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FINAL

ENVIRONMENTAL IMPACT REPORT

**AGGREGATE MINE
TRANSIT MIXED CONCRETE COMPANY
Moorpark, California**

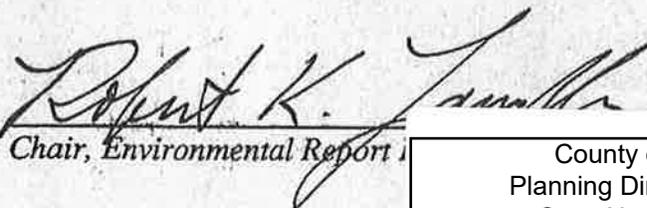
CONDITIONAL USE PERMIT CUP-4633

prepared by

**County of Ventura
Resource Management Agency
Planning Division**

JULY 1996

The Environmental Report Review Committee recommends that the decision-making body of the proposed project finds that this document has been completed in compliance with the California Environmental Quality Act.


Chair, Environmental Report

July 31, 1996

County of Ventura
Planning Director Hearing
Case No. PL21-0112
Exhibit 4b - Certified EIR and 2017 EIR
Addendum

**FINAL
ENVIRONMENTAL IMPACT REPORT
CONDITIONAL USE PERMIT CUP-4633
TRANSIT MIXED CONCRETE COMPANY (MOORPARK) AGGREGATE MINE
MOORPARK, CALIFORNIA**

July 1996

State Clearinghouse No. 89032905

Prepared for:

County of Ventura
Resource Management Agency
Planning Division

Prepared by:

County of Ventura
with Technical Assistance
Provided by Dames and Moore

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1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

The proposed project consists of an aggregate mine located approximately four miles north of the City of Moorpark in the unincorporated portion of eastern Ventura County (Figure 1). The proposed permit area encompasses 533 acres located at the terminus of Happy Camp Road about 1.5 miles north of Broadway (i.e., Highway 23) as shown on Figure 2. Approval of the project would require the issuance of a Conditional Use Permit (CUP-4633) from Ventura County.

The project site has been mined since 1948. In 1961, the County issued CUP-1328 for the mine. That permit included an asphalt batch plant. In 1975, operations at the mine were ceased. In 1976, Blue Star Ready Mix, Inc., purchased the property and acquired a renewal of CUP-1328 (consisting of a major modification of the original CUP). Operations at the mine were conducted by Blue Star Ready Mix, Inc. under the modified CUP-1328. In 1986, Blue Star Ready Mix, Inc. filed an application for a new permit (CUP-4633). Since that time, there has been prolonged environmental review and coordination with Blue Star Ready Mix, Inc., such that CUP-1328 expired before a decision could be reached.

In October 1993, the mining operations and property were acquired by Transit Mixed Concrete Company (TMC) which proposes to operate the project in accordance with the project description contained in the CUP-4633 application filed by Blue Star Ready Mix, Inc. TMC mining operations have been permitted to continue, pursuant to a Compliance Agreement (CA-4072) between TMC and the County, while the County processes TMC's CUP-4633 application and completes the associated CEQA environmental review. A Compliance Agreement is an enforcement tool available to the Planning Director to achieve zoning compliance and is authorized under Ventura County Ordinance Code Section 8114-4.

Ⓢ Although CUP-1328 has expired (except for its Reclamation Plan), its provisions have, in effect, been reinstated in accordance with the provisions of the Compliance Agreement. Under the terms of the Compliance Agreement, TMC is permitted to conduct mining operations within the previously approved Grading and Reclamation Plan and subject to the Conditions of Approval for CUP-1328. Specifically, the Compliance Agreement includes the following condition:

"OWNER shall work diligently and cooperatively with County staff in seeking to obtain a new Conditional Use Permit for continued operations at the subject site. In the interim, OWNER shall refrain from excavating material for processing and sale (to be distinguished from Reclamation and other ancillary activities) outside the currently approved Grading and Reclamation Plan boundary located between expired CUP-1328 and CUP-4158 unless authorized to do so by the Planning Director."

CUP-1328 encompassed 284 acres, of which 175 acres were approved for mining. The existing mining area is shown on Figure 2. Under CUP-4633, the applicant proposes to expand the previous CUP boundary to include an estimated 533 acres, wherein the proposed mining area would encompass about 217 acres. Of the proposed mining area, 146 acres are currently undisturbed. The remaining 71 acres of the proposed mining area have been disturbed by mining and are located within

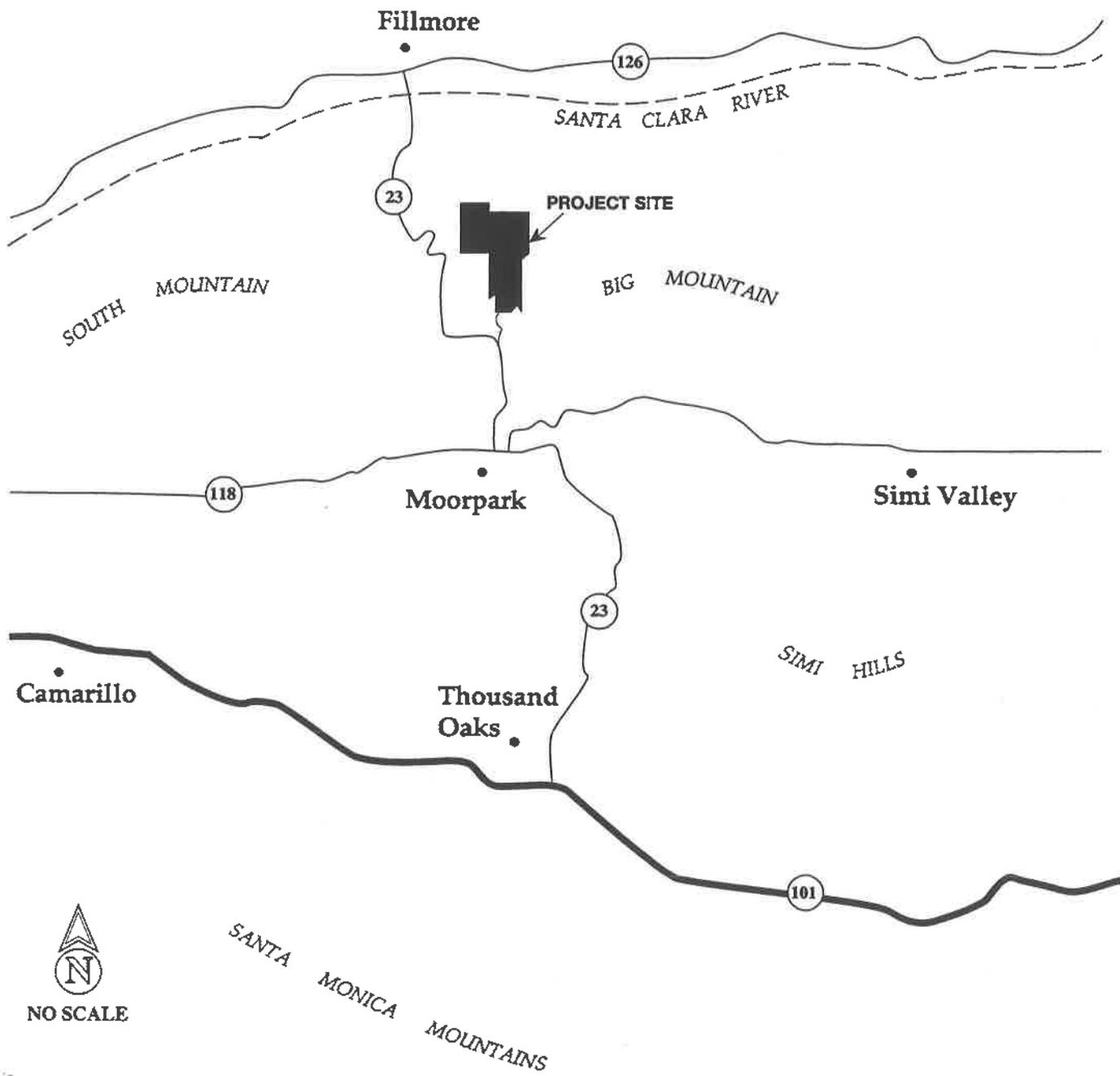


FIGURE 1

REGIONAL
LOCATION
OF PROJECT SITE

the area previously approved for mining under CUP-1328 (see Figure 2). Approximately 77 acres of the proposed mining area are located outside the area approved for mining under CUP-1328.

The objectives of the proposed project are to: 1) continue mining and processing operations at the site in a manner similar to previous operations, subject to economic viability; 2) expand the area to be mined; 3) increase the maximum annual sand and gravel production rate; 4) add hot-mix asphalt concrete batch plant (hereafter referred to as the asphalt batch plant) on site; 5) provide for the environmentally sound and economically viable closure of the site (i.e., via Reclamation Plan implementation); and 6) supply Ventura County with construction grade aggregate materials (e.g., rock, sand and gravel), specialty sands, ready-mix concrete, mortar, road base, and asphalt concrete.

The annual rate of production of the various products would vary from year to year based on economic conditions. The applicant has requested authorization in the CUP for a maximum annual mine production rate of 3,400,000 tons. This rate is substantially greater than the recent annual production rates of the mining under CUP-1328, which ranged from 1,210,400 to 1,827,500 from 1986 to 1991. The production rate of the existing mine was reduced in 1990 and in subsequent years due to the recession. Once the recession ends, the demand for construction-grade sand and gravel is expected to increase. CUP-1328 permitted facilities provide the capacity to excavate 1,800,000 gross tons per year which would result in an estimated 810 one-way heavy truck trips per day. Under CUP-1328, there are no permit conditions limiting the production level or the number of heavy trucks per day. For the purposes of this environmental analysis, the "existing setting" is therefore defined as CUP-1328, as previously modified, operating at capacity (i.e., a maximum annual production rate of 1,800,000 gross tons and a daily average of 810 one-way heavy trucks trips).

The applicant has requested a 50-year time period for the CUP, with 75 to 100 million cubic yards of material excavated from the 217-acre mining area shown on Figure 2. Mining would occur in three phases. Phase 1 encompasses approximately 65 acres and would be completed within 5-10 years. Phase 2 includes a 50-acre area that would be mined within 10-20 years. Phase 3 includes about 102 acres and would be mined over a 30-40 year period.

1.2 PURPOSE AND SCOPE OF THE EIR

Issuance of CUP-4633 would require discretionary approval by the Ventura County Planning Commission, and is subject to the requirements of the California Environmental Quality Act (CEQA). In accordance with CEQA, the Planning Division of Ventura County Resource Management Agency (RMA) prepared an Initial Study on the proposed project upon receipt of a complete application for the permit. The Initial Study (see Appendix A) indicated that the proposed project could result in significant adverse impacts to the environment, and, therefore, an EIR would be required.

In accordance with Section 15121(a) of the CEQA Guidelines, the purpose of an EIR is to serve as an informational document that:

"...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project..."

This EIR addresses both site-specific and cumulative impacts of the proposed project in accordance with the provisions set forth in the CEQA Guidelines. The focus of this EIR is to address potentially significant environmental issues identified in the Initial Study and to recommend feasible mitigation measures, where possible, that reduce or eliminate significant environmental impacts. The level of detail in the EIR is consistent with Section 15151 of the CEQA Guidelines that states:

"An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have not looked for perfection, but for adequacy, completeness, and a good faith effort at full disclosure."

The EIR addresses the following key issues which were identified in the Initial Study and during the preparation of EIR scope-of-work as having a potential for significant adverse impacts:

- Environmental and Regulatory Setting/Land Use Compatibility
- Geology and Geohazards
- Groundwater
- Erosion and Sedimentation
- Biological Resources
- Visual Resources
- Air Quality
- Noise
- Traffic

1.3 RESPONSIBLE AND TRUSTEE AGENCIES

The Ventura County Resource Management Agency (RMA) is the CEQA lead agency for the project. Discretionary approval is vested in the Planning Commission. The Planning Division of RMA is responsible for preparing the EIR. Other County agencies that would review the EIR and recommend conditions of approval include the Air Pollution Control District, Public Works Agency (PWA) (including the Flood Control District, Transportation Department, Water Resource Department, and Development Inspection Services Division), Environmental Health Division, Sheriff's Department, and Fire Protection District.

In addition to these County agencies, the California Department of Fish and Game is a state-designated trustee agency that is entitled to a mandatory notice and review of the EIR. The Regional Water Quality Control Board and the State Division of Mines and Geology may also review and comment on the EIR at their discretion.

1.4 HISTORY OF PREPARING THIS DOCUMENT

The application for the proposed project was originally filed on November 11, 1986 as CUP-1328, Modification No. 12 (subsequently refiled as CUP-4633 on August 1, 1990). The original application was found to be incomplete three times and on each occasion, additional information was

requested of the applicant. On September 30, 1988 the application was determined to be complete and an Initial Study was initiated pursuant to CEQA. Based upon the results of the Initial Study, it was determined an Environmental Impact Report was required. After developing the scope of work, a contract was awarded on July, 11 1989 to Lockman & Associates to prepare the Draft EIR.

The Draft EIR was released for public review and comment on June 11, 1991 and public hearings were subsequently held. On August 5, 1991, the County terminated the contract with Lockman & Associates. On August 21, 1991, the Ventura County Environmental Report Review Committee (ERRC) found the Draft EIR was inadequate and discussions began regarding the selection of a new EIR consultant.

On November 12, 1991, a contract was awarded to Dames & Moore to prepare a Revised Draft EIR which was released for public review and comment on October 16, 1992 and public hearings were subsequently held. On January 6, 1993, ERRC directed the preparation of a Preliminary Final EIR. At that time, traffic issues needed to be resolved and the reclamation plan needed approval by the State Division of Mines and Geology (DMG). The traffic policy issue raised at ERRC, was resolved in September of 1993 when the Planning Director issued an interpretation of Traffic Policies 4.2.2-4 and 4.2.2-5 contained in the Ventura County General Plan Goals, Policies and Programs. On May 3, 1993, the applicant's revised reclamation plan was submitted to the DMG for review. DMG approval was obtained on March 3, 1994.

In October of 1993, Transit Mixed Concrete Company (TMC) acquired the project site and assumed responsibility for the proposed project. On March 3, 1994 a contract was executed with Dames & Moore for the completion of the Preliminary Final EIR. At TMC's request, that document was recirculated as a Revised Draft EIR in August of 1994 for public review and comment. On October 26, 1994, following public hearings, ERRC directed that the Preliminary Final EIR be prepared. ERRC also directed additional studies be conducted to address outstanding issues on traffic and noise. The preparation of the traffic studies was contracted to Associated Transportation Engineers and the noise studies to Walker, Celano & Associates. These studies were completed and, at TMC's request, the resulting document was recirculated in March of 1996 as a Second Revised Draft EIR.

In addition, ERRC directed that erosion and sedimentation be better addressed, particularly in regards to identifying the source of sedimentation relative to the Leavans Ranch. Accordingly, changes have been made to the text in Sections 4.4.2 and 4.5.2-4. In the case of the later, a field investigation was conducted to determine the source of water runoff which concluded the proposed project site was not the source of the water runoff onto the Leavans Ranch. Rather, other possible sources were identified, including the TMC Fruitvale site and the Wayne J. Sand and Gravel project site. These two parties are working with the County to correct the situation and the TMC Fruitvale site has already been recontoured. Additional grade changes will result from recently approved Permit Adjustments intended to restore the highwall condition that exists along the shared boundary between the proposed project and the TMC Fruitvale site (refer to Section 4.2.3).

On May 8, 1996, the Second Revised Draft EIR was considered by ERRC at a public hearing. After closing the public hearing, ERRC directed staff to prepare this Preliminary Final EIR in response to the testimony presented and the letters received. Of special note, a recent review of a

project in the northern portion of the City of Moorpark discovered nesting pairs the California gnatcatcher (*Poliophtila californica californica*). Because the California gnatcatcher is listed as a Federally Threatened species, ERRC directed staff to conduct the field surveys needed to: 1) assess whether the proposed project supported populations of the California gnatcatcher and; 2) if present, determine whether the proposed project would result in significant impacts to this species. The field survey failed to locate the California gnatcatcher on the proposed project site nor within the immediate vicinity (refer to the discussion in Section 4.5.1-4).

Note: Text changes and additions made since the Second Revised Draft EIR are highlighted by a line on either side of the paragraph(s) where the changes reside. Corrections to section, table and/or figure references have also been so highlighted, while spelling and other minor editorial corrections/changes have not.

Tables S-1 through S-4 are the exception to this formatting rule because such highlights, when added to a tabular format, resulted in an overly cluttered presentation. Therefore, please be advised that changes have been made, without line highlights, to Tables S-1 through S-4. These changes reflect those presented and highlighted in the main sections of this EIR.

*

Text deletions, if not made in association with other text changes and additions, will be indicated by an asterisk (*) in the far left margin.

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2.0 SUMMARY OF IMPACTS AND MITIGATION

2.1 SIGNIFICANT ENVIRONMENTAL IMPACTS

Environmental impacts of the proposed project have been evaluated in the EIR. A description of the direct, indirect, and cumulative impacts of the project is provided in Section 4.0. Impacts were classified in the manner shown below. An impact was determined to be significant using the definitions of "significance" in the CEQA Guidelines (Sections 15065, 15358, 21038, and Appendices D and G).

- Class I Impacts. Significant environmental impacts that cannot be mitigated to a less than significant level. For these impacts, the County must issue a "Statement of Overriding Considerations" under Section 15092(b) of the CEQA Guidelines if the project is approved. Mitigation measures are recommended to minimize adverse impacts.
- Class II Impacts. Significant environmental impacts that can be mitigated to a less than significant level. The County must make "findings" under Section 15091(a) of the CEQA Guidelines if the project is approved. Mitigation measures are recommended to minimize these adverse impacts.
- Class III Impacts. Other environmental impacts that are potentially adverse but not significant. In many instances, conditions of approval are recommended to minimize these adverse impacts. In some instances, these impacts are minimized by mitigation measures being recommended to address Class I or II impacts.
- Class IV Impacts. Beneficial impacts.

By identifying the impacts associated with each issue area, and by recommending conditions of approval or expanding other mitigation measures in this EIR, the decision makers and the general public are offered a discussion and full disclosure of the significant environmental impacts of this proposed project.

Significant, unmitigable impacts (Class I) that cannot be avoided or reduced by mitigation to a non-significant level are as follows:

- Loss of 80 acres of coastal sage scrub habitat and 7 acres of alluvial scrub habitat which are both considered "very threatened" by the California Department of Fish and Game (project and cumulative significant, unmitigable impact, Class I).
- Loss of nesting and/or breeding habitat for coast horned lizard, coast patch-nosed snake, and loggerhead shrike, and possibly for several raptor species that may use the project site for roosting and foraging, including the golden eagle, Cooper's hawk, and black-shouldered kite (significant, unmitigable impact, Class I).
- Phase 2 and 3 excavations would be visible to many communities south of the mine, as well as recreationalists in middle and upper Happy Camp Canyon Regional Park (significant, unmitigable impact, Class I).

- Near-term, Phase 1 excavation would be visible to recreationalists using the hiking trails in upper Happy Camp Canyon Regional Park (significant, unmitigable impact, Class I).
- NO_x and PM₁₀ exceedances of both the state and federal air quality standards for O₃ and PM₁₀ (significant, unmitigable impacts, Class I).
- ROC emissions in excess of the prescribed threshold criteria for regional air quality (significant, unmitigable impacts, Class I).
- Without implementation of the City of Moorpark's circulation improvements, noise related to the proposed project is expected to contribute incrementally to the existing significant, cumulative unmitigable impacts (Class I) along Walnut Canyon Road.

Table S-1 provides a summary of impacts, recommended mitigation measures, and a characterization of residual impacts given the implementation of these mitigation measures.

2.2 INSIGNIFICANT ADVERSE IMPACTS

The proposed project would also result in a variety of impacts that are considered significant, mitigable impacts (Class II) and insignificant adverse impacts (Class III). These impacts and the associated mitigation measures and/or recommended conditions of approval are listed below in Tables S-2 (Class II impacts) and S-3 (Class III impacts). Recommended conditions of approval are presented in italics.

Note: In preparing the information summarized in Tables S-1 through S-4, the need for brevity resulted in the loss of some detail in the mitigation measures and recommended conditions of approval being summarized. In addition, some rewording was necessary to achieve the same end. The reader is advised to consult the individual sections of this EIR for the full and accurate text of the mitigation measures and recommended conditions of approval.

TABLE S-1
Summary of Significant, Unmitigable Impacts (Class I)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Mitigation Measure</i>	<i>Residual Impacts</i>
BIOLOGICAL RESOURCES	Incremental disturbance of about 146 acres of native vegetation, including coastal sage scrub, alluvial scrub, chamise chaparral, and other habitat. Loss of 80 acres of coastal sage scrub habitat and 7 acres of alluvial scrub habitat which are both considered "very threatened" by the California Department of Fish and Game.	B-1 <u>Revegetation Plan</u> <ul style="list-style-type: none"> - Revegetation using local native seeds - Topsoil management - Procedures to control invasive species - Contingency for supplemental irrigation - Reclamation Plan per SMARA requirements - Oak woodland and alluvial scrub replacement 	Significant
	Loss of nesting and/or breeding habitat for coast horned lizard, coast patch-nosed snake, and loggerhead shrike, and possibly for several raptor species that may use the project site for roosting and foraging, including the golden eagle, Cooper's hawk, and black-shouldered kite.	B-3 <u>Habitat Management and Compensation Plan</u> Potential enhancements shall include, but not be limited to: 1) purchase and installation of wildlife guzzlers; 2) purchase and installation of fencing of sensitive areas; 3) purchase of an open space easement on adjoining lands that have habitat value; 4) fund revegetation efforts in disturbed areas of the mine site, particularly areas disturbed prior to 1976; and 5) dedication of land in fee.	Significant
VISUAL RESOURCES	Phase 2 and 3 excavations would be visible to many communities south of the mine, as well as recreationalists in middle and upper Happy Camp Canyon Regional Park.	V-1 <u>Visual Elements of Reclamation Plan</u> <ul style="list-style-type: none"> - Use gradual and smoothed slopes - Create a smooth transition with the adjacent, undisturbed slopes - Revegetate with native plants 	Significant
	Near-term, Phase 1 excavation would be visible to recreationalists using the hiking trails in upper Happy Camp Canyon Regional Park.		Significant

TABLE S-1 (continued)
Summary of Significant, Unmitigable Impacts (Class I)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Mitigation Measure</i>	<i>Residual Impacts</i>
AIR QUALITY	NO _x and PM ₁₀ exceedances of both the state and federal air quality standards for O ₃ and PM ₁₀ .	<u>A-1 Air Emissions Mitigation Plan</u> - Equipment/engines properly maintained/tuned - Dust control on mined slopes, on-site roads, and stockpiles with water or chemical agents - Temporary grass cover on inactive slopes - Water spray or cover delivery trucks - Cease mining in high winds - Limit on-site haul truck speeds	Significant
	ROC emissions in excess of the prescribed threshold criteria for regional air quality.	<u>A-2 Vehicle Emissions Mitigation Program</u> - Use of low emission engines for product and on-site equipment - Conversion of conventional engines or purchase of low emissions engines for use by non-project related vehicles - Contributions to a Countywide or other mobile emissions reduction fund, if established - Other equivalent measures approved by the APCD	Significant
NOISE	Contributes incrementally to cumulative noise along Walnut Canyon Road.	<u>N-2. Alternative Access Routes</u> Requires permittee pro-rata share participation in any assessment district or other financing technique adopted to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway.	Significant, assumes the circulation improvements are not implemented by the City of Moorpark
		<u>N-3. Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue</u> Requires reciprocal agreement and permittee pro-rata share participation in a City of Moorpark sponsored traffic noise monitoring program to develop, fund, and implement a traffic noise monitoring and enforcement program designed to reduce traffic noise impacts on Walnut Canyon Road/Moorpark Avenue.	Significant, assumes reciprocal agreement is not achieved.

TABLE S-2
Summary of Significant, Mitigable Impacts (Class II)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Mitigation Measure</i>	<i>Residual Impacts</i>
GEOLOGY AND GEOHAZARDS	Damage to equipment and buildings as a result of ground shaking.	GG-1 <u>Slope Stability Analysis and Mitigation</u> Recommendations for mitigation of slope failure hazards such as slope configuration, safe excavation procedures, and use of standard engineering practices including buttressing, cut and fill excavation, and control of drainage on any newly exposed landslides. GG-2 <u>Reclamation Plan</u> Plan revision that: 1) incorporates the results of the 1993 and 1994 revegetation test plots; and 2) meet all applicable SMARA requirements, including but not limited to revegetation, topsoil management, protection of wildlife values, and any newly adopted standards for reclamation.	Less than significant
	Slope stability problems, including the potential instability of temporary cut slopes during mining operations and the instability of permanent cut slopes after final reclamation of the site.		Less than significant
	Instability of permanent slope cuts after the reclamation of the site include the instability of, and damage to, offsite property.		Less than significant
BIOLOGICAL RESOURCES	Loss of up to 50 oak trees, mostly located in a large grove in Phase 3 area, (significant, mitigable impact, Class II). The number of oak trees lost will depend upon the degree to which trees can be avoided by: 1) minor changes in the limits of mining, and 2) the number of trees replaced on-site pursuant to the Tree Protection Regulations.	B-2 <u>Avoidance Measures</u> Revise the Phase 3 limits of mining to avoid oak trees in the large grove on the east side of the project site.	Less than significant
VISUAL RESOURCES	Long-term, the Phase 1 excavation would eventually be ameliorated through reclamation once the reclaimed slopes have been restored to gentle contours and revegetated with sufficient vegetative cover to blend in with natural slopes.	V-1 <u>Visual Elements of Reclamation Plan</u> - Use gradual and smoothed slopes - Create a smooth transition with the adjacent, undisturbed slopes - Revegetate with native plants Refer to the following condition of approval described below in Table S-3 (VISUAL RESOURCES): <u>Windrow Planting</u>	Less than significant

TABLE S-2 (continued)
Summary of Significant, Mitigable Impacts (Class II)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Mitigation Measure</i>	<i>Residual Impacts</i>
NOISE	The use of "jake" brakes results in a loud intrusive sound that is likely to exceed 70 dB.	N-1. <u>Prohibit Jake Brakes</u> Trucks are prohibited from using "jake brakes" along Happy Camp Road and Walnut Canyon Road or within the City of Moorpark, except under emergency operating conditions.	Less than significant
	Contributes incrementally to cumulative noise along Walnut Canyon Road.	N-2. <u>Alternative Access Routes</u> Requires permittee pro-rata share participation in any assessment district or other financing technique adopted to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway.	Less than significant, assumes the City of Moorpark implements the circulation improvements
		N-3. <u>Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue</u> Requires reciprocal agreement and permittee pro-rata share participation in a City of Moorpark sponsored traffic noise monitoring program to develop, fund, and implement a traffic noise monitoring and enforcement program designed to reduce traffic noise impacts on Walnut Canyon Road/Moorpark Avenue.	Less than significant, assumes reciprocal agreement is achieved.
TRAFFIC	Extraordinary road maintenance and repair of Happy Camp Road and Grimes Canyon Road.	T-1. <u>Roadbed Maintenance and Repairs Fund</u> Requires the permittee to be financially responsible for the extraordinary maintenance and repairs on Happy Camp Road and Grimes Canyon Road.	Less than significant
	Cumulative impacts to the Regional Road Network.	T-2 <u>Traffic Impact Mitigation Fee</u> Pursuant to the Traffic Impact Mitigation Fee Ordinance (Ordinance #4071), requires the permittee to pay a traffic impact mitigation fee of \$74,695.76. Refer to the following condition of approval described below in Table S-3 (TRAFFIC): <u>Participation in Reciprocal Traffic Impact Mitigation Fee Agreement</u>	Less than significant

TABLE S-3
Summary of Insignificant, Adverse Impacts (Class III)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
GEOLOGY AND GEOHAZARDS	Damage to equipment and buildings as a result of fault rupture, subsidence, and/or liquefaction.	Refer to the following mitigation measures described above in Table S-1: GG-1 <u>Slope Stability Analysis and Mitigation</u> GG-2 <u>Reclamation Plan</u>	Insignificant
GROUND WATER	Slight increases in TDS and other dissolved constituents that could potentially affect groundwater quality.	<u>Groundwater Quality - Standing Water</u> Requires removal of fine soil and debris to reduce the retention time of water in mining pits and sediment detention basins. Also requires that rainwater collected in the large unlined sediment detention basin located in the southeast portion of the site be pumped into the two waste water ponds for use in the mining operations.	Insignificant
	Accidental spill of fuels, oils, paints and solvents that could potentially affect groundwater quality.	<u>Groundwater Quality - Spill Prevention</u> Specifies procedures for the storage, handling, and disposal of potentially hazardous materials. Requires Environmental Health Division permit for the installation, use and operation of underground hazardous materials storage tanks.	Insignificant
	Infiltration of contaminants into the groundwater aquifer due to leakage from the onsite septic system.	<u>Groundwater Quality Protection - Recycling Ponds and Septic Systems</u> Requires quarterly water quality samples and if water quality samples exceed the maximum contamination level(s) set by local, state or federal agencies, the permittee is to immediately consult with the County and other agencies, to identify and implement the changes needed to comply with water quality standards.	Insignificant

TABLE S-3 (continued)
Summary of Insignificant, Adverse Impacts (Class III)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
EROSION AND SEDIMENTATION	Potential for increased sediment loading of Happy Camp Canyon Regional Park.	<p><u>Sediment Detention Basin Design</u> <i>Specifies capacity and structural integrity of the existing sediment retention ponds (i.e., must adequately contain the sediments resulting from a 100-year event with a 75% scarified watershed). Monitored via annual SMARA-compliance inspection.</i></p> <p><u>Clearing Sediment Plan</u> <i>Requires the removal of sediment when the capacity of any sediment detention basin on site is reduced by more than 10%. Each year, sediments must be cleared prior to 1 November to ensure there is adequate basin capacity prior to the winter season. Monitored via annual SMARA-compliance inspection.</i></p>	Insignificant
BIOLOGICAL RESOURCES	Potential loss of a sensitive plant species (i.e., Nevin's brickellia) that potentially occurs within the proposed mining area.	<p><u>Botanical Surveys</u> <i>Requires field surveys, prior to mining activities in Phase 3, to determine the presence of any sensitive plant species identified in the EIR. If found, requires sensitive seed collection and/or transplanting.</i></p>	Insignificant
	Potential nighttime lighting and impairment of wildlife movement on and through the proposed project area.	<p>Refer to the following mitigation measures described above in Table S-1:</p> <p>V-1 <u>Visual Elements of Reclamation Plan</u> A-1 <u>Air Emissions Mitigation Plan</u> A-2 <u>Countywide Vehicle Emissions Mitigation Program</u></p>	Insignificant
	Removal of the central drainage and potential disturbance of the western drainage.	<p><u>Avoidance/Protection of Ephemeral Drainages</u> <i>Requires grading and excavation within the vicinity of the ephemeral drainage at the west side of the project site be completed in a manner that ensures drainage from all disturbed areas will flow towards the mine.</i></p> <p><i>Requires construction of 3 to 4-foot high earthen berms along the excavated side of the drainage to prevent erosion into the drainage to the east. These berms are to be seeded with annual grasses to ensure their integrity.</i></p>	Insignificant

TABLE S-3 (continued)
Summary of Insignificant, Adverse Impacts (Class III)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
VISUAL RESOURCES	Long-term, the Phase 1 excavation would eventually be ameliorated through reclamation once the reclaimed slopes have been restored to gentle contours and revegetated with sufficient vegetative cover to blend in with natural slopes.	<p>Refer to the following mitigation measures described above in Table S-1:</p> <p>V-1 <u>Visual Elements of Reclamation Plan</u></p> <p>Also, the following condition of approval is recommended:</p> <p><u>Windrow Planting</u> <i>The permittee shall plant and establish a windrow of large native trees near the lower debris basin (i.e., at the mouth of the canyon between TMC and Happy Camp Canyon Regional Park) in order to screen the mine from users in the low lying areas of the Happy Camp Canyon Regional Park.</i></p>	Insignificant
	Minor nighttime lighting.	<p><u>Nighttime Lighting</u> <i>Requires shielding and direct lighting to minimize off-site glare, particularly to the south and east.</i></p> <p><i>Requires reasonable effort be made to avoid nighttime processing on those nights when the Santa Monica Mountains Conservancy conducts scheduled star-gazing hikes in Happy Camp Canyon Regional Park.</i></p> <p><i>Limits nighttime processing to a maximum of 60 days per year, unless otherwise authorized in advance by the Planning Director.</i></p> <p>Refer to the following condition of approval described below in Table S-3 (NOISE):</p> <p><u>Third-Party 24-Hour Telephone Service</u></p>	Insignificant
AIR QUALITY	SO ₂ and CO emissions.	<p>Refer to the following mitigation measures described above in Table S-1:</p> <p>A-1 <u>Air Emissions Mitigation Plan</u></p> <p>Refer to the following condition of approval described below in Table S-3 (NOISE):</p> <p><u>Third-Party 24-Hour Telephone Service</u></p>	Insignificant
	Asphalt batch plant and asphalt haul truck odors that may be objectionable to residents along the haul route.		Insignificant
	Haul truck exhaust odors that may be objectionable to residents along the haul route.		Insignificant

TABLE S-3 (continued)
Summary of Insignificant, Adverse Impacts (Class III)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
NOISE	Operation noise, off-site.	<p><u>24-hour Contact Person</u> <i>Requires the Planning Director be provided with the current name and/or position title, address, and phone number of the permittee's field agent and other representatives who shall receive all orders and notices as well as all communications regarding matters of condition and code compliance at the permit site.</i></p> <p><u>Third-Party 24-Hour Telephone Service</u> <i>Requires a third-party 24-hour telephone service to receive and log complaints. In operating this service, requires:</i></p> <ul style="list-style-type: none"> - adjacent residents be provided number - post service number at entrance and on all permittee owned trucks - service to log complaints and transfer call to 24-hour contact person - written response within 3 days to each vehicle safety complaint, indicating the corrective action(s) taken - log maintained describing timing and method of complaint disposition - Planning Director may at any time review the complaint log, method of complaint disposition, and all related correspondence to determine if there is a need to modify this requirement 	Insignificant
	Truck traffic noise.	<p><u>Noise Monitoring</u> <i>Planning Director may direct, at permittee expense, noise monitoring to determine if the project exceeds County noise standards.</i></p> <p><i>If a noise exceedance is found to exist, requires immediately steps to either cease the operations creating the noise exceedance, or implement noise control measures that effectively reduce noise levels to within County noise standards.</i></p>	Insignificant

TABLE S-3 (continued)
Summary of Insignificant, Adverse Impacts (Class III)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
<p align="center">NOISE (continued)</p>	<p align="center">Truck Traffic Noise. (continued)</p>	<p><u><i>Vehicular Speed Limits/Enforcement</i></u> <i>Requires the permittee advise all truck operators of the need to keep their vehicles within prescribed speed limits at all times. Independent truckers found to be repeatedly violating the speed limit, shall be prohibited by the permittee from future use of the permitted facilities.</i></p> <p><u><i>Happy Camp Road/Walnut Canyon Road Transition Improvements</i></u> <i>Requires the permittee to consult with the Public Works Agency to identify feasible changes in the road design where the roadway transitions from Walnut Canyon Road to Happy Camp Road for northbound traffic. Funding for these repairs shall be incurred by the permittee via the Roadbed Maintenance and Repair Funds (<u><i>Mitigation Measure T-1</i></u>).</i></p> <p><u><i>Road Triangle Fencing</i></u> <i>Requires the permittee shall consult with the owner of the triangular shaped parcel, bordered by Happy Camp Road, Walnut Canyon Road and Broadway, to determine if the owner will permit the installation of a low level fence and "No Parking" signs. If not permit, the permittee is required to consult with the Planning Director to determine an alternative means of prohibiting parking within this area.</i></p> <p><u><i>Truck Identification Numbers</i></u> <i>All company, leased and independent trucks using the permitted facility shall be readily identifiable by a unique number. Said number shall be located on all four sides of the vehicle and sized to make them clearly visible to individuals wishing to make a complaint against the driver.</i></p>	<p align="center">Insignificant</p>

TABLE S-3 (continued)
Summary of Insignificant, Adverse Impacts (Class III)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
TRAFFIC	Average daily traffic increased by 668 one-way vehicle trips per day .	<u>Participation in Reciprocal Traffic Impact Mitigation Fee Agreement</u> Requires permittee participation in any reciprocal traffic impact mitigation fee agreement between the City of Moorpark and the County of Ventura that is designed to reduce cumulative traffic impacts.	Insignificant
	Peak hour traffic volumes increase by 41 trips (A.M.) and 34 (P.M.) trips.		Insignificant
	Contributes to Year 2000 and Year 2015 traffic volumes.		Insignificant
	Vehicle accident rates are expected to remain high, with or without the presence of truck traffic.	<u>Warning Sign Sight Distance Evaluation</u> Requires the permittee to conduct an engineering evaluation of the Grimes Canyon Road /State Route 118 intersection to determine how many of the trees should be removed.	Insignificant

TABLE S-4
Summary of Beneficial Impacts (Class IV)

<i>Issue Area</i>	<i>Description of Impact</i>	<i>Recommended Conditions of Approval</i>	<i>Residual Impacts</i>
GROUND WATER	Mining operations should result in a slight increase in groundwater recharge at the site	<u>Protecting Aquifer Recharge Areas</u> Requires permittee to maximize the potential for infiltration of runoff at the site, thus minimizing the potential for a reduction of recharge to the basin due to mining operations.	Beneficial

2.3 CONSISTENCY WITH THE VENTURA COUNTY GENERAL PLAN DESIGNATION

The Ventura County General Plan designation for the majority of the proposed project area is Open Space (O-S). This land use designation includes areas managed for the production of resources, "including areas containing major mineral deposits...". Approximately 40 acres in the northwest corner of the proposed CUP area has a General Plan designation of Agricultural. Mining activities are not being proposed on these 40 acres.

The Ventura County General Plan designates certain areas as Mineral Resource Areas on the Resource Protection Maps. These areas are subject to the requirements of the Mineral Resource Protection Overlay Zone (Zoning Ordinance Designation), described below. Most of the proposed CUP area, and all of the proposed mining area, occur within areas so designated and these lands correspond with the Mineral Resource Zone Category 2 (MRZ-2) designation used by the State Division of Mines and Geology. MRZ-2 lands are defined as areas of statewide or regional significance where adequate information exists to indicate significant mineral resources are present. The State Division of Mines and Geology developed Mineral Resources Management Goals and Policies which state that MRZ-2 lands should be protected from preclusive and incompatible land uses so that the mineral resources are available when needed.

In response to the DMG goals and policies, the County developed several General Plan goals, policies and programs to limit or preclude development within an MRP overlay zone if the proposed use would hamper or preclude access to, or the extraction of, the mineral resource.

2.4 CONSISTENCY WITH THE VENTURA COUNTY ZONING ORDINANCE

Most of the proposed permit area and all of the area proposed for mining is zoned either "O-S-160AC MRP" (Open Space, 160 acre minimum, Mineral Resource Protection Overlay Zone) or "A-E MRP" (Agricultural Exclusive, Mineral Resource Protection Overlay Zone). The purpose of the "O-S" zone is to provide for the conservation of renewable and nonrenewable resources. Approximately 80 acres in the northwest corner of the CUP area is zoned "A-E" (Agricultural Exclusive). Both the "O-S" and "A-E" zones allow mineral extraction after approval of a Conditional Use Permit by the County's decision makers.

All of the proposed mining area is located within an area subject to the provisions of the Mineral Resource Protection (MRP) Overlay Zone of the County Zoning Ordinance (Section 8109.4.4). The development standards for the MRP overlay zone call for the limiting of discretionary permits if the associated use would significantly hamper or preclude access to, or the extraction of, a mineral resource.

2.5 CONSISTENCY WITH LCA CONTRACT STATUS

Approximately 160 acres in the northwest corner of the CUP area are within portions of Land Conservation Act (LCA) Contracts 3-9.5 and 3-9.5A established in 1975. Approximately 80 acres of these lands are within the proposed mining boundaries and are proposed for mining during Phase 2 (Figure 5). These LCA lands, as well as much of the project site, are periodically grazed by cattle. LCA contracts are a mechanism to encourage farmers to retain agricultural uses of their land by reducing property tax in return for agreeing to retain agricultural use of their land for 10 years. The ten year contract is automatically renewed unless the renewal is terminated by filing a notice of non-renewal (which requires 9 years for the termination to take effect), or request for full or partial

cancellation is submitted to the County. Approval of a non-renewal or cancellation is a discretionary action made by the Board of Supervisors, using the recommendations by the County Agricultural Advisory Committee.

The Ventura County Guidelines for administering LCA contracts provides for non-agricultural uses (such as mining) on LCA lands under the following terms: "...other "compatible" agricultural or agriculturally related uses may also be allowed on lands under a LCA contract provided they are located on "marginal" lands and would not compromise, hinder, or reduce the existing or potential agricultural productivity of the land. "Compatible" uses are those which are permitted or conditionally permitted in the "A-E" or "O-S" zones.

2.6 CONSISTENCY WITH GENERAL PLAN GOALS AND POLICIES

Applicable General Plan Goals and Policies are presented here and in subsequent sections with a determination of whether or not the proposed project, inclusive of the recommended conditions of approval and mitigation measures, is consistent with these goals and policies. These discussions are pursuant to CEQA Guidelines subsection 15125(b), which states "the EIR shall discuss any inconsistencies between the proposed project and applicable general and regional plans." The final determination of consistency is made by the County's decision making body. ***This analysis is important because a CUP cannot be approved if it is found to be inconsistent with the Ventura County General Plan.***

The proposed project is consistent with all General Plan goals and policies with the following exceptions:

Mineral Resource Goals and Policies

Goal 1.4.1-2

Identify and manage mineral resources in order to:

- *Safeguard future access to the resource.*
- *Facilitate a long-term supply of mineral resources within the County.*
- *Minimize incompatibility between the extraction and production of the resource and neighboring land uses and the environment.*
- *Provide notice to landowners and the general public of the presence of significant mineral resource deposits.*

Policy 1.4.2-1

Applications for the extraction of mineral resources shall be reviewed to assure minimal disturbance to the environment and to assure that lands are reclaimed for appropriate uses which provide for and protect the public health, safety and welfare.

The determination of the proposed project's consistency with Policy 1.4.2-1 must be made within the overall context of the third subgoal of Goal 1.4.1-2: "*minimize incompatibility between the extraction and production of the resource and neighboring land uses and the environment.*" The proposed project is consistent with Policy 1.4.2-1 to the extent that the application has been reviewed to assure minimal disturbance to the environment. This is the intent of the CEQA process and various conditions of approval and mitigation measures have been recommended. With regard to the later

part of Policy 1.4.2-1, "protect the public health, safety and welfare", subgoal 1.4.1-2 becomes applicable and as a result:

- the conditions of approval and mitigation measures recommended to minimize/reduce noise (refer to Sections 4.8.2. and 4.8.5); and
- the conditions of approval and mitigation measures recommended to minimize/reduce traffic (refer to Sections 4.9.2. and 4.9.5).

The proposed project would result in significant, unmitigable impacts (Class I) to the visual resource. Because it may be argued that visual resources are an integral part of community character and therefore linked to any determination of compatibility with neighboring land uses, the proposed project is considered consistent with Goal 1.4.1-2 and, therefore, Policy 1.4.2-1 only if a statement of overriding considerations is adopted by the decision-making body regarding significant, unmitigable impacts Class I to the visual resource.

Land Use Goals and Policies

Policy 3.1.2-3

Consistency of Land Use: Any land use shall be deemed consistent with the General Plan if it is permitted under a zoning designation which is consistent with Policy Number 2 above [consistency of zoning], and if the land use does not conflict with any other policy of the County General Plan.

Section 4.1.10 presents two conflicting views on the policies regarding the proposed project's compatibility with surrounding land uses. Depending upon the accepted view, and the findings made by the decision-making body, the proposed project either is or is not consistent with the above stated goals.

The zoning designations for the site allow aggregate mining. In this regard, the proposed project is consistent with Policy 3.1.2-3. However, based upon the above discussion of Policy 1.4.2-1, the proposed project would not conflict with any other General Plan policy and is considered consistent with Policy 3.1.2-3 only if a statement of overriding considerations is adopted by the decision-making body regarding significant, unmitigable impacts (Class I) to the visual resource.

Biological Resources Goals and Policies

Goal 1.5.1

Preserve and protect significant biological resources in Ventura County from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland habitats, coastal habitats, wildlife migration corridors, and locally important species/communities.

Section 4.5.2 describes how the proposed project would result in significant unmitigable impacts (Class I), due to a loss of alluvial scrub and coastal sage scrub habitats, and a loss of wildlife habitat and the generation of on-site disturbances for all wildlife species, including sensitive species associated with the upland scrub habitats. As such, the proposed project is consistent with Goal 1.5.1, as it pertains to Policy 3.1.2-3, only if a statement of overriding considerations is adopted by

the decision-making body regarding the significant, unmitigable impacts (Class I) to biological resources.

Policy 1.5.2-2

Discretionary development shall be sited and designed to incorporate all feasible measures to mitigate any significant impacts to biological resources. If the impacts cannot be reduced to a less than significant level, findings of overriding consideration must be made by the decision-making body.

Section 4.5.2 describes how the proposed project would result in the incremental disturbance of about 146 acres of native vegetation, including coastal sage scrub, alluvial scrub, chamise chaparral, and other habitat, over the 50 year permit period. This habitat would be gradually restored to grazing lands as mining ends in different portions of the site. Up to 220 acres of the CUP permit area would be devoid of habitat at any one time. Despite the beneficial effects of on-going reclamation, habitat disturbance at the mine and in adjacent areas during the mining period represents a long-term significant, unmitigable impact (Class I) as described above. As such, the proposed project is considered consistent with this policy only if a statement of overriding considerations is adopted by the decision-making body.

Scenic Resources Goals and Policies

Goal 1.7.1-1

Preserve and protect the significant open views and visual resources of the County.

Policy 1.7.2-4

Discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.

The proposed project would have a significant, unmitigable impact (Class I) on public viewsheds in the City of Moorpark during the excavations in Phases 2 and 3, and upon viewers in Happy Camp Canyon Regional Park during all phases. No feasible mitigation measures have been identified to reduce these visual impacts of the proposed project to a less than significant level. As such, the proposed project is considered consistent with this goal and policy only if a statement of overriding considerations is adopted by the decision-making body.

2.7 PROJECT ALTERNATIVES

A wide range of alternatives are evaluated in the EIR, including the following:

- No Project Alternative
- Alternative Site Alternative
- Use of New Site Alternative
- Use of an Existing Mine Alternative
- Reduced Mining Area and/or Height Alternative
- Shorter Permit Period Alternative
- Alternative Access Routes

- Current Operations Alternative
- Second Environmentally Superior Alternative

Based upon the analysis of the proposed project and the alternatives described above, a second environmentally superior alternative (ESA) was developed: Second ESA (refer to Section 5.9). This was done pursuant to Section 15126(d)(4) of the CEQA Guidelines, which notes, if the No Project Alternative is the ESA (refer to Section 5.3), then the EIR must also identify a second ESA from among the other alternatives. The Second ESA includes the following elements:

- All of the mitigation measures and recommended conditions of approval described in the EIR apply.
- Issuance of a permit for Phases 1 and 2 for a duration of no more than 20 years, with a requirement that a permit modification, following the requisite CEQA review, be approved in order to continue Phase 2 mining beyond that time. Phase 3 would be included within the CUP boundary only for plant operations and stockpiling. However, a subsequent permit modification to the CUP and CEQA review would be required in order to initiate Phase 3 mining. If Phase 3 mining is not approved, the applicant would reclaim the site using the design and approach described in the reclamation plan approved for the project. The reclamation plan would be modified to describe Phase 1 and 2 post-mining conditions and the activity needed to achieve the required 2 to 1 slope along Phase 1 and 2 boundaries with Phase 3.
- No asphalt batch plant.
- The applicant either limits average daily traffic to that of the "Existing Setting" (i.e., 810 one-way heavy truck trips and 240 employee/other one-way trips), or the applicant would pay the Traffic Impact Mitigation Fee described in Section 4.9.3-1 for all additional trips.
- In limiting the number of heavy truck trips, the permittee will be required to maintain monthly records of truck trips. The total actual monthly truck trips would be divided by the number of authorized work days to compute an average daily truck trips for the month. Each monthly total would be summed and average daily truck trips calculated for the previous twelve (12 months). Average daily truck trips for the previous twelve (12) months in excess of the permitted limit would be considered a violation of the truck trip limit. In this manner, the permittee would develop a "rolling average" reflective of seasonal market variations while at the same time ensuring the facility operates within the overall truck trip limit.
- All truck traffic would be limited to between the hours of 6:00 A.M. and 6:00 P.M., except for up to 18 ready mix trucks which would be permitted to return between the hours of 6:00 P.M. and 7:00 P.M. The restricted hours would reduce the noise impact to residents early in the morning and in the evening when workers are at home. Exceptions may be granted on a case-by-case basis by the Planning Director and are usually limited to emergency construction or repairs by Caltrans or utility companies, though other situations may warrant an exception.

*

- Based upon the information provided in Section 4.8.2-3 (i.e., the supplemental noise study on Retrofitting Acoustically Upgraded Windows to Noise Impacted Residences), a condition of approval is recommended regarding Acoustically Upgraded Windows if a project is approved that permits more than an average daily limit of 810 heavy truck trips.
- Based upon the information provided in Section 4.8.2-3 (i.e., the supplemental noise study on Roadside Noise Barriers), a condition of approval is recommended regarding Roadside Noise Barriers, if a project is approved that permits more than an average daily limit of 810 heavy truck trips.

The Second ESA would not result in new significant impacts, when compared to the proposed project, except for those associated with the easterly extension of Broadway. However, the Broadway extension has been proposed as part of the proposed Hidden Creek Ranch/Specific Plan No. 8 within the City of Moorpark, not as an access route for TMC's CUP request. The EIR being prepared for that proposal describes significant impacts (Class I) to the biological, visual, and air resources, some of which may be attributable to the Broadway extension.

Under this alternative, changes in operating hours and the setting of a limit on heavy truck trips could reduce the magnitude of: 1) the truck noise impacts along Happy Camp Road and Walnut Canyon Road; 2) air quality impacts because of lower emissions; and 3) the amount of truck traffic along Happy Camp Road and Walnut Canyon Road. However, such changes would not reduce impacts to visual and biological resources. Elimination of the asphalt batch plant will serve to concentrate trucking on the core aggregate business and will eliminate asphalt related odors that may be found objectionable by those along the haul route. Since the daily mining activities under the Second ESA would be substantially similar to those of the proposed project, near term significant impacts to the visual resources and air quality would continue, albeit for a shorter time period, and significant impacts to the biological and visual resources would occur over a lesser area. Deferring Phase 3 mining would effectively preclude mining on those lands, save for the activity needed to achieve the required 2 to 1 slope along its boundary with Phases 1 and 2, until a subsequent CUP and environmental review has occurred.

This alternative has several benefits because it would allow the County to re-evaluate the project site and "existing setting" at various points in time via subsequent environmental and public reviews. The ability to revise and/or add conditions and/or mitigation measures to the project is important for the following reasons: 1) conditions applied to Phase 1, and/or subsequently to Phase 2, of the project may be found ineffective in addressing previously identified or new issues; 2) the environmental conditions at and near the project site may change over time, raising environmental issues not previously identified; 3) new technology may become available that can better address environmental issues; 4) subsequent environmental review may identify a need to revise the mining and/or reclamation plans; and 5) an alternative access road may be developed that would be preferable to the existing access road, the use of which could be evaluated and perhaps required of the applicant upon permit modification. In addition, operations at this mine site have been controversial for many years, and the ability to periodically review these operations through a public environmental review process appears warranted.

3.0 PROJECT DESCRIPTION

3.1 PROJECT APPLICANT

Transit Mixed Concrete Company - Moorpark
P.O. Box 1030
9035 Happy Camp Road
Moorpark, California 93021

3.2 PROPERTY OWNER

Southwestern Portland Cement, Inc.
(Southdown, Inc.)
2400 Smith Street
Houston, Texas 77002

3.3 PROJECT LOCATION AND ASSESSOR'S PARCEL NUMBERS

The project site is located about 4 miles north of the City of Moorpark in an unincorporated area of Ventura County (Figure 1) which is about 1.2 miles north of State Route 23 (Broadway), as shown on Figure 2. Approximately 2,700 feet north of the intersection of Happy Camp Road and Broadway, Happy Camp Road turns northeast, at this point traffic going to the project site goes west and north on a private access road known as Roseland Avenue (formerly Harrington Road). This road terminates at the project site, however, the mailing address is considered Happy Camp Road. It is located in portions of Sections 8, 9, 16, 17, and 21 of Township 3N and Range 19W.

The lands to be included in the Conditional Use Permit (CUP) encompass about 533 acres, as shown on Figure 2. The boundaries of the proposed CUP occur within other lands owned by the parties listed above. The Assessor's parcel numbers and zoning designations for the CUP lands include the following:

500-0-060-155 (zoned O-S-160 AC MRP; LCA contract lands)
500-0-060-165 (portions zoned A-E and A-E MRP; LCA contract lands)
500-0-100-250 (zoned O-S-160 AC MRP)
500-0-160-180 (that portion zoned O-S-160 AC MRP)
500-0-100-060 (zoned A-E MRP; LCA contract lands)

3.4 PROJECT BACKGROUND AND OBJECTIVES

3.4.1 PROJECT HISTORY

Much of the project site has been mined since 1948. In 1961, the County issued CUP-1328 for the original mine which included an asphalt batch plant. In 1975, operations at the mine were ceased. In 1976, Blue Star Ready Mix, Inc., purchased the property and acquired a renewal of CUP-1328 (consisting of a major modification of the original CUP). Operations by Blue Star Ready Mix, Inc., at the project site were conducted under the modified CUP-1328 until 1986 when the permit expired. An application for a new CUP was submitted in 1986 (CUP-4633). Since that time, there has been prolonged environmental review and coordination with Blue Star Ready Mix, Inc. and, as a result, CUP-1328 expired before a decision on CUP-4633 could be reached.

The mine was acquired by Transit Mixed Concrete Company (TMC) in October 1993. TMC is continuing the CUP application and environmental review process for the project. The current

operations at the site by Transit Mixed Concrete Company are being conducted under authorization by the County while the CUP application is being reviewed.

CUP-1328 encompassed 284 acres, of which 175 acres were approved for mining. The existing mining area is shown on Figure 3. In applying for CUP-4633, the applicant proposes to expand the previous CUP boundary to include an estimated 533 acres, wherein the proposed mining area would encompass about 217 acres (see Figure 4). Of the proposed mining area, 146 acres are currently undisturbed. The remaining 71 acres of the proposed mining area have been disturbed by mining and are located within the area previously approved for mining under CUP-1328 (see Figure 2). Approximately 77 acres of the proposed mining area are located outside the area approved for mining under CUP-1328.

3.4.2 PROJECT OBJECTIVES

The objectives of the proposed project are to: 1) continue mining and processing operations at the site in a manner similar to previous operations, subject to economic viability; 2) expand the area to be mined; 3) increase the maximum annual sand and gravel production rate; 4) add an asphalt batch plant on site; 5) provide for the environmentally sound and economically viable closure of the site; and 6) supply Ventura County with construction grade aggregate materials (e.g., rock, sand and gravel), specialty sands, ready-mix concrete, mortar, road base, and asphalt concrete.

The annual rate of production of the various products would vary from year to year based on economic conditions. The proposed maximum annual mine production rate is 3,400,000 tons. "Production" represents the processed, marketable material. The amount of excavated material would be greater due to the removal of topsoil and overburden during mining, and the removal of "fines" during processing. Unusable material in the excavated material account for the following percentages:

Overburden	4%
Unusable fines	5%
Topsoil	1%

The proposed maximum annual production of the various products from the proposed mine are listed below and assume a maximum production rate of 3,400,000 tons per year (i.e., 2,000,000 cubic yards).

<u>Product</u>	<u>Tons per Year</u>
• Sand and gravel products	3,000,000 tons
• Base materials	400,000 tons
• Less the other products described below	<u>< 800,000 tons ></u>
Net sand & gravel products	2,600,000 tons
• Other Products	
• Asphalt concrete (540,000 tons of sand and gravel plus 60,000 tons of asphalt tar)	600,000 tons
• Ready mix concrete (260,000 tons of sand and gravel plus 90,000 tons of water/additives)	<u>350,000 tons</u>
Total other products	950,000 tons
TOTAL PRODUCTS	3,550,000 tons

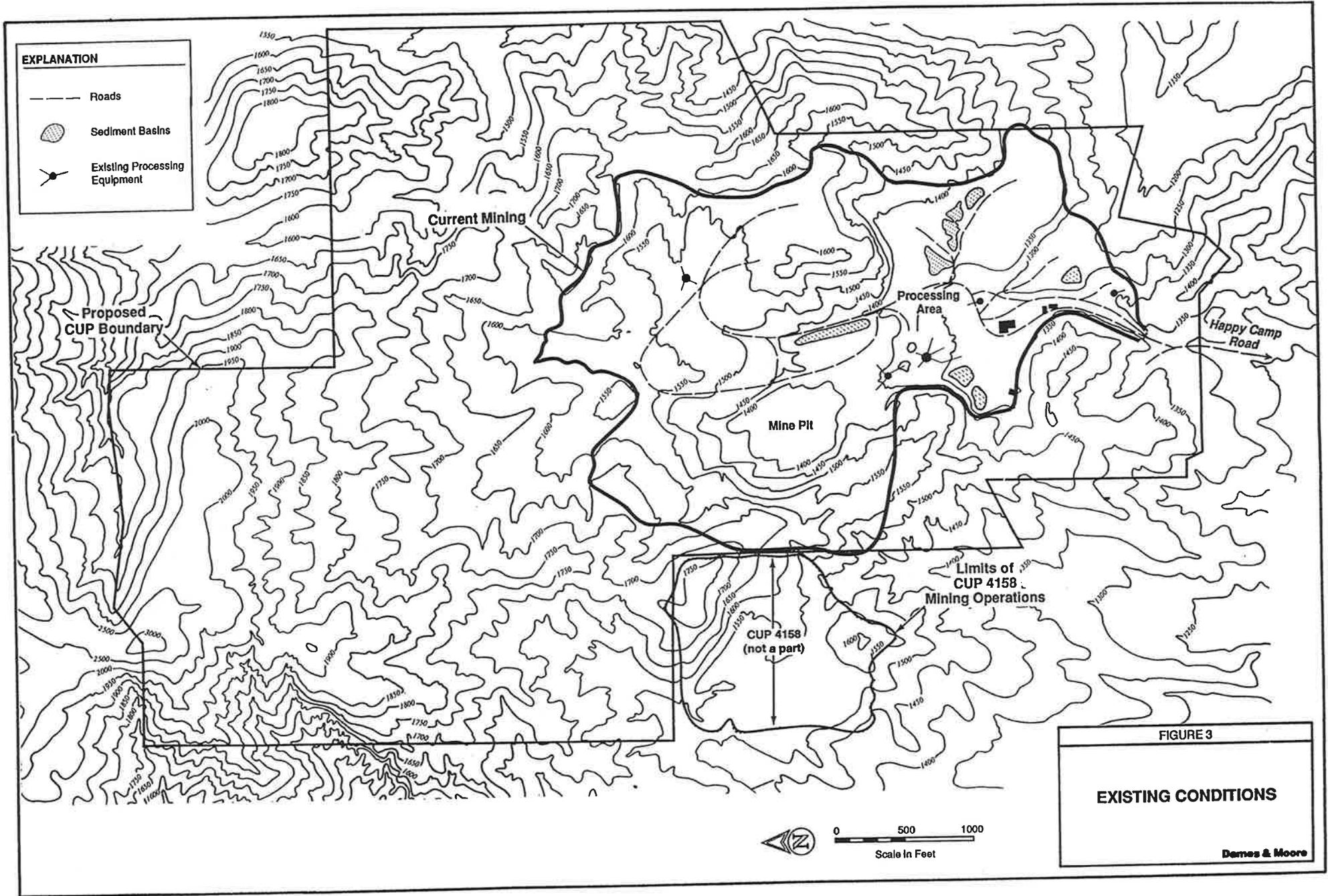
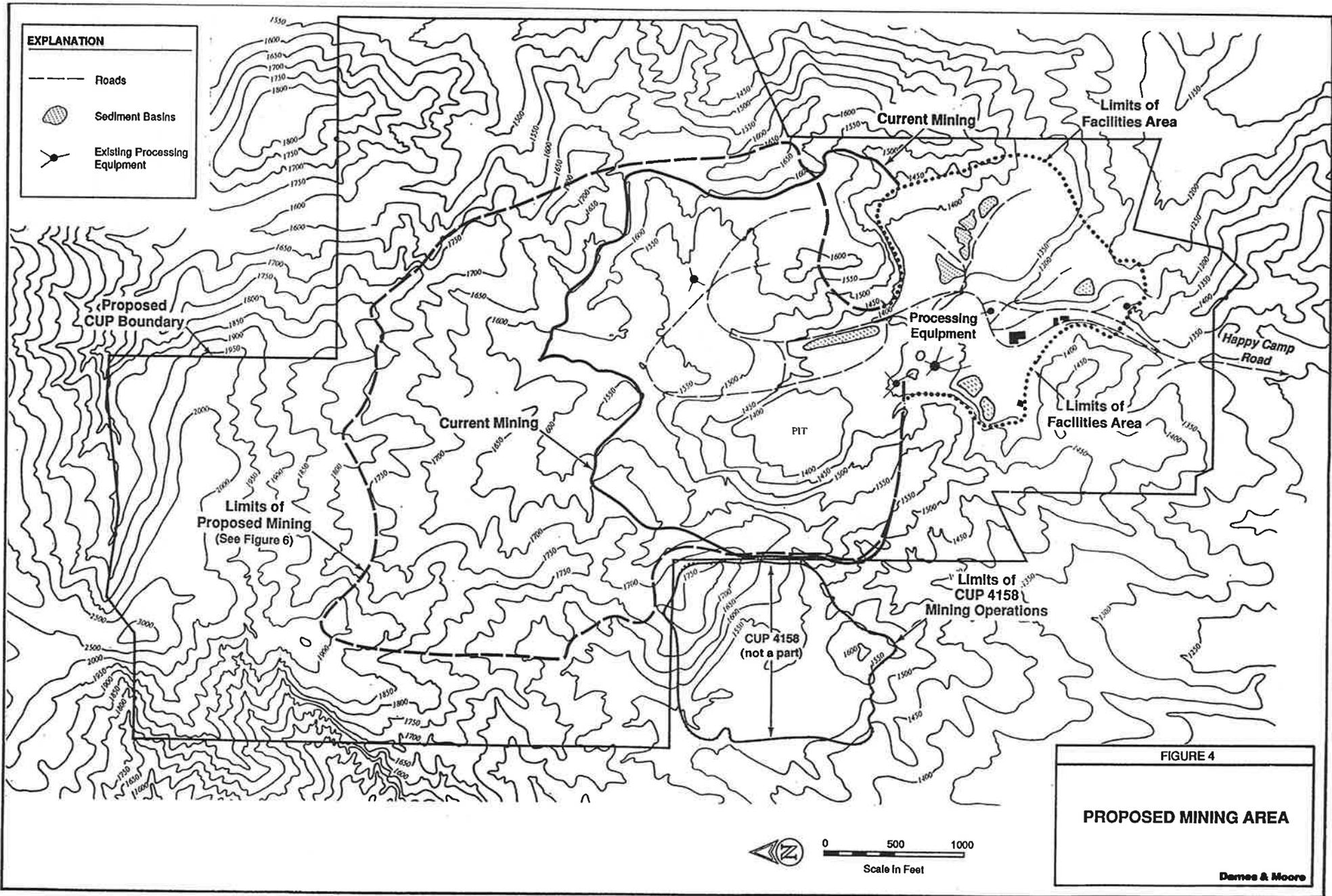


FIGURE 3

EXISTING CONDITIONS

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3.4.3 COMPLIANCE AGREEMENT

Under the terms of the Compliance Agreement (CA-4072), TMC may continue operations within the conditions of approval associated with CUP-1328. As such, TMC is currently able to operate at facility capacity. This equates to the "existing setting" with a maximum annual production rate of 1,800,000 gross tons and a daily average of 810 one-way heavy truck trips. Table 1 illustrates how widely production levels and total truck trips vary from year to year. This variation is market driven.

TABLE 1
ANNUAL MINE PRODUCTION (1983-1994)

Year	Cubic Yards	Tons	One-Way Heavy Truck Trips/Day ¹
1983	412,400	699,000	328 ²
1984	507,900	861,000	385 ²
1985	649,000	1,100,000	512 ²
1986	712,000	1,210,400	568 ²
1987	818,000	1,390,000	644
1988	946,000	1,608,200	765
1989	1,075,000	1,827,800	837
1990	824,000	1,400,800	707
1991	838,000	1,425,000	653
1992	561,000	954,000	461
1993	468,200	795,900	395 ²
1994	426,400	724,900	359 ²
CUP-1328³	1,058,650	1,800,000	810

- 1 The number of trucks is not directly proportional to the tons or cubic yards of material being transported. For example, because ready mix trucks are smaller than trucks transporting sand and gravel, the total number of trucks can vary disproportionately with the market demand for ready mix.
- 2 Extrapolated values.
- 3 CUP-1328 facilities provide the capacity to excavate 1,800,000 gross tons per year. Production at a rate of 1,800,000 gross tons per year will result in a daily average of 810 one-way heavy truck trips.

As Table 1 indicates, mine production peaked in 1989 at 1,827,800 tons of materials, involving an average of 837 one-way heavy truck trips per day. The production rate of the existing mine was reduced in 1990 and in subsequent years due to the recession. Once the recession ends, the demand for construction-grade sand and gravel is expected to increase.

The applicant has requested a 50-year time period for the CUP, during which time 75 to 100 million cubic yards of material would be excavated from the proposed 217-acre mining area (Figure 4). Mining would occur in three phases, as shown on Figure 5. Phase 1 encompasses approximately 65 acres and is located at the site of the current mining operations where a large pit has been excavated. The previous operator began excavations in the Phase 1 area in 1986 when CUP-1328 expired. TMC proposes mining to reclamation plan elevations in the Phase 1 area for 5-10 years

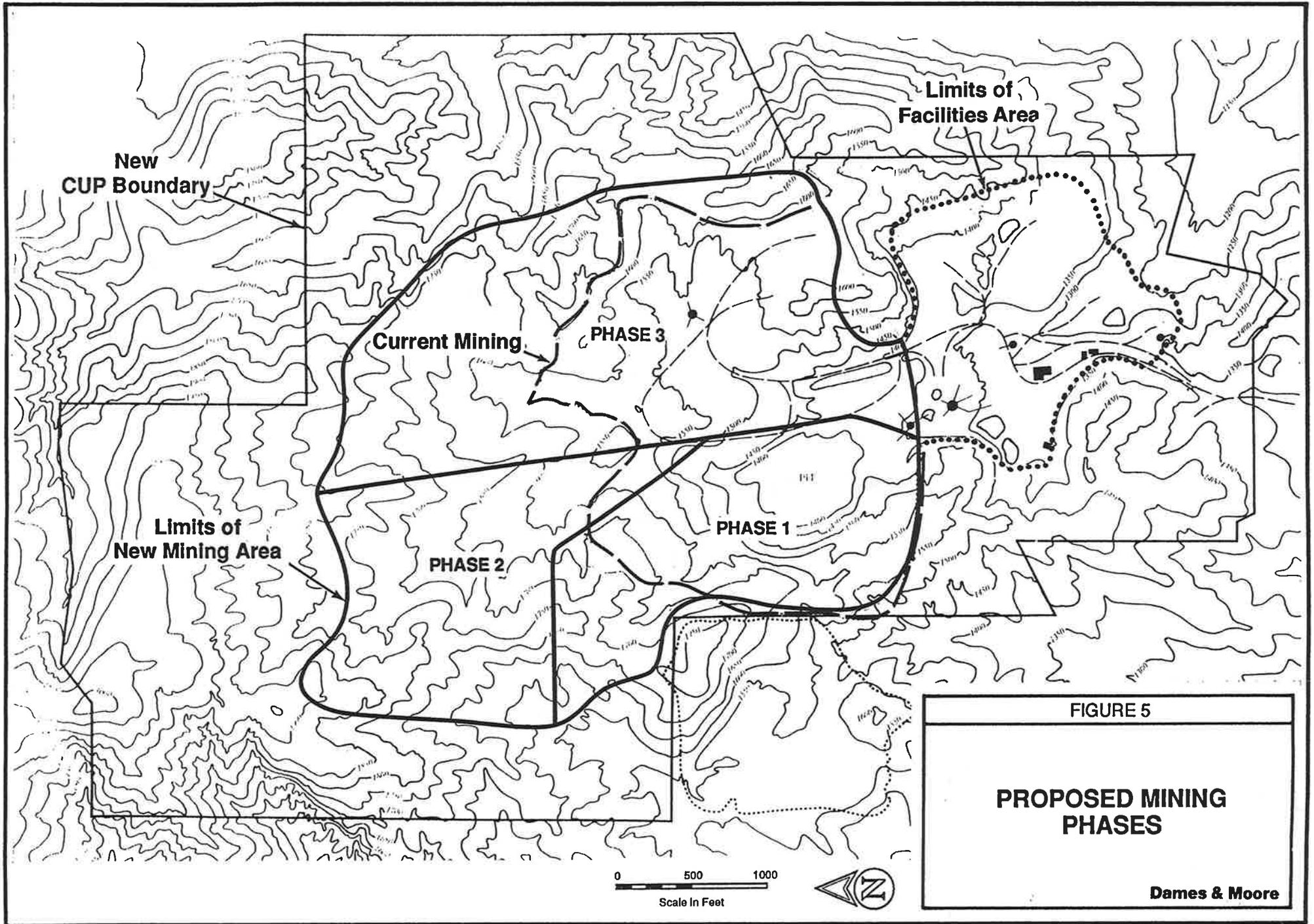


FIGURE 5

**PROPOSED MINING
PHASES**

Dames & Moore

under CUP-4633. Phase 2 consists of 50 acres directly north of the Phase 1 excavations. TMC proposes excavation of the Phase 2 area during a 10-20 year period. Phase 3 includes the remaining 102 acres (Figure 5) where TMC proposes to mine during a 30-40 year period.

3.4.5 NEED FOR PERMITTED AGGREGATE RESERVES

Aggregate reserves for the Ventura County market will be depleted over the next several years. Reserves are defined by the California Division of Mines and Geology (DMG 1993) as aggregate deposits that are owned or controlled by a mining company and for which a mining permit has been issued by the appropriate lead agency authorizing extraction (e.g., Conditional Use Permit). When the existing aggregate reserves are depleted, the Ventura County market will become dependent on reserves at more distant production locations. Though limited recycling of aggregate does occur, recycling does not represent a significant source of construction material. This is because there are quality problems with recycled aggregate materials that often preclude its use in many construction applications. For example, California Department of Transportation (Caltrans) specifications forbid the use of recycled aggregate in PCC for its projects (DMG 1985).

Because aggregate resources are considered a low value-to-weight commodity, transportation costs usually determine whether a particular quarry or production location is competitive and/or profitable for a given market area. It is generally agreed that as regional reserves are depleted, regional costs of sand and gravel will increase due to the added cost of transportation. As the cost of these basic building materials increases, so too will the cost of new construction, the cost of maintaining existing facilities and infrastructure. The cost of aggregate materials within the Ventura County market will largely depend on quarry locations and the rate of aggregate production permitted at each location.

The DMG studied the aggregate reserves in Ventura County in a 1993 report "Update of Mineral Land Classification of Portland Cement Concrete Aggregate". The report states that Ventura County has an estimated 4.8 billion tons of geologically available aggregate resources and is projected to need 415 million tons of aggregate from 1993 - 2043. Use of the term "aggregate resources" includes all available aggregate deposits within a specified area, not just "aggregate reserves" as defined above. As of January 1993, the total aggregate reserve under permit by the six mining companies in Ventura County was a little over 160 million tons.

Ventura County is currently estimated to have a 22-year supply of PCC-grade aggregate reserves. Most of that supply is sand, not gravel, located in the eastern part of Ventura County (i.e., the Simi Valley area), where the per capita consumption was 6.2 tons per year between the years 1977 and 1991. The reserves in the western part of Ventura County, where the per capita consumption between 1977 and 1991 has been 7.2 tons per year, are nearly depleted (i.e., less than 2 years' supply remaining under permit). In western Ventura County, many areas previously designated as mineral resource areas have been subjected to new regulations and/or ordinances, limiting the mining of aggregate resources within the Santa Clara River area to a depth of 30 feet, and excavation in the river channel to the "Red Line" area (i.e., lowest natural longitudinal profile of the river channel).

The proposed project includes 170 million tons of aggregate reserves, representing an 18 year supply for the entire county. Countywide, the consumption rate of aggregate reserves is predicted to be 8.3 millions tons per year for the next 50 years. CUP-4633 proposes an extraction rate of 3.4

million tons per year, which is equivalent to 41% of the estimated annual demand for mineral reserves in Ventura County for the next 50 years.

3.5 PROPOSED MINING PLAN

3.5.1 AGGREGATE RESOURCES

The previous operator has estimated that the aggregate deposits in the lands under application are approximately 305,000,000 tons of high quality sand and gravel. The marketable reserves are estimated to be approximately 270,000,000 tons.

3.5.2 PROPOSED MINING PLAN

The proposed mining area consists of a small enclosed watershed which has been disturbed by previous mining activities since 1948. A large mining pit has been created in the center of the site from past and current mining (Figure 3). Under the proposed mining plan, TMC would remove material from the center of the site, enlarging the existing pit and creating a very large "stadium-like pit" (Figure 6). Excavations up to 500 feet in depth would occur as the hillsides are removed toward the center of the site, as shown on the typical cross sections of the mining plan (Figure 7). The cut slopes would be excavated to a 2:1 (horizontal to vertical) grade in accordance with requirements of the Ventura County Public Works Agency. Finished slopes would have 10-foot-wide benches.

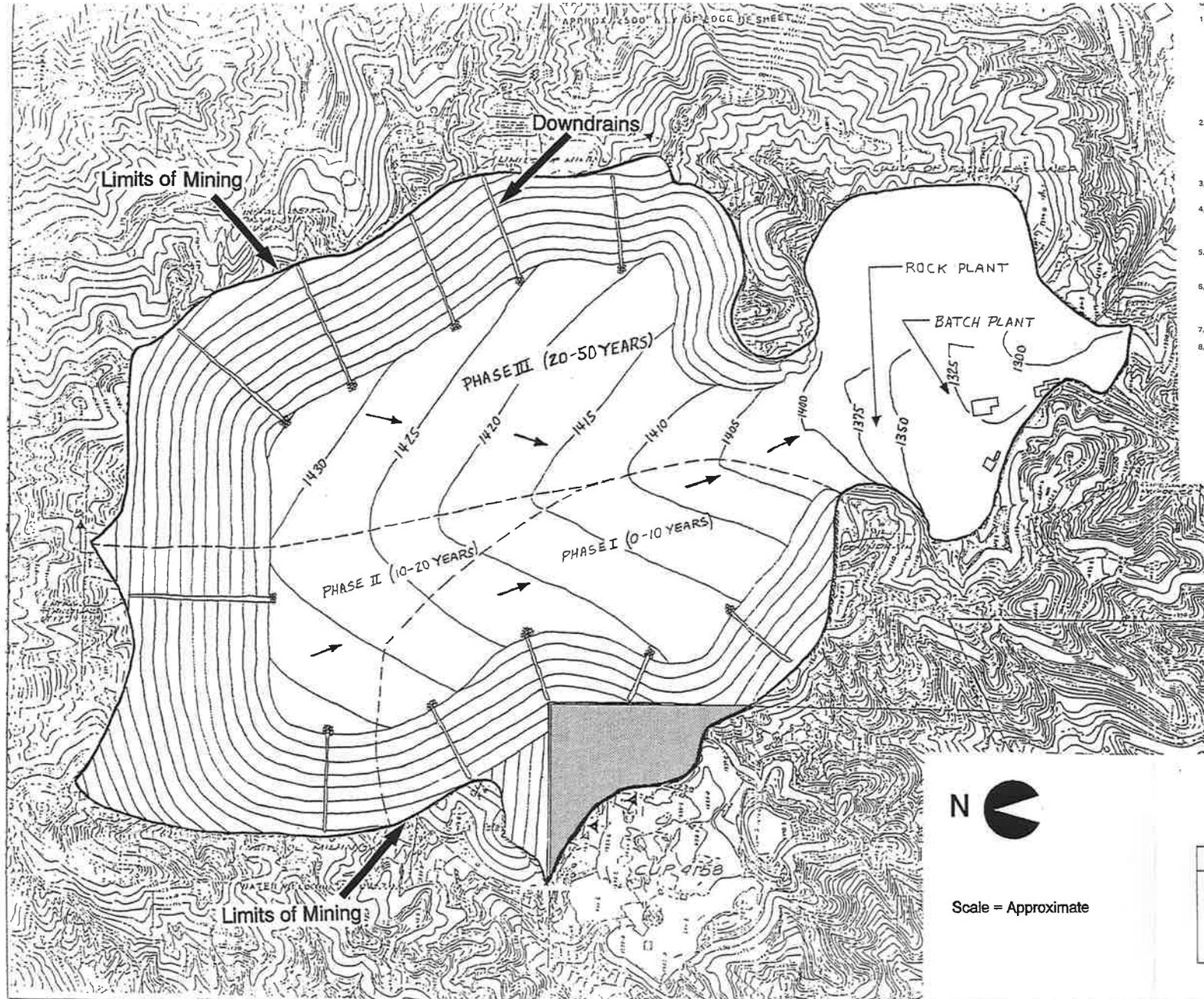
The previous operator deepened the pit in the middle of the site since 1986 to a point 100 feet below the finished grade shown on Figure 7. This pit needs to be filled to match the proposed mining plan and, under the terms of the Compliance Agreement (CA-4072), TMC was required to submit the following:

"A refill plan which is designed to bring the elevation of the main pit area up to the currently approved reclamation plan elevation or such elevation established through CUP-4633 approval. This plan is subject to the review and approval of the Planning Division and Public Works Agency."

After discussions with the County, TMC has agreed to refill the pit and to test the refill material to ensure that adequate permeability is maintained. Pursuant to this agreement, the Planning Director and Public Works Agency are currently working with TMC to finalize and approve the refill plan. TMC is expected to implement this refill plan when the pit soils are sufficiently dry.

Mining excavation by the previous operator created a dangerous "highwall" condition along the western side of the proposed Phase 1 area. At this location the resulting highwall has nearly vertical slopes and an elevational relief of 250 feet in places. Ventura County requires that this slope be reclaimed to a no greater than 2:1 slope (i.e., 2 foot horizontal distance per 1 foot vertical distance). As common owner of both mine sites, TMC has requested and received County approval of Permit Adjustments for CUP-4158 and the CUP-1328 site. These Permit Adjustments serve to amend the existing reclamation plans for both permit areas and the associated activities are consistent with the reclamation plan proposed under CUP-4633 and described below in Section 3.6. In accordance with these approved Permit Adjustments, TMC is currently lowering, contouring and reclaiming the highwall in order to create a 125-foot-high, 2:1 reclaimed slope (see cross-section A-A on Figure 7).

Typical excavation techniques in the proposed mining area would follow the current methods in which one or more bulldozers excavate the slopes of a hill, moving from the peak towards the base



1. GRADING AND RECLAMATION SHALL BE IN ACCORDANCE WITH THIS RECLAMATION PLAN, THE REVEGETATION PLAN AND THE FOLLOWING:
 - a) STATE MINING AND RECLAMATION ACT (PUBLIC RESOURCES CODE SECTION 2710 et seq.);
 - b) CALIFORNIA CODE OF REGULATIONS, TITLE 14 DIV.2, CHAPTER 8, ARTICLE 9;
 - c) VENTURA COUNTY ORDINANCE SECTION 8107-9;
 - d) VENTURA COUNTY ORDINANCE NO. 3495 WHICH ADOPTS BY REFERENCE THE UNIFORM BUILDING CODE CHAPTER 70, AND VENTURA COUNTY STANDARD LAND DEVELOPMENT SPECIFICATIONS AND LAND DEVELOPMENT MANUAL.
2. LOCATION AND MATERIALS FOR INTERCEPTOR DRAINS, BENCH DRAINS AND DOWNDRAINS SHALL MEET VENTURA COUNTY GRADING ORDINANCE NO. 3495 AND THE STANDARD LAND DEVELOPMENT SPECIFICATIONS SET FORTH IN SUBSECTIONS 201-1 AND 400, EXCEPT THAT THE CONCRETE V-DITCHES, PAVED TERRACE DRAINS, DOWN DRAINS, BENCH, VELOCITY REDUCERS AND OTHER EROSION PROTECTION DEVICES SHALL BE OF CLASS 470-C-2000 UNLESS OTHERWISE SPECIFIED.
3. ANNUAL INSPECTIONS OF CUT AND FILL SLOPES SHALL BE PERFORMED BY AN ENGINEERING GEOLOGIST WITH THE RESULTS BEING SUBMITTED IN A REPORT SUBMITTED TO THE LEAD AGENCY.
4. DEBRIS BASINS SHALL BE CLEANED AND MAINTAINED BY THE APPLICANT A MINIMUM OF ONCE EACH YEAR. DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15) THE APPLICANT SHALL PAY SPECIAL ATTENTION TO THE MAINTENANCE OF DEBRIS BASINS, DITCHES AND OTHER DRAINAGE DEVICES TO ASSURE PROPER STORM RUNOFF.
5. DURING THE LIFE OF THE PERMIT, NO MORE THAN 50 ACRES SHALL BE ACTIVELY WORKED AT ANY TIME AND NO MORE THAN 220 ACRES OF THE ENTIRE CUP PERMIT AREA INVOLVING ACTIVE MINING AREAS AND STOCKPILES SHALL BE LEFT UNRECLAIMED AT ANY ONE TIME.
6. RECLAMATION, INCLUDING BUT NOT LIMITED TO THE RESHAPING OF SLOPES AND INSTALLATION OF DRAINAGE FACILITIES SHALL BE UNDERTAKEN ON A CONTINUOUS BASIS UNTIL THE COMPLETION OF RECLAMATION. REVEGETATION SHALL IN LARGE PART TAKE PLACE IN THE FALL OF EACH YEAR TO ASSURE GERMINATION DURING THE RAINY SEASON.
7. ALL DEBRIS BASINS AND MINING FACILITIES SHALL BE REMOVED DURING OR AFTER THE FINAL PHASE OF MINING.
8. ALL STOCKPILES SHALL BE MANAGED BY UTILIZING EROSION CONTROL MEASURES INCLUDING THE SELECTIVE PLACEMENT OF STOCKPILES AND SEEDING WHEN NECESSARY.

Legend

- Limits of Slope
- Phase Boundary Lines
- Limits of Mining Activity
- Flow Direction
- Rock Energy Dissipators
- CUP 4158
- ▨ Slope Area

Note:
 Areas outside the limits of the Limits of Mining Activity were disturbed prior to Jan 1, 1976, therefore exempt from SMARA Requirements.

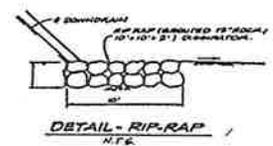
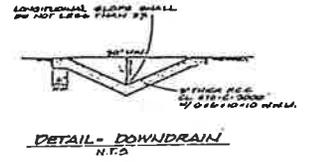
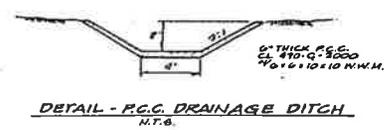
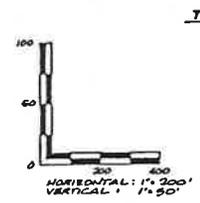
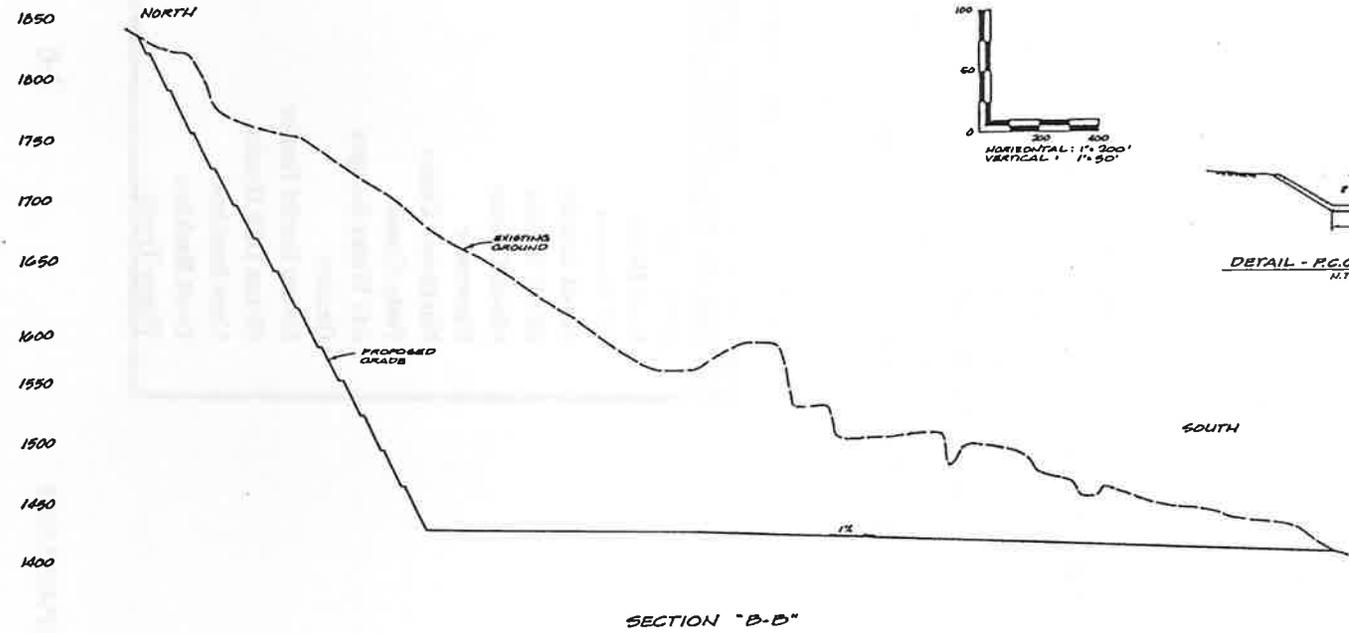
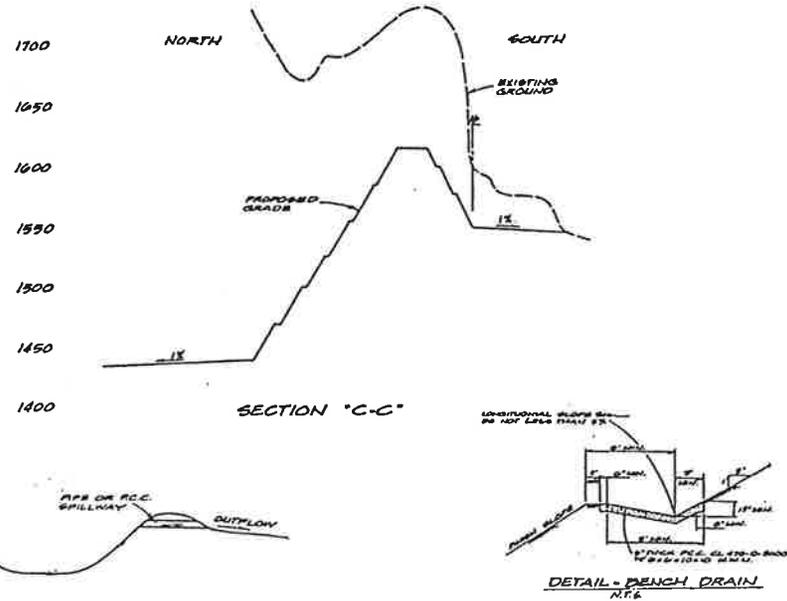
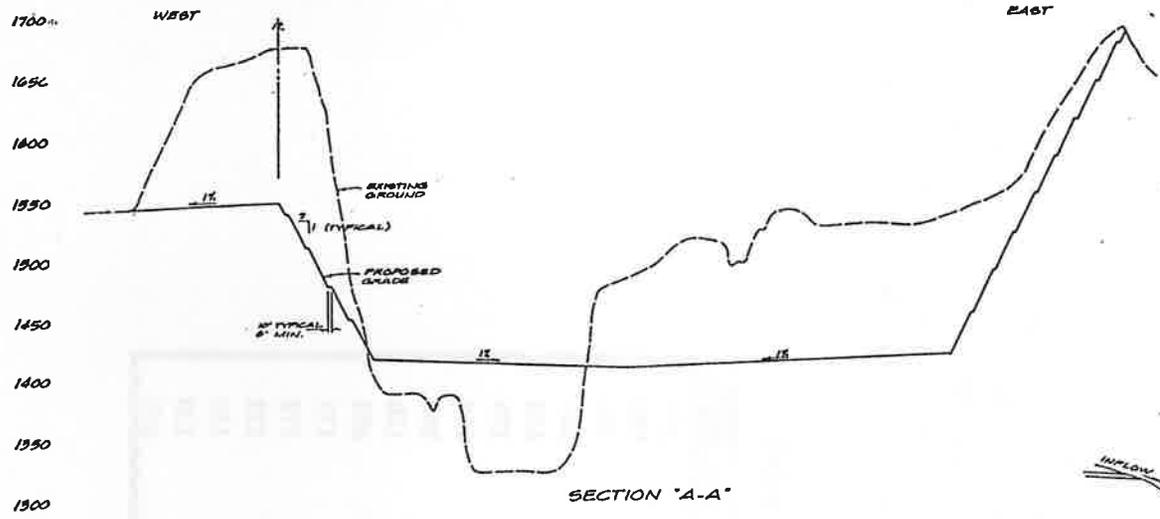
TOPO: Western Aerial Dated 8/16/92

FIGURE 6

Proposed Mining and Reclamation Plan



Scale = Approximate



- EXCAVATION NOTES:**
1. EXCAVATION SHOWN COMPLIES WITH VENTURA COUNTY GRADING ORDINANCES.
 2. BENCHES, BENCH DRAINING, GROUND COVER AND LANDSCAPING SHALL BE INSTALLED ON A CONTINUOUS BASIS UNTIL THE COMPLETION OF THE FINAL PHASE OF THE PROJECT RECLAMATION PLAN.
 3. BENCHES WILL BE CONSTRUCTED IN ACCORDANCE WITH VENTURA COUNTY GRADING ORDINANCES.

FIGURE 7

CROSS SECTION OF MINING PLAN

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of the hill. As material is removed from the native grade, topsoil and unsuitable overburden would be temporarily stockpiled near the excavation site. Suitable material is "pushed" over the hillside to the base of the hill where it would accumulate in piles. This material would then be removed by a single front-end loader and placed into an electrical feeder loading it onto a 36-inch-wide, electrically powered, conveyor belt which would transport raw material to stockpiles near the rock plant. The length and alignment of the conveyor would vary depending on the location of the mining activities. At the present time, the conveyor is about 1500 feet in length. A diagram of the typical mining methods is shown on Figure 8.

A variety of other equipment would also be used periodically during mining operations. This equipment is listed in Table 2. During maximum production, the following equipment is used most of the day: dozers (2), scraper (2), loaders (7), excavator, and crane. All other equipment listed in Table 2 would only be used for one to several hours per day, with the exception of the watering truck which would be used periodically throughout the day during dry conditions.

The average daily rate of mine production (i.e., the amount of material placed on the conveyor) is anticipated to be 12,500 tons (7,350 cubic yards). The maximum daily rate would be about 20% higher, or 15,000 tons (8,820 cubic yards). Mining is expected to occur on an average of 312 days per year.

The average amount of land disturbed by excavation activities at any time would be 30 to 50 acres. Mining would be restricted to each individual phase (described above) until marketable materials have been exhausted. Only one phase would be mined at a time and mining would not move to a subsequent phase until reclamation had been initiated on the final slopes of the previous mine phase. The applicant has proposed to restrict the total amount of land being actively mined at any time to 50 acres. As described in Section 3.6, reclamation would occur in the fall of each year on a continuous basis. Slopes would be reclaimed, as they are finished, to final mining plan elevations.

TABLE 2

LIST OF PROPOSED MINING EQUIPMENT

EQUIPMENT	No.	Hp
D-9 Dozer	1	370
D-10 Dozer	1	520
637 Scraper	2	700
988-B Loader	4	375
980-B Loader	2	240
966-B Loader	1	170
Excavator	1	360
Northwest Crane	1	260
Petty Crane	1	150
641 Water Scraper	1	450
Grader	1	175
50-ton Euclid Hauler	1	375
50-ton DJB Hauler	1	375
Case Backhoe	1	120
Drott Backhoe	1	120
Water Truck	1	175

Approximately 220 acres of the proposed CUP area is currently devoid of vegetation and used for the following project elements/activities:

Facilities, parking, storage	40 acres
Product stockpiles	20 acres
Base plant and recycling	40 acres
Overburden and top soil storage	10 acres
Existing mine pit	60 acres
Future mining operations	<u>50 acres</u>
Total =	220 acres

The applicant has proposed to restrict the total amount of disturbed land within the 533-acre CUP permit area to no more than 220 acres at any point in time. To achieve this, it is recommended that any approval of the proposed CUP include the following condition:

Recommended Condition:

Maximum Allowable Disturbed Acres

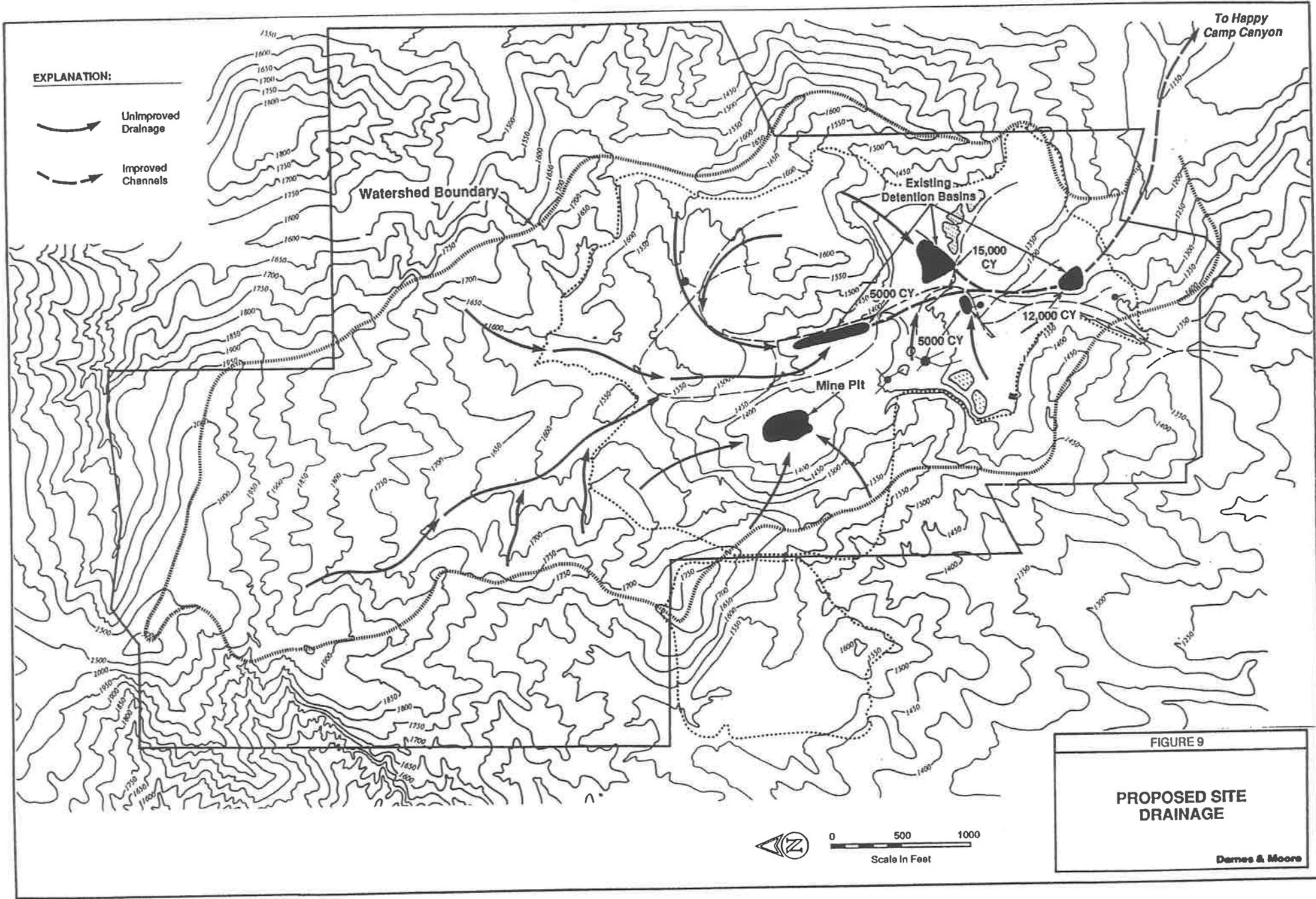
At any point in time, the area being actively mined shall not exceed 50 acres and the total disturbed acreage under CUP-4633 shall not exceed 220 acres. When disturbed acreage totals 220 acres, the permittee shall not proceed with new areas of excavation until reclamation, of acreage equivalent to or greater than the new areas of excavation, has been approved and initiated to the satisfaction of the Public Works Agency and the Planning Director.

Excavation activities would typically occur one hour after sunrise until one hour before sunset on an as-needed basis throughout the year on Mondays through Saturdays, excluding Sundays and holidays. The applicant seeks approval to conduct excavations throughout the year with no limitation on the number of days per year for mining excavations, other than excluding Sundays and holidays. No nighttime excavations are proposed. However, nighttime use of the pit feeder and conveyor systems would occur up to 60 days per year, on the same nights that nighttime processing occurs.

The movement of material from the base of the hills to the conveyor feeder and belt may need to occur at night for several days, depending on the nature of an order. For example, in processing a very large order or specialized orders (i.e., nighttime freeway repairs), the rate of excavation during daylight hours could exceed daylight processing capacities of the facilities. In such instances, excess raw materials would be left at the base of the hill for placement onto the conveyor belt at night by a front-end loader operating under lights. The material would then be conveyed to the processing area for nighttime processing (see Section 3.7.3) or for processing the next morning. When this is necessary, the applicant proposes that nighttime conveyor belt use (10:00 P.M. to 6:00 A.M.) be limited to no more than 60 days per year.

3.5.3 MINE DRAINAGE AND EROSION CONTROL

The project site is located in the headwaters of a tributary to Happy Camp Canyon drainage (Figure 2). The existing site has only one outlet, with four detention basins designed to capture sediment-laden flows before they leave the site (Figure 9). The existing large mine pit collects runoff



EXPLANATION:

-  Unimproved Drainage
-  Improved Channels

Watershed Boundary

Existing Detention Basins

15,000 CY

5,000 CY

12,000 CY

Mine Pit

To Happy Camp Canyon

FIGURE 9

PROPOSED SITE DRAINAGE

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0 500 1000
Scale in Feet

from the actively-mined areas; runoff temporarily ponds in the pit, but eventually percolates into the soil. Runoff from other portions of the existing CUP lands are currently directed to four earthen detention basins by earthen drainage ditches and steel culverts under roadways (Figure 9). The total combined capacity of the four major detention basins is 37,000 cubic yards. Under CUP-4633, the basins would be connected by concrete lined ditches and/or culverts rather than by the existing earthen ditches. There are no special erosion control measures employed in the actively mined areas and processing areas of the expired CUP-1328.

Drainages for the proposed project would follow the same approach used under CUP-1328. Runoff from actively mined areas would continue to be directed to the mining pit in the center of the site. However, as the mining nears completion, the base of the pit would be excavated and graded to a 1% slope towards the southern outlet. Runoff from the finished slopes would thereafter be directed into a drainage ditch that empties into Happy Camp Canyon drainage. The existing downstream detention basin in the permit area (Figure 9) would be enlarged to capture sediment-laden flows from the finished mining pit.

Erosion from finished slopes would be minimized by the placement of down drains about every 500 feet along the finished slopes (Figure 6). These buried drain pipes would collect runoff at the top of the finished slopes and direct the runoff through the drain to the base of the mine pit, thereby avoiding slope erosion. The 10-foot-wide benches along the slopes would be graded to collect runoff along the inner edge of the bench and direct these flows into the down drain.

3.6 PROPOSED RECLAMATION PLAN

A reclamation plan was submitted with the CUP-4633 application in November 1986. The reclamation plan is comprised of a blue line print depicting final grade, slopes and a revegetation plan describing the seed mixes and areas where seed mixes would be applied. This plan is available for review at the County of Ventura, RMA Planning Division. The plan has been revised several times since 1988 based on review comments received from the State Division of Mines and Geology. Copies of recent correspondence from the State Division of Mines and Geology on the various draft plans are presented in Appendix B. The final revegetation plan dated August 1993 is also presented in Appendix B.

