MOODY FLATS QUARRY PROJECT
LAND USE

DECEMBER | 2009

REVISED FEBRUARY 2011

Lead Agency
Shasta County, Department of Resource Management – Planning Division

Applicant/Operator
Moody Flats Quarry, LLC

BENCHMARK RESOURCES

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CONTENTS

1.0 METHODOLOGY AND TERMINOLOGY 1

2.0 EXISTING CONDITIONS 1

2.1 Regional Setting 1

2.2 Local Setting 2

2.2.1 Existing Setting and Land Use 2

2.2.2 Existing and Proposed Land Use Designations 4

3.0 REGULATORY SETTING 5

3.1 Shasta County General Plan 5

3.1.1 Shasta County General Plan 5

3.1.2 Shasta County Zoning Code 11

4.0 THRESHOLDS OF SIGNIFICANCE 11

5.0 ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND SIGNIFICANCE DETERMINATIONS 11

TABLES

Table 1 Existing and Proposed General Plan and Zoning
Table 2 Shasta County General Plan Consistency Analysis

FIGURES

LU-Figure 1 Existing Conditions Aerial Photograph
LU-Figures 2a-2c Existing Conditions Photographs
LU-Figure 3 Existing General Plan Designations
LU-Figure 4 Existing Zoning Designations

LAND USE AND PLANNING

In addition to evaluating project-specific impacts such as noise and traffic, CEQA requires that projects be reviewed for consistency with applicable local land use policies and regulations. The purpose of this section is to evaluate the Project for consistency with adopted land use plans, policies, and regulations, and to evaluate Project compatibility with existing surrounding uses.

1.0 METHODOLOGY AND TERMINOLOGY

The land use section was developed through review of County land use documents, including the County General Plan, regional plans, and zoning ordinance. In addition, aerial photographs and site visits were conducted to identify existing land uses onsite and in the surrounding area. This information was used to assess the Project's impact on existing and surrounding land uses, surrounding communities, and consistency with existing land use goals and policies.

2.0 EXISTING CONDITIONS

2.1 Regional Setting

Shasta County (County) is situated where the Central Valley of California meets the convergence of the Klamath and Coastal Mountain Ranges to the northwest and west, and the Cascade Mountain Range to the northeast and east. Elevations in the Central Valley area of the County vary between 400 and 700 feet. The Cascade Range divides the Central or Sacramento Valley region of the County from the Fall River Valley situated in its northeast corner. Approximate elevation of this valley is 3,300 feet.

The Central Valley and its southward-flowing Sacramento River provide the drainage for all the major streams in the County. Alluvium deposits in the Sacramento and Fall River Valleys define the only significant groundwater basins present in the County.

The landforms of the County also play a role in determining its climate. The convergence of the mountains on either side of the Central Valley forms a funnel that concentrates precipitation near the upper end of the valley in periods of winter storms marked by south winds. The average high temperature ranges from 53°F in January and December to 95°F in July. The average low temperature ranges from 39°F in January to 68°F in July. The seasonal temperature variations, however, can be much larger. For example, the record high temperature is 115°F (in 1981), whereas the record low temperature is 7°F (in 1985).

2.2 Local Setting

2.2.1 Existing Setting and Land Use

The Project site is located on land historically utilized as open space, as shown in LU-Figure 1, Existing Conditions Aerial Photograph. The elevation of the site ranges from approximately 800 feet to 2,000 feet above mean sea level (amsl). The site encompasses approximately 1,900 acres dominated by Montane Hardwood-Conifer and Montane Hardwood vegetative habitats. Three creeks, Moody Creek, Salt Creek, and Rancheria Creek, transverse the center and eastern portions of the site. The only man-made structures on the site are the Union Pacific Railroad line through the southeast corner of the site and Digger Bay Road through the southwest and northwest corner of the site.

Interstate 5, a north/south freeway, is the closest major public roadway and is located east of the site. The site is surrounded by undeveloped land with a limited number of rural residential properties to the northeast, south, southeast, and southwest. The closest residential properties to the site are approximately ½-mile to the southwest and 1 mile to the southeast. Several other aggregate mines are located in the vicinity, with the closest approximately 1.5 miles to the northeast.

Figure 1, Existing Conditions Aerial Photograph

Photographs of existing conditions where Project components would be developed are shown in LU-Figures 2a through 2c, Existing Conditions Photographs.

2.2.2 Existing and Proposed Land Use Designations

The Project site is currently designated by the County General Plan as Mining Resource (MR), Industrial (I), Rural Residential A (RA), and Suburban Residential (SR) (LU-Figure 3, Existing General Plan Designations). The County Zoning Code designates the property Mineral Resource, Interim Rural Residential, Community Commercial and Design Review District (C-2-DR), and General Industrial (LU-Figure 4, Existing Zoning Designations).

