

Draft Environmental Impact Report

sch no. 88030915

MICHAEL BRANDMAN ASSOCIATES





DRAFT ENVIRONMENTAL IMPACT REPORT STATE CLEARINGHOUSE NO. 88030915

THE POINTE SAN DIEGO

Prepared for:

Pointe Builders 3130 Bonita Road, Suite 200 Chula Vista, California 92010 (619) 691-1800

Contact:

Tom Henry Director of Planning and Engineering

Prepared by:

Michael Brandman Associates, Inc. 4918 North Harbor Drive, Suite 205 San Diego, California 92106 (619) 226-2223

> Contact: Mike Evans Regional Director

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SECTION 1 INTRODUCTION AND SUMMARY

1.1 PURPOSE

The subject of this environmental impact report (EIR), the Pointe San Diego, is a large-scale project involving the development of a destination resort with 641 guest suites, three restaurants, 358,300 square feet of corporate offices, a 350,000-square-foot office-professional park, 619 single-family homes, 236 apartments, an 18-hole golf course, and resort-related recreational facilities on approximately 653 acres located in the Spring Valley unincorporated community of San Diego County. Exhibit 1-1 shows the project site in its regional context and Exhibit 1-2 depicts the project site and surrounding areas.

Development of the proposed project would require amendments to the Spring Valley Community Plan text and map related to the specific plan and the urban limit line (to include the entire property proposed for development); to Sheet 6 of the Circulation System Map in the Circulation Element of the San Diego County General Plan; and to the map of resource conservation areas shown in the Conservation Element of the San Diego County General Plan. In addition, the applicant is seeking adoption of an amended Specific Plan 1.5, a zone change, major use permit, and tentative subdivision map approval.

Staff of the Department of Planning and Land Use has determined that the project could potentially result in significant environmental impacts, and requested that an EIR be prepared. An initial study was prepared and a Notice of Preparation (NOP) was issued on February 25, 1988. The following environmental components were identified as not significant in the initial study and are not addressed in this EIR:

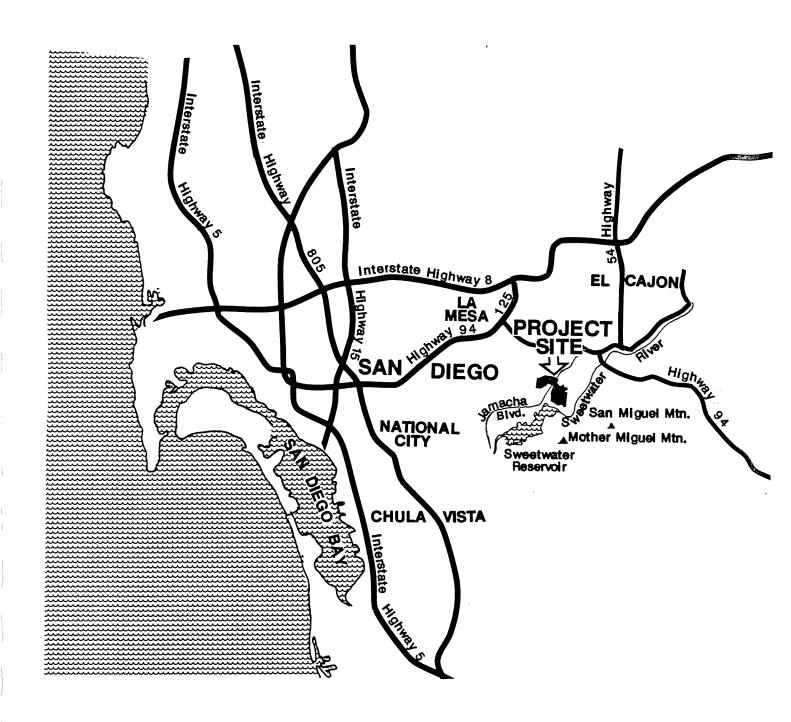
- <u>Light and Glare</u> Although the proposed project would generate artificial lighting on the site, the nature of lighting anticipated with the proposed project is not expected to significantly impact the surrounding land uses.
- <u>Human Health</u> Human health hazards are not expected to be created as a result of the development of the resort community.

This EIR was prepared by Michael Brandman Associates, Inc. (MBA) in conformance with both state and San Diego County guidelines for the implementation of the California Environmental Quality Act (CEQA) of 1970, as amended. The Draft EIR is an informational document intended for use by the county and the public. It contains a detailed analysis of the environmental impacts which can be expected to result from approval and implementation of the Pointe San Diego Specific Plan.

This Draft EIR, entitled the Draft Environmental Impact Report for the Pointe San Diego, will be available for public review and comment for 45 days. Comments on the Draft EIR for any issues related to the proposed project should be submitted to the Department of Planning and Land Use of the County of San Diego. The Planning Commission will consider the information contained in the Draft EIR and responses to comments on the Draft EIR when making recommendations to the Board of Supervisors which must certify the document as complete and in compliance with CEQA, before approving the proposed document.

1.2 SUMMARY OF ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

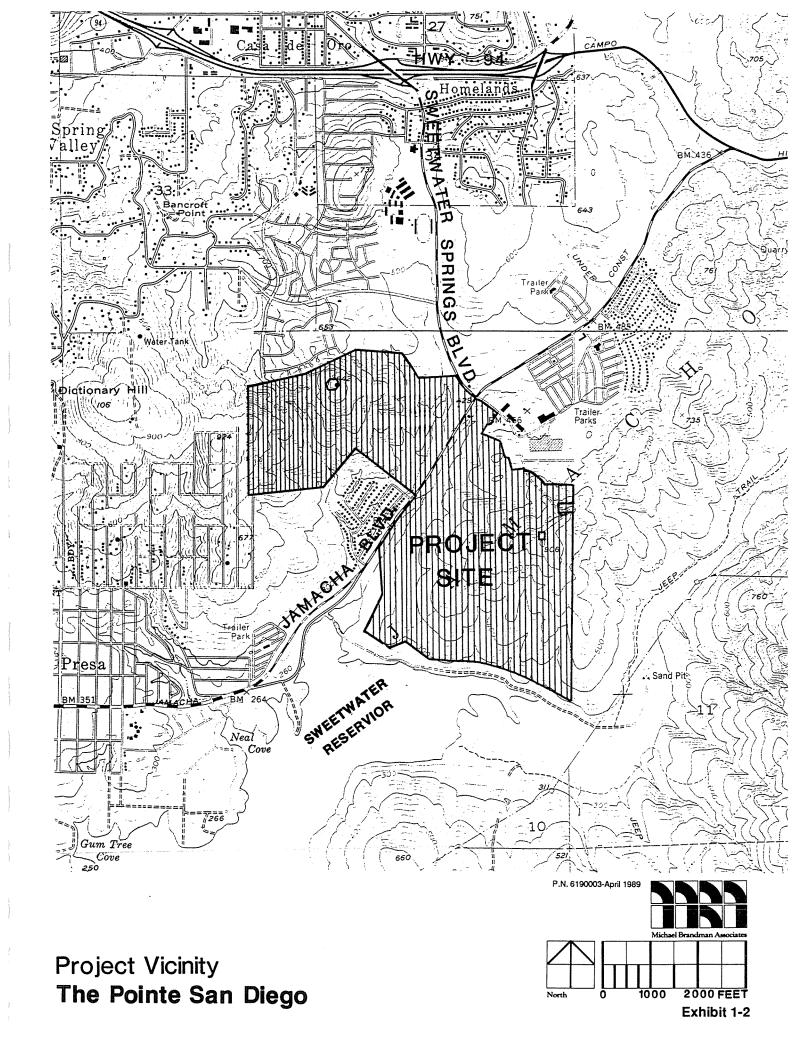
Section 3 details the environmental impacts that would result from implementation of the proposed project. The Executive Summary (Table 1-1), which follows, presents a concise synopsis of impacts of the proposed project and mitigation measures for these impacts. Impacts of the project have been rated according to the following designations: (1) NS, not significant (adverse effects that are not substantial according to CEQA, but that should be mitigated to the extent feasible); and (2) S, significant (substantial adverse changes to the environment). Mitigation measures are listed for each impact; those that have been incorporated into the project are noted with an asterisk (*). Others are recommended for incorporation into the project by the EIR consultant prior to project approval. Impacts that are noted in the summary as "unavoidable adverse impacts" after mitigation are significant effects for which the county will need to adopt statements of overriding considerations, if the project is approved as proposed (CEQA Section 21081).



Regional Location Map **The Pointe San Diego**







GEOLOGIC RESOURCES (SECTION 3.1)

MITIGATION MEASURES

Not Significant

Not Significant

Development on the project site could be affected by major earthquakes along the Rose Canyon Fault, the offshore Coronado Banks Fault or the Elsinore Fault. (S) Structures proposed on soils with moderate to high shrinking or swelling potential would be affected. (S)

Design of structures shall be in accordance with the latest Uniform Building Code which is expected to satisfactorily mitigate the anticipated intensities of earthquake shaking at the site.

width of one foot may be designed for bearing capacity of 2,000 psf. All continuous footings present within 2.5 feet of finish grade, deeper may be necessary. All pads shall have drainage swells which direct storm and irrigation water The soil conditions encountered onsite would be suitable for the use of conventional spread footings. Footings having a minimum depth and should be reinforced with one No. 4 bar top and bottom. If moderate to highly expansive soils are footings and additional foundation reinforcement away from the structures into the streets.

All grading should be performed in accordance with the "Recommended Grading Specifications" contained in the geotechnical report prepared by Geocon in January 1981 (see Appendix B). The specifications consists of clearing and grubbing, preparation of land to be filled, filling of the land, spreading and compaction and control of moving Excess materials would be stockpiled in the subsequent phase in an area which will be graded during

project would require

The proposed

approximately 3.8 million cubic yards.

development of that following phase. (S)

The project applicant shall submit a haul route plan to the County of San Diego prior to hauling material.

Significant

GEOLOGIC RESOURCES (SECTION 3.1) (Continued)

cut slopes at 1:1 ratios could result in significant Areas with unfavorable geologic conditions for

The worst case anticipated manufactured slope would be 112 feet in height which would be located in the western portion of the site. (S) erosion or landslide effects. (S)

The project site is covered by soil that is susceptible to rapid erosion during a rainstorm of heavy and long duration. (S) Volcanic rock that may require blasting to excavate is located within approximately 400 to 500 feet of the springs. Not much case history is available on the effects of ground shaking on the springs due to blasting. (PS)

each phase shall be identified when the applicant submits detailed grading plans to the county. Prior to obtaining a grading permit for each phase, the applicant shall obtain approval of the Specific locations of stockpiles during grading of stockpile locations.

stabilized by implementation of rock bolting or construction of retaining. Cut slopes at 1:1 ratios in areas exhibiting geologic conditions construction of retaining walls.

Not Significant

All graded slopes shall be planted immediately upon completion of grading in each area to reduce the risk of erosion.

Not Significant

The geotechnical specifications developed by the project geologist shall be implemented to reduce erosion.

The size of the blasting charges shall be kept to a minimum by reducing the depth and number of drill holes loaded per shot. The water flow of the springs shall be monitored before and after each blast. If blasting is negatively affecting spring flow, alternative methods of excavation shall be flow to the degree that the Bancroft Creek Mitigation Area is affected, the project applicant utilized. If blasting significantly affects spring shall provide an alternative source of water (i.e., groundwater or potable water) to the mitigation

Not Significant

Not Significant

MITIGATION MEASURES

Not Significant

GEOLOGIC RESOURCES (SECTION 3.1) (Continued)

IMPACTS

Grading activities (specifically blasting) may affect the historic structures of site SDi-185.

the historic structures and only small charges shall be used beyond that distance. As a safety measure, plywood shoring should be placed on the inside of the bottling house to avoid collapse should a surcharge inadvertently be applied to No blasting is to occur within 400 to 500 feet of the walls. Placement of the plywood shoring shall be monitored by a qualified archaeologist.

the catchment basin and 10 feet from the A chain link fence should be placed 5 feet from bottling house to avoid disturbance by souvenir hunters or inadvertent encroachment. No equipment larger than a standard tractor backhoe should be used in the vicinity of either The footings of the retaining wall and bridge abutments shall be designed to not transmit any loads to the structures. Heavy earth moving equipment should not operate within 100 feet of the ruins to avoid potentially adverse vibrations.

HYDROLOGIC RESOURCES (SECTION 3.2)

Will increase storm water flow from the project site. the proposed project of Development

The project applicant shall submit and obtain approval of a drainage plan from the San Diego County Department of Public Works.

Not Significant

Not Significant

HYDROLOGIC RESOURCES (SECTION 3.2) (Continued)

IMPACTS

affected by the proposed development if too The Bancroft Creek mitigation area could be much or too little water is provided to the area.

project applicant will monitor the two operation. Prior to issuance of major use permits proposed hydraulic pumps for the mitigation area and provide necessary repairs to ensure adequate shall post permanent bonds to provide adequate for the proposed project, the project applicant funding for the operation of the proposed spring water pumps.*

the project applicant shall make arrangements to purchase water from the Otay Water District to If the mitigation area requires additional water, recharge the mitigation area water system.*

Bancroft Creek mitigation area should be designed to allow no more than a 25 year design storm to enter into the mitigation area. This The onsite retention basins and system for the would avoid significant erosion or silting effects in the mitigation area.*

The project applicant will comply with Resolution 84-8 of the Sweetwater Authority relating to establishment of the first flush Urban Runoff Containment System.

As a result of urban activities on the project site, storm water runoff would increase and the quality of surface water would decrease potentially affecting the quality of water in Sweetwater

Reservoir. (S)

the San Diego County Department of Public retention/desiltation basins to the satisfaction of During construction, the applicant shall construct Works and plant all disturbed slopes immediately upon completion of grading to prevent erosion.