The site would be reclaimed in accordance with the slopes and elevations shown on Figure 6 with 2:1 finished slopes with 10-foot-wide benches and downdrains. The base of the finished mine site would be sloped to convey drainage through detention basins to the Happy Camp Canyon drainage.

It is anticipated that reclamation activities would take place in the fall of each year on a portion of the site; however, reclamation may not occur if no slopes are mined to finished elevations and grades. As indicated in Section 3.5, the average amount of land disturbed by excavation activities at any time would be 30 to 50 acres. Mining would be restricted to each individual phase (described above) until marketable materials have been exhausted. Only one phase would be mined at any time and mining would not move to a subsequent phase until reclamation has been initiated on the final slopes of the previous phase. The applicant proposes to restrict the total amount of land being actively mined at any time to 50 acres, and the total amount of disturbed land within the CUP-4633 permit area to a maximum of 220 acres (refer to the recommended condition of approval in Section 3.5.2).

Topsoil and unsuitable overburden would be removed separately and stockpiled separately prior to mining, then replaced in separate layers during reclamation to create the County approved post-mining subsurface profiles. Stockpiles would be periodically removed and stored at a location in the center of the mining area (see Area #9 on Figure 10). Stockpiles would be temporarily revegetated with native grasses and shrubs to reduce wind erosion and maintain soil fertility and soil mycorrhiza (see revegetation plan in Appendix B).

As each mining phase is completed, the stockpiled overburden and topsoil would be placed on finished slopes. In addition, unusable fines from processing would be temporarily stockpiled at the same location and some used in reclamation due to their value in revegetation (because of their high-water-holding capacity). However, the application of these fines in reclamation may be limited due to their potential interference with groundwater infiltration after reclamation.

The average percent of unsuitable overburden in the excavated material is expected to be about 4%, resulting in about 136,000 tons of overburden during maximum production years. The average percent of topsoil in the excavated material is expected to be about 1%, resulting in about 34,000 tons of topsoil during maximum production years. The average percent of unusable fines in the processed materials is about 5%, resulting in about 170,000 tons during maximum production years. These data indicate that about 338,000 tons per year of non-marketable materials would be available for reclamation purposes.

After replacing the overburden and topsoil, the finished slopes would be revegetated. The objectives of the revegetation element of the reclamation plan are to establish vegetation that is: 1) compatible with the native flora; 2) self-perpetuating; 3) provide wildlife habitat values; and 4) stabilize soils (see plan in Appendix B). A mix of native plant seeds (Table 3) would be applied each fall. No irrigation would be required because seeding would occur in the fall prior to winter rains, and because the species being proposed in revegetation are adapted to the natural rainfall amounts and patterns. The species included in the reclamation seed mix being proposed (Table 3) were selected based on field surveys of plant communities at the mine site and the results of on-site testing (described below). The applicant proposed methods of seeding are drilling or imprinting with a seeding rate of 20 to 30 pounds per acre.

TABLE 3
PROPOSED RECLAMATION SEED MIX

SPECIES	COMMON NAME	PROPORTION
<i>Artemisia californica</i>	California Sagebrush	8%
<i>Salvia apiana</i>	White Sage	14%
<i>Lupinus longifloris</i>	Bush Lupine	12%
<i>Elymus condensatus</i>	Giant Wild Rye	20%
<i>Eriogonum fasciculatum</i>	California Buckwheat	18%
<i>Lotus scoparius</i>	Deer Weed	13%
<i>Yucca whipplei</i>	Our Lord's Candle	15%

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| 2. Back-up Concrete Batch Plant | 11 Scales |
| 3. Portable Base Plant | 12 Administration |
| 4. Mortar Base Plant | 13 Recycling Ponds |
| 5. Asphalt Plant | 14 Gas Service |
| 6. Rock Plant | 15 Machine Shop |
| 7. Conveyor Belt | 16 Repair Shop (Trucks) |
| 8. Material Stockpiles | 17 Water Tank |
| 9. Overburden Stockpiles | 18 Truck and Auto Parking |

(See Figure 12 for More Detail)

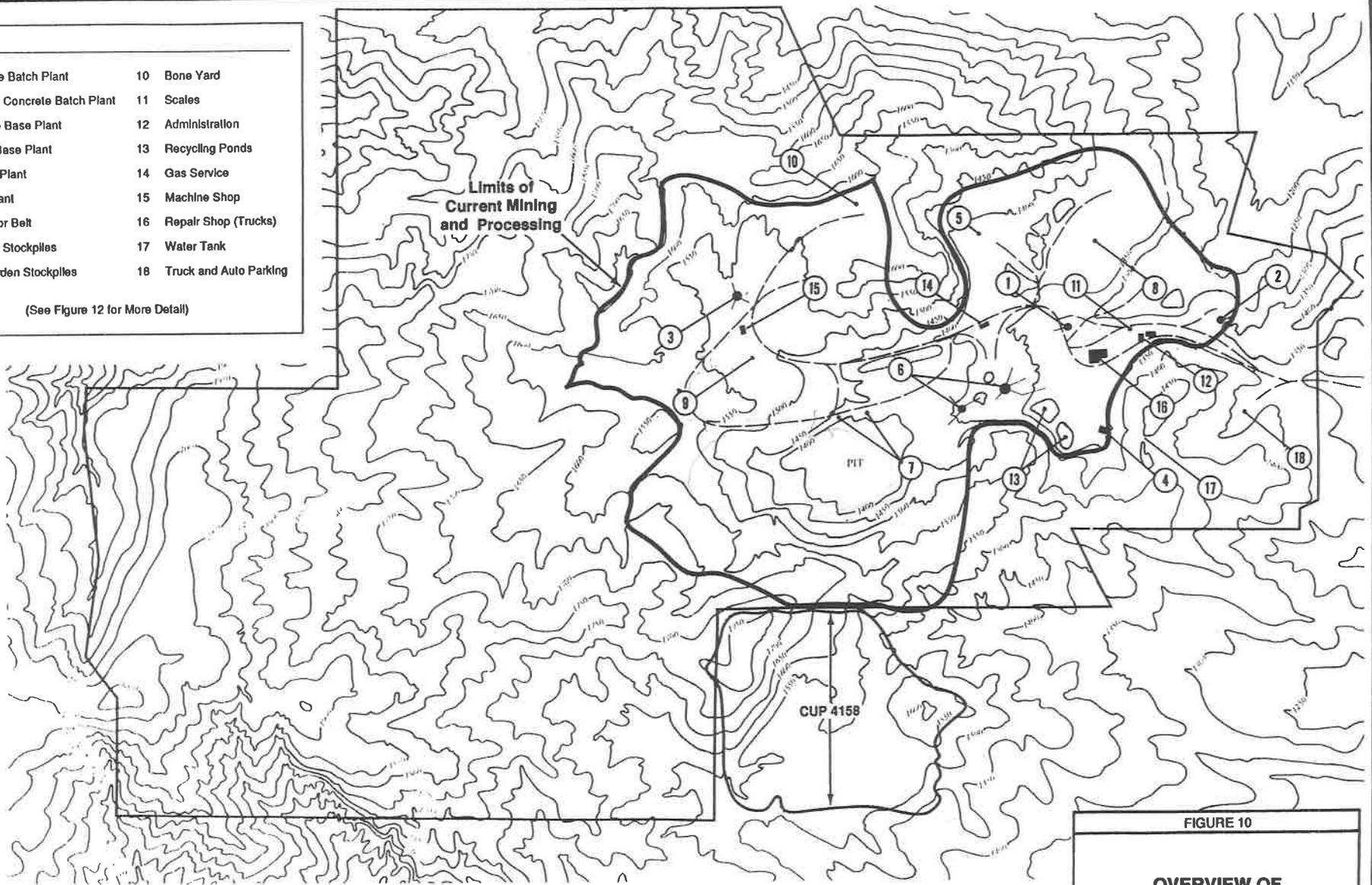


FIGURE 10

**OVERVIEW OF
PROPOSED FACILITIES**

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In addition to revegetating mined areas, the following areas would be temporarily revegetated in order to minimize erosion and fugitive dust: 1) topsoil and overburden stockpiles; and 2) disturbed areas with topsoil which are not likely to be mined within the next year and which are not required for processing or mining-related activities. These disturbed sites would be imprinted with a different seed mix specifically intended for shorter term revegetation (Table 4).

TABLE 4
PROPOSED TEMPORARY SEED MIX

SPECIES	COMMON NAME	PROPORTION
<i>Eriogonum fasciculatum</i>	California Buckwheat	50%
<i>Lotus scoparius</i>	Deer Weed	20%
<i>Hemizonia kellogii</i>	Tarweed	25%
<i>Lupinus longifloris</i>	Bush Lupine	5%

In December of 1993, the applicant initiated an on-site three-year revegetation testing program to provide data on the effectiveness of the proposed seeding techniques, seeding rates, and growth rates; and to determine the extent of weed problems. Twelve test plots were established at the mine site to compare hydroseeding with imprinting, use of different seed mixtures, and use of different mulch types. Testing continues on six test plots and, as additional test plot data is developed, the revegetation plan will be amended to incorporate the desirable results of this test plot work. The 1993, 1994 and 1995 test plots results have resulted in the following:

- Testing will continue to determine the seeding rate needed to ensure adequate coverage.

Rationale: A seeding rate of 20 to 30 pounds per acre is being tested. Initial test plots demonstrated that applying seeds at a rate of 20 pounds per acre produced the same results as applying seeds at a rate of 30 pounds per acre. In later years, the tests demonstrated higher seeding success when a seeding rate of 30 pounds per acre was used. Continued testing will determine the desired end result (i.e., coverage) and the preferred seeding rate.

- Seed imprinting is the proposed method of seeding.

Rationale: Imprinting seeds resulted in a greater rate of seed germination than hydroseeding.

- Rice straw is no longer being proposed as a mulch.

Rationale: The advantages of using rice straw, instead of less expensive and more easily available wheat and barley straw, could not be demonstrated.

- The proposed seed mix for reclamation includes the species and proportions described above in Table 3.

Rationale: Two native seed mixes were originally used in testing: coastal sage scrub, in varying proportions, and chamise chaparral. The chamise chaparral mix resulted in a near zero rate of germination and the proportions described in Table 3 achieved the greatest success.

- The proposed seed mix for temporary revegetation of disturbed sites includes the species and proportions described above in Table 4, using a seeding rate of 20 pounds per acre.

Rationale: Test results indicate a high probability of successful germination and rapid cover development.

At the commencement of final reclamation, TMC proposes to remove its plant facilities and all equipment from the site. The plant, building and road areas will have the foundations and pavement removed. All compacted areas will be ripped and reworked to a consistency and permeability similar to that of the original soils. Soil additives to improve permeability may be worked into the compacted soil, if necessary, to meet the desired conditions. The areas will then be regraded to conform with the local topography and revegetated. At that time, TMC will also initiate its long-term protection of all mined slopes and disturbed areas that are not already revegetated.

3.7 PROPOSED PROCESSING

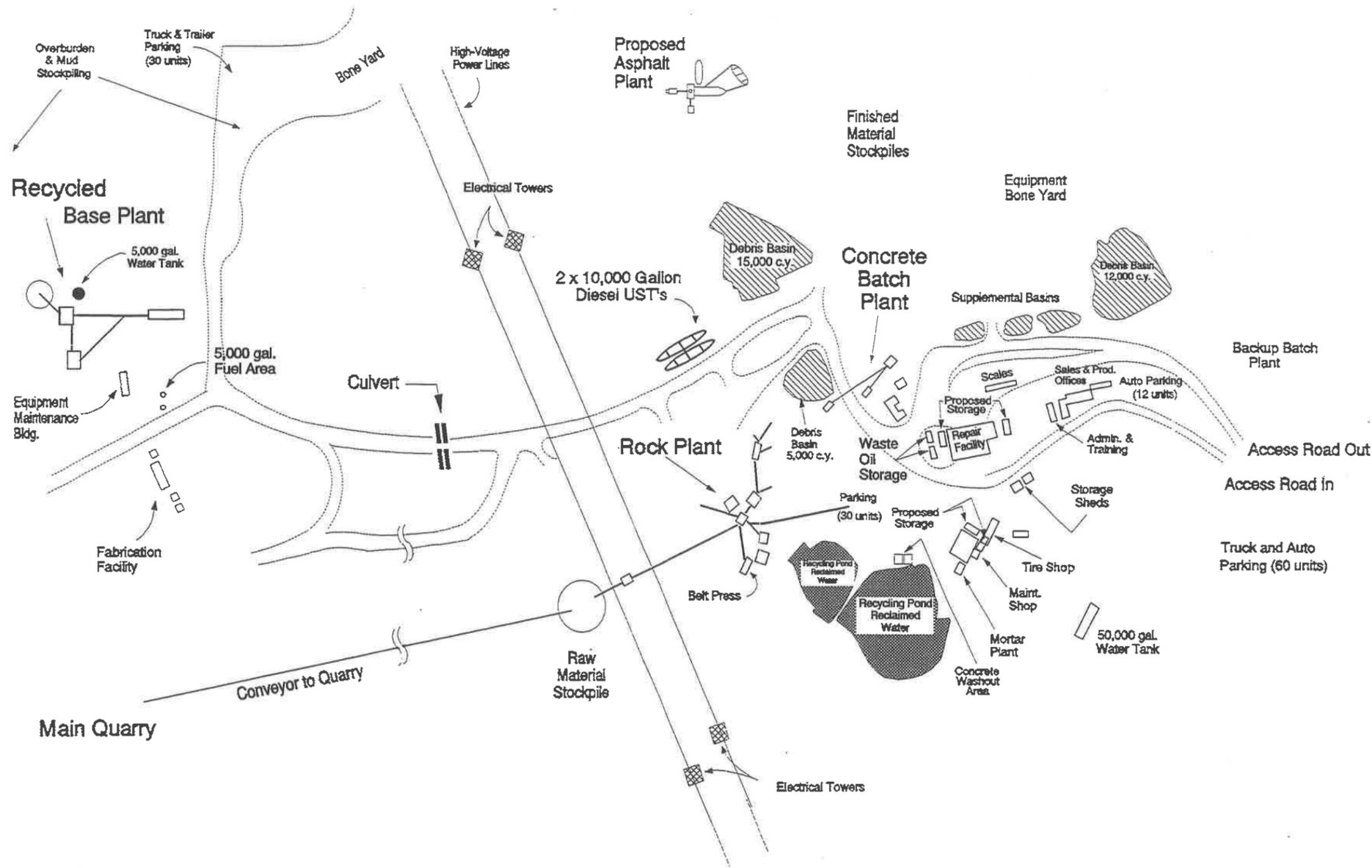
3.7.1 EQUIPMENT

Various processing facilities would be required to develop marketable products at the mine. The proposed processing facilities include the following major categories:

- Rock plant (sand and gravel sorting)
- Concrete batch plant
- Back-up concrete batch plant
- Portable combined road base plant and recycling plant
- Mortar plant
- Asphalt batch plant
- Ancillary facilities

Ancillary facilities include the recycling ponds, truck repair building, machine shop, water tank, scales, fuel service, stockpile areas, administration offices, bone yard, conveyor belt, and parking area. Table 5 lists the individual equipment for each of the proposed processing plants. The locations of the proposed facilities listed in Table 5 are shown on Figures 10 and 11. With the exception of the asphalt batch plant, all of these facilities were previously approved under CUP-1328 and have been operating on the site in accordance with the Compliance Agreement (CA-4072).

As noted earlier, the proposed operations would create various products, including ready mix concrete, concrete and plaster sand mixes, mortar, specialty sands, road base material, and asphalt concrete. The operations would begin with the excavation of raw materials at the mine site. These materials would then be transported to the "rock plant" where it would be placed in a jaw crusher to break up any rocks (estimated to comprise no more than 10% of raw materials). The crushed materials would then be transported through a series of wet or dry screens to sort the material into various products, as shown on Figure 12. Sands for mortar, concrete, road base, and asphalt would be transported by conveyor to the individual specialty plants (see Figures 10 and 11) to create these



-  = Debris Basin
-  = Recycling Pond (Reclaimed Water)
-  = Underground Storage Tanks



FIGURE 11

DETAILED FACILITY PLAN

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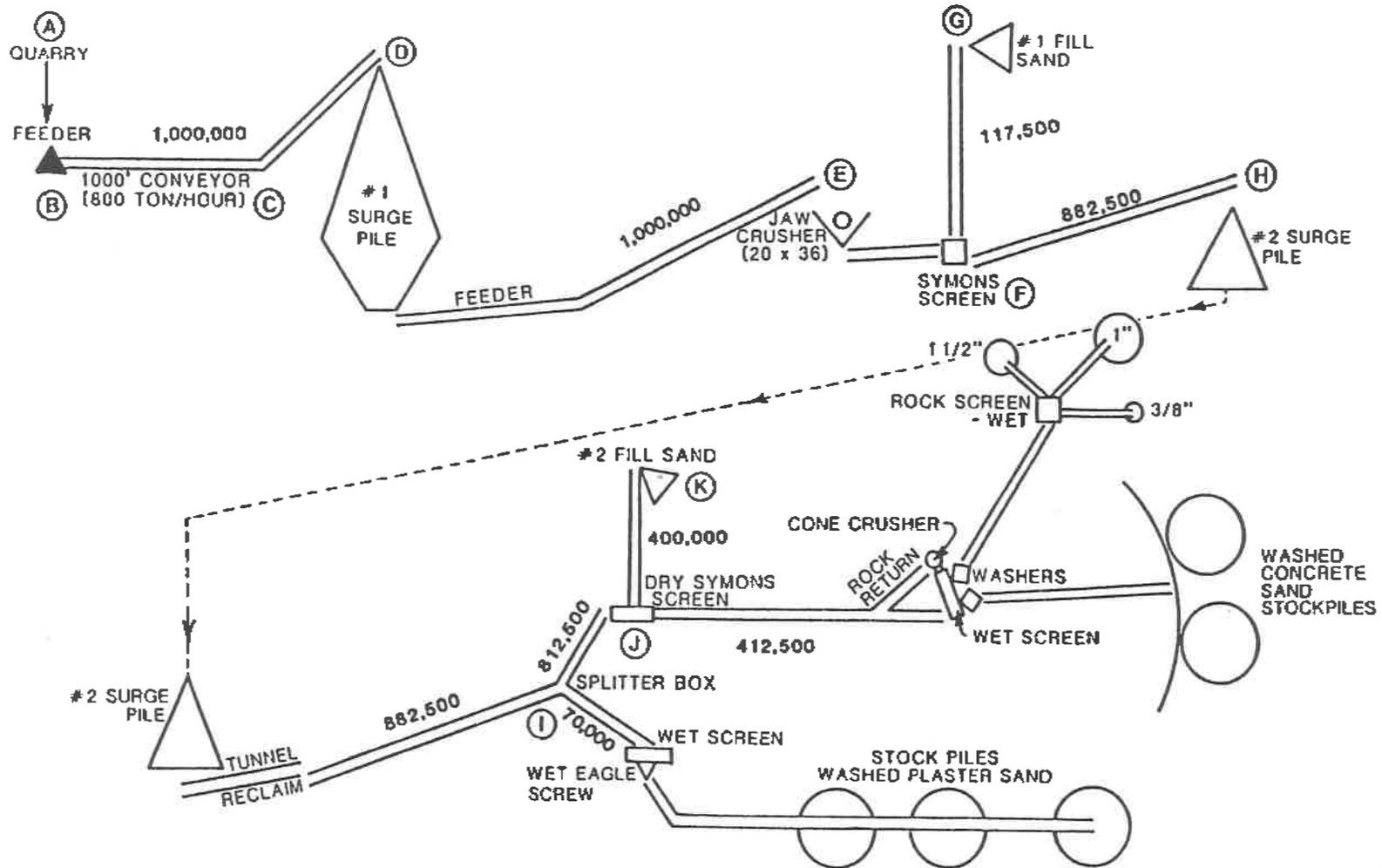


FIGURE 12

**FLOW DIAGRAM FOR
SAND AND GRAVEL
PROCESSING**

materials. At these plants, the sands from the mine site would be combined with imported material (i.e., cement, asphalt oils, etc.). Finished materials would be loaded onto trucks at the individual plants. Construction sands would be loaded at the rock plant.

The proposed project would also include a recycling operation. The portable base plant would be used periodically to crush old concrete brought to the site by returning haul trucks. The crushed concrete is cleared of metal by a magnet, then used as rock in making road base.

TABLE 5

LIST OF PROPOSED PROCESSING EQUIPMENT

- **One Rock Plant consisting of:**
 - 17 - Various length conveyors: 24-inch, 30-inch, 36-inch
 - 1 - Conveyor, 36-inch x 1500 feet
 - 3 - Radial stackers; 24-inch x 100 feet
 - 3 - Two deck classifiers, 5 feet x 16 feet
 - 1 - 3-foot diameter cone crusher
 - 1 - Driveover bunker
 - 1 - Reclaim tunnel
 - 3 - Towers including 5 Screens
 - 1 - Jaw crusher, 20-inch x 36-inch
 - 1 - Tailings dewatering belt press
 - Support equipment including electrical shed, tool shed and polymer unit.
- **One Ross Concrete Batch Plant, Rustler Model, consisting of the following:**
 - 1 - 27 cubic yard overhead aggregate storage bin
 - 1 - 5 cubic yard aggregate batcher
 - 1 - 24-inch x 36-foot charging conveyor
 - 1 - 225 barrel cement storage bin equipped with a V-20 bin vent filter
 - 1 - 5 cubic yard cement batcher
 - 1 - Bunker, concrete, ground level, 3 material transmit mix truck loading is controlled by a Carborundum baghouse and pickup hood.
 - 1 - 125 horsepower Caterpillar, Model D-1300, 100 kw diesel powered motor generator
- **One Concrete Batch Plant (standby) consisting of:**
 - 1 - Cement/water blender
 - 2 - Aggregate conveyors 36-inch x 200-feet; 30-inch x 150-feet
 - 1 - Aggregate weigh hopper
 - 1 - Cement weigh hopper with filter
 - 1 - 230 bbl cement storage silo with bin vent filter
 - 3 - 200 bbl cement storage silo with bin vent filter
 - 1 - 225 bbl cement storage silo with emissions controlled by a 180 sq. ft. CBECO baghouse
 - 1 - 175 bbl fly ash storage silo with emissions controlled by a 180 sq. ft. CBECO baghouse

TABLE 5
(continued)

- **One Portable Road Base and Recycling Plant, consisting of the following sand and gravel processing equipment:**
 - 1 - Raw material feeder, 300 ton/hour capacity
 - 1 - Jaw crusher, 30-feet x 42-inch, 125 ton/hour capacity
 - 1 - Cone crusher, 54-inch diameter, 200 ton/hour
 - 2 - Screens (3 deck, 8-feet x 20-feet; 6-feet x 12-feet)
 - 7 - Conveyors, various lengths
 - 2 - Radial stackers; 30-inch x 60-feet, 24-inch x 135-feet
 - 1 - 24,000 gallon water tank for dust and moisture control
 - 1 - Magnet set to extract nails and metal during recycling

- **One Sunrise Mortar Batch Plant consisting of:**
 - 1 - Mixer, 27 cubic feet
 - 1 - Sand bunker, 12 tons
 - 1 - Cement storage silo, 25 tons
 - 1 - Torit dust collector

- **Asphalt Batch Plant (245 tons per hour CMI Corporation Drum Mix Asphalt Batch Plant, or equivalent), consisting of:**
 - 1 - Rotary drum mix dryer, Model SJP360 (SVM 8.25), or equivalent
 - 1 - Natural gas fired 75.6 MMBTU/Hr Power Star burner, Model SJP-360, or equivalent
 - 1 - 3 bin cold feed system including 3-30" wide belt feeders
 - 1 - Asphalt concrete storage silo, 150 ton capacity
 - 1 - Drag conveyor (from drum mixer to silos) vented to burner
 - 1 - Slinger feeder conveyor vented to mixer
 - 1 - 24" x 40' coldfeed collector conveyor
 - 1 - Intermediate aggregate conveyor
 - 1 - 25,000 gallon electrically heated asphalt storage tank equipped with a tank vent condensing unit
 - 1 - Process particulate control system consisting of:
 - CMI/SAF-2420 Baghouse, with maximum air to cloth ratio of 4.31:1 equipped with a pulse jet cleaning system, or equivalent. Baghouse shall be equipped with a differential pressure gauge mounted at eye level in an accessible location. This gauge shall be capable of reading differential pressures across the filtering media of 0 to 7 inches of water column; and
 - Draft fan with a minimum flow rate capacity of 32,000 ACFM.
 - 1 - Water spray system, or equivalent, if necessary, for control of fugitive emissions from raw material storage and handling
 - 1 - "Blue Smoke" control system consisting of 30" diameter ducting connecting a 6' x 8' hood, located in the drive through under the asphalt concrete storage silo, to the drum mix dryer secondary air blower.

Source: Blue Star Ready Mix, Inc.

3.7.2 WATER USE

The proposed project would utilize water for various washing and processing operations, as well as for control of fugitive dust along on-site roads and at mining areas. The water would be provided by the Ventura County Waterworks District No. 1 plant located near Moorpark. There are portions of the mining and processing site where this water would be applied that would need to be annexed into the Waterworks District No. 1, subject to review and approval by the Local Agency Formation Commission (LAFCO).

Washing operations at the rock plant will use water provided by Waterworks District No. 1 and recycled water pumped back to the rock plant by electric pumps from two 10 acre-feet recycled water ponds (Figure 11). Average water use is estimated at 1.2 million gallons per day, of which approximately 120,000 gallons would be consumed (10%) by products and evaporation. This equates to 1,344 acre-feet per year (AFY) being used and 134 AFY being consumed. Peak water use is estimated at 1.4 million gallons per day with 140,000 gallons being consumed. This equates to 1,568 AFY being used and 157 AFY being consumed. Previous water consumption for CUP-1328 was about 297 AFY. Under the proposed project (i.e., excavating 3,400,000 tons per year) the consumption of water received from Waterworks District No. 1 is estimated at 495 AFY. This represents a net increase in water consumption of 198 AFY.

3.7.3 EMPLOYEES AND HOURS OF OPERATION

The estimated total number and type of employees and contract personnel for the proposed project are listed below. These people would work different shifts and would not all be on-site at the same time.

• Administration	14
• Repair and machine shops	13
• Concrete batch plant	5
• Mine area and base plant	35
• Truck drivers (employee and independent contractors on site)	124
• Asphalt batch plant	4
Total =	195

As noted in Section 3.5.2, excavation would occur on an as-needed basis throughout the year beginning one hour after sunrise and ending one hour before sunset on Mondays through Saturdays, excluding Sundays and holidays. No excavation would occur at night. Most of the year, employees associated with processing would work two regular daytime shifts (i.e., 6:00 A.M. to 2:30 P.M., and 2:00 P.M. to 10:30 P.M.). Processing on a two-shift basis would occur for about 220 days of the year, though the applicant seeks approval to conduct the two-shift processing throughout the year with no limitation on the number of days, other than excluding Sundays and holidays. Maintenance of equipment would occur after dark and, therefore, requires lighting.

To meet certain orders (e.g., nighttime freeway repairs), nighttime processing may be needed, using a third shift (i.e., 10:00 P.M. to 6:30 A.M.) up to 60 days of the year. During these 60 days, the facility would be operating on a 24-hour basis. The feeder and conveyor system would operate during the same nights that processing would occur.

Outgoing deliveries (TMC and independent contractor trucks) from the mine would occur between 6:00 A.M. and 6:00 P.M., Monday through Saturday, excluding Sunday and holidays. These vehicles would return to the mine between 6:00 A.M. and 8:00 P.M., Monday through Saturday. There would be no truck deliveries and returns on Sundays and holidays.

3.7.4 TRUCK TRAFFIC

The applicant owns 31 ready-mix trucks. These trucks, as well as independent contractor trucks, would transport supplies to the site (rock, asphalt oil, supplies) and transport marketable products from the site. The applicant's ready-mix trucks haul 100% of the total ready-mix concrete currently produced at the site.

The proposed average and peak daily truck trips associated with the project are shown in Table 6 for Monday through Friday, and in Table 7 for Saturdays. The average and peak daily truck and vehicle trips (one-way) associated with the proposed mine during weekdays would be 1,718 and 2,066 respectively. Truck volumes during Saturdays would be less than half these values. The distribution of proposed traffic to and from the site along the local roadways is as follows (Figure 13):

<u>Source/Destination</u>	<u>Percentage of Traffic</u>
Fillmore area using S.R. 23	7%
Camarillo/Oxnard area using S.R. 118	20%
Simi Valley/San Fernando Valley using S.R. 118	30%
Thousand Oaks/Agoura area using Moorpark Frwy	43%

TABLE 6
PROPOSED VEHICLE TRIPS, MONDAY - FRIDAY¹

	<u>Average Daily</u>	<u>Peak Daily</u>
1. Truck Deliveries		
• Ready-mix concrete	138	166
• Rock, sand, and gravel	225	270
• Misc (2 & 3 axle)	50	60
• Mortar mix	<u>13</u>	<u>16</u>
TOTAL DELIVERIES	426	512
TOTAL RETURNS	426	512
2. Incoming Supplies		
• Day	80	96
• Night	<u>8</u>	<u>10</u>
TOTAL INCOMING SUPPLIES	88	106
TOTAL RETURNS AFTER DELIVERY	88	106
3. Asphalt Batch Plant		
• Delivery	120	144
• Supplies	<u>30</u>	<u>36</u>
TOTAL DELIVERIES	150	180
TOTAL RETURNS	150	180
4. Employee Vehicles		
TOTAL INCOMING	195	235
TOTAL OUTGOING	195	235
TOTAL DAILY (M-F)	1,718	2,066

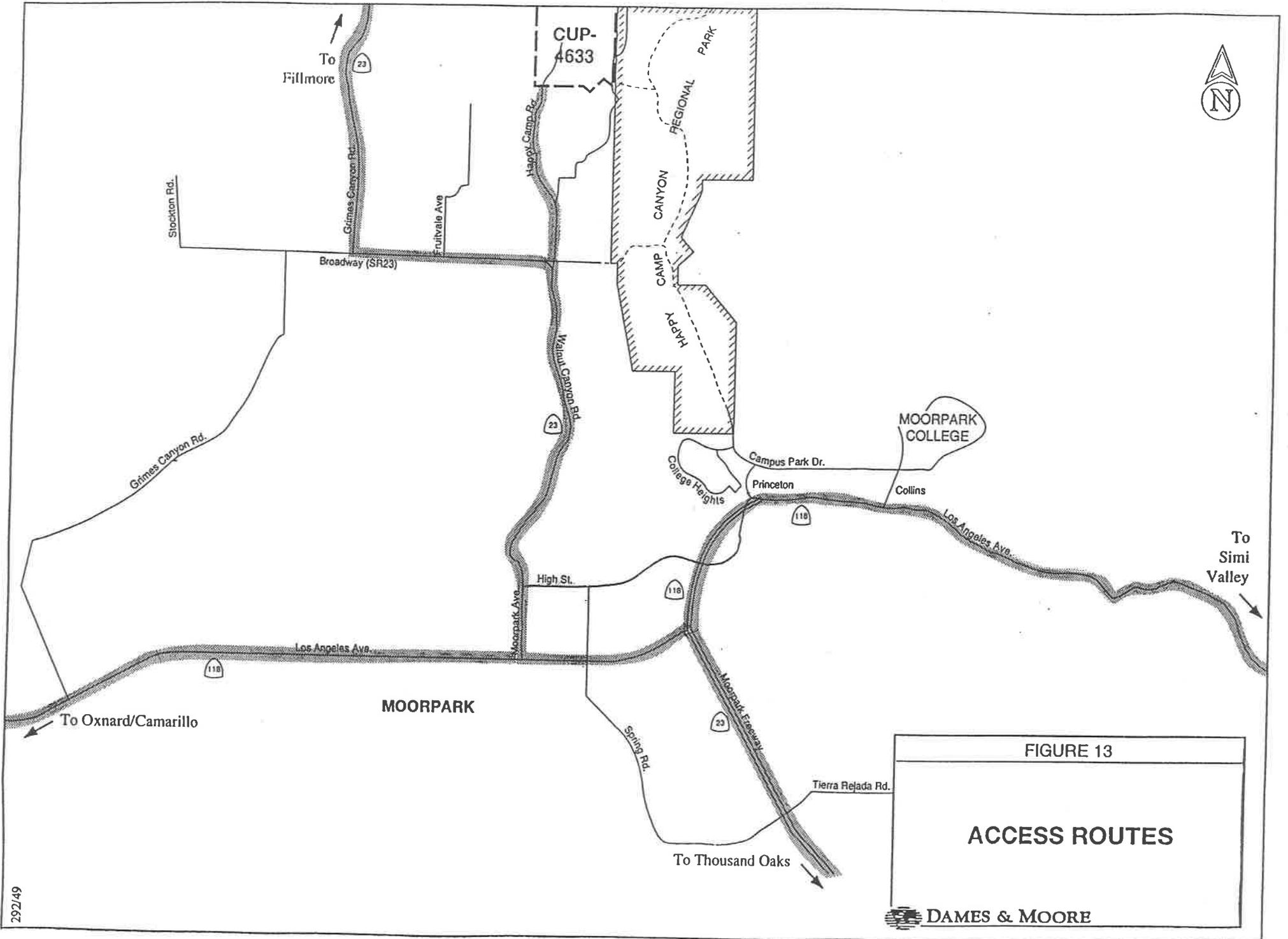


FIGURE 13

ACCESS ROUTES

DAMES & MOORE

TABLE 7

PROPOSED VEHICLE TRIPS, SATURDAY 1

	Average Daily	Peak Daily
1. Truck Deliveries		
• Ready-mix concrete	50	60
• Rock, sand, and gravel	40	48
• Misc. (2 & 3 axle)	20	24
• Mortar mix	<u>8</u>	<u>10</u>
TOTAL DELIVERIES	118	142
TOTAL RETURNS	118	142
2. Incoming Supplies		
• Day	12	14
• Night	<u>8</u>	<u>10</u>
TOTAL INCOMING SUPPLIES	20	24
TOTAL RETURNS AFTER DELIVERY	20	24
3. Asphalt Batch Plant		
• Delivery	30	36
• Supplies	<u>6</u>	<u>7</u>
TOTAL DELIVERIES	36	43
TOTAL RETURNS	36	43
4. Employee Vehicles		
TOTAL INCOMING	75	90
TOTAL OUTGOING	75	90
TOTAL DAILY (SAT.)	498	598

TABLES 6 and 7: ¹ One way trips.
Source: Blue Star Ready Mix, Inc., and TMC.

3.7.5 ADMINISTRATION AND SECURITY

The current mine (CUP-1328) contains four modular buildings along the main access road (Figure 3) for sales and administration. Nighttime and weekend security is provided by a locked gate. The applicant proposes the same under CUP-4633.

3.7.6 UTILITIES

The entire operations of the proposed project would be powered by electricity purchased from SCE. The estimated current monthly requirement is 160,670 kilowatt hours. Power would be provided by the existing system of wooden poles that traverse the site. Two 750-kV transformers are located at the site.

The only operations powered by an internal combustion engine would be a 125-hp diesel powered generator that would power the concrete batch plant during power outages. It is estimated that such outages would occur approximately 2 to 3 days per year.

The proposed asphalt batch plant would be powered by natural gas, provided by the existing 30-inch gas main that traverses the site.

3.7.7 NIGHTTIME LIGHTING

A summary of nighttime lighting is provided in Table 8. The rock plant would be lit from dark until 11:00 P.M. approximately 220 days per year. Maintenance of equipment would occur after dark and, therefore, requires lighting.

TABLE 8
SUMMARY OF NIGHTTIME LIGHTING

AREA	Shift Operation	
	Dark until 11 P.M.	Dark until Dawn
Main Gate		1 - 300 Watt Halogen Light
Mixer Truck Parking		3 - 300 Watt Halogen Light
Offices		2 - Standard 100 Watt Lights
Tire Shop		2 - Standard 100 Watt Lights
Ponds		1 - 300 Watt Halogen Light
Shop/Repair	3 - 300 Watt Halogen Perimeter Lights	1 - Standard 100 Watt Light
	2 - 100 Watt Standard Perimeter Lights	
Ready Mix		2 - Standard 100 Watt Lights
Rock Plant	100% Illumination	3 - Standard 100 Watt Lights
Fabrication Area		3 - Standard 150 Watt Spot Lights
Base Plant		2 - Standard 150 Watt Spot Lights
Scale House		1 - Standard 150 Watt Spot Light
<u>EQUIPMENT</u>		
Loader	Yard Operation Lights on Loader	
Mixers	Driving Lights on trucks driven from parking area to shop for maintenance (approx. 12 per night)	

3.7.8 SANITATION

The proposed project would utilize the existing on-site septic system that serves the administration buildings, as well as the truck repair shop and machine shop.

3.7.9 PARKING

There are four locations for parking of company and contractor trucks and vehicles at the site, as summarized below:

Parking area near entrance		60 units
Existing office		12 units
Truck repair area		30 units
NE portion of site		30 units
Total vehicles	=	132 units (120 trucks units)

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4.0 ENVIRONMENTAL ANALYSIS

The environmental consequences associated with the proposed project are described below. To facilitate reading ease and understanding, the information presented has been consolidated into relevant topics, generally reflecting the impact categories listed on the Initial Study Checklist. The following sections are included in this chapter:

- 4.1 ENVIRONMENTAL AND REGULATORY SETTING/LAND USE COMPATIBILITY
- 4.2 GEOLOGY AND GEOHAZARDS
- 4.3 GROUNDWATER
- 4.4 EROSION AND SEDIMENTATION
- 4.5 BIOLOGICAL RESOURCES
- 4.6 VISUAL RESOURCES
- 4.7 AIR QUALITY
- 4.8 NOISE
- 4.9 TRAFFIC

Each section also includes a discussion proposed project consistency or inconsistency with the applicable goals and policies of the Ventura County General Plan and other plans. The initial section, Section 4.1, describes the overall environmental and regulatory setting, including a land use compatibility discussion, and differs in its format from subsequent sections. With the exception of Section 4.1, each section of this chapter employs the following format:

- Existing Setting (i.e., environmental condition) - This subsection provides an overview of the regional and/or subregional setting. The current mining operation has been allowed to proceed under the approved Compliance Agreement, subject to CUP-1328 conditions of approval (refer to Section 1.1.). Accordingly, and for the purposes of this environmental analysis, "existing setting" is defined as being CUP-1328, as previously modified, operating at capacity (i.e., a maximum annual production rate of 1,800,000 tons and a daily average of 810 one-way heavy trucks trips).
- Project Impacts - Project impacts were initially identified by the Initial Study prepared for the proposed project, then further defined through agency and public comments. Accordingly, the EIR addresses the incremental impacts of the proposed project as they compare to those already experienced under CUP-1328. Initial Study Assessment Guideline criteria and other applicable criteria are presented herein. This provides the information needed to identify project specific impacts, the significance of those impacts, and to develop recommended conditions of approval and/or mitigation measures.
- Cumulative Impacts - For the purposes of assessing cumulative impacts, the proposed project is viewed herein as including the total set of environmental effects resulting from the proposed project plus other existing, approved, proposed and reasonably foreseeable future projects. In this regard, the description of potential cumulative impacts includes the projects described in Section 4.1. This provides the information needed to identify cumulative impacts, the significance of those impacts, and to develop recommended conditions of approval and/or mitigation measures.

- General Plan Consistency - Applicable General Plan Goals and Policies are presented here with a determination of whether or not the proposed project, inclusive of the recommended conditions of approval and mitigation measures, is consistent with these goals and policies. These discussions are pursuant to CEQA Guidelines subsection 15125(b), which states "the EIR shall discuss any inconsistencies between the proposed project and applicable general and regional plans." The final determination of consistency is made by the County's decision making body. *This analysis is important because a CUP cannot be approved if it is found to be inconsistent with the Ventura County General Plan.* In many instances, other plan goals and policies are discussed (e.g., Ventura County Water Management Plan).
- Mitigation Measures - Where a significant impact is identified, diligent effort is taken to also identify the mitigation measure(s) that will avoid or reduce the impact to a less than significant level. For ease of reference, mitigation measures have been numbered in a manner that includes the first letters of the EIR section title (e.g., in Section 4.2 Geology and Geohazards of this EIR, the first mitigation measure is numbered: GG-1).
- Residual Impacts - This subsection summarizes the impacts expected to remain following the implementation of the recommended conditions of approval and mitigation measures.

The project impacts were classified in the manner shown below. An impact was determined to be significant using the definitions of "significance" in the CEQA Guidelines (Sections 15065, 15358, 21038, and Appendices D and G).

- Class I Impacts. Significant environmental impacts that cannot be mitigated to a less than significant level. For these impacts, the County must issue a "Statement of Overriding Considerations" under Section 15092(b) of the CEQA Guidelines if the project is approved. Mitigation measures are recommended to minimize adverse impacts.
- Class II Impacts. Significant environmental impacts that can be mitigated to a less than significant level. The County must make "findings" under Section 15091(a) of the CEQA Guidelines if the project is approved. Mitigation measures are recommended to minimize these adverse impacts.
- Class III Impacts. Other environmental impacts that are potentially adverse but not significant. In many instances, conditions of approval are recommended to minimize these adverse impacts. In some instances, these impacts are minimized by mitigation measures being recommended to address Class I or II impacts. For example, fugitive dust (a Class III impact) will be minimized by the mitigation measures recommended to address significant air quality impacts related to particulate matter (PM₁₀) (a Class I impact).
- Class IV Impacts. Beneficial impacts.

By identifying the impacts associated with each issue area, and by recommending conditions of approval or expanding other mitigation measures in this EIR, the decision makers and the general public are offered a discussion and full disclosure of the significant environmental impacts of this proposed project.

4.1 ENVIRONMENTAL AND REGULATORY SETTING/LAND USE COMPATIBILITY

In this section of the EIR, the overall environmental and regulatory setting is presented, the types of land uses at and adjacent to the proposed mining area are described, and an evaluation is provided of the compatibility of these land uses with the project based on environmental impacts. In addition, there is a detailed analysis of the consistency of the proposed project with those applicable General Plan goals and policies not addressed in subsequent subsections.

4.1.1 REGIONAL SETTING

The project site is located approximately 4 miles north of the City of Moorpark in eastern Ventura County (Figure 1). It is located at the western end of the Santa Susana Mountains in an area characterized by rolling hills with orchards and rangelands. The site is about 20 miles east of Ventura and 70 miles west of downtown Los Angeles.

4.1.2 EXISTING SITE CHARACTERISTICS

The proposed permit site would encompass 533 acres and is located about 1.5 miles north of Broadway (i.e., Highway 23) as shown on Figure 2. Approximately 2,700 feet north of the intersection of Happy Camp Road and Broadway, Happy Camp Road turns northeast. At this location, traffic going to the project site heads west and north on an access road known as Roseland Avenue. This road terminates at the project site. However, the mailing address is considered as Happy Camp Road. The site contains a very large, active mine and processing area (Figure 3). The currently active mining area under CUP-1328 includes about 175 acres. It contains a large pit surrounded by near-vertical cut slopes (see Section 4.6 Photo Nos. 1 and 4). The processing area encompasses about 40 acres and is located at the southern end of the project site (Figure 3), near the boundary of Happy Camp Canyon Regional Park (see Section 4.6 Photo Nos. 2 and 3). It contains various processing equipment, buildings, parking areas, storage areas, and roads.

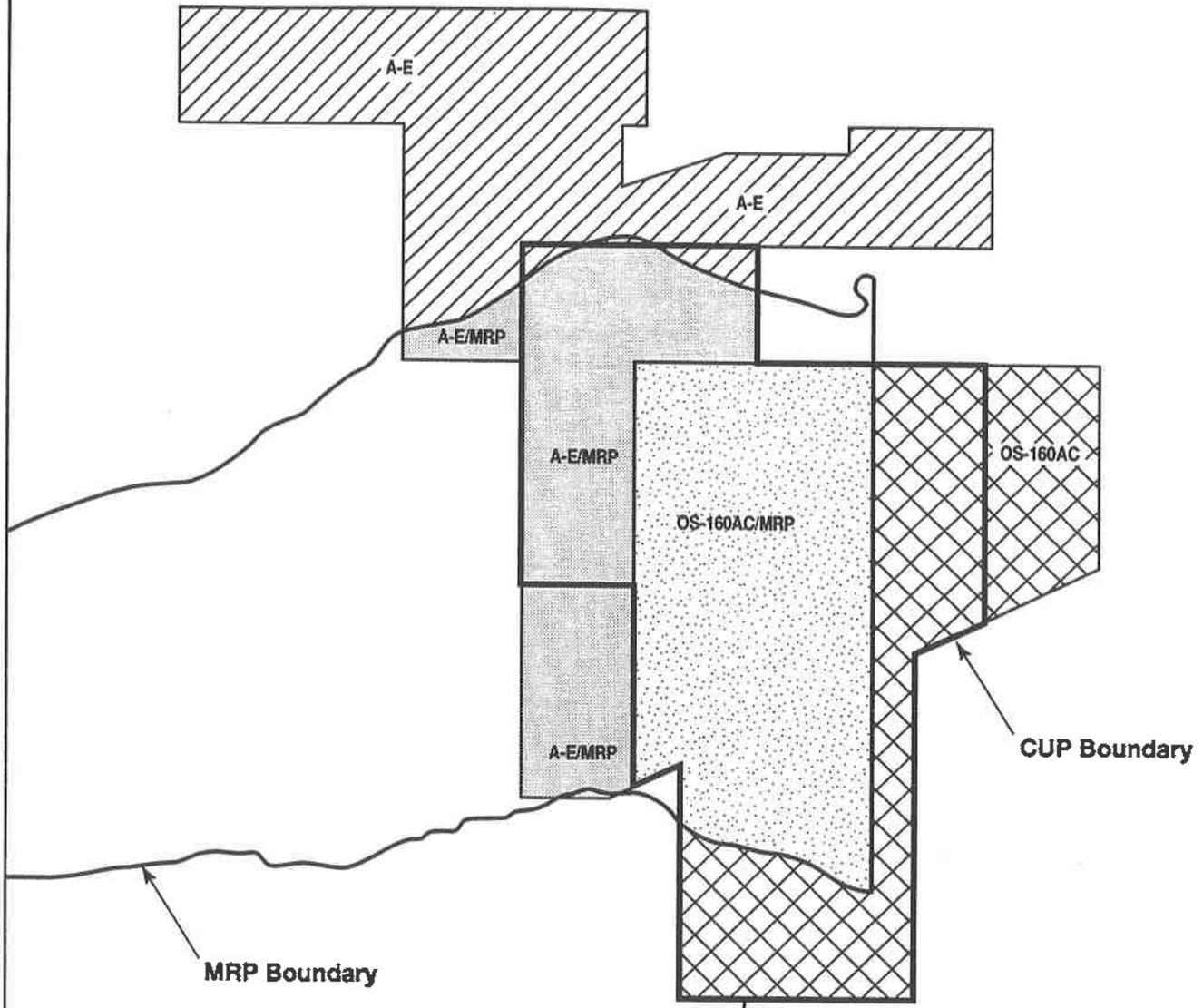
The proposed mining would occur in 71 acres of the area previously mined under CUP-1328, as well as on an additional 146 acres (Figure 4). The 146 acres of new mining area are undeveloped and contain low hills with annual grassland, scrub vegetation, and scattered oak trees (see Section 4.6 Photo No. 5).

4.1.3 SURROUNDING LAND USE

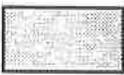
The project site is located in a remote and largely undeveloped area. Undeveloped rangelands occur north and east of the site (Figure 14A). The site is surrounded by a mixture of land uses (Figure 14B). An existing mine (CUP-4158) occurs directly west and adjacent to the site. South of the site are various agricultural lands, consisting primarily of orchards with scattered agricultural processing facilities and horse ranches. In addition, there are large lot residences (12-40+ acres in size) located throughout the area south of the site, scattered among the agricultural land uses. Happy Camp Canyon Regional Park is located directly east of the project site, while the City of Moorpark is located 4 miles to the south (Figure 15).

4.1.4 GENERAL PLAN DESIGNATION

The Ventura County General Plan designation for the majority of the proposed project area is Open Space (O-S). This land use designation includes areas managed for the production of resources, "including areas containing major mineral deposits...". Approximately 40 acres in the



EXPLANATION:

-  Agriculture Exclusive (A-E)
-  Agriculture Exclusive / Mineral Resource Protection Overlay Zone (A-E/MRP)
-  Open Space 160 Acre Minimum (OS-160AC)
-  Open Space 160 Acre Minimum / Resource Protection Overlay Zone (OS-160AC/MRP)



HAPPY CAMP ROAD

FIGURE 14A

ZONING DESIGNATIONS

EXPLANATION:

- Residences
- M Mining
- OS Open Space
- Ag Agriculture
- AI Agriculture Industry



0 1/2 1

Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles;
Simi, CA 1969, Moorpark, CA 1969.

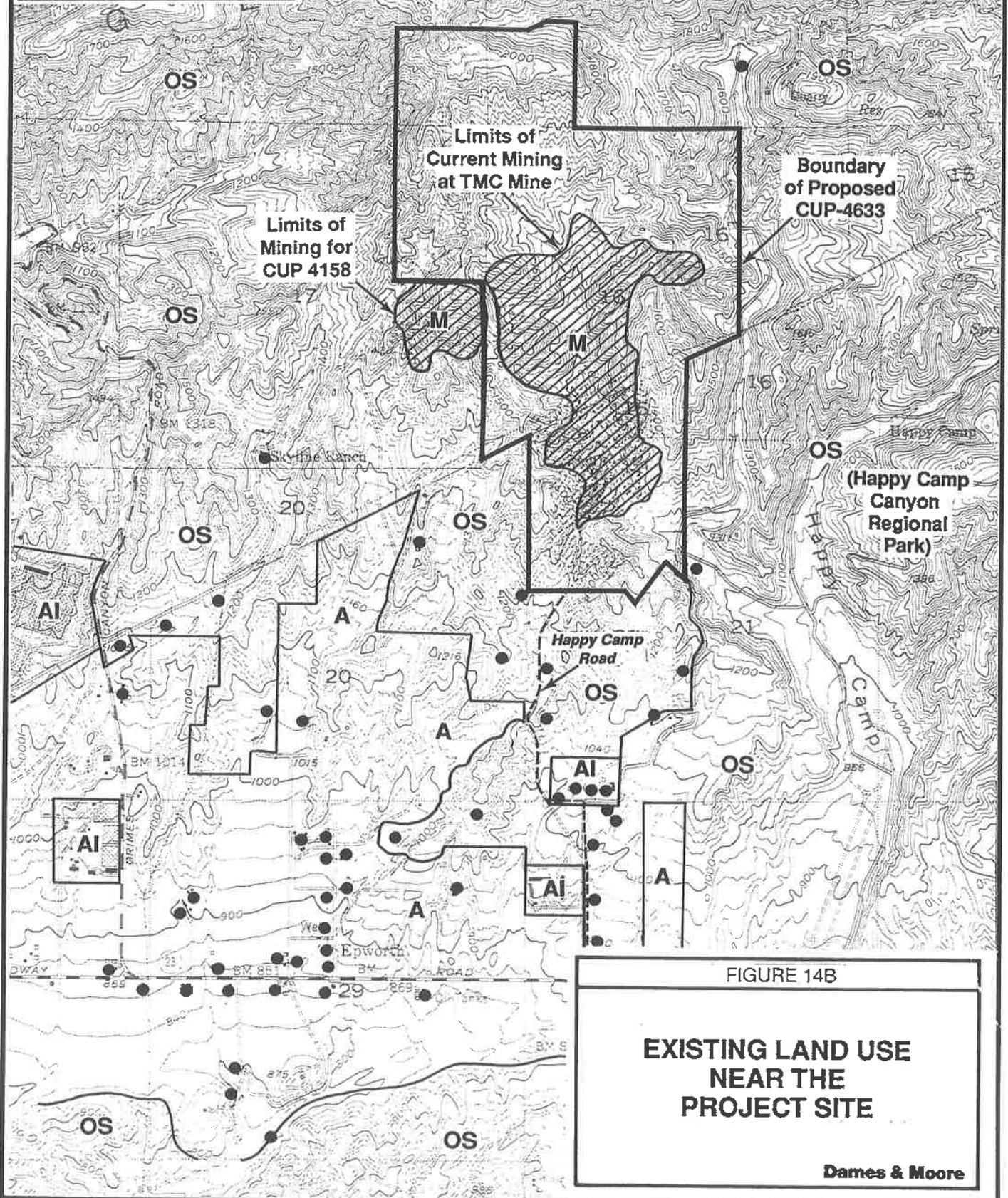


FIGURE 14B

**EXISTING LAND USE
NEAR THE
PROJECT SITE**

Dames & Moore

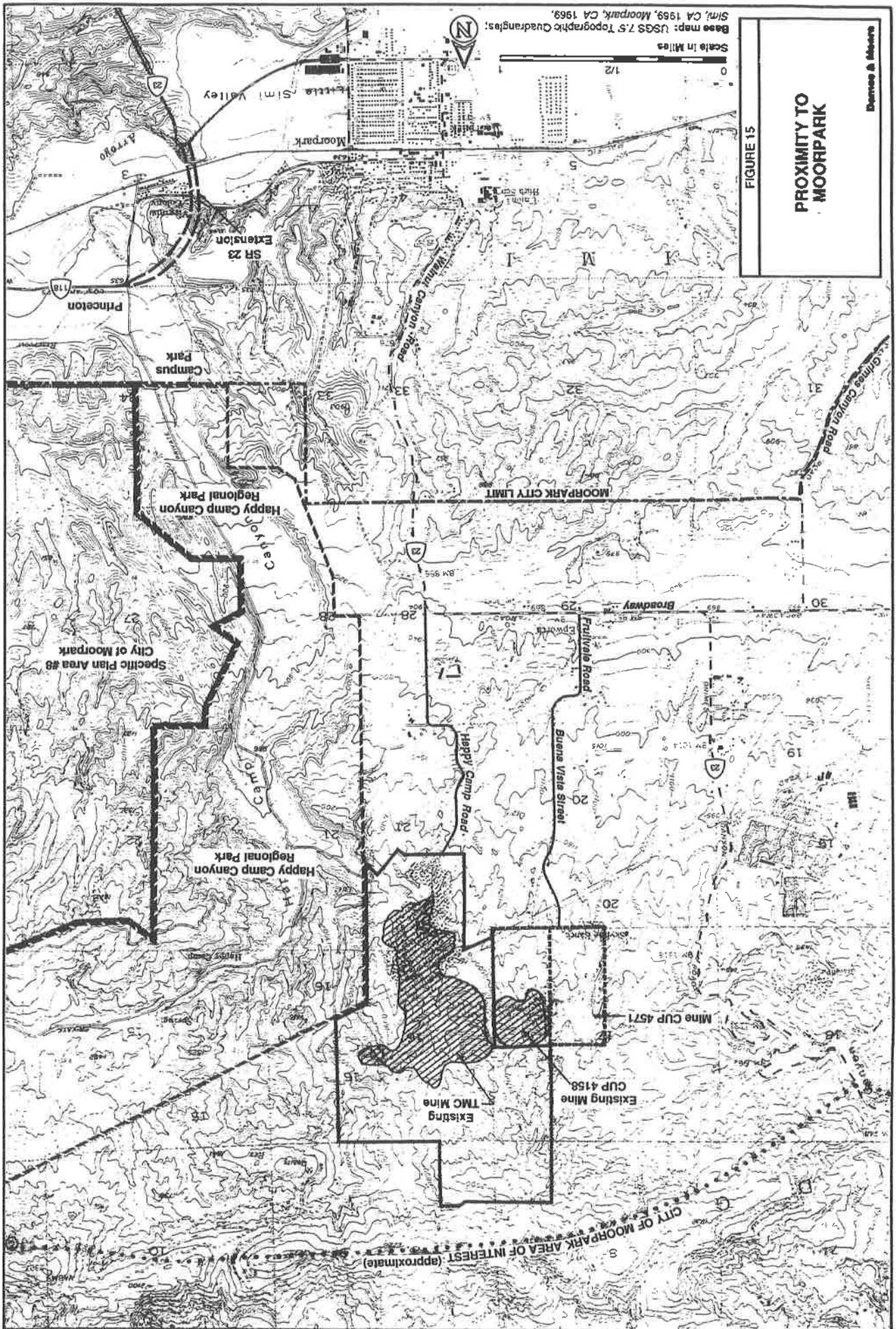


FIGURE 15

PROXIMITY TO MOORPARK

Source & Measure

northwest corner of the proposed CUP area has a General Plan designation of Agricultural. Mining activities are not being proposed on these 40 acres.

The Ventura County General Plan designates certain areas as Mineral Resource Areas on the Resource Protection Maps. These areas are subject to the requirements of the Mineral Resource Protection Overlay Zone (Zoning Ordinance Designation), described below. Most of the proposed CUP area, and all of the proposed mining area, occur within areas so designated and these lands correspond with the Mineral Resource Zone Category 2 (MRZ-2) designation used by the State Division of Mines and Geology. MRZ-2 lands are defined as areas of statewide or regional significance where adequate information exists to indicate significant mineral resources are present. The State Division of Mines and Geology developed Mineral Resources Management Goals and Policies which state that MRZ-2 lands should be protected from preclusive and incompatible land uses so that the mineral resources are available when needed.

In response to the DMG goals and policies, the County developed several General Plan goals, policies and programs to limit or preclude development within an MRP overlay zone if the proposed use would hamper or preclude access to, or the extraction of, the mineral resource. (Refer to the Ventura County General Plan - Goals, Policies, and Programs document, Section 1.4, Mineral Resources.)

4.1.5 ZONING ORDINANCE

Zoning designations for the permit site are shown on Figure 14A. Most of the proposed permit area and all of the area proposed for mining is zoned either "O-S-160AC MRP" (Open Space, 160 acre minimum, Mineral Resource Protection Overlay Zone) or "A-E MRP" (Agricultural Exclusive, Mineral Resource Protection Overlay Zone). The purpose of the "O-S" zone is to provide for the conservation of renewable and nonrenewable resources. Approximately 80 acres in the northwest corner of the CUP area is zoned "A-E" (Agricultural Exclusive). Both the "O-S" and "A-E" zones allow mineral extraction after approval of a Conditional Use Permit by the County's decision makers.

All of the proposed mining area is located within an area subject to the provisions of the Mineral Resource Protection (MRP) Overlay Zone of the County Zoning Ordinance (Section 8109.4.4). The development standards for the MRP overlay zone call for the limiting of discretionary permits if the associated use would significantly hamper or preclude access to, or the extraction of, a mineral resource. The purposes of the Mineral Resource Protection Overlay Zone are:

- To safeguard future access to an important resource.
- To facilitate a long term supply of mineral resources within the County.
- To minimize land use conflicts.
- To provide notice to landowners and the general public of the presence of the resource.
- The purpose is not to obligate the County to approve use permits for the development of the resources subject to the MRP Overlay Zone.

In addition to the limitations imposed in the MRP overlay zone, the County contains regulations for mineral development in Article 7, Section 8107-9 of the Zoning Ordinance. The purpose of the regulations is to establish reasonable controls on mining practices to ensure that these activities would be conducted in an environmentally sound manner and that mined sites would be appropriately reclaimed. Section 8107-9 of the Zoning Ordinance provides general guidelines and specific standards that are used to condition any approval of mining projects in the County.

4.1.6 LCA CONTRACT STATUS

Approximately 160 acres in the northwest corner of the CUP area are within portions of Land Conservation Act (LCA) Contracts 3-9.5 and 3-9.5A established in 1975. Approximately 80 acres of these lands are within the proposed mining boundaries and are proposed for mining during Phase 2 (Figure 5). These LCA lands, as well as much of the project site, are periodically grazed by cattle. LCA contracts are a mechanism to encourage farmers to retain agricultural uses of their land by reducing property tax in return for agreeing to retain agricultural use of their land for 10 years. The ten year contract is automatically renewed unless the renewal is terminated by filing a notice of non-renewal (which requires 9 years for the termination to take effect), or request for full or partial cancellation is submitted to the County. Approval of a non-renewal or cancellation is a discretionary action made by the Board of Supervisors, using the recommendations by the County Agricultural Advisory Committee.

The Ventura County Guidelines for administering LCA contracts provides for non-agricultural uses (such as mining) on LCA lands under the following terms: "...other "compatible" agricultural or agriculturally related uses may also be allowed on lands under a LCA contract provided they are located on "marginal" lands and would not compromise, hinder, or reduce the existing or potential agricultural productivity of the land. "Compatible" uses are those which are permitted or conditionally permitted in the "A-E" or "O-S" zones.

The LCA lands encompass about a third of the Phase 2 mining area. None of the LCA lands are located within Phase 1 or Phase 3. No significant agricultural activities occur on the LCA lands at this time. Though cattle grazing ceased for the most part in 1990, 20+ head of cattle are currently grazing this area in accordance with the terms of the LCA contract. Mining in the Phase 2 area would require about 10 years and would be followed by a period of reclamation activities. During that time, there would be little loss of agricultural production in the Phase 2 area. Therefore, Phase 2 area mining would result in insignificant adverse impacts (Class III) on agricultural activities. The following condition of approval is recommended:

Recommended Condition:

LCA Contract

Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall file a notice of non-renewal for LCA Contract 3-9.5.

4.1.7 RELATIONSHIP TO SMARA

In 1975, the State approved the Surface Mining and Reclamation Act (SMARA) which has two major objectives. One is to ensure the proper reclamation of surface mining operations, and the other

is to safeguard access to mineral resources of regional or statewide significance in light of competing land uses and urban expansion. To ensure proper reclamation, SMARA requires local jurisdictions to adopt a reclamation ordinance. SMARA also provides for the inventory and classification of significant mineral resources throughout the state. In addition, SMARA requires that local jurisdictions develop mineral resource management policies to minimize land use conflicts and to conserve mineral resources.

The State Division of Mines and Geology provided guidelines for local jurisdictions developing Mineral Resource Management Policies (MRMP). These guidelines included the following goals:

- Mineral lands designated MRZ-2 should be protected from incompatible uses.
- Surface mining in designated lands should be controlled to minimize environmental impacts, to reclaim to a usable condition for alternative land uses, to encourage mineral production while giving consideration to other land uses and environmental resources, and to remove any residual hazards to the public.

In 1985, the Ventura County Board of Supervisors adopted a Mineral Resource Management Program (MRMP) that addressed the goals and guidelines established by the state. The MRMP consisted of the following elements:

- Mineral resource policies in the Conservation and Open Space Elements of the Ventura County General Plan;
- Mineral Resource Background Report to the Open Space and Conservation Elements;
- Mineral resource zoning ordinances;
- Mineral Resource Management Goals and Policies; and
- Mining time limit guidelines.

Components of the 1985 MRMP were eventually incorporated into: 1) the revised 1988 Ventura County General Plan, the Mineral Resource Goals and Policies (Section 1.4); 2) the Mineral Resource Background Report in the Resources Appendix; and 3) Zoning Ordinance Article 7.

4.1.7-1 Recent Amendments to SMARA

In 1990, the California legislature enacted significant changes in SMARA that are summarized below. These changes increase the role of the State Division of Mines and Geology (DMG), as well as require greater regulation of mining and reclamation by the local jurisdictions. The County has developed a program to implement the new requirements. The major new SMARA requirements are as follows:

- The operator of a mine must submit an annual report to the DMG and local lead agency beginning on 1 July 1991 with the following types of information (among others):
 - Status of mining;
 - Proof of annual inspection by lead agency;
 - Proof of financial assurances for reclamation;
 - Acreage of area mined in the previous year;
 - Acreage of area reclaimed in the previous year;
 - Acreage of mine that remains undisturbed;
 - Production in previous year; and
 - Any revisions or the approved reclamation plan.
- The DMG and local lead agency would require an annual reporting fee to accompany the report.
- The DMG has adopted regulations specifying statewide reclamation standards related to wildlife habitat, backfilling and slope stability, revegetation, drainage and erosion control, cropland reclamation, structure removal, stream protection, topsoil protection, and waste management.
- The operator must provide a financial assurance, in an amount sufficient to cover the costs of reclamation, to the DMG and local lead agency. Financial assurances are reviewed annually to reflect the acreage of land to be reclaimed and to adjust reclamation costs for inflation.
- The financial assurances can be forfeited if reclamation requirements are not met. In such instances, the DMG and lead agency would use the financial assurances to perform reclamation.
- Under certain circumstances, the DMG can assume lead agency responsibilities.
- The local lead agency must adopt ordinances establishing procedures to review and approve reclamation plans, as well as to collect financial assurances.
- The local lead agency must inspect each mine within 6 months of receiving the annual report. A DMG form must be used and the results must be submitted to the state. The purpose of the inspection is to ensure compliance with applicable laws, regulations, and requirements.

4.1.8 OTHER COUNTY PLANS

The approval of CUP-4633 would require permits from the Ventura County Air Pollution Control District (APCD) for the concrete batch plant, sand and gravel plant, asphalt batch plant, and base plant. In anticipation of an increase in production, were CUP-4633 to be approved, the applicant has already obtained a modification of the existing APCD permits to accommodate an annual production level of 3.4 million gross tons. The applicant does not currently have an APCD permit for the proposed asphalt batch plant.

Independent of these permits, the County must conduct an air quality analysis and determine if the proposed project is consistent with the requirements of the Air Quality Management Plan (AQMP) (refer to Section 4.7 AIR QUALITY for a discussion of this consistency determination). In addition, the proposed project must also be found consistent with the Ventura County Water Management Plan (WMP) (refer to Section 4.3 GROUNDWATER for a discussion of this consistency determination).

4.1.9 PROJECTS CONSIDERED FOR CUMULATIVE IMPACT ANALYSIS

The projects considered in the cumulative impact analyses of this chapter of the EIR include the following categories each of which is discussed in more detail below (see Appendix C for map of cumulative projects):

- Nearby existing mines such as the adjacent TMC Fruitvale mine (CUP-4158), Best Rock Products (CUP-4171 and CUP-3451), and Wayne J. Sand and Gravel (CUP-4571).
- Projects that are being planned, but that have not been formally filed such as the Happy Camp Park golf course plans being considered by the County General Services Agency (GSA).
- Proposed projects under the jurisdiction of the County (e.g., Grimes Rock Inc., CUP-4875).
- Proposed projects within the City of Moorpark's jurisdiction (i.e., an application has been filed) or recently approved within 3 miles of the project site. The projects in the City of Moorpark are listed in Appendix C and include Hidden Creek Ranch Specific Plan No. 8. The City of Moorpark's proposed General Plan Land Use and Circulation Update which was approved in May 1992.
- West Valley Conveyance System, a major water conveyance, treatment, injection well, and storage project being proposed by the Metropolitan Water District of Southern California and Calleguas Municipal Water District.

4.1.9-1 Existing County Projects CUP-4158 (TMC Fruitvale site)

CUP-4158 was issued in 1984 for a 20 year mining operation on 160 acres (see Figure 2). CUP-4158 includes 50 conditions of approval, one of which calls for a Planning Department review, every 5 years, to assess permit condition compliance. In October 1993, TMC acquired the site. The mine produces sand and gravel products, utilizing side slope excavations and various washing, sorting, and screening equipment powered by an on-site, APCD-permitted generator (about 300-400 hp). Annual production is estimated at 300,000 tons. Since the mine site is currently in an "idle" condition, water is not being used at the mine. If mine production resumes, water would be provided by water works District #1. Water is recycled at the site; annual consumptive uses is about 27 acre-feet. All onsite runoff is contained within berms and allowed to infiltrate the soils. The mine would be reclaimed to open space with rangeland grasslands at the end of excavations.

When the mine is operating, operating hours are from 6:00 A.M. to 6:00 P.M., Monday through Saturday. Condition 23 of CUP-4158 restricts truck traffic to these hours. Condition 49 of CUP-

4158 imposes a limit of 72 average daily truck trips (one-way) at the mine. These trucks use Buena Vista Road and Fruitvale Avenue to reach Broadway where most of the trucks travel south to and from market locations.

Best Rock Products (CUPs 3451 and 4171)

These two mines are owned by the same company and are located adjacent to one another near Grimes Canyon Road (see Appendix C). CUP-3451 consists of a 160 acre mine, of which only 21 acres are being excavated for decorative rock. The permit expires July 21, 2000. Annual production is about 50 tons per year. Wash water at the site is provided by a private well in the Fillmore Groundwater Basin. The mine is permitted to operate 7:00 A.M. to 5:00 P.M., seven days per week. Maximum daily truck trips is about 40 one-way trips per day. Access to the site is by a private road to Grimes Canyon Road. CUP-3451 requires that all trucks travel on Grimes Canyon Road south to Los Angeles Avenue, rather than east onto Broadway and south onto Walnut Canyon Road.

CUP-4171 is an 80-acre site approved in 1985 (expires February 28, 2000) and produces various sand and gravel products, with an estimated annual production of 300,000 tons per year. Wash water is provided by a spring. CUP-4171 is directly adjacent to the CUP-3451 mine and operates under the same parameters and permit conditions, including the same restriction on truck access routes. This permit does not place a limit on the number of daily truck trips.

CUP-4571 (Wayne J. Sand and Gravel)

The CUP-4571 mine site (Figure 15) encompasses 80 acres located at the terminus of Buena Vista Road. The project was approved in August 1992 with an expiration date of August 11, 2012. The average annual gross production is expected to be about 300,000 tons, of which about 240,000 tons represents marketable product. The products include various sands and gravels sized for a variety of uses including road bed material, stucco, fill, etc. The processing involves screens, conveyors, washers, and dryers. Wash water at the site is provided by a private well in the Las Posas Groundwater Basin.

The mine owner may add one or more of the following new equipment at the site at a later date in order to produce new products: ready-mix cement plant, recycling plant (crusher), and/or asphalt batching plant. The annual maximum production of these plants, if they were to be installed would be as follows:

- Ready-mix cement 80,000 cubic yards (120,000 tons)
- Asphalt batching 70,000 tons
- Recycling 50,000 tons

If and when the above new products are produced, the amount of sand and gravel would be reduced accordingly such that the total annual gross production would remain at about 300,000 tons per year.

The project operates Monday through Saturday on about 250 days per year. Mining is restricted to the time period of 6:00 A.M. to 7:00 P.M., with mining typically ending at 5:00 P.M. except when there are special orders. Product truck trips occur from 6:00 A.M. to 6:00 P.M.; empty trucks return

to the site between 6:00 A.M. and 7:00 P.M.. Nighttime processing only occurs during emergency orders, estimated at no more than 5 weeks during the year.

The mine owner has 14 haul trucks (18 wheels, 24-ton capacity, trailer trucks) that are used to transport product to markets from the mine. Trucks owned by others are used very infrequently. The average daily truck one-way truck trips at the mine are about 72. The number of truck trips vary throughout the year due to the market and specific orders. The peak daily one-way truck trips at the new mine are as much as 130 one-way trips per day (i.e., about 65 truck loads in a day) for short periods of time during the year (1 - 2 days per month, on average) to meet specific orders. CUP-4571 permit conditions require that the total truck trips on Buena Vista Road and Fruitvale Avenue not exceed those previously authorized under CUP-4158 (i.e., 72 average daily one-way truck trips). These conditions require cooperation between the CUP-4158 and CUP-4571 operators in order to achieve the intended no net increase in daily truck traffic.

4.1.9-2 Planned or Contemplated Projects

Happy Camp Canyon Regional Park Development Plans

The Ventura County GSA administers the Happy Camp Canyon Regional Park which consists of 3,700 acres of undeveloped open space. Various recreation plans are being considered by the GSA which would set aside the upper 3,000 acres in its natural state for open space and would permit recreation development on the lower 700 acres. At this time, GSA is reviewing possible new leases for public recreation development on the lower 700 acres of the park. These lower 700 acres are located on both sides of the proposed Hidden Creek Drive (refer to Section 4.1.9-4 and its discussion of the proposed Hidden Creek Ranch north of the City of Moorpark).

4.1.9-3 Proposed Projects

CUP-4875 (Grimes Rock, Inc.)

An application has been filed requesting approval for a 40 acre sand and gravel mining operation on two parcels totaling 160 acres on Grimes Canyon Road approximately 2.5 miles north of the intersection of Grimes Canyon Road and Broadway Road. The applicant is requesting a 15 year permit with 50 exit loads per day. Annual production is estimated to be 250,000-1,000,000 tons per year. Export of material is expected to be 325,000 tons per year with a maximum of 422,500 tons per year.

4.1.9-4 City of Moorpark Projects

There are a large number of projects proposed, filed, processed, and/or recently approved in the City, as shown on the City of Moorpark Development Status Report (Appendix C). These projects include various residential, commercial, and industrial developments. Their locations are shown in Appendix C. There are two recently approved lot splits along Walnut Canyon Road. There are no proposed or recently approved commercial or industrial projects near the mine site.

The City of Moorpark recently updated its Land Use and Circulation Elements of the existing General Plan. This update included the following items: 1) adoption of new land use goals, policies, and plans; 2) incorporation of currently proposed general plan amendments; and 3) adoption of new circulation goals, policies, and plans.

The new land use plan designated six Specific Plan areas within and outside the City in order to guide land development, consistent with the Land Use Plan Goals and Policies, for the anticipated build-out population of 40,856. The land use plan for the unincorporated areas is shown in Appendix C. The TMC mine is located outside of the nearest Specific Plan No. 8, located east of Happy Camp Canyon.

The overall impact of the new land use plan outside of the City boundaries is one of converting undeveloped land, including agricultural lands, to urban uses by allowing the development of up to 14,911 dwelling units. Various environmental impacts would be associated with this land use conversion, including impacts to traffic, air quality, native habitat, noise, schools, waste management, wastewater disposal, water supplies, and recreation. The Final EIR on the Land Use Element update identifies that the following impacts cannot be mitigated to a level of non-significance: 1) Land Use - conversion of existing non-urbanized land and rural uses to urban uses; 2) Air Quality - long term air contaminant emissions in the project area would occur from both stationary and mobile emission sources; 3) Acoustic - long term acoustic impacts related to Land Use Plan buildout would occur due to increased vehicular traffic on area roadways; 4) Aesthetics - urbanization associated with buildout of the Land Use Plan and the subsequent loss of significant amounts of open land; and 5) Biological Resources - plant and wildlife habitats would be removed or altered as a result of construction and urban development. In each instance, a Statement of Overriding Consideration was adopted by the City.

Build-out under this Land Use Plan would result in an increase in average daily trips from 166,300 in 1989 to approximately 365,500 by the year 2010 (Source: Final EIR adopted for the Moorpark General Plan). The year 2010 was included in the City's traffic model to project the future traffic condition. In order to avoid significant impacts on circulation and traffic, a series of roadway additions and improvements are planned for in the new Circulation Element. These improvements are shown in Appendix C. The following planned improvements are most relevant to the proposed TMC Mine project (CUP-4633): 1) construction of a State Route 23 arterial by-pass from the new State Route 23/118 connection to Broadway Road along a corridor parallel to Walnut Canyon Road; and 2) extension of Broadway Road as a rural collector (i.e., another State Route 23 by-pass arterial) to Highway 118, east of Moorpark College.

An application has been filed with the City of Moorpark for development of Specific Plan No. 8, as defined in the updated Land Use Plan. This Specific Plan (also referred to as Hidden Creek Ranch) consists of approximately 4,323 acres located east of Happy Camp Regional Park. It would include a mixture of residential, institutional, and small commercial developments. The Plan proposes 3,221 residential dwelling units, on 1359.4 gross acres, an 18-hole public golf course with clubhouse, equestrian center, retail centers, three elementary schools, and parks and trails. Ancillary land uses would include, but are not limited to, water reservoirs, detention basins, a helispot, a possible onsite wastewater treatment plant, and 2,514 acres of open space. Full development of the Plan would include construction of an east-west arterial, Hidden Creek Drive, which would connect State Route 23 to State Route 118.

4.1.9-5 West Valley Conveyance System

Metropolitan Water District of Southern California (Metropolitan), in conjunction with the Calleguas Municipal Water District (Calleguas), has proposed a major water conveyance and storage

project for the region called the West Valley Conveyance System. It would consist of a 9-foot-diameter pipeline to convey state water from either a new treatment plant near Castaic Lake or the Jensen Treatment Plant (described below). This water would be conveyed to a groundwater storage system (i.e., well field) in the North Las Posas Groundwater Basin. The latter generally encompasses the lands south of Broadway between Walnut Canyon Road and Balcom Canyon Road. There are two pipeline alternatives to deliver this water to the storage area:

- **Santa Clara Feeder**, consisting of a pipeline through the Santa Clara River valley, crossing Oak Ridge Mountain through a tunnel that exits in upper Happy Camp Canyon Regional Park, connecting to District infrastructure in Moorpark.
- **San Fernando Valley Feeder**, which conveys water from the Jensen Treatment Plant across the San Fernando Valley on city streets, through a new tunnel at Santa Susana Pass, then along city streets through Simi Valley to a point of connection with existing infrastructure at Madera and Los Angeles Avenue.

The well field would contain the following elements:

- **Injection/Extraction wells.** These would be dual purpose wells located in clusters and completed at 1,000 to 1,500 foot depths. They would be powered by electricity, with a capacity of about 1500 GPM. Up to 30 wells would be required.
- **Groundwater Monitoring Facilities.** The basin would be continuously monitored for water quality and storage, using existing and new wells. Monitoring would also be used to detect any adverse effects from injection or drawdown.
- **Local Feeders and Spur Lines.** Calleguas would install small spur pipeline between the major feeder line and the wells.

4.1.10 COMPATIBILITY WITH ADJACENT LAND USES

Alternative arguments for and against compatibility are provided below for use by Ventura County decision makers.

Viewpoint No. 1: The Mine is Compatible With Adjacent Land Uses

It can be argued that the proposed project would be compatible with adjacent land uses because:

1. The project site has been mined since 1948 and is currently mined. As such, adjacent land uses (other than grazing) that have become established since the commencement of a surface mining operation have been acclimated to mining activities.
2. The new mining area is already immediately adjacent to another mining operation (CUP-4158 operated by the applicant) which is currently in an "idle" status. Also, CUP-4571 is an operating mine to the west of the proposed project. Therefore, the proposed project would not introduce a new land use into the region.

3. The mine is mostly "shielded" by ridgelines from land uses that may otherwise be incompatible (i.e., residential, urban, parks, etc). This physical barrier effectively blocks off-site noise emissions and most visual impacts. However, the ridges do not block views of the mine from various off-site locations in Moorpark, approximately 5 miles away, and do not block nighttime lighting to viewers in portions of Moorpark.
4. Surface mining is considered compatible with the primary land uses in the area which are grazing, open space, and agriculture, primarily because surface mines would eventually be reclaimed to similar land uses.
5. The project site occurs in a Mineral Resource Area on the Resource Protection Map of the General Plan which correspond to the Mineral Resource Zone Category 2 (MRZ-2) designation used by the State Division of Mines and Geology (DMG). MRZ-2 lands are defined as areas of statewide or regional significance where adequate information exists to indicate the presence of significant mineral resources (i.e., having a mineral deposit that meets certain criteria for value and marketability). DMG Mineral Resources Management Goals and Policies state that MRZ-2 lands should be protected from preclusive and incompatible land uses so that the mineral resources are available when needed. To assist local governments in establishing land uses on or adjacent to lands classified as MRZ-2, and in determining compatibility, the DMG developed the following land-use categories in its 1993 report entitled: "Update of Mineral Land Classification of Portland Cement Concrete Aggregate".

- **Incompatible** - Land uses inherently incompatible with mining and/or that require a high public or private investment in structures, land improvements, and landscaping and that would prevent mining because of the higher economic value of the land and its improvements. Examples of such uses include high density residential, low density residential with high unit value, public facilities, intensive industrial, and commercial.
- **Compatible** - Land uses inherently compatible with mining and/or that require a low public or private investment in structures, land improvements, and landscaping and that would allow mining because of the low economic value of the land and its improvements. Examples of such uses include very low density residential (e.g., 1 unit per 10 acres), extensive industrial, recreation (public/commercial), agricultural, silvicultural, grazing, and open space.

Using these definitions, the proposed project is considered compatible with adjacent uses.

6. The County has adopted several General Plan policies (Section 1.4, Mineral Resources, of the General Plan, Goals, Policies, and Programs document) to limit or preclude development within an MRP overlay zone if the proposed use would hamper or preclude access to, or the extraction of, the mineral resource. The County has designated areas as Mineral Resource Areas, on the Resource Protection Maps, and are subject to the Mineral Resource Protection (MRP) Overlay Zone (Zoning Ordinance Designation). The proposed project site is located entirely within a Mineral Resource Area and is, therefore, subject to the

provisions of the MRP Overlay Zone (Ventura County Zoning Ordinance Section 8109.4.4). The purpose of the MRP overlay zone is as follows:

- a. To safeguard future access to an important resource.
- b. To facilitate a long term supply of mineral resources within the County.
- c. To minimize land use conflicts.
- d. To provide notice to landowners and the general public of the presence of the resource.
- e. The purpose is not to obligate the County to approve use permits for the development of the resource subject to the MRP overlay zone.

Viewpoint No. 2: The Mine is Not Compatible with Adjacent Land Uses

It can be argued that the proposed project is incompatible with adjacent land uses for the following reasons:

1. The operation of the mine would result in additional project related traffic and noise, primarily along Happy Camp Road and Walnut Canyon Road. In addition, there would be visual impacts to the public in the region and, should the asphalt batch plant be constructed, the odors associated with asphalt haul trucks would be noticeable to residents along Happy Camp Road and the streets in Moorpark along the haul route.
2. The scale of the proposed project is too large for the existing and planned adjacent land uses. The proposed production rate would more than double the existing rates. The magnitude of the operation and related impacts are out of proportion with the adjacent land uses which now include many noise sensitive uses along the access roads (i.e., residential dwellings) and the adjacent Happy Camp Canyon Regional Park.
3. There has been a history of traffic and noise complaints made by local residences (particularly along Happy Camp Road) regarding the previous operator of CUP-1328. Though these complaints have decreased substantially since TMC acquired ownership of the site, noise complaints support the contention that the mine (including the proposed project) is no longer compatible with adjacent uses.
4. The proposed project includes a provision for nighttime processing for up to 60 days per year which changes the nature of the mining operations of previous decades and would subject some area residents and recreational star-gazers to a new source of nighttime lighting.

4.1.11 COMPATIBILITY WITH AGRICULTURAL OPERATIONS

There are two citrus and avocado orchards adjacent to portions of Happy Camp Road (totaling a linear distance of 100 feet). Trees are 15 to 25 feet from the edge of the paved road. The average daily truck and vehicle traffic for the proposed project along Happy Camp Road would be 1,718 one-way trips. Agricultural vehicles occasionally utilize Happy Camp Road for pruning, spraying, harvesting, or movement of farm workers. The volume of agricultural traffic along the access roads is very low due to the small extent of commercial orchards along the road.

The movement of trucks along Happy Camp Road is expected to result in insignificant adverse impacts (Class III) on agricultural vehicles for the following reasons: 1) there is sufficient room for trucks to pass other trucks and agricultural vehicles along the access road; and 2) the volume of agricultural vehicles is very low.

Another potential impact on agriculture from the proposed truck traffic is the effect of roadway dust on adjacent orchards. During scoping for the EIR there was no indication that the deposition of dust on orchard trees along Happy Camp Road was problematic. During January 1992 field visits to the site, there was no obvious physical evidence of damage to trees that occur directly adjacent to the edge of the access road. Dust apparently can reduce photosynthesis due to shading, reduce gas exchange if stomata are occluded, and soil the fruit. There have been no previous reports of damage to the trees along the access roads to the County, Soil Conservation Service, Farm Bureau, Cooperative Extension, or Agricultural Stabilization and Conservation Service.

The proposed truck traffic would generate dust that could become deposited on adjacent orchard trees and on orchard trees along the access road, resulting in insignificant adverse impacts (Class III). The mitigation measures designed to reduce the overall significant, unmitigable impacts (Class I) associated with PM₁₀ (refer to Section 4.7.5) would also serve to minimize the impacts of dust on orchard trees.

4.1.12 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Mineral Resources

Goal 1.4.1-1

Manage mineral resources in a manner which effectively plans for the access to, development and conservation of mineral resources for existing and future generations.

Goal 1.4.1-2

Identify and manage mineral resources in order to:

- Safeguard future access to the resource.*
- Facilitate a long-term supply of mineral resources within the County.*
- Minimize incompatibility between the extraction and production of the resource and neighboring land uses and the environment.*
- Provide notice to landowners and the general public of the presence of significant mineral resource deposits.*

Goal 1.4.1-3

Promote the utilization of mineral resources located close to urbanized areas before their extraction is precluded by urbanization.

Goal 1.4.1-4

Ensure that all mineral extractions are conducted in a manner which protects the environment and the public's health, safety and welfare.

Policy 1.4.2-1

Applications for the extraction of mineral resources shall be reviewed to assure minimal disturbance to the environment and to assure that lands are reclaimed for appropriate uses which provide for and protect the public health, safety and welfare.

Policy 1.4.2-5

Mining operations shall comply with the requirements of the County Zoning Ordinance and standard conditions, and State laws and guidelines relating to mining and reclamation.

The determination of the proposed project's consistency with Policy 1.4.2-1 must be made within the overall context of the third subgoal of Goal 1.4.1-2: "minimize incompatibility between the extraction and production of the resource and neighboring land uses and the environment." The proposed project is consistent with Policy 1.4.2-1 to the extent that the application has been reviewed to assure minimal disturbance to the environment. This is the intent of the CEQA process and various conditions of approval and mitigation measures have been recommended. With regard to the later part of Policy 1.4.2-1, "protect the public health, safety and welfare", subgoal 1.4.1-2 becomes applicable and as a result:

- the conditions of approval and mitigation measures recommended to minimize/reduce noise (refer to Sections 4.8.2. and 4.8.5); and
- the conditions of approval and mitigation measures recommended to minimize/reduce traffic (refer to Sections 4.9.2. and 4.9.5).

Regarding the land use compatibility issues described above, the proposed project, inclusive of the recommended conditions of approval and mitigation measures, is consistent with the third subgoal of Goal 1.4.1-2 and, therefore, Policy 1.4.2-1.

Section 4.6.2 describes significant, unmitigable impacts (Class I) to the visual resource. Because it may be argued that visual resources are an integral part of community character and therefore linked to any determination of compatibility with neighboring land uses, the proposed project is considered consistent with Goal 1.4.1-2 and, therefore, Policy 1.4.2-1 only if a statement of overriding considerations is adopted by the decision-making body regarding significant, unmitigable impacts Class I to the visual resource.

The proposed project is consistent with the remaining Mineral Resources goals and policies for the following reasons:

- The re-permitting and expansion of an existing mine with an already established processing infrastructure and access route constitutes effective management of the mineral resources for future use.
- Continued exploitation of the mineral reserves in the region would facilitate a long-term and reliable supply of mineral resources for the County.

- The mine is situated close to urbanized areas, the primary market area for processed materials.
- Project approval would be conditioned to ensure compliance with the standards for development for mineral resource projects listed in Ventura County Zoning Ordinance Code Section 8107-9 (Mining and Reclamation). The ordinance requires development of a reclamation plan, following specific guidelines that were approved by the State Division of Mines and Geology under the provisions of SMARA.
- Mitigation measures and conditions of approval have been identified that would ensure that these Zoning Ordinance standards can be achieved, as well as to assure minimal disturbance to the environment during the implementation of the project.

Land Use

Goal 3.1.1-3

Promote appropriate and orderly growth and development while protecting desirable existing land uses and a desired quality of life.

Goal 3.1.1-4

Ensure that land uses are appropriate and compatible with each other, and guide development in a pattern that will minimize land use conflicts between adjacent land uses.

Goal 3.1.1-5

Ensure that Countywide growth and development is consistent with the Guidelines for Orderly Development.

Policy 3.1.2-3

Consistency of Land Use: Any land use shall be deemed consistent with the General Plan if it is permitted under a zoning designation which is consistent with Policy Number 2 above [consistency of zoning], and if the land use does not conflict with any other policy of the County General Plan.

As discussed in Section 4.1.10 above, there are two conflicting views on the policies regarding the proposed project's compatibility with surrounding land uses. Depending upon the accepted view, and the findings made by the decision-making body, the proposed project either is or is not consistent with the above stated goals.

The zoning designations for the site allow aggregate mining. In this regard, the proposed project is consistent with Policy 3.1.2-3. However, based upon the earlier discussion of Policy 1.4.2-1, the proposed project would not conflict with any other General Plan policy and is considered consistent with Policy 3.1.2-3 only if a statement of overriding considerations is adopted by the decision-making body regarding significant, unmitigable impacts (Class I) to the visual resource.

Land Use Designation: Open Space

Goal 3.2.1-5(3)

Retain open space lands in a relatively undeveloped state so as to preserve the maximum number of future land use options.

The project would be consistent with this goal because the alteration of the natural landforms at the project site (i.e., creating more level land after reclamation) would increase the number of land options in the future for open space and agriculture related uses.

Policy 3.2.2-5(1)

Open Space should include areas of land or water which are set aside for the preservation of natural resources, including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and important watershed lands.

The proposed project is included in an area designated as Open Space in the General Plan, but there are no plans to set it aside for the preservation of the natural resources identified above because the site does not appear to contain high priority, unique natural resources that should be preserved. As such, the proposed project would be consistent with this policy.

Policy 3.2.2-5(2)

Open Space should also include areas set aside for managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands not otherwise designated Agricultural; areas required for the recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

The proposed project would be consistent with this policy because the project site, would be used for the production of mineral resources.

Employment and Commerce/Industry

Policy 3.4.2-4

Commercial and industrial developments shall be designed to provide adequate buffering (e.g., use of walls, landscaping, setbacks), and on-site activities (e.g., hours, scheduling of deliveries) shall be regulated to minimize adverse impacts (e.g., noise, glare, odors) on adjoining residential areas.

Policy 3.4.2-7

Industrial uses proposed shall be designed and conducted in a manner that is compatible with surrounding land uses such that potential impacts are mitigated to less than significant levels, or, where no feasible mitigation measures are available, a statement of overriding considerations shall be adopted.

Project related disturbances such as truck traffic, noise, odors and dust may adversely affect nearby land uses and residences. However, none of these impacts which are expected to occur at significant levels. Mitigation measures and conditions of approval have been developed in order to minimize these adverse impacts. The adoption of a statement of overriding considerations by the decision-making body will be necessary regarding significant, unmitigable impacts (Class I) to the visual resource. Therefore, the proposed project is considered consistent with these policies.

4.1.13 REGIONAL COMPREHENSIVE PLAN CONSISTENCY

The Southern California Association of Governments (SCAG) advises the Growth Management Chapter of the Regional Comprehensive Plan includes the following growth management policies which are applicable to the proposed project: (refer to Appendix K, letter dated April 1, 1996)

Encourage subregions to define an economic strategy to maintain the economic viability of the subregion, including the development and use of marketing programs, and other economic incentives, which support attainment of subregional goals and policies.

SCAG staff comments: Management of mineral resources forms an integral part of the regional, state and national economy. In recognition of this fact, the State of California Surface Mining and Reclamation Act requires cities and counties to incorporate mineral resource management policies in their general plans. Pursuant to this requirement, the Ventura County General Plan addresses mineral resource issues. The subject property has been identified as a mineral resource area on the Resource Protection Map of the [Ventura County] General Plan. The EIR indicates that:

“The project would allow the continual supply of a reliable source of sand and gravel for the region that can be used for a variety of purposes, including land and infrastructure development. Aggregate production at the mine would be dictated by the market and general economic conditions of the region. As such, the aggregate mining industry is considered a service sector to development, as well as to specialized manufacturing and other end uses.”

Viewed from this perspective, the proposed project appears to be consistent with the goals and objectives of the Growth Management Chapter of the Regional Comprehensive Plan that emphasize the need to re-invigorate the region's economy and minimize development costs.

Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage and to develop emergency response and recovery plans.

SCAG staff comments: A number of mitigation measures are included that are designed to reduce the adverse impacts of the proposed project. These measures appear to be adequate to meet the objectives of the California Environmental Quality Act and the relevant regional goals and objectives, as well. Therefore, SCAG's analysis of the relation of the project to the applicable regional plans leads to the conclusion that the proposed project appears to be consistent with the goals and policies of those plans.

4.2 GEOLOGY AND GEOHAZARDS

4.2.1 EXISTING SETTING

4.2.1-1 Topography

The proposed project site is located on the southern flank of Oak Ridge, directly west of Happy Camp Canyon and approximately three miles north of Little Simi Valley and the City of Moorpark (Figure 1). Oak Ridge is a major topographic divide in the Ventura County area that trends east-west from Tapo Canyon, where the Santa Susana Mountains begin, to about Balcom Canyon, where South Mountain begins. North of Oak Ridge is the Santa Clara River Valley. South of Oak Ridge are the relatively flat floors of Simi Valley and Little Simi Valley.

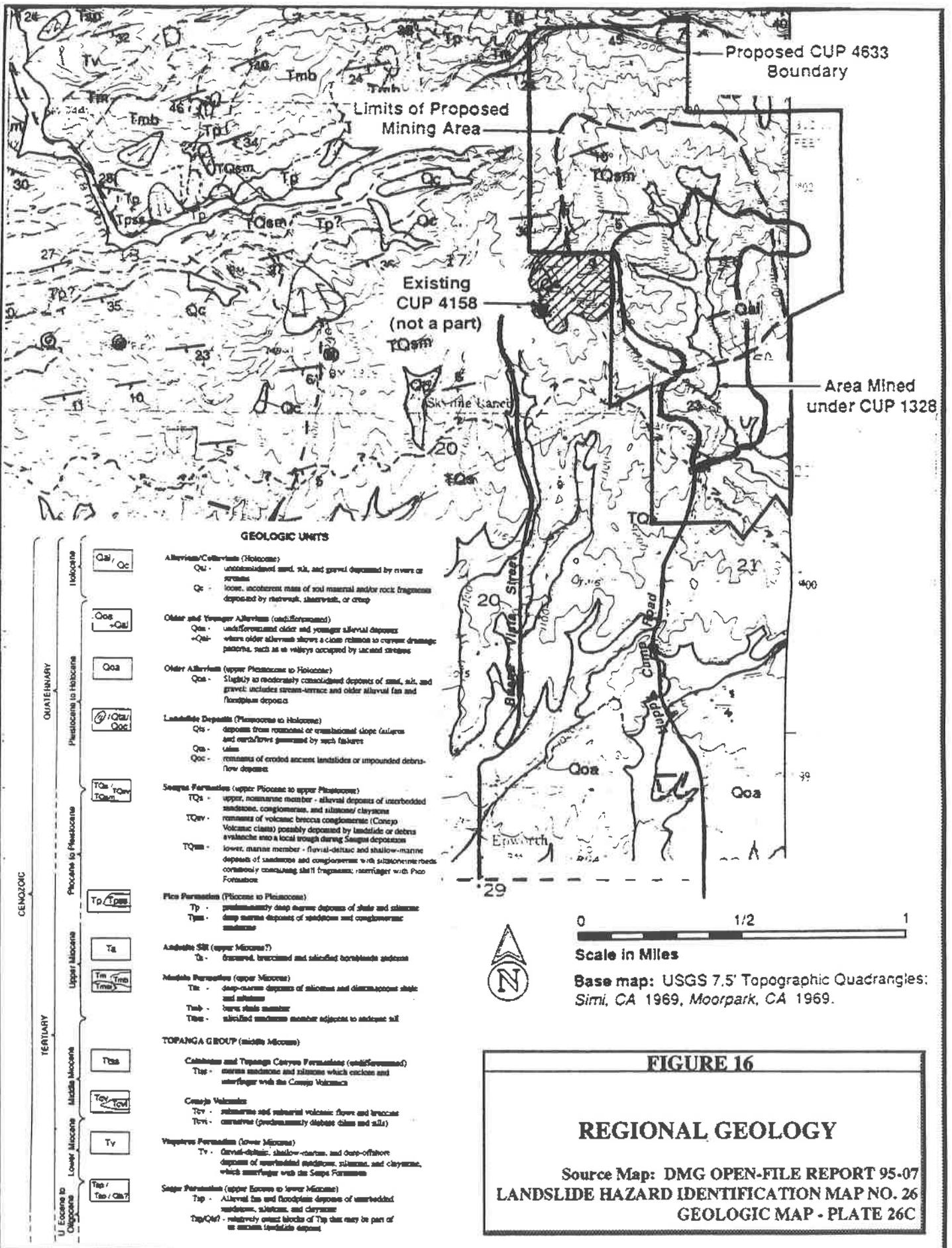
The proposed project site is located on a moderately steep to steep south-facing slope underlain by sedimentary bedrock and alluvial deposits. Local relief at the project site is approximately 800 feet with elevations ranging between approximately 2,000 feet above mean sea level (MSL) in the northern portion of the site to approximately 1,200 feet above MSL in the southern portion of the site (Figure 2). The site's moderate to steep slopes are dissected by several small, generally north-south trending canyons that are tributaries to Arroyo Las Posas/Arroyo Simi. The largest canyon traverses through the middle of the site and is the predominant topographic feature on the site. The canyon intersects Happy Camp Canyon approximately 1/4 mile east of the site's southeast corner. Ridges on the site are rounded to sharp.

4.2.1-2 Geology

The proposed project site is located in the central portion of the Transverse Ranges Physiographic Province. The general topographic and structural trend in the province is east-west. Figure 16 presents the general geology of the site and immediate vicinity. The site is located at the western end of the Happy Camp Syncline and is on the upper plate of the Oak Ridge fault, a south dipping reverse fault located on the southern side of the Santa Clara River Valley. (Source: DMG, 1972, Geologic Map of Southern Ventura County, California.)

Geotechnical Consultants, Inc., (1978) and Buena Engineers, Inc., (1988) conducted geotechnical investigations at the site. Geotechnical Consultants, Inc., identified two major lithologic units on the site: 1) San Pedro Formation bedrock of Late Pleistocene age, and 2) Recent alluvium. Buena Engineers identified the bedrock under the site as Saugus Formation. The Saugus Formation is considered the terrestrial equivalent of the marine San Pedro Formation, and is not a unique geologic formation.

The California Division of Mines & Geology (DMG) recently released a series of maps pertaining to the Moorpark and Santa Paula Quadrangles (Ventura County) (DMG Open-File Report 95-07). The Geologic Map in this series indicates the Saugus Formation (upper Pliocene to upper Pleistocene age) underlies almost the entire site (Figure 16). The Saugus Formation (symbol *TQsm*) consists of lower, marine member - fluvial-deltaic and shallow-marine deposits of sandstone and conglomerate with siltstone interbeds commonly containing shell fragments. This formation provides moderately to well consolidated, fine- to coarse-grained sand and gravelly sand. Localized zones of cobbles were encountered in exploratory borings completed by Geotechnical Consultants, Inc., (1978). The San Pedro Formation bedrock underlying the proposed project site generally dips between 5 and 25 degrees to the southwest. (Source: DMG OPEN-FILE REPORT 95-07.)



The lower and central reaches of the proposed project site, along the northwest to southeast main drainage, is underlain by Alluvium/Colluvium of Holocene age (symbol *Qal*) where unconsolidated sand, silt, and gravel has been deposited over time by rivers or streams. These recent alluvial deposits vary in thickness along the canyon bottoms.

To the north and outside of the area proposed for mining, the Saugus Formation is interfingered with Pico Formation (symbol *Tp*) of the Pliocene to Pleistocene age. The Pico Formation is comprised of predominately deep marine deposits of shale and siltstone. Also to the north, there is a small area of Alluvium/Colluvium of Holocene age (symbol *Qc*) comprised of a loose, incoherent mass of soil material and/or rock fragments deposited by rainwash, sheetwash, or creep.

A review of Geologic Map - Plate 26C (DMG OPEN-FILE REPORT 95-07) indicates that no faults cross the proposed project site nor are there faults present in the near vicinity. In addition, Geotechnical Consultants, Inc., (1978) did not report the presence of a fault during their investigation. Seismicity and faulting are further discussed in the following section.