As outlined in the County General Plan, Resource Group, Minerals (MR-a), mining operations with a lifespan of more than 30 years should be included in the Mineral Resource (MR) land use designation and Mineral Resource (MR) zone district. The policy explains that all parcels involving "extraction, processing, stockpiling, and shipping, and adjacent undeveloped area within the same ownership" shall be included within these zones. Eighty percent of the parcels within the property currently comply with this policy, but seven parcels require changes to their existing general plan and/or zoning designation. Table 1, Existing and Proposed General Plan and Zoning, provides the existing land use designation and zoning of the Project site parcels, and their respective proposed designation and zoning.

TABLE 1
EXISTING AND PROPOSED GENERAL PLAN AND ZONING

APN	Acreage	Existing		Proposed	
		General Plan	*Zoning*	*General Plan*	*Zoning*
006-770-002	143	MR	MR	MR	MR
006-770-003	143.91	MR	MR	MR	MR
006-770-004	156.66	MR	MR	MR	MR
006-770-005	4.5	MR	MR	MR	MR
065-500-002	151.91	MR	MR	MR	MR
065-500-004	152.05	MR	MR	MR	MR
307-200-002	335.79	MR	MR	MR	MR
307-200-006	7.5	MR	MR	MR	MR
307-200-007	71.7	**SR**	**IR**	MR	MR
307-200-010	512.7	**MR/I**	**MR/M**	MR	MR
307-200-018	109.62	**SR**	**IR**	MR	MR
307-200-019	11.88	**SR**	**IR**	MR	MR
307-230-014	40.35	**SR**	**IR**	MR	MR

APN	Acreage	Existing		Proposed	
		General Plan	*Zoning*	*General Plan*	*Zoning*
307-230-016	0.02	**RA**	**C-2-DR**	MR	MR
307-230-017	0.04	**RA**	**C-2-DR**	MR	MR

Notes: Zoning Districts: MR = Mineral Resource District; M = General Industrial; IR = Interim Rural Residential District; C-2-DR = Community Commercial and Design Review District. **General Plan Districts:** SR = Suburban Residential; MR = Mining Resource; I = Industrial; RA = Rural Residential A.

3.0 REGULATORY SETTING

3.1 Shasta County General Plan

3.1.1 Shasta County General Plan

Under California law, cities and counties must adopt a comprehensive, long-term general plan, which consists of a set of goals and policies that guide local land use decisions. The general plan must, at a minimum, contain seven elements – land use, circulation, housing, conservation, open space, noise, and safety. The general plan must also contain a map or diagram within the land use element illustrating land use distribution by type of use, such as commercial, residential, and open space. A jurisdiction may choose to organize their general plan with the mandatory elements in the order that meets the communities' needs. Mandatory elements may also be combined, as is often the case with open space and conservation or noise and safety. A jurisdiction may adopt additional elements to address unique needs of the community.

The County General Plan (General Plan) was adopted in 2004 and serves as the principal land use planning and policy document for the County. The General Plan represents the collective community vision concerning future land development patterns and the protection of unique resources through establishment of broad goals, objectives, and policies that guide county-wide land use. The General Plan consists of the three primary groups: public safety, resources, and community development. Contained within these three broad groups are 22 individual sections that address the issues of the seven required General Plan elements.

Figure 2a, Existing Conditions Photographs

Figure 2b, Existing Conditions Photographs

Figure 2c, Existing Conditions Photographs

Figure 3, Existing General Plan Designations

Figure 4, Existing Zoning Designations

3.1.2 Shasta County Zoning Code

The Zoning Code of Shasta County (Zoning Code), Title 17 of the County Code, is the primary tool used to implement the General Plan land use policies in the County and protect public health, welfare, and safety. The Zoning Code ensures all development conforms to these policies through regulating the height, bulk, and use of a parcel while ensuring compatibility with abutting parcels.

4.0 THRESHOLDS OF SIGNIFICANCE

The criteria used to determine the significance of impacts on land use are based on Appendix G of the CEQA Guidelines and a compilation of local guidelines. The Project would result in a significant impact if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- Conflict with any applicable habitat conservation plan or natural community conservation plan; or
- Be incompatible with the surrounding land use.

5.0 ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND SIGNIFICANCE DETERMINATIONS

Impact LU-1: Divide an Established Community

The approximately 1,900-acre property consists of undeveloped land with no existing residential or commercial uses. The established communities are located to the south (City of Shasta Lake) and northeast (Mountain Gate) of the Project. The development of the Project site would not physically divide an established community and would not interfere with existing community infrastructure or development. This impact is considered less than significant.

Level of Significance Before Mitigation: Less than Significant

Mitigation Measure: None Required

Impact LU-2: General Plan Consistency

The purpose of this impact analysis is to evaluate Project consistency with County General Plan policies applicable to development of Moody Flats Quarry. This information is provided as a tool to assist County staff and decision makers who must independently evaluate this Project and ultimately determine whether the Project is consistent with the General Plan. Table 2, Shasta County General Plan Consistency Analysis, lists the primary General Plan Goals, Objectives, and Policies that would apply to the Project and provides documentation of Project consistency.

