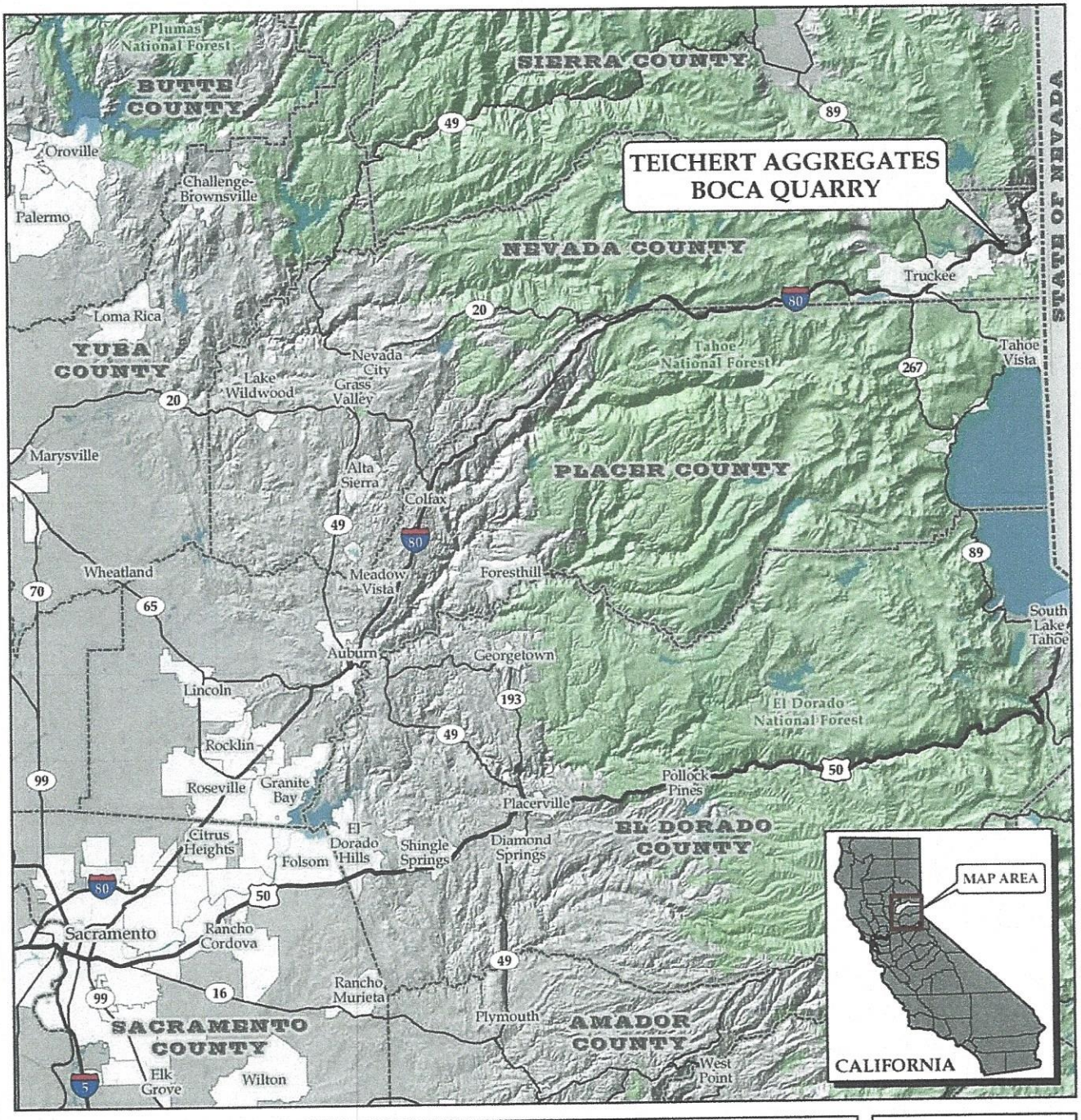

SCALE:
0 6 12 Miles

SOURCE:
Background:
USGS 30 Meter Hillshade

MAP CREATED BY: C. Cornejo DATE: 07/27/2011

BOQ_WestPit_Fig1RegionalLoc_201107.mxd

FIGURE 1
REGIONAL LOCATION
BOCA QUARRY
TEICHERT AGGREGATES
NEVADA COUNTY, CALIFORNIA

LEGEND:
- Highways
- County Boundaries
- City & Community Boundaries
- Lakes & Reservoirs
- US Parks

DISCLAIMER:
The data was mapped for assessment purposes only. No liability is assumed for the accuracy of the data shown.

TEICHERT AGGREGATES
GIS DEPARTMENT

TEICHERT

COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
950 MAIDU AVENUE NEVADA CITY, CA 95959-8617
(530) 265-1222 FAX (530) 265-9854 www.mynevadacounty.com/cda

Planning Department	Environmental Health	Building Department	Code Compliance	Housing Division	Agricultural Commissioner
Fax (530) 265-9851	Fax (530) 265-9853	Fax (530) 265-9854	Fax (530) 265-9851	Phone (530) 265-1388 Fax (530) 265-9845	255 S. Auburn Street Grass Valley, CA Phone (530) 273-2648 Fax (530) 273-1713

July 30, 2007

REVISED NOTICE OF CONDITIONAL APPROVAL
DEVELOPMENT/USE PERMIT APPLICATION

Teichert Aggregates
3500 American River Drive
Sacramento, CA 95864

File No. U06-012, RP06-001; EIS06-031
AP# 48-090-12 &48-200-03

You are hereby notified that the Nevada County Planning Commission, at their regular meeting held on July 26, 2007, after public hearing, did duly consider and approve your application filed on December 22, 2006. This Use Permit authorizes the expansion of the Hirschdale Cinder Quarry operation (now known as Boca Quarry) to expand the quarry size from approximately 15 acres to approximately 40 acres (including the processing area) with a total production yield of 2.75 million yards (approximately 4 million tons). The approval of this Use Permit U06-012 and Reclamation Plan RP06-001) supersedes the prior mining Use Permit (U83-036) located at 16774 & 16616 Hinton Road, Truckee, CA.

