State Clearinghouse No. 88090517

DRAFT ENVIRONMENTAL IMPACT REPORT

FOR

ALBERHILL RANCH SPECIFIC PLAN 89-2

WITHIN

2,667 ACRE ANNEXATION AREA

City of Lake Elsinore
130 South Main Street
Lake Elsinore, CA. 92330

Prepared by:

DOUGLAS WOOD & ASSOCIATES
1000 Quail Street, Suite 165
Newport Beach, CA. 92660
(714) 851-3119

Project Proponent:

LONG BEACH EQUITIES, INC.
2038 Armacost Avenue
W. Los Angeles, CA. 90025

APRIL 1989

TABLE OF CONTENTS

TECHNICAL APPENDICES
Bound Separately

APPENDIX	
A.	Geotechnical Feasibility Investigation, Alberhill Ranch, G.A. Nicoll & Associates, Inc. (March 1988).
	Supplemental Geotechnical Feasibility Investigation, 1,100 Acres,Alberhill Ranch, Highland Soils Engineering, Inc. (October, 1988).
B.	Biological Assessment - Alberhill Ranch, Steven G. Nelson, Consulting Biologist (May 1988).
	Stephens' Kangaroo Rat Study for Alberhill Ranch, The Planning Center & SJM Biological (September 1988).
C.	An Archaeological Assessment - Alberhill Ranch, Christopher E. Drover, Ph.D. (October 1987).
	An Archaeological Assessment of an Addendum to the Biddle Property/Alberhill Ranch Feasibility Study, Christopher E. Drover, Ph.D., (March 1988).
	A Paleontological Survey and Assessment of the Alberhill Ranch Near Lake Elsinore, Riverside, California, Heritage Resource Consultants (September 1988).
D.	Alberhill Ranch Traffic Study, Kunzman Associates (March 1989).
E.	Sewer, Water & Hydrology Analysis - Alberhill Ranch, NBS/Lowry (June 1988).
F.	Noise Assessment for the Alberhill Ranch Specific Plan, County of Riverside, Mestre Greve Associates (March 1989).
G.	Air Quality Analysis for the Alberhill Ranch Specific Plan, County of Riverside, Mestre Greve Associates (September 1988).
H.	Alberhill Ranch Fiscal Analysis, Lake Elsinore, California, Natelson Levander Whitney, Inc. (March 1989).
I.	Notice of Preparation and Project Correspondence

LIST OF EXHIBITS

LIST OF TABLES

I ENVIRONMENTAL SUMMARY

For ease of review, this section of the Environmental Impact Report (EIR) summarizes existing conditions, project impacts and mitigation measures for each environmental element that may be affected by the proposed Alberhill Ranch Specific Plan This section is a summary with a full analysis of each environmental element contained in Section IV, Description of Environmental Setting, Impacts and Mitigation Measures

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
A Geology, Soils & Seismicity		
Approximately 500 acres of the 1,853 acre Alberhill Ranch Specific Plan site have been mined for clay, resulting in deep cuts and several alteration of the natural topography Walker Canyon, containing Temescal Creek, crosses the site in a northwesterly direction On-site elevations range from 1,200' to 1,900' The site contains extensive areas of 25% slope A number of faults are present on-site, although no conclusive evidence for active faulting was found Liquefaction is likely within the lower drainage areas in the northwest portion of the site	From a geotechnical standpoint, the site will be suitable for development Project implementation will alter the existing natural landform Remedial grading and recontouring will be necessary in the mined out areas of the site Grading will also be needed to stabilize potential landslide areas There is the potential for soil settlement and liquefaction impacts during a seismic event Project grading is anticipated to balance on-site The project proposes retention of the majority of the primary ridgeline which extends through the center of the site Also, 169 acres are proposed for development at a density of 0 2 d u /acre, minimizing grading impacts in the southerly portion of the site Another 133 acres are proposed for designation as "RCD", Residential Constraint Designed, clustering units to minimize grading Areas of uncertified fills will require either full or partial removal and recompaction	Within landslide areas, partial removal and/or buttressing will be required Additional slope stability analyses shall be performed The presence or absence of suspected faults on-site shall be confirmed by trenching Erosion of slopes shall be controlled Additional study is needed to develop mitigations for liquefaction prone soils Project grading for the Alberhill Ranch Specific Plan will blend with the natural topography as much as possible, by clustering development, terracing on hillsides and by preserving 531 acres of natural open space

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
B Hydrology		
Drainage to the site is tributary to the Santa Ana River through Temescal Creek, which ultimately flows into the Pacific ocean near Newport Beach Temescal Creek is the main drainage course on the site, collecting runoff from the Walker Canyon area In addition, drainage flows from Rice Canyon into Walker Canyon on-site, then flows west to the Prado flood Control Basin The City of Lake Elsinore General Plan designates a small portion of the site near Walker Canyon as "flood plain and flood way"	Project development will increase runoff on-site, increasing flows in Walker Canyon Creek and other downstream facilities The proposed storm drain system would discharge flows into Walker Canyon Creek just west of I-15 Due to the magnitude of the flow at the discharge point, energy dissipatators are required to prevent erosion of the stream bed Some improvements (minimal) to Walker Canyon Creek are anticipated adjacent to the proposed commercial area to prevent channel erosion and to respond to potential flood hazards in this area Runoff entering the Creek will contain minor amounts of pollutants typical of urban use	All drainage facilities shall conform to the standards of the Riverside County Flood Control and Water Conservation District and the City of Lake Elsinore Community Development Department Erosion control devices and an energy dissipatating device shall be provided in order to protect the existing stream bed of Walker Canyon Creek, if necessary
C Noise		
A major noise corridor exists along Interstate 15, with noise levels directly adjacent to I-15 exceeding 70 CNEL Secondary noise corridors include Riverside Drive and Lakeshore Drive, with noise levels exceeding 65 CNEL	Construction noise represents a short term impact on ambient noise levels Traffic generated by the Alberhill Ranch Specific plan will result in substantially increased noise levels along on-site and off-site roadways Of the off-site roadway links ex-periencing a noise increase greater than 3 dB, only two are adjacent to existing residential use	Construction hours will be limited to minimize noise impacts to existing residential development All on-site residential lots and dwellings shall be sound attenuated so as not to exceed an exterior standard of 65 dB CNEL in outdoor living areas and an interior standard of 45dB CNEL in all habitable rooms The project proponent shall participate in any in-place City off-site highway noise mitigation program

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
	Terra Cotta Road between Nichols and Lakeshore, and Robb Road between Coal and Terra Cotta Along Terra Cotta Road, the 65 CNEL contour is projected to extend 2 feet past the right-of-way Along Robb Road, the 65 CNEL contour is projected to extend 49 feet past the right-of-way On-site lots along Lake Street, Robb Road and Coal Road may experience noise levels over 65 CNEL without mitigation	
D Climate and Air Quality		
The project site is located in the South Coast Air Basin Quality Management District (SCAQMD) The Basin has been designated a nonattainment area for ozone, carbon monoxide, nitrogen dioxide, total suspended particulates and lead The closest air monitoring station to the site is in Perris	Temporary air quality impacts will result from project construction When the project is completed and occupied, the project area will be directly affected by (1) vehicle emissions from project traffic, (2) indirectly influenced by pollutants emitted by power generation plants which serve the project in the South Coast Basin Projected total emissions will increase existing subregional emissions by 10 7%-23 3% within Source Receptor 25 The balanced land uses proposed by the Alberhill Ranch Specific Plan will allow residents to satisfy their recreational,commercial and educational needs within the project boundary, thereby reducing residents' reliance on motor vehicles Bicycle/Pedestrian paths are provided between land uses Air quality impacts are considered a significant adverse impact of the project	To minimize dust generation SCQAMD Rule 403 requiring watering during grading operations shall be adhered to

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
E Wildlife and Vegetation		
Native coastal sage scrub vegetation is found over the steeper hillsides on-site Coastal sage scrub supports a moderate diversity of wildlife Several bird species were observed foraging within the coastal sage scrub, including raptorial birds Relatively large areas of introduced grassland are found on the more gentle southfacing hillsides of the site, replacing native communities following dryland farming Native species have been replaced with adventitious "weedy" species Introduced grassland supports a limited diversity of wildlife The riparian/freshwater marsh vegetation complex forms a continuous border along most of Temescal Creek, varying in width from 30' to 100' This habitat supports abundant and diverse wildlife habitats These habitats serve as wildlife dispersion corridors important to regional wildlife populations A Stephens' kangaroo rat trapping program determined that the SKR (an endangered species) occurs on-site The endangered least bells vireo may also be present on-site along Temescal Creek There are three sensitive plant species believed to exist on the southwesterly flank of Alberhill Mountain on-site (Allium fimbriatum var munzii, Dudleya multicaulis and Harpagonella palmeri)	Project implementation will require the removal of vegetation on approximately 1,300 acres of the site, which will destroy wildlife habitats as well However, the Alberhill Ranch Specific Plan retains 531 acres of open space, permanently preserving sensitive riparian habitats along Temescal Creek, avoiding impacts to the least bells vireo Development in areas presently occupied by the SKR will eliminate existing populations of the species The three sensitive plant species known to exist on the southwestern flank of Alberhill Mountain will be removed by project development, resulting in the loss of sensitive resources potentially occurring here These impacts are considered "significant"	An erosion control plan shall be prepared for all development areas draining into Temescal Creek Any modification to the Creek will require permits from the Department of Fish and Game and the U S Fish and Wildlife Service Revegetation of slopes shall utilize native species As the SKR is on the Federal Endangered Species List, project development will require a permit from the U S Fish and Wildlife Service An Assessment Study shall be undertaken regarding the potential existence of the three sensitive plant species believed to exist on the southwestern flank of Alberhill Mountain

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
F Land Use		
All but eight acres of the 1,853 acre Alberhill Ranch Specific Plan and all of the 822 acre Annexation Area are currently located in unincorporated Riverside County, within the Sphere of Influence of the City of Lake Elsinore Clay mining activities were conducted on the Specific Plan site for the past 100 years, thought they were recently discontinued The 822 acre Annexation Area is composed of five physically separate areas to the north, west and south of the Specific Plan site The area is largely vacant, though some residences exist in the Nichols Road/Terra Cotta Road area The majority of the Specific Plan site and some of the Annexation Area is designated for "Mineral Resources" on the County of Riverside Open Space and Conservation Map Portions of the site and Annexation Area are designated "Areas Not Designated as Open Space and "Mountainous" Surrounding land use include clay mining activities to the west of the site, near Lake Street interchange To the north and east, where terrain is steeper, is primarily vacnat land with rural residential uses Residential development has recently occurred immediately south and west of the project site	Project approval will result in the annexation of 2,667 acres into the City of Lake Elsinore On-site land use within the Annexation Area will not be altered by project approval, as no development is proposed Proposed prezoning designations within the Nichols Road/Terra Cotta Road portion of the Annexation Area include 45 acres of R-1 zoning, allowing 270 d u and 71 acres of R-S, allowing 36 d u The rest of the Annexation Area is proposed for designation as "SPA", Specific Plan Area For the Alberhill Ranch Specific Plan site, project approval will result in a "Specific Plan" designation on the City General Plan and the construction of 3,705 d u on 896 acres of the site, 531 acres of open space, 254 acres of commercial use, 30 acres parks and 50 acres of school/park sites A gross density of approximately 2 d u /acre is achieved by the proposed Specific Plan, which is comparable to the residential densities immediately adjacent to the site In the extreme southern portion of the site, 169 acres are designated "Rural Residential" (2 d u /ac), which is compatible with the very low density residential uses existing off-site east of Terra Cotta Road	The preparation of the Alberhill Ranch Specific Plan complies with the City of Lake Elsinore General Plan designation and it contains special land use and design controls that are not available when land develops on a tract by tract basis Adequate school facilities, parks and open space, circulation, etc are provided, as are design guidelines, site planning criteria, etc No additional mitigation for impacts to land use are recommended

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
G Population and Housing		
The City of Lake Elsinore had a 1988 population of 12,800 SCAG GMA-1 Baseline Projections call for a 2010 population of 45,597 within 20,739 d u Central Riverside had a 1988 population of 237,100, with a projected population of 581,400 for the year 2010	Utilizing the factors established by the City of Lake Elsinore for park dedication requirements, a population of 11,841 persons would be generated by the Alberhill Ranch Specific Plan A population of 1,114 persons would be generated within the portions of the Annexation Area propsed for pre-zoning as R-1 and R-S The resulting 12,955 population represents a 100% increase to the 1988 City population, however, SCAG GMA-1 Baseline Projections are not exceeded The Alberhill Ranch Specific Plan also proposed 254 acres of commercial use, creating an estimated 3,097 jobs for project and area residents, enhancing the job/housing balance in the region	No mitigation measures are recommended for the increased housing and population generated by the project Mitigation measures relative to the increased demand for service as a result of the annexation request are discussed in Section IV M , Public Facilities and Services
H Energy Resources		
Since the termination of clay mining activities on-site, the project site consumes little or no energy	The Alberhill Ranch Specific Plan will create a demand for 749,200 cubic feet of natural gas per day and 182,946 kwh of electricity per day The 306 units which could be accommodated within the R-1 and R-S zoning of the annexation area will consume 67,983 cubic feet of natural gas and 6,000 kwh of electricity	The Architectural Guidelines for the Alberhill Ranch Specific Plan requires that future development comply with several measures relating to energy conservation

I Aesthetics

The 1,853-acre Alberhill Ranch site is traversed by a major ridgeline located west of and parallel to I-15, so that the primary appearance of the site from areas to the east is one of undeveloped hillsides and open space Within the interior of the site, the natural terrain has been extensively altered by clay mining activities over the past 100 years, resulting in large pits, access roads, de-silting ponds, etc Significant topographic features in the southern portion of the site also shield the interior of the site from view The site's appearance is also influenced by the riparian habitat found along Temescal Creek on-site	Implementation of the Alberhill Ranch Specific Plan will permanently alter the nature and appearance of the site through grading and development Approximately 531 acres of the site will remain as open space, encompassing the significant ridgeline located west of and parallel to I-15, as well as the riparian vegetation associated with Temescal Creek No grading is proposed within this area, therefore appearances of the site from portions of I-15 will not be impacted by project development Project approval will significantly improve the appearance of the mined area on-site In addition, the Specific Plan contains Development Standards and Design Guidelines which regulate future development within the project	The Specific Plan proposes land uses, standards and design guidelines which mitigate visual impacts of project development No additional mitigation measures are recommended

J Historic and Prehistoric Resources

One previously recorded archaeological site is present on-site and two new sites were located during survey activities One new site supported a short-term use such as stone tool manufacture Site two appears to be a male-oriented flaking station One historical site is located on-site, consisting of remnant mining activities of Pacific Sewer Pipe, possibly dated 1890 Five previously-recorded paleontological sites were identified and two new localities were found	Project grading could result in the destruction of known and unknown on-site archaeological and paleontological resources, without proper mitigation All known sites will be directly impacted by development The mining historical site will be removed as a result of project development, however, its recordation is adequate mitigation	For archaeological resources, data collection for site one shall be performed and data collection/testing program shall be performed for site two An archaeologist shall be contacted if any cultural resources are found during grading Samples shall be collected from known sites prior to project grading Grading in the sediments of the Silverado, Pauba and Older Alluvium shall be monitored full time to permit the collection of specimens

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
Fossils of several species were recovered within the Silverado Formation, which has a high paleontologic sensitivity		
K Mineral Resources		
Clay has been mined on-site for the past 100 years, though Pacific Clay Products recently terminated mining on-site because it became economically infeasible Clay mining has severely altered the natural topography on approximately 500 acres of the site Portions of the clay deposits on-site have been classified by the State Division of Mines and Geology as MRZ-2, Significant Mineral Deposits In response to State MRZ zoning, the County of Riverside General Plan designates the site for "Mineral Resources" use	Project development will preclude future use of the site for clay extraction, however, this use has been found to be economically infeasible The Specific Plan proposal would eliminate the State MRZ zone from the site The mined area of the site will require "reclamation" in order to accommodate the project	An amendment to a previously-approved Reclamation Plan for the mined area must be reviewed and approved by the City and/or the State Mining Board
L Circulation		
Roadways that will be utilized by the project include I-15, Lake St, Robb Rd, Nichols Rd, Coal Rd, Terra Cotta Rd, Collier Ave, Lakeshore Dr, Lincoln St and Riverside Dr All intersections in the vicinity of the site operate at a Level of Service C or better for existing p m peak hour condition, except for the intersection of Machado St at Lakeshore Dr, which needs signalization	The Alberhill Ranch Specific Plan proposes an on-site circulation system which implements the Riverside county and City of Lake Elsinore Circulation Elements Bike trails, pedestrian walkways and an equestrian/hiking trail are also proposed The project will generate 80,070 external trips and 576,500 miles of travel per day All intersections but one in the project area are projected to operate at	Improve Lake St between Coal Rd and I-15 to an Arterial, improve Coal Rd between Lake St and Terra Cotta Rd to a Major, improve Nichols Rd between Coal Rd and the project boundary east of I-15 to a Major, improve Robb Rd to an Arterial between Coal Rd and Lakeshore Dr, and improve Terra Cotta Rd to a Modified Secondary between Nichols Rd and Lakeshore Dr Intersection

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
	Level of Service (LOS) C or better in the p m peak hour, with proposed improvements For future traffic conditions with area wide growth and surrounding development plus the project, all intersections but one in the vicinity of the site will operate at LOS C or better To achieve LOS C at all intersections, Lake St should be upgraded to an urban arterial between I-15 and Coal Road	geometrics recommended by the Traffic Study should be implemented For existing plus project traffic conditions, traffic signals are warranted at 10 intersections
M Public Facilities and Services		
The project area is provided services by the following agencies Fire protection - California Dept of Forestry and Riverside County Fire Dept, Police protection- Riverside County Sheriff Dept, Schools - Lake Elsinore and Elsinore Union High School Districts, Parks and Recreation- Lake Elsinore Recreational and Park District, Electricity - Southern California Edison, Natural Gas - Southern California Gas Co, Telephone- General Telephone, Solid Waste- County Dept of Waste Management	There are presently no fire stations within the required response time for the proposed Category II urban development, though the City of Lake Elsinore may be acquiring a site on Lincoln St, north of Machado which would be capable of providing an acceptable level of service Project implementation will result in the need for 22 additional deputies in order to achieve the desired officer/resident ratio The Alberhill Ranch project would generate an estimated 2,224 students and proposes two 15-acre elementary school and one 20-acre junior high school sites The Alberhill Ranch Specific Plan and the 306 units which could be accommodated within the R-1 and R-S portions of the Annexation Area would result in a 2 973 average day and 5 776 MGD maximum day demand for water	The project will be required to satisfy City and County Fire Department standards for fire stations A Mello-Roos District may be formed to pay for certain project expenses The project will be subject to school impact fees imposed by AB 2926 All conditions pertaining to water and wastewater requirements as specified by the Elsinore Valley Municipal Water Dist shall be followed In order to conserve water, the project shall comply with Title 20 of the Calif Admin Code Park lands shall be provided in accordance with City of Lake Elsinore Ordinance 85-34 Building energy conservation shall be achieved by compliance with Title 24 of the Calif Admin Code The Specific Plan includes guidelines for provision of trash collection stations

EXISTING CONDITIONS	PROJECT IMPACTS	MITIGATION MEASURES
	A water distribution system is proposed to serve the project area Portions of the site would have to be served by the 1800 5 pressure zone system, which has no facilities at this time and will require a regional pump station, lines and storage reservoirs Total average daily flows of 1 3893 MGD of sewage are anticipated To provide sewage facilities, the master planned treatment plant westerly of Temescal Road must be constructed, although an interim plan is available for a portion of the project, utilizing the existing Cheney Street facility The project will create a demand for 58 73 acres of recreation facilities, per City Resolution 85-34 The Alberhill Ranch Specific Plan proposes a total of 80 acres of schools and parks, including a 30-acre Community Park The project proposes a 14' equestrian/hiking trail from Nichols Road north through the open space, providing a connection to Lake Street for future off-site recreational uses as part of the County Park Department's proposed trail system The project will create a demand for 182,946 kwh of electricity per day and 1,140,581 c f of natural gas per month The project will generate 46 tons of solid waste per day, shortening the life of the Double Butte and El Sobrante Disposal sites	

II. INTRODUCTION

A. PURPOSE

The purpose of this Environmental Impact Report (EIR) is two-fold: 1) to address the impacts associated with the proposed ultimate development and annexation into the City of Lake Elsinore of Alberhill Ranch, a 1,853-acre Specific Plan proposing 3,705 dwelling units, 254 acres of commercial use, 531 acres of open space, 30 acres of park, and 50 acres of school/park sites; and 2) to consider certain impacts associated with annexation and pre-zoning of an additional 822 acres into the City of Lake Elsinore. Proposed pre-zoning designations in this area are for 686 acres of Specific Plan Area ("SPA"), 20 acres of Open Space, 45 acres of R-1 (270 d.u.) and 71 acres of R-S (36 d.u.).

The project applicant, Long Beach Equities, Inc. submitted applications to the City of Lake Elsinore requesting approval and annexation of the Aberhill Ranch Specific Plan, as discussed above. All but eight acres of the 1,853-acre Specific Plan site are presently located in unincorporated Riverside County. After reviewing the project proposal, the City requested that the Alberhill Ranch Specific Plan EIR include pre-zoning and annexation for the 822 acres referred to in this report as the "Annexation Area".

This report is being submitted to the City of Lake Elsinore in accordance with its procedural guidelines and the State of California, Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines). This document evaluates the impacts associated with the ultimate development and annexation of the Alberhill Ranch Specific Plan site, based upon the most definitive project data available, corresponding to the degree of the underlying activity (Section 15146 of the State EIR Guidelines). In regards to the discussion of impacts associated with annexation and potential development of the 822-acre Annexation Area, it should be noted that, as indicated in Section 15151 of the State EIR Guidelines, "an evaluation of the environmental effects of a proposed project need not be exhaustive but the sufficiency of the EIR is to be reviewed in light of what is reasonably feasible". In addition, Section 15146 of the EIR Guidelines states "an EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption, or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

In accordance with these CEQA Guidelines, the EIR discusses where "reasonably feasible" the worst-case impacts of development within the Annexation Area, in accordance with their proposed pre-zoning designations. In particular, discussions of traffic and public utilities and services impacts and mitigations include

assessments of ultimate development within the R-1 and R-S zones of Annexation Area. The Draft EIR does not discuss the physical (i.e., geologic, hydrologic, biological, scientific resources) impacts of development within the Annexation Area. Given the complexity of ownerships within these parcels coupled with the lack of precise land use plans, it is not considered "reasonably feasible" to provide such impact assessments at this stage of development. In addition, 686 acres of the Annexation Area are proposed for pre-zoning as "SPA", permitting a wide range of land uses. As such, it is infeasible to determine with any accuracy the nature of impacts which would result from future development in these areas. As discussion in Section IV.F., Land Use, the EIR recommends that the City impose conditions on these Annexation Areas which require additional environmental analyses prior to approval of more specific development plans. These analyses would include detailed assessments of the impacts noted above.

It is the intent of the applicant to submit information to the City of Lake Elsinore, as Lead Agency, adequate for the following actions:

1) General Plan Amendment to reflect the "Alberhill Specific Plan Area, 2.0 d.u./acre" on the project.

2) Pre-Zoning to (SPD), Specific Plan District.

3) Adoption of the proposed Specific Plan as a Non-Conditional (SP) Specific Plan. The purpose of selecting the process for Non-Conditional Specific Plan zoning is to receive concurrent approval of the Specific Plan documents and (SP) zoning designation completing the Specific Plan process.

4) Approval of a subdivision/parcel map and site plan for the Specific Plan Area.

5) Approval of a Development Agreement between the developer and the City of Lake Elsinore.

6) Approval of the annexation of the project area into the corporate limits of the City of Lake Elsinore.

7) Reclassification of the site to MRZ 1, No Significant Mineral Deposits, by the State Board of Mines and Geology.

8) Adoption of Floor to Area Ratio (FAR) standards to be applied to proposed on-site commercial uses.

Pursuant to Section 15182 of CEQA Guidelines, no EIR or negative declaration need be prepared for a residential project which conforms to an approved Specific Plan unless: 1) subsequent changes are proposed which require important revisions of the

previous EIR; 2) substantial changes occur with respect to the circumstances under which the project is undertaken which will require important revisions in the previous EIR; or 3) new information of substantial importance to the project becomes available.

The material herein is information which is intended to enable the City of Lake Elsinore, as lead agency, to evaluate environmental effects associated with the proposed project and measures to reduce the magnitude of any adverse effects and to consider alternatives to the proposed project. The lead agency has an obligation to balance possible adverse effects of the project against a variety of public objectives, including economic, environmental and social factors, in determining whether the project is acceptable and approved for implementation (Section 15021 of State EIR Guidelines).

In addition to the City's role as lead agency, there are a number of "responsible agencies" for this project. Responsible agencies for this project include the Local Agencies Formation Commission (LAFCO) who will consider the request for annexation into the City of Lake Elsinore. For this reason, a discussion of impacts associated with annexation has been included in this EIR. Other responsible agencies include the State Department of Fish and Game, pursuant to Sections 1601-1603 of the State Fish and Game Code. The U.S. Fish and Wildlife Service may also be a responsible agency for the project, given the endangered species status of the Stephens' kangaroo rat, which has been found on-site.

The City of Lake Elsinore has determined the scope of potential environmental impacts associated with the project proposal through preparation of an Initial Study and Notice of Preparation for this Draft EIR. (The Notice of Preparation is included as Technical Appendix A.) It has been determined that an EIR be prepared which addresses a full range of specific environmental factors.

III. PROJECT DESCRIPTION

A. PROJECT LOCATION

The project entails the annexation of 2,667 acres of property into the City of Lake Elsinore, designation of General Plan land uses and pre-zoning of this area, and the approval of the 1,853-acre Alberhill Ranch Specific Plan. The project is located in western Riverside County adjacent to the northern boundary of the City of Lake Elsinore as shown in the Regional Map (Exhibit 1) and Vicinity Map (Exhibit 2).