TABLE 2
SHASTA COUNTY GENERAL PLAN CONSISTENCY ANALYSIS

Policy	Consistency Analysis
PUBLIC SAFETY GROUP: SEISMIC AND GEOLOGIC HAZARDS	
SG-2: Protection of development on unstable slopes by developing location of development relative to these hazards.	The Project would involve mining of a hillside by creating a series of benches and highwalls (see Project Description, Section 6.0). A slope stability report has been prepared and included as Appendix E. The report confirms proposed slopes of 1:1 would be stable and not present a hazard upon reclamation. In addition the post mining end use is open space and does not currently envision any development.
SG-3: Protection of development from other geologic hazards, such as volcanoes, erosion, and expansive soils.	As described in Section 5.1 of the Reclamation Plan, best management practices will be implemented to limit erosion, including revegetation on undisturbed stockpile, strawbales and waddles, and other such control measures. The site does not contain expansive soils.
PUBLIC SAFETY GROUP: FLOOD PROTECTION	
FL-1: Protection of public health and safety, both on-site and downstream, from flooding through floodplain management, which regulates the types of land uses which may locate in the floodplain, prescribes construction designs for floodplain development, and requires mitigation measures for development which would impact the floodplain by increasing runoff quantities.	Moody Flats Quarry is not located within a FEMA floodplain.

Policy	Consistency Analysis
PUBLIC SAFETY GROUP: FIRE SAFETY AND SHERIFF PROTECTION	
FS-1: Protect development from wildland and non-wildland fires by requiring new development projects to incorporate effective site and building design measures commensurate with level of potential risk presented by such a hazard and by discouraging and/or preventing development from locating in high risk fire hazard areas.	The Project site is designated as an area that may contain substantial forest fire risks by the California Department of Forestry. Property owners within these areas are subject to the requirements of Public Resource Code Sections 4125 and 4142.
FS-a: All new land use projects shall conform to the County Fire Safety Standards.	Moody Flats Quarry will conform to all applicable County Fire Safety Standards.
FS-b: Known fire hazard information should be reported as part of every General Plan amendment, zone change, use permit, variance, building site approval, and all other land development applications subject to the requirements of the California Environmental Quality Act (CEQA).	See FS-1, above.
FS-d: New development in areas designated Urban Residential and Suburban Residential should be encouraged to incorporate effective site planning and structural design features designed to prevent and deter crime.	This policy does not apply as the Applicant is requesting a zone change and general plan amendment to remove the Suburban Residential General Plan designation and Interim Rural Residential zoning designations (see Project Description).
PUBLIC SAFETY GROUP: NOISE	
N-1: To protect County residents from the harmful and annoying effects of exposure to excessive noise.	An Environmental Noise Assessment (ENA) was prepared and included as Appendix M. The ENA identified noise levels from Project operation at the closest receptors to the site. The ENA concluded that noise levels from the Project would exceed County noise standards at some surrounding receptor locations. The ENA identified mitigation measures that would reduce these exceedences below County noise standards.
N-2: To protect the economic base of the County by preventing incompatible land uses from encroaching upon existing or programmed land uses likely to create significant noise impacts.	The Project has dealt with this in two respects. First, we are requesting a rezone and general plan amendment to parcels not currently designated as Mineral Resources. Second, the Project and associated facilities have been located in areas of the 1,900-acre site at significant distances from surrounding receptors. The large land holding of the Applicant surrounding the quarry and operations area will prevent incompatible land uses.
N-3: To encourage the application of state-of-the-art land use planning methodologies in the area of managing and minimizing potential noise conflicts.	See N-2, above.

Policy	Consistency Analysis
N-b: Noise likely to be created by a proposed non-transportation land use shall be mitigated so as not to exceed the noise level standards of Table N–IV as measured immediately within the property line of adjacent lands designated as noise-sensitive. Noise generated from existing or proposed agricultural operations conducted in accordance with generally accepted agricultural industry standards and practices is not required to be mitigated.	See N-1, above.
N-c: Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table N–IV upon existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that appropriate noise mitigation may be included in the project design. The requirements for the content of an acoustical analysis are given by Table N-V.	See N-1, above.
N-d: The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Figure N-1 and Table N–VI.	The ENA, prepared and included as Appendix M, analyzed noise impacts associated with Project truck traffic. The analysis did not identify a significant increase in noise levels as a result of Project traffic.
N-f: Noise created by new transportation sources shall be mitigated to satisfy the levels specified in Table N–VI at outdoor activity areas and/or interior spaces of existing noise-sensitive land uses. Transportation noise shall be compared with existing and projected noise levels shown in Tables N-I and N-II.	See N-d, above.
N-g: Existing noise-sensitive uses may be exposed to increased noise levels due to future roadway improvement projects as a result of increased traffic capacity and volumes and increases in travel speeds. In these instances, it may not be practical to reduce increased traffic noise levels consistent with those contained in Table N-VI. Therefore, as an alternative, the following criteria may be used as a test of significance for increases in the ambient outdoor activity areas of the noise level of noise-sensitive uses created as a result of a new roadway improvement project:	See N-d, above.