After said hearing, and upon the evidence submitted, the Planning Commission hereby notify you that your Use Permit is granted, subject to the following Mitigation Measures and Conditions:

MITIGATION MEASURES

1. **Land Use Impacts.** To offset the potential Land Use compatibility impacts, the following mitigation measure shall be required:

Mitigation Measure 1A. Within 30 days of approval, the property corners and line (south of the quarry pit) shall be clearly established in the field (staked and flagged). Any of the associated mining equipment (storage containers, scales, equipment) that encroaches into the USFS parcel (APN 48-090-13) shall be relocated and maintained on the subject parcel (APN 48-090-12) north of the USFS parcel and in compliance with the applicable Zoning setbacks (30 feet). Since there is no Use Permit for this adjacent parcel (APN 48-090-13) an easement for equipment storage will not resolve this land use issue. (Any existing legal access, if applicable, over APN 48-090-13 is excluded from this Mitigation Measure.)

3. **Geology and Soils Impacts.** To offset the potential for excessive soil erosion to result from the daily mining operations, the following mitigation shall be required:

Mitigation Measure 3A. Any topsoil salvaged for later reclamation use, or imported for reclamation use, that is stored on site shall be contained by use of a berm or ridge of compacted soil used to contain any runoff or divert any water from erosion of the stockpiles.

Mitigation Measure 3B. Mulching may be used to temporarily and permanently stabilize cleared or freshly seeded areas. Types of mulches include organic materials, straw, wood chips, bark and other

wood fibers, decomposed granite, and gravel. Mulch material used for erosion control on site shall be acceptable to the Lahontan Region of the California Regional Water Quality Control Board.

Mitigation Measure 3C. Mulching may be used to temporarily and permanently stabilize cleared or freshly seeded areas. Types of mulches include organic materials, straw, wood chips, bark and other wood fibers, decomposed granite, and gravel.

4. **Hydrology and Water Quality Impacts:** To offset the potential water quality impacts, the following mitigation measures shall be required:

Mitigation Measure 4A. All run-off water collected in the quarry pit (operating area) shall be captured and contained within an impound area (located against the base of the quarry wall). If necessary, suitable disposal areas may include other areas within the project site and may not be directly disposed onto any adjacent properties. The exhaust ends of any necessary culverts and/or drainpipes should be fitted with an energy dissipater such as rip-rap boulders or concrete baffles. It will be the responsibility of the operator that the drain systems be inspected and cleaned on a regular basis to ensure that they are functioning correctly.

Mitigation Measure 4B. If any off-site stormwater waste discharge results from the surface water management plan, then an NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities shall be required.

Mitigation Measure 4C. During construction activity of the new haul road, there shall be no waste and/or waste water discharged into surface waters, drainage courses or wetlands. Grading plans shall note this requirement and shall be reviewed by the Regional Water Quality Control Board for compliance with waste discharge requirements or waivers, prior to grading permit approval.

5. **Air Quality Impact:** To minimize the potential air quality impacts associated with the new haul road construction, and the ongoing operation at this project site, the following mitigation is required:

Mitigation Measure 5A. During the construction of the new haul road joining the quarry pit with Stampede Meadows Road, the operator shall use alternatives to open burning of vegetative material on the project site unless deemed infeasible by the Air Pollution Control Officer. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.

Mitigation Measure 5B. During the construction of the new haul road joining the quarry pit with Stampede Meadows Road, the operator shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of new road development and construction.

Mitigation Measure 5C. Fugitive dust emissions resulting from site clearing and road construction shall be minimized at all times, utilizing control measures including dust palliatives, regularly applied water, graveled or paved haul roads, etc. Control measures shall be noted on the grading plans.

Mitigation Measure 5D. When transporting any material during road construction, or during the sale of product at the quarry, measures shall be taken to prevent materials from spilling or blowing onto streets and highways. Earthen materials, if transported, shall be adequately sprayed with water prior to transport onto public roads. Vegetative material shall be tarped prior to transport.

Mitigation Measure 5E. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily, with adequate coverage to control fugitive dust.

Mitigation Measure 5F. All areas with vehicle traffic shall be watered or have dust palliative applied as necessary for regular stabilization of dust emissions.

Mitigation Measure 5G. All land clearing, grading, earth moving, or excavation activities on a project shall be suspended as necessary to prevent excessive windblown dust when winds exceed 20 mph.

Mitigation Measure 5H. If a project is located in an area that has the geological potential to contain asbestos-containing material or asbestos parent minerals, as determined by a registered geologist, or the project has identified deposits of asbestos-containing material, serpentine, or asbestos parent-material, then no person shall engage in grading and construction operations unless a dust mitigation plan has been submitted and approved by the NSAQMD. Projects where grading activity lasts no more than four calendar days in total and disturbs less than 250 cubic yards of material may be exempted by the APCO, if conditions warrant. Dust mitigation plans must conform to District Rule 226 – Dust Control.

6. **Transportation and Circulation Impacts.** To offset the circulation impacts resulting from heavy truck use, the following mitigation measures are recommended:

Mitigation Measure 6A. The continued shipping from the quarry shall require the construction of the new access road, as proposed, to bypass the Hirschdale Road Bridges (17C-045 and 17C-046). The road shall be constructed in a timely manner, excepting for adverse weather conditions or extreme fire danger. This mitigation recognizes that a portion of the proposed haul road does require a special permit from the USFS for the temporary road over their property before connecting to Stampede Meadows Road. In the event the USFS denies the special permit, then an alternative access to Interstate 80 shall be required and a truck cap shall be required. If Hirschdale Road is used, then the truck cap established in Condition A.8 shall apply.