Not Significant with

Not Significant

MITIGATION MEASURES

IMPACTS

HYDROLOGIC RESOURCES (SECTION 3.2) (Continued)

Groundwater from a single well would not be able to sufficiently provide an adequate supply of golf course for irrigational the purposes. (S) water to

A will-serve letter from the Otay Water District accordance with county groundwater policy that for temporary irrigational purposes shall be The project applicant shall ascertain by means of a site-specific hydrogeologic investigation in water can be supplied to the golf course from multiple wells and spring water prior to grading. obtained by the project applicant.

CULTURAL RESOURCES (SECTION 3.3)

Construction of the footbridge foundations could affect cultural resources in site SDi-185. (S)

any The proposed project shall be redesigned to exclude the proposed footbridge across SDi-185 or design a footbridge that places the footings on a minimum of 12 inches of clean and sterile fill disturbance of Features A, B or C of SDi-185. any artifacts and avoid preserve ಧ

Not Significant

the footbridge must be reviewed by the Corps During construction, a qualified archaeologist If a footbridge is implemented, all final plans for archaeological staff prior to construction. must be onsite to monitor the placement of any that subsurface nistoric deposits will be avoided. required footings to ensure

Planting of native plants within the proposed open space easement, and more specifically, within the drainage area of the springs, shall be limited to reduce potential disturbance to the historic features. If any landscaping is to be

The project applicant is proposing to enhance the vegetation in the area of archaeological/historic site SDi-185.

CULTURAL RESOURCES (SECTION 3.3) (Continued)

planted within the site area, a minimum of 12 inches of clean, sterile fill shall be placed on the site to protect it from disturbance. A qualified archaeologist shall be present to monitor the placement of any fill material.

Not Significant

All irrigation systems within the boundaries of the site shall be constructed above ground or within the minimum 12-inch sterile fill material. Vegetation removal shall be monitored by a qualified archaeologist to ensure that the site SDi-185 will not be disturbed.

> proposed project would increase human activity around site SDi-185. (S)

Not Significant The project design shall include development of fences, walls, or grade differences around the

boundaries of the proposed open space easement

to reduce potential disturbance by visitors.

ologist should inspect the site on a regular basis An archaeological monitoring program shall be implemented subsequent to project development to ensure that indirect impacts from vandalism will not occur. In addition, a qualified archaein order to monitor any disturbance of the site.

provided to the ACOE at the completion of con-185. The ACOE shall be informed of any project Letter reports from the archaeologist shall be struction or improvement activities on site SDipreservation this changes associated with program

CULTURAL RESOURCES (SECTION 3.3) (Continued)

ion of the "Secretary of the Interior's Standards All archaeological work to preserve site SDi-185 shall be carried out by, or under the direct supervision of, a person or persons meeting or exceeding the appropriate qualifications set forth in the Professional Qualifications Standards sectand Guidelines for Archaeology and Historic Preservation" (Fed. Reg., Volume 48, No. 190, September 29, 1980, pp. 44716-42). Prior to issuance of an occupancy permit for the resort, the project applicant shall retain a qualified professional to prepare and submit a nomination of the Isham Springs site to the National Register of Historic Places as a historic resources. Prior to issuance of an occupancy permit for the resort, the applicant shall submit a nomination of the Isham Springs site to the County Historic Site Board under Section 7550 of the Zoning Ordinance of the County of San Diego. The project applicant has been issued a 404 permit by the Army Corps of Engineers for the replacement of the aquatic and riparian habitat the existing ponds within Bancroft Creek. destruction

Not Significant

proposed project would ponds and replace the habitat within Bancroft of the riparian existing Development and remove the aquatic Creek.

Not Significant

CULTURAL RESOURCES (SECTION 3.3) (Continued)

IMPACTS

could Grading activities such as surcharging could affect the historical remains of site SDi-185. (S)

Grading activities could occur within 6 to 12 feet As a safety measure, plywood shoring should be placed on the inside of the bottling house remains to avoid collapse should a surcharge inadvertently be applied to the walls. Placement of the plywood shall be monitored by a qualified archaeologist. of the bottling house remains.

LAND USE (SECTION 3.4)

A small portion of the proposed project is outside the urban limit line. (S) The project proposes more extensive grading and development of steep hillsides than permitted by Spring Valley community plan standards. Development of the site would create pockets of residential units on both hillsides and extensively grade the valley floor of the site for the resort. The proposed grading would significantly alter the topography and appearance of the site. The land uses proposed in the project are similar to the adopted specific plan uses. (S) The project would result in the realignment of Jamacha Boulevard and the right of way for the proposed South Bay Expressway. (S)

Adjust the urban limit line to include all of the area which would be controlled and intended for development in this project.

Not Significant

Adjust the undisturbed slope criteria to permit development with small pads and slope rounding to blend with natural topography.*

Significant

Adjust the percentage of undisturbed slopes to engineered grading plans for the existing specific derived from the final plan and eliminate the golf course and environmental mitigation areas from the disturbed slope criteria represent criteria. Sheet 6 of the circulation map for the county shall be revised to reflect the proposed design for South Boulevard and the Expressway. Jamacha

Not Significant

LAND USE (SECTION 3.4) (Continued)

containing the livestock watering ponds which were built in the 1940s and commonly known as Development is proposed in the area currently Hansen's Ponds. (S)

nation for RCA 15 to the area in which the Relocate the resource conservation area desig-Hansen's Ponds will replacements for located.*

Significant

Significant

BIOLOGICAL RESOURCES (SECTION 3.5)

308.4 acres of open space. This conversion would include the loss of a maximum of 297.6 acres of upland habitat (47 percent of the total) and 10.8 acres of wetland habitat (95 percent) would be ost. As a result of this conversion, wildlife The project would result in the conversion of nabitat would be fragmented (S).

The project applicant is proposing that portions actively habitat and creation and enhancement of wetlands and associated habitats. A mitigation plan sate on a 1-to-1 basis for the loss of 10.8 acres of The mitigation enhanced through the enhancement of upland is designed for the project site to fully compenarea will require installation and maintenance of of the open space on the site be aquatic and riparian habitats. an artificial water supply.*

Prior to destruction of Hansen's Ponds, the applicant shall establish a mechanism to ensure bond to finance continued maintenance of the area as well as giving the mitigation area to a non-profit agency such as that the mitigation area will be protected and maintained in perpetuity to the satisfaction of the Director of Planning and Land Use. Such mechanism could include establishment of a trust the Nature Conservancy to administer. or posting a

BIOLOGICAL RESOURCES (SECTION 3.5) (Continued)

IMPACTS

the proposed project would gnateatcher. Habitat modification or loss would significantly affect the California black-tailed affect over 80 percent of the onsite population. of Development

Development of the proposed project would Otay tarplant; the entire population would be significantly affect the state-listed endangered lost. The presence of people, their pets, night lighting and roads with their associated noise and traffic hazard will decrease the usefulness of remaining on and offsite open spaces for wildlife in the immediate vicinity of the proposed development.

No feasible mitigation measures are available.

No feasible mitigation measures are available.

Significant

Mitigation areas will be protected from trespass County Sheriffs Department with by fencing and signing. Resort personnel will enforcement. assist the

Not Significant

Significant

prohibited will be nse throughout the site. Off-road vehicle

Dogs will be required to be leashed outside of privately fenced yards.

on natural open space areas will be mitigated by the use of one or more of the following alternatives: (1) low intensity street lamps at the edge of development, especially along the eastern portion of the site; (2) low elevation lighting poles; and (3) shielding by internal silvering of the globe The potentially adverse effects of night lighting or external opaque reflectors.

TRANSPORTATION AND CIRCULATION (SECTION 3.6)

The proposed project will generate approximately 32,507 average trips per day. (S)

The following general plan circulation element amendments are required.

Not Significant

- Reclassify Jamacha Boulevard from Jamacha Road to Sweetwater Springs Boulevard from a major to a collector road.
- Add Pointe Parkway from Jamacha Boulevard to Jamacha Boulevard South as a collector street.
- Springs Add Jamacha Boulevard from Pointe Parkway to Sweetwater Springs Boulevard as collector frontage roads on the north and south sides of Route 54.

recommendations Except for the ultimate South Bay Expressway, the project applicant will construct the proposed described in the traffic report.* according to the roads

system will be provided. Grading of the six-lane expressway and construction of a four-lane arterial will occur during Phase 1 development. Right-of-way within the project for the ultimate frontage road and interchange An interim six-lane prime arterial is expressway,

TRANSPORTATION AND CIRCULATION (SECTION 3.6) (Continued)

IMPACTS

traffic volumes exceed capacity which should This interim facility is proposed to be signalized at Pointe recommended for the South Bay Expressway until Parkway and Sweetwater Springs Boulevard.* occur in approximately 2005.

The developer shall prepare a transportation program to encourage ridesharing and use of plan and establish demand management public transit.

The county may also require construction of the Jamacha Boulevard north frontage road. Pointe County of San Diego may require the applicant to construct the Pointe Parkway Bridge Builders disagrees with the need for this and the Sweetwater Springs Boulevard Bridge. construction.

AIR QUALITY (SECTION 3.7)

short-term duration, could be troublesome to workers and adjacent developments, even though Short-Term - The emissions produced during grading and construction activities, although of prescribed wetting procedures are followed. (S) 2 generate a total of 349.8 tons of fugitive dust for estimated each month of construction activity. (S) s. The proposed development

Maintain equipment engines in proper tune and phase and schedule construction activities to level emission peaks.

Not Significant

Control fugitive dust by regular watering, paving construction roads or other dust palliative measures.

Not Significant

AIR QUALITY (SECTION 3.7) (Continued)

Long-Term - An increase in total vehicle miles traveled (VMT) and the increased consumption of electricity and natural gas by site visitors, workers and residents would result in an increase of CO, NOx and NMHC levels. (NS)

sort and office developments by providing convenient bus stop locations, bicycle storage facilities, extensive riding, hiking and equestrian The project applicant shall institute a transportation demand management program for the retrails throughout the community.

Not Significant

Reduce emissions from natural gas and electrical consumption by complying with the State Energy Conservation Standards.

NOISE (SECTION 3.8)

Short-Term - Surrounding land uses will experience a significant, though temporary noise level increase during construction activities. (S)

Bay Pointe Parkway will be exposed to noise levels greater than 60 dB CNEL. The County of San Long-Term - Proposed residential units and Expressway, Sweetwater Springs Boulevard and Diego Noise Element indicates a standard of 60 South resort lodging located near dB CNEL for residential uses. (S)

Should noise complaints be received during construction activities, the applicant shall conduct noise monitoring to ensure compliance with the County of San Diego Code, Noise Abatement Control, Section 36.410. The entire area of the proposed project shall be designated as a Noise Protection Easement.

Not Significant

approval of a Site Plan. At the time of the Site nodn Plan processing, a complete acoustical analysis Protection Easement can be allowed development within the Residential

Not Significant

NOISE (SECTION 3.8) (Continued)

Director, Department of Planning and Land The acoustical analysis shall demonstrate shall be provided to the satisfaction of the following:

- No residential uses are located in an area which might be impacted by traffic noise exceeding CNEL=75 dB limit. ಹೆ
- "noise sensitive" living areas are reduced to Traffic noise impacts within the outdoor CNEL=60 dB or less. ڡؙ
- Interior noise levels in habitable rooms of single-family residences will not exceed CNEL=45 dB as well as multi-family limit, ပံ

Grading operations may include blasting and sand and gravel operation activities that could significantly affect surrounding residences. (S)

Not Significant

Mining activities at the site shall not be allowed

until a complete acoustical analysis is provided to the satisfaction of the Director, Department demonstrate that noise impacts from the

of Planning and Land Use.

The analysis shall

activities to the adjacent

proposed mining

residential land uses will not exceed the property line sound level limits specified in the County of

San Diego Noise Ordinances.

PUBLIC SERVICES AND UTILITIES (SECTION 3.9)

Fire Services

The project would add to the number of incidents reported to the department. (NS)

The project applicant shall provide funding to the San Miguel Consolidated Fire Protection District in accordance with the department's mitigation fee program.*

Not Significant

required to meet the fire suppression standards of the San Miguel Consolidated Fire Protection All structures, including residential units, are District, which would generally mean sprinklering of all structures. The project applicant shall submit and obtain approval of a fire hydrant plan and a roadway access plan from the San Miguel Consolidated Fire Protection District. Fire Protection District approval for all site plans and building plans must be received prior to issuance of building permit approval.

Police Services

The proposed project would require two additional 24-hour patrol units. (S)

increase its police protection to adequately serve the proposed project. The department has indi-The San Diego County Sheriff's Department shall cated that the project may require two additional 24-hour patrol units. Funding for the additional

PUBLIC SERVICES AND UTILITIES (SECTION 3.9) (Continued)

general fund and/or developer fees which are The proposed project is additional sheriff protection services in the nel within their budget which would require personnel would be provided through the County's expected to generate tax revenues to the county general fund that could be used to provide for the project area. The County Sheriff's Department would include the cost for the additional personapproval by the County Board of Supervisors. under consideration.

The Pointe San Diego resort will maintain its own security force to patrol the project and assist the Sheriff's Department in responding emergency.*

Schools

elementary, 59 intermediate and 179 senior high students. (S) generate project would The proposed

The project proponent shall provide funding to the Grossmont Union High School District and the La Mesa - Spring Valley Elementary School District in accordance with State Assembly Bill

Not Significant

Park and Recreation

According to the County of San Diego Standard of 15 acres of parkland per 1,000 people, the proposed project would require approximately 35 acres of county local parkland. (S)

recreational facilities on the project site which will be open to the public as well as resort The proposed resort will include a variety of guests.*

Not Significant

AFTER MITIGATION

MITIGATION MEASURES

PUBLIC SERVICES AND UTILITIES (SECTION 3.9) (Continued)

IMPACTS

per dwelling unit to develop local parks. The Parks and Recreation Department shall determine if the proposed project is subject to the The San Diego County Department of Parks and Recreation has enacted a developer fee of \$800 department's developer fee program.