The Alberhill Ranch Specific Plan site consists of approximately 1,853 acres of land, portions of which are divided by Interstate 15. (Eight acres of the Specific Plan site are already within City limits.) The site is bounded generally by I-15 to the north, Terra Cotta Road/Nichols Road to the south, El Toro Road to the east, and Robb Road/Lake Street to the west. As shown on the Ownership Map included in the back pocket of this document, the 822 acre Annexation Area consists of five physically separate areas, some of which lie between the Alberhill Ranch site and the current City boundary. Both the Specific Plan site and the Annexation Area are located in the City's Sphere of Influence.

B. BACKGROUND

Approximately 1,350 acres of the Specific Plan site are owned by the Biddle Family, with the remaining approximately 500 acres owned by Packfic Clay Products, Inc. Long Beach Equities is purchasing all of the Biddle holdings and is the project applicant for the Alberhill Ranch Specific Plan. Ownerships of all parcels within the 822 acre Annexation Area are shown on the Ownership Map found in the back pocket of this document. Approximately 520 of the 822 acres within the Annexation Area are owned by the Biddles and are being purchased by the project applicant.

Approximately 500 acres of the Specific Plan site has been disturbed by mining operations that have occurred over the last 100 years. (Exhibit 4, Elevation Analysis, depicts the extent of the disturbance on-site.) Although Pacific Clay Products owns approximately 500 acres of the Specific Plan site, most of their mineral extraction activities on-site have occurred on land leased from the Biddles. During the past 100 years, much of the usable clay has been removed from this portion of the site. As of June 30, 1988, Pacific Clay Products terminated their lease on Biddle land, and ceased their mining operation at that location.

C. PROJECT OBJECTIVES

CEQA Guidelines require a statement of the objectives sought by the proposed project. Certain planning and development objectives were targeted by the project to assure the

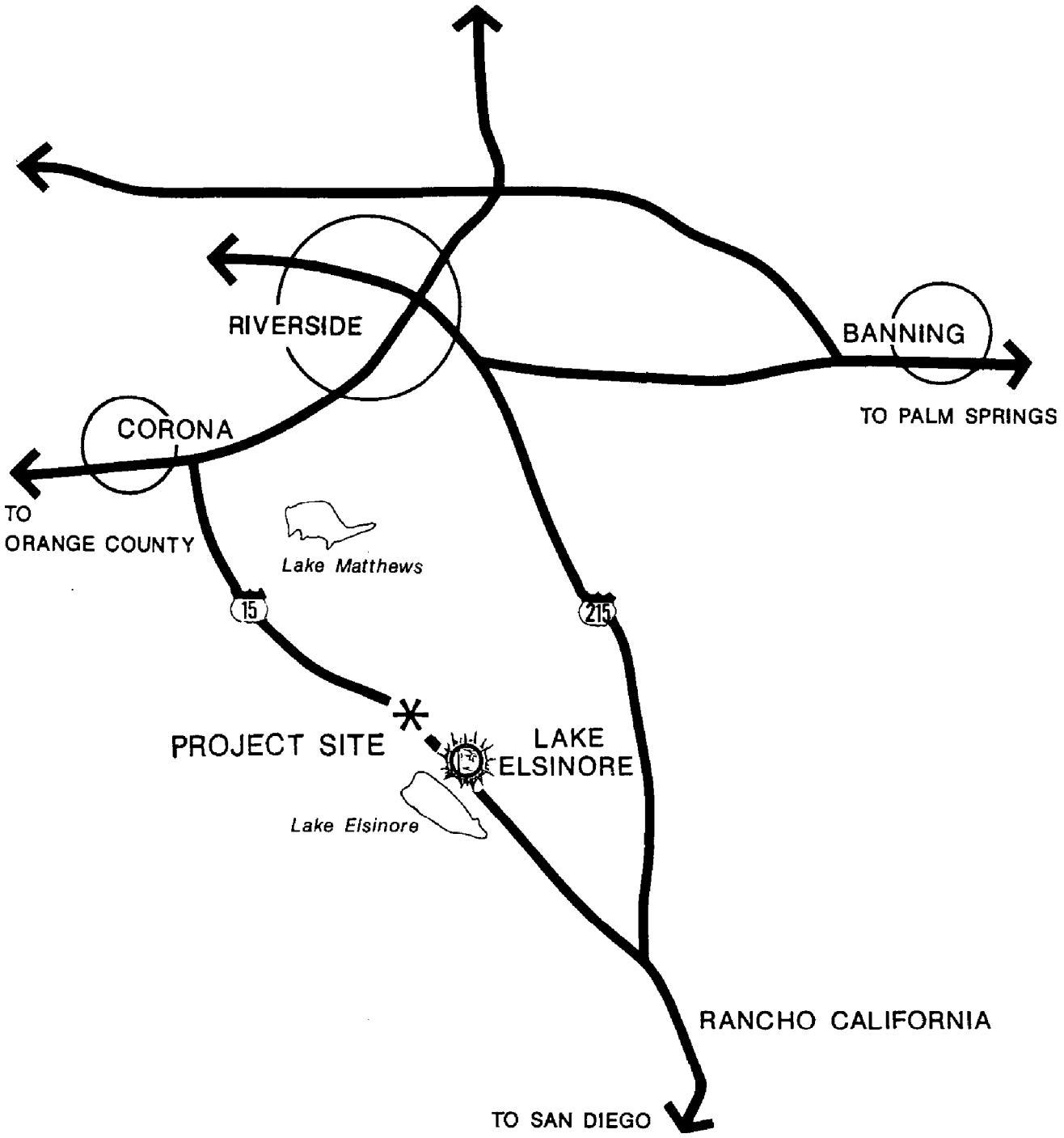


EXHIBIT 1

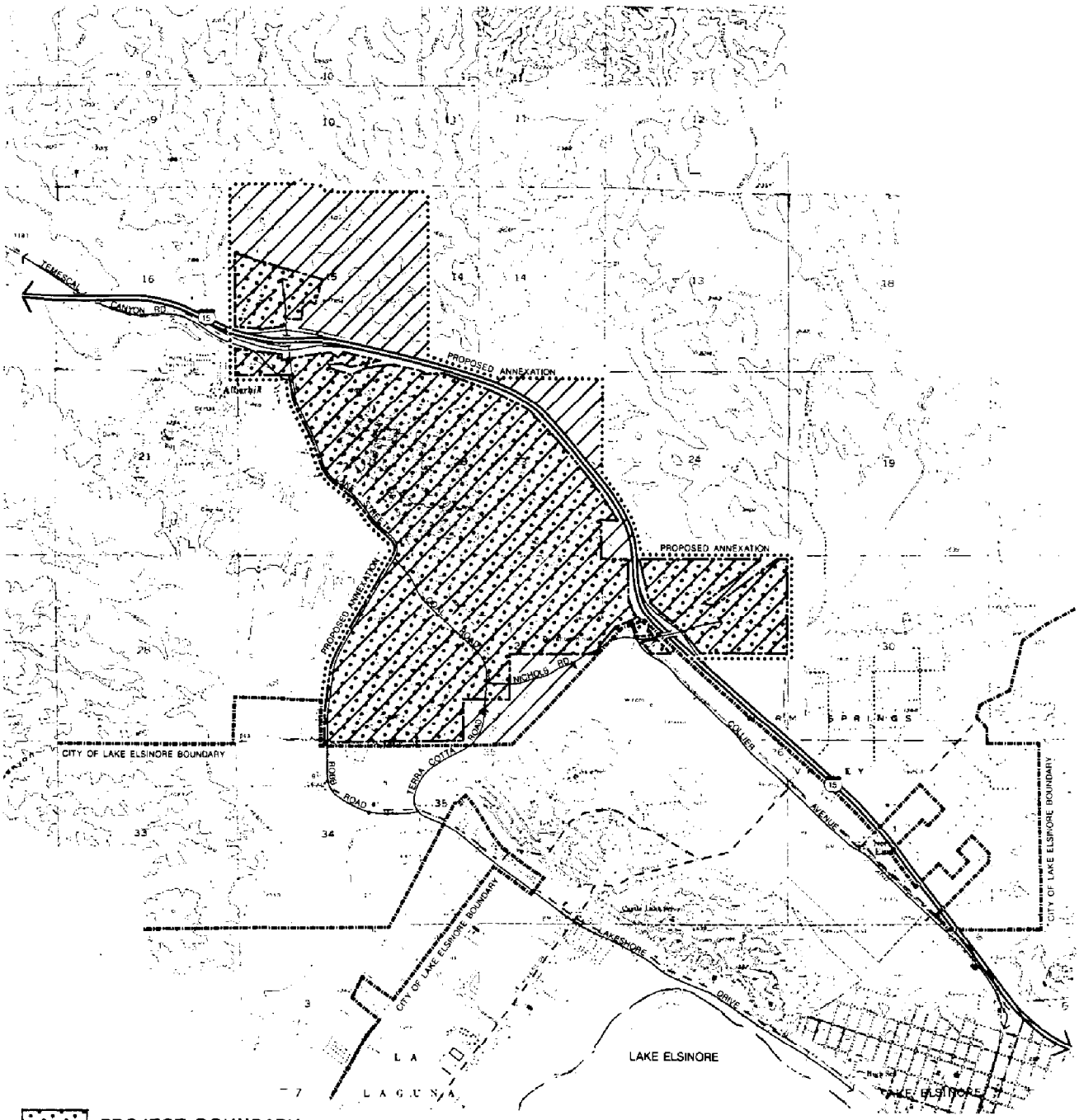
Regional Map

Alberhill Ranch

LONG BEACH EQUITIES, INC

no scale

TURRINI and BRINK



PROJECT BOUNDARY

PROPOSED ANNEXATION AREA TO CITY OF LAKE ELSINORE

EXHIBIT 2

Vicinity Map

Alberhill Ranch

LONG BEACH EQUITIES, INC

TURRINI and BRINK

environmental compatibility, aesthetic satisfaction and functional integrity of the project as a whole. Project objectives include, but are not limited to, the following:

o Preserve substantial areas for open space, including significant natural resources and wildlife habitats on-site;

o Provide sufficient area for both active and passive recreation in conjunction with open space and greenbelt areas throughout the project area;

o Ensure the reclamation and enhancement of areas impacted by prior mining operations for the public health, safety and welfare;

o Utilize state-of-the-art grading techniques which minimize the intrusion of development into natural open space areas and which maintain, to the greatest extent possible, existing natural terrain and significant topographic features;

o Minimize the extent of environmental impacts resulting from the development of this project and provide substantial mitigation for all adverse effects;

o Provide opportunities for regional/subregional commercial/ industrial development which do not conflict or compete with the City's downtown development potential;

o Provide a balance of uses within the project area which serve the immediate needs of its residents;

o Provide attractive neighborhoods which offer a wide range of housing opportunities and that are marketable within the developing economic profile of the City of Lake Elsinore; and

o Provide or extend the public facilities and improvements necessary to accommodate the ultimate buildout of the project and to maintain a quality level of service for its residents.

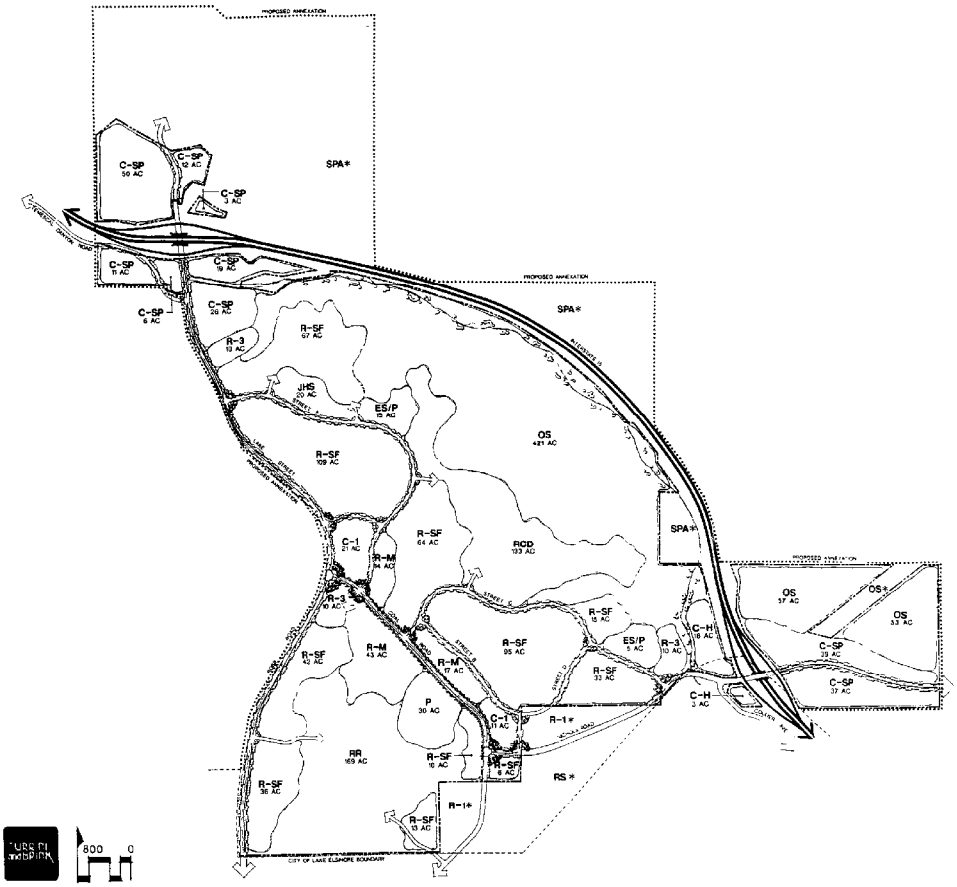
D. PROJECT CHARACTERISTICS

Alberhill Ranch Specific Plan

The Alberhill Ranch Specific Plan proposes primarily residential land uses, with neighborhood commercial sites in the central portion of the site to support the resident's needs for goods and services. Commercial Specific Plan has been designated at each of two freeway interchanges to provide opportunities for light industrial and research/development uses, together with commercial support services and freeway-oriented retail.

EXHIBIT 3

Land Use Plan



LEGEND

	Land Use	Acres	Density	Dwelling Units
RR	Rural Residential	169	0.2 du/ac	34
RCD	Single-Family Residential	133	3.0 du/ac	399
R-SF	Single-Family Residential	490	4.0 du/ac	1960
R-M	Single-Family Residential	74	8.0 du/ac	592
R-3	Multi-Family Residential	30	24.0 du/ac	720
C-1	Neighborhood Commercial	32		
C-H	Highway Commercial **	19		
C-SP	Commercial/Specific Plan	203		
JHS	Junior High School	20		
ES/P	Elementary School/Park	30		
P	Park	30		
OS	Open Space	531		
	Roads	92		
	TOTAL	1853 AC		3705 DU
R-1*	Single-Family Residential	45		
R-S*	Residential Estates	71		
SPA*	Specific Plan Area	686		
OS*	Open Space	20		
	TOTAL	822		

*LAND USE DESIGNATIONS WITHIN ANNEXATION AREA BUT OUTSIDE ALBERHILL RANCH SPECIFIC PLAN AREA

**INCLUDES 8 ACRES WITHIN CITY OF LAKE ELSINORE BOUNDARY CURRENTLY ZONED C-M

Alberhill Ranch

LONG BEACH EQUITIES, INC

Residential Use

A total of 3,705 dwelling units are proposed within five (5) density categories, ranging from 0.2 dwelling unit per acre in the Rural Residential category to 24 dwellings per acre in the R-3 category. The overall residential density on a gross acreage basis is 2.0 dwelling units per acre.

1. Rural Residential

The Rural Residential (R-R) designation is consistent with the Very Low Density Residential designation as described in the City's General Plan. In context of Alberhill Ranch, Rural Residential is intended primarily for the development of single-family residences on large, estate lots. A minimal amount of development area is permitted on each lot to ensure that the majority of the property remains in open space, maintaining the rural character of the area. A total of 34 dwelling units on 169 acres are proposed within this designation, at a density of 0.2 d.u./acre. One area of Rural Residential use is proposed, within the southwestern portion of the site. On-site, the R-R area is surrounded by Single-Family Residential use at densities of 4.0 d.u./acre and 8.0 d.u./acre, as well as by a 30-acre park site. Off-site and adjacent to the R-R area's southern boundary are developed Tracts 19750 and 15020.

2. RCD Single Family Residential - Constraint Design

The RCD category is consistent with the General Plan's Low Density Residential designation. This category is intended primarily to allow clustered, single family residences within the hillside areas adjoining open space. The purpose of this category is to maintain a low overall density to preserve natural terrain and topographic features by clustering single family dwelling units on smaller lots. The net result is an increase in the total area devoted to open space and buffering natural areas for residential development. A total of 133 acres of RCD is proposed on the Specific Plan, extending from the primary ridgeline south in the center of the project area. A total of 399 dwelling units are proposed in this category, at a density of 3.0 d.u./acre. One area of RCD use is proposed. It provides an on-site transition between the 421 acre open space area and areas proposed for Single-Family Residential use.

3. R-SF Single Family Residential

The R-SF category is consistent with the Low Density Residential designation of the General Plan. This category is intended primarily for conventional single family development. The overall density in this category is higher than the RCD because the terrain is less steep and the area

does not typically adjoin open space. A total of 1,960 units on 490 acres is designated R-SF, predominantly in the south-central portions of the site, at a density of 4.0 d.u./acre.

4. R-M Single Family Residential

The R-M category is consistent with the General Plan's Medium Density Residential designation. This category is intended to allow a variety of housing types, including single family detached dwellings, zero lot line dwellings and attached townhouses. The purpose of this category is to allow for higher density, clustered development up to 12 d.u./ac., but to maintain an overall density of 8 d.u./ac. maximum. A total of 74 acres is designated R-M for a maximum of 592 dwelling units. R-M areas are delineated along the Coal Road corridor between Nichols Road and Robb Road.

5. R-3 Multi-Family Residential

The R-3 category is consistent with the General Plan's High Density Residential designation. This category is intended to allow multi-family apartment and condominium projects in transitional areas between commercial uses and lower density residential projects. A total of 720 units on 30 acres in three (3) separate sites has been delineated along major streets in close proximity to commercial sites, in keeping with City standards for high density development.

Commercial Use

Three (3) categories of commercial use are provided within Alberhill Ranch. Commercial, office and business park uses are proposed in the categories described below.

1. C-1 Neighborhood Commercial

This category is intended primarily to provide retail and commercial services for the residents in the immediate vicinity. Commercial office uses are also compatible within this category. A total of 32 acres of Neighborhood Commercial is provided with 21 acres located at Coal Road and Robb Road and 11 acres located at Nichols Road and Coal Road. Each site is located at major intersections within the project area and are central to two neighborhood areas for the convenience of the residents.

2. C-H Highway Commercial

Nineteen (19) acres have been designated as C-H, Highway Commercial, north of Nichols Road in the vicinity of Collier Road. It should be noted that 8 acres of this area are

currently zoned CM - Commercial Manufacturing. This redesignation would provide more retail and service commercial uses in proximity to the Nichols Road/I-15 interchange. The site is more compatible with freeway oriented uses and is isolated from residential uses, in keeping with City standards.

3. C-SP Commercial - Specific Plan

The intent of the C-SP District is to reserve appropriate locations consistent with the General Plan for certain categories of office, retail commercial and light industrial uses that are relatively free of nuisance or hazardous characteristics and to protect these areas from intrusion by residential and other inharmonious uses. The C-SP uses will generally be located in the more visible areas of the Alberhill Ranch, such as adjacent to major thoroughfares and freeways. The Alberhill Ranch Specific Plan provides a list of permitted uses in the C-SP District, including retail and service commercial in conjunction with business park types of use, such as research and development, limited manufacturing, office and administrative uses. Business support services are also compatible with this category. A total of 203 acres have been designated at the two freeway interchanges within the project area: Lake Street/I-15 and Nichols Road/I-15. The flexibility inherent within this C-SP category allows the City to establish the form and character of each development on a project by project basis.

<u>Parks and Schools</u>

1. Elementary Schools/Park Sites

The concept of joint use has been incorporated into the plan by combining park and elementary school sites in two locations. These sites, each 15 acres in size, have been integrated into the residential portions of the project. Sites are located away from major thoroughfares and are in close proximity to residences to reduce vehicle trips. Both pedestrian and bicycle access separate from vehicular traffic is provided between residential areas and these sites.

It is expected that several acres of each site will be used for Lake Elsinore School District buildings and parking facilities. The remainder of each 15 acre site will be used for playgrounds, ballfields, and miscellaneous open space and recreation activities. To provide a maintenance cost savings to the School District, if the District so agrees, the 15-acre site exclusive of School District facilities will be dedicated to the City of Lake Elsinore for maintenance.

2. Junior High School Site

One junior high school site has been delineated in the north-central portion of the project in the center of residential development. The site has been sized according to Elsinore Union High School District standards for such facilities. The site is accessible by both pedestrian and bicycle systems, and vehicular access is provided by a lower volume collector street.

3. Community Park Site

A thirty-acre community park site is proposed in the vicinity of Nichols Road and Terra Cotta/Coal Roads. This site provides access to the residents of Alberhill Ranch and is in close proximity to the Terra Cotta area. Approximately 10 - 15 acres of this site will be "usable" for active participation recreational uses. It is anticipated that the remainder of the 3-0-acre site will remain in its natural condition. Some trails and picnic areas will be provided in this area. The site will be graded to blend with the existing topography.

Open Space

The Alberhill Ranch Specific Plan proposes 531 acres of permanent undeveloped open space, or approximately 28% of site acreage. The majority of the open space (421 acres) will be retained north of the primary ridgeline in Walker Canyon. This area will be left primarily in its natural condition. The riparian woodland along Temescal Creek will be preserved in order to maintain a significant wildlife habitat on the site. This habitat area will be protected from encroachment by development by the ridgeline and open space which separates it from the development area. It is estimated that 30 - 35 acres of manufactured slopes will be required within this area, at the interface with Single-Family Residential (R-SF and RCD) areas.

In open space areas adjacent to development, fuel modification zones will be established utilizing fire retardant and fire resistant plant materials. Landscaping and revegetation plans will be reviewed with the County Fire Department to ensure fire protection in areas prone to grassland and range fires. Generally, fuel modification zones will extend 50 feet into open space areas where development is downslope and 100 feet in an upslope condition. Developed recreational facilities are not proposed within natural open space areas, however, an equestrian/hiking trail is proposed by the Riverside County Parks Department and will be provided within Walker Canyon per Parks Department standards.

The open space system will be dedicated to the City or City sponsored assessment district for ownership and maintenance.

Circulation System

The circulation system serving Alberhill Ranch combines elements of the County Master Plan of Highways with the City's circulation element, as described below. (See Exhibit 18, Circulation Plan.)

1. Arterial Highways

Robb Road south of Coal Road is currently two lanes. Ultimately, this road will be improved to Arterial Highway standards with a 110' right-of-way and an 86' pavement width (curb-to-curb). A traffic signal will eventually be warranted at the intersection of Robb Road and Coal Road. Lake Street betweeen Coal Road and I-15 will also be improved to an Arterial cross-section.

2. Major Highways

Lake Street south of Coal Road will be improved to Major Highway standards (100' right-of-way and a pavement width of 76'), with traffic signals ultimately warranted at its northerly and southerly intersections with "A" Street.

Coal Road will be improved to Major Highway standards with a traffic signal warranted at its intersection with Nichols Road. Left turn lanes will be necessary for north, south and westbound approaches at this intersection.

Nichols Road will ultimately be upgraded to Major Highway standards from Terra Cotta across I-15. Traffic signals will ultimately be warranted at the intersections of Nichols Road and "C" Street, and at Collier Avenue.

3. Secondary Highways

Temescal Canyon Road will become a Secondary Highway (88' right-of-way and 64' of pavement) west of its intersection with Lake Street. Left turn lanes and a traffic signal will ultimately be warranted at this intersection.

Terra Cotta Road will ultimately be improved to Secondary Highway standards south of Nichols Road.

4. Collector Streets

Several interior streets within the project will be improved to Collector Street standards (66' right-of-way with 44' pavement widths). This includes Street "A", "B", "C", "D", "E" and "F". Two major loop streets will provide access to the majority of residential areas north and south of the Coal Road/Lake Street intersection.

5. Local Streets

Vehicular access within individual planning areas will be provided by local streets which will extend from the Collector Loop Streets in the central portion of the project. Access from local streets to streets larger than Collectors will be limited to reduce points of conflict on the roadways carrying higher traffic volumes and speeds.

6. Private Roads

Private roadways may be utilized where appropriate. A minimum of 36' of paved roadway will be provided for private roads. This is considered an appropriate width to insure proper fire access, smooth traffic flow and on-street parking.

Annexation Area

As previously discussed, the 822 acre Annexation Area is composed of five physically separate areas situated to the north, east and southeast of the Alberhill Ranch Specific Plan area. No development is proposed within any part of the Annexation Area as part of this request for annexation into the City of Lake Elsinore. However, pre-zoning designations have been assigned to all portions of the Annexation Area at the request of the City. Proposed pre-zoning designations for the Annexation Area are shown on Exhibit 3, Land Use Plan, as follows:

Proposed Pre-Zoning Designation		Acres	Density	Potential No. Dwelling Units
R-1	Single-Family Residential	45	6 d.u./acre	270
R-S	Residential Estates	71	.5 d.u./acre	36
SPA*	Specific Plan Area	686	--	--
		822 Acres		306 d.u.

* Ultimate uses within the 686 acres of Specific Plan Area may include any combination of residential, commercial, industrial, mining, open space and agricultural use. Future uses in these areas will be subject to the provisions of Chapter 17.99 of the City of Lake Elsinore Zoning Code.

E. INTENDED USES OF EIR

According to Section 15357 of CEQA Guidelines, a "discretionary project" means a project which requires the exercise of judgement or deliberation when the public agency or body decides to approve

or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances or regulations. As discussed in Section II.A., Introduction and Purpose, it is anticipated that this EIR will be used for the following discretionary actions:

1) General Plan Amendment to reflect the "Alberhill Ranch Specific Plan Area, 2.0 d.u./acre" on the project site on the City of Lake Elsinore General Plan. Also, it is anticipated that the City will ultimately amend their General Plan to include appropriate land use designations for the 822-acre Annexation Area.