Mitigation Measure 6B. Upon completion of the new haul road, the operator shall post temporary signs at the east- and west-bound off-ramps of Interstate 80 and Hirschdale Road that direct the gravel trucks toward the new route over Stampede Meadows Road. These signs shall remain in place for a minimum of one year following the completion of the new road. The signs shall include the name of the operator and quarry, a direction arrow to follow, and the recommended CB channel to use along that route. Encroachment Permits for the signs shall be obtained from the Nevada County Department of Transportation.

Mitigation Measure 6C. Due to the potential significant impacts that this project could have on the public road system (Stampede Meadows Road), the road maintenance mitigation fee, currently in effect for the current operation (in the amount of $0.05 per ton), shall remain in effect for the amended operation. This fee will be used to supplement road maintenance on Stampede Meadows Road. In the event a future alternative access to Interstate 80 is obtained (e.g., a direct on-ramp via Hinton Road under-crossing) that eliminates the regular use of the County-maintained roads, then this measure shall no longer apply.

7. **Biological Impacts.** To offset the potential biological impacts associated with the mining revegetation, the following mitigation shall be required:

Mitigation Measure 7A. Reclamation planning objectives and specifications shall include revegetation with species known to be used as browse or herbaceous forage by migrating or summer-resident mule deer.

10. **Noise Impacts.** To offset the potential noise impacts resulting from truck traffic along Hirschdale Road, the following mitigation measures shall apply:

Mitigation Measure 10A. Deleted, see Planning Condition A.6.a.

Mitigation Measure 10B. Upon completion of the new haul road over to Stampede Meadows Road, the existing haul route via Hinton Road may remain available to employee use (personal or corporate vehicles), off-season property access, and emergency use. All large truck traffic (empty or full) shall use the new route whenever it is available for use. Recognizing the operator cannot control the independent trucks, the Hinton Road gate shall be closed precluding non-essential (employee) traffic from using this access and the independent trucks shall be required to drive around and re-enter the site via Stampede Meadows Road.

15. **Cultural Resource Impacts.** To offset potentially adverse cultural or historical resources impacts associated with the activities on site, the following mitigation measure shall be required:

Mitigation Measure 15A. All equipment operators and employees involved in any form of ground disturbance shall be advised of the remote possibility of encountering subsurface cultural resources. If such resources are encountered or suspected, work shall be halted immediately and the Planning Department contacted. A professional archaeologist shall be consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If bones are encountered and appear to be human, California Law requires that the Nevada County Coroner and the Native American Heritage Commission be contacted and, if Native American resources are involved, Native American Organizations and individuals recognized by the County shall be notified and consulted about any plans for treatment.

Mitigation Monitoring Matrix:

MEASURE	MONITORING AUTHORITY	WHEN IMPLEMENTED
1A	Planning Department	Within 30 days of approval.
3A, 3B, 3C	Planning Department	Annually with Reclamation Inspection.
4A, 4B	Planning / Lahontan (CRWQCB)	Annually / If applicable.
4C	Building Department	Approval of grading permit and during inspections of completed work.
5A	Planning Department	Approval of the grading permit.
5B, 5C	Building Department	Approval of grading permit and during inspections of completed work.
5D, 5E, 5F, 5G, 5H	Northern Sierra Air Quality Management District	Annually with Permit to Operate
6A	Planning Department	Within 6 months of approval.
6B	Planning Department	Upon Completion of the New Haul Road
6C	Department of Public Works	Ongoing.
7A	Planning Department	Annually with Revegetation Activities
10A	Planning Department	Within 6 Months of Project Approval
10B	Planning Department	Upon Completion of the New Haul Road
15A	Planning Department	Ongoing.

Use Permit Conditions of Approval

A. PLANNING DEPARTMENT:

1. This Use Permit authorizes the expansion of the former Hirschdale Cinder Quarry extraction pit, permitted by U83-036, and expands the pit size from approximately 15 acres to approximately 40 acres (including the processing area), with a total production yield of 2.75 million yards (approximately 4 million tons). The approval of Use Permit U06-012 (and Reclamation Plan RP06-001) supersedes the prior Use Permit U83-036. All mining activities shall be consistent with the approved December 2006 Mining Plan, as amended by the conditions herein.

2. This Use Permit shall remain valid for 20 years from the date of approval, including any periods of Idle Mine Status, as defined in PRC Section 2727.1.

3. The new access road grading and improvement plans shall be designed by a qualified professional engineer (e.g., geotechnical engineer).

4. Deleted during public hearing on 7-26-07.

5. Pursuant to Policy 17.7 of the Mineral Management Chapter, the Mining Use Permit shall return to the Nevada County Planning Commission for a compliance review. The review shall be every five years after the commencement of operation.

6. The hours of operation shall be limited to the following:

   a. During the interim period (prior to the completion of the new haul road) no gravel trucks shall use Hirschdale Road. Quarry extraction and processing hours shall remain from 7:00 a.m. to 6:00 p.m., Monday through Saturday.

   b. After completion of the new haul road, the interim period shall cease. The hours of operation for the quarry extraction and truck hauling shall then be limited to 7:00 a.m. to 6:00 p.m., Monday through Saturday. During this period, the use the Hirschdale Road access shall be limited to employee use (personal or corporate vehicles), off-season property access, and emergency use. (Spring water collection trucks are encouraged to use the new access, but are not limited to that access.)

   c. Emergency use shall be defined as periods when weather related acts of nature require the aggregate material to protect property or public resources, and when such emergencies occur while the new access road is not available for use by gravel trucks. Any such emergencies shall only be declared by a State, County, or local public agency, and the Office of Emergency Services is opened. During such periods, no truck cap or limitations on hours of operation shall apply.

7. The mine plan and conditions may not be changed without amending this permit except that minor adjustments to the project and conditions may be made if approved by the staff and if such changes do not result in a major departure from the approval either individually or cumulatively. The staff will report all such adjustments to the Planning Commission when applicable (or during the review hearing outlined in Condition A.5 above).

