on mobile mining equipment.
2. Full treatment of processing-area crushers and screen-decks with suspended noise-attenuation curtains.
3. Limitations on use of excavator-mounted hydraulic rock breakers and load-out of rip-rap[3].

Following "proof of concept" testing, the analysis concludes that implementation of the additional (voluntary) noise mitigation measures would not only ensure compliance with applicable County noise standards but would also significantly reduce the potential for adverse public reaction to modified hours of operation at the quarry.

See ***Appendix D, Noise and Vibration Assessment***.

Lighting

A Light Pollution Prevention Plan has been prepared to identify the location of existing and proposed lighting fixtures that will illuminate operational areas during extended hours of operation while minimizing off-site effects. Area and task lighting is currently in-place at the Project site for safety purposes and to operate during periods of low visibility. In order to facilitate extended hours of operation, it is anticipated that additional lighting will be necessary in select operational areas. In addition to the approximate ten existing light fixtures associated with the processing plant, it is anticipated that approximately four new lighting fixtures will be needed in the processing and load-out area. Consistent with existing practices, in locations where lighting does not exist or where stationary lighting is not feasible, industry-standard portable light towers will be employed. The locations of the portable light towers will vary as mining progresses throughout the site. The existing Use Permit addresses requirements for site lighting by stipulating that "artificial illumination of any area within Quarry site shall be of a non-glare nature and shall be shielded to extent feasible to prevent glare from affecting neighboring parcels of land with direct line of site of the Quarry…" (COA #23). Consistent with this requirement, existing and proposed lighting fixtures will be equipped with shields / hoods that concentrate illumination downward such that no direct lighting is cast offsite. Given setbacks from nearby public streets and residences, as well as the fact that mining will predominantly occur below grade, site lighting

[3] Rip-rap is considered rock greater than 4 inches in diameter

is not anticipated to affect neighboring parcels of land. In addition, the site's rolling topography and perimeter vegetation will also provide natural screening from potential lighting impacts.

See ***Appendix E, Light Pollution Prevention Plan***.

Biological Resources

An updated biological resources and jurisdictional waters assessment was conducted for the proposed Project to evaluate whether there have been any changes to the biological setting since the prior environmental review, and whether the proposed Project may impact nocturnal wildlife species as a result of extended operating hours. The updated biological assessment determined that there have been no significant changes in the biological setting at the Project site since the 2013 EIR was prepared and that no new jurisdictional features, beyond those previously mapped and permitted, are present. Further, the updated biological assessment concludes that with implementation of the Light Pollution Prevention Plan and adherence to existing and proposed noise mitigation measures, potential impacts to nocturnal wildlife species associated with modified hours of operation will be less than significant.

See ***Appendix F, Biological Resources Assessment***, and ***Appendix G, Jurisdictional Waters Assessment***.

2.0 SUPPLEMENT TO ENVIRONMENTAL INFORMATION FORM

Section 2.0 is a supplement to the County of Amador's Environmental Information Form and contains responses to questions that require more text than the space provided on the form would allow.

2.1 Site Size

The Project Site is comprised of Assessor's Parcel Number ("APN") 005-230-018-000 (formerly 005-230-007-000 and 005-230-016-000), which is 159.66 acres in size. No change from existing conditions.

2.2 Square Footage of Existing / Proposed Structures

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify square footage of existing / proposed structures already approved. No change from existing conditions.

2.3 Number of Floors of Construction

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify number of floors of construction already approved. No change from existing conditions.

2.4 Amount of Off-Street Parking Provided

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify amount of off-street parking already approved. No change from existing conditions.

2.5 Source of Water

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify the source of water already approved. No change from existing conditions.

2.6 Method of Sewage Disposal

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify the method of sewage disposal already approved. No change from existing conditions.

2.7 Attach Plans

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify the approved mining and reclamation plans. No change from existing conditions.

2.8 Proposed Scheduling of Project Construction

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify the approved mining and reclamation schedule or term. No change from existing conditions.

2.9 Phasing

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify the approved mining and reclamation phasing. No change from existing conditions.

2.10 Associated Projects

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2).

2.11 Subdivision / Land Division Projects

N/A – the Project does not include a request for subdivision / land division.

2.12 Residential Projects

N/A – the Project does not include a residential component.

2.13 Commercial Projects

N/A – the Project is not classified as a commercial project.

2.14 Industrial Projects

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2) and will not modify the type, estimated employment per shift, or loading facilities. No change from existing conditions.

2.15 Institutional Projects

N/A – the Project does not include an institutional component.

2.16 Variance, Conditional Use Permit, or Rezoning Application

The Project involves a request to modify the approved hours of operation for operational / reclamation activities with an existing conditional use permit (UP-06; 9-2).

2.17 Additional Information / Environmental Setting

An Applicant's Draft Initial Study has been prepared to analyze the proposed Project's potential impacts using the Environmental Checklist Form presented in Appendix G of the CEQA Guidelines.

See ***Appendix H, Applicant's Draft Initial Study***.

Recording Requested by:

AND WHEN RECORDED MAIL THIS DEED AND, UNLESS OTHERWISE SHOWN BELOW, MAIL TAX STATEMENTS TO.

Jeffrey R. Reed
The Reed Leasing Group, LLC
928 12th Street, Suite 700
Modesto, CA 95354

Amador County Recorder
Sheldon D. Johnson
DOC- 2012-0000058-00
Check Number 7887
REQD BY BRUNN & FLYNN
Wednesday, JAN 04, 2012 10:36:01
Ttl Pd $13.00 Nbr-0000218122
CT1/R1/1-3

SPACE ABOVE THIS LINE FOR RECORDERS USE

APN: 005-230-016

GRANT DEED

DOCUMENTARY TRANSFER TAX $ ∅

☐ computed on full value of property conveyed, or

☐ computed on full value less liens and encumbrances remaining at time of sale

SIGNATURE OF DECLARANT OR AGENT DETERMINING TAX — FIRM NAME: Brunn & Flynn

FOR VALUABLE CONSIDERATION, receipt of which is acknowledged, REED FAMILY VINEYARDS, LLC, a California Limited Liability Company grants to THE REED LEASING GROUP, LLC, a California Limited Liability Company, all right, title, and interest in the real property situated in the County of Amador, State of California, described as follows:

See "Exhibit A" attached hereto and made a part hereof.

Dated: 12-9, 2011

REED FAMILY VINEYARDS, LLC

By: _____
Jeffrey R. Reed, Manager

ACKNOWLEDGMENT

State of California
County of Stanislaus)

On December 9, 2011 before me, Mardi E. Courtright, Notary Public
(Insert name and title of the officer)

personally appeared Jeffrey R. Read
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct

WITNESS my hand and official seal.

MARDI E. COURTRIGHT
COMM. #1848199
NOTARY PUBLIC-CALIFORNIA
STANISLAUS COUNTY
My Comm Expires May 28, 2013

Signature Mardi E. Courtright (Seal)

EXHIBIT A

THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF AMADOR, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1 AS SHOWN AND DELINEATED ON PARCEL MAP NO. 2071 FOR NORMAN D. BORTH, ET UX, FILED IN THE OFFICE OF THE COUNTY RECORDER OF AMADOR COUNTY ON OCTOBER 24, 1984 IN BOOK 38 OF MAPS AND PLATS, AT PAGE 73.

EXCEPTING FORM THAT PORTION OF SAID LAND LYING WITHIN LOT NO. 98 AS SHOWN BY STRATTON'S MAP OF SAID RANCHO ARROYO SECO, THE MINERAL ON SAID LAND WITH THE RIGHT TO MINE THE SAME, AS RESERVED IN DEED FROM J. MORA MOSS, ET AL, TO J.C. HAMERICK RECORDED NOVEMBER 23, 1865 IN BOOK "J" OF DEEDS, PAGE 21, RECORDS OF AMADOR COUNTY.

EXCEPTING FROM THE REMAINDER THEREOF, ALL THE MINERALS BENEATH THE SURFACE OF SAID TRACT OF LAND AND OF ALL AND EVERY OF THEM AND ESPECIALLY THE COAL, CLAY AND OTHER LIKE SUBSTANCES WITH THE FULL RIGHT, POWER AND PRIVILEGE TO WORK AT AND MINE FOR AND TAKE OUT AND EXTRACT THE SAME, ALL AS MORE PARTICULARLY PROVIDED IN DEED FROM DAVID D COLTON TO DAVID GOODMAN, RECORDED JUNE 2, 1877 IN BOOK "P" OF DEEDS, PAGE 422, RECORDS OF AMADOR COUNTY.

APN. 005-230-016

END OF DOCUMENT

Requested by:
BOARD OF SUPERVISORS
Return to:
SURVEYING & ENGINEERING

Amador County Recorder
Kimberly L. Grady
DOC- 2013-0003790-00
Check Number 11125547
REQD BY GEORGE REED INC
Friday, APR 26, 2013 15:53
Ttl Pd $13.00 Nbr-0000238898
CT2/R1/1-3

CERTIFICATE OF MERGER

I,/WE, the undersigned owner(s) of record, hereby declare our intention to merge said real property, heretofore known and described as follows

ALL THOSE PARCELS OF LAND SITUATED IN THE COUNTY OF AMADOR, STATE OF CALIFORNIA, BEING: PARCEL 1 AS SHOWN AND DELINEATED ON PARCEL MAP NO. 2071 FOR NORMAN D. BORTH, ET UX, FILED IN THE OFFICE OF THE AMADOR COUNTY RECORDER ON OCTOBER 24, 1984 IN BOOK 38 OF MAPS AND PLATS, AT PAGE 73; AND,
PARCEL B, AS SHOWN ON THAT CERTAIN "RECORD OF SURVEY BAMERT PROPERTY" LOCATED IN RANCHO ARROYO SECO, ACCORDING TO THE QFFICIAL MAP THEREOF FILED FOR RECORD JANUARY 4, 1966 IN BOOK 12 OF MAPS AND PLATS, PAGE 43, AMADOR COUNTY RECORDS.

Said land to be known hereafter as follows: (SEE DESCRIPTION ATTACHED)

THE REED LEASING GROUP, LLC,
A California Limited Liability Company

Owner(s)Signature: _____
Print (name/title) Jeffrey R. Reed, Managing Member

Owner(s)Signature _____
Print (name/title)

STATE OF CALIFORNIA)
) SS
COUNTY OF _____)

On _____ before me,
_____, Notary Public, personally appeared
_____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature _____ (seal)

ACKNOWLEDGMENT

State of California
County of Stanislaus)

On January 21, 2013 before me, Mardi E Courtright
(insert name and title of the officer)

personally appeared Jeffrey R. Reed,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct

WITNESS my hand and official seal

Signature Mardi E. Courtright (Seal)

MARDI E. COURTRIGHT
COMM. #1848199
NOTARY PUBLIC-CALIFORNIA
STANISLAUS COUNTY
My Comm Expires May 28, 2013

MERGER
LEGAL DESCRIPTION
APN'S: 005-230-007 & 016

All those certain pieces or parcels of land situate in the County of Amador, State of California, lying within a portion of the "Rancho Arroyo Seco", described as follows:

BEGINNING at a 5/8" diameter rebar with tag L.S. 4233 marking the Northwest corner of the above referred to Parcel 1, said corner lies on the Southerly right of way line of State Highway 88; thence along said Southerly right of way line the following (6) six courses: 1) North 78°47'18" East, a distance of 326.65 feet to an angle point marked by a 6" x 6" concrete monument; thence 2) North 61°54'15" East, a distance of 1022.85 feet to an angle point marked by a 6" x 6" concrete monument and a point of curvature of a non-tangent curve, concave Southeasterly, having a radius of 3960.00 feet of which the radius point bears South 22°14'39" West; thence 3) Northeasterly along the arc of said curve, through a central angle of 9°44'20", an arc distance of 673.10 feet to the end of said curve marked by a 6" x 6" concrete monument; thence 4) North 88°03'55" East, a distance of 149.98 feet to an angle point marked by a 6" x 6" concrete monument; thence 5) North 73°10'04" East, a distance of 184.36 feet to an angle point marked by a 6" x 6" concrete monument; thence 6) North 82°14'50" East, a distance of 741.58 feet to the Northeast corner of said Parcel B, herein above referred to; thence leaving said Southerly right of way of State Highway 88 and proceeding South 14°08'54" East along the East line of said Parcel B, a distance of 3832.12 feet to a 1/2" diameter iron pipe marking the Southeasterly corner thereof; thence North 56°51'19" West along the Southerly line of said Parcel B, a distance of 1169.76 feet to the Southwesterly corner of said Parcel B marked by a 5/8" diameter rebar with tag L.S. 4233; thence North 14°29'37" East along the West line of said Parcel B, a distance of24.00 feet to the Southeast corner of said Parcel 1, said corner also lies on the center line of 60.00 foot wide Public Road known as Jackson Valley Road; thence North 57°56'17" West along the South line of said Parcel B, a distance of 1069.88 feet to the beginning of a tangent curve, concave Southwesterly, having a radius of 950.00 feet; thence continuing Northwesterly along the Southerly line of said Parcel 1 and the arc of said curve, through a central angle of 13°40'32", an arc distance of 226.75 feet to the Southwest corner of said Parcel 1; thence North 14°22'44' East along the west line of said Parcel 1, a distance of 262.31 feet to an angle point in said West line marked by a 5/8" diameter rebar with tag L.S. 3570; thence continuing along said West line of Parcel 1 North 56°17'55" West, a distance of 299.46 feet to an angle point in said West line marked by a 5/8" rebar with tag L.S. 4233; thence continuing along said West line of Parcel 1 North 14°44'28" East, a distance of 1100.23 feet to the point of beginning of this description.

CONTAINING 159.663 Acres more or less

SUBJECT to all easements and/or rights of way of record.

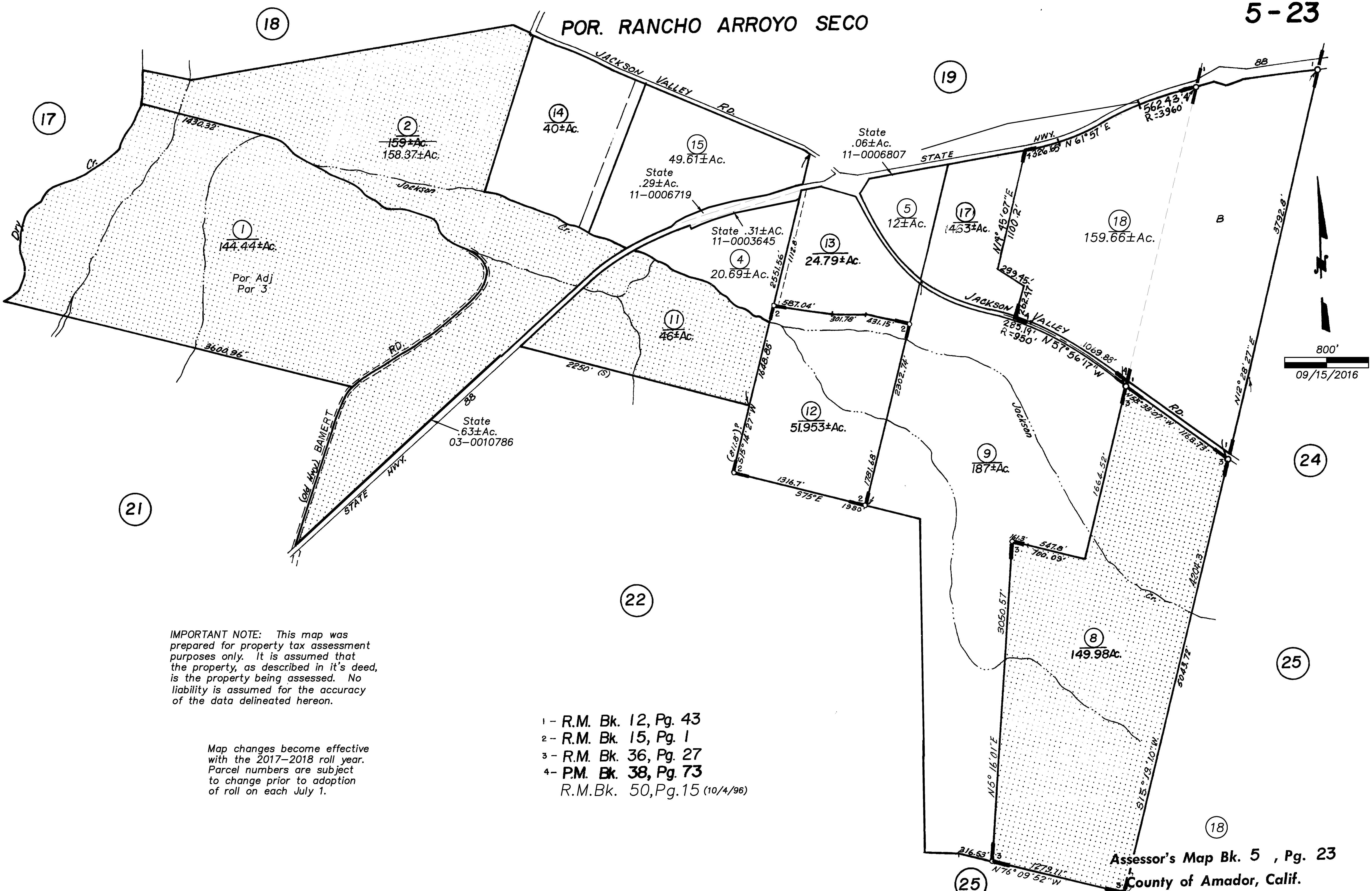
The herein above described merged parcel of land is depicted as Parcel 1 of Book 38 of Maps and Plats at Page 74 and Parcel B of Book 12 of Maps and Plats at Page 43. Courses in the above description are shown on that certain Record of Survey filed in the Office of the Recorder of the County of Amador on June 13, 2006 in Book 58 of Maps and Plats at Page 94.

Dave Skidmore, L.S. 7126
2/11/13

I Mas Locations\Amador County\432J-[illegible]R1)

END OF DOCUMENT

POR. RANCHO ARROYO SECO



18
17
19
21
22
24
25
25
18
JACKSON VALLEY RD.
STATE HWY. 88
1430.32'
2
159±Ac.
158.37±Ac.
14
40±Ac.
15
49.61±Ac.
State
.29±Ac.
11-0006719
State
.06±Ac.
11-0006807
State .31±AC.
11-0003645
1
144.44±Ac.
Por Adj
Par 3
Dry Cr.
Jackson Cr.
4
20.69±Ac.
13
24.79±Ac.
5
12±Ac.
17
1463±Ac.
18
159.66±Ac.
B
11
46±Ac.
3600.96'
2250' (S)
State
.63±Ac.
03-0010786
(old Hwy) BAMERT RD.
12
51.953±Ac.
9
187±Ac.
8
149.98Ac.
562.43'
R=3960'
N 61°51' E
1326.65'
N 11°45'07"E
1100.2'
3792.8'
N 12°28'27"E
N 57°56'17"W
1069.86'
R=950'
587.04'
301.78'
431.15'
2551.56'
1112.8'
1648.86'
S 15°14'27"W
2302.74'
1316.7'
S 75° E
1980'
1781.68'
1664.52'
547.8'
700.09'
3050.57'
N 5°16'01"E
4204.3'
5043.72'
S 15°19'10"W
N 76°09'52"W
1279.11'
316.53'
800'
09/15/2016

IMPORTANT NOTE: This map was prepared for property tax assessment purposes only. It is assumed that the property, as described in it's deed, is the property being assessed. No liability is assumed for the accuracy of the data delineated hereon.

Map changes become effective with the 2017–2018 roll year. Parcel numbers are subject to change prior to adoption of roll on each July 1.

1 - R.M. Bk. 12, Pg. 43
2 - R.M. Bk. 15, Pg. 1
3 - R.M. Bk. 36, Pg. 27
4 - P.M. Bk. 38, Pg. 73
R.M.Bk. 50,Pg.15 (10/4/96)

February 17, 2021

Mr. Chuck Beatty, Director
Planning Department
County of Amador
810 Court Street
Jackson, CA 95642

RE: Declaration of Dual Ownership for both the Reed Leasing Group LLC and George Reed Inc.

Dear Mr. Beatty,
George Reed Inc. operates the Jackson Valley Quarry under Amador County Conditional Use Permit UP-06; 9-2 (CUP) which is applying to revise the existing CUP conditions to extend the hours of operations. The landowner for the 159 acres that the Jackson Valley Quarry operates on is owned by the Reed Leasing Group LLC parcel (PN 005-230-018-000).
Both George Reed Inc. and the Reed Leasing Group LLC are owned by myself, Jeff Reed, and I am aware of and support George Reed Inc's. application to revise the Conditions of Approval for extending the hours of operations for the Jackson Valley Quarry.
If you have any questions regarding this application, please call Tom Ferrell at (209) 681-3726.

Sincerely,

Jeff Reed
George Reed Inc & The Reed Leasing Group, Inc
928 12th Street, STE 700
Modesto, CA 95354-2330
(209) 521-7423

Environmental Noise & Vibration Assessment

George Reed Jackson Valley Quarry Extended Hours of Operation

Amador County, California

BAC Job # 2020-149

Prepared For:

George Reed, Inc.

Mr. Tom Ferrell
140 Empire Avenue
Modesto, CA 95354

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard, President

May 17, 2023

BOLLARD
Acoustical Consultants

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Executive Summary

Bollard Acoustical Consultants, Inc. (BAC) was retained to evaluate potential noise and vibration impacts related to a proposal to modify the currently permitted hours of operation at the George Reed, Inc., (GRI) Jackson Valley Quarry (JVQ) in Amador County, California (Project). The proposed modifications would allow for typical operational / reclamation activities (i.e., excavation, processing, load-out, and hauling) to occur during modified hours of operation: generally, 6:00 a.m. – 10:00 p.m. Monday through Friday, and 7:00 a.m. to 3:00 p.m. on Saturday (load-out and hauling only), with allowances for operations outside of these hours to meet project / contract demands or to maximize power supply management. No change to the approved hours of operation for site preparation activities or blasting are requested. BAC's analysis involved an iterative process to thoroughly assess noise-producing activities at the site as well as identify and validate noise mitigation measures that would not only ensure compliance with applicable County noise standards but would also significantly reduce the potential for adverse public reaction to extended hours of operation at the quarry. This iterative process has included:

1. A comprehensive assessment to model and identify potential Project impacts, including identification of potential noise sources that, although compliant with County requirements, could be further lessened to decrease potential noise impacts to surrounding residents;

2. Identification of site-specific noise mitigation measures that go beyond County requirements to minimize Project impacts;

3. GRI's implementation of "proof of concept" noise mitigation measures at the site; and

4. Post-mitigation noise monitoring to validate effectiveness of the mitigation measures.

This analysis reveals that, without implementation of noise mitigation measures, noise generated during nighttime activities could exceed acceptable levels at certain discrete sensitive receptors in the project vicinity. Accordingly, site-specific noise mitigation measures are recommended for the project that include increasing mining setbacks, implementing processing area source noise control measures, and limiting the number of nighttime truck load-out operations. After implementation of these noise mitigation measures, the analysis concludes that noise impacts would be reduced to less than significant levels.

No adverse vibration impacts are identified for the proposed project. As a result, no vibration mitigation measures are warranted for the project.

In addition to developing necessary mitigation measures to ensure compliance with County code requirements, GRI requested that BAC identify additional noise reduction measures that could be implemented to further reduce the potential for adverse public reaction to extended hours of operation at the quarry. Through additional assessment of primary noise-generating activities at the site, BAC identified the following recommendations:

1. Replacement of traditional, tonal, backup warning devices with advanced, broad-band, backup warning devices on mobile mining equipment.

2. Full treatment of processing-area crushers and screen-decks with suspended noise-attenuation curtains.

3. No use of excavator-mounted hydraulic rock breakers during nighttime hours.

4. No load-out of rip-rap[1] during nighttime hours.

In order to assess the effectiveness of the proposed mitigation measures, GRI implemented "proof of concept" mitigation measures in the form of installation of a noise attenuation curtain on a crusher at the processing plant, and purchase of a backup warning device replacement. BAC conducted updated noise monitoring following installation of the mitigation measures, along with an assessment of noise from the hydraulic rock breaker and load out of rip rap to determine actual noise reductions associated with the additional proposed mitigation measures. Additional noise measurements of excavation operations from areas shielded from view by the pit slopes were also conducted to quantify the degree of acoustic shielding provided by the pit walls.

The analysis concludes that implementation of the additional (voluntary) noise mitigation measures would not only ensure compliance with applicable County noise standards but would also significantly reduce the potential for adverse public reaction to nighttime operations at the quarry.

Current Hours of Operation

The Use Permit (UP-06; 9-2) currently restricts hours of operation to the following:

- Site preparation activities[2]: 8AM – 5PM, Monday through Friday (COA 44.a)
- Operational / reclamation activities[3] (other than site preparation): 6AM – 6PM, Monday through Friday (COA 15)
- Maintenance and repair work: no restriction as long as activities do not exceed 45 dBA at the property line (COA 15)
- Blasting: 11:30AM – 2:30PM, Monday through Friday, unless conditions or circumstances require delay of the blast after 2:30 p.m. (COA 16)

Proposed Project

The project proposes to modify the Use Permit to allow typical operational / reclamation activities to occur during modified hours of operation: generally, 6:00 a.m. – 10:00 p.m. Monday through Friday, and 7:00 a.m. to 3:00 p.m. on Saturday (load-out and hauling only), with allowances for

[1] Rip-rap is considered rock greater than 4 inches in diameter

[2] Site preparation was defined in the Quarry Use Permit Environmental Impact Report (EIR) to include the removal of vegetation, the removal of topsoil and overburden, grading.

[3] The EIR described operational/reclamation activities as those involving excavation, earth movement, and loading operations.

operations outside of these hours to meet project / contract demands or to maximize power supply management. No change to the approved hours of operation for site preparation activities or blasting are requested.

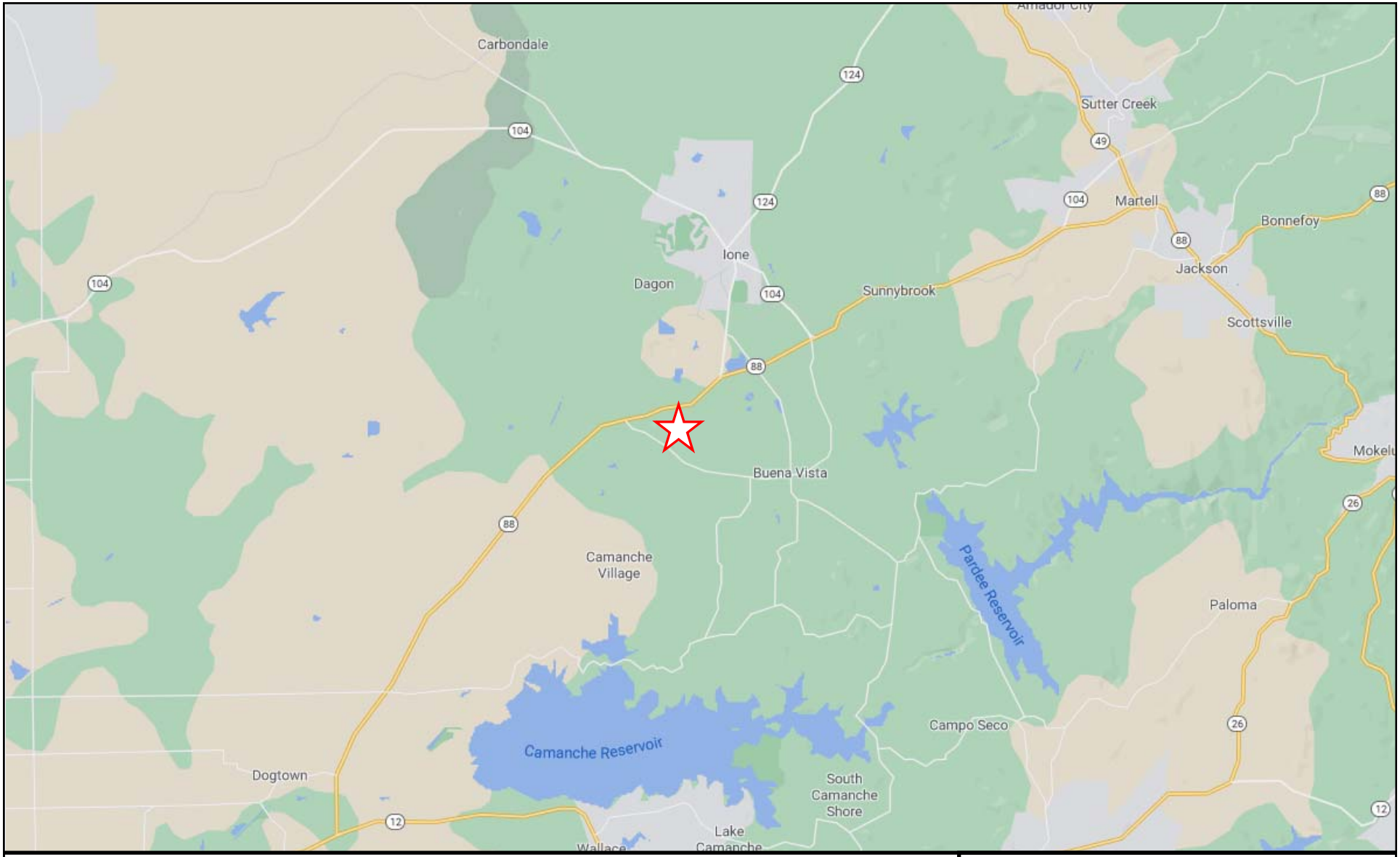
The Project will not modify the existing production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. Through modification of COA #15, GRI will be able to better serve regional market demands and achieve parity with its largest local competitor who has nearly identical (but less restrictive) operating hours to those being requested.

The Use Permit Conditions 44-49 pertain to the noise generation of the facility and require that noise levels not exceed specified limits at the project property lines. The noise standards applicable to the quarry operations are discussed later in this report.

Objectives of this Analysis

The objectives of this analysis are as follows:

- To provide background information pertaining to noise and vibration fundamentals and effects.
- To identify existing noise-sensitive land uses in the immediate project vicinity.
- To quantify existing ambient noise and vibration levels in the immediate project vicinity.
- To use the guidelines of the California Environmental Quality Act (CEQA), with local Amador County noise standards and measured existing noise and vibration levels to develop appropriate standards of significance for this project.
- To predict project-related noise and vibration levels at the nearest sensitive receptor areas and to compare those levels against the applicable standards of significance.
- Where significant project-related noise or vibration impacts are identified, to recommend and evaluate mitigation options that will reduce those impacts to a less than significant level.



Legend

☆ Jackson Valley Quarry Location

N

Scale (miles)

0 2 4

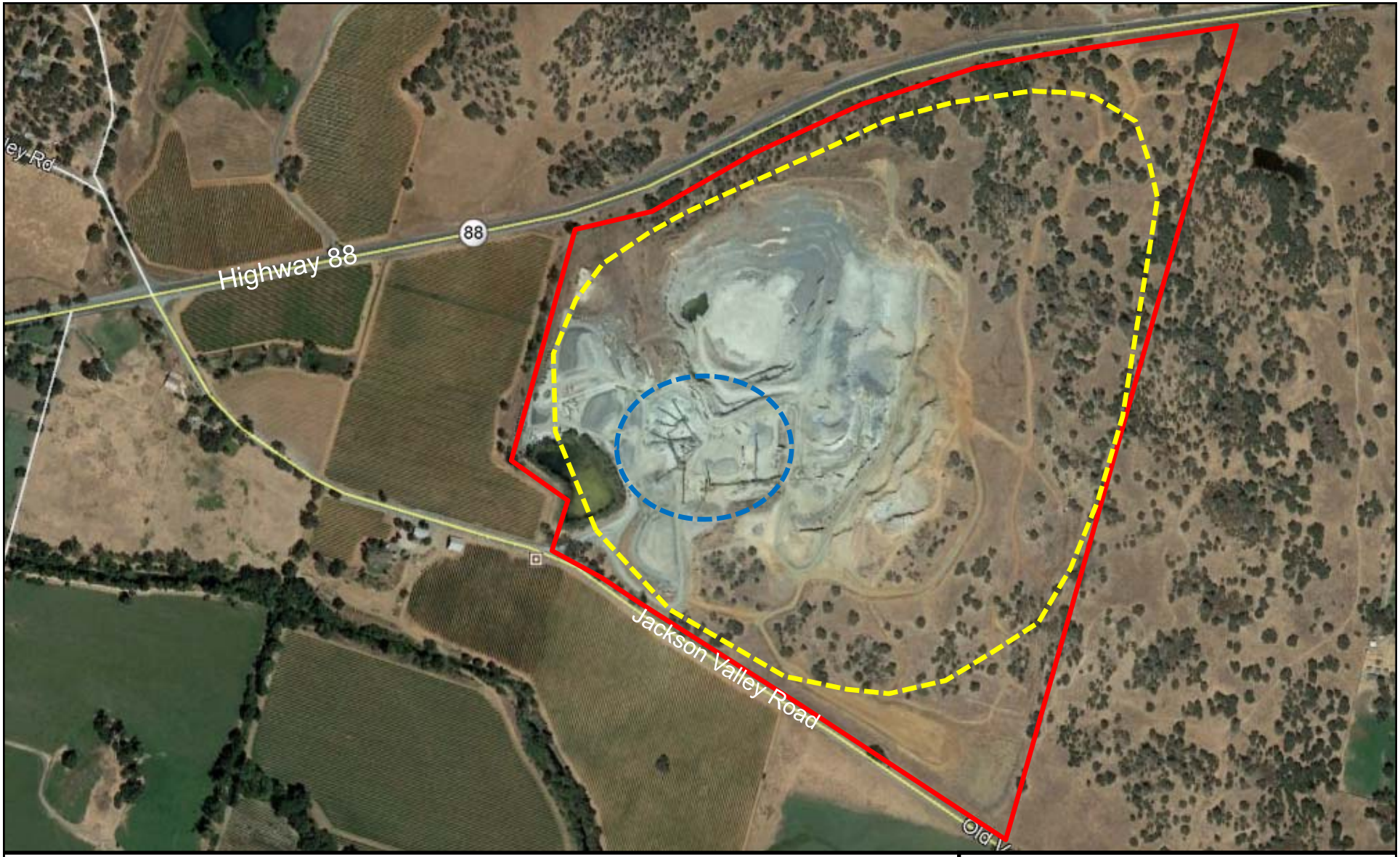
Jackson Valley Quarry

Amador County, CA

Project Site Vicinity

Figure 1

BOLLARD Acoustical Consultants



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Processing Area

Ultimate Mine Disturbance Area

Site Boundary

N

Scale (Feet)

0 300 600

Jackson Valley Quarry

Amador County, CA

Figure 2

BOLLARD Acoustical Consultants

Background on Noise and Vibration

Noise/Sound

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that human hearing can detect. If the pressure variations occur frequently enough (i.e., at least 20 times per second) they can be identified as sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz). Please see Appendix A for definitions of terminology used in this report.

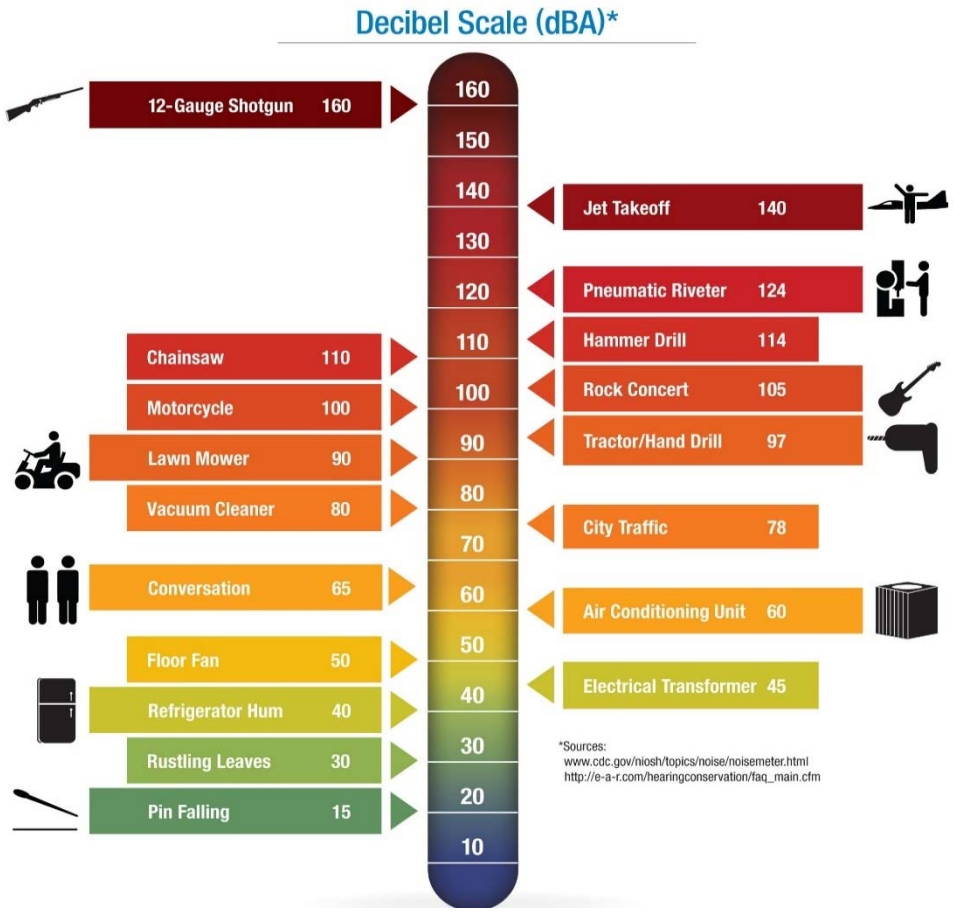
Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale utilizes the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers within a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Figure 3 illustrates common noise levels associated with various sources.

The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighting the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. All noise levels reported in this section are A-weighted.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The Day-Night Average Level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. L_{dn} based noise standards are commonly used to assess noise impacts associated with traffic, railroad and aircraft noise sources.

Figure 3 - Typical A-Weighted Sound Levels of Common Noise Sources



Noise Attenuation with Distance

Stationary “point” sources of noise, attenuate (lessen) at a rate of approximately 6 dBA per doubling of distance from the source, not accounting for environmental conditions (i.e., atmospheric conditions, noise barriers, ground type, vegetation, topography, etc.). Surface traffic (a “moving point” source), would typically attenuate at a lower rate, approximately 4.5 dBA per doubling distance from the source (also dependent upon environmental conditions).

Noise from aggregate excavation and processing sites (with heavy mobile and stationary equipment and trucks entering and exiting the site daily) would have characteristics of both “point” and “line” sources, so attenuation would generally range between 4.5 and 6 dBA per doubling of distance.

Atmospheric (Molecular) Absorption and Anomalous Excess Attenuation

Air absorbs sound energy. The amount of absorption is dependent on the temperature and humidity of the air, as well as the frequency of the sound. Families of curves have been developed which relate these variables to molecular absorption coefficients, frequently expressed in terms

of dB per thousand feet. For standard day atmospheric conditions, defined as 59 degrees Fahrenheit and 70% relative humidity, the molecular absorption coefficient at 1000 hertz is 1.5 dB per thousand feet. Molecular absorption is greater at higher frequencies, and reduced at lower frequencies. In addition, for drier conditions, the molecular absorption coefficients generally increase. Similarly, as temperature increases, molecular absorption coefficients typically increase as well.

Anomalous excess attenuation caused by variations in wind speed, wind direction, and thermal gradients in the air can typically be estimated using an attenuation rate of 1.5 dB per thousand feet for a noise source generating a 1000 hertz signal. As with molecular absorption, anomalous excess attenuation typically decrease with lower frequencies and increases with higher frequencies.

For this analysis, the SoundPlan Version 8.2 noise prediction model was used to project noise generated at the project site to the nearest residences. International Standards Organization (ISO) 9613-2 was employed as the sound propagation methodology within SoundPlan. ISO 9613-2 applies appropriate octave-band offsets for atmospheric absorption for various combinations of temperature and relative humidity for each noise source associated with the project.

Effects of Topographic Shielding

A noise barrier is any impediment which intercepts the path of sound as it travels from source to receiver. Such impediments can be natural, such as a hill or other naturally occurring topographic feature which blocks the receiver's view of the source. Impediments can also be vegetative, such as heavy tree cover which similarly blocks the source from view of the receiver. In addition, impediments can be man-made, such as a solid wall, earthen berm, or structure constructed between the noise source and receiver. Regardless of the type of impediment, the physical properties of sound are such that, at the point where the line-of-sight between the source and receiver is interrupted by a barrier, a 5 dB reduction in sound occurs.

The effectiveness of a barrier is a function of the difference in distance sound travels on a straight-line path from source to receiver versus the distance it must travel from source to barrier, then barrier to receiver. This difference is referred to as the "path length difference", and is used to calculate the Fresnel Number. A barrier's effectiveness is a function of the Fresnel number and frequency content of the source. In general, the more acute the angle of the sound path created by the introduction of a barrier, the greater the noise reduction provided by the barrier.

For this project, receptors to the east will typically be substantially shielded from view of most on-site activities, but receptors to the west will have less shielding by intervening topography. Where such shielding would occur, the level of noise reaching the receiver would be lower than at unshielded receivers located the same distances from the source. To account for shielding of project noise sources by intervening topography, elevation data for the entire study area was input to the SoundPlan model to create a 3-dimensional base map. Noise source and receptor heights were input within the base map and the noise prediction model automatically computed the degree of acoustic shielding between each source and receptor.

Effects of Ground Cover

Ground cover also affects sound propagation. For example, soft ground is more acoustically absorptive than paved surfaces and vegetated ground is more absorptive still. For this analysis, it was assumed that the project site would essentially consist of acoustically hard surfaces with little sound absorption. Conversely, the area surrounding the project site is moderately vegetated, primarily with grass, vineyards and oak trees. Using aerial imagery and project site plans, the SoundPlan model inputs for both hard surfaces, soft surfaces, and vegetated areas were applied. The degree of sound absorption applied to each noise source at each receptor varies depending on the type of ground cover and distance between the noise sources and receptors. The greater the distance between the project site and the sensitive receptors, the greater the amount of intervening vegetation and the higher the degree of sound absorption. Where the ground between the noise source and receptor consists primarily of hardscape, the model applied positive offsets to account for reflections of sound from those surfaces.