Sewer

The proposed project is expected to generate 0.5 mgd of sewage. (NS)

Not Significant

The project proponent shall pay sewer mitigation fees to the Spring Valley Sanitation District in

accordance with the district's fee program.

Water

The proposed project is expected to require 1.0 mgd of water. (NS)

The project applicant shall submit construction drawings of the proposed water system on the project site to the Otay Water District for approval.

Not Significant

The project applicant shall provide funding to the Otay Water District in accordance with the district's fee program. To ensure adequate domestic water and fire hydropneumatic system for residences located above 750 feet above sea level. This system will be designed to the standards set by the Otay Water District and the San Miguel Consolidated is proposing flows, the project applicant Fire Protection District.*

PUBLIC SERVICES AND UTILITIES (SECTION 3.9) (Continued)

water conservation measures should be implemented. de mand, To reduce water

allocation system for new services which will be in effect until adequate storage facilities are Construction will not commence for Otay Water District has implemented a water buildings until water has been allocated. available.

Solid Waste

project is expected to generate approximately 11,840 tons of solid waste per The proposed year. (NS)

The project applicant should implement recycling programs.

Not Significant

Electricity

The proposed project will require approximately 27.5 million kilowatt hours per year. (NS)

the The applicant will comply with Energy Conservaof Title 24 California Administrative Code. ü tion Standards outlined

Not Significant

The project applicant shall consult with SDG&E during the building phase to implement energy conservation techniques whenever possible.

Gas

The proposed project will require approximately 753,221 therms per year of natural gas. (NS)

Energy of the Title California Administrative Code. Conservation Standards of

Not Significant

the

The applicant will comply with

þe should conservation techniques implemented whenever possible. Energy

PUBLIC SERVICES AND UTILITIES (SECTION 3.9) (Continued)

IMPACTS

design and installation of natural gas facilities The applicant shall consult with SDG&E during for the project.

AESTHETICS (SECTION 3.10)

visual and aesthetic character of the site. The the site could result in adverse effects to the Grading and development of the proposed uses on visual effect would be similar to the adopted specific plan. (S)

residential units shall be compatible with the Color selection for building materials of surrounding environment.

Significant

factured slopes. When combined with slope rounding and variation in steepness and texture of the slope face, the manmade slopes will better Native vegetation should be planted on all manublend with the natural areas.*

units to fit into the steep terrain and help screen The project applicant shall design the residential cut slopes.*

SOCIOECONOMICS (SECTION 3.11)

would units, approximately 2,400 residents and approxi-Currently, Spring implementation of the proposed project with the The proposed project will consist of 855 dwelling Valley is primarily a residential community. of employment opportunities balance future 5,000 employees. the ţ community. (NS) associated contribute mately

No measures are necessary.

Not Significant

SECTION 2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The Pointe San Diego Resort is proposed to be located in the Spring Valley community, an unincorporated area of southern San Diego County. Exhibit 1-1 shows the regional location of the proposed project and Exhibit 1-2 shows the vicinity of the project site. The site is located approximately 10 miles east of downtown San Diego, on both sides of Jamacha Boulevard north of the Sweetwater Reservoir. The irregularly shaped specific planning area consists of approximately 653 acres known as Hansen's Ranch. West of the site are the Dictionary Hill and La Presa neighborhoods. Rancho San Diego is to the north and east and the Sweetwater Reservoir is to the south.

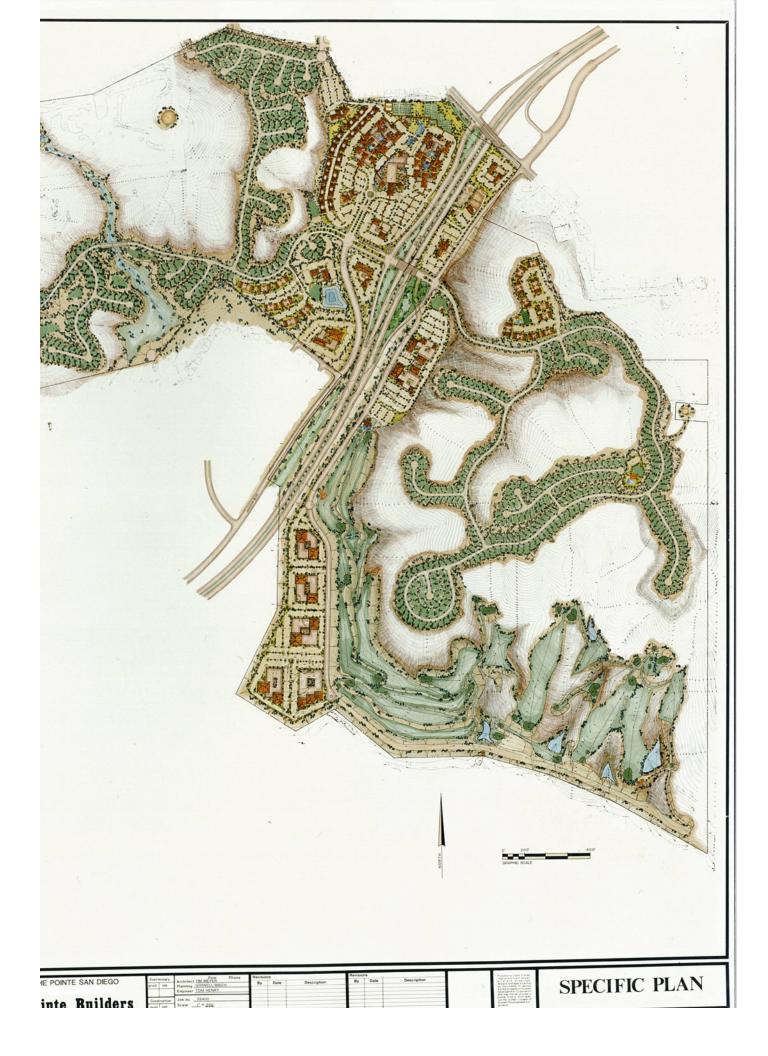
2.2 PROJECT CHARACTERISTICS

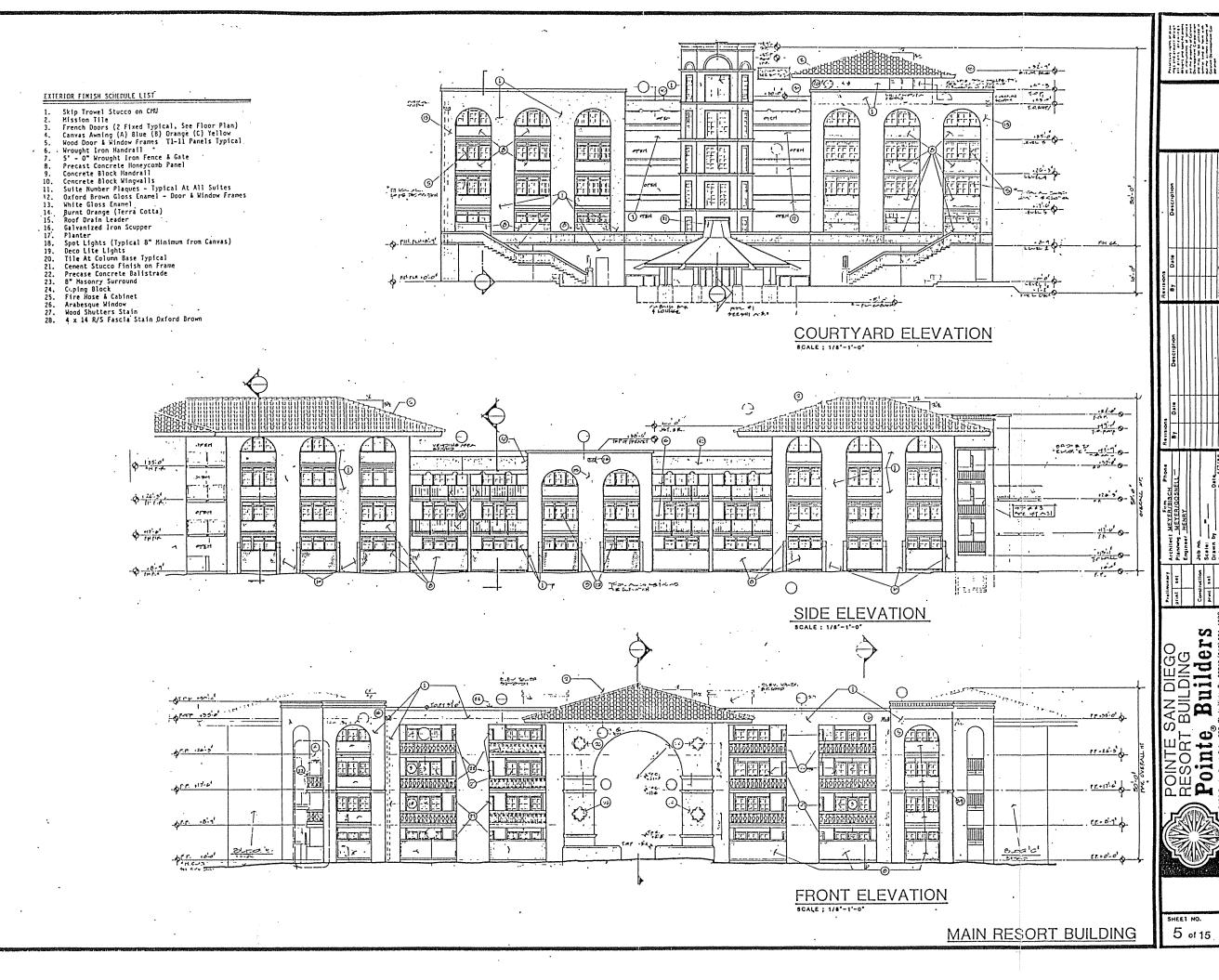
The proposed project is a luxury destination resort community including the resort complex, 358,300 square feet of corporate offices, 619 single-family homes, 236 apartments, a 350,000-square-foot office-professional park, and an 18-hole golf course. Color palette 1 shows the proposed specific plan (the SR-54 hook off-ramp at Golf Course Drive has been slightly modified and details of the ramp are depicted in Figure 26 in Appendix F). A destination resort is a facility containing all of the amenities a guest might desire for an extended stay, whether visiting as a meeting delegate, commercial traveler, or tourist. The resort complex is proposed to contain 641 guest suites in eighteen buildings and a 73,050-square-foot convention facility. The convention facility is to be located between two of the guest suite multiple story buildings, each containing 223 guest suites. The remaining 195 guest suites are located in 16 mountainside buildings. Adjacent to the two main suite buildings and the convention facility building are seven tennis courts and two volleyball courts, and a health center. Courtyards containing pools, cabana bars, arcades, putting greens, and barbecue areas are surrounded by the resort buildings. A child care center is located within walking distance of the resort. The center is located in the corporate office complex south of the Pointe Parkway and Jamacha Boulevard South frontage road. Other recreational facilities include racquetball, squash, and handball courts in

the two main suite buildings, and an 18-hole golf course with clubhouse facility adjacent to Sweetwater Reservoir. Elevations of the main resort buildings are illustrated in Exhibit 2-1 and the mountainside suite elevations are shown in Exhibit 2-2. The tract map for the resort area is depicted on Exhibit 2-1a. The plot plan for the interim and ultimate conditions of the resort area are illustrated in Exhibits 2-3, 2-4, and 2-5. The landscape plan for the interim and ultimate conditions of the resort area are illustrated in Exhibits 2-6, 2-7, and 2-8. During the interim condition, no Jamacha Boulevard North frontage road adjacent to the resort will be constructed along the expressway because traffic volumes would not warrant a frontage road system during the interim condition (see Section 3.6 for a more detailed discussion of when a frontage road system would be warranted, built, and how it would be funded). Under the ultimate conditions, a north frontage road adjacent to the resort connecting the on- and off-ramps of the South Bay Expressway will be implemented.

The convention center is proposed to be connected to the guest suites by elevated walkways that separate vehicular and pedestrian activities. The convention center has a 20,000-square-foot grande ballroom (see Exhibit 2-9 for elevation view), an 8,200-square-foot companion ballroom, and numerous supplementary meeting areas. This convention facility has a total of 52,500 square feet of permanent meeting space. An additional 20,500 square feet of meeting and exhibition space is also proposed through use of a pavilion tent. When erected, the pavilion tent would be located between the two main resort buildings in a lawn area (see Exhibit 2-4 for location).

The proposed resort will include three free-standing public restaurants with a total building area of 36,500 square feet. One restaurant is nestled northwest of the resort suites (see Exhibit 2-10 for elevation view of "Different Pointe of View Restaurant"). Views from this restaurant overlook the resort area, Sweetwater Reservoir, and the valley. Access to this restaurant is provided from Avenida Bosque an interproperty road, and the elevated walkways that attach the guest suites and convention facilities.