2) Adoption of "Specific Plan" pre-zoning and zoning designations for the Alberhill Ranch site.

3) Adoption of pre-zoning and zoning designations for the 822-acre Annexation Area.

4) Approval of a subdivision/parcel map, tentative tract maps and/or site plans for the Alberhill Ranch Specific Plan.

5) Approval of a Development Agreement between the developer of the Alberhill Ranch Specific Plan and the City of Lake Elsinore.

6) Appproval of the annexation of the 2,667-acre project area into the City of Lake Elsinore by LAFCO.

7) Approval of certain roadway improvements, interchange improvements, etc. by Caltrans.

It is anticipated that a number of agencies will use or review the EIR, including but not limited to:

-City of Lake Elsinore
-Lake Elsinore Recreation and Park District
-LAFCO
-County of Riverside Flood Control District
-Riverside County Fire Department
-Riverside County Sheriff Department
-Riverside County Parks Department
-Riverside County Road Department
-Elsinore Valley Municipal Water District
-Lake Elsinore School District
-Caltrans
-California Department of Fish and Game
-U.S. Department of Fish and Wildlife

In addition, a list of all agencies who received a copy of the Notice of Preparation for the project is included as part of Technical Appendix I., Notice of Preparation and Project

IV. DESCRIPTION OF ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES.

A. GEOLOGY, SOILS & SEISMICITY

The following discussion summarizes the following reports: 1) "Geotechnical Feasibility Investigation, Alberhill Ranch, Alberhill-Lake Elsinore Area" (March 1988), prepared by G.A. Nicoll & Associates, and 2) "Supplemental Geotechnical Feasibility Investigation, 1,100 Acres, Alberhill Ranch" (October 1988) prepared by Highland Soils Engineering Inc. These reports are included in their entirety as Technical Appendix A. The report prepared by Highland Soils provides specific information for development of 950 acres of the site which have been impacted by mining activities and identifies existing landslides on 150 acres of the property. Within the following discussion, the information is based on the Nicoll & Associates study, unless otherwise indicated.

EXISTING CONDITIONS

Site History

Approximately 500 acres of the Alberhill Ranch Specific Plan site have been mined in the past. In the early 1880's, coal and clay were discovered in the Alberhill area and from 1890 to 1956, the Alberhill Coal and Clay company mined clay from the deposits located on the Biddle property within the easterly half of Section 22 and the westerly one-third of Section 23. In 1956, Pacific Clay Products acquired exclusive rights to the Alberhill Coal and Clay Company deposits. Although their on-site mining operations have ceased, Pacific Clay Products is still mining clay in the project area.

The E.L. Yeager Construction Company mined sand and gravel from two pits located along the north side of Interstate 15, near Lake Street. In addition, numerous clay pits, access roads, desilting ponds and large fill spoil piles are present within the Alberhill Coal and Clay Pits northeast of Lake Street. Some abandoned mine shafts and tunnels are also present in the pit area.

Topography

The project site is situated within predominantly hilly terrain located north of Lake Elsinore. Walker Canyon, Temescal Creek and Interstate 15 cut the site in northwesterly direction. An unnamed valley is situated along the southwest boundary of the property. Natural slope gradients at the site range from almost level to 1:1 (horizontal:vertical). A number of nearly vertical man-made cuts are present within the mining area in Sections 22 and 23. Above sea level elevations range from 1,200 feet to 1,900 feet (See Exhibit 4, Elevation Analysis). As shown on Exhibit 5, Slope Analysis, the site contains extensive areas of 25% slope.

Geological Setting

The site is located at the southeast end of the Temescal Valley, which is situated along the south-west boundary of the Perris Peneplain, in the Peninsular Ranges Geomorphic Province. Igneous and metamorphic rocks form the basement complex which is overlain by Tertiary and Quaternary Age marine and non-marine sediments. The geologic structure of the southern Temescal Valley is characterized by a complex of northeast trending faults which have developed in response to tectonic activity along the Elsinore fault zone.

As shown in Exhibit 6, Geology Map, the site is underlain by the following geologic units:

- Bedford Canyon Formation (Jbc, Jbca)
- Santiago Peak Volcanics (Jsp, Jspa)
- Granitic Rocks (Kgr)
- Silverado Formation (Tsi)
- Pauba Formation (Qp)
- Older Alluvium (Qalo)
- Colluvium (Qcol)
- Alluvium (Qual)

Also shown on Exhibit 6, Geology Map, are the locations of suspected landslides, areas of artificial fill, and faults, as discussed below:

- Landslides (Qls, Qlsa, Qls?)

  The landslides are shown on Exhibit 6, Geology Map, with arrows indicating the general direction that movement occurred. Active landslides (Qlsa) are present in the mining area. A number of areas of questionable slide occurrences (Qls?) are present in the mining area and southwest of Coal Road and west of Terra Cotta Road. It appears that most of the slides occur within the Silverado Formation, probably along weak clay beds. In the mining area, more extensive areas of sliding may be present beneath the spoil fill than are shown on the Geologic Map.

- Stockpiled Fill (Fill sp)

  Stockpiled fill consisting of sedimentary clays of the Silverado Formation and residual clays derived from altered volcanic and metamorphic rocks has been stockpiled by the Pacific Clay Products Co.

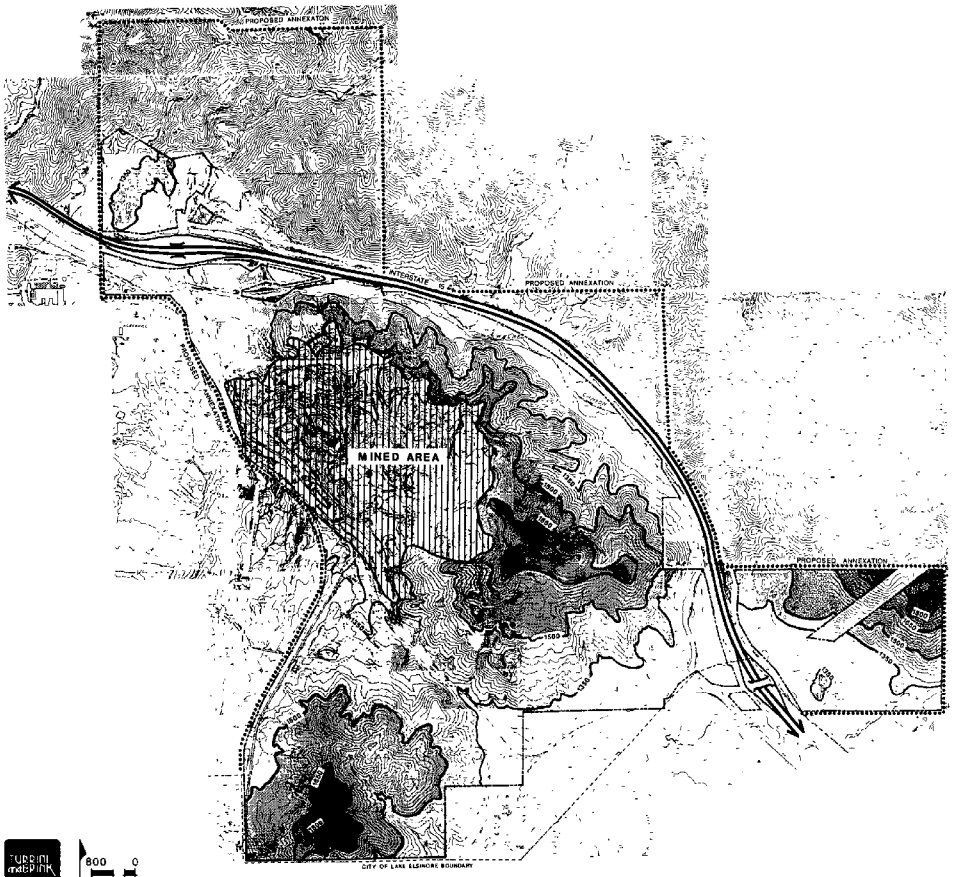


EXHIBIT 4

Elevation Analysis

Legend

- 1200'-1350'
- 1350'-1500'
- 1500'-1650'
- 1650'-1800'
- 1800'-1950'
- MINED AREA*

*Area in which mineral extraction has disrupted natural contour intervals

Alberhill Ranch

LONG BEACH EQUITIES, INC

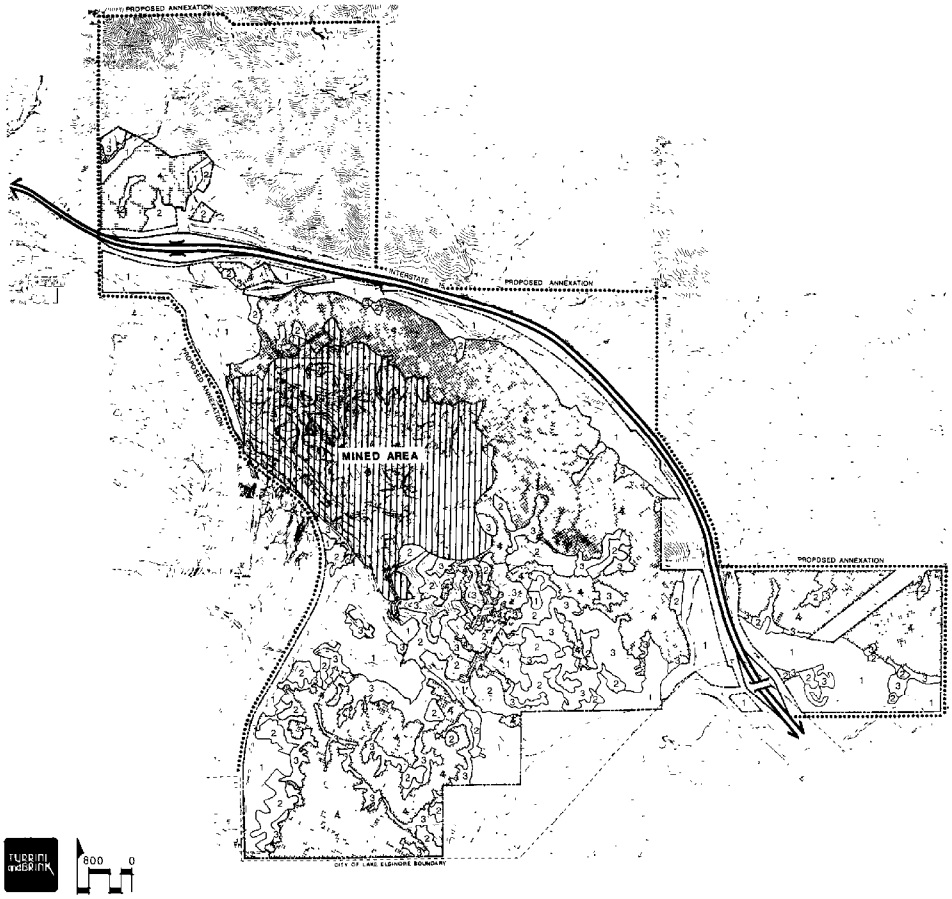


EXHIBIT 5

Slope Analysis

Legend

	CATEGORIES	ACRES
#1	0–8%	436
#2	9–15%	231
#3	16–25%	242
#4	>25%	641
* MINED AREA		303
	TOTAL ACRES	1853

*Area in which mineral extraction has disrupted natural contour intervals

Alberhill Ranch

LONG BEACH EQUITIES, INC

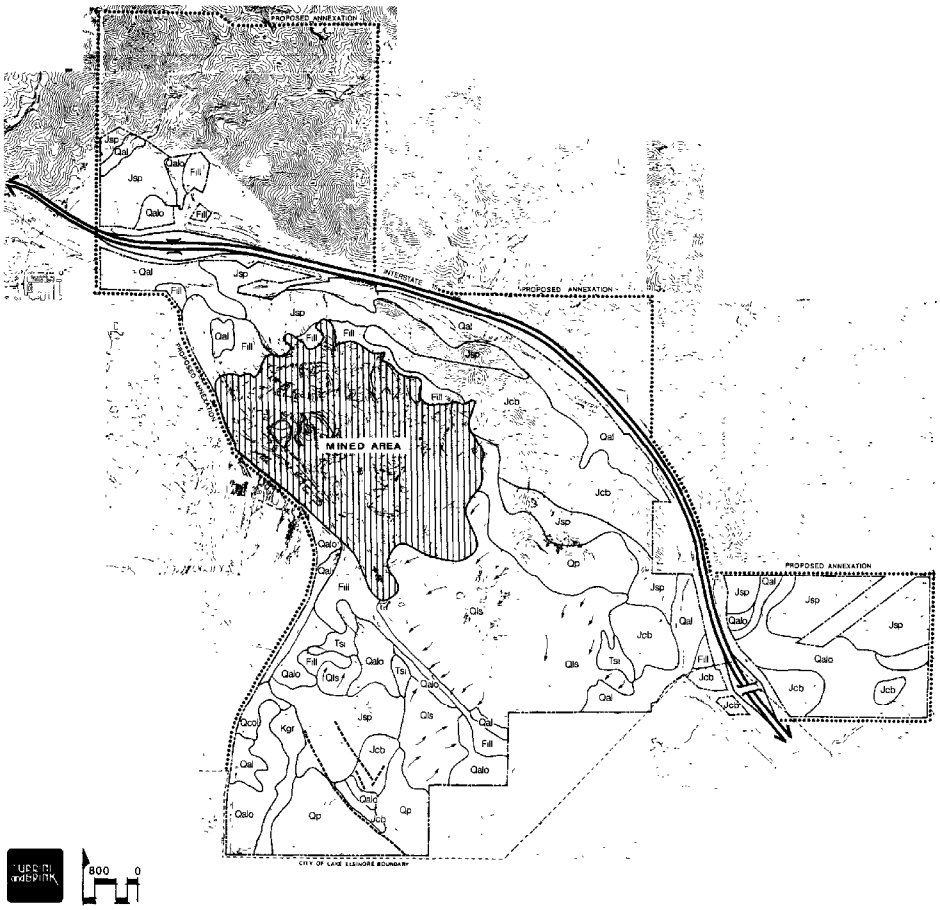


EXHIBIT 6

Geology Map

(Project Area)

Legend

Fill	FILL
Qal	ALLUVIUM
Qls	LANDSLIDE
Qcol	COLLUVIUM
Qalo	OLDER ALLUVIUM
Qp	PAUBA FORMATION
Tsi	SILVERADO FORMATION
Kgr	GRANITIC BEDROCK
Jsp	SANTIAGO PEAK VOLCANICS
Jspa	SANTIAGO PEAK VOLCANICS, ALTERED (CLAY RESOURCE)
Jbc	BEDFORD CANYON FORMATION
Jbca	BEDFORD CANYON FORMATION, ALTERED (CLAY RESOURCE)
	MINED AREA*

* See Mined Area Geology Map

Note: For Detailed Mapping, See Appendix , Geotechnical Feasibility Investigation, Plate 1, Prepared By G.A. Nicoll & Assoc., Inc.

Alberhill Ranch

LONG BEACH EQUITIES, INC

- Mining Spoil (Fills)

Mining spoil has been accumulating in the Alberhill Coal and Clay Pits since 1883. It has been estimated that from 1881 to 1987, approximately 6.4 million cubic yards of mining spoil have been placed within the Alberhill Coal and Clay Pits area. The spoil fill has not been compacted.

- Undifferentiated Fill (Fillu)

Road base fill placed during the construction of portions of Lake Street and Coal Road, Railway bed fill for the abandoned A.T. and S.F. Railroad track, and fill placed during the construction of dirt access roads and for the regrading of the two gravel pits, have been designated as Undifferentiated fill. Some of these fills have probably not been compacted and tested.

- Certified Fills (Fillc)

Fill that was placed, compacted and tested during the construction of the Interstate 15 and the re-alignment of the north end of Lake Street has been designated as Certified Fill.

- De-silting Pond Sediments (DPS)

The de-silting pond sediments are present within the de-silting ponds in the Alberhill Coal and Clay Pits. These sediments consist of layers of soft, moist to wet sand, silt and clay. Some layers of decaying vegetation may be present in the older pond sediments.

- Faulting

A number of northwest-trending faults that dip at moderate to steep angles toward the southwest and northeast are present on the site, as shown on Exhibit 6, Geology. No conclusive evidence for active faulting was found. As stated in "Mitigation Measures", the presence or absence of faults should be confirmed by future trenching.

Seismicity

Seismic risk in Southern California is a well recognized factor, and is directly related to geologic fault activity. Seismic damage potential depends on the proximity to active or potentially active fault zones, and on the type of geologic structures. In relative terms, seismic damage is generally less intense in consolidated formations, such as bedrock, than in unconsolidated materials, such as alluvium.

In Southern California, most of the seismic damage to man made structures results from ground shaking and to a lesser degree from liquefaction and ground rupture caused by earthquakes along active fault zones. In general, the greater the magnitude of the earthquake, the greater the potential damage. Seismic hazards at this site are attributed to ground shaking as a result of an earthquake epicentered on an active fault.

Potential causative faults in the project area are the San Andreas Fault (located 30 miles to the southwest), the San Jacinto Fault (located 20 miles to the southwest), the Newport-Inglewood Fault (located 25 miles to the northeast), the Whittier - Elsinore Fault (located .2 miles from the site), and the San Fernando Fault (located 65 miles to the southeast). With one exception, historic seismic events along the Elsinore Fault Zone are limited to microseismic earthquakes. The 6.0 magnitude earthquake that occurred in the Alberhill area on May 15, 1910, is the only major event recorded in historic times along the Elsinore Fault Zone.

Liquefaction

According to the report prepared by Highland Soils Engineering, Inc., the majority of the site is underlain by well-consolidated sedimentary, metamorphic or igneous bedrock which precludes most liquefaction problems. However,liquefaction is likely within the lower drainage areas in the northwest portion of the site where loose, sandy, alluvial soils and shallow groundwater exist.

Soil Settlement

The settlement potential under seismic loading conditions for the on-site materials is, in the opinion of Highland Soils Engineering, very low to low for the volcanic, metamorphic, and sedimentary bedrock, low to moderate within the alluvium and landslide materials, and low to high with the existing fill soils.

PROJECT IMPACTS

The following discussion presents impacts associated with development and operation of the Alberhill Ranch Specific Plan. Geotechnical and grading impacts which may occur within the Annexation Areas have not been evaluated. It is anticipated that the nature of future impacts and mitigation measures associated with the Annexation Areas would be analyzed as part of the environmental review conducted by the City of Lake Elsinore when future development plans are submitted.

From a geotechnical standpoint, it is the opinion of both G.A. Nicoll & Associates, Inc. and Highland Soils Engineering, Inc. that the Alberhill Ranch site will be suitable for development, provided recommendations contained in the respective reports are implemented during planning, design and construction. As in the preceeding "Existing Conditions" discussion, the following information is based on the Nicoll & Associates report, unless otherwise noted.

Topography

Implementation of the Alberhill Ranch Specific Plan will result in several direct impacts on the project site and will unavoidably alter some of the existing natural landform. These impacts will occur during the development phase of the project; however they will result in long-term visual and physical impacts, as the site will be permanently altered by project development.

The grading concept for the Alberhill Ranch Specific Plan site is intended to maintain the natural land form as closely as possible. Remedial grading activities will be necessary in the mined out areas of the site and recontoured in accordance with the guidelines established in the Reclamation Plan required by the Surface Mining and Reclamation Act (SMARA). Grading will also be needed to stabilize potential landslide areas through fill buttressing and recontouring. Grading of the site will be conducted in a manner which will eliminate/minimize the need for the import or export of dirt.

Significant topographic features that have not been impacted by mining or that are not constrained geotechnically will be retained. As shown on Exhibit 3, Land Use Plan, 531 acres of the site have been designated as permanent open space. This allows retention of the majority of the primary ridgeline which extends northwest/southerly through the center of the site, though some recontouring will be necessary. Where grading is necessary along this ridgeline, it will be recontoured to maintain its natural character. Grading below the ridgeline to the south will generally follow natural contours in creating terraces to stabilize the slopes. On the Walker Canyon side of the ridgeline, grading and recontouring will be minimized to maintain the natural open space and preserve the Temescal Creek habitat area.

In addition, 169 acres of the site are proposed for development with Rural Residential uses, at a density of 0.2 d.u./acre (See Exhibit 3, Land Use Plan). This low density product will minimize grading impacts on the steeper slopes at the southern project boundary.

Another 133 acres of the site are proposed for designation as "RCD", Single Family Residential Constraint Designed. Development standards for this land use category are intended to encourage design solutions which minimize grading and maximize preservation of the natural hillside topography. This may be accomplished by clustering dwelling units in appropriate areas and thus retaining areas of significant natural topography.

Geologic Setting

The construction and development phase of the proposed project will have a number of direct impacts on the geologic characteristics of the site and require consideration, as follows:

-Excavation Conditions

Project grading will necessitate excavations in underlying soil material. Based on G.A. Nicoll & Associates' field exploration and evaluation of geotechnical literature, the native soils and fill soils (Qal,Qalo,Qcol DPS and Fill) underlying most of the site should be readily excavated with conventional earthmoving equipment. Light to heavy ripping can be expected in the Silverado Formation, in the cemented zones of the Pauba Formation and in the altered bedrock of the Bedford Canyon Formation and Santiago Peak Volcanics. In the unaltered bedrock, moderate to heavy ripping is anticipated within the Bedford Canyon Formation and the upper 30 to 60 feet of the Santiago Peak Volcanics. Excavation below the depth of 30 to 60 feet in the unaltered Santiago Peak Volcanics will require blasting.

Most of the material generated during the excavation of the soil and bedrock units will be suitable for use as fill. However, some of the bedrock cuts and cuts within the Pauba Formation will produce rock fragments larger than 8 inches that will require special handling during grading, such as off-site removal or windrowing.

-Unsuitable Soils

Project grading will require removal and recompaction of all uncertified fill in areas planned for development, according to G.A. Nicoll & Associates. Most of the existing fills will be suitable for use as structural fill. The de-silting ponds sediments (DPS) in the Alberhill Coal and Clay Pits will require special treatment to remove excess moisture before it can be utilized as structural fill. Alluvial and colluvial soils (Qal, Qcol) and topsoils that are porous or those having low in-situ densities will require removal in areas to be developed.

According to Highland Soils Engineering, Inc., partial fill removal averaging 5 to 10 feet may be adequate for artificial fills which are more than 10 feet in thickness and which have been placed on natural slopes of less than 5:1 (horizontal: vertical), pending grading plan review and additional investigation. (See "Mitigation Measures".)

-Expansive Soils and Bedrock

The "Geotechnical Feasibility Investigation" prepared by G.A. Nicoll & Associates (included as Technical Appendix A) describes the expansion potential for soil and bedrock material, to be considered in the design of footings and foundations for the proposed project.

-Slope Stability

Grading for the proposed project will require cut and fill of slopes. Based on the observed geologic conditions and on the nature of the on-site soils, cut and fill slopes should be grossly stable at slope ratios of 2:1 (horizontal:vertical), except in areas underlain by bedrock of the Silverado Formation and Landslides. Northwest, west and southwest-facing cut slopes constructed in the Silverado Formation will require buttressing in order to insure stability. As discussed in "Mitigation Measures", grading in areas underlain by landslides will require the total or partial removal, or buttressing of the landslides. Cut slopes constructed in sandy and gravelly soils, or in soft or highly fractured bedrock, may be surficially unstable and may require stabilization fills.

-Erosion and Drainage

Project implementation could result in erosion of slopes. In the undeveloped condition, erosion of slopes has occurred on steep slopes, on slopes where the vegetation is sparse or absent and on slopes where loose soils are present. "Mitigation Measures" will be necessary to control potential erosion of slopes resulting from the proposed development.

-Percolation Characteristics

The "Geotechnical Feasibility Investigation" prepared by G.A. Nicoll & Associates (included as Technical Appendix A) describes the percolation characteristics of the site, to be considered in the design of the grading plan.

-Mine Shafts and Tunnels

As part of project grading, the mine shafts and tunnels remaining from historic coal and clay mining activities will require collapsing and removal or filling. (See "Mitigation Measures".)

Seismicity

No ground surface rupture during future seismic events is anticipated, though the presence or absence of active faults on-site will be confirmed through trenching. (See "Mitigation Measures".) Moderate to severe groundshaking is anticipated during a 100-year interval, thereby exposing future project residents and structures to seismic hazard. However, the hazard is no greater than is found throughout Southern California.

Liquefaction and Soil Settlement

Liquefaction during a seismic event is likely within the lower drainage areas in the northwest portion of the site where loose, sandy, alluvial soils and shallow groundwater exist. In order to avoid impacts to future residents and structures in this area, mitigation will be necessary. (See "Mitigation Measures".) There is the potential for soil settlement impacts during a seismic event. The design of foundation and footings for the project will respond to the settlement potential of the site.

Significance of Impacts

Due to direct impacts associated with grading of the Alberhill Ranch Specific Plan, fault hazards, seismic safety, liquefaction and soil settlement, the Alberhill Ranch Specific Plan has been determined to have a significant impact on the environment, but these impacts can be mitigated to a level of non-significance through project design or through implementation of the mitigations listed below. No indirect or secondary project impacts are anticipated.

MITIGATION MEASURES

A-1) According to Highland Soils Engineering,Inc., partial removal and/or buttressing will be required in areas underlain by landslides. During the preparation of the site grading plans, the proposed grades shall be developed in such a way that the fills will be placed at the toe of slides to increase the stability of the existing landslides. Additional subsurface investigation and slope stability analysis shall be performed in conjunction with the preparation of the site grading plan. At the time of tentative tract map or plot plan submittal, a grading plan will be submitted for review by the Community Development Director and City Chief Building Official.

A-2) The presence or absence of suspected faults on-site shall be confirmed by future trenching. At the time of tentative tract map or plot plan submittal, a report from a qualified geotechnical consultant shall be submitted confirming that there are no active faults on the site. If any active faults are found, the project shall implement all recommendations of the report to mitigate potential hazards.

A-3) Erosion of slopes shall be controlled by planting vegetation and by constructing properly engineered drainage systems, in accordance with City of Lake Elsinore standards. Project grading will occur in three phases, thus limiting the potential for erosion. The grading plan submitted for the project shall have an erosion control component. Potential methods of mitigation of erosion include landscaping cut and fill slopes as soon as practical to reduce the potential for erosion, and use of erosion control devices such as energy dissipators. Positive surface gradients shall be provided to direct surface water from structural foundations.