Effects of Noise on People

The effects of noise on people can be divided into three categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the third category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

An important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment (or ambient noise) to which one has adapted. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 2013):

- It is widely accepted that the average healthy ear can barely perceive noise level changes of 3 dBA;
- A change in level of 5 dBA is a readily perceptible increase in noise level; and
- A 10-dBA change is recognized as twice as loud as the original source.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. Noise levels are measured on a logarithmic scale, instead of a linear scale. On a logarithmic scale, the sum of two noise sources of equal loudness is 3 dBA greater than the noise generated by only one of the noise sources (e.g., a noise source of 60 dBA plus another noise source of 60 dBA generate a composite noise level of 63 dBA). To apply this formula to a specific

noise source, in areas where existing levels are dominated by traffic, a doubling in traffic volume will increase ambient noise levels by 3 dBA. Similarly, a doubling in heavy equipment use, such as the use of two pieces of equipment where one formerly was used, would also increase ambient noise levels by 3 dBA.

Audibility

It should be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. Because every physical process creates noise, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change. A discussion of what constitutes a substantial change in noise environments is provided in the Criteria section of this report.

Single-Event Noise & Sleep Disturbance

A single event is an individual distinct loud activity, such as a blasting event at an aggregate quarry, an aircraft overflight, a train or truck passage, or any other brief and discrete noise-generating activity. Noise exposure quantified in terms of 24-hour-averaged descriptors, such as L_{dn} or CNEL, can mask the potential for annoyance or sleep disturbance associated with individual loud events due to the averaging process.

Extensive studies have been conducted regarding the effects of single-event noise on sleep disturbance, with the Sound Exposure Level (SEL) metric being a common metric used for such assessments. SEL represents the entire sound energy of a given single-event normalized into a one-second period regardless of event duration. As a result, the single-number SEL metric contains information pertaining to both event duration and intensity. Another descriptor utilized to assess single-event noise is the maximum, or L_{max}, noise level associated with the event. A problem with utilizing L_{max} to assess single events is that the duration of the event is not considered.

Due to the wide variation in test subjects' reactions to noises of various levels (some test subjects were awakened by indoor SEL values of 50 dB, whereas others slept through indoor SEL values exceeding 80 dB), no definitive consensus has been reached with respect to a universal criterion to apply to environmental noise assessments. The Federal Interagency Committee on Aviation Noise (FICAN) has provided estimates of the percentage of people expected to be awakened when exposed to specific SEL inside a home (FICAN 1997). According to the FICAN study, an estimated 5 to 10% of the population is affected when interior SEL noise levels are between 65 and 81 dB, and few sleep awakenings (less than 5%) are predicted if the interior SEL is less than 65 dB.

Baseline Noise and Vibration Environments

Identification of Existing Sensitive Receptors

The immediate project vicinity is rural in nature, containing agricultural, wineries, equestrian training and boarding facilities and residences on agriculturally designated lots. A total of 17 representative receptors were evaluated in this study. Those receptor locations are identified on Figure 4. With the exception of Receptor 9, which represents a winery, each of the receptors represents the location of the nearest residence or group of nearest residences to the quarry site.

While it is recognized that there are more than 17 residences in the general project vicinity, it is not necessary to assess project impacts at each and every individual residence. Rather, standard industry convention is to assess impacts at receptors which represent the nearest sensitive land uses to the project site (including residences located adjacent to project haul routes), groups of residences with similar exposure to the project site, and more distant receptors which may experience different topographic shielding of the project site (or lack thereof), than the nearest receptors.

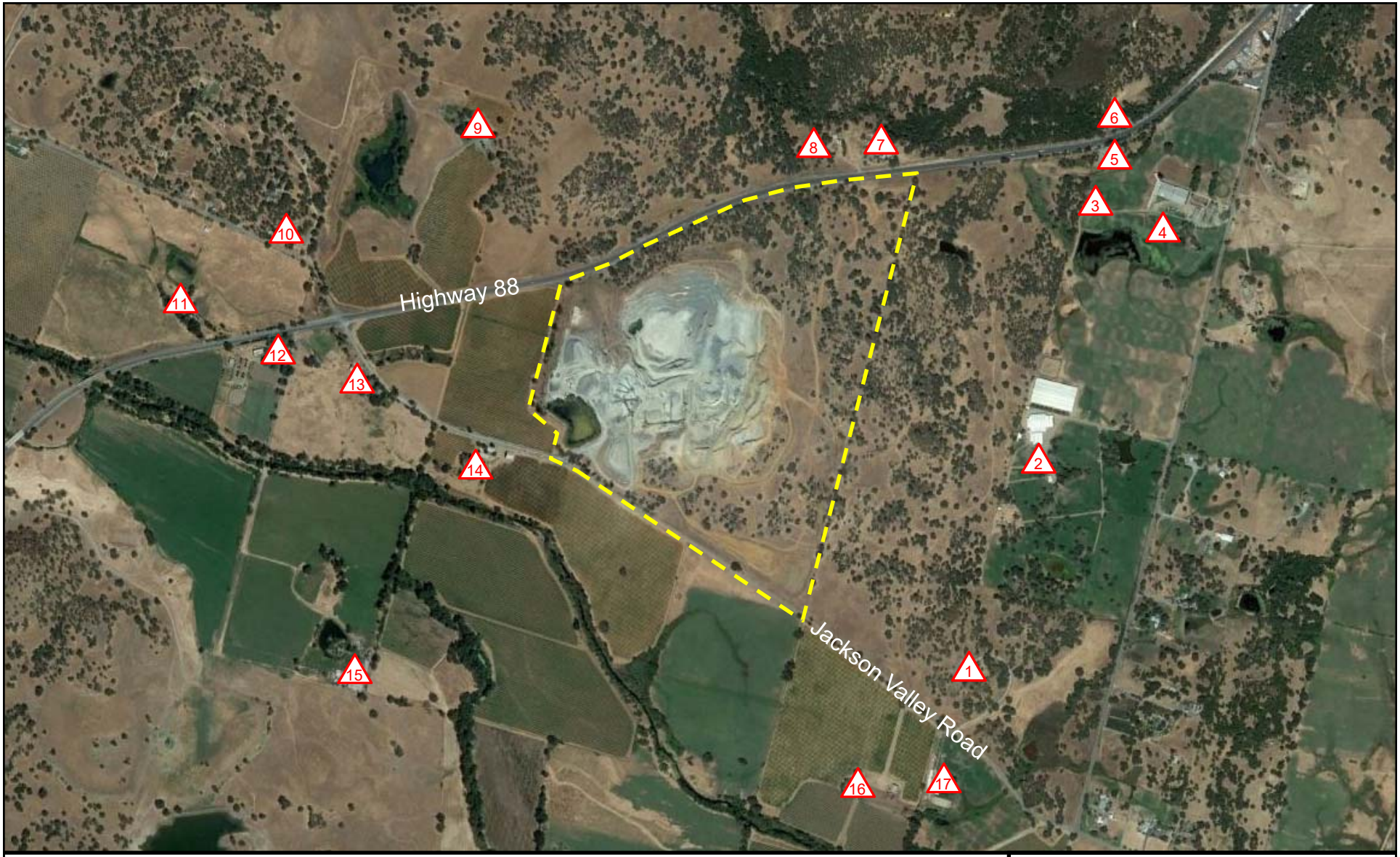
Existing Ambient Noise Environment at Sensitive Receptors

The California Environmental Quality Act (CEQA) states that a project would result in a significant noise impact if it causes a substantial increase in ambient noise levels. (See CEQA Appendix G, Section XII.) In order to determine the threshold at which a project would result in a substantial noise increase, the baseline (pre-project) ambient conditions at potentially impacted noise-sensitive land uses must be established.

To quantify existing (baseline) ambient noise environment in the project vicinity, continuous noise level measurements were conducted at six (6) locations around the quarry site boundaries. The noise measurement locations are identified on Figure 5. Figure 5 also indicates the locations of short-term noise monitoring sites within the quarry which were used to establish reference noise levels for the quarry processing equipment (crushers, screens, conveyors, mobile equipment). The short-term, on-site, noise measurement results are discussed later in this report.

The continuous noise survey period extended from Thursday, October 8th to Tuesday October 13th, 2020, for a continuous period of 144 hours of monitoring at each location.

It is noted that continuous noise monitoring was not conducted at each of the 17 sensitive receptors evaluated in this study. However, the data collected at each site was used to project ambient conditions at the nearest receptors to each monitoring site.



Legend

Noise Sensitive Receptors

Note: All receptors except #9 represent residences.
Receptor 9 represents a Winery.

N

Scale (Feet)

0 500 1000

Jackson Valley Quarry

Amador County, CA

Nearest Noise Sensitive Receptors

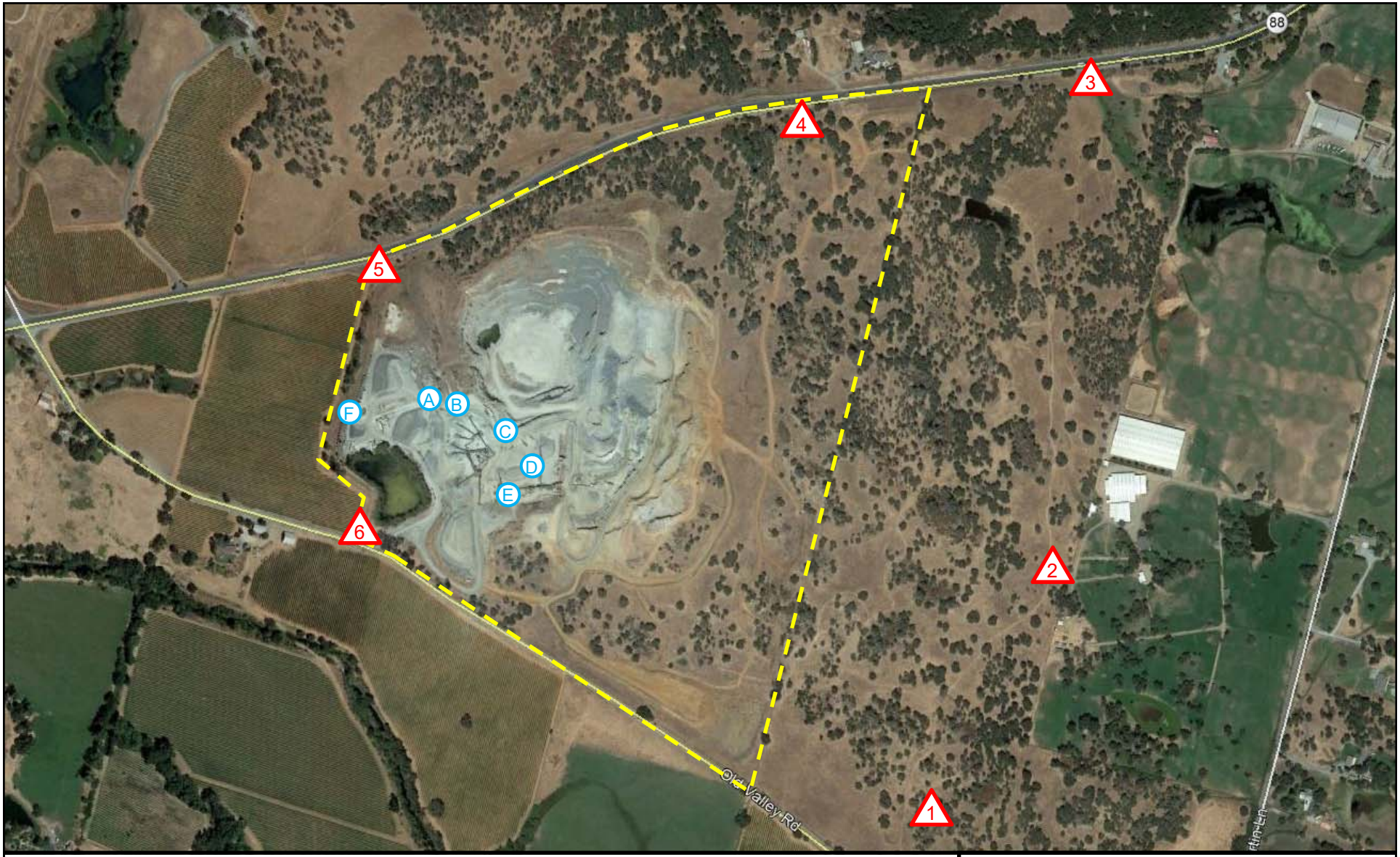
Figure 4

BOLLARD Acoustical Consultants

Larson Davis Laboratories (LDL) Model 820 and 831 precision integrating sound level meters were used by BAC to conduct the noise level surveys. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4). Appendix B shows photographs of each of the continuous noise monitoring sites.

Weather conditions present during the monitoring program were typical for the season during which they were conducted. There were no adverse or anomalous weather conditions which would have caused measured ambient noise levels to be atypical.

Numerical summaries of the ambient noise level measurements are provided in Table 1. Table 1 also contains the arithmetic mean of the average (L_{eq}) and maximum (L_{max}) data collected on each day of the survey. Graphs of the individual hourly average (L_{eq}), and maximum (L_{max}), noise levels for each site and each day are presented in Appendix C.



Legend

- (#) Short-Term Noise Measurement Locations (Site D also used for short-term vibration survey)
- (#) Long-Term Noise Measurement Locations & Short-Term Vibration Measurement Locations
- Site Boundary

N

Scale (Feet)

0 300 600

Jackson Valley Quarry

Amador County, CA

Noise & Vibration Measurement Locations

Figure 5

BOLLARD Acoustical Consultants

Table 1 - Long-Term Ambient Noise Survey Results
Jackson Valley Quarry – Amador County, California

		Daytime (7 am – 10 pm)		Nighttime (10 pm – 7 am)		
Site	**Date**	**Leq**	**Lmax**	**Leq**	**Lmax**	**Ldn/ CNEL**
1	Thursday, October 8, 2020	53	66	43	57	53
	Friday, October 9, 2020	53	65	42	58	53
	Saturday, October 10, 2020	49	64	44	61	51
	Sunday, October 11, 2020	49	62	42	57	50
	Monday, October 12, 2020	50	62	46	59	53
	Tuesday, October 13, 2020	46	63	49	59	55
	Weekday Average	**50**	**64**	**45**	**58**	**53**
	Weekend Average	**49**	**63**	**43**	**59**	**51**
	Overall Average	**50**	**64**	**44**	**58**	**53**
2	Thursday, October 8, 2020	43	57	42	55	48
	Friday, October 9, 2020	43	61	40	55	47
	Saturday, October 10, 2020	43	60	38	53	46
	Sunday, October 11, 2020	44	60	36	51	45
	Monday, October 12, 2020	47	63	41	55	49
	Tuesday, October 13, 2020	45	62	41	54	48
	Weekday Average	**44**	**61**	**41**	**55**	**48**
	Weekend Average	**43**	**60**	**37**	**52**	**45**
	Overall Average	**44**	**60**	**40**	**54**	**47**
3	Thursday, October 8, 2020	62	76	59	75	66
	Friday, October 9, 2020	62	78	59	74	66
	Saturday, October 10, 2020	61	77	57	75	64
	Sunday, October 11, 2020	61	74	56	74	63
	Monday, October 12, 2020	60	75	58	74	65
	Tuesday, October 13, 2020	61	75	58	74	65
	Weekday Average	**61**	**76**	**58**	**75**	**65**
	Weekend Average	**61**	**75**	**56**	**75**	**64**
	Overall Average	**61**	**76**	**58**	**75**	**65**
4	Thursday, October 8, 2020	61	77	58	74	65
	Friday, October 9, 2020	62	79	58	76	65
	Saturday, October 10, 2020	61	77	57	75	64
	Sunday, October 11, 2020	62	75	56	74	64
	Monday, October 12, 2020	61	77	58	75	65
	Tuesday, October 13, 2020	61	77	58	75	65
	Weekday Average	**62**	**77**	**58**	**75**	**65**
	Weekend Average	**61**	**76**	**56**	**74**	**64**
	Overall Average	**62**	**77**	**58**	**75**	**65**
5	Thursday, October 8, 2020	60	77	57	75	64
	Friday, October 9, 2020	61	80	57	75	65
	Saturday, October 10, 2020	60	79	56	75	64
	Sunday, October 11, 2020	61	76	55	74	63
	Monday, October 12, 2020	61	78	58	75	65
	Tuesday, October 13, 2020	61	78	58	75	65
	Weekday Average	**61**	**78**	**58**	**75**	**65**
	Weekend Average	**60**	**78**	**56**	**75**	**63**
	Overall Average	**61**	**78**	**57**	**75**	**64**

Table 1 - Long-Term Ambient Noise Survey Results
Jackson Valley Quarry – Amador County, California

Site	Date	Daytime (7 am – 10 pm) Leq	Daytime (7 am – 10 pm) Lmax	Nighttime (10 pm – 7 am) Leq	Nighttime (10 pm – 7 am) Lmax	Ldn/ CNEL
6	Thursday, October 8, 2020	60	78	55	73	62
	Friday, October 9, 2020	59	78	54	73	62
	Saturday, October 10, 2020	58	78	54	75	61
	Sunday, October 11, 2020	56	77	52	72	60
	Monday, October 12, 2020	59	76	54	73	62
	Tuesday, October 13, 2020	59	79	54	71	61
	Weekday Average	**59**	**77**	**54**	**73**	**62**
	Weekend Average	**57**	**77**	**53**	**74**	**60**
	Overall Average	**58**	**77**	**54**	**73**	**61**

Source: Bollard Acoustical Consultants, Inc. (BAC), 2020

Inspection of the Table 1 noise level data indicates there was not an appreciable difference in measured noise levels between the *weekday* periods when the plant was operating versus the *weekend* period when the facility was not operating. This is due to the considerable shielding of the facility from view of the nearest residences by intervening topography as well as elevated background noise levels at some of the measurement sites due to traffic on Highway 88.

As expected, Sites 3, 4 and 5 logged the highest ambient noise levels due to their proximity to Highway 88. Similarly, monitoring Sites 1 and 2 exhibited the lowest ambient noise levels due to those sites being located considerable distances away from Highway 88 and being substantially shielded from view of the roadway by intervening topography.

During the nighttime hours of the survey, it is not surprising that there was effectively no difference in measured noise levels between weekday and weekend periods as the facility does not currently operate at night (i.e., past 6:00 p.m., other than maintenance and repair work).

The nighttime periods of the survey are most germane to this evaluation as the applicant is proposing extended hours of operation up to 24 hours per day for operational/reclamation activities. As a result, the nighttime ambient noise measurement results were used to establish baseline conditions for the assessment of project noise impacts whereas the daytime levels measured during periods when the facility was operating were used to calibrate the noise prediction model.

The Table 1 data was projected to the 17 sensitive receptors based on the relative distances between the most significant noise sources (roadways or JVQ plant operations), the noise monitoring sites, and the distances to the receptors. For example, Receptor 3 is located approximately 485 feet from Highway 88 and noise monitoring Site 3 was located 140 feet from that roadway. The computed decrease in Highway 88 traffic noise between the measurement site and receptor is 8.1 dBA (based on a 4.5 dB decrease per doubling of distance from the roadway). As a result, an offset of -8.1 dB was applied to the ambient noise levels measured at

Site 3 to adjust those levels to be more representative of the ambient conditions at Receptor 3. Where the primary noise source affecting the receptor was considered to be existing Jackson Valley Quarry operations, the relative distances between the quarry and receptor were used to develop the appropriate offsets. Table 2 shows the projected baseline nighttime ambient conditions at each of the 17 receptors after application of the appropriate offsets to the ambient noise conditions measured at Sites 1-6.

Table 2 - Projected Baseline Ambient Noise Levels
Nearest Receptors to Jackson Valley Quarry – Amador County, California

		Projected Nighttime Baseline		
Receiver	**Main Source**	**Average (Leq)**	**Maximum (Lmax)**	**Projected Baseline Ldn/CNEL**
1	Jackson Valley Rd / Plant	44	57	52
2	Distant Hwy 88 / Plant	40	54	47
3	Hwy 88	50	67	57
4	Hwy 88	46	62	53
5	Hwy 88	59	75	66
6	Hwy 88	62	78	69
7	Hwy 88	59	76	66
8	Hwy 88	55	72	62
9	Hwy 88	45	61	52
10	Hwy 88 / Plant	47	64	54
11	Hwy 88	53	70	60
12	Hwy 88	58	75	65
13	Hwy 88 / Jackson Valley Rd	54	73	62
14	Jackson Valley Rd	50	68	57
15	Jackson Valley Rd	35	53	42
16	Plant	43	56	52
17	Plant	42	55	51

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

The projected nighttime ambient noise levels at the nearest sensitive receptors shown in Table 2 are used in a later section of this report to establish the project standards of significance relative to baseline conditions.

Existing Ambient Vibration Environment at Sensitive Receptors

Vibration generated by heavy equipment associated with the aggregate industry dissipates rapidly with distance. During BAC field visits, no discernible vibration was detected at off-site locations. Nonetheless, to quantify the baseline vibration environment in the immediate project vicinity, BAC conducted short-term vibration monitoring on the afternoon of October 14, 2020 when the facility was in normal operation. With the exception of monitoring Site 3, which was inaccessible during the short-term vibration monitoring period, the monitoring was at the same 6 locations where the long-term ambient noise surveys were conducted.

An additional on-site, short-term vibration measurement was conducted in the middle of the processing area approximately 100 feet from the primary (jaw) crusher near short-term monitoring Site D (see Figure 5), to quantify the vibration generation of the processing equipment for subsequent analysis.

The vibration measurements were conducted using a Larson-Davis Laboratories Model LxT sound level meter fitted with a BRC SEN_VEL Vibration Transducer (500 mV/ips). The test system is a Type I instrument designed for use in assessing vibration as perceived by humans, and meets the full requirements of ISO 8041:1990(E). The vibration measurement system was calibrated in the field prior to use to ensure the accuracy of the measurements. A summary of the vibration measurement results is provided in Table 3 with the graphical results provided in Appendix D.

Table 3 - Summary of Short-Term Vibration Results
Jackson Valley Quarry – Amador County, California

	Measured Vibration Levels, VdB rms		
Measurement Site[1]	**Min**	**Average**	**Max**
1	31	32	57
2	31	32	57
4	31	32	58
5	33	35	58
6	40	42	59
Processing Area (D)	51	54	77

1. Short-term vibration measurement locations are identified on Figure 5.

As expected, the highest measured vibration levels occurred within the processing area where the registered maximum level was 77 VdB. At the perimeter of the site, the measured vibration levels averaged between 32 and 42 V dB, which is below the threshold of perception. At the nearest sensitive receptors to the project site, baseline vibration levels are predicted to be approximately 35 VdB or less.

Criteria for Acceptable Noise & Vibration Exposure

The California Environmental Quality Act (CEQA) contains noise impact assessment guidelines. In addition, California cities and counties are required to adopt a Noise Element as part of the General Plan. Cities and counties typically also adopt a noise ordinance. The Project site is located in Amador County, which has both a General Plan Noise Element and a County Code Noise Ordinance. Applicable CEQA Guidelines, Amador County noise-level criteria, and appropriate criteria of other jurisdictions are discussed below.

California Environmental Quality Act (CEQA) Guidelines

The State of California has established regulatory criteria that are applicable to this assessment. Specifically, Appendix G of the CEQA Guidelines are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. According to the CEQA guidelines, the project would result in a significant noise or vibration impact if the following occur:

A. Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?

B. Generation of excessive groundborne vibration or groundborne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

As noted in CEQA Criteria “A” above, a project’s noise impacts must be evaluated relative to both the ***increase*** in noise levels which would result from the project as well as compliance with standards established in the local general plan or noise ordinance.

The Amador County General Plan Noise Element and Noise Ordinance do not have a specific policy or standard for assessing noise impacts associated with ***increases*** in off-site ambient noise levels resulting from project-generated traffic on public roadways. However, the Amador County General Plan Noise Element identifies a 5 dB change in noise levels as being “clearly noticeable” and a 3 dB change as being the threshold of perceptibility.

As noted previously, audibility and perceptibility are not tests of significance according to CEQA. If this were the case, any project which added any audible/perceptible amount of noise to the environment would be considered significant according to CEQA. CEQA requires a ***substantial*** increase in ambient noise levels before noise impacts are identified, not simply an audible or perceptible change. As a result, this analysis utilizes a 5 dB threshold for evaluating the significance of project-related noise level increases.

Amador County Noise Regulations

As stated previously, Amador County has both an adopted General Plan Noise Element and a Noise Ordinance. While the Noise Element contains specific numerical standards, the Noise Ordinance does not. As a result, this evaluation focuses on achieving compliance with the County's General Plan Noise Element. The Noise Element policies and standards which would be applicable to this project are presented below.

Amador County Noise-Standards Applicable to Off-Site Traffic

County General Plan Table N-3 establishes land use compatibility standards for a variety of uses. The standards are presented in terms of CNEL and, for residential uses, are applicable at outdoor activity areas. CNEL represents the 24-hour weighted average noise level with penalties applied to noise generated during evening and nighttime periods. For residential uses, the applicable noise standard is 60 dB CNEL. However, this standard would not be applicable to project-generated off-site traffic as the project is not proposing new residential development. Rather, impacts associated with off-site traffic noise level increases are evaluated using a 5 dB significance criteria based on the County's General Plan Noise Element conclusions that a 5 dB increase is a clearly noticeable change.

Amador County Noise-Standards Applicable to On-Site Quarry Operations

County General Plan Table N-4 establishes noise level performance standards for non-transportation noise sources. These standards would be applicable to all noise sources located within the quarry, including on-site excavation, processing and on-site truck circulation. The standards are presented in terms of daytime and nighttime average (L_{eq}) and maximum (L_{max}) noise level descriptors. Although not specifically stated, the standards are considered to be applicable to all noise-sensitive land uses. The nighttime average and maximum noise level standards shown in General Plan Noise Element Table N-4 are 45 dB L_{eq} and 65 dB L_{max}.

Although not specifically stated, in cases where baseline ambient noise levels currently exceed the County's noise standards shown in General Plan Table N-4, it is assumed that the applicable noise standard would be increased to equal the baseline level plus 5 dB. Where baseline noise levels are below the GP Table N-4 standards, the standards are applied without adjustment.

Noise Standards of Other Jurisdictions

Appendix G of the CEQA Guidelines, Section XII (Noise) states that a project would result in a significant noise impact if it resulted in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

As noted previously, Amador County has adopted both a Noise Element and Noise Ordinance. The Noise Element contains reasonable numeric standards for the assessment of noise impacts. Because the County's noise standards have been developed specifically for Amador County, and because those standards provide thresholds in terms of hourly average, and single-event

maximum noise levels, they are also comprehensive. As a result, the use of standards developed for other jurisdictions in lieu of the adopted Amador County noise standards for on-site noise sources is not warranted.

The areas where consideration of noise standards beyond those adopted by Amador County is warranted are with respect to vibration impact assessment and sleep disturbance. Criteria for vibration exposure and recommendations for appropriate thresholds for sleep disturbance follow.

Sleep Disturbance Criteria

Since a court case in Berkeley, California (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners of the City of Oakland* (2001) 91 Cal.App.4th 1344), which pertained to increased aircraft overflights of the City of Berkeley, there has been increased attention to the evaluation of single-event noise levels during the preparation of noise analyses. The Berkeley case ruling required that single-event noise be considered, but it did not recommend an appropriate single event noise level standard.

The Federal Interagency Committee on Aviation Noise (FICAN) has provided estimates of the percentage of people expected to be awakened when exposed to specific SELs inside a home (FICAN 1997). However, FICAN did not recommend a threshold of significance based on the percent of people awakened. According to the FICAN study, 10% of the population is estimated to be awakened when the SEL interior noise level exceeds 81 dBA. An estimated 5 to 10 percent of the population is affected when the SEL interior noise level is between 65 and 81 dBA, and few sleep awakenings (less than 5 percent) are predicted if the interior SEL is less than 65 dBA.

The threshold for sleep disturbance is not absolute because there is a high degree of variability from one person to another. Thus, the means of applying such research to land use decisions is not yet clear. As a result, no government agency has suggested what frequencies of awakenings are acceptable (California Division of Aeronautics 2002). For these reasons, the Federal Interagency Committee on Noise (FICON) and the California Airport and Land Use Planning Handbook continue to use CNEL as the primary tool for the purpose of land use compatibility planning (California Division of Aeronautics 2002). Note that CNEL and L_{dn} are often used interchangeably, as there is only a subtle difference in noise level penalties between the two metrics during evening hours. In fact, the L_{dn} represents the cumulative exposure to all single events; that is, the exposure of all SELs taken together, weighed to add penalties for nighttime occurrences, and averaged over a 24-hour period. Thus, it can be argued that the L_{dn}-based standards already account for the individual impacts associated with the SELs.

This analysis conservatively utilizes a criteria of 65 dB SEL within residences as the threshold at which sleep disturbance impacts could occur. Based on the FICAN test results on aviation noise, less than 5% of the population experiences sleep disturbance if interior noise is less than 65 dB SEL.

For this analysis, noise from nighttime truck passages on Jackson Valley Road would be considered significant if it exceeds 65 dB SEL at the interior of the two residences located on Jackson Valley Road (Receptors 13 & 14). Because Highway 88 currently carries considerably

higher traffic volumes than Jackson Valley Road, including nighttime heavy truck traffic, the project would not be introducing a new nighttime traffic noise source onto that roadway. Therefore, the assessment of sleep disturbance impacts is limited to residences located adjacent to Jackson Valley Road.

Noise Impact Assessment Criteria Applied to this Project

As indicated in Table 2, baseline nighttime ambient conditions exceeded the 45 dB L_{eq} and 65 dB L_{max} Amador County nighttime noise level standards at 8 of the 17 receptors analyzed in this evaluation. As a result, the noise standards applicable at those receptors would be the measured baseline noise levels plus 5 dB. Where existing baseline noise levels are below the County's 45 dB L_{eq} and 65 dB L_{max} nighttime noise level limits (General Plan Table N-4), those standards are applied without adjustment. Table 4 shows the nighttime noise level standards applicable to the project at each of the 17 receptor locations after adjustment for baseline ambient conditions where appropriate.

Table 4 - Applicable Noise Level Limits After Adjustment for Baseline Ambient Conditions Nearest Receptors to Jackson Valley Quarry – Amador County, California

	Noise Level Criteria, dBA		
Receptor	Average (Leq)	Maximum (Lmax)	Ldn/CNEL
1	45	65	60
2	45	65	60
3	55	72	60
4	51	65	60
5	64	80	71
6	67	83	74
7	64	81	71
8	60	77	67
9	50	65	60
10	52	65	60
11	58	75	65
12	63	80	70
13	59	78	67
14	55	73	60
15	45	65	60
16	45	65	60
17	45	65	60

Note: The criteria are based on the computed baseline ambient conditions at each receptor location (see Table 2), with a 5 dB offset applied to baseline ambient conditions which currently exceed the County's 45 dB Leq or 65 dB Lmax nighttime standards, or 60 dB Ldn standard. Where ambient conditions do not currently exceed the County standards, those standards are applied without adjustment.
Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

Vibration Criteria

The California Environmental Quality Act (CEQA) contains vibration impact assessment guidelines. The Amador County Noise Element and Noise Ordinance do not contain criteria for acceptable vibration exposure applicable to this project. However, the Federal Transit Administration (FTA) and the California Department of Transportation (Caltrans) provide such criteria. Those criteria are discussed in the sections that follow.

Federal Transit Authority Criteria for Acceptable Vibration Levels

Table 12-3 of the Federal Transit Administration (FTA) Noise and Vibration Manual, reproduced as Table 5 below, provides vibration levels at which damage to structures could occur. As shown in Table 5, a vibration level of 90 VdB is the minimum at which the onset of damage to extremely susceptible buildings could occur. As a result, this level was considered to be a conservative benchmark against which project-generated vibration levels were evaluated in this analysis.

Table 5 - FTA Criteria for Assessing Vibration Damage to Structures

Building Category	Level, VdB[1]
I. Reinforced-concrete, steel or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90

[1.] RMS velocity in decibels (VdB) re 1 micro-inch/second

As indicated in Table 5, vibration levels exceeding 90 VdB would be required prior to the onset of damage to buildings which are extremely susceptible. In addition to providing guidance with respect to vibration levels which would cause damage to structures, the FTA guidelines also provide criteria for assessing the potential for annoyance related to vibration. Table 8-1 of the FTA Noise and Vibration Manual, reproduced in Table 6 below, provides vibration criteria for general assessment of impacts.

Table 6 - Groundborne Vibration Impact Criteria for General Assessment

	Impact Levels (VdB)		
Land Use Category	Frequent Events[a]	Occasional Events[b]	Infrequent Events[c]
Category 1: Buildings where vibration would interfere with interior ops.	65[d]	65[d]	65[d]
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: Federal Transit Administration, Transit Noise Impact and Vibration Assessment, May 2006.
Vibration levels are measured in or near the vibration-sensitive use.

a. "Frequent Events" is defined as more than 70 vibration events of the same source per day.
b. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.
c. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.
d. This criterion limit is based on levels that are acceptable for most moderately-sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.

According to Table 6, the general assessment impact level for frequent events applicable at residential uses is 72 VdB. Where vibration levels exceed this threshold, a detailed vibration assessment is recommended. Because operations would essentially occur continuously during the proposed extended hours, the FTA criteria applicable to "Frequent Events" is applied to this analysis of potential annoyance resulting from project activities.

Project Vibration Generation

Vibration generated during nighttime aggregate excavation, processing and load-out operations would be similar to that which currently occurs during daytime hours. This is because no changes in overall plant equipment, production or heavy truck trip generation are proposed as part of the project. Rather, the proposed project would allow shifting of production, processing and load-out to nighttime hours when desired, but no increases in production are proposed. As noted previously, blasting would continue to occur during daytime hours pursuant to the current use permit requirements, so no nighttime blasting operations would result from this project.

As noted in Table 3, measured maximum existing project vibration levels at the quarry boundaries ranged from 57 to 59 VdB, with averages ranging from 32 to 42 VdB. These levels would not increase as a result of nighttime operations as the processes and equipment used during nighttime operations would be identical to those present during the vibration measurements. Vibration levels at the more distant sensitive receptors would be even lower than those measured at the quarry boundaries. As a result, maximum project vibration levels at the nearest receptors are predicted to be below 59 VdB. As noted in Table 5, a vibration level of at least 90 VdB would be required for the onset of damage to extremely susceptible structures. Table 6 indicates that vibration levels of 72 VdB or more would be required for annoyance impacts to occur at residences. Because existing and project-generated vibration levels are well below those thresholds, no vibration-related impacts are identified for this project.

Project Noise Generation

As stated previously, noise generated during nighttime aggregate excavation, processing and load-out operations would be similar to that which currently occurs during daytime hours. This is because no changes in overall plant equipment, production or heavy truck trip generation are proposed as part of the project. Rather, the proposed project would allow shifting of production, processing and load-out to nighttime hours, with no increases in overall production. The shift in hours of operation will provide George Reed the ability to serve regional construction projects that now routinely occur at night and optimize work hours in response to market demands. As noted previously, blasting would continue to occur during daytime hours pursuant to the current use permit requirements, so no nighttime blasting operations would result from this project. The following evaluation assumes noise would be generated during nighttime hours by excavation, processing and load-out. Each of these sources is evaluated separately and cumulatively below.

Existing Project Noise Mitigation Requirements

It should be noted that the current use permit for the Jackson Valley Quarry includes conditions of approval related to noise mitigation. The current Quarry Conditions of Approval which pertain to noise (#44-49), are reproduced below:

44. The operator/permittee shall ensure project activities adhere to/comply with the following operational conditions:

a. Site preparation activities shall be limited to the daytime hours of 6AM - 5PM, Monday through Friday.

b. All equipment, fixed or mobile shall be outfitted with properly operating and maintained exhaust and intake mufflers, consistent with manufacturers' standards.

c. Impact tools (e.g. jackhammers, pavement breakers, rock drills), shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter tools, such as the use of drills, rather than impact tools, shall be used whenever feasible.

d. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, shall incorporate insulation barriers, or other measures to the extent feasible.

e. Prior to issuance of the Amended Use Permit signs shall be posted at the Quarry site entrance and in the area of the quarry expansion for the purpose of informing all quarry workers, contractors, subcontractors, their employees and agents, materials haulers of the basic requirements of Conditions 44 a. through d. above.

f. Prior to issuance of the Amended Use Permit signs shall be posted at the Quarry site that include permitted days and hours for site preparation and for Quarry operations, a day and evening contact number for the Quarry site, and a contact number in the event of problems.

g. An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.

45. The operator/permittee shall construct along that portion of the northern property line of the Quarry site an approximately seven (7) foot high earthen noise and visual attenuation berm necessary to block the line of site from the nearest residence to the north to the noise sources and to the traveling public. This berm may be developed from overburden or aggregate material and shall be landscaped for erosion control. The location of this berm shall be approximately as shown on Sheets 2 and 3 of the Reclamation Plan. This berm shall remain in perpetuity, unless otherwise advised by the County upon reclamation.

46. The operator/permittee shall adhere to the following:

a. On-site equipment shall be outfitted at all times with noise attenuation devices. Haul trucks shall not exceed the standards for maximum permitted noise established in Article 2.5 of Chapter 5 of Division 12 of the California Vehicle Code. (former COA 17).

b. The following noise standards shall not be exceeded at the property lines:

Time Period	Noise Standard
6AM-6PM	65 decibels (A-weighting)

c. The above standards shall not be exceeded except by the following A-weighting allowed decibels for the duration of time set forth below:

Cumulative Duration of the Intrusive Sound (Cumulative period of minutes In hour)	Allowance Decibels (A-weighting)
a. 30 minutes In hour	0
b. 15 minutes In hour	+5
c. 5 minutes In hour	+10
d. 1 minute In hour	+15
e. Level not to be exceed at any time	+20

Said noise level requirements shall be cumulative and apply to all equipment on the project site (except blasting), including, but not limited to, the crushing/screening equipment, trucks and other equipment that may be owned by the operator/permittee or any other person. The use of loud sound signals shall be avoided in favor of visual (flashing light) warnings except for those loud signals required by safety laws for the protection of personnel.

d. Upon the request of Amador County, the operator/permittee shall provide for the measurement of decibels at the Quarry property lines.

e. If these off-site noise standards cannot be maintained, operator/permittee shall employ muffling, noise attenuation berms, noise deflection walls, or enclose equipment within (temporary) structures.

47. The operator/permittee shall not allow the use of jake brakes on Jackson Valley Road by trucks entering or exiting the Quarry site. Operator/permittee shall ensure that signs remain on the Quarry site and on Jackson Valley Road, at a location conspicuous to truck traffic, stating that "the use of jake brakes is prohibited on Jackson Valley Road".

48. The operator/permittee shall install low berms (minimum five feet in height) and trees in low topographic areas (designated on Figure 7, attached) along the Project's eastern property line to aid in screening eastward-blowing dust and aid in the deflection of potential noise from the eastward expansion of the Quarry operations to 4121 Jackson Valley Road (May property). Berms shall be constructed when overburden material becomes available with the first eastward expansion of the Quarry. Priority for berm construction shall be as indicated on Figure 7, with the intent to deflect dust and noise from the initial expansion and continue in successive expansions. The first berm shall be constructed within three months of commencing overburden removal within the expansion area. The two additional berms shall be constructed with each successive annual expansion of the Quarry eastward. All berms shall be constructed no later than 3 years from the commencement of operations within the expansion area. Trees shall be planted on the berms within three months of completion of each of the berms and shall be a maximum 24-inch box size, of a mix of at least two evergreen species native to the area, such as: Coulter pine (Pinus coulteri), Jeffrey pine (Pinus jeffreyi), Incense cedar (Calacedrus decurrens), and Interior live oak (Quercus wislizenii).

The operator/permittee shall maintain the trees until established (a maximum of 7 years from each initial planting) and shall replace any which die within that 7 -year period.

49. Quarry and rock processing employees shall not be exposed to noise levels higher than those established by California OSHA and the Federal Mine Safety and Health Administration (MSHA).

The Quarry operator is currently in compliance with these mitigation measures and they would remain in effect under the currently proposed project operations.

Processing Area Noise Generation

On-site processing activities are located within the processing area identified on Figure 2. The primary noise sources associated with the quarry processing operations consist of crushers, screens, mobile equipment (front loaders, water truck, etc.), and heavy truck circulation related to load out.

To quantify the noise generation of the processing area operations BAC utilized the long-term ambient noise monitoring data collected during periods when the facility was in operation as well as short-term reference noise level measurements conducted on October 7, 2020. The short-term noise measurements were conducted at Sites A-F on Figure 5. The short-term surveys were utilized to quantify both noise level and frequency content of the processing area operations, including noise from all sources.

A Larson Davis Laboratories (LDL) Model 831 precision integrating sound level meter was used by BAC to conduct the short-term processing area noise level surveys. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4). Appendix E shows representative photographs of the short-term noise monitoring sites.

From the short-term processing area noise level measurements it was concluded that the average and maximum noise levels for typical processing operations were approximately 81 dB L_{eq} and 84 dB L_{max} at a reference distance of 150 feet from the effective noise center of the processing area. The frequency content of the processing area noise was centered at 800 Hertz but no particularly tonal components were identified. The results of the short-term noise measurements conducted at Sites A-E are provided in Appendix F.

The reference noise level data cited above for the processing area were used as inputs to the SoundPlan model to project processing operations noise to the nearest receptors. The results of those calculations are provided in Table 7. Table 7 also compares the predicted levels against the project standards of significance. Figure 6 illustrates the average (L_{eq}) noise contours in the project vicinity resulting from the processing operations.

As indicated in Table 7, average hourly (L_{eq}) processing area noise generation is predicted to be acceptable relative to the nighttime average noise standards applicable at each receptor. Maximum (L_{max}) processing noise generation is also predicted to be acceptable relative to the nighttime maximum noise standards at all receptors.

Although average (L_{eq}) processing area noise generation is predicted to be satisfactory relative to the applicable nighttime noise exposure criteria at all receptors in the immediate project vicinity, at receptor 14 the predicted level is right at the standard with no margin of safety. At receptor 15 the standard would be satisfied but with only a 2 dB margin of safety.

In addition to noise generated by processing area equipment and processes, noise would also be generated during nighttime hours by excavation and off-site heavy truck trips. When the noise generation of those sources is combined with processing area noise generation, combined noise exposure from all nighttime sources which would result from the project is expected to exceed the project noise standards of significance (an evaluation of combined noise levels from all project noise sources follows in a later section of this report). As a result, BAC recommends implementation of noise mitigation measures to further reduce processing area operations noise generation during nighttime hours. A discussion of processing area noise mitigation options is provided in the following section.