Policy	Consistency Analysis
• Where existing traffic noise levels are less than 60 dB L_{dn}, a +5 dB L_{dn} increase will be considered significant; and • Where existing traffic noise levels range between 60 and 65 dB L_{dn}, a +3 dB L_{dn} increase will be considered significant; and • Where existing traffic noise levels are greater than 65 dB L_{dn}, a + 1.5 dB L_{dn} increase will be considered significant.	
N-i: Where noise mitigation measures are required to achieve the standards of Tables N-IV and N-VI, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving compliance with the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.	Mitigation measures have been identified and recommended in the ENA to reduce noise levels below County thresholds. These measures include the use of topography, location of site facilities, and equipment noise control technologies to reduce Project-related noise levels.
N-l: The use of site planning and building materials/design as primary methods of noise attenuation is encouraged. Recommended techniques include, but are not limited to, such items as: **<u>Site Planning</u>** • Use of building setbacks and dedication of noise easements to increase the distance between the noise source and the receiver. • Locating uses and orienting buildings that are compatible with higher noise levels adjacent to noise-generators or in clusters as a means to shield more noise-sensitive areas and uses. • Using noise-tolerant structures, such as garages or carports, to shield noise-sensitive areas. • Clustering office, commercial, or multiple-family residential structures to reduce interior open-space noise levels. • Locate automobile and truck access to commercial or industrial land uses abutting residential parcels at the	See N-i, above.

Policy	Consistency Analysis
maximum practical distance from the residential parcels. • Avoid the siting of commercial and industrial loading and shipping facilities adjacent to residential parcels whenever practicable. • Parking areas for commercial and industrial uses should be set back from adjacent residential uses to the maximum extent feasible, or buffered and shielded by walls, fences, berms, and/or landscaping techniques. **Building Materials/Design** • Using dense building materials and tight-fitting doors. • Employing multi-glazed and multi-pane windows. • Placing unopenable windows on the side of the structure facing a major roadway and entry doors on the side of the building facing away from the major roadway. • Avoiding placing balconies and patio areas facing major transportation routes.	
PUBLIC SAFETY GROUP: HAZARDOUS MATERIALS	
HM-1: Protection of life and property from contact with hazardous materials through site design and land use regulations and storage and transportation standards.	As described in Section 6.5 of the Project Description, fuels will be stored on-site in above ground storage tanks and impervious surfaces with secondary containment consistent with existing state and federal regulations.
RESOURCES GROUP: TIMBER	
T-1: Preservation of timberlands suitable for forest management and production to allow for the continuation of such uses or to provide opportunities for the future establishment of such uses.	The Project site will result in the disturbance of approximately 430 acres out of 1,900 acres owned by the Applicant. The remaining 1,470 acres is dominated by timber that may be suitable for management and production in the future.
T-2: Protection of timberlands from incompatible adjacent land uses which adversely impact forest management activities.	See T-1, above.
RESOURCES GROUP: MINERALS	
MR-1: To identify, conserve, develop, and utilize Shasta County mineral resources while protecting mineral resource sites and access routes from potential conflicts with incompatible land uses.	The Applicant has identified a high quality source of PCC grade aggregate through detail geologic investigation and drilling programs. The Project has been designed to utilize the existing topography and Applicant land holdings to buffer the Project from surrounding receptors.

Policy	Consistency Analysis
MR-2: To encourage the production and conservation of minerals while giving consideration to values relating to recreation, watersheds, wildlife, range, forage, timberlands, and aesthetics.	The Project is intended to develop a known high quality resource of aggregate over the course of its anticipated 100-year life. The Project was designed to avoid the most environmentally sensitive resources on-site, including Moody Creek and Rancheria Creek, identified cultural resources, and limit the aesthetic changes to receptors outside the Project site.
MR-3: To ensure that mining operations are conducted in such a manner as to protect the public health, safety, and welfare; to minimize adverse impacts on adjacent land uses; and to mitigate other potential adverse environmental impacts.	The Project is located within the 1,900-acre property of the Applicant with mining and ancillary facilities situated to maintain significant distance and topographic buffers from surrounding receptors. The Project is designed to incorporate all applicable state and federally required safety measures and mitigation measures have been provided in the environmental assessment to reduce potential impacts to surrounding land uses.
MR-4: To ensure that mined lands are reclaimed to minimize adverse impacts on the environment, to protect the public health and safety, and to restore mined lands sites to a usable condition which is readily adaptable to alternative land uses.	A Reclamation Plan has been included in the Application. The Project site is currently undeveloped open space. Upon completion of mining operations, the site will be returned to an open space condition with potential water storage in the South Pit.
MR-5: To maintain an adequate long-term supply of mineral resources within the County, in particular, Portland cement concrete grade alluvial sand and gravel.	The Applicant, through detail geologic investigation, has identified a high quality source of PCC grade aggregate sufficient to support approximately 100 years of reserves.
MR-6: To encourage the use of recycled mineral resources, especially aggregate materials.	The Application includes a recycling plant for importing and processing of recycled materials.
MR-a: Mineral operations that are long-term (i.e. 30 years or more of expected operation) should be included in the Mineral Resource (MR) land use designation and in the Mineral Resource (MR) zone district. Included in this designation and zoning shall be areas used for extraction, processing, stockpiling, and shipping, and adjacent undeveloped areas within the same ownership as the mining operation site. Development and uses within MR designations and zone districts shall be regulated so that proposed future land uses will avoid or mitigate incompatibilities with mineral extraction operations.	As discussed in Section 3.2 of the Project Description of this Application a General Plan Amendment is requested to change the existing designation of seven parcels to Mining Resource. In addition, a rezone is requested for the same seven parcels to Mineral Resource District.