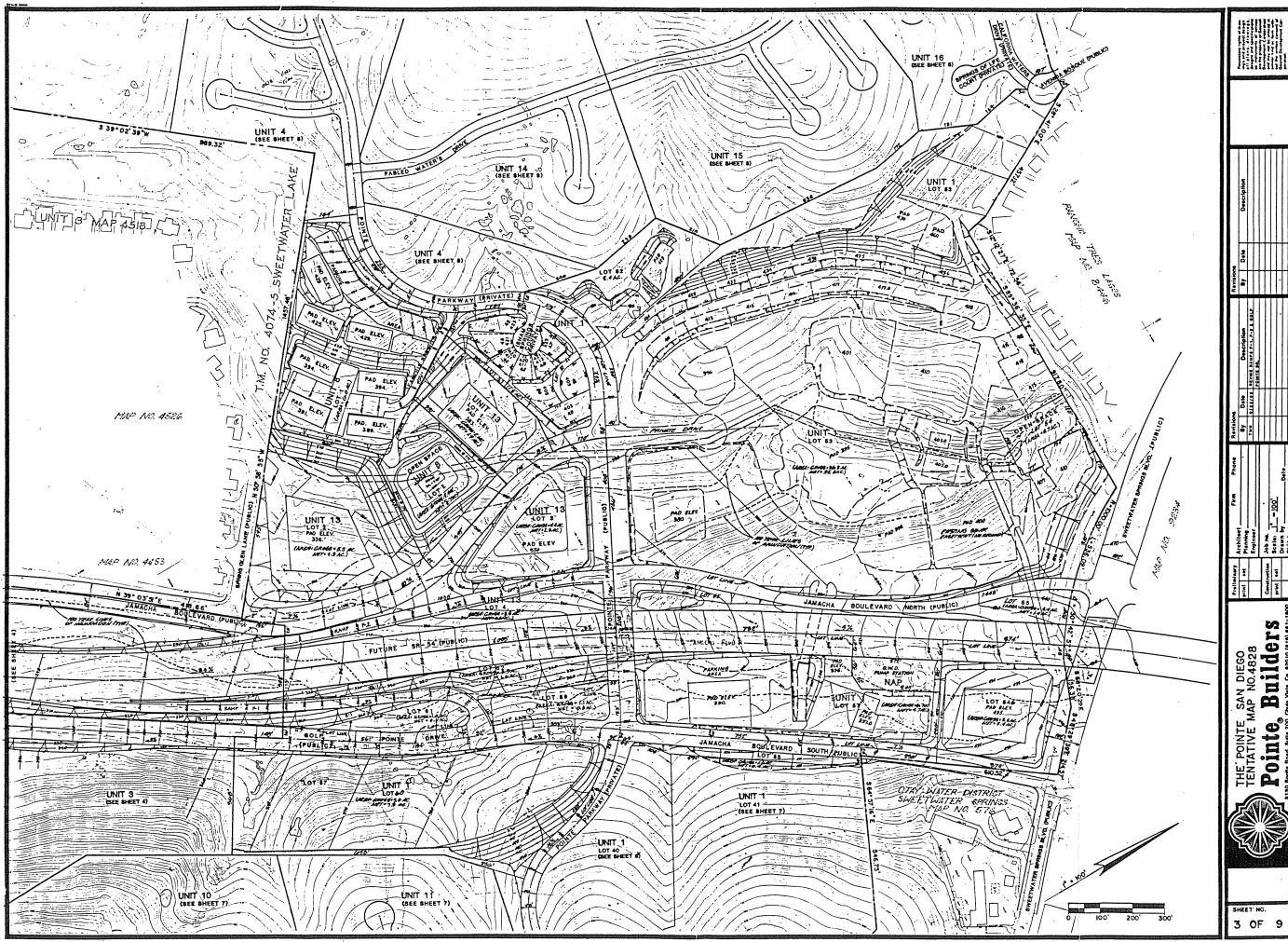


San Diego Resort Elevations Pointe

Exhibit 2-1

Main The

Note: Full size maps are filed and ava for review at the County of San Diego.

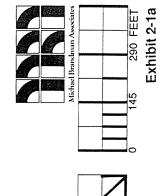


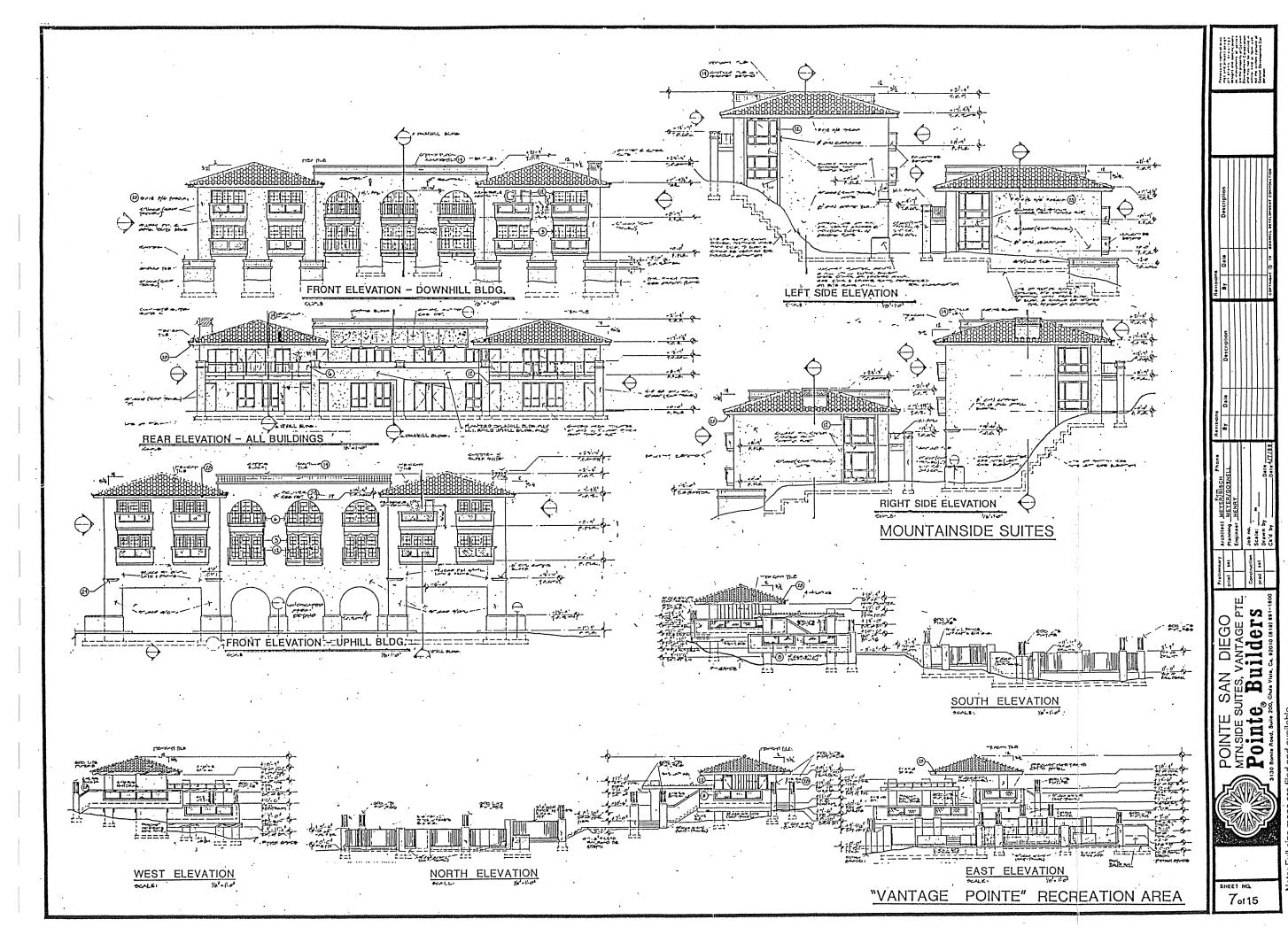
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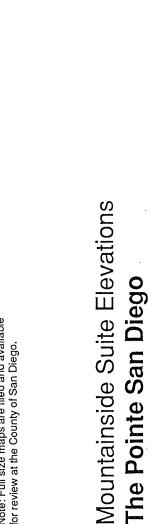
Tract Map-Resort Area, Model Center,

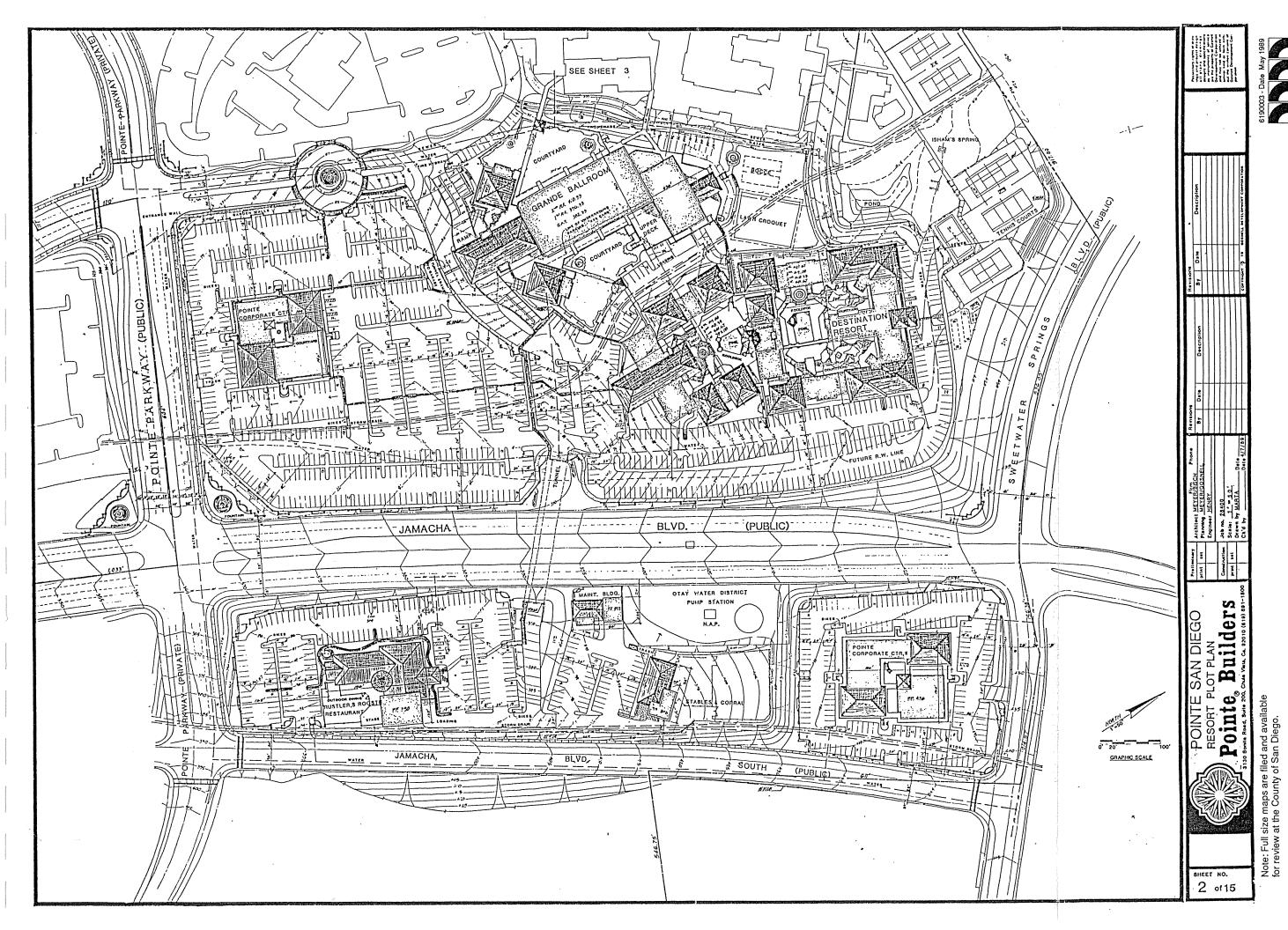
and Apartment Complex The Pointe San Diego

Note: Full size maps are filled and available for review at the County of San Diego.