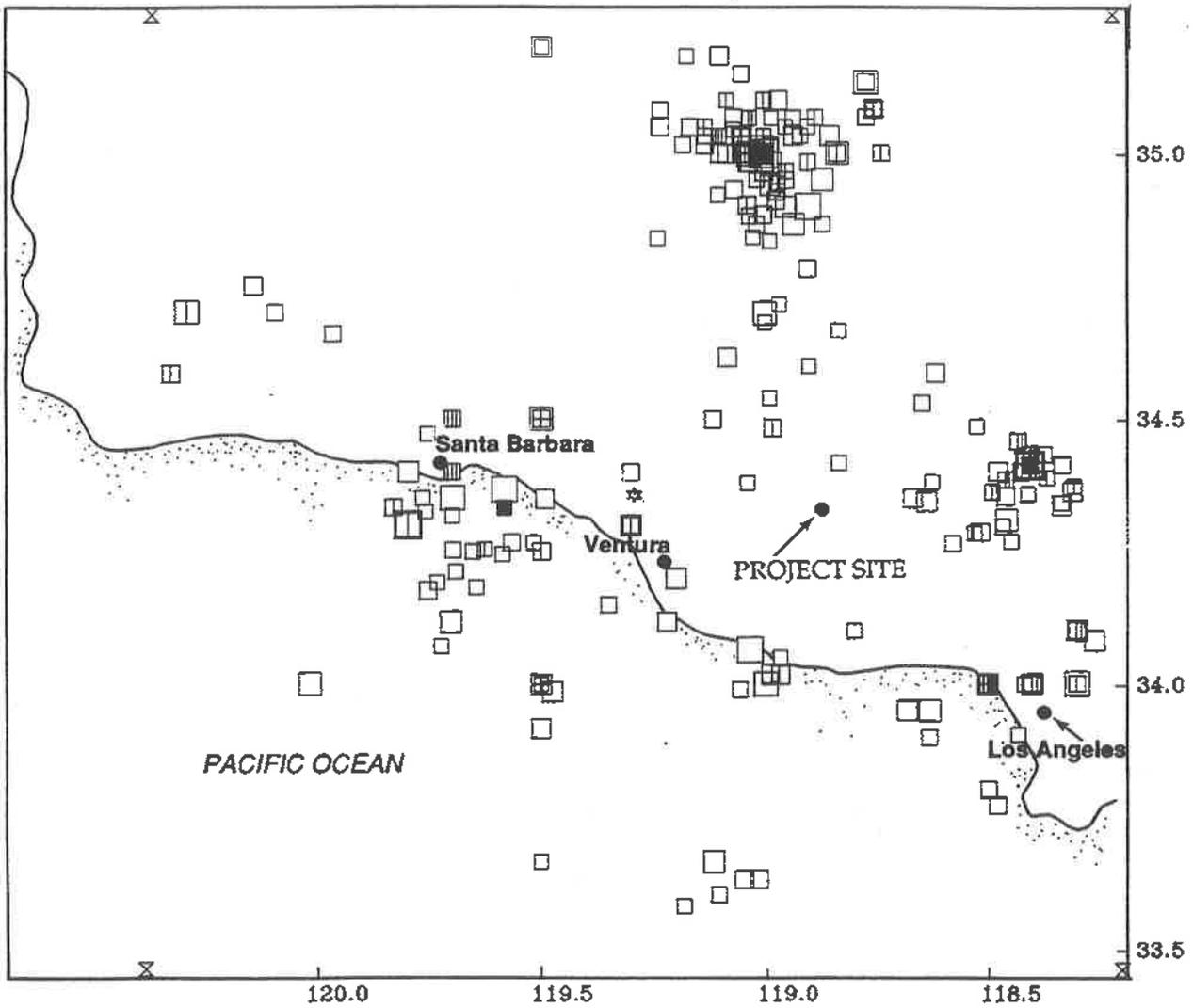
4.2.1-3 Geohazards

4.2.1-3.1 Seismicity and Faulting (Ground Shaking, Fault Rupture, and Liquefaction)

The locations of historical earthquakes are generally coincident with the location of major fault zones (Allen, 1975; Yerkes, 1985). Studies of seismicity of the area are summarized in Yerkes (1985) and Ziony and Jones (1989). Earthquake epicenter data on file at the National Oceanographic and Atmospheric Administration and DMG indicate numerous earthquake epicenters in the region (Figure 17). Most of the activity is apparently related to the San Fernando and Santa Susana faults, the Santa Monica-Hollywood-Malibu Coast and Newport-Inglewood fault zone, and the White Wolf-Pleito fault zone (Figure 18A). A cluster of historic seismicity west of the site shown on Figure 17 is likely due to a series of faults located offshore. Based on a review of the following, no obvious faults occur on or directly adjacent to the project site: 1) Geologic Map - Plate 26C (DMG OPEN-FILE REPORT 95-07), 2) Geologic Map of Southern Ventura County, California (DMG, 1972), and 3) a report by Geotechnical Consultants, Inc. (1978) for CUP 1328.

Many active or potentially active faults occur within 60 miles of the site. These faults include the Oak Ridge fault (3 miles); Simi-Santa Rosa fault (7 miles); Santa Susana fault (8 miles); San Cayetano fault (9 miles); Springville fault (12 miles); Camarillo fault (14 miles); Mission Hills fault (20 miles); Northridge Hills fault (20 miles); San Gabriel fault (20 miles); Malibu Coast fault (20 miles); San Fernando fault (25 miles); San Andreas fault (30 miles); and the White Wolf-Pleito fault zone (45 miles).

Historic earthquakes which caused strong ground motion in the site area include the 1976 M 4.6 earthquake on the Santa Susana fault zone, the 1971 M 6.6 earthquake on the San Fernando fault zone, the 1952 M 7.3 earthquake in southern Kern County (White Wolf-Pleito fault zone), and the 1857 Fort Tejon earthquake (M 7.9) on the San Andreas fault zone. Numerous small earthquakes and possibly the 1925 Santa Barbara earthquake (M 6.8) have been associated with the western end of the Oak Ridge fault (Yerkes, 1985). The Oak Ridge fault, the Simi-Santa Rosa fault, and the Santa Susana fault are the most significant local faults.



EXPLANATION:

MAGNITUDE

- 4
- 5
- 6
- 7
- 8



**MULTIPLE EVENTS OF SAME MAGNITUDE
AT SAME LOCATION**

FIGURE 17

**HISTORIC SEISMICITY
OF SITE REGION
JULY 1902- APRIL 1985**

Dames & Moore

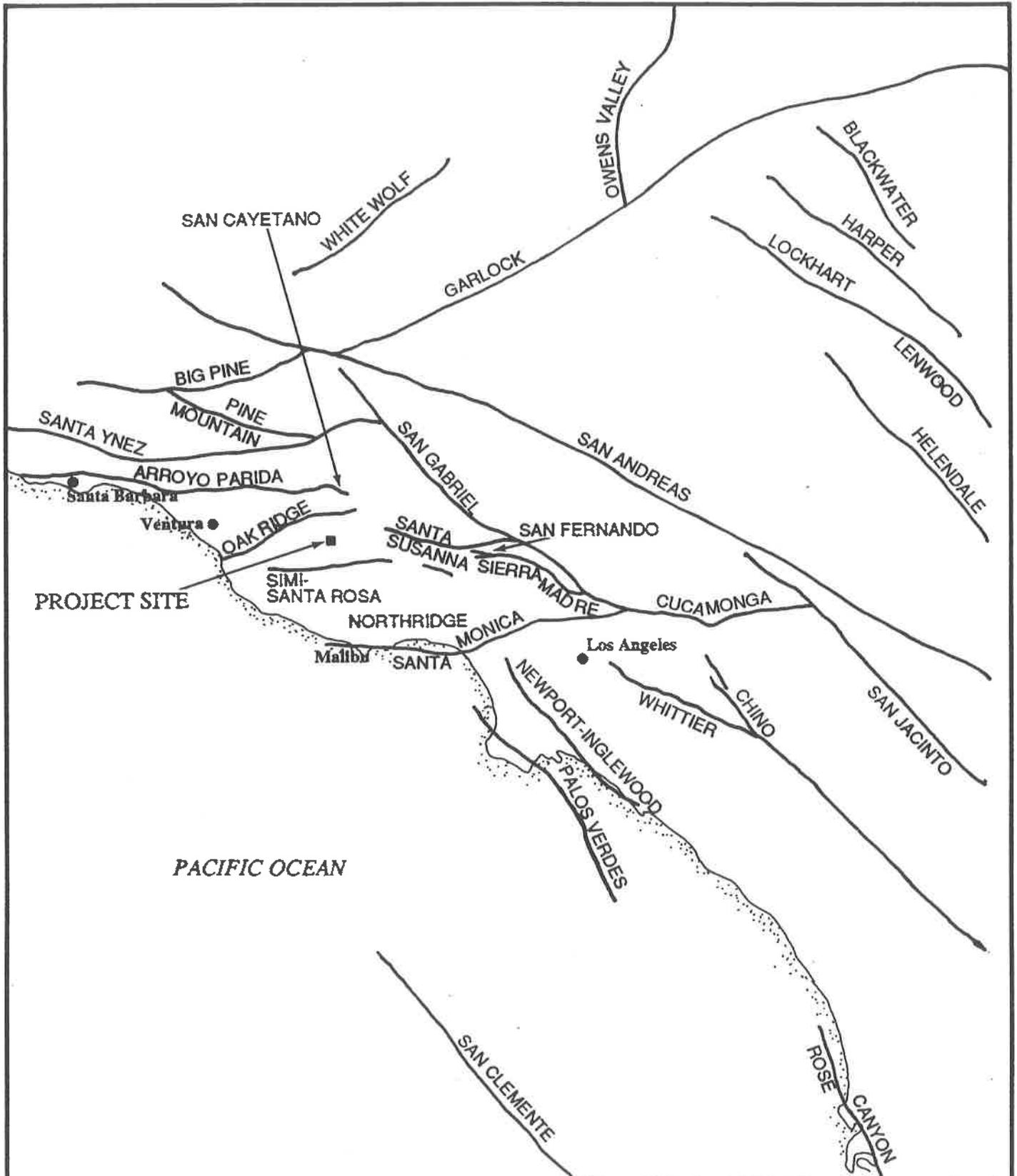


FIGURE 18A

**LOCATION OF
NEARBY FAULTS**

SOURCE: Jennvigs, 1975

The greatest potential source for strong ground motion at the site is the Oak Ridge fault due to its: 1) proximity to the site; 2) length and continuity, and 3) available data on its late Quaternary history and slip rate. Earthquakes of $M \geq 6$ on the portion of the Oak Ridge fault nearest the site would be expected to generate peak horizontal accelerations at the site on the order of 0.3g or more with maximum values on the order of 0.7 to 0.8g possible. Other sources are capable of generating significant strong ground motion at the site but at values similar to, or less than, events on the Oak Ridge fault.

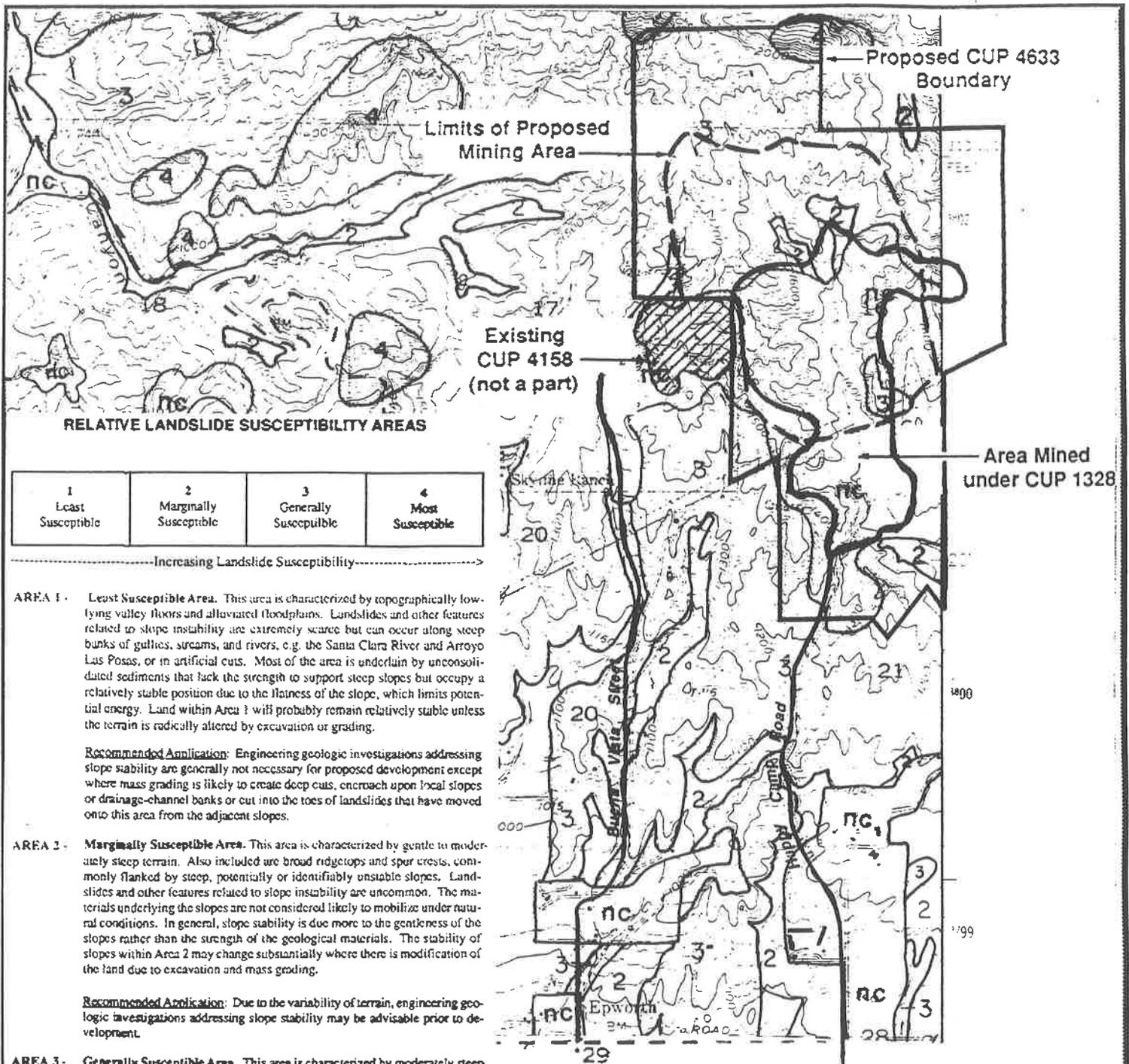
A visual inspection of the mine site was conducted by Hilltop Geotechnical, Inc., on January 25, 1994. The purpose of the inspection was to evaluate any slope damage or other adverse geologic affects resulting from the January 17, 1994 Northridge Earthquake. According to Hilltop Geotechnical, Inc., no significant slope failures or other adverse affects were noted. Some minor surficial slope failure in the form of slope ravelling and/or small topples was observed. However, no major damage or deep seated landsliding was observed.

Also a consideration, liquefaction is a process by which water-saturated unconsolidated sediments lose their strength due to increased pore pressure during or after an earthquake. Two main factors affecting the potential for liquefaction in a earthquake are: 1) the character of the unconsolidated strata, and 2) the depth to groundwater (a depth to the water table of less than 50 feet is typically considered to be a significant positive factor in a potential for liquefaction). Based on the consolidated nature of the bedrock that underlies the site and the current groundwater elevations (see Section 4.3), liquefaction is not considered a significant potential hazard at the site.

4.2.1-3.2 Slope Stability

The site consists of mostly moderate to steep slopes underlain by moderately consolidated sedimentary bedrock. Buena Engineers, Inc., (1988) did not report any evidence of landslides on the project site, most probably because the CUP-1328 boundary did not encompass the entirety of that being proposed under CUP-4633. The recently completed Landslide Distribution Map - Plate 26B-1 (DMG OPEN-FILE REPORT 95-07) identifies a "Definite or Probable" northeasterly landslide in the northeast-most corner of the proposed CUP-4633 boundary. However, this landslide is not located within the area proposed for mining nor will it be affected by mining activities. (Note: This area coincides with the area depicted as an area "Most Susceptible" to landslide activity in Figure 18B.) The Relative Landslide Susceptibility Map - Plate 26A (DMG OPEN-FILE REPORT 95-07) identifies the mined areas within the proposed project site as "Areas Not Classified." The majority of the remaining site is identified as a "Generally Susceptible Area" (Figure 18B), with some being classified as a "Marginally Susceptible Area."

"Generally Susceptible Area" is characterized by moderately steep terrain. Although landslides are uncommon, slopes are likely to be near their stability limits because of the steepness of the slopes and relative weakness of the underlying rock units. Thus, the material underlying this area can be expected to fail, locally, when natural processes or man-made alterations adversely modify the terrain and steepen, load, or remove natural supporting buttresses from slopes. For example, if excavation or cut slope grading at the site were to occur at the bases of unstable slopes, slope stability could be adversely affected. Consequently, steep slopes within the site boundaries (natural or man made) should be considered to have a potential for slope failure during excavation or during seismically induced ground-shaking (earthquakes). Based on results of a field study, Buena Engineers, Inc.,



AREA 1 - Least Susceptible Area. This area is characterized by topographically low-lying valley floors and alluviated floodplains. Landslides and other features related to slope instability are extremely scarce but can occur along steep banks of gullies, streams, and rivers, e.g. the Santa Clara River and Arroyo Las Posas, or in artificial cuts. Most of the area is underlain by unconsolidated sediments that lack the strength to support steep slopes but occupy a relatively stable position due to the flatness of the slope, which limits potential energy. Land within Area 1 will probably remain relatively stable unless the terrain is radically altered by excavation or grading.

Recommended Application: Engineering geologic investigations addressing slope stability are generally not necessary for proposed development except where mass grading is likely to create deep cuts, encroach upon local slopes or drainage-channel banks or cut into the toes of landslides that have moved onto this area from the adjacent slopes.

AREA 2 - Marginally Susceptible Area. This area is characterized by gentle to moderately steep terrain. Also included are broad ridgetops and spur crests, commonly flanked by steep, potentially or identifiably unstable slopes. Landslides and other features related to slope instability are uncommon. The materials underlying the slopes are not considered likely to mobilize under natural conditions. In general, slope stability is due more to the gentleness of the slopes rather than the strength of the geological materials. The stability of slopes within Area 2 may change substantially where there is modification of the land due to excavation and mass grading.

Recommended Application: Due to the variability of terrain, engineering geologic investigations addressing slope stability may be advisable prior to development.

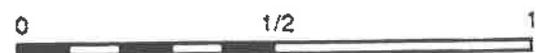
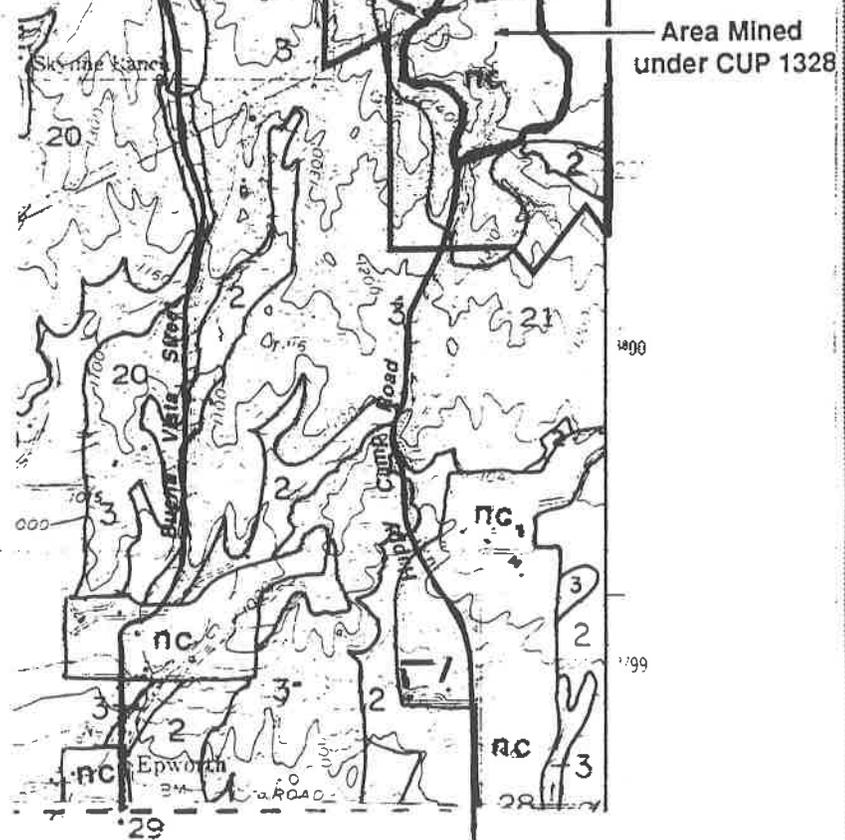
AREA 3 - Generally Susceptible Area. This area is characterized by moderately steep terrain. Although landslides are uncommon, slopes are likely to be near their stability limits because of the steepness of the slopes and relative weakness of the underlying rock units. Thus, the material underlying this area can be expected to fail, locally, when natural processes or man-caused alterations adversely modify the terrain and steepen, load, or remove natural supporting buttresses from slopes.

Recommended Application: Detailed engineering geologic investigations for proposed development, which address slope stability, should be required and completed, prior to development, because of the potential for slope failure that can result from land modification.

AREA 4 - Most Susceptible Area. This area is characterized by moderately steep to rugged, very steep terrain. Most of the identified landslides occur within Area 4 (whether apparently active or not). Also included are slopes where there is substantial evidence of downslope movement of surficial materials. Slopes within Area 4 should be considered naturally unstable, subject to failure even in the absence of the activities of man.

Recommended Application: Detailed, comprehensive engineering geologic investigations addressing slope stability should be required for any proposed development.

nc Areas Not Classified. These areas have been significantly modified by grading for development, road construction, quarrying, or oil-well drilling.



Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles; Simi, CA 1969, Moorpark, CA 1969.

FIGURE 18B

RELATIVE LANDSLIDE SUSCEPTIBILITY

Source Map: DMG OPEN-FILE REPORT 95-07
LANDSLIDE HAZARD IDENTIFICATION MAP NO. 26
RELATIVE LANDSLIDE SUSCEPTIBILITY - PLATE 26A

(1988) reported that some adverse bedding orientations (dip of strata is parallel to or less than that of the slope) occur in the northern and eastern portions of the proposed excavations. However, Buena Engineers, Inc., stated the following in their report:

"Based on our field observations, and our experience and judgement, deep seated slope failures would not be anticipated, even where bedding orientations are adverse, as a result of the proposed cut slope grading."

Buena Engineers, Inc., based their statement on the following:

- The sand and gravel beds beneath the site are typically lenticular and cross bedded. Therefore, it would not be expected that grading would expose any planes of weakness.
- The existing excavation shows a high degree of stability on various orientations and heights, including gradients steeper than 2:1.
- Regionally, the "Saugus Formation", which underlies the site, demonstrates a high degree of stability, except where clay beds are present. Deep seated landslides are not mapped in the general area of the site.

4.2.1-3.3 Subsidence

The project site is not located in a known area of major historic or currently occurring land-surface subsidence (Miller, 1966). However, for completeness we present a brief discussion of subsidence in this section. Four major causes of land-surface subsidence in southern California are: 1) tectonic activity, 2) ground-water extraction, 3) excessive withdrawal of oil and/or gas, and 4) application of water onto moisture deficient soil (hydrocompaction).

Because the site is located in southern California, an active seismic region, subsidence due to tectonic activity is a potential geologic hazard. The potential hazard of tectonic subsidence, however, is not considered significant because tectonic subsidence is usually very small and would not affect mining operations.

Significant subsidence due to pumping of groundwater or oil is not considered a significant potential hazard on the project site because: 1) no oil or gas wells are located on or directly adjacent to the site; and, 2) the bedrock material of the groundwater aquifer beneath the site consists principally of coarse-grained material and is unlikely to be susceptible to subsidence from groundwater extraction.

Areas with low density alluvial material may be susceptible to hydrocompaction if subjected to excessive application of water. However, alluvium that occurs in southern California is not considered to be typically susceptible to hydrocompaction. Therefore, the hazards associated with hydrocompaction at the site are not considered significant.

4.2.1-3.4 Unique Geologic Features

No unique geologic features are known to occur within the boundaries of the proposed mining site.

4.2.1-3.5 Petroleum Resources

No known significant mineral reserves with the exception of sand and gravel are known to occur at the site (DMG, 1973). The sand and gravel reserves at the site are described in Section 3.4. The site is located near the Shiells Canyon Oil Field, the Bardsdale Oil Field, the Moorpark Oil Field, and the Oak Park Oil Field, but no oil or gas wells are located on the site and the proposed mining operations do not include the excavation of oil bearing material (DMG, 1973 and California Division of Oil and Gas, 1990).

4.2.1-3.6 Soils

The major soil series within the site boundary are summarized in Table 9. Information in the table was taken from the Soil Conservation Survey's General Survey of Ventura County (SCS, 1970). The major soil series are listed with corresponding map symbols and topography/setting. Also included in the table is general information on texture, depth, slope, drainage, erosion hazard, shrink-swell behavior, permeability, and primary use. The SCS report indicates that the primary soils types on the project site are fine and coarse sandy loam (SbF, CoC, AsF, BdG). The SbF, BdG and AsF soils are located on generally steep to steep slopes and have a moderate to severe erosion hazard. The soils are generally characterized by "well" to "excessive" drainage with permeabilities ranging from 0.2 to more than 20 inches per hour (in/hr). These soils are primarily used for range and watershed purposes.

4.2.2 PROJECT IMPACTS

The potential impacts associated with site geologic conditions include those related to seismicity and faulting, slope stability, subsidence, unique geological features, and petroleum reserves.

4.2.2-1 Seismicity and Faulting

The site is located in a tectonically active area. Seismicity and faulting are represented herein as the combined potential seismic hazards associated with strong ground shaking, fault rupture, and/or liquefaction.

The Ventura County Initial Study Assessment Guidelines do not provide specific threshold criteria for the environmental assessment of ground shaking hazards. Potential impacts, due to strong ground motion at the site, include damage to equipment and buildings, injury to mining personnel from falling debris, and increased slope instability. Because the site is located in a tectonically active area, these potential impacts are considered significant, mitigable impacts (Class II) and should not preclude mining activities. Measures to mitigate potential the impacts of seismic ground motion are outlined in Section 4.2.5 (GG-1 Slope Stability Analysis and Mitigation).

The Ventura County Initial Study Assessment Guidelines provide the following threshold criteria for the environmental assessment of fault rupture hazards:

Threshold Criteria:

Fault rupture hazards primarily exist along pre-existing faults. Threshold criteria for determining whether a project is potentially at risk with respect to fault rupture is its location within any of the following areas: 1) A State of California designated Alquist-Priolo Special Fault Study Zone, 2) A County of Ventura designated Fault Hazard Area, 3) A County of Ventura designated Potential Fault Hazard Area.

TABLE 9

CHARACTERISTICS OF SOILS AT THE PROJECT SITE

Major Soil Series	SCS Map Symbol	Setting	Texture	Depth (inches)	Slope (%)	Natural Drainage	Erosional Hazard	Shrink-Swell Potential	Permeability inches/hour	Primary Use
PRIMARY										
Badland	BdG	Very steep, severely eroded areas	Variable	0-10	ND	Variable	Severe	Moderate	0.63-2.0	Watershed
Arnold	AsF	Strongly sloping to steep upland areas	Sandy soils	60 or more	9-50	Excessive	Moderate to severe	Low	6.3-20	Range and watershed
San Andreas	SbF	Steep upland areas	Sandy loam	60	30-50	Well	Severe	Moderate	0.2	Range and watershed
Corralitos	CoC	Alluvial fans	Loamy coarse sand and fine sand (gravelly in places)	60 or more	2-9	Excessive	Slight	Low	>20	Citrus crops, avocados, field crops, walnuts, urban development, strawberries, vegetables
SECONDARY										
San Benito	ScF2	Steep upland areas	Clay loam	24-48	30-50	Well	Severe	Moderate	0.2	Range and watershed
Super	SuF2	Steep uplands	Gravelly loam	24-58	30-50	Well	Severe	Moderate	0.2-2.0	Range and watershed
Castaic and Saugus	CgG2	Steep to very steep upland areas	Silty clay loam and sandy loam	20-50	30-75	Well	Very severe	Moderate	0.2-0.63	Range and watershed
Sandy Alluvial Land	Sd	Floodplains	Stratified loamy sand and sandy loam	ND	ND	Excessive	Slight	Low	0.2-2.0	ND
Rincon	RcD2	Terraces	Silty clay loam	40-60	9-15	Well	Moderate	High	0.06-0.63	Citrus crops, field crops, urban development, range

ND: Not Described

Source: Soil Conservation Survey (1970)

Potential impacts due to fault rupture generally include damage to equipment and buildings. Geotechnical Consultants, Inc., (1978) did not report the occurrences of exposed faults in the area of CUP 1328. In addition, DMG (1973) does not show the presence of any major fault within or directly adjacent to the proposed site. Although displacement of unexposed faults could possibly occur in the project site during a regional seismic event, such displacements would likely be very minor and would not be expected to significantly affect mining operations. Therefore, potential impacts associated with fault rupture are considered to be insignificant adverse impacts (Class III).

The Ventura County Initial Study Assessment Guidelines provide the following threshold criteria for the environmental assessment of liquefaction hazards:

Threshold Criteria:

Projects located in mapped liquefaction-susceptible areas or located on a site underlain by recent or older alluvium must be evaluated for liquefaction potential, as determined by the Public Works Agency. The liquefaction evaluation must include determination of ground water levels that is based on at least one soil boring drilled a minimum of 40' deep.

Potential impacts due to liquefaction generally include damage to equipment and buildings. The potential occurrence of liquefaction at the site is considered very low because of the coarse-grained nature of the bedrock underlying the site and the fact that the depth of groundwater at the site exceeds 50 feet. Therefore, potential impacts associated with liquefaction are considered insignificant adverse impacts (Class III).

4.2.2-2 Slope Stability

The Ventura County Initial Study Assessment Guidelines do not provide specific threshold criteria for the environmental assessment of slope stability hazards. Instead, the guidelines call upon the lead agency, in this instance the RMA Planning Division, to determine impact significance based upon the site characteristics described herein.

Excavation during the proposed mining operations would substantially alter the existing topography. Most of the 533-acre site could be affected by the proposed mining operations, and the associated cutting and excavating of slopes and site reclamation. As a result, there is a potential for slope stability problems, including the potential instability of temporary cut slopes during mining operations and the instability of permanent cut slopes after final reclamation of the site. These potential impacts, discussed below, are considered to be significant, mitigable impacts (Class II).

Potential impacts associated with the instability of temporary cut slopes during mining operations include damage to equipment, possible injury to personnel from moving debris, and possible increased slope instability associated with the excavation or disturbance of steep slopes or old unexposed landslides. Because of the occurrence of steep slopes at the site, the granular nature of the rock material that underlies the mining area, and the potential occurrence of earthquake induced landslides, the impacts associated with temporary cut slopes during mining operations have the potential to be significant. Appropriate mitigation measures for these potential impacts are outlined in Section 4.2.5 (GG-1 Slope Stability Analysis and Mitigation).

Potential impacts associated with the instability of permanent slope cuts after the reclamation of the site include the instability of, and damage to, offsite property. These potential impacts may cause damage to future onsite and offsite structures and are considered potentially significant. Mitigation measures to reduce potential slope instability hazards are outlined in Section 4.2.5 (GG-2 Reclamation Plan).

4.2.2-3 Subsidence

The Ventura County Initial Study Assessment Guidelines do not provide specific threshold criteria for the environmental assessment of subsidence.

Potential impacts associated with subsidence include damage to equipment and buildings. The potential impacts associated with subsidence at the site are considered insignificant adverse impacts (Class III). Subsidence due to tectonic activity is usually very small in locations where it occurs and, therefore, is not considered a significant hazard to mining personnel or mining operations. Subsidence is generally associated with those areas of oil or water extraction and are dependent upon the level of well activity in a given area. Subsidence due to groundwater and oil/gas extraction is not considered a significant hazard at the site due to the coarse-grained nature of the bedrock, the depth to groundwater which exceeds 50 feet, and the absence of active oil/gas wells on or adjacent to the site.

Land-surface subsidence due to hydrocompaction is not typically observed in alluvium deposited in the mountainous regions of southern California and, therefore, is not considered significant hazard at the site. The proposed project does not include development of permanent structures is considered over alluvium. However, if development of permanent structures is considered over alluvium at the site in the future, a geotechnical evaluation of the site is recommended in order to completely discount/identify the effects of subsidence due to hydrocompaction.

4.2.2-4 Unique Geologic Features

No unique geologic features are known to occur within the boundaries of the project site. Therefore, no impacts to unique geologic features are anticipated at the site.

4.2.2-5 Petroleum Reserves

No significant oil reserves are known to occur on the site. Therefore, no impacts to oil/gas reserves are anticipated.

4.2.3 CUMULATIVE IMPACTS

The proposed project is not expected to result in any significant, unmitigable cumulative geologic impacts with the adjacent mine.

An unsafe condition exists along the shared property boundary between CUP-4158 and CUP-1328 that is worthy of note. Mining excavation by the previous operator created a dangerous "highwall" condition along the western side of the proposed Phase 1 area. At this location the resulting highwall has nearly vertical slopes and an elevational relief of 250 feet in places. Ventura County requires that this slope be reclaimed to a no greater than 2:1 slope (i.e., 2 foot horizontal distance per 1 foot vertical distance). As common owner of both mine sites, TMC has requested and received County approval of Permit Adjustments for CUP-4158 and the CUP-1328 site. These Permit

Adjustments serve to amend the existing reclamation plans for both permit areas and the associated activities are consistent with the reclamation plan proposed under CUP-4633 (refer to Section 3.6). In accordance with these approved Permit Adjustments, TMC is currently lowering, contouring and reclaiming the highwall in order to create a 125-foot-high, 2:1 reclaimed slope (see cross-section A-A on Figure 7).

Excavations at the nearby CUP 4571 mine (Wayne J. Sand and Gravel) and CUPs 4171 and 3451 (Best Rock Products) are not expected to contribute any cumulative geologic impacts due to their distance from the project site. No cumulative geologic impacts are expected with the other projects listed in Section 4.1, due to their distance from the project site.

4.2.4 GENERAL PLAN CONSISTENCY

The General Plan goals and policies related to geology and geohazards require that project applications include specific information, studies, and/or investigations regarding ground shaking, fault rupture, liquefaction, landslides/mudslides, and subsidence. This information was submitted by the applicant. The goals and policies also provide that additional information be developed, as needed, through the environmental review process. The recommended mitigation measures and conditions of approval described herein for the proposed project are the direct result of this process and the proposed project is therefore consistent with the goals and policies of the Ventura County General Plan.

4.2.5 MITIGATION MEASURES

In general, mitigation of potential geologic impacts and hazards can be accomplished by appropriate engineering design or the removal of the hazard. To reduce the potential damage by mining operations and geological hazards previously identified, the mitigation measures listed below are recommended.

GG-1. Slope Stability Analysis and Mitigation

Prior to the issuance of the Zoning Clearance for Phase 1, and prior to initiating mining activities in the Phase 2 and 3 areas, the permittee shall submit a slope stability analyses, conducted by a County approved registered geotechnical engineer or engineering geologist, that is acceptable to the Public Works Agency. The analyses shall include consideration of the stability of temporary cuts during mining operations, as well as stability of permanent reclaimed cut slopes after mining operations. The investigations shall include recommendations for mitigation of slope failure hazards such as slope configuration, safe excavation procedures, and use of standard engineering practices including buttressing, cut and fill excavation, and control of drainage on any newly exposed landslides. The Annual Status Report submitted to the County shall contain a summary of all activities conducted during the previous year pursuant to the recommendations in the slope stability report.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the Zoning Clearance for Phase 1, and prior to initiating mining activities in the Phase 2 and 3 areas. Annual County inspections shall provide

on-site observations of slope conditions. Annual Status Reports submitted by the permittee shall provide written documentation of slope hazard mitigation.

Monitoring Work Program/Monitoring Agencies: The Planning Division, in consultation with the Public Works Agency, shall be the monitoring agency.

Standard of Success: Approvals of the slope stability analyses for each phase, as well as Annual Status Reports. No slope failures during the life of the permit.

GG-2. Reclamation Plan

The permittee shall prepare, and submit to the County Planning Division, a revised revegetation plan (a component of the full Reclamation Plan) that: 1) incorporates the results of the 1993 and 1994 revegetation test plots; and 2) meets all applicable SMARA requirements, including but not limited to revegetation, topsoil management, protection of wildlife values, and any newly adopted standards for reclamation. Prior to the issuance of the Zoning Clearance for Phase 1, the above said plan must be approved by the Planning Director.

Reclamation shall occur during the fall of each year in areas where mining is completed. Reclamation need not occur if there are no slopes that are mined to finished elevations and grades during a particular year. Mining shall be restricted to one phase at a time until marketable materials have been exhausted. Only one phase shall be mined at any time. Mining shall not move to a subsequent phase until reclamation has been initiated on the final slopes of the previous phase. The total amount of land being actively mined at any time shall not exceed 50 acres, and the total amount of disturbed land (including active mining areas, processing areas, roads, and stockpiles) in the CUP permit area shall not exceed 220 acres. Disturbed lands that exceed these acreage limits must either: 1) be temporarily reclaimed with annual grass cover until these areas are mined again; or 2) reclaimed to final grade and vegetative conditions.

Once a year, an Annual Status Report shall be submitted to the County for review and approval. This report shall contain sufficient information to allow an annual County site inspection pursuant to SMARA, including but not limited to, an accurate map showing the disturbed acreage from the current year, boundaries of actively mined areas, processing facilities, stockpiles, and boundaries of reclaimed areas.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the Zoning Clearance for Phase 1, and prior to mining activities in the Phase 2 and 3 areas. Annual County inspections shall provide on-site observations of reclamation performance and compliance. The DMG-required Annual Status Reports submitted by the permittee shall provide written documentation of compliance.

Monitoring Work Program/Monitoring Agencies: The Planning Division, in consultation with the Public Works Agency, shall be the monitoring agency.

Standard of Success: Approvals of the: 1) Reclamation Plans for each phase; 2) annual site visits; and 3) Annual Status Report.

4.2.6 RESIDUAL IMPACTS

After implementation of the above recommended mitigation measures, the proposed project is expected to generate the following potential residual impacts:

- damage to equipment and buildings as a result of ground shaking (significant, mitigable impacts, Class II), fault rupture (insignificant adverse impacts, Class III), and/or liquefaction (insignificant adverse impacts, Class III);
- slope stability problems, including the potential instability of temporary cut slopes during mining operations and the instability of permanent cut slopes after final reclamation of the site (significant, mitigable impacts, Class II);
- instability of permanent slope cuts after the reclamation of the site include the instability of, and damage to, offsite property (significant, mitigable impacts, Class II); and
- damage to equipment and buildings due to subsidence (insignificant adverse impacts, Class III).

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4.3 GROUNDWATER

4.3.1 EXISTING SETTING

The project site is located in the northeast portion of the North Las Posas Groundwater Basin (Figure 19). The North Las Posas Basin covers an area of approximately 58 square miles and has a drainage area of approximately 73 square miles (Turner, 1975).

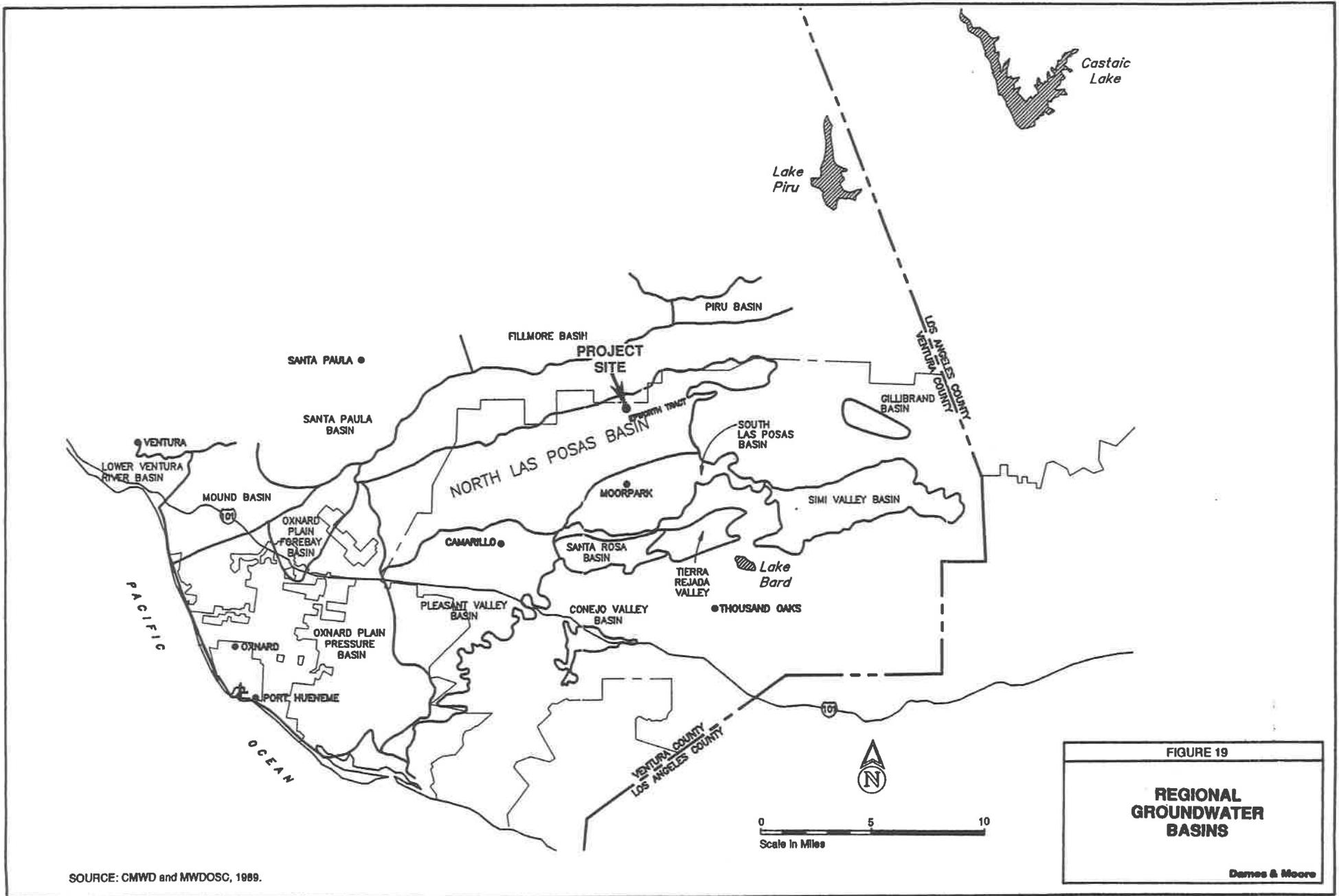
The structure and hydrogeology of the North Las Posas Basin have been discussed in detail by Turner (1975). The groundwater basin consists of numerous east-west trending synclinal and anticlinal structures. The basin is defined on the north by the nonwater-bearing rocks of the Oak Ridge and South Mountain areas and on the east by the non-water bearing rocks of the Happy Camp Wash. The southern boundary of the basin is formed by an anticlinal structure that separates the basin from the Pleasant Valley and South Las Posas Groundwater Basins (Figure 19). The North Las Posas Basin is bounded on the west by the Oxnard Plain Groundwater Basin.

Groundwater in the North Las Posas Basin occurs primarily in four units; 1) a recent and upper Pleistocene alluvium deposit, 2) the Epworth Gravels of upper Pleistocene age, 3) the Fox Canyon aquifer zone of lower Pleistocene age, and 4) the Grimes Canyon aquifer zone of lower Pleistocene age. Figure 20 presents a north-south trending cross-section through the basin that runs approximately through the area of the project site. The Lower Aquifer System zones, the Fox Canyon and Grimes Canyon, are considered the major water bearing units in the North Las Posas Basin and compose what is commonly called the "Lower Aquifer System" (LAS) in the basin. The Fox Canyon aquifer is part of the San Pedro Formation and is continuously exposed along the southern flank of South Mountain-Oak Ridge area. The Grimes Canyon aquifer zone is considered to be the upper member of the Santa Barbara Formation and is also exposed in the South Mountain-Oak Ridge area. Based on a Ventura County Water Resources & Development Department (VCWRDD) unpublished map (1991), the Grimes Canyon aquifer zone generally underlies most of the site except in the very southern portion of the site where the Fox Canyon aquifer zone occurs.

4.3.1-1 Basin Groundwater Recharge and Discharge

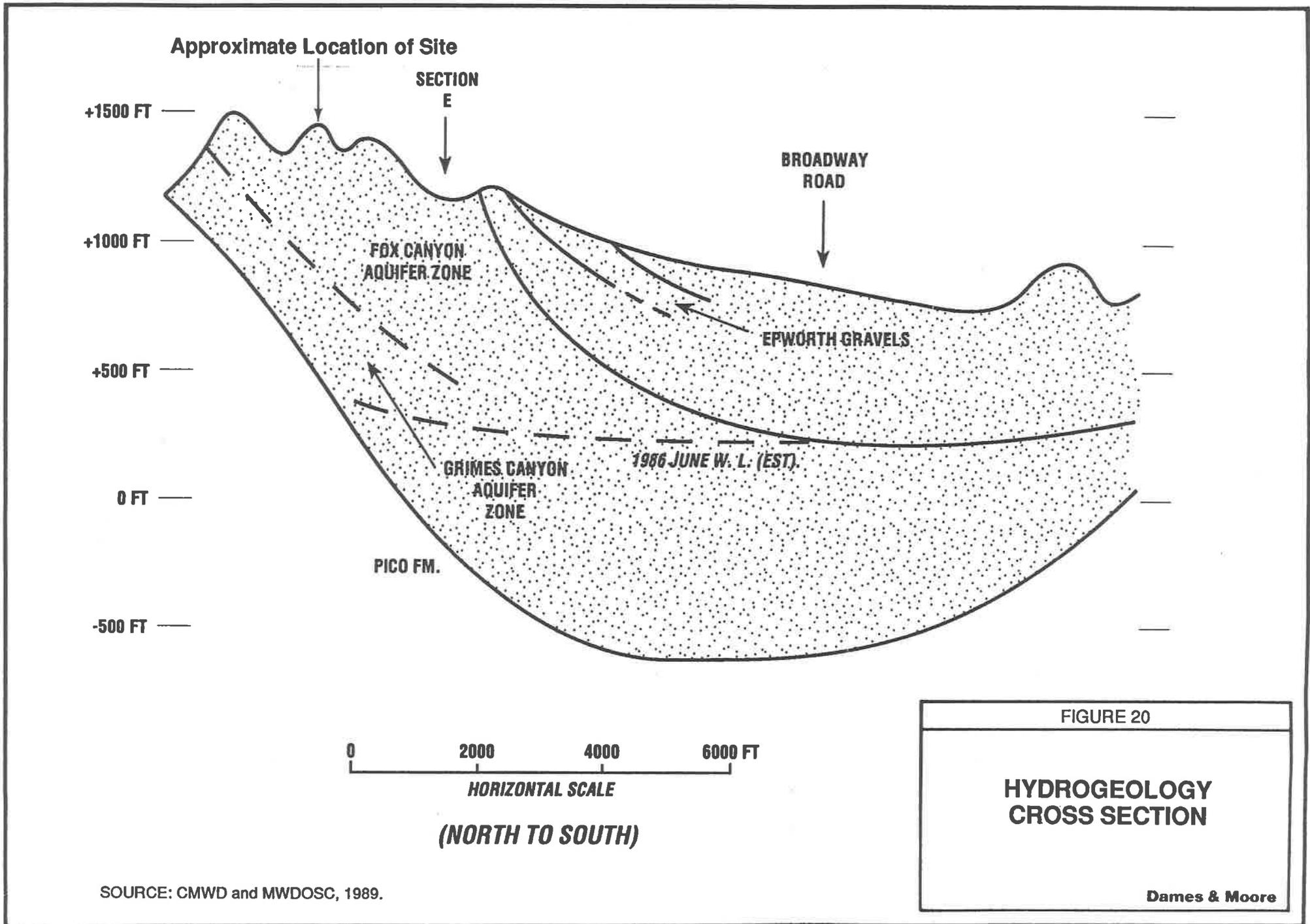
The total groundwater inflow or recharge to the North Las Posas Basin is estimated to be approximately 26,000 acre feet per year (AFY) (Fox Canyon Groundwater Management Agency [GMA], 1984). Inflow to the Lower Aquifer System (i.e., Fox Canyon and Grimes aquifers) in the North Las Posas Basin occurs primarily by the direct infiltration of precipitation in the areas along South Mountain and Oak Ridge, and in the Las Posas Hills where the Lower Aquifer System is exposed, and secondarily by recharge from the Upper Aquifer System which overlies the Lower Aquifer System (Luke Hall, 1991).

The project site directly overlies the Lower Aquifer System outcrops along the southern flank of Oak Ridge and generally all excavation would occur within the material of the Lower Aquifer System (i.e., San Pedro Formation). The total area of exposure of the Lower Aquifer System along the South Mountain-Oak Ridge area is estimated to be approximately 9.5 square miles. The proposed project consists of mining approximately 217 acres of area that is generally underlain by the Lower Aquifer System. This is approximately 3½ percent (%) of the total estimated area of Lower Aquifer System exposed in the South Mountain and Oak Ridge area.



SOURCE: CMWD and MWDOCS, 1989.

FIGURE 19
**REGIONAL
 GROUNDWATER
 BASINS**
 Dames & Moore



The total groundwater demand in the basin is estimated to be approximately 37,400 AFY (GMA, 1984). Outflow of groundwater from the North Las Posas groundwater basin is considered to occur primarily by pumping from wells.

4.3.1-2 Groundwater Use

4.3.1-2.1 Regional Groundwater Use

Groundwater is the single largest source of water for Ventura County. In 1986, groundwater resources provided approximately 67 percent of the water utilized in the county (Ventura County General Plan, 1989). The major water bearing aquifers in Ventura County include the Fox Canyon and Grimes Canyon aquifers (Lower Aquifer System) that occur in the North Las Posas Basin and directly underlie the proposed site.

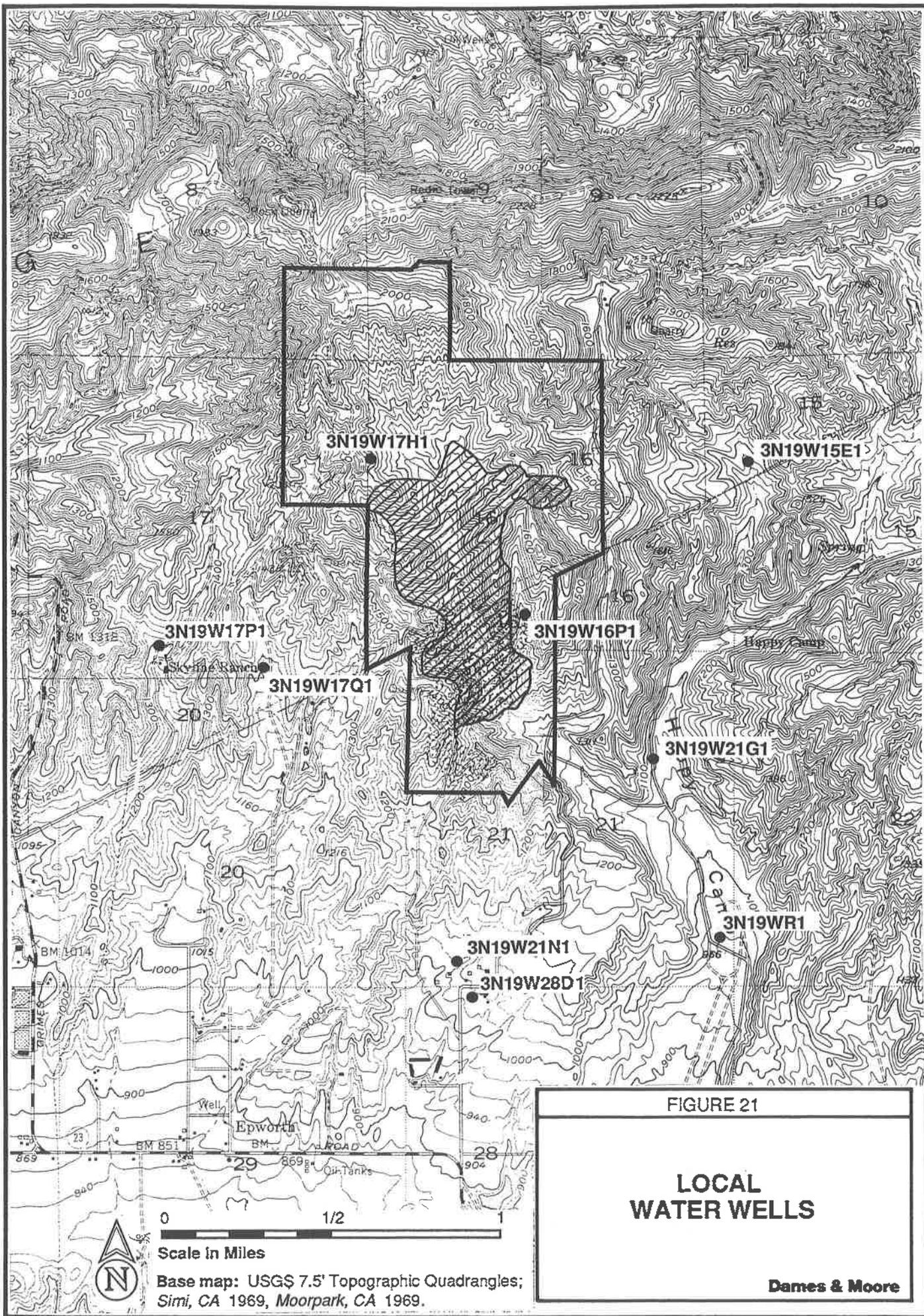
Groundwater in the North Las Posas Basin is utilized for industrial, agricultural and domestic purposes. Groundwater in this basin is under the jurisdiction of the GMA. The GMA was created by State of California Legislation in 1982 to manage groundwater in portions of Ventura County with the objective of controlling overdraft. Currently, the Fox Canyon aquifer is being overdrafted at a rate of approximately 18,700 AFY (Ventura County General Plan, 1989). Based on inflow and outflow estimates projected by GMA, the North Las Posas Groundwater Basin, which includes portions of the Fox Canyon and Grimes Canyon aquifer zones is being overdrafted by approximately 11,400 AFY. A GMA task study indicated that because of the present overdraft conditions in the Lower Aquifer System, dewatering would occur in the eastern portion of the North Las Posas Basin (GMA, 1984). Based on a worst case scenario, the GMA study showed that an area ranging from 3.4 to 6.7 square miles, which includes the project site, would be dewatered (i.e., drying up of aquifer due to declining water levels) along the eastern periphery of the basin by the year 2010. The 1984 GMA study suggested that, if projected groundwater extractions were allowed, the importation of water to supplement the dewatered areas be considered.

Because of the existing overdraft conditions, recent ordinances (GMA Ordinance Nos. 4 and 5) were adopted by the GMA that prohibit the installation of new water wells on the outcrop of the Lower Aquifer System and mandates the reduction of extraction allocations in the area under the jurisdiction of the GMA (GMA, 1987 and GMA, 1990). The project site is located in the GMA area and, therefore, Ordinances No. 4 and No. 5 would apply to the proposed project.

The location of water wells within ½ mile of the site are shown in Figure 21 and information on these wells is summarized in Table 10 (VCWRDD unpublished map, 1992). An unpublished map prepared by the GMA indicates that three of the wells within a ½ mile of the site (3N/19W-17P1, 3N/19W-17Q1 and 3N/19W-15E1) are active wells.

4.3.1-2.2 Site Well Locations and Groundwater Use

Ventura County maps show two wells, 3N/19W-17H1 and 3N/19W-16P1, located on the project site (VCWRDD, unpublished map, 1992). A well log for a third well on site (3N/19W-16H1) was found in the Ventura County files but is not shown on any maps. The well is listed as a "test well". Based on an unpublished GMA map, the three wells located on the site are not active wells. However, the previous mine owner reports that well 3N/19W-16H1 is used to water cattle (Jim Sandoval, personal communication, 1991). The groundwater wells on the site would not be used to supply water to the proposed project (TMC, pers. comm. to Janna Minsk).



3N19W17H1

3N19W15E1

3N19W17P1

3N19W16P1

3N19W17Q1

3N19W21G1

3N19WR1

3N19W21N1

3N19W28D1

FIGURE 21

**LOCAL
WATER WELLS**

Dames & Moore



Scale in Miles
 Base map: USGS 7.5' Topographic Quadrangles;
 Simi, CA 1969, Moorpark, CA 1969.

TABLE 10

WELL INFORMATION AND WATER LEVEL DATA

State Well Number	Well Completed	Well Depth (ft bgs)	Water Levels (ft bgs)	Date of Water Level Measurement
3N/19W-15E1	Aug 1986	455	--	--
3N/19W-16P1	Aug. 1986	455	--	--
*3N/19W-16H	Jan. 1945	356	--	--
3N/19W-17H1	June 1958	651	590	June 1958
3N/19W-17P1	June 1953	763	720	June 1955
3N/19W-17Q1	Oct. 1987	1417	1023 1030 1040 1030 1040 1040 1036 1040 1039	Aug. 1988 Dec. 1988 Aug. 1989 Oct. 1989 Dec. 1989 Feb. 1990 March 1990 June 1990 Sept. 1990
3N/19W-17R	Sept. 1938	801	730	Sept. 1938
3N/19W-21N1	Nov. 1943	343	--	--
3N/19W-21Q1	Nov. 1944	560	80	Nov, 1944
3N/19W-21R1	Nov. 1944	560	80	Nov, 1944
3N/19W-28D1	Jan. 1944	405	--	--

* Not shown on Ventura County Water Resources and Development unpublished map

ft bgs: feet below ground surface

Source: Ventura County Public Works Agency.

For current and proposed mining water would be supplied by the Ventura County Waterworks District No. 1 (District). The District has provided a memorandum dated 6 January 1993 to the County Planning Division stating that it can meet the demands of the proposed project.

However, the proposed mine expansion area is located outside the boundary of the District. In order to provide water for these areas, there are two options: 1) purchase "interrupted water service" for use in the expansion area and pay higher rates; or 2) annex the CUP site into the District. The latter would require payment of an annexation fee to the District, as well as approval by the Local Agency Formation Commission (LAFCO). The approval by LAFCO would require a public hearing

and review of the environmental impacts of the project. LAFCO has indicated the Final EIR prepared for CUP-4633 would be used during LAFCO's environmental review process.

TMC has indicated that they would pursue annexation upon approval of the CUP. However, if annexation is denied, then TMC would purchase "interrupted water service" from the District.

The average water use in the past has been approximately 297 AFY, based on a recent District estimate (Pakala, 1993), for sand and gravel washing and concrete mixing. This estimate was based on yearly mining operations that processed approximately 1.2 million cubic yards (yd³) of material. The project description indicates that future processing at the mine may reach 2.0 million yd³. Based on a ratio of estimated processing to water use the mine could use 495 AFY during maximum production.

No water is planned for use in revegetation because the reclamation plan specifies that native plants would be used, and that plant establishment and growth would be dependent upon natural rainfall.

According to the District, approximately 75% of the water used in their service area has historically been imported from the Metropolitan Water District (surface water) and 25% of the water has been extracted from local groundwater wells (Ken Besina, personal communication, 1992). As noted below in Section 4.3.2.1, the District imports between 65 and 75 percent of the total water demand, and blends this water with approximately 25 to 35 percent locally derived groundwater, as dictated by seasonal and current demand requirements. However, the District notes that all water deliveries to the mine site are drawn solely from imported sources. Further, the Fox Canyon Groundwater Management Agency has adopted ordinances which limit groundwater extractions. Therefore, since there is no expected net increase in the use of groundwater, the proposed project will have no significant impacts upon groundwater supplies.

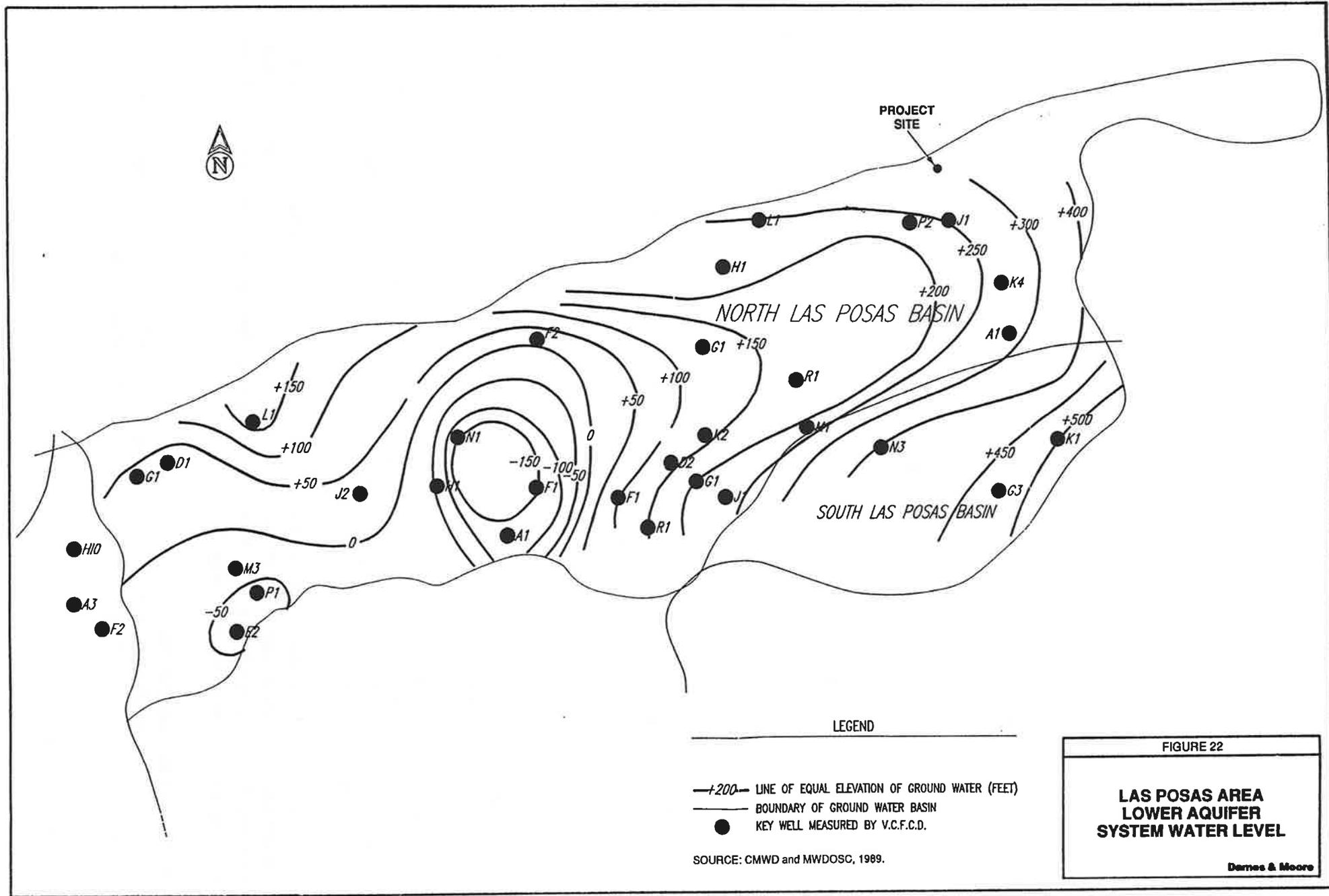
4.3.1-3 Historical Groundwater Levels and Flow

Based on a 1989 water level map prepared by Calleguas Municipal Water District and Metropolitan Water District of Southern California (1989), groundwater elevations in the lower aquifer system beneath the site are between approximately 250 and 400 feet MSL (Figure 22). Groundwater levels in a well located immediately west of the site (well 3N/19W-17Q1) ranged from 1,023 to 1,040 feet below ground surface between August 1988 and September 1990 (Table 10). Based on a well head elevation of approximately 1,300 feet (estimated from the location of the well on a 1:24,000 scale topography map), the groundwater level elevation in well 3N/19W-17Q1 is approximately 300 feet above sea level (MSL).

Based on the 1989 water level data presented in Figure 22, the groundwater flow in the lower aquifer system near the project site is toward the southwest. Water level data reported in the County of Ventura's Quadrennial Report also shows the groundwater flow direction toward the southwest in the area of the site (Ventura County, 1984).

4.3.1-4 Groundwater Quality

Available groundwater quality information from several technical documents and unpublished information from the VCWRDD was reviewed for the EIR. Within the North Las Posas Basin, the



- LEGEND
- +200— LINE OF EQUAL ELEVATION OF GROUND WATER (FEET)
 - BOUNDARY OF GROUND WATER BASIN
 - KEY WELL MEASURED BY V.C.F.C.D.

SOURCE: CMWD and MWDOCS, 1989.

FIGURE 22

**LAS POSAS AREA
LOWER AQUIFER
SYSTEM WATER LEVEL**

Dames & Moore

total dissolved solids (TDS) of groundwater ranges from less than 250 milligrams per liter (mg/l) to more than 750 mg/l and is of acceptable quality for most beneficial uses (Ventura County, 1984).

*

Based on reported TDS concentrations, the groundwater quality in the near vicinity of the site is excellent to good (Ventura County, 1989). Regional groundwater quality data presented by Ventura County (1984) and the Calleguas Municipal Water District and Metropolitan Water District of Southern California (1989) show the TDS concentrations in the area to be approximately 250 mg/l. TDS in groundwater sampled from a well located immediately west of the TMC site (3N/19W-17Q1) on October 29, 1987 was 426 mg/l. The predominant dissolved constituents in the groundwater sample collected from the well were calcium (90 mg/l), bicarbonate (191 mg/l), and sulfate (178 mg/l). TDS concentrations for groundwater collected in well 3N/19W-17P1, located approximately ½ mile west of the site ranged between 170 and 235 mg/l between 1972 and 1989 (Table 10).

4.3.2 PROJECT IMPACTS

Potential impacts on groundwater resources associated with mining operations include water use/changes in groundwater use (pumping), groundwater recharge, aquifer storage capacity, and groundwater quality. These impacts are discussed below.

4.3.2-1 Groundwater Use

The Ventura County Initial Study Assessment Guidelines provides the following threshold criteria for the environmental assessment of groundwater quantity:

"Threshold Criteria:

A land use or activity which could cause a significant adverse impact upon ground water resources in itself or on a cumulative basis. Threshold criteria include, but are not limited to:

- 1. Any use that will increase the net utilization of ground water in a basin that is overdrafted or adversely impacts an overdrafted basin is a significant adverse impact.*
- 2. In ground water basins that are not overdrafted or that do not impact an overdrafted basin, net water use that will individually or cumulatively cause the basin to become overdrafted is a significant adverse impact."*

The estimated maximum consumptive water use at the proposed mine is estimated to be 495 AFY, a net increase of 198 AFY. Water would be supplied by the Ventura County Water District No. 1, Division 3 ("District"), which is subject to GMA ordinances. The District imports between 65 and 75 percent of the total water demand, and blends this water with approximately 25 to 35 percent locally derived groundwater, as dictated by seasonal and current demand requirements. In a memo dated March 13, 1995 (Reddy Pakala), the District stated that all water deliveries to the mine site are drawn solely from imported sources. None of these water sources would result in a net increase in the utilization of groundwater within an overdrafted basin nor would these water sources result in a basin becoming overdrafted. Therefore, the proposed project would not result in significant impacts. However, the following conditions of approval are recommended:

Recommended Conditions:

Water Supply

To ensure a reliable and adequate water supply, the permittee shall annex the entire permit area into Ventura County Water Works District No. 1. Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall provide evidence of recordation of LAFCO's annexation of the permit boundaries (CUP 4633) into VCWWD No. 1, and a statement from the District about providing reliable and adequate supplies, derived solely from imported water, for the life of the permit issued.

Use of On-Site Wells

In the future, if an on-site well(s) is proposed for use, the permittee shall register said well(s) with the Fox Canyon Groundwater Management Agency (GMA). At that time, the permittee shall submit a report describing the land use and make formal application to the GMA for a groundwater extraction allocation. The permittee and property owner shall also submit an acknowledgment that no additional groundwater above the present GMA allocation will be needed. Any use of groundwater must first be approved by the GMA.

Water Conservation Measures

To reduce water use and to ensure effective water conservation practices are employed, the following water conservation measures shall be implemented:

- a. Water discharge from the proposed sand and gravel washing operations shall be recycled on a routine basis (as in the current operations). Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall provide a letter of commitment to use the recycling process.*
- b. Pursuant to Ordinances 4 and 5 of the Fox Canyon GMA, no groundwater pumping may occur at the project site during mining or during reclamation.*
- c. To the extent feasible, the permittee shall use reclaimed water for watering roads, stockpiles, and processing equipment dust control. Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall submit a study on the feasibility of purchasing and applying reclaimed water from local sources, including, but not limited to the cities of Simi Valley and Moorpark, and the County of Ventura.*
- d. All water recycling ponds shall be lined or sealed to prevent pollution of, or percolation into, area groundwater supplies. Sealed is defined herein to include "sealed by operation" wherein fines deposited during the operation of the water recycling ponds have been deposited to the point of having effectively rendered the ponds impermeable.*

4.3.2-2 Groundwater Recharge

The Ventura County Initial Study Assessment Guidelines do not provide specific threshold criteria for the environmental assessment of groundwater recharge.

Groundwater recharge to the North Las Posas Groundwater Basin occurs primarily by infiltration of rainwater in the areas where the Lower Aquifer System is exposed at the surface (Luke Hall, 1991). Potential impacts associated with the reduction of groundwater recharge include a decrease in groundwater storage, and changes in groundwater flow and water table elevations, all of which could affect the yield of groundwater wells in the area. The project site is located on a surface exposure of the Lower Aquifer System and, therefore, groundwater recharge to the basin may potentially be reduced during proposed mining operations if the ground surface were made less permeable than the scoured surface that currently exists. However, recharge at the site shall either increase or remain the same at the proposed site during and after mining operations due to the following planned actions:

- Flattening of slopes in some areas of the site during excavation and reclamation is expected to decrease runoff. As a result, recharge should effectively increase in these areas.
- The planned installation of terraces, and utilization of berms and sediment basins would also decrease runoff and increase local recharge.
- Excavation at the project site would expose more permeable aquifer material which should effectively increase recharge.

A modeling study by Lockman & Associates (1991) indicated that mining operations at the site should not adversely impact groundwater recharge. Lockman & Associates (1991) used the H.E.L.P. computer program by EPA to model recharge during different phases of the mining operation. A decrease in groundwater recharge at the site is not expected to occur. Based on their modeling results, it was concluded that mining operations should result in a slight increase in groundwater recharge at the site. This is considered a beneficial impact (Class IV). However, the following condition of approval is recommended to maximize potential recharge at the site:

Recommended Condition:

Protecting Aquifer Recharge Areas

To maximize the potential for infiltration of runoff at the site, thus minimizing the potential for a reduction of recharge to the basin due to mining operations, the following measures shall be implemented:

- a. Cut slope benches, drainage berms, and sediment detention basins shall be designed to maximize the potential infiltration of runoff by using the lowest acceptable gradients for runoff and avoiding the use of any impermeable channels or lining material within the sediment detention basin.***

- b. *Topsoil from the site to be used in reclamation shall be characterized by a moderate to high permeability (at least equal to the pre-mining characteristics) that would approximate pre-project rates of infiltration. The permeability of topsoil to be used in reclamation shall be approved by the County prior to reclamation of each mining phase. Data on topsoil permeability shall be provided in the Reclamation Plans prepared by the permittee. Reclamation Plans must be approved by the County prior to the issuance of the Zoning Clearance for Phase 1, and prior to mining in Phase 2 and 3 areas, and in the SMARA-required Annual Status Report. (Refer to Mitigation Measure GG-2.)*
- c. *All rock crushing activities and procedures that might generate fines and any asphalt processing or production plants, if located on the aquifer outcrop, shall be placed on a sealed surface that drains directly into the lined or sealed water recycling ponds, or into sediment retention basins.*

4.3.2-3 Aquifer Storage Capacity

The Ventura County Initial Study Assessment Guidelines do not provide specific threshold criteria for the environmental assessment of aquifer storage capacity.

The effective storage of the North Las Posas Basin may potentially decrease if mining or excavation occurs below the groundwater table. However, based on recent and historical groundwater levels and mining operation plans, the storage capacity of the basin would not be affected by proposed mining operations. Based on final grading elevations on the site reclamation plan, excavation during mining operations would generally occur above approximately 1,400 feet MSL.

Based on published water contour maps and groundwater levels in 3N/19W-17Q1, groundwater in the Lower Aquifer System occurs approximately 1,000 feet below the lowest proposed grading elevation. In addition, a water level reading from 3N/19W-17H1 in June 1958 indicates that historical groundwater levels in this well were approximately 300 feet below the proposed grading elevation. Based on this water level information, impacts associated with a decrease in aquifer storage are not expected to occur.

4.3.2-4 Groundwater Quality

The Ventura County Initial Study Assessment Guidelines provides the following threshold criteria for the environmental assessment of groundwater quality:

Threshold Criteria:

A land use or activity which could cause a significant adverse impact upon ground water resources in itself or on a cumulative basis. Threshold criteria include, but are not limited to:

1. *Any land use proposal that will individually or cumulatively degrade the quality of ground water and cause it to fail to meet ground water quality objectives for a hydrologic unit defined in the Basin 4A, 3 or 5D Plans is a significant adverse impact.*

The proposed project site is located within a hydrologic unit defined in the Basin 4A Plan. Groundwater in the vicinity of the project site is reported to be of excellent to good quality. The groundwater quality beneath the site and in the groundwater basin could be adversely affected if: 1) water that recharges the basin is of relatively poor quality, 2) waste water discharged from mining operations is of poor quality and is allowed to infiltrate to the aquifer; 3) accidental spills of hydrocarbon or other chemicals occur during mining operations, 4) improper leakage of the onsite septic system; and, 5) improper abandonment of water wells during excavation operations. Potential impacts on groundwater quality from mining operations are discussed below.

During mining operations, pits would be open as they are "worked" and "unlined" sediment retention basins would be used to control runoff. Presently four sediment retention basins are located on the site including a large unlined basin located on the southeastern portion of the site. The quality of recharge water may be reduced by allowing runoff to stand in these open pits or sediment retention basins where evaporation may increase TDS before the water infiltrates into the aquifer material. The potential changes in groundwater quality include a slight increase in TDS and other dissolved constituents, though this increase is not expected to result in a failure to meet ground water quality objectives for that hydrologic unit. Therefore, the proposed project would result in insignificant adverse impacts (Class III), given the relatively small amount of water which would be expected to infiltrate from these unlined sediment ponds. However, the following condition of approval is recommended to minimize the potential impacts from standing water and associated evaporation:

Recommended Condition:

Groundwater Quality - Standing Water

To reduce the potentially adverse impact of standing water on groundwater quality (i.e., water standing in open mining pits and/or sediment detention basins), the permittee shall implement the following measures:

- a. The retention time of water in these areas shall be minimized so as to be consistent with the sediment and flood water control design criteria for each sediment retention basin. The retention time of water in the mining pits and sediment detention basins shall be reduced by periodically removing fine soil and debris to allow for rapid percolation. The schedule and techniques for removal of fine soil and debris from these areas shall be determined by the RMA Planning Director, in consultation with the Groundwater Management Agency. Proposed schedules and techniques for the removal of fine soil and debris from these areas shall be documented and included in the Reclamation Plans prepared by the permittee. Reclamation Plans must be approved by the County prior to the issuance of the Zoning Clearance for Phase 1, and prior to mining in each of the Phase 2 and 3 areas. This information shall be included in the SMARA-required Annual Status Report. (Refer to Mitigation Measure GG-2.)*
- b. To reduce the use of District water and to minimize potential increases in TDS resulting from evaporation, rainwater collected in the large unlined sediment*

detention basin located in the southeast portion of the site shall be pumped into the two waste water ponds for use in the mining operations.

The proposed mining operation would produce waste water (water that washes the sand and gravel material). Waste water at the mine site is currently discharged into two unlined recycling ponds where fine material such as clay particles are allowed to settle out of the waste water. These fine materials serve to seal the ponds. From the ponds, the waste water is recycled back into the sand and gravel washing operations. It is reported that, on the average, approximately 800,000 gallons per day is recycled at the mine.

Current mining operation plans indicate that the same waste water recycling capabilities would continue at the project site. The amount of percolation from the ponds is unknown, but likely to be low because of the accumulation of fines on the bottom of the ponds. Infiltration of waste water into the aquifer could occur which may potentially increase the concentration of TDS and other dissolved constituents in the aquifer. To assess the potential TDS increase in groundwater if the lining underlying the ponds did leak, water quality samples from the two evaporation ponds were examined from: 1) samples collected by the previous mine owners in accordance with a waste discharge requirement from the Regional Water Quality Control Board in 1983; 2) samples collected by Dames & Moore in 1992; and 3) 1994 samples collected by the new mine owners in accordance with a waste discharge requirement from the Regional Water Quality Control Board. Laboratory results are presented in Appendix D from both sources. Laboratory results indicate that at the time of sampling TDS concentrations in the waste water ranged between 160 and 520 mg/l, which falls within the TDS values in the local groundwater. In addition, the concentrations of all major dissolved constituents were below California State recommended levels for drinking water. Based on these results, groundwater quality beneath the site would not be significantly impacted by the proposed project. However, the following condition of approval is recommended to minimize the potential impacts from waste water infiltration:

Recommended Condition:

Groundwater Quality Protection - Recycling Ponds and Septic Systems

To avoid unanticipated adverse impacts to groundwater quality due to the percolation of waste water from the recycling ponds at the project site, the permittee shall provide the RMA Environmental Health Division with the results of the quarterly water quality samples (required under the RWQCB's discharge requirements). If water quality samples exceed the maximum contamination level(s) set by local, state or federal agencies, the permittee shall immediately consult with the County and other agencies, as needed, to identify and implement the changes needed to comply with water quality standards.

During mining operations, material utilized on the site may include fuels, oils, paints and solvents. A list of aboveground storage tanks and site locations, as well as the underground fuel storage tank at the site is provided in Appendix D. An accidental spill of these materials on the surface or from an aboveground/underground storage tank may allow for the infiltration of contaminants into the aquifer. The potential impacts of an accidental spill are compounded because soils would be stripped

from the site and the Lower Aquifer System would be exposed at the site surface. Consequently, the capacity of naturally occurring soils to retard the migration of contaminants would be reduced and the possibility of an accidental spill occurring directly on the aquifer outcrop is increased. The spill contingency plan (Appendix D) for the proposed project includes measures specifically designed to prevent spills and, in the event of a spill, to minimize the potential impacts to groundwater quality. The spill contingency plan describes the material handling precautions and, if a release occurs, prescribes the immediate remedial measures. With spill contingency plan implementation, the proposed project would result in insignificant adverse impacts (Class III). However, the following condition of approval is recommended to prevent the release of contaminants into the groundwater:

Recommended Condition:

Groundwater Quality - Spill Prevention

To reduce the potential impact on groundwater quality associated with accidental spills of petroleum hydrocarbons and solvents at the new mining area, the following procedures shall be required:

- a. The storage, handling, and disposal of potentially hazardous materials shall be in compliance with applicable State regulations which are enforced by the Environmental Health Division.*
- b. Prior to the issuance of the Zoning Clearance for Phase I, the permittee shall contact the Environmental Health Division and obtain all necessary permits for the installation, use and operation of underground hazardous materials storage tanks.*
- c. Prior to the issuance of the Zoning Clearance for Phase I, the permittee shall contact the Hazardous Materials Section of the Environmental Health Division and obtain all necessary permits.*

(Source: Ventura County Resource Management Agency - Environmental Health Division memorandum to the Planning Division dated October 26, 1994)

Infiltration of contaminants into the groundwater aquifer may also occur due to leakage from the onsite septic system. However, according to Lockman & Associates (1991), the onsite septic system has been approved by the Ventura County Resource Management Agency - Environmental Health Division based upon a soils report and a percolation test. Therefore, the potential impacts to groundwater quality associated with leakage from septic systems are considered insignificant adverse impacts (Class III).

Several wells are known to occur on the project site and at least one well (3N/19W-17H1) appears to be located in the area where excavation operations would occur. The potential impacts associated with improper well abandonment include providing a conduit to groundwater which could result in possible groundwater degradation. Consequently, some wells on the site may need to be destroyed which is a requirement of Ventura County Ordinance Code Section 4824 (Destruction of Abandoned Wells). Prior to any destruction work being performed, a permit must be obtained from

the Ventura County Public Works Agency - Water Resources Division. When properly destroyed, the potential impacts to groundwater quality is considered insignificant. Therefore, the following condition of approval is recommended to ensure water wells have been properly destroyed:

Recommended Condition:

Groundwater Quality - Water Well Abandonment

To reduce potential adverse impacts on groundwater quality, resulting from the abandonment of water wells, all abandoned water wells shall be properly destroyed in accordance with the standards outlined in Ventura County Ordinance No. 3991 and California Department of Water Resource Bulletin No. 74-9. Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall provide the County Planning Division with documentation that abandoned wells have been properly destroyed.

4.3.3 CUMULATIVE IMPACTS

The proposed project would use water provided by Ventura County Water District No. 1, Division 3 ("District") who derives all of its current water supplies, and will derive all future water supplies, from imported sources. As such, the proposed project will not increase the net utilization of groundwater in a basin that is overdrafted nor will it adversely impact an overdrafted basin. Therefore, the propose project will not result in significant cumulative impacts.

4.3.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Goal 1.3.1-2

Effectively manage the water resources of the County by adequately planning for the development, conservation and protection of water resources for present and future generations.

Goal 1.3.1-3

Maintain and, where feasible, restore the chemical, physical and biological integrity of surface and groundwater resources.

Goal 1.3.1-4

Ensure that the demand for water does not exceed available water resources.

Goal 1.3.1-5

Protect and, where feasible, enhance watersheds and aquifer recharge areas.

Goal 1.3.1-6

Promote reclamation and reuse of wastewater for recreation, irrigation, and to recharge aquifers.

Goal 1.3.1-7

Promote efficient use of water resources through water conservation.

Policy 1.3.2-1

Discretionary development which is inconsistent with the goals and policies of the County's Water Quality Management Plan (WQMP) shall be prohibited, unless overriding considerations are cited in by the decision-making body.

Policy 1.3.2-4

Discretionary development shall not significantly impact the quantity or quality of water resources within watersheds, groundwater recharge areas or groundwater basins.

The proposed project is consistent with these goals and polices because: 1) the applicant would use a water recycling system on-site to conserve water; 2) runoff from the site would be collected in sediment retention basins, thereby enhancing percolation into the Lower Aquifer System; 3) low permeability soils would not be placed on aquifer recharge areas during site reclamation; 4) any future water wells at the mine or reclaimed property for open space grazing would be governed by extraction allocations established by the Fox Canyon Groundwater Management Agency (GMA) under Ordinance #5 which places restrictions on future extractions to correct the overdraft condition; 5) there would be no significant degradation of surface water hydrology or quality because the mining plan has incorporated effective sediment retention structures; and, 6) recharge of the local groundwater basin would not be reduced, and in fact, may increase due to the more gradual slopes produced during site reclamation.

The Ventura County General Plan (Public Facilities and Services Appendix) provides the following goals and policies which are applicable to the proposed project:

Water Supply Facilities

Goal 4.3.1-2

Encourage the employment of water conservation measures in new and existing development.

Policy 4.3.2-2

Discretionary development shall be conditioned to incorporate water conservation techniques and the use of drought resistant native plants pursuant to the County's Guide to Landscape Plans.

The project would be consistent with these goals and policies given the water conservation employed at the site (i.e., the use of a recycling system) and because project approval will be conditioned to require the registration of any on-site water well, prior to its use, with the Fox Canyon GMA (refer to Section 4.3.2-1 Groundwater Use). In addition, project approval will be conditioned in the manner described above in Policy 4.3.2-2 (refer to Mitigation Measure B-1 Revegetation Plan).

4.3.4-1 Water Management Plan Consistency

Regarding General Plan Policy 1.3.2-1, the Ventura County Water Management Plan (WMP) was adopted by the Board of Supervisors in February 1995. The 1995 WMP is an update of the 1980 Areawide Water Quality Management Plan. The update is part of a continuing County effort to maintain and improve the management of County water resources in order to meet the current and future demands of urban, industrial, agricultural and in-stream water uses. The WMP sets forth goals, policies and programs for water supply, demand management, and water quality to protect and enhance County water resources. The following WMP goals and policies apply to the proposed project:

Overall Regional Water Resources and Quality

Goal 2

Restore and maintain the chemical, physical and biological integrity of surface and groundwater resources.

Groundwater

Policy C.1

Protect existing groundwater resources and prevent or discourage new development (agricultural or urban), which would degrade groundwater, from locating on aquifer recharge areas.

Water Demand Management

Policy D.1

Preserve groundwater resources within the Fox Canyon Groundwater Management Agency (GMA) boundaries.

Water Quality/Non-Point Source Pollution Issues

Policy A.2

Protect, and where feasible, enhance aquifer recharge areas.

Policy D.1

Prevent the unauthorized abandonment of wells through active enforcement and strengthen current enforcement capabilities.

Policy F.1

Prohibit certain subsequent land uses and practices of reclaimed recharge areas that would be inconsistent with the protection of groundwater and surface water quality and recharge capabilities.

The proposed project would be consistent with these goals and policies because the design of the mining plan would not allow any significant degradation of surface water hydrology or quality. In addition, the proposed excavations and reclamation would be designed so that the recharge of the groundwater basin would not be reduced, nor would groundwater quality be adversely affected.

4.3.4-2 Consistency with the General Plan of the City of Moorpark

The proposed project site is located outside of the City of Moorpark's boundaries and Sphere of Influence (Figure 15). However, the project is located within the City's Area of Interest and is designated as Open Space. Therefore, the following Moorpark General Plan policy applies to the proposed project.

Land Use Element - Preservation of Environmental Quality

Policy 14.6

Areas identified as significant aquifer recharge areas shall be protected and preserved.

The proposed project would be consistent with this policy because there would be no significant degradation of aquifer recharge areas nor of surface water hydrology or quality. In addition, the proposed new extractions would be minimal and the proposed excavations would avoid encountering groundwater. The recommended conditions of approval will ensure groundwater quality will be maintained, while increasing the rate of aquifer recharge, and the reclamation plan would avoid sealing of aquifer recharge areas. As such, the integrity of aquifer recharge areas and groundwater resources would not be reduced.

*

4.3.5 MITIGATION MEASURES

None.

4.3.6 RESIDUAL IMPACTS

After implementation of the above recommended conditions of approval, the proposed project is expected to generate the following potential residual impacts:

- slight increases in TDS and other dissolved constituents that could potentially affect groundwater quality (insignificant adverse impacts, Class III);
- accidental spill of fuels, oils, paints and solvents that could potentially affect groundwater quality (insignificant adverse impacts, Class III);
- infiltration of contaminants into the groundwater aquifer due to leakage from the onsite septic system (insignificant adverse impacts, Class III); and
- increase in groundwater recharge at the site (beneficial impact, Class IV).

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4.4 EROSION AND SEDIMENTATION

4.4.1 EXISTING SETTING

The proposed mining area is contained within a single watershed, encompassing about 433 acres (Figure 23). The watershed is relatively small. The southern half is disturbed by current mining and processing activities, while the northern half is characterized by gentle hills with moderately dense scrub vegetation.

There are two major drainages within the watershed (Figure 24). The central and primary drainage is about 3000 feet in length. It exits the project site at the southeast corner, joining Happy Camp Canyon drainage. A small tributary to the main drainage is located on the eastern edge of the property (Figure 24). The exact location of the central drainage within the disturbed mining area is shown on Figure 9. There are four existing sediment retention basins along the drainage.

Lockman & Associates (1991) estimated the discharge rates for the central drainage for the 10, 25, and 50-year events for mining phases 1, 2, and 3. These estimates of peak stormwater runoff were completed using the Ventura County Flood Control District Hydrology Manual to determine the co-efficient of permeability and the storm intensity. The 10, 25, and 50-year discharge levels are estimated at 766, 889, and 954 cubic feet per second (cfs).

Geotechnical Consultants (1978) estimated the sediment production from the mine under various conditions. The sediment production under the 100-year event for the mining area ranges from 21,000 to 30,100 cubic yards for a mining area that is devoid of vegetation on 10% to 75% of the total surface area, respectively. Geotechnical Consultants (1978) also estimated the annual debris production. For a mining area that is only scarified on 10% of the surface area, the annual sediment production is expected to be 1400 cubic yards. The annual sediment production ranges up to 2000 cubic yards for a mining area that has 75% scarification.

4.4.2 PROJECT IMPACTS

Erosion and sediment, as a topic area, are closely related to the previous discussion on slope stability (refer to Section 4.2.2-2 Slope Stability) which described the landslide potential due to earthquakes, temporary cut slopes during mining operations, and potential instability of permanent slope cuts after the reclamation of the site. Appropriate mitigation is outlined in Section 4.2.5 (GG-1 Slope Stability Analysis and Mitigation) and GG-2 Reclamation Plan).

The impacts described herein are those impacts related to erosion and sedimentation that were not described in the aforementioned section. The Ventura County Initial Study Assessment Guidelines do not provide specific threshold criteria for the environmental assessment of erosion and sedimentation. However, the Guidelines do provide that threshold criteria be determined by the lead agency for the environmental assessment of landslide and mudflow hazards based on the location of the site or project within, or outside of, hillside terrain. The lead agency in this regard, the Public Works Agency, used criteria describing whether the proposed project will: 1) increase peak discharge; or 2) increase the velocity of existing flows.

As described earlier in Section 4.3 GROUNDWATER, the proposed project would flatten slopes in some areas of the site during excavation and reclamation, install terraces, use berms and sediment

basins, and expose more permeable aquifer material. As a result, the proposed project is not expected to increase the peak discharges from the site because: 1) infiltration at the site is expected to be slightly increased with additional mining; and 2) the watershed boundaries would not increase.

In addition, the project is not expected to increase velocities of flows exiting the project site because: 1) the watershed would have a flatter gradient due to mining; and 2) the use of sedimentation ponds would reduce stream velocities.

The exposed sand and gravels at the project site appear to have a high erosion potential. In 1988, the project site contained three sediment detention basins with a combined capacity of 29,000 cubic yards. Buena Engineers described these sediment detention basins as having sufficient capacity to contain the 100-year event with one year accumulation (reasonable worst case conditions), assuming that the watershed is scarified on 75% of its surface area. Since this report, a fourth sediment detention basin was constructed, bringing the combined storage capacity to 37,000 cubic yards.

The applicant intends removing accumulated sediment each year from the basins because they represent marketable products. Based on this consideration, the sizing of the current sediment detention basins appear adequate to capture sediments and prevent them from exiting the site and becoming deposited in Happy Camp Canyon Regional Park. Any deposition of sediments in the downstream areas would include minor wash load, and are considered insignificant adverse impacts (Class III). In order to ensure the deposition of sediments in the downstream areas is minimized, the following conditions of approval are recommended:

Recommended Conditions:

Sediment Detention Basin Design

The permittee shall demonstrate that the capacity and structural integrity of the existing sediment retention ponds are, at a minimum, able to adequately contain the sediments resulting from a 100-year event with a 75% scarified watershed. Documentation of the capacity and structural integrity of each sediment detention pond shall be prepared by a County approved registered civil engineer and submitted to the Public Works Agency for review and approval. Prior to the issuance of the Zoning Clearance for Phase 1, the permittee must first receive Public Works Agency approval of the sediment detention basin design.

The permittee shall also provide documentation of the available capacity and structural integrity of all sediment detention basins as part of the Annual Status Report associated with the annual SMARA-compliance inspection.

Clearing Sediment Plan

Whenever the sediment has been deposited to the point where the capacity of any sediment detention basin on site is reduced by more than 10%, the permittee shall clear the basin(s) of accumulated sediment. Each year, sediments shall be cleared prior to 1

November to ensure there is adequate basin capacity prior to the winter season. The permittee shall document sediment clearing in the Annual Status Report, and demonstrate sediment clearing in the annual SMARA onsite inspection.

In the drainage report by Ghormley (1993), it was shown that the mine area represents only 5% of the total watershed of the Happy Camp Canyon drainage. Hence, changes in average or peak flow from the mine site would cause very minor changes in the hydrology and sediment transport characteristics of the Happy Camp Canyon drainage. The proposed detention basins at the mine site would reduce peak flows entering Happy Camp Canyon by about 40%. The resulting decreases in peak flows in Happy Camp Canyon drainage would only be about 2%. Hence, no adverse hydrologic impact on the downstream areas are expected.

4.4.3 CUMULATIVE IMPACTS

The project has the potential to contribute to increased sediment loading of Happy Camp Canyon Regional Park which would involve grading and other surface disturbing activities. Due to the presence of engineered sediment retention ponds, this would result an insignificant adverse impact (Class III). Section 4.4.2 above recommends conditions of approval that are expected to minimize the deposition sediment loading of Happy Camp Canyon Regional Park.

4.4.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan does not provide specific goals and policies for erosion and sedimentation. However, in the preceding sections of this EIR, several goals and polices are described that have the net effect of minimizing erosion and sedimentation. Refer to Sections 4.2 GEOLOGY AND GEOHAZARDS and 4.3 GROUNDWATER.

4.4.5 MITIGATION MEASURES

None.

4.4.6 RESIDUAL IMPACTS

After implementation of the above recommended conditions of approval, the proposed project is expected to generate the following residual impacts:

- potential for increased sediment loading of Happy Camp Canyon Regional Park (insignificant adverse impact, Class III).

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4.5 BIOLOGICAL RESOURCES

4.5.1 EXISTING SETTING

The biological investigations consisted of a review of available literature on the biological resources in the Moorpark area, a review of in-house literature on sensitive species which potentially occur in the project area, contacts with knowledgeable botanists and wildlife biologists in the region, and a field survey of the project site on 17 December 1991 by Dames & Moore.

Various reports and data sources were reviewed to evaluate the botanical and wildlife resources of the project site and vicinity. These sources include: 1) California Natural Diversity Data Base reports (CNDDDB 1990, 1991); 2) plant distribution data (Munz 1974; Abrams and Ferris 1940-1960; Dale 1986; and Smith and Berg 1988); 3) wildlife distribution data (Webster et al. 1980; Zeiner et al. 1990; Williams 1986; Stebbins 1985; and Remsen 1978); 4) previous environmental documents (Dames & Moore 1990, 1991a,b; Envicom 1984; Impact Sciences, Inc., 1991; Planning Corp. 1990; City of Simi Valley 1988; County of Ventura 1976, 1990); and 5) personal contacts with various local biologists (Borges, Collins, Dice, Hunt, Kuhn, Skinner, Sweet, Thomas, pers. comms.).

4.5.1-1 Vegetation Types

There are ten vegetation types at the project site, classified primarily by dominant plant species, and secondarily by physical and environmental factors such as elevation and human-caused disturbances. Upland types include ruderal, non-native grassland, coastal sage scrub, white sage scrub, chamise chaparral, mixed chaparral, and oak woodland. Types which may be classified as wetlands or riparian habitats include alluvial scrub and freshwater marsh. They are considered potential wetland habitats because they occur in drainage systems; however, a formal wetland delineation was not performed at the project site. Most of these "wetland" habitats occur in sediment detention basins within the current mining lease area and they are continually disturbed. There are no high quality riparian woodlands or undisturbed wetlands within the project site.

The vegetation cover on land which has been graded or scraped varies considerably, depending upon the age of the disturbance and reclamation treatment. Recently graded or scraped land that has not been reclaimed usually contains a sparse cover or ruderal, or disturbance-maintained vegetation. The topsoil stockpile area which has been relatively undisturbed in at least a year contains a unique assemblage of native, coastal sage scrub plant species. One of the steep cut slopes has been seeded with annual grasses for erosion control purposes, and currently contains a mixture of annual grasses and ruderal vegetation.

A description of each of these ten vegetation types that are currently found on the project site is provided below. Dominant plant species are identified for each type by common name, while a list of all vascular plant species observed during the field survey is provided in Table 11. The distribution of vegetation types at the project site is shown on Figure 25.

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KEY TO VEGETATION TYPES:

- | | |
|---|--|
|  California Sage Scrub |  Alluvial Scrub |
|  White Sage Scrub |  Non-Native Grassland |
|  Chamise Chaparral |  Ruderal Vegetation |
|  Mixed Chaparral |  Freshwater Marsh/Water |
|  Oak Woodland |  Regrowth California Sage Scrub |

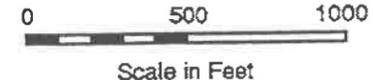
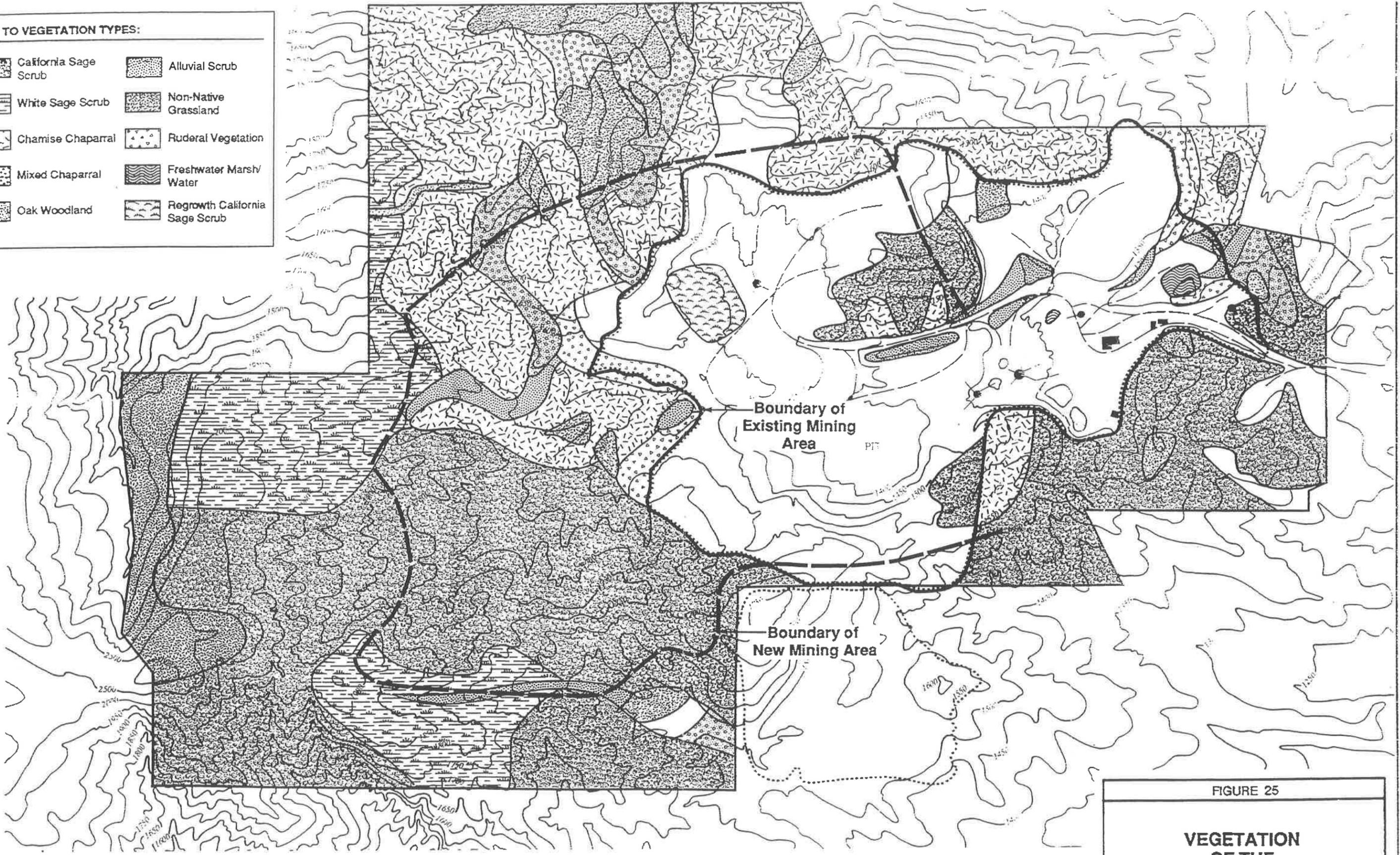


FIGURE 25
VEGETATION OF THE PROJECT SITE
Dames & Moore

TABLE 11

VASCULAR PLANT SPECIES OBSERVED AT THE PROJECT SITE

<u>Scientific Name</u> ²	<u>Common Name</u> ²	<u>Growth Form</u> ³
<i>Adenostoma fasciculata</i>	chamise	S
<i>Agrostis stolonifera</i> *	redtop	PG
<i>Ambrosia acanthicarpa</i> *	annual burweed	AH
<i>Ambrosia psilostachya</i> var. <i>californica</i>	western ragweed	PH
<i>Artemisia californica</i>	California sage	S
<i>Arundo donax</i> *	giant reed	PG
<i>Asclepias fascicularis</i>	narrow-leaved milkweed	PH
<i>Avena barbata</i> *	slender wild oats	AG
<i>Avena fatua</i> *	wild oats	AG
<i>Baccharis pilularis</i>	coyote bush	S
<i>Baccharis glutinosa</i>	mulefat	S
<i>Brassica campestris</i> *	field mustard	AH
<i>Brassica nigra</i> *	black mustard	AH
<i>Bromus diandrus</i> *	rip-gut brome	AG
<i>Bromus rubens</i> *	red brome	AG
<i>Bromus mollis</i> *	soft-chess brome	AG
<i>Calystegia macrostegia</i>	morning glory	PV
<i>Cardionema ramosissimum</i>	sand mat	PH
<i>Carduus pycnocephalus</i> *	Italian thistle	AH
<i>Carex triquetra</i>	triangular-fruited sedge	PG
<i>Cercocarpus betuloides</i>	mountain mahogany	S
<i>Chenopodium album</i> *	white goosefoot	AH
<i>Cirsium californicum</i>	California thistle	PH
<i>Clematis lasiantha</i>	chaparral virgin's bower	PV
<i>Conyza canadensis</i> *	horseweed	AH
<i>Corethrogyne filaginifolia</i>	cudweed-aster	PH
<i>Croton californicus</i>	California croton	PH
<i>Cryptantha</i> sp.	popcorn flower	AH
<i>Dichelostemma puchellum</i>	blue dicks	PH
<i>Diplacus longiflorus</i>	sticky monkeyflower	S
<i>Elymus condensatus</i>	giant wildrye	PG
<i>Eremocarpus setigerus</i>	dove weed	AH
<i>Eriastrum densifolium</i> ssp. <i>austromontanum</i>	perennial eriastrum	PH
<i>Ericameria ericoides</i> ssp. <i>pinifolius</i>	pine bush	S
<i>Eriogonum elongatum</i>	elongate buckwheat	PH
<i>Eriogonum fasciculatum</i>	California buckwheat	S
<i>Eriogonum gracillimum</i>	slender buckwheat	AH
<i>Eriophyllum confertiflorum</i>	golden yarrow	PH
<i>Erodium cicutarium</i>	red-stem filaree	AH
<i>Eucalyptus</i> sp.	eucalyptus	T
<i>Euphorbia albomarginata</i>	rattlesnake weed	AH
<i>Galium angustifolium</i>	narrow-leaved bedstraw	AH
<i>Gilia</i> sp.	gilia	AH
<i>Gnaphalium californicum</i>	california everlasting	PH
<i>Gnaphalium leucocephalum</i>	everlasting	PH
<i>Haplopappus squarrosus</i>	sawtooth goldenbush	S
<i>Heteromeles arbutifolia</i>	toyon	T
<i>Heterotheca grandiflora</i>	telegraph weed	AH
<i>Hypochoeris glabra</i>	smooth cat's ear	AH

<i>Leptodactylon californicum</i>	pricky phlox	S
<i>Lotus scoparius</i>	deer weed	S
<i>Lupinus</i> sp.	annual lupine	AH
<i>Lupinus arboreus</i>	bush lupine	S
<i>Malacothrix saxatilis</i>	cliff aster	PH
<i>Marrubium vulgare</i> *	horehound	AH
<i>Melica imperfecta</i>	small-flowered melica	PG
<i>Melilotus albus</i> *	white sweet clover	AH
<i>Mirabilis californica</i>	wishbone bush	PH
<i>Nicotiana glauca</i> *	tree tobacco	S
<i>Opuntia basilaris</i> ssp. <i>basilaris</i>	beavertail cactus	S
<i>Penstemon centrathifolius</i>	scarlet bugler	PH
<i>Perezia microcephala</i>	sacapellote	PH
<i>Phacelia ramosissima</i> var. <i>sufrutescens</i>	branding phacelia	PH
<i>Phacelia cicutaria</i> var. <i>hispida</i>	caterpillar phacelia	AH
<i>Pityrogramma triangularis</i>	goldenback fern	F
<i>Prunus ilicifolia</i>	holly-leaved cherry	S
<i>Quercus agrifolia</i>	coast live oak	T
<i>Quercus dumosa</i>	scrub oak	S
<i>Rhamnus californica</i>	coffee berry	S
<i>Rhus integrifolia</i>	lemonade berry	S
<i>Ribes malvaceum</i> var. <i>malvaceum</i>	chaparral currant	S
<i>Salix lasiolepis</i>	arroyo willow	T
<i>Salsola iberica</i> *	Russian thistle	AH
<i>Salvia apiana</i>	white sage	S
<i>Salvia columbariae</i>	chia	AH
<i>Salvia leucophylla</i>	purple sage	S
<i>Sambucus mexicana</i>	elderberry	T
<i>Schismus arabicus</i> *	Arabian grass	AG
<i>Senecio douglasii</i>	bush groundsel	S
<i>Senecio vulgaris</i> *	common groundsel	AH
<i>Solanum douglasii</i>	white nightshade	PH
<i>Sonchus oleraceus</i> *	sow-thistle	AH
<i>Stellaria media</i> *	common chickweed	AH
<i>Stephanomeria virgata</i>	twiggy wreath plant	AH
<i>Stillingia linearifolia</i>	linear-leaved stillingia	PH
<i>Stipa pulchra</i>	purple needlegrass	PG
<i>Stipa coronata</i>	giant needlegrass	PG
<i>Streptanthus heterophyllus</i>	streptanthus	AH
<i>Typha latifolia</i>	cattail	PG
<i>Yucca whipplei</i>	our lord's candle	S

¹ Observed during field surveys on December 19, 1991.