A-4) A more detailed investigation shall be required to locate the existing tunnels and shafts in areas of future development and to determine their present conditions. Depending on future grades and on the locations and conditions of subsurface excavations, some of the tunnels and shafts may be left in place and may require only sealing of the entrances. Others may require filling, or collapsing and removal. During the preparation of grading plans, detailed on-site inspections shall be conducted by the applicant to determine the location and condition of tunnels and shafts. Prior to the issuance of grading permits, a report stating the results of these inspections and methods of filling or removal shall be submitted to the City Chief Building Official for review and approval.

A-5) According to Highland Soils Engineering, Inc., a grading plan review shall be conducted by the geotechnical engineer in order to develop specific mitigations relative to liquefaction prone soils. Additional field investigation may be necessary. Commonly employed procedures for mitigating the problems include the use of a compacted fill mat along with a gravel blanket, post-tensioned slabs, additional footing reinforcement, and setbacks from the tops of fill slopes toeing into liquefaction prone areas. Prior to the issuance of grading permits, the applicant shall submit a report from a qualified geotechnical engineeer confirming the absence/presence of liquefaction areas on the subject site, for approval by the City Chief Building Official. If potential liquefaction areas are found, then the project shall implement all recommendations made therein.

A-6) According to Highland Soils Engineering, Inc., the final determination for subdrainage requirements shall be made during existing fill and alluvial removals when a Geologist or Soils Engineer can observe the actual subsurface conditions.

A-7) The recommendations of Highland Soils Engineering relative to foundations shall be adhered to during project design.

A-8) If major grading operations take place during the rainy months of the year, additional precautions shall be taken to minimize erosion, in accordance with the erosion control plan component of the grading plan to be approved by the City Chief Building Official.

A-9) The project shall conform with the latest Uniform Building Code in order to satisfactorily mitigate the effects of seismic groundshaking.

The Alberhill Ranch Specific Plan contains design guidelines (Section IX.H., Grading Design) intended to minimize the disturbance of and blend with the natural topography as much as possible through the use of the following design guidelines. In addition, the Specific Plan proposes that grading of the natural terrain in all Residential Rural (RR) and Residential Constraint Design (RCD) areas be minimized, particularly on slopes in excess of 25%.

B. HYDROLOGY

EXISTING CONDITIONS

The following discussion summarizes the "Hydrology Study for Alberhill Ranch" prepared by NBS/Lowry. It is included in its entirety as Technical Appendix E.

Surface Drainage

The project site is located within the extensive Upper Santa Ana Valley Watershed which extends to the main divide of the Santa Ana Mountains south of Trabuco Creek. Drainage from the site is tributary to the Santa Ana River through Temescal Creek, which ultimately flows into the Pacific Ocean near Newport Beach in Orange County. Temescal Creek is the main drainage course on the site. It collects runoff from the Walker Canyon area which encompasses slopes both east and west of I-15. One hundred year storm runoff in this area is 11,500 cubic feet per second (CFS). In addition, drainage flows from Rice Canyon, east of Horsethief Canyon, more or less follow the Lake Street alignment along the site's northwestern boundary, and into Walker Canyon contributing 3,800 cfs to the flow. From there, drainage flows west to the Prado Flood Control Basin near Corona. Hydrologic conditions associated with the project site are shown in Exhibit 7, Existing Hydrology.

Existing Federal Emergency Management Agency (FEMA) data does not include detailed mapping of the project area. However, the project site is shown as Zone "D" on the Flood Insurance Rate Map (FIRM) index dated March 1983. This indicates an area of undetermined, but possible flood hazard. In addition, as discussed later, under "General Plan Policies" and as shown on Exhibit 11, Existing Land Use/Zoning, portions of the site are designated as "Floodway Fringe" and "Flood Plain & Flood Way" on the City of Lake Elsinore General Plan. No Master Plan of Drainage has been prepared by the Riverside County Flood Control and Water Conservation District; therefore no drainage fees are assessed.

At the request of the Riverside County Flood Control District, the U.S. Corps of Engineers has prepared a detailed project report that recommends Federal participation in the implementation of a flood control project that includes modification to Temescal Wash and the outlet of Lake Elsinore. The wash would be modified along the reach starting at the outlet of the Lake and extending downstream to Riverside Drive. The Alberhill Ranch project is downstream from the reach.

EXHIBIT 7

Existing Hydrology

SOURCE . NBS/LOWRY

Legend

- DRAINAGE BOUNDARIES
- 650 cfs — 100 YEAR STORM RUN OFF
- TEMESCAL CREEK

Alberhill Ranch

LONG BEACH EQUITIES, INC

Groundwater

Groundwater storage is continually being replenished by deep water percolation caused by precipitation and stream flow. The depth to groundwater surface is typically determined by existing on-site water wells. However, no wells are known to be present on the site and no groundwater was encountered in any exploration pits.

Free groundwater may be present within the alluvium in Temescal Creek. Minor amounts of groundwater may be present in the alluvium in the main tributaries to Temescal Creek, such as the tributary north of the Lake Street overpass. The E.L. Yeager Construction Company mined sand and gravel from two pits located along the north side of Interstate 15 near the Lake Street overpass. Both pits are now inactive and both have been regraded. It was noted that alluvium at the bottom of the Yeager Pit was becoming wet during quarrying operations. Perched groundwater may be present where permeable material overlies less permeable soils and bedrock.

A number of springs are present at the base of the Pauba Formation where it caps the Santiago Peak Volcanics and the Bedford Canyon Formation within the southwest portion of the site, near the inactive fault traces. Some seepage water was reported in some of the mine shafts and tunnels on the site.

PROJECT IMPACTS

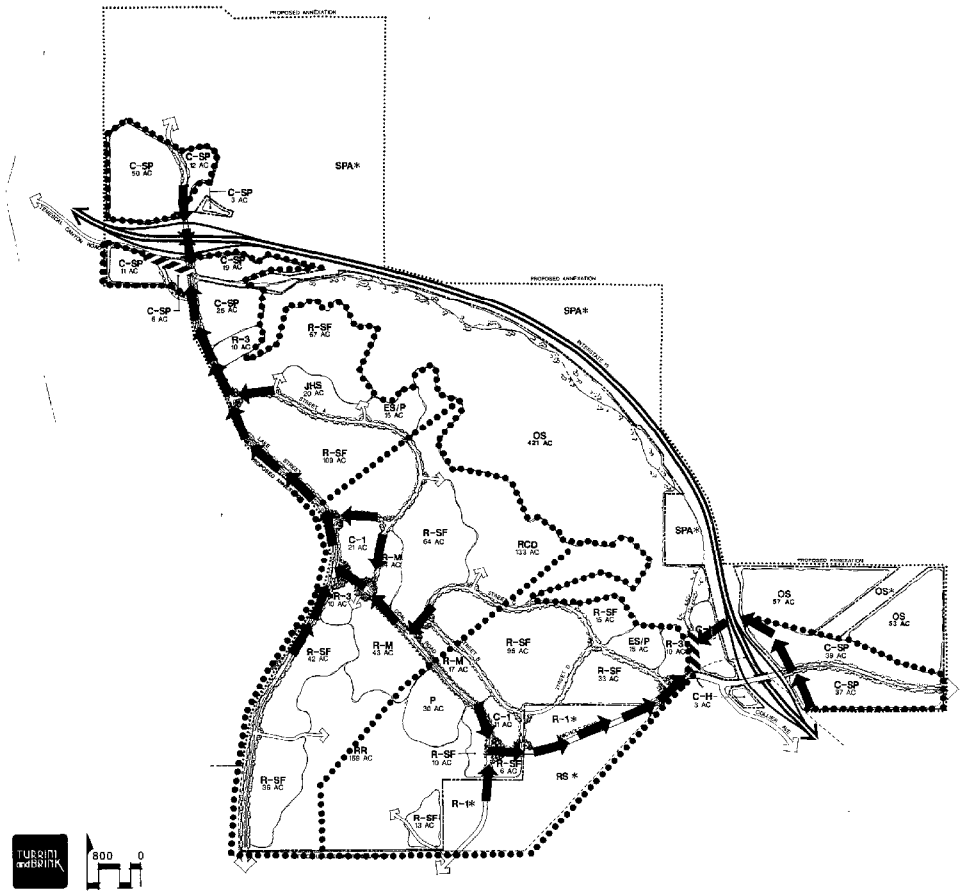
The following discussion presents impacts associated with development and operation of the Alberhill Ranch Specific Plan. Hydrologic impacts which may occur within the Annexation Areas have not been evaluated. It is anticipated that the nature of future impacts and mitigation measures associated with the Annexation Areas would be analyzed as part of the environmental review conducted by the City of Lake Elsinore when future development plans are submitted.

The development and construction phase of the Alberhill Ranch Specific Plan will potentially create short-term impacts related to erosion and sedimentation of Walker Canyon Creek. However, as discussed in Section IV.A., Geology, Soils & Seismicity, the grading plan for the project will contain an erosion control component to mitigate impacts associated with erosion during construction.

The development phases of the project will result in the creation of impermeable surfaces on-site, thereby increasing anticipated amount of on-site runoff and concomitantly reducing groundwater recharge. The increased site runoff, as well as upstream surface flows, will be accommodated by the proposed drainage system, as shown on Exhibit 8, Drainage Facilities.

EXHIBIT 8

Drainage Facilities



Legend

- R.C.P. STORM DRAIN
- CHANNEL IMPROVEMENTS
- DRAINAGE AREA WITHIN PROJECT SITE

TURRINI and BRINK

Alberhill Ranch

LONG BEACH EQUITIES, INC

The proposed storm drain layout shows a proposed pipe in the Lake Street right-of-way. Plans for this proposed pipe will be reviewed and approved by the City of Lake Elsinore Public Works Department, the Riverside County Road Department and the Riverside County Flood Control and Water Conservation District (RCFC & WCD).

The proposed storm drain system would discharge flows into the Walker Canyon Creek just west of I-15. Because of the magnitude of the flow at the discharge point, an energy dissipating structure is being considered at this time to reduce the outlet velocity and protect the existing stream bed. Erosion control devices (such as riprap over exposed soil) would then be used to protect Walker Canyon Creek against possible erosion problems. Minimal improvements to Walker Canyon Creek are envisioned adjacent to the proposed commercial area to prevent channel slope erosion. The minor modifications to the creek are not anticipated to conflict with the U.S. Corps of Engineer's proposed project, due to their distance downstream (1.1 miles) from the Corp's project.

Given the use of erosion control devices at the point of discharge into the Creek, as described above, no secondary impacts upon riparian habitat are anticipated.

The increased runoff will increase flows into Walker Canyon Creek and ultimately increase flows in Temescal Creek downstream, but the effect to properties directly downstream of the discharge point should be minimal. Temescal Creek is a well defined watercourse with high canyon walls and a well defined floodplain. Any future development of downstream properties will require them to stay clear to the 100 year floodway. Therefore, the development of Alberhill Ranch should not adversely affect downstream properties with regards to flooding.

Runoff from the project site entering the storm drain system and Walker Canyon Creek will contain minor amounts of pollutants normally typical of urban use. However, the magnitude of this impact is not great and this is not considered a significant impact.

Significance of Impacts

The Alberhill Ranch Specific Plan proposes Highway Commercial uses within the area designated "Floodway Fringe" and "Flood Plain & Flood Way" on the City of Lake Elsinore General Plan. This is considered a significant impact; however, it can be reduced to a level of insignificance by implementation of recommended Mitigation Measures. No other significant impacts are anticipated.

C. NOISE

The following discussion is based upon the "Noise Assessment for the Alberhill Ranch Specific Plan, County of Riverside" (September 1988), which is submitted in its entirety as Technical Appendix F.

EXISTING CONDITIONS

Community noise levels are measured in terms of the "A-weighted decibel", abbreviated dBA. A-weighing is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear.

Several rating scales have been developed for measurement of community noise. The predominant rating scale now in use in California for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL scale represents a time weighted 24 hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise occurs during certain sensitive time periods is penalized for occurring at these times. The evening time period (7 p.m. to 10 p.m.) penalizes noise by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. A CNEL noise level may be reported as a "CNEL of 60 dBA", "60 dBA CNEL", or simply "60 CNEL".

The criteria used to assess the acceptability of community noise levels varies with the municipality. The County of Riverside and the City of Lake Elsinore require that the exterior living areas (yards and patios) for new residential land uses do not exceed 65 CNEL. In addition, for multi-family residential projects, the California Noise Insulation Standard requires that the indoor noise levels in multi-family residential development do not exceed a CNEL of 45 dBA. In accordance with this standard, both the City of Lake Elsinore and the County of Riverside require that single family and multi-family development achieve an indoor noise standard of 45 CNEL.

Existing traffic volumes and estimated speeds were used with the Federal Highway Administration Model to estimate existing noise levels in terms of CNEL. Traffic volumes were obtained from the traffic study by Kunzman Associates for Alberhill Ranch (August 1988).

The distances to the CNEL contours for the roadways in the vicinity of the project site are given in Table 2, Existing Noise Levels. These represent the distance from the centerline of the road to the contour value shown. Note that the values given in Table 2 do not take into account the effect of any noise barriers or topography that may affect ambient noise levels.

The data in Table 2 indicates that a major noise corridor exists along Interstate 15. Noise levels directly adjacent to the interstate exceed 70 CNEL. Secondary noise corridors would include Riverside Drive and Lakeshore Drive. Noise levels directly adjacent to these roadways are in excess of 65 CNEL. Other roadways in the project vicinity have low levels of traffic and correspondingly low levels of noise.

PROJECT IMPACTS

Alberhill Ranch Specific Plan

The following discussion presents impacts associated with development and operation of the Alberhill Ranch Specific Plan.

Short-Term Impacts

During the development phase of the Alberhill Ranc Specific Plan, construction noise will be generated, which represents a short term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. Grading activities typically represent one of the highest potential for noise impacts, however, most of the grading should occur away from existing residential land uses. If problems do arise, the most effective methos of controlling construction noise is through local control of construction hours. When construction occurs adjacent to existing residential development the hours of construction should be limited to 7 a.m. to 7 p.m. on Monday through Friday. Construction should not be permitted for these circumstances on weekends or federal holidays. This is in accordance with Chapter 17.78, Noise Control, of the City Zoning Code.

Long-Term Impacts/Off-Site

During the operation phase of the Alberhill Ranch Specific Plan, traffic will be generated which will alter noise levels in surrounding areas. To assess the impact of the proposed project on land uses adjacent to streets that will serve the project, the increases in roadway noise along these streets was determined. These roadways were modeled for traffic conditions with and without the project (these two traffic conditions are defined in the traffic report). The projected increases in the CNEL noise level are presented in Table 3. All roadways with a projected increase in traffic due to the project are reported.

In community noise assessments, changes in noise levels greater than 3dBA are often identified as significant, while changes less than 1 dBA will not be discernible to local residents.

The data indicates that the noise will increase substantially over currently planned noise levels in the vicinity of the project. The noise levels are projected to increase by more than 3 dBA on the CNEL scale for most of the roadways. However, only those roadways that have a significant noise increase and are adjacent to existing residential developments are of concern.

Roadways along planned residential areas that are not yet developed can be mitigated by the developer at the time of construction. Examination reveals that of all of the roadway links that will experience a noise increase greater than 3 dB, only two links are adjacent to existing residential developments. These roadway links are Terra Cotta Road between Nichols and Lakeshore, and Robb Road between Coal and Terra Cotta.

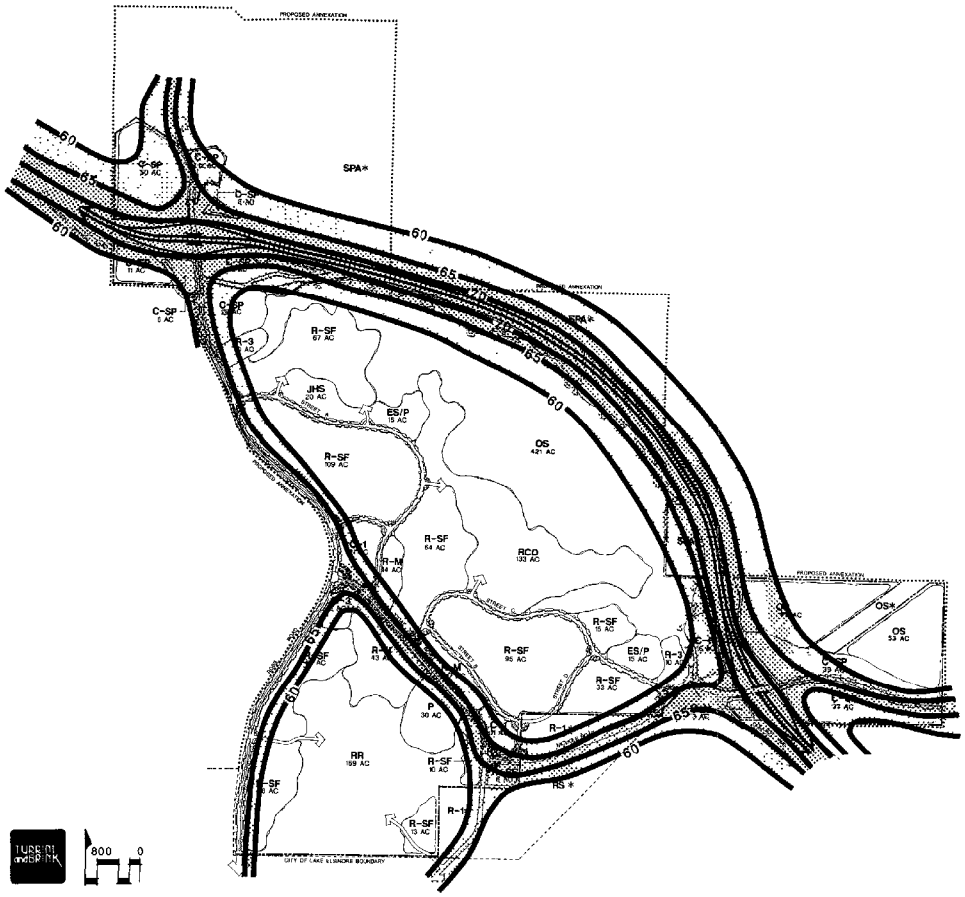
Traffic volumes reported in the traffic study were used with the FHWA Highway Traffic Noise Model to project unmitigated noise levels for all of the roadways. These projections do not take into account any barriers or topography that may reduce noise levels. Table 4 presents the only two roadway links with significant noise increases adjacent to existing residential development.

TABLE 4
FUTURE NOISE IMPACTS TO OFF-SITE RESIDENTIAL DEVELOPMENT

	Distance to CNEL Contour From Centerline of Roadway (Feet)		
Roadway	70 CNEL	65 CNEL	60 CNEL
Robb Road			
Coal to Terra Cotta	**48**	**104**	**224**
Terra Cotta Road			
Nichols to Lakeshore	**22**	**46**	**100**

EXHIBIT 9

Future On-Site CNEL Noise Levels



Legend

NOISE CONTOURS

Alberhill Ranch

LONG BEACH EQUITIES, INC

Also within the Annexation Area are 686 acres proposed for pre-zoning as "APR". Due to the existence of a major noise corridor along I-015, future uses on both sides of the freeway within the Annexation Area will be impacted by the 65 CNEL contour. Depending on the nature of future proposed land uses (Commercial, industrial, residential, etc.), appropriate mitigations would be determined. It is anticipated that any future development in the Annexation Area would be required to achieve acceptable interior and exterior noise levels, in accordance with City standards. The nature of future impacts and mitigation measures required to achieve these levels would be analyzed as part of the environmental review required when future development plans for the Annexation Area are submitted.

Significance of Impacts

Allthough the operation phase of the Alberhill Ranch Specific Plan will result in significant on- and off-site traffic noise impacts, implementation of the following "Mitigation Measures" will reduce impacts to a level of insignificance:

MITIGATION MEASURES

C-1) Construction adjacent to existing residential development shall be limited to the hours of 7 a.m. to 7 p.m. on Monday through Friday. Construction should not be allowed on weekends or federal holidays.

C-2) In order to ensure adequate noise control at construction sites, machinery maintenance areas shall be physically separated from residential uses.

C-3) All on-site residential lots and dwellings shall be sound attenuated against present and projected noise, which shall be the sum of all noise impacting the project, so as not to exceed an exterior standard of 65 dB CNEL in outdoor living areas and an interior standard of 45 dB CNEL in all habitable rooms, as follows:.

a) Prior to the issuance of Grading Permits, an Acoustical Analysis Report shall be submitted to the City of Lake Elsinore for approval. The report shall describe in detail the exterior noise environment and preliminary on-site mitigation measures. Acoustical design features to achieve interior noise standards may be included in the report in which case it may also satisfy "B" below.

b) Prior to the issuance of any building permits, an acoustical analysis report describing the acoustical design features of the structures required to satisfy the exterior and interior noise standards shall be submitted to the City

for approval along with satisfactory evidence which indicates that the sound attenuation measures specified in the approved acoustical report(s) have been incorporated into the design of the project.

C-4) The project proponent shall participate in any off-site highway noise mitigation program established by the City of Lake Elsinore in place at the time of final tract map approval.

D. CLIMATE AND AIR QUALITY

The following information summarizes the "Air Quality Analysis for the Alberhill Ranch Specific Plan" (August 1988) prepared by Mestre Greve Associates which is included in its entirety as Technical Appendix G.

EXISTING CONDITIONS

Climate

The climate around the Alberhill Ranch area, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidities, and limits precipitation to a few storms during the winter "wet" season. Temperature are normally mild with rare extremes above 100 degrees F or below freezing. Daily and seasonal variations about the annual mean temperature of 62 degrees F are small.

Winds in the project area are almost always driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime on-shore sea breezes. At night the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground based inversions, sometimes referred to as radiation inversions, are most severe during clear cold early winter mornings. Under conditions of a ground based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin and is responsible for high levels of ozone observed during summer months in the air basin.

Air Quality

The proposed project is located in the South Coast Air Basin and, jurisdictionally, is the responsibility of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD sets and enforces regulations for stationary sources in the basin. The CARB is charged with controlling motor vehicle emissions.

The SCAQMD in coordination with the Southern California Association of Governments (SCAG) has developed an Air Quality Management Plan (AQMP) for the air basin. The South Coast Air Basin has been designated a non-attainment area for ozone, carbon monoxide, nitrogen dioxide, total suspended particulates, and lead. The AQMP is designated to accommodate a moderate amount of new development and growth throughout the basin. The AQMP projections and mitigations are based on the SCAG-82 Growth Forecasts.

In 1987, Governor Deukmejian signed Senate Bill 151 into law which gives the SCAQMD significant new powers. The law instructs the SCAQMD to develop new transportation control measures and to develop rules for indirect sources (i.e., shopping centers, stadiums, and facilities which attract a large number of vehicles). The district is also required to develop further programs and regulations that would increase ridesharing and limit heavy-duty truck traffic on freeways during rush hours. The new SCAQMD programs will be developed during 1988, with the implementation following later.

The project site is located in SCAQMD's Source Receptor Area 25. The closest station is in Perris, and is in Source Receptor Area 24. The air quality monitoring collected at the Perris station is representative of the air quality experienced in the project area. Air quality data for the Perris station is provided in Table 5.

TABLE 5

AIR QUALITY LEVELS MEASURED AT THE PERRIS AMBIENT AIR MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level	Days State Std. Exceeded
Ozone	0.1 ppm for 1 hr.	0.12 ppm for 1 hr.	1984	0.22	137
			1985	0.29	146
			1986	0.22	133
			1987	0.22	136
Particulates	50 ug/m3 for 24 hr.	260 ug/m3 for 24 hr.	1984	193	15.0%
			1985	201	17.1%
			1986	215	18.8%
			1987	187	33.3%

NOTES:

1. Sulfates and leads were not exceeded at the Perris station.
2. Particulate standards for California was changed in 1984 to include only matter with an aerodynamic diameter of 10 micrometers or less (PM10). Data reported is total suspended particulates, since PM10 levels are not monitored at the Perris station.
3. Carbon monoxide and nitrogen oxides are not monitored at the Perris station.

The air quality data indicates that ozone is the air pollutant of primary concern in the project area. Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of the chemical reactions of other pollutants, most importantly hydrocarbons and nitrogen dioxide, in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the project area. All areas of the South Coast Air Basin contribute to the ozone levels experienced at Perris, with the more significant areas being those directly upwind. The major metropolitan area of Los Angeles contributes heavily to the ozone levels experienced in the area.

Particulates levels in the area are due to natural sources, grading operations, and motor vehicles. Particulate data indicates that particulates exceeded the State and federal standards much of the time each year.

Carbon monoxide and nitrogen dioxide are not monitored at the Perris station. Levels of these pollutants are attributable primarily to automobile traffic, and usually do not reach high levels except near major congested roadways, The levels of these pollutants are probably very low in the project area.

State and federal standards for lead and sulfates were not violated at the station. It should be noted that the standards for these pollutants are exceeded in other parts of the air basin, but were not exceeded for the Perris station. The SCAQMD publication, "Air Quality Trends in the South Coast Air Basin 1975-1983," provides an excellent summary of air quality trends in the basin.

PROJECT IMPACTS

The following discussion presents impacts associated with development and operation of the Alberhill Ranch Specific Plan. Air Quality impacts resulting from future development which may occur within the Annexation Area have not been evaluated in the Air Quality Assessment included as Technical Appendix G. Appproximately 686 acres of the 822-acre Annexation Area are proposed for pre-zoning as "SPA", Specific Plan Area. Due to the range of land uses allowed by "SPA" zoning, it is not feasible to forecast air quality impacts until development proposals are prepared. As discussed in Section II.A. Introduction and Purpose, it is anticipated that the City will require additional environmental analyses prior to approval of development plans in the Annexation Areas.