8. In the event that alternative access is unavailable, then the use of Hirschdale Road shall be limited (as the sole access to this site) to two loaded gravel trucks per hour. The hours of hauling

operation shall be restricted to 9:00 a.m. to 5:00 p.m. on weekdays only. No weekend gravel hauling is permitted during periods when Hirschdale Road is the only access to this site.

B. DEPARTMENT OF PUBLIC WORKS:

1. The approach of the new haul road onto Stampede Meadows Road shall be improved in conformance with Private Road Approach standards.

2. An Encroachment Permit, issued by the Nevada County Public Works Department, is required prior to any work within the Stampede Meadows right-of-way.

C. ENVIRONMENTAL HEALTH:

1. Upon approval of the Use Permit, make an application with this Department and pay permit fees for a sewage disposal permit. The system shall be installed and finalled by this Department within six (6) months of the approval of the Use Permit.

2. Upon approval of the Use Permit, provide the following for the proposed spring potable water supply:

   a) Provide a letter from the property owner indicating approval of the proposed use.
   b) Make application for a shared water supply permit and provide an easement agreement for review by this department. Record the approved easement agreement on the property title. A sample easement agreement document is available from this department.
   c) Install distribution system under permit from the Nevada County Building Department.
   d) Make application from this Department for a raw water certification.

Reclamation Plan Conditions of Approval

D. PLANNING DEPARTMENT:

1. The reclamation program approved for this quarry is defined in the June 2007 Reclamation Plan (RP06-001), and shall be consistent with the December 2006 Mining Plan (U06-012), as amended.

2. Prior to commencement of the operation, a financial assurance shall be posted with the County pursuant to Section 2773.1 of the Surface Mining and Reclamation Act of 1975 (SMARA). The amount of the financial assurance shall be 100% of the reclamation cost estimate plus 25% for contingency, pursuant to Section 2773.1 (a) (1), to reclaim the maximum area that is possible to be disturbed. The estimate shall include the cost of all drainage improvements and erosion control. The estimate shall be reviewed by the Nevada County Resource Conservation District (erosion control and revegetation), Nevada County Department of Transportation (equipment costs, operating time rates and volume of material to be moved), and approved by the Planning Department (proper form, SMARA compliance).

   NOTE: Section 2773.1(1)(3) states that the bond amount shall be adjusted annually to account for new lands disturbed, inflation, and reclamation of lands accomplished in accordance with the approved plan.

3. An annual monitoring program report shall be submitted to the Planning Department no later than December 1, of each year. Said report shall include:

   a. The amount of material mined in that year from both the terrace and the river (if applicable).b. A summary of any reclamation and revegetation, which occurred in that year.

   c. A discussion of the success of the previous years' revegetation (when applicable).
   d. A discussion of the adequacy of the existing engineer's bond estimate (see NOTE above).
   e. Any other information deemed to be pertinent or that is required by the County.

   NOTE: In the event that Planning Department is unable to perform the inspections, the operator shall hire a qualified person (as defined in Section 2774 (b)) to perform the inspections and make the required recommendations.

4. All inspections of reclamation activities by Planning Department, or its assignee shall be funded by the applicant or his successor. All staff time, including inspections will be billed at actual costs in conformance with the adopted fee schedule approved by the Board of Supervisors and in effect at that time.

5. Pursuant to Policy 17.7 of the Mineral Management Chapter, the Reclamation Plan shall return to the Nevada County Planning Commission for a compliance review. The review shall be every five years after the commencement of operation.

6. If the operator plans to maintain an "Idle" mining status, pursuant to the definition in Section 2727.1 of SMARA, the Interim Management Plan (Section 7.0 of the approved Reclamation Plan) shall become applicable to this operation. The Interim Management Plan shall comply with the provisions in Public Resources Code Section 2770(h).

7. All conditions of the Reclamation Plan, approved by Nevada County, shall be incorporated into the approved Reclamation Plan (the conditions shall be placed in the Appendix.). The applicant shall furnish the County and the State Department of Conservation with a complete final copy of the approved Reclamation Plan within sixty (60) days of approval.

8. Upon completion of the mining activities on site, the new haul road (connecting to Stampede Meadows Road) shall either be fully reclaimed or, if permitted by the USFS, shall be restored to a self-maintaining manner (hydrologically invisible) and kept available for emergency access. The reclamation standards for the new haul road, in either instance, shall be pursuant Public Resources Code Section 2772(c)(5). The grading plans for the new haul road shall also be included in the approved Reclamation Plan as an appendix.

Pursuant to the requirements of the Land Use and Development Code, you are hereby notified that this permit is not valid until the expiration of ten (l0) days from the date of the Planning Commission action ***(Effective Date: August 07, 2007).*** If the granting of the permit is appealed or submitted to the Board of Supervisors for final action, the effective date is stayed until final action by said Board. Any appeal must be submitted on the proper form which is available from the Clerk to the Board of Supervisors, Eric Rood Administrative Center, Nevada City, California 95959 (Deadline for appeal: Monday, August 06, 2007, at 5:00 p.m.).

Construction pursuant to this permit approval must be completed and the use commenced thereon within ***three (3) years)*** from the effective date of the approval of the permit, which would be **August 07, 2010**, unless an extension of time for reasonable cause is requested prior to the expiration date, and granted by

the Planning Commission pursuant to Section 5.10 of the Nevada County Land Use and Development Code. If no extension is granted, the permit shall become null and void, as to the portion of the approved use not completed.

The Planning Commission considered the initial study and found that the project, with conditions imposed, will not have a significant effect on the environment and has directed staff to file a Notice of Determination for a Negative Declaration with the County.