Policy	Consistency Analysis
1. Uses permitted in these areas should include mineral exploration and extraction, processing, and accessory uses. 2. Residential uses may be permitted for security and labor housing. 3. The minimum parcel size for lands in the MR designation shall be 20 acres.	
MR-d: The County will initiate the redesignation and rezoning for existing mining operations which had reclamation plans approved prior to January 1, 1998, and which are not already so designated and zoned. Applicants shall initiate redesignation and rezoning for new mining operations.	See MR-a, above.
MR-i: All new or expanded mining operations shall have a use permit to ensure that they are conducted in a manner to protect the public health, safety, and welfare, and to minimize adverse impacts on adjacent land uses and the environment.	As discussed in Section 2.0 of the Project Description, the Applicant is requesting a Conditional Use Permit as one of the Project's primary entitlements and discretionary actions.
MR-j: On-site processing, including crushing, washing, screening, sorting, and stockpiling, should be allowed as much as possible at all mineral resource sites, subject to consideration of potential conflicts with adjacent and nearby land uses, and to mitigation of potential adverse environmental effects. However, concrete plants and asphalt plants should only be permitted in the Mineral Resource (MR) and General Industrial (M) zone districts, subject to approval of a use permit.	As discussed in the Project Description, the Applicant is requesting a CUP for operation of a hardrock quarry, processing facility (including crushing, washing, screening, and stockpiling), and ancillary facilities (including an asphalt plant, ready-mix facility, and recycling plant). As required by policy MR-a, above, the Applicant is seeking a General Plan Amendment and rezone for parcels not currently designated as Mining Resource and Mineral Resource District.
MR-k: Mining may be permitted in the in-stream or gravel bar areas of a river or creek provided the removal of sand and gravel is...	No in-stream mining is proposed as part of this Application.
MR-l: Mining may be permitted in the floodplain area of a river or stream provided that a plan is prepared by a qualified professional including data and analysis to show that the proposed mining in the floodplain will not alter the course of the adjacent river or stream, will not cause river or stream to flow through the mined area, and will not significantly change the boundaries of the floodplain.	The Project is not located in a FEMA identified floodplain.

Policy	Consistency Analysis
MR-m: Mining may be permitted in areas of agricultural soils, provided that a plan is submitted by a qualified professional including data and analysis to show that the soil shall be replaced in such a way as to maintain the same or better agricultural qualities and class as existed prior to mining disturbance. Mining in A-cg designated areas is subject to policy AG-g.	The Project is not located in an area historically or currently subject to agricultural activities and operations. In addition, the Project is not located on parcel with agriculture land use or zoning designations.
MR-o: Aggregate recycling facilities should be included as a use permitted subject to a use permit in General Industrial and Mineral Resource zone districts.	As discussed in Section 6.3 of the Project Description, the Applicant intends to have a recycle plant on-site for processing of recycled materials.
RESOURCES GROUP: AIR QUALITY	
AQ-1e: The County shall require new air pollution point sources such as, but not limited to, industrial, manufacturing, and processing facilities to be located an adequate distance from residential areas and other sensitive receptors.	An Air Quality Impact Analysis has been prepared for the Project, consistent with Shasta County Air Quality Management District guidance, outlining Project emissions and a human health risk assessment (see Appendix F).
AQ-2b: The County will work to accurately determine and fairly mitigate the local and regional air quality impacts of projects proposed in the unincorporated portions of Shasta County.	See AQ-1e, above.
AQ-2c: Land use decisions, where feasible, should contribute to the improvement of air quality. New projects shall be required to reduce their respective air quality impacts to below levels of significance, or proceed as indicated in Policy AQ-2e.	See AQ-1e, above.
AQ-2e: Shasta County will cooperate with the AQMD in assuring that new projects with stationary sources of emissions of non-attainment pollutants or precursors that exceed 25 tons per year shall provide appropriate emission offsets. A comparable program which offsets indirect emissions of pollutants exceeding 25 tpy from development projects shall also be utilized to mitigate air pollution impacts. An EIR will be required for all projects that have unmitigated emissions of non-attainment pollutants exceeding 25 tons per year.	The Applicant understands exceedances of County and/or AQMD thresholds will require mitigation to the extent feasible, and is committed to working with the County and/or AQMD to identify feasible mitigation and reductions in on-site emissions during the environmental review process.
AQ-2f: Shasta County shall require appropriate Standard Mitigation Measures and Best Available Mitigation Measures on all discretionary land use applications as recommended by the AQMD in order to mitigate both direct and indirect emissions of non-attainment pollutants.	See AQ-2e, above.