Short Term Impacts

Temporary impacts will result from construction activities of the Alberhill Ranch Specific Plan. Air pollutants will be emitted by construction equipment and dust will be generated during grading and site preparation. Construction activities for large development projects are estimated by the U.S. Environmental Protection Agency ("Compilation of Air Pollutant Emission Factors") to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust as required by SCAQMD Rule 403, the emissions can be reduced by 50 percent. Applying the above factors to the approximately 1,353 acres of the project (not including open space), a 6 month grading cycle, and a 5 year grading duration, results in an estimate of 2.67 tons per day of particulate emissions released. Although this represents 2% by weight of the 146 tons per day of particulates currently released in Riverside County, this type of particulate weighs more than the type of particulate generated by vehicle emissions. Therefore, a straight comparison by weight is not accurate in determining level of significance. In addition, due to the relatively large size of the particulate matter generated during

grading, the particulates are trapped by the upper respiratory system and do not travel into the lungs posing a health hazard, as do particulates generated by vehicular emissions. Additionally, this material is inert silicates, rather than the complex organic particulates released from combustion sources which are more harmful to health. Dust generated by such activities usually becomes more of a local nuisance than a serious health problem. In some cases grading may be near existing development. Care should be taken to minimize the generation of dust. Common practice for minimizing dust generation is watering prior to and during grading.

Heavy-duty equipment emissions are difficult to quantify because of day to day variability in construction activities and equipment used. A diesel powered scraper is the most common equipment used for grading operations. For this type of project 2 pieces of heavy equipment may be expected to operate at one time.

If all of the equipment operated for 8 hours per day the following emissions would result; 23 pounds per day of carbon monoxide, 99 pounds per day of nitrogen oxides, 10 pounds per day of hydrocarbons, 7.4 pounds per day of sulfur oxides, and approximately 6.5 pounds per day of particulates. The emissions generated by construction equipment are very minor.

Long Term Impacts

The main source of emissions generated by the Alberhill Ranch Specific Plan will be from motor vehicles. Other emissions will be generated from the residential combustion of natural gas for space heating and the generation of electricity. Emissions will also be generated by the commercial use of natural gas and electricity.

Estimates of the vehicular emissions generated by the Alberhill Ranch Specific Plan were made. Emission factors are from the SCAQMD "Air Quality Handbook," (April 1987). The factors are based on the EMFAC6D Program. The traffic report for the project (prepared by Kunzman and Associates, August 1988) forecasts 576,500 vehicle miles traveled per day (VMT). An average vehicle speed of 25 miles per hour was assumed for the projections. The emissions are projected for the year 2000. This year is the approximate year for project completion, and can be compared to directly to emission forecasts for the region. The projected emissions are presented in Table 6. They are calculated by multiplying the VMT for the project times the emission factor and conversion factors. Note that the Air Quality Handbook no longer provides emission rates for sulfur oxides as motor vehicles provide only a small portion of the total emissions of sulfur oxides.

TABLE 6

VEHICULAR EMISSIONS

Pollutant	Emissions (Tons/Day)
Carbon Monoxide	3.85
Nitrogen Oxides	0.70
Sulfur Oxides	N/A
PArticulates	0.17
Total Hydrocarbons	0.34
Reactive Hydrocarbons	0.30

Emissions will also be generated on-site by the combustion of natural gas for space heating and water heating for the proposed Alberhill Ranch Specific Plan as presented on Table 7. Emission factors were obtained from the Air Quality Handbook referenced previously.

TABLE 7

EMISSIONS FROM THE COMBUSTION OF NATURAL GAS

Pollutant	Emissions (Lbs./Day)
Carbon Monoxide	22.81
Nitrogen Oxides	106.90
Sulfur Oxides	0.00
Particulates	0.17
Hydrocarbons	6.05

Off-site emissions will also be generated due to electrical usage. The generation of electrical energy by the combustion of fossil fuels results in additional emissions off-site. Emissions generated by these means are presented in Table 8.

TABLE 8

EMISSIONS GENERATED BY ELECTRICAL USAGE

Pollutant	Emissions (Lbs./Day)
Carbon Monoxide	36.59
Nitrogen Oxides	210.39
Sulfur Oxides	21.95
Particulates	7.32
Hydrocarbons	1.83

Total Emissions

The additional emissions generated by the Alberhill Ranch Specific Plan are compared to emissions for Riverside County in Table 8A. The total emissions generated by the project are presented in the first line of Table 8A. The Riverside County emissions are for 2000 and are from the 1982 Revision to the Air Quality Management Plan. (The Draft 1988 AQMP does not provide emission forecasts by County or by Source Receptor Area.) The increases in all pollutants when compared to Riverside County emissions will be less than 1.5%. The increases in regional emissions are not considered significant, and significant changes in the regional air quality are not expected. Sub-regional emissions are projected to increase significantly. Generally, increases greater than 2 percent are considered significant. The projected sub-regional emission increases range from 10.7% to 23.3%. While this percentage increase is substantial and significant, it should be kept in mind that part of the reason the percentage increase is so high is that there is currently very little development in Source Receptor Area 25. The project would be anticipated to degrade slightly the air quality experienced in the Source Receptor Area, and perhaps adjoining areas.

TABLE 8A

COMPARISON OF EMISSIONS

Contaminant	CO	NO_x	SO_x	Part.	THC	RHC
Emissions in Tons per Day						
2000 Alberhill Ranch (Tn/Dy)	3.94	0.87	0.01	0.18	0.35	0.31
2000 Riverside Co. (Tn/Dy)	504.47	68.44	6.34	146.5	222.45	80.33
1987 Receptor #25	24.31	3.72	N/A	N/A	N/A	2.86
Emissions as a Percent of Regional Emissions						
Percent of County Emissions	0.78%	1.27%	0.17%	0.12%	0.16%	0.38%
Percent of Receptor Area 25	16.2%	23.3%	N/A	N/A	N/A	10.7%

The AQMP is designed to accommodate growth in the basin consistent with the SCAG-82 Growth Forecasts. This growth forecast is based essentially on the general plans adopted by the various local governments at the time of the development of the forecast, which for the project site is the County of Riverside. The County General Plan designates all of the site west of Lake Street for "Mineral Resources". Smaller portions of the site are designated "Mountainous" and "Not Designated as Open Space". The Alberhill Ranch Specific Plan would result in a substantial increase in vehicle emissions compared to the "Mineral Resource" designation; the mining activities permitted by the General Plan also generate pollutants including particulate matter, emissions from factory and mining equipment, etc. However, the project will contribute new sources of emissions which were not accounted for in the AQMP and is therefore not consistent. If the Alberhill Ranch Specific Plan is approved, it will become part of the City's General Plan and ultimately incorporated into future AQMP Plans.

Significance of Impacts

The Alberhill Ranch Specific Plan will have a significant impact on air quality in Source Receptor Area 25 and will require a Statement of Overriding Findings. The following mitigation measures are recommended for the project. These measures will reduce, but not eliminate the significance of the impact.

MITIGATION MEASURES

Construction Impacts

D-1) To minimize dust generation during grading operations SCAQMD Rule 403 shall be adhered to which will require watering during earth moving operations. A watering program for the project shall be submitted to the City for approval prior to commencement of grading.

Regional Air Quality

Support and compliance with the AQMP for the basin is the most important measure to achieve this goal. The AQMP includes improvement of mass transit facilities and implementation of vehicular usage reduction programs. If the Alberhill Ranch Specific Plan is approved, it will become part of the City's General Plan and ultimately incorporated into future AQMP Plans. The AQMP also includes energy conservation measures. Some of these have been incorporated into the project design, including provision of alternate transportation modes including biking and pedestrian trails. The following mitigations are also recommended:

D-2) Mass transit accommodations such as bus turnout lanes, park and ride areas and bus shelters shall be provided, where feasible.

D-3) Provide energy conserving street lighting in accordance with City and utility company standards.

D-4) Provide traffic signal synchronization where feasible.

E. WILDLIFE AND VEGETATION

The following discussion summarizes information contained in the following documents: 1) "Biological Assessment, Biddle Property, Riverside County, California" (June 1988) prepared by Steven G. Nelson, Consulting Biologist; and 2) Stephens' Kangaroo Rat Study for Alberhill Ranch" (September 1988) prepared by The Planning Center & SJM Biological. These reports are included in their entirety as Technical Appendix B.

EXISTING CONDITIONS

Biotic Communities

Following are descriptions of the biotic communities, consisting of plant and wildlife species found on-site. As the term implies, biotic communities are predictable assemblages of species which exist within the same physical habitat and have a very close and complex set of interrelationships. Biotic communities are shown on Exhibit 10, Biology Map.

1. Coastal Sage Scrub

Native coastal sage scrub is found over the steeper hillsides on-site, presumably where clearing and agriculture production in the past has not been feasible. These areas are primarily found in the extreme northern, northeastern and southwestern portions of the project area. In a regional perspective, this is a relatively common biotic community of coastal southern California.

Coastal sage scrub is a relatively open shrub vegetation, dominated by shrubs that grow two to five feet high and do not commonly form a closed canopy. Of interest in hillside and watershed management, these species are adapted to frequent fire. Although fire normally consumes coastal sage scrub vegetation entirely, it is re-established within two to three years by resprouting from burned stumps.

Groundcover is present but sparse. Dominant groundcover species are annual grasses and forbs that have been introduced through grazing and agriculture.

Coastal sage scrub supports a moderate diversity of wildlife in comparison to other habitats in southern California. However, vegetative productivity is normally high and large numbers of individuals of each species are usually found. Several species of lizards and snakes were observed or are expected.

Rodents and other small mammals are also abundant. These, in turn, support several species of larger mammalian predators, including coyote, gray fox and bobcat. Mule deer are also expected on-site.

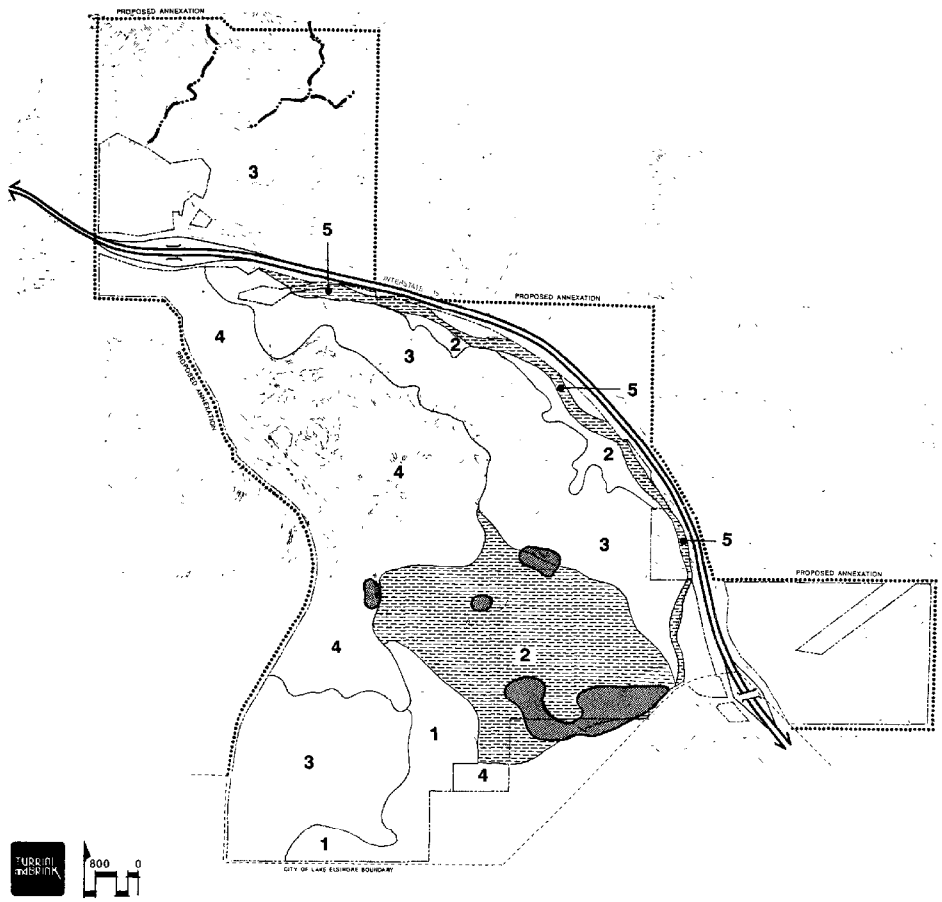


EXHIBIT 10

Biology

Legend

1	INTRODUCED GRASSLAND
2	INTRODUCED GRASSLAND/ COASTAL SAGE SCRUB
3	COASTAL SAGE SCRUB
4	DISTURBED/RUDERAL
5	RIPARIAN/FRESHWATER MARSH & LEAST BELLS VIREO HABITAT
	RIPARIAN INFLUENCE
	BIOLOGICALLY IMPORTANT AREA
	STEPHENS' KANGAROO RAT HABITAT

Alberhill Ranch

LONG BEACH EQUITIES, INC

Many species of birds were observed foraging within the coastal sage scrub and others are expected. Several raptorial birds were also observed including red-tailed hawk, turkey vulture and American kestral.

2. Introduced Grassland

Introduced grassland is a vegetation type that replaces native communities following dryland farming, heavy grazing, and other artificial clearing. Native plant species are either cleared or are destroyed and are replaced by adventitious species that can withstand frequent disturbance. The majority of these are non-native and are often considered to be "weeds".

Relatively large introduced grasslands are found on the more gentle south-facing hillsides of the site. Presumably, these areas were once covered by a native coastal sage scrub or native grassland community. However, past livestock grazing have long since cleared away native vegetation.

Introduced grassland is easily reestablished after fire; and on-going grazing and agricultural practices will continue to promote this vegetation. However, if left undisturbed, these areas will eventually revert back to their native conditions of native grasslands or coastal sage scrub.

Large open expanses of grassland support a limited diversity of wildlife, but those that are present are normally abundant. The side-blotched lizard, western fence lizard, red diamond rattlesnake and gopher snake are the characteristic reptiles of this community. The latter two species as well as larger mammalian predators, such as coyote, fox and bobcat, are supported by abundant population of rodents and small mammals.

Two groups of birds dominate the avian fauna in this community. Grassland birds such as the western meadowlark, water pipit, savannah sparrow, lark sparrow and horned lark forage for seeds and insects on the ground. Several of these species will nest here if not disturbed. The second group of birds are the predators. These species are expected to include the red-tailed hawk, marsh hawk, black shouldered kite, turkey vulture, American kestrel, barn owl, and great horned owl. For these organisms, grasslands serve as important feeding grounds where they prey on small mammals, lizards, and small birds. However, they depend on woodland habitats in the region for nesting and perching sites.

3. Riparian/Freshwater Marsh

Riparian communities are found along drainage courses throughout California where moisture is at or near the surface on a year-round basis. These conditions are favorable for the establishment of a rich cover of trees, shrubs, herbs, and grasses. This community type is found along numerous drainage

courses in the study area. It was once much more extensive in the region: however, flood control and irrigation projects have severely restricted its distribution. Due to the wide variation in the intensity and extent of man's activities adjacent to and within these areas, species composition and growth form vary considerably.

Riparian vegetation occurs along Temescal Creek on-site where there is evidence of permanently wet soil. This association is typically dominated by dense stands of willows nine to fifteen feet tall. Cottonwood and western sycamore are also common here. As shown on Exhibit 10, Biology Map, this area is considered to be "Biologically Important". Intermixed with riparian are areas of freshwater marsh. This community is composed of emerged aquatic plants and is found in permanently saturated soils where the water table is at or above the ground surface.

The riparian/freshwater marsh vegetation complex forms a contiguous corridor along most of Temescal Creek within the site boundaries. This corridor generally varies in width from approximately thirty feet to approximately 100 feet.

Riparian habitats normally possess a high diversity of plant types enhanced by their overlap with surrounding vegetation types (edge effect or ecotone), which in turn support abundant and diverse wildlife resources. Several amphibian and reptile species are also common here. Rodents are common along the edge of neighboring habitats and in areas where seasonal flooding does not occur. Particularly in lowland areas, woodlands are very important to furbearers (rabbits, raccoons, skunks, foxes, coyotes, weasels, bobcats) which use these habitats for cover, food, and denning. Populations of furbearers commonly reach their greatest densities in and around these areas.

Woodlands are very important to bird species. Nearly all the species found in surrounding habitats can be found here. In addition, it supports others that require the moist vegetation and/or tree. Many of these species are migratory, and utilize this habitat for over-wintering. Hawks, owls, falcons, kites, and doves specifically require the trees as perching and nesting sites and forage in surrounding vegetation. Some predatory species such as Cooper's hawk and sharp-skinned hawk forage in the habitat itself.

These habitats also serve as wildlife dispersion corridors important to regional wildlife populations. Many wildlife species, particularly medium and large forms, must move from place to place to forage for food or meet other requirements necessary for their survival. Wildlife dispersion usually takes place along canyon drainages and streamcourses, not only because topographic resistance is minimized, but also because they commonly support woodland habitats which provide cover, food, and/or water during movement.

The freshwater marsh community serves as the entire habitat for a number of faunal species. Most of these spend their entire life cycle in freshwater aquatic and semi-aquatic habitats, and could not otherwise survive.

Rodent populations can be found on the outside edge of the habitat, and medium to large sized mammals use the marsh for cover while watering, feeding and resting. Several bird species found here are also specialized for this type of habitat and can be found nowhere else. They include the Virginia rail, sora rail, American bittern, common yellowthroat, and long-billed marsh wren. There is an additional avifaunal component that requires the cover of the marsh and the open water of the intermittent ponds. These include American coot, common gallinule, green heron, great blue heron, grebes, and several species of ducks.

4. Disturbed Ruderal

A significant portion of the central portion of the site has been mined for the underlying clay deposits. This area has been completely altered from its native condition. Alterations have been so intensive that large expanses of bare ground exist today. This condition of intensive and/or frequent disturbance supporting sparse non-native vegetation is termed "ruderal".

High Interest Species

Several species which were observed or are expected to occur within the project area have been given special status designations by governmental agencies and private conservation groups. One species designated as endangered by the U.S. Fish and Wildlife Service occurs on-site. This is the Stephens' kangaroo rat (SKR), whose range includes the study area.

Effective 10/31/88, the SKR is provided protection by the Endangered Species Act of 1973, as amended. The Act sets forth a series of general prohibitions and exceptions that apply to all endangered wildlife. In part, these prohibitions make it illegal to "take", transport or sell any listed species. Permits may be issued to carry out activities involving endangered wildlife species under certain circumstances. Such permits are available for scientific purposes and for "incidental take" in connection with otherwise lawful activities.

In order to determine the presence or absence of the species on-site, a trapping program was undertaken by The Planning Center & SJM Biological. The results of this program are summarized herein, while the complete study, entitled "Stephens' Kangaroo Rat Study for Alberhill Ranch" (September 1988) is contained in Technical Appendix C.

The area trapped covers approximately 350 acres within the site boundaries determined to be "Biologically Important" located just west of I-15, as shown on Exhibit 10, Biology Map. A total of nine Stephens' kangaroo rats (SKR) were captured over two trap-nights. In addition, abundant sign was present at other trap sites, although no rats were captured. As a result of the trapping program, it was determined that Stephens' kangaroo rats occur in a general area covering approximately 37 acres. Due to the patchy nature of the area's occupation by SKR and the presence of several sites with heavily disturbed substrate that is unsuitable for SKR, approximately 20 of these acres is considered occupied or exhibit strong potential for occupation by SKR.

Another endangered wildlife species, the least bells vireo, though not observed may also be present on-site, associated with the dense riparian habitat along Temescal Creek. This species is known from the Temescal Canyon area and characteristically inhabits dense willow thickets, such as those found on-site.

The site also provides habitat for a group of birds included on the Audubon's Society's early warning list, known as the "Blue List". Blue-listed species are not rare or endangered and the listing is advisory only.

There are three sensitive plants known from the site, as described below. They are located within the area depicted as "Biologically Sensitive" on Exhibit 10, Biology Map. None of these are presently sanctioned as rare and endangered by State and Federal agencies. Due to the fall field investigation, the potential existence of these three species could not be verified.

Allium fimbriatum var. munzii (soon to become Allium munzii) is by far the most sensitive. Only eight populations are known to exist for this plant, seven in the Gavilan Hills- Temescal Canyon region and one about 20 miles to the east near Murietta Hot Springs.

Dudleya multicaulis is a wider ranging species. Alberhill Mountain represents the southern limit of its distribution on the east side of the Santa Ana Mountains. This species is currently a candidate for federal listing, the only one of the three being considered at this time.

Harpagonella palmeri is an annual, unlike the preceding two taxa which are both perennial herbs. Like the preceding two taxa, it is exclusively associated with clay soils, at least in its California range. It occurs over much of the clay soil on the south flank of Alberhill Mountain, and is fairly tolerant of mild disturbance.

PROJECT IMPACTS

The construction phase of the project will directly impact biological habitats through cut, fill and other grading activities, resulting in the loss of vegetation and the destruction of less mobile wildlife forms. From the standpoint of biological diversity, the loss of native communities such as coastal sage scrub will have an inherently greater significance than the loss of non-native or highly disturbed communities, such as rural/agriculture. As vegetation is removed or otherwise destroyed, the associated wildlife will either be destroyed or will be displaced to adjacent habitat areas where they will crowd and disrupt local populations.

The construction phase, as well as the operation phase of the project will result in harassment of wildlife. Harassment is defined as those activities of man, his machines, and his associated domestic animals which increase the physiological costs of survival or decrease the probability of successful reproduction in wildlife populations.

It should be noted that approximately one third of the site has previously been disturbed by mining operations and now exists in a disturbed/ruderal condition. Therefore, impacts to this area are not considered adverse.

The approximately 531 acres of open space proposed by the Alberhill Ranch Specific Plan includes 421 acres adjacent to Temescal Creek which will permanently preserve the sensitive riparian habitats on-site, thus avoiding project impacts to Temescal Creek on-site. This area provides highly valuable habitat for wildlife, potentially including an endangered species, the least bells vireo.

Sensitive biological resources on-site also include known and/or potential habitat for the endangered Stephens kangaroo rat (SKR). Development in the areas presently occupied by SKR will eliminate existing populations of this species. Development in areas of potential habitat will eliminate future expansion of the species into these areas during years of high population density. Assuming that known populations on-site were not eliminated by development, the latter impact would probably still contribute to the long-term demise of the species on-site. Due to the relatively small size and patchy distribution of SKR populations on the property, long-term on-site preservation is considered unlikely. Development of unoccupied habitats on-site would fragment existing populations of SKR and would contribute domestic pets to the predator pool, which would lead to the gradual loss of the species from the property.

Finally, three sensitive plants - Allium fimbriatum var. munzii, Dudleya multicaulis, and Harpagonella palmeri - are known to exist on the southwestern flank of Alberhill Mountain and the extreme southern portion of the site. The areas are proposed for

rural and single family residential, urban park and neighborhood commercial uses, resulting in the permanent removal of these species from the site. According to the project botanist, these sensitive plant species do not transplant well and "habitat bank" programs for these plants do not exist. Therefore, there is not the potential for off-site mitigation. In addition, preservation through fencing of the limited areas on-site in which the plants themselves grow is also not considered effective over the long-term, due to the sensitive nature of the plants and the extensive amount of urban disturbance which would surround them, such as pets, dust, disturbance of natural drainage patterns, etc. Therefore, if present on-site, these species will be lost.

Significance of Impacts

The Alberhill Ranch Specific Plan preserves a total of 531 acres of open space, including approximately 421 acres adjacent to sensitive riparian habitat along Temescal Creek on-site, thereby mitigating through project design potential impacts.

Project implementation will result in the development of an area where three sensitive plant species are known to exist. As no mitigation is proposed by the project, this must be considered a significant impact. If the spring survey to be undertaken as part of Mitigation Measure E-6 does not find these species on-site, the significance of this impact would be eliminated.

Development of known and potential habitat for the endangered Stephens' kangaroo rat as proposed by the project will contribute to the long-term demise of the species and is considered a significant impact. As discussed in Mitigation Measure E-5, the project will be required to contribute $1,950 per acre of land developed towards a program to establish a SKR Habitat Conservation Area or other appropriate mitigation as determined by the City's 10A permit, thereby ensuring the long-term survival of the species. However, the actual project impact is still considered significant.

Elsewhere on-site, proposed uses will also require habitat alteration, vegetation loss and will result in harassment of wildlife. However, these uses affect resources of relatively low significance and sensitivity, in a regional context.

MITIGATION MEASURES

The following mitigations are recommended, but will not eliminate the significant impacts identified above:

E-1) A comprehensive erosion and sedimentation control plan shall be prepared for all development areas draining into Temescal Creek. The plan should address the project during and after construction. The intent here is to protect valuable riparian/freshwater marsh habitats from degradation and loss.

E-2) Revegetation of cut and fill slopes, fuel modification zones and other graded areas shall be accomplished with plant palettes containing predominantly native species. Steeper slopes shall be revegetated with a mixture of coastal sage scrub species while more level areas shall be revegetated with species of native perennial grasses in an attempt to reestablish native grassland. An expert in landscape revegetation, who is knowledgeable and qualified in native plant mixtures should be consulted in this regard. A comprehensive landscape plan which incorporates these elements shall be prepared as a guideline and adhered to.

E-3) Any proposed modifications (eg. drainage outlets) to Temescal Creek, however minor, shall be processed with the California Department of Fish and Game pursuant to the requirements of the State Fish and Game Code Sections 1601-1603 Streambed Alteration Notification process.

E-4) Due to the presence of "blue lines" on-site as shown on the U.S.G.S. map for the area, the project shall also require a "404 Permit" from the the U.S. Corps of Engineers, with input from the U.S. Fish and Wildlife Service.

E-5) As the SKR is on the Federal Endangered Species list, project development will require a "permit to take" from the U.S. Fish and Wildlife Service, in accordance with the the Endangered Species Act and implementing regulations. In order to secure such a permit, mitigation must be made, such as the payment of fees. The City is required to obtain A "10 A" permit from U.S. Fish and Wildlife before any development in the SKR range can occur within the City. In order to obtain this permit, the City must submit a Mitigation Program for Fish and Wildlife approval. It is possible that the City of Lake Elsinore would adopt the "interim" ordinance now in effect in Riverside County which is payment of $1,950 per acre of land developed within SKR range.