NEVADA COUNTY PLANNING COMMISSION
Randy Wilson, Ex-Officio Secretary

By: _____
Janet Hayes, Clerk to the Planning Commission

RW:jh

cc: Department of Transportation & Sanitation
Environmental Health Department
Pamela Dobbas
Jim Wiley-Taylor & Wiley

PROOF OF SERVICE BY MAIL

(Code of Civil Procedure Sections 1013a and 2015.5)

I am a resident of the United States and of the State of California, County of Nevada; I am over the age of eighteen years and not a party to the within action; my business address is:

ERIC ROOD ADMINISTRATIVE CENTER
950 Maidu Avenue Nevada City, California 95959-8617

I am readily familiar with the Nevada County Planning Department's business practice for the collection and processing of correspondence for mailing with the United States Postal Service. The within documents will be deposited with the United States Mail on July 31, 2007, in the ordinary course of business.

The name(s) and address(s) of the person(s) served as shown on the envelope(s) are as follows:

Teichert Aggregates, 3500 American River Drive, Sacramento, CA 95862
Pamela Dobbas, 2945 Bell PMB258, Auburn, CA 95603
Jim Wiley, Taylor & Wiley, 2870 Gateway Oaks Drive #200, Sacramento, CA 95833

The foregoing person(s) were served with approval letter for Use Permit, File # U0-012 & EIS006-031, by placing same for collection and mailing on July 31, 2007, at Nevada City, California, following ordinary business practices.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on July 31, 2007, at Nevada City, California.

_____
Signature

STOP
STOP

STOP

STOP

STOP

STOP

STOP

Evacuation Routes

The project site can be accessed from two roads, both of which are low traffic volume and are a short distance to I-80. Hinton Road exits the project area to the South, passes under I-80 and intersects with Hirschdale Road which meets Stampede Meadows Road at an on-ramp complex of I-80. West Hinton Road exits the project site to the north and intersects with Stampede Meadows Road which proceeds to the on-ramp complex of I-80. West Hinton Road is used as the haul route for product leaving the site and the roads are not part of an evacuation route for any population centers. The surrounding area is remote and undeveloped with the majority of the development in the area located south of I-80 (GoogleEarth© 2018).

Airports and Schools

The nearest airport, the Tahoe Truckee Airport, is located approximately 5.35 miles southwest of the project site. The Airport Influence Area extends roughly 2.7 miles from the airport's runways and does not extend over the project site or off-site roadway improvement area. No private or government airstrips are located within ten miles of the proposed project site (Nevada County 2014).

Glenshire Elementary School is the school nearest to the project site and is located more than two miles southwest of the project site (Nevada County 2018).

Wildfire Hazard Severity Zones

California law requires CAL FIRE to identify areas based on the severity of fire hazard likely to occur in a particular area. Factors considered in the rating include fuel (flammable materials), slope and weather conditions. The zones are classified according to the severity of the fire based on the anticipated behavior and likelihood of threats to structures. The project site is located within a State Responsibility Area classified as a Very High Hazard Severity Zone (Nevada County 2018; CAL FIRE 2019).

The majority of the off-site roadway improvement area is located in a Federal Responsibility Area. The USFS has identified the Wildfire Hazard Potential for the off-site roadway improvement area as ranging from Moderate to Very High (USFS 2019).

4.10.2 Regulatory Framework

Development of the proposed project is subject to a number of regulatory requirements and industry standards related to the storage, transport, and use of hazardous materials. Most regulations originate at the state and federal levels, with local county and city agencies enforcing these regulations. In the case of the proposed project, ammonium nitrate would be used for blasting.

Federal

The Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATF), the Department of Homeland Security, and the Department of Transportation coordinate a federal effort to improve chemical risk management, advance ammonium nitrate safety, and protect human health and the environment.

Significance Threshold 7 – Interfere with an Emergency Response/Evacuation Plan

The project would not interfere with the implementation of or physically interfere with an adopted emergency response or evacuation plan. In times of emergency or disaster response, the state highways would serve as primary routes, and designated county arterial roadways in the area would serve as secondary routes. The project site is not in an evacuation area – neither Hinton Road or Stampede Meadows Road are evacuation routes identified in the Nevada County or City of Truckee Emergency Plans (Nevada County 2011a, b). Operations at the project site would be in accordance with the safety and evacuation plan prepared for the project and approved by the County.

The proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or an emergency evacuation plan, and potential project impacts would be less than significant.

Significance Threshold 8 – Create Exposure to Wildfire Risk

The project site is located within a State Responsibility Area classified as a Very High Hazard Severity Zone by CAL FIRE (Nevada County 2018; CAL FIRE 2019). CAL FIRE maps fire hazard severity for State and Local Responsibility Areas. The majority of the off-site roadway improvement area is located in a Federal Responsibility Area. The USFS has identified the Wildfire Hazard Potential for the off-site roadway improvement area as ranging from Moderate to Very High (USFS 2019).

Heavy equipment, chainsaws, and vehicles (including personal automobiles transporting workers) have the potential start a fire during construction of the off-site roadway improvement area and during activities on the project site that involve working in or near vegetated areas. Besides a brief period of ground clearing, however, the bulk of project operations would occur in the quarry pit where combustible fuel would not likely be present.

Despite this low probability for the project's implementation to create a fire risk, vegetation and slash removed during site preparation may be placed on soil stock piles and burned. Proposed mitigation (MM HAZ-3) would require the removal of dried vegetation or other combustible materials, to the extent feasible, to reduce the potential of wildland fires. Additionally, during construction, spark arrestors or turbo chargers (which eliminate sparks in exhaust) and fire extinguishers would be required for all heavy equipment pursuant to MM HAZ-4. With the implementation of the proposed mitigation (MMs HAZ-3 and HAZ-4), the potential for exposure to wildland fires would be reduced, and associated impacts would be reduced to a level of less than significant.

4.10.5 Level of Significance Before Mitigation

Based on the above analysis, potentially significant impacts could occur associated with: (1) reasonably foreseeable release of hazardous materials if not correctly stored on the project site and without the proper authorization; (2) accidental release of hazardous materials; (3) and exposure to wildfire risk.