² Scientific and common names follow Munz (1974), Abrams and Ferris (1940-1960), and Dale (1986).

³ Growth form: AG = annual grass; AH = annual herb; F = fern; PG = perennial grass; PH = perennial herb; PV = perennial vine; S = shrub; T = tree.

* Introduced or naturalized species.

Ruderal

Ruderal vegetation is dominated by introduced, weedy herbs and grasses which invade disturbed areas. Within the project site, it is found on cut and fill slopes near the actively or recently mined areas and along roadways. Ruderal plant species often occur as major components to most of the other plant communities at the project site. The most abundant ruderal plant species include cudweed aster, tree tobacco, twiggy wreath plant, Russian thistle, mustards, wild oats, red brome, and Arabian grass.

Non-Native Grassland

Non-native grassland occurs on the ridge top at the northern edge of the project site and within the current mine area, on a graded slope that was seeded with an annual grass mixture (Figure 25). This vegetation type is dominated by introduced, non-native, annual grasses and herbs such as zorro fescue, blando brome (= red brome), wild oats, mustards and sow thistle. However, it may also be associated with native species, including needlegrasses, popcorn flower, blue dicks, and annual lupine. The northern grassland habitat consists of a grassland/shrub assemblage, in which the shrub cover is usually less than 10 percent. Common shrub species include California sage, pine bush, and white sage.

White Sage Scrub

This vegetation type is dominated by a sparse cover of white sage shrubs. The total shrub cover is only about 20 to 40 percent. The openings contain a sparse herbaceous mixture of native and non-native plant species. Other common shrub species include our lord's candle and pine bush. Herbaceous species include rattlesnake weed, popcorn flower, twiggy wreath plant, mustards, elongate buckwheat, California croton, needlegrasses, spike moss, and narrow-leaved bedstraw. Within the project site, white sage scrub occurs on moderate slopes in the northern portion of the project site (Figure 25). White sage scrub intergrades with coastal sage scrub in the center of the northern portion of project site. These two vegetation types contain some of the same plant species, with the differences being in the dominant plant species and total shrub cover.

Coastal Sage Scrub

Coastal sage scrub consists of low, soft-stemmed shrubs or suffrutescent herbs, which are often resinous and pungently scented. The dominant, characteristic shrub species is California sage. Other common species on the project site include pine bush, white sage, California buckwheat, common groundsel, our lord's candle, sawtooth goldenbush, giant wildrye, needlegrasses, wishbone bush, and mustards. Taller shrubs and trees, such as toyon, scrub oak, and coast live oak, occur in low numbers throughout this vegetation type. Coastal sage scrub is the predominant vegetation type on the ungraded areas of the project site, covering the mountains in the western portion of the project site (Figure 25). This type of habitat is considered "very threatened" by the California Department of Fish and Game (source: Natural Diversity Data Base, state ranking of S3.1).

Regrowth Coastal Sage Scrub

A stand of coastal sage scrub vegetation occurs on the topsoil stockpile area (see Figure 25). This is where the overburden and tailing soils have been set aside and allowed to naturally revegetate. It is dominated by California everlasting and perennial eriastrum, rather than the dominant coastal sage scrub species, California sage. This habitat is rich in species diversity, containing a mixture of

coastal sage scrub and ruderal plant species such as telegraph weed, tree tobacco, California sage, deer weed, twiggly wreath plant, streptanthus, common groundsel, and sawtooth goldenbush.

Chamise Chaparral

Chamise chaparral at the project site is dominated almost exclusively by the chamise shrub, or it may be associated with coastal sage scrub species. The shrub cover is generally moderate to dense, with a sparse understory of spring flowering annuals or short lived perennials. Associated plant species include white sage, deer weed, pine bush, red brome, chia, and popcorn flower. As with coastal sage scrub, chamise chaparral contains scattered toyon, scrub oak, and coast live oak trees and shrubs. Chamise chaparral occurs in the eastern portion of the project site (Figure 25). It intergrades with mixed chaparral on steeper slopes.

Mixed Chaparral

Mixed chaparral consists of a dense, often impenetrable cover of tall, broad-leaved shrubs. The impenetrable stands contain no understory vegetation, while the more open stands contain a herbaceous-grassy understory. Mixed chaparral occurs in small, steeply walled canyons and on mesic north and east facing slopes on the project site (Figure 25). Common species include scrub oak, chamise, coffeeberry, laurel sumac, toyon, coast live oak, small-flowered melica, giant needlegrass, and scarlet bugler.

Oak Woodland

Oak woodlands are typically found on north-facing slopes, shaded ravines and canyons along the coast ranges of California. A moderately dense woodland occurs at the site, dominated by the evergreen coast live oak tree. It contains the following understory species: chamise, toyon, wild oats, and horehound. Oak woodland vegetation is primarily scattered throughout the project site, as small stands or individual trees. However, a large oak grove occurs at the eastern edge of the project site (Figure 25), most of which is outside of the proposed mine expansion area.

Alluvial Scrub

The alluvial scrub vegetation type occurs along the central drainage of the project site. The vegetation cover varies along the length of the drainage, from a low cover of herbs and grasses in the sandy, drier areas, to patches of willow, mulefat, and elderberry shrubs in the rocky areas that tend to hold more water. Common herbaceous species include California croton, everlasting, tree tobacco, annual burweed, and horseweed. Although this habitat is dry for most of the year, portions may be considered riparian habitat. This type of habitat is considered "very threatened" by the California Department of Fish and Game (source: Natural Diversity Data Base, state ranking of S1.1).

Alluvial scrub occurs along the canyon bottoms and in the sediment detention basins of the project site (Figure 25). The western and north-eastern canyons contain mostly annual grasses, while the canyon in the middle of the project site contains many elderberry and mulefat shrubs north of the existing mine. The two detention basins in the northern portion of the existing mine contain mulefat shrubs, and a few small willow and coast live oak trees.

This vegetation type is not the same as the alluvial scrub that occurs in Happy Camp Canyon. The scrub in Happy Camp Canyon is dominated by sage brush scrub, while the vegetation at the mine is dominated by mulefat and willows.

Freshwater Marsh

Freshwater marsh vegetation periodically lines the banks of the two processing ponds within the current mining lease. These ponds are filled with water from processing and recycling. The sediment collected in the ponds is periodically removed and added to the topsoil stockpile. The freshwater marsh vegetation lining the basins is also removed in this process, so the plant species consist of fast growing, disturbance tolerant species, such as cattail, mulefat, giant reed, tree tobacco, and horseweed. Willow trees grow in less frequently disturbed portions of the ponds.

4.5.1-2 Wildlife Habitat and Species

Major wildlife habitats within the project area include grassland, chaparral/scrub, oak woodland, and open water/wetland. The distribution of wildlife habitat types generally corresponds to the vegetation types described above and shown on Figure 25. The grassland habitat contains non-native grassland, alluvial scrub, sparse white sage scrub, and sparse coastal sage scrub vegetation; the chaparral/scrub habitat contains chamise chaparral, mixed chaparral, dense white sage scrub, and dense coastal sage scrub vegetation; the oak woodland habitat contains the oak woodland vegetation type as well as the scattered individual oak trees; and the open water/wetland habitat contains freshwater marsh and alluvial scrub vegetation.

The four wildlife habitats and their dominant species are described below. Table 12 lists wildlife species which may occur at the project site, as well as the habitats with which they may be found. Because of their mobility, wildlife species are typically not restricted to their characteristic habitat types.

Grassland

Although the grassland vegetation type in the project area contains scattered shrubs, the openings are large enough that it is still considered grassland habitat. Alluvial scrub in the undeveloped portions of the project area is included in this habitat because it is dry for most of the year and also contains a low shrub cover. Sparse white sage scrub and coastal sage scrub vegetation types, in which the grassland cover is predominant, are considered grassland habitat.

Several species of reptiles and small mammals may reside in burrows in the grassland habitat. The most common resident reptiles expected on the project site include western fence lizard, side-blotched lizard, coachwhip, gopher snake, common kingsnake. Mammals that may reside on the project site include desert cottontail, Audubon's cottontail, California ground squirrel, California pocket mouse, Pacific kangaroo rat, western harvest mouse, and deer mouse. Many larger mammals and raptors obtain most of their diet in grasslands, feeding on the reptiles and small mammals. Bird species which commonly forage in grasslands include loggerhead shrike, red-tailed hawk, barn owl, Brewer's blackbird and house finch. Bird species which may nest in the grassland habitat include western meadowlark, lark sparrow, and burrowing owl.

TABLE 12

WILDLIFE SPECIES THAT MAY OCCUR AT THE PROJECT SITE

<u>Scientific Name</u> ¹	<u>Common Name</u> ¹	<u>Habitat</u> ²		
		C	G	Q
REPTILES/AMPHIBIANS				
<i>Ensatina eschscholtzi</i>	Ensatina		X	X
<i>Sceloporus occidentalis</i>	Western fence lizard	X	X	X
<i>Uta stansburiana</i>	California side-blotched lizard	X	X	X
<i>Phrynosoma coronatum frontale</i>	California horned lizard	X	X	
<i>Eumeces skiltonianus</i>	Western skink	X		
<i>Cnemidophorus tigris</i>	Western whiptail	X	X	X
<i>Gerrhonotus multicarinatus</i>	Southern alligator lizard		X	X
<i>Leptotyphlops humilis</i>	Western blindsnake	X		
<i>Masticophis flagellum</i>	Coach whip	X	X	X
<i>Masticophis lateralis lateralis</i>	California striped racer	X		
<i>Coluber constrictor mormon</i>	Western racer		X	X
<i>Lampropeltus getulus</i>	Common king snake	X	X	X
<i>Pituophis melanoleucus</i>	Gopher snake	X	X	X
<i>Thamnophis sirtalis</i>	Common garter snake	X		
<i>Hypsiglena torquata</i>	Night snake	X		X
<i>Crotalus viridis</i>	Western rattlesnake	X		
BIRDS				
<i>Cathartes aura</i>	Turkey vulture	X	X	X
<i>Accipiter cooperi</i>	Cooper's hawk		X	X
<i>Buteo regalis</i>	Red-shouldered hawk		X	
<i>Buteo jamaicensis</i>	Red-tailed hawk		X	X
<i>Aquila chrysaetos</i>	Golden eagle	X	X	
<i>Falco sparverius</i>	American kestrel	X	X	X
<i>Callipepla californica</i>	California quail	X		
<i>Columba fasciata</i>	Band-tailed pigeon	X	X	
<i>Zenaida macroura</i>	Mourning dove	X	X	X
<i>Geococcyx californianus</i>	Roadrunner	X		
<i>Tyto alba</i>	Barn owl		X	X
<i>Otus asio</i>	Common screech owl			X
<i>Chaetura vauxi</i>	Vaux's swift	X	X	X
<i>Calypte spp.</i>	Hummingbirds	X		
<i>Selasphorus spp.</i>	Hummingbirds	X		
<i>Melanerpes formicivorus</i>	Acorn woodpecker			X
<i>Picoides nuttallii</i>	Nuttall's woodpecker			X
<i>Colaptes auratus</i>	Common flicker	X		
<i>Sayornis saya</i>	Say's phoebe	X	X	X
<i>Tyrannus verticalis</i>	Western kingbird	X	X	X
<i>Eremophila alpestris</i>	Horned lark		X	
<i>Tachycineta thalassina</i>	Violet-green swallow			X
<i>Stelgidopteryx rufi-collis</i>	Rough-winged swallow			X
<i>Aphelocoma coerulescens</i>	Scrub jay	X		X
<i>Corvus brachyrhynchos</i>	American crow	X	X	X
<i>Corvus corax</i>	Common raven	X	X	X
<i>Paus inornatus</i>	Plain titmouse			X
<i>Psaltriparus minimus</i>	Bushtit	X		X
<i>Catherpes mexicanus</i>	Canyon wren			X
<i>Thryomanes bewicki</i>	Brewick's wren	X	X	

TABLE 12
(continued)

<u>Scientific Name</u> ¹	<u>Common Name</u> ¹	<u>Habitat</u> ²		
		<u>C</u>	<u>G</u>	<u>O</u>
<i>Toxostoma redivivum</i>	California thrasher	X		
<i>Catharus guttatus</i>	Hermit thrush	X	X	X
<i>Turdus migratorius</i>	American robin	X		X
<i>Regulus calendula</i>	Ruby-throated kinglet	X		X
<i>Chamaea fasciata</i>	Wrentit	X		
<i>Lanius ludovicianus</i>	Loggerhead shrike	X	X	X
<i>Passerella</i> spp.	Sparrows	X		X
<i>Zonotrichia</i> spp.	Sparrows	X		X
<i>Spizella</i> spp.	Sparrows	X		X
<i>Junco hyemalis</i>	Dark-eyed junco	X		X
<i>Chondestes grammacus</i>	Lark sparrow		X	
<i>Amphispiza belli</i>	Sage sparrow		X	
<i>Carpodacus mexicanus</i>	House finch	X	X	X
<i>Pipilo erythrophthalmus</i>	Rufous-sided towhee	X		X
<i>Pipilo fuscus</i>	Brown towhee	X		X
<i>Euphagus cyanocephalus</i>	Brewer's blackbird		X	
<i>Sturnella neglecta</i>	Western meadowlark		X	
MAMMALS				
<i>Scapanus latimanus</i>	Broad-footed mole	X		X
<i>Lepus californicus</i>	Black-tailed jackrabbit	X	X	
<i>Sylvalagus auduboni</i>	Audubon's cottontail	X		
<i>Spermophilus beecheyi</i>	California ground squirrel	X	X	X
<i>Eutamias merriami</i>	Merriam chipmunk	X		
<i>Thomomys bottae</i>	Botta's pocket gopher	X	X	
<i>Perognathus californicus</i>	California pocket mouse	X	X	
<i>Dipodomys agilis</i>	Pacific kangaroo rat	X		
<i>Reithrodontomys megalotis</i>	Western harvest mouse	X	X	X
<i>Peromyscus californicus</i>	California mouse	X		
<i>Peromyscus maniculatus</i>	Deer mouse	X	X	X
<i>Neotoma lepida</i>	Desert woodrat	X		
<i>Neotoma fuscipes</i>	Dusky-footed woodrat			X
<i>Microtus californicus</i>	California vole		X	
<i>Canis latrans</i>	Coyote	X	X	X
<i>Urocyon cinereoargenteus</i>	Gray fox	X	X	X
<i>Procyon lotor</i>	Raccoon			X
<i>Spilogale gracilis</i>	Spotted skunk		X	X
<i>Mephitis mephitis</i>	Striped skunk		X	X
<i>Felis concolor</i>	Mountain lion	X	X	X
<i>Felis rufus</i>	Bobcat	X	X	X
<i>Odocoileus hemionus</i>	Mule deer	X	X	X

Sources: Dames & Moore 1990, 1991a,b; County of Ventura 1976; Impact Sciences, Inc., 1991.

¹ Nomenclature follows Garrett and Dunn 1981; Burt and Grossenheider 1976; American Ornithologists Union (AOU) 1982; Stebbins 1985.

² Habitat types: C = Chaparral/scrub; G = Grassland; O = Oak Woodland

Status:

- FE = Federally listed, endangered (USFWS 1991b).
- C2 = Candidate species under review for Federal listing (USFWS 1991a).
- SE = State listed, endangered (CDFG 1991b).
- CSC = Considered a "Species of Special Concern" by the California Department of Fish and Game (Remsen 1978; Williams 1986; Jennings 1983).
- CP = California Fully Protected - California native species or subspecies that may not be taken or possessed at any time (CDFG 1988).

Chaparral/Scrub

This habitat contains a moderate to dense shrub cover. A large variety of wildlife reside and forage in chaparral/scrub habitats in southern California. Common resident reptiles and small mammals include southern alligator lizard, western fence lizard, striped racer, western rattlesnake, brush rabbit, black-tailed jackrabbit, Meriam chipmunk, California pocket mouse, western harvest mouse, and dusky footed woodrat. Larger mammals such as coyote and California mule deer commonly forage in chaparral/scrub habitats. Common resident birds include California quail, California thrasher, Bewick's wren, California towhee, scrub jay, and rufous crowned sparrow.

Oak Woodland

Oak woodland habitats occur at the eastern edge of the project site and throughout the site as small stands or individual scattered trees. Oak woodland habitats are generally used by a variety of wildlife, for cover, food, nesting and roosting. Wildlife use of the larger oak woodland habitat at the eastern edge of the project site, and also oak woodland habitats off site to the east, is expected to be high. However, since most of the oak woodland habitat on site consists of the small stands, and due to the mining activities, the species abundance and diversity around the oak trees within the project site is expected to be low. Wildlife from the significant oak woodlands at the eastern edge of the site and off-site may wander and forage on throughout the project site.

Reptiles which inhabit oak woodlands in the project area include southern alligator lizard, California legless lizard, western racer, and garter snake. The trees provide excellent cover for many mammalian species such as opossum, shrews, raccoon, badger, skunks, California mule deer, coyote, gray fox, mountain lion, and bobcat. The presence of trees also provides nesting, roosting and foraging habitat for many avian species, including woodpeckers, common flicker, northern oriole, sparrows, and warblers. Several species of raptors may nest in the oak trees in the project area, such as turkey vulture, red-shouldered hawk, red-tailed hawk, Cooper's hawk, prairie falcon, screech owl, and great horned owl.

Open Water/Wetland

This habitat consists of the process water ponds within the current mining lease. The ponds are filled with water and surrounded by freshwater marsh vegetation. Open water/wetlands are important wildlife habitats in the project area since it is so dry. However, the relative value of the ponds to wildlife is low since they are surrounded by heavy machinery and are usually lighted during the night. For this reason, no resident wildlife are expected in this habitat on the project site. Mammals and birds from the adjacent habitats may forage for insects or frogs around the basins, or may come to the ponds for water. The ponds may be used by wildlife only when the mine is shut down (as in the winter nights).

4.5.1-3 Sensitive Plants

Sensitive plants consist of federal- and state-listed species (USFWS 1991a; CDFG 1991a), federal candidates for listing (USFWS 1990), and plant species considered rare by the California Native Plant Society (CNPS) (Smith and Berg 1988) and the Simi Valley General Plan (City of Simi Valley 1988). Ten species of sensitive plants are known to occur in the Simi Valley/Santa Susana Mountains region, and could potentially occur at the project site. This conclusion is based upon a review of botanical reference manuals (Munz 1974; Abrams & Ferris 1940-1960), the CNPS inventory of sensitive plants (Smith and Berg 1988), information compiled by the California Natural Diversity Data Base (CNDDB 1990, 1991), conversations with local botanists (Burgess, Kuhn, Dice, Thomas, Henrickson, pers. comms.), and field surveys of the project site to assess habitat conditions. These species are summarized in Table 13, and described below.

Many of the species listed on Table 13 grow only in certain soil types that do not occur on the project site. Information on soil types on the project site is based upon Ventura County soil guides (California Division of Mines and Geology 1972 and 1995; USDA 1970), a site reconnaissance, and conversations with previous TMC Mine owner, Jim Sandoval. Santa Susana tarplant (*Hemizonia minthornii*) grows on older cretaceous sandstone outcroppings such as at the eastern end of the Simi Valley. Conejo dudleya (*Dudleya parva*), Conejo buckwheat (*Eriogonum crocatum*), and dune larkspur (*Delphinium parryi* ssp. *blochmaniae*) are all found in the Simi Valley area, but only on soils derived from Conejo volcanics, which have not been identified at or near the project site. These plants may also occur on small pockets of other types of volcanic soils (Thomas, pers. comm.), which also do not occur on the project site.

Lyon's pentachaeta (*Pentachaeta lyonii*) occurs scattered throughout the coastal mountains, from western Los Angeles County to northern Ventura County. Locally it has been recorded from the hills between Moorpark and Thousand Oaks. Lyon's pentachaeta grows in clay soils, on knolls that contain a very sparse grassland cover, and usually at the edges of firebreaks. Suitable habitat occurs only at the northern end of the project site in the non-native grassland habitat, outside of the proposed mine expansion area.

Braunton's milkvetch (*Astragalus brauntonii*) grows in limestone lenses in chaparral and coastal sage scrub habitats. This species germinates only after fire or mechanical scarification of the seed. It was once thought to be extirpated, but there have been at least four recent sightings of Braunton's milkvetch in southern California. The closest, and northern-most population is located in the Oak Park area of Agoura Hills (Planning Corp. 1990). However, other populations could be present on limestone soils in the region (Thomas, pers. comm.). Since limestone soils or lenses were not observed and are not known to occur on the project site, this species is not expected to occur on the project site.

Nevin's brickellia (*Brickellia nevinii*), fish's milkwort (*Polygala cornuta* var. *fishae*), Catalina mariposa lily (*Calochortus catalinae*), and club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*) are not listed as threatened or endangered, nor are they proposed for listing. They are included on List 4 of the CNPS inventory which consists of a "watch list".

TABLE 13

SENSITIVE PLANT SPECIES KNOWN FROM THE MOORPARK AREA

<u>Scientific Name</u> ¹	<u>Common Name</u> ¹	<u>Status</u> ² Fed/State/CNPS	<u>Growth</u> <u>Form</u> ³	<u>Flowering</u> <u>Period</u>	<u>Habitat</u>	<u>Local</u> <u>Distribution</u> ⁴
<i>Astragalus brauntonii</i>	Braunton's milk vetch	C2/--/1B	PH	Feb-June	Chaparral; limestone soils. 50-1500 ft.	Thousand Oaks and Agoura Hills.
<i>Brickellia nevinii</i>	Nevin's brickellia	--/--/4	S	Sept.-Nov.	Chaparral; dry slopes washes; 800-5500 ft.	Tapo Canyon area, north of Simi Valley.
<i>Calochortus catalinae</i>	Catalina mariposa lily	--/--/4	PH	March-May	Grassland, and openings in scrub, chaparral, oak woodland.	Common throughout the coastal foothills.
<i>Calochortus clavatus</i> var. <i>clavatus</i>	club-haired mariposa lily	--/--/4	PH	April-June	Grassland, and openings in coastal sage scrub, chaparral and oak woodland.	Common throughout the southern coastal foothills.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	dune larkspur	--/--/1B	PH	April-May	Chaparral; clayey soils derived from Conejo volcanics; sand dunes.	Conejo Pass.
<i>Dudleya parva</i>	Conejo dudleya	C1/--/1B	PH	May-June	Chaparral, coastal sage scrub, grassland; soils derived from Conejo volcanics.	Conejo Pass and Wildwood Regional Park in Thousand Oaks.
<i>Eriogonum crocatum</i>	Conejo buckwheat	C2/CR/1B	PH	April-July	Coastal sage scrub; Conejo volcanic outcrops.	Wildwood Regional Park in Thousand Oaks.
<i>Nolina cismontana</i>	Cismontane nolina	--/--/LU	S	April-June	Chaparral; coastal sage scrub; dry slopes.	Oak Park in Agoura Hills and Ojai.
<i>Pentstemon lyonii</i>	Lyon's pentstemon	C1/CE/1B	AH	March-April	Grassland, openings in chaparral and coastal sage scrub; soils derived from Conejo volcanics.	Las Posas Hills and Santa Susana Mountains.
<i>Polygala cornuta</i> var. <i>fishae</i>	Fish's milkwort	--/--/4	S	June-Aug.	Chaparral, oak woodland; rocky canyons; below 3000 ft.	Calumet Canyon on the north face of Oak Ridge.

¹ Scientific and common names follow Munz (1974) and Smith and Berg (1988), except *Nolina cismontana*, which is a newly described species (Planning Corp. 1990).

TABLE 13
(concluded)

² Status information:

Federal (USFWS 1990):

- C1 = Federal candidate category 1; enough data on file to support the federal listing.
- C2 = Federal candidate category 2; threat and/or distribution data are insufficient to support federal listing.

State (CDFG 1991):

- CR = Listed as rare in the State of California.
- CE = Listed as endangered in the State of California.

Other

CNPS (Smith and Berg 1988):

- 1B = Plants of limited distribution—a watch list.
- LU = (Locally Uncommon):

Considered locally sensitive by botanists (Burgess, pers. comm.) and Simi Valley General Plan (City of Simi Valley 1988).

³ Growth Form: AH = annual herb; PH = perennial herb; S = shrub.

⁴ Distribution information based upon the following sources: CNDDB 1990,1991; Planning Corp. 1990; Smith and Berg 1988; Dames & Moore, in-house files.

Several populations of Nevin's brickellia were recorded from the Big Sky Ranch property in 1984, which is several miles east of the project site (Envicom 1984). Nevin's brickellia occurs in coastal sage scrub, primarily on steep canyon walls above streams, but also potentially in drier habitats. Suitable habitat for Nevin's brickellia occurs in scattered locations on the project site, where there is naturally occurring steep-walled slopes.

Fish's milkwort is known from the Santa Monica Mountains and the mountains around Ojai. It has recently been observed in Calumet Canyon (Dames & Moore, in-house files), which is about three miles north of the project site. This moderate sized shrub grows in shady, rocky canyons covered with oak woodland or mixed chaparral vegetation. Suitable habitat for Fish's milkwort occurs only at eastern edge of the project site, outside of the proposed mine expansion area.

Catalina and club-haired mariposa lilies grow in grasslands and open areas within coastal sage scrub, chaparral and oak woodland vegetation types, usually in heavy, clay soils. Both are listed because their habitat is threatened by coastal development; however, they are relatively common species in Santa Barbara and Ventura Counties. Suitable habitat for Catalina and club-haired mariposa lilies occurs in the clay soils north of the project site, outside of the proposed mine expansion area.

The classification of cismontane nolina (*Nolina cismontana*) is currently being revised. It was thought to be included in the species *Nolina parryi*, but recent work by James Dice, California Department of Parks and Recreation, indicates that *N. cismontana* is actually a separate species from *N. parryi* that is known from only a few scattered populations in southern California (Planning Corp. 1990; Dice, pers. comm.). As soon as it is officially recognized as a unique species, it will be listed on the CNPS's List 1B and recommended for listing by the state and federal governments (Skinner, pers. comm.). It grows on clay soils, among chaparral and scrub vegetation. Populations of *N. cismontana* are known from the Oak Park area, many miles south of the project site (Planning Corp. 1990), and also in Wheeler Gorge, in the Ojai area (Thomas, pers. comm.). Suitable habitat for cismontane nolina occurs north of the project site, outside of the proposed mine expansion area.

In summary, only one sensitive plant species potentially occurs at the project site: Nevin's brickellia. This species has a low likelihood of occurrence in small numbers at the project site. It is not a threatened or endangered species, nor a candidate for listing.

4.5.1-4 Sensitive Animals

Sensitive animals consist of federal- and state-listed species (USFWS 1991a; CDFG 1991b), federal candidates for listing (USFWS 1991b), California fully protected species (CDFG 1988), and California wildlife Species of Special Concern. Wildlife Species of Special Concern are taxa included on lists of regionally declining wildlife, including ones for reptiles and amphibians by Jennings (1983), birds by Remsen (1978), and mammals by Williams (1986).

Based on the review of distribution guides (Zeiner et al. 1990; Ingles 1965; Burt and Grossenieder 1976; Stebbins 1985; Garrett and Dunn 1981), previous environmental documents (Dames & Moore 1990, 1991a,b; CH2MHill 1991; Impact Sciences, Inc., 1991; MBA 1991; Planning Corp. 1990; Envicom 1984; County of Ventura 1976; USFWS 1986), occurrence records of sensitive animals compiled by the CNDDB (1990, 1991), and conversations with local biologists (Collins,

Hunt, Kuhn, Burges, pers. comms.), 18 taxa of sensitive wildlife are known to or could potentially occur in the project area (see Table 14). However, most of these taxa are not expected to occur on the project site, except as rare visitors, due to lack of suitable habitat and poor habitat quality resulting from existing mining disturbances. Those taxa which are extremely rare or have a greater probability of occurring in the project area described below.

The coast horned lizard (*Phrynosoma coronatum*) occurs throughout the dry coastal regions of California, west of the desert and high-elevation mountains. Suitable habitat for this species is moderate slopes with a light cover of chaparral or coastal sage scrub vegetation. This species includes two varieties which have different status rankings. The San Diego horned lizard (*P. c. blainvillei*) is a Category 2 federal candidate species and a CDFG Species of Special Concern. The California horned lizard (*P. c. frontale*) is a CDFG Species of Special Concern. Integration between the two subspecies has occurred in northern Ventura County and northwestern Los Angeles County (McGurty 1980). A historic record of the San Diego horned lizard is listed from the Santa Susana Mountains several miles southeast from the project site (CNDDDB 1990). Either form of the coast horned lizard may occur at the project site, although the California coast horned lizard is more likely to occur northwest of the Los Angeles Basin.

The coast patch-nosed snake (*Salvadora hexalepis virgultea*) is a Category 2 federal candidate species and is listed as a Species of Special Concern by the CDFG. Its range extends coastally from San Luis Obispo County south into northwest Baja California. Coast patch-nosed snakes utilize upland scrub and chaparral habitats as well as washes. It was not observed during the field surveys. It is, however, expected to occur in the project area (Sam Sweet, pers. comm.).

The loggerhead shrike (*Lanius ludovicianus*) is a Category 2 federal candidate species. It is a resident in lowlands and foothills preferring open habitats with adequate perch sites from which it searches for prey. Loggerhead shrike populations have declined because of habitat loss to agricultural conversion and development. However, populations in the Pacific states have remained fairly stable (Morrison 1981). Because of the availability of suitable foraging and nesting habitat, it is likely that this species nests in the project area.

The following raptors considered to be declining or threatened in the region may occur throughout Southern California as residents or winter migrants: golden eagle (*Aquila chrysaetos*), ferruginous hawk (*Buteo regalis*), northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperi*), black-shouldered kite (*Elanus caeruleus*), and prairie falcon (*Falco mexicanus*). Ferruginous hawk, northern harrier, sharp-shinned hawk, and prairie falcon are not expected to nest or breed at or near the project site because they are winter migrants in California. The oak woodlands in Happy Camp Canyon Regional Park east of the project site provide moderate to high quality roosting habitat in the winter for these species. These oak woodland habitats also provide high quality nesting habitat for many other sensitive species of raptors, including the golden eagle, Cooper's hawk, and black-shouldered kite. Oak trees on the project site are not likely to be regularly used for roosting or nesting because they are scattered, occur in such low numbers, and due to the noise and activities associated with the mine.

TABLE 14

SENSITIVE ANIMAL SPECIES POTENTIALLY OCCURRING IN THE MOORPARK AREA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status Federal/State</u> ¹	<u>Habitat</u>	<u>Local Distribution</u> ²
REPTILES				
<i>Phrynosoma coronatum blainvillei</i>	San Diego horned lizard	C2/CSC	Coastal sage scrub, chaparral; sandy washes	Northwest Los Angeles County
<i>Phrynosoma coronatum frontale</i>	California horned lizard	--/CSC	Coastal sage scrub, chaparral; sandy washes	Ventura County and south
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	--/CSC	Washes, sandy flats, chaparral; rocky areas	Ventura County and south areas
BIRDS				
<i>Accipiter cooperii</i>	Cooper's hawk	-/CSC	Oak woodland; riparian; grassland	Resident of project area
<i>Accipiter striatus</i>	Sharp-shinned hawk	--/CSC	Riparian and oak woodland	Rare winter migrant; potential habitat present in Happy Canyon
<i>Aquila chrysaetos</i>	Golden eagle	-/CP,CSC	Forages over grassland; agricultural fields	Expected throughout as a year-round resident
<i>Athene cunicularia</i>	Burrowing owl	--/CSC	Grassland, sparse scrubland; occupies ground squirrel burrows	Rare resident of project region; no recent or historic records from the project area
<i>Buteo regalis</i>	Ferruginous hawk	C2/CSC	Grasslands and agricultural fields	Rare winter migrant; no breeding records in California
<i>Circus cyaneus</i>	Northern harrier	-/CSC	Marshes and adjacent grassland; agricultural fields	Migrant; Breeds in Central Valley
<i>Elanus caeruleus</i>	Black-shouldered kite	--/CP	Grassland, riparian areas	Uncommon resident of project area; potential habitat in Happy Canyon
<i>Falco mexicanus</i>	Prairie falcon	-/CSC	Grassland	Rare winter migrant
<i>Lanius ludovicianus</i>	Loggerhead shrike	C2/--	Chaparral, coastal sage scrub	Resident of project area

TABLE 14
(continued)

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status Federal/State</u> ¹	<u>Habitat</u>	<u>Local Distribution</u> ²
<i>Polioptila californica</i>	California Gnatcatcher	FT/CSC	Coastal sage scrub	Rare non-migratory resident, recently sighted in 1995 approx. 4 miles south, last previous sighting was 1924
MAMMALS				
<i>Macrotus californicus</i>	California leaf-nosed bat	C2/CSC	Many; roosts in caves and abandoned structures	Simi Valley (reportedly extirpated)
<i>Antrozous pallidus</i>	Pallid bat	--/CSC	Many; roost in caves and abandoned mineshafts	Status unknown
<i>Euderma maculatum</i>	Spotted bat	C2/CSC	many; caves and mines shafts	Status unknown
<i>Bassariscus austutus</i>	Ringtail	--/CP	Riparian, oak woodland	Status unknown
<i>Taxidea taxus</i>	American badger	-/CSC	Grassland and oak woodland	Uncommon resident

¹ Status:

Federal = U.S. Fish and Wildlife Service 1991a,b

FE = listed as Endangered under the Federal Endangered Species Act.

FT = listed as Threatened under the Federal Endangered Species Act.

C2 = Candidate species under review for Federal listing.

C3 = No longer a candidate for Federal listing.

State = California Department of Fish and Game 1991b

CE = listed as Endangered under the California Endangered Species Act.

CT = listed as Threatened under the California Endangered Species Act.

CP = California fully protected species; individuals may not be possessed or taken at any time.

CSC = considered a species of special concern by the California Department of Fish and Game.

² Distribution information: CNDDDB 1990, 1991; Remsen 1978; County of Ventura 1976; Impact Sciences, Inc., 1991; Dames & Moore 1990, 1991a,b; Zeiner et al. 1988-1990; Williams 1986; Paul Collins, pers. comm.; Larry Hunt, pers. comm.

The burrowing owl (*Athene cunicularia*) is found widely over California in grassland, pasture land and scrub habitats. Unlike other owls, this species is ground-dwelling, usually occupying abandoned ground squirrel burrows, which it excavates and modifies. It has been declining steadily since the 1940's due to the conversion of grasslands and pasture lands to agriculture, and the destruction of ground squirrel colonies by plowing and poisoning (Remsen 1978). Suitable foraging habitat and ground squirrel colonies are present within the grassland habitats in the northern portion of the project site, outside of the proposed mine expansion area.

The California gnatcatcher (*Poliophtila californica californica*) is currently listed as a threatened species by the USFWS. The gnatcatcher is nonmigratory and nests and forages in moderately dense stands of coastal sage scrub occurring on arid hillsides, mesas, and washes. Coastal sage scrub communities dominated by California sagebrush, California buckwheat, and white sage seem to be preferred by this species. Loss of habitat for this species and fragmentation of habitat from expanding development and agriculture has been a major factor in the decline of this species in southern California. At the present time, it appears that California gnatcatchers may vary in abundance from fairly common to quite rare. In addition, California gnatcatchers may or may not occur in areas of apparently ideal habitat. Ventura County is at the historic extreme northern range of the California gnatcatcher. One California gnatcatcher was observed in Moorpark on several dates between June 14 and 27, 1995. (Jones and Ramirez 1995). Prior to the sighting of the single individual in 1995, no other sightings have been documented in Ventura County since 1924. The 1995 sighting occurred approximately 4 miles south of TMC's proposed project site at an elevation of between 600 and 700 feet.

A survey of the TMC site was conducted (refer to Appendix L California Gnatcatcher Survey) and no California gnatcatchers were detected on either the project site or the two off-site locations. The two off-site locations were at the lowest elevations surveyed and contained the highest quality coastal sage scrub. Based on the survey, it was concluded the potential for California gnatcatchers to occur at the survey site is extremely low due to the northern extreme of the range, elevation, marginal coastal sage scrub habitat, lack of California gnatcatchers on suitable off-site habitat, and the fact that only one sighting has been documented in the County since 1924.

Five sensitive mammalian species may occur at the project site, pallid bat (*Antrozous pallidus*), spotted bat (*Euderma maculatum*), California leaf-nosed bat (*Macrotus californica*), ringtail (*Bassariscus austutus*), and badger (*Taxidea taxus*). Although they are not common in the Simi Valley area, the badger and ringtail may occur in grassland and oak woodland habitats in the project area (Kuhn, pers. comm.), which are primarily outside of the proposed mine expansion area. A population of California leaf-nosed bat was recorded from Simi Valley in 1950, but has apparently been extirpated (CNDDDB 1990). Bats typically roost in fairly undisturbed caves, abandoned mine shafts, abandoned building, and rock crevices. The present status of most sensitive bats in this region is not known. The range and habitat for bats varies greatly, but most do not occur in frequently disturbed areas such as the current mine.

4.5.2 PROJECT IMPACTS

The Ventura County Initial Study Assessment Guidelines provide specific threshold criteria for the environmental assessment of biological resources. So as to reduce redundancy, these criteria are listed once, rather than being repeated in each subsection.

THRESHOLD CRITERIA

Appendix G of the CEQA Guidelines states that a project will normally have a significant impact if it would:

- (a) Conflict with adopted environmental plans and goals of the community where it is located; ...*
- (c) Substantially affect a rare or endangered species of animal or plant, or the habitat of the species;*
- (d) Interfere substantially with the movement of any resident or migratory fish or wildlife species; ...*
- (t) Substantially diminish habitat for fish, wildlife or plants; ...*
- (v) ... Involve the use, production or disposal of materials which pose a hazard to ... animal or plant populations in the area affected.*

Section 15065(a) of the CEQA Guidelines states that a project may have a significant effect if it has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

It is the goal of the Ventura County General Plan to preserve and protect significant biological resources in Ventura County. The General Plan further states that discretionary development which could potentially impact biological resources shall be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures.

The following general guidelines are presented to identify the general parameters of "significant impacts". Whether these threshold criteria are broached by a particular project must be determined, on a case-by-case basis, by a qualified biologist.

1. Endangered, Threatened, or Rare Species

A significant impact to such species would occur if a project would directly or indirectly:

- reduce species population*
- reduce species habitat*
- restrict reproductive capacity*

2. Wetland Habitat

A significant impact would result from the direct reduction of, or a substantial indirect impact to, a significant Wetland Habitat. All wetlands are potentially significant; therefore, a qualified biologist must make a determination of significance in consultation with the California Department of Fish and Game during Initial Consultation.

3. Coastal Habitat

According to the State Coastal Act and the County's Local Coastal Program, virtually any direct reduction of, or indirect impact to, a Coastal Habitat could be considered significant.

4. Migration Corridors

A significant impact to a migration corridor would result if a project would substantially interfere with the use of said area by fish or wildlife. This could occur through elimination of native vegetation, erection of physical barriers, or intimidation of fish or wildlife via introduction of noise, light, development or increased human presence.

5. Locally Important Species/Communities

Since this group of species/communities is so diverse, significance must be made by a qualified biologist on a case-by-case basis.

Threshold criteria linked to the species status listing by federal and state agencies are referenced throughout the following text, as they may apply. The status of a particular species were also summarized in the preceding tables within the overall discussion of the existing setting (e.g., federal and state listings of threatened, endangered, other species). Collectively, this information was used to make the determinations of impact significance presented in the subsections to follow.

4.5.2-1 Effects on Vegetation

The new mining area encompasses about 217 acres, divided into three phases (see Figure 5). A summary of the vegetation types within the new mining area is provided in Table 15. About 71 acres of this area is currently disturbed, barren, or used for existing mining operations. The proposed project would affect a variety of vegetation types on the remaining 146 acres, but primarily coastal sage scrub, alluvial scrub, and chaparral vegetation. The estimated acreage of vegetation types to be removed during the 50-year mining period area are shown in Table 15 by mining phase.

TABLE 15

ACREAGE OF VEGETATION TYPES TO BE REMOVED

Vegetation Type	Phase 1	Phase 2	Phase 3	Total
Coastal sage scrub	22	40	18	80
Chamise chaparral		1	40	41
White sage scrub		5		5
Mixed chaparral			5	5
Oak woodland			1	1
Non-native grassland			1	1
Ruderal vegetation		2	4	6
Alluvial scrub	1		3	4
Alluvial scrub ¹			3	3
Barren areas or developed	42	2	27	71
TOTAL	65	50	102	217

¹ Located within a current mine detention basin.

During Phase 1 of the proposed mining plan, approximately 22 acres of coastal sage scrub and 1 acre of alluvial scrub would be removed. The 65-acre Phase 1 lands are mostly devoid of vegetation due to previous and ongoing mining activities associated with Phase 1. The 65-acre area would be reclaimed to scrub vegetation at the end of a 5-10 year period.

During Phase 2 of the proposed mining plan, approximately 40 acres of coastal sage scrub, 1 acre of chamise chaparral, 5 acres of white sage, and 2 acres of ruderal vegetation would be removed. The 50-acre area would be reclaimed to scrub vegetation at the end of the 10-year period.

During Phase 3 of the proposed mining plan, approximately 75 acres of native vegetation would be lost over a 30-year period. Most of this vegetation is coastal sage scrub (18 acres), alluvial scrub (6 acres, 3 acres of which are located within an existing detention basin), and chamise chaparral (40 acres). The 102-acre area would be reclaimed to scrub vegetation at the end of the 30-year period.

It is anticipated that the scrub vegetation established during reclamation would require 3 to 5 years to become self-sustaining, and that the newly established scrub vegetation would not have the exact same complement and density of the original native plant species that existed prior to mining.

Alluvial scrub habitat and coastal sage scrub habitat are both considered "very threatened" by the California Department of Fish and Game (source: Natural Diversity Data Base, state rankings of S1.1 and S3.1, respectively). The proposed project would result in the collective loss of 80 acres of coastal sage scrub vegetation and 7 acres of alluvial scrub habitat, and reclamation would restore some of the native scrub species. However, the newly restored plant community is not expected to

fully match the species composition and structure of the pre-mining vegetation. Due to this direct loss and the resulting long-term alteration of the species composition and plant density of this native habitat, each phase of the proposed project would result in significant, unmitigable impacts (Class I). (Source: Ventura County Guidelines for Preparation of Environmental Assessments for Biological Resources.) Though unmitigable, appropriate mitigation measures for these potential impacts are outlined in Section 4.5.5 (B-1 Revegetation Plan and B-3 Habitat Management and Compensation Plan).

4.5.2-2 Effects on Oak Trees

The project site contains many mature coast live oak trees which are valuable resources to wildlife, used for shade, food, nesting sites and perching sites. For most of the site, the wildlife value of these oak woodlands is considered low because the majority of oak trees on the project site are scattered and surrounded by existing mining disturbances. However, a small portion of a large oak grove on the east side of the mining site would be removed during Phase 3 (see Figure 25).

It is estimated that up to 50 oak trees (mostly located in a large grove in Phase 3 area) could be eventually removed by the project. This is considered a significant, mitigable impact (Class II) because: 1) many of these trees can be avoided by minor changes in the limits of mining; and 2) any trees that are removed would be replaced on-site pursuant to the Tree Protection Regulations described in the Ventura County Zoning Ordinance Code (Section 8107-25, as it may be amended). Appropriate mitigation measures for these potential impacts are outlined in Section 4.5.5 (B-2 Avoidance Measures).

4.5.2-3 Effects on On-site Drainages

The main drainage through the project site has been completely graded and altered. It contains sediment detention basins that are cleaned out regularly. One other ephemeral drainage occur in the western portion of the proposed mining area (Figure 25). Neither drainage contains riparian woodland or wetland habitat. Removal of the central drainage and disturbance of the western drainage for the proposed mine plan is considered an insignificant adverse impact (Class III). The western drainage can be avoided by minor changes in the limits of mining, while the central drainage would eventually be replaced by a man-made watercourse as part of the proposed reclamation plan. To ensure avoidance and these changes occur, the following condition of approval is recommended:

Recommended Condition:

Avoidance/Protection of Ephemeral Drainages

Grading and excavation within the vicinity of the ephemeral drainage at the west side of the project site shall be completed in a manner that ensures drainage from all disturbed areas will flow towards the mine. To prevent erosion into the drainage to the east, 3 to 4-foot high earthen berms shall be placed along the excavated side of the drainage and seeded with annual grasses to ensure their integrity.

4.5.2-4 Effects on Off-site Drainage

In the drainage report by Ghormley (1993), it was shown that the mine area represents only 5% of the total watershed of the Happy Camp Canyon drainage. Hence, changes in average or peak flow

from the mine site would cause very minor changes in the hydrology and sediment transport characteristics of the Happy Camp Canyon drainage. The proposed sediment detention basins at the mine site would reduce peak flows entering Happy Camp Canyon by about 40%. The resulting decreases in peak flows in Happy Camp Canyon drainage would only be about 2%. Hence, no adverse hydrologic impact on the riparian habitats of the Happy Camp Canyon wash are expected. These habitats include alluvial scrub (dominated by sagebroom scrub) which is considered sensitive by the California Department of Fish and Game. Alluvial sagebroom scrub has the highest sensitivity rank ("S1.1") by the California Natural Diversity Data Base.

4.5.2-5 Effects on Sensitive Plants

Only one sensitive plant species could potentially occur within the proposed mine expansion area: Nevin's brickellia. Potential loss of individuals of this species is considered an insignificant adverse impact (Class III) because very few, if any plants are expected to be present, and because this species is not considered threatened or endangered. However, botanical surveys are recommended prior to Phase 3 to search for this species and salvage seeds for propagation elsewhere on the site in order to reduce the magnitude of the impact. In this regard, the following condition of approval is recommended:

Recommended Condition:

Botanical Surveys

Prior to initiating mining activities in the Phase 3 area, the permittee shall prepare a field survey plan that describes the methods and timing of field surveys to determine the presence of any sensitive plant species identified in the EIR. If a sensitive plant species is found in the Phase 3 mining area, the permittee shall prepare a second plan that describes the methods for collecting seeds and/or transplanting plants from the Phase 3 area. The permittee shall submit the plan to the Planning Director for review and approval, in consultation with the California Department of Fish and Game. The permittee shall revise the plan in accordance with the comments received from the California Department of Fish and Game and as directed by the Planning Director. If no comments are received within 60 days from the California Department of Fish and Game, the Planning Director shall determine plan adequacy. Once approved, said plan shall be implemented pursuant to the terms described therein.

New plant populations in similar numbers and areal extent shall be established on portions of the CUP site that are unmined and will remain unmined. The plants shall be established by seed or transplanting following the procedures described in the plan. This plan shall also describe the relocation site conditions, performance criteria for seed germination and transplanting, monitoring methods, and contingency actions if the relocation fails. The replacement populations shall be monitored and protected from grazing for five years. The status of the replacement plant populations shall be reported to the County in the Annual Status Report for the mine. The Annual Status Report shall include written documentation of seed collection and plant re-establishment program, if avoidance of the sensitive plant species is not possible.

4.5.2-6 Effects on On-site Wildlife

The project would result in the loss of habitat (i.e., native vegetation, see above) for various wildlife species. The project would also result in the generation of noise (daytime and nighttime), nighttime lighting, on-site truck traffic, and on-site human activity. The occurrence of these disturbance is expected to reduce the abundance and variety of wildlife using the permit area (i.e., populations), compared to the pre-mining conditions. This effect is not expected to occur beyond the watershed boundaries of the permit area, due to the buffering effects of the ridgelines.

Many sensitive wildlife species potentially use the project site or its vicinity. Those species which could use the project site for nesting and/or breeding include coast horned lizard, coast patch-nosed snake, and loggerhead shrike. Several raptor species may use the project site for roosting and foraging. In addition, an on-site survey determined the potential for California gnatcatchers to occur at the proposed project site is extremely low, resulting in no anticipated impact to this USFWS listed "threatened" species (refer to Appendix L California Gnatcatcher Survey). However, loss of wildlife habitat and the generation of on-site disturbances for all wildlife species (including sensitive species associated with the upland scrub habitats) is considered a significant, unmitigable impact (Class I). Though it is recognized these impacts can be eventually ameliorated somewhat through revegetation, said revegetation would not fully offset the loss of habitat diversity nor the loss of habitat during prolonged mining activities. (Source: Ventura County Guidelines for Preparation of Environmental Assessments for Biological Resources.) Though unmitigable, appropriate mitigation measures for these potential impacts are outlined in Section 4.5.5 (B-1 Revegetation Plan and B-3 Habitat Management and Compensation Plan).

4.5.2-7 Effect on Off-site Wildlife

Significant wildlife habitat in the immediate vicinity of the proposed project is concentrated within the Happy Camp Canyon Regional Park to the east. The park contains over 3000 acres of undeveloped land, including relatively pristine examples of oak woodland, riparian woodland, coastal sage scrub, cactus scrub, and chamise chaparral. The lower canyon also contains an ephemeral wash with alluvial scrub vegetation, a relatively rare habitat type considered "very threatened" by California Department of Fish and Game and local conservation groups. The park contains a wide variety and abundance of wildlife species because of the mixture of habitats and undeveloped condition of the park. Golden eagles and black-shouldered kites (i.e., recently referred to as white-tailed kites) have been recently sighted in the park. A recent survey determined the potential for California gnatcatchers to occur in those areas immediately adjacent to the proposed project site is extremely low, resulting in no anticipated impact to this USFWS listed "threatened" species (refer to Appendix L California Gnatcatcher Survey).

Noise levels experienced in areas adjacent to the mine, including Happy Camp Regional Park, are not expected to increase significantly as a result of the proposed project. Maximum increases in off-site noise levels in the park are expected to be less than 3 dB due to the increased production, and this would be somewhat offset by the increased distance from the newly mined areas to the park. Hence, there would be no noise related impacts to wildlife in the park or in the open space north of the mine site.

The air quality investigations presented in Section 4.7 of this EIR indicate that particulate matter (PM₁₀) concentrations would exceed the state and federal standards at the western boundary of the

mine site due to dispersion of dust from mining and processing from the predominately east-to-west winds. This has been identified as a significant, unmitigable impact (Class I) and, though unmitigable, appropriate mitigation measures for these potential impacts are outlined in Section 4.7.5 (A-1 Air Emissions Mitigation Plan and A-2 Vehicle Emissions Mitigation Program). As noted above, the majority of the significant wildlife habitat is located to the east of the proposed project, in the Happy Camp Regional Park.

The mining site and Happy Camp Canyon have not been identified as providing wildlife migration corridors between the Simi Hills and Santa Susana Mountains in wildlife movement corridor studies in the region (*Critical Wildlife Corridor/Habitat Linkage Areas between the Santa Susana Mountains, the Simi Hills, and the Santa Monica Mountains* by Paul Edelman, 1990 and *A Consideration of Wildlife Movements in the Santa Susana Mountains* by Envicom, 1993). Because Happy Camp Canyon represents a substantial open space area with diverse habitats and abundant wildlife, it is likely there is limited wildlife movement, involving off-site wildlife, that would experience insignificant adverse impacts (Class III) as a result of the proposed project.

The effect of nighttime lighting on off-site wildlife populations, though potentially disruptive, would only occur up to 60 days of the year. During these nights, wildlife in the region, including in Happy Camp Canyon Regional Park, are expected to avoid the mine site areas and thereby affect the foraging, traveling, and/or sheltering patterns of these wildlife species. Species that could be affected include carnivores, small mammals, deer, and bats. This nighttime lighting is considered an insignificant adverse impact (Class III). Refer to the discussion of nighttime lighting and recommended condition of approval in Section 4.6.2 (Visual Resources Project Impacts).

4.5.3 CUMULATIVE IMPACTS

Alluvial scrub habitat and coastal sage scrub habitat are both considered "very threatened" by the California Department of Fish and Game (source: Natural Diversity Data Base), would be adversely impacted. The proposed project would contribute significant, unmitigable impacts (Class I), cumulatively, to the biological resources in the region, primarily due to the combined loss of native habitat in the alluvial scrub and coastal sage scrub communities. (Source: Ventura County Guidelines for Preparation of Environmental Assessments for Biological Resources.) The other projects contributing to this significant, cumulative, unmitigable impact are the Fruitvale Mine (CUP-4158) (currently idle), Best Rock Products (CUP-4171), Wayne J. Sand and Gravel (CUP-4571), proposed developments in Happy Camp Canyon Regional Park, and the City of Moorpark's General Plan Land Use Plan Update (see Section 4.1). Though unmitigable, appropriate mitigation measures for these potential impacts are outlined in Section 4.5.5 (B-1 Revegetation Plan and B-3 Habitat Management and Compensation Plan).

4.5.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Biological Resources

Goal 1.5.1

Preserve and protect significant biological resources in Ventura County from incompatible land uses and development. Significant biological resources include

endangered, threatened, or rare species and their habitats, wetland habitats, coastal habitats, wildlife migration corridors, and locally important species/communities.

The proposed project would result in significant unmitigable impacts (Class I), resulting in a loss of alluvial scrub and coastal sage scrub habitats, and a loss of wildlife habitat and the generation of on-site disturbances for all wildlife species, including sensitive species associated with the upland scrub habitats. As such, the proposed project is consistent with Goal 1.5.1, as it pertains to Policy 3.1.2-3, only if a statement of overriding considerations is adopted by the decision-making body regarding the significant, unmitigable impacts (Class I) to biological resources.

Policy 1.5.2-1

Discretionary development which could potentially impact biological resources shall be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures.

Qualified biologists (Ms. Melinda Trask and Dr. John Gray) evaluated the impacts of the proposed development for this EIR. Appropriate mitigation measures were developed and are presented in Section 4.5.5. Hence, the proposed project is consistent with this policy.

Policy 1.5.2-2

Discretionary development shall be sited and designed to incorporate all feasible measures to mitigate any significant impacts to biological resources. If the impacts cannot be reduced to a less than significant level, findings of overriding consideration must be made by the decision-making body.

The project would result in the incremental disturbance of about 146 acres of native vegetation, including coastal sage scrub, alluvial scrub, chamise chaparral, and other habitat, over the 50 year permit period. This habitat would be gradually restored to grazing lands as mining ends in different portions of the site. Up to 220 acres of the CUP permit area would be devoid of habitat at any one time. Despite the beneficial effects of on-going reclamation, habitat disturbance at the mine and in adjacent areas during the mining period represents a long-term significant, unmitigable impact (Class I) as described above. As such, the proposed project is considered consistent with this policy only if a statement of overriding considerations is adopted by the decision-making body.

Policy 1.5.2-3

Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7½ minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.

A highly disturbed drainage occurs in the center of the project site. A qualified biologist examined the habitats in the drainage and determined that "wetlands", as defined by the U.S. Fish and Wildlife Service and the Corps of Engineers (i.e., jurisdictional wetlands under Section 404 of the Clean Water Act) are not present in these drainages. Hence, the proposed project would not have any impacts on wetlands and is, therefore, consistent with this policy.

Policy 1.5.2-5

The California Department of Fish and Game, the U.S. Fish and Wildlife Service, National Audubon Society and the California Native Plant Society shall be consulted when discretionary development may affect significant biological resources. ...

Those listed in Policy 1.5.2-5 were consulted during the preparation of this EIR. Review comments, if any, were incorporated into subsequent revisions of the EIR. Therefore, the proposed project is consistent with this policy.

4.5.4-1 Consistency with the General Plan of the City of Moorpark

The proposed project site is located outside of the City of Moorpark's boundaries and Sphere of Influence (Figure 15). However, the project is located within the City's Area of Interest and is designated as Open Space. Therefore, the following Moorpark General Plan goals and policies apply to the proposed project.

Land Use Element - Preservation of Environmental Quality

Goal 15

Maintain a high quality environment that contributes to and enhances the quality of life and protects public health, safety and welfare.

Policy 15.1

Public & private projects shall be designed so that significant vegetation shall be maintained and protected, including riparian and oak woodland vegetation and mature trees (as defined in the City Code),

Policy 15.2

Ecologically sensitive habitats shall be protected and preserved or replaced with no net loss of habitat so long as there is substantial public benefit to any relocation program.

The project would result in the incremental disturbance of about 146 acres of native vegetation, including coastal sage scrub, alluvial scrub, chamise chaparral, and other habitat, over the 50 year permit period. This habitat would be gradually restored to grazing lands as mining ends in different portions of the site. Up to 220 acres of the CUP permit area would be devoid of habitat at any one time. Despite the beneficial effects of on-going reclamation, habitat disturbance at the mine and in adjacent areas during the mining period represents a long-term significant, unmitigable impact (Class I) as described above. As such, the proposed project is considered consistent with this goal and these policies only if a statement of overriding considerations is adopted by the decision-making body.

Open Space, Conservation and Recreation Element

Goal 4

Preserve and maintain the physical and biological environment from future growth-related degradation. In those areas where degradation is inevitable, ensure the restoration of affected areas.

The proposed project is consistent with this goal because, under SMARA, the entire project site will be reclaimed and revegetated in the manner described in the reclamation plan.

4.5.5 MITIGATION MEASURES

Though the proposed project would result in significant, unmitigable impacts to biological resources, the mitigation measures listed below are recommended to reduce the magnitude of these project specific and cumulative impacts.

B-1. Revegetation Plan

Prior to the issuance of the Zoning Clearance for each phase of mining, a revised revegetation plan (a component of the full Reclamation Plan) shall be submitted to the County Planning Division that incorporates the results of the 1993 - 1995 and subsequent revegetation test plots. The County shall review and approve the first revised revegetation plan prior to the issuance of the Zoning Clearance for Phase 1 to ensure that it meets all applicable SMARA requirements, including but not limited to revegetation, topsoil management, protection of wildlife values, and any newly adopted standards for reclamation.

The permittee's revised revegetation plan shall include the following additional elements:

- Only a native shrub seed mixture shall be used. Seeds shall be collected on-site or from the Santa Susana Mountains if sufficient local seed is not available from native plant and seed retailers.
- A statement on why soil amendments are or are not required, based on the results of the 1993 and 1994 test plots.
- Procedures to avoid the inadvertent introduction of those species described as "non-native plants/escaped exotics" (refer to Appendix 6 of the Ventura County Landscape Design Criteria) during planting.
- A contingency plan to provide supplemental irrigation to newly-planted areas if the use of natural rainfall is determined to be insufficient, or there is one or more dry years that may threaten the survival of revegetated areas.
- Plans to replace (at the end of Phase 3) the one acre of oak woodland and seven acres of alluvial scrub that will be removed from the mining area.

- Specific performance standards based on the information developed through the analysis of test plot results.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the Zoning Clearance for Phase 1, and prior to mining activities in the Phase 2 and 3 areas. Annual County inspections will provide on-site observations of revegetation performance. Annual Status Reports submitted by the permittee will provide written documentation of revegetation success.

Monitoring Work Program/Monitoring Agencies: The Planning Divisions will be the monitoring agency.

Standard of Success: Approvals of the: 1) Reclamation Plans for each phase, including a revegetation element; 2) annual site visits; and 3) Annual Status Report.

B-2. Avoidance Measures

The limits of mining for Phase 3 shall be revised to avoid oak trees in the large grove on the east side of the project site. Prior to initiating mining activities in the Phase 3 area, the permittee shall submit a plan to the County for review and approval, showing the boundary of the oak grove, describing how it will be marked in the field, and describing how avoidance during mining will be accomplished. Avoidance of this area will greatly reduce potential impacts to wildlife, including roosting raptors, as well as reducing the number of oak trees to be removed.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the Zoning Clearance for Phase 3. Annual County inspections will provide on-site observations of avoidance efforts. Annual Status Reports submitted by the permittee will provide written documentation of avoidance program.

Monitoring Work Program/Monitoring Agencies: The Planning Division, in consultation with the Public Works Agency, will be the monitoring agency.

Standard of Success: Approvals of the: 1) revised limits of mining for Phase 3; 2) annual site visits; and 3) Annual Status Report.

B-3. Habitat Management and Compensation Plan

The proposed project would result in the following significant impacts that cannot be mitigated to a less than significant level: 1) short-term loss and long-term degradation of 80 acres of coastal sage scrub and 7 acres of alluvial scrub at the mine site; 2) contributes to cumulative habitat loss; and 3) short-term loss and long-term degradation of wildlife populations at and near the mine site.

Based on the short-term and long-term cumulative nature of these impacts and the broad area adversely affected outside of the mine site, the permittee shall prepare a Habitat Management and Compensation Plan that provides for habitat enhancement and preservation efforts within Happy Camp Canyon Regional Park, or within the immediate area (i.e., within a 1 mile radius) of the project site. This Habitat Management and Compensation Plan shall be prepared by a qualified biologist, who is approved by the County and retained by the permittee. The Habitat Management and Compensation Plan shall include a description of permittee obligations and requirements that reasonably relate to the project related identified impacts described in the Final EIR and shall include an implementation summary and time schedule.

The Habitat Management and Compensation Plan shall describe long-term habitat enhancement and preservation measures commensurate with the long-term wildlife habitat impacts of the project (i.e., 146 acres of habitat being disturbed) through a renewal of 146 acres of native vegetation over the life of the permit. Potential enhancements shall include, but not be limited to: 1) purchase and installation of wildlife guzzlers; 2) purchase and installation of fencing of sensitive areas; 3) purchase of an open space easement on adjoining lands that have habitat value; 4) fund revegetation efforts in disturbed areas of the mine site, particularly areas disturbed prior to 1976; and 5) dedication of land in fee.

The Habitat Management and Compensation Plan shall be submitted to the Planning Director for review and approval no later than nine (9) months after the final approval of CUP-4633. Prior to its approval, the Habitat Management and Compensation Plan shall be made available to the Eastern Ventura County Conservation Authority (EVCCA) review and comment, as the Plan may relate to the Happy Camp Canyon Regional Park or other properties being managed by the EVCCA. Prior to its approval, the Habitat Management and Compensation Plan shall also be made available to the California Department of Fish and Game for review and comment.

The permittee shall implement, or cause implementation of, the Habitat Management and Compensation Plan in accordance with the schedule, obligations and requirements described therein.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: The Habitat Management and Compensation Plan shall be submitted to the Planning Director for review and approval no later than nine (9) months after the final approval of CUP-4633.

Monitoring Work Program/Monitoring Agencies: The Planning Division will be the monitoring agency.

Standard of Success: Implementation of a County approved Habitat Management and Compensation Plan.

4.5.6 RESIDUAL IMPACTS

After implementation of the above recommended conditions of approval and mitigation measures, the proposed project is expected to generate the following residual impacts:

- loss of 80 acres of coastal sage scrub habitat and 7 acres of alluvial scrub habitat which are both considered "very threatened" by the California Department of Fish and Game (project and cumulative significant, unmitigable impact, Class I);
- loss of nesting and/or breeding habitat for coast horned lizard, coast patch-nosed snake, and loggerhead shrike, and possibly for several raptor species that may use the project site for roosting and foraging, including the golden eagle, Cooper's hawk, and black-shouldered kite (significant, unmitigable impact, Class I);
- loss of up to 50 oak trees, mostly located in a large grove in Phase 3 area, (significant, mitigable impact, Class II). (The number of oak trees lost will depend upon the degree to which trees can be avoided by: 1) minor changes in the limits of mining, and 2) the number of trees replaced on-site pursuant to the Tree Protection Regulations.);
- potential loss of a sensitive plant species (i.e., Nevin's brickellia) that potentially occurs within the proposed mining area (insignificant adverse impact, Class III);
- potential dust, nighttime lighting and impairment of wildlife movement on and through the proposed project area (insignificant adverse impact, Class III); and
- removal of the central drainage and potential disturbance of the western drainage would result in insignificant adverse impacts (insignificant adverse impact, Class III).

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4.6 VISUAL RESOURCES

4.6.1 EXISTING CONDITIONS

The proposed project site is located approximately 4 miles north of the City of Moorpark in eastern Ventura County (Figure 1). It is located at the western end of the Santa Susana Mountains in an area characterized by rolling hills with orchards and rangelands. The site is about 20 miles east of Ventura and 70 miles west of downtown Los Angeles, and is located in a relatively isolated portion of Ventura County shielded from the nearby City of Moorpark by natural ridges, agricultural lands, and urban development (Figure 15). Happy Camp Canyon Regional Park is located immediately to the east and southeast of the proposed project site (Figure 26) and further to the southeast lies the proposed Hidden Creek Ranch (i.e., Specific Plan No. 8 for the City of Moorpark).

The proposed permit site is located about 1.5 miles north of Broadway (i.e., Highway 23) as shown on Figure 2. Approximately 2,700 feet north of the intersection of Happy Camp Road and Broadway, Happy Camp Road turns northeast. At this location, traffic going to the project site heads west and north on an access road known as Roseland Avenue. This road terminates at the project site.

The site contains a very large, active mine and processing area (Figure 3). The currently active mining area under CUP-1328 includes about 175 acres. It contains a large pit surrounded by near-vertical cut slopes (see Figure 27, Photo Nos. 1 and 4). The processing area encompasses about 40 acres and is located at the southern end of the project site (Figure 3), near the boundary of Happy Camp Canyon Regional Park (see Figure 27, Photo Nos. 2 and 3). It contains various processing equipment, buildings, parking areas, storage areas, and roads. (Note: All photos were taken in 1991.)

Under CUP-4633, the applicant proposes to expand the previous CUP boundary to include an estimated 533 acres, wherein the proposed mining area would encompass about 217 acres. Of the proposed mining area, 146 acres are currently undisturbed and located outside the area previously approved for mining under CUP-1328. The remaining 71 acres of the proposed mining area have been disturbed by mining and are located within the area previously approved for mining under CUP-1328. The combined new and old mining areas would encompass about 321 acres (Figure 4). The proposed mining would occur in 71 acres of the area previously mined under CUP-1328, as well as on an additional 146 acres (Figure 4). The 146 acres of new mining area are undeveloped and contain low hills with annual grassland, scrub vegetation, and scattered oak trees (see Figure 27, Photo No. 5).

The site is surrounded by a mixture of land uses. Undeveloped rangelands occur north and east of the site (Figure 14). The existing CUP-4158 mine, currently idle, is located directly west and adjacent to the site and is also owned by TMC. The CUP-4158 excavation and processing areas are not visible from the proposed project site. South of the site are various agricultural and residential land uses. The former consists primarily of orchards with scattered processing facilities and horse ranches. Rural-type residences occur throughout the area south of the site, scattered among the agricultural land uses. Happy Camp Regional Park is located directly east of the project site, while the City of Moorpark is located 4 miles to the south (Figure 15).

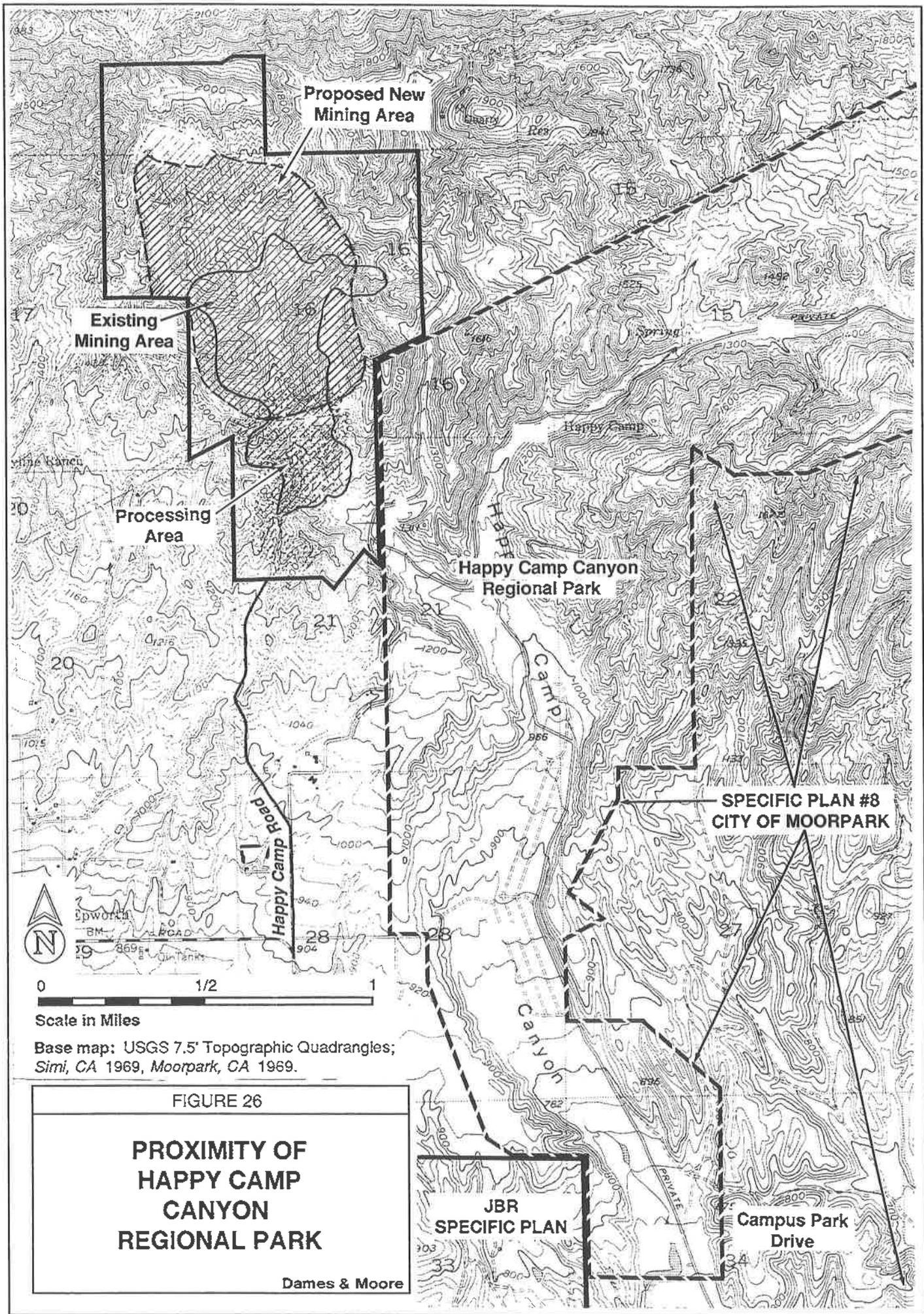


FIGURE 26

**PROXIMITY OF
HAPPY CAMP
CANYON
REGIONAL PARK**

Dames & Moore

Sensitive viewing locations are defined in this EIR as being public or private areas from which there are visually pleasing or otherwise attractive views. These locations are often parks, hiking trails, or highway views. These locations may also include private residences. A variety of sensitive viewpoints are located at or around the project site which is privately owned land with restricted access. These include portions of the City of Moorpark, Happy Camp Canyon Regional Park, and the northern portions of the City of Thousand Oaks (Figure 27). There are no scenic highways within viewing distance of the proposed project.

4.6.2 PROJECT IMPACTS

The Ventura County Initial Study Assessment Guidelines provide the following threshold criteria for the environmental assessment of scenic areas and features:

Threshold Criteria:

Appendix G of the CEQA Guidelines state that a project will have a significant impact if it would "have a substantial, demonstrable negative aesthetic effect." Policy 1.7.2.4 of the General Plan states that a project would have a significant impact if it would "degrade visual resources or significantly alter or obscure public views."

The proposed mining plan includes three phases, as shown on Figure 5. Phase 1 would occur on 65 acres and result in a maximum cut slope height of 270 feet (Figure 7). Phase 2 would result in a cut slope height of 320 feet on a 50-acre parcel. Phase 3 would occur over 102 acres, and result in cut slope heights of about 500 feet. Phases 1 and 2 would occur on the western edge of the project site, while Phase 3 excavations would occur on the eastern side (Figure 5).

Excavation activities would remove native vegetation and expose various slopes, benches, and other man-made landforms. The two main drainages would be avoided. The soils in the project site are generally light colored and contrast greatly with the more dull and muted tones of the natural vegetation. Based on an examination of the existing mine, the excavated slopes in the mining expansion areas would represent a dominant visual intrusion on the undisturbed natural landscape until they are reclaimed.

Reclamation and revegetation of finished slopes would reduce the magnitude of the impact by adding more natural contours and textures to the finished slopes. In particular, the reclamation of slopes as mining proceeds would reduce the areal extent of disturbed, bare ground, and, therefore, reduce the visual impact. However, the reclaimed slopes would still be expected to represent a dominant visual feature within the context of a largely undisturbed landscape with a complex background and middleground of mountains and valleys with various vegetation types. The magnitude and significance of the long term visual impact of actively mined and/or reclaimed slopes would ultimately depend upon the effect on sensitive viewing locations, as described below.

Potential visual impacts of the proposed project consists of an adverse alteration of the existing landscape features (i.e., color, texture, configuration, etc) at the project site that is noticeable by the public from sensitive viewing locations. These impacts would vary depending on elevation and distance from the site, intervening structures or landforms, nature of view (i.e., fleeting or stationary), and nature of landscape alteration at the mine.

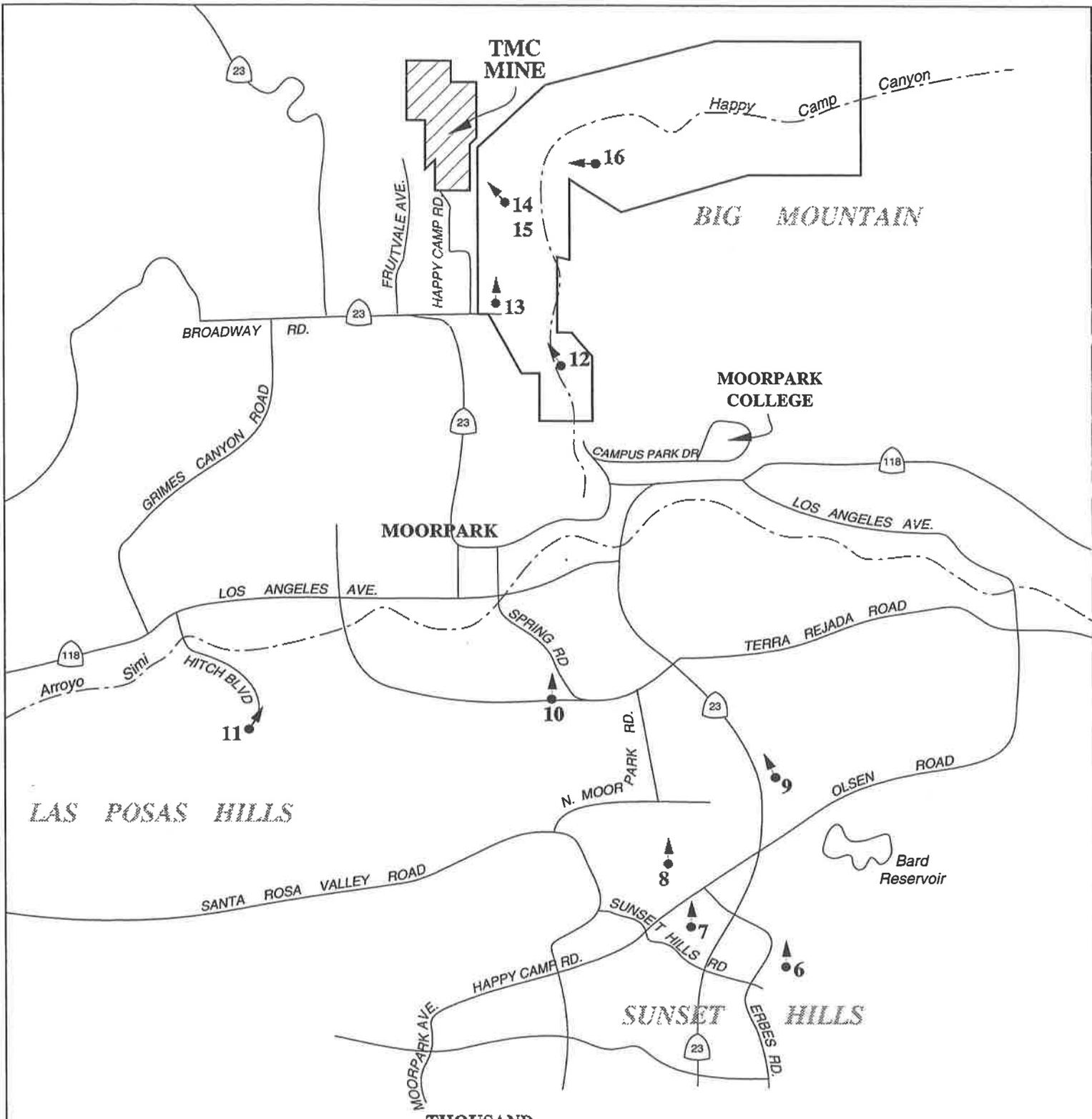


FIGURE 27

**PHOTO LOCATIONS FOR
VISUAL ANALYSIS
- MOORPARK**



EXPLANATION:

 Photo Location

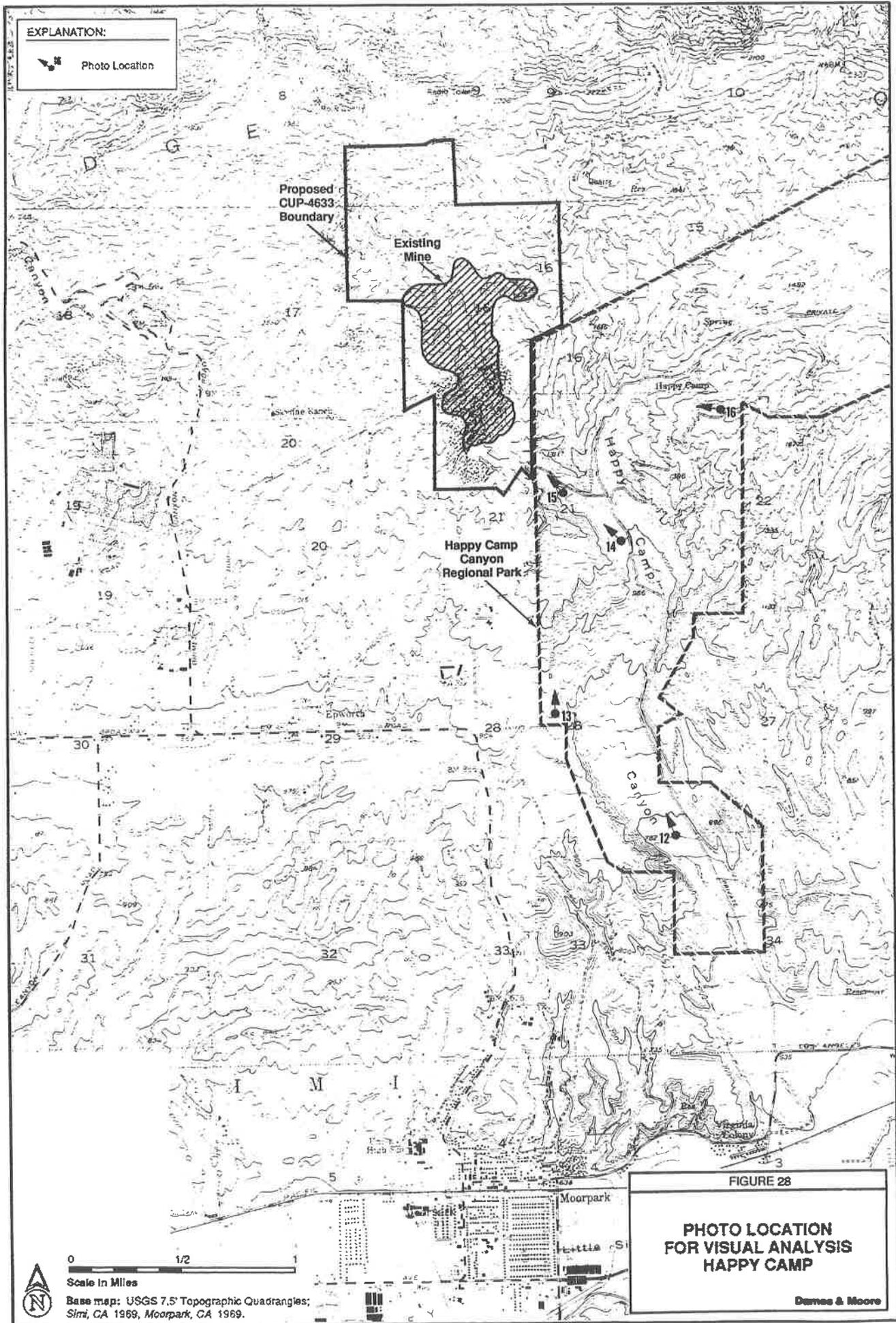


FIGURE 28

**PHOTO LOCATION
FOR VISUAL ANALYSIS
HAPPY CAMP**



0 1/2 1
Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles;
Simi, CA 1969, Moorpark, CA 1969.

Dames & Moore



0 1/2 1

Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles:
Simi, CA 1969, Moorpark, CA 1969.

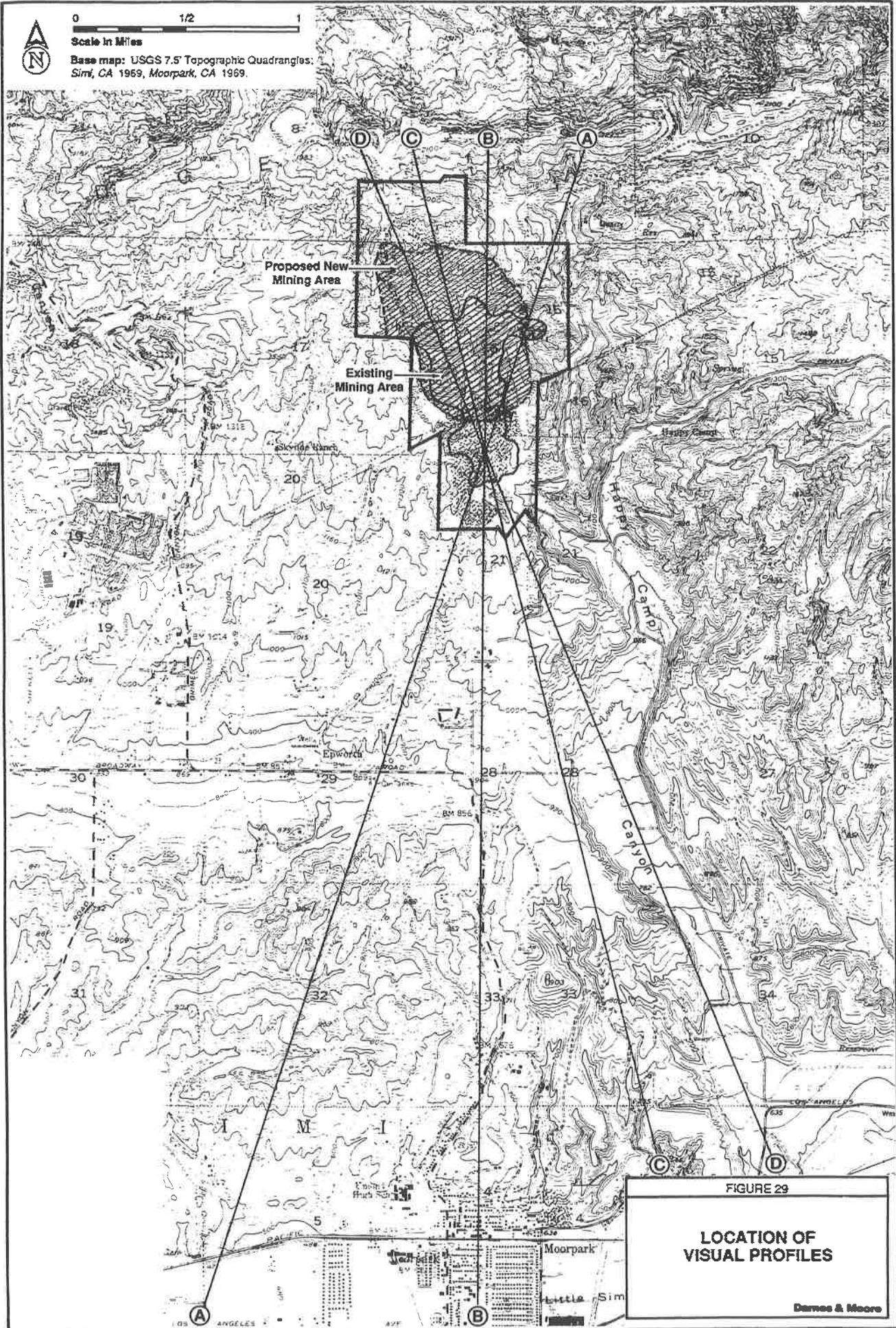


FIGURE 29

LOCATION OF
VISUAL PROFILES

Darvas & Moore

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Processing Area

Existing Mine Pit

Active Mining Area



Photo No. 1 Panoramic view of the project site, looking southwest. Primary drainage is in the foreground.

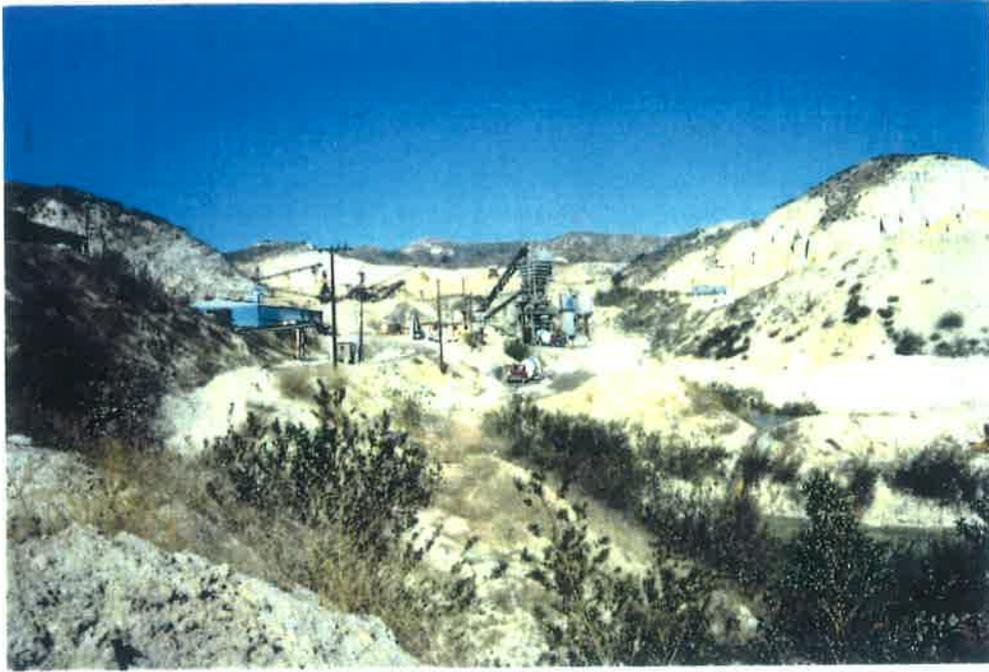


Photo No. 2 View of concrete batch plant from eastern end of project site, at the mouth of the canyon.



Photo No. 3 View easterly of Happy Camp Canyon from the eastern end of project site, at mouth of canyon.



Photo No. 4 View of active mining area. Material is pushed down the slope and loaded into hopper for transport by conveyor belt.



Photo No. 5 View southeast of mine expansion area.



Photo No. 6 View of mine from Erbes Road in the Sunset Hills of Thousand Oaks.



Photo No. 7 View of mine from Corte Cima in Sunset Hills of Thousand Oaks.



Photo No. 8 View of mine from Calle Zocalo in Sunset Hills of Thousand Oaks.



Photo No. 9 View of mine from Moorpark Freeway (SR-23).



Photo No. 10 View of mine from Ransom Road in Moorpark.



Photo No. 11 View of mine from Ternez Drive in Moorpark Home Acres.



Photo No. 12 View of mine from lower end of Happy Camp Canyon.



Photo No. 13 View of mine from middle portion of Happy Camp Canyon.



Photo No. 14 View of mine from upper Happy Camp Canyon.



Photo No. 15 View of mine from upper Happy Camp Canyon.



Photo No. 16 View of mine from eastern ridgeline of Happy Camp Canyon.

Two qualitative methods were employed to assess the magnitude of these impacts:

- Photographs were taken at selected sensitive viewpoints to determine if the existing and proposed mine cut slopes would be visible. See Figure 27, Photos 6 through 16. The locations of these photos are shown on Figures 27 and 28.
- Profiles of lines-of-sight to the mine were constructed for selected sensitive viewpoints. Maps of the profile locations are provided on Figure 29. The profiles are shown on Figure 30.

The cut slopes of the existing mine are readily visible from the locations listed below. These cut slopes would remain visible until they are reclaimed, with or without the issuance of CUP-4633. With few exceptions, mining activity for Phase 1, and most of Phase 2, would not be visible to these locations because they would be located inside the existing cut slopes which are not visible from the south.

- **Figure 27 - Photo No. 11 and Figure 30 - Profile A-A'**
Las Posas Hills. This area includes the Moorpark Home Acres community. Residents in this area have a distant view of the existing mine. The upper 50 feet of Phases 2 and 3 excavations would be visible from these homes on clear days.
- **Figure 27 - Photo Nos. 6, 7, and 8**
Sunset Hills. This portion of Thousand Oaks contains residences along several ridgetops across from the project site. The mine is readily visible on a clear day. The upper 400 feet of the Phases 2 and 3 mining would be visible to these residents.
- **Figure 27 - Photo No. 9 and Figure 30 - Profile C-C'**
Highway 23 (Moorpark Freeway). This freeway travels downslope from the Sunset Hills to Moorpark. There are fleeting views of the mine from the freeway while traveling northbound. The upper 250 feet of the Phases 2 and 3 mining would be visible to those traveling northbound.
- **Figure 27 - Photo No. 10 and Figure 30 - Profile B-B'**
Central Moorpark. The existing mine's cut slopes are visible to many areas in Moorpark, including the residential neighborhoods located south of the Arroyo Simi, and from some locations along such roadways as Spring Road, Tierra Rejada Road, and Los Angeles Avenue/New Los Angeles Avenue. Intervening topography does screen the project when viewed from other areas in Moorpark. The upper 200 feet of the Phases 2 and 3 mining would be visible from some of these locations.
- **Figure 30 - Profile C-C'**
Eastern Moorpark at College Heights and Campus Park Drive. The existing mine is partially visible from selected locations in this residential neighborhood. The upper 250 feet of Phases 2 and 3 excavations would be visible from many of these homes.

- **Happy Camp Canyon Regional Park.** The park includes several distinctive viewpoints due to the variety of elevations and land forms within the park. These viewpoints are listed below:
 - **Figure 27 - Photo No. 12** - The existing mine is not visible from the south gate of the park due to the intervening topography.
 - **Figure 27 - Photo No. 13** - The upper portion of the existing mine is visible from the western entrance to the park at the end of Broadway. The upper 50 feet of Phase 3 excavation would be visible from this location.
 - **Figure 27 - Photo Nos. 14 and 15** - The existing vertical cut slopes at the entrance to the mining area (created by previous mining) are readily visible from the mouth of the canyon leading to the mine. Phase 2 and 3 excavations would be partially visible from this low-lying portion of the canyon. (Note: The two cut slopes with towers atop are pre-SMARA and, as such, are not subject to the SMARA site reclamation requirements associated with other disturbed areas of the project site.)
 - **Figure 27 - Photo No. 16** - Substantial, clear views of the mining area occur on the ridgeline hiking trail in upper Happy Camp Canyon Regional Park because the trail is at the same elevation of the mine slopes. Portions of all of the proposed mining activities would be visible to recreationalists using this trail.

Based on the above results, the cut slopes of the existing mine would remain visible until they are reclaimed, with or without the issuance of CUP-4633. With few exceptions, expanded Phase 1 excavation would only be visible to recreationalists using the hiking trails in upper Happy Camp Canyon Regional Park. Residents in communities to the south are not likely to notice any landform alteration during Phase 1 since activity would be located inside the existing cut slopes which are not visible from the south. As such, there would be no visual impact to these residents. In contrast, there would be a significant, unmitigable impacts (Class I) for Happy Camp Park recreationalists in the near-term. Long-term this impact is expected to eventually be ameliorated through reclamation, once the reclaimed slopes have been restored to gentle contours and revegetated with sufficient vegetative cover to blend in with natural slopes (i.e., significant, mitigable impacts [Class II], and possibly insignificant adverse impacts [Class III]) (refer to Section 4.6.5, V-1 Visual Elements of Reclamation Plan).

Phase 2 and 3 excavations would be visible from a distance by residential communities south of the mine, as well as by recreationalists in middle and upper Happy Camp Canyon Regional Park. This is considered a significant, unmitigable impact (Class I) in the near-term. As noted above, this impact may eventually be partially ameliorated through reclamation, once the reclaimed slopes have been restored to gentle contours and revegetated with sufficient vegetative cover to blend in with natural slopes.

To partially reduce the visual impacts of the existing and proposed project, the following condition of approval is recommended:

Recommended Condition:

Windrow Planting

The permittee shall plant and establish a windrow of large native trees near the lower retention basin (i.e., at the mouth of the canyon between TMC and Happy Camp Canyon Regional Park) in order to screen the mine from users in the low lying areas of the Happy Camp Canyon Regional Park.

4.6.2-1 Nighttime Lighting

The proposed project would involve excavation on an as-needed basis throughout the year beginning one hour after sunrise and ending one hour before sunset on Mondays through Saturdays, excluding Sundays and holidays. No excavation would occur at night. Most of the year, employees associated with processing would work two regular daytime shifts (i.e., 6:00 A.M. to 2:30 P.M., and 2:00 P.M. to 10:30 P.M.). Processing on a two-shift basis would occur for about 220 days of the year, though the applicant seeks approval to conduct the two-shift processing throughout the year with no limitation on the number of days, other than excluding Sundays and holidays. During normal operations, the rock plant would be lit from dark until 11:00 P.M. approximately 220 days per year. Maintenance of equipment would occur after dark and, therefore, requires lighting. A summary of nighttime lighting is provided in Section 3.7.7, Table 8.

To meet certain orders (e.g., nighttime freeway repairs), nighttime processing may be needed, using a third shift (i.e., 10:00 P.M. to 6:30 A.M.) up to 60 days of the year. The feeder and conveyor system would operate during the same nights that processing would occur. During this time, the processing areas would be illuminated and the lighting at the site may be visible to residents in eastern Moorpark near College Heights. The site illumination may also be visible to certain residences along Happy Camp Road that are situated on hills. In addition, the nighttime lighting could affect the occasional star-gazing hikes in Happy Camp Canyon Regional Park led by the Santa Monica Mountains Conservancy.

The visual impact from the lights at the processing area is expected to be diffuse at a distance, rather than a sharp glare associated with nighttime lighting at football stadiums and baseball fields. As such, this is considered an insignificant adverse impact (Class III). To ensure this is the case, the following condition of approval is recommended:

Recommended Condition:

Nighttime Lighting

The permittee shall provide lighting for normal operations, maintenance and site security and for conveyor belt operation, processing and other areas to be lit during periods of nighttime processing. The permittee shall submit, to the Planning Director, proposed nighttime lighting performance standards. Said performance standards shall indicate the areas to be lit and describe light designs, the range of wattages, how lighting will be shielded and directed to minimize off-site glare (i.e., particularly to the south and east), and other pertinent information. In preparing this information, the permittee

shall consult with the Santa Monica Mountains Conservancy in order to incorporate the considerations needed to minimize impacts to nighttime star-gazers in Happy Camp Regional Park. Prior to the issuance of the zoning clearance for Phase 1, the permittee must have first obtained Planning Director approval of the nighttime lighting performance standards. Because changes in the location of nighttime lighting and specifications are anticipated during the life of the project, all changes shall be consistent with the approved performance standards, unless otherwise approved by the Planning Director.

Annually, the permittee shall consult with the Santa Monica Mountains Conservancy and the Ventura County Astronomical Society to obtain the annual schedules of nighttime star-gazing hikes in Happy Camp Canyon Regional Park. The permittee shall then make reasonable effort to avoid nighttime processing during those evenings.

Nighttime processing shall be limited to a maximum of 60 days per year, unless otherwise authorized in advance by the Planning Director. If numerous complaints arise, the Planning Director may require the permittee to annually submit, for Planning Director review and approval, a schedule for nighttime processing. The permittee would then be required to limit nighttime processing to those days specified in the approved schedule, unless otherwise approved in advance by the Planning Director.