Table 7 - Predicted Current (Unmitigated) Processing Area Noise Levels
Nearest Receptors to Jackson Valley Quarry – Amador County, California

Receiver	Predicted Leq	Leq Standard	Exceedance?	Predicted Lmax	Lmax Standard	Exceedance
1	32	45	No	35	65	No
2	30	45	No	33	65	No
3	37	53	No	40	71	No
4	37	45	No	40	65	No
5	37	62	No	40	80	No
6	36	65	No	39	83	No
7	40	62	No	43	80	No
8	32	58	No	35	76	No
9	40	45	No	43	65	No
10	44	50	No	47	65	No
11	44	56	No	47	74	No
12	47	61	No	50	79	No
13	50	59	No	53	79	No
14	55	55	No	58	75	No
15	43	45	No	46	65	No
16	40	45	No	43	65	No
17	40	45	No	43	65	No

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

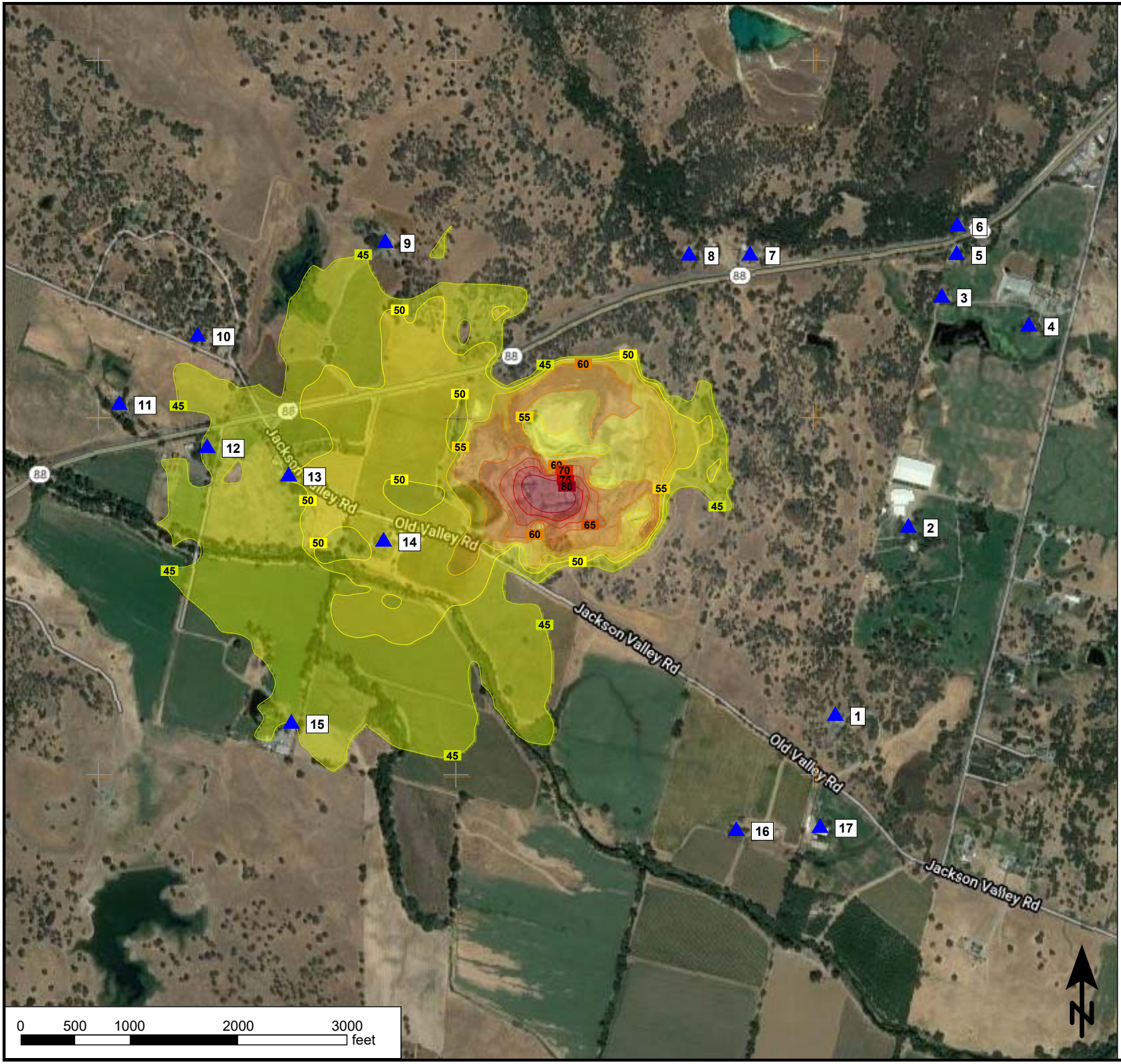


Figure 6
Jackson Valley Quarry
Current (Unmitigated)
Processing Area
Noise Contours

Current
(Unmitigated)
Processing
Equipment
Noise Contours

Leq, dB(A)

>=	80	
75	-	80
70	-	75
65	-	70
60	-	65
55	-	60
50	-	55
45	-	50

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Processing Equipment Noise Mitigation Measures

As noted above, although processing operations are predicted to be satisfactory relative to the project standards of significance, there is little or no margin of safety at the nearest residences and combined noise from all components of the project is predicted to exceed the project standards of significance (combined project noise generation is discussed later in this report). To reduce processing noise at the nearest sensitive receptors, the following noise mitigation measures are recommended:

1. Suspend acoustic curtains around the processing plant crushers and screen decks (i.e., the loudest components of the processing plant).
2. Replacement of traditional, tonal, backup warning devices with advanced, broad-band, backup warning devices on mobile mining equipment.
3. No load-out of rip-rap during nighttime hours.
4. Following full implementation of the noise mitigation measures identified above, periodic noise monitoring should be conducted to confirm effectiveness of the mitigation measures and compliance with the applicable noise standards.

Implementation of the above described mitigation measures, in conjunction with the ongoing application of the current project conditions of approval which pertain to noise, are projected to reduce nighttime processing noise to levels at least 8 dB below the project standards of significance shown in Table 4. Table 8 shows the processing area noise levels at the nearby sensitive receptors following implementation of the recommended noise control measures. Figure 7 illustrates the processing area noise mitigation measures following implementation of noise control measures at the project site.

Table 8 - Predicted Processing Area Noise Levels after Implementation of Processing Area Noise Control Measures Nearest Receptors to Jackson Valley Quarry – Amador County, California

Receiver	Predicted Leq	Leq Standard	Leq Exceedance?	Predicted Lmax	Lmax Standard	Lmax Exceedance?
1	29	45	No	32	65	No
2	32	45	No	35	65	No
3	38	53	No	41	71	No
4	37	45	No	40	65	No
5	37	62	No	40	80	No
6	36	65	No	39	83	No
7	38	62	No	41	80	No
8	31	58	No	34	76	No
9	32	45	No	35	65	No
10	40	50	No	43	65	No
11	40	56	No	43	74	No
12	42	61	No	45	79	No
13	44	59	No	47	79	No
14	45	55	No	48	75	No
15	30	45	No	33	65	No
16	38	45	No	41	65	No
17	38	45	No	41	65	No

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

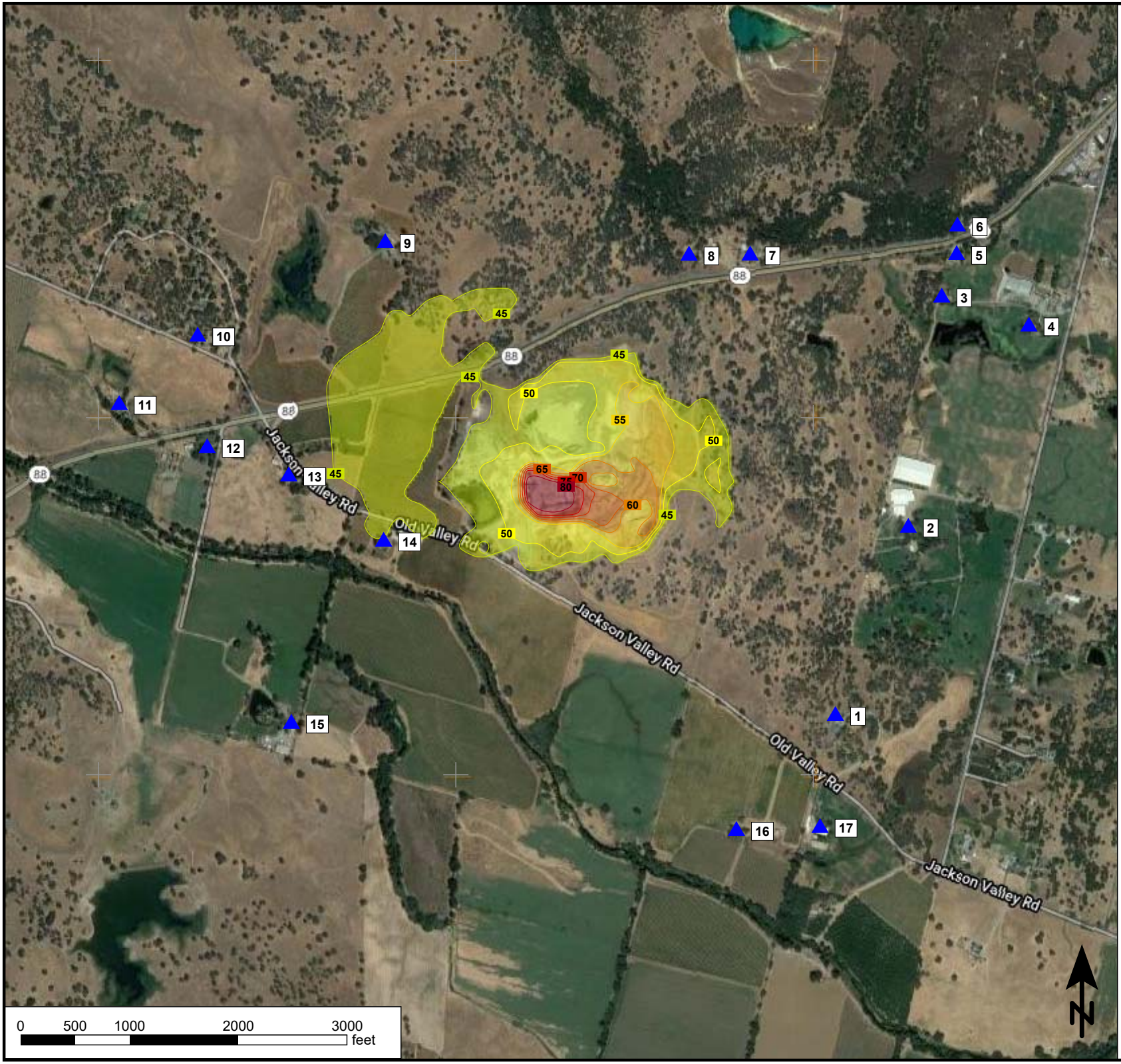

Figure 7
Jackson Valley Quarry
Mitigated Processing
Area Equipment
Noise Contours

Mitigated
Processing
Equipment
Noise Contours

Leq, dB(A)

>=		80
75	-	80
70	-	75
65	-	70
60	-	65
55	-	60
50	-	55
45	-	50

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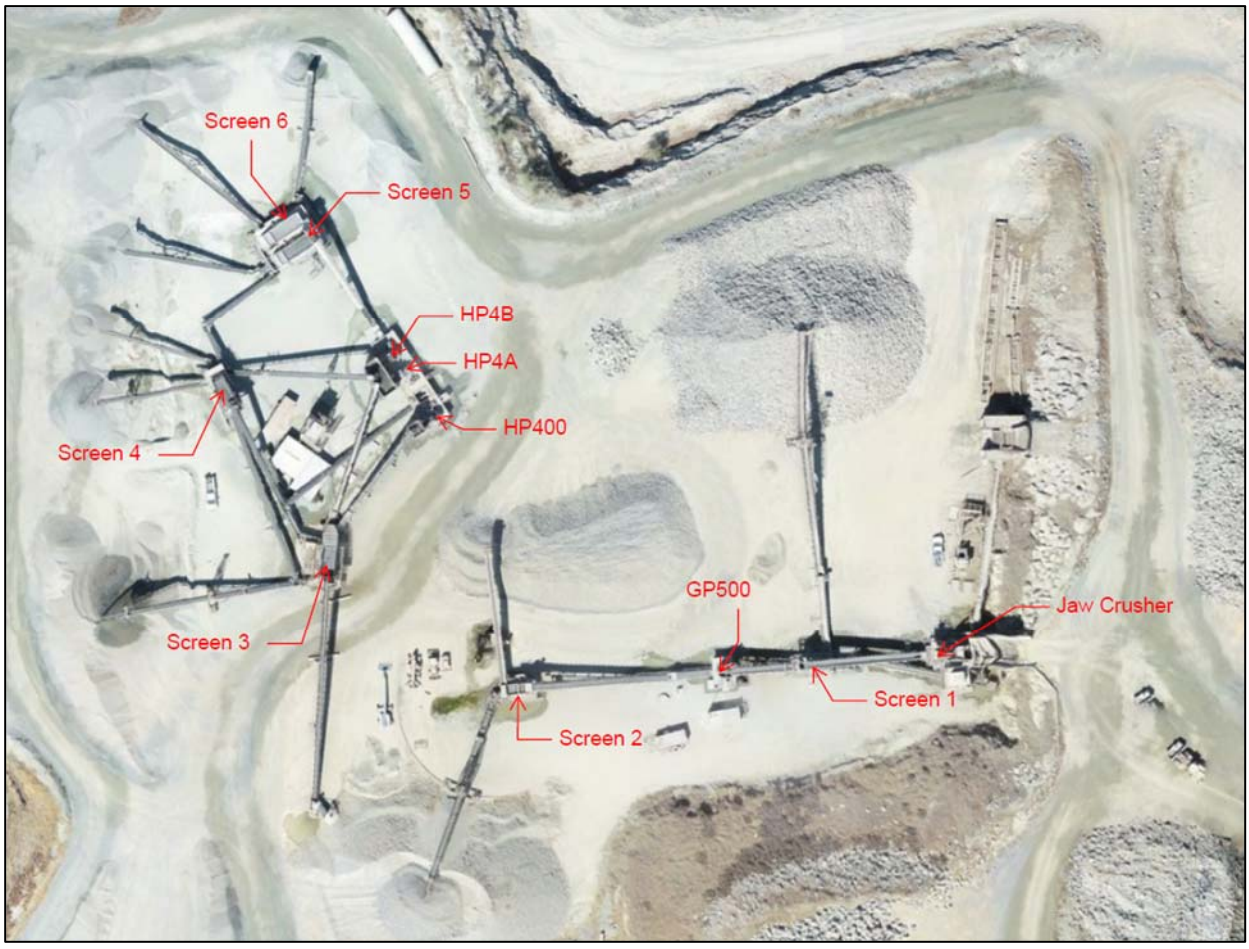
Verification of Processing Equipment Noise Mitigation Effectiveness

A series of noise tests were conducted at the project site to verify the effectiveness of the recommended processing equipment noise mitigation measures. The following sections describe the steps taken to implement trial mitigation measures and to evaluate the noise attenuation provided by those measures.

Suspension of Acoustic Curtains at Processing Area Crushers and Screen Decks

Figure 8 shows the locations of the main processing area crushers and screen decks. On September 7, 2022, BAC conducted acoustical testing around the perimeter of each crusher and screen deck. The purpose of that testing was to select the crushing/screening equipment which would best demonstrate the available noise reduction when treated with suspended acoustic curtains. To isolate the noise generation of each crusher and screen, and to minimize the contribution of noise in the test sample from other nearby crushers and screens, the testing was conducted in close proximity to the crushing and screening equipment.

Figure 8 – Jackson Valley Quarry Processing Area Crushers and Screen Deck Locations

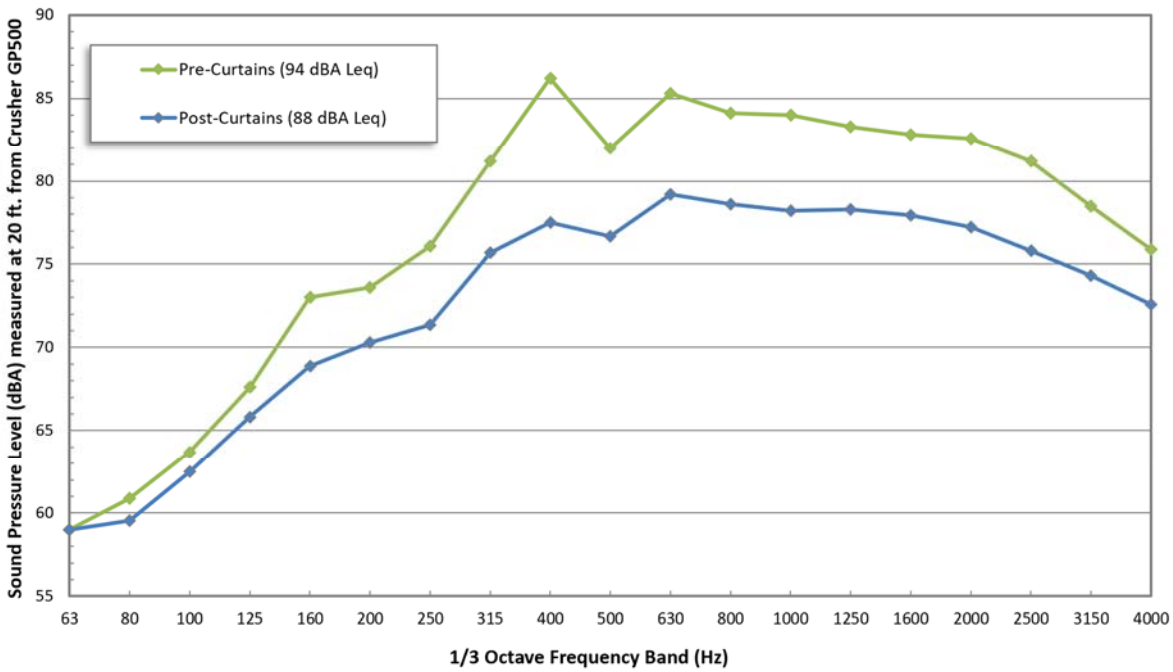


The results of the acoustic testing indicated that crusher GP500 (see Figure 8), would be most suitable for demonstrating the benefits of suspended acoustic curtains in reducing processing area noise. Accordingly, acoustic curtains were suspended along the west and south sides of crusher GP500 following completion of the September 2022 noise surveys. Following installation of the suspended acoustic curtains, additional noise level measurements of crusher GP500 were conducted in November of 2022. Figures 9 & 10 show the crusher conditions before and after the installation of acoustic curtains. Figure 11 shows the changes in noise levels generated by this crusher resulting from the suspended curtain installation.

Figure 9 – Crusher GP500 before curtains

Figure 10 – Crusher GP500 after acoustic curtain installation

Figure 11
Measured GP500 Crusher Noise Levels Before & After Suspension of Acoustic Curtains
Jackson Valley Quarry - Amador County, California



As indicated in Figure 11, the suspension of the acoustic curtains around the west and south sides of crusher GP500 resulted in a 6 dBA decrease in noise levels at the noise measurement site. However, because the noise surveys were partially influenced by noise generated by the nearby Jaw-Crusher, and Screens 1 & 2 (see Figure 8 for locations), the actual noise attenuation of crusher GP500 provided by the suspended acoustic curtains is expected to be greater than 6 dBA. The test results clearly indicate the effectiveness of suspending acoustic curtains around noise-generating equipment. After treatment of each crusher and screen deck in the processing area with similar suspended acoustic curtains the overall processing area noise reduction is anticipated to be approximately 10 dBA at the nearest residences to the processing area, which would represent a substantial noise level decrease.

Backup Warning Device Replacement

Due to the tonal (beep-beep) nature of the most typically used backup warning devices, concerns regarding their use, particularly during late night or early morning hours, are not uncommon. In the August 2021 noise analysis, noise level measurements of existing facility operations were used to model project-generated noise levels in the community. Those measurements included all aspects of the operations at Jackson Valley Quarry, including excavation, processing and load-out of materials from the site.

Because load-out truck circulation routes at the quarry do not require heavy trucks to operate in reverse, thereby triggering their backup warning devices, the use of backup warning devices at the project site is limited to mobile equipment operated by George Reed personnel. The most common type of mobile equipment for which backup warning devices are frequently used are front-loaders and heavy haul trucks. However, any type of mobile equipment within the quarry processing or load-out areas which operates in reverse (dozers, excavators, etc.), would similarly utilize backup warning devices. In addition, ancillary support vehicles such as lubrication, fuel and service trucks also utilize backup warning devices.

In recent years advances in technology have resulted in refinements to backup warning device operations. Specifically, some types of backup warning devices have been designed to emit a more broad-band tone (i.e., squawkers or quackers), which continue to provide audible warning to persons in the immediate vicinity of the equipment operating in reverse while blending with the ambient noise environment at more distant locations. Some of these devices also utilize smart-technology which samples the ambient environment in the immediate vicinity of the heavy equipment and adjusts the volume level of the backup warning sound accordingly. As a result, the newer generation of backup warning systems utilize warning sounds which better blend with local ambient soundscapes and which are of equal or lower overall sound output than existing systems.

The use of the new technology backup warning devices at the project site are expected to both reduce overall facility noise levels and significantly reduce the noticeability and audibility of the backup warning tones at the nearest residences to the project site.

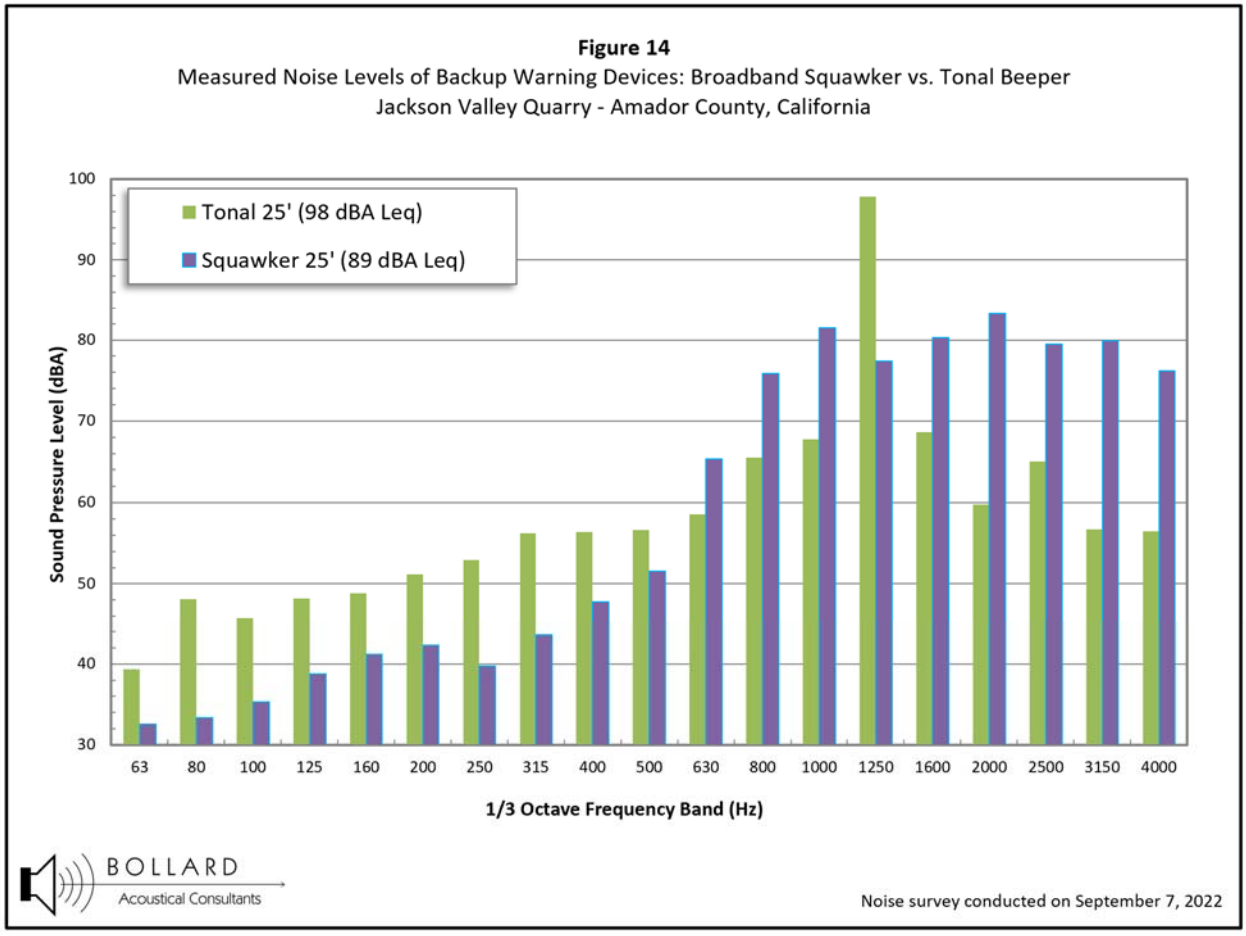
To quantify the differences in noise levels generated by traditional, tonal backup warning devices (beepers), versus broad-band backup warning devices (squawkers or quackers), noise level measurements of both types of devices were conducted at the Jackson Valley Quarry in September of 2022.

The measurements were conducted from a distance of 25 feet from the operating back-up warning devices using a Larson-Davis Laboratories Model 831 precision (Type 1) noise level meter with 1/3 octave-band filters. The sound level meter was calibrated prior to use with an LDL CA-200 acoustical calibrator to ensure the accuracy of the measurements. Figures 12 & 13 show photographs of the backup-warning device noise testing. It should be noted that the broad-band warning device had yet to be installed in mobile equipment at the quarry so it was tested while supported on the back of a utility truck. However, the noise generation and frequency content of the warning device would be identical when mounted to mobile equipment operating at the quarry.

Figure 12 – Backup "beeper" warning device test

Figure 13 – Broadband backup warning device test

Figure 14 shows the results of the noise level tests for the two backup warning device types. As indicated on Figure 14, the traditional tonal warning device emitted a pure tone at 1,250 Hertz and generated an overall sound pressure level of 98 dBA at the noise test distance of 25 feet. Conversely, the squawker-type backup warning device was broadband in nature from 800 to 4000 Hertz, and was 9 dBA quieter than the traditional beeper device. As a result, the substitution of the broadband warning devices for the traditional tonal devices would result in a dramatic decrease in audibility of the backup warning devices at nearby residences in the project vicinity.



Nighttime Restriction on Load-Out of Rip-Rap

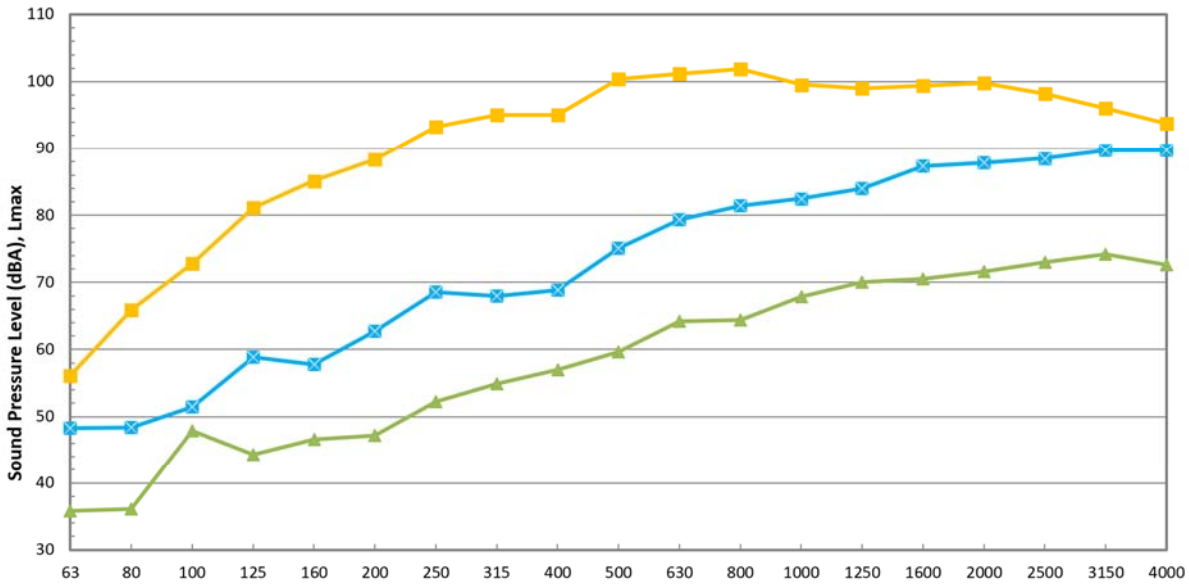
Noise generated during the loading of highway haul trucks is dependent largely on the size of the material being loaded and the condition of the trailer which is being loaded. More specifically, larger material falling into an empty steel trailer generates higher noise levels than smaller material. In addition, material falling into a partially loaded (non-empty) trailer generates lower noise levels than material falling into an empty trailer.

BAC conducted noise testing of trailers being loaded with various sized materials at the JVQ on November 30, 2022. Noise measurements were conducted from a position in close proximity to the trailer being loaded to minimize contamination of the noise test results from sources of noise other than the trailer loading. The purpose of the noise testing was to determine the differences in noise generation of various sized aggregate materials being loaded into haul trucks. Tests were conducted of front-loaders filling haul trucks with rip-rap, with 3/4-inch crushed material, and with 3/8-inch crushed material. Photographs of the tests are provided in Figures 15 & 16, with the noise test results presented in Figure 17.

Figure 15 – Loadout of Rip-Rap

Figure 16 – Loadout of 3/8-inch Crushed Rock

Figure 17
Measured Maximum Noise Levels of Material Loadout into Empty Trailers
Jackson Valley Quarry - Amador County, California



BOLLARD Acoustical Consultants

Noise survey conducted on 11.30.2022

The Figure 17 noise test data indicate that the loadout of rip-rap generated substantially higher noise levels than the loadout of smaller processed aggregates. Specifically, the loadout of rip-rap was found to be 15 dB louder than the loadout of 3/4-inch crushed material and 30 dBA louder than the loadout of 3/8-inch crushed material. Given the elevated noise generation associated with the loadout of the rip-rap it was determined that rip-rap loadout operations should be limited to daytime hours. This measure would result in a dramatic reduction in audibility of nighttime loadout operations at the existing residences in the JVQ vicinity.

Excavation Noise Generation

As indicated on Figure 2, the approved mine disturbance area is large. As a result, the distance from the mobile excavation equipment (i.e., shovel, loader, dozer, excavator, haul trucks, water truck, etc.) to the nearest sensitive receptors will vary depending on where excavation activities are occurring within the pit. In addition, the degree of topographic shielding between the excavation equipment and nearest receptors will vary depending on the depth of the excavation operations within the pit. In general, excavation operations are progressing in an easterly direction.

Noise level measurements conducted at the Jackson Valley Quarry and the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) were used to quantify the noise generation of typical excavation equipment and operations at the quarry. Typical excavation operations would involve a shovel, bulldozer, excavator, front-end loader, haul trucks, and a water truck. The combined noise generation of the mobile equipment would be approximately 80 dB L_{eq} and L_{max} at a reference distance of 100 feet from the effective noise center of the excavation operations, although such equipment is typically somewhat spread out within an excavation area.

The reference noise level data cited above for the excavation equipment were propagated from the nearest point of excavation to the project vicinity receptors assuming standard spherical spreading of sound (6 dB decrease per doubling of distance) and an attenuation rate of 1.5 dB per thousand feet for atmospheric absorption and excess ground attenuation. For a very conservative assessment of excavation noise generation, it was assumed that all excavation equipment was operating at existing grade, without the benefit of shielding by the pit walls. As excavation progresses deeper into the pit, considerable shielding would be realized. The results of the excavation calculations are provided in Table 9. Table 9 also compares the predicted levels against the project standards of significance.

As indicated in Table 9, worst-case (unshielded) excavation noise levels would exceed the project noise standards at 9 of the 17 receptors evaluated in this study. Predicted maximum (L_{max}) excavation noise generation is predicted to be acceptable relative to the nighttime maximum noise standards at all receptors.

As previously stated, the Table 9 noise levels assume no shielding by intervening topography at the nearby receptors. In actuality, most of the receptors would be partially or significantly shielded even during initial excavation operations in a previously undisturbed area. Nonetheless, the predicted magnitude of exceedance of the project noise standards ranges from 2 to 9 dB. Once

the excavation operations have progressed into the pit and the pit walls are providing complete visual screening of those operations at the nearby receptors, noise levels will decrease significantly.

Because worst-case, unshielded, excavation operations would generate noise levels predicted to exceed the applicable nighttime noise exposure criteria at some nearby receptors, implementation of noise mitigation measures would be warranted for the excavation operations during extended hours. A discussion of excavation area noise mitigation options is provided in the following section.

Excavation Equipment and Operations Noise Mitigation Measures

As noted above, worst-case (unshielded) excavation operations could exceed the project standards of significance by 2 to 9 dB during nighttime operations at the nearest receptors when those operations are occurring at the nearest locations to each receptor and at existing grade (prior to depressing into the pit). To reduce excavation noise to a state of compliance with the project thresholds of significance, the following noise mitigation measures are recommended:

1. Limit excavation activities to the currently permitted hours of operations (i.e., 6:00 a.m. to 6:00 p.m.) until the excavation equipment has progressed sufficiently into the pit (i.e., 20 feet below existing grade) to be shielded by surrounding topography. Figure 18 shows the locations where excavation activities should be limited to currently permitted hours of operation until that equipment is depressed at least 20 feet below existing grade.

2. Rock breaking with excavator-mounted hydraulic pistons shall be strictly limited to daytime hours.

3. Following implementation of the recommended noise control measures identified above, periodic noise monitoring should be conducted to confirm effectiveness of the control measures and compliance with the applicable noise standards.

Because the identified exceedances of the significance criteria are relatively minor (2-9 dB), implementation of the above-described mitigation measures, in conjunction with the ongoing application of the current project conditions of approval which pertain to noise, would be feasible to reduce nighttime excavation impacts to a less than significant level. Figure 19 shows the predicted excavation noise contours once the excavation equipment has depressed into the pit. Table 10 shows the mitigated excavation noise levels at the nearest potentially affected sensitive receptors.

In addition to the noise contours shown in Figure 19 which illustrate the reduction in overall mining noise levels once the excavation equipment has recessed into the pit, Figure 20 shows a noise contour cross-section between the recessed excavation equipment and nearby Receptors 1 & 2. Similar shielding would occur at the other receptors as excavation activities recess below the edges of the pit walls.

Table 9 - Predicted Worst-Case (Unmitigated) Excavation Noise Levels
Nearest Receptors to Jackson Valley Quarry – Amador County, California

Receiver	Predicted Leq	Leq Standard	Leq Exceedance?	Predicted Lmax	Lmax Standard	Lmax Exceedance?
1	51	45	Yes	54	65	No
2	54	45	Yes	57	65	No
3	51	53	No	54	71	No
4	47	45	Yes	50	65	No
5	49	62	No	52	80	No
6	49	65	No	52	83	No
7	62	62	No	65	80	No
8	64	58	Yes	67	76	No
9	52	45	Yes	55	65	No
10	48	50	No	51	65	No
11	45	56	No	48	74	No
12	48	61	No	51	79	No
13	52	59	No	55	79	No
14	57	54	Yes	60	75	No
15	47	45	Yes	50	65	No
16	49	45	Yes	52	65	No
17	47	45	Yes	50	65	No

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

Legend

Required Nighttime Excavation Setbacks Until Equipment is 20 feet Below Existing Grade

Extents of Mining

Site Boundary

N

Scale (Feet)

0 300 600

Required Mine Setbacks for Nighttime Excavation Until 20 Feet Below Existing Grade

Jackson Valley Quarry - Amador County, CA

Figure 18

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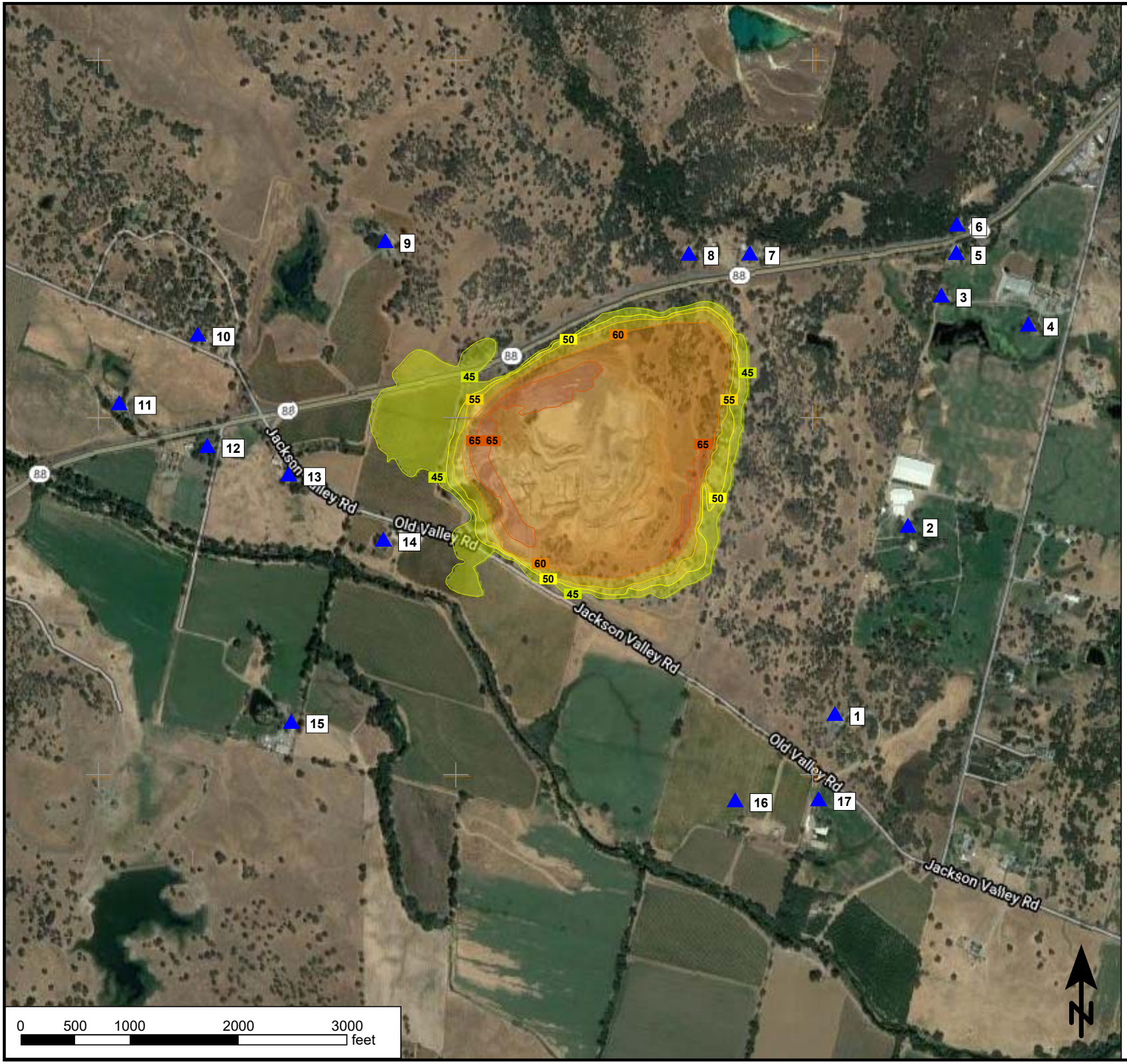

Figure 19
Jackson Valley Quarry
Excavation Noise
Noise Contours
with Equipment
Depressed in Pit

Mitigated
Excavation
Equipment
Noise Contours

Leq, dB(A)

	>=	80
75	-	80
70	-	75
65	-	70
60	-	65
55	-	60
50	-	55
45	-	50

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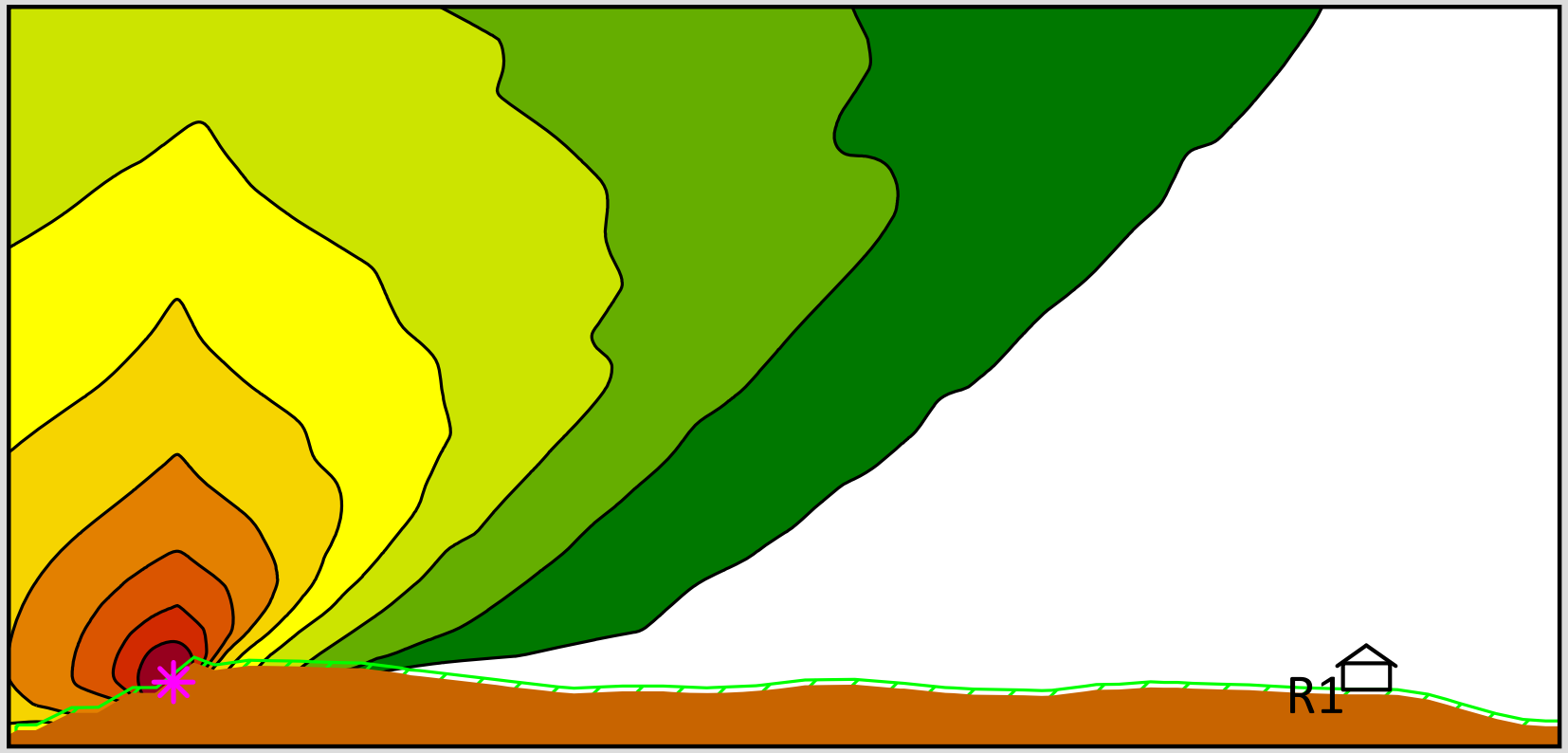

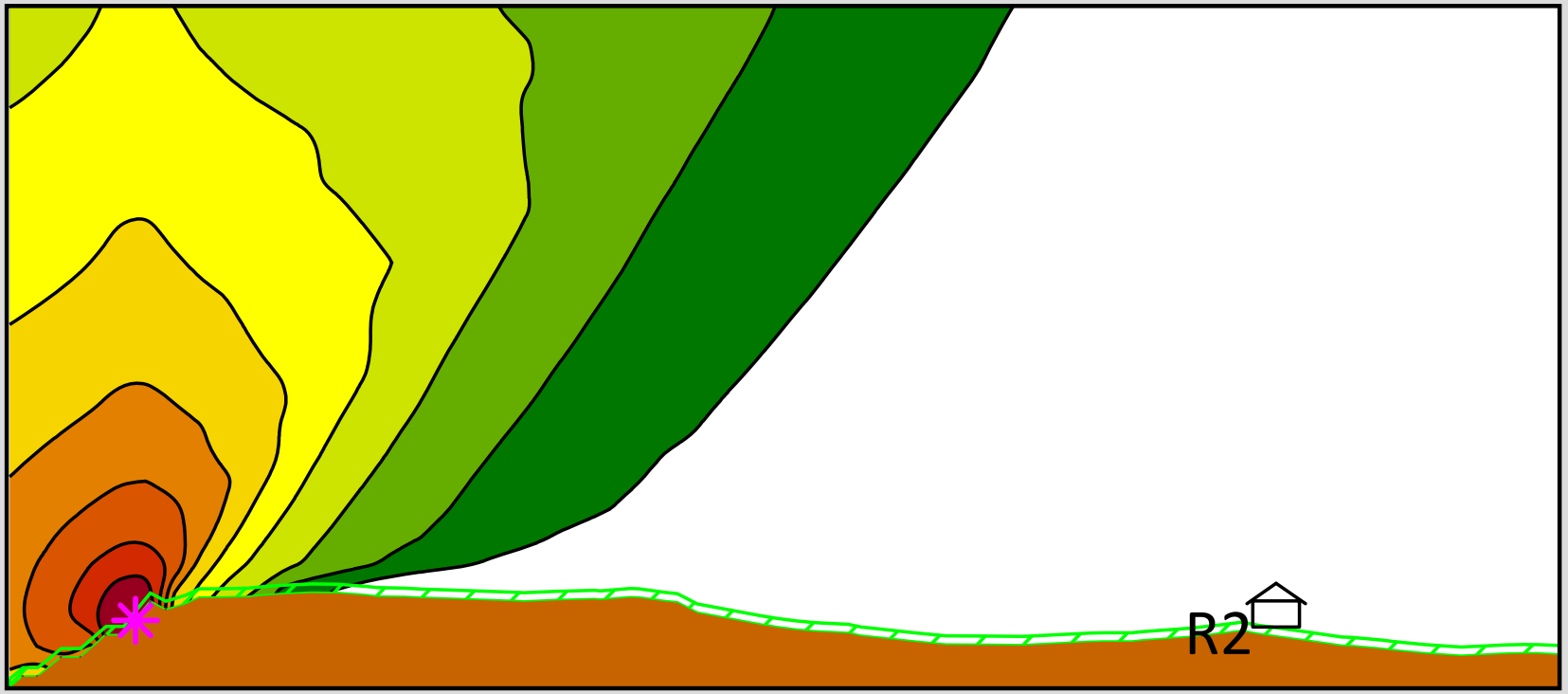

Figure 20
Jackson Valley Quarry

Representative
Excavation Noise
Noise Contour
Cross-Sections with
Equipment
Depressed in Pit

Excavation
Equipment
Noise Contours -
Receptors 1 & 2

Leq, dB(A)

>=	80
75 -	80
70 -	75
65 -	70
60 -	65
55 -	60
50 -	55
45 -	50
40 -	45

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Table 10 - Predicted Mitigated Excavation Noise Levels (excavation equipment depressed below pit walls)
Nearest Receptors to Jackson Valley Quarry – Amador County, California

Receiver	Predicted Leq	Leq Standard	Leq Exceedance?	Predicted Lmax	Lmax Standard	Lmax Exceedance?
1	32	45	No	37	65	No
2	28	45	No	33	65	No
3	37	53	No	42	71	No
4	35	45	No	40	65	No
5	36	62	No	41	80	No
6	35	65	No	40	83	No
7	41	62	No	46	80	No
8	42	58	No	47	76	No
9	33	45	No	38	65	No
10	37	50	No	42	65	No
11	37	56	No	42	74	No
12	39	61	No	44	79	No
13	42	59	No	47	79	No
14	44	54	No	49	75	No
15	38	45	No	43	65	No
16	38	45	No	43	65	No
17	36	45	No	41	65	No

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

Verification of Excavation Equipment Noise Mitigation Effectiveness

A series of noise tests were conducted at the project site to verify the effectiveness of the recommended excavation equipment and operations noise mitigation measures. The following sections describe the steps taken to implement trial mitigation measures and to evaluate the noise attenuation provided by those measures.