Policy	Consistency Analysis
AQ-2g: Significance thresholds as proposed by the AQMD for emissions shall be utilized when appropriate for: (1) Reactive Organic Gases (ROG) and Oxides of Nitrogen (NO_x), both of which are precursors of ozone, and (2) inhalable particulate matter (PM_{10}) in determining mitigation of air quality impacts.	See AQ-2e, above.
AQ-2j: The County shall work toward measures to reduce particulate emissions from construction, grading, excavation, and demolition to the maximum extent feasible.	See AQ-2e, above.
AQ-4b: The County's development standards shall require the paving of roads as a part of new development permits to the extent necessary to meet access and air quality objectives. These requirements shall be designed to help mitigate potentially significant adverse air quality impacts created by particulate emissions on both an individual and cumulative basis.	See AQ-2e, above.
RESOURCES GROUP: WATER RESOURCES	
W-9: Institute effective measures to protect groundwater quality from potential adverse effects of increased pumping or potential sources of contamination.	There are no known groundwater supply wells completed within the Bass Mountain Diabase bedrock formation within the vicinity of the proposed Project. Groundwater production for domestic and municipal supply use occurs in adjacent watersheds and from different geologic formations. Since the mine pit locations are on small peaks located along a topographic ridge, the pits form their own watersheds and will not intercept groundwater that has percolated into the subsurface from outside the pit boundaries. Therefore, the quarry pits will not affect groundwater supplies outside of the pit boundaries or at depths below the pit floors. The mine pits will not interfere with or reduce recharge. During mining, all rain that falls within the pit will be retained within the pit. Part of the water retained within the pit will recharge groundwater through fractures in the bedrock. After mining is completed, reclamation will re-establish the natural surface drainage patterns in the area.

Policy	Consistency Analysis
W-a: Sedimentation and erosion from proposed developments shall be minimized through grading and hillside development ordinances and other similar safeguards as adopted and implemented by the County.	The Project will alter the drainage patterns at the two quarry pit locations, the plant site, the processing area, and the overburden storage area. During mining, rain that falls on the disturbed quarry areas will be retained within the quarry pits for use as process water or dust control water. There will be no discharge of water from the quarry pits, and thus no potential for erosion or siltation, from the quarries. The processing area and overburden storage area may involve the filling of small drainages with waste rock and overburden. Major stream courses or rivers will not be altered. Drainage controls and stormwater best management practices will be constructed in these areas to prevent erosion or siltation.
W-b: Septic systems, waste disposal sites, and other sources of hazardous or polluting materials shall be designed to prevent contamination to streams, creeks, rivers, reservoirs, or groundwater basins in accordance with standards and water resource management plans adopted by the County.	As described in Section 6.5 of the Project Description, fuels will be stored on-site in above-ground storage tanks and impervious surfaces with secondary containment consistent with existing state and federal regulations.
RESOURCES GROUP: FISH AND WILDLIFE RESOURCES	
FW-1: Protection of significant fish, wildlife, and vegetation resources.	As discussed in the Biological Resources Section of this Application, the Project site was surveyed for special status biological species. The Project site has potential to impact 1 special status plant specie (Northern Clarkia) and 4 animal special status species. Mitigation measures have been provided to minimize and/avoid impacts to those special status species that have a high potential to occupy or use the site.
FW-2: Provide for a balance between wildlife habitat protection and enhancement and the need to manage and use agricultural, mineral extraction, and timber land resources.	The Project proposes to develop approximately 430 acres of the 1,900-acre land holding of the Applicant. Approximately 80 percent of the site will remain undisturbed for open space.
FW-b: Recognition that classification of some fish, wildlife, and vegetation resources designated and used as Timberlands, Mineral Resource, Croplands, or Grazing lands does, in most cases, protect habitat resources. However, if there is a conflict, the timber, mineral extraction, or agricultural land use classifications mentioned above shall prevail in a manner consistent with State and Federal laws.	As discussed in Section 3.2 of the Project Description of this Application, a General Plan Amendment is requested to change the existing designation for seven parcels to Mining Resource. In addition a rezone is requested for the same seven parcels to Mineral Resource District. The Project site was surveyed for special status biological species. The Project site has potential to