4.6.3 CUMULATIVE IMPACTS

Potentially significant visual intrusions that would be caused by those projects described in Section 4.1.9. The greatest potential involves the Happy Camp Canyon Park Development, the implementation of the City of Moorpark's Land Use Plan, and the City of Moorpark's Specific Plan Areas Nos. 2 and 8. The visual intrusions caused by these projects could combine with the proposed project for a significant, unmitigable cumulative visual impact in the region (Class I). Though unmitigable, appropriate mitigation measures for these potential impacts are outlined in Section 4.6.5 (V-1 Visual Elements of Reclamation Plan).

4.6.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Visual Resources

Goal 1.7.1-1

Preserve and protect the significant open views and visual resources of the County.

Policy 1.7.2-4

Discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.

The proposed project would have a significant, unmitigable impact (Class I) on public viewsheds in the City of Moorpark during the excavations in Phases 2 and 3, and upon viewers in Happy Camp

Canyon Regional Park during all phases. No feasible mitigation measures have been identified to reduce these visual impacts of the proposed project to a less than significant level. As such, the proposed project is considered consistent with this goal and policy only if a statement of overriding considerations is adopted by the decision-making body.

4.6.4-1 Consistency with General Plan of City of Moorpark

The proposed project site is located outside of the City of Moorpark's boundaries and Sphere of Influence (Figure 15). However, the project is located within the City's Area of Interest and is designated as Open Space. Therefore, the following Moorpark General Plan Land Use goals and policies apply to the proposed project.

Land Use Element - Preservation of Environmental Quality

Goal 14

Establish land uses and development intensities which are compatible with scenic and natural resources and which encourage environmental preservation.

Policy 14.1

New development shall be located and designed to minimize adverse visual impacts and/or environmental impacts to the community.

Policy 14.2

New development shall respect, integrate with, and complement the natural features of the land.

Goal 16

Enhance and maintain the suburban/rural identity of the community.

Policy 16.2

Hillside development standards shall be adopted which restrict grading on slopes greater than 20 percent and which encourage the preservation of visual horizon lines and significant hillsides as prominent visual features.

Open Space, Conservation and Recreation Element

Goal 1

Preserve and maintain the unique aesthetic and visual qualities of Moorpark as a city with scenic topographic features and elements that promote the quality of life that Moorpark citizens pursue.

Policy 1.1

Protect the scenic viewsheds both to and from the City of Moorpark. This shall include those views extending north to the Santa Susana Mountains and south to Tierra Rejada Valley. This will extend to any new development and to any future renovations and additions that may potentially obscure a viewshed.

The project would be consistent with these goals and policies only if a statement of overriding considerations is adopted by the decision-making body.

4.6.5 MITIGATION MEASURES

Though the proposed project would result in significant, unmitigable impacts to visual resources, the mitigation measures listed below are recommended to reduce the magnitude of these project specific and cumulative impacts.

V-1. Visual Elements of Reclamation Plan

The Reclamation Plan shall be revised, prior to the issuance of the zoning clearance for Phase 1, to include and/or emphasize the following elements in order to minimize the residual visual impacts of the reclaimed mine:

- a. Use gradual and smoothed slopes to create gentle landscape features. Reclaimed slopes shall be graded to create a smooth transition with the adjacent, undisturbed slopes.
- b. Revegetate with native plants that will provide the maximum biomass and areal coverage in order to minimize visual scars from bare soils.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the zoning clearance for Phase 1, and prior to mining activities in the Phase 2 and 3 areas. Annual County inspections will provide on-site observations of revegetation performance. Annual Status Reports submitted by the permittee will provide written documentation of revegetation success.

Monitoring Work Program/Monitoring Agencies: The Planning Division will be the monitoring agency.

Standard of Success: Planning Director approvals of the: 1) Reclamation Plans for each phase, including a revegetation element; 2) annual site visits; and 3) Annual Status Report.

Note: Reducing the height of the Phase 2 and 3 vertical cut slopes to avoid visual impacts is not recommended here as a mitigation measure because it would substantially alter the mining plan. Instead, this change in the project is considered an alternative to the proposed project and is discussed in Section 5.0.

4.6.6 RESIDUAL IMPACTS

After implementation of the above recommended mitigation measures and conditions of approval, the proposed project is expected to generate the following residual impacts:

- Phase 2 and 3 excavations would be visible to some communities south of the mine, as well as recreationalists in middle and upper Happy Camp Canyon Regional Park (significant, unmitigable impact, Class D);

- near-term, the cut slopes of the existing mine, with or without the issuance of CUP-4633, would remain visible from many areas in Moorpark until these slopes are reclaimed and, with few exceptions, expanded Phase 1 excavation would only be visible to recreationalists using the hiking trails in upper Happy Camp Canyon Regional Park (significant, unmitigable impact, Class I);

(Note: The two cut slopes with towers atop in Photo Nos. 14 and 15 are pre-SMARA and, as such, are not subject to the SMARA site reclamation requirements associated with other disturbed areas of the project site.)

- long-term, the Phase 1 excavation would eventually be ameliorated through reclamation once the reclaimed slopes have been restored to gentle contours and revegetated with sufficient vegetative cover to blend in with natural slopes (significant, mitigable impacts, Class II/possibly insignificant adverse impacts, Class III); and
- minor nighttime lighting (insignificant adverse impact, Class III).

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4.7 AIR QUALITY

4.7.1 EXISTING CONDITIONS

4.7.1-1 Background Climate Data

The regional climate is characterized by warm, dry summers and mild winters. Most rainfall occurs in the winter months, usually beginning in November with the rainy season lasting through April. The region is dominated by a semi-permanent high pressure cell located to the northwest over the Pacific Ocean. This high pressure cell migrates to the north during the summer and deflects storms to the north. In the winter, the cell moves south which allows storms to move into the southern California region. Occasionally during the summer months, strong tropical storms will move north, resulting in rain showers in the coastal areas.

The project site is located about 4 miles north of the City of Moorpark at the end of Happy Camp Road in an unincorporated area of Ventura County. The local meteorology is influenced by the topography of the area which is composed of mountain ranges up to 3000 feet high with inland canyons and valleys below.

Temperatures in the region are moderate due to the proximity of the project site to the coast. The mean annual temperatures range from the mid-forties in winter to the mid-seventies in summer.

High altitude regional wind patterns are predominantly from the west in the winter and northwest in the summer. Santa Ana winds occasionally occur, most often during the fall season, resulting when a high pressure formation becomes stagnant in the desert plain regions. Air quality standards in Ventura County are often exceeded during Santa Ana conditions due to the transport of ozone (O₃) from the Los Angeles area.

Definition of Terms

The Ventura County Initial Study Assessment Guidelines provides the following definitions of terms relating to the environmental assessment of air quality:

AQMP Population Forecasts

Population and dwelling unit forecasts adopted by the Board of Supervisors on May 7, 1985, and incorporated into the 1987 Air Quality Management Plan (AQMP). AQMP population forecasts are used in determining whether a proposed project is consistent with the AQMP.

Carbon Monoxide (CO)

A colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances.

Growth/Nongrowth Areas

Geographic subareas of the county based on Analysis Zones created by the State Department of Transportation and the Ventura County Public Works Agency. Growth and Nongrowth areas are comprised of aggregated Analysis Zones. Each city lies within a Growth area, and, in general, growth areas represent the present and future incorporated area of each city. Nongrowth areas are unincorporated areas of the county which are not expected to receive significant urban development in the future.

Nitrogen Oxides (NO_x)

Although there are a number of NO_x compounds, only two are important in air pollution. These are: nitric oxide (NO), a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or pressure; and nitrogen dioxide (NO₂), a reddish-brown irritating gas formed by the combination of nitric oxide with oxygen. NO_x plays a critical role in the photochemical reactions that produces ozone.

Ozone (O₃)

The product of a series of complex chemical reactions and transformations between ROC and NO_x in the presence of sunlight. Since ozone is formed in the atmosphere and not directly emitted by any source, it is known as a secondary pollutant. O₃ is the air pollutant of primary concern in Ventura County.

Particulate Matter (PM₁₀)

Fine solids or liquids in the atmosphere made up of dust, soot, aerosols, fumes and mists. Federal and state standards exist for particulate matter less than or equal to 10 microns in size (PM₁₀).

Reactive Organic Compounds (ROC)

A highly reactive group of hydrocarbons which play a critical role in the photochemical reactions that produce ozone.

Sulfur Dioxide (SO₂)

A colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. During humid conditions, SO₂ may, through a series of chemical reactions with other materials, produce sulfate particulates.

4.7.1-2 Regulatory Overview

Air pollution control efforts in Ventura County are administered by federal, state, and local governments, as discussed below.

Federal Clean Air Act. The 1970 amendments to the Federal Clean Air Act (CAA) established a joint state and federal program to control air pollution. These amendments established the National Ambient Air Quality Standards (NAAQS) which are presented in Table 13. In addition, the amendments required individual states to submit State Implementation Plans (SIP) which describe statewide efforts for achieving attainment of the NAAQS within certain prescribed periods.

The Federal CAA Amendments of 1977 required all states to submit plans that "demonstrated" attainment of the applicable standards by the statutory deadline. Ventura County was not able to demonstrate attainment of the federal O₃ standard by the deadline, and was required to impose even more stringent controls. (See discussion under Ventura County Planning Efforts.)

Federal Clean Air Act Amendments were signed into law on November 15, 1990. These amendments require areas to attain the federal clean air standards within 5 to 20 years, depending on the severity of the air quality problem. The amendments also set out new planning requirements for federal nonattainment areas. Ventura County has been designated a severe area for ozone. Therefore, the County must attain the federal ozone standard by the year 2005.

TABLE 13

AMBIENT AIR QUALITY STANDARDS AND INCREMENTS

Pollutant	Averaging Period	California ^{a, b} Standards (ppm)	National Standards ^d	
			Primary ^{e, f} ($\mu\text{g}/\text{m}^3$)	Secondary ^{e, f} ($\mu\text{g}/\text{m}^3$)
NO ₂	1-hour	0.25 (470 $\mu\text{g}/\text{m}^3$)	—	—
	Annual	—	100 (0.05 ppm)	100 (0.05 ppm)
SO ₂	1-hour	0.25 (655 $\mu\text{g}/\text{m}^3$)	—	—
	3-hour	—	—	1300
	24-hour	0.05 (131 $\mu\text{g}/\text{m}^3$)	365 (0.14 ppm)	—
	Annual	—	80 (0.03 ppm)	—
CO	1-hour	20.00 (23 mg/m^3)	40 mg/m^3 (35 ppm)	—
	8-hour	9.00 (10 mg/m^3)	10 mg/m^3 (9 ppm)	—
O ₃	1-hour	0.09 (180 $\mu\text{g}/\text{m}^3$)	240 (0.12 ppm)	240 (0.12 ppm)
PM ₁₀	24-hour	50 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$
	Annual	30 $\mu\text{g}/\text{m}^3$	50 $\mu\text{g}/\text{m}^3$	50 $\mu\text{g}/\text{m}^3$
Sulfates	24-hour	25 $\mu\text{g}/\text{m}^3$	—	—
Lead	30-day	1.5 $\mu\text{g}/\text{m}^3$	—	—
Ammonia	Calendar Quarter	—	1.5 $\mu\text{g}/\text{m}^3$	1.5 $\mu\text{g}/\text{m}^3$

- a California Standards for ozone, carbon monoxide, sulfur dioxide (1 hour), nitrogen dioxide and particulate matter (PM₁₀) are values not to be exceeded. The sulfates and lead standards are not to be equaled or exceeded.
- b, c Concentration is expressed first in the units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25° C and a reference pressure of 760 mm of mercury. All measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 mm of mercury (1,013.2 millibar). Parts per million (ppm) in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- d National Standards, other than ozone and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.
- e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the Environmental Protection Agency.
- f National Secondary Standards: The levels of air quality necessary to protect public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standards within a "reasonable time" after the implementation plan is approved by the Environmental Protection Agency.

California Clean Air Act. The primary goal of the California Clean Air Act (CCAA), which became effective January 1989, is to be in attainment of the State Ambient Air Quality Standards "at the earliest practicable date." The California Clean Air Act establishes a program which includes participation by the Air Resources Board (ARB) and Air Pollution Control Districts (APCDs) in order to attain the state standards. The ARB is, among other things, responsible for implementing motor vehicle emission standards, emission control warranty requirements, and the use of cleaner burning motor vehicle fuels. APCDs are responsible for controlling emissions from stationary sources of air pollution, control of areawide sources of emissions, the design and implementation of transportation and vehicle fleet management measures, and fostering incorporation of air quality considerations into local land use planning decisions.

Under provisions of the California CAA, nonattainment areas are classified according to the severity of their air quality problem. Ventura County has been formally designated as a severe nonattainment area for O₃. As such, the County is required to implement the most stringent measures necessary to reach attainment, including the following: 1) use of retrofit best available control technology (BACT); 2) comprehensive transportation control measures (TCM); and 3) development of indirect source control program. These measures are expected to result in a 5% annual reduction in O₃ precursors.

Ventura County Planning Efforts. Under provisions of the California Clean Air Act, Ventura County has developed several Air Quality Management Plans (AQMP) which are comprehensive planning documents to guide the Air Pollution Control District (APCD), County, and other local agencies on progress toward attainment of the O₃ standard. The 1979 AQMP was the first comprehensive air quality planning effort in Ventura County. This plan predicted attainment of the federal O₃ standard by 1987. This prediction was overly optimistic and it soon became obvious that attainment by 1987 would not occur. A subsequent Plan, the 1982 AQMP, was a refinement of the 1979 Plan. This plan acknowledged that attainment of the federal O₃ standard would not occur by the required 1987 deadline, and that further planning efforts were necessary.

In 1985, the Ventura County Air Pollution Control District (VCAPCD) undertook a comprehensive update to the 1982 AQMP to provide for additional emission reductions. The 1987 AQMP was the result of this effort and was adopted by the County in July 1988. Although the 1987 AQMP provided for emission reductions beyond the 1982 AQMP, the 1987 Plan did not demonstrate attainment of the federal O₃ standard at any time in the foreseeable future.

1991 Air Quality Management Plan. Building upon the 1987 AQMP, the 1991 AQMP was prepared in response to the California Clean Air Act and contained new and revised control measures designed to move the county further toward state and federal clean air standards. The 1991 AQMP was adopted by the District's Air Pollution Control Board on October 8, 1991.

1994 Air Quality Management Plan. The most recent AQMP, the *Ventura County 1994 Air Quality Management Plan*, was prepared to satisfy the planning requirements of the 1990 Federal Clean Air Act Amendments (CAAA) and to outline a strategy for meeting the federal ozone clean air standard by the year 2005, while accommodating a reasonable and inevitable amount of growth. The CAAA requirements addressed by the 1994 AQMP are:

- attainment of the federal ozone standard by the year 2005;
- a post-1996 Rate-of-Progress demonstration;
- contingency measures;
- an updated 1990 baseline emission inventory;
- revised 1990-1996 Rate-of-Progress emission reduction calculations; and
- revised estimates showing motor vehicle emissions will decrease despite increases in vehicle use.

1995 Air Quality Management Plan Revision. The 1995 AQMP Revision, approved in December 1995, was prepared to provide updated information since 1994 AQMP approval. Also, the 1995 AQMP Revision formally revises certain submittals required under the federal Clean Air Act and contains new modelling results and improved emission forecasts.

4.7.1-3 Existing Air Quality

Regions are classified as being either attainment or nonattainment depending on the number of times an air quality standard is exceeded. An area is considered nonattainment of the state O₃ standard if the standard is exceeded once in three years. An area is in nonattainment of the federal O₃ standard if the federal standard is exceeded on three or more days in three calendar years. Table 13 presents federal and state ambient air quality standards. Ventura County has been designated nonattainment for O₃ and PM₁₀ by the California Air Resources Board and nonattainment for O₃ by EPA.

During the years 1980-1993, the state O₃ standard and the federal O₃ standard have been exceeded (refer to Table 14). Ozone concentrations have declined steadily at most air quality monitoring stations and the number of violations in Ventura County have decreased since 1980. Ventura County is in attainment for carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂).

Ambient concentrations of air pollutants are determined through air quality monitoring. The Ventura County APCD operates air quality monitoring stations located in Piru, approximately 15 miles north of the project site; in Thousand Oaks, located approximately 8 miles southwest; and Simi Valley, Ojai, Ventura, and El Rio. In addition, the California Air Resources Board operates a station in the Casitas Pass. All of these stations monitor for O₃. The Piru, Thousand Oaks, Simi Valley, Ojai, Ventura, and El Rio stations monitor ambient particulate matter (PM₁₀) concentrations, and the Simi Valley station monitors for all of the federally regulated criteria pollutants (O₃, NO₂, SO₂, CO and PM₁₀).

Ozone (O₃)

Photochemical oxidants, such as O₃, are formed in the atmosphere in the presence of sunlight by a series of complex chemical reactions, principally involving oxides of nitrogen (NO_x) and reactive organic compounds (ROC). Compounds which assist in the formation of O₃ are known as O₃ precursors. As previously discussed, Ventura County is classified as nonattainment for O₃. The Moorpark-Simi Valley region has the largest number of O₃ exceedances in Ventura County, due in part, to its close proximity to the South Coast Air Basin. Table 14 presents O₃ exceedance data for the air quality monitoring stations.

Particulate Matter

Particulate matter, less than or equal to 10 microns in size (PM₁₀), is of concern to human health because particulates of this size can be inhaled into deep portions of the lung, causing health problems. Particulates of all sizes are capable of absorbing and scattering sunlight which can impair visibility. Ventura County is classified as a state nonattainment area for PM₁₀. Table 15 presents recent PM₁₀ exceedance data for the Simi Valley and Piru stations.

Oxides of Nitrogen

Nitrogen oxides (NO_x) emissions are typically emitted largely as nitric oxide (NO) as a result of fossil fuel combustion processes. NO is subsequently oxidized to nitrogen dioxide (NO₂) in the atmosphere. NO₂ is of concern because this compound reacts with hydrocarbons to form O₃. NO₂ concentrations typically peak during the early morning hours. Reaction with hydrocarbon (HC) compounds increases as temperature increases, leading to peak O₃ concentrations in the afternoon. Ventura County is classified as attainment for NO₂ and concentrations have not exceeded either the state or federal standards since 1977.

TABLE 14
EXCEEDANCES OF OZONE (O₃) STANDARDS¹

Year	El Rio	Ventura	Simi Valley	Piru	Ojai	Thousand Oaks	County-wide ²
1980	3/30	3/18	29/82	45/104	33/75	26/73	61/139
1981	8/29	3/19	38/110	69/114	27/101	-	85/149
1982	3/23	3/13	61/113	13/66	25/80	12/66	70/142
1983	7/20	7/28	49/111	16/68	10/77	13/70	58/125
1984	1/12	3/13	34/112	4/37	3/30	5/46	45/130
1985	3/28	3/10	35/127	7/42	6/34	10/48	44/136
1986	5/25	1/18	50/134	9/72	10/58	12/54	59/149
1987	5/33	4/20	22/90	5/63	3/45	2/31	31/123
1988	3/25	1/9	52/120	8/45	3/51	9/44	55/135
1989	2/18	2/14	40/101	4/42	5/57	10/49	46/116
1990	0/9	0/5	14/86	4/46	2/27	3/27	18/99
1991	0/12	2/12	32/97	4/44	4/30	0/20	33/107
1992	3/12	0/4	6/58	0/15	4/33	2/31	10/68
1993	1/8	2/5	8/40	0/4	1/23	4/22	13/57
1994	0/7	0/3	15/80	2/19	2/17	2/28	17/87

Note: Numbers represent (# of days exceeding national standard) / (# of days exceeding state standard).

¹ Year 1980 through 1993 data is derived from the Air Quality Management Plan (AQMP), Appendix M-94, Ambient Air Quality Data (1977-1993). Year 1994 data from the AQMP, Appendix M-94 (Addendum).

² Countywide totals do not equate to the sum of the city exceedances. This is due to the fact that each exceedance countywide may also be reflected in the table as an exceedance for one or more city location.

TABLE 15

MAXIMUM HOURLY CONCENTRATIONS OF AIR POLLUTANTS
IN THE PROJECT REGION, 1992 AND 1993 ¹

		CO ppm		NO ₂ ppm	SO ₂ ppm		PM ₁₀ mg/m ³	
		1 Hour	8 Hour Mean	1 Hour	1 Hour	Annual Mean	24 Hour	Mean
Simi Valley	1992	7.0	3.5	0.1	0.01	--	84	31.7
	1993	9.0	--	0.1	--	--	68	28.1
Piru	1992	--	--	--	--	--	67	30.7
	1993	--	--	--	--	--	118	28.8

¹ Data from 1994 AQMP

Sulfur Dioxide (SO₂)

Sulfur dioxide is a non-flammable colorless gas with a pungent irritating odor. Most SO₂ is produced from the burning of fossil fuels. Adverse health effects include irritation of the respiratory system and diminished lung function especially in asthmatic and elderly individuals. As presented in Table 15, the maximum hourly SO₂ concentration levels are in compliance with both the state and federal ambient air quality standards.

Carbon Monoxide (CO)

Motorcycles are a primary source of carbon monoxide in urban areas. Carbon monoxide (CO) in non-urban areas is produced by forest fires and agricultural burning. Carbon monoxide has a high affinity for hemoglobin and replaces oxygen in the blood stream. Deleterious effects of CO range from headaches and nausea at low concentrations to asphyxiation at high concentrations. As presented in Table 15, the maximum hourly CO concentration levels are in compliance with both the state and federal ambient air quality standards.

Hydrocarbons (HC)

Hydrocarbons are common compounds comprised of hydrogen and carbon. Some hydrocarbons are classified as reactive (e.g., ROC) and react in the presence of sunlight with NO_x compounds to form O₃. The predominant anthropogenic source of hydrocarbons is the operation of motor vehicles. Adverse health effects are numerous, depending on the specific HC compound, and many of the compounds can be very harmful to humans. There are no ambient air quality standards for hydrocarbons, but control of these compounds is important in order to reduce air toxics as well as O₃ concentrations.

4.7.1-4 Ventura County Air Pollution Control District Rules and Regulations

The local air quality rules and regulations that may apply to this proposed project are mandated by the VCAPCD. The mining operation consists of a number of individual processes which require permits from the APCD and are subject to the APCD Rules. The major processes associated with the proposed mining operation include quarrying, rock crushing and screening, concrete batching, and asphalt concrete batching. In anticipation of an increase in production, were CUP-4633 to be approved, the applicant has already obtained a modification of the existing APCD permits to accommodate an annual production level of 3.4 million gross tons. The applicant does not currently have an APCD permit for the proposed asphalt batch plant.

Stationary combustion equipment associated with the proposed project includes a 75.6 MMBTU/HR burner for the asphalt batch plant and a 125 hp diesel back-up generator.

At a minimum, the proposed project will be subject to the following Rules and Regulations of the Ventura County APCD:

Rule 26 - New Source Review - Rule 26 specifies the requirements for new or modified stationary sources of NO_x, ROC, or PM₁₀ in the south zone of Ventura County. These requirements include emission control equipment, required offsets, and identification of mitigation measures to be implemented. It is likely that BACT will be required whenever feasible to reduce emissions from this project as much as possible.

Rule 50 - Opacity - requires that emissions from any single source are not darker than No. 1 on the Ringelmann Chart for a period greater than three (3) minutes in any one (1) hour period.

Rule 51 - Nuisance - requires that a person shall not discharge from any source such quantities of air contaminants, including dust and odors, which cause injury, detriment, nuisance, or annoyance to the public.

Rule 52 - Particulate Matter - Concentration and Rule 53 - Particulate Matter - Process Weight - require that sources not discharge particulate matter into the atmosphere in excess of limits specified in the tables contained in the rules.

Rule 72 - New Source Performance Standards - incorporates the requirements of the federal New Source Performance Standards and ensures that stationary sources will at a minimum, meet the federal emission standards.

4.7.2 PROJECT IMPACTS

California CEQA Guidelines state that a project would have a significant effect on the environment if it will violate any ambient air quality standard, contribute substantially to an existing or projected air quality standard violation, or expose sensitive receptors to substantial pollutant concentrations. Explicit criteria for determining if a project exceeds an air quality significance threshold are provided in the Ventura County Initial Study Assessment Guidelines. These Guidelines provide the following threshold criteria for the environmental assessment of air quality:

Threshold Criteria:

1. Local Air Quality

- a. Carbon Monoxide: A CO screening analysis should be conducted for any project exceeding 25 pounds per day... of either ROC of NOx which may significantly impact roadway intersections which are currently operating at, or which are expected to operate at, Levels of Service D, E, or F, or at any project-impacted roadway intersection at which there may be a CO hotspot.
- b. Toxic Air Pollutants: Any project which may release toxic or hazardous air pollutants to the atmosphere in amounts which may be injurious to nearby populations should be analyzed for potential toxic air pollutant impacts.
- c. Odors: Any project which may create objectionable odors which may impact sensitive receptors should be analyzed for potential odor impacts.
- d. Particulate Matter/Dust: Any project which may create, either during construction or operation, excessive amounts of fugitive dust or other particulate matter, should be analyzed for potential adverse impacts, including nuisances.

2. Regional Air Quality

-
- b. Any general development project in the remainder of the ozone nonattainment area of the county [outside Ojai CAO and Ventura 1 non-growth area] capable of daily emissions of:

Reactive Organic Compounds: 25 pounds

Nitrogen Oxides: 25 pounds

These are thresholds for projects that the Ventura County Air Pollution Control Board has determined will individually and cumulatively jeopardize attainment of the ozone standard and thus have a significant adverse impact on air quality in the county.

- c. A project which may cause an exceedance of any ambient air quality standard (state or federal), or makes a substantial contribution to an existing exceedance of an air quality standard. Substantial is defined as making measurably worse an existing exceedance of a state or federal ambient air quality standard.
- d. Any project with emissions greater than two pounds per day of ROC, or two pounds per day of NOx, that is found to be inconsistent with the Ventura County AQMP will have a significant cumulative adverse air quality impact.

The 1989 Ventura County Air Quality Impact Analyses Guidelines provide thresholds and impact significance criteria for emission sources, such as construction equipment, which typically fall outside the jurisdiction of the APCD. These thresholds only apply to equipment and operations not subject to an APCD Permit to Operate. Calculation methodologies, equipment emission factors and vehicle trip generation rates, referenced herein, are derived from the Air Quality Impact Analyses Guidelines and from an EPA document entitled: Compilation of Air Pollutant Emission Factors, commonly referred to as AP-42. Copies of these documents are available at the Ventura County Air Pollution Control District, 669 County Square Drive, Ventura, CA 93003.

4.7.2-1 Emission Data

The proposed project would cause increased emissions of NO_x, ROC and PM₁₀ to the local air basin. The project has been divided into three major emission categories: Fugitive Dust Sources, Processing Plants, and Miscellaneous Combustion Sources. Each of the major categories has been broken down into the following project components which have been evaluated for their emission generating potential as discussed in more detail below.

Fugitive Dust Sources	Processing Plants	Other Combustion Sources
<ul style="list-style-type: none">• Overburden Removal• Mining Operations• Storage Piles• On-site Road Dust	<ul style="list-style-type: none">• Asphalt Batch Plant• Rock Plant and Conveyor• Road Base and Recycling Plant• Mortar Plant• Concrete Batch Plant	<ul style="list-style-type: none">• Truck Transport• On-Site Equipment• Employee Vehicles• Back-up Generator

Fugitive Dust Sources

Overburden and Topsoil Removal

Removal of the overburden and topsoil overlying the sand and gravel deposits would involve the use of loaders and haul trucks. Both topsoil and overburden would be stockpiled temporarily on an inactive portion of the site, and would be used to reclaim portions of the mine when mining operations cease. Emission factors used for overburden and topsoil removal (0.0033 lbs/cubic yards) were calculated from AP-42 Section 8.24. The emission factor for removal of overburden using the dragline method is used since this method is anticipated to have emission characteristics similar to the method used for this project. An estimated 100,000 cubic yards of overburden and topsoil (or 5% of total production, in terms of cubic yards) would be removed each year under full production yielding estimated total annual PM₁₀ emissions of 0.17 tons/year. Assumptions include a drop height of 5 feet and a moisture content of 3.5%. Under the "existing setting," an estimated 60,000 cubic yards of overburden and topsoil (or 5% of total production, in terms of cubic yards) would be removed each year under full production yielding estimated emissions of 0.10 tons/year of PM₁₀. Therefore, the increased overburden and topsoil removal associated with the proposed project is estimated to result in a net annual increase of 0.7 tons/year of PM₁₀. (Refer to Table 16.)

Mining Operations

An annual maximum of approximately 3.4 million tons of sand and gravel aggregate could be mined with an average of 312 days of mining per year. Quarried aggregate is assumed to have a moisture content of 3.5% and a silt content of 5.0%. Aggregate would be pushed into the pit by dozers working the upper portions of the mining area and then loaded into a conveyor hopper by a loader. Due to the high moisture content of the material, emissions are expected to be fairly low. Emission factors used for mining operations are calculated from AP-42 Section 8.24. Total annual

PM₁₀ emissions from mining operations are calculated to be 36 tons/year of PM₁₀ assuming an average drop height of 150 feet. Under the "existing setting," 1,800,000 gross tons of sand and gravel aggregate could be mined with an average of 312 days of mining per year. Total fugitive dust emissions are calculated to be 21.6 tons/year of PM₁₀ assuming an average drop height of 150 feet. Therefore, the increased mining operations associated with the proposed project is estimated to result in a net annual increase of 14.4 tons/year of PM₁₀. (Refer to Table 16.)

TABLE 16
FUGITIVE DUST (PM₁₀) EMISSIONS

Activity or Equipment	Proposed Project		Existing Setting		Increased Emissions	
	tons/yr	lbs/day ¹	tons/yr	lbs/day ¹	tons/yr	lbs/day ¹
Mining Activities						
• Overburden/Topsoil Removal	0.17	1.10	0.10	0.66	0.07	0.44
• Mining Excavation	36.00	230.80	21.60	138.48	14.40	92.32
• Stockpiles	1.03	5.70	1.03	5.70	--- ²	---
• On-Site Road Dust	136.27	752.90	81.76	451.74	54.51	301.16
Processing Equipment						
• Asphalt Batch Plant (260 days)	2.20	16.60	--- ³	---	2.20	16.60
• Rock Plant (300 days)	18.70	125.00	11.22	75.00	7.48	50.00
• Road Base/Recycling Plant (260 days)	6.40	64.00	3.84	38.40	2.56	25.60
• Mortar Plant (300 days)	0.30	2.00	0.18	1.20	0.12	0.80
• Mortar Plant (300 days)	3.60	24.00	2.16	14.40	1.44	9.60
Misc. Combustion Sources						
• Truck Transport (Avg.) ⁴	20.00	128.20	12.00	76.92	8.00	51.28
• On-Site Equipment	3.40	50.90	2.04	30.54	1.36	20.36
• Employee Vehicles	2.40	16.70	1.44	10.02	0.96	6.68
• Back-Up Generator (20 days)	0.03	3.0	0.03	3.00	--- ⁵	---
TOTAL	230.50	1,420.90	137.40	846.06	93.10	574.84

¹ Based on 312 mining days per year, unless otherwise noted in the first column.

² Assumes no change in stockpiles.

³ Existing Setting does not include an asphalt batch plant.

⁴ Emissions to and from destinations within Ventura County.

⁵ Assumes no change in back-up generator use.

Stockpiles

Mined sand and gravel would be temporarily stored in active stockpiles until needed. Stockpiled material would be used as input into other processes at the facility, or shipped off-site. The surface area of these stockpiles is assumed to be about one acre (J. Sandoval, pers. comm.). Emission factors for storage piles are taken from AP-42 Table 8.19.1-1. On average, stockpiles are assumed to be

active for 312 days (6.3 lbs/day) and inactive for 52 days (1.7 lb/day) per year. The emission factor for active storage piles includes the loading of aggregate onto piles, equipment traffic in storage areas and wind erosion of the piles. Total annual PM₁₀ emissions from stockpiles are calculated to be 1.03 tons per year. The stockpiles being proposed are no larger than currently exists under the "existing setting." Therefore, the stockpiles associated with the proposed project will result in no net increase of PM₁₀. (Refer to Table 16.)

On-site Road Dust

On-site road dust is generated from construction equipment and delivery vehicles travelling between the various processing plants on the unpaved roads. The emission factor (3.0 lbs/Vehicle Mile Travelled) was calculated from AP-42 Table 11.2.1. Assumptions used in the equation include 5% silt content (J. Sandoval, pers. comm.), one mile of unpaved road travel per trip, 40 days per year with precipitation in excess of 0.01 inches, and trucks with 10 wheels and a weight of 30 tons, limited to an on-site speed of 15 miles per hour. Water application is assumed to reduce PM₁₀ emissions by 50%. There would be an average of 664 weekday truck roundtrips and 174 Saturday roundtrips during the year. Total PM₁₀ emissions from on-site unpaved roads are calculated to be 136.27 tons/year. Under the "existing setting," there would be an average of 405 weekday truck roundtrips and 105 Saturday roundtrips during the year. Total PM₁₀ emissions from on-site unpaved roads are calculated to be 81.76 tons/year. Therefore, the increased mining operations associated with the proposed project is estimated to result in a net annual increase of 54.51 tons/year of PM₁₀. (Refer to Table 16.)

Processing Plants

Asphalt Batch Plant

The proposed asphalt batch plant is assumed to have an annual production rate of 600,000 tons, a daily production rate of 2000 tons/day, and a maximum hourly production rate of 245 tons. The plant is equipped with a natural gas fired 75.6 MMBTU/hr burner. Particulate emissions were calculated using AP-42 Table 8.1-3, and would be controlled by a baghouse employing a pulse jet cleaning system. Gaseous emissions were calculated using emission factors for natural gas combustion (AP-42 Table 1.4-1) which were converted using industry standard data of 251.04 SCF of natural gas burned per ton of asphalt mix produced. See Appendix E for details on the derivation of the emission factors. There is no asphalt batch plant included within the "existing setting." (Refer to Table 16.)

Rock Plant and Conveyor

Mined aggregate composed of sand and rocks is sent to the rock plant which employs a jaw crusher and screening systems. An average of approximately 12,500 tons of rocks would be crushed and sorted each day for use in other products or for off-site sales. Emissions from the rock plant are primarily particulate emissions released during the crushing and screening of aggregate materials. Emission factors for particulate emissions are from AP-42 Table 8.19.1-1. Emissions would be controlled by use of baghouses and a fogger. Total annual PM₁₀ emissions from the rock plant and conveyor are based on 312 days of operation per year and are estimated to be 18.7 tons/year for the proposed project. Under the "existing setting," the annual PM₁₀ emissions are estimated to be 11.22 tons/year for the proposed project. Therefore, the increased rock plant and conveyor operations associated with the proposed project is estimated to result in a net annual increase of 7.48 tons/year of PM₁₀. (Refer to Table 16.)

Road Base and Recycling Plant

The road base and recycling plant would produce a maximum of 2000 tons/day of road base and operate approximately 200 days per year. Emission factors for the plant are calculated from source specific information supplied by J. Sandoval (pers. comm.). Total annual PM₁₀ emissions from the road base and recycling plant are calculated to be 64 lbs/day and 6.4 tons/year. Under the "existing setting," the annual PM₁₀ emissions are estimated to be 3.84 tons/year for the proposed project. Therefore, the increased road base and recycling plant operations associated with the proposed project is estimated to result in a net annual increase of 2.56 tons/year of PM₁₀. (Refer to Table 16.)

Mortar Plant

The mortar plant consists of a 27 cubic feet mixer, a 12 ton sand bunker, a 25 ton cement storage silo and a Torit dust collector. The mortar plant is assumed to produce approximately 10 cubic yards of mortar per day and operate 260 days per year. Emissions from the mortar plant would be controlled by a baghouse and water sprays. The PM₁₀ emission factor is taken from AP-42 Table 8.10-1. Total annual PM₁₀ emissions from the mortar plant are estimated to be 0.3 tons/year. Under the "existing setting," the annual PM₁₀ emissions are estimated to be 3.84 tons/year for the proposed project. Therefore, the increased road base and recycling plant operations associated with the proposed project is estimated to result in a net annual increase of 2.56 tons/year of PM₁₀. (Refer to Table 16.)

Concrete Batch Plant

The concrete batch plant is assumed to produce 1000 cubic yards of concrete per day and operate 300 days per year. The concrete is loaded into ready-mix trucks which deliver the material to off-site customers. Primary emissions associated with operation of the concrete batch plant are particulate emissions which are liberated during mixing of the aggregate materials and during truck loading operations. Emissions would be controlled by use of baghouses and a vacuum suction device. Total annual PM₁₀ emissions from the concrete batch plant are estimated to be 3.6 tons/year. Under the "existing setting," the annual PM₁₀ emissions are estimated to be 2.16 tons/year for the proposed project. Therefore, the increased concrete batch plant operations associated with the proposed project is estimated to result in a net annual increase of 1.44 tons/year of PM₁₀.

Sources of Gaseous Pollutant Emissions

On-Site Equipment

On-site equipment would be a primary source of gaseous combustion emissions. Equipment includes dozers, scrapers and loaders used to remove overburden, mine aggregate, and load aggregate onto conveyors. Estimated daily and annual emissions are provided in Tables 17 and 18.

Asphalt Batch Plant

The asphalt batch plant and haul trucks transporting the asphalt along Happy Camp Road and streets within Moorpark are expected to contribute relatively small amounts of ROC and PM₁₀. However, the asphalt batch plant is expected to contribute significantly higher amounts of NO_x and CO. Estimated daily and annual emissions are provided in Tables 17 and 18.

Back-up Generator

A 125 hp diesel skid-mounted back-up generator is available on site to provide emergency power as needed. The generator is also employed for pumping water from lower retention basins to upper settling ponds for reuse in the processing systems. The generator is expected to be used an average

of 200 hours per year. Emission factors from the diesel generator are from AP-42 Table 3.3-1. Estimated daily and annual emissions are provided in Tables 17 and 18.

TABLE 17
DAILY GASEOUS POLLUTANT EMISSIONS

Activity or Equipment	lbs/day			
	ROC	NO _x	SO ₂	CO
Mining				
• Proposed Equipment	66.1	558.0	57.7	180.2
• Existing Equipment	39.7	334.8	34.6	108.1
Net Increase	26.4	223.2	23.1	72.1
Processing				
• Proposed Asphalt Batch Plant	3.0	70.2	0.4	17.6
• Existing Setting (none)	---	---	---	---
Net Increase	3.0	70.2	0.4	17.6
Processing				
• Proposed Back-Up Generator (20 d/yr)	4.0	39.0	3.0	8.0
• Existing Back-Up Generator (20 d/yr)	4.0	39.0	3.0	8.0
Net Increase	---	---	---	---
Transportation				
• Proposed Truck Deliveries (Avg.)	110.7	476.2	26.8	358.3
• Existing Truck Deliveries (Avg.)	66.4	285.7	16.1	215.0
Net Increase	44.3	190.5	10.7	143.3
Transportation				
• Proposed Employee Vehicles	2.5	3.6	0.4	25.1
• Existing Employee Vehicles	1.5	2.2	0.2	15.1
Net Increase	1.0	1.4	0.2	10.0
Total Proposed	186.3	1,147.0	88.3	589.2
Total Existing	111.6	661.7	53.9	346.2
Total Net Increase	74.7	485.3	34.4	243.0

TABLE 18

ANNUAL GASEOUS POLLUTANT EMISSIONS

Activity or Equipment	tons/year			
	ROC	NO _x	SO ₂	CO
Mining				
• Proposed Equipment	4.60	38.40	3.90	12.00
• Existing Equipment	2.76	23.04	2.34	7.20
Net Increase	1.84	15.36	1.56	4.80
Processing				
• Proposed Asphalt Batch Plant	0.40	9.10	0.00	2.30
• Existing (none)	---	---	---	---
Net Increase	0.40	9.10	0.00	2.30
Processing				
• Proposed Back-Up Generator (20 d/yr)	0.04	0.39	0.03	0.08
• Existing Back-Up Generator (20 d/yr)	0.04	0.39	0.03	0.08
Net Increase	---	---	---	---
Transportation				
• Proposed Truck Deliveries (Avg.)	17.30	74.30	4.20	55.90
• Existing Truck Deliveries (Avg.)	10.38	44.58	2.52	33.54
Net Increase	6.92	29.72	1.68	22.36
Transportation				
• Proposed Employee Vehicles	0.30	0.50	0.10	3.30
• Existing Employee Vehicles	0.18	0.30	0.06	1.98
Net Increase	0.12	0.20	0.04	1.32
Total Proposed	22.64	122.69	8.33	73.58
Total Existing	13.36	68.31	4.95	42.80
Total Net Increase	9.28	54.38	3.28	30.78

Truck Transport

Haul trucks bringing supplies to the mine and delivering finished products to customers would be a major source of emissions for this project. Primary emissions generated include combustion emissions from the engines during idle and loaded-mode operations. Emissions are based on the estimated number of trips per week and the total distances trucks that will travel to each destination. Trucks are assumed to travel to four (4) primary destinations: Fillmore, Camarillo/Oxnard, Simi Valley, and Thousand Oaks. Emission calculations for idle mode include an assumed 20 minute per trip idle time. Other assumptions used to estimate emissions from trucks are shown in Appendix E. Estimated daily and annual emissions are provided in Tables 17 and 18.

Employee Vehicles

An important component of total project emissions includes emissions from employee vehicles traveling to and from the work site. It has been estimated that there would be approximately 195 vehicles traveling to the site each weekday and 75 vehicles traveling to the site on Saturdays. Each vehicle is assumed to make 2 one-way trips per day (1 from home to the work site and another from the work site to home). Emissions from employee vehicles were calculated using the emission data from the California Air Resources Board EMFAC7E program. Emissions were estimated using 1994 vehicle fleet composition, a temperature of 60° F, and an average travelling speed of 35 miles per hour. Estimated daily and annual emissions are provided in Tables 17 and 18.

Total Project Emissions

The proposed project would generate pollutant emissions in excess of threshold criteria for PM₁₀, ROC, and NO_x. Therefore, the proposed project would result in significant, unmitigable impacts (Class I) to local air quality. (Refer to Table 19).

TABLE 19
EXCEEDANCE OF EMISSIONS THRESHOLDS

Pollutant	Proposed Project		Existing Setting		Threshold Criteria	Net Increase, Mobile Above Threshold
	Mobile	Stationary	Mobile	Stationary		
PM ₁₀	1420.9		846.1		any contribution to an existing	574.8
ROC	186.3	7.0	111.6	4.0	25 #/day	46.7
NO _x	1147	109.2	661.7	39.0	25 #/day	390.3

All figures in Table 19 are an expression of emission pounds per day (#/day).

As noted above, Ventura County is in attainment for SO₂ and CO emissions. The proposed project is not expected to change this status.

Dispersion Modeling of PM₁₀ Emissions

AeroVironment, Inc., conducted the air quality analysis for the project by Lockman and Associates (1991) who prepared the previously unpublished EIR. AeroVironment, Inc. estimated the total PM₁₀ emissions from the project at 1568 lbs/day and 225 tons/year using slightly different assumptions and emission factors than used in this EIR. Their results are essentially the same as those presented in this EIR and the conclusions herein are not affected. The AeroVironment modeling data are presented in Appendix F.

AeroVironment, Inc., also conducted a dispersion modeling of PM₁₀ emissions in the Lockman and Associates (1991) document, the results of which are summarized herein. The Industrial Source Complex Short-Term Model (ISCST) was used to estimate maximum hourly and annual average PM₁₀ concentrations at the CUP boundaries, as well as residences along Happy Camp Road and in Happy Camp Canyon Regional Park. Meteorological data from Simi Valley air quality monitoring station were used in the model. The model included all emissions described above, and a 24-hour mining and processing operation. AeroVironment, Inc., considered the modeling assumptions to be

worst case and likely to overestimate the impacts slightly. The estimates of PM₁₀ concentrations did not include ambient levels.

The modeling results indicated that the maximum hourly and annual concentrations would occur at the western boundary of proposed CUP-4633 boundary, adjacent to CUP-4158, which is also owned by TMC. AeroVironment, Inc., indicated that there are predominately east-to-west winds in the area and developed the following estimates of maximum PM₁₀ concentrations. These PM₁₀ concentrations would exceed the state and federal PM₁₀ standards.

	<u>Maximum Concentration (ug/m³)</u>		
	<u>Project</u>	<u>State Std.</u>	<u>Federal Std.</u>
24-Hour Values	2133	50	150
Annual Values	556	30	50

Estimated maximum 24-hour concentrations in other locations outside the propose CUP-4633 boundary include 94 ug/m³ at residences along Happy Camp Road, 20 ug/m³ in Moorpark, and 118 ug/m³ in Happy Camp Canyon Regional Park. AeroVironment, Inc. also concluded these exceedances of the PM₁₀ standards are to be considered a significant, unmitigable impact (Class I).

*

Odors From Asphalt Batch Plant and Asphalt Haul Trucks

The previously uncertified EIR for the proposed project, prepared by Lockman and Associates (1991), contained an assessment of odor impacts which is summarized below. The primary source of odors from the project is the asphalt batch plant and haul trucks transporting the asphalt along Happy Camp Road and streets within Moorpark. According to Lockman and Associates (1991), odors from the proposed asphalt batch plant are typically not detectable if the plant is more than one mile from sensitive receptors, such as homes. Sensitive receptors (e.g., Happy Camp Regional Park and residences along Happy Camp Road) are located 2000-4000 feet away from the proposed asphalt batch plant (refer to Section 4.8.1). Odors are associated with the ROC and PM₁₀ emissions from the asphalt batch plant (see Tables 16, 17, and 18). Lockman and Associates (1991), in consultation with AeroVironment, Inc., consider these emissions from the asphalt batch plant to be relatively small, and unlikely to be detected off-site. Assuming asphalt batch plant odors are detected, these odors are considered an insignificant adverse impact (Class III).

There is no accepted methodology to assess the potential for odors from asphalt haul trucks to be detected and objectionable to residents along Happy Camp Road and streets in Moorpark where the haul trucks would travel. Existing analytical tools and dispersion models are not accurate at predicting odor impacts at distances of 100-200 feet, which represent the distance of homes from the streets where haul truck travel. An estimated 120 to 144 asphalt delivery trucks would use Happy Camp and Walnut Canyon Roads during Monday through Friday. Given the amount of daily asphalt truck traffic, it is likely that certain residences may experience asphalt odors and find them objectionable. These odors are considered an insignificant adverse impact (Class III). Though not a significant impact, certain measures have been included in the recommended Air Emissions Mitigation Plan to reduce asphalt odors (refer to Section 4.7.5.).

Truck Exhaust Fumes

Objectionable odors may also emanate from haul truck exhaust along the access roads. These odors are the result of uncombusted diesel fuel and the hydrocarbons resulting from combustion. Such fumes are readily detected adjacent to an idling truck. It is expected that truck exhaust odors will be occasionally noticed by residents along Happy Camp Road during periods of low wind conditions, and due to the large volume of truck trips per day. However, the frequency of this detection is considered low to moderate because the meteorological conditions in the area would readily disperse such exhaust "plumes" under all but the most calm conditions. Typical moderate meteorological conditions in the region consist of winds of 1.0 meter per second. This type of wind would disperse a "plume" within 10 to 20 seconds before a concentrated exhaust "plume" could reach a residence. As such, the frequency of objectionable odors reaching the residences along the access roads under existing conditions is considered low to moderate. It should be noted that air quality models to predict odors over such short distances (i.e., 50 to 100 feet) are not sufficiently accurate to be used for this assessment.

The proposed project would increase the number of truck trips along the access road. This increase is not expected to increase the concentration of exhaust and asphalt fumes detected by residents because each truck would pass by the homes separately and "plumes" would not coincide. However, there may be an increase in the frequency of detectable odors with the proposed project. This is considered an insignificant adverse impact (Class III).

Valley Fever

Valley fever (Coccidioidomycosis) is a disease that is typically contracted by inhaling spores of a specific fungus found in the topsoils of the arid western states. These spores are dispersed by ground-disturbing activities such as plowing or by wind erosion. The fever can result in mild illness to a fatal illness. Valley fever is very common in the more arid San Joaquin Valley. In 1994, the Ventura County Public Health Department initiated an investigation into the number of reported cases of valley fever within Ventura County. This investigation and subsequent reporting found the following number of reported cases in Ventura County: 1989 (2 cases), 1990 (7 cases), 1991 (7 cases), 1992 (60 cases), 1993 (52 cases), 1994 (243 cases), and 1995 (24 cases). The 1992 and 1993 cases were attributed to a prolonged period of high winds and the high number of cases in 1994 were attributed to the January 16, 1994 Northridge Earthquake. (Source: personal communication from Marilyn Billimek.) Given the distance from the proposed project to possible receptors of fugitive dust and the recommended PM₁₀ related mitigation measures, it is concluded that the proposed project does not constitute a significant valley fever health risk.

Air Toxics "Hot Spots" Program Data

Under AB 2588, operators of certain facilities are required to prepare an inventory of their air toxics emissions. Based on the inventory data, the APCD sets risk assessment priorities for each facility. High priority facilities are required to prepare health risk assessments. A scoring system is employed wherein a score of 10 or more is considered a high priority which triggers a health assessment.

Based on 1990 emission data, TMC was categorized as low priority for health risk assessment. Therefore, no health risk assessment was required. The 1990 priority score for the "existing setting" was 0.90. Based on 1992 updated data, TMC was again found to be a low priority with a score of

0.90. (Source: May 1, 1996 memo from Terri Thomas [APCD] to Lou Merzario [RMA-Planning Division].)

Regarding the proposed asphalt batch plant, the 1990 and 1991 emission data for the PW Gillibrand asphalt batch plant in Simi Valley was reviewed. This review was conducted to determine how a TMC asphalt batch plant might be categorized. Based on the 1990 emission data, PW Gillibrand was categorized as an intermediate priority for health risk and no health risk assessment is required. The 1990 priority score was 5.26. However, direct comparison between the proposed TMC project and PW Gillibrand data cannot be made since there are site specific considerations that differ between projects. (Source: June 5, 1996 memo from Terri Thomas [APCD] to Lou Merzario [RMA-Planning Division].) The following two examples serve to illustrate this point:

- 1) The "RP factor" or receptor proximity is based on the distance from the emission source to the nearest receptor (i.e., residence, workplace, other). The greater the distance from the source to the nearest receptor, the lower the RP factor, and the lower the priority score. For TMC, the RP factor is 0.04, and for PW Gillibrand, the RP factor is 0.011.
- 2) Throughput is also used in determining emission data. This reflects the amount of material processed, by category, and the associated fuel combustion. Though TMC's throughput in 1992 was considerably greater than PW Gillibrand in all categories except asphalt, the amount of diesel fuel combustion by TMC was only 4,000 gallons, or 0.5% of the 800,534 gallons used by PW Gillibrand. The proposed project includes a fuel combustion source for the asphalt batch plant, to be fueled by natural gas. In contrast to diesel, this fuel combustion source will produce significantly different types and quantities of air toxics emissions.

An APCD Authority to Construct will be required for the construction of an asphalt batch plant. If such a plant is approved, TMC will need to make application to the APCD for an Authority to Construct and, at that time, submit the information needed to accurately establish air toxics emissions and determine whether a health risk assessment is to be prepared or not.

4.7.3 CUMULATIVE IMPACTS

The proposed project would result in significant, unmitigable cumulative impacts (Class I) because: 1) Ventura County is in non-attainment of the state PM_{10} standard and the proposed project's contribution would be locally substantial; 2) proposed project emissions could combine with the emissions associated with the two adjacent mines (i.e., CUP-4571 and CUP-4158).

There is also a potential for significant cumulative impacts to air quality if the following proposed projects are completed in the region: 1) Happy Camp Park Development, and 2) City of Moorpark's General Plan Land Use and Circulation update. If one or more of these major projects are approved, potentially significant cumulative air quality impacts would occur with the proposed project due to PM_{10} and NO_x emissions. Though unmitigable, appropriate mitigation measures for these potential impacts are outlined in Section 4.7.5 (A-1 Air Emissions Mitigation Plan and A-2 Vehicle Emissions Mitigation Program).

4.7.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Air Quality

Goal 1.2.1-1

Diligently seek and promote a level of air quality that protects public health, safety, and welfare, and seek to attain and maintain the State and Federal Ambient Air Quality standards.

Goal 1.2.1-2

Ensure that any adverse air quality impacts, both long-term and short-term, resulting from discretionary development are mitigated to the maximum extent feasible.

Policy 1.2.2-1

Discretionary development that is inconsistent with the Air Quality Management Plan (AQMP) shall be prohibited, unless overriding considerations are cited by the decision-making body.

Policy 1.2.2-3

Discretionary development that would have a significant adverse air quality impact shall only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate (offset) for the air quality impact. Developers shall be encouraged to employ innovative methods and technologies to minimize air pollution impacts.

Policy 1.2.2-5

Development subject to APCD permit authority shall comply with all applicable APCD rules and permit requirements, including the use of best available control technology (BACT) as determined by the APCD.

The proposed project would result in significant, unmitigable impacts to air quality (Class I). However, project approval would be conditioned to require the mitigation measures described in Section 4.7.5, maintain consistency with the AQMP, comply with APCD requirements, and employ best available control technology (BACT). As such, the proposed project is considered consistent with the above stated goals and policies.

4.7.5 MITIGATION MEASURES

NO_x and PM₁₀ are the principal air pollutants of concern due to the exceedances of both the state and federal air quality standards for O₃ and PM₁₀. Though the proposed project would result in significant, unmitigable impacts to air quality, these are reasonable and feasible mitigation measures that will reduce emissions from the proposed project, but will not reduce the impacts of ROC, NO_x and PM₁₀ to less than significant levels. Due to the number and complexity of the recommended mitigation measures, a comprehensive Air Emissions Mitigation Plan is recommended, as described below.

*

A-1. Air Emissions Mitigation Plan

Prior to issuance of the zoning clearance for Phase 1, the permittee shall submit an Air Emissions Mitigation Plan to the APCD for review and approval which shall contain the following elements:

Ozone (O₃) Precursor Mitigation Measures

1. At all times, O₃ precursor emissions shall be controlled by ensuring equipment and truck engines are maintained in good condition and in proper tune as per manufacturer's specifications.

PM₁₀ Mitigation Measures

2. Fugitive dust throughout the site shall be controlled by the use of a watering truck, generally at least three times a day (except during and immediately after rainfall). Water shall be applied to all on-site roads, stockpiles areas, actively excavated areas, and all areas that are temporarily inactive. To prevent fugitive dust, fugitive dust should, under most conditions, not be visible. Environmentally safe dust control agents may be used in lieu of watering.
3. All active storage piles shall be watered, as needed, or treated with environmentally safe dust control agents. The placement of wind fences, enclosures, or silos to control PM₁₀ may also be appropriate at some locations.
4. Inactive areas (i.e., 6 months or longer) shall be seeded with native grasses or other native groundcover, approved by the Planning Director, to encourage a temporary vegetative cover to reduce wind erosion. All temporary seeding shall make use of the following seed mix and shall be applied at a rate of 20 pounds per acre (i.e., unless another seed mix/rate of application is proved more effective via on-site test plot/analysis and approved by the Planning Director):

TEMPORARY SEED MIX

SPECIES	COMMON NAME	PROPORTION
<i>Eriogonum fasciculatum</i>	California Buckwheat	50%
<i>Lotus scoparius</i>	Deer Weed	20%
<i>Hemizonia kelloggii</i>	Tarweed	25%
<i>Lupinus longifloris</i>	Bush Lupine	5%

Environmentally safe chemical stabilizers may be used on exposed areas which are not in use and not to the point of being revegetated. Note: Using chemical stabilizers on such areas has shown PM₁₀ reduction efficiencies in excess of 90 percent. Additionally, by applying a compatible chemical stabilizer, post-revegetation can provide a continuous dust control efficiency of greater than 90 percent for revegetated areas. (Source: Solarchem Resources, a report entitled Dust-Off Environmental Safety Report, prepared by McLaren)

Environmental Engineering, which reports an average dust emission reduction of 95 percent over a three week period when using MgCl₂ as a dust suppressant on a mine haul road.)

5. The facility and all associated equipment shall be operated in accordance with all applicable APCD regulations.
6. All mining, processing, and excavation with a potential to emit particulates shall be curtailed during periods of high winds (e.g., over 30 miles per hour) averaged over a one-hour period. At any point in time, if it is observed that fugitive dust is blowing off-site, additional watering activities shall be initiated. If watering is insufficient to prevent fugitive dust (i.e., during periods of extreme heat or winds), dust generating activities shall be immediately curtailed until the conditions abate.
7. The permittee shall ensure that all trucks leaving the site comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of aggregate and aggregate-related materials spilling onto public streets.

In addition, all trucks operated by the mine, and all trucks that visit the mine, must be free of loose soil, particularly around the fenders, wheels and axles. If necessary, the wheels and tires of trucks leaving the site shall be sprayed and washed free of loose dirt with water before the trucks leave the facility.

8. Haul trucks shall be limited to an on-site speed of 15 miles per hour. Signs indicating such shall be posted on-site and haul truck drivers shall be instructed not to exceed an on-site speed of 15 miles per hour.
9. Unpaved roads on the site shall be watered or treated with an environmentally safe chemical dust suppressant/palliative approved by APCD.

Asphalt Batch Plant Mitigation Measures

10. Operations of the asphalt batch plant and the transportation of asphalt products shall be conducted so as to fully comply with all applicable APCD regulations and APCD permit conditions.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: An Air Emissions Mitigation Plan shall be submitted to the County for review and approval prior to the issuance of the zoning clearance for Phase 1. Annual County inspections pursuant to SMARA requirements will provide an opportunity to observe many of the mitigation measures, particularly those related to dust control on roads and for stockpiles.

Monitoring Work Program/Monitoring Agencies: The APCD will review and approve the Air Emissions Mitigation Plan and any required reports. The APCD will be the monitoring

agency. In lieu of said monitoring by the APCD, a third party monitoring consultant, approved by the Planning Director, may be hired at permittee expense.

Standards of Success: APCD approval of the Air Emissions Mitigation Plan and compliance through monitoring by the APCD or a third party monitoring consultant.

A-2. Vehicle Emissions Mitigation Program

The permittee shall develop and implement a Vehicle Emissions Mitigation Program (VEMP). The VEMP is intended to mitigate/reduce project-related reactive organic compounds (ROC) and nitrogen oxide (NO_x) emissions that are net of the County's air quality CEQA Guidelines thresholds (i.e., 25 pounds per day for ROC and for NO_x), to the maximum extent feasible, utilizing compressed natural gas/low emissions vehicles or other equivalent techniques. At the time of project approval, the VEMP is assumed to require the project permittee to reduce mobile ROC and NO_x emissions through a combination of one or more of the following:

1. Use of low emission engines for product and on-site equipment.
2. Conversion of conventional engines or purchase of low emission vehicles/engines for use by non-project related vehicles.
3. Contributions to a countywide of other mobile emissions reduction fund, if such a fund is established by the APCD.
4. Other equivalent measures and/or programs approved by the APCD.

The permittee is encouraged to consult with and, to the extent feasible, work with any other organization, agencies, and/or parties, deemed appropriate by the permittee and the APCD, to design and implement the VEMP.

Permittee's total cost (Total Program Cost) for the VEMP shall be \$887,512. This cost is based on the California Air Resources Board's estimate of the cost to scrap 1975-1981 automobiles thereby achieving an equivalent reduction in project-related mobile emissions, net of County CEQA Guideline thresholds, assuming 312 days operation per year (i.e., 46.7 pounds/day or 7.32 tons/year of ROC and 390.1 pounds/day or 60.95 tons/year of NO_x). Total Program Cost may be a lesser amount if the permittee can demonstrate, to the satisfaction of the APCD, that the VEMP has fully mitigated 46.7 pounds/day of ROC and 390.1 pounds/day for NO_x. Total Program Cost may be reduced if the applicant can demonstrate, to the satisfaction of the APCD, that total project-related ROC and NO_x emissions subject to mitigation by the VEMP is less than 46.7 pounds/day of ROC and 390.1 pounds/day for NO_x. Said demonstration must be based on actual project operations and shall be submitted to the APCD within one year of the issuance of the Zoning Clearance for Phase 1.

Except as specified in the alternative below, the permittee shall, within six months of the issuance of the Zoning Clearance for Phase 1, submit a proposed VEMP to the APCD for review and approval. VEMP implementation shall not begin until the VEMP has been approved by the APCD. The VEMP shall be implemented within six months, and completed within four years, of its approval date.

If requested by the permittee, the APCD will develop and implement the VEMP on behalf of the permittee. If the permittee so requests, the permittee shall pay the APCD a VEMP mitigation fee equal to the Total Program Cost indicated above (i.e. \$887,512). Said fee shall be paid to the APCD over a four year period.

Alternative: Within six months of the issuance of the Zoning Clearance for Phase 1, the permittee may formally request the VEMP be delayed until the annual gross tonnage of mined material exceeds 1.8 million tons. If the permittee chooses this alternative, the permittee shall formally limit mining operations to no more than 1.8 million gross tons per year and shall submit quarterly reports to the APCD and the Planning Director, showing the gross amount of mined material during the previous three months. The extraction of more than 1.8 million gross tons per year may not occur until the Planning Director has, in consultation with the APCD, approved said increase in writing and the permittee has received APCD approval of the VEMP and has implemented the VEMP in the manner described above.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Quarterly status/progress reports to the APCD describing tasks completed and progress made; permittee expenditures toward VEMP implementation; outstanding problems, concerns, or delays; and tasks to be completed during the next reporting period.

Monitoring Work Program/Monitoring Agencies: The APCD will review and approve the VEMP. The APCD will be the monitoring agency. In lieu of APCD monitoring, the permittee may hire, at permittee expense, a third party monitoring consultant approved by the APCD.

Standards of Success: Permittee's successful participation in the APCD approved VEMP and subsequent compliance through monitoring by the APCD or a third party monitoring consultant.

4.7.6 RESIDUAL IMPACTS

After implementation of the above recommended mitigation measures, the proposed project is expected to generate the following residual impacts:

- NO_x and PM₁₀ exceedances of both the state and federal air quality standards for O₃ and PM₁₀ (significant, unmitigable impacts, Class D);
- ROC emissions in excess of the prescribed threshold criteria for regional air quality (significant, unmitigable impacts, Class D);

- SO₂ and CO emissions are expected to result in insignificant adverse impacts (Class III);
- asphalt batch plant and asphalt haul trucks odors that may be objectionable to residents along the haul route (insignificant adverse impacts, Class III); and
- haul truck exhaust odors that may be objectionable to residents along the haul route (insignificant adverse impacts, Class III).

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4.8 NOISE

In 1992, Walker, Celano, and Associates prepared an *Updated Noise Impact Analysis* (Appendix G) to evaluate the potential noise impacts of mining operations and of truck traffic. Twelve noise monitoring stations were established for monitoring ambient noise levels and predict future noise levels at and near the project site, as well as along the access roads. A series of acoustic measurements were conducted, typically in 15 minute samples, at each of these stations during the years 1989 (September), 1990 (April), and 1992 (March and April). The locations of these stations are shown on Figure 31 and summarized in Table 20. A *Supplementary Noise Impact Analysis* (Appendix H) was conducted to more accurately characterize truck noise in response to public comments. The results of these studies are summarized below.

4.8.1 EXISTING CONDITIONS

The areas of primary concern for noise impacts include Happy Camp Road, Walnut Canyon Road, and Moorpark city streets due to the large number of trucks travelling along these roads and the proximity of residences to the roadways. Noise sensitive receptors surrounding the project site include:

- Residences along Happy Camp Road, south of the mine. The nearest residences are located along the CUP boundaries, about 2000 feet from the processing area and about 4000 feet from the mining area (see Figure 14B).
- Happy Camp Regional Park is adjacent to the CUP boundaries and about 2000 feet from the processing area, and about 4000 feet from the new mining area (see Figure 15). At this time, the park is used only for hiking. Eventually, an active recreational development within the park is expected. Current plans consist of several golf courses in the lower canyon.
- Residences along Walnut Canyon Road, as well as city streets within Moorpark such as Walnut Canyon Road, Moorpark Avenue, Los Angeles Avenue and New Los Angeles Avenue where haul trucks would pass.
- Residences along Buena Vista Road and Skyline Ranch are located approximately 2000 feet or more from the CUP boundary.

Definition of Terms

The Ventura County Initial Study Assessment Guidelines provides the following definitions of terms relating to the environmental assessment of noise:

Noise - Noise is defined as any unwanted sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. Because the effects of noise accumulate over time, it is necessary to deal not only with the intensity of sound but also the duration of human exposure to the sound.

Noise Sensitive Uses - Dwellings, schools, hospitals, nursing homes, churches and libraries.

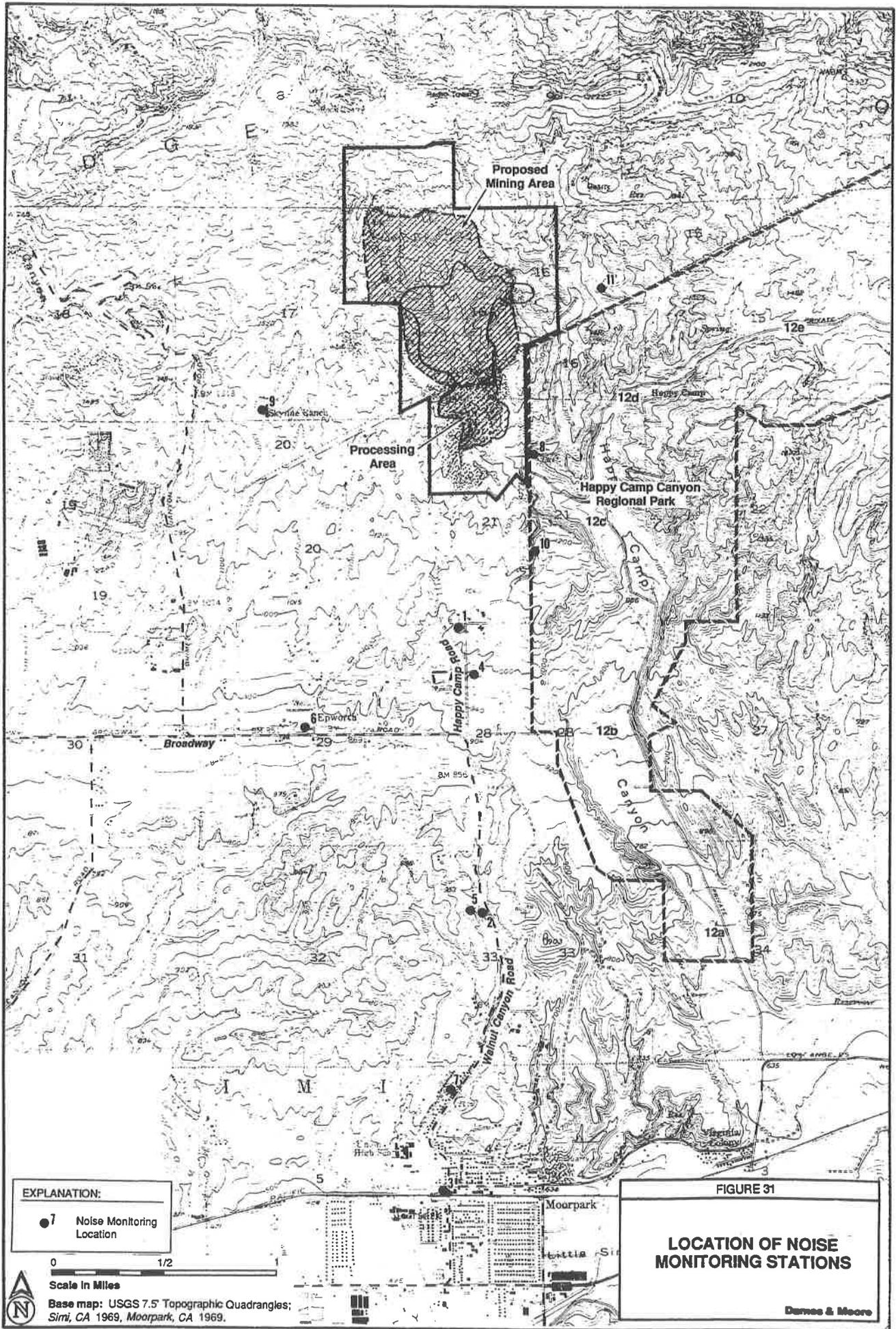


TABLE 20

LOCATION OF NOISE MONITORING SITES

No.	Monitoring Site
1	Happy Camp Road. 50 ft. west of the center line of Happy Camp, 115 ft. south of the "T" intersection with Roseland Ave.
2	Walnut Canyon Road. 30 ft. west of the center line of Walnut Canyon at the CMWD pump station.
3	Moorpark Ave. 44 ft. west of the center line of Moorpark Ave. between High Street and the Southern Pacific Railroad tracks.
4	Happy Camp Road. 50 ft. east of the center line of Happy Camp, 1500 ft. north of Walnut Canyon Road Junction.
5	Walnut Canyon Road. 50 ft. west of the center line of Walnut Canyon at the CMWD pump station.
6	Broadway. 50 ft. north of the center line of Broadway west of Fruitvale Ave.
7	Walnut Canyon Road. 50 ft. west of the center line of Walnut Canyon/Moorpark Ave., 1400 ft. north of Casey Street.
8	Happy Camp Road. South side of Happy Camp Road near end, approximately 1000 ft. southeast of the TMC site.
9	Skyline Ranch. Skyline Ranch at north end of Sheckell Road, approximately 4000 ft. westerly of the TMC site.
10	Walters Ranch. Walters Ranch, approximately 3000 ft. southerly of the TMC site.
11	Purdham Residence. Outside entry gate to Purdham residence, approximately 4000 ft. northeasterly of the TMC site.
12	Happy Camp Regional Park. Five positions in Happy Camp Canyon Park.

Note: See Figure 31 for locations of monitoring sites.

Decibel (dB) - A unit division on a logarithmic scale whose base is the tenth root of ten, used to represent ratios of quantities proportional to power. In simple terms, if the power is multiplied by a factor of ten, then ten is added to the representation of the power on the decibel scale. If 0 dB represents 1 unit of power, 60 dB represents one million units, etc.

A-weighted Sound Level [dB(A)] - Sound pressure level measured using the A-weighting network, a filter which discriminates against low and very high frequencies in a manner similar to the human hearing mechanism at moderate sound levels (ref. ANSI S1.4).

Time Average Sound Level ($L_{eq}T$ - dB) - The level, in decibels, of the mean (average) sound pressure averaged over time period T. This is often referred to as "equivalent sound level" and hence the "eq" subscript. The "equivalence" is to a sound of constant level which has the same total acoustic energy content. [Note: For the purposes of this EIR, $L_{eq}1H$ (1 hour) was used.]

Community Noise Equivalent Level [CNEL - dB(a)] - The long-term time average sound level, weighted as follows:

- Frequency response is filtered using the A-weighting network.
- Sounds occurring between 7 p.m. and 10 p.m. are weighted by 5 dB (in effect, the number of noise events is multiplied by 3.15).
- Sounds occurring between 10 p.m. and 7 a.m. are weighted by 10 dB (in effect, the number of noise events is multiplied by 10).

Ambient Noise - The noise which results from the combination of all sources, near and far. The ambient noise levels are expressed as $L_{eq}T$ or CNEL as judged appropriate to the situation.

Noise Contour - A line on a map which indicates locations of constant ambient sound level near or around known sources of noise. In practice, noise contours are often shown as calculated for the dominant source of noise only.

4.8.2 PROJECT IMPACTS

The Ventura County Initial Study Assessment Guidelines provide the following threshold criteria for the environmental assessment of noise:

Threshold Criteria:

....

4. Noise generators proposed to be located near any noise sensitive use shall incorporate noise control measures so that outdoor noise levels at the noise receptor do not exceed:
 - a. $L_{eq}1H$ of 55 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
 - b. $L_{eq}1H$ of 50 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
 - c. $L_{eq}1H$ of 45 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

4.8.2-1 Operational Noise - On-site

Measurements of noise emissions for the major equipment at the existing processing area were included in the *Updated Noise Impact Analysis* (1992) (Appendix G). The sound levels for each type of equipment were measured from a distance of 50 feet and the results are summarized in Table 21. The measured sound levels from these equipment range from 72 dB to 92 dB.

In addition to measuring the sound levels from individual equipment, Walker, Celano, and Associates (1992) also measured ambient noise levels in the middle of the processing area in order

to determine typical total noise levels during a typical work day. This noise measurement location was 50 feet from the concrete batch plant. A second noise measurement location was established at the south end of the facility, in line between the existing mining/batch plant operations and Happy Camp Canyon Regional Park. These results are shown below:

- 50 feet from the concrete plant 82.4 dB to 88.1 dB intrusive sound (i.e., haul trucks)
77.9 dB to 79.1 dB ambient sound ($L_{eq}1H$)
- South end of TMC facility 61.9 dB intrusive sound
overlooking Happy Camp Cyn. 51.8 dB ambient sound ($L_{eq}1H$)

TABLE 21

MEASURED EQUIPMENT NOISE EMISSIONS

Noise Source	Data	Sound Level at 50 ft.
Heavy Equipment Backup Alarm	Measured at TMC Site	83 dB
Sand/Gravel Sifter at Road Materials Area	Measured at TMC Site	86 dB
Cat 980B Loader	Measured at TMC Site	85 dB
Cat 988B Loader	Measured at TMC Site	86 dB
Typical Sand/Gravel Conveyor	Measured at TMC Site	72 dB
Main Concrete Batch Plant	Measured at TMC Site	78 dB
Retention Basin Water Pump/Generator	Measured at TMC Site	79 dB
On-Site Loaded Sand/Gravel Truck	Measured at TMC Site	80 dB
On-Site Loaded Concrete Truck	Measured at TMC Site	83 dB
Portland Cement Offload Vibrator	Measured at TMC Site	85 dB
Bulk Truck with On-Board Compressor	File Data	88 dB
Concrete Truck Washout	File Data	74 dB
350 HP Scraper	EPA NTID 300.1	92 dB
Cat D-8 Bulldozer	EPA NTID 300.1	90 dB
Cat 966 Loader	EPA NTID 300.1	85 dB

4.8.2-2 Operational Noise - Off-site

Noise levels experienced off-site due to the combined mining and processing equipment (described in Section 3.0) were predicted using a sound propagation model that allows a reduction of 6 dB per doubling of distance for wave spreading, plus an additional 1.5 dB reduction per 1000 feet for absorption by the atmosphere and terrain (refer to Appendix G). However, the model does not account for shielding by hills or other physical features, or for thermal and wind gradients that deflect sound. As such, the predicted sound levels are very conservative, that is, the predicted values

would only be accurate if the sound generator and receptor were within a direct line of sight and/or under extreme inversion atmospheric conditions (i.e., temperature rising with altitude).

Based on the sound propagation model, predicted off-site noise contours were developed for four major operational scenarios, as listed below and shown on Figures 32 through 35:

- All mining and processing equipment in operation simultaneously (Figure 32).
- Mining activities only (Figure 33).
- Concrete batch plant operations only (Figure 34).
- Truck "back-up beeper" noise at the processing area only (Figure 35).

As noted above, the noise contour data shown on Figures 32 - 35 are overestimates, based upon a predictive model that does not take into account intervening landform or vegetation. In order to determine the potential magnitude of this overestimate, ambient noise levels during the operation of TMC in 1992 were measured at the four nearest noise monitoring stations:

- Happy Camp Regional Park, "care camp" area, located adjacent and east of the CUP boundary, about 1000 feet southeast of the processing area (Monitoring Site #8 on Figure 31).
- Skyline Ranch, located the middle of Happy Camp Road about 2000 feet west of the processing area (Monitoring Site #9 on Figure 31).
- Walters Ranch, located the middle of Happy Camp Road about 2000 feet south of the processing area (Monitoring Site #10 on Figure 31).
- Purdham residence, located along upper Happy Camp Road about 2000 feet east of the mining area (Monitoring Site #11 on Figure 31).

Measured ambient noise levels at the above locations were compared to the levels predicted by the model. These data are presented in Table 22. The predicted noise levels for combined mining and processing at these locations range from 45 dB to 55 dB. In contrast, measured ambient noise levels were about 10 dB less than the predicted levels, demonstrating the noise-attenuating effect of the intervening terrain and vegetation. Measured ambient noise levels for the four major operational scenarios ranged from 23 dB to 45 dB (Table 22).

With one exception (i.e., Skyline Ranch monitoring site), Walker, Celano, and Associates concluded the surrounding residential or recreational use areas are likely to experience mining and processing operation noise at or below the 45 dB level. This falls within the County's noise threshold criteria for all time periods and as such constitutes an insignificant adverse impact (Class III).

As mining progresses westerly toward the Skyline Ranch monitoring site, so too would the noise contours illustrated in Figure 33. As a result, noise levels off-site are not expected to exceed 50 dB. This would conform with the daytime and evening noise threshold criteria, resulting in an insignificant adverse impact (Class III). Were nighttime mining to occur, the noise experienced at the Skyline Ranch monitoring site would exceed the established criteria for nighttime noise. Though nighttime

Note: The noise levels are shown in dBAs. They are the maximum predicted noise levels. Actual levels will be 10 or more dBAs lower. See text

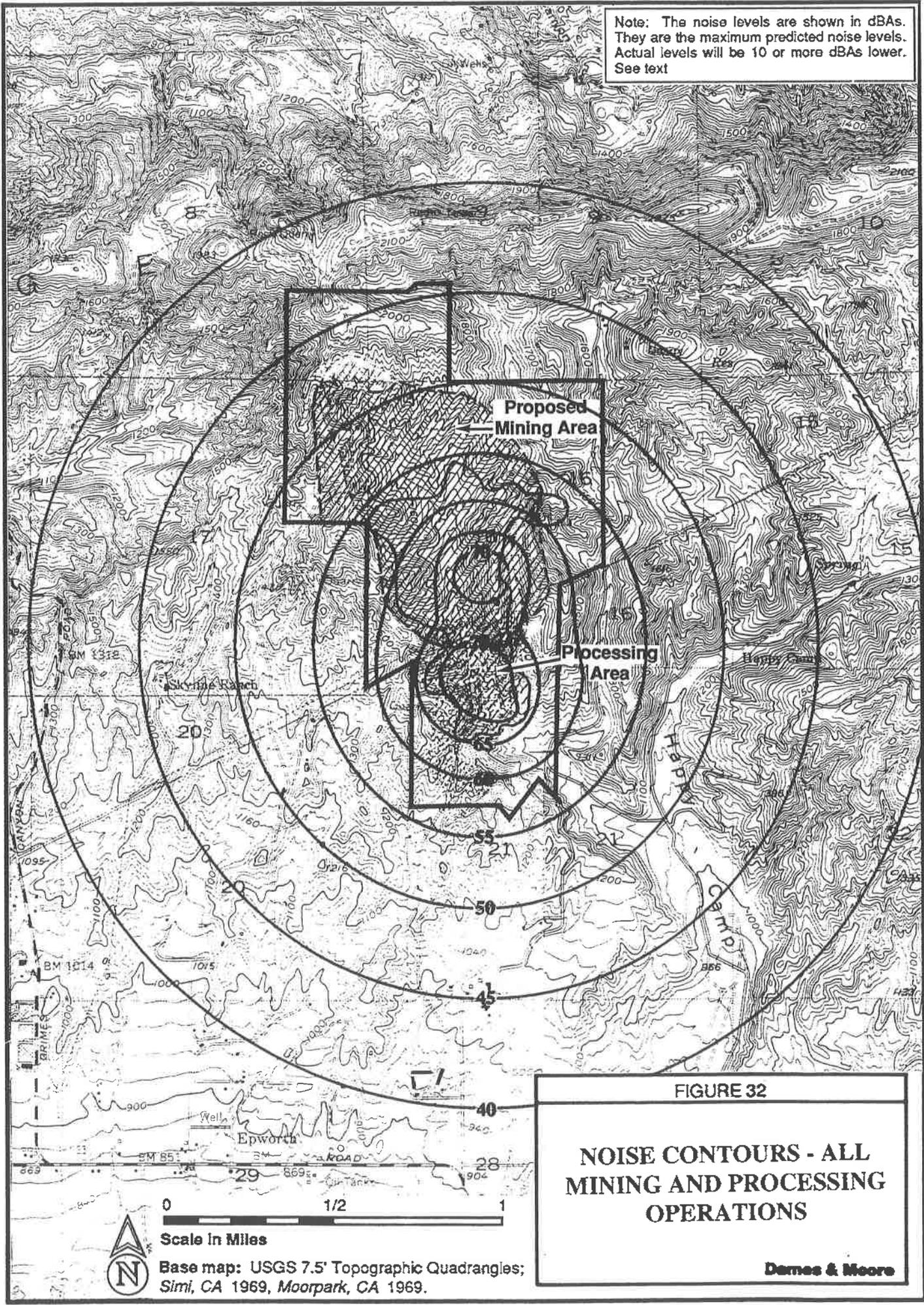


FIGURE 32

NOISE CONTOURS - ALL MINING AND PROCESSING OPERATIONS



Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles; Simi, CA 1969, Moorpark, CA 1969.

Dames & Moore

Note: The noise levels are shown in dBAs. They are the maximum predicted noise levels. Actual levels will be 10 or more dBAs lower. See text

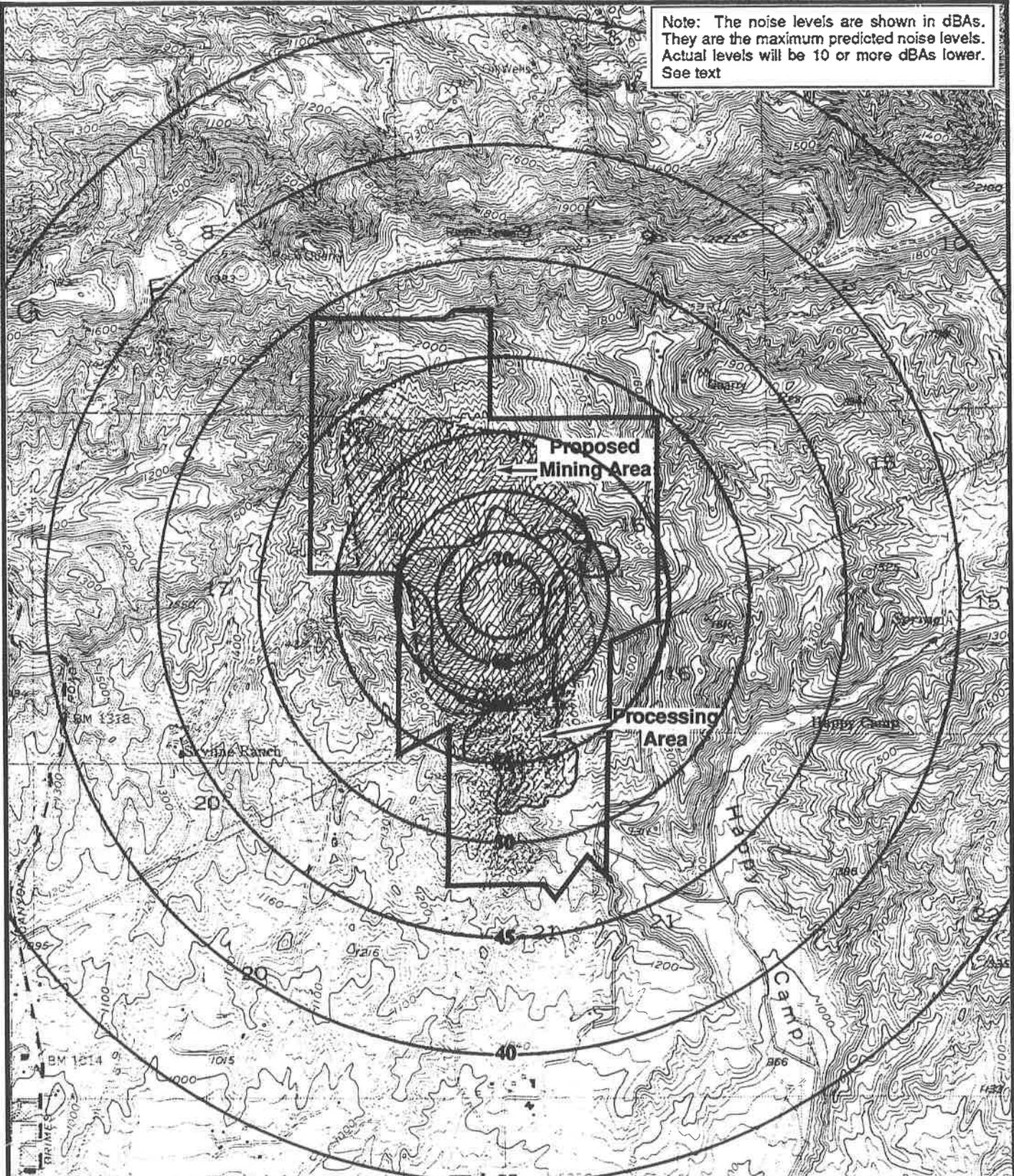


FIGURE 33

**NOISE CONTOURS-
MINING**

Dames & Moore



0 1/2 1
Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles;
Simi, CA 1969, Moorpark, CA 1969.

Note: The noise levels are shown in dBAs. They are the maximum predicted noise levels. Actual levels will be 10 or more dBAs lower. See text

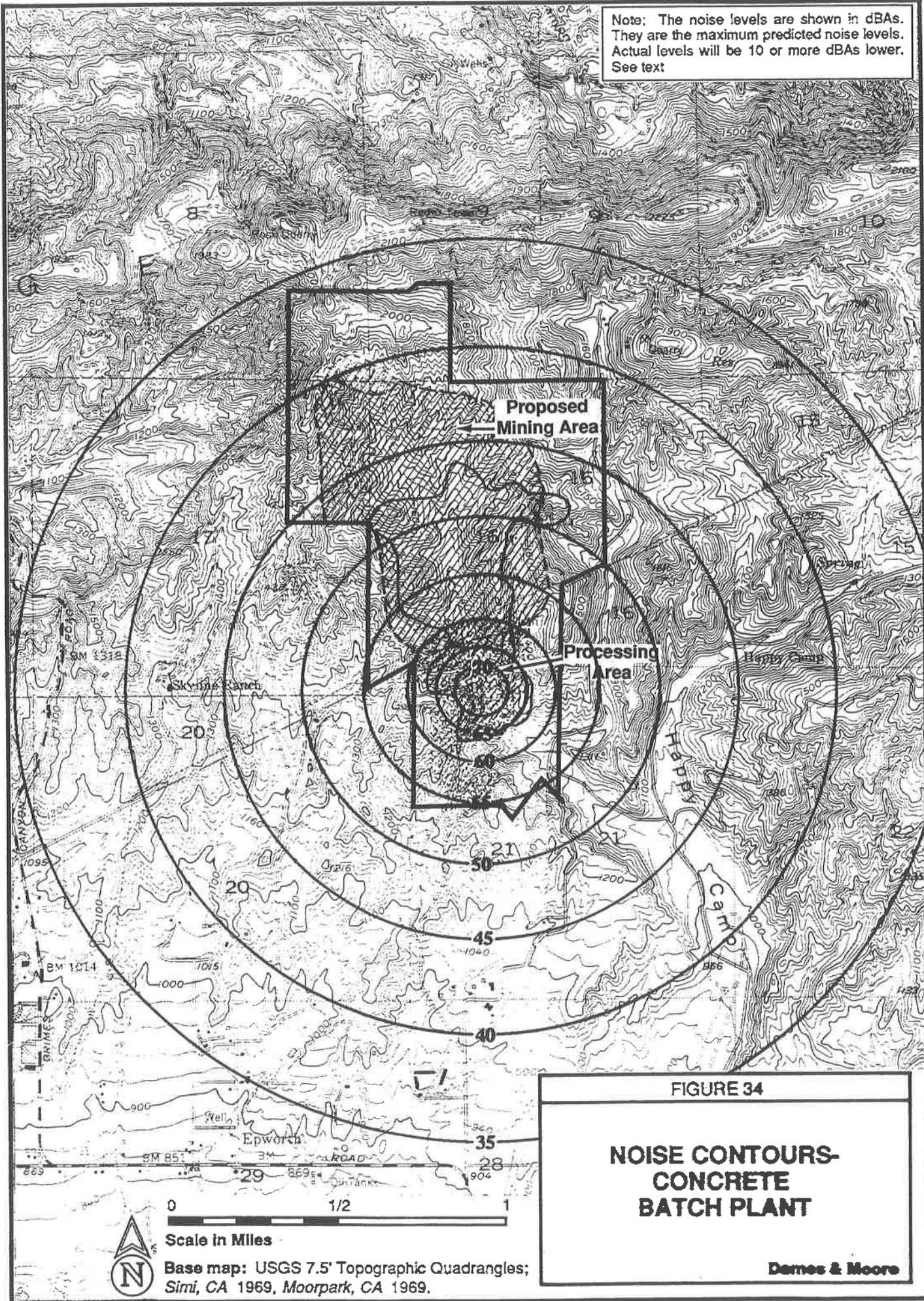


FIGURE 34

**NOISE CONTOURS-
CONCRETE
BATCH PLANT**

0 1/2 1

Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles;
Simi, CA 1969, Moorpark, CA 1969.

Dames & Moore

Note: The noise levels are shown in dBAs. They are the maximum predicted noise levels. Actual levels will be 10 or more dBAs lower. See text

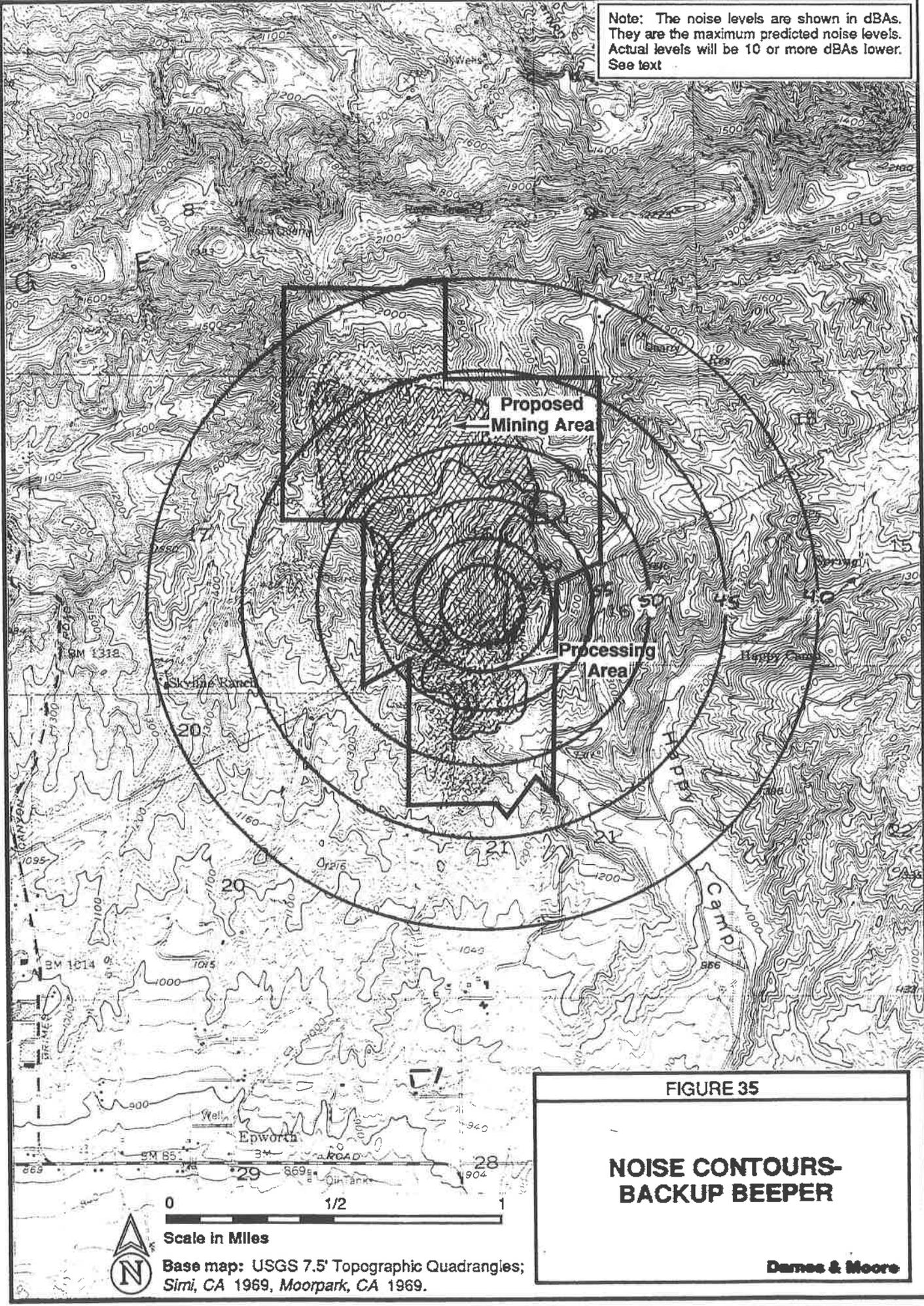


FIGURE 35

**NOISE CONTOURS-
BACKUP BEEPER**

Dames & Moore



Scale in Miles

Base map: USGS 7.5' Topographic Quadrangles;
Simi, CA 1969, Moorpark, CA 1969.

processing is being proposed for up to 60 days per year, nighttime mining is not being proposed (refer to Section 3.5.2). The Skyline Ranch is sufficiently distant from the processing facilities to ensure noise levels do not exceed 45 dB. This falls within the County's noise threshold criteria for late night hours and as such constitutes an insignificant adverse impact (Class III).

TABLE 22
PREDICTED AND MEASURED NOISE - OFF-SITE

Monitoring Sites ¹	Predicted Processing Noise	Predicted Mining Noise	Measured Ambient Noise
8. Happy Camp Road and Happy Camp Canyon Park	55 dB	50 dB	23-45 dB
9. Skyline Ranch	46 dB	47 dB	31-40 dB
10. Walters Ranch	50 dB	45 dB	41-44 dB
11. Purdham Residence	50 dB	50 dB	33-43 dB

¹ Locations of monitoring sites shown on Figure 31

Processing noise levels in the 45-50 dB range could occur at some off-site locations depending on equipment and observer location and intervening terrain conditions. This is most likely to occur during periods of maximum production and if this level of noise is experienced during nighttime hours, it would exceed the nighttime noise threshold criteria. However, the project description includes the following provisions which are expected to prevent an exceedance of nighttime noise threshold criteria, thereby resulting in insignificant adverse impacts (Class III).

Excavation would begin one hour after sunrise and end one hour before sunset on Mondays through Saturdays. No excavation would occur at night, nor on Sundays or holidays. (Refer to Section 3.5.2.)

Normal processing would typically occur during two regular daytime shifts (6:00 A.M. to 2:30 P.M. and 2:00 P.M. to 10:30 P.M.). However, to meet certain orders, such as nighttime freeway repairs, processing may need to occur at night using a third shift (10:00 P.M. to 6:30 A.M.) for up to 60 days each year. (Refer to Section 3.7.3.)

Outgoing deliveries from the mine would occur between the hours of 6:00 A.M. and 6:00 P.M., Monday through Saturday. These vehicles would return to the mine between the hours of 6:00 A.M. and 8:00 P.M., Monday through Saturday. There would be no truck deliveries and returns on Sundays and holidays. (Refer to Section 3.7.3.)

4.8.2-3 Truck Noise Impact Analysis

To address comments on the August 1994 Revised Draft EIR, the following additional studies were undertaken. The results of these studies are used herein in lieu of the 1992 analysis results. Each study is discussed in more detail below and the entire text of the study is included as Appendix H (*Supplementary Noise Impact Analysis*, by Walker, Celano & Associates, November 17, 1995):

- Noise Impact of Variations in Truck Speed on Happy Camp Road;
- Noise Impacts of Variations in Allowable Weekday Truck Volume;
- Noise Impacts of Variations in Allowable Saturday Truck Volume;
- Retrofitting Acoustically Upgraded Windows to Noise Impacted Residences;
- Suitable Locations for Roadside Noise Barriers; and
- Noise Impacts of an Alternate Access Route to the Facility.

Noise Impacts of Traffic Speed Variations on Happy Camp Road

Detailed measurements of noise due to individual truck passages both along Happy Camp Road and Walnut Canyon Road were included in the *Updated Noise Impact Analysis* (1992) (Appendix G). The measurements along Happy Camp Road included more than fifty heavy trucks that were classified by axle count. On the basis of these measurements, sound exposure levels (SEL) were computed for the various truck types. SEL is the logarithmic product of the average noise level (usually A-weighted) and the time duration. It is not an actual measured noise level, but rather it is used in the computation of long term averages such as CNEL and L_{dn} (day-night average noise level). These noise levels were used in the noise attenuation model and are summarized in Table 23.

TABLE 23
COMPUTED TRUCK NOISE LEVELS

Truck Type	SEL at 50' (dB)
Happy Camp Road	
Medium	77
Mixer	80
Truck and Trailer	82
Tractor/Semi Trailer/Trailer	86
Tractor and Long Semi Trailer	86
	SEL at 40' (dB)
Walnut Canyon/Moorpark Ave.	
Medium	82
Mixer	83
Truck and Trailer	85
Tractor/Semi Trailer/Trailer	86
Tractor and Long Semi Trailer	85

Truck speeds were not determined during the acoustic measurements since the data was intended for use in evaluation of incremental noise impacts due to variations in truck traffic volume. However, it was estimated that average truck speeds during the measurements were approximately 35 mph on Happy Camp Road.

A computer model was developed to evaluate noise impacts in terms of hourly average noise level ($L_{\text{eq}}1\text{H}$) for variations in average traffic speed along Happy Camp Road. Calculations were run for 5 mph steps from 25 mph to 45 mph, with the "existing setting" condition assumed to be 35 mph. The model was run twice in order to compare results based on the measurement data to those based on standard California State Vehicle Noise Emission Level data from FHWA/CA/TL-84/13 (CALVENO). The first computer run utilized reference sound levels for TMC trucks based on the

measurement data and CALVENO levels for non-TMC trucks and all passenger autos. The second computer run utilized CALVENO levels for all vehicles. The results are summarized in Tables 24 and 25. (Note, the 0.01 dB precision shown in these, and all subsequent, tables is used to permit illustration.) For reference, an increase of 1 dB is normally judged by an "average" listener to be just discernable, a 3 dB change is definitely noticeable, and a change in level of approximately 10 dB is necessary for the difference to be judged to be half of twice as loud.

TABLE 24

CHANGE IN HOURLY AVERAGE NOISE LEVEL (Leq1H - dB¹)
 50 FEET FROM THE CENTER OF HAPPY CAMP ROAD AT VARIOUS TRAFFIC SPEEDS
 USING 35 MPH AS THE BASE CONDITION

Speed	Early AM TMC Staff Arrivals	Average Daytime Hour TMC Only	Average Daytime Hour Other Traffic Only	Average Daytime Hour TMC + Other Traffic
25	-1.07	0.10	-2.43	-0.09
30	-0.02	0.84	-0.93	0.69
35	0.00	0.00	0.00	0.00
40	0.99	0.55	1.31	0.63
45	1.93	1.03	2.50	1.21

¹ Uses measured data for TMC Trucks & CALVENO for non-TMC vehicles.
 Daytime hour = 6 a.m. to 7 p. m.
 Source: Appendix H, Supplementary Noise Impact Analysis, Table 1

TABLE 25

CHANGE IN HOURLY AVERAGE NOISE LEVEL (Leq1H - dB¹)
 50 FEET FROM THE CENTER OF WALNUT CANYON ROAD AT VARIOUS TRAFFIC SPEEDS
 USING 35 MPH AS THE BASE CONDITION

Speed	Early AM TMC Staff Arrivals	Average Daytime Hour TMC Only	Average Daytime Hour Other Traffic Only	Average Daytime Hour TMC + Other Traffic
25	-1.07	0.11	-2.43	0.01
30	-0.02	0.85	-0.93	0.77
35	0.00	0.00	0.00	0.00
40	0.99	0.54	1.31	0.59
45	1.93	1.03	2.50	1.12

¹ Uses CALVENO reference noise emission data for all vehicles.
 Daytime hour = 6 a.m. to 7 p. m.
 Source: Appendix H, Supplementary Noise Impact Analysis, Table 2

Upon examination of the data in Tables 24 and 25, it can be seen that for a constant traffic volume and mix of vehicle types, changes in average traffic speed would have little effect on the average noise levels experienced along Happy Camp Road. Line by line comparison of the results in Tables 24 and 25 shows similar incremental variations in noise levels, using both the measurement and CALVENO data, with differences of 0.1 dB or less between the two.

Decreasing average traffic speed could reduce average noise due to non-TMC truck traffic by approximately 1 to 2.5 dB. However, since it has been observed that speeds of non-TMC traffic often exceed 35 mph, conformance with a speed limit lower than 35 mph is not likely. Further, reducing heavy truck speeds below approximately 35 mph could result in small increases in average noise, since trucks would not operate in "cruise" mode, but rather at a higher engine speed in a lower gear. However, the estimated increase would be less than 1 dB, as shown in the "TMC only" entries in Tables 24 and 25. This change would be essentially imperceptible to an average listener. Therefore, truck noise associated with the proposed project is considered an insignificant impact (Class III).