Nighttime Restriction on Excavation at Unshielded Locations

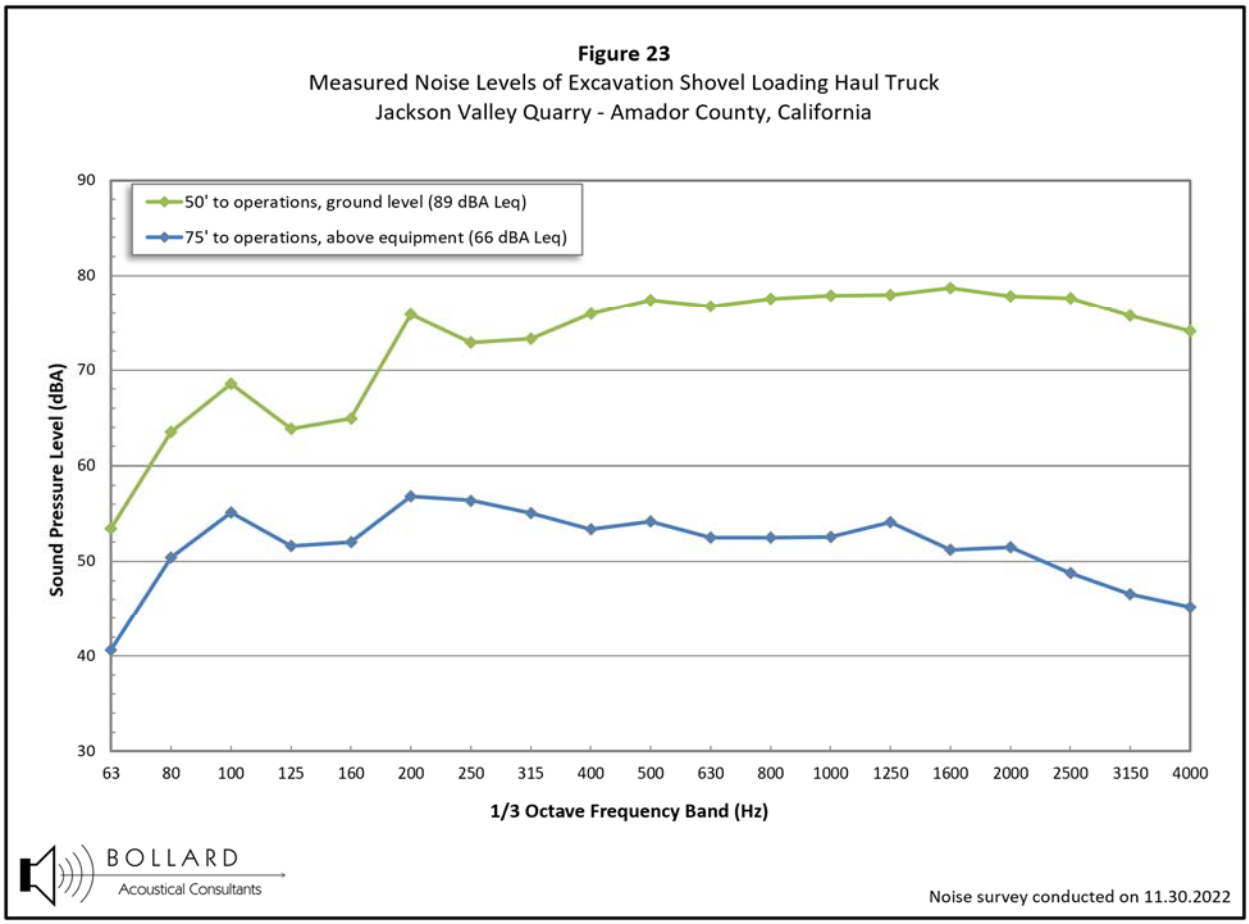
Noise is generated during excavation by an excavator-type shovel loading large haul trucks for transport to the processing area jaw crusher. The components of this noise consist of the movement of the steel-tracked shovel, the loading of the shovel with aggregate material, and the depositing of that material into the haul trucks.

BAC conducted noise testing of the excavation operations conducted at JVQ on November 30, 2022. Noise measurements were conducted from a position with direct line-of-sight to the excavation operations as well as a location above the excavation area which was completely shielded from view by the pit walls/benches of the excavation area. The purposes of the noise testing were to determine the degree of excavation noise-attenuation provided by intervening topography and to determine if restricting unshielded excavation operations to daytime hours would be warranted. Figure 21 shows a photograph of the unshielded excavation operations and Figure 22 shows a photograph illustrating the shielding provided by the pit benches/walls. Figure 23 shows the excavation noise survey results.

Figure 21 – Unshielded Excavation Activities as Viewed from Pit Floor

Figure 22 – Shielding of Excavation Activities as Viewed from Bench Above Pit Floor

Figure 23
Measured Noise Levels of Excavation Shovel Loading Haul Truck
Jackson Valley Quarry - Amador County, California



The Figure 23 noise test data indicate that the excavation operations generated noise levels of 89 dBA at a distance of 50 feet without any shielding by intervening topography. Figure 23 also indicates that, when the excavation operations were shielded from view of the noise measurement location by the walls/benches of the excavation area (a common occurrence), a 20 dBA reduction in noise levels was obtained by that intervening topography. Given the elevated noise generation of the unshielded excavation operations, it was determined that excavation activities should be limited to daytime hours unless the excavation area is shielded from view of existing residences in the quarry vicinity by the benches/walls of the excavation pit. These test results clearly indicate that this measure will be very effective in reducing excavation noise levels at the nearby residences in the project vicinity.

Nighttime Restriction on Use of Excavator-Mounted Rock Breakers

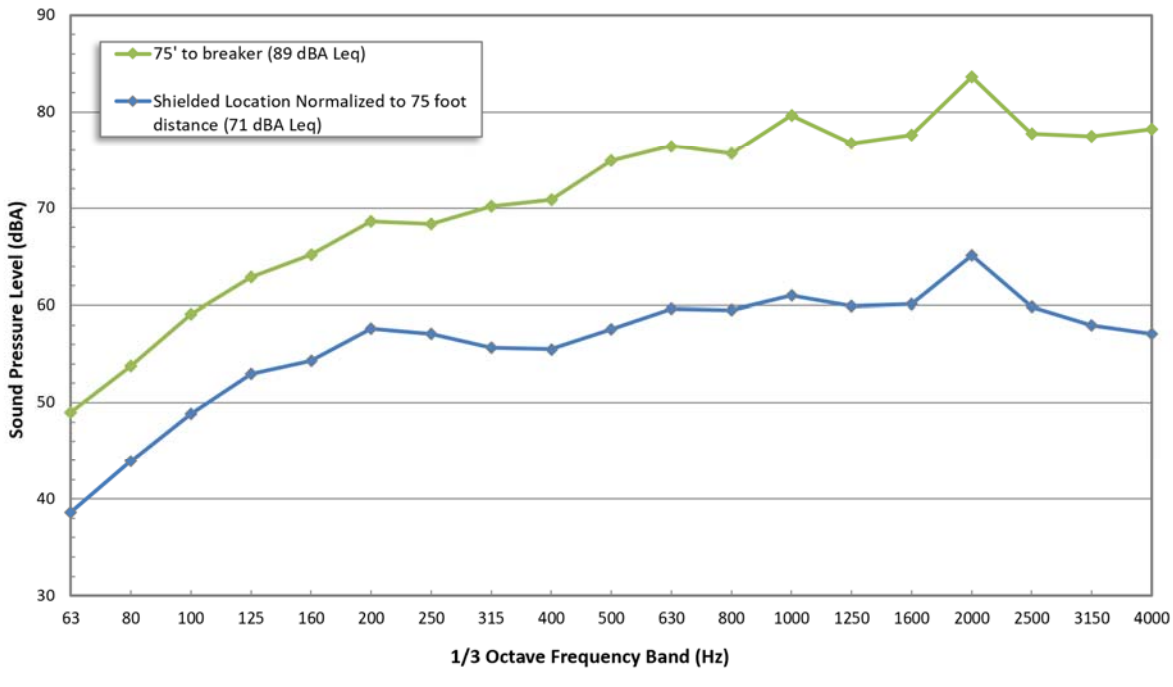
Following blasting of hard-rock material deposits it is not uncommon for some boulders to be too large for the primary (jaw) crusher to reduce to manageable sizes. In such cases, such boulders are reduced in size in the quarry area using excavator-mounted pneumatic rock breakers prior to transport to the processing area for crushing and screening. These activities generate noise signatures comparable to jack hammers commonly used on construction sites, but with a slightly slower impact speed.

BAC conducted noise testing of the pneumatic rock breaker utilized at JVQ on November 30, 2022. Noise measurements were conducted from a position with direct line-of-sight to the breaker as well as a location which was shielded from view of the breaker by intervening topography. The purposes of the noise testing were to determine the degree of noise-attenuation provided by intervening topography and to determine if restricting the pneumatic rock breaker usage to daytime hours would appreciably affect the nighttime noise environment at existing residences located in the general quarry vicinity. Figure 24 shows a photograph of the excavator-mounted pneumatic rock breaker and Figure 25 shows the noise survey results for both the shielded and unshielded locations.

The Figure 25 noise test data indicate that the rock breaker generated noise levels of 89 dBA at a distance of 75 feet without any shielding by intervening topography. Figure 25 also indicates that, when the rock breaker was shielded from view of the noise measurement location, an 18 dBA reduction in noise levels was obtained by that intervening topography. Given the elevated noise generation of the unshielded breaker and because it is not possible to ensure that the breaker would be completely screened from view of residences in the quarry vicinity while operating, it was determined that usage of the rock breaker should be limited to daytime hours. These test results clearly indicate that this measure will be very effective in reducing excavation large rock breaking activity noise levels at the nearby residences in the project vicinity.

Figure 24 – Excavator-Mounted Pneumatic Rock Breaker

Figure 25
Measured Rock-Breaker Noise Levels (Unshielded and Shielded by Topography)
Jackson Valley Quarry - Amador County, California



BOLLARD Acoustical Consultants

Noise survey conducted on 11.30.2022

Off-Site, Nighttime, Heavy Truck Traffic Noise Levels

To quantify the single-event, hourly average, and 24-hour average noise generation of project traffic, BAC utilized noise level data collected at the Jackson Valley Quarry entrance, the Federal Highway Administration Traffic Noise Prediction Model and BAC file data for aggregate haul truck noise emissions. The following section describes the nighttime noise generation of the off-site heavy truck traffic on Jackson Valley Road and Highway 88.

Jackson Valley Road Receptors:

BAC file data for the noise emissions of a 1990 Kenworth T800 with a Cummins 88NT350 Diesel engine with an 18-speed gear box was used to establish reference noise levels for truck passbys on Jackson Valley Road. That data was supplemented with additional heavy truck noise level data collected at various locations in recent years.

Given the relatively short length of the segment of that roadway between Highway 88 and the quarry site (approximately 2,000 feet), haul truck speeds on Jackson Valley Road are relatively low (approximately 25-30 mph). BAC's file data for aggregate truck passbys indicates maximum noise levels of approximately 70 dB L_{max} at the reference distance of 100 feet from the passby route. The computed average SEL from the truck passby tests was 75 dB SEL. To compute hourly noise levels associated with project heavy truck passbys, the following formula is used:

$$Leq(h) = SEL + 10*Log (N) – 10*Log(3600), \text{ where…}$$

Leq(h):	Hourly average noise level resulting from all truck passbys.
SEL:	Mean Sound Exposure Level of an individual truck passby.
N:	The number of truck passbys which occur in a given hour.
3600:	The number of seconds in an hour.

According to George Reed, Inc., data logs for the period when the ambient noise surveys were being conducted, the facility generated as many as 35 hourly truck loads (70 trips) during a busy hour with an average of approximately 25 loads (50 trips) per hour. For purposes of this evaluation, BAC assumed up to 35 loads (70 passbys) of project heavy trucks on Jackson Valley Road during a busy hour. For the evaluation of day/night average levels at the residences primarily exposed to Jackson Valley Road traffic noise, this analysis conservatively assumed 9 continuous nighttime hours at 70 heavy truck passbys (trips) per hour. Using this operational data with the heavy truck reference noise data cited above, the resulting day/night average level at a reference distance of 100 feet from the centerline of Jackson Valley Road computes to 64 dB L_{dn}. The computed project traffic noise exposure at the residences where the primary noise exposure is due to Jackson Valley Road is presented in Table 11.

With respect to the issue of sleep disturbance at the nearest potentially-affected receptors on Jackson Valley Road, (Receptors 13 and 14), during nighttime material load-out operations, the exterior sound exposure levels (SEL) were computed to range from 70 to 75 dB at the exterior of those residences. With windows in the closed position, interior noise levels would be approximately 25 dB below exterior noise levels, thereby resulting in an interior SELs of 45-50

dB. (Footnote 2 of General Plan Table N-3 states that interior noise standards shall be satisfied with windows in the closed position). Because single-event noise associated with nighttime heavy truck passbys on Jackson Valley Road would be 15-20 dB below the 65 dB SEL noise threshold within the interior of those residences with windows closed, this condition is considered to be satisfied.

Highway 88 Receptors:

To predict project traffic noise levels for the receptors with Highway 88 exposure, the FHWA Traffic Noise Prediction Model was used. The nighttime heavy truck traffic volume was assumed to be 630 nightly trips (70 trips/hr * 9 hours). Project heavy truck trip distribution was reported to be approximately 75% on Highway 88 west of the intersection of Jackson Valley Road and 25% 25% on Highway 88 east of Jackson Valley Road. Vehicle speeds were based on BAC observations and posted speed limits. Table 11 shows the project traffic noise exposure for the receptors with both Jackson Valley Road and Highway 88 traffic noise exposure. Table 11 also shows the applicable L_{dn} standards at each receptor based on the County's General Plan standards and measured ambient conditions.

Table 11 - Predicted Worst-Case Heavy Truck Passby Noise Levels
Nearest Receptors to Jackson Valley Road and Highway 88 – Amador County, California

Receiver	Predicted Ldn	Ldn Standard	Ldn Exceedance?
1	38	60	No
2	41	60	No
3	52	60	No
4	48	60	No
5	61	71	No
6	64	74	No
7	61	71	No
8	57	67	No
9	46	60	No
10	53	60	No
11	59	65	No
12	64	70	No
13	64	67	No
14	59	60	No
15	44	60	No
16	40	60	No
17	39	60	No

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

Summary of Off-Site Traffic Noise Impacts

The Table 11 data indicate that nighttime project heavy truck trip generation is not predicted to exceed the Amador County General Plan noise standards after adjustment of those standards to reflect elevated ambient conditions at some receptors. In addition, single-event noise levels generated by project heavy trucks on Jackson Valley Road during nighttime hours are not

predicted to exceed criterial for sleep disturbance within the two residences located adjacent to that roadway. As a result, off-site heavy truck traffic noise impacts are not considered significant.

To assist George Reed in determining the maximum number of hourly and nighttime heavy truck passbys which could occur on the local roadway network without resulting in exceedance of the project's standards of significance, BAC conducted an iterative analysis using the methodologies cited above. The results of that analysis indicate the following:

1. To not exceed the day/night average (Ldn) noise thresholds at the nearest residences in the project vicinity the maximum number of loads generated by the facility should not exceed 385 between the hours of 10 pm and 7 am (770 trips/passbys).

2. To not exceed the hourly average (Leq) noise thresholds at the nearest residences in the project vicinity the maximum number of loads generated by the facility should not exceed 45 loads during any nighttime hour (90 trips).

Combined Noise from All Project Sources

The noise generation of each component of the project (processing, excavation, and hauling) has been evaluated separately above. Because the Amador County General Plan applies different noise standards to noise generated by on-site operations (excavation, processing and on-site circulation) and off-site heavy truck traffic on public roadways, the noise generation of the on-site, "stationary" noise sources and off-site traffic noise sources cannot practically be combined. To provide an evaluation of each project noise source operating concurrently using a single noise descriptor (Leq), off-site heavy truck traffic noise levels were predicted in terms of hourly averages (L_{eq}) for addition to noise generated by on-site activities which is also described in terms of Leq.

The analysis of unmitigated, combined noise levels from all 3 components indicates the project would result in an exceedance of the project standards of significance at nearby noise-sensitive receptors during nighttime hours. However, implementation of the noise mitigation measures described previously in this assessment would provide sufficient noise attenuation to reduce combined noise generation from all three project components to a state of compliance with the applicable standards of significance. Table 12 shows the combined noise levels of all three project noise sources in terms of hourly average noise levels (Leq) following implementation of the recommended noise mitigation measures.

The Table 12 data indicate that, following implementation of the noise mitigation measures cited herein, the combined noise generation of each major noise-generating component of the project is predicted to be satisfactory relative to the project standards of significance. As a result, the noise mitigation control measures developed in this evaluation should be implemented to ensure compliance with the project standards of significance. Nonetheless, as noted previously, a follow-up noise monitoring program should be implemented upon completion of noise mitigation implementation and commencement of nighttime operations to confirm the assumptions and conclusions of this analysis.

Table 12 - Combined Mitigated Nighttime Noise Exposure From All Sources
Nearest Receptors to Jackson Valley Quarry – Amador County, California

	Predicted Average Noise Level (Leq) After Mitigation					
Receiver	**Processing**	**Excavation**	**Off-Site Traffic**	**Combined**	**Leq Standard**	**Exceedance?**
1	29	32	34	37	45	No
2	32	28	37	38	45	No
3	38	37	47	48	53	No
4	37	35	43	44	45	No
5	37	36	57	57	62	No
6	36	35	59	59	65	No
7	38	41	56	56	62	No
8	31	42	52	53	58	No
9	32	33	42	43	45	No
10	40	37	48	49	50	No
11	40	37	54	54	56	No
12	42	39	59	59	61	No
13	44	42	59	59	59	No
14	45	44	54	54	54	No
15	30	38	39	42	45	No
16	38	38	36	42	45	No
17	36	36	35	40	45	No

Source: Bollard Acoustical Consultants, Inc. (BAC) 2020

Appendix A
Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.

Jackson Valley Quarry

Amador County, CA

Noise Measurement Site Photos

Site 1

Appendix B-1

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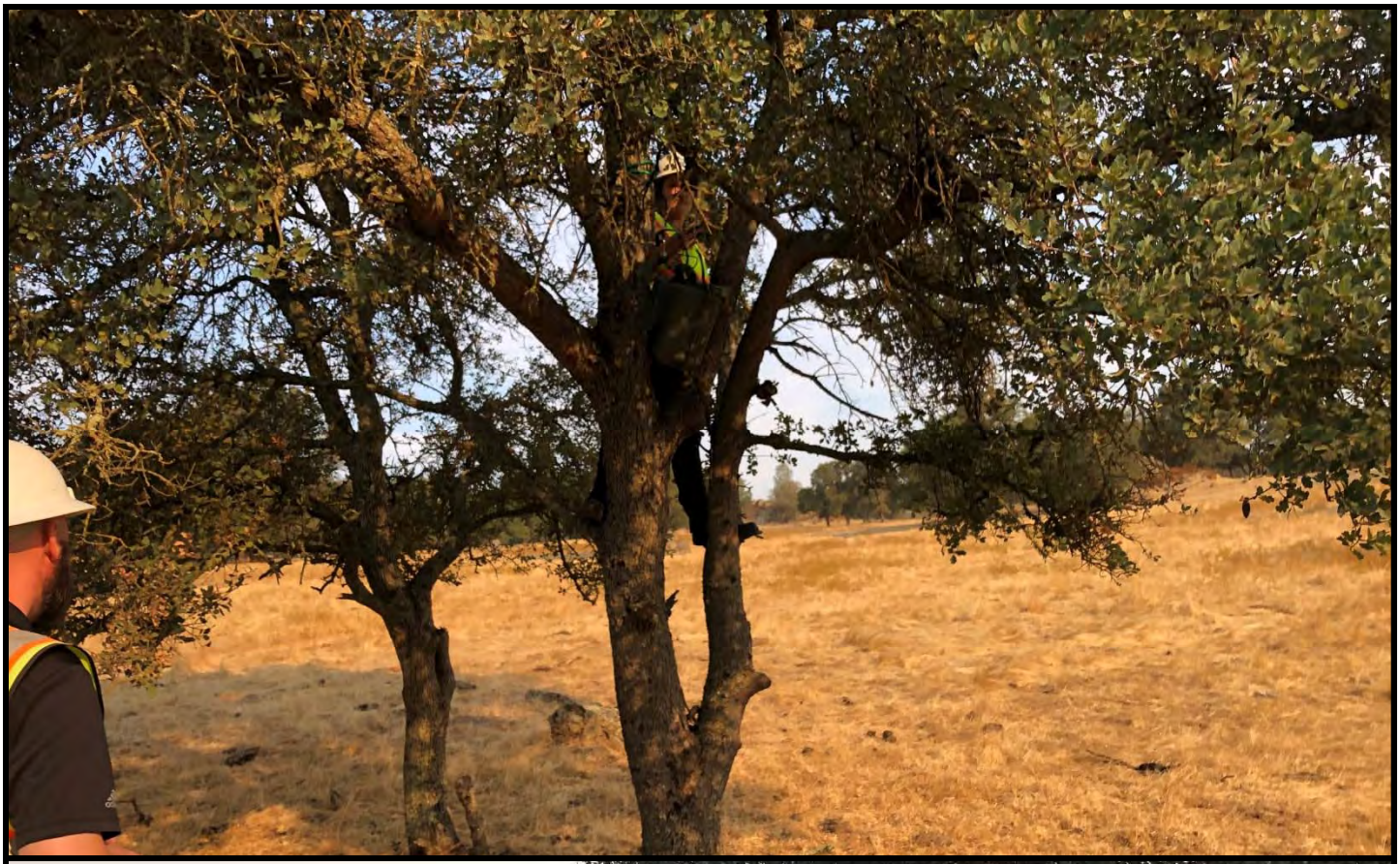

Jackson Valley Quarry

Amador County, CA

Noise Measurement Site Photos

Site 2

Appendix B-2

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Jackson Valley Quarry

Amador County, CA

Noise Measurement Site Photos

Site 3

Appendix B-3

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Jackson Valley Quarry

Amador County, CA

Noise Measurement Site Photos

Site 4

Appendix B-4

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Jackson Valley Quarry

Amador County, CA

Noise Measurement Site Photos

Site 5

Appendix B-5

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Jackson Valley Quarry

Amador County, CA

Noise Measurement Site Photos

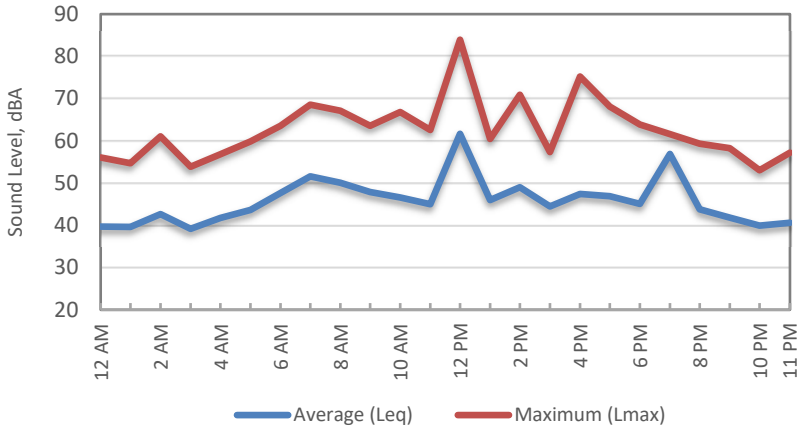
Site 6

Appendix B-6

BOLLARD Acoustical Consultants

Appendix C - 1
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 1

Thursday, October 08, 2020



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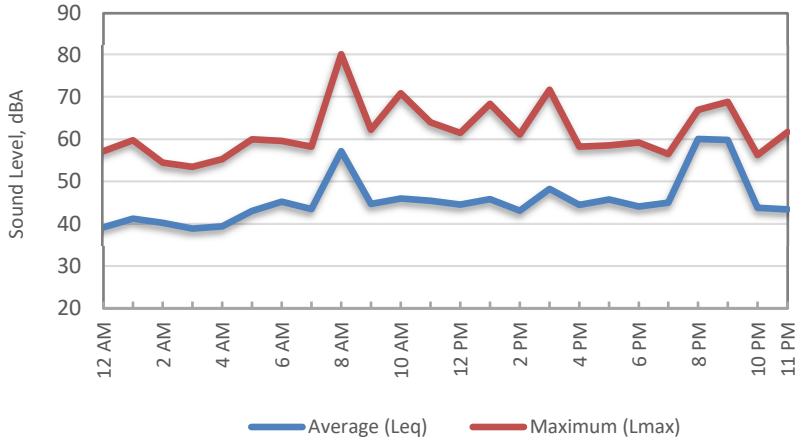

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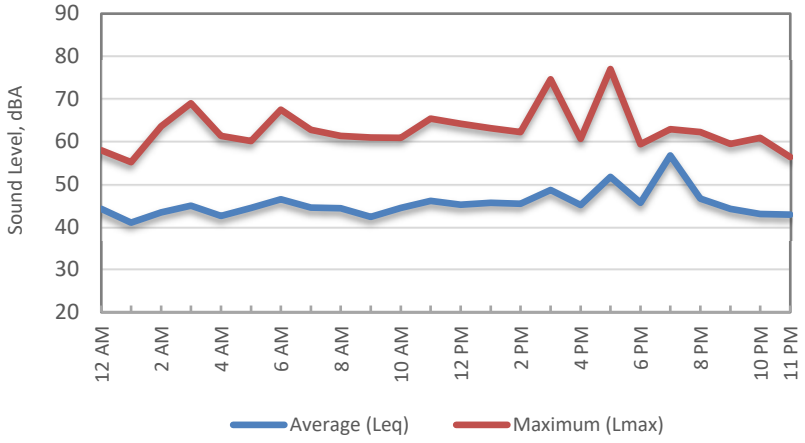

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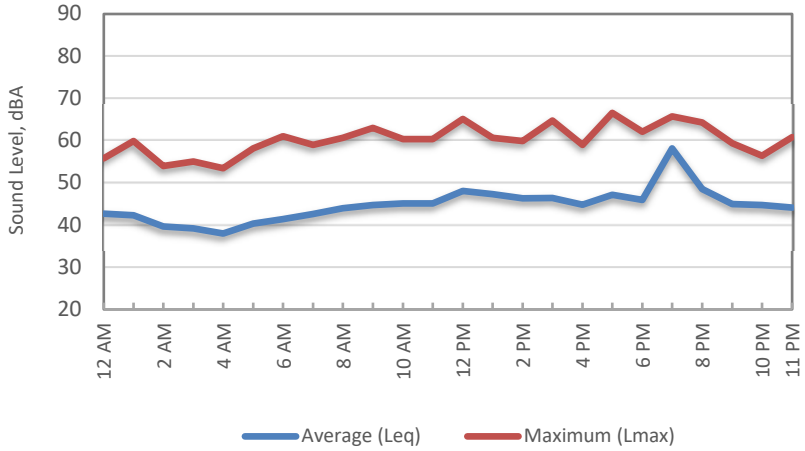

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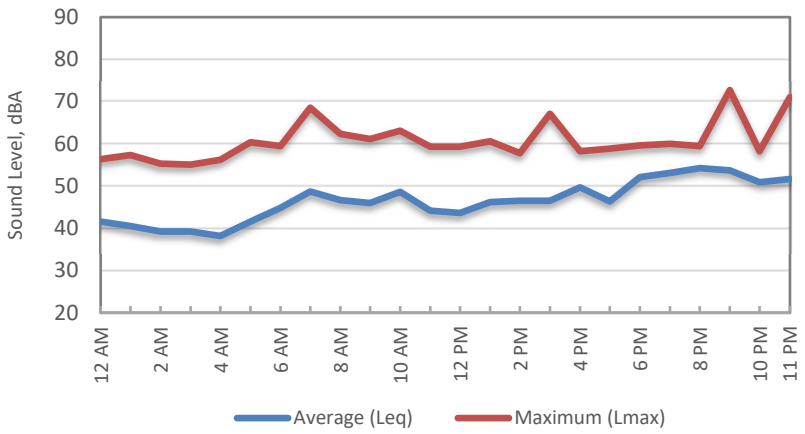
Appendix C - 2
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 1

Monday, October 12, 2020



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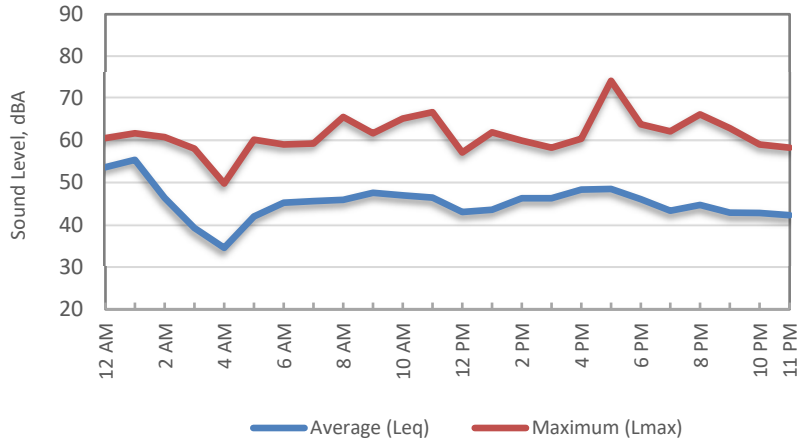

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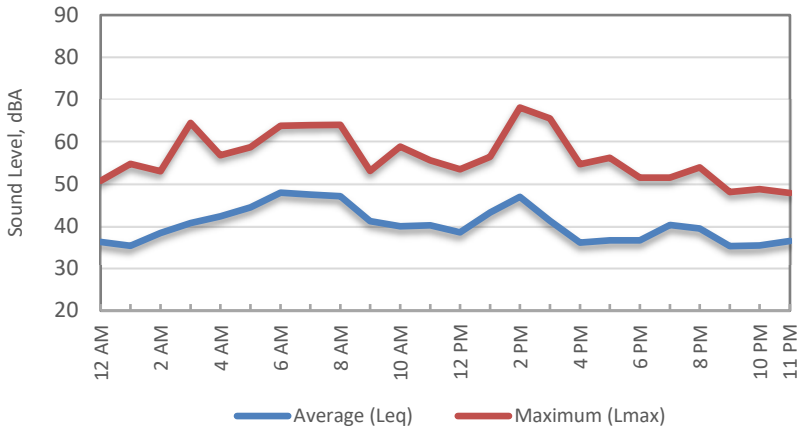
Appendix C - 3
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 2

Thursday, October 08, 2020



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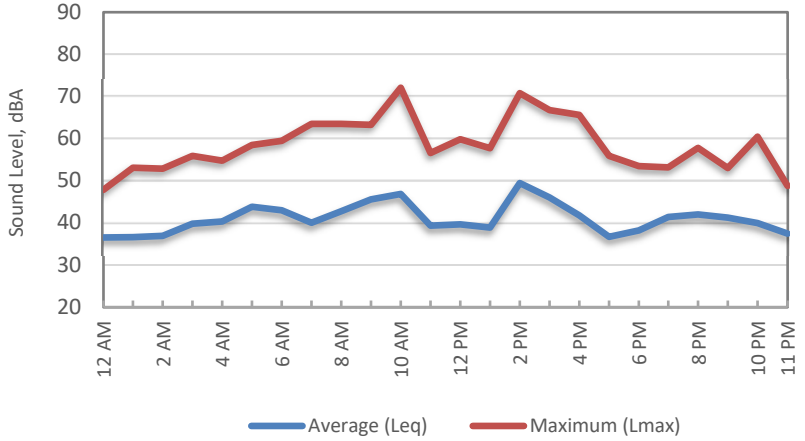

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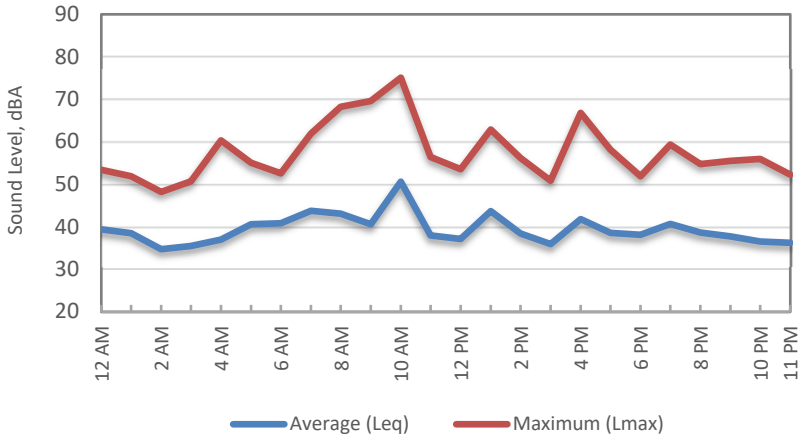

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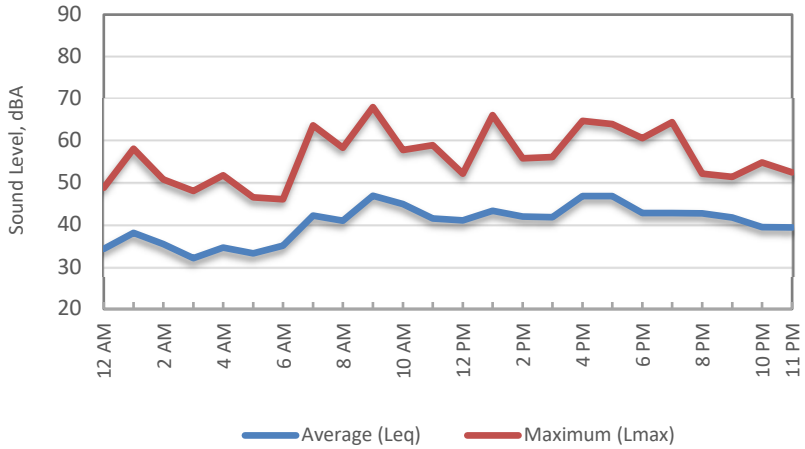

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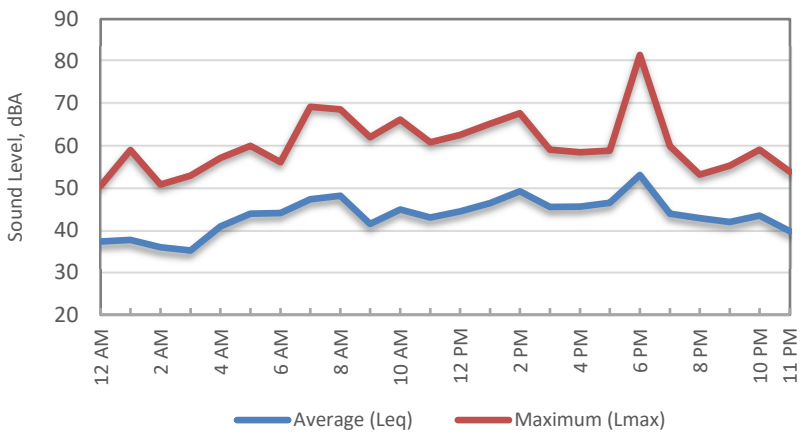
Appendix C - 4
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 2

Monday, October 12, 2020



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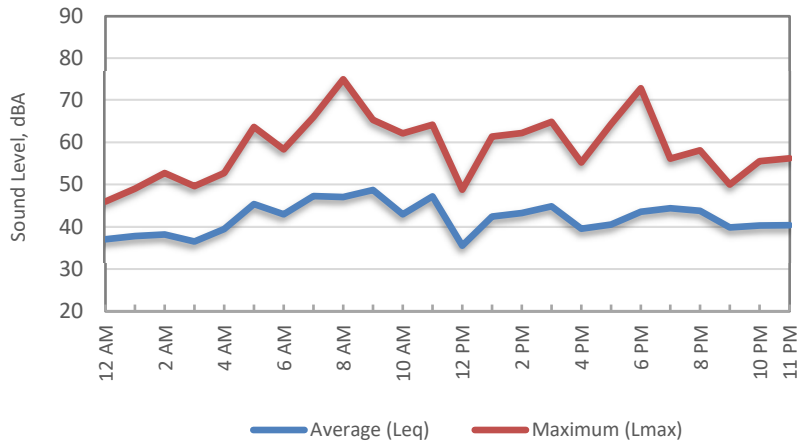

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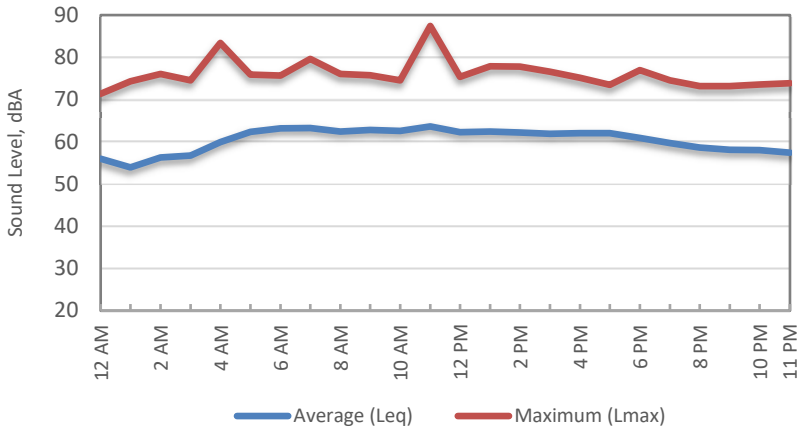
Appendix C - 5
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 3