Policy	Consistency Analysis
	impact 1 List 1B plant species and several animal special status species. Mitigation measures have been provided to minimize and/avoid impacts to those special status species that have a high potential to occupy or use the site.
FW-c: Projects that contain or may impact endangered and/or threatened plant or animal species, as officially designated by the California Fish and Game Commission and/or the U. S. Fish and Wildlife Service, shall be designed or conditioned to avoid any net adverse project impacts on those species.	See FW-1, above.
FW-d: The significant river and creekside corridors of Shasta County shall be designated on the General Plan maps. The primary purpose of this designation is to protect the riparian habitats from development and from adverse impacts from conflicting resources uses. The purpose is also to encourage open space and recreation (policy OSR-e). Mapping of significant waterway corridors in areas designated as resource protection lands is not required since it is assumed that resource land uses will also act to protect such waterway corridors. Riparian habitat protection along the significant river and creekside corridors, as designated on the plan maps shall be achieved, where appropriate, by the following measures: • Regulation of vegetation removal. • Design of grading and road construction to restrict sediment input to all streams. • Establishment of a development set-back. • The siting of structures, including clustering. • Recreation plans for the Sacramento River, Clear Creek, and other feasible waterway resources.	No County identified significant river or creekside corridors exist onsite. Three unvegetated intermittent drainages transverse the site including Salt Creek, Moody Creek, and Rancheria Creek. Mitigation Measures have been provided recommending the Applicant work with California Department of Fish and Game and Army Core of Engineers to obtain appropriate permits and approvals
RESOURCES GROUP: SCENIC HIGHWAYS	
SH-1: Protection of the natural scenery along the official scenic highways of Shasta County from new development which would diminish the aesthetic value of the scenic corridor.	The closest officially-designated scenic highway is Shasta Dam Boulevard, 2 miles west of the site. The distance between the Project site and the Scenic Highway, along with the influences of intervening topography and vegetation eliminate the potential for a substantial adverse impact on the Scenic Highway visual resources.

Policy	Consistency Analysis
SH-2: New development along scenic corridors of the official scenic highway should be designed to relate to the dominant character of the corridor (natural or natural and man-made contrast) or of a particular segment of the corridor. Relationships shall be achieved in part through regulations concerning building form, site location, and density of new development.	See SH-1, above.
SH-3: Recognition that the management practices of agriculture, timber, and other resource-based industries which may cause some degradation of the visual quality of the scenic corridor are inevitable but their impacts are temporary.	See SH-1, above.
SH-a: To protect the value of the natural and scenic character of the official scenic highway corridors and the County gateways dominated by the natural environment, the following provisions, along with the County development standards, shall govern new development: • Setback requirements; • Regulations of building form, material, and color; • Landscaping with native vegetation, where possible; • Minimizing grading and cut and fill activities; • Requiring use of adequate erosion and sediment control programs; • Siting of new structures to minimize visual impacts from highway; • Regulation of the type, size, and location of advertising signs; • Utility lines shall be underground wherever possible; where undergrounding is not practical, lines should be sited in a manner which minimizes their visual intrusion.	See SH-1, above..
RESOURCES GROUP: HERITAGE RESOURCES	
HER-1: Protection of significant prehistoric and historic cultural resources.	An Archaeological Inventory Survey (including Native American consultation) was conducted that identified seven prehistoric and four historic cultural sites. Of these seven sites only one is located within the proposed disturbance are of the Project. A mitigation measure has been provided

Policy	Consistency Analysis
	recommending implementation of a Historic Properties Treatment Plan to protect the identified resources and reduce this Impact to a less that significant level.
HER-a: Development projects in areas of known heritage value shall be designed to minimize degradation of the resources. Where conflicts are unavoidable, mitigation measures which reduce such impacts shall be Implemented. Possible mitigation measures may include clustering, buffer or nondisturbance zones, and building siting requirements.	See above.

As demonstrated above, the Project does not conflict with any General Plan elements applicable to this Project. Additionally, since the Applicant has requested a General Plan Amendment to redesignate those seven parcels not currently in compliance with General Plan policy MR-a, the Project does not conflict with the General Plan with respect to those parcels. The table above does not analyze consistency with the Circulation Element of the General Plan as we anticipate this will be conducted by County Staff upon completion of a Traffic Impact Study during the environmental review process.

Level of Significance Before Mitigation: Less than Significant

Mitigation Measure: None Required

Impact LU-3: Zoning Compatibility

The County Zoning Code designates the property Mineral Resource, Interim Rural Residential, General Industrial, and Community Commercial (see LU-Figure 4). As outlined above in the Shasta County General Plan, Resource Group, Minerals (MR-a), mining operations over 30 years should be included in the MR land use designation and MR zone district. The policy explains all parcels that involve "extraction, processing, stockpiling, and shipping, and adjacent undeveloped area within the same ownership" shall be included within these zones. While most of the parcels within the Project site currently comply with this policy, some parcels require a change to their existing zoning designation. As such, the Applicant has requested Rezone as one of the primary entitlements for those parcels not currently in compliance with General Plan policy MR-a. Table 1 lists the parcels for which a rezone is requested. The

Project would be consistent with applicable zoning code regulations with the proposed rezone of the parcels as outlined above.