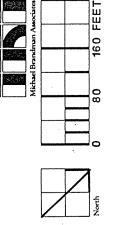


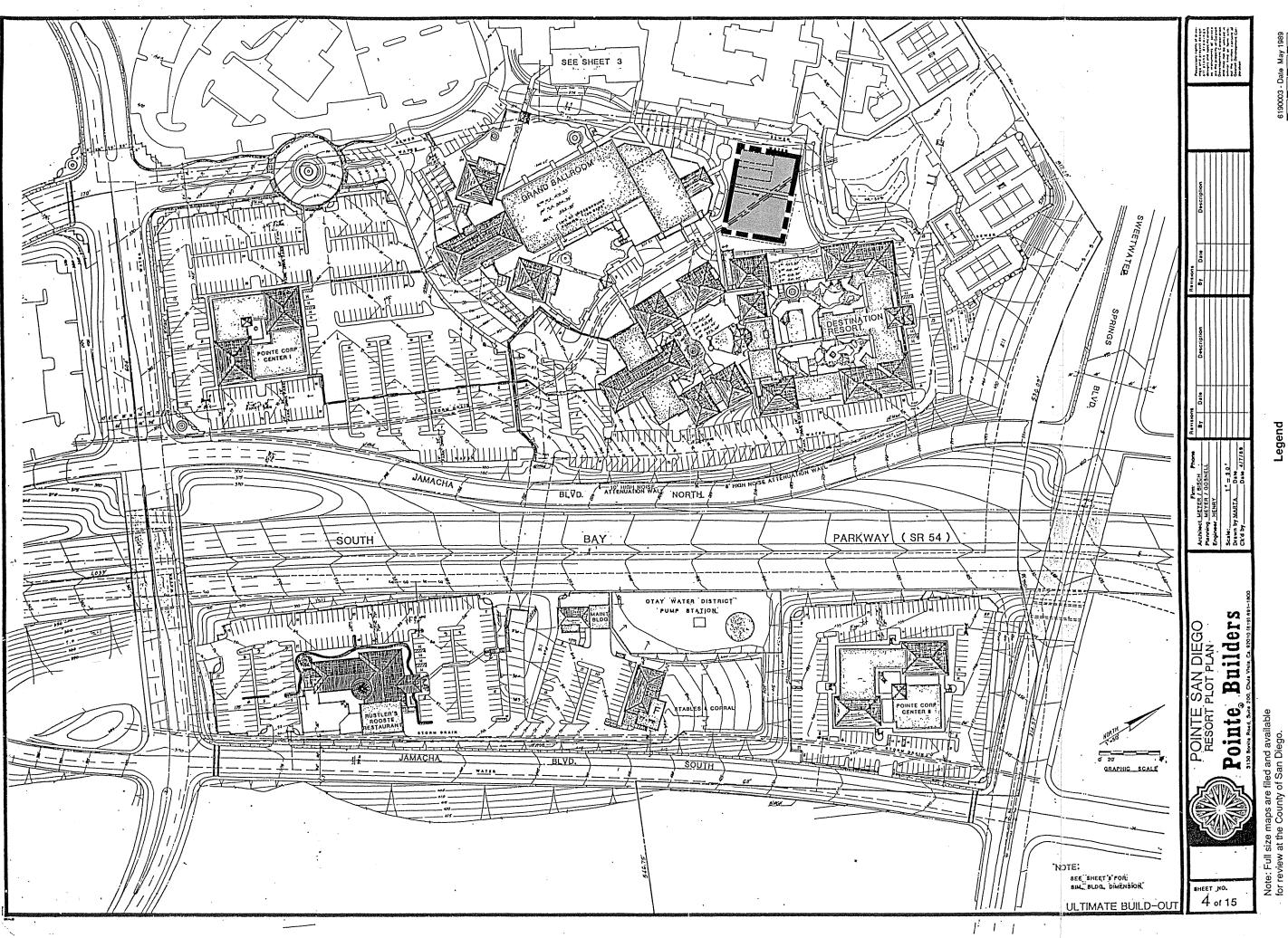




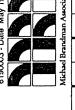


Plot Plan - Interim Resort Area **The Pointe San Diego**

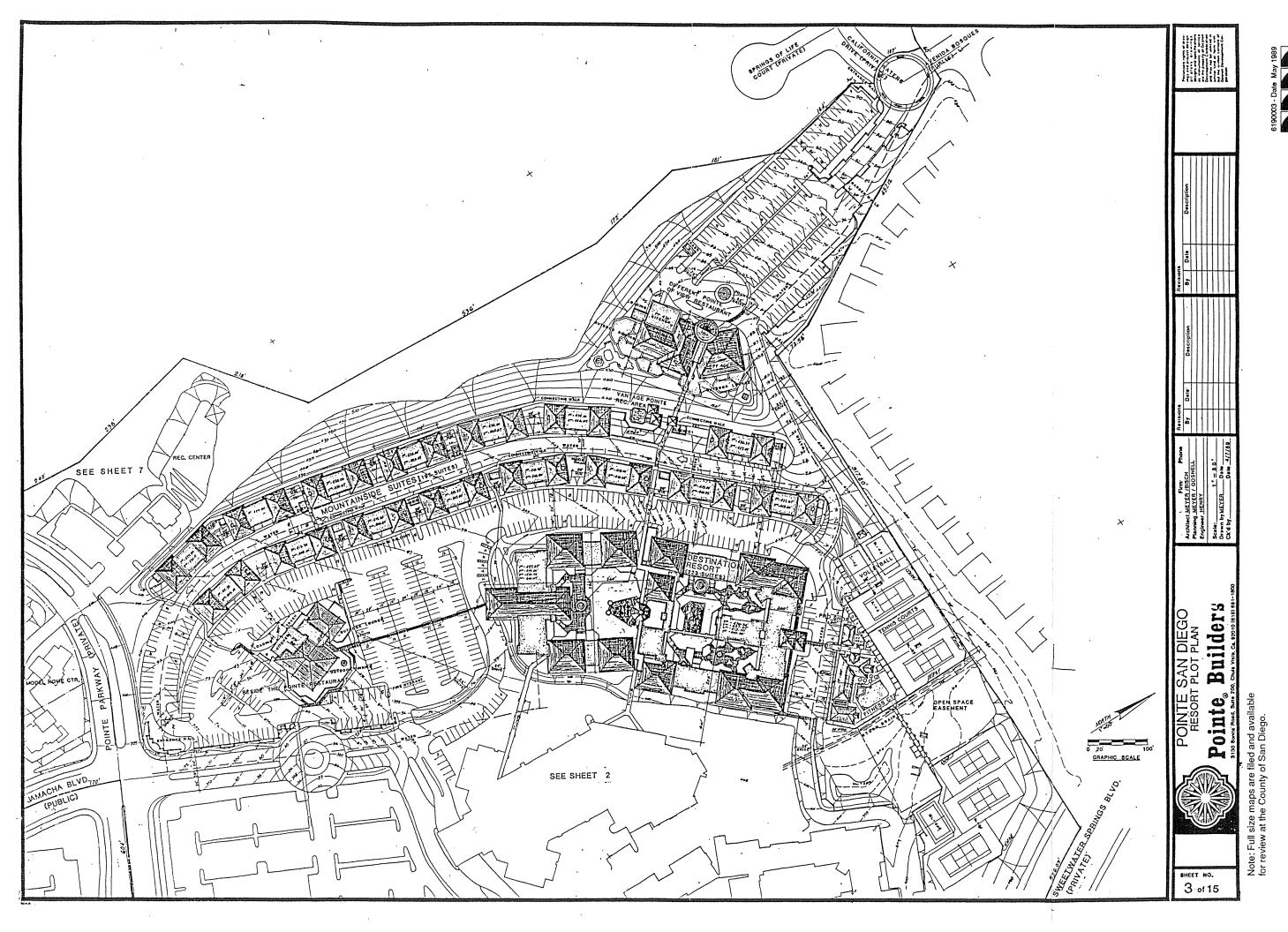




Plot Plan - Ultimate Resort Area The Pointe San Diego



160 FEET Exhibit 2-4



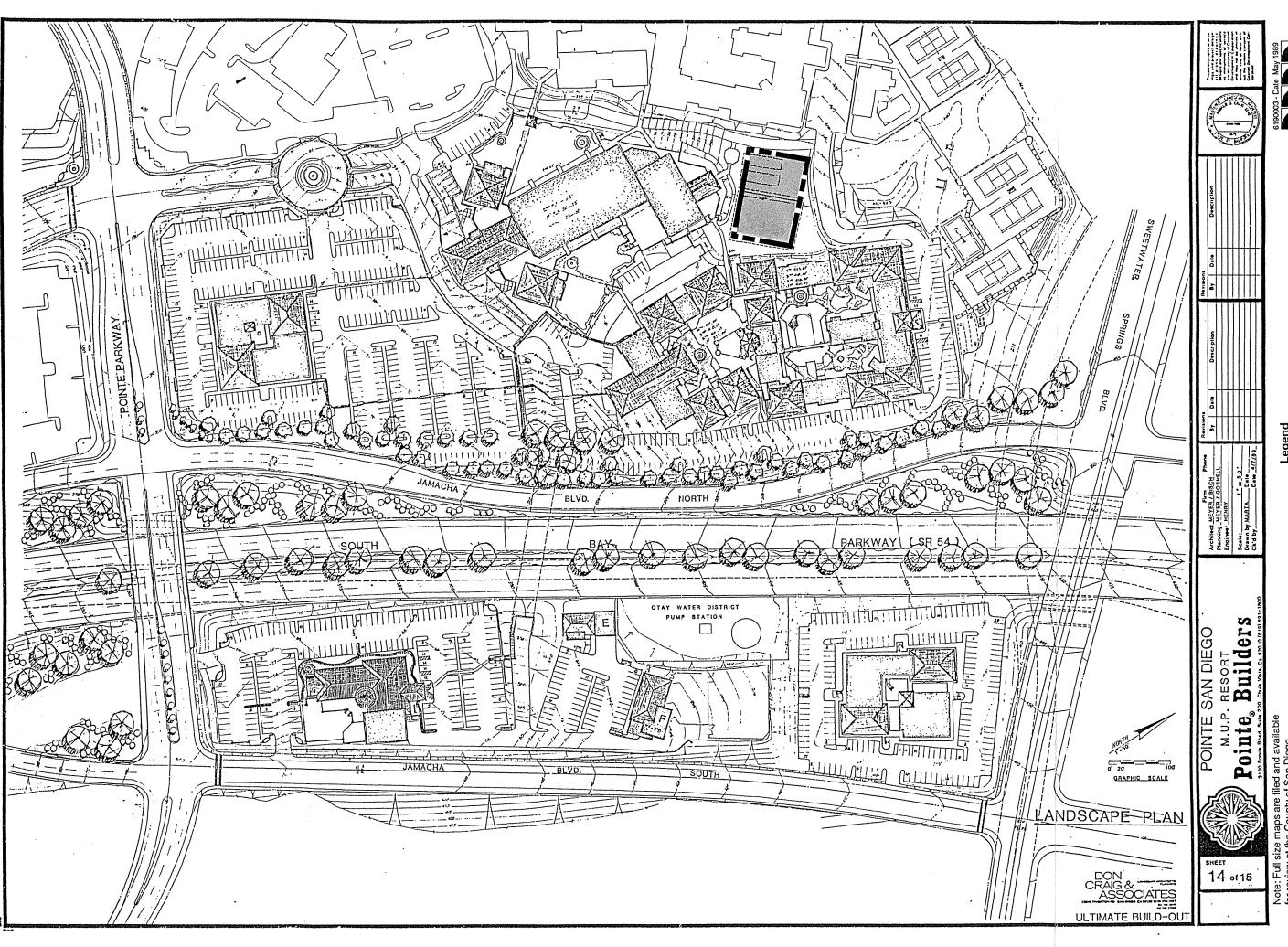
Plot Plan - Interim and Ultimate Resort Area **The Pointe San Diego**

Nichael Brandman Associates
North 0 80 160 FEET
Exhibit 2-5

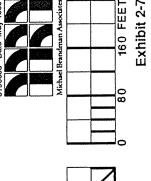


Landscape Plan - Interim Resort Area **The Pointe San Diego**

Michael Brandman Associates
North 0 80 160 FEET
Exhibit 2-6



Landscape Plan - Ultimate Resort Area The Pointe San Diego















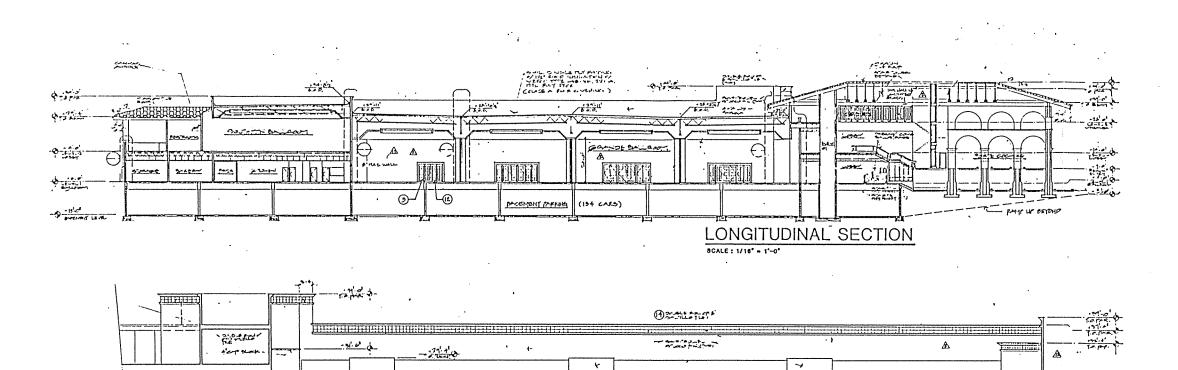
Exhibit

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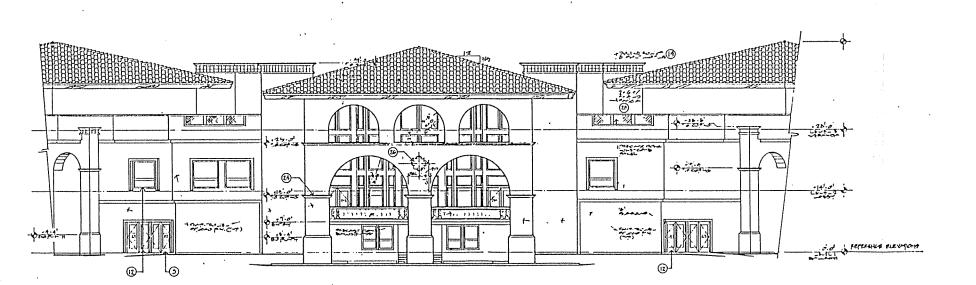
12 of 15

and San Diego Area andscape Plan Resort Pointe Ultimate He



المراجعة -

SIDE ELEVATION



- 32500

PORTE COCHERE ELEVATION

GRANDE BALLROOM

POINTE SAN DIEGO
GRANDE BALLROOM
Pointe Builders

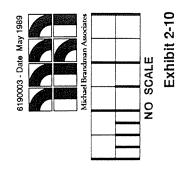
6 of 15

Elevations Ballroom

The Pointe San Diego



NO SCALE Exhibit 2-9



Note: Full size maps are filed and available or review at the County of San Diedo.

Restaurant Elevations **The Pointe San Diego** The second restaurant is located northwest of the entrance to the resort near the mountainside suites (see Exhibit 2-11 for elevation view of "Beside the Pointe Restaurant"). This restaurant serves as the "all purpose" facility providing a wide range of choices over a 21-hour period.