Thursday, October 08, 2020



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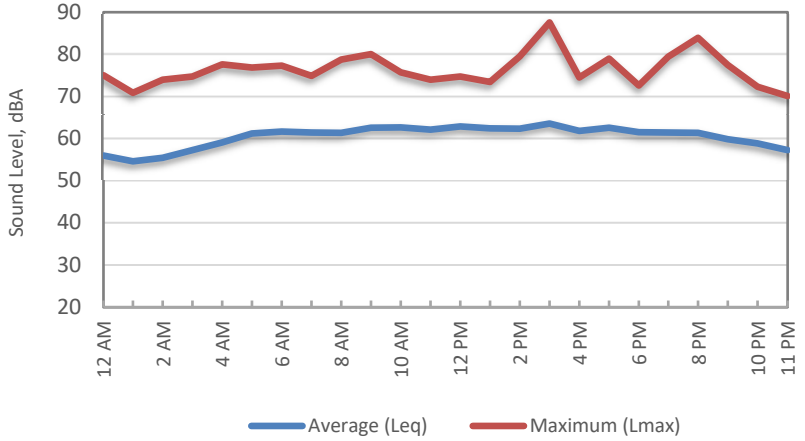

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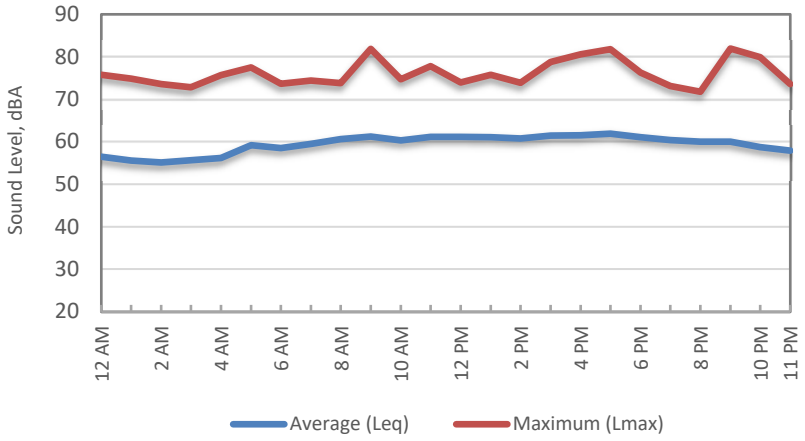

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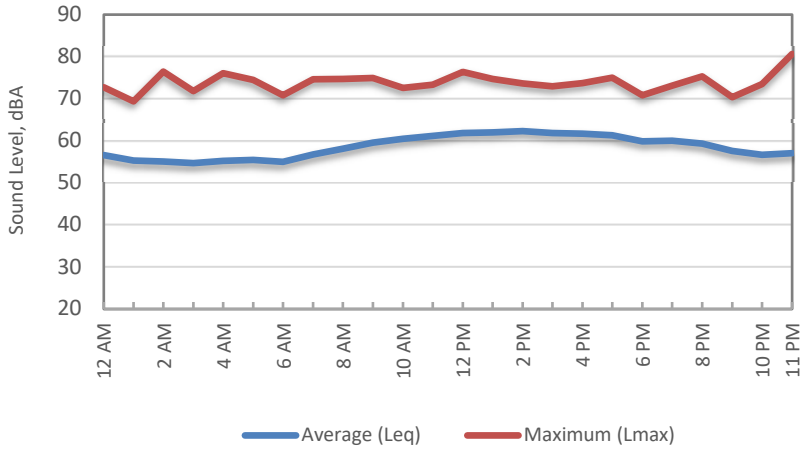

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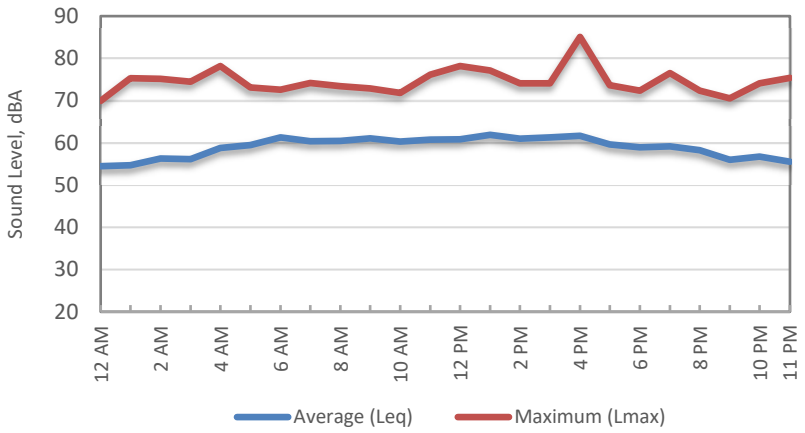
Appendix C - 6
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 3

Monday, October 12, 2020



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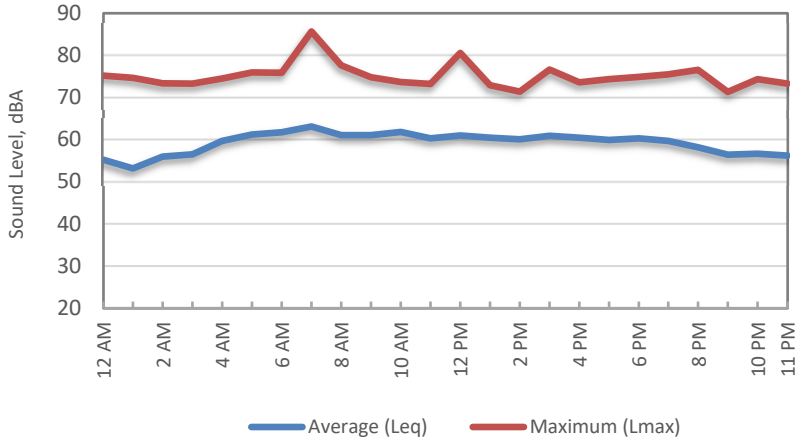

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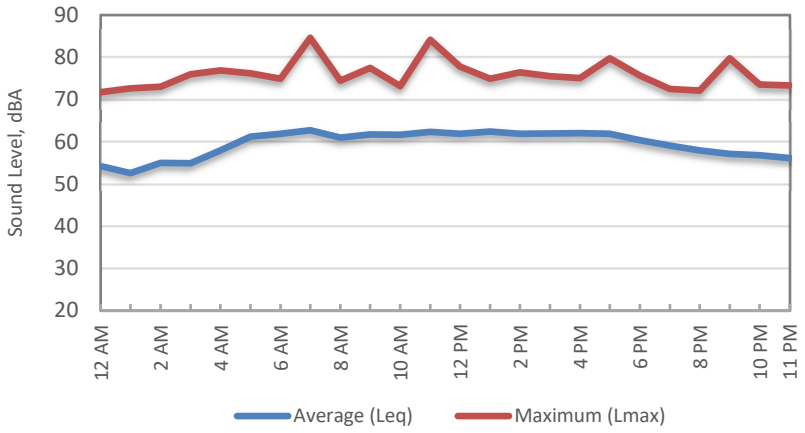
Appendix C - 7
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 4

Thursday, October 08, 2020



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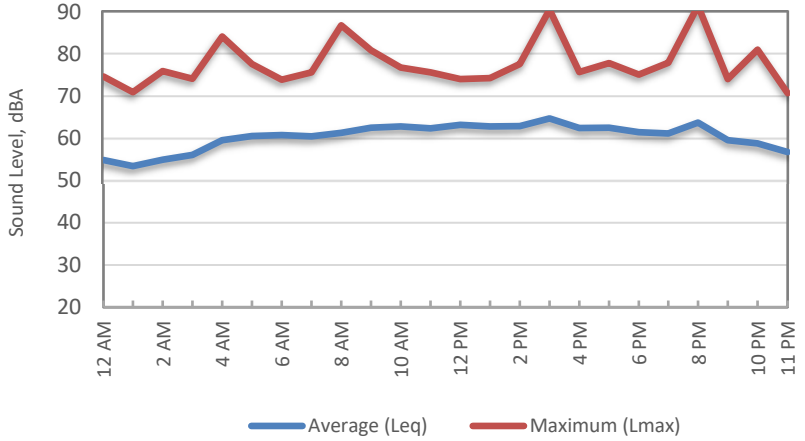

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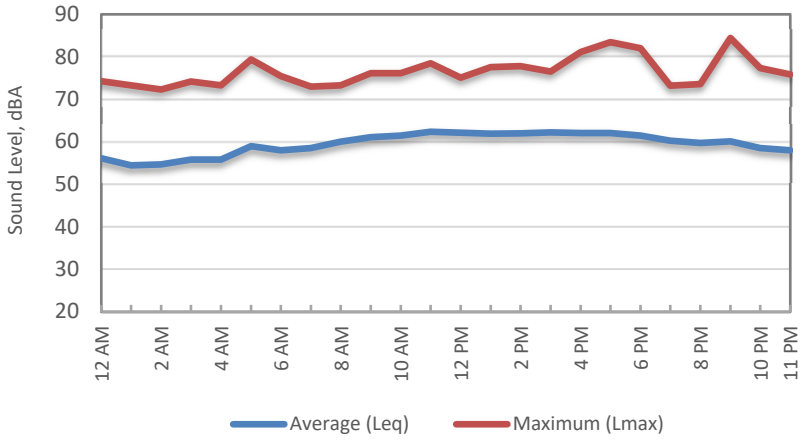

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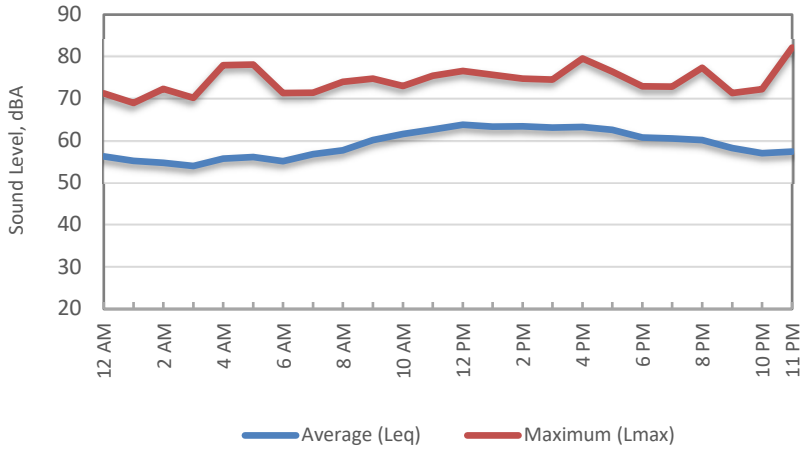

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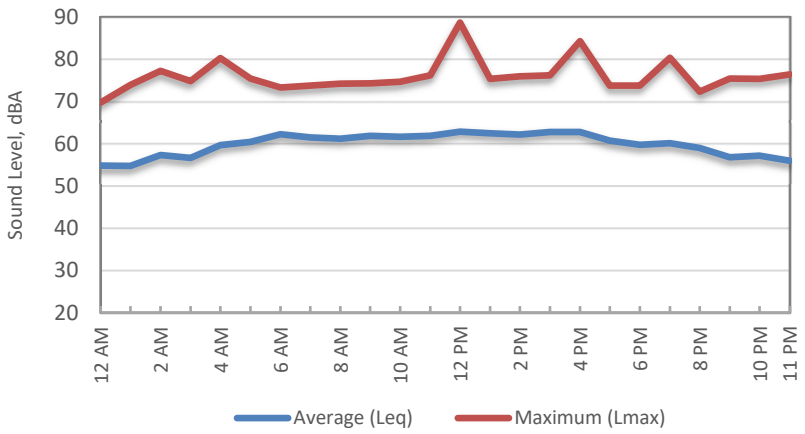
Appendix C - 8
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 4

Monday, October 12, 2020



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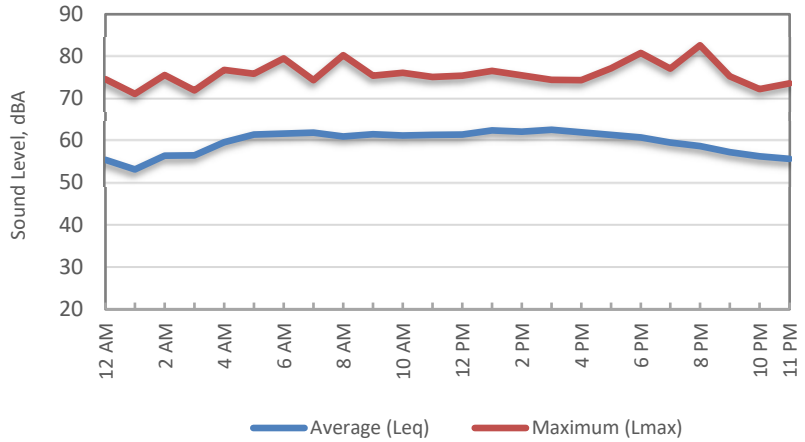

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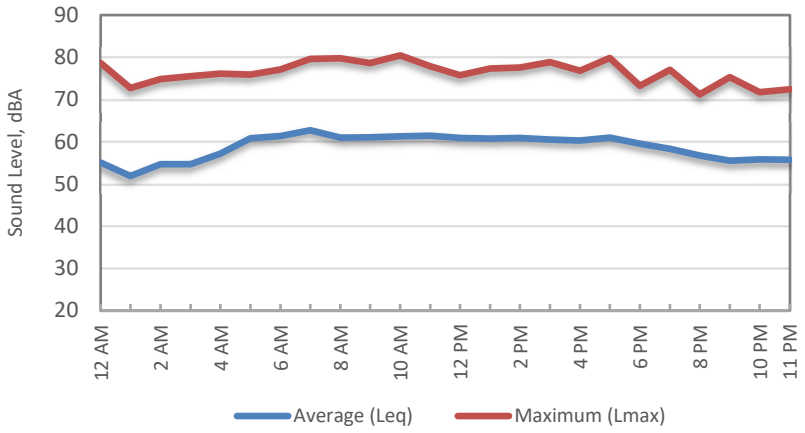
Appendix C - 9
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 5

Thursday, October 08, 2020



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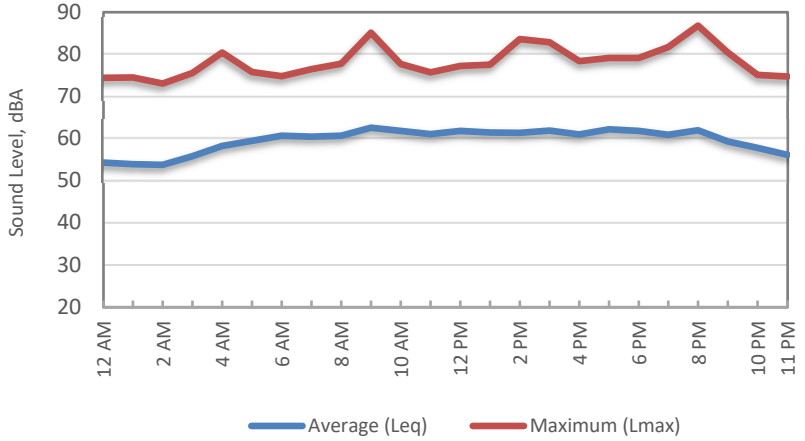

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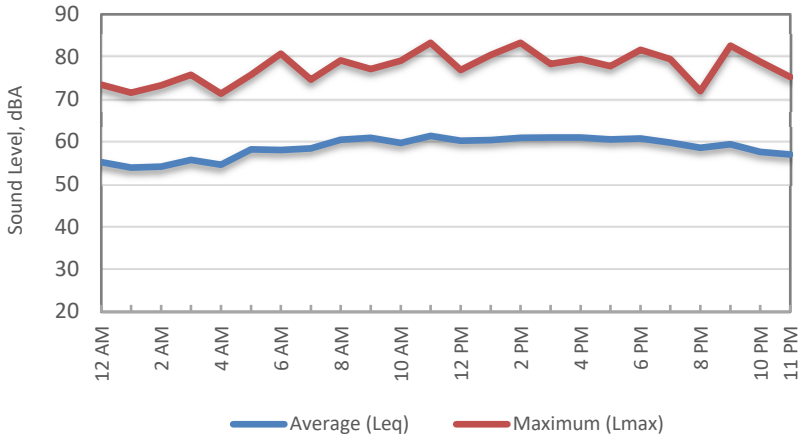

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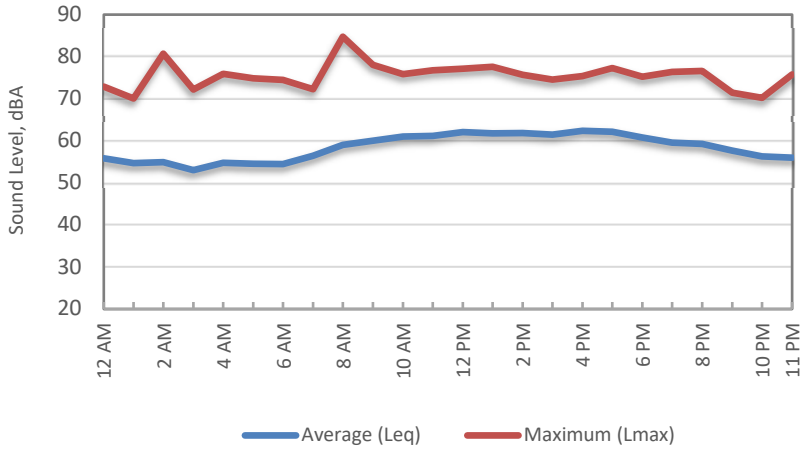

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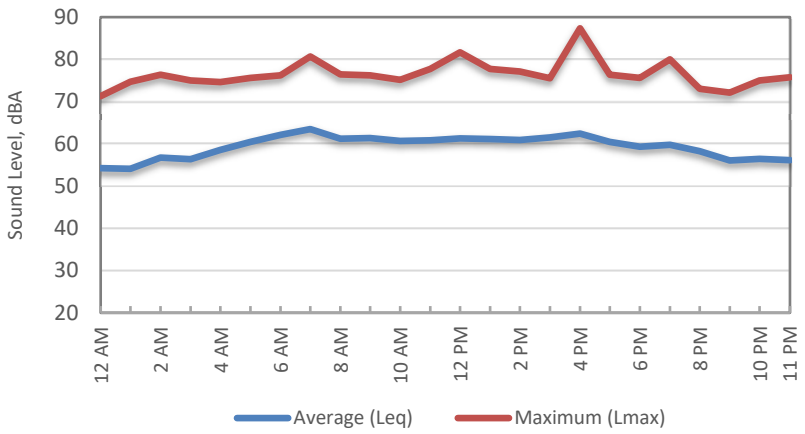
Appendix C - 10
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 5

Monday, October 12, 2020



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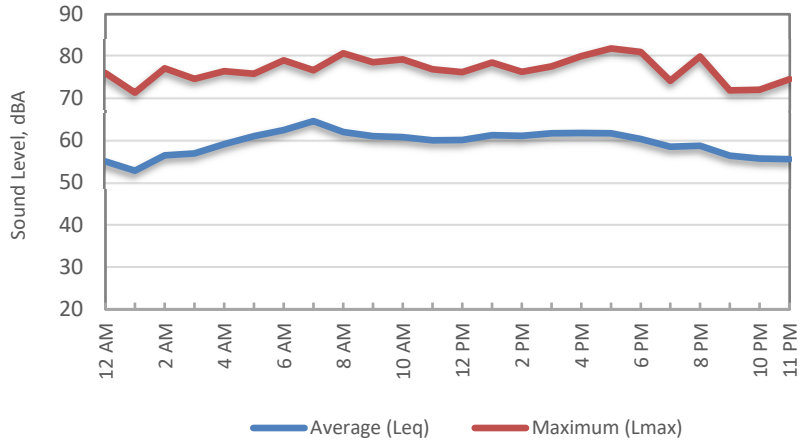

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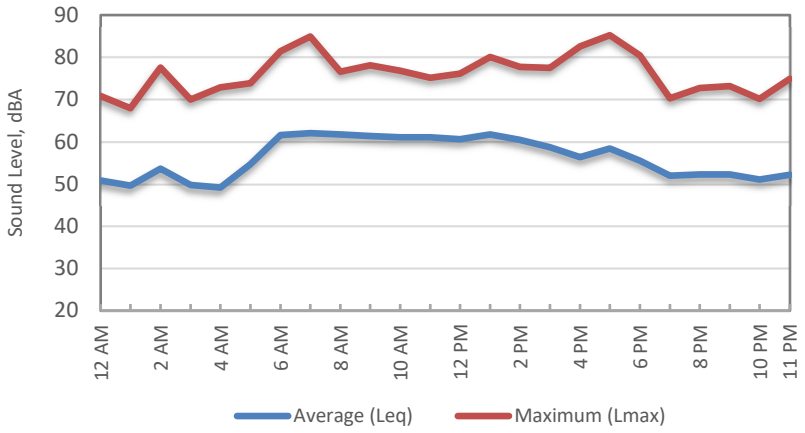
Appendix C - 11
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 6

Thursday, October 08, 2020



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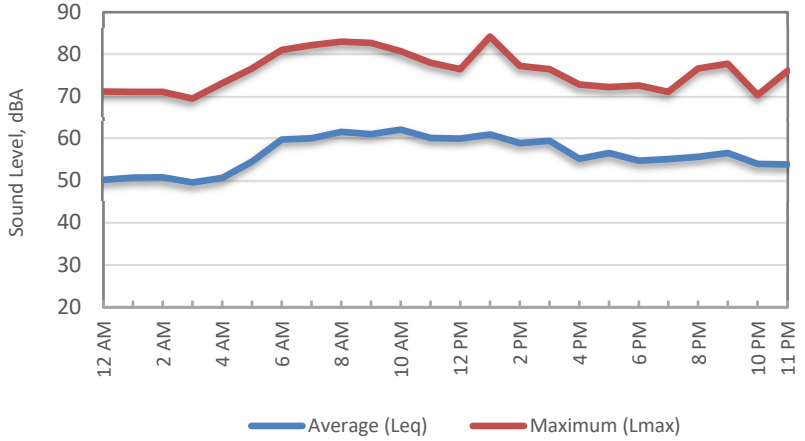

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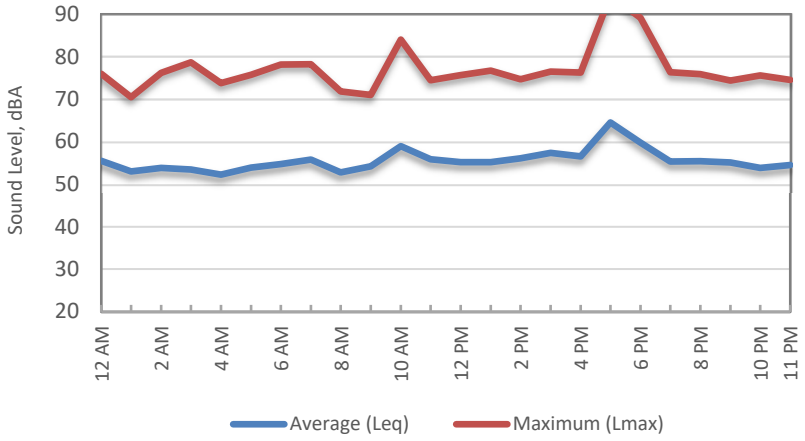

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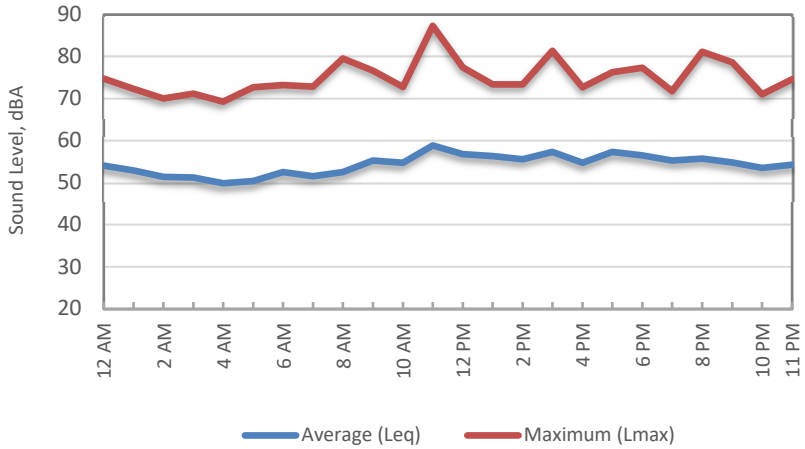

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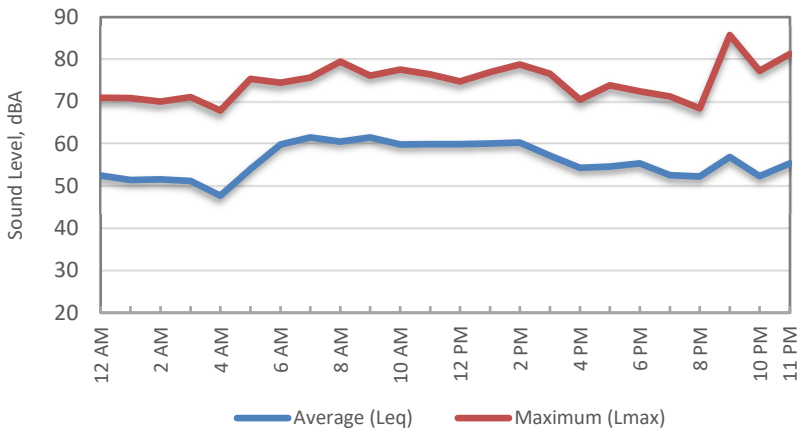
Appendix C - 12
Ambient Noise Monitoring Results
Jackson Valley Quarry - Amador County
Site 6

Monday, October 12, 2020



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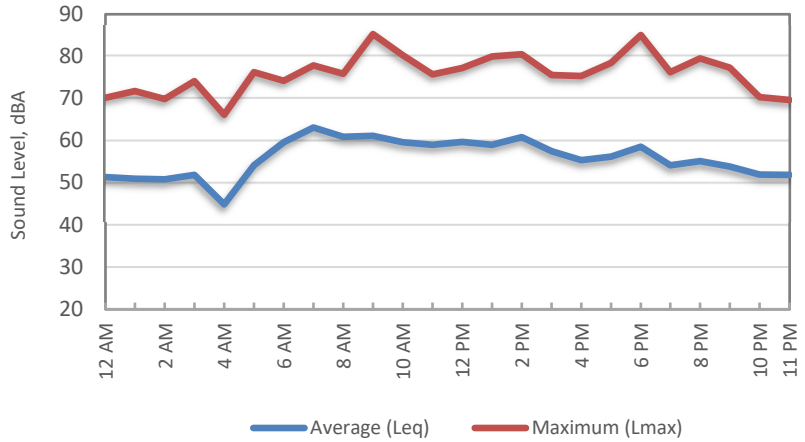

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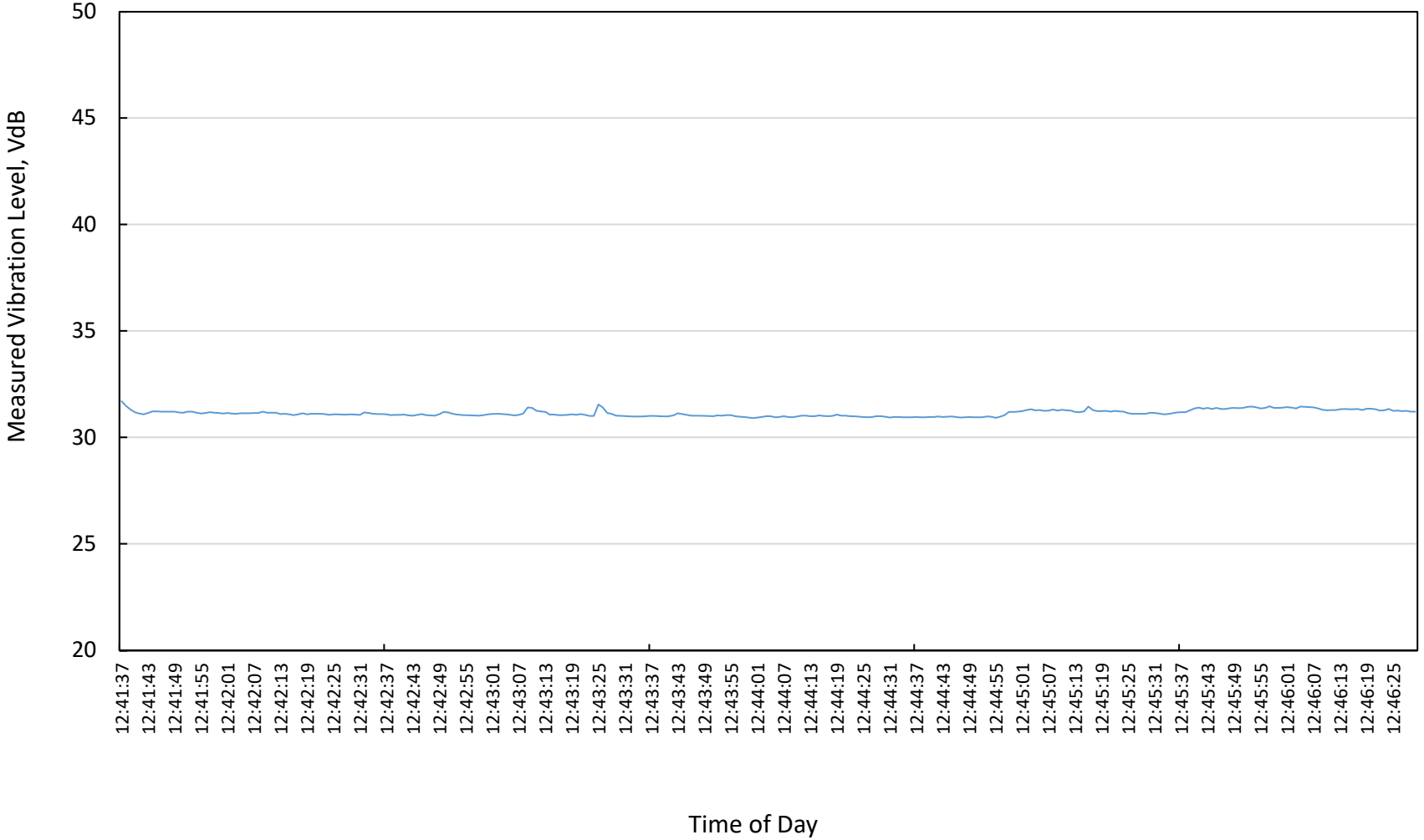
Appendix D-1
Short-Term Vibration Measurement Results
Site 1: Jackson Valley Quarry, Amador County, California
October 14, 2020



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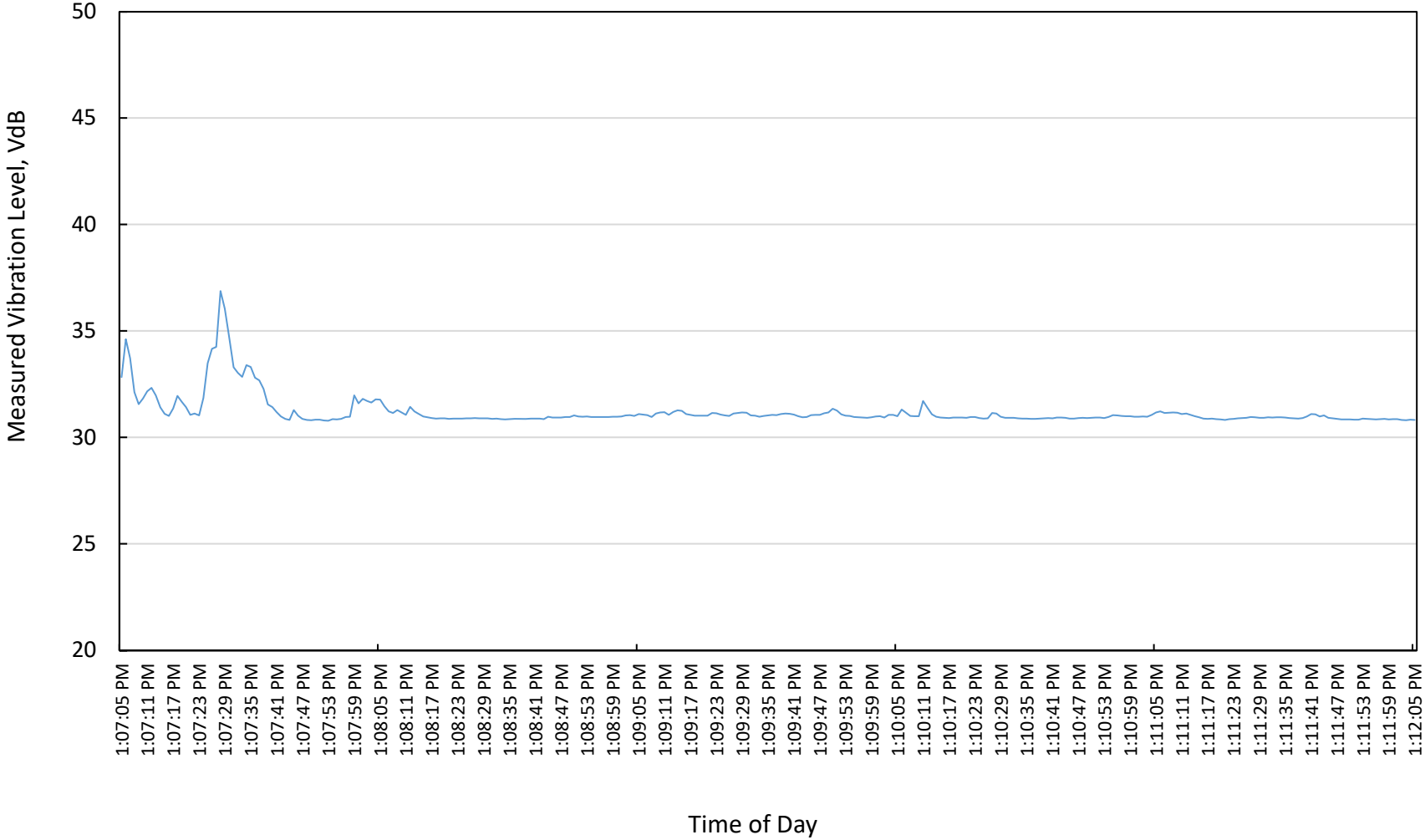
Appendix D-2
Short-Term Vibration Measurement Results
Site 2: Jackson Valley Quarry, Amador County, California
October 14, 2020



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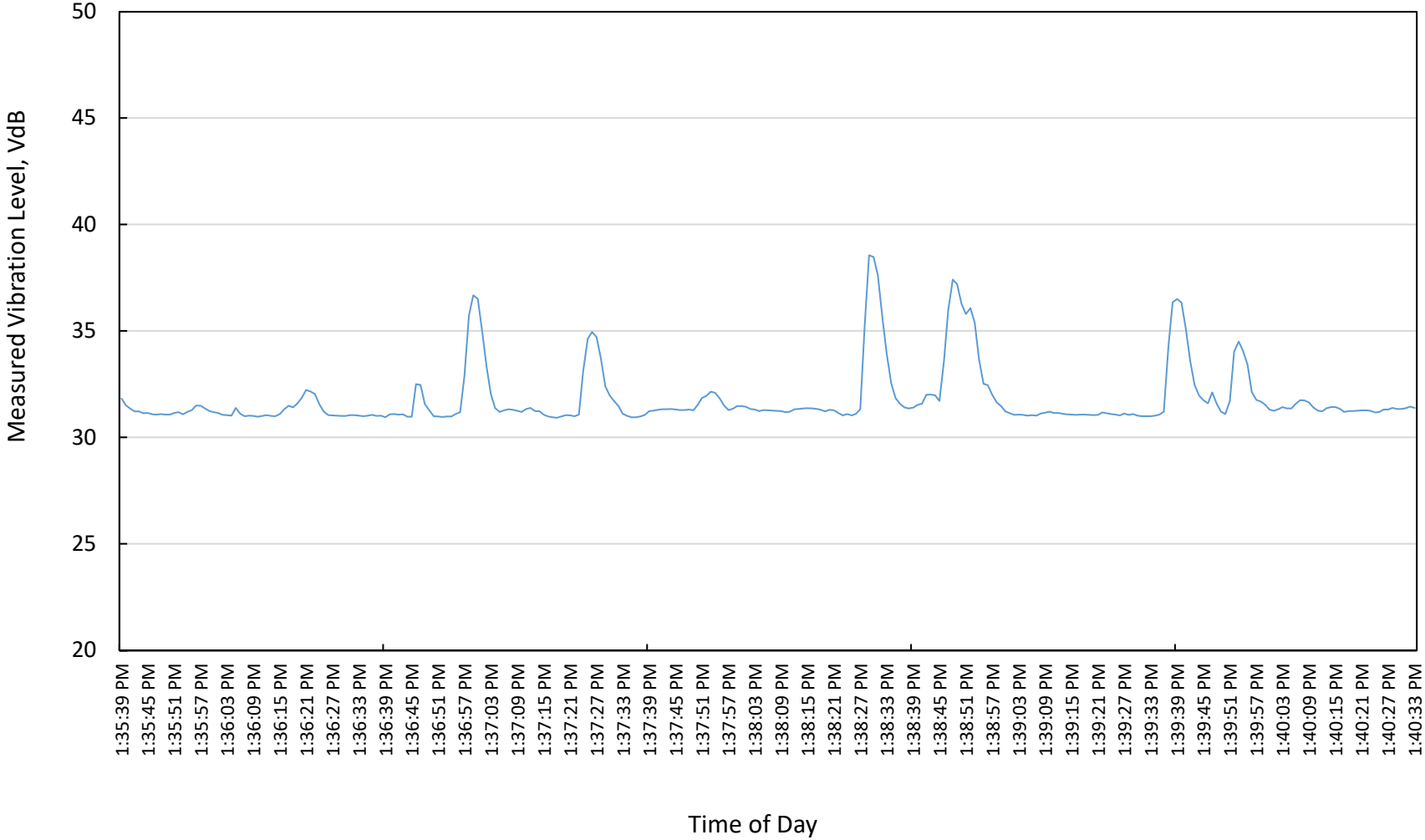
Appendix D-3
Short-Term Vibration Measurement Results
Site 4: Jackson Valley Quarry, Amador County, California
October 14, 2020



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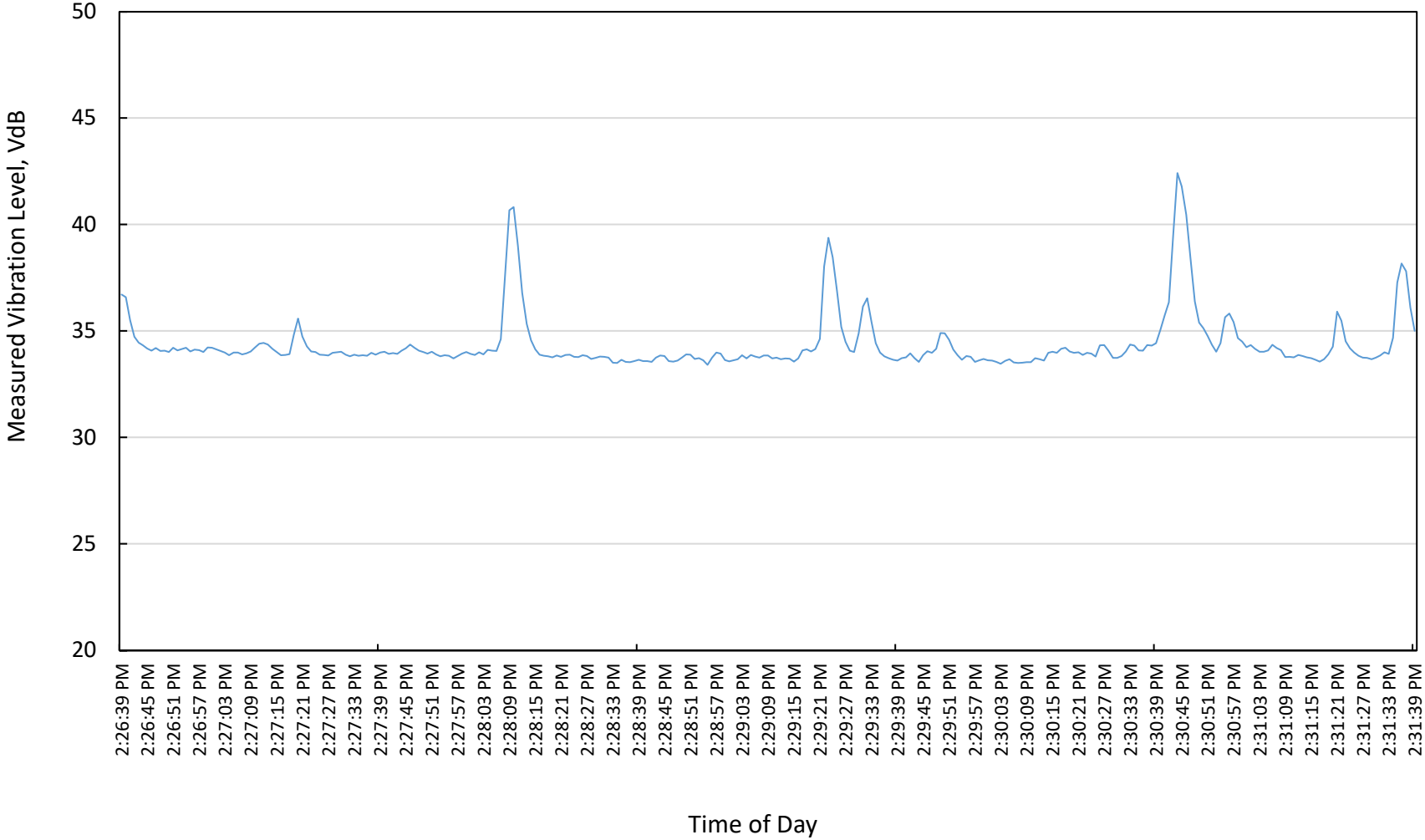
Appendix D-4
Short-Term Vibration Measurement Results
Site 5: Jackson Valley Quarry, Amador County, California
October 14, 2020