Level of Significance Before Mitigation: Less than Significant

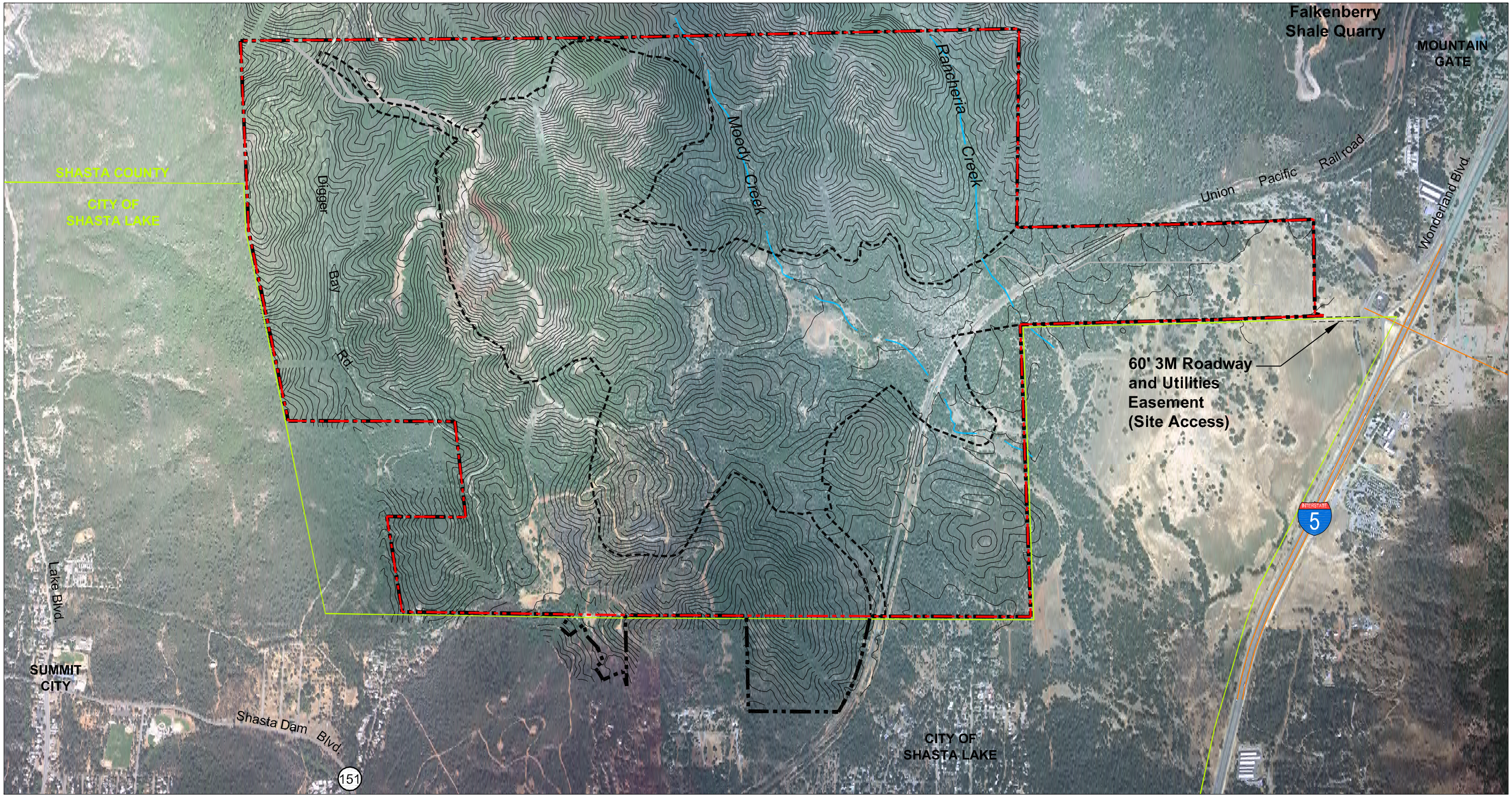
Mitigation Measure: None Required

Impact LU-4: Conservation Plan Conflict

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans for the Project site or surrounding vicinity.

Level of Significance Before Mitigation: Less than Significant

Mitigation Measures: None Required



AERIAL PHOTOGRAPH SOURCE: Pace Civil, Inc. (08-2006)

N

0 1/4 mile

SCALE: 1" = 1/4 mile

Property Ownership	± 1900 acres
Site Boundary	± 1810 acres
Limits of Surface Disturbance	
City of Shasta Lake Boundary	

BENCHMARK RESOURCES

Existing Conditions Aerial Photograph

MOODY FLATS QUARRY

LU - Figure 1

North Pit Mineral Resource (View from West)

South Pit Mineral Resource (View from West)

Existing Conditions Photographs

MOODY FLATS QUARRY

BENCHMARK RESOURCES

LU - Figure 2a

Secondary and Ancillary Processing and Load-Out Area (View Southwest)

Overburden Fill Area

Existing Conditions Photographs

MOODY FLATS QUARRY

BENCHMARK RESOURCES

LU - Figure 2b

Overpass Location

UP Main Line and Rail Siding/Spur Location

Existing Conditions Photographs

MOODY FLATS QUARRY

BENCHMARK RESOURCES

LU - Figure 2c