As would normally be expected, increased average speed would result in increased average noise levels. The calculated increase would be approximately 2 to 2.5 dB when traffic is mostly automobiles and less than 1.5 dB during periods when noise is primarily due to heavy truck traffic.

Noise Impacts of Variations in TMC Weekday Traffic Volume

Traffic noise analyses in the *Updated Noise Impact Analysis* (1992) (Appendix G) showed that incremental noise impacts due to variations in project related traffic were significant only on Happy Camp Road and Walnut Canyon Road where project related traffic comprises a substantial portion of the total traffic volume. Therefore, the *Supplementary Noise Impact Analysis* (Appendix H) was limited to an evaluation of noise impacts along these two roadways. A computer model was developed to evaluate changes in overall noise exposure along Happy Camp Road and Walnut Canyon Road for variations in allowable traffic volume attributable to TMC operations.

Tables 26, 27 and 28 show the noise levels ($L_{eq,1H}$) computed at a distance of 50 ft from the center of Happy Camp Road and Walnut Canyon Road, respectively. Because of the change in the posted speed limit on Walnut Canyon Road in the 1100 block from 30 mph to 40 mph, two tables, Tables 27 and 28, were developed.

The "existing setting" assumes the project conditions described in Section 4.0. Year 2000 and year 2010 traffic projections were obtained from the earlier studies for Blue Star and TMC, the City of Moorpark Traffic Model and traffic analyses for other projects in the general area. Projections for year 2010 traffic on Walnut Canyon Road are somewhat problematical since the City's traffic model and other project traffic studies include several variations of potential major circulation improvements that, if implemented, would potentially divert traffic off of Walnut Canyon Road. These possible improvements include:

Extension of Broadway easterly to an extension of State Route 23, easterly to the easterly end of Campus Park Drive, or easterly to the vicinity of the present City limits and southerly to State Route 118;

Extension of State Route 23 northerly to an extension of State Route 118 and/or northerly to an extension of Broadway;

Extension of Spring Road northerly to a new "C" Street, a new "D" Street or an extension of Broadway;

Extension of State Route 118 westerly and southerly to Los Angeles Avenue in the vicinity of the present westerly City limits, westerly of Tierra Rejada Road.

TABLE 26

**CHANGE IN HOURLY AVERAGE NOISE LEVEL (L_{eq1H} - dB¹)
50 FEET FROM THE CENTER OF HAPPY CAMP ROAD AT 35 MPH**

Condition	Existing Non-TMC + Condition	Year 2000 Non-TMC + Condition	Year 2010 Non-TMC + Condition
TMC Existing Setting	0.00	0.00	0.00
TMC Peak Existing Setting	0.57	0.44	0.37
Proposed Peak Daily	2.78	2.27	1.97
Proposed Avg Daily	2.02	1.62	1.39
75% of Proposed Avg Daily	0.84	0.66	0.55
60% of Proposed Avg Daily	-0.05	-0.04	-0.03
45% of Proposed Avg Daily	-1.19	-0.88	-0.72
30% of Proposed Average Daily	-2.72	-1.91	-1.53
15% of Proposed Average Daily	-5.17	-3.28	-2.55
No TMC Project	-11.35	-5.33	-3.89

¹ Uses measured data for TMC Trucks & CALVENO for autos and non-TMC trucks.
Source: Appendix H, Supplementary Noise Impact Analysis, Table 3b

Examination of Table 26 illustrates the noise levels estimated for differing TMC (truck and employee) traffic volume. The hourly average noise level (L_{eq1H}) along Happy Camp Road would range from a decrease of 11 dB, were all TMC traffic to be eliminated, to a maximum potential increase of less than 2.8 dB, above the "existing setting" noise levels, for the requested peak daily truck operations. Therefore, truck noise associated with the proposed project is considered an insignificant impact (Class III).

Future year 2000 and year 2010 traffic volumes on Happy Camp Road are projected to substantially increase, respectively (i.e., total volumes on the order of 5,000 ADT and 8,000 ADT). These large increases in cumulative traffic growth would result in TMC traffic being a smaller fraction of the total volume on Happy Camp Road. Hence, the incremental decreases due to elimination of TMC traffic would be smaller (i.e., approximately 4 dB for year 2000 and 3 dB for year 2010). Similarly, incremental increases due to requested maximum TMC traffic would also be smaller,

approximately 2 dB. Cumulatively, truck noise associated with the proposed project is considered an insignificant impact (Class III).

TABLE 27

CHANGE IN HOURLY AVERAGE NOISE LEVEL (Leq1H - dB ¹)
 50 FEET FROM THE CENTER OF WALNUT CANYON ROAD, NORTH OF HIGH STREET (30 MPH ZONE)

Condition	Existing Non-TMC + Condition	Year 2000 Non-TMC + Condition	Year 2010 Non-TMC + Condition
TMC Existing Setting	0.00	0.00	0.00
TMC Peak Existing Setting	0.28	0.21	0.19
Proposed Peak Daily	1.58	1.21	1.09
Proposed Average Daily	1.11	0.84	0.75
75% of Proposed Average Daily	0.43	0.32	0.28
60% of Proposed Average Daily	-0.03	-0.02	-0.02
45% of Proposed Average Daily	-0.54	-0.39	-0.34
30% of Proposed Average Daily	-1.13	-0.80	-0.70
15% of Proposed Average Daily	-1.82	-1.26	-1.09
No TMC Project	-2.65	-1.77	-1.52

TABLE 28

CHANGE IN HOURLY AVERAGE NOISE LEVEL (Leq1H - dB ¹)
 50 FEET FROM THE CENTER OF WALNUT CANYON ROAD, NORTH OF HIGH STREET (40 MPH ZONE)

Condition	Existing Non-TMC + Condition	Year 2000 Non-TMC + Condition	Year 2010 Non-TMC + Condition
TMC Existing Setting	0.00	0.00	0.00
TMC Peak Existing Setting	0.31	0.23	0.21
Proposed Peak Daily	1.69	1.32	1.19
Proposed Average Daily	1.18	0.91	0.82
75% of Proposed Average Daily	0.46	0.35	0.31
60% of Proposed Average Daily	-0.03	-0.02	-0.02
45% of Proposed Average Daily	-0.59	-0.43	-0.38
30% of Proposed Average Daily	-1.23	-0.89	-0.78
15% of Proposed Average Daily	-2.00	-1.40	-1.22
No TMC Project	-2.95	-1.99	-1.72

¹ Uses measured data for TMC Trucks & CALVENO for autos and non-TMC trucks.
 Source: Appendix H, Supplementary Noise Impact Analysis, Table 4c and 4d

Tables 27 and 28 show projections for year 2010 traffic on Walnut Canyon Road. These projections were based on a scenario that retained high traffic on Walnut Canyon Road. At such time as any of these proposed improvements are constructed, it is likely that TMC traffic would also utilize alternate and/or improved routes. This would likely result in local traffic only along Walnut Canyon Road. For example, the City of Moorpark traffic analysis (Figure III-4, not included) shows total year 2010 volume of 4,000 ADT on Walnut Canyon Road, between proposed extensions of State Route 118 and Casey Road, while studies for other projects in the area show volumes on the order of 11,000 to 12,000 ADT in this same vicinity.

Examination of the data in Tables 27 and 28 shows that elimination of all TMC traffic from Walnut Canyon Road would result in small decreases in overall noise, 2.65 to 2.95 dB from the "existing setting" traffic volume, and less for the projected future conditions. Increased TMC traffic volume, up to the requested maximum daily traffic, would result in small projected increases in total traffic noise (i.e., less than 1.7 dB over the noise resulting from non-TMC traffic plus "existing setting" TMC traffic volume). Therefore, truck noise associated with the proposed project is considered an insignificant impact (Class III).

Noise Impacts of Variations in TMC Saturday Traffic Volume

A computer model was developed to evaluate changes in noise exposure along Happy Camp Road for variations in allowable TMC Saturday traffic volume. Since specific Saturday non-TMC traffic volume data was not readily available, the baseline condition was assumed to be 80% of average "existing setting" weekday traffic. Table 29 shows the hourly average noise level (L_{eq1H}) at a distance of 50 ft from the center of Happy Camp Road for various TMC traffic volumes from the requested Saturday maximum down to zero TMC traffic.

TABLE 29

CHANGE IN HOURLY AVERAGE NOISE LEVEL (L_{eq1H} - dB¹) AT VARIOUS SATURDAY TRAFFIC VOLUMES 50 FEET FROM THE CENTER OF HAPPY CAMP ROAD AT 35 MPH

Condition	Existing Non-TMC + Condition	Year 2000 Non-TMC + Condition	Year 2010 Non-TMC + Condition
TMC Existing Setting	0.00	0.00	0.00
TMC Peak Existing Setting	0.50	0.25	0.17
Proposed Peak Daily	2.54	1.43	1.00
Proposed Average Daily	1.85	1.01	0.69
75 % of Proposed Average Daily	0.78	0.40	0.27
60 % of Proposed Average Daily	0.00	0.00	0.00
45 % of Proposed Average Daily	-0.98	-0.45	-0.30
30 % of Proposed Average Daily	-2.22	-0.95	-0.60
15 % of Proposed Average Daily	-4.01	-1.52	-0.95
No TMC Project	-7.18	-2.93	-2.55

¹ Uses measured data for TMC Trucks & CALVENO for autos and non-TMC trucks.
Source: Appendix H, Supplementary Noise Impact Analysis, Table 5b

Examination of Table 29 shows that the effect of variations in allowable TMC Saturday traffic volume on the hourly average noise level ($L_{eq}1H$) along Happy Camp Road would range from a decrease of 7 dB, were all TMC traffic to be eliminated, to a maximum potential increase of less than 2.5 dB, were the requested peak Saturday operations to be added to the non-TMC Saturday traffic. Therefore, truck noise associated with the proposed project is considered an insignificant impact (Class III). Incremental changes for the year 2000 and 2010 projections would be smaller due to the substantially increased cumulative non-TMC traffic.

The noise impact of prohibiting Saturday truck operations between the hours of 6:00 a.m. and 7 a.m. was computed in terms of both the overall average noise level (CNEL) and average daytime hourly noise level ($L_{eq}1H$). The results are shown in Table 30. It can be seen that prohibiting TMC traffic between the hours of 6:00 a.m. and 7:00 a.m. while allowing the same total truck volume, would reduce the computed CNEL by less than 1 dB. This would be due to elimination of the "nighttime" weighting factor of ten on approximately 1/13 of the day's total truck volume. However, the average noise level throughout the entire day would be marginally increased by 0.3-0.4 dB, since all of the traffic would occur during a 1 hour shorter total time duration.

TABLE 30

**CHANGE IN HOURLY AVERAGE NOISE LEVEL (CNEL and $L_{eq}1H$ - dB¹)
DUE TO PROHIBITING TMC TRUCK TRAFFIC BETWEEN 6:00 AM & 7:00 AM
50 FEET FROM THE CENTER OF HAPPY CAMP ROAD AT 35 MPH**

Condition	Existing Non-TMC + Condition (CNEL)	Existing Non-TMC + Condition ($L_{eq}1H$)
Proposed Peak Sat 6am-7pm	-0.94	0.39
Proposed Average Sat 6am-7pm	-0.92	0.32

¹ Uses measured data for TMC Trucks & CALVENO for autos and non-TMC trucks.
Source: Appendix H, Supplementary Noise Impact Analysis, Table 6

Retrofitting Acoustically Upgraded Windows to Noise Impacted Residences

As noted above, truck noise associated with the proposed project is considered an insignificant impact (Class III). However, it has been suggested that residences located along Walnut Canyon Road and/or Happy Camp Road should be retrofitted with acoustically upgraded windows to reduce the interior noise impacts of TMC related traffic. Noise sensitive uses proposed to be located near highways, truck routes, heavy industrial activities and other relatively continuous noise sources are required, by Ventura County, to incorporate noise control measures to ensure that:

- Indoor noise levels in habitable rooms do not exceed CNEL 45.
- Indoor noise levels in bedrooms do not exceed 60 dB(A) maximum.
- Outdoor noise levels do not exceed CNEL 60 or $L_{eq}1H$ of 65 dB(A) during any hour.

Though these noise criteria do not apply to the proposed project, they can assist in characterizing the amount of noise being experienced by residents along the haul route and what might be done to reduce any additional noise resulting from the proposed project (e.g., retrofitting homes with acoustically upgraded windows).

In the first instance, CNEL 45 dB is specified as the maximum allowable indoor noise level from exterior noise sources. Normal residential construction, with windows and doors closed, typically provides approximately 20 dB of outdoor-to-indoor noise reduction. Therefore, installation of acoustically upgraded windows might be an appropriate noise mitigation measure for residences subjected to outdoor noise exposures in excess of CNEL 65 dB.

However, it must be understood that it is necessary to keep the windows closed in order to realize the improved sound isolation. If the windows are opened for natural ventilation, the outdoor-to-indoor noise reduction would be approximately 10-12 dB regardless of window type. Therefore, if the residences are not adequately ventilated, the occupants are unlikely to take advantage of the improved windows, and if air conditioning were to be provided, operating costs may be prohibitive.

Sound levels decrease as the distance from the noise source increases. Over hard terrain (i.e., pavement) average traffic noise levels decrease approximately 3 dB for every doubling of distance from the center of the road. Over soft terrain (i.e., bare soil, grassland, planted areas, etc.) average traffic noise levels decrease approximately 4.5 dB for every doubling of distance from the center of the road. Relative changes in traffic noise levels for distances other than the 50 ft reference distances utilized in the CNEL computations shown in Appendix H (*Supplementary Noise Impact Analysis*, Tables 3, 4a and 4b) are summarized in Table 31, below.

TABLE 31
TRAFFIC NOISE AT VARIOUS DISTANCES FROM CENTER OF STREET
RELATIVE TO LEVEL CONDITIONS AT 50 FEET

Distance - ft	25	30	40	50	60	70	80	100	125	150	175	200
Level - dB	+3.0	+2.2	+1.0	0.0	-1.2	-2.2	-3.1	-4.5	-6.0	-7.2	-8.2	-9.0

Note: Distances less than 50 ft assume sound transmission over hard pavement. Distances greater than 50 ft assume sound transmission over a soft site, since the width of pavement on both Walnut Canyon Road and Happy Camp Road is less than 30 ft.

Walnut Canyon Road:

For the 30 mph and 40 mph speed limit zones, traffic noise exposures at 50 ft from the center of Walnut Canyon without including noise due to the proposed increases in TMC traffic, would range from CNEL 66-68 dB for the "existing setting" traffic volume, to CNEL 68-70 dB for the projected future year 2000 traffic, and to CNEL 69-71 dB for the projected future year 2010 traffic. (Source: Appendix H, *Supplementary Noise Impact Analysis*, Tables 4a and 4b.) Noise exposure 50 ft from the center of Walnut Canyon Road attributable to "existing condition" TMC traffic alone would be approximately CNEL 64-67 dB and noise due to requested TMC peak daily traffic alone would be approximately CNEL 67-69 dB. However, it should be noted that noise due to "existing setting"

TMC traffic is lower than noise due to "existing setting" non-TMC traffic. Also, the noise due to the requested TMC peak daily traffic is lower than the noise due to projected future non-TMC traffic.

Maximum noise due to the combination of the requested TMC peak daily traffic and the projected future non-TMC traffic would be approximately CNEL 73 dB at 50 ft from the center of the street. Therefore, using the distance adjustment values shown in Table 31, maximum traffic noise due to combined peak TMC traffic and future non-TMC traffic, at residences located more than approximately 175 ft from the center of Walnut Canyon Road would be below CNEL 65 dB, and acoustically upgraded windows would not be warranted, even for new construction.

Examination of recent aerial photographs (dated 11-29-94) and drive-by visual observations did not reveal any residences on either side of Walnut Canyon Road located within 200 ft of the center of the street on County lands northerly of the Moorpark City Limit. Therefore, no residences in the County along Walnut Canyon Road are impacted by traffic noise in excess of CNEL 65 dB, and acoustically upgraded windows would not be warranted, even for new construction.

However, numerous residences are located along Walnut Canyon Road within the northerly portion of the City of Moorpark at distances on the order of 40 to 50 ft from the center of the street. These residences would be subject to exterior noise in the CNEL 71-74 dB range, depending on actual setback and traffic speed. Were these new homes being proposed, approximately 26-29 dB of exterior-to-interior noise reduction would be necessary to meet the CNEL 45 dB indoor noise criterion. A degree of sound isolation can be achieved through the use of acoustically rated windows, provided that the basic construction of the residence is acoustically adequate as well.

Exterior-to-interior noise reduction calculations were run for several different existing and retrofitted construction scenarios assuming a 10 foot by 12 foot room with one exterior wall facing the street and either two 6 square foot double hung windows or a single 20 square foot sliding window. The results of the four scenarios are summarized below.

Scenario 1 assumed a very old house with wood siding and no insulation in the exterior walls. In this instance, use of STC 41 rated double windows with a 4" air space between the lites, in lieu of original single glazed double hung windows with double strength glass, would reduce the estimated indoor noise from approximately CNEL 52 dB to CNEL 49 dB, achieving a 3 dB noise reduction.

Scenario 2 assumed wood siding with insulation and the same windows as case one. This change would result in an improvement from approximately CNEL 51 dB to CNEL 46 dB, achieving a 5 dB noise reduction.

Scenario 3 assumed an insulated stucco wall and the same window sizes as cases one and two. In this instance, use of STC 32-33 rated dual-glazed windows, in lieu of original double hung windows with double strength glass, would reduce the estimated indoor noise from approximately CNEL 49 dB to CNEL 45-42 dB, achieving a 4-7 dB noise reduction. Use of the STC 41 rated double windows would result in CNEL 40 dB, achieving a 9 dB noise reduction.

Scenario 4 also assumed an insulated stucco wall. In this instance, use of an STC 32-33 rated dual glazed window, in lieu of a 20 sq.ft. single glazed sliding window with 3/32" or 1/8" glass, would reduce the estimated indoor noise from approximately CNEL 48 dB to CNEL 47-44 dB, achieving a 1-4 dB noise reduction. Use of the STC 41 rated double window would result in CNEL 41 dB, achieving a 7 dB noise reduction.

Thus, it can be seen that retrofitting homes with acoustically upgraded windows could result in reduced noise levels inside residences along Walnut Canyon Road, within the City of Moorpark. However, depending on the basic construction of the structure, indoor noise could still be in excess of the CNEL 45 dB criterion required for new home construction and, as noted above, the windows would have to remain closed in order to realize the reduced noise levels.

Further, noise levels along Walnut Canyon Road, within the City of Moorpark, due to both existing non-TMC traffic and projected future non-TMC traffic would already be in excess of County guidelines for new home construction (refer to Section 4.8.3). Also, if the City's proposed circulation improvements were to be implemented, a large portion of both non-TMC and TMC traffic would utilize alternate routes. For example, if future traffic volume on Walnut Canyon is reduced to approximately 4,000 ADT (i.e., as shown in the City's model, due to a new routing for State Route 23 or the easterly extension of Broadway), noise levels along Walnut Canyon Road within the City of Moorpark would be reduced by approximately 5 dB to CNEL 64-66 dB, assuming the same vehicle mix as the present traffic. The reduction would be greater if the new roadways become the designated truck routes and Walnut Canyon Road were to carry only local traffic. (Refer to the discussion in Sections 5.7.2 STATE ROUTE 23 NORTH-SOUTH BY-PASS and 5.7.3 EASTERLY EXTENSION OF BROADWAY.)

As noted above, the CNEL criteria used in this additional study are not directly applicable to the proposed project in the form of significance criteria. Using the criteria that does apply, it has been determined the noise associated with the proposed project will result in insignificant adverse impacts (Class III) along Walnut Canyon Road. Accordingly, no mitigation measures are warranted.

Happy Camp Road and Roseland:

Noise due to "existing setting" peak and average TMC traffic only would be below CNEL 65 dB at 50 ft from the center of Happy Camp Road. Noise due to the TMC requested average and peak daily traffic only would be in the CNEL 66-67 dB range. Therefore, noise due to TMC traffic only, at residences located more than approximately 70 ft from the center of Happy Camp Road would be below CNEL 65 dB, and acoustically upgraded windows would not be justified. (Source: Appendix H, *Supplementary Noise Impact Analysis*, Table 3.)

Similarly, the maximum noise due to the combination of TMC requested peak traffic and projected future year 2010 non-TMC traffic would be approximately CNEL 69 dB. Therefore, cumulative traffic noise including peak TMC operations, at residences located more than 100 ft from the center of Happy Camp Road would be below CNEL 65 dB, and acoustically upgraded windows would not be justified. Residences located along Happy Camp Road and Roseland are for the most part, sited at large distances from the street, typically ranging from 100 to more than 500 feet from the center of the street. Examination of recent aerial photographs (dated 11-29-94) and drive-by visual observations did not reveal any residences located closer than 100 ft from the center of Happy

Camp Road or Roseland. Therefore, acoustically upgraded windows would not be warranted along these roads.

Roadside Noise Barriers

Construction of roadside noise barriers has been suggested as a possible means to mitigate noise traffic due to TMC traffic. The Ventura County CNEL 60 dB and City of Moorpark CNEL 65 dB residential exterior noise criteria are normally applied to primary outdoor living areas (i.e., rear and side yards, private patios, etc.) of new residential uses proposed to be located adjacent to existing noise sources. Though these noise criteria do not apply to the proposed project, they can assist in characterizing the amount of noise being experienced by residents along the haul route and what might be done to reduce any additional noise resulting from the proposed project (e.g., roadside barrier walls).

Front yards of dwellings are often exempted from meeting these noise criteria when access to the property is via a driveway that would constitute a substantial opening in the length of the barrier. Further, when new residential uses are proposed adjacent to an existing roadway, noise mitigation is normally the responsibility of the developer of the property, not the responsibility of the operator of vehicles traveling on the road.

Livestock areas (i.e., stables, pastures, corrals, barns, etc.) are not normally considered to be primary outdoor living areas. Therefore, roadside noise barriers would not normally be required at these types of uses.

In general, unless a traffic noise barrier is high enough to interrupt the line-of-sight between the listener and the elevated exhaust stacks of the trucks, and long enough to block the view to a significant portion of the length of the road, the noise reduction provided by the barrier will be minimal. Barriers constructed immediately adjacent to the roadway would provide minimal attenuation of traffic noise if the receiver location is significantly elevated above the roadway, since there would be an uninterrupted line-of-sight over the top of the barrier to the noise source.

Walnut Canyon Road:

There are no residences visible within 350-400 ft either side of Walnut Canyon Road in the County, between Broadway and the Moorpark City Limits. Outdoor noise levels, due to the combination of projected future non-TMC traffic and peak requested daily TMC traffic, would be CNEL 60 dB or lower at distances greater than approximately 375 ft from the center of Walnut Canyon Road. Therefore, no noise barriers would be needed.

There are several residences located on both sides of Walnut Canyon Road in the northerly portion of the City of Moorpark at distances varying from a minimum of approximately 75-100 ft to more than 800 ft from the center of the street. Outdoor noise levels due to the combination of projected future non-TMC traffic and peak requested daily TMC traffic would be CNEL 65 dB or lower at distances greater than approximately 175 ft from the center of Walnut Canyon Road. Therefore, no noise barriers would be needed at those residences located more than approximately 175 ft from Walnut Canyon Road.

One residence was observed close to the easterly side of Walnut Canyon Road approximately 1000 ft southerly of the Water District Pump Station. The structure is set back approximately 75-100 ft from the center of the street and the lot is elevated approximately 5-10 ft above the street. An 6-7 ft high barrier constructed on the top of the slope up from the street at the edge of the level portion of the lot could provide approximately 7-10 dB of shielding of traffic noise, depending on the actual location and relative elevations of the road, barrier and observer. However, as noted above in the discussions regarding possible upgrading of windows, noise due to non-TMC traffic alone is higher than the City's CNEL 65 dB outdoor noise criterion and higher than noise due to TMC traffic. Also, if the City's proposed circulation improvements were to be implemented, traffic noise would decrease substantially, obviating any need for noise barriers.

Roadside noise barriers would be impractical for those residences located close to the street within the City of Moorpark from the vicinity of the Community Center/Library complex to approximately 0.5 mile northerly of Casey Road. Walnut Canyon Road is a State Route with a narrow total right-of-way width. Hence, Caltrans guidelines would have to be followed relative to barrier construction, placement, restriction of visibility, etc. These lots are for the most part relatively narrow and the sole access to most is via driveways connecting to Walnut Canyon Road. Therefore, the barrier would require large openings at each driveway, which would constitute a significant portion of the total length and would significantly reduce the effectiveness of the noise barrier.

As will be discussed below in Section 4.8.4, the noise impacts of proposed TMC traffic are to be analyzed in terms of Ventura County General Plan Policy 2.16.2-1(4) which regulates noise generators proposed to be located near noise sensitive uses. Accordingly, the "ambient noise plus 3 dB" noise criterion is to be applied to the proposed project, since the "existing setting" noise, which includes current TMC traffic already exceeds the daytime threshold level of Leq1H 55 dB. Since peak truck traffic under the proposed project would increase average noise levels by less than 1.7 dB along Walnut Canyon Road, truck noise associated with the proposed project is considered an insignificant adverse impact (Class III).

Happy Camp Road and Roseland:

Noise levels 50 ft from the center of Happy Camp Road and Roseland due to TMC traffic only would be approximately CNEL 64 dB for the "existing setting" average daily traffic CNEL 66 dB for the requested average daily traffic and CNEL 67 dB for the requested peak daily traffic. Noise levels 125 ft and 150 ft from the center of the street would be approximately 6 dB and 7 dB lower, respectively, than the noise 50 ft from the center of the street. (Source: Appendix H, *Supplementary Noise Impact Analysis*, Table 3.) For TMC requested average daily traffic, residences located 125 ft or more from the center of the street would meet Ventura County CNEL 60 dB exterior noise criterion for new home construction. For TMC requested peak daily traffic, residences located 150 ft or more from the center of the street would meet the CNEL 60 dB exterior noise criterion for new home construction.

Sixteen residences are visible on both sides of Happy Camp Road and Roseland between the TMC gate and the intersection with Broadway. Of these sixteen residences, possibly three or four are located approximately 100-125 ft from the center of the street where the TMC requested peak daily traffic would be in excess of the County CNEL 60 dB. Were these new homes being proposed, they would be subject to the criterion regarding exterior noise.

At 100 ft from the center of the street, the noise would be approximately 4.5 dB lower than the noise at the 50 ft reference distance (i.e., CNEL 63 dB due to the TMC peak requested traffic and approximately CNEL 65 dB due to the combination of the future non-TMC traffic and the peak requested TMC traffic). Should it be applied to front yard areas between the residence and the street, new home construction standards would require a 5 dB noise reduction in order to conform with the CNEL 60 dB outdoor noise criterion. Construction of a 6 ft barrier along the edge of the right-of-way would reduce noise levels by approximately 5-6 dB, depending on relative elevations of street, barrier and receiver. However, these properties have substantial yard areas behind the residences that would conform with the 60 dB criterion due to the additional distance from the street and shielding provided by the residence itself without the need for additional barriers along the street. In addition, property size may make the construction of a noise barrier infeasible, either due to cost, or because the property owners may not want a sound barrier wall constructed across their property. Though new home construction would be subject to the CNEL 60 dB criterion, the proposed project is held to the "less than 3 dB increase in ambient noise" criterion is, therefore, expected to result in noise considered to be an insignificant adverse impact (Class III).

Other residences along Happy Camp Road are located 175 ft, or more, from the street and thus TMC traffic noise would be below CNEL 60 dB and no noise barriers would be needed.

As will be discussed below in Section 4.8.4, the noise impacts of proposed TMC traffic are to be analyzed in terms of Ventura County General Plan Policy 2.16.2-1(4) which regulates noise generators proposed to be located near noise sensitive uses. Accordingly, the "ambient noise plus 3 dB" noise criterion is to be applied to the proposed project, since the "existing setting" noise, which includes current TMC traffic already exceeds the daytime threshold level of Leq1H 55 dB. Since peak truck traffic under the proposed project would increase average noise levels by less than 2.8 dB along Happy Camp Road and Roseland, truck noise associated with the proposed project is considered an insignificant adverse impact (Class III).

Noise Impacts of Alternate Route

A possible alternate route was investigated for truck traffic leaving the TMC facility to reduce noise impacts along Happy Camp Road. This route would proceed generally southwesterly from the TMC mine, joining Grimes Canyon Road (State Route 23) in the vicinity of the Shekell/Skyline Ranch Road intersection. At this point, the majority of TMC traffic would turn left (i.e., southerly) on to Grimes Canyon Road, continuing to destinations south and east. A small percentage of TMC traffic would turn right and continue northerly. (Refer to Section 5.7 ALTERNATIVE ACCESS ROUTES.)

Depending on the fraction of TMC traffic that would utilize this alternate route, noise levels at residences located along Happy Camp Road could potentially be reduced to as low as the no TMC condition (i.e., reduced by as much as 11 dB). However, the majority of TMC traffic would continue to travel southerly to Walnut Canyon Road through the City of Moorpark to destinations to the south, east, and west. Therefore, this alternative route would not reduce noise levels at residences located along Walnut Canyon Road in the City of Moorpark.

In late 1994, a drive-by survey was conducted to determine the number of residences located along the proposed route and the number of residences located along Happy Camp Road. There

were a total of 16 residences visible along both sides of Happy Camp Road, between the plant entrance and the intersection of Broadway and Happy Camp Road. There were 22 residences visible along Grimes Canyon Road and Broadway, between the intersection of Grimes Canyon Road and Skyline Ranch Road, and the intersection of Broadway and Happy Camp Road. Setbacks ranged from less than 100 ft for several residences located along Broadway to many hundreds of feet along both roads.

While this proposed alternate route would reduce noise impacts due to TMC traffic for 16 residences located along Happy Camp Road, it would increase noise for 22 residences located along Grimes Canyon Road and Broadway in excess of the 3dB increase criterion (refer to Table 32).

As will be discussed below in Section 4.8.4, the noise impacts of proposed TMC traffic are to be analyzed in terms of Ventura County General Plan Policy 2.16.2-1.(4) which regulates noise generators proposed to be located near noise sensitive uses. Accordingly, the "ambient noise plus 3 dB" noise criterion is to be applied to the proposed project, since the "existing setting" noise, which includes current TMC traffic, already exceeds the daytime threshold level of Leq1H 55 dB. Since peak truck traffic under the proposed project would increase average noise levels by 4 to 7 dB along portions of Broadway and Grimes Canyon Road, truck noise associated with the proposed alternate route is considered a significant, unmitigable impact (Class I). Ventura County General Plan Policy 2.16.2-4 prohibits the approval of this alternative route because it would result in noise levels in excess of those permitted under Policy 2.16.2-1(4).

TABLE 32

CHANGE IN HOURLY AVERAGE NOISE LEVEL (Leq1H - dB¹) RESULTING FROM TMC ALTERNATE ROUTE 50 FEET FROM THE CENTER OF BROADWAY & GRIMES CANTON ROAD

Broadway west of Walnut Canyon at 50 MPH Condition	Existing Non-TMC + Condition	Year 2000 Non-TMC + Condition
TMC Existing Setting along Existing Route	0.00	0.00
TMC Existing Setting along Alternate Route	3.03	1.89
Proposed Average Daily along Existing Route	0.38	0.21
Proposed Average Daily along Alternate Route	4.38	2.88
No TMC Project	-0.65	-0.34
Grimes Canyon Road north of Broadway at 45 MPH Condition	Existing Non-TMC + Condition	Year 2000 Non-TMC + Condition
TMC Existing Setting along Existing Route	0.00	0.00
TMC Existing Setting along Alternate Route	4.93	2.71
Proposed Average Daily along Existing Route	0.61	0.26
Proposed Average Daily along Alternate Route	6.63	3.94
No TMC Project	-1.13	-0.43

¹ Uses measured data for TMC Trucks & CALVENO for autos and non-TMC trucks.
Source: Appendix H, Supplementary Noise Impact Analysis, Table 7b

Summary Conclusions Based on the Supplementary Noise Impact Analysis

As noted above, these additional studies were undertaken to address the comments received on the August 1994 Revised Draft EIR prepared for the proposed project. As a result of the additional noise impact analyses, the following conclusions have been made:

- Restriction of allowable TMC truck speed along Happy Camp Road would not result in a meaningful reduction in average noise levels along this road, and reduced truck speed could actually result in a slight increase in noise since trucks would not operate in "cruise" mode. Reduction in allowable speed for non-TMC vehicles could result in small (1 to 2.5 dB) reduction in average traffic noise, were a reduced speed limit to be enforced. Increased allowable speeds would result in increased average noise levels.
- Variations in allowable TMC truck volume along Happy Camp Road could decrease noise levels by 3 to 10 dB over the "existing setting," the later representing the No Project Alternative. Noise impacts along Walnut Canyon Road were smaller, indicating noise levels could be decreased by 1.5 to 2 dB, since TMC traffic comprises a smaller fraction of the total traffic volume along Walnut Canyon Road, than along Happy Camp Road.
- Variations in allowable Saturday TMC truck volume along Happy Camp Road could decrease noise levels by 2.5 to 6 dB over the "existing setting," the later representing the No Project Alternative.
- Installation of acoustically upgraded windows could result in reduced indoor noise levels, provided the construction of each affected residence is suitable, and the windows can remain closed. However, for the traffic scenarios analyzed, noise along Walnut Canyon Road attributable to TMC traffic is lower than noise attributable to non-TMC traffic. Also, street improvements proposed by the City of Moorpark, if implemented, would significantly reduce traffic along Walnut Canyon Road, obviating the need for noise reduction measures. No residences along Happy Camp Road are located close enough to the street to warrant installation of acoustically upgraded windows.
- Roadside noise barriers could be worthwhile to a few residences, even though noise along Walnut Canyon Road attributable to TMC traffic is lower than noise attributable to non-TMC traffic. However, the associated noise criterion used in this analysis applies to new construction and not to the proposed project. Many of these properties have substantial yard areas that would allow new construction to conform with the 60 dB criterion and property size may make the construction of a noise barrier infeasible, either due to cost, or because the property owners may not want a sound barrier wall constructed across their property. In addition, street improvements proposed by the City of Moorpark, if implemented, would significantly reduce traffic along Walnut Canyon Road, obviating the need for noise reduction measures.
- A southwesterly route to Grimes Canyon Road would eliminate all TMC traffic from Happy Camp Road thereby decreasing noise levels. However noise levels at residences located along Broadway and Grimes Canyon Road could be increased by 1.5 to more than 6 dB. Thus, if the alternate route were to be constructed, noise would be reduced at 16 residences located along Happy Camp Road and increased at 22 residences located along Broadway and Grimes Canyon

Road. In some locations the potential for increased noise could exceed 3 dB and thus would not be allowable under Ventura County General Plan Policy 2.16.2-1(4).

- The proposed project will result in insignificant adverse impacts (Class III). To ensure this is the case, the following conditions of approval are recommended:

Recommended Conditions:

24-hour Contact Person

Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall provide the Planning Director with the current name and/or position title, address, and phone number of the permittee's field agent and other representatives who shall receive all orders and notices as well as all communications regarding matters of condition and code compliance at the permit site. There shall always be such a contact person(s) designated by the permittee. If the address or phone number of the permittee's agents should change, or the responsibility assigned to another person or position, the permittee shall provide the Planning Director with the new information without delay.

Third-Party 24-Hour Telephone Service

Prior to the issuance of the Zoning Clearance for Phase 1, the permittee shall establish, at permittee cost, a third-party 24-hour telephone service to receive and log noise, night-lighting, dust, traffic, speeding trucks, unsafe truck operations, use of "jake brakes" and/or other complaints. In operating this service, the following requirements apply:

- a. All adjacent residences and businesses shall be notified in writing of the third-party 24-hour telephone service, its telephone number and intent. In addition, the number for the 24-hour telephone service shall be posted at the entrance to the project site and on all permittee owned trucks.*
- b. The third-party telephone service shall maintain a log of all complaints and, once logged, shall immediately transfer the call to the permittee's 24-hour contact person who will address the complaint as appropriate.*
- c. In matters of vehicle safety, the permittee must respond in writing to the County Public Works Agency within 3 working days to each complaint, indicating the corrective action(s) taken. If the County is not satisfied with the corrective actions and/or there is repeated complaints of a similar nature, the County shall investigate the issue and then meet with the permittee to resolve the issue. If there is a serious public nuisance or safety issue, and a satisfactory response is not forthcoming from the permittee, the County shall have the option to modify, suspend or revoke in the manner provided by the Ventura County Zoning Ordinance.*

- d. *The permittee shall maintain, and make available to the Ventura County Planning Division upon request, a log of the timing and method of complaint disposition, and all related correspondence.*
- e. *At the discretion of the Planning Director, the Planning Division may at any time review the complaint log, method of complaint disposition, and all related correspondence to determine if there is a need to modify this requirement.*
- f. *At the discretion of the City Manager for the City of Moorpark, the City Manager may at any time review the complaint log, method of complaint disposition, and all related correspondence.*

Noise Monitoring

To resolve noise complaints, the Planning Director may direct, at permittee expense, noise monitoring by the County or a County approved noise consultant. Such monitoring shall determine ambient noise levels in the immediate vicinity of project site and in close proximity to the residences and/or other sensitive receptors who have registered the noise complaint(s). Having established ambient noise levels, the County or the County's approved noise consultant will monitor project related noise to determine if the project exceeds the following noise standards:

- *$L_{eq}1H$ of 55 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.*
- *$L_{eq}1H$ of 50 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.*
- *$L_{eq}1H$ of 45 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.*

If a noise exceedance is found to exist, the permittee shall take immediately steps to either cease the operations creating the noise exceedance, or implement noise control measures that effectively reduce noise levels to within prescribed noise standards.

4.8.2-4 "Jake" Brakes

In addition to normal truck noise, "jake" brakes are often used along steeper portions of the roadway. The use of "jake" brakes is currently prohibited along Happy Camp Road, and the roadway is so signed. However, there is regular and unrestricted use of these brakes along Walnut Canyon Road. The use of "jake" brakes results in a loud intrusive sound that is likely to exceed 70 dB and this level of noise is considered a significant, mitigable impact (Class II). (Refer to Section 4.8.5. N-1 Prohibit Jake Brakes.)

4.8.2-5 Noise Related Issues Raised During the Public Testimony on the Second Revised Draft EIR

On May 8, 1996, the Environmental Report Review Committee (ERRC) conducted a public hearing on the Second Revised Draft EIR prepared for the proposed project. At that time public

testimony was made and more specific noise related issues were noted and ERRC directed these issues be evaluated and incorporated into the Final EIR. The following issues areas were identified and the first two pertain to the Happy Camp Road/Walnut Canyon Road/Broadway intersection:

- 1) The exit speed for trucks returning from Walnut Canyon Road and the grade break in the roadway often combine to cause a sudden noise that can be disruptive to the adjacent horse stable. To address this situation the following conditions of approval are recommended:

Recommended Conditions:

Vehicular Speed Limits/Enforcement

The permittee shall routinely advise all company and leased truck operators of the need to keep their vehicles within prescribed speed limits at all times. Independent truckers are to be held to the same requirement and, if found to be repeatedly violating the speed limit, shall be prohibited by the permittee from future use of the permitted facilities. If speeding problems persist, the Planning Director may find the need to consult with the permittee to identify what reasonable additional monitoring is required to assist in identifying the offending drivers.

Happy Camp Road/Walnut Canyon Road Transition Improvements

The permittee shall consult with the Public Works Agency who will identify whether changes are feasible in the road design at that location where the roadway transitions from Walnut Canyon Road to Happy Camp Road for northbound traffic. Funding for these repairs shall be incurred by the permittee in implementing the Roadbed Maintenance and Repair Funds (refer to Mitigation Measure T-1 in Section 4.9-5).

- 2) In the early morning hours, prior to the opening of the TMC facility, independent truck operators often park their trucks in the triangular parcel formed by these three roads. As trucks approach, noise is generated by the trucks as brakes are set, engines idle and drivers converse. This early morning noise is objectionable to the adjacent residents. To address this situation the following condition of approval is recommended:

Recommended Condition:

Road Triangle Fencing

Prior to the issuance of the Zoning Clearance for Phase I, the permittee shall consult with the owner of the triangular shaped parcel, bordered by Happy Camp Road, Walnut Canyon Road and Broadway, and determine whether that owner will permit the permittee to install and maintain a low level fence. The permittee shall then advise the Planning Director of this determination. If the owner permits, the

permittee shall consult with the Public Works Agency and Caltrans to determine setbacks, then shall install said fence, using a material acceptable to the Public Works Agency and Caltrans, to a height no greater than three feet. "No Parking" signs shall be installed every 50 feet along the fence, unless required otherwise by the Public Works Agency or Caltrans. If the owner does not permit, the permittee shall consult with the Planning Director to determine an alternative means of prohibiting parking within this area.

Note: As of the writing of this EIR, the above referenced parcel is owned by the Joseph G. Leavens Trust.

- 3) Neighbors in close proximity to this intersection have advised it is usually a few truckers that are the source of the majority of the complaints being made about excessive speed and noise. Unfortunately, it is often difficult to identify the offending driver because there is no way of easily identifying one truck from another. To resolve this, it was suggested that each truck entering the TMC facility be required to display a unique identification number. Accordingly, the following condition of approval is recommended:

Recommended Condition:

Truck Identification Numbers

All company owned and leased trucks shall be readily identifiable by a unique number that is sized and located on all four sides of the vehicle in order to be clearly visible to individuals wishing to make a complaint against a individual driver. Since the permittee has no direct control over the vehicles used by independent truckers, the permittee shall use the truck trip logs and the complaint logs (i.e., especially the time and date) to identify truckers against whom a complaint has been made and to resolve complaints.

4.8.3 CUMULATIVE IMPACTS

As indicated in Tables 26 through 29, the proposed project will contribute from 1.0 dB to 1.97 dB to the cumulative noise levels expected from future traffic along Walnut Canyon Road and the Moorpark city streets as the Moorpark General Plan build-out is achieved, and as the Happy Camp Canyon Regional Park is developed. Noise levels along Walnut Canyon Road, within the City of Moorpark, due to both existing non-TMC traffic and projected future non-TMC traffic would already be in excess of County guidelines for new home construction. Therefore, any additional noise resulting from the proposed project would contribute incrementally to the existing significant, cumulative mitigable impact Class II). However, this determination is valid only if the City of Moorpark's proposed circulation improvements are implemented and a large portion of both non-TMC and TMC traffic utilize the alternate routes (refer to Section 4.8.5, Mitigation Measures N-2 Alternative Access Routes below). For example, if future traffic volume on Walnut Canyon is reduced to approximately 4,000 ADT, noise levels along Walnut Canyon Road within the City of Moorpark would be reduced by approximately 5 dB to CNEL 64-66 dB, assuming the same vehicle mix as the present traffic. The reduction would be greater if the new roadways become the designated truck routes and Walnut Canyon Road were to carry only local traffic. Were this to occur,

the net impact along Walnut Canyon Road would be beneficial (Class IV), though this benefit is not directly attributable to the proposed project.

This Class II determination is also based upon the achievement of a noise monitoring program reciprocal agreement (refer to Section 4.8.5, Mitigation Measure N-3 Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue below).

If these circulation improvements are not implemented and/or a noise monitoring program reciprocal agreement is not achieved, the proposed project would contribute incrementally to the existing significant, cumulative unmitigable impacts (Class I) along Walnut Canyon Road.

4.8.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Hazards - Noise

Goal 2.16-1

To protect the health, safety and general welfare of County residents by elimination or avoidance of adverse noise impacts on existing and future noise-sensitive uses.

Policy 2.16.2-1

All discretionary development shall be reviewed for noise compatibility with surrounding uses. Noise compatibility shall be determined from a consistent set of criteria based on the standards listed below. An acoustical analysis by a qualified acoustical engineer shall be required of discretionary developments involving noise exposure or noise generation in excess of the established standards. The analysis shall provide documentation of existing and projected noise levels at on-site and off-site receptors, and shall recommend noise control measures for mitigating adverse impacts.

...(4) Noise generators proposed to be located near any noise sensitive land use shall incorporate noise control measures so that outside noise levels at the noise receptor do not exceed:

- a. $L_{eq}1H$ of 55dB(A) or ambient noise levels plus 3dB(A), whichever is greater, during any hour from 6 A.M. to 7 P.M..*
- b. $L_{eq}1H$ of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7 P.M. to 10 P.M..*
- c. $L_{eq}1H$ of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10 P.M. to 6 A.M.*

Policy 2.16.2-4

Discretionary development which would be impacted by noise or generate noise which cannot be reduced to meet the standards prescribed in Policy 2.16.2-1, shall be

prohibited. This policy does not apply to noise generated during the construction phase of a project if overriding considerations are adopted by the decision-making body.

The proposed project is consistent with this goal and policy because it would not increase noise levels more than 3dB above ambient noise levels. Noise increases are expected to result in insignificant adverse impacts (Class III) for residences along truck haul roads.

4.8.5 MITIGATION MEASURES

With the exception of "jake brake" use, the proposed project is expected to result in an insignificant adverse noise impact (Class III). The use of "jake brakes" was identified as a significant, mitigable impact (Class II). To mitigate this impact to a less than significant level, the following mitigation measure is recommended.

N-1. Prohibit Jake Brakes

The permittee shall prohibit all TMC owned trucks, and those trucks contracted by TMC, from using "jake brakes" along Happy Camp Road and Walnut Canyon Road or within the City of Moorpark, except under emergency operating conditions. Independent truckers are to be held to the same prohibition and, if found to be repeatedly using "jake brakes" along the described route, shall be prohibited by the permittee from future use of the permitted facilities.

Implementation Responsibility: Permittee or successor in interest. The permittee must also acquire formal agreement from independent truck contractors to conform to the mitigation.

Monitoring Frequency: Prior to the issuance of the zoning clearance for Phase 1, the permittee must provide evidence that all TMC truck operators have been informed of the restriction, and that formal agreements have been made with independent truckers (e.g., agreements that are part of the hauling contract, other binding agreement). If the County receives a complaint about the use of "jake brakes" by any trucks enroute to or from the CUP-4633 project site, the Planning Division may require the permittee to fund an independent monitoring effort to detect the violators.

Monitoring Work Program/Monitoring Agencies: The Planning Division.

Standards of Success: Absence of complaints.

N-2. Alternative Access Routes

Due to the increased truck traffic and cumulative noise along the streets of the City of Moorpark, particularly Walnut Canyon Road, and the need for various improvements to mitigate future traffic on these streets, as described in the City of Moorpark's Circulation Element, the permittee shall participate in any assessment district or other financing technique, including the payment of traffic mitigation fees, which the County of Ventura may adopt to fund or partially fund the proposed State Route 23 by-pass extension and/or easterly extension of Broadway. If such a district or other mechanism is created, the permittee shall be required to pay only its pro-rata share of any assessment or other charges.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: As needed, when a program is developed by the County.

Monitoring Work Program/Monitoring Agencies: The Planning Division, in consultation with the Public Works Agency, shall be the monitoring agency.

Standards of Success: Acquisition of funds from the permittee.

N-3. Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue

Due to the increased truck traffic and cumulative noise along the streets of the City of Moorpark, particularly Walnut Canyon Road, the permittee shall contribute on a pro-rata basis to a City of Moorpark sponsored traffic noise monitoring program on Walnut Canyon Road/Moorpark Avenue if a reciprocal agreement is implemented between the County of Ventura and the City of Moorpark during the life of the permit. This reciprocal agreement shall be between the County of Ventura and the City of Moorpark to develop, fund, and implement a traffic noise monitoring and enforcement program designed to reduce traffic noise impacts on Walnut Canyon Road/Moorpark Avenue. If such an agreement is developed, the permittee shall be required to pay only its pro-rata share of any assessment or other charges.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: As needed, when a program is developed by the County.

Monitoring Work Program/Monitoring Agencies: The Planning Division, in consultation with the City of Moorpark, shall be the monitoring agency.

Standards of Success: Acquisition of funds from the permittee.

4.8.6 RESIDUAL IMPACTS

After implementation of the above recommended conditions of approval, the proposed project is expected to generate the following residual impacts:

- Without implementation of the City of Moorpark's circulation improvements, noise related to the proposed project is expected to contribute incrementally to the existing significant, cumulative unmitigable impacts (Class I) along Walnut Canyon Road;
- With implementation of the City of Moorpark's circulation improvements, noise related to the proposed project is expected to contribute incrementally to the existing significant, cumulative mitigable impacts (Class II) along Walnut Canyon Road;
- Operation noise, off-site, is expected to result in insignificant adverse impacts (Class III); and
- Truck traffic noise is expected to result in insignificant adverse impacts (Class III).

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4.9 TRAFFIC

Associated Transportation Engineers (ATE) prepared an assessment of the project traffic on roadway conditions and intersection capacity (Appendix I). The following represents a summary of this January 1996 traffic study.

4.9.1 EXISTING CONDITIONS

4.9.1-1 Existing Street Network

The circulation system serving the project site is comprised of two State Highways, as well as major arterial and local collector streets. The primary components of the study street system included State Route 118, State Route 23, Happy Camp Road, and Grimes Canyon Road. Each is discussed below.

State Route 118 (S.R. 118): This State Highway extends from the Santa Paula Freeway (State Route 126) in the eastern portion of the City of Ventura to the Foothill Freeway (Interstate 210) near the City of San Fernando. The following text describes the various segments of S.R. 118 in the project study area.

North of the New Los Angeles Avenue interchange, S.R. 118 is a four-to-six lane freeway.

Between the New Los Angeles Avenue interchange and Spring Road, S.R. 118 continues on a westerly alignment along New Los Angeles Avenue. New Los Angeles Avenue is a major east-west arterial within the City of Moorpark. This arterial has four travel lanes with traffic signals at Spring Road and Science Drive.

Between Spring Road and Tierra Rejada Road, S.R. 118 continues along Los Angeles Avenue. Los Angeles Avenue in this portion of the City of Moorpark is four lanes with median left-turn lane. Los Angeles Avenue is signalized at Spring Road, Moorpark Avenue, Park Lane, Liberty Bell Road and Tierra Rejada Road.

West of Tierra Rejada Road, S.R. 118 continues west along Los Angeles Avenue as a four lane facility to Mira Sol. West of Mira Sol, there is one westbound lane. West of Butter Creek Road, S.R. 118 is a two-lane arterial.

State Route 23 (S.R. 23): This State Highway facility extends north from U.S. Highway 101 to S.R. 118, at the New Los Angeles Avenue interchange. The following text describes the various segments of S.R. 23 in the project study area.

South of the New Los Angeles Avenue interchange, S.R. 23 is a four-to-six lane freeway.

Between the New Los Angeles Avenue interchange and Spring Road, S.R. 23 continues on a westerly alignment along New Los Angeles Avenue. New Los Angeles Avenue is a major east-west arterial with four travel lanes with turn lanes at the intersections. There are traffic signals at Science Drive and at Spring Road.

Between Spring Road and Moorpark Avenue, S.R. 23 continues westerly along Los Angeles Avenue. This segment of Los Angeles Avenue has four travel lanes.

Between Los Angeles Avenue and High Street, S.R. 23 continues on a northerly alignment along Moorpark Avenue. Moorpark Avenue is a major north-south arterial with one northbound travel lane, a median left-turn lane and two southbound travel lanes between Los Angeles Avenue and just south of Second Street. North of Second Street, Moorpark Avenue transitions to one travel lane each direction with a median lane to just south of Third Street. From just south of Third Street to High Street, Moorpark Avenue is a two-lane facility. Moorpark Avenue is signalized at Los Angeles Avenue, Poindexter Avenue-First Street and High Street.

Between High Street and Broadway, S.R. 23 continues on a northerly alignment along Walnut Canyon Road. This section of S.R. 23 has two travel lanes and a median two-way left-turn lane from High Street to 0.2 miles north of Casey Road. From this point to Broadway S.R. 23 has two 13 foot travel lanes, with gravel shoulders and serves as the primary north-south route between the Cities of Moorpark and Fillmore.

Between Walnut Canyon Road and Grimes Canyon Road, S.R. continues on a westerly alignment along Broadway. This section of S.R. 23 has two 13 foot travel lanes, with gravel shoulders.

North of Broadway, S.R. 23 continues on a northerly alignment along Grimes Canyon Road. This section of S.R. 23 has two 13 foot travel lanes, with gravel shoulders.

Happy Camp Road is a north-south County collector street that has two travel lanes. This County Road is 25 feet in width and serves as the primary access for the TMC quarry facility and the adjacent rural residential areas. Happy Camp Road is stop-sign controlled at its intersection with S.R. 23.

Grimes Canyon Road between Broadway and Los Angeles Avenue (S.R. 118) is a two-lane collector roadway. This roadway is approximately 20 feet in width and is stop sign controlled at both the Los Angeles Avenue (S.R. 118) and Broadway intersections.

Internal Private Roads do not comply with Ventura County Public Works Agency Road Standards. Therefore, the Transportation Department advises they will not accept these private roads into the County Road System. No such proposal is being made by TMC.

4.9.1-2 Existing Setting Daily Traffic Volumes

As noted above in Section 3.4.3, under the terms of the Compliance Agreement (CA-4072), TMC has been allowed to continue operations within the conditions of approval associated with CUP-1328. This equates to an approximate daily traffic generation of 1,050 one-way vehicle trips, 810 of which involve trucks and is illustrated in Figure 36.

For this study, average daily traffic (ADT) volume and vehicle classification data was obtained from the California Department of Transportation (Caltrans), the City of Moorpark and 1993 machine counts conducted by ATE personnel. The average daily traffic volumes on the freeway sections of S.R. 118 and S.R. 23 were obtained from the City's traffic model document. Copies of the ADT

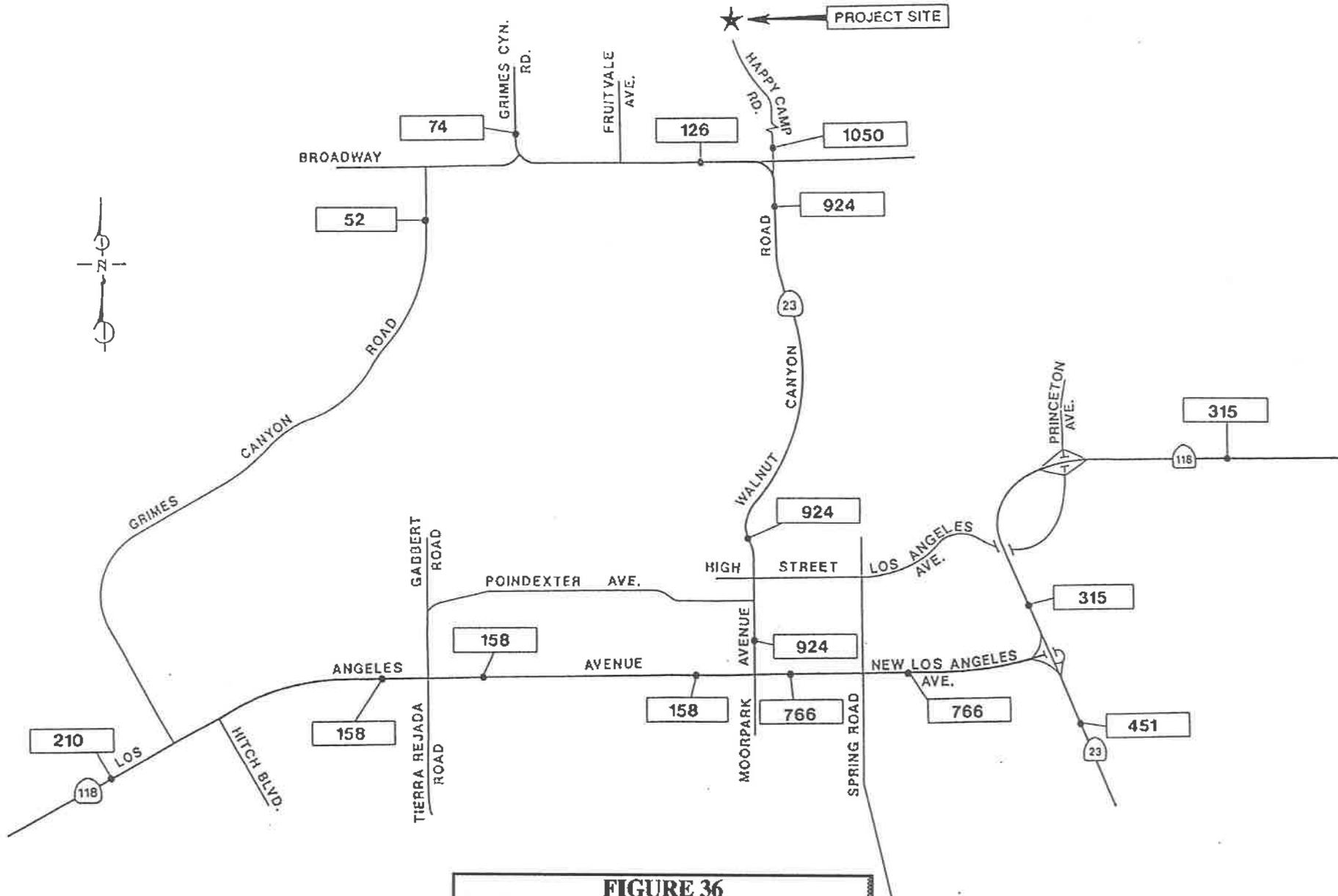


FIGURE 36

**ALLOWABLE OPERATIONS
AVERAGE DAILY TRAFFIC VOLUMES**



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count results conducted by ATE and vehicle classification data are contained in Appendix I (i.e. the Technical Appendix to the *Traffic and Circulation Study*, January 15, 1996). The vehicle classification data indicated that heavy vehicles/trucks represented approximately 20% of the traffic on Los Angeles Avenue (S.R. 118) and approximately 15% of the traffic on Moorpark Avenue (S.R. 23). This data also indicated that approximately 10% of the traffic on Grimes Canyon Road between Broadway and Los Angeles Avenue was comprised of heavy vehicles/trucks. The actual traffic counts were adjusted upward to include the traffic volumes described above in Section 4.9.1-2 and the total is illustrated in Figure 37 as the "existing setting" ADT volumes for the study street segments. Copies of the ADT count and vehicle classification data are contained in Appendix I (*Traffic and Circulation Study*, January 15, 1996).

4.9.1-3 Existing Setting Peak Hour Traffic Volumes and Levels of Service

The existing A.M. (6:30 A.M. to 8:30 A.M.) and P.M. (4:00 P.M. to 6:00 P.M.) peak hour intersection traffic count data utilized for this study was obtained from the City of Moorpark and collected by ATE. Figure 38 illustrates the existing A.M. and P.M. peak hour intersection traffic volumes.

Traffic flow on roadway networks is most severely restricted at intersections. Therefore, a detailed traffic flow analysis examined the operating conditions of critical intersections during peak travel time periods. In analyzing the operational characteristics of an intersection, Level of Service (LOS) grades A through F are used, with LOS A indicating very good operations and LOS F indicating poor operations (more complete definitions of the level of service grades are contained in Appendix I). The County of Ventura policies regarding traffic state that the minimum acceptable level of service for roadways and intersections within the County is LOS D. The City of Moorpark policies regarding traffic state that the minimum acceptable level of service for intersections within the City of Moorpark is LOS C.

To estimate the existing operational efficiency of the signalized intersections, a volume-to-capacity (V/C) analysis was performed. The levels of service for the signalized study intersections were calculated using the "Intersection Capacity Utilization" (ICU) methodology as described in the guidelines published by the Technical Committee on Congestion Management Programs. A review of the LOS calculation procedures published by the City of Moorpark indicated that these methodologies are consistent with the procedures utilized by the County. However, there are some subtle differences in these methodologies used by the County of Ventura and by the City of Moorpark to calculate ICU. For example, the City uses a lower lane capacity, assesses some penalties for dual left turn lanes, and includes a yellow interval penalty. These differences are minor and do not affect the description of impacts, nor the mitigation measures or recommended conditions of approval. Accordingly, and since the project is being evaluated within the permitting jurisdiction of the County, the ICU methodology adopted for use by the County was deemed appropriate for use in the analysis of project impacts.

The levels of service for the stop-sign controlled study intersections were determined based on actual vehicle delays measured during the A.M. and P.M. peak hour periods. The vehicle delays at the Walnut Canyon Road/Happy Camp Road/Broadway intersection (three separate intersections) were averaged to represent the operations of a single intersection. A set of delay ranges for unsignalized intersections was utilized to equate the average vehicle stop delay to level of service

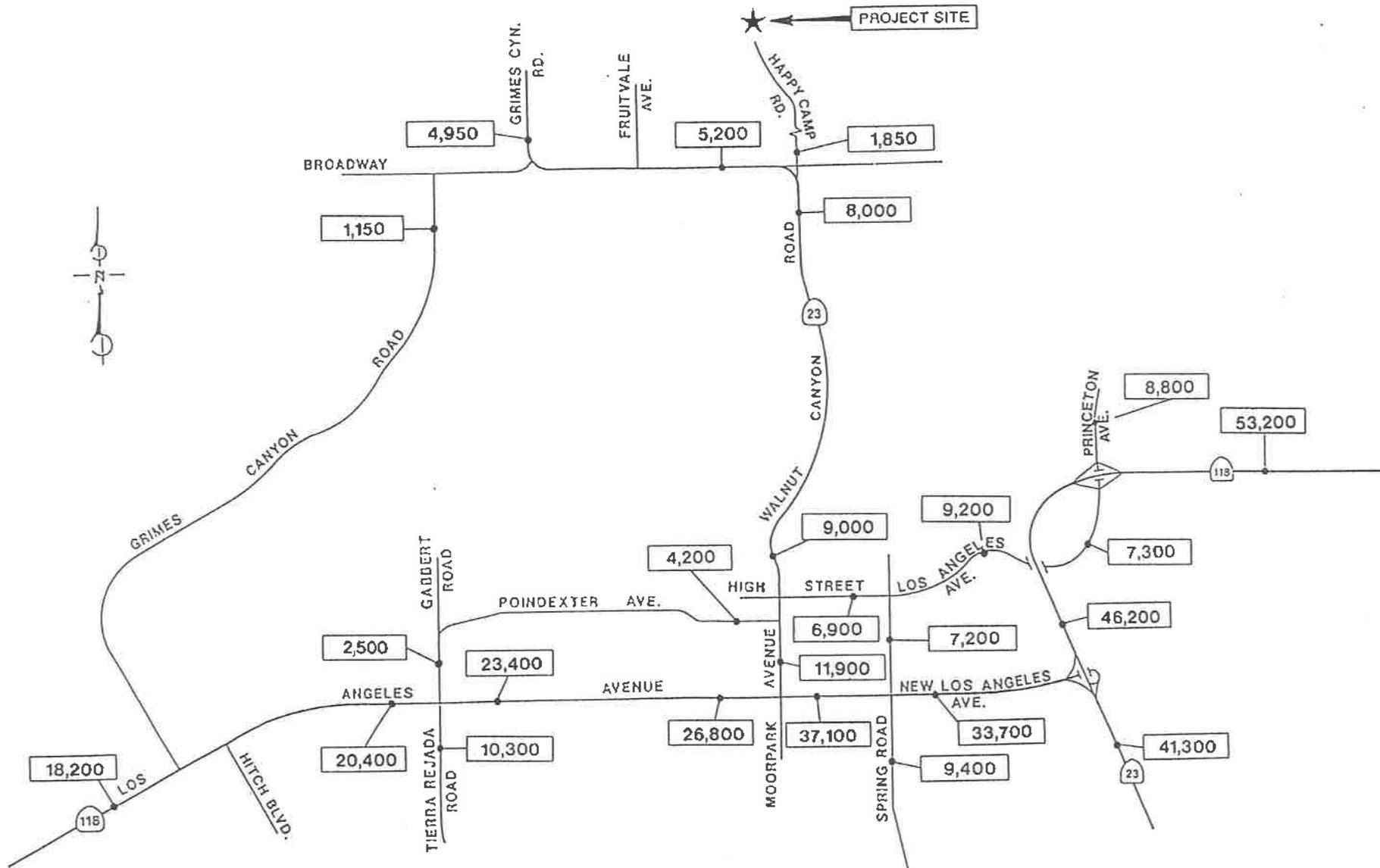


FIGURE 37

"EXISTING SETTING"

AVERAGE DAILY TRAFFIC VOLUMES



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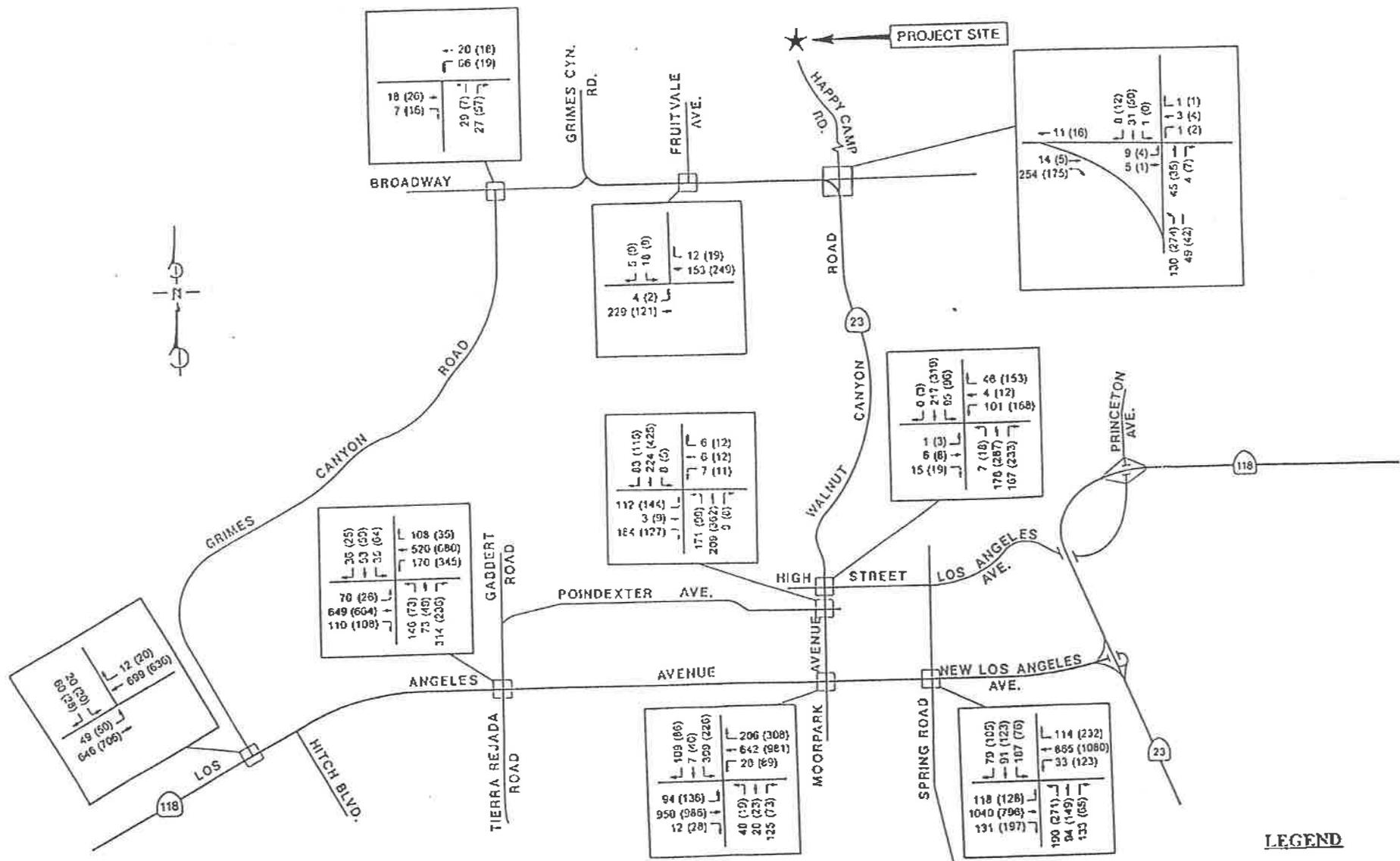
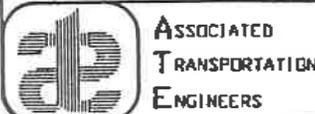


FIGURE 38

"EXISTING SETTING"

PEAK HOUR TRAFFIC VOLUMES



ratings. Appendix I contains a brief discussion of the calculation procedures used in determining the levels of service at signalized and unsignalized intersections, and the vehicle delay data sheets, and level of service calculation worksheets.

In order for the peak hour level of service calculations to reflect the number of trucks utilizing Los Angeles Avenue (S.R. 118) and Moorpark Avenue (S.R. 23), the peak hour traffic volumes were adjusted at the affected intersections using data contained in the Highway Capacity Manual. To account for approximately 20% truck traffic on Los Angeles Avenue, the east-west through peak hour volumes were divided by 0.91 ($f_{HV} = 0.91$) at the appropriate intersections. In a similar manner the peak hour volumes at the affected intersections along Moorpark Avenue were divided by 0.93 ($f_{HV} = 0.93$) to account for the 15% truck traffic utilizing this arterial. A copy of the heavy vehicle/truck traffic adjustment factor data is contained in Appendix I. Table 33 lists in which jurisdiction the intersection is located, the type of traffic control, and the existing setting peak hour levels of service for the nine study intersections.

TABLE 33
EXISTING PEAK HOUR LEVELS OF SERVICE

Study Intersection	Intersection Control Type	V/C Ratio - LOS Value	
		A.M. Peak Hour	P.M. Peak Hour
Los Angeles Ave / Spring Rd ¹	Signal	0.55 - A	0.66 - B
Los Angeles Ave / Moorpark Ave ¹	Signal	0.50 - A	0.54 - A
Los Angeles Ave / Tierra Rejada Rd ¹	Signal	0.45 - A	0.56 - A
Los Angeles Ave / Grimes Cyn Rd ²	1-Way Stop	NA - C	NA - C
Moorpark Ave / Poindexter Ave-First St ¹	Signal	0.44 - A	0.52 - A
Moorpark Ave / High St ¹	Signal	0.26 - A	0.40 - A
Walnut Cyn Rd / Happy Camp Rd / Broadway ³	Multi-Way Stop	NA - B	NA - C
Broadway / Fruitvale Ave ²	1-Way Stop	NA - C	NA - C
Broadway / Grimes Cyn Rd ²	1-Way Stop	NA - A	NA - A

¹ Peak hour volumes adjusted to account for heavy vehicle/truck traffic.

² Level of service based on vehicle delays measured in the field.

³ Vehicle delays averaged to represent the operations of a single intersection.

The data presented in Table 33 indicate that the nine study intersections currently operate at acceptable levels of service. This conclusion is based on the minimum acceptable levels of service defined by the County of Ventura and the City of Moorpark. Field observations conducted by ATE confirmed that the nine study intersections currently operate at acceptable levels of service during both the A.M. and P.M. peak hour periods.

4.9.2 PROJECT IMPACTS

The assessment of traffic impacts is based on an evaluation of the effects on volume-to-capacity ratios and LOS at key intersections in the study area. Intersections are the limiting factor in traffic flow. The roadways in the study area have greater capacity than the intersection, hence, roadway volume-to-capacity ratios and levels of service are not assessed. The Ventura County Initial Study Assessment Guidelines provide the following threshold criteria for the environmental assessment of public roads and highways Level of Service (LOS):

Threshold Criteria:

1. *A project that would have an impact on a road segment or intersection that is currently operating at a less than acceptable Level of Service (Policy 4.2.2-3 of the County General Plan) will be considered to have a significant impact.*
2. *A project that would have an impact on a road segment or intersection that is currently operating at an acceptable Level of Service, where the cumulative traffic impacts would result in the Level of Service falling to an unacceptable level (Policy 4.4.4-3 of the County General Plan), will be considered to have a significant impact.*

Impact Criteria:

A project that would result in 10% or more of the total project traffic and one or more vehicle trips during the peak hour on a road segment or intersection, will be considered to have an impact on that road segment or intersection's traffic flow.

These criteria were used to determine the significance of impacts generated by the proposed project at the intersections and roadways within the County. The intersections of Los Angeles Avenue/Grimes Canyon Road, Walnut Canyon Road-Happy Camp Road/Broadway, Broadway/Fruitvale Avenue, and Broadway/Grimes Canyon Road are within the County's jurisdiction.

City of Moorpark - The City of Moorpark significance criteria states if a level of service degradation of one level of service or greater is attributable to a project, the project is considered to have a significant impact which would require mitigation. In addition, this criteria states that a level of service degradation of less than one level of service may also be considered significant. This significance criteria is based on a change in the level of service grade at an intersection (i.e., LOS C to LOS D, LOS D to LOS E or LOS E to LOS F) which provides a broad range of measurement for project-specific impacts. In order to equate this significance criteria to a more definitive unit of measurement for LOS D, E and F, the following criteria was developed to relate the change in V/C ratio to project-specific impacts. The following criteria was utilized to identify project-specific impacts at the study intersections within the City of Moorpark.

- At an intersection that is operating at LOS D (with project traffic), a significant impact is attributable to the project if the project traffic results in a V/C ratio change greater than or equal to 0.02.
- At an intersection that is operating at LOS E or LOS F (with project traffic), a significant impact is attributable to the project if the project traffic results in a V/C ratio change of 0.01 or greater.

4.9.2-1 Proposed Project Trip Generation

The following two project trip generation scenarios were utilized in the evaluation of traffic impacts that would be associated with the proposed project. The first scenario quantifies the trip generation estimates for the level of operations that are associated with the "existing setting". The second scenario quantifies the trip generation estimates for the proposed project, representing the

average production level operating conditions at the project site, including both truck related activities (delivery of materials to market, concrete ready-mix truck trips and delivery of supplies to the site) and employee traffic.

The data in Table 34 indicate that at the existing level of operations the project site generates a total of 1,050 one-way daily trips, with 64 trips occurring during the A.M. peak hour and 55 trips occurring during the P.M. peak hour. These data also illustrate the proposed level of operations would generate a total of 1,718 daily one-way trips, 107 trips occurring during the A.M. peak hour and 97 trips occurring during the P.M. peak hour. Therefore, the proposed project would result in an increase of 668 one-way trips daily, including 41 A.M. and 34 P.M. peak hour one-way trips.

TABLE 34
EXISTING AND PROPOSED A.M. & P.M. PEAK HOUR TRAFFIC VOLUMES

Study Scenario	Number of Vehicle Trips						
	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Total	In	Out	Total	In	Out
Existing Setting: ¹							
Truck Activity Trips -	810	54	23	31	16	9	7
Employee Trips -	240	10	8	2	39	8	31
Totals:	1,050	64	31	33	55	17	38
Proposed Project: ²							
Truck Activity Trips -	1,328	89	38	51	27	15	12
Employee Trips -	390	16	13	3	62	12	50
Totals:	1,718	105	51	54	89	27	62
Net Increase:	+668	+41	+20	+21	+34	+10	+24

¹ Based on definition of "existing setting" which involves 1,800,000 gross tons of production per year, operating 312 days per year, and averaging 1,050 one-way vehicles trips per day, of which 810 are one-way heavy truck trips.

² TMC proposed project operations.

4.9.2-2 Proposed Project Trip Distribution

The peak hour-to-daily trip ratios observed at the facility indicated that approximately 6.1% of the daily trips under the "existing setting" occur during the A.M. peak hour and approximately 5.2% occur during the P.M. peak hour. Of these peak hour trips, truck traffic constitutes 85% of the A.M. peak hour trips and 30% of the P.M. peak hour trips. Refer to Table 35 and Figure 39 below (source: Dames & Moore).

Using the trip generation estimates in Table 34 above and the trip distribution percentages in Table 35 below, the proposed project trips were distributed onto the study-area street network. The additional trips are attributable to the proposed project and are illustrated as "Project - Added" in Figure 40. Similarly, the additional peak hour traffic volumes are attributable to the proposed project and are illustrated as "Project - Added" in Figure 41.

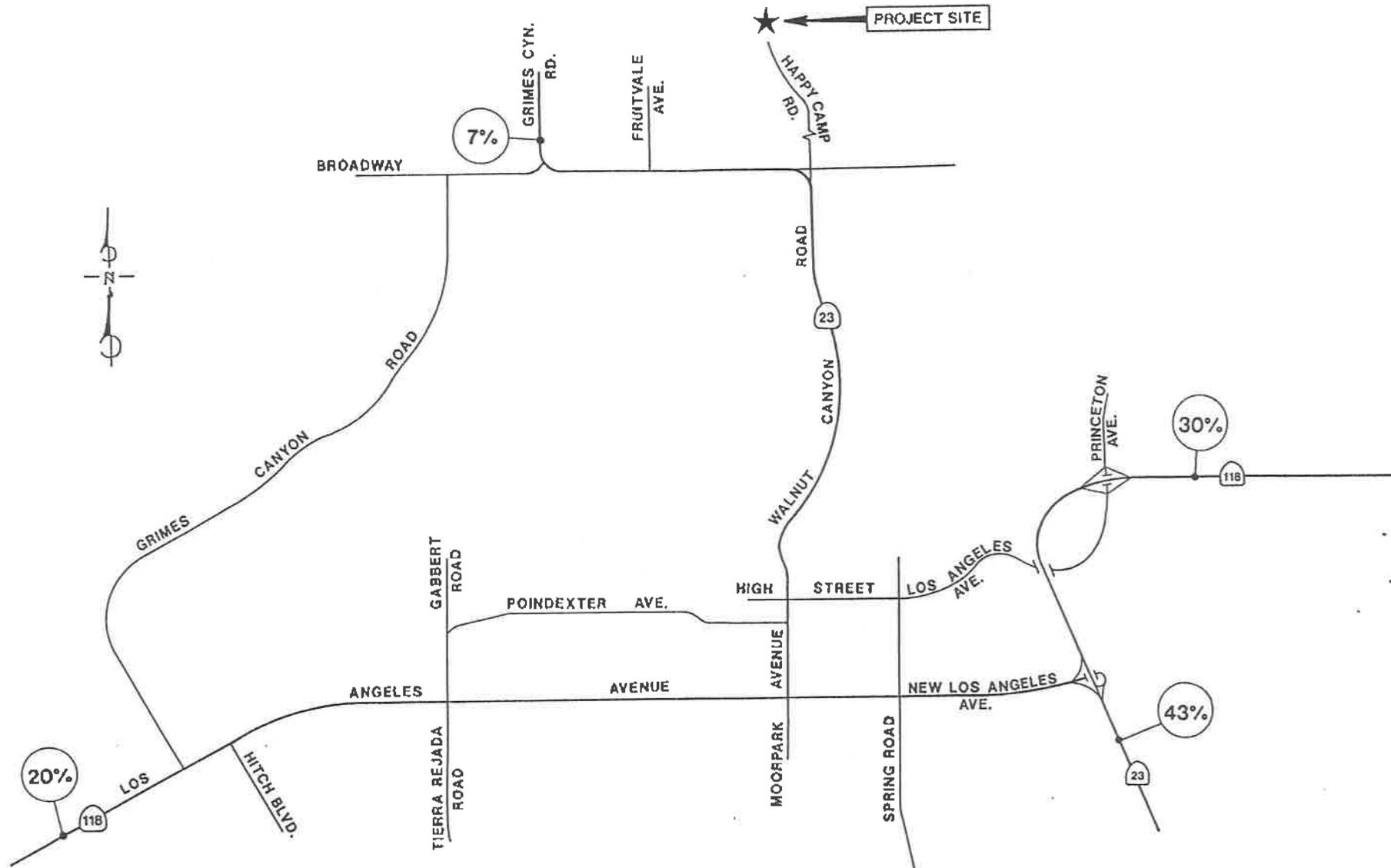
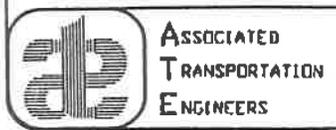


FIGURE 39

TMC OPERATIONS

TRAFFIC DISTRIBUTION PERCENTAGES



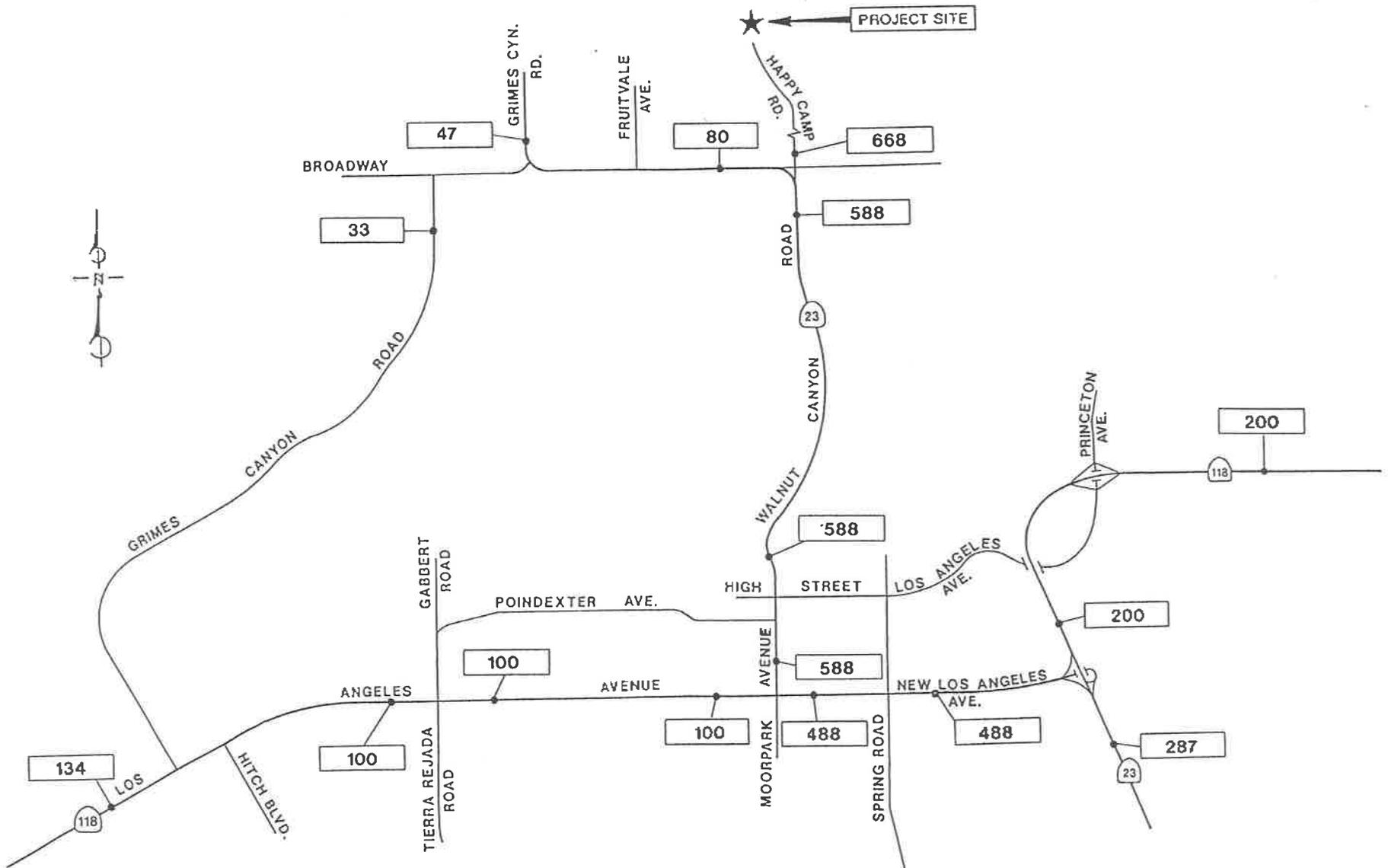


FIGURE 40

PROJECT - ADDED

AVERAGE DAILY TRAFFIC VOLUMES



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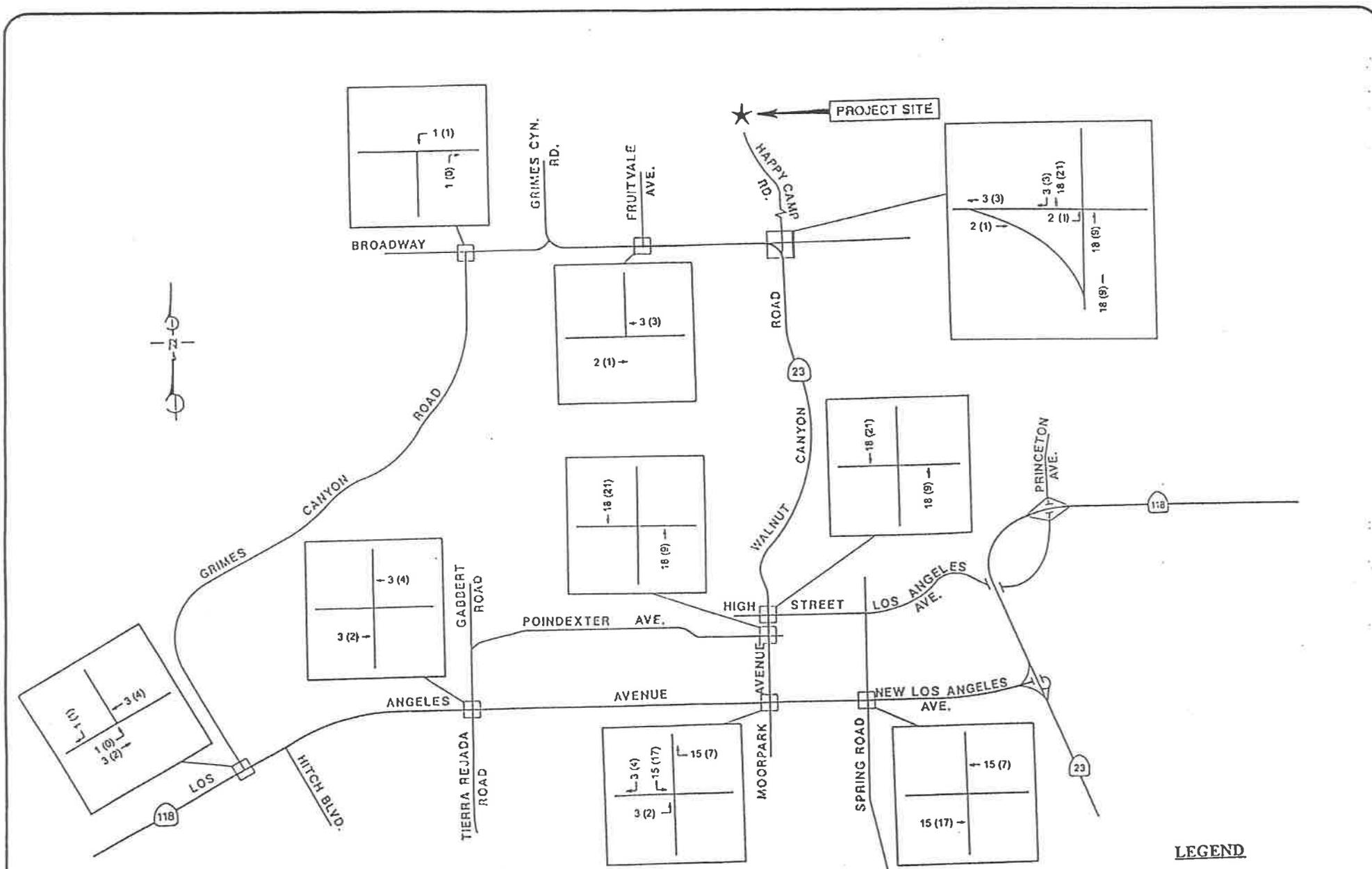


FIGURE 41

PROJECT - ADDED
PEAK HOUR TRAFFIC VOLUMES

TABLE 35
PROJECT TRIP DISTRIBUTION PERCENTAGES

Origin / Destination	Distribution Percentage
To and From the North: via Broadway-Grimes Cyn Rd	7%
To and From the West: via Broadway-Grimes Cyn Rd-Los Angeles Ave via Walnut Cyn Rd-Moorpark Rd-Los Angeles Ave	5% 15%
To and From the East: via Walnut Cyn Rd-Moorpark Ave-Los Angeles Ave-S.R. 118	30%
To and From the South: via Walnut Cyn Rd-Moorpark Ave-Los Angeles Ave-S.R. 23	<u>43%</u>
Total:	100%

4.9.2-3 Proposed Project Intersection Impact Analysis

The net traffic volume totals shown in Table 34 were added to the "existing setting" traffic volumes in order to identify project-specific impacts, if any. The "existing setting"-plus-project daily and A.M. and P.M. peak hour volumes are illustrated on Figures 42 and 43, respectively. The "existing setting"-plus-project peak hour levels of service were calculated for the nine study intersections assuming the "existing setting"-plus-project traffic volumes. Presented in Tables 36 and 37 are the results of this analysis, with the level of service calculation worksheets contained in Appendix I.

TABLE 36
EXISTING SETTING-PLUS-PROJECT - A.M. PEAK HOUR LOS

Study Intersection	V/C Ratio - LOS Value		V/C Ratio Change	Sign. Impact
	Existing Setting	Existing + Proposed Project		
Los Angeles Ave / Spring Rd ¹	0.55 - A	0.56 - A	0.005	No
Los Angeles Ave / Moorpark Ave ¹	0.50 - A	0.51 - A	0.007	No
Los Angeles Ave / Tierra Rejada Rd ¹	0.45 - A	0.45 - A	0.001	No
Los Angeles Ave / Grimes Cyn Rd	NA - C	NA - C	NA	No
Moorpark Ave / Poindexter Ave-First St ¹	0.44 - A	0.45 - A	0.013	No
Moorpark Ave / High St ¹	0.26 - A	0.28 - A	0.013	No
Walnut Cyn Rd / Happy Camp Rd / Broadway ²	NA - B	NA - B	NA	No
Broadway / Fruitvale Ave	NA - C	NA - C	NA	No
Broadway / Grimes Cyn Rd	NA - A	NA - A	NA	No

¹ Peak hour volumes adjusted to account for heavy vehicle/truck traffic.

² Vehicle delays averaged to represent operations of a single intersection.

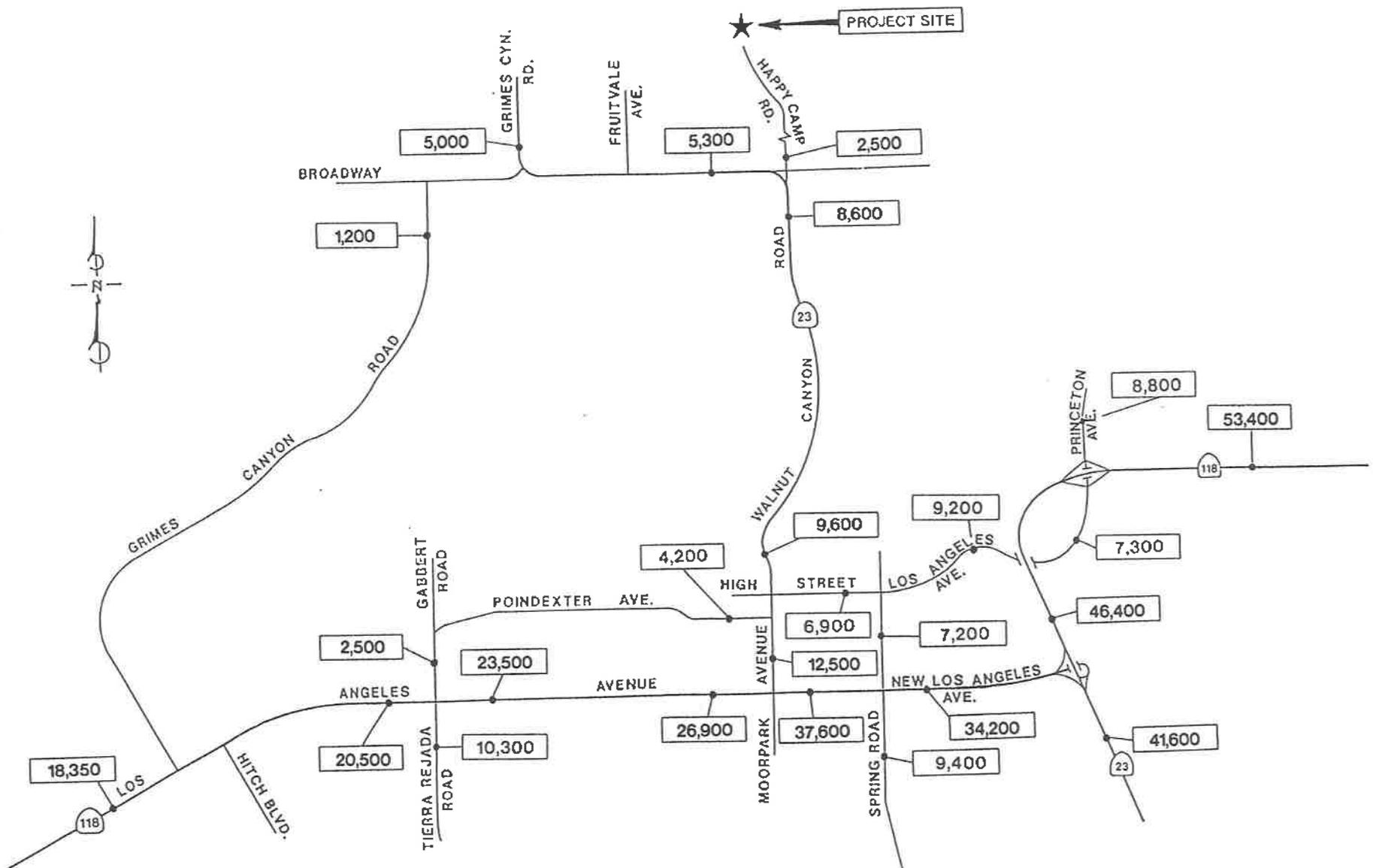


FIGURE 42

EXISTING + PROJECT

AVERAGE DAILY TRAFFIC VOLUMES



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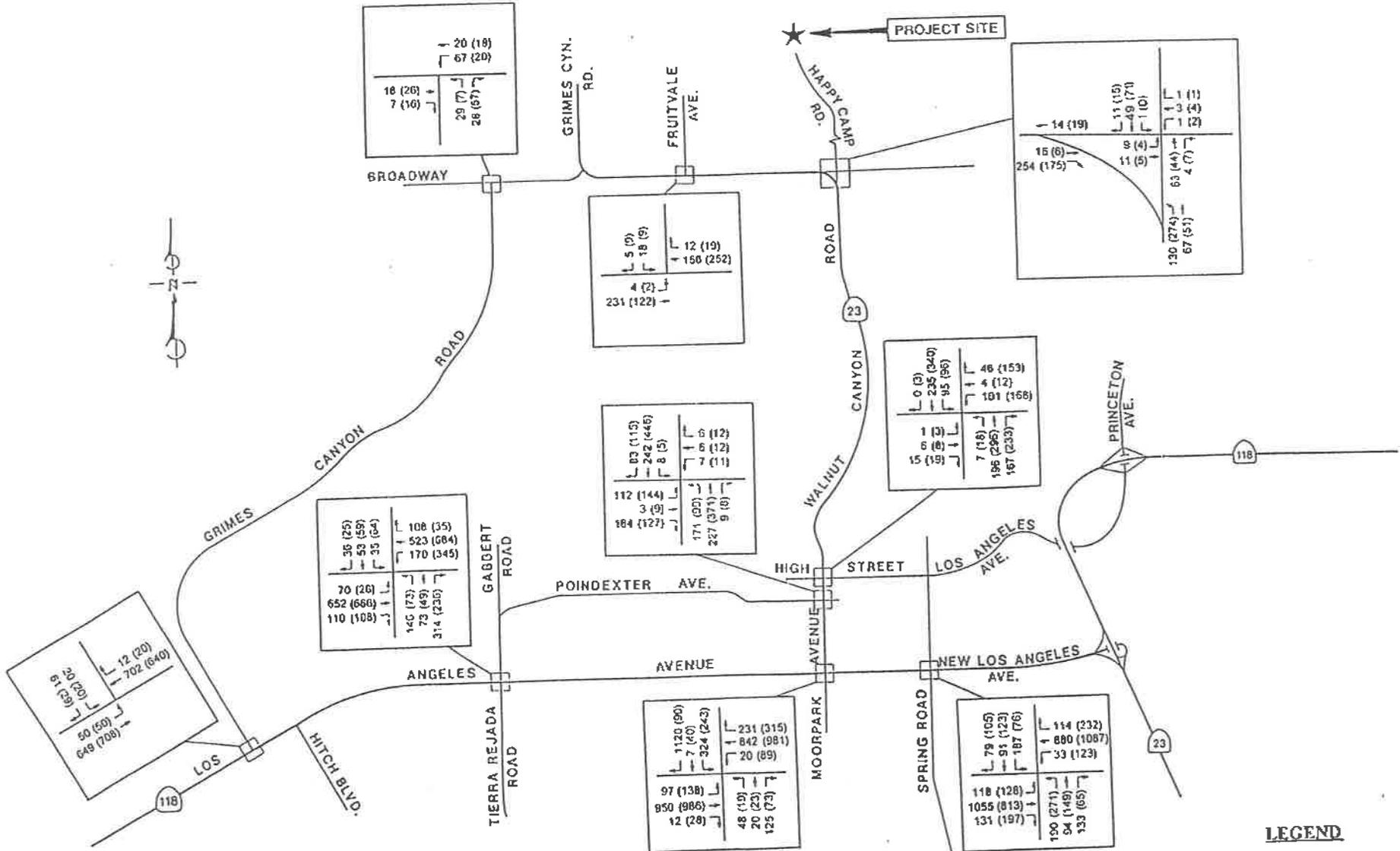


FIGURE 43
EXISTING + PROJECT
PEAK HOUR TRAFFIC VOLUMES

TABLE 37

EXISTING SETTING-PLUS-PROJECT - P.M. PEAK HOUR LOS

Study Intersection	V/C Ratio - LOS Value		V/C Ratio Change	Sign. Impact
	Existing Setting	Existing + Proposed Project		
Los Angeles Ave / Spring Rd ¹	0.66 - B	0.66 - B	0.003	No
Los Angeles Ave / Moorpark Ave ¹	0.54 - A	0.55 - A	0.007	No
Los Angeles Ave / Tierra Rejada Rd ¹	0.56 - A	0.56 - A	0.001	No
Los Angeles Ave / Grimes Cyn Rd	NA - C	NA - C	NA	No
Moorpark Ave / Poindexter Ave-First St ¹	0.52 - A	0.53 - A	0.014	No
Moorpark Ave / High St ¹	0.40 - A	0.40 - A	0.006	No
Walnut Cyn Rd / Happy Camp Rd / Broadway ²	NA - C	NA - C	NA	No
Broadway / Fruitvale Ave	NA - C	NA - C	NA	No
Broadway / Grimes Cyn Rd	NA - A	NA - A	NA	No

¹ Peak hour volumes adjusted to account for heavy vehicle/truck traffic.

² Vehicle delays averaged to represent operations of a single intersection.

The data presented in Tables 36 and 37 indicate that the proposed project will not result in significant impacts at any of the nine study intersections. In addition, the proposed project is not expected to degrade the LOS at any of the study intersections within the City of Moorpark. This meets the significance criteria for Ventura County and for the City of Moorpark. Therefore, the proposed project would result in insignificant adverse impacts (Class III).

4.9.2-4 Safety Impacts

An evaluation of traffic safety issues along S.R. 23 was conducted by CalTap for the proposed project site. This safety study contained an evaluation of vehicle speeds (passenger car and trucks), vertical and horizontal roadway alignment, sight distance, traffic control devices, pavement conditions and accident data. The following text is a brief summary of the data contained in the safety study conducted by CalTap.

Vehicle Speeds - An evaluation of vehicle speeds on the segment of S.R. 23 between Los Angeles Avenue and Shekell Road indicated that the prevailing truck speeds were between 2 and 10 miles per hour (MPH) less than the prevailing vehicle speeds and the total combined vehicle and truck speeds. This evaluation also indicated that in the areas where no speed limit was posted (speed limit 55 MPH), the prevailing truck speeds were 1 to 6 MPH less than 55 MPH, while the prevailing vehicle speeds were 2 to 4 MPH higher than 55 MPH.

Vertical/Horizontal Roadway Alignment - An evaluation of the vertical and horizontal roadway alignment of S.R. 23 between Los Angeles Avenue and Ventura Street (S.R. 126) was based on a review of the S.R. 23 construction plans. The evaluation indicated that this segment of S.R. 23 complied with the Caltrans criteria for the design of vertical and horizontal curves on California State Highways.

Sight Distance - The adequacy of sight distance was evaluated along the segment of S.R. 23 between Los Angeles Avenue and Grimes Canyon Road. This evaluation was based on guidelines established by the Institute of Transportation Engineers (ITE) and indicated that all locations analyzed were in conformance with these ITE guidelines.