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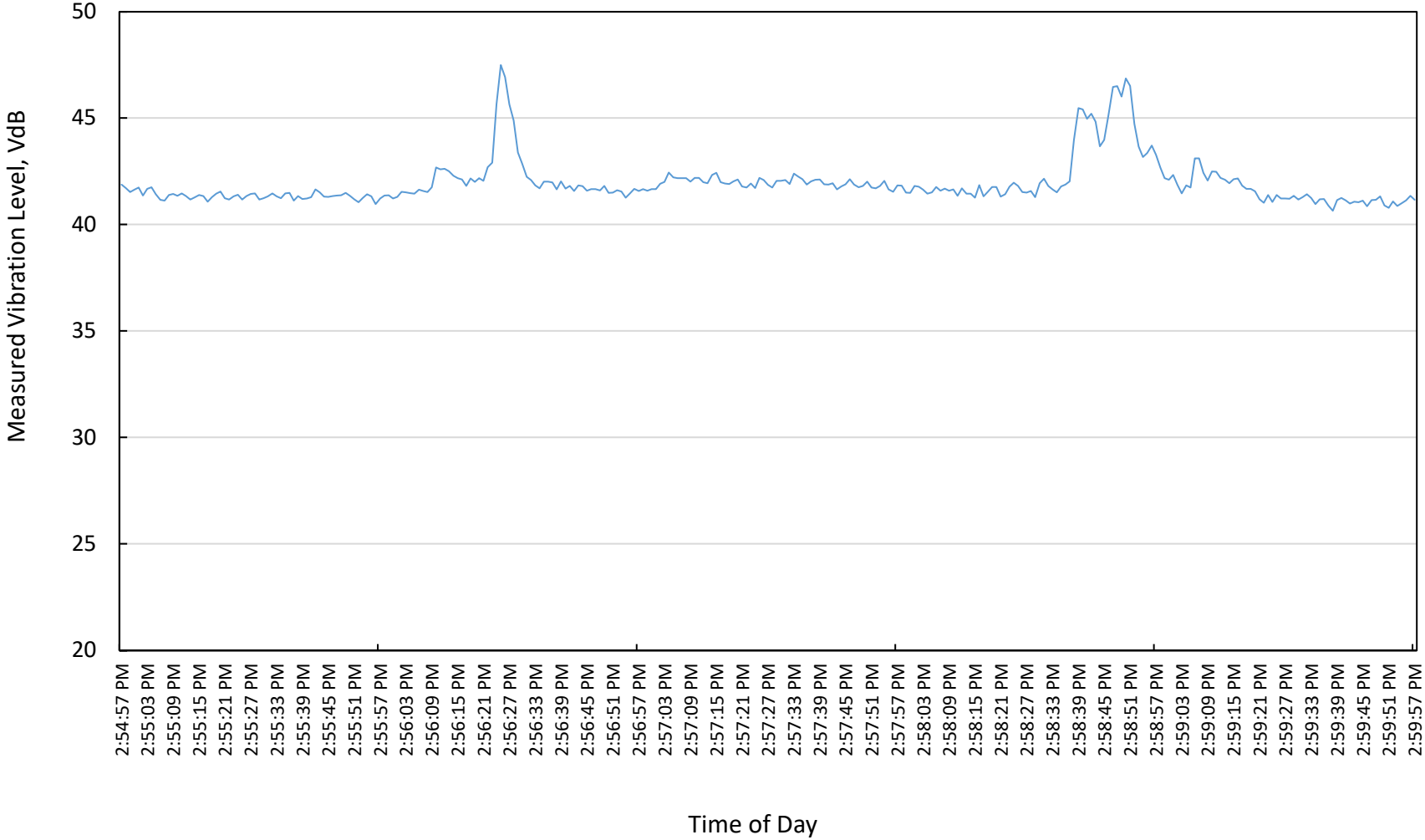
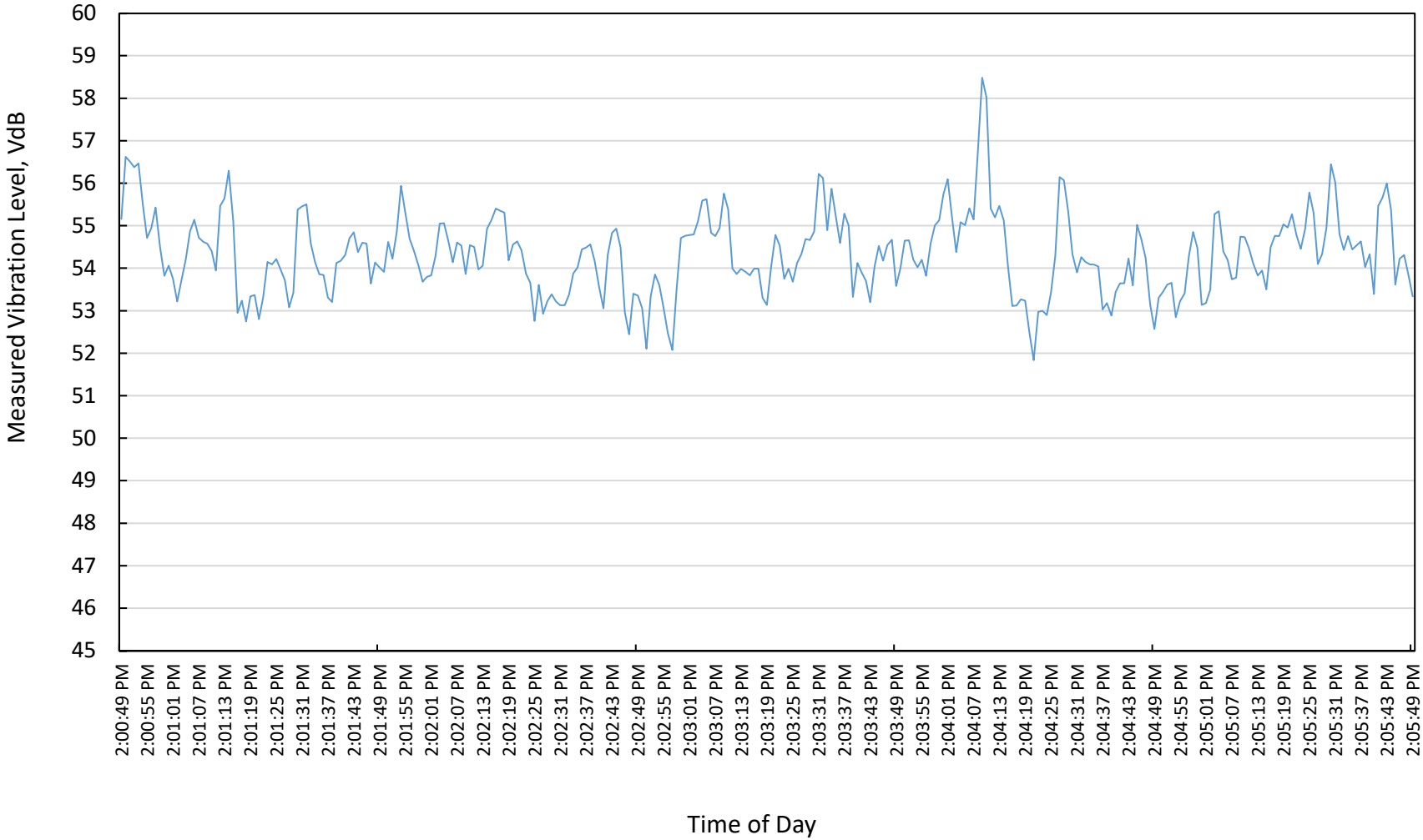
Appendix D-5
Short-Term Vibration Measurement Results
Site 6: Jackson Valley Quarry, Amador County, California
October 14, 2020



BOLLARD Acoustical

Appendix D-6
Short-Term Vibration Measurement Results
Plant Site: Jackson Valley Quarry, Amador County, California
October 14, 2020



BOLLARD Acoustical

Jackson Valley Quarry

Amador County, CA

Short-Term Noise Measurement Photos

Processing Area

Appendix E-1

BOLLARD Acoustical Consultants

Jackson Valley Quarry

Amador County, CA

Short-Term Noise Measurement Photos

Processing Area

Appendix E-2

BOLLARD Acoustical Consultants

Appendix F
Short-Term Plant Area Noise Measurement Results
Jackson Valley Quarry - July 10, 2020

									1/1 Laeq								
Location	**LAeq**	**LASmax**	**LAS2**	**LAS8**	**LAS15**	**LAS25**	**LAS50**	**LAS90**	**31.5**	**63.0**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**
A	67	68	68	68	67	67	67	67	28	41	45	52	55	62	63	60	48
B	73	76	75	74	73	73	72	72	34	47	56	62	65	68	66	62	52
C	81	84	83	83	83	82	81	80	38	56	62	70	73	77	76	71	60
D	91	95	94	93	93	92	91	85	48	63	72	77	85	87	84	78	68
E	86	87	87	86	86	86	85	85	40	55	66	71	77	81	81	76	65
F	69	80	78	77	66	58	55	53	33	35	43	51	65	61	62	57	46

Note: Short-Term Plant Area Noise Monitoring Locations are Shown on Figure 5

BOLLARD Acoustical

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GEORGE REED INC.
GENERAL ENGINEERING CONTRACTORS
SINCE 1944
State Contractor's License No. 211337-A

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140 EMPIRE AVENUE
MODESTO, CALIFORNIA 95354
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"Night Lighting Management Plan"

Jackson Valley Quarry Project

Prepared for

George Reed, Inc

August 2, 2021

SECTION 1 INTRODUCTION

This Night Lighting Management Plan (Plan) for GRI's Jackson Valley Quarry Project (Project) outlines lighting types and methods that will be used to provide a safe working environment for all approved nighttime operations. This plan has been developed to identify the location of existing and proposed lighting fixtures that will illuminate operational areas during the extended hours of operation while minimizing off-site effects.

1.1 Project Overview

As permitted, Jackson Valley Quarry operates until 6 PM at night, which is past sunset during the winter months. As a result, the lighting proposed in this plan already exist under the Conditional Use Permit UP-06; 9-2 with Condition 23 shown below.

> ***Condition 23****: Artificial illumination of any area within the Quarry site shall be of a non-glare nature and shall be shielded to the extent feasible to prevent glare from affecting neighboring parcels of land with a direct line of sight of the Quarry.*

This Plan addresses illumination where night work occurs on the Project. Lighting is required to create a safe working environment at the mining face, material processing plant, material load-out and crew parking areas. This plan is applicable to all segments of the Project (Figure 1).

There may be minimal changes to the existing lighting due to the extended hours. Example lighting used in the project area are shown in Figure 1. Mobile lighting is primarily used in the mining areas but may occasionally be used in other areas to supplement existing lighting for safety purposes. Artificial illumination in any area within the Site shall be of a non-glare nature and shall be shielded to the extent feasible to prevent glare from affecting neighboring parcels of land within a direct line of sight of the quarry.

SECTION 2 METHODS

2.1 Night Lighting Requirements

As needed, night work will be performed in accordance with the following guidelines:

- Permanent, unshielded uplighting will be prohibited.
- Exterior light fixtures will be hooded, with lights directed downward or toward the area to be illuminated so that backscatter to the nighttime sky is minimized.
- Luminescence or light sources will be shielded to prevent light trespass outside of the Project boundary.
- Lighting will be the minimum necessary brightness consistent with ensuring worker safety.
- Lights will be adjusted to illuminate only the areas necessary for night work tasks in specific work locations.

Portable lights with reflector housings that can be directionally shielded will be used for illumination. Low-mast lighting systems will be used as much as possible. The reflectors will be directed downward and toward the specific work area as appropriate to minimize stray light spillover.

FIGURES

Mining Area

Mining Area

Processing & Load-Out Area

Mining Area

Entrance

Old Valley Rd

88

Figure 2: Portable Light Towers with Light Hoods

Figure 3: Stationary MH & LED Flood Lighting Used in Processing and Load-Out Area

Figure 4: Stationary LED Lighting U g and Load-Out Area.

Figure 5: Effectiveness of Cutoff Angles

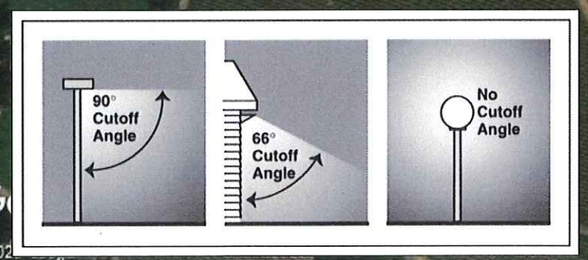


FIGURE 1: Project Overview Map

GEORGE REED INC. GENERAL ENGINEERING CONTRACTORS SINCE 1944

Jackson Valley Quarry
Lighting Plan
Prepared By: SRW
Date: December 06, 2020

February 10, 2021

BASIC RESOURCES, INC.
Contact: Tom Ferrell
140 Empire Avenue
Modesto, California 95354

SUBJECT: Biological Resources Report for the Extension of Operating Hours at the Jackson Valley Quarry Located within Assessor Parcel Numbers (APNs) 005-230-016 and 005-230-007 in Amador County, California

Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological resource report for the extension of operating hours at the Jackson Valley Quarry (project site or site) located near the City of Ione, Amador County, California. A biological resources survey was conducted by biologists Travis J. McGill and Jacob H. Lloyd Davies on November 24, 2020 to document baseline conditions and assess the potential for the extension of operation hours to impact nocturnal wildlife species known to occur within the vicinity of the project site. Special attention was given to the suitability of the project site and immediately surrounding areas to support nocturnal wildlife species and special-status identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project; and includes avoidance and minimization measures to prevent potential impacts to such species.

Project Location

The project site is generally located south and east of State Route 88, west of the community of Buena Vista, north of the community of Camanche Village, southwest of the City of Ione, Amador County, California. The site is depicted on the Ione quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 11 of Township 5 North, Range 9 East. Specifically, the site is bound to the north by State Route 88 and to the south by Jackson Valley Road within APNs 005-230-007 and 005-230-016 at 3421 Jackson Valley Road. Refer to Exhibits 1 and 2 in Attachment A.

Project Description

In order to support regional customer demands, George Reed, Inc. (GRI) has submitted a request to modify the approved hours of operation to allow for 24-hour operational/reclamation activities. Other than the extension of operating hours, GRI seeks no change to any element of the approved operations or Permit. The Project would not modify the disturbance area, current productions levels, materials to be mined, or mining methods, and the overall production and processing activities would be consistent with existing conditions.

Important to this analysis, the site currently conducts operational/reclamation activities from 6:00 a.m. to 6:00 p.m. which does involve activities during "nighttime" hours. As a result, area and task lighting is currently in-

place at the Site for safety purposes and to operate during periods of low visibility. However, in order to facilitate extended nighttime activities, it is anticipated that additional lighting will be necessary in select operational areas, and noise and vibration from construction equipment will occur in extended hours.

Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted to document existing conditions and assess the potential for special-status biological resources and nocturnal wildlife to occur within the project site.

Literature Review

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site that could be effected by extending operation hours. Previously recorded occurrences of special-status wildlife species and their proximity to the project site was determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site was reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1993-2018);
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provides a baseline from which to inventory the biological resources potentially occurring within the project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

Habitat Assessment/Field Investigation

Following the literature review, biologists Travis J. McGill and Jacob H. Lloyd Davies inventoried and evaluated the condition of the habitat within the project site on November 24, 2020. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site and immediate adjacent areas. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community and/or land cover type in acres.

Wildlife

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names in this report (first reference only).

Existing Site Conditions

The proposed project site is located in an area that primarily supports agricultural land uses and rural residential homes. The site is bordered by State Route 88 on its northern boundary with undeveloped, vacant land to the immediate north and a mining quarry approximately 1 mile to the north; the site is bordered by undeveloped, vacant land, and rural residential homes beyond; and the site is bordered by agricultural lands to the south and west. The site consists of the existing Jackson Valley Quarry that is actively being mined, and the immediate surrounding undeveloped areas within the previously approved mining footprint.

On-site elevation ranges from approximately 231 to 420 feet above mean sea level and the site generally slopes from east to west. The main area of on-site topographical relief coincides with the active mining operations within the western portion of the site and areas removed from mining activities support a series of rolling hills.

The undisturbed areas on the western and northern boundaries of the project site consists of three (3) vegetation communities: oak woodland savannah, non-native grassland, and riparian. The site also supports one (1) land cover type that would be classified as disturbed. Refer to Attachment B, *Site Photographs*, for representative site photographs.

Oak woodland savannah occurs throughout the eastern portion of the site and along the northern boundary. This community is dominated by coast live oak (*Quercus agrifolia*), canyon oak (*Quercus chrysolepsis*), and blue oak (*Quercus douglasii*), with an understory primarily composed of annual non-native grasses such as red brome (*Bromus madritensis* ssp. *rubens*), wild oat (*Avenua fatua*), and soft chess (*Bromus hordeaceus*).

The southwest and northwest corners of the site support water detention basins and a riparian vegetation community. Notable plant species observed in this community include cottonwood (*Populus fremontii*), cattail (*Typha latifolia*), and rushes (*Juncus* spp.). It should be noted that the on-site ponds are actively used for water storage and acquisition for use in on-site mining activities and are routinely impacted by associated disturbances.

The non-native grassland community occurs intermixed with the oak woodland savannah where large trees tend to be absent. Additional plant species observed within the grassland plant community during the field investigation include wedgeleaf ceanothus (*Ceanothus cuneatus*), chamise (*Adenostoma fasciculatum*), gray pine (*Pinus sabiniana*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus*), cryptantha (*Cryptantha* sp.), and narrow leafed owl's clover (*Castilleja attenuata*).

Disturbed areas include active and remnant mining areas, dirt roads, and adjacent areas, and are largely devoid of vegetation except for weedy/ruderal species adapted to significant disturbance.

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides lists of species detected during the field investigation and provides insight into which species are nocturnal and may be impacted by project implementation. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

Birds

The undisturbed areas on the eastern, northern and southern portions of the project site provide suitable foraging and nesting habitat for a variety of bird species that occur in the region. Bird species detected during the field investigation include northern flicker (*Colaptes auratus*), acorn woodpecker (*Melanerpes formicivorous*), northern mockingbird (*Mimus polyglottos*), western bluebird (*Sialia mexicana*), lesser goldfinch (*Spinus psaltria*), California scrub-jay (*Aphelocoma californica*), phainopepla (*Phainopepla nitens*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), California quail (*Callipepla californica*), and black phoebe (*Sayornis nigricans*). In addition, signs of owl foraging activity (i.e. pellets) were observed during the field investigation, and the area surrounding the project site supports suitable nesting habitat for local owl species.

Of the aforementioned bird species, only owls are nocturnal and may be impacted by project implementation. Due to on-site and surrounding habitats, regional topography, and known habitat requirements and ranges of native owl species, only great-horned owl (*Bubo virginianus*) and barn owl (*Tyto alba*) are expected to utilize the undeveloped portions of the project site for foraging activities. No large raptor nests were observed within the project footprint during the field investigation. With implementation of avoidance and minimization measures described below, impacts to the aforementioned species will be less than significant.

Mammals

The undisturbed areas on the eastern, northern and southern portions project site provide suitable foraging and cover habitat for a variety of mammalian species that occur in the region. Mammalian species detected during the field investigation included coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), gopher (*Thomomys* sp.), and striped skunk (*Mephitis mephitis*). While no bat species or potential roosting opportunities were observed during the field investigation, the project site does support suitable foraging habitat for bats. Further, suitable roosting habitat can be found in the general area surrounding the site, indicating that bat species have the potential to occur.

All of the aforementioned species, except mule deer, are typically nocturnal and have the potential to be impacted by project implementation. With implementation of avoidance and minimization measures described below, impacts to the aforementioned species will be less than significant.

Reptiles

The project site provides suitable foraging and cover habitat for a limited variety of reptile species adapted to a high degree of anthropogenic disturbance. No reptile species observed during the field investigation. Common reptilian species that could potentially occur on-site include California kingsnake (*Lampropeltis californiae*), Pacific gopher snake (*Pituophis catenifer catenifer*), northern Pacific rattlesnake (*Crotalus oreganus oreganus*), forest alligator lizard (*Elgaria multicarinata multicarinata*), and northwestern fence lizard (*Sceloporus occidentalis occidentalis*).

Of the aforementioned species, California kingsnake, Pacific gopher snake, and northern Pacific rattlesnake are could be affected by night activities. With implementation of avoidance and minimization measures described below, impacts to the aforementioned species will be less than significant.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

No documented wildlife movement areas occur within the boundary of the project site. The nearest wildlife movement area occurs within Jackson Creek, approximately 600 feet south of the project, beyond Jackson Valley Road and existing agricultural development. These and other surrounding land uses have isolated the project site from Jackson Creek and surrounding habitats, and there are no riparian corridors, creeks, or useful patches of steppingstone habitat within or connecting the project site to any identified wildlife corridors or linkages. The site is further constrained to the east but by existing agricultural development, ranching activities, and paved roads. As a result, extending operating hours is not expected to disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

Special-Status Wildlife Species

The CNDDB Rarefind 5 was queried for reported locations of special-status wildlife species in the Ione USGS 7.5-minute quadrangles. Only one quadrangle was queried due to surrounding land uses and regional topography, and limited scope of work. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status wildlife species.

The literature search identified eight (8) special-status plant species, seven (7) special-status wildlife species, and one (1) special-status plant community as being documented within the Ione 7.5-minute

quadrangle. Special-status wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site is presented in Attachment C*: Potentially Occurring Special-Status Biological Resources*.

Special-Status Plant

According to the CNDDB and CNPS, eight (8) special-status plant species have been recorded in the Ione quadrangle (refer to Attachment C). No special-status plant species were observed within the boundaries of the project site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site does not have potential to support any special-status plants known to occur in the vicinity of the site and all special-status plant species are presumed absent.

Special-Status Wildlife

According to the CNDDB, seven (7) special-status wildlife species have been reported in the Ione quadrangle (refer to Attachment C). No special-status wildlife species were observed on-site during the field investigation. Onsite and adjacent disturbances have reduced potential foraging and nesting/denning opportunities for most wildlife species. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a low potential to support Tricolored blackbird (*Agelaius tricolor*), California tiger salamander (*Ambystoma californiense*), and western pond turtle (*Emys marmorata*). All remaining special-status wildlife species were presumed to be absent from the project site.

Based on the results of the updated field investigation, and conclusions presented in the April 2013 Final Environmental Impact Report, the extension of operating hours is not expected to have a significant impact to special-status wildlife species.

Special-Status Plant Communities

One (1) special-status plant community has been recorded within the Ione quadrangle: Ione Chaparral. This plant community does not occur onsite.

Critical Habitats

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a Clean Water Act Permit from the United States Army Corps of Engineers). If a there is a federal nexus,

then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The nearest designated Critical Habitat is located approximately 2.7 miles southeast for California tiger salamander (*Ambystoma californiense*).

Avoidance and Minimization Measures

The avoidance and minimization measures provided in the Light Pollution Prevention Plan, existing conditions of approval, and recommended mitigation measures listed in the Environmental Noise and Vibration Assessment are intended to address potential indirect effects to nocturnal wildlife species associated with extending operating hours.

Lighting

Nighttime lighting associated with extended hours for the project have the potential to disrupt the behaviors of local nocturnal wildlife species. The proposed project is not anticipated to significantly increase lighting and glare. All light sources will be designed with internal baffles to direct the lighting towards the ground and the disturbed areas and have a zero-side angle cut off to the horizon to prevent glare from affecting neighboring parcels. The extension of operating hours is not expected to result in lighting that extends beyond the quarry footprint. In addition, vehicle headlights from parking areas and drive aisles will not shine into adjacent undeveloped habitat.

Noise

Noise associated with extended hours of operation for the project have the potential to disrupt the behaviors of local nocturnal wildlife species. However, the existing mining pit has created a physical separation or barrier from undeveloped habitats to the north, west, and south. This barrier has created a noise buffer from potential indirect impacts on local wildlife movement adjacent to the project site. The natural buffer created by the existing mining pit significantly lessen any noise exposure to any nocturnal wildlife species.

A project specific Environmental Noise and Vibration Assessment (prepared by Bollard Acoustical Consultants, 2021) analyzed potential noise and vibration impacts related to the extended hours of operation at the Jackson Valley Quarry. Specific noise sources evaluated included aggregate mining, processing, and loadout. This evaluation did not analyze noise or vibration generated by blasting operations, as no changes to current blasting operations are proposed as part of the project.

The evaluation concluded that, with implementation of appropriate noise mitigation measures (e.g.., mining setbacks, processing area source noise control, and limitations on the number of nighttime truck load-out operations) impacts from noise would be reduced to less than significant levels. Further, no adverse vibration impacts were identified for the proposed project, and no vibration mitigation measures were recommended.

Conclusion

There have been no significant changes in the biological setting at the Project site since the 2013 Environmental Impact Report was prepared in support of the Jackson Valley Quarry Use Permit. With implementation of mitigation measures provided in the Light Pollution Prevention Plan, existing Conditions of Approval, and

outlined in the Environmental Noise and Vibration Assessment, indirect impacts to nocturnal wildlife will be less than significant.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D.
Managing Director

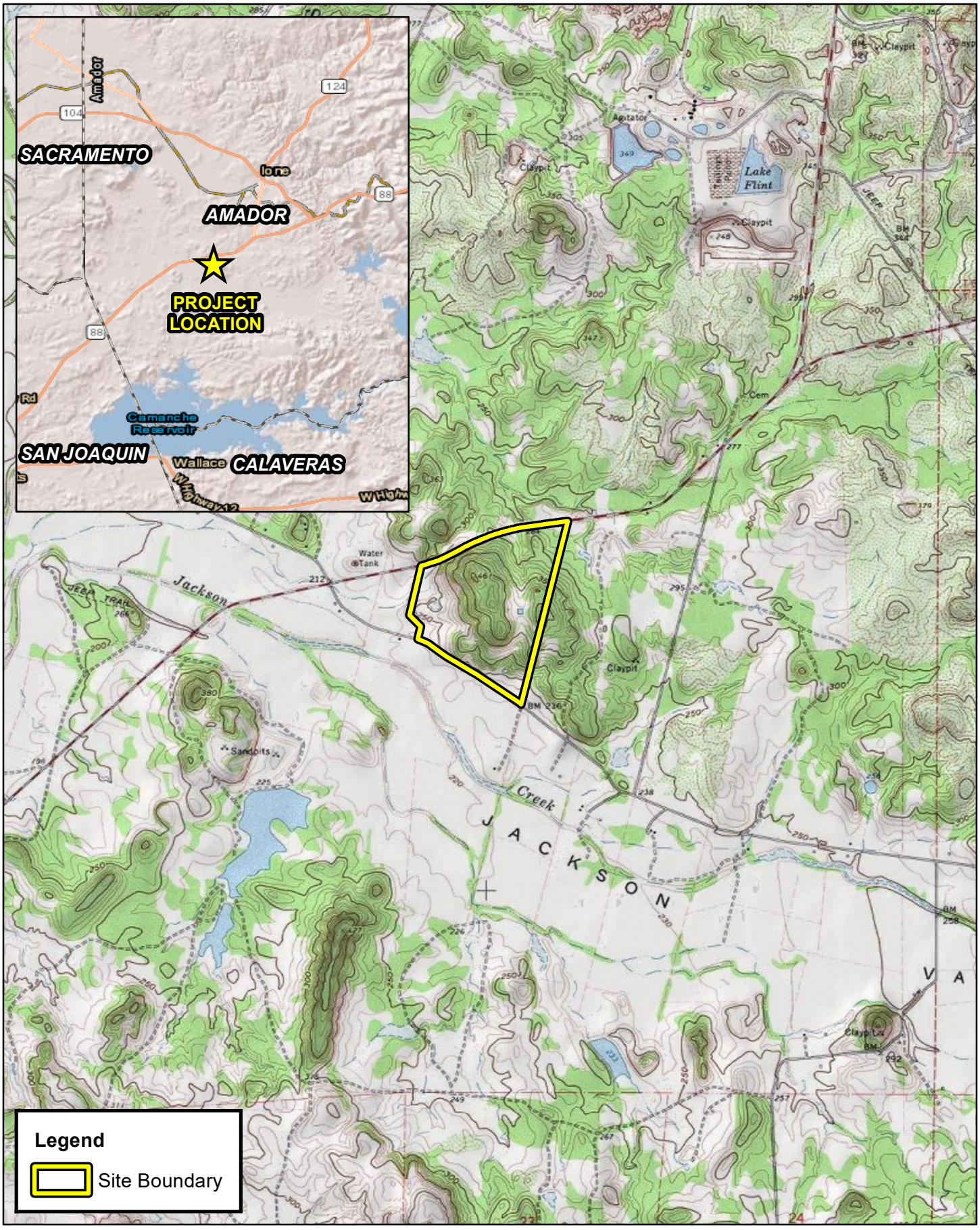
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Site Photographs*
C. *Potentially Occurring Special-Status Wildlife Species*

Attachment A

Project Exhibits



JACKSON VALLEY QUARRY

Regional Vicinity

Exhibit 1

ELMT CONSULTING

0 0.25 0.5 1 Miles

Source: USA Topographic Map, Amador County

ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, Amador County

JACKSON VALLEY QUARRY

Project Site

Exhibit 2

Attachment B

Site Photographs

Photograph 1: From the eastern boundary of the project site looking southwest across the southeast corner.

Photograph 2: From the southeast corner of the project site looking north along the eastern boundary.

Photograph 3: From the middle of the eastern boundary of the project site looking west.

Photograph 4: Looking northwest across the northeast corner of the project site.

Photograph 5: Looking east across the northern portion of the project site.

Photograph 5: Looking west across the northern portion of the project site.

Photograph 7: Looking southwest across the active mining operations in the middle of the project site.

Photograph 8: Looking southeast across the active mining operations in the middle of the project site.

Photograph 9: Oak woodland savannah in the eastern portion of the project site.

Photograph 10: Looking north across the water detention basin in the northeast corner of the project site.

Photograph 11: A recently graded access road in the eastern portion of the project site; adjacent to oak woodland savannah.

Photograph 12: A swathe of non-native grassland in between areas supporting oak woodland savannah.

Attachment C

Potentially Occurring Special-Status Wildlife Resources

Scientific Name	Common Name	Federal Status	State Status	CDFW Listing	CNPS Rare Plant Rank	Potential to Occur
Special-Status Wildlife Species						
Agelaius tricolor	tricolored blackbird	None	THR	SSC	-	Low
Ambystoma californiense	California tiger salamander	THR	THR	WL	-	Low
Ardea herodias	great blue heron	None	None	-	-	Presumed Absent
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	THR	None	-	-	Presumed Absent
Emys marmorata	western pond turtle	None	None	SSC	-	Low
Icteria virens	yellow-breasted chat	None	None	SSC	-	Presumed Absent
Phrynosoma blainvillii	coast horned lizard	None	None	SSC	-	Presumed Absent
Special-Status Plant Species						
Arctostaphylos myrtifolia	Ione manzanita	THR	None	-	1B.2	Presumed Absent
Crocanthemum suffrutescens	Bisbee Peak rush-rose	None	None	-	3.2	Presumed Absent
Eriogonum apricum var. apricum	Ione buckwheat	END	END	-	1B.1	Presumed Absent
Eryngium pinnatisectum	Tuolumne button-celery	None	None	-	1B.2	Presumed Absent
Erythranthe marmorata	Stanislaus monkeyflower	None	None	-	1B.1	Presumed Absent
Horkelia parryi	Parry's horkelia	None	None	-	1B.2	Presumed Absent
Jepsonia heterandra	foothill jepsonia	None	None	-	4.3	Presumed Absent
Navarretia myersii ssp. myersii	pincushion navarretia	None	None	-	1B.1	Presumed Absent
Special-Status Plant Communities						
Ione Chaparral		None	None	Sensitive	-	Absent

U.S. Fish and Wildlife Service (Fed) - Federal

END- Federal Endangered
THR- Federal Threatened
DL- Delisted

California Department of Fish and Wildlife (CA) - California

END- California Endangered
THR- California Threatened
Candidate- Candidate for listing under the California Endangered Species Act
FP- California Fully Protected
SSC- Species of Special Concern
WL- Watch List

California Native Plant Society (CNPS)

California Rare Plant Rank

1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 Plants About Which More Information is Needed – A Review List
4 Plants of Limited Distribution – A Watch List

CNPS Threat Ranks

0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

January 26, 2021

BASIC RESOURCES, INC.
Contact: Tom Ferrell
140 Empire Avenue
Modesto, California 95354

SUBJECT: Jurisdictional Review for the Extension of Operating Hours at the Jackson Valley Quarry Located within Assessor Parcel Numbers (APNs) 005-230-016 and 005-230-007 in Amador County, California

Introduction

This report contains the findings of ELMT Consulting's (ELMT) jurisdictional review for the extension of operating hours at the Jackson Valley Quarry (project site or site) located near the City of Ione, Amador County, California. A field investigation was conducted by biologists Travis J. McGill and Jacob H. Lloyd Davies on November 24, 2020 to document previously mapped jurisdictional waters and verify that the site does not support any other jurisdictional features.

Project Location

The project site is generally located south and east of State Route 88, west of the community of Buena Vista, north of the community of Camanche Village, southwest of the City of Ione, Amador County, California. The site is depicted on the Ione quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 11 of Township 5 North, Range 9 East. Specifically, the site is bound to the north by State Route 88 and to the south by Jackson Valley Road within APNs 005-230-007 and 005-230-016 at 3421 Jackson Valley Road. Refer to Exhibits 1 and 2 in Attachment A.

Project Description

In order to support regional customer demands, George Reed, Inc. (GRI) has submitted a request to modify the approved hours of operation to allow for 24-hour operational/reclamation activities. Other than the extension of operating hours, GRI seeks no change to any element of the approved operations or Permit. The Project would not modify the disturbance area, current productions levels, materials to be mined, or mining methods, and the overall production and processing activities would be consistent with existing conditions.

Methodology

Literature Review

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that

are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Field Investigation

Following the literature review, biologists Travis J. McGill and Jacob H. Lloyd Davies conducted a field investigation to verify the results of formal delineation of wetlands and other waters of the U.S. completed by ESA (2009) and revised in 2010.

Existing Site Conditions

The proposed project site is located in an area that primarily supports agricultural land uses and rural residential homes. The site is bordered by State Route 88 on its northern boundary with undeveloped, vacant land to the immediate north and a mining quarry approximately 1 mile to the north; the site is bordered by undeveloped, vacant land, and rural residential homes beyond; and the site is bordered by agricultural lands to the south and west. The site consists of the existing Jackson Valley Quarry that is actively being mined, and the immediate surrounding undeveloped areas within the previously approved mining footprint.

On-site elevation ranges from approximately 231 to 420 feet above mean sea level and the site generally slopes from east to west. The main area of on-site topographical relief coincides with the active mining operations within the western portion of the site and areas removed from mining activities support a series of rolling hills.

Jurisdictional Areas

Based on the information provided in the in the Environmental Impact and subsequent regulatory approvals issued for the project, a total of 0.39 acre of jurisdictional features were mapped within the project site. To mitigate for impacts to these onsite jurisdictional features, George Reed, Inc. purchased 1.17 acres of floodplain mosaic wetland (seasonal wetland) credits out of the Cosumnes Floodplain Mitigation Bank. The mitigation credits were purchased on July 30, 2018 to satisfy the conditions of the regulatory approvals (refer to Attachment C).

The regulatory approvals issued for the project are currently valid and remain in effect for the project. The USACE Clean Water Act (CWA) Section 404 Nationwide Permit and the RWQCB CWA Section 401 Water Quality Certification are valid until March 18, 2022 (refer to attachment B). The CDFW Section 1602 Streambed Alteration Agreement is valid until July 27, 2022.

Site conditions remain the same, and no new jurisdictional features, beyond those previously mapped and permitted, were observed onsite during the November 24, 2020 field survey.

Conclusion

Site conditions remain the same, and no new jurisdictional features, beyond those previously mapped and permitted, were observed onsite during the November 24, 2020 field survey. Accordingly, there have been no significant changes in the biological setting at the project site, and the project is not anticipated to result in new impacts to jurisdictional waters.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D.
Managing Director

Travis J. McGill
Director

A. *Delineation of Wetlands and other Waters of the U.S. (ESA)*
B. *Regulatory Approvals*
C. *Agreement for Sale of Mitigation Credits*

Attachment A

Delineation of Wetlands and Waters of the U.S. (ESA)

**See 2013 EIR for Delineation of Wetlands and Waters of the U.S.*

Attachment B

Regulatory Approvals

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

June 12, 2017

Regulatory Division (SPK-2011-00164)

Mr. Jeff Welch
George Reed, Inc.
140 Empire Avenue
Modesto, California 95354

Dear Mr. Welch

We are responding to your March 25, 2015, pre-construction notification for a Department of the Army (DA) Nationwide permit (NWP) for the Jackson Valley Quarry Expansion project. The approximately 93-acre site is located in Section 23, Township 5 North, Range 9 East, Mount Diablo Meridian, Latitude 38.3072°, Longitude -120.9570°, Amador County, California.

Based on the information you provided to this office, the proposed project involves the discharge of fill material into 0.39 acre of waters of the U.S. for the expansion of the existing Jackson Valley Quarry, subject to Section 404 of the Clean Water Act. The specific activities that require DA authorization are the excavation of an open mining pit bounded by 1.2:1 slopes in the center of the proposed project area. Expansion work would include blasting the rock and crushing it into a manageable size for transport. Existing trees and vegetation would be removed by dozers, scrapers, and backhoes. Topsoil and overburden would be removed using earth moving equipment. The anticipated maximum depth of the mining pit would be 350 ft. below ground surface. A 100 ft. undisturbed buffer would be established to the north, east, and south of the pit. These activities would result in the permanent effects to and loss of 0.01 acre of palustrine wetland and 0.38 acre of ephemeral stream and pond. The proposed activities would be conducted in accordance with the *Project Impacts* plans dated July 21, 2015.

We have determined that activities in waters of the U.S. associated with the project are authorized by NWP Number 44 Mining Activities.

You must comply with all terms and conditions of the NWP and applicable regional conditions. Information about the NWP terms and conditions and Sacramento District regional conditions for California, excluding the Lake Tahoe Basin are available on our website at www.spk.usace.army.mil/Missions/Regulatory/Permitting/NationwidePermits.aspx. In addition, your work must comply with the following special condition:

1. To compensate for the loss of 0.01 acre of palustrine wetland and 0.38 acre of ephemeral stream and pond, you shall purchase 0.39 credits of non-tidal wetlands habitat at the Cosumnes Floodplain mitigation bank. Evidence of this purchase shall be provided to the Corps prior to initiation of construction activities within waters of the U.S.

Within 30 days after completion of the authorized work, you must sign the enclosed Compliance Certification and return it to this office with the information required by Sacramento District Regional Condition C(9) for California.

This verification is valid until March 18, 2022, when the existing NWPs are scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date the NWP is modified, reissued, or revoked, you will have 12 months from the date of the modification, reissuance or revocation to complete the activity under the present terms and conditions. Failure to comply with the general and regional conditions of this NWP, or the project-specific special conditions of this authorization, may result in the suspension or revocation of your authorization.

We would appreciate your feedback on this permit action including your interaction with our staff and processes. For more information about our program or to complete our Regulatory Program national customer service survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Please refer to identification number SPK-2011-00164 in any correspondence concerning this project. If you have any questions, please contact Mr. Ely Lane at our California South Section Office, 1325 J Street, Room 1350, Sacramento, California 95814, by email at Ely.T.Lane@usace.army.mil, or telephone at (916) 557-6886.

Sincerely,

Kathleen A. Dadey Ph.D.
Chief, California South Section
Regulatory Division

Enclosures

cc: (w/o encls)

Ms. Elizabeth Lee, California Regional Water Quality Control Board, Central Valley Region, Elizabeth.Lee@waterboards.ca.gov
Mr. Ray Weiss, Environmental Manager, rayw@quincyeng.com

12 September 2016

Jeff Welch
George Reed, Inc.
140 Empire Avenue
Modesto, CA 95354

CERTIFIED MAIL
91 7199 9991 7035 8364 2352

CLEAN WATER ACT SECTION 401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION; GEORGE REED, INC., JACKSON VALLEY QUARRY EXPANSION PROJECT (WDID#5B03CR00073), AMADOR COUNTY

This Order responds to the 19 March 2015 application submitted by George Reed, Inc. (Applicant) for the Water Quality Certification of the Jackson Valley Quarry Expansion Project (Project), permanently impacting 0.39 acre/2,002 linear feet of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Nationwide Permit #44 (SPK-2011-00164) under Section 401 of the Clean Water Act, and a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act and State Water Board Order 2003-0017-DWQ.

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

1. **This Water Quality Certification (Certification) is not valid until coverage under Section 404 of the Clean Water Act is obtained. If the Project, including the area of impact (as described) is modified through this process, this Certification will not be valid until amended by the Central Valley Water Board.**

2. This Order serves as a Water Quality Certification (Certification) action that is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code and Section 3867 of the California Code of Regulations.

3. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to Section 3855(b) of the California Code of Regulations, and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

4. The validity of any non-denial Certification action shall be conditioned upon total payment of the full fee required under Section 3860(c) of the California Code of Regulations.

5. This Certification is no longer valid if the project (as described) is modified, or coverage under Section 404 of the Clean Water Act has expired.

6. All reports, notices, or other documents required by this Certification or requested by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) shall be signed by a person described below or by a duly authorized representative of that person.

    (a) For a corporation: by a responsible corporate officer such as: 1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; 2) any other person who performs similar policy or decision-making functions for the corporation; or 3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
    (b) For a partnership or sole proprietorship: by a general partner or the proprietor.
    (c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

7. Any person signing a document under Standard Condition number 5 shall make the following certification:

    "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

TECHNICAL CERTIFICATION CONDITIONS:

In addition to the above standard conditions, the Applicant shall satisfy the following:

1. The Applicant shall notify the Central Valley Water Board in writing seven (7) days in advance of the start of any work within waters of the United States and waters of the State.

2. Except for activities permitted by the United States Army Corps of Engineers under Section 404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.

3. The Applicant shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site

personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed project shall be adequately informed and trained regarding the conditions of this Certification.

4. The Applicant shall perform surface water sampling[1]:
   a) when performing any in-water work;
   b) in the event that project activities result in any materials reaching surface waters; or
   c) when any activities result in the creation of a visible plume in surface waters.

   The sampling requirements in Table 1 shall be conducted upstream out of the influence of the project, within ambient conditions in lake habitat, and 300 feet downstream of the work area. The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff.

Table 1: Monitoring Requirements

Parameter	Unit	Type of Sample	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab(1)	Every 4 hours during in-water work	(2, 4)
Settleable Material	mL/L	Grab(1)	Every 4 hours during in-water work	(2)
Visible construction related pollutants (3)	Observations	Visual Inspections	Continuous throughout the construction period	—

(1) Grab samples shall not be collected at the same time each day to get a complete representation of variations in the receiving water.
(2) Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff.
(3) Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.
(4) A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

Surface water sampling shall occur at mid-depth. A surface water monitoring report shall be submitted within two weeks of initiation of in-water construction, and every two weeks thereafter. In reporting the sampling data, the Applicant shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the project complies with Certification requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria below.