The project would result in less than significant impacts associated with: (1) hazardous materials in the vicinity of schools; (2) hazardous materials sites; (3) hazards associated with a public airport or private airstrip; and (4) interfering with an emergency response/evacuation plan.

reached and although the quarry could be at full production in a given year, it may not operate at full production the next year. As such, three production scenarios were analyzed for mining operations;

- Scenario 1, *Peak Daily Production*, analyzes peak production based on a typical workday (12 hours per day for approximately 180 working days) production of 4,100 tons per day, yielding approximately 738,000 tons per year.

- Scenario 2, *Worst-Case Daily Production*, analyzes the worst-case daily production of 10,080 tons per day based on the maximum number of trucks able to be managed on-site. This scenario assumes equipment is operating continuously for 16 hours with load-out occurring up to 24 hours per day, six days a week, yielding a maximum 10,080 tons per day. The maximum annual production of 1,000,000 tons would yield approximately 93 working days under this scenario.

- Scenario 3, *Average Daily Production*, assumes an average production of approximately 3,170 tons per day yielding 570,000 tons per year based on a normal 8 hours per day work shift for approximately 180 working days.

1.5.2 Reclamation

Under the Amended Reclamation Plan, mining and reclamation would be concurrent activities throughout the life of the quarry, and the implementation of reclamation would be timed to allow maximum extraction of salable resources from both pits for the life of the mine. Because the processing plant in the East Pit would continue to operate for the duration of the life of the West Pit, final reclamation of this portion of the East Pit would be delayed until the end of the entire project life. Implementation and monitoring of final reclamation activities would be completed within five years after the completion of mining.

Resoiling would occur on both the wide Phase II pit floors (once backfilling is completed) and the narrow benches separating the Phase III highwalls of the West Pit. Additional clean backfill from construction sites outside the project site may be imported to supplement backfill operations and to provide a suitable plant growth medium to supplement the salvaged topsoil. Following soil placement, native grasses, shrubs and trees would be broadcast seeded and revegetation of the final surface is intended to consist of vegetation types and species similar to the vegetation currently existing on the project site.

Following completion of mining and reclamation activities, mobile equipment associated with the mining operation would be removed from the site, as well as stationary equipment including, but not limited to, the office building, scale, screens and conveyors.

1.5.3 Operating Schedule and Workforce

The plant would operate, on a single-shift basis from May 1 until October 31, six days per week (total of 158 operating days minus any holidays). Based upon market demand or emergency needs such as urgent response to flood events, the quarry may open earlier or continue operations later than the dates stated above but would not exceed 180 operating days per year. Mining, processing, sales, and truck transport from the site would generally take place between 6 a.m. and 6 p.m., Monday through Friday, and between 7 a.m. and 4 p.m. on Saturday. Occasionally, customer demand and/or operational considerations may dictate periods of extended hours which can involve two shifts and result in

Scenario 1: Peak Daily Production

Peak Daily Production analyzes peak production based on a typical workday (12 hours per day for approximately 180 working days) production of 4,100 tons per day, yielding approximately 738,000 tons per year. Scenario 1 would generate 571 one-way trips per day and 11,410 VMT. If timber operations occur concurrently with operation, the timber harvest truck trips would replace haul truck trips, and the VMT would increase by 1,100 VMT to 12,510. This worse-case scenario was analyzed.

Table 7
SCENARIO 1: PEAK DAILY VEHICULAR & HEAVY EQUIPMENT

Equipment	No. of Equipment per Day	Hours per Vehicle per Day	Vehicle Hours per Day
Quarry Mine Operation			
Dozer	1	12	12
Loader	1	12	12
Portable Pump	1	12	12
Excavator	1	12	12
Water Truck	1	12	12
Aggregate Processing Plant			
Loader	1	12	12
Haul Trucks	4	12	48
Jaw Crusher	1	12	12
Screening System	1	12	12

Scenario 2: Worst-Case Daily Production

Worst-Case Daily Production analyzes the worst-case daily production of 10,080 tons per day based on the maximum number of trucks able to be managed on-site. This scenario assumes equipment is operating continuously for 16 hours with load-out occurring up to 24-hours per day, six days a week, yielding a maximum 10,080 tons per day. An estimated annual production of 1,000,000 tons would equate to approximately 93 working days. Scenario 2 would generate 1,402 one-way trips per day and 28,021 VMT. If timber operations occur concurrently with operation, the timber harvest truck trips would replace haul truck trips, and the VMT would increase by 1,100 VMT to 29,121. This worse-case scenario was analyzed.

Table 8
SCENARIO 2: WORST-CASE DAILY VEHICULAR & HEAVY EQUIPMENT

Equipment	No. of Equipment per Day	Hours per Vehicle per Day	Vehicle Hours per Day
Quarry Mine Operation			
Dozer	1	16	16
Loader	1	16	16
Portable Pump	1	16	16
Excavator	1	16	16
Water Truck	1	16	16

Table 8
SCENARIO 2: WORST-CASE DAILY VEHICULAR & HEAVY EQUIPMENT (cont.)

Equipment	No. of Equipment per Day	Hours per Vehicle per Day	Vehicle Hours per Day
Aggregate Processing Plant			
Loader	1	16	16
Haul Trucks	4	16	64
Jaw Crusher	1	16	16
Screening System	1	16	16
Loader	1	16	16

Scenario 3: Average Daily Production

Average Daily Production, assumes an average production of approximately 3,170 tons per day yielding 570,000 tons per year based on a normal 8 hours per day work shift for approximately 180 working days Calculations for *Average Annual Production* are based on *Average Daily Production* multiplied by 180 working days per year and therefore utilize the equipment listed below in Table 9. Scenario 3 would generate 442 one-way trips per day and 8,827 VMT. If timber operations occur concurrently with operation, the timber harvest truck trips would replace haul truck trips and the VMT could increase by 1,100 VMT to 9,927. This worse-case scenario was analyzed.