The third restaurant is situated on the southeasterly side of Jamacha Boulevard, northwest of the Jamacha Boulevard South and Pointe Parkway intersection (see Exhibit 2-10 for elevation view of "Rustler's Rooste Restaurant"). Access to this restaurant from the resort is by a tunnel under Jamacha Boulevard and the South Bay Expressway. Public parking is provided at these facilities.

The existing Isham Springs historic site is near the seven proposed tennis courts. The springs are preserved as a "Historic Pointe of Interest." Pointe Builders will clear the non-native brush that is currently invading the integrity of the site, stabilize the foundations which are all that remain of the bottling plant, and construct a footbridge to permit visitors to see the site without endangering the remaining resources. Conditions are outlined in the Army Corps of Engineers 404 permit existing for the site. See Exhibit 2-12 for a plan of the proposed development and Section 3.3 for a more extensive discussion of project impacts.

An equestrian area would be located on the east side of the South Bay Expressway (SR-54) with a tunnel providing access from the resort under the South Bay Expressway and Jamacha Boulevard. Hiking and riding trails would connect to the regional trail running along the Sweetwater River (see Section 3.9.4).

Corporate office space (358,300 square feet) is planned within and near the resort complex along Jamacha Boulevard North and Jamacha Boulevard South. The elevation view of the corporate center along Jamacha Boulevard North is illustrated in Exhibit 2-11.

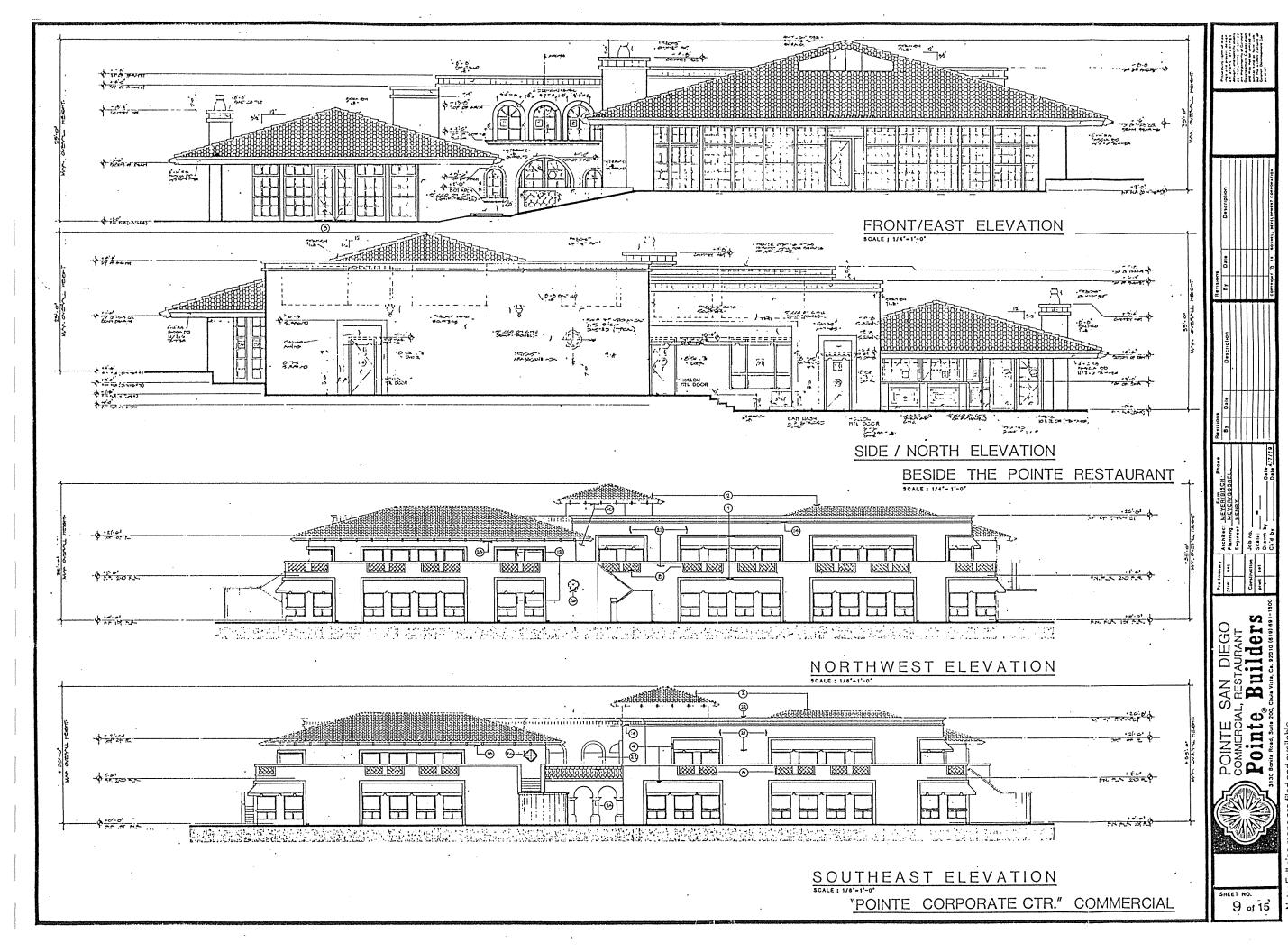
An office-professional park is proposed southeast of Jamacha Boulevard and south of Pointe Parkway adjacent to Sweetwater Reservoir. The office-professional park will include 350,000 square feet of space.

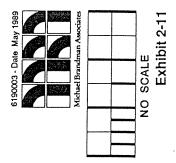
A golf course is also proposed southeast of the South Bay Expressway, west of the office-professional park, and north of Sweetwater Reservoir. The golf course will include 18 holes and a 7,500-square-foot golf center (clubhouse). The tract map for the golf course is located on Exhibits 2-13 and 2-14. The plot plan for the golf course is illustrated in Exhibits 2-15, 2-16, and 2-17. The golf course clubhouse elevations are illustrated in Exhibit 2-18.

Also proposed is the Bancroft Creek mitigation area. Since a majority of the onsite wetlands (Hansen's Ponds, Hansen's Creek, and Little Hansen's Creek) are disturbed by past and ongoing activities such as recreation and dumping, the project includes a conversion of Hansen's Ponds, Hansen's Creek (except for Isham's Springs), and a majority of Little Hansen's Creek to a developed resort complex. The wildlife value of these areas will be replaced on Bancroft Creek (see Exhibit 3-12 in Section 3.2 for proposed conditions). The replacement plan is described in detail in Section 3.5.4. Appendix B depicts the location of the water line and pump station that will be utilized for the Bancroft Creek mitigation area. Appendix E contains the approved Army Corps of Engineers (ACOE) 404 permit which includes the mitigation measures required for the project implementation.

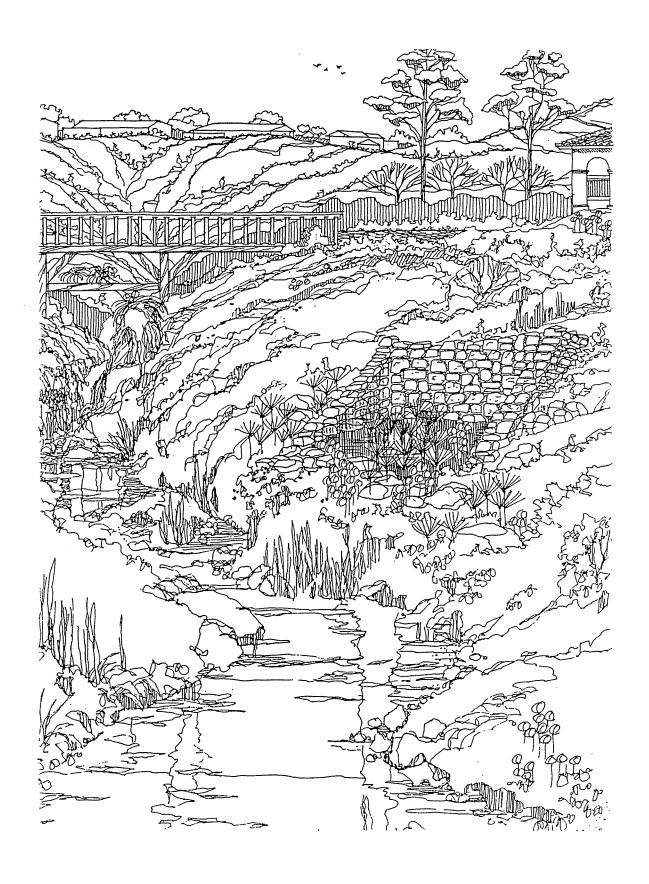
The proposed project includes 855 residential units; 619 single-family and 236 multiple-family. The single-family units are clustered along the hillsides on the eastern and western portions of the site, away from the noise and traffic of Jamacha Boulevard and South Bay Expressway. Two multiple-family areas are provided within the resort community. One area, consisting of 132 units, is located east of South Bay Expressway along Pointe Parkway and the other area, consisting of 104 units, is located southwest of the resort (see Exhibits 2-1a and 2-29 for tract maps, Exhibit 2-19 for plot plan, and Exhibit 2-20 for landscape plan) and one on the east side at the top of the hillside (see Exhibit 2-21 for plot plan and Exhibit 2-22 for landscape plan), contain private swimming pools and play areas for use by the residents. The residential streets on the project site are private with gateway monuments located on Pointe Parkway at the entrance to the residential areas.

The proposed development will involve grading of approximately 3.8 million cubic yards of earth. Since much of the hillside is solid rock with limited soil cover, blasting will be necessary. Section 3.1 discusses grading impacts and Section 3.8 discusses the noise impacts of the proposed project.



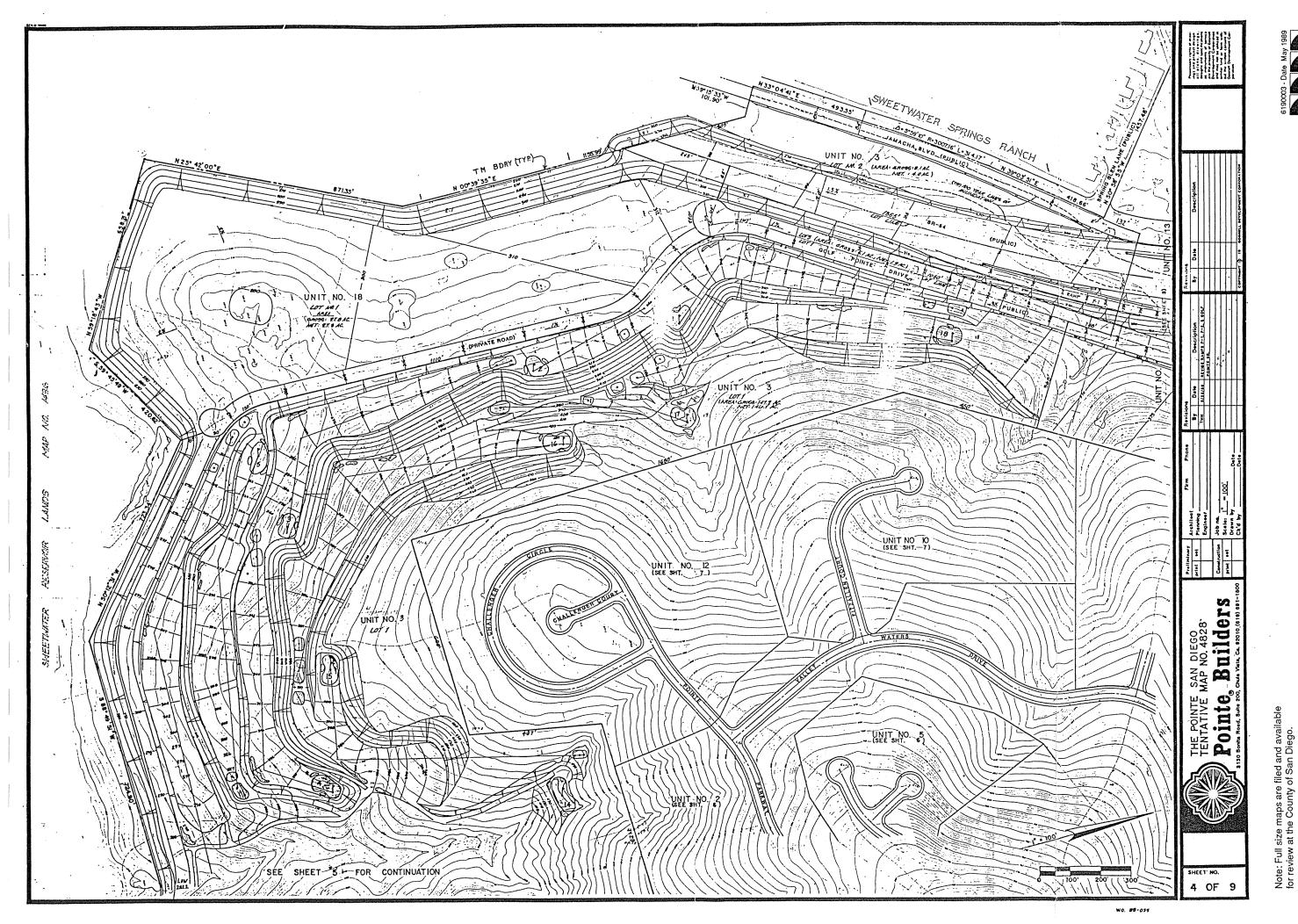


ote: Full size maps are lited and r review at the County of San D Restaurants and Corporate Center Elevations **The Pointe San Diego**