[1] Sampling is not required in wetlands, where the entire wetland is being permanently filled; provided there is no outflow connecting the wetland to surface waters.

If no sampling is required, the Applicant shall submit a written statement stating, "No sampling was required" within two weeks of initiation of in-water construction, and every two weeks thereafter.

5. The Central Valley Water Board adopted a *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised April 2016 (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Turbidity and settleable matter limits are based on water quality objectives contained in the Basin Plan and are part of this Certification as follows:

   a) Activities shall not cause turbidity increases in surface water to exceed:
      i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTUs;
      ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
      iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
      iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and
      v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

      Except that these limits will be eased during in-water working periods to allow a turbidity increase of 15 NTUs over background turbidity. In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior approval of the Central Valley Water Board staff.

   b) Activities shall not cause settleable matter to exceed 0.1 mL/L in surface waters as measured in surface waters within and 300 feet downstream of the project.

6. The Applicant shall notify the Central Valley Water Board immediately if the above criteria for turbidity, settleable matter, or other water quality objectives are exceeded.

7. In-water work shall occur during periods of no flow and no precipitation.

8. Activities shall not cause visible oil, grease, or foam in the receiving water.

9. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Applicant must perform frequent inspections of construction

equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.

10. The Applicant shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the project. The Plan must detail the project elements, construction equipment types and location, access and staging and construction sequence.

11. Silt fencing, straw wattles, or other effective management practices must be used along the construction zone to minimize soil or sediment along the embankments from migrating into the waters of the United States through the entire duration of the project.

12. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the project area.

13. All areas disturbed by project activities shall be protected from washout and erosion.

14. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.

15. All materials resulting from the project shall be removed from the site and disposed of properly.

16. This Certification does not allow permanent water diversion of flow from the receiving water. This Certification is invalid if any water is permanently diverted as a part of the project.

17. If water is present, the area must be dewatered prior to the start of work.

18. If temporary surface water diversions and/or dewatering are anticipated, the Applicant shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) must be developed prior to initiation of any water diversions. The Plan(s) shall include the proposed method and duration of diversion activities. The Plan(s) must be consistent with this Certification and must be made available to the Central Valley Water Board staff upon request.

19. When work in a flowing stream is unavoidable and any temporary dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the state below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate Technical Certification Condition 5 of this Certification.

20. If any temporary dam or other artificial obstruction is constructed, the temporary dam or other artificial obstruction shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.

21. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances to surface water and/or soil is prohibited. In the event of a prohibited discharge, the Applicant shall notify the Central Valley Water Board Contact within 24-hours of the discharge.

22. The Applicant shall apply for a name change or amendment to this Certification should any of the following occur: a) a change in the ownership of all or any portion of the Project; b) any change in the project description; c) any change involving discharge amounts, temporary impacts, or permanent impacts; or d) amendments, modifications, revisions, extensions, or changes to the United States Army Corps of Engineers' Nationwide Permit #44 or the California Department of Fish and Wildlife Streambed Alteration Agreement.

23. The Applicant shall comply with all California Department of Fish and Wildlife requirements, including those requirements described in Streambed Alteration Agreement No. 1600-2015-0053-R2.

24. The Applicant shall work with Central Valley Water Board Non-15 Staff to determine if coverage under Waste Discharge Requirements (WDRs) is required.

25. The Conditions in this Certification are based on the information in the attached "Project Information Sheet" and the application package. If the actual project, as described in the attached Project Information Sheet and application package, is modified or changed, this Certification is no longer valid until amended by the Central Valley Water Board.

26. The Applicant shall implement each of the mitigation measures specified in the certified Environmental Impact Report for the project, as they pertain to biology, hydrology and water quality impacts as required by Section 21081.6 of the Public Resource Code and Section 15097 of the California Code of Regulations.

27. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. The applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.

    (a) If the Applicant or a duly authorized representative of the project fails or refuses to furnish technical or monitoring reports, as required under this Certification, or falsifies any information provided in the monitoring reports, the applicant is subject to civil liability, for each day of violation, and/or criminal liability.

    (b) In response to a suspected violation of any condition of this Certification, the Central Valley Water Board may require the Applicant to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including cost of the reports, shall be in

reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

(c) The Applicant shall allow the staff of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the project premises for inspection, including taking photographs and securing copies of project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the project.

28. To mitigate for the loss of 0.25 acre of lake, 0.13 acre of stream channel, and 0.01 acre of wetland, the Applicant shall purchase a minimum of 0.398 wetland floodplain mosaic creation mitigation credits from the Cosumnes Floodplain Mitigation Bank, or as required by the United States Army Corps of Engineers for the impacted watershed prior to commencing construction. The Applicant shall provide evidence of all off-site compensatory mitigation to the Central Valley Water Board. Evidence of on-site compensatory mitigation shall be provided with the Notice of Completion. At a minimum, compensatory mitigation must achieve a ratio of 1:1 for permanent impacts.

NOTIFICATIONS AND REPORTS:

29. The Applicant shall provide a Notice of Completion (NOC) no later than 30 days after the project completion. The NOC shall demonstrate that the project has been carried out in accordance with the project description in the Certification and in any approved amendments. The NOC shall include a map of the project location(s), including final boundaries of any on-site restoration area(s), if appropriate, and representative pre and post construction photographs. Each photograph shall include a descriptive title, date taken, photographic site, and photographic orientation.

30. The Applicant shall submit all notifications, submissions, materials, data, correspondence, and reports in a searchable Portable Document Format (PDF). Documents less than 50 MB must be emailed to: centralvalleysacramento@waterboards.ca.gov. In the subject line of the email, include the Central Valley Water Board Contact, Project name, and WDID number as shown in the subject line above. Documents that are 50 MB or larger must be transferred to a disk and mailed to the Central Valley Water Board Contact.

CENTRAL VALLEY WATER BOARD CONTACT:

Stephanie Tadlock, Environmental Scientist
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-8114
Stephanie.Tadlock@waterboards.ca.gov
(916) 464-4644

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

Amador County is the Lead Agency responsible for compliance with the California Environmental Quality Act for the Jackson Valley Quarry Expansion Project pursuant to Section 21000 et seq. of the Public Resources Code. Amador County certified the Environmental Impact Report on 30 July 2013. Amador County filed a Notice of Determination with the State Clearinghouse on 5 August 2013 (SCH No. 2007042002).

The Central Valley Water Board is a responsible agency for the project. The Central Valley Water Board has determined that the Environmental Impact Report is in accordance with the requirements of the California Environmental Quality Act.

The Central Valley Water Board has reviewed and evaluated the impacts to water quality identified in the Environmental Impact Report. The proposed mitigation measures discussed in the Environmental Impact Report were adopted to avoid and minimize project impacts to State waters and are required by this Certification.

With regard to the remaining impacts identified in the Environmental Impact Report, the corresponding mitigation measures proposed are within the responsibility and jurisdiction of other public agencies.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the George Reed, Inc., Jackson Valley Quarry Expansion Project (WDID#5B03CR00073) will comply with the applicable provisions of Section 301 ("Effluent Limitations"), Section 302 ("Water Quality Related Effluent Limitations"), Section 303 ("Water Quality Standards and Implementation Plans"), Section 306 ("National Standards of Performance"), and Section 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. Through this Order, this discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification (General WDRs)".

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on: a) the discharge being limited and all proposed mitigation being completed in compliance with the conditions of this Certification, George Reed, Inc.'s application package, and the attached Project Information Sheet; and b) compliance with all applicable requirements of the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised April 2016.

Any person aggrieved by this action may petition the State Water Resources Control Board to review the action in accordance with California Water Code Section 13320 and California Code of Regulations, Title 23, Section 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this action, except that if the thirtieth day following the date of this action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Original Signed By Adam Laputz for:

Pamela C. Creedon
Executive Officer

Enclosure: Project Information Sheet

Attachments: Figure 1 – Project Location Map
Figure 2 – Site Map

cc: Distribution List, page 14

PROJECT INFORMATION SHEET

Application Date: 19 March 2015

Applicant: Jeff Welch
George Reed, Inc.
140 Empire Avenue
Modesto, CA 95354

Applicant Representative: Phil Wade
Area West Environmental, Inc.
7006 Anice Street
Orangevale, CA 95662

Project Name: Jackson Valley Quarry Expansion Project

Application Number: WDID#5B03CR00073

Date on Public Notice: 27 March 2015

Date Application Deemed Complete: 11 September 2015

Type of Project: Oil, Gas, & Mineral Extraction – Hard Rock Mines

Approved Months of Project Implementation: 6 September 2016 through 5 September 2021, or as otherwise directed by the California Department of Fish and Wildlife

Project Location: Section 11, Township 5 North, Range 9 East, MDB&M.
Latitude: 38°18'27.05" N and Longitude: 120°57'40.39" W

County: Amador County

Receiving Water(s) (hydrologic unit): Unnamed tributary to Jackson and Sutter Creeks, unnamed wetlands, and unnamed lake, San Joaquin Hydrologic Basin, North Valley Floor Hydrologic Unit #531.11, Herald HSA

Water Body Type: Wetland, Streambed, Lake

Designated Beneficial Uses: The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised April 2016 (Basin Plan) has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include, but are not limited to: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND); Hydropower Generation (POW); Groundwater Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Biological Habitats of Special Significance (BIOL); Rare, Threatened, or

Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD). A comprehensive and specific list of the beneficial uses applicable for the project area can be found at http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml.

303(d) List of Water Quality Limited Segments: An unnamed tributary to Jackson and Sutter Creeks, an unnamed wetland, and unnamed lake are the receiving waters for the Jackson Valley Quarry Expansion Project. The unnamed tributary, unnamed wetland, and unnamed lake are not listed on the 303(d) list. The most recent list of approved water quality limited segments is found at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml

Project Description: The Jackson Valley Quarry Expansion Project (Project) is located at Highway 88 near the junction of Jackson Valley Road and Highway 88 in the city of Ione. The Project consists of expanding the existing aggregate mining operations at the Jackson Valley Quarry to an adjacent 85.7-acre parcel. Only 71 of the 85.7 acres will be used for aggregate mining operations.

The expansion includes mining the onsite resources by blasting the rock and crushing it into a manageable size for transport to the existing production facility. Expansion will remove the high ground in the center of the project site, leaving an open 71-acre pit with 1.2:1 sloped sides and a 100-foot undisturbed setback around the perimeter to filter and contain sediments disturbed during mining operations and prevent impacts to off-site surface water from construction and operational activities. The un-mined portions of the parcel will be left in an undisturbed, natural state. The expansion of the quarry site will eliminate 0.25 acre of lake, 0.13 acre/2,002 linear feet of stream channel, and 0.01 acre of wetland, which are all waters of the United States.

The Applicant has enrolled under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order NPDES No. CAS000001 (WDID#5S0I012875). The Applicant will work with the Central Valley Water Board Non-15 staff to address waste discharges to land.

This Certification does not authorize any discharges from mine operation activities.

No dewatering will occur within the Project area. No wet concrete will be placed into waters of the United States. The Project will permanently impact 0.39 acre/2,002 linear feet of waters of the United States.

Preliminary Water Quality Concerns: Construction activities may impact surface waters with increased turbidity and settleable matter.

Proposed Mitigation to Address Concerns: The Applicant will implement Best Management Practices to control sedimentation and erosion. The Applicant will conduct turbidity and settleable matter testing during in-water work, stopping work if Basin Plan criteria are exceeded or observations indicate an exceedance of a water quality objective.

All temporary affected areas will be restored to pre-construction contours and conditions upon completion of construction activities to provide 1:1 mitigation for temporary impacts.

Excavation/Fill Area: Approximately 220,220 cubic yards of aggregate rock and native soil will be excavated from 0.39 acre of waters of the United States.

No fill material will be placed into waters of the United States.

Dredge Volume: None

California Integrated Water Quality System Impact Data: The Project will permanently impact 0.01 acre of wetland habitat (waters of the United States), 0.13 acre/2,002 linear feet of stream bed habitat (waters of the United States), 0.25 acre of lake habitat (waters of the United States) from excavation activities.

Table 2: Impacts from Excavation Activities

Aquatic Resource Type	Temporary			Permanent					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	Cubic-yards	Linear-feet	Acres	Cubic-yards	Linear-feet	Acres	Cubic-yards	Linear-feet
Lake	--	--	--	0.25	--	--	--	--	--
Stream Channel	--	--	--	0.13	--	2,002	--	--	--
Wetland	--	--	--	0.01	--	--	--	--	--
TOTAL	**--**	**--**	**--**	**0.39**	**--**	**2,002**	**--**	**--**	**--**

United States Army Corps of Engineers File Number: SPK-2011-00164

United States Army Corps of Engineers Permit Type: Nationwide Permit #44

California Department of Fish and Wildlife Streambed Alteration Agreement:
1600-2015-0053-R2

Possible Listed Species: White tailed kite, Loggerhead shrike, and Hoover's calycadenia.

Status of CEQA Compliance: Amador County certified an Environmental Impact Report on 30 July 2013. Amador County filed a Notice of Determination with the State Clearinghouse on 5 August 2013 (SCH No. 2007042002).

The Central Valley Water Board will file a Notice of Determination with the State Clearinghouse as a responsible agency within five (5) days of the date of this Certification.

Compensatory Mitigation: To mitigate for the loss of 0.25 acre of lake, 0.13 acre of stream channel, and 0.01 acre of wetland, the Applicant shall purchase a minimum of 0.398 wetland floodplain mosaic creation mitigation credits from the Cosumnes Floodplain Mitigation Bank, or as required by the United States Army Corps of Engineers.

Table 3: Compensatory Mitigation for Permanent Physical Loss of Area

Aquatic Resource Type	Comp Mitigation Type			Units		Established	Re-established	Rehabilitated	Enhanced	Preserved	Unknown
	In-Lieu	Mit. Bank	Permittee Responsible	AC (Acres)	LF (Linear Feet)						
Wetland	--	X	--	0.39	--	X	--	--	--	--	--

Application Fee Provided: Total fees of $27,027.00 have been submitted to the Central Valley Water Board as required by Section 3833(b)(3)(A) and Section 2200(a)(3) of the California Code of Regulations.

DISTRIBUTION LIST

Melissa France (SPK-2011-00164)
United States Army Corps of Engineers
Sacramento District Headquarters
1325 J Street, Room 1350
Sacramento, CA 95814-2922

Bob Hosea (Electronic Copy Only)
1600-2015-0053-R2
Department of Fish and Wildlife
Bob.Hosea@wildlife.ca.gov

Bill Jennings
CA Sportfishing Protection Alliance
3536 Rainier Avenue
Stockton, CA 95204

Bill Orme (Electronic Copy Only)
State Water Resources Control Board
Stateboard401@waterboards.ca.gov

Joe Morgan (Electronic Copy Only)
United States Environmental Protection Agency
Morgan.Joseph@epa.gov

Phil Wade (Electronic Copy Only)
Area West Environmental, Inc.
pwade@areawest.net

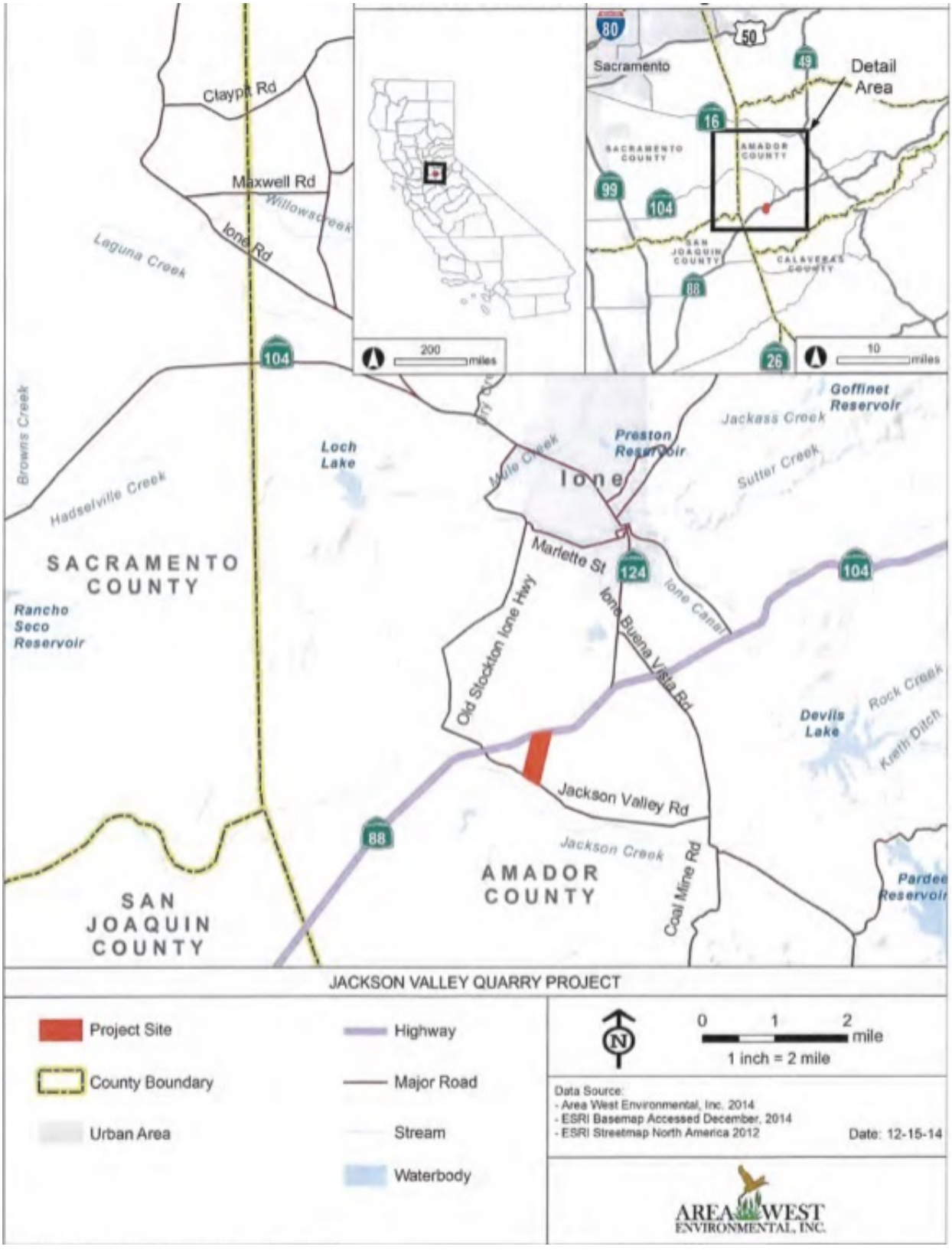


Figure 1 – Project Location Map

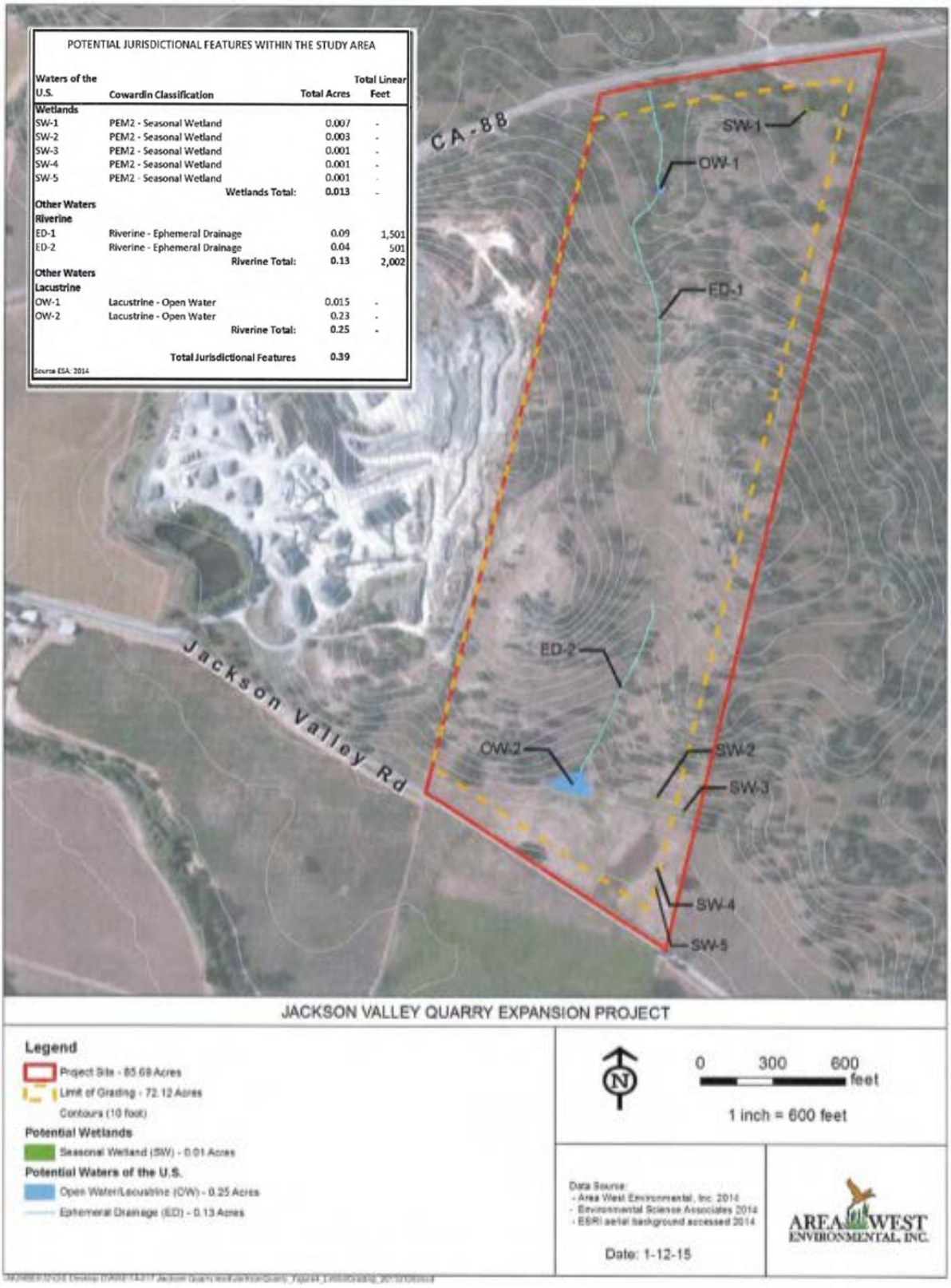


Figure 2 – Site Map

California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

JUL 27 2017

Date

Ed Berlier
George Reed, Inc.
140 Empire Avenue
Modesto, CA 95352

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2015-0053–R2
Jackson Valley Quarry expansion

Dear Mr. Berlier:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Jackson Valley Quarry expansion (Project). Before the California Department of Fish and Wildlife (Department) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, the Department, acting as a responsible agency, filed a Notice of Determination (NOD) within five working days of signing the Agreement. The NOD was based on information contained in the Final Environmental Impact Report and Reclamation Plan prepared by the lead agency.

Under CEQA, the filing of an NOD triggers a 30-day statute of limitations period during which an interested party may challenge the filing agency's approval of the Project. You may begin the Project before the statute of limitations expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Bob Hosea, Environmental Scientist at (916) 358-1124 or bob.hosea@wildlife.ca.gov.

Sincerely,

Tina Bartlett
Regional Manager

ec: Jeff Welch, Reed Inc.; jeff.welch@reed.net
Bob Hosea, CDFW; bob.hosea@wildlife.ca.gov

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NORTH CENTRAL REGION
1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CA 95670

STREAMBED ALTERATION AGREEMENT

NOTIFICATION NO. 1600-2015-0053-R2
Unnamed seasonal streams, small ponding basins and seasonal wetlands

ED BERLIER
JACKSON VALLEY QUARRY EXPANSION

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (Department) and George Reed, Inc. as represented by Ed Berlier (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified the Department on 19 March, 2015 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, the Department has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project is located at unnamed tributaries to Dry Creek, in the County of Amador, State of California; Latitude 38°18' 27.05" N, Longitude 120° 57' 47.39" W (Exhibit A).

PROJECT DESCRIPTION

The project is limited to permanent removal of two seasonal streams and associated vegetation (0.13 acres), two small open water ponds receiving runoff from the streams (0.25 acres) and a seasonal wetland located in the Northeast portion of the project site (0.01 acres). These activities are part of the expansion of an open-pit hard rock quarry.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: migratory neo-tropical songbirds, aquatic and semi-aquatic wildlife, including California tiger salamander, and native oak species (Exhibit B).

The adverse effects the project could have on the fish or wildlife resources identified above include: permanent loss of 0.39 acres of seasonal wetlands, open water, seasonal drainages and associated riparian and emergent wetland vegetation habitat through expansion of the quarry operations, potential risk of mechanical crushing of amphibians if present on site.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to Department personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

1.3 Notification of Conflicting Provisions. Permittee shall notify the Department if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, the Department shall contact Permittee to resolve any conflict.

1.4 Project Site Entry. Permittee agrees that Department personnel may enter the project site at any time to verify compliance with the Agreement.

1.5 California Endangered Species Act. This Agreement does not authorize the Permittee to take any species listed under California Endangered Species Act (CESA) as a result of project activities.

1.6 Take of Nesting Birds. Sections 3503, 3503.5 and 3513 of the FGC prohibit the take of all birds and their active nests, including raptors and other migratory non-game birds (as listed under the federal Migratory Bird Treaty Act).

1.7 Notification to the California Natural Diversity Database. If any special status species are observed in project surveys, Permittee or designated representative shall submit Natural Diversity Data Base (NDDB) forms to the NDDB for all

preconstruction survey data within five (5) working days of the sightings, and provide to the Department's Regional office three (3) copies of the NDDB forms and survey maps.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

2.1 Work Period. The time period for completing the work within the project site shall be restricted to periods of low stream flow and dry weather. Construction activities shall be timed with awareness of precipitation forecasts and likely increases in stream flow. Construction activities within the project area shall cease until all reasonable erosion control measures, inside and outside of the project area, have been implemented prior to all storm events to prevent offsite movement of disturbed soils, and turbid stormwater runoff.

2.2 Work Period Modification. If Permittee needs more time to complete the project activity, the work may be permitted outside of the work period *and extended on a day-to-day basis* by the Department representative who reviewed the project, or if unavailable, through contact with the Regional office. Permittee shall submit a written request for a work period variance to the Department. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should consider the effects of increase in lake elevation, and rain delays. Work period variances are issued at the discretion of the Department. The Department will review the written request to work outside of the established work period. The Department reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. The Department will have ten (10) calendar days to review the proposed work period variance.

2.3 Stream Diversions / Dewatering. If work in the flowing portion of the stream is unavoidable, the entire stream flow shall be diverted and contained on site. Stream flow shall be diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses. Any temporary dam or other artificial obstruction constructed shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation and in such a manner as to prevent offsite movement of turbid stormwater runoff.

2.4 Bird Nests. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by the FGC. No vegetation or other substrate that contain active nests of birds shall be disturbed until all eggs have hatched and young birds have fledged without prior consultation and approval of a

Department representative. If construction is scheduled during the breeding season then a breeding bird survey will be conducted no more than three (3) days prior to the start of construction by a Department approved biologist. All active bird nests will be marked following the survey to avoid destruction by equipment. If nesting raptors are identified within the area, a non-disturbance buffer will be established around the nest site. The size of the non-disturbance buffer and any other restrictions will be determined through consultation with the Department following completion of the survey. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with the Department and USFWS, shall be required before project work can be reinitiated. If, during the course of carrying out the project, an active nest is identified or becomes established, that was not previously identified during a breeding bird survey, a buffer or installation of appropriate barriers shall be established between the construction activities and the active nest so that nesting activities are not interrupted. The buffer shall be delineated and shall be in effect throughout construction or until the nest is no longer active. The buffer(s) shall be determined based upon the life history of the individual species, including their sensitivity to noise, vibration, ambient levels of human activity and general disturbance, the current site conditions (screening vegetation, terrain, etc.) and the various project-related activities necessary to implement the project.

2.5 Vegetation Removal. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Except for the trees specifically identified for removal in the notification, no native trees with a trunk diameter at breast height (DBH) in excess of four (4) inches shall be removed or damaged without prior consultation and approval of a Department representative. Where native trees or woody riparian vegetation split into several trunks close to ground level, the DBH shall be measured for each trunk and calculated as one tree. Using hand tools (clippers, chain saw, etc.), trees may be trimmed to the extent necessary to gain access to the work sites. All cleared material/vegetation shall be removed out of the project area.

2.6 Sediment Control. Precautions to minimize turbidity/siltation shall be taken into account during project planning and implementation. This may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures shall be taken. The sediment barrier(s) shall be maintained in good operating condition throughout the construction period and the following rainy season. Maintenance includes, but is not limited to, removal of accumulated silt and/or replacement of damaged silt fencing, coir logs, coir rolls, and/or straw bale dikes.

The use of non-wildlife friendly monofilament or plastic netting based erosion control blankets is prohibited. If any BMPs are to be left in place at the end of the project, they must to be wildlife friendly. If project activities occur in or

near a watercourse, wildlife friendly products shall be used at all times even if they are temporary. To minimize wildlife entanglement and plastic debris pollution, choose temporary erosion and sediment control products that either do not contain netting, or that contain netting manufactured from 100% biodegradable **non-plastic materials** such as jute, sisal, or coir fiber. Netting used in wildlife friendly products should have a loose-weave wildlife-safe design with movable joints between the horizontal and vertical twines, allowing the twines to move independently and thus reducing the potential for wildlife entanglement. Degradable, photodegradable, UV-degradable, oxo-degradable, or oxo-biodegradable plastic netting (including polypropylene, nylon, polyethylene, and polyester) are not acceptable alternatives. The Permittee is responsible for the removal of non-biodegradable silt barriers (such as plastic silt fencing) or the netting surrounding coir logs and/or rolls, after the disturbed areas have been stabilized with erosion control vegetation (usually after the first growing season). Upon Department determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective Department approved control devices are installed or abatement procedures are initiated.

2.7 Pollution Control. Utilize Best Management Practices (BMPs) to prevent spills and leaks into water bodies. If maintenance or refueling of vehicles or equipment must occur on-site, use a designated area and/or a secondary containment, located away from drainage courses to prevent the runoff of storm water and the runoff of spills. Ensure that all vehicles and equipment are in good working order (no leaks). Place drip pans or absorbent materials under vehicles and equipment when not in use. Ensure that all construction areas are covered by a site-wide spill response plan and have proper spill clean-up materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances. Any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the State. Any of these materials, placed within or where they may enter a stream or lake by the Applicant or any party working under contract or with the permission of the Permittee, shall be removed immediately. The Department shall be notified immediately by the Permittee of any spills and shall be consulted regarding clean-up procedures.

2.8 Stranded Aquatic Life. The Permittee shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets and by hand. Captured aquatic life shall be released immediately in the closest body of water adjacent to the work site. This condition does not allow for the take or disturbance of any State or federally listed species, or State listed species of special concern.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

3.1 Loss of Habitat. Permittee shall mitigate for the permanent loss of jurisdictional waters at a rate of 3:1 for 0.39 acres of seasonal streams, seasonal wetlands and small open water seasonal ponds (1.17 acres). Permittee may purchase mitigation credits at a local, State approved mitigation bank or purchase a conservation easement, prepare and implement a rehabilitation or enhancement plan for habitat on private property in the vicinity of the project site.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

4.1 Permittee shall submit to the Department, proof of purchase of mitigation credits or proof of establishment of conservation easement appropriate to habitat removed, prior to start of construction activities.

4.2 The Permittee shall notify the Department within two (2) working days of beginning work within the unnamed seasonal tributaries to Dry Creek. Notification shall be submitted as instructed in Contact Information section below. Email notification is preferred.

4.3 Upon completion of the project activities described in this agreement, the work area within unnamed seasonal tributaries to Dry Creek shall be digitally photographed. Photographs shall be submitted to the Department within fourteen (14) days of completion. Photographs and project commencement notification shall be submitted as instructed in Contact Information section below. Email submittal is preferred.

CONTACT INFORMATION

Any communication that Permittee or the Department submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or the Department specifies by written notice to the other.

To Permittee:

Ed Berlier
George Reed, Inc.
140 Empire Avenue
Modesto, CA 95352
Phone: 209-523-0734
ed.berlier@georgereed.com

To Contact:
Jeff Welch
Reed Center
928 12th Ave, Street #700
Modesto, CA 95352

To The Department:

Department of Fish and Wildlife
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
Attn: Lake and Streambed Alteration Program – Streambed Desk
Notification #1600-2015-0053-R2
Phone: 916-358-2885
FAX: (916) 358-2912
r2lsa@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute the Department's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

The Department may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before the Department suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before the Department suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused the Department to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes the Department from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects the Department's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

The Department may amend the Agreement at any time during its term if the Department determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by the Department and Permittee. To request an amendment, Permittee shall submit to the Department a completed "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in the Department's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter the Department approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to the Department a completed "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in the Department's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to the Department a completed "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in the Department's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). The Department shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of the Department's signature, which shall be: 1) after Permittee's signature; 2) after the Department complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at https://www.wildlife.ca.gov/Conservation/CEQA/Fees.

TERM

This Agreement shall expire five (5) years from the Department's date of signature, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

A. Exhibit A: Google Earth site map
B. Exhibit B: CDFW BIOS map

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify the Department in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

FOR GEORGE REED, INC.

Ed Berlier — Date: 6/26/17

FOR DEPARTMENT OF FISH AND WILDLIFE

Tina Bartlett
Regional Manager For — Date: 7/27/17

Prepared by: Bob Hosea
Environmental Scientist

Exhibit A: Google Earth site map

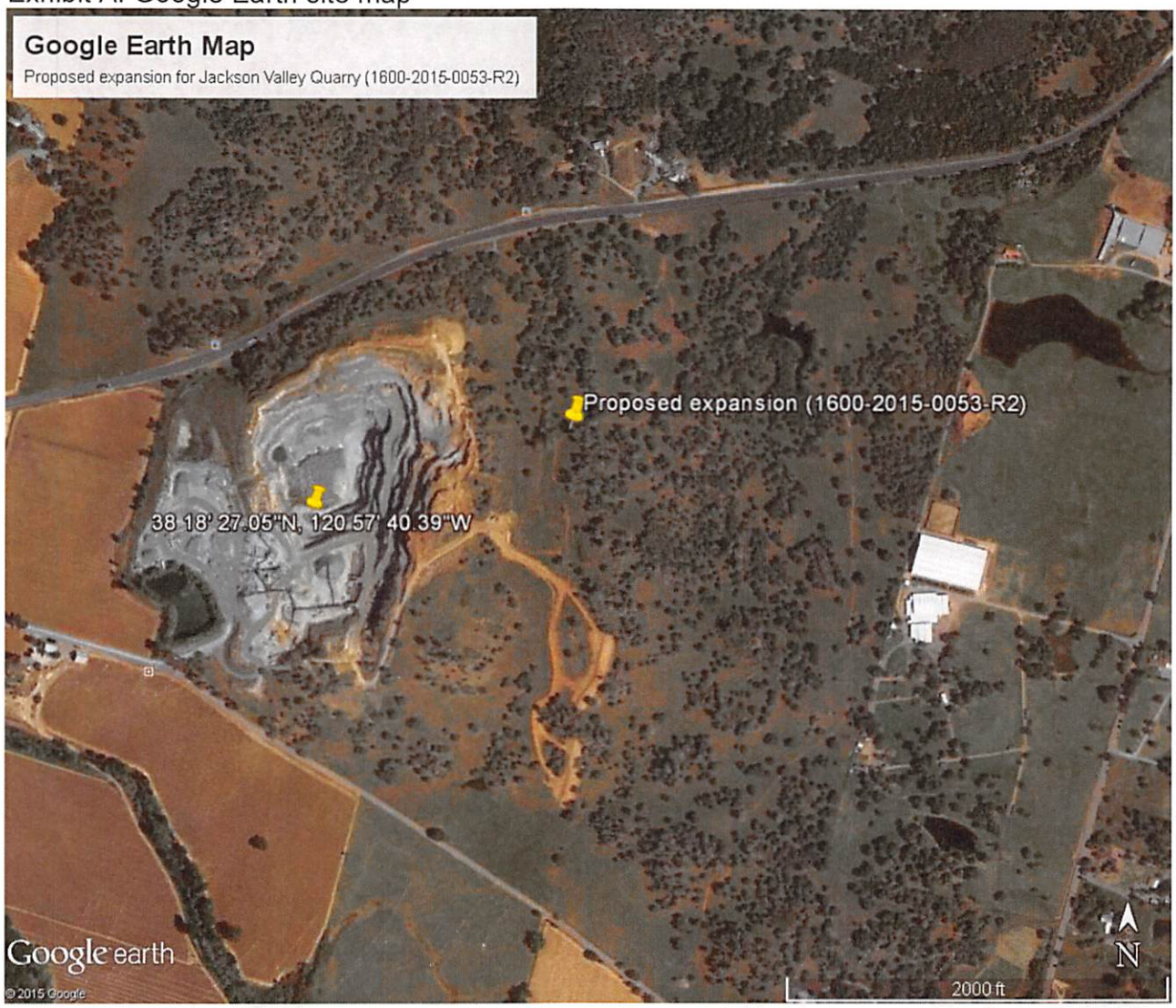
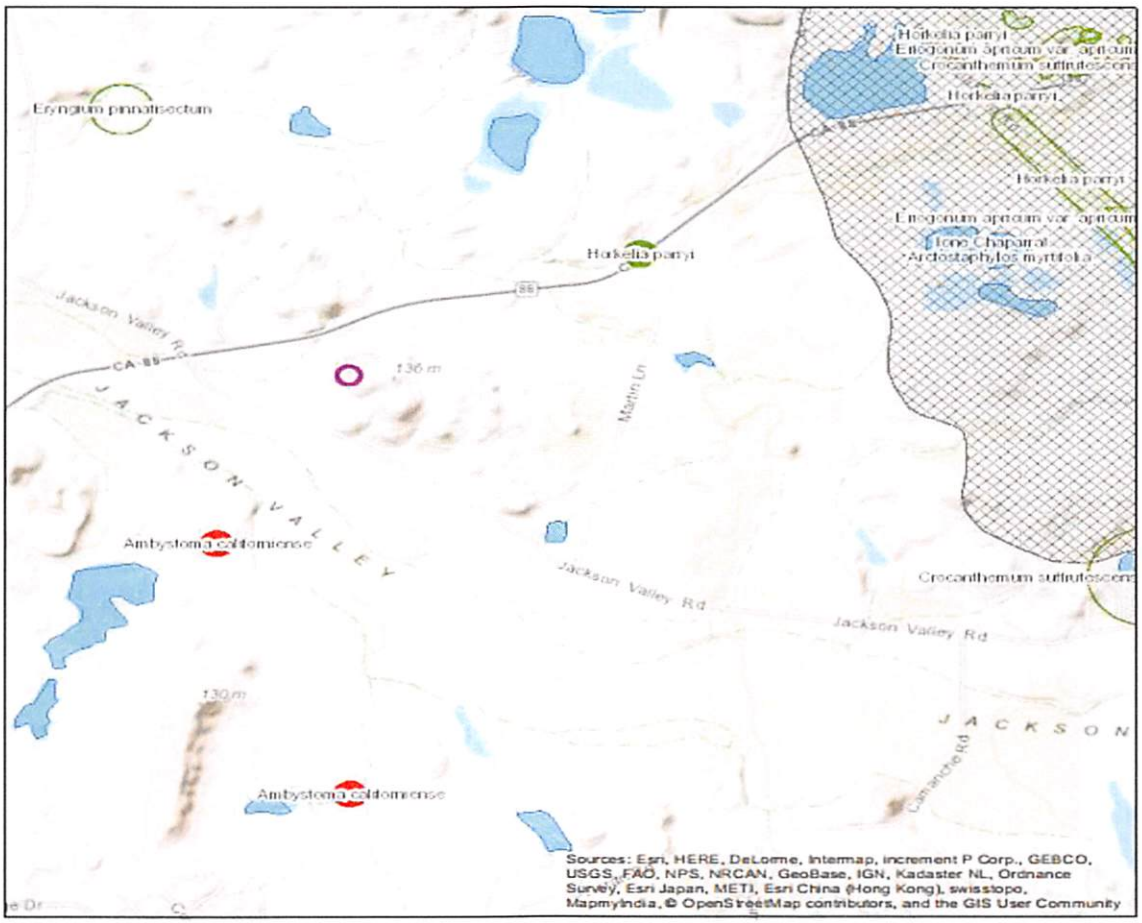


Exhibit B: CDFW BIOS map

Map of Project Area



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1:36,112

0 0.3 0.6 1.2 mi
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July 13, 2015

Author: bhoese
Printed from http://bios.dfg.ca.gov

Attachment C

Agreement for Sale of Mitigation Credits

Cosumnes Floodplain Mitigation Bank

AGREEMENT FOR SALE OF MITIGATION CREDITS

CDFW Notification No: 1600-2015-0053-R2

WDID #: 5B03CR00073

USACE Permit No: SPK-2011-00164

This Agreement is entered into this 30TH day of July, 2018 by and between WESTERVELT ECOLOGICAL SERVICES, LLC (Bank Owner) and GEORGE REED, INC (Project Applicant), jointly referred to as the "Parties," as follows:

RECITALS

A. The Bank Owner has developed the Cosumnes Floodplain Mitigation Bank (Bank) located in Sacramento County, California; and

B. The Bank was approved by the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) (jointly referred to as "Agencies") on **September 30, 2009**, and is currently in good standing with these agencies; and

C. The Bank has received approval from the Agencies to offer riparian wetlands and seasonal wetlands under the Clean Water Act and riparian forest, Scrub Shrub, and Shaded Riverine Aquatic (SRA) credits through the *Cosumnes Floodplain Mitigation Bank Enabling Instrument* (Bank Agreement); and

D. Project Applicant is seeking to implement the Jackson Valley Quarry Expansion Project described on Exhibit "A" attached hereto (Project), which would unavoidably and adversely impact 0.39 acres of jurisdictional waters (seasonal streams, seasonal wetlands, and small open water seasonal ponds), and seeks to compensate for the loss of said habitat by purchasing Credits from the Bank; and

E. Project Applicant has been authorized by the U.S. Army Corps of Engineers, (Permit No: SPK-2011-00164), The Central Valley Regional Water Quality Control Board (WDID #: 5B03CR00073), and the California Department of Fish and Wildlife (Streambed Alteration Agreement No: 1600-2015-0053-R2) to purchase from the Bank **1.17 floodplain mosaic wetland (seasonal wetland) credits** upon confirmation by the Bank Owner of credit availability/adequate balance of credits remaining for sale; and

F. Project Applicant desires to purchase from Bank and Bank desires to sell to Project Applicant **1.17 floodplain mosaic wetland (seasonal wetland) credits**;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Bank hereby sells to Project Applicant and Project Applicant hereby purchases from Bank **1.17 floodplain mosaic wetland (seasonal wetland) credits** for the purchase price of **$163,800.00**. The Bank will then deliver to Project Applicant an executed Bill of Sale in the manner and form as attached hereto and marked Exhibit "B". The purchase price for said credits shall be paid by cashier's check or, at the option of Bank, wire transfer of funds according to written instructions by Bank to Project Applicant.