E-6) An Assessment Study shall be undertaken prior to the issuance of grading permits regarding the existence, potential or known, of the three sensitive plant species on-site. This was not possible as part of the biological study, due to the fall field investigations. For best results, this survey should be performed during the spring months when these plants are flowering and can, therefore, be identified and located precisely. Although this survey will not mitigate impacts to these resources, it will shed more light on the exact significance of resource areas. Consequently, it will provide planners and decision-makers with better information than can be derived by the biology report which is liberal in delineating important resource areas and assumes a worst case scenario for its impact assessment.

E-7) The C-H development (s), as proposed, will be located adjacent to Temescal Creek. Because of the biological significance of the Creek, all development within the C-H Districts will be subject to site plan review per Design Review process as required by Chapter VIII of the Specific Plan "Development Standards". During Design Review, the relationship of the proposed C-H development(s) to Temescal creek will be examined and reviewed to insure that adequate and appropriate set backs and design mitigations are implemented. Furthermore, it is anticipated that those areas within the C-H Districts that are located directly adjacent to the Creek will be landscaped with specially selected plant materials that will complement the existing riparian/fresh water marsh vegetation in the Creek. All proposed improvements to the Creek will also be subject to review by the County Flood Control District.

F. LAND USE

EXISTING CONDITIONS

All but eight acres of the 1,853-acre Alberhill Ranch Specific Plan and all of the 822-acre Annexation Area are currently located in unincorporated Riverside County, adjacent to the City of Lake Elsinore's northern boundary. Eight acres in the southern portion of the Alberhill Ranch Specific Plan site are within City limits. The entire project area is within the City's Sphere of Influence as determined by LAFCO. Overall, a total of 2,667 acres are proposed for annexation into the City of Lake Elsinore.

It should be noted that no development is proposed within any of the Annexation Areas at this time. The 822 acres are included as part of the 2,667 acre annexation proposal at the request of the City of Lake Elsinore due to its location between the existing City boundary, the Alberhill Ranch site, and/or the limits of the City's Sphere of Influence boundary.

On-Site Land Use

Alberhill Ranch Specific Plan

As discussed in Section III.B., Background, a large portion of the Alberhill Ranch Specific Plan site has been disturbed by mining operations that have occurred over the last 100 years. In the early 1800's, coal and clay were discovered in the Alberhill area. Coal and clay were mined by tunneling and open pit methods. Since 1940, the clay has been mined almost entirely by the open pit method. In 1956, Pacific Clay Products acquired exclusive rights to the Alberhill Coal and Clay Company deposits and the mining of clay is still in progress to the west of the project site today.

Although Pacific Clay Products owns approximately 500 acres of the Specific Plan site, most of their mineral extraction activities on-site have occurred on land leased from the Biddles. During the past 100 years, much of the usable clay has been removed from this portion of the site. As of June 30,1988, Pacific Clay Products terminated their lease on Biddle land and ceased their mining activity at that location because mining remaining clay deposits was economically infeasible. This is primarily because of costs associated with mining to the depths of the remaining clay deposits. Pacific Clay Products, the largest clay operator in Riverside County, gave notice five years ago to the Biddle family that they planned to terminate their lease in July 1988. Pacific Clay continues to mine their 2,000 acre clay mining operation adjacent to the project site. (See "Surrounding Land Use".) It should be noted that given current zoning and General Plan designations for the site, Pacific Clay Products could commence clay mining on their 500 acres of the site.

Annexation Areas

The 822-acre Annexation Area is composed of five physically separate areas to the north, east and south of the Alberhill Ranch site. This area is presently in a vacant, undeveloped state, although a few residences exist in the Annexation Area in the vicinity of Nichols Road and Terra Cotta Road. The 822-acre area is held in multiple private ownerships as shown on the Ownership Areas Map included in the back pocket of this document. Long Beach Equities has plans to purchase from the Biddles the two large annexation areas, totalling approximately 516 acres in size, located northwest of I-15.

On-Site Zoning and General Plan Designations

Alberhill Ranch Specific Plan

-County of Riverside General Plan Designations

The majority of the Specific Plan site is currently located within the County of Riverside. As shown on Exhibit 11, the County of Riverside General Plan Open Space and Conservation Map designates the Alberhill area, including much of the Specific Plan site, for "Mineral Resources" use. This designation is applied to State-classified MRZ-2 zones and permits mineral production and related uses and open space. The minimum lot size is 20 acres. The subject of the State's MRZ-2 Mineral Classification is discussed in Section IV.K., Mineral Resources.

Portions of the site on both sides of I-15 are designated "Areas Not Designated as Open Space", permitting urban development. This includes the approximately 65 acres north of I-15 at the Lake Street interchange. Approximately 110 acres of the site located east of I-15 and north of Nichols Road are designated as "Mountainous Area".

According to the Riverside County Comprehensive General Plan, both the Alberhill Ranch site and the Annexation Areas are located in the Elsinore Valley Area of the Southwest Territory Planning Area. Land Use Policies for the Elsinore Valley Areas are as follows:

> Future land uses within this area should be mineral extraction operations and Category I and Category II land uses, along I-15 north of the City of Lake Elsinore's Sphere of Influence. The remaining area north of Lake Elsinore's sphere of influence should be Category III land uses.

The project area does not lie within the boundaries of any Community Policy Areas of the Riverside County Comprehensive General Plan.

-County of Riverside Zoning Designation

The County of Riverside Zoning Designation for the Alberhill Ranch site is primarily MRA (Mineral Resources and Related Manufacturing). Limited areas of (R-R) Rural Residential exist in the southern portion of the site.

Major uses permitted in the MRA zone include large parcels with agricultural use, utility lines and recreational uses along with mining and stockpiling operations, rock crushing and ore reduction activities. The R-R zone allows light agricultural uses from the A-1 (agricultural-1) zone; R-1 uses (min. 20,000 sq. ft./1 ac lots) and R-A (Residential Agricultural lots over 20,000 sq. ft.). Horses and farm animals are also allowed.

- City of Lake Elsinore General Plan Designation

As previously discussed, the Specific Plan site as well as the Annexation Areas lie within the Sphere of Influence of the City of Lake Elsinore (except for the eight acres of the Specific Plan site which are already within City limits). The City of Lake Elsinore adopted its General Plan in December 1982 and includes the southern part of the project site and the Annexation Areas as within its Sphere of Influence. The City has since extended its Sphere boundary further north and east to encompass the entire project site. The General Plan, however, has not been updated to show land use designations within its new Sphere. The majority of the Sphere of Influence encompassing the project site is designated in a "holding pattern" for (1) Residential permitting a maximum density of 1 du/2 net acre.

In addition, portions of the Specific Plan site along Temescal Creek adjacent to Interstate 15 are designated (14A) Impact Sensitive - Floodplain and Floodway, and (14B) Impact Sensitive-Floodway Fringe along Temescal Creek adjacent to Interstate 15. The Floodplain and Floodway designation applies to areas subject to inundation such as 100-year floodplains as defined by flood rate insurance maps and other applicable City ordinances establishing provisions for health and safety. The Floodway Fringe designation includes the area along Temescal Wash between the lake outflow point and the Planning Area boundary which is subject to sheetflow inundation from surrounding hillsides. Industrial and commercial zoning can be applied when provisions are made to insure that flood hazards are eliminated.

- City of Lake Elsinore Zoning Designations

Zoning for the eight acres of the site located within the City boundary is CM (Commercial-Manufacturing District) allowing uses which combine commercial and industrial characteristics, including large display or storage uses and limited retailing.

Annnexation Area

- County of Riverside General Plan Designation

As can be seen on Exhibit 11, Existing Land Use/Zoning, the two large Annexation Areas northeast of I-15 are designated as "Mountainous" by the County of Riverside Open Space and Conservation Map. The remainder of the Annexation Area, including the Terra Cotta/Nichols Road area, is designated as "Area Not Designated as Open Space".

-County of Riverside Zoning Designations

The portion of the Annexation Areas located north of the Lake Street interchange is zoned MRA (Mineral Resources and Related Manufacturing). Also found east of I-15 are areas of R-R (Rural Residential) zoning.

In the vicinity of Nichols Road and Terra Cotta Road, approximately 25 acres to the north of Nichols Road are currently zoned M-SC (Manufacturing and Service Commercial). The remaining approximately 90 acres southwest of Nichols Road are zoned R-1 (One-Family Residential). Assuming a density of 6 d.u./acre, a total of 540 d.u. could be potentially accommodated in this area under current Riverside County zoning. (See Exhibit 11, Existing Land Use/Zoning.)

-City of Lake Elsinore General Plan and Zoning Designations

As with the Specific Plan site, the Annexation Areas are within the Sphere of Influence of the City of Lake Elsinore. No City General Plan or zoning designations are presently assigned to this area.

<u>Surrounding Land Use</u>

Exhibit 11, Existing Land Use/Zoning, depicts zoning and General Plan designations in the surrounding project area. Exhibit 12, Surrounding Land Use, shows existing land uses in the project area. Table 9, Adjacent Land Uses, presents this information in a tabular form.

TABLE 9
ADJACENT LAND USES

Location	Existing Land Use	Zoning	General Plan
Surrounding North	Vacant	R-R	Mountainous*
Surrounding East	Vacant, Single Family Res.	R-R	Mountainous*
Surrounding South	Vacant, Single Family Res.	R-1 M-1	(2) Residential**
Surrounding West	Mineral Extract. Ceramics Manuf.	MH M-R-A R-R	Mineral Resource*

*County of Riverside General Plan designation
**City of Lake Elsinore General Plan designation

As previously discussed, Pacific Clay Products is continuing to mine clay on 2,000 acres off-site to the west of the Alberhill Ranch site. In addition to their mining activities, Pacific Clay operates a ceramic factory, where they manufacture clay tile and pipe. The location of the mining operation and ceramic factory is depicted on Exhibit 12, Surrounding Land Use.

To the north and east of the Annexation Area, where terrain is steeper, is primarily vacant land in unincorporated Riverside Coutny, with limited rural residential use.

Some residential development has recently occurred immediately south and southwest of the Specific Plan site. Tract 18719 (377 d.u.; 2.0 d.u./acre) is presently under construction adjacent to the southwest corner of the site. To the south of the Specific Plan site, encompassing the area between Robb Road and Terra Cotta Road, are two recently constructed tracts: Tract 19750 (108 d.u.; 2.8 d.u./acre) and Tract 15020 (127 d.u.; 2.9 d.u./acre). These and other surrounding developments are discussed in Table 10, Residential Development in Project Area, corresponding with their # on Exhibit 12.

Remaining land uses south of the Nichols Road/Terra Cotta Road portion of the Annexation Area consist of scattered very low density residences in the City of Lake Elsinore, zoned R-1 with a City General Plan designation of (2) Residential. In the vicinity of Collier Avenue, which parallels nearby I-15 within the City of Lake Elsinore, industrial uses are zoned and are developing near the freeway.

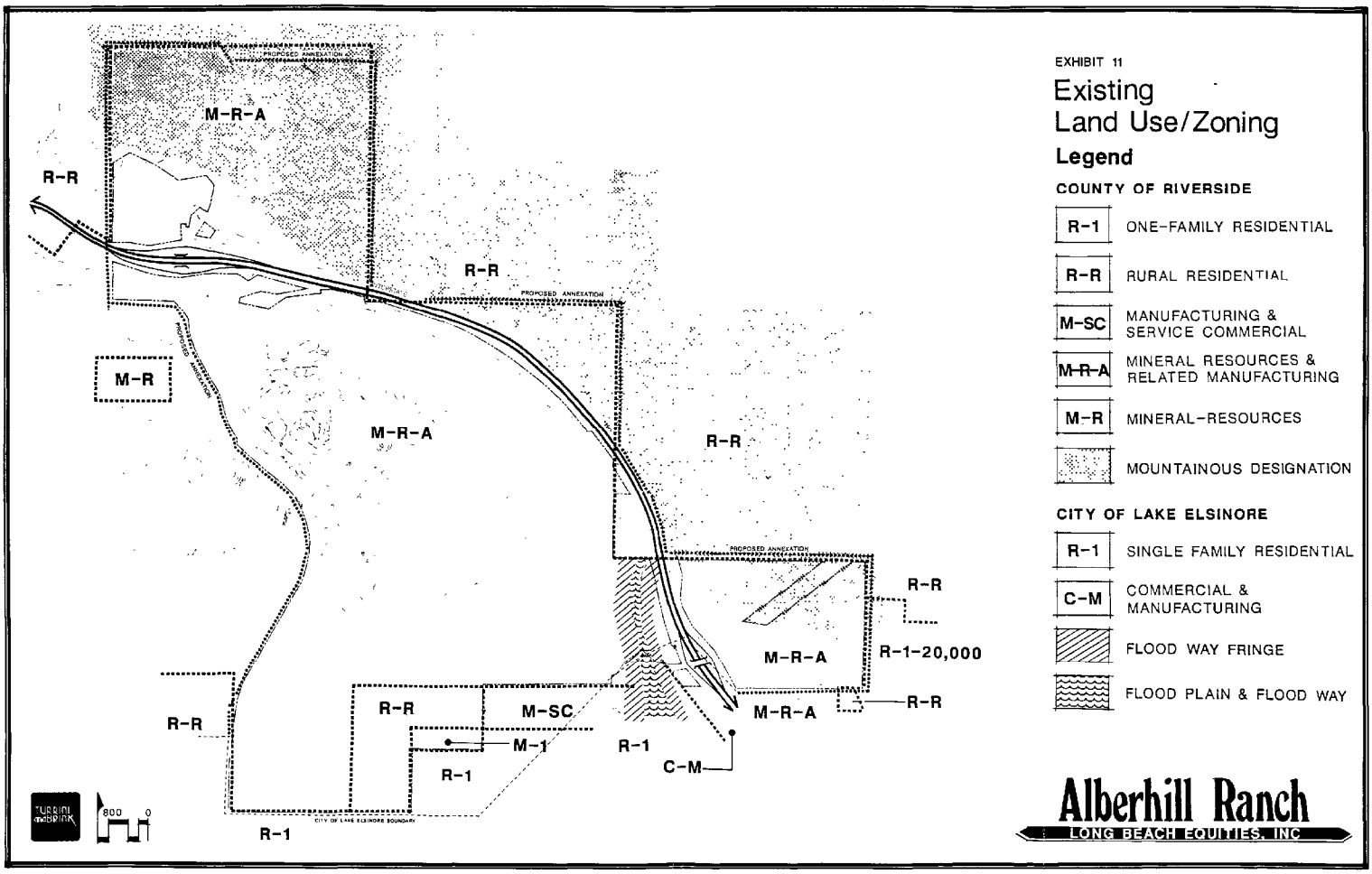
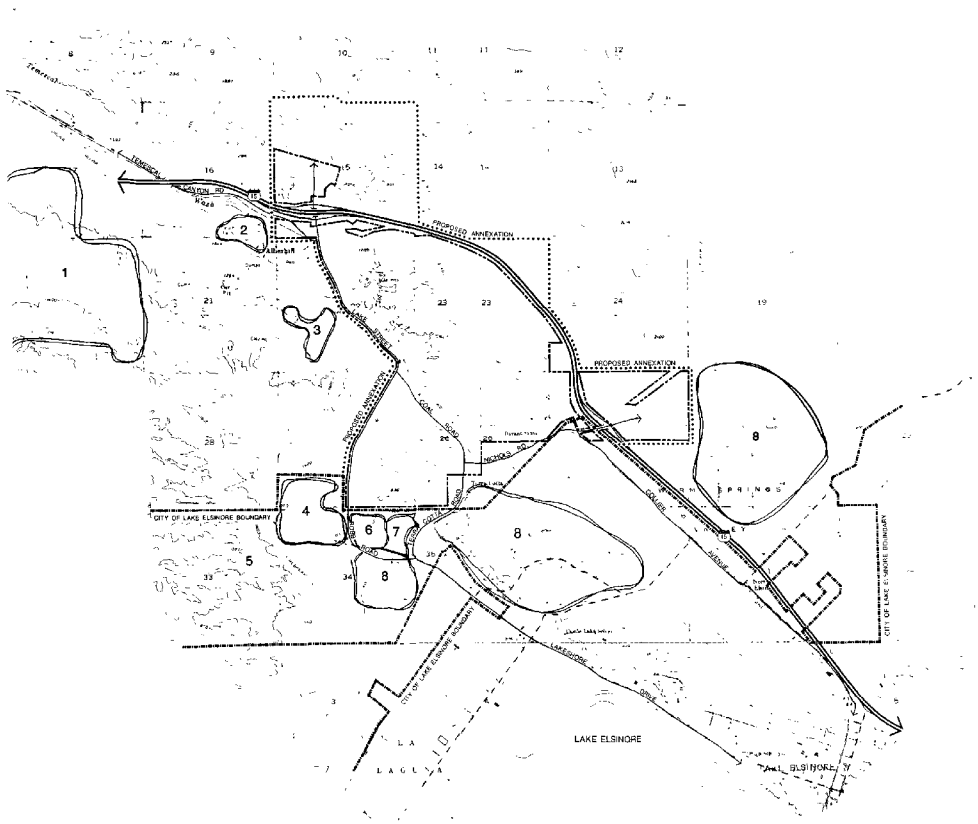


EXHIBIT 11
Existing
Land Use/Zoning
Legend
COUNTY OF RIVERSIDE
R-1 ONE-FAMILY RESIDENTIAL
R-R RURAL RESIDENTIAL
M-SC MANUFACTURING & SERVICE COMMERCIAL
M-R-A MINERAL RESOURCES & RELATED MANUFACTURING
M-R MINERAL-RESOURCES
MOUNTAINOUS DESIGNATION
CITY OF LAKE ELSINORE
R-1 SINGLE FAMILY RESIDENTIAL
C-M COMMERCIAL & MANUFACTURING
FLOOD WAY FRINGE
FLOOD PLAIN & FLOOD WAY
M-R-A
R-R
PROPOSED ANNEXATION
M-R
M-R-A
R-R
R-R
M-R-A
R-1-20,000
R-R
M-R-A
R-R
R-R
M-SC
M-1
R-1
R-1
C-M
R-1
CITY OF LAKE ELSINORE BOUNDARY
800
0
Alberhill Ranch
LONG BEACH EQUITIES, INC

EXHIBIT 12

Surrounding Land Uses



Legend

1	HORSETHIEF CANYON SPECIFIC PLAN #152 (UNDER CONSTRUCTION)
2	CERAMIC FACTORY
3	MINING OPERATION
4	TRACT MAP #18719 (DEVELOPING)
5	SPECIFIC PLAN AREA (VACANT)
6	TRACT MAP #19750 (DEVELOPED)
7	TRACT MAP #15020 (DEVELOPED)
8	EXISTING RESIDENTIAL

turrini and brink

Alberhill Ranch

LONG BEACH EQUITIES, INC

As shown on Exhibit 12 and Table 10, a total of 2,612 units have either been approved, are under construction or have been recently completed in the immediate project area.

TABLE 10

RESIDENTIAL DEVELOPMENT IN PROJECT AREA

# per Exh.12	Project Title	Status	No. units
#1	Horsethief Canyon Specific Plan #152 (County of Riverside)	Under Constr.	2,000 units
#4	Tract 18719 (City of Lake Elsinore)	Under Constr.	377 units (2.0 du/ac)
#6	Tract 19750 (City of Lake Elsinore)	Complete	108 units (2.8 du/ac)
#7	Tract 15020 (City of Lake Elsinore)	Complete	127 units (2.9 du/ac)
#8	Existing Residential (City of Lake Elsinore)		
		TOTAL	2,612 units

PROJECT IMPACTS/GENERAL PLAN POLICIES

On-Site Land Use

Project approval will result in the annexation of 2,667 acres of land into the City of Lake Elsinore. (Eight acres of the 1,853 acre Alberhill Ranch Specific Plan are already within City limits.) This will result in an increased demand for public services from the City, as discussed in Section IV.M., Public Facilities and Services. As the project site is within the Sphere of Influence of the City of Lake Elsinore and is located adjacent to the northern boundary of the City, annexation of the site could be considered to be occurring in accordance with accepted planning practices, based upon provision of public facilities and services.

Annexation Area

No development is proposed within the Annexation Area as part of this request for annexation into the City of Lake Elsinore. As discussed later, pre-zoning designations have been assigned to the 822 acre Annexation Area at the request of the City of Lake

Elsinore and are being evaluated as part of this Environmental Impact Report. However, no development is proposed at this time for the 822 acre Annexation Area as part of this project. Annexation of the entire 2,667 acre area into the City of Lake Elsinore would, however, increase the feasibility of some form of development occurring within the Annexation Area, by extending municipal and utility services to the Alberhill Ranch site. Making these services more accessible to the 822 acre Annexation Area would eliminate a potential development constraint.

As discussed in Section II.A., Introduction and Purpose, given the complexity of ownerships within the Annexation Areas coupled with the lack of precise land use plans, it is not considered "reasonably feasible" to provide impact assessments at this stage of processing. Therefore, no impacts have been identified at this time associated with annexation of this area into the City corporate boundary.

It should be noted that 686 acres of the Annexation Area are proposed for designation as "SPA", Specific Plan Area, which will be subject to the provisions of Chapter 17.99 of the City of Lake Elsinore Zoning Code and will be required to conform with General Plan Policies. Ultimate uses within these areas may include any combination of residential, commercial, industrial, mining, open space and agricultural use. At the time that Specific Plans are prepared in these areas, an environmental impact assessment would be prepared to identify any impacts associated with development.

The proposed pre-zoning designations could accommodate construction of 306 d.u. in the Terra Cotta/Nichols Road area, a decrease of 234 d.u. compared to the 530 units which could potentially be accommodated by present zoning. The proposed pre-zoning designations also eliminate any future M-SC use in this area.

As no development is proposed at this time, the annexation of these areas into the City of Lake Elsinore will not create impacts in terms of geology, hydrology, noise, climate and air quality, wildlife/vegetation, energy resources, aesthetics, historic and prehistoric resources or mineral resources. However, these zoning designations will allow for future residential development within the City and project annexation will create impacts in terms of population in the City of Lake Elsinore and provision of public services, as discussed in Section IV.G., Population and Housing, and Section IV.M., Public Facilities and Services. Traffic generated within the areas proposed for R-1 and RS zoning is included in the discussion of future traffic conditions in Section IV.L., Circulation. In addition, impacts associated with potential future development of this area have been considered in the assessment of cumulative impacts, as discussed in Section V.A., Cumulative Impacts Analysis. It should be noted that any subsequent development proposals in these areas would require City processing and approval. This includes, among other things, environmental

review, planning staff input, public hearings and City Council approval. Site specific analyses, such as biological and archaeological surveys and impact assessments would be appropriate at that time.

Alberhill Ranch Specific Plan

Within the Alberhill Ranch Specific Plan site, project approval will result in the development of the land uses proposed by the Specific Plan, as described in Section III.C., Proposed Land Use, and as shown on Exhibit 3, Land Use Plan. These uses include 3,705 dwelling units on 896 acres of the site, 531 acres of open space, 254 acres of commercial use (including Neighborhood Commercial, Highway Commercial and Commercial Specific Plan), 30 acres of parks, and 50 acres of school/park sites. Considering the total 1,853 site acreage and the 3,705 dwelling units proposed, a gross density of approximately 2.0 d.u./acre is achieved by the proposed Specific Plan.

Development of the Alberhill Ranch site will preclude future use of the site for clay mining operation, although some remedial removal of clay and minor reclamation of existing stockpiles may occur prior to or in conjunction with project grading. As previously discussed, Pacific Clay Products has already terminated their lease with the Biddles due to economic constraints associated with mining remaining clay deposits. The termination of clay mining on-site is not a project impact.__

With the exception of the 531 acres of open space proposed (28% of project acreage), development of the Alberhill Ranch Specific Plan will also eliminate open space and the rural atmosphere currently present on those portions of the site not previously disturbed by clay mining and will continue the trend towards urban development occurring in the area.

<u>On-Site Zoning and General Plan Designations</u>

Alberhill Ranch Specific Plan

- County of Riverside General Plan Designation

As a result of project approval, the Alberhill Ranch Specific Plan site and Annexation Area will be incorporated into the City of Lake Elsinore and will therefore be subject to the goals and policies of the City of Lake Elsinore General Plan.

As discussed under "Existing Conditions", the majority of the Specific Plan site is designated as "Mineral Resources" by the County of Riverside General Plan. This designation is in response to the State's Mineral Resource Zone. However, the clay mining activities which have been occurring over the past 100 years have extracted the mineral resource to the point where Pacific Clay Products, Inc. found it no longer economically

feasible to do so. Therefore, the project applicant is requesting a General Plan Amendment, zone change, etc. as necessary in order to change the future land uses to those proposed by the Alberhill Ranch Specific Plan. This topic is discussed in more detail in Section IV.K., Mineral Resources. As discussed later under "Significance of Impacts", the change in land use designation from "Mineral Resources" to "Specific Plan" could be a potentially significant environmental impact.

- County of Riverside Zoning Designations

As a result of project approval, the Alberhill Ranch Specific Plan site and Annexation Area will be incorporated into the City of Lake Elsinore and will, therefore, no longer be subject to the zoning regulations of the County of Riverside. The Alberhill Ranch Specific Plan does not propose uses that are consistent with the County's zoning designation of MRA (Mineral Resources and Related Manufacturing). As discussed in Section IV.K., Mineral Resources, it appears that clay extraction is no longer an economically viable use for the Alberhill Ranch site; therefore, residential, commercial and recreational uses and zoning are being proposed as the site is annexed into the City of Lake Elsinore. As discussed under "Significance of Impacts", the change in zoning designations from County MRA zoning to City Specific Plan zoning is a potentially significant environmental impact.

- City of Lake Elsinore General Plan

Approval of the Alberhill Ranch Specific Plan will result in designation of the site as "Alberhill Ranch Specific Plan Area, 2.0 d.u./acre" on the City of Lake Elsinore General Plan. The topic of flooding associated with the project site's City General Plan land use designation of "Floodplain and Floodway" and "Floodway Fringe" is discussed in Section IV.B., Hydrology. The Alberhill Ranch Specific Plan's relationship to the goals, objectives and policies of the City General Plan is evaluated in Section V.G., General Plan Consistency.