Table 9
SCENARIO 3: AVERAGE DAILY VEHICULAR & HEAVY EQUIPMENT

Equipment	No. of Equipment per Day	Hours per Vehicle per Day	Vehicle Hours per Day
Quarry Mine Operation			
Dozer	1	8	8
Loader	1	8	8
Portable Pump	1	8	8
Excavator	1	8	8
Water Truck	1	8	8
Aggregate Processing Plant			
Loader	1	8	8
Haul Trucks	4	8	32
Jaw Crusher	1	8	8
Screening System	1	8	8

5.1.3 TAC Impacts to Sensitive Receptors

Project impacts may include emissions of pollutants identified by the state as TACs. Sensitive receptors are typically defined as schools (preschool through 12th grade), hospitals, resident care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality.

According to the NSAQMD, impacts of hazardous air pollutants, such as asbestos and diesel exhaust, should be evaluated. In addition, projects must be modeled and analyzed if located within 1,000 feet of sensitive receptors. Since the proposed quarry is not within 1,000 feet of sensitive receptors, no Health Risk Assessment was conducted.

The results of these operating scenarios are summarized in Tables 16 through 18 for the proposed project.

Table 16
SCENARIO 1: PEAK DAILY PRODUCTION QUARRY OPERATIONAL EMISSIONS

Emission Source	Criteria Pollutant Emission Levels (lbs/day)					
	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Mining Activities	4.29	25.81	44.11	0.07	31.80	23.50
Materials Processing	6.45	37.79	60.20	0.12	156.31	78.09
On- and Off-site Traffic	3.49	17.09	108.85	0.42	3.27	1.53
TOTAL	**14.22**	**80.69**	**213.16**	**0.61**	**191.39**	**103.11**
NSAQMD Significance Threshold	137	n/a	137	n/a	137	n/a
Significant Impact?	*No*	*n/a*	***Yes***	*n/a*	***Yes***	*n/a*

Source: Appendix A
Notes: "Peak production" would be about 4,100 tons per day (12-hour days in place of the 16-hour "double shift" for the "worst case" day scenario.

Table 17
SCENARIO 2: WORST-CASE DAILY PRODUCTION QUARRY OPERATIONAL EMISSIONS

Emission Source	Criteria Pollutant Emission Levels (lbs/day)					
	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Mining Activities	5.72	34.42	58.81	0.09	43.46	28.19
Materials Processing	8.60	50.39	80.26	0.16	340.72	134.88
On- and Off-site Traffic	8.09	38.79	253.07	0.97	7.57	3.53
TOTAL	**22.40**	**123.60**	**392.14**	**1.23**	**391.75**	**166.60**
NSAQMD Significance Threshold	137	n/a	137	n/a	137	n/a
Significant Impact?	*No*	*n/a*	***Yes***	*n/a*	***Yes***	*n/a*

Source: Appendix A
Notes: "Worst-case" day production is 10,080 tons per day based on the maximum number of trucks able to be managed on-site. Divided by a maximum annual production of 1,000,000 tons, yields approximately 93 working days.

Table 18
SCENARIO 3: AVERAGE DAILY PRODUCTION QUARRY OPERATIONAL EMISSIONS

Emission Source	Criteria Pollutant Emission Levels (lbs/day)					
	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Mining Activities	2.86	17.21	29.41	0.05	27.84	21.96
Materials Processing	4.30	25.19	40.13	0.08	130.04	69.58
On- and Off-site Traffic	2.78	13.71	86.42	0.33	2.60	1.21
TOTAL	**9.93**	**56.12**	**155.96**	**0.46**	**160.48**	**92.75**
NSAQMD Significance Threshold	137	n/a	137	n/a	137	n/a
Significant Impact?	*No*	*n/a*	***Yes***	*n/a*	***Yes***	*n/a*

Source: Appendix A
Notes: Average daily production is assumed to be 3,170 tons per day. All daily average calculations are based off of an "average day" multiplied by 8 hours per day.

As shown in Tables 16 through 18, NO_X and PM_{10} emissions would exceed the NSAQMD thresholds for all three operating scenarios and would be considered a potentially significant impact. The following mitigation measures are prescribed.

Mitigation Measure AQ-02: Diesel control measures including, but not limited to the following, shall be incorporated by Project Applicant into contract specifications:

- To minimize potential diesel emission impacts on nearby receptors (pursuant to NSAQMD Regulation 2, Rule 205, Nuisance), heavy duty diesel equipment shall be properly tuned. A schedule of tune-ups shall be developed and performed for all equipment operating within the project area, particularly for haul and delivery trucks. A log of required tune-ups shall be maintained and a copy of the log shall be submitted to County for review every 2,000 service hours.

- To minimize diesel emission impacts, construction contracts shall require off-road compression ignition equipment operators to reduce unnecessary idling with a two minute time limit.

- On-road and off-road material hauling vehicles shall shut off engines while queuing for loading and unloading for time periods longer that two minutes.

- Off-road diesel equipment shall be fitted with verified diesel emission control systems (e.g., diesel oxidation catalysts) to the extent reasonably and economically feasible.

- Construction equipment shall utilize alternative fuel equipment (i.e., compressed or liquefied natural gas, biodiesel, electric) to the extent reasonably and economically feasible.