2. The sale and transfer herein is not intended as a sale or transfer to Project Applicant of a security, license, lease, easement, or possessory or non-possessory interest in real property, nor the granting of any interest of the foregoing.

3. Project Applicant shall have no obligation whatsoever by reason of the purchase of the Credits, to support, pay for, monitor, report on, sustain, continue in perpetuity, or otherwise be obligated or liable for the success or continued expense or maintenance in perpetuity of the credits sold, or the Bank. Pursuant to the Bank Agreement and any amendments thereto, Bank shall monitor and make reports to the appropriate agency or agencies on the status of any Credits sold to Project Applicant. Bank shall be fully and completely responsible for satisfying any and all conditions placed on the Bank or the Credits by all state or federal jurisdictional agencies.

4. The Credits sold and transferred to Project Applicant shall be non-transferable and non-assignable, and shall not be used as compensatory mitigation for any other Project or purpose, except as set forth herein.

5. Project Applicant hereby commits to purchase the Credits and in association therewith shall tender payment for the Credits no later than 30 days from the date of this Agreement.

6. Upon purchase of the credits specified in paragraph E above, the Bank shall submit to the parties listed in the Notices section of the Bank Agreement / Bank Enabling Instrument, copies of the: a) Agreement for Sale of Credits; b) Bill of Sale; c) Payment Receipt; and d) an updated ledger. The updated inventory / ledger must detail: i) Project Applicant; ii) Project Name; iii) Status (sale complete/sale not complete); iv) Credit Sale Date; v) Service File Number; vi) U.S. Army Corps of Engineers File Number (if applicable); vii) Total Number of Credits Authorized to Sell; viii) Total Number of Credits Sold to Date (inclusive); and ix) Balance of all Credits Available. The inventory / ledger should include all sales data from bank opening/establishment to the present.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

BANK:

WESTERVELT ECOLOGICAL SERVICES, LLC
Cosumnes Floodplain Mitigation Bank Owner

By: _____ Date: 8/15/2018

PROJECT APPLICANT:

GEORGE REED, INC

By: _____ Date: 7/30/2018
ED BERLIER VP-GM

Exhibit "A"

DESCRIPTION OF PROJECT
TO BE
MITIGATED

CDFW Notification No: 1600-2015-0053-R2
WDID #: 5B03CR00073
USACE Permit No: SPK-2011-00164

The proposed project involves the discharge of fill material into 0.39 acre of waters of the U.S. for the expansion of the existing Jackson Valley Quarry. The project will include the excavation of an open mining pit. Expansion work would include blasting the rock and crushing it into a manageable size for transport.

*****

Exhibit "B"

BILL OF SALE

In consideration of **$163,800.00**, receipt of which is hereby acknowledged, *Westervelt Ecological Services, LLC (Bank Owner)* does hereby bargain, sell and transfer to the *(Project Applicant) George Reed, Inc.* **1.17 floodplain mosaic wetland (seasonal wetland) credits** in the *Cosumnes Floodplain Mitigation Bank* in Sacramento County, California, developed, and approved by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, California Department of Fish and Wildlife, and National Marine Fisheries Service.

Westervelt Ecological Services, LLC represents and warrants that it has good title to the credits, has good right to sell the same, and that they are free and clear of all claims, liens, or encumbrances.

Westervelt Ecological Services, LLC covenants and agrees with the buyer to warrant and defend the sale of the credits hereinbefore described against all and every person and persons whomsoever lawfully claiming or to claim the same.

DATED: 8/15/2018

Westervelt Ecological Services, LLC
Cosumnes Floodplain Mitigation Bank Owner

By: _____

Exhibit "C"

Cosumnes Floodplain Mitigation Bank
PAYMENT RECEIPT

PARTICIPANT INFORMATION

Name: George Reed, Inc.

Address: 140 Empire Ave
Modesto, CA 95354

Telephone: Jordan Main

Contact: (916) 825-4997

PROJECT INFORMATION

Project Description: Jackson Valley Quarry Expansion Project

Project File Number: Permit No: SPK-2011-00164
Notification No. 1600-2015-0053-R2
WDID: 5B03CR00073

Species/Habitat Affected: 0.39 acres jurisdictional waters

Credits to be Purchased: 1.17 acres floodplain mosaic wetland (seasonal wetland) credits

Payment Amount: $163,800.00

Project Location: Jackson, CA

County/Address: Amador County

PAYMENT INFORMATION

Payee: Westervelt Ecological Services, LLC

Payer: George Reed, Inc.

Amount: One Hundred Sixty Three Thousand Eight Hundred Dollars

Method of payment: Cash Check No. 514365 Money Order No.

Received by: _____ Date: 8/15/2018
(Signature)

Name: TRAVIS Hemmen Title: Vice President

THE BACK OF THIS DOCUMENT CONTAINS A WATERMARK. HOLD AT ANGLE TO VIEW.

GEORGE REED INC.
GENERAL ENGINEERING CONTRACTORS

P.O. BOX 4760
MODESTO, CA 95352
(209) 523-0734

F&M BANK 08-441 1211

514365

DATE	CHECK NO.	AMOUNT
July 30, 2018	514365	$163,800.00

PAY *** *One hundred sixty-three thousand eight hundred and xx / 100 Dollars****

O THE
RDER
F

WESTERVELT ECOLOGICAL SERVICES LLC
600 N MARKET BLVD SUITE 3
SACRAMENTO CA 95834

GEORGE REED, INC.

VOID AFTER 6 MONTHS • TWO SIGNATURES REQUIRED

⑈514365⑈ ⑆121108844⑆ 02065894O1⑈

[APPLICANT'S DRAFT]

CEQA INITIAL STUDY AND SUBSEQUENT MITIGATED NEGATIVE DECLARATION

AMENDMENT TO USE PERMIT (UP-06; 9-2) TO ALLOW FOR MODIFIED HOURS OF OPERATION

GEORGE REED, INC.

JACKSON VALLEY QUARRY

(CA MINE ID NO. 91-03-0020)

AMADOR COUNTY, CA

August 2023

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Background

George Reed, Inc. ("GRI") owns and operates a fully-permitted aggregate mining site known as the Jackson Valley Quarry ("JVQ" or "Site") located on the south side of Highway 88 approximately ½ mile east of the most westerly junction of Jackson Valley Road and Highway 88 in the Ione area of Amador County ("County"). In 2013, GRI obtained approval of a Use Permit Amendment (UP-06; 9-2) and Reclamation Plan (RP-06-1) for an expansion of the Site from approximately 74 acres to approximately 159 acres, with reclamation to open space and grazing following the completion of mining ("2013 JVQ Expansion Project"). The 2013 JVQ Expansion Project underwent environmental review pursuant to the California Environmental Quality Act ("CEQA"). As Lead Agency, the County prepared and certified an Environmental Impact Report (herein referred to as the "2013 EIR"), adopted Findings of Fact, and adopted a Mitigation Monitoring and Reporting Program[1].

1.2 Environmental Review

In accordance with CEQA, when a Lead Agency considers further discretionary approval on a previously approved project, the Lead Agency is required to consider if the previously certified CEQA document provides an adequate basis for rendering a decision on the proposed discretionary action. When making such a decision, the Lead Agency must consider any changes to the project or its circumstances that have occurred and any new information that has become available since the project's CEQA document was certified.

In accordance with State CEQA Guidelines Sections 15162–15164, prior to approving a further discretionary action, and depending on the situation, the Lead Agency must either: (1) prepare a Subsequent EIR; (2) prepare a Supplemental EIR; (3) prepare a Subsequent Negative Declaration; (4) prepare an Addendum to the EIR or Negative Declaration; or (5) prepare no further documentation. More specifically, State CEQA Guidelines Section 15162(a) states:

> *When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:*
>
> 1) *Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
>
> 2) *Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative*

[1] The 2013 JVQ Expansion Project was approved by the Amador County Planning Commission on June 11, 2013, and was upheld on appeal by the Amador County Board of Supervisors on July 30, 2013.

declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*

    A. *The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*

    B. *Significant effects previously examined will be substantially more severe than shown in the previous EIR;*

    C. *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*

    D. *Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*

As demonstrated in Section 3.0, CEQA Evaluation, none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR review have occurred. This Initial Study / Subsequent MND supports the conclusion that the proposed Project will not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, as discussed below, there is no new information of substantial importance, new mitigation measures, or new alternatives that would substantially reduce significant impacts. As a result, when considered with the 2013 EIR, this Initial Study / Subsequent MND is an appropriate CEQA document for analysis and consideration of the proposed Project.

2.0 PROJECT DESCRIPTION

2.1 Project Title and Location

George Reed, Inc. Jackson Valley Quarry – Amendment to Use Permit (UP-06; 9-2) to Allow for Modified Hours of Operation.

2.2 Lead Agency Name and Address

Lead Agency Name:	County of Amador, Planning Department
Lead Agency Address:	810 Court Street, Jackson, CA 95642
Contact Person:	Chuck Beatty, Director
Phone Number:	(209) 223-6380

2.3 Project Sponsor's Name and Address

Applicant:
Attn: Tom Ferrell
George Reed, Inc.
140 Empire Avenue
Modesto, CA 95354

Agent:
Attn: Jordan Main
Compass Land Group
3140 Peacekeeper Way, Suite 102
McClellan, CA 95652

2.4 Assessor Parcels, Ownership, Zoning, and General Plan Designations

The Project Site's current assessor parcel numbers, acreage, ownership, zoning and General Plan land use designations are as follows:

Current APN	Acreage	Ownership	Zoning	General Plan
005-230-018	159.66 ac.	The Reed Leasing Group, LLC*	Special Use (X)	Mineral Resource Zone (MRZ) and Agricultural General (AG)

**The Reed Leasing Group, LLC is an affiliate company of George Reed, Inc.*

2.5 Description of Project

The JVQ Use Permit (UP-06; 9-2) currently restricts hours of operation to the following:

1. Site preparation activities: 8:00 a.m. – 5:00 p.m., Monday through Friday (COA 44.a)
2. Operational / reclamation activities (other than site preparation): 6:00 a.m. – 6:00 p.m., Monday through Friday (COA 15)
3. Maintenance and repair work: no restriction as long as activities do not exceed 45 dBA at the property line (COA 15)
4. Blasting: 11:30 a.m. – 2:30 p.m., Monday through Friday (COA 16)

George Reed, Inc. ("GRI") proposes to modify Condition of Approval ("COA") #15 of the JVQ Use Permit (UP-06; 9-2) to allow operational / reclamation activities to occur during modified hours of operation: 6:00 a.m. – 10:00 p.m. Monday through Friday, with limitations for activities allowed between the hours of 6:00 p.m. and 10:00 p.m. ("Project"). No change to the approved hours of operation for site preparation activities or blasting are requested. See ***Table 1, Comparison of Existing vs. Proposed Hours of Operation***.

The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. Through modification of COA #15, GRI will be able to better serve regional market demands, optimize electrical power supply management, and come closer to achieving parity with its largest local competitor who has similar (but less restrictive) operating hours to those being requested.

Table 1
Comparison of Existing vs. Proposed Hours of Operation

Activity	Existing Approved	Proposed
Site Preparation	Mon – Fri, 8 am – 5 pm	No change
Operational / Reclamation	Mon – Fri, 6 am – 6 pm	Mon – Fri, 6 am – 10 pm[1]
Maintenance & Repair Work	Anytime	No change
Blasting	Mon – Fri, 11:30 am – 2:30 pm	No change

[1] *Proposed Limitations to Updated Hours*

- *Mining of the outer areas of the quarry will remain limited to the hours of 6:00 am – 6:00 pm, Mon – Fri, until mining has progressed to a depth of at least one bench height (~20 ft.) as delineated in the noise report (Bollard; May 2023).*
- *Use of excavator-mounted hydraulic rock breakers will remain limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.*
- *Load out of rip-rap will be limited to the hours of 6:00 am – 6:00 pm, Mon – Fri.*

2.6 Surrounding Land Uses and Setting

The Project Site consists of an active hard rock quarry mining operation. The Site is bounded by agricultural land use designations on all sides. Surrounding land uses include SR 88 and open space to the north and east, Jackson Valley Road and agricultural lands to the south, and agricultural lands and SR 88 to the west. (Reference 2013 EIR; §3.1.2, Setting)

2.7 Public Agencies Whose Approval is Required

GRI is not aware of any other applicable discretionary approvals required by other public agencies to carry out the Project.

3.0 CEQA EVALUATION

3.1 Environmental Factors Potentially Affected

The proposed Project will not have a significant effect on the environment, as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

3.2 Evaluation of Environmental Impacts

The following checklist is taken from the Environmental Checklist Form presented in Appendix G of the CEQA Guidelines. The checklist is used to describe the impacts of the proposed Project and identify project-specific mitigation measures, as appropriate: For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The Project would not have any impact.

I. AESTHETICS. *Except as provided in Public Resources Code Section 21099, would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to aesthetics has occurred since the 2013 EIR (e.g., nearby receptors, scenic designations).

a-b. The 2013 EIR found that the 2013 JVQ Expansion Project would have a less than significant impact on scenic vistas and resources. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to scenic vistas and scenic resources. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

c. The 2013 EIR found that, despite reclamation, impacts to the existing visual character of the Site would be considered significant and unavoidable, and a mitigation measure was adopted to reduce potential impacts. The Project would continue to comply with the existing mitigation measure relating to aesthetics identified in the 2013 EIR:

> *3.11.2: Implementation of approved reclamation plan. Mine reclamation is required by the Surface Mining and Reclamation Act (SMARA). SMARA requires mines to be reclaimed to a usable condition that is readily adaptable for a productive alternative land use that*

creates no danger to public health or safety. SMARA also requires surface mining operators to obtain approved financial assurance for the reclamation of mined lands, so that the public would not bear the cost of reclaiming abandoned operations. The reclamation process would include revegetation of disturbed areas around the perimeter of the project site

The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to the existing visual character of the Site. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

d. The 2013 EIR found that the 2013 JVQ Expansion Project would have a less than significant impact due to light or glare. Area and task lighting is currently in-place at the Project site for safety purposes and to operate during periods of low visibility. The proposed Project, although consisting of the same equipment types, production levels, and mining footprint, may shift additional production activities to extended hours, requiring additional lighting within select operational areas. A Light Pollution Prevention Plan has been prepared to identify the location of existing and proposed lighting fixtures that will illuminate operational areas during extended hours of operation while minimizing off-site effects. In addition to the approximate ten existing light fixtures associated with the processing plant, it is anticipated that approximately four new lighting fixtures will be needed in the processing and load-out area. Consistent with existing practices, in locations where lighting does not exist or where stationary lighting is not feasible, industry-standard portable light towers will be employed. The locations of the portable light towers will vary as mining progresses throughout the site. The existing Use Permit addresses requirements for site lighting by stipulating that "artificial illumination of any area within Quarry site shall be of a non-glare nature and shall be shielded to extent feasible to prevent glare from affecting neighboring parcels of land with direct line of site of the Quarry…" (COA #23). Consistent with this requirement, existing and proposed lighting fixtures will be equipped with shields / hoods that concentrate illumination downward such that no direct lighting is cast offsite. Given setbacks from nearby public streets and residences, as well as the fact that mining will predominantly occur below grade, site lighting is not anticipated to affect neighboring parcels of land. In addition, the site's rolling topography and perimeter vegetation will also provide natural screening from potential lighting impacts. A ***less than significant impact*** resulting from light or glare will occur.

II. AGRICULTURE AND FORESTRY RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepare the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to agriculture and forestry resources has occurred since the 2013 EIR.

a-e. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to agriculture and forestry resources. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

III. AIR QUALITY. *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to air quality has occurred since the 2013 EIR.

a-d. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to air quality. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to biological resources has occurred since the 2013 EIR.

a-f. The applicant commissioned an updated Biological Assessment (ELMT, 2021) in support of the proposed Project to determine whether extended hours of operation may impact biological resources at the Site. ELMT determined the following:

- No substantial changes to the vegetation communities at the Site have occurred since the 2013 EIR;
- No documented wildlife movement areas occur within the boundary of the Site;
- No special-status wildlife species were observed during the habitat assessment;
- The Site is not located within federally designated Critical Habitat; and
- No new wetlands or potentially jurisdictional features, beyond those previously mapped and permitted, were observed.

ELMT's analysis confirms that there has been no significant change in the biological setting at the Project site since the 2013 EIR, and that the Project's proposed change to approved hours of operation would have **no impact** with respect to riparian habitat and sensitive natural communities, wetlands or jurisdictional waters, wildlife movement, local ordinances, or adopted habitat conservation plans.

ELMT's analysis concludes that potential impacts to nocturnal wildlife species would be **less than significant** with implementation of the proposed Light Pollution Prevention Plan (GRI, 2021), proposed noise mitigation measures contained within the Project's updated noise assessment (Bollard, 2021; rev. 2023), and continued implementation of the biological resources mitigation measures adopted in connection with the 2013 EIR:

> *3.6.1a: As a precautionary measure, a qualified plant biologist shall conduct a preconstruction survey in the spring just prior to surface disturbance of each new area to be mined to ensure that Hoover's calycadenia (Calycadenia hooveri) and any other state or federal special-status plant species would not be affected by the proposed activities. If no sensitive plants are found, then no further action would be needed. If special-status plant species are found, the project proponent shall consult with USFWS and/or CDFW to provide minimization and avoidance measures commensurate with the standards provided in applicable USFWS and/or CDFW protocols for the affected species. Where project disturbance will impact special status plant species habitat and avoidance is impractical, offsite habitat shall be preserved at a 1:1 ratio unless a different ratio is authorized by USFWS and/or CDFW protocol and or site specific circumstances justify a different ratio. The preservation and avoidance measures shall include, at a minimum, appropriate buffer areas clearly marked during mining activities, monitoring by a qualified botanist, and the development and implementation of a replanting plan (collection of success) for any individuals of the species that cannot be avoided.*
>
> *3.6.1b: To avoid and minimize impacts on tree-nesting raptors and other listed/protected (i.e., Migratory Bird Treaty Act) nesting birds the following measures will be implemented;*
>
> - *If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally from October through February).*

- *If grading and tree removal activities are scheduled to occur during the breeding season for tree-nesting raptors and other listed/protected nesting birds (generally from March through September), pre-construction surveys for tree-nesting raptors and other listed/protected nesting birds shall be conducted. The surveys shall be conducted by a qualified biologist in suitable nesting habitat within 1,000 feet of the disturbance area for tree nesting raptors and other nesting birds prior to project activities that will occur between March 15 and September 15 of any given year. If active nests are recorded within these buffers the project proponent shall consult with CDFW to determine and implement appropriate avoidance and mitigation measures. Measures may include, but are not limited to, buffers (typically 500 feet) and monitoring.*

3.6.2: Implement On- and Off-site Replacement of Oak Woodlands Habitat. Where avoidance is not feasible or practicable, the project applicant shall provide a combination of on-site and off-site blue oak tree replacement of the full function and value of the natural community at a per-tree ratio of no less than 1:1. On-site mitigation may not represent more than one-half of the required mitigation consistent with PRC 21083.4 (b) (2) (C). All trees and shrubs planted shall be purchased from a locally adapted genetic stock obtained within 50 miles and 1,000 feet in elevation of the project site. To help ensure habitat establishment and success, planting densities shall not exceed 450 trees for each acre planted. The maintenance and monitoring plan shall include cages for each seedling, identify a weed control schedule, and outline a watering regimen for the plantings. Mitigation shall commence within one year of the removal of trees due to project operations. Replacement plantings would occur as areas are affected by mining operations. The requirements to maintain trees for mitigation purposes terminates seven years after the replacement trees are planted (PRC 21083.4 (b)(2)(C)).

As an alternative to on- or direct offsite mitigation (implemented by the applicant), the project proponent may contribute funds to the Oak Woodlands Conservation Fund, as established under Fish and Game Code §1363(a), for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board.

3.6.3: Compensate for Loss of Potential Jurisdictional Wetland Features and Associated Riparian Habitat. To ensure that there is no net loss of wetland and associated riparian habitat and no significant impact to potential jurisdictional features, the project proponent shall compensate for impacted wetlands and associated riparian habitat at a ratio of no less than 1:1. Compensation shall take the form of wetland preservation or creation in accordance with U.S. Army Corps of Engineers and CDFW mitigation requirements, as required under project permits. Preservation and creation may occur on-site (through a conservation agreement) or off-site (through purchasing credits at a Corps approved mitigation bank), or as otherwise permitted or required by governing agencies.

V. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to cultural resources has occurred since the 2013 EIR.

a-c. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, will have **no impact** to cultural resources. The Project would not increase the area subject to disturbance or the depth of excavation relative to what was analyzed under the 2013 EIR. In addition, the Project would continue to comply with the existing mitigation measures relating to cultural resources identified in the 2013 EIR:

3.9.2: If paleontologic, historic or prehistoric archaeological resources, such as chipped or ground stone, fossil bearing rock, large quantities of shell, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, no further mining should be permitted within 100 feet of the find until the Amador County Technical Advisory Committee is notified, and a qualified archaeologist can assess the significance of the find and prepare an avoidance, evaluation or mitigation plan if appropriate.

3.9.3: In the event of discovery or recognition of any human remains on site anywhere within the project area, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of Amador County has been contacted, per Section 7050.5 of the California Health and Safety Code. If the coroner determines that the human remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Pub. Res. Code Sec. 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

1. *The coroner of the county has been informed and has determined that no investigation of the cause of death is required; and*
2. *if the remains are of Native American origin,*
    a. *The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or*
    b. *The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.*

VI. ENERGY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to energy has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to energy. Instead, by operating during extended hours, GRI will have flexibility to curtail energy consuming operations during periods of peak power demand, resulting in potentially beneficial impacts to energy use. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

VII. GEOLOGY AND SOILS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to geology and soils has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to geology and soils. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. Further, the Project would not increase the area subject to disturbance, slope angles, or the depth of excavation relative to what was analyzed under the 2013 EIR. **No impact** would occur.

In addition, the Project would continue to comply with the existing mitigation measures relating to geology and soils identified in the 2013 EIR:

> *3.7.2: A California registered Geotechnical Engineer shall inspect the quarry slopes on an annual basis during excavation (in addition to following major seismic events) to assess bedrock fracture and joint conditions. If it is proven that annual inspections are not necessary, inspections may be reduced with the Geotechnical Engineer's recommendation and County concurrence. The inspection shall require continued mapping and movement monitoring of the mining slopes to assess slope stability. If a slope condition presents risk to mine safety or the potential for erosion/siltation, repair measures shall be implemented. Engineering recommendations for slope repair or stabilization shall be incorporated into the proposed project.*
>
> *3.9.2: If paleontologic, historic or prehistoric archaeological resources, such as chipped or ground stone, fossil bearing rock, large quantities of shell, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, no further mining should be permitted within 100 feet of the find until the Amador County Technical Advisory Committee is notified, and a qualified archaeologist can assess the significance of the find and prepare an avoidance, evaluation or mitigation plan if appropriate.*

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to greenhouse gas emissions. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to hazards or hazardous materials has occurred since the 2013 EIR.

a-d. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to hazards and hazardous materials. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

In addition, the Project would continue to comply with the existing mitigation measures relating to hazards and hazardous materials identified in the 2013 EIR:

3.10.1: If contaminated soil and/or groundwater are encountered or suspected contamination is encountered during project construction, work shall be halted in the area, and the type and extent of the contamination shall be identified. A qualified professional, in consultation with the overseeing regulatory agency (RWQCB, DTSC, and/or ACEHD) shall then develop an appropriate method to remediate the contamination, and determine the appropriate handling and disposal method of any contaminated soil and/or groundwater. If required, a remediation plan shall be implemented in conjunction with continued project construction.

3.10.2: The project applicant will ensure, through the enforcement of contractual obligations, that all contractors transport, store, and handle construction related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the California Department of Transportation, the Central Valley Regional Water Quality Control Board, ACEHD, the Amador Fire Protection District, the Jackson Valley Fire Protection District, and as outlined in the Spill Prevention Control and Countermeasures Plan (SPCCP) and the HMMP prepared for the project site. The project applicant will also ensure that all contractors immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures as outlined in the SPCCP. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the CVRWQCB-issued NPDES construction activity storm water permits will be taken to ensure that no hazardous materials enter any nearby waterways.

X. HYDROLOGY AND WATER QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☐	☒
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
i) result in substantial erosion or siltation on- or off-site	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to hydrology and water quality has occurred since the 2013 EIR.

a-d. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to hydrology and water quality. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. **No impact** would occur.

In addition, the Project would continue to comply with the existing mitigation measure relating to hydrology and water quality identified in the 2013 EIR:

> *3.10.2: The project applicant will ensure, through the enforcement of contractual obligations, that all contractors transport, store, and handle construction related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the California Department of Transportation, the Central Valley Regional Water Quality Control Board, ACEHD, the Amador Fire Protection District, the Jackson Valley Fire Protection District, and as outlined in the Spill Prevention Control and Countermeasures Plan (SPCCP) and the HMMP prepared for the project site. The project applicant will also ensure that all contractors immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures as outlined in the SPCCP. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the CVRWQCB-issued NPDES construction activity storm water permits will be taken to ensure that no hazardous materials enter any nearby waterways.*

XI. LAND USE AND PLANNING. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to land use and planning has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to land use and planning. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. No element of the proposed Project affects land use/planning considerations; the Project is consistent with the County's relevant land use plans. **No impact** would occur.

XII. MINERAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to land use and planning has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to mineral resources. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use. The Project would not change the maximum annual production level or otherwise impact the availability of mineral resources. **No impact** would occur.

XIII. NOISE. *Would the project result in:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to noise has occurred since the 2013 EIR.

a. The applicant commissioned an updated Environmental Noise and Vibration Assessment (Bollard Acoustical Consultants, 2021; rev. 2023) in support of the proposed Project to determine whether extended hours of operation may result in new or more severe impacts from noise from those analyzed in the 2013 EIR. Bollard conducted a detailed assessment to identify existing noise-sensitive land uses in the immediate project vicinity; quantify existing ambient noise and vibration levels in the immediate project vicinity; use CEQA guidelines and local Amador County noise standards to develop appropriate standards of significance for this project; predict project-related noise and vibration levels at the nearest sensitive receptor areas and to compare those levels against the applicable standards of significance; and where potentially significant project-related noise impacts are identified, to recommend and evaluate mitigation options that will reduce those impacts to a less than significant level.

The noise assessment evaluated 24-hour unmitigated (worst-case) conditions and revealed that, without implementation of mitigation measures, noise generated during nighttime activities could exceed acceptable levels at certain discrete sensitive receptors in the Project vicinity. Following preparation of the noise study, the project description was revised to remove nighttime activities (i.e., after 10:00 p.m.). Notwithstanding, the noise consultant developed noise reduction mitigation measures that could be implemented to reduce the potential for adverse public reaction to extended hours of operation at the quarry.

Mitigation Measure N-1: Processing Plant Source Control

Install acoustic curtains around the processing plant crushers and screen decks (i.e., the loudest components of the processing plant).

Mitigation Measure N-2: Replacement of Backup Warning Devices

Replace traditional, tonal, backup warning devices with advanced, broad-band, backup warning devices on mobile mining equipment.

Mitigation Measure N-3: Limit Hours for Load-Out of Rip-Rap

No load-out of rip-rap between 6:00 p.m. and 10:00 p.m.

Mitigation Measure N-4: Limit Hours for Rock Breaking with Excavator-Mounted Equipment

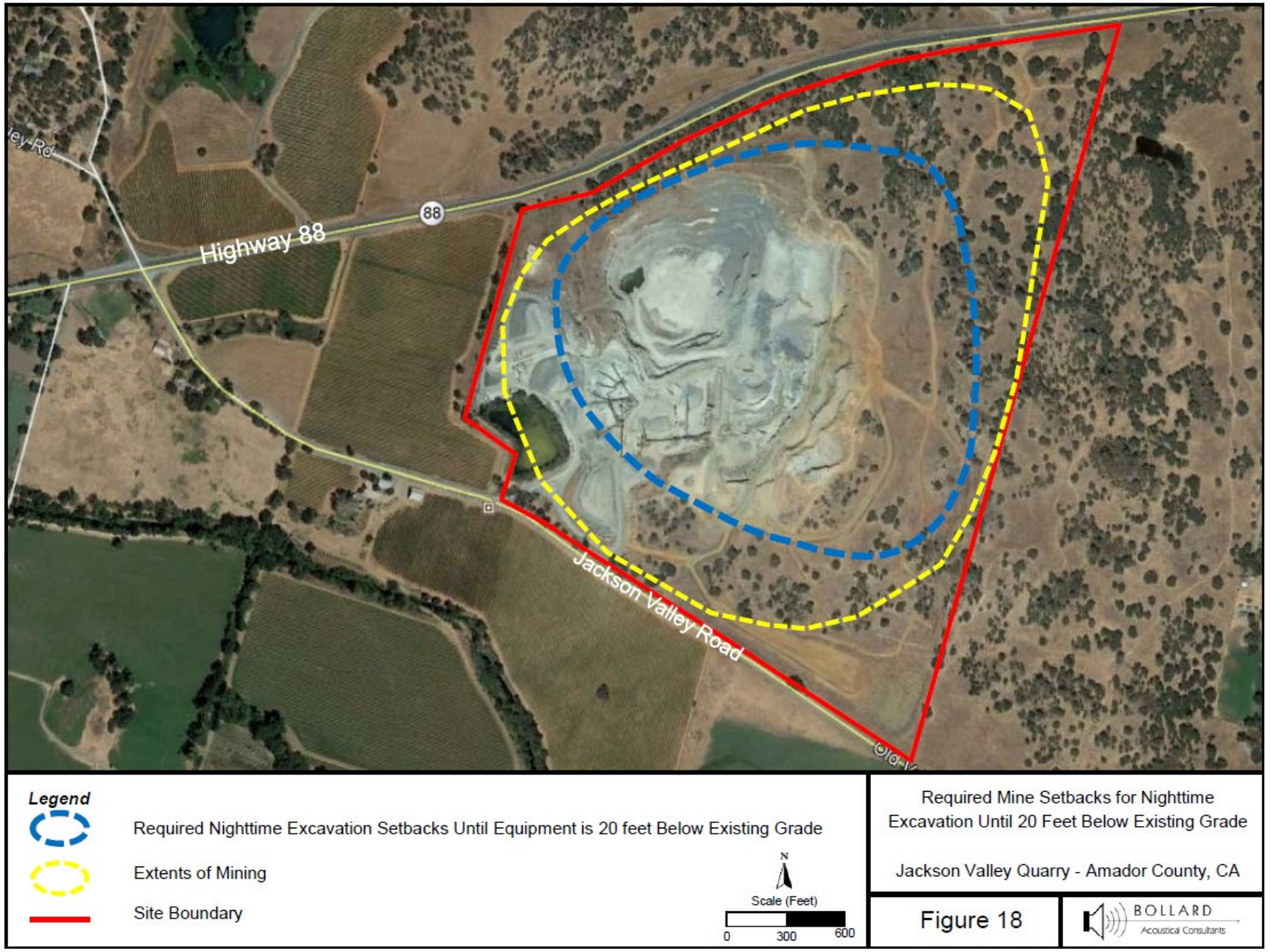
No rock breaking with excavator-mounted hydraulic pistons between 6:00 p.m. and 10:00 p.m.

Mitigation Measure N-5: Excavation Buffers

Limit excavation activities to 6:00 a.m. – 6:00 p.m. until the excavation equipment has progressed sufficiently into the pit (i.e., 20 feet below existing grade) to be shielded by surrounding topography. Figure 18 from the Bollard report (shown below) identifies the locations where excavation activities should be limited to currently permitted hours of operation until that equipment is depressed at least 20 feet below existing grade.

Mitigation Measure N-6: Compliance Monitoring

Following implementation of N-1 through N-5, periodic noise monitoring should be conducted to confirm effectiveness of the mitigation measures and compliance with the applicable noise standards.


Highway 88
88
Jackson Valley Road
Legend
Required Nighttime Excavation Setbacks Until Equipment is 20 feet Below Existing Grade
Extents of Mining
Site Boundary
N
Scale (Feet)
0
300
600
Required Mine Setbacks for Nighttime Excavation Until 20 Feet Below Existing Grade
Jackson Valley Quarry - Amador County, CA
Figure 18
BOLLARD
Acoustical Consultants

Level of Significance After Mitigation:

Implementation of Mitigation Measures N-1 through N-5, in conjunction with voluntary implementation of new technology backup warning devices and the ongoing application of the current project conditions of approval which pertain to noise, would reduce potential impacts associated with noise to ***less than significant***.

In addition, the Project would continue to comply with the existing mitigation measures relating to noise identified in the 2013 EIR:

3.4.1a: In order to avoid noise-sensitive hours of the day and night, project applicant shall comply with the following:

- *Site preparation activities shall be limited to the daytime hours of 8 a.m. through 5 p.m. Monday through Friday.*

3.4.1b: To reduce daytime noise impacts due to mining operations, the applicant shall implement the following measures:

- *During mining operations, the project applicant shall outfit all equipment, fixed or mobile, with properly operating and maintained exhaust and intake mufflers, consistent with manufacturers' standards.*
- *Impact tools (e.g., jack hammers and rock drills) used for mining operations shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible.*
- *Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.*

3.4.1c: To further address the nuisance impact of site preparation activities, the project applicant shall implement the following:

- *Signs shall be posted at all site entrances to the property upon commencement of mining operations, for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the applicable sites of the basic requirements of Mitigation Measures 3.4.1a through 3.4.1b.*

- *Signs shall be posted at the project site that include permitted operation days and hours, a day and evening contact number for the job site, and a contact number in the event of problems.*
- *An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.*

3.4.2: The applicant shall construct an approximately 7 foot high earthen berm, which can be developed from overburden or aggregate material and which shall be landscaped for erosion control and will remain in place during the life of the project. The berm shall be placed along a portion of the northern edge of the project site that will block the line of sight from the nearest residence to the north to the noise sources of mining activities.

b. The applicant commissioned an updated Environmental Noise and Vibration Assessment (Bollard Acoustical Consultants, 2021; rev. 2023) in support of the proposed Project to determine whether the modified hours of operation may result in new or more severe impacts from groundborne vibration from those analyzed in the 2013 EIR. Bollard determined the vibration generated during extended hours of operation would be similar to that which currently occurs during daytime hours. This is because no changes in overall plant equipment, production or heavy truck trip generation are proposed as part of the project. Rather, the proposed project would allow shifting of production, processing and load-out to an additional 4 hours per day, but no increases in production are proposed. No change to currently approved blasting hours would occur. Because existing and project-generated vibration levels are well below those thresholds, no vibration-related impacts are identified for the Project. **No impact** would occur.

c. The Project site is not located within the vicinity of a private airstrip or within two miles of a public airport. **No impact** would occur.

XIV. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to population and housing has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to population and housing. The Project would not include construction of new housing or any development that would draw people to the area nor displace existing people or housing. **No impact** would occur.

XV. PUBLIC SERVICES. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to public services has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to public services. The Project would not require the construction of new public service facilities (e.g., fire protection, police protection, school, parks, other public facilities), and would not affect existing public service facilities. **No impact** would occur.

In addition, the Project would continue to comply with the existing mitigation measures relating to public services identified in the 2013 EIR:

3.8.1a: The project applicant will ensure, through the enforcement of contractual obligations that during construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. The contractor shall keep these areas clear of combustible materials in order

to maintain a firebreak. Any construction and mining equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles and heavy equipment.

3.8.1b: The project applicant shall, in consultation with the Jackson Valley Fire Protection District (JVFPD), create fire-safe landscaping near the structures and develop a plan for emergency response and evacuation at the project site.

XVI. RECREATION.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to recreation has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to recreation. The Project would not result in an increased use of existing recreational facilities and would not involve the expansion of recreational facilities. **No impact** would occur.

XVII. TRANSPORTATION *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to transportation has occurred since the 2013 EIR.

a-d. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to transportation. Instead, GRI will have flexibility to shift approved levels of traffic to an extended operational period (up to 24 hours per day and on Saturdays), resulting in a beneficial impact to transportation. Transportation of aggregate products during off-peak hours reduces congestion during periods of peak travel and improves transportation safety. The Project will not modify the approved production levels, total number of truck trips, trucking routes, or otherwise expand or intensify the existing use. **No impact** would occur.

In addition, the Project would continue to comply with the existing mitigation measures relating to transportation identified in the 2013 EIR:

3.2.3a: Widen the westbound SR 12 approach at the intersection of SR 88 / SR 12 to provide a separate 100-foot-long right-turn lane, and modify the signal to provide overlap phasing for southbound right turns during the protected eastbound left-turn phase.

3.2.3b: Install traffic signals, and associated geometric improvements (such as deceleration and turning lanes), at the intersection of State Route 88 at Jackson Valley Road [West]).

3.2.3c: Install traffic signals at the intersection of SR 88 and Buena Vista Road.

3.2.3d: Install traffic signals at the intersection of SR 88 and SR 104 – Jackson Valley Road (East).

3.2.5: Construct an eastbound right-turn lane at the intersection of SR 88 and Jackson Valley Road [West] (#2), in accordance with Caltrans standards (for deceleration lane length and storage length).

3.2.6a: Reconstruct Jackson Valley Road (West) from the quarry access northwest to SR 88, in accordance with Amador County standards.

3.2.6b: The quarry operator shall enter into a new long-term maintenance agreement with Amador County to maintain Jackson Valley Road (West) between the quarry access and SR 88.

XVIII. TRIBAL CULTURAL RESOURCES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to tribal cultural resources has occurred since the 2013 EIR.

a-c. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, will have **no impact** to tribal cultural resources. The Project would not increase the area subject to disturbance or the depth of excavation relative to what was analyzed under the 2013 EIR. In addition, the Project would continue to comply with the existing mitigation measures relating to cultural resources identified in the 2013 EIR:

3.9.2: If paleontologic, historic or prehistoric archaeological resources, such as chipped or ground stone, fossil bearing rock, large quantities of shell, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, no further mining should be permitted within 100 feet of the find until the Amador County Technical Advisory Committee is notified, and a qualified archaeologist can assess the

significance of the find and prepare an avoidance, evaluation or mitigation plan if appropriate.

3.9.3: In the event of discovery or recognition of any human remains on site anywhere within the project area, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of Amador County has been contacted, per Section 7050.5 of the California Health and Safety Code. If the coroner determines that the human remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Pub. Res. Code Sec. 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

1. *The coroner of the county has been informed and has determined that no investigation of the cause of death is required; and*
    2. *if the remains are of Native American origin,*
        a. *The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or*

The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c. Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructures, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to utilities and service systems has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to utilities and service systems. By operating during extended hours, GRI will have flexibility to curtail energy consuming operations during periods of peak power demand, resulting in potentially beneficial impacts to energy use. No new water facilities, wastewater treatment facilities, or stormwater drainage facilities would be required to support the Project. **No impact** would occur.

XX. WILDFIRE. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project. No significant change to the environmental setting in relation to wildfire has occurred since the 2013 EIR.

a-b. The proposed Project, involving only a change to the approved hours of operation for operational / reclamation activities, would result in no new or different impacts related to wildfires. The Project would not exacerbate wildfire risks or impair emergency response or evacuation plans. **No impact** would occur.

In addition, the Project would continue to comply with the existing mitigation measures relating to wildfires[2] identified in the 2013 EIR:

3.8.1a: The project applicant will ensure, through the enforcement of contractual obligations that during construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. The contractor shall keep these areas clear of combustible materials in order

[2] Wildfires was not a specific Appendix G checklist item at the time of the 2013 EIR; however, wildfire related mitigation measures were adopted in connection with the analysis related to public services.

to maintain a firebreak. Any construction and mining equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles and heavy equipment.

3.8.1b: The project applicant shall, in consultation with the Jackson Valley Fire Protection District (JVFPD), create fire-safe landscaping near the structures and develop a plan for emergency response and evacuation at the project site.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

This Initial Study hereby incorporates by reference the prior 2013 EIR and focuses solely on the potential environmental impacts of the proposed Project.

a-c. The proposed Project involves a change to the approved hours of operation for operational / reclamation activities at an existing mining site. The Project will not modify the approved production levels, materials to be mined, area of disturbance, equipment types or mining methods, or otherwise expand or intensify the existing use.

An updated noise and vibration assessment was conducted for the proposed Project to evaluate potential impacts to nearby receptors and compliance with current Amador County noise standards during extended hours of operation. The noise and vibration assessment evaluated 24-hour unmitigated (worst-case) conditions, then determined appropriate mitigation measures to ensure that the extended hours of operations do not adversely affect sensitive receptors located in the Project vicinity. No adverse vibration impacts were identified for the proposed Project and subsequent to the noise study the project description was revised to remove activities during nighttime hours. Notwithstanding, noise reduction mitigation measures that could be implemented to reduce the potential for adverse public reaction to extended hours of operation

at the quarry were developed by the noise consultant that include mining setbacks, processing area source noise control, and limitations on activities between 6:00 p.m. and 10:00 p.m. The analysis concludes that noise-related impacts would be less than significant levels. An adaptive management program consisting of periodic nose monitoring following implementation of the noise mitigation measures would be conducted to confirm effectiveness of the mitigation measures and compliance with applicable noise standards.

A Light Pollution Prevention Plan has been prepared to identify the location of existing and proposed lighting fixtures that will illuminate operational areas during extended hours of operation while minimizing off-site effects. Given setbacks from nearby public streets and residences, as well as the fact that mining will predominantly occur below grade, site lighting is not anticipated to affect neighboring parcels of land. In addition, the site's rolling topography and perimeter vegetation will also provide natural screening from potential lighting impacts.

An updated biological resources and jurisdictional waters assessment was conducted for the proposed Project to evaluate whether there have been any changes to the biological setting since the prior environmental review, and whether the proposed Project may impact nocturnal wildlife species as a result of extended operating hours. The updated biological assessment determined that there have been no significant changes in the biological setting at the Project site since the 2013 EIR was prepared and that no new jurisdictional features, beyond those previously mapped and permitted, are present. Further, the updated biological assessment concludes that with implementation of the Light Pollution Prevention Plan and adherence to existing and proposed noise mitigation measures, potential impacts to nocturnal wildlife species associated with extended hours of operation will be less than significant.

In addition, the Project would continue to comply with all applicable existing mitigation measures relating identified in the 2013 EIR.

On the basis of the evaluation contained in this document, the proposed Project would have **less than significant impacts** to the overall quality of the environment and on human beings, and would not be cumulatively considerable.