-City of Lake Elsinore Zoning Designations

Approval of the Alberhill Ranch Specific Plan would result in the 1,853-acre site being assigned a "Specific Plan Area" zoning designation, and all future development in the Specific Plan area would be subject to the Alberhill Ranch Specific Plan Zoning Ordinance, Design Guidelines and Implementation Program, as approved by the City of Lake Elsinore. This would supercede the current County zoning as well as the CM zoning currently found on the eight acres of the Specific Plan that are already within the City of Lake Elsinore.

Annexation Area

-County of Riverside General Plan and Zoning Designations

As a result of project approval, the 822-acre Annexation Area would be incorporated into the City of Lake Elsinore and would, therefore, be subject to the goals and policies of the City of Lake Elsinore General Plan and the regulations of the City Zoning Code rather than those of the County. An estimated 686 acres of the 822-acre Annexation Area are proposed for pre-zoning as "SPA", Specific Plan Area, which could potentially allow uses compatible with the existing County General Plan designation of "Mountainous" and "Area Not Designated as Open Space" and the current County MRA and R-R zoning in these areas. On the other hand, future Specific Plans in these areas could propose uses that are much more intense than allowed by current County General Plan and zoning designations. The extent of this impact cannot be determined given the lack of development plans in this area.

As previously discussed, within the Terra Cotta Road/Nichols Road portion of the Annexation Area, the proposed change of zone from County of Riverside R-1 and M-SC zoning to City of Lake Elsinore R-1 and RS zoning will allow the construction of 306 d.u, a decrease of 234 units. In addition, the change of zone results in the loss of approximately 25 acres of M-SC zoning. Development in this area is consistent with the County General Plan designation of "Area Not Designated as Open Space".

- City of Lake Elsinore General Plan and Zoning Designations

Pre-zoning is the process by which the City assigns a zoning classification to land before it is annexed into the City. As shown on Exhibit 3, Land Use Plan, 686 acres of the 822 acre Annexation Area are proposed for pre-zoning as "Specific Plan Area". This zoning designation will require that Specific Plans be submitted by developers of large land ownerships. As previously discussed, it is not feasible to provide impact assessments within the Annexation Areas given the lack of precise development plans for these areas. The "Specific Plan Area" zoning and General Plan designation insures that any future development proposed in these areas will be subject to review and appproval by the City of Lake Elsinore in order to assess and mitigate any future impacts. Development in these areas will be subject to the provisions of Chapter 17.99 of the City of Lake Elsinore Zoning Code. Ultimate uses within these areas may include any combination of residential, commercial, industrial, mining, open space and agricultural use.

Approximately 45 acres of the Annexation Area in the vicinity of Terra Cotta and Nichols Road are proposed for pre-zoning as R-1 as shown on Exhibit 3, Land Use Plan. Assuming a density of 6 d.u./acre, a total of 270 d.u. could potentially be accommodated. A General Plan designation of (2) Residential would be compatible

with R-1 zoning. Also, 71 acres south of Nichols Road are proposed for designation as RS "Residential Estates" and could potentially accommodate 36 units. A City General Plan designation of (1) Residential is compatible with the .5 d.u./acre allowed by the RS pre-zoning designation. The 306 d.u. which could be accommodated by these designations is a decrease in density compared to the 540 d.u. and the 25 acres of M-SC use allowed by current Riverside County zoning (assuming R-1 densities of 6 d.u./acre). The decreased intensity of land use permitted by the proposed pre-zoning designations would generally result in reduced environmental impacts.

The remaining 20 acres of the Annexation Area, within the easternmost extension of the site, are an Edison Company easement proposed for pre-zoning as Open Space.

Surrounding Land Use

The Alberhill Ranch Specific Plan proposes an overall density of 2.0 dwelling units per acre, which is in keeping with the residential character of development immediately adjacent to the project site (Tracts 18719, 19750 and 15020) within the City of Lake Elsinore to the southwest. This density is also consistent with the General Plan concept of providing lower densities at the perimeter of the City. It is also consistent with similar Specific Plan areas designated in the City's General Plan, including Ramsgate at 2.5 d.u./acre, Canyon Lake Hills at 2.0 d.u./acre and the Missing Link at 2.0 d.u./acre.

Other surrounding land uses include the Pacific Clay Products clay mining operation and ceramic factory. Adjacent to the ceramic factory are proposed areas of C-SP (Commercial/Specific Plan). As a result, no land use conflicts are anticipated between the ceramic factory and land uses proposed by the Alberhill Ranch Specific Plan. The clay mining operation itself takes place on the west side of Lake Street. As part of project implementation, Lake Street will be improved to Major Highway standards and will ultimately have a 100 foot right-of-way and a pavement width of 76 feet. In addition, Lake Street will be landscaped and a setback will be provided between the street and future residential uses. No residential uses are proposed within 300' of the mining operation. Considering the use of Lake Street as a buffer, as well as required setbacks associated with mining operations, no land use conflicts are anticipated.

Within hillside areas and areas adjoining significant open space, both large lot development and cluster development concepts will be applied to maximize the open space and to create a transition between natural and developed areas. In keeping with City Council policy, high density development sites have been designed not to exceed 10 acres in area.

At freeway interchanges, a mix of commercial retail and business park uses will be accommodated. Commercial uses will include support services for office and business park uses in addition to freeway oriented retail and service commercial uses.

The R-1 zoning proposed within the Annexation Area located just north of Nichols Road is a change in the ultimate land use presently allowed by the M-SC zoning. The proposed R-1 zoning is more compatible with land uses proposed by the surrounding Alberhill Ranch Specific Plan. In addition, the City's General Plan designates industrial uses in the corridor along Collier Avenue and I-15. For these reasons, the County MS-C zoning has been eliminated in favor of the R-1 designation. Within the Annexation Area south of Nichols Road and east of Terra Cotta Road is an approximately 71 acre area designated for RS zoning, "Residential Estates", accommodating 36 units. This RS zoning is intended to be compatible with existing low density uses to the south within the City of Lake Elsinore.

Significance of Impacts

If this Environmental Impact Report is certified prior to annexation into the City of Lake Elsinore, then the land use designation conflict with existing County policies could potentially be considered a significant impact. However, mitigation to this impact is annexation to the City and adoption of site specific zoning which is intended to be compatible with the surrounding area. If this mitigation occurs, then this impact is reduced to a level of insignificance.

MITIGATION MEASURES

The preparation of the Alberhill Ranch Specific Plan complies with the City of Lake Elsinore General Plan designation and it contains special land use and design controls that are not available when land develops on a piecemeal, tract by tract basis. It provides for adequate school facilities, parks and open space, circulation, etc., as well as provides design guidelines for Entry Statements, Streetscapes, Landscaped Setbacks, etc. In addition, site planning and design criteria include Architectural Guidelines, Commercial Design Criteria, Land Use Transitions, Community Parks, Open Space and Trails, Community Walls and Fencing, and Grading Design. The Specific Plan is required to satisfy the City of Lake Elsinore Zoning Code Section 17.99, Special Plan District. No additional mitigation for impacts to land use are recommended.

G. POPULATION AND HOUSING

EXISTING CONDITIONS

Table 11A, Population and Housing Data, presents 1988 population and housing totals for the County of Riverside, Central Riverside, and the City of Lake Elsinore. These figures are per the State Department of Finance (DOF). Also presented are Southern California Association of Governments (SCAG) Growth Management Forecasts for the County of Riverside and for Central Riverside for the year 2010. Year 2010 projections for the City of Lake Elsinore are from SCAG GMA-1 Baseline Projections, the most current projections available.

TABLE 11A
POPULATION AND HOUSING DATA

	County of Riverside		Central Riverside		City of Lake Elsinore	
	Pop.	d.u.	Pop.	d.u.	Pop.	du.
1988	946,100		237,100		12,790	5,928
2010	1,815,800	816,200	581,400	258,000	45,597	20,739

Table 11B, Employment Projections, provides SCAG's existing and projected employment totals (per the Growth Management Forecast) for the County and for Central Riverside. No data was available for the City of Lake Elsinore. In 1984, the job/housing ratio in Riverside was .76 jobs per d.u.; in Central Riverside, it was .45 jobs per d.u.

TABLE 11B
EMPLOYMENT PROJECTIONS

	County of Riverside Employment	Central Riverside Employment
1984	247,000	39,800
2010	626,500	179,500

PROJECT IMPACTS

Population projections established by the City of Lake Elsinore in calculating park dedication requirements (Resolution No. 85-34) indicate a factor of 3.6 persons per d.u. for single family, 3.1 for duplex/medium-low density and 1.8 for apartments/condos.

Alberhill Ranch Specific Plan

Utilizing the City park dedication factors, the anticipated population generated by Alberhill Ranch is projected in Table 11C, Population Projections - Alberhill Ranch.

TABLE 11C

POPULATION PROJECTIONS - ALBERHILL RANCH

Dwelling Units	Land Use	Factor	Pop.
34 d.u.	R-R (Rural Residential)	3.64	124
399 d.u.	RCD (Single-Family Residential)	3.64	1,452
1,960 d.u.	R-SF (Single-Family Residential)	3.64	7,134
592 d.u.	R-M (Single-Family Residential)	3.10	1,835
720 d.u.	R-3 (Multi-Family Residential)	1.80	1,296
3,705 d.u.		TOTAL POPULATION	11,841

The projected population of 11,841 persons for the Alberhill Ranch Specific Plan based on City Resolution 85-34 is greater than the population projected within the Fiscal Analysis for the project. (See Technical Appendix H, Fiscal Impact Report.) The Fiscal Impact Report projections utilize factors consistent with new residential tracts throughout Southern California. However, in order to provide a "worst-case" assessment of impacts, the higher figure (based on City Resolution No. 85-34) has been utilized.

Annexation Area

Utilizing the City's factors described above for the Annexation Area, a population of 1,114 would result, as shown in Table 11D, Population Projections - Annexation Area.

TABLE 11D

POPULATION PROJECTIONS - ANNEXATION AREA

Dwelling Units	Land Use	Factor	Pop.
36 d.u.	R-S (Residential Estates)	3.64	131
270 d.u.	R-1 (Single-Family Residential)	3.64	983
306 d.u.		TOTAL POPULATION	1,114

The 11,841 persons generated by the Alberhill Ranch Specific Plan and the 1,114 persons potentially generated with the annexation area results in a population of 12,955. This represents an approximately 100% increase to the 1988 City population of 12,790. However, the growth embodied by this project is within SCAG's GMA-1 Baseline Projections, which projected a City population of 45,597 by the year 2000. (See Section V.A., Cumulative Impacts Analysis for additional detail.)

Also, it should be noted that the Alberhill Ranch Specific Plan is proposing 254 acres of commercial use, including 203 acres of Commercial/Specific Plan. The predominant uses would be retail and service commercial in conjunction witha business park type of uses, such as research and development, limited manufacturing, office and administrative uses. As such, employment opportunities will be created, enhancing the jobs/housing balance of the area.

The Fiscal Impact Analysis included in Technical Appendix H estimates that the commercial/industrial development proposed by the Alberhill Ranch project will consist of the square footages listed below. In addition, the County of Riverside Community and Economic Development Department provided the employment factors provided below. As illustrated, the Alberhill Ranch Specific Plan will generate an estimated 3,097 jobs.

Supermarket:	100,000 s.f.	x 1 per	500 s.f.=	200 jobs
Superdrug	40,000 s.f.	x 1 per	550 s.f.=	72 jobs
Retail Tenant	565,000 s.f.	x 1 per	550 s.f.=	1,027 jobs
Non-Retail Tenant	103,000 s.f.	x 1 per	500 s.f.=	206 jobs
Hotel	120,000 s.f.	x 1 per	1,000 s.f.=	120 jobs
Office	40,000 s.f.	x 1 per	250 s.f.=	160 jobs
Bus.Park/Industrial	2,625,000 s.f.	x 1 per	2,000 s.f.=	1,312 jobs
			TOTAL	3,097 JOBS

As the Alberhill Ranch Specific Plan proposes construction of 3,705 d.u., the jobs/housing ratio provided by this project is .83 jobs per d.u. This ratio exceeds SCAG goals for new development in Riverside County of .77 jobs per d.u., while it conforms precisely with SCAG goals for new development in Central Riverside. The Specific Plan areas are anticipated to develop over a 13 year period, thereby ultimately creating employment opportunities for area residents and enhancing the job/housing balance in the region.

MITIGATION MEASURES

No mitigation measures are recommended for the increased housing and population generated by the Alberhill Ranch Specific Plan. However, Section IV.M. Public Facilities and Services, presents mitigation measures associated with increased demand for services from the City of Lake Elsinore as a result of the annexation request.

H. ENERGY RESOURCES

EXISTING CONDITIONS

Portions of the Alberhill Ranch project site were previously utilized for clay mining activities by Pacific Clay Products. Since the termination of Pacific Clay Products lease on the site, the project site consumes little or no energy.

PROJECT IMPACTS

The construction phase of the project will increase consumption of gasoline and diesel fuels for operation of construction equipment. In addition, energy is required to produce the construction materials and other material aspects of the project.

The operation phase of the project will increase consumption of energy for motor vehicle movement, space and water heating, cooking, refrigeration, air conditioning, etc.

As discussed in Section IV.M., Public Facilities and Services, on-site natural gas demand for the proposed Alberhill Ranch Specific Plan is estimated at 749,201 cubic feet per day. On-site electricity for the proposed project is expected to consume 182,946 kwh per day.

The 306 units which could be accommodated within the R-1 and R-S zoning of the Terra Cotta/Nichols Road area of the Annexation Areas will consume 67,983 c.f.of natural gas and 6,000 kwh of electricity per day. Due to the lack of precise development plans in the large portions of the Annexation Areas which are located east of I-15, it is not considered "reasonably feasible" to provide impact assessments relative to energy demand at this stage of development. (See Section II., Introduction and Purpose.)

Significance of Impacts

The increased energy demand created by this project is not considered a significant impact.

MITIGATION MEASURES

Section IX.D, Architectural Guidelines, of the Alberhill Ranch Specific Plan requires that future project development comply with several guidelines relating to energy conservation. These include the use of roof projections and overhangs in response to energy and climate concerns, guidelines for use of solar panels and support solar equipment.

In addition, Specific Plan Section IX.C, Site Planning Guidelines, proposes that when possible, structures be sited to take full advantage of natural and man-made amenities, breezes, sun and wind orientation, and views. Shading through the

appropriate use of landscaping should be used to protect structures from solar heat gain during the summer months. If desired, buildings may be oriented to facilitate the application of solar heating systems.

Energy conservation will be achieved through compliance with Title 24 of the California Administrative Code. No additional mitigation is proposed.

I. AESTHETICS

EXISTING CONDITIONS

The appearance of the 1,853 acre Alberhill Ranch project site is influenced by a number of factors. Due to the presence of a major ridgeline on-site located west of and parallel to I-15, the primary appearance of the site from off-site areas to the east is one of undeveloped hillsides and open space. Significant topographic features in the southern portion of the site also shield the interior of the site from view. Exhibit 4, Elevation Analysis, provides an illustration of the location and extent of these topographic features.

Another major factor influencing the appearance of the project site is the previous clay mining operation, which extensively altered the natural terrain and deteriorated the visual appearance of the site. Exhibit 4 depicts the extent of the mined area on-site. This area has been extensively disturbed by clay extraction activities over the past 100 years. Large pits, access roads, de-silting ponds and large fill spoil piles are present in this area. However, due to the topographic features noted in the preceding paragraph, this mined area is not visible except as a distant view from the northwest, generally.

The final factor related to the aesthetic qualities of the site is the riparian habitat found along the Temescal Creek on-site. (See Exhibit 10, Biology Map.) This area is dominated by dense stands of willows, nine to fifteen feet tall. This corridor varies in width from approximately 30 to approximately 100 feet.

PROJECT IMPACTS

The following discussion presents impacts associated with development of the Alberhill Ranch Specific Plan. Impacts to aesthetics which may occur within the Annexation Areas have not been evaluated. Given the lack of any development plans within these areas, it is not considered "reasonably feasible" to provide such impact assessments at this stage of development. (See Section II., Introduction and Purpose.)

Implementation of the Alberhill Ranch Specific Plan will permanently alter the nature and appearance of the site. The development phase of the project will involve grading to required to accommodate the uses depicted on Exhibit 3, Land Use Plan. These uses include 3,705 dwelling units, 254 acres of commercial use, as well as schools, parks, roads, etc. Approximately 531 acres of the site will remain as open space. This open space acreage encompasses the riparian vegetation associated with Temescal Creek. The open space system also includes the significant ridgeline located west of and parallel to I-15. No grading is proposed within this open space area (though some recontouring of this ridgeline will occur); therefore,

appearances of the site from most portions of I-15 will not be impacted by project development. Approximately 169 acres in the southern portion of the site will be developed at a density of 0.2 d.u./acre, thereby minimizing visual impacts to natural topography in that area as well.

This alteration of appearance of the site is permanent and will continue throughout the life of the project (operation phase).

Approval of the Alberhill Ranch Specific Plan will significantly improve and enhance the appearance of the mined area on-site. In order to accommodate the residential, commercial and school uses proposed in this area, the mined area will be "reclaimed". The urban uses proposed by the project will be visually more attractive than the current disturbed excavated area.

In addition, the Alberhill Ranch Specific Plan contains Development Standards and Design Guidelines which regulates future development within the 1,853 acre project. These include guidelines relative to entry statements, streetscapes, landscaped setbacks, architectural guidelines, land use transition policies, grading design guidelines, etc. These features of the Specific Plan are intended to further enhance the appearance of the site. Project development will include an extensive landscaping design, as shown on Exhibit 13, Landscape Plan.

Significance of Impacts

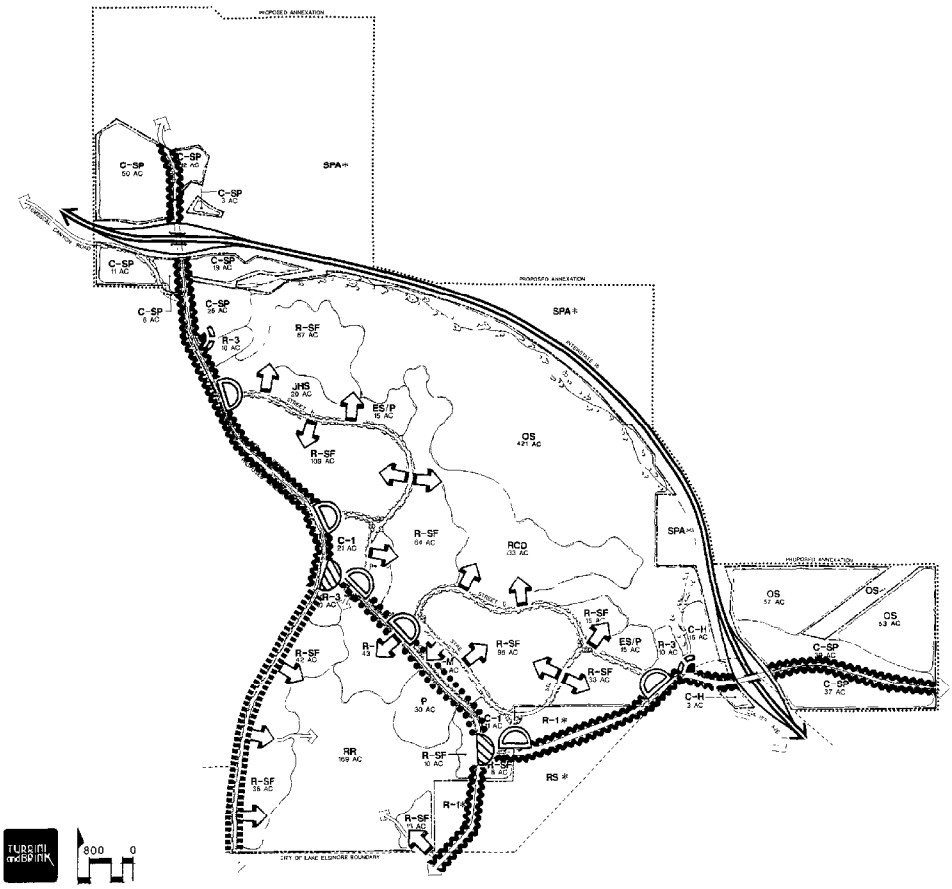
As discussed above, implementation of the Alberhill Ranch Specific Plan will result in impacts to the aesthetics of the area. However, the Specific Plan design mitigates these impacts through the preservation of 531 acres of natural open space, by reclaiming the mined area, and through the the imposition of standards and design guidelines regulating future development within the Specific Plan area.

MITIGATION MEASURES

As discussed above, the Alberhill Ranch Specific Plan proposes land uses, standards and design guidelines which mitigate visual impacts of project development. No additional mitigation measures are recommended.

EXHIBIT 13

Landscape Concept



Legend

- COMMUNITY ARRIVAL
- COMMUNITY ENTRY
- PROJECT ENTRY
- NEIGHBORHOOD ENTRY
- FORMAL LANDSCAPE TREATMENT
- INFORMAL LANDSCAPE TREATMENT
- SEMI-FORMAL LANDSCAPE TREATMENT

TURRINI and BRINK

800 0

Alberhill Ranch

LONG BEACH EQUITIES, INC

J. HISTORIC AND PREHISTORIC RESOURCES

The following information summarizes the following reports: 1) "Archaeological Assessment of the Biddle Property Feasibility Study" (October 1987); 2) "An Archaeological Assessment of an Addendum to the Biddle Property/Alberhill Ranch Feasibility Study" (March 1988) prepared by Christoper E. Drover, PhD and 3) "A Paleontological Survey and Assessment of the Alberhill Ranch near Lake Elsinore" (September 1988), prepared by Heritage Resource Consultants. These reports are included in their entirety as Technical Appendix C.

EXISTING CONDITIONS

Archaeology

An archaeological records check and survey were undertaken during September 1987 and February 1988, for the project site located on the Alberhill and Elsinore 7.5 USGS quadrangles, to ascertain whether any cultural resources might be impacted by the proposed development. A surface survey conducted on the subject property and a check of the archaeological site records on file at the Archaeological Research Unit (ARU), University of California, Riverside, were accomplished.

A review of the archaeological site records on file at the ARU showed only one site within the subject property boundaries, Riv-659; however, this site was mitigated by excavation by CalTrans as part of the widening of the Route 71 freeway.

Two new archaeological sites were located during survey activities. Site One consists of two loci of relatively sparse, surface distributions of artifacts. Artifacts found include cores, flakes and hammerstone. Given the low density of artifact distribution and soil conditions, no subsurface component is expected for this site. The artifacts and nature of their distribution, suggest a low intensity use, likely reflecting short-term activities such as stone tool manufacture. No indications exist of the site serving as even a limited campsite.

Archaeological Site two was located in the west-central portion of the project area during survey activities and consists of a hammerstone, cores, manos, a drill, flakes, projectile blanks, spent cores and numerous fragments of debitage exhibiting primary, secondary and tertiary working. This site would appear to be a male-oriented flaking station.

An historical site is located on the subject property, just west of the intersection of Nichols and Terra Cotta Roads. This site, just inside the project boundary, consists of remnant mining activities apparently associated with the Pacific Sewer Pipe operations at Terra Cotta as early as 1890. All that physically remains at this location is a brick lined well or pool (8 feet in diameter and 3 feet deep), and an elongated pile of silty ash or slag, possibly the by product of firing clay. A small slab of cement remains of the approximate dimensions of 6'x 8' with the date February 28, 1940. Given the referenced date of 1890 for the founding of the Pacific Sewer Pipe activities at this location, it is questionable whether the slab or the brick-lined well might date to a later period and use.

Another nearby site of historic potential, the Alberhill School built sometime between 1910 and 1920 lies just outside the subject property on the west side of Lake Street, just south of the intersection of Lake Street and Temescal Canyon Road.

Paleontology

The methods used in the paleontological study included: 1) review of the records of known paleontological sites in the region, 2) a survey of paleontological and geological publications for the project region, and 3) a sample survey of approximately ten percent of the property.

Five previously recorded sites were identified within the Silverado Formation. In addition, two new paleontologic localities were located during the field survey, for a total of seven sites. Fossils of several species of leaves, fern fronds, water reeds, stems, roots, trunks, etc. were recovered at these localities.

In addition to paleontologic resources known to exist on-site, the potential for discovering resources (paleontologic sensitivity) can be determined for each of the geologic formations on-site as discussed below:

Bedford Canyon Formation and Santiago Peak Volcanics
Paleontologic Sensitivity: Low

Due to the low-grade metamorphic activity that the rocks of the Bedford Canyon Formation have been subjected to, it is highly unlikely that significant paleontological resources will be recovered from this property during future earth-moving.

Intrusive Igneous Rocks of the Southern California Batholith
Paleontologic Sensitivity: None

Due to the mode of origin of these rocks there is no possibility that paleontological remains will be present in them.

Silverado Formation
Paleontologic Sensitivity: High

The fossil plants represented at the Alberhill ranch localities represent a major portion of the paleobotanical resources known from the Silverado formation. Although the Alberhill Ranch sites are not unique in yielding paleobotanical remains representing the Paleocene Epoch flora of the Western United States, they are among no more than a hand full of localities available for study. All of the known sites of this kind are considered rare and scientifically significant.

Pauba (?) Formation Equivalent
Paleontologic Sensitivity: Low

According to the literature and record search, neither the Pauba Formation of Unnamed Sandstone/Conglomerate are known to have yielded paleontological resources in the study region. The Pauba Formation has yielded vertebrate fossils from several sites in the Rancho California area.

Quaternary Older Alluvium
Paleontological Sensitivity: Low

Fossils are known from the older alluvium to the south at the Railroad Canyon and Skinner Reservoirs. The fossils found at both reservoirs were recovered from "clay soil" or clayey silt similar to the sediments found on the Alberhill Ranch.

Colluvium and Alluvium
Paleontological Sensitivity: Very low

No fossils or sub-fossils have been recorded from these sediments in the region. Although paleobiological remains may occur in these sediments, as they may in any other sediment, the likelihood of any being recovered from the study property is minimal.