Mitigation Measure AQ-03: Dust Control Measures. The Applicant shall comply with NSAQMD Rule 226, which requires implementation of feasible dust control measures which may include, but are not limited to the following:

- Ensure no visible dust emissions occurs beyond the property line;
- Ensure no dust emissions exceeding 20 percent opacity occur anywhere on the property;
- Ensure no offsite increase in ambient PM10 concentrations greater than 50 µg/m3 occur;
- Ensure no track-out exceeding 25 feet from the property occurs;
- Employ a dust control supervisor who has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance;
- Water to maintain soil moisture at 12 percent on haul roads and other active unpaved surfaces that are not chemically stabilized;
- Water to prevent visible dust more than 100 feet from any earth moving or mining activity;
- Utilize watering, dust suppressants, larger aggregate cover, and revegetation in inactive, disturbed areas to prevent wind driven dust;
- Water unpaved roads daily, and limit the speed on unpaved roads to 15 mph;
- Utilize chemical stabilization, watering, covering, and enclosure of storage piles;
- Conduct sweeping of paved roads at the end of each workday shift, utilizing certified sweepers;
- Conduct prompt cleanup of any spilled material and stabilization of any spilled material storage piles at a minimum frequency of daily at the end of each work day;

- Utilize dust suppressants or other dust control methods on conveyors, loading, unloading, or transferring activities;
- Utilize baghouse emission controls on screening and crushing activities or other dust control measures to meet the visible emission limits;
- Conduct chemical stabilization of unpaved haul roads;
- Cover or otherwise stabilize aggregate loads (i.e., loads to remain 6 inches from the upper edge of the container area) to avoid dust emissions from product transport trucks in compliance with California Vehicle Code No. 23114; and
- Utilize wheel washers, rumble grate, and paving of internal roads or use of dust palliatives on roads to eliminate track out.
- Suspend excavation and grading activity when sustained winds make reasonable dust control difficult to implement, e.g., for winds over 25 miles per hour.
- Limit the area subject to blasting, mining, and other operational activity at any one time, as feasible.

Significance after Mitigation: Significant and unavoidable.

6.3 IMPACTS TO SENSITIVE RECEPTORS

The CARB describes sensitive receptors as residences, schools, day-care centers, playgrounds, medical facilities, or other facilities that may house individuals with health conditions (medical patients or elderly persons/athletes/students/children) that may be adversely affected by changes in air quality. The two primary pollutants of concern regarding health effects for residential development are CO and DPM. Implementation of the project may lead to increase in chronic exposure of nearby sensitive receptors to certain toxic air contaminants from various stationary and mobile sources. An analysis of the project's potential to expose sensitive receptors to these pollutants is described below.

Figure 5, Air Quality Sensitive Receptor Locations, presents the location of sensitive receptors within one-quarter mile of the project site. Potentially affected sensitive receptors identified within one-quarter mile radius include recreational users near the southern edge of Boca Reservoir (i.e., boaters, fishermen, campers, cyclists, etc.); the Boca Reservoir's caretaker residence located on Stampede Meadows Road just south of the dam; and the Truckee River RV Park on the south side of I-80 at the Hirschdale Road exit.

6.3.1 Diesel Particulate Matter

Construction activities are sporadic, transitory, and short-term in nature, and once construction activities have ceased, so, too, have emissions from construction activities. DPM is not included as a criteria pollutant; however, is recognized by the State of California as containing carcinogenic compounds. The risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of cancer exposure, which is defined in the California Air Pollution Control Officers Association (CAPCOA) Air Toxics "Hot Spots" Program Risk Assessment Guidelines (CAPCOA 1993) as 24 hours per day, 7 days per week, 365 days per year, for 30 years for residences.

DPM would be emitted from heavy equipment used in the construction process. The proposed project would operate a maximum of 30 years for 180 days per year, and the off-site roadway improvement

AQ-4 Prior to issuance of the encroachment permit for the off-site roadway improvements and prior to commencing operations in the West Pit, the work area shall be evaluated by a qualified individual to determine the presence/absence of asbestos containing materials. The results of the analyses shall be provided to the Nevada County Department of Environmental Health (NCDEH), Certified Unified Program Agency (CUPA).

If naturally occurring asbestos is found at the project site, the Project Applicant shall prepare an Asbestos Health and Safety Program and an Asbestos Dust Control Plan for approval by CUPA. The Asbestos Health and Safety Program and Asbestos Dust Control Plan may include, but is not limited to, the following:

- Equipment operator safety requirements: protective clothing, breathing apparatuses to prevent inhalation of airborne asbestos fibers,
- Dust mitigation measures: continually water site to prevent airborne dust migration, cover all vehicle that haul materials from the site
- Identification of CUPA-approved disposal areas for all excavated materials.

Significance after Mitigation: Less than significant.

6.3.3 Crystalline Silica

Crystalline silica has not been identified as a toxic air contaminant under the California Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983). There are no similar Federal laws or regulations that list crystalline silica as a hazardous air pollutant or toxic air contaminant. Crystalline silica is subject to Proposition 65, which requires businesses emitting crystalline silica or other listed emissions at levels that exceed the significance risk threshold in Proposition 65, to notify the public of emissions and potential hazards. Crystalline silica is a component of soil, sand, granite and many other minerals. Crystalline silica may become respirable-sized particles when workers chip, cut, drill or grind materials that contain it. If respirable crystalline silica dust enters the lungs, it causes the formation of scar tissue (silicosis) which can be disabling or even fatal, reducing the lungs' ability to take in oxygen and increasing the susceptibility to lung infections like tuberculosis. The non-crystalline form of silica (amorphous silica) is not nearly as toxic, since it usually does not cause the formation of scar tissue in the lungs.

High occupational exposure to crystalline silica has been linked to respiratory problems and in some cases to cancer. Crystalline silica related illnesses historically have been associated with industrial processes such as mining. However, due to stringent health and safety regulations that have been imposed over the years, mining related respiratory illnesses have steadily declined. Due to the presence of a large amount of quartz at the project site, fugitive dust emissions may contain crystalline silica. For crystalline silica emissions, PM_4 is used instead of PM_{10} because the health effects standard is based on PM_4. By analyzing the size distribution of particulate emissions associated with aggregate handling and storage as reported by the USEPA (USEPA AP-42, Chapter 13, Section 2.4-3), the PM_4 to PM_{10} ratio of 40 percent was used to estimate PM_4 emissions. (PM_4 is 40 percent of PM_{10} x 23 percent bulk crystalline silica of bulk rock x 44 percent of ground crystalline silica to PM_4 particles = 4 percent of PM_{10}). As a conservative analysis, it was assumed that four percent of all PM_{10} fugitive dust would be respirable quartz dust. The estimated on-site emissions include all of the emission controls and other emission