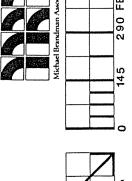


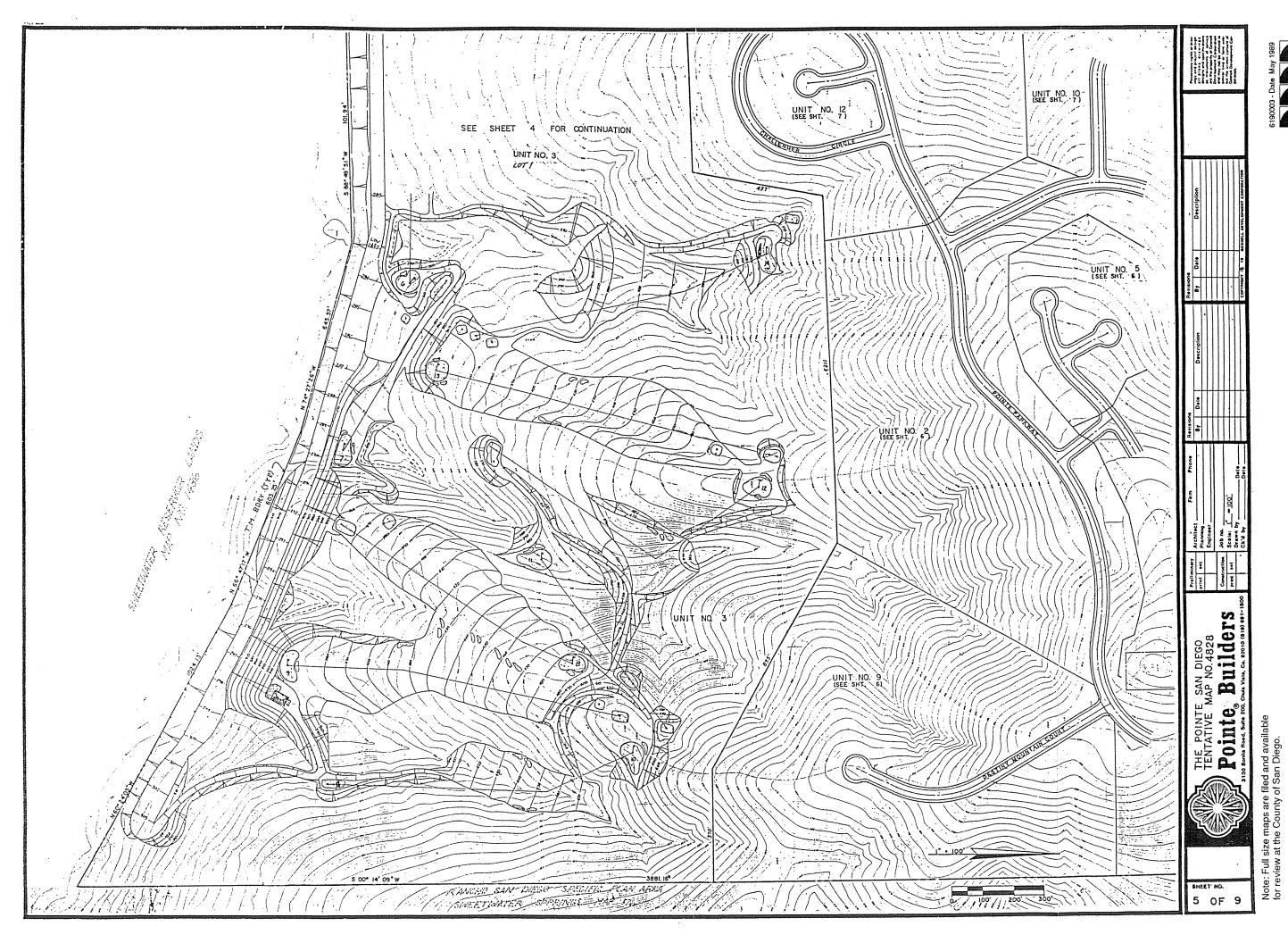






Tract Map San Diego Course Pointe





Golf Course Tract Map



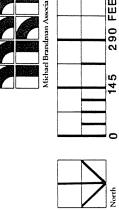
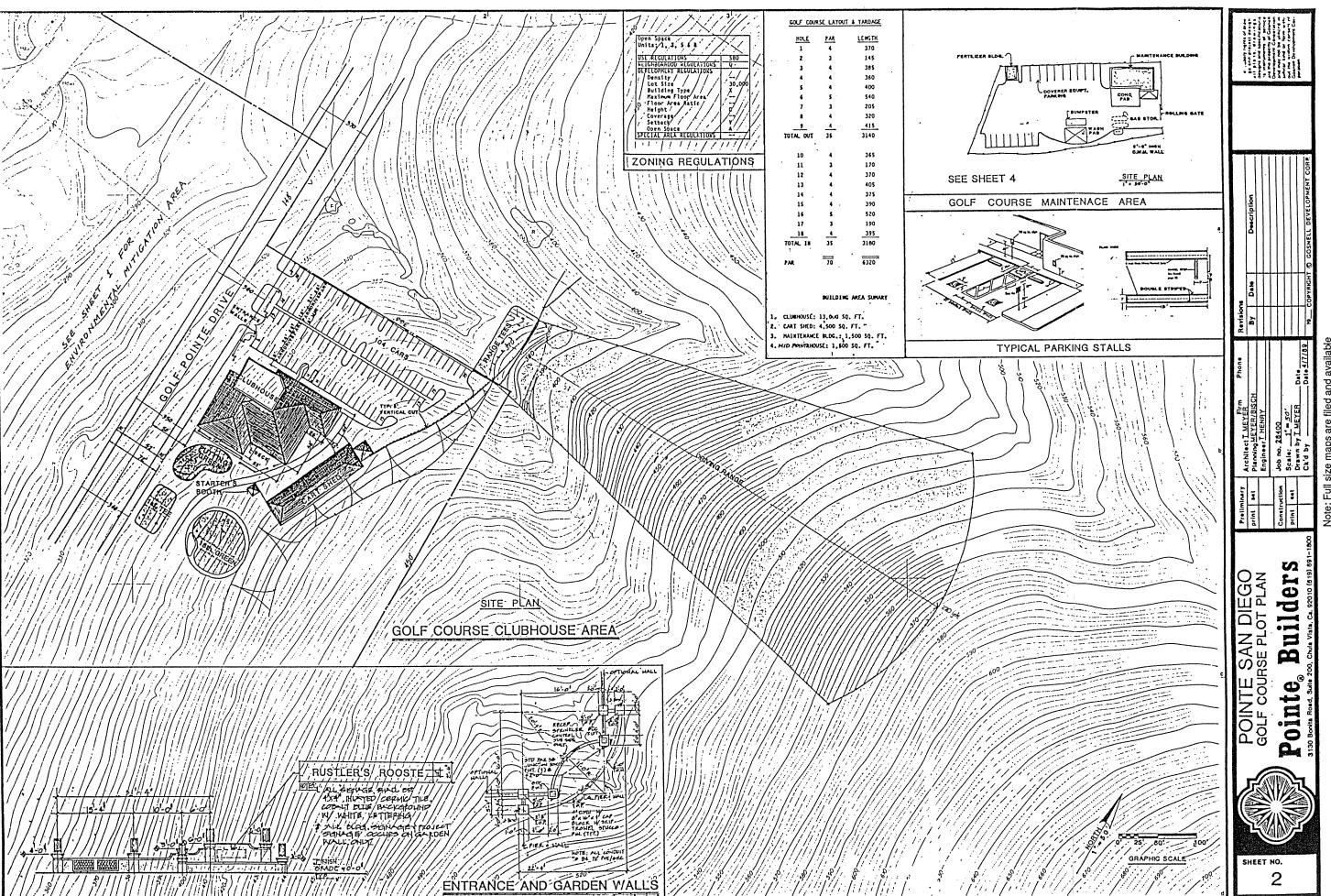
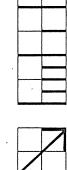
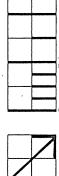
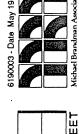