Traffic Control Devices - A review of the traffic control devices along the segment of S.R. 23 between Los Angeles Avenue and Ventura Street indicated that current traffic control devices along this State highway meet minimum Caltrans standards.

Pavement Conditions - A CalTap field inspection of the pavement conditions along S.R. 23 indicated that the majority of the roadway surface was in good conditions. At the time this inspection was conducted the portion of S.R. 23 south of the San Marino Oil Company was under construction, and it was concluded that this was the only section of roadway that needed improvements.

Accident Data - An evaluation of traffic accident data on S.R. 23 between Los Angeles Avenue and Telegraph Road was performed using data provided by Caltrans for a 45 month time period. This data indicated that a total of 215 accidents were reported, of which 33 (15%) involved trucks. There were no fatal accidents involving trucks reported. This data also indicated that 35 of the 215 accidents occurred at intersections, with only one accident involving truck traffic. It was noted that none of the total 215 accidents reported occurred at the intersections of Happy Camp Road, High Street, S.R. 118 or Grimes Canyon Road.

A comparison the actual accident rates to the expected rates published by Caltrans (for roadways with similar characteristics) indicated that all of the study roadway segments experienced a higher actual accident rate, except the segment of S.R. 23 between High Street and Broadway. This comparison also indicated that for those segments which have a higher actual accident rate, that this rate would still be higher even without the presence of truck traffic. Therefore, the proposed project would result in insignificant adverse impacts (Class III).

In response to comments received on a prior Draft EIR prepared for the proposed project, ATE personnel conducted an evaluation of the access for the project traffic onto S.R. 23 at the Walnut Canyon Road/Happy Camp Road/Broadway intersection and the adequacy of the advisory speed warning signs on curves along Grimes Canyon Road and Happy Camp Road.

Warning Signs - In order to evaluate the adequacy of the advisory speed warning signs on curves, ATE used the "Ball Bank Indicator" method described in the Traffic Manual. This evaluation was performed on the segment of Grimes Canyon Road between Los Angeles Avenue (S.R. 118) and Broadway, and on Happy Camp Road north of Broadway. The results of this evaluation indicated that the advisory speed warning signs were appropriate for the various curves along these two street segments. At the intersection of Grimes Canyon Road with S.R. 118, it is noted that there are trees located within the right-of-way that restrict the sight distance to the west. This location should be subject to an engineering evaluation to determine how many of the trees should be removed. Therefore, the following condition of approval is recommended:

Recommended Condition:

Warning Sign Sight Distance Evaluation

To ensure there is adequate sight distance within the Grimes Canyon Road right-of-way, the permittee shall conduct an engineering evaluation of the Grimes Canyon Road /S.R. 118 intersection to determine how many of the trees should be removed. The results of this evaluation shall be provided to the Planning Director prior to the issuance of the zoning clearance for Phase 1. The Planning Director will then determine what action needs to be taken, if any, in consultation with the Public Works Agency.

4.9.2-5 Roadway Traffic Index Evaluation

An analysis of the probable Traffic Index (T.I.) was performed for Happy Camp Road north of Broadway and Grimes Canyon Road between Los Angeles Avenue (S.R. 118) and Broadway in order to evaluate the potential impacts that would be associated with the proposed project-generated truck traffic. This analysis calculated the Traffic Index (T.I.) value for these two roadways, for the "existing setting" and for the "existing setting"-plus-project traffic. (Refer to Table 34 above.)

The T.I. value is a design parameter that is based upon truck classification and volume data and is used to determine the structural needs for a section of a roadway, given its soil conditions and design life. The intent of such an evaluation is to provide an adequate roadway section for the design period. The data that is required for this analysis are the truck volume projections by axle configuration (number of axles) and the design period for the roadway (10- or 20-years). This information is used to calculate the Equivalent Single Axle Load (ESAL). (Note: The ESAL value is converted to a T.I. value by using Table 603.4A in the Caltrans Design Manual.) The T.I. value is then used to determine the required thickness of the roadbed materials to ensure the roadway has adequate strength to accommodate the projected truck traffic volumes. The T.I. values for the various scenarios were calculated using the guidelines contained in the Caltrans Highway Design Manual. A comparison of the ESAL's between scenarios allows the estimation of the proportional change in life expectancy of a roadway. There are many other factors that enter in to the sufficiency of a particular structural section, and the comparison of T.I. values is only a general indication of what can be expected. In this regard, there is no significance threshold.

Happy Camp Road - The T.I. value calculations for Happy Camp Road indicated that, for the "existing setting", a T.I. value of 9.5 would be required for a 10-year design life, and a T.I. value of 10.5 would be required for a 20-year design life. These calculations also indicated that, with the proposed project-added traffic, a T.I. value of 10.5 would be required for a 10-year design life, and a T.I. value of 11.0 would be required for a 20-year design life. Based on these T.I. value calculations, the proposed project traffic on Happy Camp Road may reduce the life expectancy of the roadway surfacing by 30 to 40 percent. Therefore the proposed project would result in significant, mitigable impacts (Class II). (Refer to Section 4.9.5, T-1 Roadbed Maintenance and Repairs Fund.)

ATE personnel conducted a visual inspection of this segment of Happy Camp Road. This inspection indicated that the segment of Happy Camp Road between Broadway and the point where Happy Camp Road ends and Roseland Avenue turns and heads west is in fair condition with a few localized failures. Beyond this point Roseland Avenue (a private road maintained by TMC) is in poor

condition with structural section failures throughout. These failures are primarily due to inadequate drainage and the repeated loading of truck traffic associated with the project site.

Grimes Canyon Road - The T.I. value calculations for Grimes Canyon Road between Broadway and S.R. 118 indicated that, for the "existing setting", a T.I. value of 7.5 would be required for a 10-year design life, and a T.I. value of 8.5 would be required for a 20-year design life. These calculations also indicated that, with the proposed project-added traffic, a T.I. value of 8.0 would be required for a 10-year design life, and a T.I. value of 8.5 would be required for a 20-year design life. Based on these T.I. value calculations, the proposed project traffic may reduce the life expectancy of the roadway surfacing by 20 to 25 percent. Therefore the proposed project would result in significant, mitigable impacts (Class II). (Refer to Section 4.9.5, T-1 Roadbed Maintenance and Repairs Fund.)

ATE recently conducted visual inspections of the 3.5 mile segment of Grimes Canyon Road, between Los Angeles Avenue (S.R. 118) and Broadway. This inspection indicated that this roadway is in fairly good condition, with minimal localized failures.

Maintenance records were obtained from the County's Public Works Agency for these two roadway segments. Based on the visual inspections conducted by ATE and a review of the maintenance records, it is apparent that the County's maintenance program in this portion of Ventura County has maintained the structural integrity of these two roadways.

The State of California has developed a user fee program for the maintenance of the state and local road systems. Typically, truck operators pay users fees in the form of motor vehicle fuel taxes, registration fees, and truck weight fees (e.g., approximately \$4,000 per year). These taxes and fees are then distributed to state and county governments for road purposes. Since the proposed project is dependent upon the trucks that will be hauling materials to market, and the trucks will be paying substantial user fees, the affect of proposed project traffic on the county road system will generally be mitigated.

However, these fees and taxes do not provide the funds needed for the extraordinary road maintenance and repair associated with concentrated road use (i.e., as described above for Happy Camp Road and Grimes Canyon Road in the immediate vicinity of the proposed project). The Ventura County Public Works Agency used the Equivalent Single Axle Load methodology to assess the extent to which proposed project trucking would damage asphaltic concrete pavement and determined an annual fee of \$10,737 was needed to mitigate these impacts (Table 38). This annual fee forms the basis for Section 4.9.5, Mitigation Measure T-1 Roadbed Maintenance and Repairs Fund.

TABLE 38

EXTRAORDINARY PAVEMENT REHABILITATION COSTS

Road Name	Road Limits	Pavement Width	Length (Miles)	Cost of Overlay ¹	Percent Attributable to Proposed Project	Project Allocation	Project Allocation (per year)
Grimes Canyon Road	S.R. 118 to Broadway	22	3.66	\$276,345	28.3	\$78,206	\$7,821
Happy Camp Road	S.R. 23 to Roseland	24	0.50	\$41,184	70.8	\$29,158	\$2,916
TOTALS				\$317,529		\$107,364	\$10,737

¹ Assumes a unit cost of \$0.65 per square foot in 1994 dollars and a 10 year design life.

4.9.2-6 Alternative Haul Routes - Refer to Section 5.7.

4.9.3 CUMULATIVE IMPACTS

4.9.3-1 Traffic Impact Mitigation Fee

The County of Ventura recently evaluated anticipated increases in cumulative traffic through the year 2010 based upon General Plan buildout. Based upon this analysis, a Traffic Impact Mitigation Fee Ordinance (Ordinance #4071) and General Plan Amendment (GPA 94-3) were adopted, both of which became effective on January 19, 1995.

Under the new ordinance, it is assumed all discretionary development adding traffic to the Regional Road Network will result in significant, cumulative mitigable impacts (Class II). As mitigation, a traffic impact mitigation fee is to be imposed upon new discretionary development within Ventura County to ensure each project contributes fees representing its pro-rata share of future improvements to the County's Regional Road Network. The traffic impact mitigation fee is assessed based on the ADT added by the project (i.e., in addition to the "existing setting"). For the proposed project, Table 34 served as the basis for calculating the traffic impact mitigation fee (i.e., an additional 668 ADT). Accordingly, a mitigation measure has been developed to assess a traffic impact mitigation fee (refer to Section 4.9.5, T-2 Traffic Impact Mitigation Fee).

4.9.3-2 Year 2000 Analysis

An evaluation was made of the short-term cumulative traffic impacts that would be associated with the proposed project. The cumulative scenario presented in this analysis is based on the Year 2000 traffic conditions as contained in the City of Moorpark's traffic model document. The City's traffic model data provides the total Year 2000 ADT and peak hour (A.M. and P.M.) traffic volumes for the study street segments and intersections. Illustrated on Figure 44 are the Total Year 2000 ADT volumes, with the Total Year 2000 A.M. and P.M. peak hour volumes shown on Figure 45. The traffic volumes presented on these figures include the proposed project's traffic.

In order to evaluate the potential traffic impacts that would be associated with the proposed project, the A.M. and P.M. peak hour intersection levels of service were calculated at the nine study intersections utilizing the peak hour traffic volumes illustrated on Figure 45. These intersection level

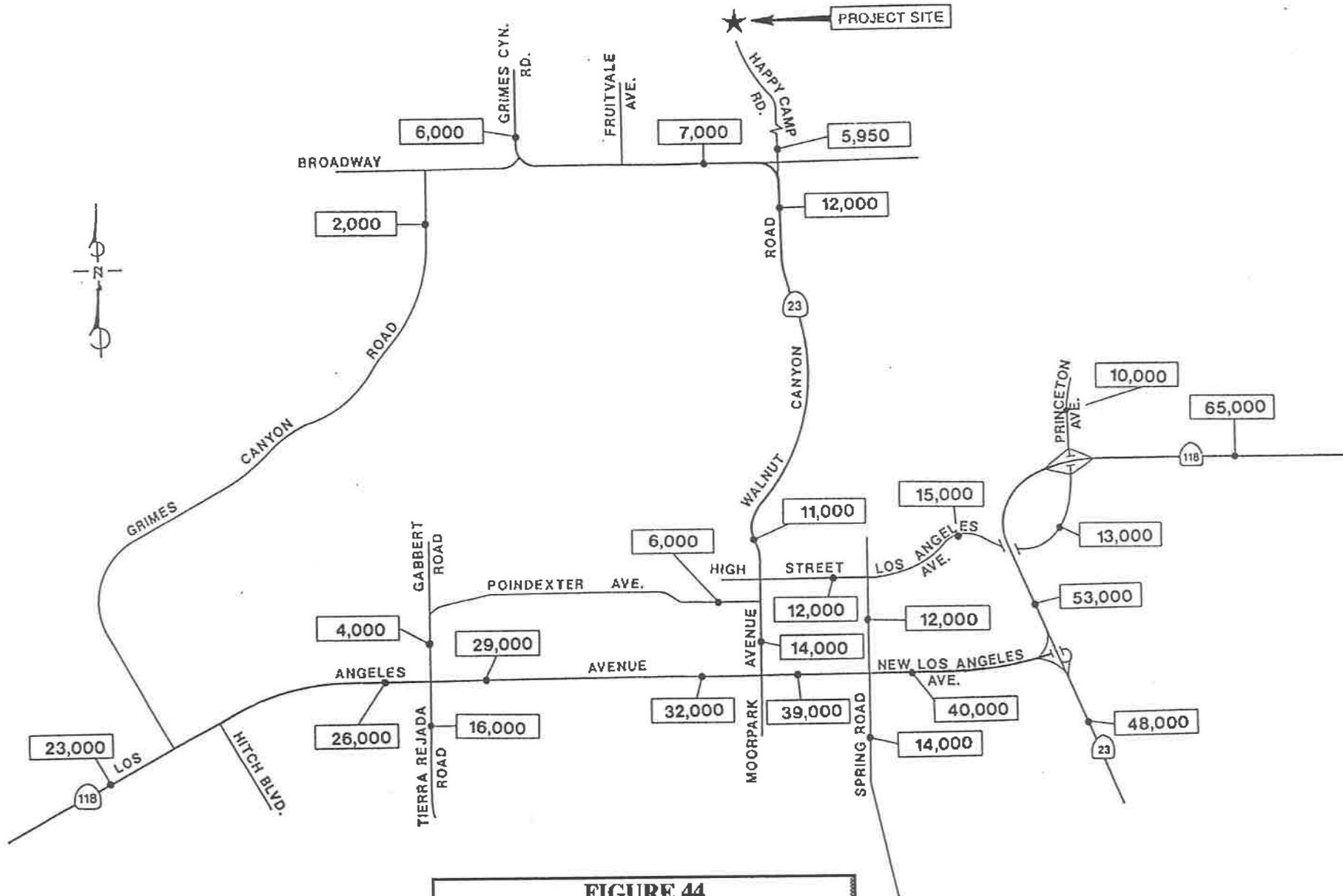


FIGURE 44
YEAR 2000
AVERAGE DAILY TRAFFIC VOLUMES



**ASSOCIATED
TRANSPORTATION
ENGINEERS**

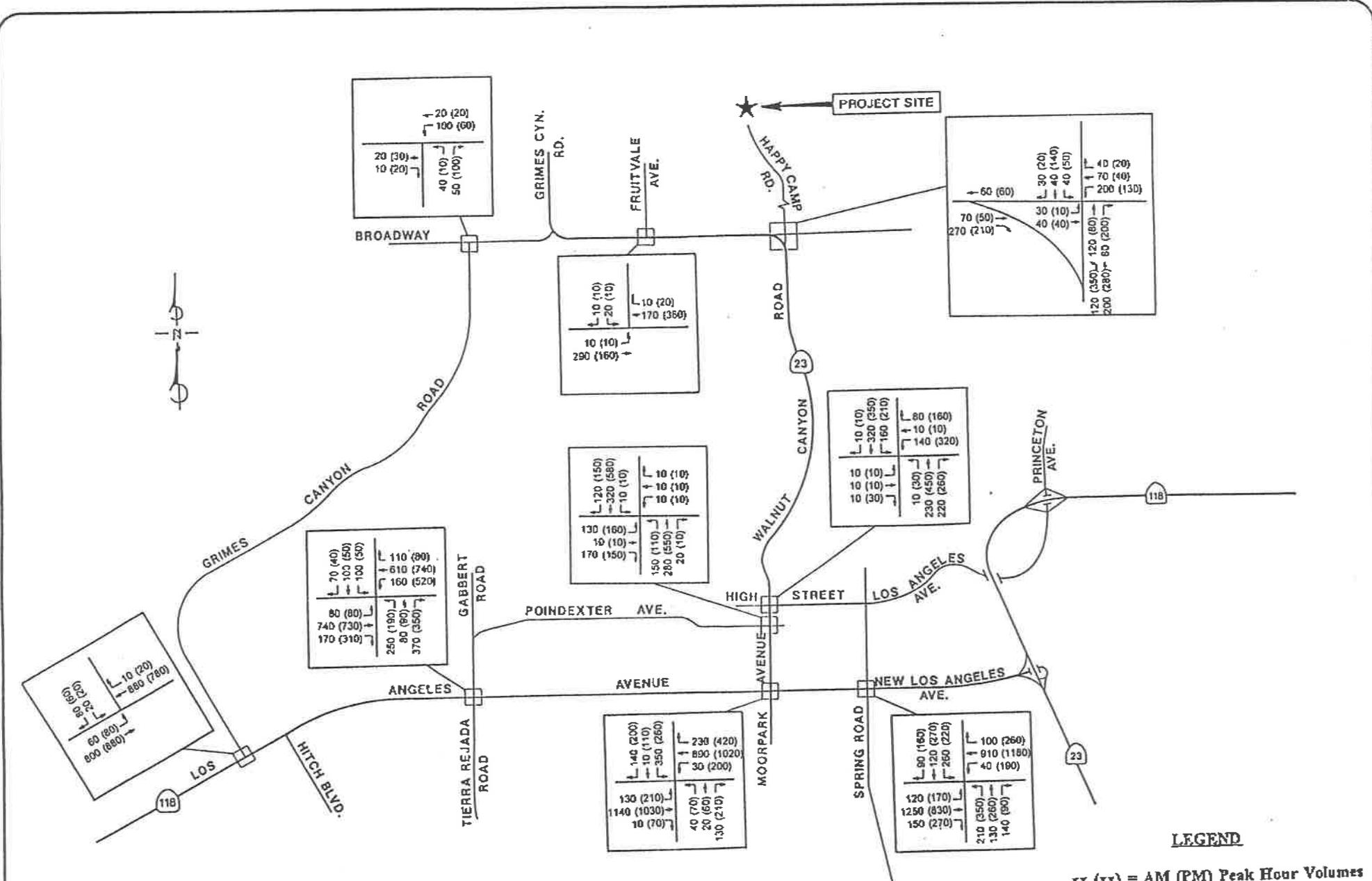


FIGURE 45

YEAR 2000

PEAK HOUR TRAFFIC VOLUMES

of service calculations were performed assuming the existing geometrics at the nine study intersections. Presented in Tables 39 and 40 are the results of the cumulative analysis for the A.M. and P.M. peak hours, respectively. The Year 2000 level of service calculations are presented for the "existing setting" and for the "existing setting"-plus-project.

The data in Table 39 indicates that the nine study intersections would continue to operate at acceptable levels of service during the A.M. peak hour, and that the proposed project would not generate any significant impacts during this time period. The intersection of Broadway/Fruitvale Avenue is within the County's jurisdiction, and LOS D is considered acceptable by the County of Ventura.

TABLE 39

YEAR 2000 - A.M. PEAK HOUR LOS

Study Intersection	V/C Ratio - LOS Value		V/C Ratio Change	Sign. Impact
	Existing Setting	Existing + Proposed Project		
Los Angeles Ave / Spring Rd ¹	0.66 - B	0.66 - B	0.005	No
Los Angeles Ave / Moorpark Ave ¹	0.57 - A	0.57 - A	0.005	No
Los Angeles Ave / Tierra Rejada Rd ¹	0.56 - A	0.56 - A	0.001	No
Los Angeles Ave / Grimes Cyn Rd	NA - C	NA - C	NA	No
Moorpark Ave / Poindexter Ave-First St ¹	0.50 - A	0.51 - A	0.013	No
Moorpark Ave / High St ¹	0.36 - A	0.37 - A	0.012	No
Walnut Cyn Rd / Happy Camp Rd / Broadway ²	NA - C	NA - C	NA	No
Broadway / Fruitvale Ave	NA - D	NA - D	NA	No
Broadway / Grimes Cyn Rd	NA - B	NA - B	NA	No

¹ Peak hour volumes adjusted to account for heavy vehicle/truck traffic.
² Vehicle delays averaged to represent operations of a single intersection.

TABLE 40

YEAR 2000 - P.M. PEAK HOUR LOS

Study Intersection	V/C Ratio - LOS Value		V/C Ratio Change	Sign. Impact
	Existing Setting	Existing + Proposed Project		
Los Angeles Ave / Spring Rd ¹	0.84 - D	0.85 - D	0.003	No
Los Angeles Ave / Moorpark Ave ¹	0.70 - B	0.70 - B	0.006	No
Los Angeles Ave / Tierra Rejada Rd ¹	0.75 - C	0.75 - C	0.001	No
Los Angeles Ave / Grimes Cyn Rd	NA - C	NA - C	NA	No
Moorpark Ave / Poindexter Ave-First St ¹	0.64 - B	0.66 - B	0.014	No
Moorpark Ave / High St ¹	0.68 - B	0.69 - B	0.006	No
Walnut Cyn Rd / Happy Camp Rd / Broadway ²	NA - D	NA - D	NA	No
Broadway / Fruitvale Ave	NA - C	NA - C	NA	No
Broadway / Grimes Cyn Rd	NA - B	NA - B	NA	No

¹ Peak hour volumes adjusted to account for heavy vehicle/truck traffic.
² Vehicle delays averaged to represent operations of a single intersection.

The data in Table 40 indicates that eight of the nine study intersections would continue to operate at acceptable levels of service, with the Los Angeles Avenue/Spring Road intersection operating unacceptably in the LOS D range during the P.M. peak hour. This intersection is in the City of Moorpark, which utilizes LOS C as the minimum acceptable level of service. The Walnut Canyon Road/Happy Camp Road/Broadway intersection is also projected to operate in the LOS D range, which is an acceptable level of service, as defined by the County of Ventura. The data in Table 41 also indicates that the proposed project traffic would not generate any significant impacts during the P.M. peak hour (change in V/C ratio less than 0.02). It is to be noted that the City of Moorpark will implement improvements to the Los Angeles Avenue/Spring Road intersection that will maintain LOS C, since this is required in their circulation element.

Based on the Year 2000 analysis data presented in Tables 39 and 40, the proposed project would not generate any significant impacts at the nine study intersections. Therefore, the proposed project would result in insignificant adverse impacts (Class III). However, the proposed project will incrementally add to the projected Year 2000 traffic volumes. Therefore, if the County of Ventura and the City of Moorpark establish a reciprocal traffic mitigation fee agreement the following condition of approval is recommended:

Recommended Condition:

Participation in Reciprocal Traffic Impact Mitigation Fee Agreement

The permittee shall participate in any reciprocal traffic mitigation fee agreement between the City of Moorpark and the County of Ventura that is designed to reduce the cumulative traffic impacts. Said participation shall be based on the permittee's pro rata contribution to the impacting traffic and shall be limited to the incremental addition to traffic (i.e., in addition to the "existing setting" of 1,050 one-way vehicle trips per day, of which 810 involve one-way trucks trips).

A review of the peak hour volumes and vehicle delays at the Walnut Canyon Road/Happy Camp Road/Broadway intersection with S.R. 23 indicated that proposed project traffic would experience delays in the LOS C-D range for the Year 2000 scenario. The projected Year 2000 delays at this location were averaged to represent the operations of a single intersection, thus providing a worst case analysis. The access for proposed project traffic onto S.R. 23 is not expected to adversely impact the operations at this location. Furthermore, the proposed project will not significantly impact this location. However, if the Year 2000 volumes do occur, this would be in part due to the extension of Broadway east of Walnut Canyon Road to the proposed Hidden Creek Ranch project and would require the reconfiguration of this intersection. The resultant operation would be LOS C or better.

4.9.3-3 Year 2015 Analysis

The TMC application is for a long term permit, thus a qualitative analysis of the roadway system is needed. The traffic projections by the City of Moorpark for their "Year 2010" are based upon full buildout of their General Plan. Since economic conditions over the past few years have slowed the development in Ventura County and the entire southern California area, it is reasonable to utilize

Moorpark's projections and consider them to be applicable to the Year 2015. The scenario presented in this analysis is based on the traffic volumes and circulation system as contained in the transportation and circulation EIR section for the Hidden Creek Ranch Project in the City of Moorpark. The Moorpark Traffic Analysis Model (MTAM) was used to produce the traffic estimates for the Year 2015 ADT and peak hour (A.M. and P.M.) traffic volumes for the study street segments and intersections. The City's Circulation Element provides for several changes to the system by Year 2015. The MTAM takes into consideration the planned configurations when distributing future traffic volumes.

The proposed project's incremental contribution to the Year 2015 peak hour volumes (peak hour percent contributions) were calculated at each of the study-area intersections based on the Year 2015 A.M. and P.M. peak hour traffic volumes. Table 41 shows the Year 2015 peak hour volumes and the project percent contribution to each intersection volume.

The data in Table 41 indicates that the project contributes less than 4% of the total volume to any of the study-area intersections in the Year 2015. The 4% increase will not cause significant impacts at the study intersections, the project traffic additions will incrementally add to the future Year 2015 volumes. Therefore, the proposed project would result in insignificant adverse impacts (Class III). If Ventura County and the City of Moorpark develop a reciprocal traffic mitigation fee agreement, it is recommended the project be conditioned as described above in Section 4.9.3-2 (*Participation in Reciprocal Traffic Mitigation Fee Agreement*).

TABLE 41
YEAR 2015 PEAK HOUR PROJECT PERCENT CONTRIBUTION

Study Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Year 2015 Volume	Project-Added Volume	Project % Contrib.	Year 2015 Volume	Project-Added Volume	Project % Contrib.
Los Angeles Ave./Spring Rd.	3,290	30	0.9%	5,210	24	0.5%
Los Angeles Ave./Moorpark Ave.	2,670	36	1.3%	4,350	30	0.7%
Los Angeles Ave./Tierra Rejada Rd.	2,560	6	0.2%	3,560	6	0.2%
Los Angeles Ave./Grimes Cyn Rd.	2,230	8	0.4%	2,230	7	0.3%
Moorpark Ave./Poindexter Ave.-First St.	1,040	36	3.5%	1,660	30	1.8%
Moorpark Ave./High St.	950	36	3.8%	1,660	30	1.8%
Walnut Cyn Rd.-Happy Camp Rd./Broadway	1,130	41	3.6%	1,480	34	2.3%
Broadway/Fruitvale Ave.	440	5	1.1%	430	4	0.9%
Broadway/Grimes Cyn Rd.	400	2	0.5%	320	1	0.3%

4.9.3-4 County Congestion Management Program

The County's Congestion Management Program (CMP) states that the minimum acceptable standard for traffic operations is LOS E. However, so that local jurisdictions are not unfairly penalized for existing congestion, CMP locations currently operating in the LOS F range are considered acceptable. The following text discusses the roadway and intersection operations as they relate to the County's CMP.

Roadway Operations - A review of the total "Year 2000" ADT volumes illustrated on Figure 44 indicates that the majority of the study street segments are projected to operate at acceptable levels of service (LOS E or better), as defined by the CMP. However, based on a set of standard engineering roadway design capacities (a copy contained in Appendix I), the segment of Los Angeles Avenue (S.R. 118) between Tierra Rejada Road and S.R. 23 is projected to operate in the LOS F range, with or without TMC traffic. A review of the proposed project ADT volumes illustrated on Figure 43 indicates that the proposed project traffic would comprise approximately 0.6% of the total daily traffic on this segment of Los Angeles Avenue (S.R. 118).

Intersection Operations - A review of the CMP indicated that three of the study intersections contained in this analysis are also CMP intersections. These three intersections are along Los Angeles Avenue (S.R. 118) at Spring Road, Moorpark Avenue and Tierra Rejada Road. As shown in the cumulative analysis, these three study intersections are projected to operate at acceptable levels of service (LOS E or better) under the total Year 2000 traffic conditions with existing geometrics. In addition, a review of the City's traffic model data for the Year 2015 scenario indicated that these three intersections would operate in the LOS E range with existing geometrics, an acceptable level of service as defined by the CMP.

4.9.4 GENERAL PLAN CONSISTENCY

The Ventura County General Plan (Goals, Policies and Programs) provides the following goals and policies which are applicable to the proposed project:

Transportation/Circulation

Goal 4.2.1-2

Ensure that as discretionary development creates the need, existing roads within the Regional Road Network and Local Road Network are improved, and additional roads needed to complement the Regional Road Network and Local Road Network are constructed, so as to keep all such roads functioning at an acceptable LOS.

Goal 4.2.1-3

Ensure that development which would contribute to the cumulative need for improvements or additions to the Regional Road Network bears its pro-rata share of the costs of all such improvements or additions.

Policy 4.2.2-3

The minimum acceptable Level of Service (LOS) for road segments and intersections within the Regional Road Network and Local Road Network shall be as follows:

- a. LOS-'D' for all County thoroughfares and Federal Highways and State Highways in the unincorporated area of the County, except as otherwise provided in subparagraph (b);*
- b. LOS-'E' for State Route 33 between northerly end of the Ojai freeway and the City of Ojai;*
- c. LOS-'C' for all County-maintained local roads; and*

- d. *The LOS prescribed by the applicable city for all Federal highways, State highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County (similar to Policies 4.2.2-3 through 4.2.2-6) respecting development in the city that would individually or cumulatively affect the LOS of Federal highways, State highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County.*

At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the lower LOS of the two shall be the minimum acceptable LOS for that intersection.

Policy 4.2.2-4

Except as otherwise provided in the Ojai Area Plan, County General Plan land use designations changes and zone changes shall be evaluated for their individual and cumulative impacts, and discretionary development shall be evaluated for its individual impact, on existing and future roads, with special emphasis on the following:

(a) Whether the project would cause existing roads within the Regional Road Network or Local Road Network that are currently functioning at an acceptable LOS to function below an acceptable LOS;

(b) Whether the project would worsen traffic conditions on existing roads within the Regional Road Network or the Local Road Network that are currently functioning below an acceptable LOS; and

(c) Whether the project would cause future roads planned for additions to the Regional Road Network or the Local Road Network to condition below an acceptable LOS.

Policy 4.2.2-5

Except as otherwise provided in the Ojai Area Plan, County General Plan land use designation changes and zone changes that would cumulatively cause any of the impact identified in subparagraphs (a) through (c) of Policy 4.2.2-4 shall be prohibited unless the Board of Supervisors adopts a Statement of Overriding Consideration. County General Plan land use designation changes, zone changes and discretionary development that would individually cause any of the impacts identified in subparagraphs (a) through (c) of Policy 4.2.2-4 shall be prohibited unless feasible mitigation measures are adopted which would ensure that the impact does not occur or unless a project completion schedule and full funding commitment for road improvements are adopted which ensure that the impact will be eliminated within a reasonable period of time. This policy does not apply to city thoroughfares, city-maintained local roads, or Federal or State highways, located within a city unless the applicable city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County (similar to Policies 4.2.2-3 through 4.2.2-6)

respecting development in the city that would affect the LOS of County thoroughfares, County-maintained local roads, and Federal and State highways located within the unincorporated area of the County.

Policy 4.2.2-6

Development that would generate additional traffic shall pay its pro-rata share of the costs of necessary improvements to the Regional Road Network per the County's Traffic Impact Mitigation Fee Ordinance as amended from time to time.

The project is consistent with these goals and policies because: 1) an evaluation of potential traffic impacts due to the project and due to cumulative development in the City of Moorpark area is presented as part of the EIR; 2) the permittee will be required to provide annual funds to the County for road maintenance, thereby mitigating the impacts of extraordinary road maintenance; 3) no significant impact would occur under current and proposed operations, including under the cumulative traffic scenario developed by the City of Moorpark for the year 2000; 4) the permittee will be required comply with the conditions of the reciprocal traffic fee mitigation agreement between the County of Ventura and the City of Moorpark; and 5) the permittee will be required to pay traffic impact mitigation fees corresponding to the proposed project's pro-rata share of future improvements to the Regional Road Network.

4.9.4-1 Consistency with the General Plan of the City of Moorpark

The proposed project site is located outside of the City of Moorpark's boundaries and Sphere of Influence (Figure 15). However, the project is located within the City's Area of Interest and is designated as Open Space. Therefore, the following Moorpark General Plan goal and policies apply to the proposed project.

Circulation Element

Goal 2

Provide a circulation system which supports existing, approved and planned land uses throughout the City while maintaining a desired level of service on all streets and at all intersections.

Policy 2.1

Level of service "C" shall be the system performance objective for traffic volumes on the circulation system. For roadways and interchanges already operating at less than level of service "C", the system performance objective shall be to maintain or improve the current level of service.

Policy 2.2

Project phasing shall be coordinated with the construction of on-site and off-site circulation improvements to maintain the performance standards objectives specified in Policy 2.1 and to ensure that improvements are in place when needed.

Policy 2.3

New development projects shall mitigate off-site traffic impacts to the maximum extent feasible.

Policy 2.4

All new development shall participate in a transportation improvement fee program. This fee enables circulation improvements to be funded by new development in a manner that maintains the performance objectives specified in Policy 2.1.

The proposed project will not change the level of service at any of the study intersections along the haul routes. Near-term, all of these study intersections will continue operating at level of service "C" or better. The same is true long-term, except at one study intersection where level of service "D" is expected with or without the proposed project. Given the imposition of the County's Traffic Impact Mitigation Fee, and condition language requiring TMC's pro-rata share participation in any City/County traffic mitigation reciprocal agreement, the proposed project is consistent with this goal and these policies.

4.9.5 MITIGATION MEASURES

T-1. Roadbed Maintenance and Repairs Fund

The permittee shall be responsible for the cost of extraordinary road maintenance and repairs of Happy Camp Road (i.e., that 0.5 mile portion from its intersection with Broadway and Walnut Canyon Road, north to Roseland Avenue) and Grimes Canyon Road (i.e., that 3.66 mile portion between Los Angeles Avenue [S.R. 118] and Broadway) within the County's jurisdiction. Prior to the issuance of the zoning clearance for Phase 1, the permittee shall deposit, with the Public Works Agency, \$10,737 into a revolving fund to be used, as-needed, for road maintenance and repairs on Happy Camp Road and Grimes Canyon Road. The Maintenance Division of the Public Works Agency shall periodically inspect the condition of the roads and advise the permittee of the needed road maintenance and repairs. The permittee has the option of performing the necessary road maintenance and repairs within 30 days, or allowing the County to utilize the revolving fund to affect said maintenance and repairs.

If the permittee elects to perform road maintenance and repairs, said maintenance and repairs shall be in accordance with Public Works Agency standards. If, in the determination of the Public Works Agency, road maintenance and repairs are not to Public Works Agency standards, the County may utilize the revolving fund to affect said maintenance and repair. When this occurs, the permittee shall supplement the revolving fund, in \$5,000 increments, within 30 days of written request by the Public Works Agency.

If the permittee elects to have road maintenance and repairs performed by the Maintenance Division of the Public Works Agency, the revolving fund shall be used at the discretion of the Public Works Agency to make the necessary road maintenance and repairs. The permittee shall supplement the revolving fund, in \$5,000 increments, within 30 days of written request by the Public Works Agency.

The roadbed maintenance and repair fee is based upon the assumption that project related traffic will contribute 28.3% to the traffic along the subject portion of Grimes Canyon Road and 70.8% to the traffic along the subject portion of Happy Camp Road. The roadbed maintenance fee shall be reviewed annually and will be increased or decreased based on the permittee's percentage use, actual maintenance and repair expenditures, and/or inspection of road conditions.

To determine the number of heavy truck trips associated with project operations, the permittee shall maintain monthly records of truck trips. The total actual monthly truck trips shall be divided by the number of authorized work days to compute an average daily truck trips for the month. Each monthly total would be summed and average daily truck trips calculated for the previous twelve (12) months. In this manner, a "rolling average" will be developed that is reflective of seasonal market variations. These truck trip records shall be made available to the Planning Director and to the Public Works Agency for use in determining the permittee's percentage use as it relates to the calculation of this roadbed maintenance fee.

Implementation Responsibility: The permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the zoning clearance for Phase 1, the permittee shall submit \$10,737 to the Public Works Agency to establish a road maintenance and repairs revolving fund. Other monitoring to occur on an as-needed basis.

Monitoring Work Program/Monitoring Agencies: The Public Works Agency.

Standard of Success: Acquisition of the funds from the permittee, on an as-needed basis, and the performance of road maintenance and repairs, as required.

T-2 Traffic Impact Mitigation Fee

Pursuant to the Traffic Impact Mitigation Fee Ordinance (Ordinance #4071), the permittee shall pay a traffic impact mitigation fee based on the net increase in traffic above the "existing setting" condition. The net increase has been identified as being 668 average daily trips. Prior to the issuance of the zoning clearance for Phase 1, the permittee shall pay a traffic impact mitigation fee of \$74,695.76 to the Public Works Agency. (Said fee is based on a fee rate of \$111.82 for each additional average daily trip.)

Implementation Responsibility: The permittee or successor in interest.

Monitoring Frequency: Prior to the issuance of the zoning clearance for Phase 1, the permittee shall pay a traffic impact mitigation fee of \$74,695.76 to the Public Works Agency.

Monitoring Work Program/Monitoring Agencies: The Public Works Agency.

Standard of Success: Payment of the above described traffic impact mitigation fee.

4.9.6 RESIDUAL IMPACTS

After implementation of the above recommended mitigation measures and conditions of approval, the proposed project is expected to generate the following potential residual impacts:

- increase average daily traffic (668 one-way vehicle trips per day) is expected to result in insignificant adverse impacts (Class III);
- increase in peak hour traffic volumes (41 A.M. trips and 34 P.M. trips) is expected to result in insignificant adverse impacts (Class III);
- incremental additions to Year 2000 and Year 2015 traffic volumes are expected to result in insignificant adverse impacts (Class III); and
- vehicle accident rates are expected to remain high, with or without the presence of truck traffic, resulting in an insignificant adverse impact (Class III).

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5.0 PROJECT ALTERNATIVES

The California Environmental Quality Act (CEQA) requires that an EIR present reasonable and feasible alternatives to a proposed project, including the "No Project" alternative. For the purposes of this chapter, the "proposed project" is the project proposed by Transit Mixed Concrete, Company (TMC), as previously described in Chapter 3.0 PROJECT DESCRIPTION. This definition does not include any of the mitigation measures identified in this EIR in Section 4.0 ENVIRONMENTAL ANALYSIS.

Section 15126(d) of the CEQA Guidelines requires that an EIR describe a range of reasonable alternatives to the proposed project, or to the location of the proposed project, which would feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (i.e., compared to the proposed project). This evaluation must include a discussion of a "No Project" alternative, and identify an "Environmentally Superior" alternative. In this section, several alternatives to the proposed project are identified, followed by a brief evaluation of their feasibility based on logistic, costs, institutional obstacles, and environmental permitting constraints.

If an alternative would result in one or more significant impacts in addition to those previously identified for the proposed project, these additional impacts are also to be discussed in this section, though in less detail than is required for the proposed project itself. The following analysis of alternatives, though not exhaustive, looks at a "reasonable" number of alternatives, covering a "reasonable" range of types of alternatives.

Although the analysis of alternative impacts is not as detailed as the analysis of proposed project impacts, the alternatives have been evaluated in enough detail to provide decision makers with adequate information to allow them to intelligently take account of each alternative's environmental consequences. Also included in this analysis is a brief description of the rationale for selecting the alternatives discussed and for rejecting any of the various alternatives, including identified alternative locations for the project.

5.1 SUMMARY OF PROJECT OBJECTIVES AND NEED FOR PERMITTED AGGREGATE RESERVES

The objectives of the proposed project are to: 1) continue mining and processing operations at the site in a manner similar to previous operations, subject to economic viability; 2) expand the area to be mined; 3) increase the maximum annual sand and gravel production rate; 4) add an asphalt batch plant on site; 5) provide for the environmentally sound and economically viable closure of the site; and 6) supply Ventura County with construction grade aggregate materials (e.g., rock, sand and gravel), specialty sands, ready-mix concrete, mortar, road base, and asphalt concrete. (Refer to Section 3.4.2.)

As previously discussed in Section 3.4.2, aggregate reserves for the Ventura County market will be depleted over the next several years. Reserves are defined by the California Division of Mines and Geology (DMG 1993) as aggregate deposits that are owned or controlled by a mining company and for which a mining permit has been issued by the appropriate lead agency authorizing extraction (e.g., Conditional Use Permit). When the existing aggregate reserves are depleted, the Ventura

County market will become dependent on reserves at more distant production locations. Though limited recycling of aggregate does occur, recycling does not represent a significant source of construction material. This is because there are quality problems with recycled aggregate materials that often preclude its use in many construction applications. For example, California Department of Transportation (Caltrans) specifications forbid the use of recycled aggregate in Portland Cement Concrete (PCC) grade materials for its projects (DMG 1985).

Because aggregate resources are considered a low value-to-weight commodity, transportation costs usually determine whether a particular quarry or production location is competitive and/or profitable for a given market area. It is generally agreed that as regional reserves are depleted, regional costs of sand and gravel will increase due to the added cost of transportation. As the cost of these basic building materials increases, so too will the cost of new construction, the cost of maintaining existing facilities and infrastructure. The cost of aggregate materials within the Ventura County market will largely depend on quarry locations and the rate of aggregate production permitted at each location.

The DMG studied the aggregate reserves in Ventura County in a 1993 report "Update of Mineral Land Classification of Portland Cement Concrete Aggregate". The report states that Ventura County has an estimated 4.8 billion tons of geologically available aggregate resources and is projected to need 415 million tons of aggregate from 1993 - 2043. Use of the term "aggregate resources" includes all available aggregate deposits within a specified area, not just "aggregate reserves" as defined above. As of January 1993, the total aggregate reserve under permit by the six mining companies in Ventura County was a little over 160 million tons.

Ventura County is currently estimated to have a 22-year supply of PCC-grade aggregate reserves. Most of that supply is sand, not gravel, located in the eastern part of Ventura County (i.e., the Simi Valley area), where the per capita consumption was 6.2 tons per year between the years 1981 and 1991. The reserves in the western part of Ventura County, where the per capita consumption since 1976 has been 7.2 tons per year, are nearly depleted (i.e., less than 2 years' supply remaining under permit). In western Ventura County, many areas previously designated as mineral resource areas have been subjected to new regulations and/or ordinances, limiting the mining of aggregate resources within the Santa Clara River area to a depth of 30 feet, and excavation in the river channel to the "Red Line" area (i.e., lowest natural longitudinal profile of the river channel).

The proposed project includes 170 million tons of aggregate reserves, representing an 18 year supply for the entire county. Countywide, the consumption rate of aggregate reserves is predicted to be 8.3 million tons per year for the next 50 years. CUP-4633 proposes an extraction rate of 3.4 million tons per year, which is equivalent to 41% of the estimated annual demand for mineral reserves in Ventura County for the next 50 years.

5.2 SUMMARY OF PROJECT SIGNIFICANT IMPACTS

The CEQA Guidelines Section 15126(d)(1) states the EIR discussion shall focus on alternatives to the proposed project or its location which are capable of avoiding or substantially lessening any significant effects of the proposed project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. EIR Sections 4.5 through 4.7

describe how the proposed project would result in the following significant, unmitigable impacts (Class I):

- Removal of 146 acres of native vegetation during mining, including 80 acres of coastal sage scrub, as well as chamise chaparral and other habitat.
- Loss of nesting and/or breeding habitat for coast horned lizard, coast patch-nosed snake, and loggerhead shrike, and possibly for several raptor species that may use the project site for roosting and foraging, including the golden eagle, Cooper's hawk, and black shouldered kite.
- Phase 2 and 3 excavations would be visible to some communities south of the mine, as well as recreationalists in middle and upper Happy Camp Canyon Regional Park.
- Near-term, Phase 1 excavation would be visible to recreationalists using the hiking trails in upper Happy Camp Canyon Regional Park.
- NO_x and PM₁₀ exceedances of both the state and federal air quality standards for O₃ and PM₁₀.
- ROC emissions in excess of the prescribed threshold criteria for regional air quality.

Though not a specific requirement of CEQA, the following lesser impacts of the proposed project were used to identify and evaluate alternatives (refer to EIR Sections 4.6, 4.8, and 4.9):

- Asphalt batch plant and asphalt haul truck odors may be objectionable to residents along the haul route (insignificant adverse impacts, Class III).
- Haul truck exhaust odors that may be objectionable to residents along the haul route (insignificant adverse impacts, Class III).
- Noise from haul trucks along access routes, particularly on Happy Camp Road, Walnut Canyon Road, and streets within the City of Moorpark (insignificant adverse impacts, Class III).
- Increased average daily traffic (insignificant adverse impacts, Class III);
- Increased peak hour traffic volumes (insignificant adverse impacts, Class III);
- Incremental additions to Year 2000 and Year 2015 traffic volumes (insignificant adverse impacts, Class III); and
- Vehicle accident rates are expected to remain high, with or without the presence of truck traffic (insignificant adverse impact, Class III).

5.3 NO PROJECT ALTERNATIVE

Under this alternative, CUP-4633 would not be approved. No mining would be allowed at the project site. This alternative would not meet the applicant's project objectives. The existing mine would be reclaimed in accordance with the 1978 approved reclamation plan. It is anticipated that full

reclamation with the establishment of vegetative cover and long-term drainage structures would require approximately 3 to 5 years. During the first year, there would be extensive grading to create finished stable slopes. In addition, drainage structures would be installed. Finally, the initial hydroseeding and/or other methods of revegetation would occur prior to the first winter season.

In subsequent years, there would be periodic repair of drainage structures, correction of erosion problems, and reseeded as needed to achieve the desired revegetation. Once the slopes are stable and the plant covering is self sustaining, the land is expected to support very limited cattle grazing. As such, there would be very little activity at the site. Although the reclaimed slopes would have plant cover, it is anticipated that the project site would continue to exhibit evidence of its mining history (i.e., lightly colored man-made slopes).

This alternative is the Environmentally Superior Alternative (ESA) as it would avoid most of the environmental impacts noted in Table S-1 (Section 2.2), including the significant, unmitigated impacts noted herein. Significant near-term visual impacts would remain until revegetation has been successfully achieved. The removal of project related traffic and noise from the street system studied would result in beneficial impacts (Class IV), particularly along Happy Camp Road and Walnut Canyon Road. However, the proposed project traffic distribution estimates were based on the existing and projected market area and the construction materials needed within that market area. With or without the proposed project, aggregate materials will be transported to and within the market area in response to local demand. The only variable is the source of these aggregate materials.

Therefore, while the no project alternative would eliminate the traffic associated with this particular project site, the traffic associated with aggregate development would continue to utilize the County's roadway system to service the market from another project site. Also, since ready-mix concrete and asphalt concrete both have significant transit time limitations before the product begins to cure, the demand for these materials would likely be met by another locally permitted project site or by aggregate material hauled from another area (e.g., Bakersfield) to a local processing/batch plant where the final mixing and marketing of materials would occur. This would likely result in increased regional traffic volumes and increased local construction costs. For these reasons, the No Action Alternative was rejected.

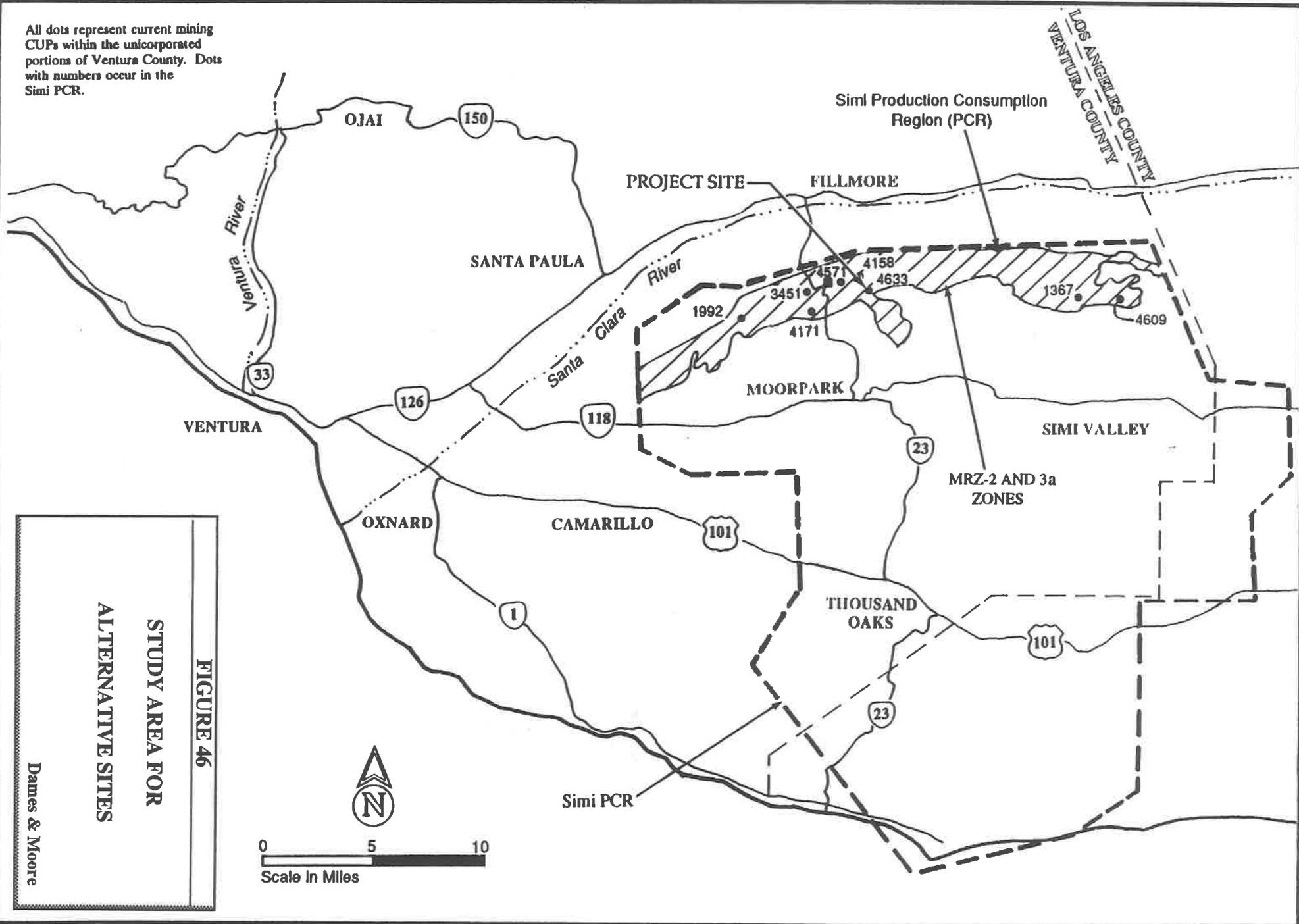
(Note: Pursuant to Section 15126(d)(4) of the CEQA Guidelines, if the No Project Alternative is the ESA, then the EIR must also identify a second ESA from among the other alternatives. Refer to Section 5.9 for the discussion of this second ESA.)

5.4 ALTERNATIVE SITE

Under this alternative, it was assumed that the geographic area used to select an alternative site would be limited to the Simi Production Consumption Region (PCR) (see Figure 46), designated by the State Division of Mines and Geology (DMG). The applicant's project objective is to provide rock material within the Simi PCR and alternative project sites outside this region would not be economically feasible due to added haul costs and the limited radius for ready-mixed concrete and asphalt concrete products (i.e., ready mix has a viable haul radius of approximately 45 minutes).

The Western Ventura PCR was also reviewed as a possible region for alternative sites. However, sites within this PCR would not provide an economical source of aggregate material of the

All dots represent current mining CUPs within the unincorporated portions of Ventura County. Dots with numbers occur in the Simi PCR.



ALTERNATIVE SITES
STUDY AREA FOR

FIGURE 46

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Simi PCR due to the increased haul distance and the associated travel time. In addition, most Western Ventura region mining operations are located within the Santa Clara River channel and are likely to cause greater impacts to the environment than the non-riparian mining sites found in the Simi PCR. It was concluded that only a mining site within the Simi PCR would meet the applicant's project objective of continuing to provide aggregate to the area on an economically competitive basis.

The assessment of an alternative site in the Simi PCR was limited to Mineral Resource Zones 2 and 3a (Figure 46). These zones are designated by the DMG to indicate resources that have regional or statewide significance or which have a high potential to contain mineral deposits of significance. An alternative site in the Simi PCR could be located in a variety of areas along the MRZ-2 and 3a Zones (see Figure 46). The specific locations would be dependent on the availability of a willing landowner to sell or lease the site, the availability of access and water, and other logistic considerations. Under this alternative, CUP-4633 would not be approved on the proposed site and this would result in reclamation of the existing mine site and would include the activities and site-specific impacts described in Section 5.3 above. Furthermore, the applicant would relocate the existing mining and processing facilities to a new undeveloped area or to an existing mine within the Simi PCR where at least limited access exists. Each of these two scenarios are evaluated below.

5.4.1 USE OF NEW SITE ALTERNATIVE

For this alternative, it is assumed that the existing TMC quarry facility (existing and proposed operations) would be relocated to a new undeveloped area within the Simi PCR where there is at least limited access. The most likely location would be in the mountains between Moorpark and Simi Valley. The relocation of the project site would result in the transposition of project related impacts to other roadways and intersections within the Moorpark and Simi Valley area. The Simi PCR represents a band of aggregate deposits that extends east-west along Oak Ridge, from South Mountain to Tapo Canyon, above Simi Valley (Figure 46). Several potential new mine sites could be located in the following areas:

- Canyons north of Bradley Road, west of Balcom Canyon with access along Los Angeles Avenue (State Route 118) to Bradley Road, to a yet to be constructed north-south road to the mine site.
- Two canyons east of Balcom Canyon, including the location of a previous aggregate mine, Somis Rock Mine (CUP-1922). Access would be along Los Angeles Avenue (State Route 118) to Balcom Canyon Road, to Stockton Road, and then to a yet to be constructed north-south road to the mine site.
- Land directly west of the CUP-4571 mine, at the location of Skyline Ranch. Access would either be by: 1) from the north along State Route 23; or 2) from the south along Grimes Canyon Road. A yet to be constructed road would connect the mine to Grimes Canyon Road near Egg City (Figure 46). For this site, no truck traffic would be allowed along Broadway towards Moorpark.

New mine sites north of Happy Camp Canyon Regional Park were not considered feasible because access would necessitate the construction of a very long road (i.e., in excess of 5-8 miles) in order to reach State Route 118. Also, connecting to State Route 118 may be impossible given the substantial amount of new development along State Route 118 in Simi Valley. A new mine site in Tapo Canyon was also rejected due to the lack of sufficient area and the low capacity of Tapo

Canyon Road for new truck traffic due to the presence of the P.W. Gillibrand Mine (CUP-1367) and the Tapo Sand and Gravel Products Mine (CUP-4609) (refer to Section 5.4.2 below).

Use of a new site could potentially avoid the following significant visual impacts to park users and residents of urban areas. In addition it could also potentially avoid the lesser impacts of noise and odors along the existing and proposed project haul route. The above sites are located in remote rural areas where the impacts would affect a smaller number of people compared to the proposed project site.

These new sites would not avoid the following significant impacts: 1) NO_x, ROC, and PM₁₀ emissions from mining, processing, and haul trucks; and 2) loss of native habitat. In fact, use of the above new sites, depending on the location, could result in the following new significant impacts in addition to those identified for the proposed project. Because of these potentially new impacts, the Use of a New Site Alternative was rejected.

- Depending upon the site, a new project location on a new, undisturbed area could potentially result in greater biological impacts (i.e., direct impacts to threatened or endangered species, or a substantially greater loss of native habitat).
- Each of the above new sites would require the construction of a new access road, probably 1-2 miles in length, and would involve a longer haul distance, resulting in correspondingly greater emission levels from the haul trucks.
- If water can not be purchased from a water purveyor, use of groundwater may be necessary at the new site. This may be infeasible because the new sites are located within the North Las Posas Groundwater Basin in the Fox Canyon GMA and the installation of a new well with new extractions would be prohibited. If one or more wells exist, the pumping of groundwater would be limited to existing entitlements, as they have been and will be reduced by the Fox Canyon GMA, which may or may not meet project needs.
- The introduction of heavy truck traffic into an area previously void of such traffic could result in significant noise impacts to noise sensitive receptors. If so, Ventura County General Plan Policy 2.14.2-2 would prohibit such development.
- Potentially significant impacts to paleontological and cultural resources could result since the presence of these resources at the above new sites is currently unknown.

5.4.2 USE OF AN EXISTING MINE ALTERNATIVE

Existing mine sites within the Simi PCR were also identified as alternatives to the proposed project. The sites considered include CUP-4158 (Fruitvale Mine), CUP-3451 and CUP-4171 (both Best Rocks Products mines).

CUP-4158 - The most likely alternative site would be the existing CUP-4158 mine, owned and operated by TMC, and currently a SMARA approved "idle" mine. The CUP-4158 site is located west and adjacent to the proposed project (Figure 47). Use of this mine would require the applicant to significantly "downscale" existing operations because CUP-4158 is conditioned to only produce

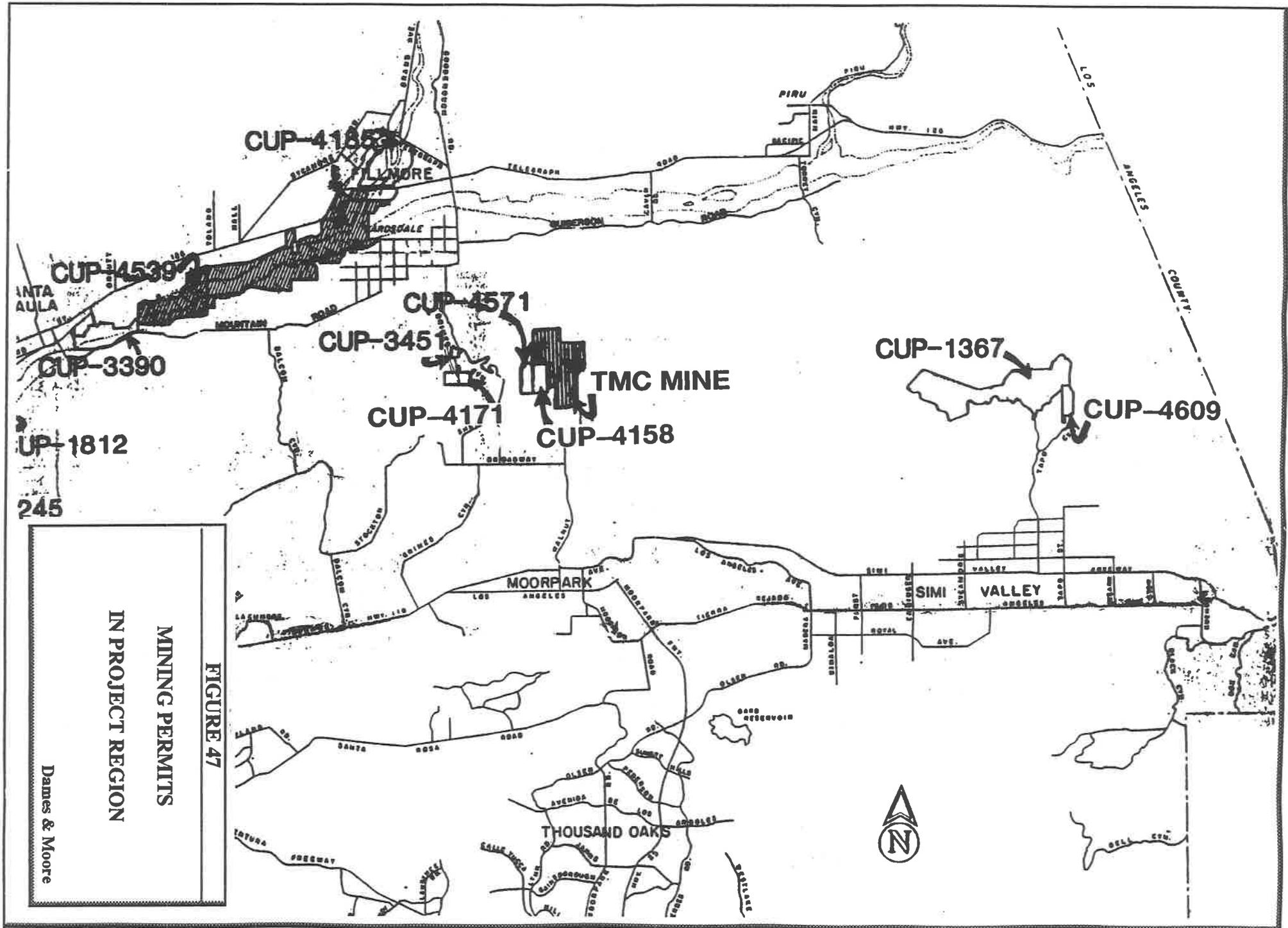


FIGURE 47

MINING PERMITS

IN PROJECT REGION

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300,000 tons per year, an order of magnitude less than the proposed project. The CUP-4158 mine encompasses only 80 acres and access along Buena Vista Road and Fruitvale Avenue to Broadway is currently limited to an average of 72 truck trips per day. As such, it is not likely that the mine production rate could be increased with the existing access road.

If a new access road were established to the west, connecting the CUP-4158 site with Grimes Canyon Road, it might be possible for the applicant to seek approval to increase mine production at CUP-4158. This would result in increased truck use along Grimes Canyon Road to State Route 118, rather than down Broadway and Walnut Canyon Road to Moorpark. Under this scenario, total production at the alternative site would only be a fraction (10% or less) of the aggregate at the proposed mine which fails to meet the applicant's project objectives. Therefore, use of the CUP-4158 site was rejected as an alternative.

CUP-3451 and/or CUP-4171 - Other mines in the vicinity of the proposed project include CUP-3451 and/or CUP-4171 (Best Rocks Products) which are located along Stockton Road, west of Grimes Canyon Road (Figure 47). Since these existing mines are not owned or operated by TMC, the applicant would need to purchase them. It is assumed that all truck traffic would be routed along Grimes Canyon Road to State Route 118, thereby avoiding Broadway and Walnut Canyon Road. The removal of project related traffic and noise from the street system studied would result in beneficial impacts (Class IV), particularly along Happy Camp Road and Walnut Canyon Road. However, as noted above, the proposed project traffic distribution estimates were based on the existing and projected market area and the construction materials needed within that market area. With or without the proposed project, aggregate materials will be transported to and within the market area in response to local demand. The only variable is the source of these aggregate materials. Use of these mines as an alternative would avoid the significant visual impacts associated with the proposed project.

However, the current annual combined production from these mine sites is less than 220,000 tons per year well below the applicant's stated objectives for the proposed project. In addition, expansion of these mines would result in significant biological resources and air quality impacts, and possibly significant impacts to groundwater and cultural resource. Therefore, use of the CUP-3451 and/or CUP-4171 sites was rejected as an alternative.

CUP-1367 and/or CUP-4609 - As noted above in Section 5.4.1, there are two existing mine sites in Tapo Canyon, CUP-1367 (P.W. Gillibrand Mine), and CUP-4609 (Tapo Sand and Gravel Products). Approximately 50% of the products sold from the CUP-1367 mine site are sand products used in plaster or with Portland cement. In addition, the mine produces such specialty products as sand for glass, filtration, golf courses, and other recreational uses. Though the CUP-1367 mine does produce rock, rock production is not of the percentage nor quantity associated with the proposed project. As such, an expansion of CUP-1367 would likely not achieve the applicant's project objectives.

The CUP-4609 mine encompasses only 97.8 acres, of which 31.8 will be mined for various sand and gravel products. As with CUP-1367, CUP-4609 produces a high grade sand used with Portland cement, and specialty sand used in playgrounds and for the construction of horse tracks. As such, an expansion of CUP-4609 would likely not achieve the applicant's project objectives.

Truck traffic associated from the CUP-1367 mine site averages 475 one-way heavy truck trips per day, while that from the CUP-4609 mine site averages 144 one-way heavy truck trips per day. Were one or both of these mines expanded to increase production by the proposed project's 3.4 million tons per year, the resulting addition of 1,328 would likely result in significant traffic and noise impacts. Therefore, expanded use of the CUP-1367 and/or CUP-4609 sites was rejected as an alternative.

5.5 REDUCED MINING AREA AND/OR HEIGHT ALTERNATIVE

Under this alternative, the proposed 217-acre mining area would be reduced in size in order to achieve the following:

- shortened mining period, thereby limiting the all environmental impacts that are time related (e.g., visual, air quality, noise);
- reduced impacts to biological resources since fewer acres of habitat would be disturbed;
- reduced visual impacts by lowering the upper limits of the cut slopes on the easterly and northeasterly borders of the proposed project site so as to avoid the upper 50 to 400 feet of Phases 2 and 3 (i.e., those areas that would be visible to Happy Camp Canyon Regional Park users and a portion of the City of Moorpark).

Any reduction in the proposed new 217-acre mining area would result in direct and corresponding reductions in the impacts identified for the proposed project. Since the daily mining activities would be substantially similar to those of the proposed project, near term significant impacts to the visual resources and air quality would continue, albeit for a shorter time period, and significant impacts to the biological and visual resources would occur over a lesser area. Therefore, this alternative would not result in new significant impacts. Avoiding the proposed Phase 2 and 3 cut slope would effectively preclude mining on those lands and the corresponding reduction in the project size and scope may or may not attain the applicant's project objectives. This alternative was not rejected because it is possible for Ventura County decision makers to approve a lesser project, with correspondingly lesser environmental impacts, while achieving some of the applicant's project objectives, though for a lesser period of time (refer to Section 5.9).

5.6 SHORTER PERMIT PERIOD ALTERNATIVE

The applicant is seeking a permit to operate a mine for 50 years. Without an increase in the annual production rate, a shorter time period would reduce the duration of the significant impacts described above in Section 5.2. Though this alternative would not result in new significant impacts, in contrast to the proposed project, a shorter permit period would result in incrementally similar and significant air quality impacts while the mine is in operation, significant impacts to the biological resources (i.e., the loss of native habitat) and, significant visual impacts if Phase 2 and 3 mining is permitted on the upper slopes. A shorter permit period may or may not achieve the applicant's objective of a long-term operation at the site.

Under this alternative, a permit would be granted for Phase 1 mining only. Near the end of Phase 1 mining, in 5-10 years, the permittee could apply for a permit modification to extend the permit for the next ten years of Phase 2 mining. Near the end of Phase 2 mining, an additional 10 years, the

permittee could apply for a permit modification to extend the permit for the next 10+ years for Phase 3 mining. In each instance, a supplemental environmental review would be conducted to identify and address the environmental issues resulting from Phase 1 or 2 operations. Accordingly, Phase 2 and/or Phase 3 would be viewed in light of the new or changed "existing setting" and any approvals could include the new or revised permit conditions and/or mitigation measures found necessary.

This alternative has several benefits because it would allow the County to re-evaluate the project site and "existing setting" at various points in time via subsequent environmental and public reviews. The ability to revise and/or add conditions and/or mitigation measures to the project is important for the following reasons: 1) conditions applied to Phase 1, and/or subsequently to Phase 2, of the project may be found ineffective in addressing previously identified or new issues; 2) the environmental conditions at and near the project site may change over time, raising environmental issues not previously identified; 3) new technology may become available that can better address environmental issues; 4) subsequent environmental review may identify a need to revise the mining and/or reclamation plans; and 5) an alternative access road may be developed that would be preferable to the existing access road, the use of which could be evaluated and perhaps required of the applicant upon permit modification. In addition, because mine operations have resulted in such issues as project traffic and noise, the ability to periodically review these operations through a public environmental review process appears warranted. This alternative was not rejected because it is possible for Ventura County decision makers to approve a project with a shorter time period, with the possibility of approving subsequent phases of the proposed project after additional environmental review (refer to Section 5.9).

5.7 ALTERNATIVE ACCESS ROUTES

Section 4.9 discusses how the proposed project's trucks would not reduce the LOS along the haul route to unacceptable levels. Notwithstanding this determination, the establishment of an alternative access route remains a primary issue regarding the proposed project because trucks traveling along Happy Camp Road, Walnut Canyon Road, and through the City of Moorpark do contribute to existing and cumulative traffic and noise levels. In addition, an alternative access road could provide circulation benefits to the residents in the immediate vicinity of the proposed project. Funding for an alternative access route could be achieved by pro rata contributions by all benefitting parties, including, but not limited to, TMC, other aggregate mines in the vicinity (including those mines in the Fillmore area that send trucks over the mountains), and other existing and new development within the City of Moorpark or the Happy Camp Canyon Regional Park. Potential alternative routes to and from the proposed project are evaluated qualitatively below and illustrated in Figures 48 and 49.

5.7.1 GRIMES CANYON ROAD ONLY

This alternative route would restrict the applicant to using Happy Camp Road to Broadway to Grimes Canyon Road, then southbound to State Route 118 (Los Angeles Avenue). Once on State Route 118, truck traffic would travel either through Moorpark or onto State Routes 23/118. A limited amount of truck traffic already uses this route to service market locations west of the City of Moorpark. By requiring all truck traffic to use this route, the use of Walnut Canyon Road and several intersections within the City of Moorpark would be avoided. The exclusion of trucks would have a noticeable beneficial impact (Class IV) on residents along Walnut Canyon Road streets within the City of Moorpark due to the reductions in truck traffic and truck related noise.

However, this alternative would introduce new traffic and noise along Grimes Canyon Road. The introduction of heavy truck traffic into an area previously void of such traffic could result in significant noise impacts to noise sensitive receptors (Class I) and possibly safety impacts. If so, Ventura County General Plan Policy 2.14.2-2 would prohibit such development. In addition, under this alternative, it would be necessary to upgrade Grimes Canyon Road, such upgrades consisting of the widening of three bridges, the installation of a signal at Grimes Canyon and State Route 118, and shoulder work, presumably at the applicant's expense. Lastly, since most of the truck traffic would proceed easterly along State Route 118, the haul distance and time to market would be increased significantly. This would result in increased air emissions, already identified as a significant impact (Class I), and would serve to significantly reduce the market area of the proposed project and/or increase the cost of delivered products. Therefore, limiting truck use to this route was rejected as an alternative.

5.7.2 STATE ROUTE 23 NORTH-SOUTH BY-PASS

This alternative would consist of the extension of State Route 23 from the State Routes 118/23 junction, northerly to an intersection with Broadway (State Route 23) (Figure 48), as described in the City of Moorpark's Circulation Element. This alternative would require the acquisition of private property for a right-of-way, and the construction of a new road. The road would traverse the center of the RBR Specific Plan No. 2 which is planned for residential development. This alternative would avoid traffic noise impacts along Walnut Canyon Road and reduce traffic volume in downtown Moorpark. However, it would not avoid traffic noise impacts along Happy Camp Road, and it would introduce new traffic and traffic noise impacts to residences east of Walnut Canyon Road, as well as to new residences built in Specific Plan No. 2. This alternative route would not avoid all traffic within the city streets because trucks would still travel along Spring Street to access the State Routes 23/118 freeway using the New Los Angeles Avenue ramps. Spring Street would not be used once State Route 118 is extended westerly from Princeton Street, across the north side of Moorpark (above High Street) and westerly. This extension of State Route 118 would have an interchanges with the State Route 23 by-pass arterial, as described in the City of Moorpark's Circulation Element.

The City of Moorpark advises it is considering an alternative circulation system for the Specific Plan No. 2 project that would create an arterial roadway connecting Walnut Canyon Road to Spring Road, that could serve as an interim State Route 23 by-pass arterial. The City of Moorpark has not yet made a decision on the proposed Specific Plan, the interim State Route 23 by-pass arterial, or determined whether truck traffic will be allowed to use this extension. To allow TMC truck use on this proposed extension, the City would need to designate the extension as a truck route, per City Council Resolution. However, it is highly likely that an upturn in the local economy will result in the development of a State Route 23 by-pass before TMC ramps up to full production.

However, this alternative is valid only if the City of Moorpark's proposed circulation improvements are implemented and a large portion of both non-TMC and TMC traffic utilize the alternate routes (refer to Section 4.8.3). Implementation of this alternative would necessitate coordinated efforts by the County of Ventura and the City of Moorpark. As indicated in Section 4.8.5, the following mitigation measure was developed to address this eventually, essentially incorporating this alternative:

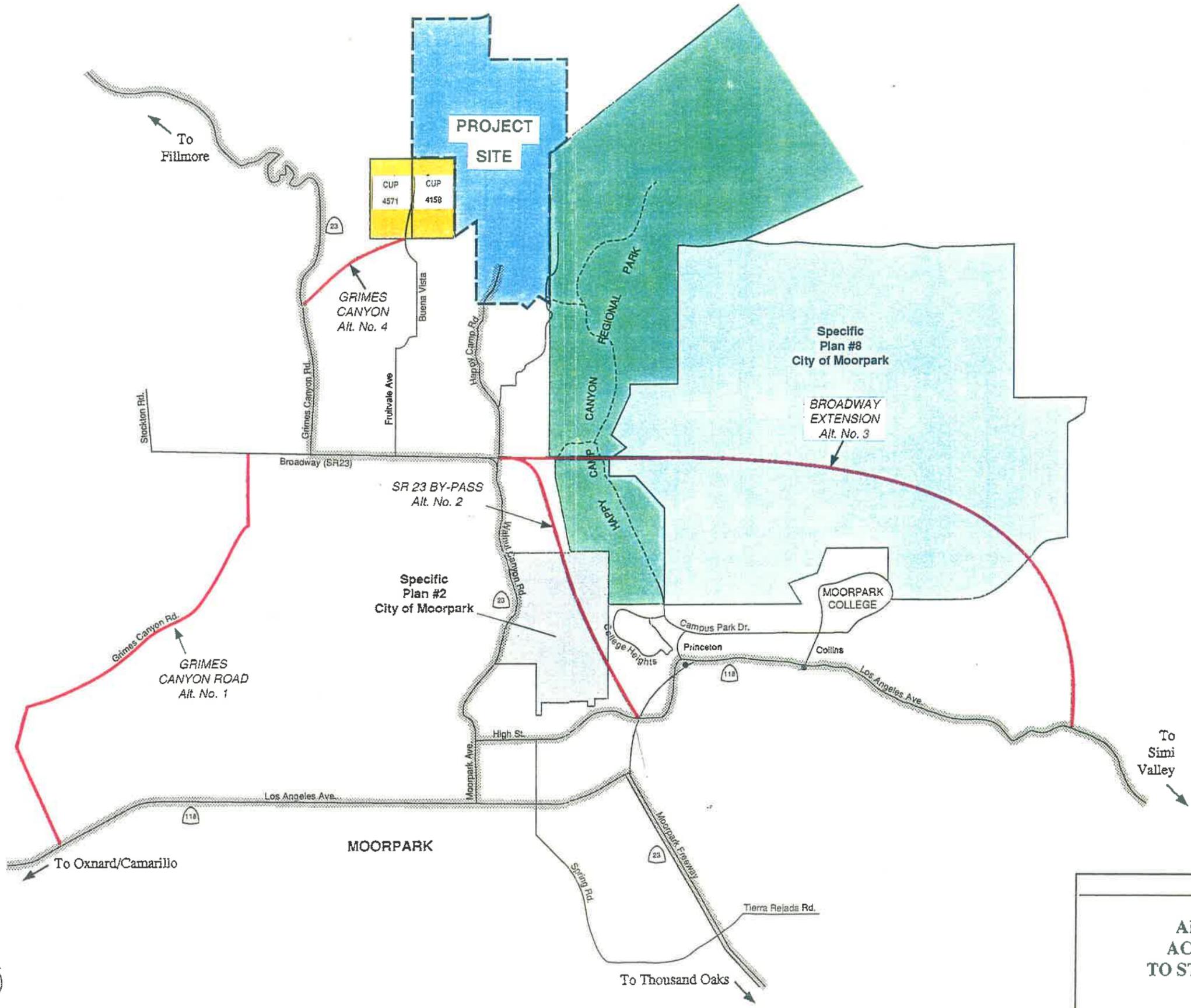


FIGURE 48
ALTERNATIVE ACCESS ROUTES TO STATE ROUTE 118
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N-2. Alternative Access Routes

Due to the increased truck traffic and cumulative noise along the streets of the City of Moorpark, particularly Walnut Canyon Road, and the need for various improvements to mitigate future traffic on these streets, as described in the City of Moorpark's Circulation Element, the permittee shall participate in any assessment district or other financing technique, including the payment of traffic mitigation fees, which the County of Ventura may adopt to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway. If such a district or other mechanism is created, the permittee shall be required to pay only its pro-rata share of any assessment or other charges.

As noted above, the City of Moorpark's decisions regarding the proposed Hidden Creek Ranch/Specific Plan No. 2, and/or any interim State Route 23 by-pass arterial, will determine whether this alternative becomes available to TMC related truck traffic.

5.7.3 EASTERLY EXTENSION OF BROADWAY

This alternative consists of the construction of an extension of Broadway that travels east through Happy Camp Regional Park to join with State Route 118 east of Moorpark, as identified in the City of Moorpark's Circulation Element. This alternative would require the purchase of private property and the acquisition of a right-of-way within the Park. Use of the route would avoid traffic noise impacts along Walnut Canyon Road and reduce traffic volumes on Moorpark city streets. However, it would not avoid traffic noise impacts along Happy Camp Road.

The easterly extension of Broadway has been proposed as part of the proposed Hidden Creek Ranch/Specific Plan No. 8 within the City of Moorpark. The EIR being prepared for that proposal describes significant impacts (Class I) to the biological, visual, and air resources, some of which may be attributable to the Broadway extension. The City of Moorpark has not yet made a decision on the proposed Specific Plan, nor has it decided whether truck traffic will be allowed to use this extension. To allow TMC truck use on this proposed extension, the City would need to designate the extension as a truck route, per City Council Resolution. The extension of Broadway to the east, in the unincorporated area of the county, would also require an amendment to the Ventura County General Plan, Public Facilities and Services Appendix, Transportation/Circulation. These actions are currently being contemplated by the County of Ventura at the request of the City of Moorpark. 

If the easterly extension of Broadway is constructed, and if the above noted actions are taken to allow TMC truck traffic on this extension, TMC easterly bound traffic would utilize the new road to access State Route 118. In approving the Hidden Creek Ranch/Specific Plan No. 8, it is assumed the City of Moorpark will incorporate the necessary design criteria (i.e., set-backs, construction standards, other) to ensure the resulting level of traffic and noise will not adversely impact Specific Plan development. It is likely the proposed extension of Broadway would be a four-lane divided roadway, which would more readily accommodate the easterly bound TMC traffic. In Happy Camp Regional Park, the extension will provide the beneficial impact of having provided access to contemplated private sector recreation development. It is also expected the Park will experience additional noise, from Specific Plan development, contemplated recreation development, and trucks. However, this alternative is valid only if the City of Moorpark's proposed circulation improvements are implemented and a large portion of both non-TMC and TMC traffic utilize the alternate routes

(refer to Section 4.8.3). Implementation of this alternative would necessitate coordinated efforts by the County of Ventura and the City of Moorpark. As indicated in Section 4.8.5, the following mitigation measure was developed to address this eventuality, essentially incorporating this alternative:

N-2. Alternative Access Routes

Due to the increased truck traffic and cumulative noise along the streets of the City of Moorpark, particularly Walnut Canyon Road, and the need for various improvements to mitigate future traffic on these streets, as described in the City of Moorpark's Circulation Element, the permittee shall participate in any assessment district or other financing technique, including the payment of traffic mitigation fees, which the County of Ventura may adopt to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway. If such a district or other mechanism is created, the permittee shall be required to pay only its pro-rata share of any assessment or other charges.

As noted above, the City of Moorpark's decisions regarding the proposed Hidden Creek Ranch/Specific Plan No. 8 will determine whether this alternative becomes available to TMC related truck traffic.

5.7.4 SOUTHWESTERN ACCESS TO GRIMES CANYON ROAD

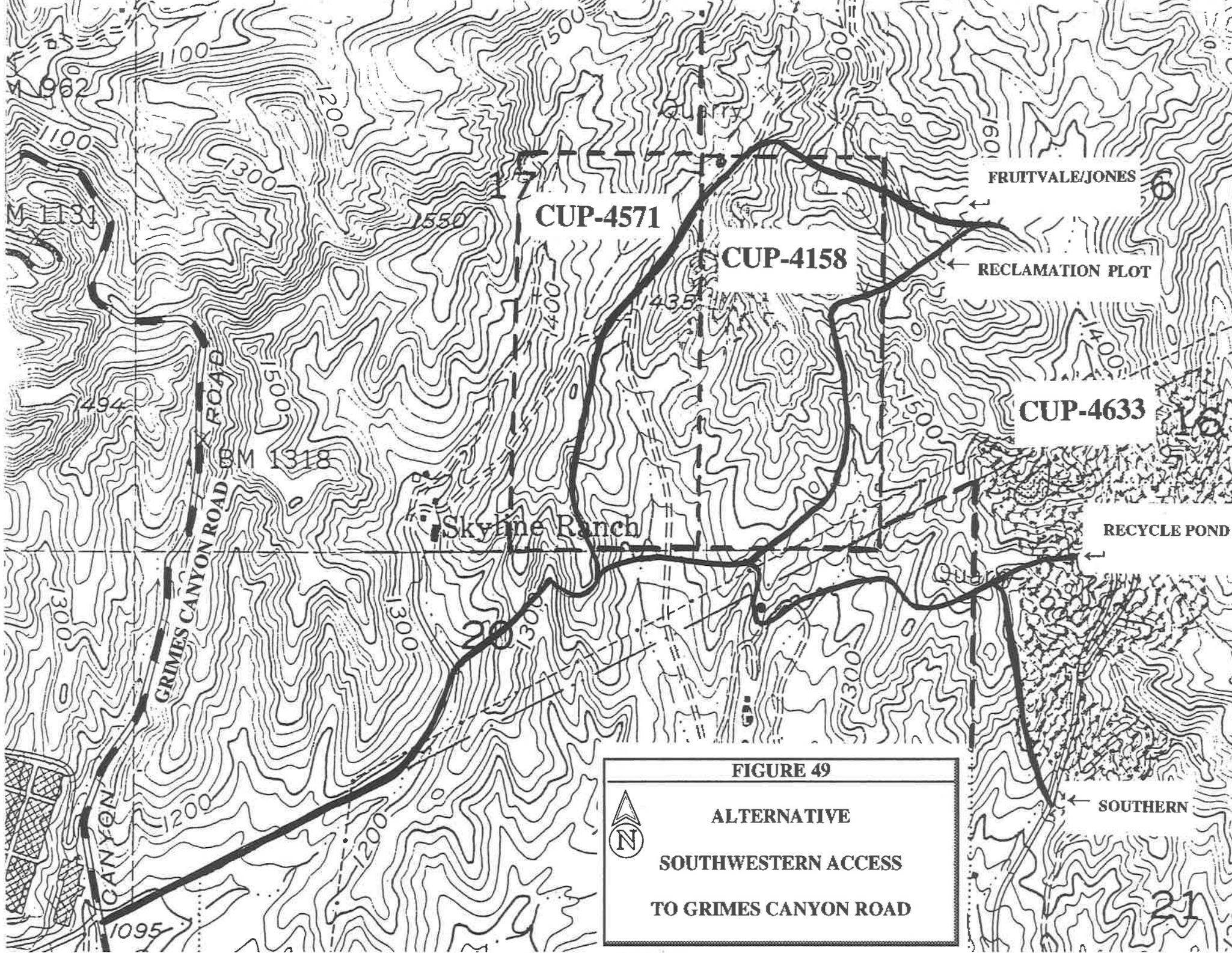
This alternative consists of a new road being constructed southwesterly from the proposed project site to the Skyline Road/Grimes Canyon Road intersection. This alternative was developed at the direction of the Ventura County ERRC who requested the EIR identify and evaluate alternative access in response to Revised Draft EIR public comments received from Happy Camp Road residents and to address potential CUP-4158 truck traffic needs. The following four alternative routes were evaluated and are illustrated in Figure 49:

- **Fruitvale/Iones Route** - beginning near the surge pile and travelling northwest near the existing project mine pit (CUP-1328 mine site), crossing TMC's Fruitvale mine site (CUP-4158), entering the Wayne J. Sand and Gravel mine site (CUP-4571) near the north end, continuing on the north side of the power lines to Skyline Road, then proceeding down Skyline Road to Grimes Canyon Road.

This route would require the least cut and fill but would be the longest, at more than two miles, and would have over one mile of 8% grade.

- **Reclamation Plot Route** - beginning near the surge pile and travelling northwest near the existing project mine pit (CUP-1328 mine site), crossing TMC's Fruitvale mine site (CUP-4158), turning more southwesterly at the top of the first ridge, following the power lines to Skyline Road, then proceeding down Skyline Road to Grimes Canyon Road.

This route would be over 1.7 miles long with over one mile of 8% grade.



- **Recycle Pond Route** - beginning near the CUP-1328 mine site recycle ponds, travelling southwest over the first ridge, turning directly west under the power lines, following the power lines to Skyline Road, then proceeding down Skyline Road to Grimes Canyon Road.

This route would be the shortest, at approximately 1.6 miles, with over 0.75 miles of 8% grade. This route travels over property not owned by TMC and not leased by Wayne J Sand and Gravel (CUP-4571) and would require the purchase of rights-of-way from other property owners. Also, this route would require a cut of almost 70 vertical feet at its beginning so as not to violate 8% grade maximum.

- **Southern Route** - beginning at the truck parking lot on the west side of the entrance road before the road splits, travelling southwest over the first ridge, turning directly west under the power lines, following the power lines to Skyline Road, then proceeding down Skyline Road to Grimes Canyon Road.

The characteristics are the same as the Recycle Pond Route.

All routes would result in the disturbance to croplands, orchards, and additional impacts to air quality due to the longer haul route and native wildlife habitat, the later two being significant impacts (Class I).

Estimated construction costs are between \$1,000,000 and \$2,000,000 per mile, not including structures and engineering. Paving costs would add another \$290,000 to \$563,000, depending upon the route and the materials used (i.e., asphalt or concrete). In addition, safety dictates the construction of one or more runaway truck ramps along the 8% grades.

The delivery radius for ready mix is time sensitive, effectively being 45 minutes under most conditions. The routes described above would serve to reduce this radius by 22, 20.2, 17.6, and 17.6 minutes, respectively. This is due to the increased travel distance and, in particular, the 8% grade. For perspective, the grade along the I-5 "Grape Vine" is a maximum 6%. The impact of this increased travel time is illustrated in Table 42 below:

TABLE 42
MARKET AREA DECREASE DUE TO ADDED TRIP TIME

Route	Time Decrease	Miles Decrease	Area Covered Square Miles	% of Market Area Remaining
Current	0	0	2853	100
Fruitvale/Jones	9	6	1809	64
Reclamation Plot	11	7	1613	57
Recycle Pond	15	10	1256	44
Southern	17	11	1094	39

In addition to evaluating various alternative routes, the Skyline Road/Grimes Canyon Road intersection was also evaluated. It was determined that, due to sight distance and time, this intersection fails to meet Caltrans signal warrants (i.e., the installation of a signal would be needed)

and it is highly unlikely that Caltrans would permit a traffic signal to be installed at the intersection. (Source: February 14, 1995 Traffic Flow Gap Study conducted by Albert Grover & Associates). In the absence of a signal, it was concluded the following would be required for safer operations at this intersection:

- Widen Grimes Canyon Road south of Skyline Road to accommodate a west-to-southbound left hand merge lane approximately 700 feet long. Such widening would include the widening or rebuilding of the existing bridge located 300 feet south of Skyline Road. This study was based on 739 departing TMC trucks which would need to turn into this merge lane.
- Widen Grimes Canyon Road north of Skyline Road to provide a southbound left hand turn lane at Skyline Road to accommodate the estimated 60 returning TMC vehicles per day that would need to turn left there, and not to impede southbound thru traffic while left-turning TMC traffic is waiting for a gap in northbound traffic to turn left.

Based upon this information, it was concluded these four alternative southwesterly sub-routes to Grimes Canyon Road were infeasible both in terms of their cost and because they would significantly reduce the service area of the proposed project and the attainment of project objectives.

5.7.5 SOUTHWESTERN ACCESS TO GRIMES CANYON ROAD THEN USE OF GRIMES CANYON ROAD ONLY

This alternative is a combination of the **Southwestern Access Alternatives to Grimes Canyon Road** described immediately above in Section 5.7.4 and the first alternative, **Grimes Canyon Road Only** described in Section 5.7.1. Under this alternative, as trucks gain access to Grimes Canyon Road from a southwesterly access alternative, they would be restricted to the use of Grimes Canyon Road.

By requiring all truck traffic to use this route, the use of Happy Camp Road, Walnut Canyon Road and several intersections within the City of Moorpark would be avoided. The exclusion of trucks would have a noticeable beneficial impact (Class IV) on residents along Walnut Canyon Road streets within the City of Moorpark due to the reductions in truck traffic and truck related noise.

However, this alternative would introduce new traffic and noise along Grimes Canyon Road, affecting more homes than are currently affected. The introduction of heavy truck traffic into an area previously void of such traffic could result in significant noise impacts to noise sensitive receptors (Class I) and possibly safety impacts. If so, Ventura County General Plan Policy 2.14.2-2 would prohibit such development. In addition, under this alternative, it would be necessary to upgrade Grimes Canyon Road, such upgrades consisting of the widening of three bridges, the installation of a signal at Grimes Canyon and State Route 118, and shoulder work, presumably at the applicant's expense. Since most of the truck traffic would proceed easterly along State Route 118, the haul distance and time to market would be increased significantly.

Use of any of the Southwestern Access Alternative Routes to Grimes Canyon Road results in an even greater haul distance and time to market. This would result in increased air emissions, already identified as a significant impact (Class I), and would serve to significantly reduce the market area of the proposed project and/or increase the cost of delivered products. Lastly, use of any of the

Southwestern Access Alternative Routes to Grimes Canyon Road would result in the disturbance to croplands, orchards, and additional impacts to native wildlife habitat, the later being a significant impact (Class I). In addition, it was concluded that the four alternative southwesterly sub-routes to Grimes Canyon Road were infeasible both in terms of their cost and because they would significantly reduce the service area of the proposed project and the attainment of project objectives. Therefore, this alternative was rejected.

5.8 CURRENT OPERATIONS ALTERNATIVE

This alternative would limit the production at the proposed project site to that associated with the "existing setting" (refer to Section 4.0). The current mining operation has been allowed to proceed under the approved Compliance Agreement, subject to CUP-1328 conditions of approval (refer to Section 1.1.). Under this alternative the project would have a maximum annual production rate of 1,800,000 gross tons, operate 312 days per year, and involve a daily average of 810 one-way heavy trucks trips. Presented in Table 43 are the trip generation estimates associated with this level of production. Also presented for comparison purposes are the trip generation estimates for the proposed project.

**TABLE 43
REDUCED PROJECT TRIP GENERATION ESTIMATES**

Study Scenario	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Total	In	Out	Total	In	Out
Proposed Operations	1,718	105	51	54	89	27	62
Existing Setting	1,050	64	31	33	55	17	38
Net Reduction in Proposed	-668	-41	-20	-21	-34	-10	-24

The data in Table 43 indicates that a reduced project alternative would generate approximately 1,050 average daily one-way trips, 64 A.M. and 55 P.M. peak hour trips. The impacts associated with this alternative are essentially the same as those currently being experienced under the "existing setting." When compared to the impacts of the proposed project, this alternative would result in no new and proportionately less impacts to the County or City roadway system serving the project site.

Under this alternative, changes in operating hours and the setting of a limit on heavy truck trips could reduce the magnitude of: 1) the truck noise impacts along Happy Camp Road and Walnut Canyon Road; 2) air quality impacts because of lower emissions; and 3) the amount of truck traffic along Happy Camp Road and Walnut Canyon Road. However, such changes would not reduce impacts to visual and biological resources. Alternative operations would include:

- An average daily limit of 810 one-way heavy truck trips, with no more than 54 A.M. and 16 P.M. peak hour heavy truck trips. In limiting the number of heavy truck trips, the permittee will be required to maintain monthly records of truck trips. The total actual monthly truck trips would be divided by the number of authorized work days to compute an average daily truck trips for the month. Each monthly total would be summed and average daily truck trips calculated for the previous twelve (12 months). Average daily truck trips for the previous twelve (12)

months in excess of the permitted limit would be considered a violation of the truck trip limit. In this manner, the permittee would develop a "rolling average" reflective of seasonal market variations while at the same time ensuring the facility operates within the overall truck trip limit.

- Restrict hours of truck deliveries and returns to 6:00 A.M. to 6:00 P.M., compared to the proposed 6:00 A.M. to 8:00 P.M. hours of operation. The restricted hours would reduce the noise impact to residents early in the morning and in the evening when workers are at home.

This alternative was not rejected because it is possible for Ventura County decision makers to approve a lesser project (i.e., similar to current operations), with certain operational changes to address some of the environmental issues, and still achieve some of the applicant's project objectives (refer to Section 5.9).

5.9 SECOND ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based upon the analysis of the proposed project and the alternatives described above, a second environmentally superior alternative (ESA) was developed. This was done pursuant to Section 15126(d)(4) of the CEQA Guidelines, which notes, if the No Project Alternative is the ESA, then the EIR must also identify a second ESA from among the other alternatives. (Refer to Section 5.3 for a discussion of the No Action Alternative.)

Under this alternative it is possible to reduce and possibly avoid significant environmental impacts while allowing the applicant to partially achieve the stated project objectives. The Second ESA includes the following elements:

- All of the mitigation measures and recommended conditions of approval described previously in this EIR apply.
- Issuance of a permit for Phases 1 and 2 for a duration of no more than 20 years, with a requirement that a permit modification, following the requisite CEQA review, be approved in order to continue Phase 2 mining beyond that time. Phase 3 would be included within the CUP boundary only for plant operations and stockpiling. However, a subsequent permit modification to the CUP and CEQA review would be required in order to initiate Phase 3 mining. If Phase 3 mining is not approved, the applicant would reclaim the site using the design and approach described in the reclamation plan approved for the project. The reclamation plan would be modified to describe Phase 1 and 2 post-mining conditions and the activity needed to achieve the required 2 to 1 slope along Phase 1 and 2 boundaries with Phase 3.
- No asphalt batch plant.
- The applicant either limits average daily traffic to that of the "Existing Setting" (i.e., 810 one-way heavy truck trips and 240 employee/other one-way trips), or the applicant would pay the Traffic Impact Mitigation Fee described in Section 4.9.3-1 for all additional trips.
- In limiting the number of heavy truck trips, the permittee will be required to maintain monthly records of truck trips. The total actual monthly truck trips would be divided by the number of authorized work days to compute an average daily truck trips for the month. Each monthly total

would be summed and average daily truck trips calculated for the previous twelve (12) months. Average daily truck trips for the previous twelve (12) months in excess of the permitted limit would be considered a violation of the truck trip limit. In this manner, the permittee would develop a "rolling average" reflective of seasonal market variations while at the same time ensuring the facility operates within the overall truck trip limit.

- All truck traffic would be limited to between the hours of 6:00 A.M. and 6:00 P.M., except for up to 36 ready mix trucks which would be permitted to return between the hours of 6:00 P.M. and 7:00 P.M. The restricted hours would reduce the noise impact to residents early in the morning and in the evening when workers are at home. Exceptions may be granted on a case-by-case basis by the Planning Director and will usually be limited to emergency construction or repairs by Caltrans or utility companies, though other situations may warrant an exception.
- Based upon the information provided in Section 4.8.2-3 (i.e., the supplemental noise study regarding Retrofitting Acoustically Upgraded Windows to Noise Impacted Residences), the following condition of approval is recommended if a project is approved that permits more than an average daily limit of 810 heavy truck trips:

Acoustically Upgraded Windows

The permittee shall participate in any reciprocal agreement between the City of Moorpark and the County of Ventura that is designed to reduce cumulative traffic noise along Walnut Canyon Road, within the northerly portion of the City of Moorpark. Said agreement should identify homes that would benefit from the installation of acoustically upgraded windows and, among those, homes that would benefit from the installation of an air conditioning unit. The cost of participation shall be based on the permittee's pro rata contribution to the traffic.

- Based upon the information provided in Section 4.8.2-3 (i.e., the supplemental noise study regarding Roadside Noise Barriers), the following condition of approval is recommended if a project is approved that permits more than an average daily limit of 810 heavy truck trips:

Roadside Noise Barriers

The permittee shall participate in any reciprocal agreement between the City of Moorpark and the County of Ventura that is designed to reduce cumulative traffic noise impacts for those residences identified in the Section 4.8.2-3 as possibly benefitting from the installation of a noise barrier wall. The cost of participation shall be based on the permittee's pro rata contribution to the traffic.

The Second ESA would not result in new significant impacts, when compared to the proposed project, except for those associated with the easterly extension of Broadway. However, the Broadway extension has been proposed as part of the proposed Hidden Creek Ranch/Specific Plan No. 8 within the City of Moorpark, not as an access route for TMC's CUP request. The EIR being

prepared for that proposal describes significant impacts (Class I) to the biological, visual, and air resources, some of which may be attributable to the Broadway extension.

Under this alternative, changes in operating hours and the setting of a limit on heavy truck trips could reduce the magnitude of: 1) the truck noise impacts along Happy Camp Road and Walnut Canyon Road; 2) air quality impacts because of lower emissions; and 3) the amount of truck traffic along Happy Camp Road and Walnut Canyon Road. However, such changes would not reduce impacts to visual and biological resources. Elimination of the asphalt batch plant will serve to concentrate trucking on the core aggregate business and will eliminate asphalt related odors that may be found objectionable by those along the haul route. Since the daily mining activities under the Second ESA would be substantially similar to those of the proposed project, near term significant impacts to the visual resources and air quality would continue, albeit for a shorter time period, and significant impacts to the biological and visual resources would occur over a lesser area. Deferring Phase 3 mining would effectively preclude mining on those lands, save for the activity needed to achieve the required 2 to 1 slope along its boundary with Phases 1 and 2, until a subsequent CUP and environmental review has occurred.

This alternative has several benefits because it would allow the County to re-evaluate the project site and "existing setting" at various points in time via subsequent environmental and public reviews. The ability to revise and/or add conditions and/or mitigation measures to the project is important for the following reasons: 1) conditions applied to Phase 1, and/or subsequently to Phase 2, of the project may be found ineffective in addressing previously identified or new issues; 2) the environmental conditions at and near the project site may change over time, raising environmental issues not previously identified; 3) new technology may become available that can better address environmental issues; 4) subsequent environmental review may identify a need to revise the mining and/or reclamation plans; and 5) an alternative access road may be developed that would be preferable to the existing access road, the use of which could be evaluated and perhaps required of the applicant upon permit modification. In addition, because mine operations have resulted in such issues as project traffic and noise, the ability to periodically review these operations through a public environmental review process appears warranted.

However, approval of a lesser project would likely result in another application(s) for a mining project(s) in order to meet the demand for aggregate material within the market area of the proposed project. Such a project(s) would result in its own impacts that, depending upon location, could significantly impact biological and other resources, and would likely result in additional traffic, noise and air quality impacts.

This alternative was not rejected because it is possible for Ventura County decision makers to approve a lesser project (i.e., similar to current operations), for a shorter period of time, with the above described changes to address some of the environmental issues, and still partially achieve the applicant's project objectives.

5.10 IMPACTS FROM ALTERNATIVES

CEQA (Section 15126(d)(3)) states that, if an alternative would cause one or more significant effects in addition to those that would be caused by the proposed project, the significant effects of

the alternative shall be discussed but in less detail than the significant effects of the proposed project. This has been done for each of the alternatives described above. For those alternatives involving alternative locations, this determination and the related discussion is necessarily qualitative rather than quantitative due to the absence of site specific analyses for those locations.

Based on the available information, the following summarizes the new and potentially significant impacts described above for each of the alternatives:

No Project Alternative - none.

Alternative Site - Use of New Site Alternative - biological (e.g., loss of habitat and direct impacts to threatened and endangered species), increased air emissions (i.e., due to a potentially longer haul route), use of groundwater, truck related noise, and paleontological and cultural resources could be impacted.

Use of an Existing Mine Alternative - CUP-4158 - none.

Use of an Existing Mine Alternative - CUP-3451 and/or CUP-4171 - biological, air emissions, use of groundwater, and cultural resources.

Use of an Existing Mine Alternative - CUP-1367 and/or CUP-4609 - traffic and noise.

Reduced Mining Area and/or Height Alternative - none.

Shorter Permit Period Alternative - none.

Alternative Access Routes - Grimes Canyon Road Only - traffic, noise, increased air emissions, and possibly safety.

Alternative Access Routes - State Route 23 North-South By-Pass - none.

Alternative Access Routes - Easterly Extension of Broadway - biological, visual, and air emissions.

Alternative Access Routes - Southwestern Access to Grimes Canyon Road:

Fruitvale/Jones Route - biological and increased air emissions.

Reclamation Plot Route - biological and increased air emissions.

Recycle Pond Route - biological and increased air emissions.

Southern Route - biological and increased air emissions.

Alternative Access Routes - Southwestern Access to Grimes Canyon Road the Use of Grimes Canyon Road Only - biological, traffic, noise, increased air emissions, and possibly safety.

Current Operations Alternative - none.

Second Environmentally Superior Alternative - none.

5.11 SUMMARY OF ALTERNATIVES AND THEIR DISPOSITION

Table 44 summarizes the disposition of the various alternatives considered in the evaluation and determination of the Second ESA, described in Section 5.9.