PROJECT IMPACTS

The following discussion presents impacts associated with development of the Alberhilll Ranch Specific Plan. Impacts to historic and prehistoric resources resulting from future development which may occur within the Annexation Areas have not been evaluated in the Archaeological Assessment and Paleontological Survey and Assessment included as Technical Appendix C. It should be noted that given the multiple ownerships of the Annexation Areas and the lack of precise development plans, it is not considered "reasonably feasible" to provide such impact assessments at this stage of development. (See Section II., Introduction and Purpose.)

Archaeology and Paleontology

During the development phase of the project, grading will be undertaken which could result in the destruction of known and unknown on-site archaeological and paleontological resources, unless the recommended "Mitigation Measures" are implemented. The two known archaeological sites as well as all eight known paleontological sites will be directly impacted by project development.

The development phase of the project will warrant the removal of the remnant mining historical site. Given the condition and subsequent disturbances at the historical site, it does not warrant any further mitigation efforts. At this point the site essentially consists of a location where past historic activities occurred, and its' recordation as part of this report constitutes adequate mitigation.

Significance of Impacts

Although the impacts described above have the potential to be significant, the following "Mitigation Measures" will reduce all impacts to a level of insignificance.

MITIGATION MEASURES

Archaeology

J-1) For site one, data collection shall be performed, that is, the mapping and surface collection of the artifact described. Such data collection could be accomplished in four to five man-days and would free the area for future development activities of any kind.

J-2) For site two, data collection/testing program shall be performed, that is, mapping and surface collection and subsurface testing prior to development. While it is assumed that the site is primarily a surface deposit, subsurface testing would allow for the determination of site depth. Should subsurface deposits be encountered, testing will have determined what further sample size is necessary to achieve final mitigation. Such data collection activity could be accomplished in twenty man-days and would free the area for further development activities of any kind.

J-3) Any cultural resources encountered as a result of grading, shall result in the contact of a qualified archaeologist for inspection prior to further grading activities.

Paleontology

J-4) The collection of samples from sites which will be directly impacted prior to construction shall be conducted by a qualified paleontologist, in consultation with a paleobotanist. The purpose for the collection of impacted sites is to expand the size of existing museum research collections which do not currently contain the quality or diversity of specimens which are available from the existing sites to provide adequate samples to serve to needs of future research.

J-5) After pre-development collections are completed, the grading in the sediments of the Silverado and Pauba (?) Formations, and Older Alluvium shall be monitored full time. The following procedures shall be implemented during monitoring:

a) The monitor must be empowered to temporarily halt or redirect excavation equipment while fossils are being removed. The monitor shall be equipped to speedily collect specimens if they are encountered.

b) The monitor, with assistance if necessary, shall collect individual fossils and/or samples of fossil-bearing sediments. If specimens of small animal species are encountered the most time and cost efficient method of recovery is to remove a selected volume of fossil-bearing earth from the grading area and stockpile it off-site for later processing.

c) Fossils recovered during earthmoving or as a result of screen-washing of sediment samples shall be cleaned and prepared sufficiently to allow identification. This allows the fossils to be described in a report of findings and reduces the volume of matrix around specimens prior to storage, thus reducing storage costs.

d) A report of findings shall be prepared and submitted to the public agency responsible for overseeing developments and mitigation of environmental impacts upon completion of mitgation. This report would minimally include a statement of the types of paleontologic resources found, the methods and procedures used to recover them, an inventory of the specimens recovered, and a statement of their scientific significance.

e) The paleontological specimens recovered as a result of mitigation shall be donated to a qualified scientific institution where they would be afforded long term preservation and the opportunity for further scientific study.

K. MINERAL RESOURCES

EXISTING CONDITIONS

As discussed in Section IV.F., Land Use, the Alberhill Ranch site has been utilized for clay mining activities for the past 100 years. In 1956, Pacific Clay Products acquired exclusive rights to the Alberhil Coal and Clay Company deposits and the mining of clay is still in progress in parts of the Alberhill area today. As shown on Exhibit 12, Surrounding Land Use, Pacific Clay Products continues to mine their 2,000 acre clay mining operation to the west of the project site.

Pacific Clay Products owns approximately 500 acres of the Specific Plan site, located to the south and southeast of the "Mined Area" shown on Exhibit 4, Elevation Analysis. Only portions of the Pacific Clay Products land have been mined and it has also been used for stockpiling of mined material. Most of their mineral extraction activities on-site have occurred on land leased from the Biddles. On-site clay mining activities ceased as of June 30, 1988. Pacific Clay Products terminated their lease on the Biddle property because mining remaining clay deposits on-site became economically infeasible. This is primarily because of costs associated with mining to the depths of the remaining clay deposits. Pacific Clay Products, the largest clay operator in Riverside County, gave notice five years ago to the property owner that they planned to terminate their lease in July 1988.

As discussed in Section IV.F., Land Use, the clay deposits on the Alberhill Ranch site have been classified by the State Division of Mines and Geology into the following Mineral Resource Zones, as shown in Exhibit 14, Mineral Resource Map.

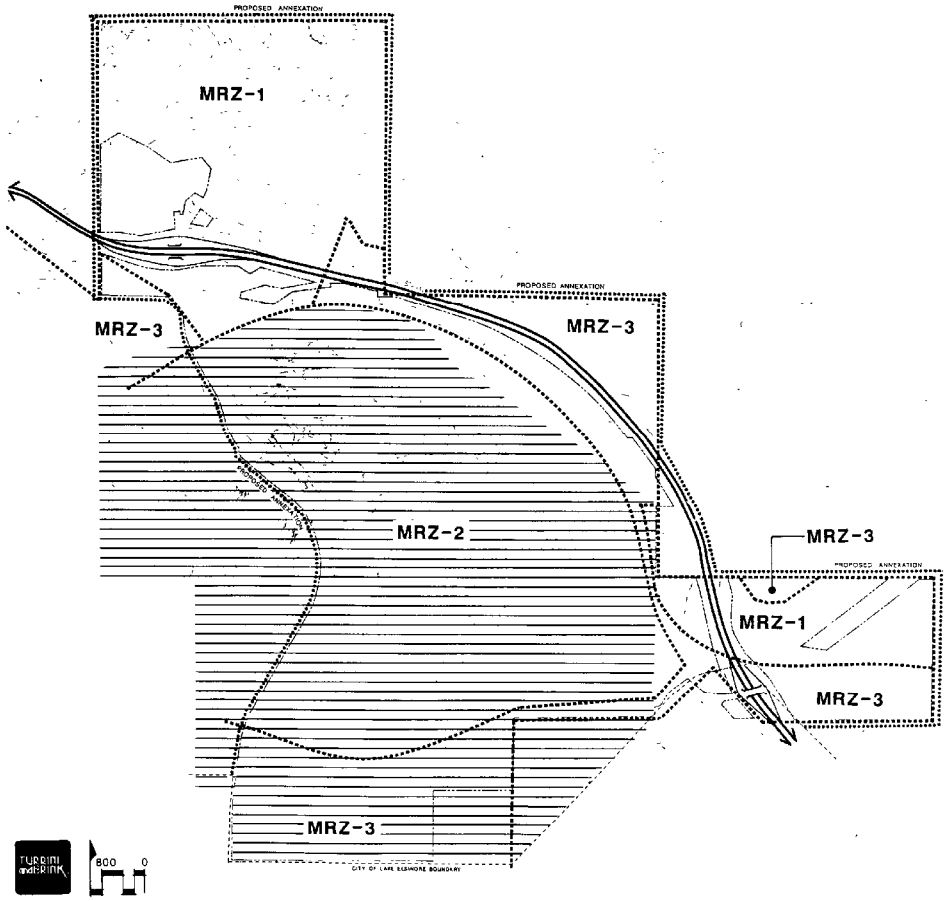
MRZ-1	No significant mineral deposits
MRZ-2	Significant mineral deposits
MRZ-3	Insufficient data to evaluate (includes areas where full composition and value of deposits are unknown)

The central portion of the site is classified MRZ-2 as a result of Pacific Clay's request for classification of clay deposit areas in 1982. In response to the State MRZ zoning, the County of Riverside General Plan designates the site for "Mineral Resources" use. According to the State Division of Mines and Geology, the lead agency has ultimate jurisdiction as to the use of land classified within a mineral resource zone, since the classifications are advisory only. However, the lead agency's General Plan must include the state information on the mineral deposits and policies for managing them.

Typically, the step beyond State "classification" for mineral lands is "designation" of the property, to protect sites as areas of regional or Statewide significance. This status is normally conferred by the State Mining Board to further establish the

EXHIBIT 14

Mineral Resource Map



Legend

MRZ-1	NO SIGNIFICANT MINERAL DEPOSIT
MRZ-2	SIGNIFICANT MINERAL DEPOSIT
MRZ-3	UNKNOWN EXTENT OF MINERAL DEPOSIT
	MINERAL RESOURCE DESIGNATION
	BOUNDARY OF MINERAL CLASSIFICATION

Alberhill Ranch

LONG BEACH EQUITIES, INC

statewide value or significance of the mineral resource. As noted above, the project site has only been "classified", and there is no effort underway to "designate" it.

A Reclamation Plan is required by SMARA for any mining conducted after 1976, to demonstrate how an area will be "reclaimed" after it is "mined out". The purpose of this action is to restore the land to an acceptable level for potential development as a subsequent alternative "higher use". Reclamation involves moving equipment, grading and recontouring the site, removing toxins, stabilizing slopes and landscaping. While clay resources on the project site may not be exhausted when Pacific Clay terminates its lease, reclamation will obviously still be necessary before any further use can be developed.

A Reclamation Plan was prepared by Converse Ward Davis Dixon, Inc. for Pacific Clay Products in 1978. According to the Riverside County Geologist, Reclamation Plan 1-12 referring to the Alberhill area was approved by the County in 1978.

PROJECT IMPACTS

The following discussion presents impacts associated with development and operation of the Alberhill Ranch Specific Plan. Impacts to mineral resources resulting from potential future development within the Annexation Areas have not been evaluated. As can be seen on Figure 14, Mineral Resource Map, portions of the Annexation Areas have mineral resource designations; however, it is anticipated that the nature of future impacts and mitigation measures within the Annexation Areas will be analyzed as part of the environmental review conducted by the City of Lake Elsinore when future development plans are submitted.

The acquisition and development phases of the Alberhill Ranch Specific Plan will directly impact mineral resources by precluding future use of the site for clay extraction, regardless of economic constraints. It should be noted that Pacific Clay Products Inc. may undertake minor reclamation and remedial removal of existing clay stockpiles prior to or in conjunction with project grading. The development and construction phase of the project will require that the mined area of the site be "reclaimed" in order to accommodate the proposed urban development.

As discussed above, mineral extraction activities have ceased on-site. The clay deposits on Biddle property have been mined over the past 100 years to the extent that deposits are depleted in terms of economic considerations associated with its mining. Therefore, the project applicant is requesting a General Plan Amendment, zone change, etc. as necessary in order to change the future land uses to those proposed by the Alberhill Ranch Specific Plan.

The Specific Plan proposal would result in the elimination of the State MRZ zone from the project site. According to Debra Herman of the State Mining and Geology Board, the City of Lake Elsinore, as lead agency, can make a finding that the mineral resources on-site have been depleted and that development of the site with urban uses is in keeping with the policies of their General Plan for resource management. The lead agency examines the economic value of the mineral resource and the regional significance of eliminating that resource (in terms of job loss, loss of clay), should any new use be proposed. The Department of Conservation, Division of Mines and Geology will participate as a responsible agency in reviewing the Draft EIR and General Plan Amendment (GPA) through the State Clearinghouse. The State's role is to review and comment only. It has no power to supersede any local agency decision converting mineral land to an alternative use.

The lead agency's finding typically includes economic justification in its determination. In this case, Pacific Clay Products' termination of its lease after 30 years of mining is an indication that mineral extraction is no longer feasible. In addition, according to the project applicant, other clay mining companies looked at the mined area and also determined that future mining was not economically feasible.

Significance of Impacts

The impacts described above can be mitigated to a level of non-significance by implementation of the following "Mitigation Measures":

MITIGATION MEASURES

K-1) An amendment to the previously-approved Reclamation Plan for the mined area must be reviewed and approved by the City of Lake Elsinore and/or the State Mining Board. The Reclamation Plan must be approved prior to the issuance of grading permits.

K-2) All mined areas of the Alberhill Specific Plan area shall be regraded for development in accordance with the Reclamation Plan and Chapter 70 of the Uniform Building Code.

L. CIRCULATION

The following discussion is based upon the "Alberhill Ranch Traffic Study" prepared by Kunzman Associates (June 1988), which is included in its entirety as Section D, Technical Appendices.

EXISTING CONDITIONS

Roadways that will be utilized by the development include Interstate 15, Lake Street, Robb Road, Nichols Road, Coal Road, Terra Cotta Road, Collier Avenue, Lakeshore Drive, Lincoln Street, and Riverside Drive. Their General Plan classifications are shown on Exhibit 15, Master Plan of Highways. In the vicinity of the project site, the following roadway conditions exist.

Interstate 15: The Corona Freeway extends from San Diego northward to Corona. It has six lanes in the vicinity of the site.

Lake Street: This roadway is classified as a 100 foot Major with 76 feet of curb-to-curb pavement width on the Riverside County General Plan Circulation Element. It is currently two lanes in the vicinity of the site.

Nichols Road: This roadway is classified as a 100 foot Major with 76 feet of curb-to-curb pavement width on the City of Lake Elsinore and County Circulation Elements. It is currently two lanes (unpaved) in the vicinity of the site.

Coal Road: This roadway is classified as a 100 foot Major with 76 feet of curb-to-curb pavement width on the County Circulation Element. It is currently two lanes (unpaved) in the vicinity of the site.

Robb Road: This roadway is classified as a 110 foot Arterial with 86 feet of curb-to-curb pavement width on the City and County Circulation Elements. It is currently two lanes in the vicinity of the site.

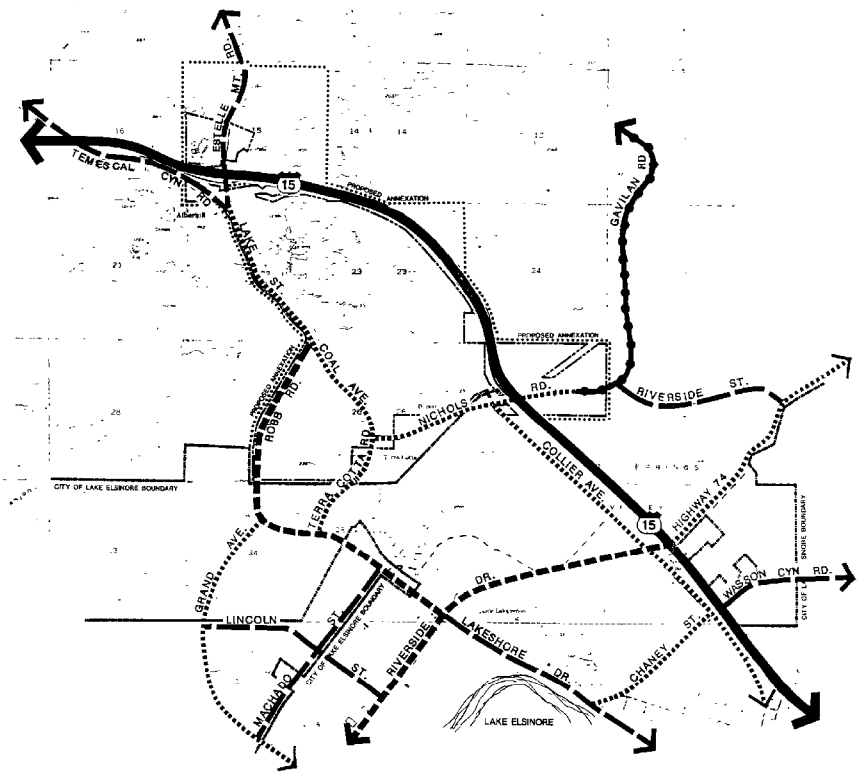
Terra Cotta Road: This roadway is classified as a Modified Collector on the City General Plan. It is currently two lanes (unpaved) in the vicinity of the site.

Collier Avenue: This roadway is classified as a Modified Collector on the City General Plan. It is currently two lanes (unpaved) in the vicinity of the site.

Lakeshore Drive: This roadway is classified as a 100 foot Major with 76 feet of curb-to-curb pavement width on the City General Plan. It is currently two lanes in the vicinity of the site.

EXHIBIT 15

Master Plan of Highways



Legend

- FREEWAY VARIABLE
- MOUNTAIN ARTERIAL HIGHWAY 110' ROW (County)
- ARTERIAL HIGHWAY 110' ROW
- MAJOR HIGHWAY 100' ROW
- SECONDARY ROAD 88' ROW

TURRIN and BRINK

no scale

Alberhill Ranch

LONG BEACH EQUITIES, INC.

Lincoln Street: This roadway is classified as an 88 foot Secondary with 64 feet of curb-to-curb pavement width on the City and County Circulation Elements. It is currently two lanes in the vicinity of the site.

Riverside Drive: This roadway is classified as a 100 foot Major with 76 feet of curb-to-curb pavement width on the City General Plan. It is currently two lanes in the vicinity of the site. It is also California State Route 74 in the Lake Elsinore area.

Existing Travel Lanes and Intersection Controls

Exhibit 16, Existing Number of Through Travel Lanes and Intersection Controls, identifies the existing roadway conditions for arterials near the site.

Daily Traffic Volumes

Exhibit 17, Existing Daily Traffic Volumes depicts the average daily two-way traffic volumes. Traffic volumes were obtained from the County of Riverside and the 1986 Traffic Volumes on State Highways from CalTrans.

Existing Intersection Capacity Utilization

The technique used to assess the operation of an intersection is know as Intersection Capacity Utilization (ICU). To calculate an ICU the volume of traffic using the intersection is compared to the capacity of the intersection. ICU is usually expressed as a percent. The percent represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The ICU'S for existing intersections in the vicinity of the project are shown in Table 12, Existing Intersection Capacity. Intersections in the vicinity of the site operate at a Level of Service C or better for existing evening peak hour traffic conditions, except for the intersection of Machado Street at Lakeshore Drive, which needs to be signalized.

Traffic Signal Warrants

Previous studies indicate that a traffic signal is currently warranted at the intersection of Machado Street at Lakeshore Drive. According to the County Road Department, signalization of this intersection is in a very preliminary stage. It has not been designed at this time. It is anticipated that it will be scheduled in the 1989-90 period, with actual construction occurring not before June 1990. A signal has recently been installed at the intersection of Riverside Drive at Lakeshore Drive.

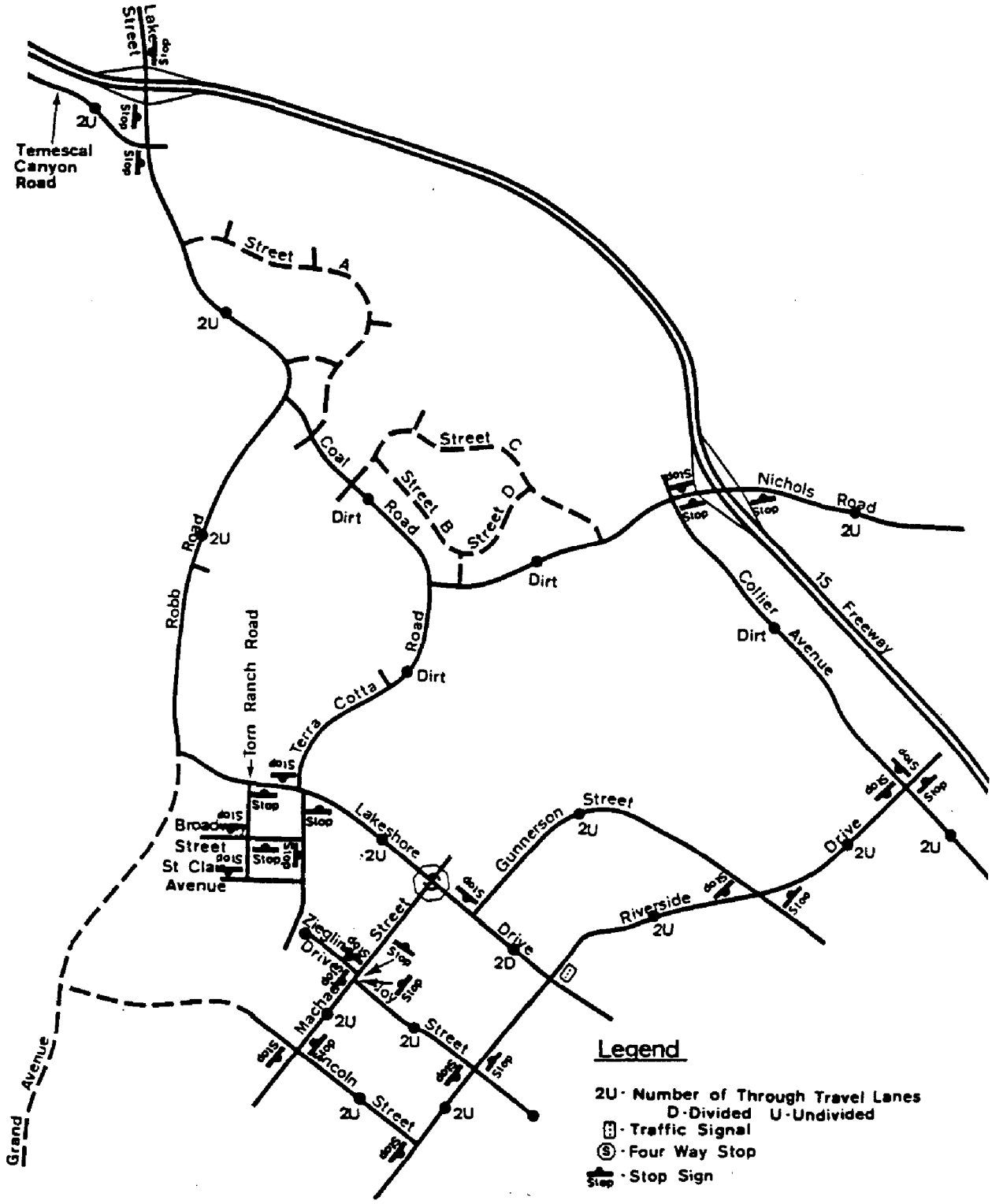


EXHIBIT 16

Existing Traffic Conditions

Alberhill Ranch

LONG BEACH EQUITIES, INC

TURRINI and BRINK

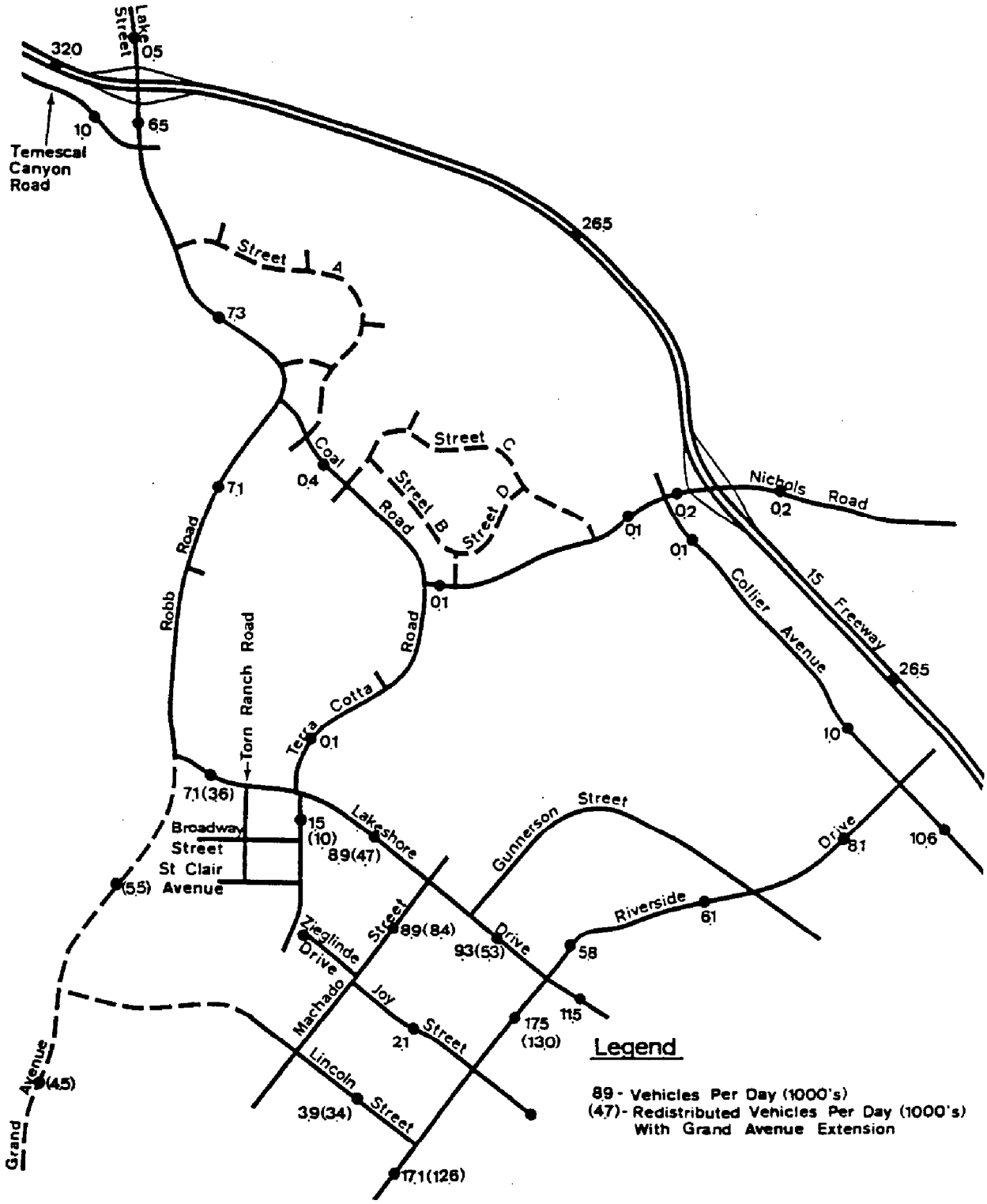


EXHIBIT 17

Existing Traffic Volumes

Alberhill Ranch

LONG BEACH EQUITIES, INC

TURRINI and BRINK