TABLE 44
ALTERNATIVES AND THEIR DISPOSITION

ALTERNATIVE	DISPOSITION
No Project (Section 5.3)	rejected
Use of New Sites (Section 5.4.1)	rejected
Use of an Existing Mine (Section 5.4.2)	rejected
Reduced Mining Area and/or Height (Section 5.5)	considered in Second ESA
Shorter Permit Period (Section 5.6)	considered in Second ESA
Alternative Access Routes (Section 5.7)	
• Grimes Canyon Road Only	rejected
• State Route 23 North-South By-Pass	considered in Second ESA
• Easterly Extension of Broadway	considered in Second ESA
• Southwestern Access to Grimes Canyon Road (all 4 subroutes)	rejected
• Southwestern Access to Grimes Canyon Road and Use of Grimes Canyon Road Only	rejected
Current Operations (Section 5.8)	considered in Second ESA

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6.0 GROWTH-INDUCING IMPACTS

The project would allow the continual supply of a reliable source of sand and gravel for the region that can be used for a variety of purposes, including land and infrastructure development. Aggregate production at the mine would be dictated by the market and general economic conditions of the region. As such, the aggregate mining industry is considered a service sector to development, as well as to specialized manufacturing and other end users. Mining and sales of aggregate does not, in and of itself, induce development. Hence, the proposed project would not have a growth-inducing impact.

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7.0 MITIGATION MONITORING PLAN

A mitigation monitoring plan will be prepared by the County Planning Division after certification of the EIR in compliance with AB 3180. Issues to be addressed in the mitigation monitoring plan are the mitigation measures themselves, monitoring methods and actions, timing of mitigation actions, and the monitoring agency. The majority of the monitoring actions can be integrated with the new annual compliance reporting and inspection procedures established by the recent amendments to SMARA.

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8.0 LIST OF EIR PREPARERS

County of Ventura, RMA Planning Division:

Lou Merzario	Planner
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Melinda Trask	Biology
Leann Schuler	Land Use Compatibility and Visual Resources
John Van Kirk	Air Quality

Walker, Celano & Associates	Noise Studies and Analyses
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Associated Transportation Engineers	Traffic Studies and Analyses
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Woodward-Clyde	Management Assistance
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Chambers Group, Inc.	California Gnatcatcher Survey
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9.0 REFERENCES

GENERAL REFERENCES

- Ventura County General Plan - Goals, Policies and Programs.
- Ventura County General Plan - Public Facilities and Services Appendix.
- Ventura County General Plan - Resources Appendix.
- Ventura County Initial Study Assessment Guidelines, November, 1992.
- Ventura County Landscape Design Criteria.
- Ventura County Zoning Ordinance (Non-Coastal).

ENVIRONMENTAL AND REGULATORY SETTING/LAND USE COMPATIBILITY

- City of Moorpark Development Status Report.
- City of Moorpark General Plan (Land Use and Circulation Elements and FEIR).
- California Division of Mines and Geology, 1993. *Update of Mineral Land Classification of Portland Cement Concrete Aggregate.*

GEOLOGY AND GEOHAZARDS

- Allen, C.A., 1975. *Geologic Criteria for Evaluating Seismicity: Geological Society for American Bulletin*, vol. 86, pp. 1041-1057.
- Buena Engineers, Inc., 1988. *Geotechnical Engineering Report, Aggregate Mining Project, Grimes Canyon Area.*
- California Division of Oil and Gas, 1990. *Munger Map Book.*
- California Division of Mines and Geology, 1972. *Geologic Map of Southern Ventura County, California.*
- California Division of Mines and Geology, 1983. *Geology and Mineral Resources Study of Southern Ventura County, Preliminary Report 14.*
- California Division of Mines and Geology, 1995. *Landslide Hazards in the Moorpark and Santa Paula Quadrangles, Ventura County, California. Landslide Hazard Identification Map No. 26. (DMG OPEN-FILE REPORT 95-07)*
- Geotechnical Consultants, 1978. *Geotechnical Investigation, Proposed Debris Basis, CUP-1328.*

Miller, R.E., 1966. *Land Subsidence in Southern California: Engineering Geology in Southern California*, pp. 273-297.

Soil Conservation Survey, 1970. *Soil Survey, Ventura Area, California: United States Department of Agriculture*.

Ventura County General Plan - Resources Appendix.

Yerkes, R.F., 1985. Geologic and seismologic setting - in Ziony, J.I. (ed) *Evaluating earthquake hazards in the Los Angeles Region - an earth science perspective: U.S. Geological Survey Prof. Paper 1360*, pp. 25-42.

Ziony, J.I. and Jones, L.M., 1989. Map showing Late Quaternary faults and 1978-84 seismicity of the Los Angeles Region, California, U.S. Geological Survey Map MF-1964.

GROUNDWATER

Besina, Ken, 1992. Personal communication.

Calleguas Municipal Water District and Metropolitan Water District of Southern California, 1989. Water level map.

Fox Canyon Groundwater Management Agency (GMA), 1984. Unpublished Map 1989.

Fox Canyon Groundwater Management Agency, Ordinance Nos. 4 and 5.

Hall, Luke, 1991. Personal communication to Jeff Zukin. Ventura County Public Works Agency.

Jones, Wayne, 1990. Personal conversation with Jeff Zukin of Dames & Moore.

Lockman & Associates, 1991. H.E.L.P. (EPA) computer program to model groundwater recharge.

Pakala, Reddy, 1993. Ventura County Public Works Agency. Personal communication with Jeff Zukin of Dames & Moore.

Turner, 1975. Ventura County Public Works Agency. Personal communication to Jeff Zukin of Dames & Moore.

Safa, Barry, 1990. City of Simi Valley, personal communication with Jeff Zukin of Dames & Moore.

Sandoval, J., 1991. Personal communication.

Spectrum Engineering (Eide A.), 1989. Major Modification CUP 1367: unpublished consulting report.

Transit Mixed Concrete, Co. Personal communication to Janna Minsk.

Ventura County Ordinance Code Section 4824 (Destruction of Abandoned Wells).

Ventura County Quadrennial Report, 1984.

Ventura County Water Resources and Development Department. Unpublished maps 1991, 1992.
Ventura County Public Works Agency.

Ventura County Water Management Plan, 1995.

EROSION AND SEDIMENTATION

Geotechnical Consultants, 1978. *Geotechnical Investigation, Proposed Debris Basis, CUP-1328.*

Ghormley, William J., Consulting Engineers, Inc., 1993. *Drainage Report, Blue Star Ready Mix, CUP-4633*, April 13, 1993.

Lockman & Associates, 1991. *Draft Environmental Impact Report, Blue Star Ready Mix, Incorporated (CUP-4633), SCH #89032905.*

United States Geological Survey, Water Resources Division, 1974. *Erosion and Sediment Yields in Mountain Watersheds of the Transverse Ranges, Ventura and Los Angeles Counties, California.* June.

BIOLOGICAL RESOURCES

Abrams, L. and R. Ferris, 1940-1960. Illustrated Flora of the Pacific States: Washington, Oregon, and California. Vol. I-IV. Stanford University Press, Stanford, California.

American Ornithologists Union (AOU), 1983. Checklist of North American Birds, 6th edition. Allen press, Lawrence, KS.

Burges, Richard, 1990. Personal communication. City of Thousand Oaks Planning Department. 4 December.

Burt, W.H. and Grossheider, R.D., 1976. A Field Guide to the Mammals. Houghton Mifflin Company. Boston, Massachusetts. 288 pp.

California Department of Fish and Game (CDFG), 1988. Fish and Game Code of California, Section 1603.

CDFG, 1988. re: Plants Fully Protected

CDFG, 1991a. Designated endangered, threatened and rare plants of California. Nongame-Heritage Program, Endangered Plant Project, Sacramento, California. January.

- CDFG, 1991b. List of state and federal endangered and threatened animals of California. Nongame-Heritage Program, Endangered Plant Project, Sacramento, California. Revised January.
- CDFG, 1991c. *Special Animals, August 1991*. re: Species of Special Concern.
- California Division of Mines and Geology, 1972. *Geologic Map of Southern Ventura County, California*.
- California Division of Mines and Geology, 1995. *Landslide Hazards in the Moorpark and Santa Paula Quadrangles, Ventura County, California. Landslide Hazard Identification Map No. 26. (DMG OPEN-FILE REPORT 95-07)*
- California Natural Diversity Data Base (CNDDDB), 1990. Computer report and map overlays for Simi Valley and Santa Susana 7.5 minute quadrangles, dated 18 October 1990. California Department of Fish and Game, Sacramento, California.
- California Natural Diversity Data Base (CNDDDB), 1991. Computer report and map overlays for Simi Valley and Santa Susana 7.5 minute quadrangles. California Department of Fish and Game, Sacramento, California.
- CH2MHill, 1991. *Draft Environmental Impact Report, Water Rights Application No. 29408*. Prepared for the City of Thousand Oaks, California.
- City of Simi Valley, 1990. Simi Valley General Plan, General 3.4, Plant Life.
- Collings, Paul. Vertebrate Biologist, Santa Barbara Museum of Natural History. Telephone conversation with Richard Tanner on October 1, 1991.
- County of Ventura, 1990. Initial Study checklist, CUP-1367-3. Planning Division, Resource Management Agency. 2 July.
- Dames & Moore, 1990. *Draft Environmental Impact Report, Mobil M-70 Pipeline*. Prepared for the City of Los Angeles and the Angeles National Forest.
- Dames & Moore, April 1991. *Draft Environmental Impact Report, Major Modification No. 3 to CUP-1367. Expansion of Mining Area Gillibrand Aggregate Mine*. Prepared for the County of Ventura.
- Dale, 1986. Personal communication.
- Dice, James, 1990. Personal communication. California Department of Parks and Recreation, San Diego. 4 December.
- Edelman, Paul, 1990. Critical Wildlife Corridor/Habitat Linkage Areas between the Santa Susana Mountains, the Simi Hills, and the Santa Monica Mountains.

Envicom Corporation, 1984. *Biological Assessment of the Big Sky Ranch, Simi Valley, California*. Prepared for W&B Builders, Inc., 30 August.

Envicom Corporation, 1993. A Consideration of Wildlife Movements in the Santa Susana Mountains.

Federal Interagency Committee for Wetland Delineation, 1989. Federal manual for identifying and delineating jurisdictional wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Washington, D.C. Cooperative Technical Publication.

Garrett and Dunn, 1981. Birds of Southern California, Status and Distribution. Los Angeles Audubon Society, Los Angeles, California.

Henrickson, James. Biologist, California State University, Los Angeles. Telephone conversation with Melinda Trask on June 4, 1991.

Hunt, Larry. Herpetologist, University of California, Santa Barbara. Telephone conversation with Richard Tanner on October 9, 1991.

Ingles, 1965. Mammals of the Pacific Coast. University of California Press, Berkeley, California.

Jennings, M.R., 1983. An annotated checklist of the amphibians, and reptiles of California. *California Fish and Game* 6913:151-171.

Jones, C. and R. Ramirez, 1995. A 1995 Sighting of the California Gnatcatcher in Ventura County. In Abstracts of the Symposium on the Biology of the California Gnatcatcher. University of California, Riverside.

Kuhn, Michael, 1990. Personal communication. City of Simi Valley Planning Department. 10 December.

Munz, P. A., 1974. A Flora Southern California. University of California Press, Berkeley and Los Angeles, California.

Planning Corporation, 1990. *Draft Environmental Impact Report, Oak Park Community*.

Remsen, J.V., 1978. Bird species of special concern in California: an annotated list of declining or vulnerable bird species. California Department of Fish and Game, Wildlife Management Branch, Administrative Report 78-1.

Sandoval, J., 1991. Personal communication.

Skinner, Mark, 1990. Personal communication. California Native Plant Society, Sacramento. 10 December.

- Smith, J.P., Jr. and K. Berg, 1988. Inventory of rare and endangered vascular plants of California. California Native Plant Society Special Publication No. 1 (4th Edition).
- Stebbins, R.C., 1985. A Field Guide to Western Reptiles and Amphibians, 2nd edition, revised. Houghton Mifflin, Boston, Massachusetts.
- Sweet, Sam. Herpetologist, University of California, Santa Barbara. Telephone conversation with Richard Tanner on October 9, 1991.
- Tate, J., 1986. The blue list for 1986. American Birds Vol. 40, No. 2; 227-235.
- Thomas, Timothy, 1991. Personal communication. Santa Monica Mountains National Recreation Area. 2 January.
- United States Department of Agriculture (USDA), 1970. Soil Survey, Ventura Area, California. Soil Conservation Service, University of California Agricultural Experiment Station. April.
- United States Fish and Wildlife Service (USFWS), 1986. Planning Aid Letter on the Corps of Engineers Calleguas Creek Flood Control Project, Ventura County, California. Laguna Niguel Field Office. 29 September.
- USFWS, 1990. Endangered and threatened wildlife and plants; Review of plant taxa for listing as endangered or threatened species; notice of review. Federal Register 55:6184-6229 No. 35. 21 February.
- United States Fish and Wildlife Service (USFWS), 1991a. Endangered and threatened wildlife and plants. 50 CFR 17.11 & 17.12. March.
- USFWS, 1991b. Endangered and threatened wildlife and plants; Review of vertebrate wildlife; notice of review. Federal Register 55: 554-579 No. 4. 6 January.
- Webster, R., P. Lehman, L. Bevier, 1980. The Birds of Santa Barbara and Ventura Counties, California. Santa Barbara Museum of Natural History Occasional Paper No. 10, Santa Barbara, California.
- Williams, D.F., 1986. Mammalian species of special concern in California. California Department of Fish and Game, Wildlife Management Division, Administrative Report 86-1. June.
- Zeiner, D.C., Laudenslayer, W.F., Mayer, K.E., and White, M., 1989-90. *California's Wildlife: Volume I, Amphibious and Reptiles; Volume II, Birds; Volume III, Mammals*. California Statewide Habitat Relationships System, State of California, The Resources Agency, Department of Fish and Game, Sacramento, California.

AIR QUALITY

AeroVironment, Inc., 1991. Air quality analysis prepared for Lockman and Associates who prepared the previously unpublished EIR.

California Air Resources Board EMFAC7E Program.

County of Ventura. Air Pollution Control District, 1989. Guidelines for the Preparation of Air Quality Impact Analyses. October.

Sandoval, J., 1991. Personal communication.

Ventura County Air Pollution Control District - Rules and Regulations.

Ventura County Air Quality Management Plan, 1994.

County of Ventura. Public Health Department, Valley Fever, 1994. Personal communication on January 3, 1996 from Marilyn Billimek.

NOISE

California State Vehicle Noise Emission Level data from FHWA/CA/TL-84/13 (CALVENO).

Caltrans, Highway Design Manual, Chapter 1100, Highway Traffic Noise Abatement, January 1987.

City of Moorpark Traffic Model and traffic analyses (Table III-4).

Federal Highway Administration (FHWA), Federal-Aid Highway Program Manual, Volume 7, Chapter 7, Section 3, August 1982.

FHWA, FHWA Highway Traffic Noise Prediction Manual, FHWA-RD-77-108, December 1978.

FHWA, Technical Advisory T6640.8A: Guidance for Preparing and Processing Environmental and Section 4(F) Documents, October 30, 1987.

Walker, Celano & Associates, 1992. *Draft Updated Noise Impact Analysis for Blue Star Expansion Project CUP-1328, Ventura County, California. April 22, 1992.*

Walker, Celano & Associates, 1995. *Supplementary Noise Impact Analysis, Transit Mixed Concrete Company, Moorpark Aggregate Mine CUP-4633, Ventura County, California. November 17, 1995.*

TRAFFIC

Associated Transportation Engineers (ATE), 1996. *Transit Mix Concrete Project, Ventura, California. Traffic and Circulation Study. January 15, 1996.*

Austin-Foust Associates, Inc., June 1994. Moorpark Traffic Analysis Model.

CalTap, 1990. Traffic Safety Study.

Caltrans, Fourth Edition. Highway Design Manual - Topic 603.

Caltrans, 1982. Traffic Manual (Section 4-02.4).

Caltrans, July 1993. 1992 Traffic Volumes on California State Highway.

Caltrans, January 1994. 1992 Annual Average Daily Truck Traffic on the California State Highway System.

City of Moorpark- Guidelines for Traffic and Circulation Studies.

Highway Capacity Manual, 1976. Highway Research Board Special Report No. 87; Washington D.C.

ITE Southern California Section, Ventura-Santa Barbara Chapter, Technical Committee on Congestion Management Programs. Developing A Uniform Method For Calculating Intersection Level Of Service For Congestion Management Programs.

Michael Brandman & Associates, September 1995. Hidden Creek Ranch Project Traffic and Circulation Draft EIR Section, SCH #94021028.

Robert W. Crommelin, *Use of Intersection Capacity Utilization Values to Estimate Overall Level of Service*, Traffic Engineering, July 1974.

Transportation Research Board, 1985. Highway Capacity Manual (Special Report 209) - Table 9-6.

Ventura County Congestion Management Program.

Ventura County General Plan Amendment (GPA 94-3), adopted January 19, 1995.

Ventura County Traffic Impact Mitigation Fee Ordinance (Ordinance #4071), adopted January 19, 1995.



Exhibit 4b

ENVIRONMENTAL IMPACT REPORT (EIR) ADDENDUM CEQA Guidelines Section 15164

A. BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Entitlement:** A modified Conditional Use Permit (CUP) is requested to authorize the expansion of an existing aggregate surface mining facility. (Case No. PL16-0134)

2. **Applicant:** CEMEX Construction Materials Pacific, LLC
3990 E. Concours Street, Suite 200
Ontario, CA 91764

3. **Property Owner:** CEMEX Construction Materials Pacific, LLC
3990 E. Concours Street, Suite 200
Ontario, CA 91764

4. **Location:** The project site is located approximately four miles north of the City of Moorpark in unincorporated area of Ventura County. The facility address is 9035 Roseland Avenue, Moorpark, CA 93060.

5. **Tax Assessor's Parcel Numbers:** 500-0-060-155, 500-0-060-165,
500-0-100-250, 500-0-100-060, and
500-0-160-255

6. **Lot Sizes, General Plan Land Use Designation, and Zoning Designation:**

Table 1: Summary of Project Site Parcels

Parcel Number	Lot Size (acres)	Zoning Designation	General Plan Designation
500-0-060-155	146.24	AE-40ac (Agricultural Exclusive, 40 acre minimum lot size) AE-40ac/MRP (Agricultural Exclusive, 40 acre minimum lot size, Mineral Resources Protection Overlay)	Open Space
500-0-060-165	314.02	AE-40ac AE-40ac/MRP	Open Space
500-0-100-250	430.28	OS-160ac/MRP (Open Space, 160 acre minimum lot size, Mineral Resource Protection Overlay)	Open Space
500-0-100-060	158.93	AE-40ac/MRP	Open Space
500-0-160-255	119.85	OS-160ac/MRP	Open Space

7. Responsible and/or Trustee Agencies: California Department of Fish and Wildlife

8. Project Description:

The "Project Description" presented below constitutes the applicant's request. Any authorization granted by the County of Ventura will be limited to the conditions of approval imposed on a granted CUP and the content of an approved amended Reclamation Plan.

The Applicant requests that a modified CUP and discretionary Tree Permit be granted, and an amended Reclamation Plan, be approved to authorize an expansion of surface mining activities at the existing CEMEX Construction Materials Pacific, LLC (CEMEX) aggregate mining and processing facility. The permitted operation includes the use of various equipment necessary for processing mined materials and the operation of a Ready-Mix Concrete plant and asphaltic concrete plant.

Proposed changes in the existing mining facility:

The proposed project includes the following changes to the existing permitted facility:

- An extension of the effective period of the CUP to authorize the continuation of the previously permitted surface mining and material processing activities for an additional 49 years (i.e. until the year 2064). The maximum rate of mineral material production, and the associated haul truck traffic, would remain the same as authorized under the current permit (CUP 4633-1).
- Mining excavation in the 84-acre "Phase 3" area of the project site as identified and evaluated in the below-described 1996 certified Environmental Impact Report ("EIR") along with continued mining excavation in the Phase 1 and 2 areas of the site.

(Note: The originally proposed mining excavation area on the project site was previously divided into three phases. Excavation of the Phase 1 and 2 areas is authorized by CUP 4633-1. However, excavation of the Phase 3 area was not authorized with the granting of CUP 4633-1.)

- Production and export of approximately 58 million tons of aggregate materials. This includes 25 million tons of material remaining in the Phase 1 and 2 areas and an additional 33 million tons from the Phase 3 excavation area.

The following table shows the area, available tonnage of mineral resources, and estimated time period of production for the existing (Phase 1 and 2) and the proposed (Phase 3) mining areas.

Table 2 Proposed Mining Phases

Phase	Approx. Area	Approx. Tons**	Approx. Period
Phases 1 & 2	147 acres	25 million	21 years
Phase 3	84 acres	33 million	28 years
Total:	231 acres	58 million	49 years

*historic mining rate (1.18 million tons per year) based on average production since 1983 adjusted to include unsaleable material to reflect gross tonnage.

**gross tonnage based on March 2015 topography, using 1.7 tons/yd³ density

- Sale of wash fines (and other non-aggregate materials) or use of these earth materials in site reclamation including placement in permanent storage fills within the footprint of Phase 3.
- Modification of Condition of Approval No. 82 of CUP 4633-1 that specifies which portions of the project site are included in the total authorized disturbed area and the area of active mining operations.

The existing condition states:

“At any point in time, the area being actively mined shall not exceed 50 acres and the total disturbed acreage under CUP-4633 shall not exceed 220 acres. When disturbed acreage totals 220 acres, the Permittee shall not proceed with new areas of excavation until reclamation, of acreage equivalent to or greater than the new areas of excavation, has been approved and initiated to the satisfaction of the Public Works Agency and the Planning Director.”

The Applicant is proposing that the condition be modified to state:

“At any point in time, the area being actively mined shall not exceed 50 acres and the total disturbed acreage under CUP 4633 shall not exceed 270 acres. Areas that have begun the reclamation process to the satisfaction of the Planning Director will not count toward the total disturbed acreage or active mined acreage.”

- Increase the allowed area of surface mining activity (the “mined lands”) from 321 acres (as authorized by LU04-0168) to 331 acres to include the eastern portion of the Phase 3 excavation area and increase the total disturbed acreage (i.e. the area subject to mining excavation) from 220 acres to 270 acres.

Existing mining facility components:

Described below are the existing mining facilities and processes authorized by CUP 4633-1 that would continue to be utilized under the requested modified CUP and amended Reclamation Plan.

Processing facilities:

- Aggregate processing plant
- Concrete batch plant
- Back-up concrete batch plant
- Portable combined road base plant and recycling plant (Recycled Base Plant)
- Mortar plant
- Asphaltic concrete plant
- Portable screening plant
- Ancillary facilities and associated equipment

Ancillary facilities include the water recycling ponds and equipment, truck repair building, machine shop, water tanks, scales, fuel tanks, stockpile areas, administration offices, bone yard (i.e., an open storage area for parts and materials), conveyor belts, and parking areas.

CEMEX produces a variety of products, including ready mix concrete, concrete and plaster sand mixes, mortar, specialty sands and road base material, and may someday produce asphaltic concrete as currently entitled.

Mineral production methods:

Typical excavation techniques in the permitted mining area follow the current methods in which one or more bulldozers excavate the slopes of a hill, moving from the peak towards the base of the hill. As material is removed from the native grade, topsoil and unsuitable overburden are temporarily stockpiled near the excavation site. Suitable material is "pushed" over the hillside to the base of the hill where it accumulates in piles. This material is then moved by either a bulldozer or a front-end loader and placed into an electrical feeder loading it onto an electrically powered conveyor belt which transports the raw material to the aggregate processing plant or to a nearby stockpile. The length and alignment of the conveyor generally increases over time as CEMEX excavates further away from the aggregate processing plant.

At the aggregate processing plant, raw materials may be placed in a crusher to reduce rock size and the crushed materials are conveyed through a series of wet or dry sorting screens where the material is sorted by size into various products. Sands for mortar, concrete, and road base are transported by conveyor to CEMEX's individual specialty plants. At these plants, the aggregates from the mine site are combined with imported material, such as cement, to produce finished products. Finished materials are then loaded onto trucks at the individual plants or from stockpile areas for transport. Construction sands are loaded at the aggregate processing plant.

The existing facility includes a recycling operation, which involves the use of a portable plant to crush concrete and asphalt brought to the site for recycling. The crushed material is cleared of metal by a magnet and delivered offsite for use as road base.

The existing facility also includes a portable screening plant that is utilized as needed during facility operations. The excavated materials processed through the portable screening plant will be separated from the material processed through the aggregate processing plant.

B. STATEMENT OF ENVIRONMENTAL FINDINGS:

On December 10, 1996, the Ventura County Board of Supervisors certified an EIR for the subject surface mining operation (then operated by Transit Mixed Concrete Company or "TMC") that evaluated the environmental impacts of a phased mining operation that would involve a 217-acre area and take place over a 50-year period. The mining operation was projected to produce 75-100 million cubic yards (44 to 59 million tons) of material with a maximum annual production rate of 3.4 million tons. The certified EIR identified significant impacts on biological and visual resources. The proposed surface mining activities were projected to disturb 146 acres of native vegetation, which would result in the loss of nesting or breeding habitat for several native wildlife species. To mitigate these impacts, the mine operator was required to create and implement a comprehensive revegetation, habitat management, and compensation plan. The area disturbed by excavation conducted during Phases 2 and 3 of the mining plan would be visible to surrounding communities. Thus, various aesthetic enhancements were also required to be included in the reclamation plan to address these significant visual impacts. The certified EIR also identified significant air quality and noise impacts and required mitigation to address these issues.

Under CEQA Guidelines section 15162, an addendum to an EIR that was previously certified for the subject project is the appropriate means of documenting the fact that none of the conditions set forth in CEQA Guidelines section 15162 calling for the preparation of a subsequent EIR have occurred with respect to the project for which a subsequent discretionary approval is sought. Section 15162 requires the lead agency to prepare a subsequent EIR if there are new significant environmental effects associated with the proposed project, or if the proposed project would increase the severity of previously-identified significant environmental impacts, based on project changes, new information, or a change in circumstances under which the project is undertaken, that warrant major revisions to the previously certified EIR.

The conditions described in section 15162 of the CEQA Guidelines which require the preparation of a subsequent EIR are stated below, along with a discussion as to why a subsequent EIR is not required to analyze the environmental impacts of the proposed

changes in the mining facility (i.e. the CEQA “project”) that would be authorized by the requested modified CUP.

- 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [§ 15162(a)(1)].**

The certified EIR identified, evaluated, and assigned environmental effects associated with the project to four classes:

- Class I: Significant environmental impacts that cannot be mitigated to a less than significant level. For these impacts, the County must issue a “Statement of Overriding Consideration” under section 15092(b) of the CEQA Guidelines if the project is approved. Mitigation measures are recommended to minimize these adverse impacts;
- Class II: Significant environmental impacts that can be mitigated to a less than significant level. The County must make “findings” under section 15091(a) of the CEQA Guidelines if the project is approved. Mitigation measures are recommended to minimize these adverse impacts;
- Class III: Other environmental impacts that are potentially adverse but not significant. In many instances, conditions of approval are recommended to minimize these adverse impacts. In some instances, these impacts are minimized by mitigation measures being recommended to address Class I or II impacts; and
- Class IV: Beneficial impacts.

Class I Impacts:

The certified EIR identified several Class I, significant, unmitigable impacts including impacts on biological resources, visual resources, air quality, and noise along with recommended mitigation measures (Table 3).

Biological Resources

The significant, unmitigable impacts on biological resources were projected to result from the disturbance of approximately 146 acres of native vegetation and habitat and specifically the loss of 80 acres of coastal sage scrub habitat and 7 acres of alluvial scrub habitat which were considered “very threatened” by the California Department of Fish and Game (now the California Department of Fish and Wildlife). In addition to the loss of native vegetation, impacts on biological resources would

include the loss of habitat and/or breeding habitat coast horned lizard, coast patch-nosed snake, loggerhead shrike, and various raptor species.

Mitigation measures were recommended to reduce the severity of these identified impacts to the extent feasible: a Revegetation Plan (Mitigation Measures B-1, CUP 4633-1 Condition of Approval No. 112) and a Habitat Management and Compensation Plan (HMCP) (Mitigation Measure B-3, CUP 4633-1 Condition of Approval No. 114). A Revegetation Plan is included as part of the Surface Mine and Reclamation Act (SMARA)-required reclamation plan to be implemented progressively as mining activities are completed in each phase of the mine plan which meets the Standard of Success for mitigation measure B-1 in the certified EIR. A Habitat Management and Compensation Plan (HMCP) was prepared by Chambers Group Inc. and dated March 2000, along with Implementation Status Reports prepared by West Coast Environmental and Engineering, dated September 30, 2004, and Sespe Consulting Inc., dated June 14, 2012. The HMCP identified and evaluated three management and compensation options:

- Option 1: Preservation (including restoration of 6.2-acres) of 198 acres of Transit Mixed Concrete Company (TMC) property;
- Option 2: Enhancement within Happy Camp Canyon Regional Park; and,
- Option 3: Preservation of 126 acres of TMC's "Section 20" property located to the west of the mining site and adjacent to Grimes Canyon Road (SR 23).

Option 1 was identified in the HCMP as the most desirable mitigation alternative as it created a buffer between the mining operation and Happy Camp Canyon Regional Park. This option was implemented. Option 2 was rejected in the HCMP as its implementation was determined to be infeasible. Option 3 was found to be less desirable because of its location closer to developed areas. Additional features of the HMCP which were successfully implemented include the construction of two wildlife guzzlers, artificial water sources, one in the depression below the entrance to the site and the other in the northeast section of the project site along Happy Camp Road. The HMCP preservation area encompasses most of the identified coast live oak grove east of the Phase 3 mining area boundary.

The 2000 HCMP includes a termination date of 20 years or when the mining site has been reclaimed. Such a temporary arrangement is not currently considered by the County to constitute adequate mitigation for the long-term effects on biological resources that would result from surface mining activities. Thus, the requested modified CUP will include a condition of approval (Condition No. 33) that will require the 198-acre HMCP area to be permanently protected through the recording of a conservation easement. In addition, an endowment fund will be required to be established by the Permittee to ensure future maintenance of the preserved lands.

With the permanent implementation of the HMCP, the significant impacts on biological resources will be mitigated to the extent feasible.

Implementation of the proposed project would result in an increase in the area of un-reclaimed land from 50 acres to 100 acres and an increase in the total mining excavation area from 220 acres to 270 acres. The effects on biological resources due to excavation of the Phase 3 area were evaluated in the certified EIR. Thus, this change in the currently-permitted facility would not result in a new impact not previously evaluated. The previously approved conditions requiring Botanical Surveys prior to any land disturbance in the Phase 3 area will be carried forward and updated to reflect changes in best management practices for biological resources. These include conditions of approval 36, 37, and 38.

Therefore, the proposed changes to the existing mining operation would not create any new significant environmental effects or substantially increase the severity of previously identified significant effects with respect to biological resources.

Visual Resources

Significant, unmitigable impacts on visual resources were identified due to the visibility of the Phase 2 and Phase 3 excavations from communities south of the mining operation and from Happy Camp Canyon Regional Park, and due to the visibility of the Phase 1 excavations from hiking trails in upper Happy Camp Canyon Regional Park.

A mitigation measure was identified in the certified EIR and included in the conditions of approval to address the impacts on visual resources. Although this measure would not reduce these impacts to a less than significant level, it reduces the impacts to the extent feasible. The components of the recommended visual resource mitigation measure (Visual Elements of Reclamation Plan, CUP 4633-1 Condition of Approval No. 115) were incorporated into the reclamation plan as required by SMARA and will be implemented during the reclamation phase of the project.

In addition, the excavation of the Phase 3 area was previously evaluated for impacts on visual resources in the certified EIR, and the excavation of this area will not substantially change under the proposed project.

Based on the foregoing, the proposed changes to the existing mining operation would not create any new significant environmental effects or substantially increase the severity of previously identified significant effects with respect to visual resources.

Air Quality

Significant and unmitigable impacts on air quality were estimated to result from project-generated Nitrogen Oxide (NO_x) and Particulate Matter/Fugitive Dust (PM₁₀) emissions in excess of both the state and federal air quality standards for Ozone (O₃) and PM₁₀. In addition, Reactive Organic Compound (ROC) emissions from the project were estimated to exceed the prescribed threshold criteria for regional air quality.

The certified EIR divided the analysis of air quality impacts between three project components: fugitive dust sources, processing plants, and other combustion sources. Fugitive dust sources include overburden removal, mining operations, storage piles, and on-site road dust. Processing plants on the project site include: the asphalt batch plant, rock plant and conveyor system, road base and recycling plant, mortar plant, and concrete batch plant. Other combustion sources associated with the project include: truck transportation of material, other on-site equipment, employee vehicles, and a back-up generator. Mitigation measures identified in the certified EIR were incorporated as conditions of approval into CUP 4633-1. These measures reduced impacts to the extent feasible but not to a less than significant level. These measures include:

- Mitigation Measure A-1 Air Emissions Mitigation Plan (CUP 4633-1 Condition of Approval No. 116)
- Mitigation Measure A-2 Vehicle Emissions Mitigation Program (CUP 4633-1 Condition of Approval No. 117)
- CUP 4633-1 Condition of Approval No. 41 Facilities Subject to APCD Regulations
- CUP 4633-1 Condition of Approval No. 42 Authority Construct/Permit to Operate

These mitigation measures will all be carried forward (as Conditions 24, 25, 26 and 27) in the modified CUP. Because material production and associated equipment and vehicle use would remain unchanged under the proposed project, emissions due to processing plants and combustion sources would likewise remain unchanged. Operations of the asphalt batch plant, rock plant and conveyor, road base and recycling plant, mortar plant, concrete batch plant, and back-up generator would not be altered from current conditions. No change to the number or employees is requested and so no changes to the emissions associated with employee vehicles are anticipated to occur. The proposed project does not include additional material transportation truck trips and would not result in increased truck emissions beyond what was previously analyzed in the certified EIR.

The level of fugitive dust (PM_{10}) emissions, would not be the proposed increase in the total area disturbed by surface mining activities from 220 to 270 acres. This is because the land under active mining excavation will remain at 50 acres. Fugitive dust is primarily generated during excavation activities (use of earth-moving equipment) and the transport of mineral materials on the onsite haul roads. These activities will not change from the current conditions as the level of material production and export will not change. Existing conditions of approval require watering of disturbed lands to minimize dust generation and revegetation of disturbed areas that have not been subject to excavation activities for more than 6 months. Furthermore, the potential for dust generation from wind erosion decreases rapidly after ground has been disturbed as the fine particles subject to wind transport are winnowed away. Particulate matter (PM_{10}) is also generated as part of motor vehicle emissions. As the project does not involve an increase in transport truck traffic, no increase in PM_{10} emissions is anticipated from this source.

Regulatory changes have occurred since the certification of the certified EIR. These changes include the listing of diesel particulate matter as a toxic air contaminant, the requirement for analysis of greenhouse gases in CEQA documents, and the U.S. Environmental Protection Agency's adoption of standards for fine particulates ($PM_{2.5}$).

The level of pollutant emissions generated by diesel-powered trucks (including material transport trucks) and mining equipment per unit of distance or hour of operation, have substantially decreased since the certification of the certified EIR due to improved emissions standards and technology mandated by the California Air Resources Board. Because the proposed project does not involve an increase in truck traffic or heavy equipment use, emissions from these sources will thus be less than identified in the certified EIR.

The effect of greenhouse gas (GHG) emissions on climate change is not addressed in the certified EIR as this issue became prominent in later years. The September 30, 2016 *Air Quality and Climate Change Impact Assessment* prepared by Sespe Consultants estimates the GHG emissions that result from the operation of the existing facilities is 29,846 metric tonnes of CO_2 equivalent (MTCO_{2e}) per year. The project approved in 1996 involved an increase in haul truck traffic from the previously-permitted 810 one-way truck trips per day to 980 truck trips per day. The production of air pollutant emissions, including GHG, is proportional to the material production and export rate. Thus, only 17 percent (i.e. 5,074 MTCO_{2e} per year) of the GHG emissions constituted an impact of the project at the time the certified EIR was prepared.

The CEQA Threshold of Significance currently recommended to be used by the Ventura County Air Pollution Control District (APCD) is 10,000 MTCO_{2e} per year. Thus, the 5,074 MTCO_{2e} per year of GHG emissions related to the 1996 project (i.e. the increase of 170 truck trips per day) does not exceed the current Threshold.

The estimated GHG emissions due to the current operations have already occurred in the past 20 years and are part of the existing setting or baseline condition for environmental review. Since the intensity of the permitted surface mining activities and the material transport operations are not proposed to increase above the historic level, the project would not result in a new impact on climate change.

Based on the foregoing, the proposed changes to the existing mining operation would not create any new significant environmental effects or substantially increase the severity of previously identified significant effects with respect to air quality.

Noise

The significant, unmitigable impact associated with noise identified in the certified EIR was the incremental contribution to cumulative noise along Walnut Canyon Road, specifically due to mining truck traffic along this route.

Mitigation measures incorporated into the conditions of approval served to reduce noise impacts to the extent feasible but not to a less than significant level. The noise mitigation measures identified in the certified EIR include:

- N-1 Prohibit Jake Brakes (Condition of Approval No. 118);
- N-2 Alternative Access Routes (Condition of Approval No. 119); and
- N-3 Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue (Condition of Approval No. 120).

Of these three mitigation measures, only N-1, Prohibit Jake Brakes (carried forward into the new permit as Condition of Approval 49), was implemented. Mitigation measure N-2, Alternative Access Routes, was not implemented as an assessment district or other financing technique adopted to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway was not created. Mitigation measure N-3, Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue, was not implemented as a City of Moorpark-sponsored traffic noise monitoring program to develop, fund, and implement a traffic noise monitoring and enforcement program designed to reduce traffic noise impacts on Walnut Canyon Road/Moorpark Avenue was not created.

The proposed project would not result in additional truck traffic beyond what was analyzed in the certified EIR and authorized by CUP 4633-1.

Based on the foregoing, the proposed changes to the existing mining operation would not create any new significant environmental effects or substantially increase the severity of previously identified significant effects with respect to noise.

Following certification of the EIR in 1996, the County of Ventura revised its Initial Study Assessment Guidelines (ISAGs) in 2010. Under the revised ISAGs, noise associated with vehicles traveling on State highways is not considered a potentially significant impact. Thus, the noise impact that was identified as a significant and unavoidable project impact in the certified EIR would not be considered a significant impact if evaluated under the current ISAGs.

Class II Impacts:

The certified EIR identified Class II, potentially significant but mitigable impacts, and associated mitigation measures (Table 4), in the issue areas of geology and geohazards, biological resources, visual resources, noise, and traffic.

Geology and Geohazards

The significant, but mitigable, impacts on the project from the local geology and geohazards identified in the certified EIR were damage to equipment and buildings as a result of ground-shaking, on-site damage from slope stability problems on temporary cut slopes and permanent reclaimed slopes, and damage to off-site property from on-site slope stability problems on reclaimed slopes.

The certified EIR identified two mitigation measures: GG-1, Slope Stability Analysis and Mitigation (CUP 4633-1 Condition of Approval No. 110), and GG-2, Reclamation Plan (CUP 4633-1 Condition of Approval No. 111). The issues addressed in these mitigation measures are now addressed in the amended Reclamation Plan prepared in accordance with the Surface Mining and Reclamation Act, the State Mining and Geology Board reclamation regulations, and the Ventura County Non-Coastal Zoning Ordinance. This Plan would be approved concurrently with the granting of the requested modified CUP.

The project site evaluated in the certified EIR will not change with the proposed project and the underlying geologic conditions have not changed since the granting of the current permit in 1996. No changes to the previously identified mitigation measures or applied conditions of approval related to addressing geology and geohazards are requested for the proposed permit modification.

Based on the foregoing, the proposed changes to the existing mining operation would not create any new significant environmental effects or substantially increase the severity of previously identified significant effects with respect to geology and geohazards.

Biological Resources

The potentially significant, but mitigable, impact on biological resources identified in the certified EIR was the loss of up to 50 oak trees, located in a large grove in the Phase 3 area.

The requested modified CUP would authorize mining excavation in the Phase 3 area that at the time of the certified EIR included a grove of oak trees. The Arborist Report (Atmore 2015) submitted with the current application provides an updated count of oak trees that would be impacted by surface mining activities in the Phase 3 area. In this area, two oak trees would be preserved in place and 23 oak trees would be removed. The removal of these 23 oak trees is addressed through the requirement to obtain a discretionary Tree Permit concurrently with the requested modified CUP in accordance with the requirements of the Ventura County Tree Protection Ordinance (TPO). In addition to obtaining a permit, the TPO requires the permittee to avoid grading and other construction activity within the drip lines of existing trees to be preserved. The removed trees shall be replaced, or an in-lieu compensation fee paid.

The existing mitigation measure/condition of approval specific to oak trees in the Phase 3 area reads as follows:

Oak Tree Avoidance Measures (Condition of Approval No. 113 of CUP 4633; Mitigation Measure B-2)

Condition: The permittee shall avoid activities encroaching upon the oak trees in the large grove on the east side of the project site. Prior to initiating any of the land disturbing activities within the Phase 3 area that are permitted under Condition 1.e (Permitted Uses), the permittee shall submit a plan to the County for review and approval, showing the boundary of the oak grove, describing how it will be marked in the field, and describing how avoidance during mining will be accomplished. Avoidance of this area will greatly reduce potential impacts to wildlife, including roosting raptors, as well as reducing the number of oak trees to be removed.

Implementation Responsibility: Permittee or successor in interest.

Monitoring Frequency: Prior to initiating any of the land disturbing activities within the Phase 3 area that are permitted under Condition 1.e (Permitted Uses). Annual County inspections will provide on-site observations of avoidance efforts. Annual Status Reports submitted by the permittee will provide written documentation of avoidance program.

Monitoring Work Program/Monitoring Agencies: The Planning Division, in consultation with the Public Works Agency, will be the monitoring agency.

Standard of Success: Approvals of the revised limits of mining for Phase 3. Annual site visits (refer to Condition 80 – SMARA Annual Review for Compliance with SMARA and Permit Conditions) and Annual Status Report (refer to Condition 81) verify avoidance of the oak trees in the large grove on the east side of the project side.

This mitigation measure has been satisfied with the submittal of the current application. The location of the eastern boundary of the Phase 3 area has been modified from the 1996 proposal to avoid most of the oak trees identified in the previous project review. The measures to replace or offset the loss of oak trees required by the TPO constitute adequate mitigation of this impact on biological resources. Condition of approval No. 66 implements the requirement for a Tree Permit.

Visual Resources

The significant, but mitigable, impact on visual resources identified in the certified EIR was the long-term visibility of the Phase 1 mining area to off-site viewers. This impact was found to be mitigated through the measures included in the approved Reclamation Plan. The effects on visual resources due to excavation of the Phase 1 area would not change under the current proposal.

Noise

The significant, but mitigable, impacts on surrounding noise sensitive uses identified in the certified EIR were the use of “jake,” or compression release engine brakes and incremental contributions to cumulative noise along Walnut Canyon Road. Mitigation measure N-1, Prohibit Jake Brakes, would be carried forward (as Condition of Approval 49) if the proposed project is approved. As described in the project description, no change in the daily truck trip volume would result from the proposed permit modification.

Based on the above discussion, implementation of the proposed project would not exacerbate the Class II noise impacts identified in the certified EIR.

Traffic

The significant, but mitigable, impacts on traffic and roadways identified in the 1996 EIR were the accelerated degradation of Happy Camp Road and Grimes Canyon Road, and cumulative effects on the Regional Road Network. The certified EIR evaluated a proposed increase in truck traffic volume of 518 one-way trips per day from the then-permitted 810 one-way truck trips per day (the baseline condition) to 1,328 one-way trips per day.

The Ventura County Board of Supervisors imposed a condition of approval (Condition No. 99, Limitations on One-Way Heavy Truck Trips) on CUP 4633-1 that limited the total number of truck trips to an average of 980 one-way trips per day with a daily maximum of 1,180 one-way trips per day. Condition of Approval No. 99 (reproduced below) allowed an increase of only 170 one-way truck trips per day above the baseline condition.

Limitations on One-Way Heavy Truck Trips

The number of heavy truck trips to and from the project site shall be limited as follows:

- a. Monday through Friday, the permittee shall limit the number of heavy truck trips to and from the project site to an average of 980 one-way trips per day, as calculated using a rolling monthly average. Additionally, the permittee shall limit the number of heavy truck trips to and from the project site to a daily maximum of 1,180 one-way trips.

Calculation: The permittee shall maintain daily trip records for all one-way heavy trucks trips. Monthly, the actual number of Monday through Friday one-way heavy truck trips shall be totaled, then divided by the number of authorized Monday through Friday work days that month. The resulting "Monday through Friday" average for the month shall be added to the "Monday through Friday" average calculated for the preceding 11 months. This total shall then be average to determine the "Monday through Friday" average for the previous 12 months. In this manner, the permittee will develop a "rolling monthly average" reflective of seasonal market variations while at the same time ensuring the facility operates within the overall one-way truck trip limit of 980, Monday through Friday.

- b. Saturday, the permittee shall limit the number of heavy truck trips to and from the project site to a maximum of 276 one-way trips per day, as calculated using a rolling monthly average. Additionally, the permittee shall limit the number of heavy truck trips to and from the project site to a daily maximum of 332 one-way trips.

Calculation: The permittee shall maintain daily trip records for all one-way heavy truck trips. Monthly, the actual number of Saturday one-way heavy truck trips shall be totaled, then divided by the number of authorized Saturday work days that month. The resulting "Saturday" average for the month shall be added to the "Saturday" averages calculated for the preceding 11 months. This total shall then be averaged to determine the "Saturday" average for the previous twelve (12) months. In this manner, the permittee will develop a "rolling monthly average" reflective of seasonal market variations while at the same time ensuring the facility operates within the overall one-way truck trip limit of 276, Saturdays.

This limitation applies to all product trucks coming to and going from the site (full and empty trucks). Trips within the project site or between areas of the project site (e.g., from an excavation area to the plant site) do not count against this ceiling. Employee vehicles, service and maintenance vehicles do not count against this maximum.

At the request of the Planning Director, the permittee shall develop summary information, documenting the number of one-way heavy truck trips that have occurred over the period of time specified by the Planning Director. Said period of time shall not exceed the preceding twelve (12) months.

The applicant has provided historic truck traffic data that demonstrates that the operator of the CEMEX facility has exercised the maximum truck traffic volume authorized under CUP 4633-1. Thus, the 980 average daily truck trips and 1,180 maximum daily truck trips limits constitute the baseline condition for the current project. Given that the applicant has not proposed a change to the existing permitted level of truck trips, the proposed project would not result in any new impacts on traffic circulation.

The truck traffic limitations will be included in the modified CUP as Condition of Approval No. 22.

As indicated in recent traffic studies, several intersections along the truck travel route in the vicinity of the Grimes Canyon mining facilities are at or projected to operate in the foreseeable future at Level of Service (LOS) F. This level of service is considered unacceptable by County standards. However, this situation would not be degraded by the proposed CEMEX project as the facility would be limited (per Condition of Approval No. 22) to the historic volume of peak hour truck trips (PHTs). The LOS at the area intersections, such as State Highway 126/State Highway 23 in Fillmore and Moorpark Avenue (SR 23) and Los Angeles Avenue (SR 118) in Moorpark, is dependent on the volume of PHTs. With no increase in PHTs, the CEMEX project would not degrade the LOS at the local intersections.

Class III Impacts:

The certified EIR identified Class III, adverse but less than significant impacts and associated recommended mitigation measures (Table 5) in the issue areas of geology and geohazards, groundwater, erosion and sedimentation, biological resources, visual resources, air quality, noise, and traffic. The certified EIR evaluated impacts of surface mining activities in the Phase 1, Phase 2, and Phase 3 areas of the mining site. The surface mining methods, material processing procedures, rate of mineral production and level of transport truck traffic is not proposed to change from the historic operations that have been conducted under the authority of CUP 4633-1. Thus, the current proposal to initiate mining

excavation in the Phase 3 area does not present any new environmental issues not addressed in the certified EIR.

Table 3 1996 EIR Summary of Significant, Unmitigable Impacts (Class I)

Issue Area	Description of Impact	Recommended Mitigation Measure	Residual Impacts
Biological Resources	<p>Incremental disturbance of about 146 acres of native vegetation, including coastal sage scrub, alluvial scrub, chamise chaparral, and other habitat.</p> <p>Loss of 80 acres of coastal sage scrub habitat and 7 acres of alluvial scrub habitat which are both considered "very threatened" by the California Department of Fish and Wildlife.</p>	<p><u>B-1 Revegetation Plan</u> -Revegetation using local native seeds -Topsoil management -Procedures to control invasive species -Contingency for supplemental irrigation -Reclamation Plan per SMARA requirements -Oak woodland and alluvial scrub replacement</p>	Significant
	<p>Loss of nesting and/or breeding habitat for coast horned lizard, coast patch-nosed snake, and loggerhead shrike, and possibly for several raptor species that may use the project site for roosting and foraging, including the golden eagle, Cooper's hawk, and black-shouldered kite.</p>	<p><u>B-3 Habitat Management and Compensation Plan</u> Potential enhancements shall include, but not be limited to: 1) purchase and installation of wildlife guzzler; 2) purchase and installation of fencing of sensitive areas; 3) purchase of an open space easement on adjoining lands that have habitat value; 4) fund revegetation efforts in disturbed areas of the mine site, particularly areas disturbed prior to 1976; and 5) dedication of land in fee.</p>	Significant
Visual Resources	<p>Phase 2 and 3 excavations would be visible to many communities south of the mine, as well as recreationalists in middle and upper Happy Camp Canyon Regional Park.</p>	<p><u>V-1 Visual Elements of Reclamation Plan</u> -Use gradual and smoothed slopes -Create a smooth transition with the adjacent, undisturbed slopes -Revegetate with native plants</p>	Significant
	<p>Near-term, Phase 1 excavation would be visible to recreationalists using the hiking trails in upper Happy Camp Canyon Regional Park.</p>		Significant
Air Quality	<p>NO_x and PM₁₀ exceedances of both the state and federal air quality standards for O₃ and PM₁₀.</p>	<p><u>A-1 Air Emissions Mitigation Plan</u> -Equipment/engines properly maintained/tuned -Dust control on mined slopes, on-site roads, and stockpiles with water or chemical agents -Temporary grass cover on inactive slopes -Water spray or cover delivery trucks -Cease mining in high winds -Limit on-site haul truck speeds</p>	Significant
	<p>ROC emissions in excess of the prescribed threshold criteria for regional air quality.</p>		Significant

		<p><u>A-2 Vehicle Emissions Mitigation Program</u> -Use of low emission engines for product and on-site equipment -Conversion of conventional engines or purchase of low emissions engines for use by non-project related vehicles -Contributions to a Countywide or other mobile emissions reduction fund, if established -Other equivalent measures approved by the APCD</p>	
Noise	Contributes incrementally to cumulative noise along Walnut Canyon Road.	<p><u>N-2 Alternative Access Routes</u> Requires permittee pro-rata share participation in any assessment district or other financing technique adopted to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway.</p>	Significant, assumes the circulation improvements are not implemented by the City of Moorpark.
		<p><u>N-3. Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue</u> Requires reciprocal agreement and permittee pro-rata share participation in a City of Moorpark sponsored traffic noise monitoring program to develop, fund, and implement a traffic noise monitoring and enforcement program designed to reduce traffic noise impacts on Walnut Canyon Road/Moorpark Avenue.</p>	Significant, assumes reciprocal agreement is not achieved.

Table 4 1996 EIR Summary of Significant, Mitigable Impacts (Class II)

Issue Area	Description of Impact	Recommended Mitigation Measure	Residual Impacts
Geology and Geohazards	Damage to equipment and buildings as a result of ground shaking.	<u>GG-1 Slope Stability Analysis and Mitigation</u> Recommendation for mitigation of slope failure hazards such as slope configuration, safe excavation procedures, and use of standard engineering practices including buttressing, cut and fill excavation, and control of drainage on any newly exposed landslides. <u>GG-2 Reclamation Plan</u> Plan revision that: 1) incorporates the result of the 1993 and 1994 revegetation test plots; and 2) meet all applicable SMARA requirements, including but not limited to revegetation, topsoil management, protection of wildlife values, and any newly adopted standards for reclamation.	Less than significant
	Slope stability problems, including the potential instability of temporary cut slopes during mining operations and the instability of permanent cut slopes after final reclamation of the site.		Less than significant
	Instability of permanent slope cuts after the reclamation of the site include the instability of, and damage to, offsite property.		Less than significant
Biological Resources	Loss of up to 50 oak trees, mostly located in a large grove in Phase 3 area, (significant, mitigable impact, Class II). The number of oak trees lost will depend upon the degree to which trees can be avoided by: 1) minor changes to the limits of mining, and 2) the number of trees replaced on-site pursuant to the Tree Protection Regulations.	<u>B-2 Avoidance Measures</u> Revise the Phase 3 limits of mining to avoid oak trees in the large grove on the east side of the project area.	Less than significant

Visual Resources	Long-term, the Phase 1 excavation would eventually be ameliorated through reclamation once the reclaimed slopes have been restored to gentle contours and revegetate with sufficient vegetative cover to blend in with natural slopes.	<u>V-1 Visual Elements of Reclamation Plan</u> -Use gradual and smoothed slopes -Create a smooth transition with the adjacent, undisturbed slopes -Revegetate with native plants Refer to the following condition of approval described below in Table S-3 (Visual Resources): <i>Windrow Planting</i>	Less than significant
Noise	The use of "jake" brakes results in a loud intrusive sound that is likely to exceed 70 dB.	<u>N-1 Prohibit Jake Brakes</u> Trucks are prohibited from using "jake" brakes along Happy Camp Road and Walnut Canyon Road or within the City of Moorpark, except under emergency operating conditions.	Less than significant
	Contributes incrementally to cumulative noise along Walnut Canyon Road.	<u>N-2 Alternative Access Routes</u> Requires permittee pro-rata share participation in any assessment district or other financing technique adopted to fund or partially fund the proposed State Route 23 by-pass extension and/or the easterly extension of Broadway. <u>N-3. Noise Monitoring Program for Walnut Canyon Road/Moorpark Avenue</u> Requires reciprocal agreement and permittee pro-rata share participation in a City of Moorpark sponsored traffic noise monitoring program to develop, fund, and implement a traffic noise monitoring and enforcement program designed to reduce traffic noise impacts on Walnut Canyon Road/Moorpark Avenue.	Less than significant, assumes the City of Moorpark implements the circulation improvements Less than significant, assumes reciprocal agreement is reached.
Traffic	Extraordinary road maintenance and repair of Happy Camp Road and Grimes Canyon Road.	<u>T-1 Roadbed Maintenance and Repairs Fund</u> Requires the permittee to be financially responsible for the extraordinary maintenance and repairs on Happy Camp Road and Grimes Canyon Road.	Less than significant
	Cumulative impacts on the Regional Road Network.		Less than

		<p><u>T-2 Traffic Impact Mitigation Fee</u> Pursuant to the Traffic Impact Mitigation Fee Ordinance (Ordinance #4071), requires the permittee to pay a traffic impact mitigation fee of \$74,695.76.</p> <p>Refer to the following condition of approval described below in Table S-3 (Traffic):</p> <p><i>Participation in Reciprocal Traffic Impact Mitigation Fee Agreement</i></p>	significant
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Table 5 1996 EIR Summary of Insignificant Adverse Impacts (Class III)

Issue Area	Description of Impact	Recommended Conditions of Approval	Residual Impacts
Geology and Geohazards	Damage to equipment and buildings as a result of fault rupture, subsidence, and/or liquefaction.	Refer to the following mitigation measures described above in Table S-1: GG-1 <u>Slope Stability Analysis and Mitigation</u> GG-2 <u>Reclamation Plan</u>	Insignificant
Groundwater	Slight increase in TDS and other dissolved constituents that could potentially affect groundwater quality.	<u>Groundwater Quality – Standing Water</u> Requires removal of fine soil and debris to reduce the retention time of water in mining pits and sediment detention basins. Also requires that rainwater collected in the large unlined sediment detention basin located in the southeast portion of the site be pumped into the two waste water ponds for use in the mining operations.	Insignificant
	Accidental spill of fuels, oils, paints and solvents that could potentially affect groundwater quality.	<u>Groundwater Quality – Spill Prevention</u> Specifies procedures for the storage, handling, and disposal of potentially hazardous materials. Requires Environmental Health Division permit for the installation, use and operation of underground hazardous materials storage tanks.	Insignificant

	Infiltration of contaminants into the groundwater aquifer due to leakage from the onsite septic system.	<u>Groundwater Quality Protection – Recycling Ponds and Septic Systems</u> Requires quarterly water quality samples and if water quality samples exceed the maximum contamination level(s) set by local, state or federal agencies, the permittee is to immediately consult with the County and other agencies, to identify and implement the changes needed to comply with water quality standards.	Insignificant
Erosion and Sedimentation	Potential for increased sediment loading of Happy Camp Canyon Regional Park.	<u>Sediment Detention Basin Design</u> Specifies capacity and structural integrity of the existing sediment retention ponds (i.e., must adequately contain the sediments resulting from a 100-year event with a 75% scarified watershed). Monitored via annual SMARA-compliance inspection. <u>Clearing Sediment Plan</u> Requires the removal of sediment when the capacity of any sediment detention basin on site is reduced by more than 10%. Each year, sediments must be cleared prior to 1 November to ensure there is adequate basin capacity prior to the winter season. Monitored via annual SMARA-compliance inspection.	Insignificant
Biological Resources	Potential loss of a sensitive plant species (i.e., Nevin’s brickellia) that potentially occurs within the proposed mining area.	<u>Botanical Surveys</u> Requires field surveys, prior to mining activities in Phase 3, to determine the presence of any sensitive plant species identified in the EIR. If found, requires sensitive seed collection and/or transplanting.	Insignificant
	Potential nighttime lighting and impairment of wildlife movement on and through the proposed project area.	Refer to the following mitigation measures described above in Table S-1: V-1 Visual Elements of Reclamation Plan A-1 Air Emissions Mitigation Plan A-2 Countywide Vehicle Emissions Mitigation Program	Insignificant

	<p>Removal of the central drainage and potential disturbance of the wester drainage.</p>	<p><u>Avoidance/Protection of Ephemeral Drainages</u> Requires grading and excavation within the vicinity of the ephemeral drainage at the west side of the project site be completed in a manner that ensures drainage from all disturbed areas will flow towards the mine.</p> <p>Requires construction of 3 to 4-foot high earthen berms along the excavated side of the drainage to prevent erosion into the drainage to the east. These berms are to be seeded with annual grasses to ensure their integrity.</p>	<p>Insignificant</p>
<p>Visual Resources</p>	<p>Long-term, the Phase 1 excavation would eventually be ameliorated through reclamation once the reclaimed slopes have been restored to gentle contours and revegetated with sufficient vegetative cover to blend in with natural slopes.</p>	<p>Refer to the following mitigation measures described above in Table S-1:</p> <p>V-1 Visual Elements of Reclamation Plan</p> <p>Also, the following condition of approval is recommended:</p> <p><u>Windrow Planting</u> The permittee shall plant and establish a windrow of large native trees near the lower debris basin (i.e., at the mouth of the canyon between TMC and Happy Camp Canyon Regional Park) in order to screen the mine from users in the low lying areas of the Happy Camp Canyon Regional Park.</p>	<p>Insignificant</p>
	<p>Minor nighttime lighting.</p>	<p><u>Nighttime Lighting</u> Requires shielding and direct lighting to minimize off-site glare, particularly to the south and east.</p> <p>Requires reasonable effort be made to avoid nighttime processing on those nights when the Santa Monica Mountains Conservancy conducts scheduled star-gazing hikes in Happy Camp Canyon Regional Park.</p> <p>Limits nighttime processing to a maximum of 60 days per year, unless otherwise authorized in advance by the Planning Director.</p> <p>Refer to the following condition of approval described below in Table S-3 (Noise):</p>	<p>Insignificant</p>

		<u>Third-Party 24-Hour Telephone Service</u>	
Air Quality	SO ₂ and CO emissions.	Refer to the following mitigation measures described above in Table S-1:	Insignificant
	Asphalt batch plant and asphalt haul truck odors that may be objectionable to residents along the haul route.	A-1 Air Emissions Mitigation Plan	Insignificant
	Haul truck exhaust odors that may be objectionable to residents along the haul route.	Refer to the following condition of approval described below in Table S-3 (Noise): Third-Party 24-Hour Telephone Service	Insignificant
Noise	Operation noise, off-site.	<u>24-Hour Contact Person</u> Requires the Planning Director be provided with the current name and/or position title, address, and phone number of the permittee's field agent and other representatives who shall receive all orders and notices as well as all communications regarding matters of condition and code compliance at the permit site.	Insignificant
	Truck traffic noise.	<u>Third-Party 24-Hour Telephone Service</u> Requires a third-party 24-hour telephone service to receive and log complaints. In operating this service, requires:	Insignificant
			- adjacent residents be provided number - post service number at entrance and on all permittee owned trucks - service to log complaints and transfer call to 24-hour contact person - written response within 3 days to each vehicle safety complaint, indicating the corrective action(s) taken - log maintained describing timing and method of complaint disposition - Planning Director may at any time review the complaint log, method of complaint disposition, and all related correspondence to determine if there is a need to modify this requirement

		<p><u>Noise Monitoring</u> Planning Director may direct, at permittee expense, noise monitoring to determine if the project exceeds County noise standards.</p> <p>If a noise exceedance is found to exist, requires immediately steps to either cease the operations creating the noise exceedance, <u>or</u> implement noise control measures that effectively reduce noise levels to within County noise standards.</p> <p><u>Vehicular Speed Limits/Enforcement</u> Requires the permittee advise all truck operators of the need to keep their vehicles within prescribed speed limits at all times. Independent truckers found to be repeatedly violations the speed limit, shall be prohibited by the permittee from future use of the permitted facilities.</p> <p><u>Happy Camp Road/Walnut Canyon Road Transition Improvements</u> Requires the permittee to consult with the Public Works Agency to identify feasible changes in the road design where the roadway transitions from Walnut Canyon Road to Happy Camp Road for northbound traffic. Funding for these repairs shall be incurred by the permittee via the Roadbed Maintenance and Repair Funds. (Mitigation Measure T-1).</p> <p><u>Road Triangle Fencing</u> Requires the permittee shall consult with the owner of the triangular shaped parcel, bordered by Happy Camp Road, Walnut Canyon Road and Broadway, to determine if the owner will permit the installation of a low level fence and "No Parking" signs. If not permit, the permittee is required to consult with the Planning Director to determine an alternative means of prohibiting parking within this area.</p> <p><u>Truck Identification Number</u> All company, leased and independent trucks using the permitted facility shall be readily identifiable by a unique number. Said number shall be located on all four sides of the</p>	
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		vehicle and sized to make them clearly visible to individuals wishing to make a complaint against the driver.	
Traffic	Average daily traffic increased by 668 one-way vehicle trips per day.	<u>Participation in Reciprocal Traffic Impact Mitigation Fee Agreement</u> Requires permittee participation in any reciprocal traffic mitigation fee agreement between the City of Moorpark and the County of Ventura that is designed to reduce cumulative traffic impacts.	Insignificant
	Peak hour traffic volumes increase by 41 trip (A.M.) and 34 (P.M.)		Insignificant
	Contributes to Year 2000 and Year 2015 traffic volumes.		Insignificant
	Vehicle accident rates are expected to remain high, with or without the presence of truck traffic.	<u>Warning Sign Sight Distance Evaluation</u> Requires the permittee to conduct an engineering evaluation of the Grimes Canyon Road/State Route 118 intersection to determine how many of the trees should be removed.	Insignificant

Summary:

The proposed project would not substantially alter the total area to be mined that was evaluated in the certified EIR and would only permit the continuation of existing operations, including the existing permitted level of truck traffic. Moreover, the impacts that would result from the excavation of the Phase 3 area that would be authorized by the requested modified CUP were previously evaluated in the certified EIR. The HMCP prepared to address impacts on biological resources has been implemented over the past 20 years and will become a permanent measure (in accordance with Condition of Approval No. 33) under the requested modified permit.

Thus, the proposed changes in the existing surface mining operation do not require major revisions of the certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

- 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [§ 15162(a)(2)].**

General Land Use and Traffic conditions:

There have been no substantial changes in land use in the vicinity of the subject mining facility since the current permit was granted in 1996. Aerial photographs taken between 1994 and 2016 of the project site and the surrounding area were reviewed. These photographs demonstrate that no new noise-sensitive uses (e.g., single-family dwellings) have constructed closer to the project site than those present when the certified EIR was prepared. Traffic volume on State Highway 23 has also not substantially changed since 1996 and remains at 6,000 to 7,000 average daily trips. The project site continues to be bordered on the west by the Wayne J Sand and Gravel mining facility, open space and park lands to the north and east, and low density residential uses and agriculture to the south.

City of Moorpark Attempted Regulation of Grimes Canyon Quarry Truck Traffic:

A changed circumstance has arisen with respect to potential truck traffic-related impacts associated with the CEMEX mining operation.

In October 2015, the City of Moorpark (Moorpark) entered into a "Traffic Agreement Between the Broad Beach Geologic Hazard Abatement District (District) and the City of Moorpark Regarding Truck Haul Routes and Monitoring

in Connection with the Broad Beach Shoreline Protection and Sand Replenishment Project” (Agreement; Attachment 1).

The Agreement concerns the District’s Broad Beach Restoration Project (Beach Project). As described in the Agreement, the Beach Project will involve the transport of sand, primarily from the Grimes Rock and CEMEX quarries located in Grimes Canyon, to the Beach Project site located in the City of Malibu. Sand for the Beach Project will be acquired by District and hauled by independent trucking operators. The District has stated its intent to begin delivering sand to its Beach Project site in the fall of 2017. According to the Agreement, approximately 300,000 cubic yards of sand will initially be deposited, and subsequent sand deposition events of approximately 300,000 cubic yards each will occur approximately every five years thereafter, over a 20-year period. Periodic interim or erosion nourishments involving placement of up to 75,000 cubic yards may also occur on an as-needed basis. The Beach Project is anticipated to generate approximately 44,000 one-way truck trips over the course of approximately three to five months, five days per week, during each of the aforementioned 300,000 cubic yard replenishment events.

The Agreement *expressly prohibits* all Beach Project-related Grimes Canyon sand hauling trucks from driving on State Route 23 and all other public roads through and adjacent to Moorpark. It instead *expressly requires* all such truck traffic to travel on a northern route on State Routes 23 and 126 through the City of Fillmore (Fillmore), the unincorporated County and the cities of Santa Paula, Ventura and Oxnard.

By prohibiting all Beach Project-related truck traffic from using any state highway or public road in the vicinity of Moorpark, and requiring all such traffic to travel north through the unincorporated County, Fillmore, and other jurisdictions, the Agreement would add an average of at least 13.2 miles to each one-way truck trip, resulting in approximately 5,082,000 additional vehicle miles traveled over the 20-year project. Exclusive use of this route would cause the emission of thousands of additional pounds of criteria pollutants and greenhouse gasses, compared to use of the direct lawful haul route from Grimes Canyon to the Beach Project site. The Agreement would also result in traffic-related impacts such as noise, dust, safety issues and congestion to occur and be concentrated along the mandated northern haul route. Attachment 2 of this Addendum includes a chart that summarizes the additional vehicle miles and air pollutant emissions that would result from the implementation of the Agreement.

It is reasonably foreseeable that the sand for the Beach Project will be obtained from the CEMEX mining facility. The operator of the nearby Grimes Rock facility stated in a July 19, 2017 letter (Attachment 3) that Grimes Rock “will not sell any product to or which is intended for Broad Beach” as long as the Agreement is in place. Neither Moorpark nor the District conducted any environmental review

pursuant to CEQA of the effects of the diversion of truck traffic to a longer haul route before executing the Agreement.

In analyzing the project-specific and cumulative traffic, air quality, and other potential impacts associated with the CEMEX mining operation in the certified EIR, the County relied upon traffic engineering studies that estimated that 93 percent of the truck traffic from the CEMEX facility would travel southbound through Moorpark with the remaining 7 percent travelling northbound to Fillmore. As the CEMEX facility is proposed to continue operating at the current permit limit of 980 one-way truck trips per day, it would be estimated that about 70 trips per day would travel northbound. During the initial year of the Broad Beach Project, approximately 44,000 truck trips would be required to deliver 300,000 cubic yards of sand. This is equivalent to an annual average of 141 northbound truck trips per operational day (Monday-Saturday) solely to serve the Broad Beach Project. Because the Broad Beach Project is designed to have sand delivered in a three to five month window, the number of truck trips travelling between the CEMEX facility and Fillmore would be up to about 550 one-way trips per day over a 3-month period.

It is recognized that the distribution of truck traffic will vary over time as construction projects are completed in various areas of Ventura County and adjoining jurisdictions. However, the certified EIR did not contemplate that truck traffic to and from the CEMEX mining site would be indirectly routed by Moorpark or other public or private entities without the County's knowledge or approval. Such indirect traffic routing arrangements could cause CEMEX-related truck traffic to conflict with the traffic distribution pattern utilized in the certified EIR. Thus, the traffic-related impacts associated with CEMEX's supply of sand for the Broad Beach Project subject to the indirect truck routing requirements of the Agreement have not been analyzed.

The County, as the permitting authority for CEMEX and the other quarries located in the Grimes Canyon area, is responsible for analyzing and mitigating the environmental impacts associated with these mining operations. In order for the County to fulfill this CEQA obligation in light of the aforementioned changed circumstance, the following condition of approval has been added to the recommended conditions of approval for the requested modified CUP.

XX. SUPPLY OF MATERIAL INVOLVING INDIRECT TRUCK ROUTING

Permittee shall not knowingly supply material to the Broad Beach Geologic Hazard Abatement District or any person or entity acting on its behalf ("Broad Beach"), if Broad Beach is party to an agreement with the City of Moorpark that precludes material hauling trucks from using the most direct haul route on a state highway in unincorporated Ventura County between the permitted facility and the Broad Beach project site, unless and until the County authorizes the arrangement by approving a discretionary permit modification. A discretionary permit modification granted by the County that authorizes the Permittee to serve the Broad Beach project shall include conditions of approval to monitor and regulate truck traffic associated with this specific project.

With the addition of this permit condition, the aforementioned changed circumstance will not result in new significant environmental effects, or a substantial increase in the severity of previously identified significant effects. Instead, the potential environmental effects associated with CEMEX's proposed supply of sand to the Broad Beach Project pursuant to an indirect truck routing arrangement will require subsequent analysis and approval by the County in accordance with CEQA and the County's Non-Coastal Zoning Ordinance.

Summary:

With implementation of a condition requiring future discretionary review of any indirect truck routing associated with the Broad Beach Project, the circumstances under which the project is undertaken have not substantially changed since the EIR was certified in 1996. No new significant environmental effects or a substantial increase in the severity of a previously identified significant effect would result from the proposed project. Thus, major revisions in the certified EIR are not required.

- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the Board of Supervisors certified the previous EIR, shows any of the following:**
 - a. The project will have one or more significant effects not discussed in the previous EIR [§ 15162(a)(3)(A)].**

The effects of greenhouse gas (GHG) emissions due to the surface mining activities on climate change were not discussed in the certified EIR as was generally the case with environmental documents prepared at that time. As discussed in Section 1 above, the level of GHG emissions that resulted from the

1996 project approved by the County did not exceed the current Threshold of Significance.

The estimated GHG emissions due to the current operations have already occurred in the past 20 years and are part of the existing setting or baseline condition for environmental review. Since the intensity of the permitted surface mining activities and the material transport operations are not proposed to increase above the historic level, the project would not result in a new impact on climate change.

The above conclusion does not account for the increase in GHG emissions that would result from the additional vehicle miles travelled by haul trucks that would occur with the implementation of the Broad Beach-Moorpark Agreement. This issue is addressed in Section 2 above.

In summary, no new information has been identified that indicates the project would result in a new significant effect not discussed in the certified EIR.

b. Significant effects previously examined will be substantially more severe than shown in the previous EIR [§ 15162(a)(3)(B)].

No new information has become available indicating that a significant effect identified in the 1996 EIR will be substantially more severe.

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative [§ 15162(a)(3)(C)].

No such mitigation measures have been identified.

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative [§15162(a)(3)(D)].

No such mitigation measures have been identified.

Therefore, based on the information provided above, there is no substantial evidence to warrant the preparation of a subsequent EIR. The decision-making body shall consider this addendum to the certified EIR prior to making a decision on the project.

C. PUBLIC REVIEW:

Pursuant to the CEQA Guidelines section 15164(c), this addendum to the certified EIR does not need to be circulated for public review, and shall be included in, or attached to, the certified EIR.

Prepared by:



Brian R. Baca, Manager
Commercial and Industrial Permits
Ventura County Planning Division

Attachments:

1. Traffic Agreement Between the Broad Beach Geologic Hazard Abatement District and the City of Moorpark.
2. Truck traffic analysis of Moorpark/BBGHAD Agreement
3. 7-19-17 letter to the City of Fillmore from P. Goldenring

**AGREEMENT BETWEEN THE BROAD BEACH
GEOLOGIC HAZARD ABATEMENT DISTRICT AND THE
CITY OF MOORPARK REGARDING TRUCK HAUL
ROUTES AND MONITORING IN CONNECTION WITH
THE BROAD BEACH SHORELINE PROTECTION AND
SAND REPLENISHMENT PROJECT**

This Agreement ("Agreement") is made and entered into this 7th day of October, 2015 by and between the Broad Beach Geologic Hazard Abatement District ("BBGHAD"), formed under California Public Resources Code Section 26500 *et seq.*, and the City of Moorpark, a California municipal corporation ("City") (collectively the "Parties"), to address and resolve the potential impacts of the Broad Beach Shoreline Protection and Sand Replenishment Project ("Project") on the City.

RECITALS

- A. The Project involves the transport of sand from sand and rock quarries immediately north of the City to replenish Broad Beach in the City of Malibu, California. As proposed, the Project would be split into major sand deposition events of approximately 300,000 cubic yards each, one at the inception of the Project and approximately every five (5) years thereafter or as needed. In addition, periodic interim or erosion nourishments involving up to 75,000 cubic yards would be permitted on an as needed basis. For purposes of this Agreement, the duration of the Project shall not exceed twenty (20) years, unless during the 20-year period of the Project, additional sand ~~disposition~~ ^{DEPOSITION} events are approved by the BBGHAD and applicable permitting agencies, including but not limited to the California Coastal Commission (CCC). For purposes of this Agreement, the term "Project" includes interim nourishment and ~~disposition~~ ^{DEPOSITION} events that occur during the 20-year period of the Project. This Project description may be subject to amendment as part of the permitting processes for each applicable permitting agency.
- B. As proposed, the Project's initial sand ~~disposition~~ ^{DEPOSITION} event and each major event occurring approximately every five (5) years thereafter would involve an estimated 44,000 one-way trips by sand hauling trucks over the course of approximately three to five months between the approximate hours of 7:00 a.m. and 9:00 p.m. five days per week. Two of the three sand and rock quarries (Grimes Rock and CEMEX) proposed as sources of the Project sand are located immediately north of the City in unincorporated Ventura County. The BBGHAD originally proposed haul routes to and from those two quarries that included using Walnut Canyon Road, Moorpark Avenue and Grimes Canyon Road south of Broadway Road that are located in or immediately adjacent to the City.
- C. The City has objected to the use of Walnut Canyon Road, Moorpark Avenue and Grimes Canyon Road south of Broadway Road as potential haul routes for the Project because of the significant impacts those routes would have on the City, including but not limited to: a disproportionate impact on the lower-income, disadvantaged and Latino portion of the community through which those trucks would travel; dangers caused to school children arising from the existence of eight school bus stops located along Grimes Canyon Road, the lack of sidewalks along portions of those roads which are used by school children to

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walk to and from two elementary schools, a middle school, the City library, local parks and other uses in close proximity to those routes; the sand, dust and other particulate matter emanating from the trucks ~~the~~ contribute to air pollution and may cause excess debris along local roads; the noise pollution from the high volume of trucks and times of day of the hauling operation; and the fact that both routes would cross active railroad tracks used by Amtrak and Metrolink as well as freight trains.

- D. On June 11, 2014, Mayor Janice Parvin of the City sent a letter to the Board of the BBGHAD objecting to the proposed haul routes for the Project through or adjacent to the City and asserting that use of those haul routes would constitute a public nuisance for which the City would seek to abate.
- E. On July 25, 2014, Mayor Janice Parvin of the City sent letters to the members of the California Coastal Commission and the State Lands Commission asking for each Commission to impose conditions on the respective permits required for the Project to preclude the use of truck hauling routes through or adjacent to the City.
- F. On December 11, 2014, the CCC held a public hearing in Monterey where, prior to action on the application, the BBGHAD withdraw its original coastal development permit application.
- G. On April 3, 2015, the BBGHAD submitted a revised coastal development permit application to the CCC, which is based on the Project description articulated in Recital "A" above, and a public hearing for this application has been scheduled before the CCC on October 9, 2015 or as may be continued thereafter from time-to-time.
- H. Since July 25, 2014, staff representatives of the BBGHAD and the City have met on several occasions to review and address the City's concerns with the proposed and potential haul routes and to develop a plan and system for using acceptable alternative and northerly haul routes that do not involve truck routes through or adjacent to the City, along with monitoring compliance with those alternative routes.
- I. BBGHAD staff and technical consultants have informed the City that a northerly route using State Highways 23 and 126 through the City of Fillmore, which avoid the City, are feasible and acceptable alternative routes for hauling sand from both the Grimes Rock and CEMEX quarries.
- J. The parties now desire to resolve the dispute over the truck routes for the Project and to formalize their agreement on which haul routes shall be used and not used and how compliance with the approved routing plan will be monitored and enforced.

TERMS AND CONDITIONS

In consideration of the matters set forth above, and for a full and valuable consideration, the Parties agree as follows:

- 1. Recitals. The Recitals above are true and correct, and are incorporated into the terms of this Agreement.



2. Prohibited Haul Routes. Trucks used for sand hauling in connection with the Project are prohibited from using Walnut Canyon Road, Grimes Canyon Road south of Broadway Road or any other highway, road or street in or immediately adjacent to the City of Moorpark, except in cases of "emergency," as defined in Section 5 below. This includes truck trips to and from the quarries at the beginning or end of the work shift.
3. Staging and Parking of Trucks. All trucks used for sand hauling in connection with the Project shall not be staged or parked in the City or immediately adjacent to the City, at anytime for the duration of the Project.
4. Permitted Haul Routes. All sand hauling trucks for the Project shall use Grimes Canyon Road (State Route 23) to State Highway 126 through Fillmore as the haul route from the Grimes Rock quarry and/or the CEMEX quarry to the Project site and the same route from the Project site to the Grimes Rock quarry and/or CEMEX quarry. If the Grimes Rock quarry is used, trucks will only enter and exit the northern entrance of this quarry.
5. Emergency Exception to Haul Route Prohibitions. An "emergency" exists, for purposes of Sections 2 and 6, only when a first responder (a fire or law enforcement official from an agency with applicable jurisdiction) determines all lanes on State Highway 126 west of State Highway 23 or State Highway 23 north of the quarry are closed to truck traffic. An emergency ceases to exist when a first responder determines that at least one lane becomes available to truck traffic on portions of State Highway 126 and State Highway 23 referenced above. If only one direction of travel is affected, the use of this Emergency Exception shall only apply to the direction of travel that is blocked and truck travel shall continue to use the permitted haul route in the direction that is not blocked. If an emergency exists ^{THAT} ~~the~~ precludes the use of the permitted haul route, then Grimes Canyon Road south of Broadway may be used but not Walnut Canyon Road unless Grimes Canyon Road south of Broadway is also blocked due to an emergency condition, and then only for the blocked direction of travel.
6. Requirements for Use of Emergency Exception. In the event of an emergency as defined in Section 5 above, use of routes through or adjacent to Moorpark may only occur between the hours of 7 A.M. and 8:15 P.M., Monday through Friday, except holidays. The BBGHAD shall provide City with immediate notice of the commencement of the Emergency Exception (not more than one hour after a determination of emergency). The notice of commencement of the Emergency Exception shall be provided by electronic mail to the City's City Manager (currently at SKueny@MoorparkCA.gov) and Community Development Director (currently at DBobardt@MoorparkCA.gov) and by way of telephone to the City's Community Development Director (currently at (805) 517-6281). During the period that any hauling is allowed or directed through Moorpark, the BBGHAD shall prohibit its contractors and subcontractors from using haul trucks with compression release engine brakes, known as "jake brakes" within the City (except under emergency operating conditions).

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7. Duration of Haul Route Prohibitions. The haul route prohibitions shall apply to the BBGHAD's use of the Grimes Rock Quarry and CEMEX Quarry throughout the duration of the Project. The BBGHAD shall provide City notice of the commencement and completion of each of the sand ~~disposition~~ ^{DEPOSITION} events for the Project.
8. Hauler Agreements. The BBGHAD shall include the haul route prohibitions in any agreements entered into between the BBGHAD, the quarries, and any contracted haulers and required contracted haulers to include such terms in their agreements with their subcontracted haulers involved in the Project. The City of Moorpark shall be a named beneficiary of this term in those contracts.
9. GPS Tracking Devices. The BBGHAD shall require all truck owners and operators used in the Project to place and maintain GPS tracking devices in each truck used for this Project, with a penalty imposed on truck hauler companies, subcontractors and independent contractors by BBGHAD and paid to City by BBGHAD, as provided in Section 12, for failure to use, removal or tampering with the GPS device while the truck is being used for this Project.
10. Computer Monitoring. Prior to the commencement of the first sand ~~disposition~~ ^{DEPOSITION} event for the Project, the BBGHAD or its contractor or consultant shall, at BBGHAD's cost, provide, install, make operational and maintain in working order for the duration of the Project, software for at least one City-owned and operated computer that allows the City to monitor by web-based GPS the location of ~~the~~ all BBGHAD-related truck traffic in real time from the City-owned computer. ~~AD~~
11. License Plate Monitoring. On or before the first day of the third and subsequent interim nourishment sand ~~disposition~~ ^{DEPOSITION} event during the term of the Project, and at the beginning of each day of that event, the BBGHAD shall provide City with the license plate numbers of all trucks hauling sand that day on BBGHAD's behalf to assist City with additional monitoring and enforcement of the interim nourishment sand ~~disposition~~ ^{DEPOSITION} events. The requirements of this Section shall be in addition to, and not as a substitute for computer monitoring under Section 10 or any other provision of this Agreement.
12. Penalties on Haulers who Violate Terms. The BBGHAD shall establish and enforce penalties, including monetary penalties, for any violations of the haul routes by the owners and operators of trucks engaged in Project hauling operations. Penalties shall be paid to the City, as provided in Section 13.
13. Liquidated Damages. In the event a truck engaged in the Project for the BBGHAD is determined and documented by the City as operating on a prohibited haul route as defined in Section 2, parking or staging in the City as prohibited by Section 3, or violating the terms of the emergency exception as provided in Sections 5 and 6, the BBGHAD shall pay to City the sum of \$100.00 for each such documented truck trip or violation that occurs in the first ten (10) days of operation, \$200.00 for each such documented truck trip violation that occurs in the eleventh (11th) through thirtieth (30th) day of operation, \$250.00 for each such documented truck trip violation that

occurs in the thirty-first (31st) through sixtieth (60th) day of operation, and \$500.00 for each subsequent truck trip violation, as liquidated damages for the violation. The amounts shall be paid to City within ten (10) days of the City's submittal to BBGHAD of the evidence of the violation. This amount shall be accepted by City as liquidated damages and not as a penalty and as City's sole and exclusive remedy for damages (but City shall not be prohibited from seeking specific performance or injunctive relief in addition to obtaining such liquidated damages, as provided in Section 14.) For purposes of this Agreement a violation is documented if there is a recorded incident of the violation as detected and documented from the computer monitoring software as provided in Section 10, photographic and dated evidence collected by the City, by a copy of a Sheriff Department, California Highway Patrol or City Code Enforcement incident report or citation, or by other means sufficient to prove a violation as provided by the City to BBGHAD. The BBGHAD hereby stipulates and agrees that such amount is a reasonable estimate of damages that will be incurred by City in the event of such violation, pursuant to California Civil Code Section 1671 *et seq.*, and that the exact amount of such damages would be extremely difficult and impractical to determine. BBGHAD desires to limit the damages for which it might be liable for such violations of this Agreement and the Parties desire to avoid the costs and delays they would incur if a lawsuit were commenced to recover damages. The Parties acknowledge this provision by placing their initials below:



BBGHAD



City

14. Additional Remedies and Enforcement. In addition to the provisions of Section 13, the remedies for breach of the Agreement by City shall also include injunctive relief and/or specific performance.
15. Notice of Changes to the Project. The BBGHAD shall provide written notice to the City not less than five days after the submittal by the BBGHAD of a request to the CCC or the State Lands Commission to modify the Project in a manner that affects the use of truck haul routes, the duration of the use of those routes or the quantities of truck trips used in the Project.
16. Third Party Beneficiaries. No term or provision of this Agreement is intended to or shall be for the benefit of any person or entity not a party hereto, and no such other person or entity shall have any right or cause of action hereunder.
17. Defense and Indemnity. The BBGHAD agrees to defend, indemnify, and hold harmless City, at BBGHAD's sole expense, with counsel reasonably acceptable to City, any claim, lawsuit, or cause of action brought to challenge the City's approval of this Agreement. The BBGHAD further agrees to reimburse City for any costs and/or attorneys' fees which City may incur as a result of any such action. City may, at its sole discretion, participate in the defense of any such action at City's cost, but such participation shall not relieve the BBGHAD of its obligations under this Section.



18. City Release of Claims. Except with respect to enforcement of the terms of this Agreement, City hereby waives and releases the BBGHAD, its officers, employees, agents, attorneys and consultants, (collectively "BBGHAD Released Parties"), and each of them, of and from any and all claims, demands, disputes, damages, liabilities, causes of action, and other claims or rights to relief, legal or equitable, of every kind and nature, whether known or unknown, past or present, which City has or may have against the BBGHAD Released Parties, arising out of, or in any way related to the Project.
19. City Waiver of Cal. Code Civ. Proc. Section 1542. City being fully aware of the meaning of Cal. Civil Code §1542, and on the risks attendant with waiver thereof, expressly waives any rights it may have, or claims to have against the BBGHAD Released Parties, or any of them, under the provisions of Cal. Civil Code §1542, which provides:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

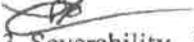


City

20. Joint Drafting and Mutual Interpretation. This Agreement shall be construed and interpreted in a neutral manner. This Agreement is a negotiated document and shall be deemed to have been drafted jointly by the Parties, and no rule of construction or interpretation shall apply against a particular party based on the assumption or contention that the Agreement was drafted by one of the Parties. In this regard, the provisions of Cal. Civil Code § 1654 are waived and deemed inapplicable to the interpretation of this Agreement.
21. Right to Independent Counsel. The Parties acknowledge and represent that they have had the right to and benefit of consultation with independent legal counsel and expert consultants. The Parties have read and understand the entirety of this Agreement, and have been advised as to the legal effects of this Agreement, as to, for example, their rights and obligations, and hereby willingly and voluntarily agree to every term of this Agreement.
22. Entire Agreement. This Agreement contains the entire understanding of the Parties with respect to the matters addressed in it and incorporated herein, and supersedes any and all oral agreements between or among the Parties regarding the matters resolved herein, which are hereby merged into this final Agreement. There are no representations, covenants, or undertakings other than those expressly set forth or expressly incorporated herein. The Parties acknowledge that no Party, or any agent or attorney of any Party has made any promise, representation, or warranty whatsoever, express or implied, not contained herein to induce any other Party to



execute this Agreement. The Parties acknowledge that they have not executed this Agreement in reliance on any promise, representation, or warranty not specifically contained herein or expressly incorporated herein. The Parties, and each of them, fully represent and declare that they have carefully read this Agreement ~~and all exhibits hereto~~, and that they have voluntarily signed this Agreement. 

-  23. Severability. Should any provision of this Agreement be declared or determined by a court of competent jurisdiction to be illegal, invalid, or unenforceable, the invalidity, illegality, or unenforceability shall not affect any other provision of the Agreement and the remainder of the Agreement shall be construed as if the invalid, illegal, or unenforceable provision had never been included.
24. Governing Law and Venue. The validity of this Agreement and the interpretation of any of its terms or provisions shall be governed by the laws of the State of California. Any action, suit or proceeding related to, or arising from, this Agreement shall be filed in the appropriate court having jurisdiction in the County of Ventura.
25. Change in State Law or Other Event Materially Affecting Agreement. If a change in state law occurs that materially affects the Parties' obligations or rights under this Agreement or under the Pass Through Agreement, whether such change occurs through enactment of a statute or by virtue of a final judicial decision, the Parties shall have the duty to take such actions as may be reasonably necessary to modify such agreement(s) so that the Parties' duties and rights under such agreement(s) are consistent with any such change in law.
26. Amendments or Modifications. This Agreement may be amended or modified only by the mutual agreement of the Parties and only when all Parties memorialize in writing their consent to amend or modify.
27. Notices. Any notice required to be given, except for immediate notices of the invocation of the Emergency Exception as provided in Section 5 and 6 which has its own notice provisions, shall be deemed to have been given by depositing such notice in the United States mail, postage prepaid, and addressed as follows:

TO CITY:

TO BBGHAD:

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City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021
Attention: City Manager

Mark Goss
c/o Elkins Kalt, et al
2049 Century Park East, Suite 2700
Los Angeles, CA 90067
tel.: (310) 699-9666
email:
markchristiangoss@gmail.com

Kenneth A. Ehrlich
Elkins Kalt et al.
2049 Century Park East, Suite 2700
Los Angeles, CA 90067
tel. (310) 746-4400
email: kehrlich@elkinskalt.com

Either party may, from time to time, by written notice to the other, designate a different address or contact person, which shall be substituted for the one above specified. Notices, payments and other documents shall be deemed delivered upon receipt by personal service or as of the third (3rd) day after deposit in the United States mail.

28. No Admission of Liability. Nothing in this Agreement shall be construed as an admission of liability or wrongdoing by any Party to this Agreement or an admission of any claim against any Party hereto.
29. Effective Date. This Agreement shall become effective on the date that both parties have executed this Agreement.
30. Attorneys' Fees Provision. If any of the Parties breach any of the provisions of this Agreement, necessitating the filing of a civil action or any other proceeding to enforce any or all of the terms of this Agreement, the prevailing party may recover reasonable attorneys' fees and costs incurred in enforcing the terms and provisions of this Agreement.
31. Captions and Interpretations. Paragraph titles or captions contained in this Agreement are inserted as a matter of convenience and for reference, and in no way define, limit, extend, or describe the scope of this Agreement.
32. Counterparts. This Agreement may be signed in counterparts and the executed counterparts shall together form the executed Agreement. A facsimile version of any Parties' signature shall serve as an original thereof.
33. Copy Admissible. In any action or proceeding relating to this Agreement, the Parties stipulate that a copy of the Agreement may be admissible to the same extent as the original Agreement, unless the exceptions set forth in Section 1521 of the Cal. Evidence Code are found to be applicable.

34. Signatories. Each signatory warrants and represents that he or she is competent and authorized to execute this Agreement on behalf of the party for whom he or she purports to sign.

IN WITNESS WHEREOF, the undersigned have executed this Agreement.

City of Moorpark



By: Jahice S. Parvin
Jahice S. Parvin, Mayor

Attest:

Maureen Benson
Maureen Benson, City Clerk

Broad Beach Geologic Hazard Abatement District

By: Walter L. Kanno
~~President~~ of the Board
CHAIR

Attest:

[Signature]
Secretary

Moorpark / BBGHAD Agreement

Analysis of truck traffic vehicle miles travelled (VMTs)

Length of Moorpark-preferred (northern) route =
 Length of Direct southern route =

53.7 miles
 40.5 miles

Year	Cubic Yards	One-way Truck trips	Vehicle miles travelled		Nox Emission Factor (Pounds per mile)	Vehicle Emissions	Vehicle Emissions	Excess NOx emissions due to Agreement (Pounds)	Excess Nox emissions (Pounds/day)	GHG Emission Factor (MTCO2e/mile)	Excess GHG Emissions (MTCO2e)
			Northern Route	Southern Route		(Pounds of NOx) Northern Route	(Pounds of NOx) Southern Route				
1	300000	44000	2362800	1782000	0.0395	93330.6	70389	22941.6	62.85	0.5	290400
2	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
3	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
4	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
5	300000	44000	2362800	1782000	0.0395	93330.6	70389	22941.6	62.85	0.5	290400
6	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
7	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
8	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
9	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
10	300000	44000	2362800	1782000	0.0395	93330.6	70389	22941.6	62.85	0.5	290400
11	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
12	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
13	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
14	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
15	300000	44000	2362800	1782000	0.0395	93330.6	70389	22941.6	62.85	0.5	290400
16	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
17	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
18	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
19	75000	11000	590700	445500	0.0395	23332.65	17597.25	5735.4	15.71	0.5	72600
20	300000	44000	2362800	1782000	0.0395	93330.6	70389	22941.6	62.85	0.5	290400
Totals =	2625000	385000	20674500	15592500		816642.75	615903.75	200739	27.50		2541000
Excess VMTs with Moorpark/BBGHAD Agreement =				5082000							

PETER A. GOLDENRING
JAMES E. PROSSER
EDWIN S. CLARK

THE LAW OFFICES OF
GOLDENRING & PROSSER
A PROFESSIONAL LAW CORPORATION
ATTORNEYS AND COUNSELORS AT LAW
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VENTURA, CALIFORNIA 93003-6622

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FACSIMILE (805) 642-3145
EMAIL
Attorneys@GoPro-Law.com

IRA GOLDENRING
(1924-1986)

July 19, 2017

Via Email drowlands@ci.fillmore.ca.us

Mr. David W. Rowlands
City Manager
City of Fillmore
250 Central Avenue
Fillmore, California 93015

Re: Grimes Rock, Inc.

Dear Mr. Rowlands:

It is our understanding that the City of Fillmore has reached out to our client Grimes Rock, Inc. and Russell Cochran for some clarification as to the status of Grimes Rock, Inc. and the City of Fillmore. It is important to recognize the many year ongoing relationship between Grimes Rock and the City of Fillmore and our client is truly appreciative of that cooperative relationship. That partnership has developed over several decades, has been mutually beneficial and our client believes it is a successful model that allows for credible business activity but at the same time always being sensitive to the concerns of the community of Fillmore and its citizens.

From our client's perspective, it is extremely unfortunate that the City of Moorpark has chosen to act outside of the normal planning process. First, the City of Moorpark did that with the Broad Beach Geologic Hazard Abatement District ("Broad Beach") where the City of Moorpark essentially threatened Broad Beach that if it did not reach a contractual agreement with the City of Moorpark, the City would appear at every public hearing, every agency and make life as difficult as possible for Broad Beach and their efforts to address their problem. This is documented in the public records we have obtained. Broad Beach chose to make an agreement with the City of Moorpark and as you know that matter is presently in the Courts. This agreement prohibits Broad Beach from any transport of materials on any roadway, including public highways and state highways, through Moorpark even though there clearly is a legal right to do so. The route through Moorpark is known by all to be the shortest, most efficient and most environmentally appropriate haul route. The effect of this agreement is to result in the potential of significant impacts to the City of Fillmore, the County of Ventura, our client and numerous other communities should any agreement be reached between Broad Beach and CEMEX for the acquisition of the material, something we believe to be in fact occurring.

The second event is the now disclosed CEMEX and City of Moorpark agreement that is outside of the statutory process for funding traffic mitigation and is effectively a "purchase for silence" by CEMEX from the City of Moorpark with respect to the CEMEX 50 year plus CUP

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pending application. From our client's perspective, yet again, the City of Moorpark has stepped outside of the regular statutory planning process and acted in a way that not only is damaging to the City of Fillmore and numerous other communities but to private industry and like situated competitors such as Grimes Rock. As you know, Grimes Rock acts under a very strict CUP which defines specifically the vehicular traffic to and from the mine. As part of that, Moorpark demanded in the CUP process limitations of truck trips from Grimes Rock through Moorpark and to meet the demands of Moorpark, the County of Ventura's Planning Department insisted on including in the CUP what is referred to as a "internal haul route" which requires vehicles that are to travel south through Moorpark to transit through the mine property, not use the Grimes grade and exit at a "south entrance." This also was designed from a traffic safety perspective for the citizens in the area, including many citizens of Fillmore, to virtually eliminate trucks transiting to and from the Grimes Rock mine using the Grimes grade up or down. This "internal haul route" took over three years and \$2,000,000 to implement and is designed not just to limit traffic through Moorpark but increase public safety on State Route 23.

The effect, as I trust you are aware, of the CEMEX and City of Moorpark \$1,500,000 "we will not oppose or dispute your application" agreement is that CEMEX will proceed through a CUP process without any environmental, traffic, public safety or citizen involvement from the City of Moorpark on a 50 plus year CUP for truck traffic of approximately 1,100 trips. To our understanding under the application none of the trips of CEMEX are designed, unlike Grimes Rock CUP, to travel one way or the other, there are no "alternate" or additional entrances being required, there are no monitoring requirements of origin and destination of trucks as is required of Grimes Rock and the CUP is for nearly twice in duration. Grimes Rock's concerns include the fact that it is believed that CEMEX presently uses roughly 50 or 55 percent of the truck trips being sought. That leaves somewhere in the vicinity of 400 to 500 truck trips per day, six days a week, available to CEMEX for use on additional projects and that would include Broad Beach, as well as any number of other projects many of which would be accessed through Highway 126 and thus through Fillmore. The effect would be that the CEMEX traffic not only would not go through Moorpark but would go up and down the Grimes grade, which is exactly what the County wanted to abate under the Grimes Rock CUP.

For these and many of the other reasons, Grimes Rock wishes to express its concerns with respect to what has unfolded, not just from a fairness perspective but from an impact perspective as Grimes Rock has stepped to the plate and always will step to the plate with the City of Fillmore to "do the right thing" and will always act within its CUP which practically and legally captures and identifies all of the truck trips that could impact Fillmore. Grimes Rock has and always will step to the plate in regard to participating in any and all mitigation and public safety projects to benefit the City of Fillmore because of its trips which are identified in the traffic studies and in the CUP structure.

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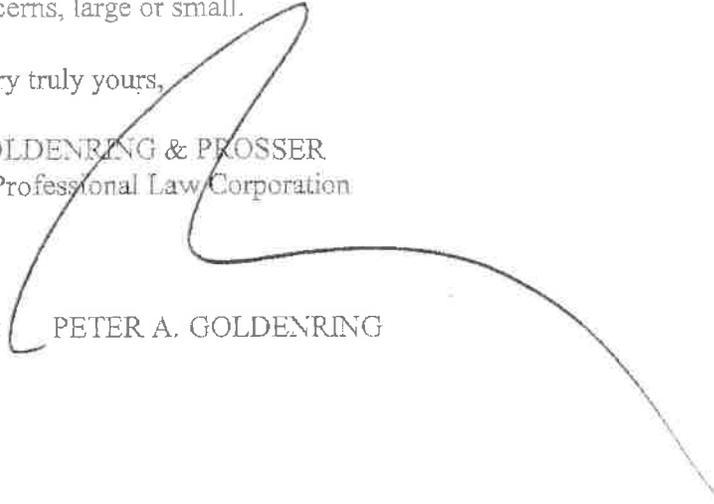
Obviously our client is frustrated because this all feels extraordinarily unfair in terms of treatment for like situated mines and from our perspective is likewise extraordinarily unfair to Fillmore given the now two private deals that the City of Moorpark has made, first with Broad Beach and then with CEMEX which, from our perspective, can only result in substantial additional traffic impact to the City of Fillmore.

Because of all this and in the spirit of acting in the utmost good faith, we wish to affirm to you that Grimes Rock, Inc. will not sell any product to or which is intended for Broad Beach so long as all of these aberrations and the resulting traffic impacts are unrecognized because of these private agreements. It places unfair burdens on the City of Fillmore and treats our client unfairly as was most recently confirmed when the City of Moorpark admitted publicly that they would not dispute any issues with Grimes Rock if only Grimes Rock would enter into an agreement similar to CEMEX with the City of Moorpark. Our client declined because the whole demand was offensive, outside of statutory requirements and at its core resulted in different cities being treated differently and in this case the City of Fillmore being treated differently for no reason other than the City of Fillmore was choosing, as it always has, to act honorably, consistent with the law and as an honest broker and partner for all of its citizens and members of the community. It is our hope that CEMEX will make the same commitment and exhibit the same attitude with the City of Fillmore as has Grimes Rock, Inc. because it is not just about the City of Fillmore but how we all live together in this community.

I am available to answer any questions that may assist you in regard to this matter and you and your staff may always reach out and communicate directly with Grimes Rock, Inc. and specifically Rusty Cochran on any issues or concerns, large or small.

Very truly yours,

GOLDENRING & PROSSER
A Professional Law Corporation

By:  PETER A. GOLDENRING

PAG:nc
cc: Kimberly L. Prillhart, County of Ventura
Fillmore City Council
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