Exhibit 2-14

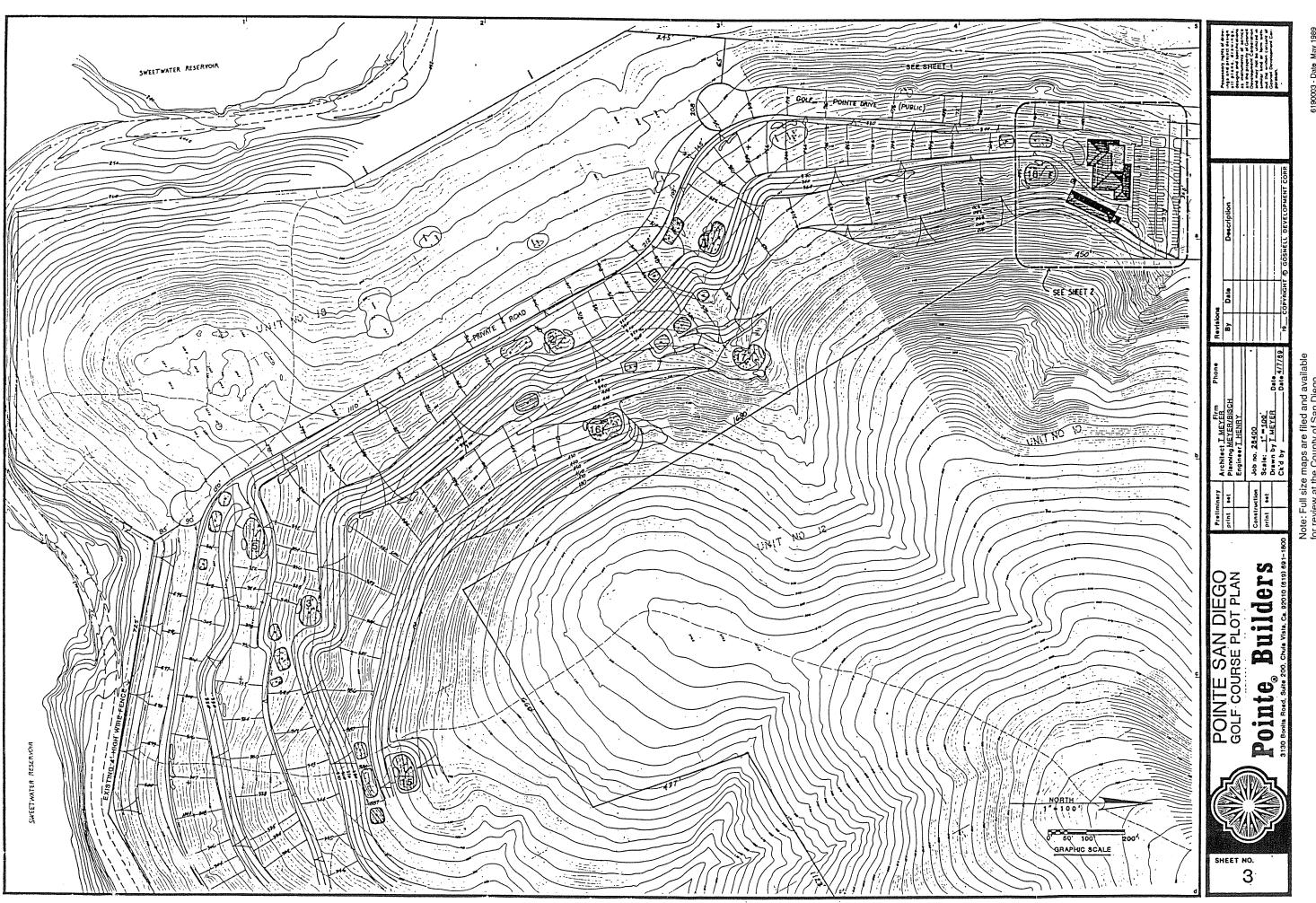




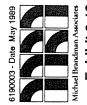




The Pointe San Diego **Golf Course** Plan Plot

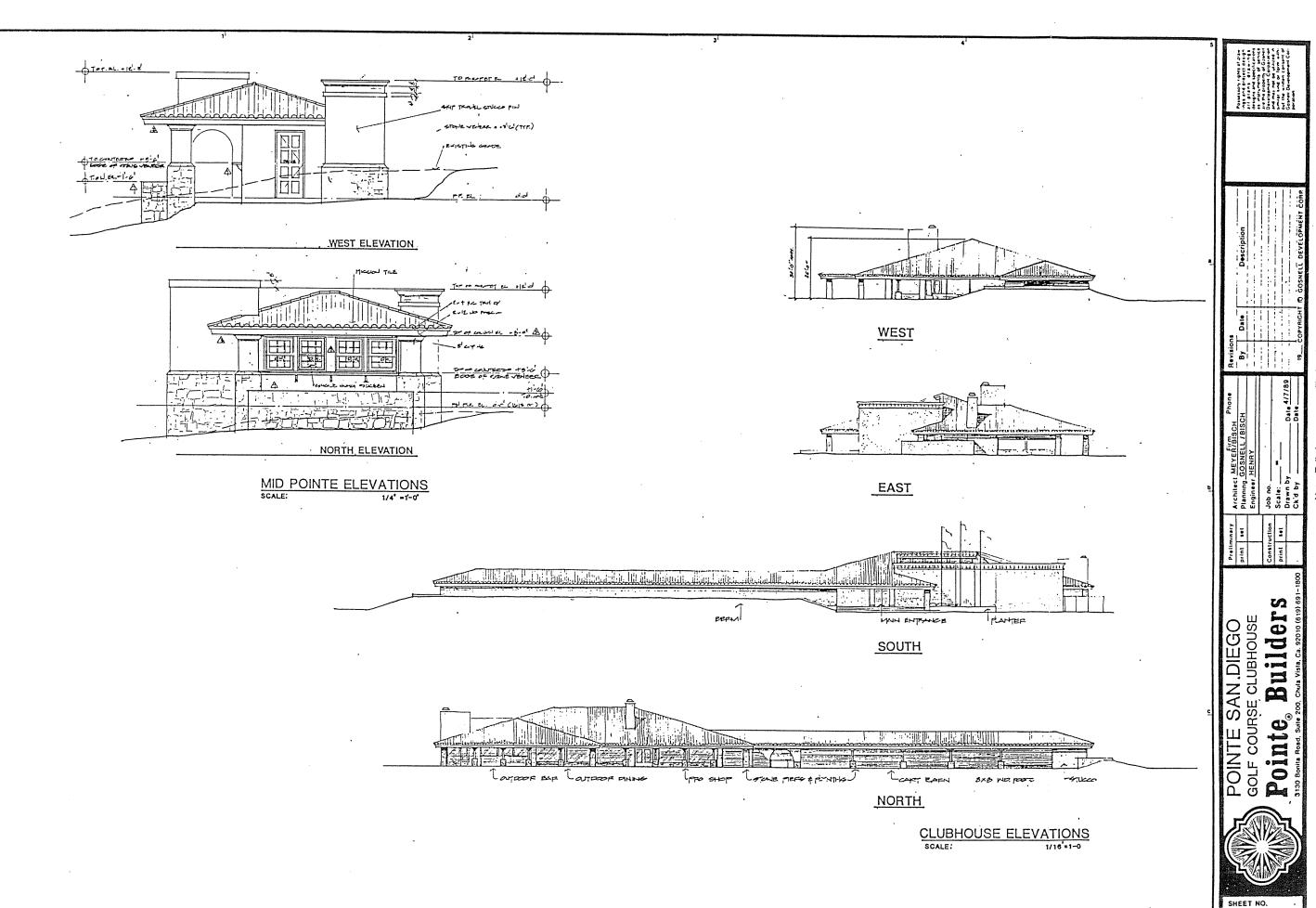


The Pointe San Diego Plot Plan - Golf Course





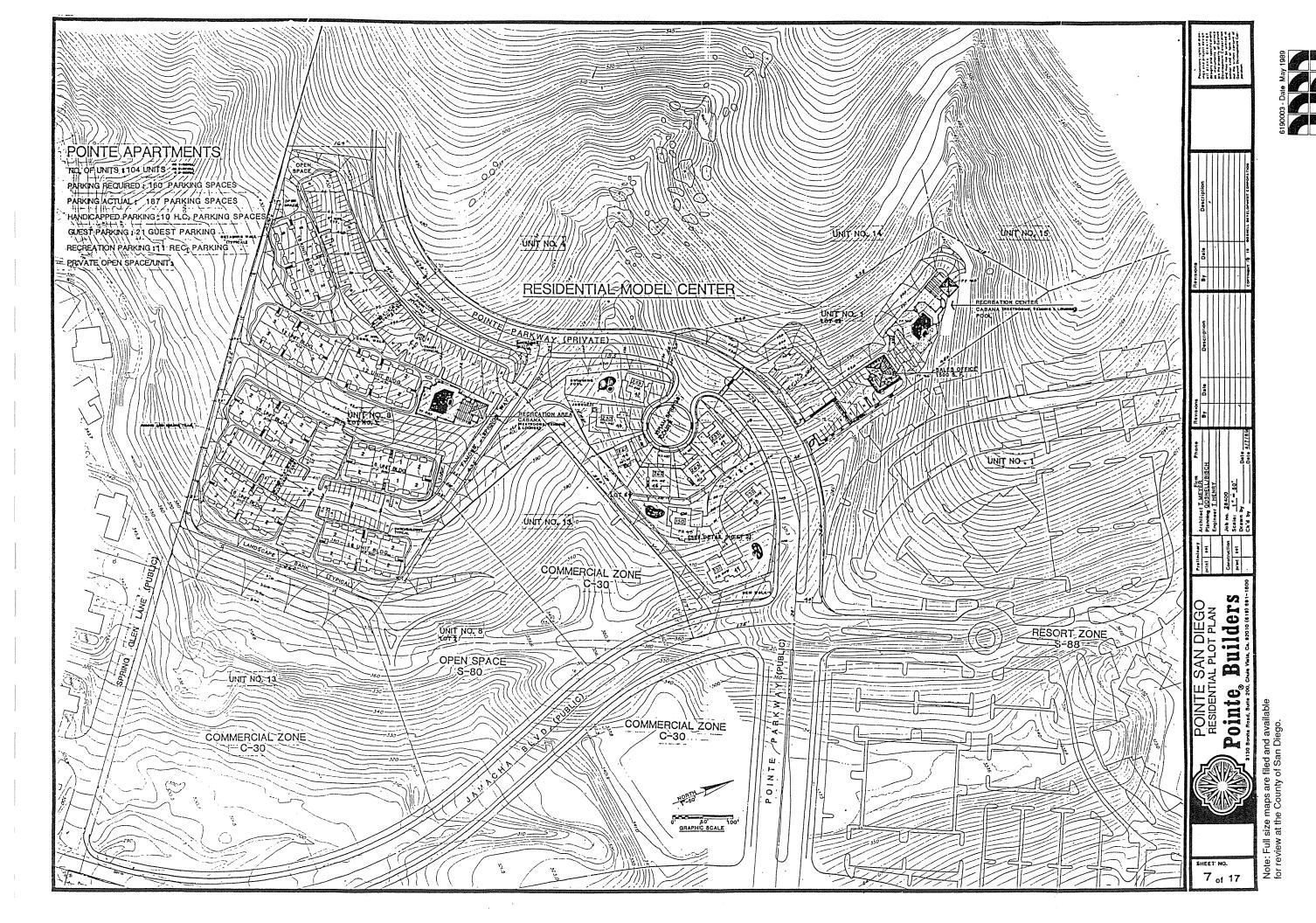




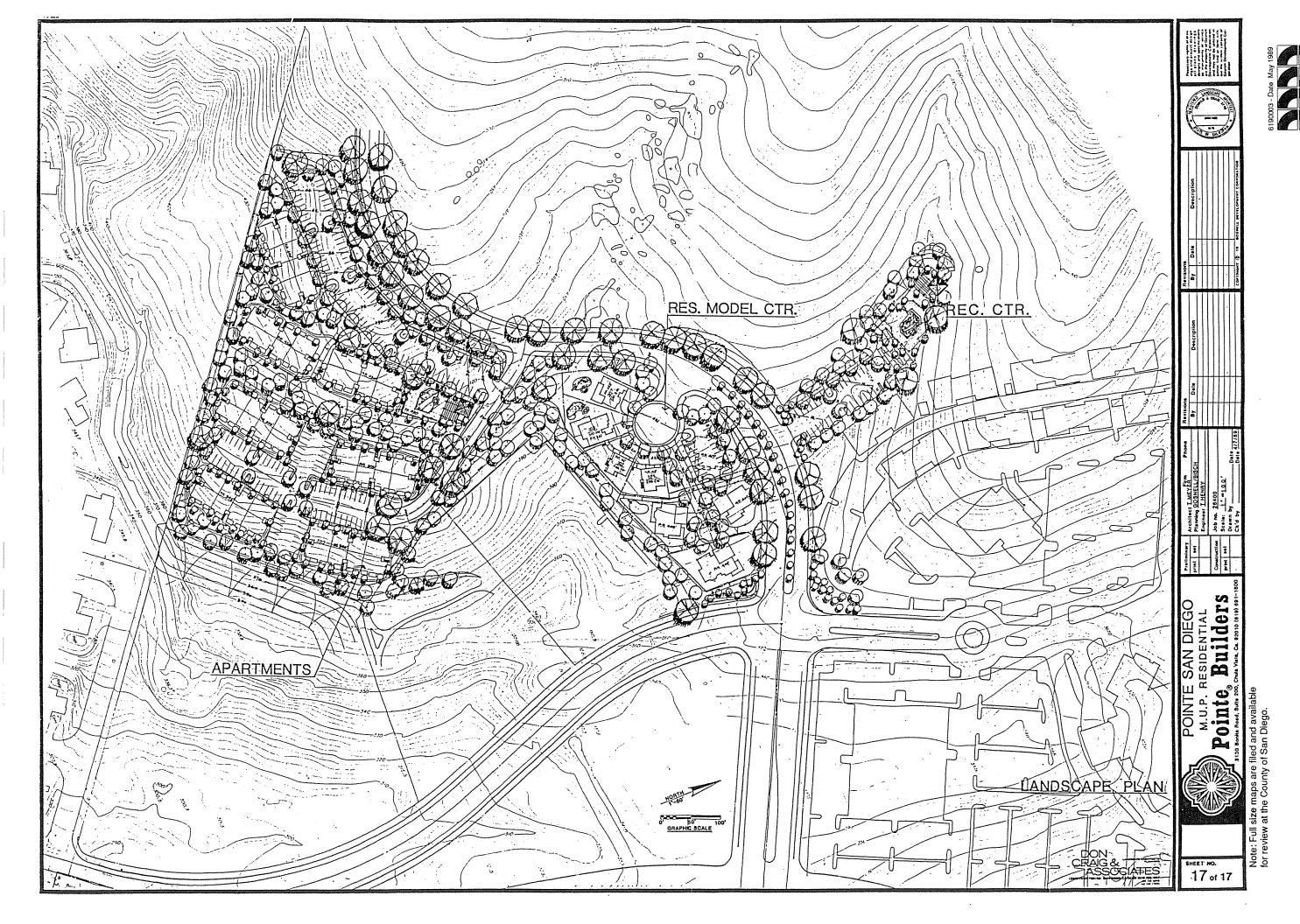
The Pointe San Diego

Golf Course Clubhouse Elevations

5



- West Side Recreation The Pointe San Diego Center and Residential Plot Plan



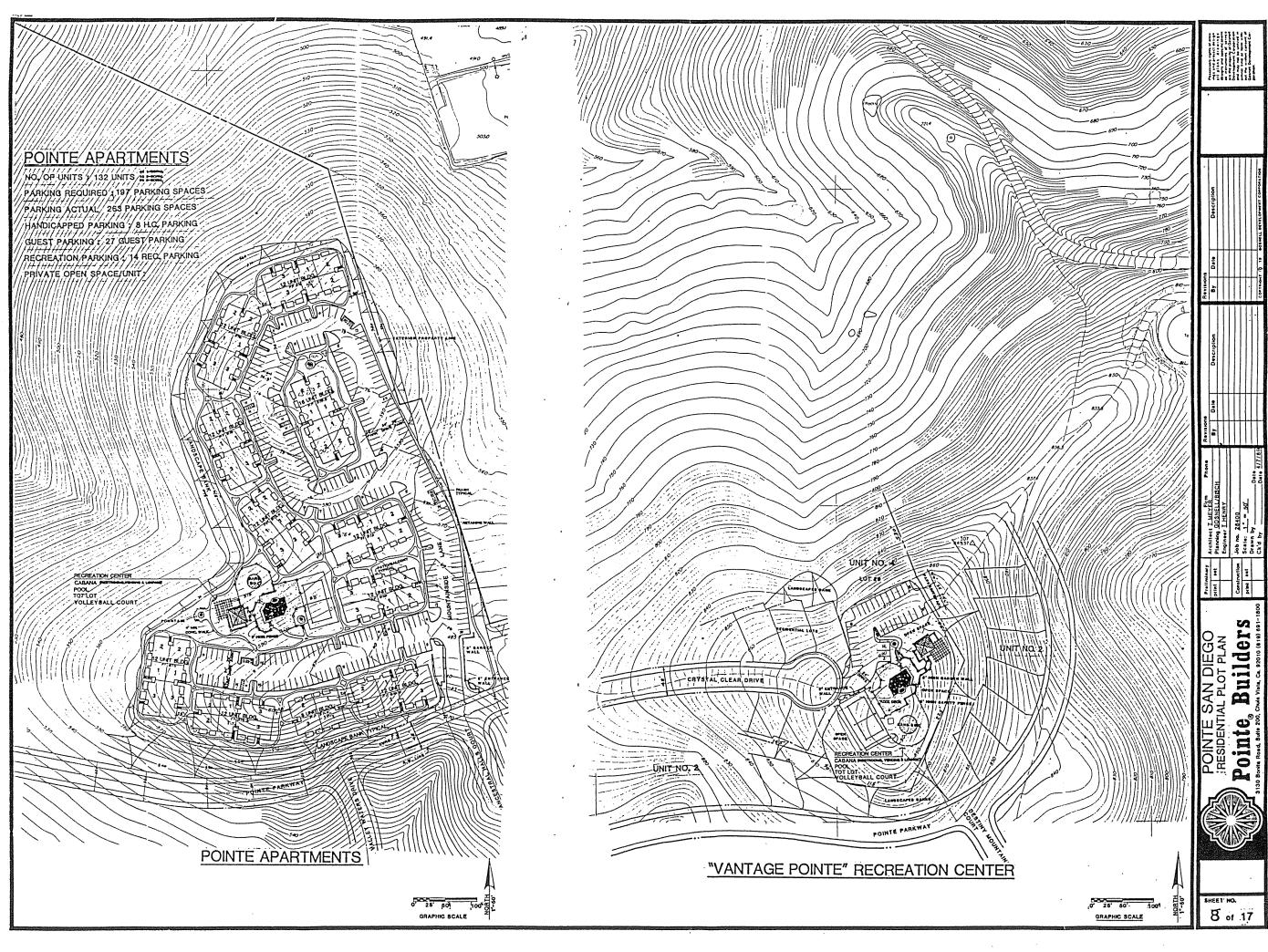
Michael Brandman Associates

Michael Brandman Associates

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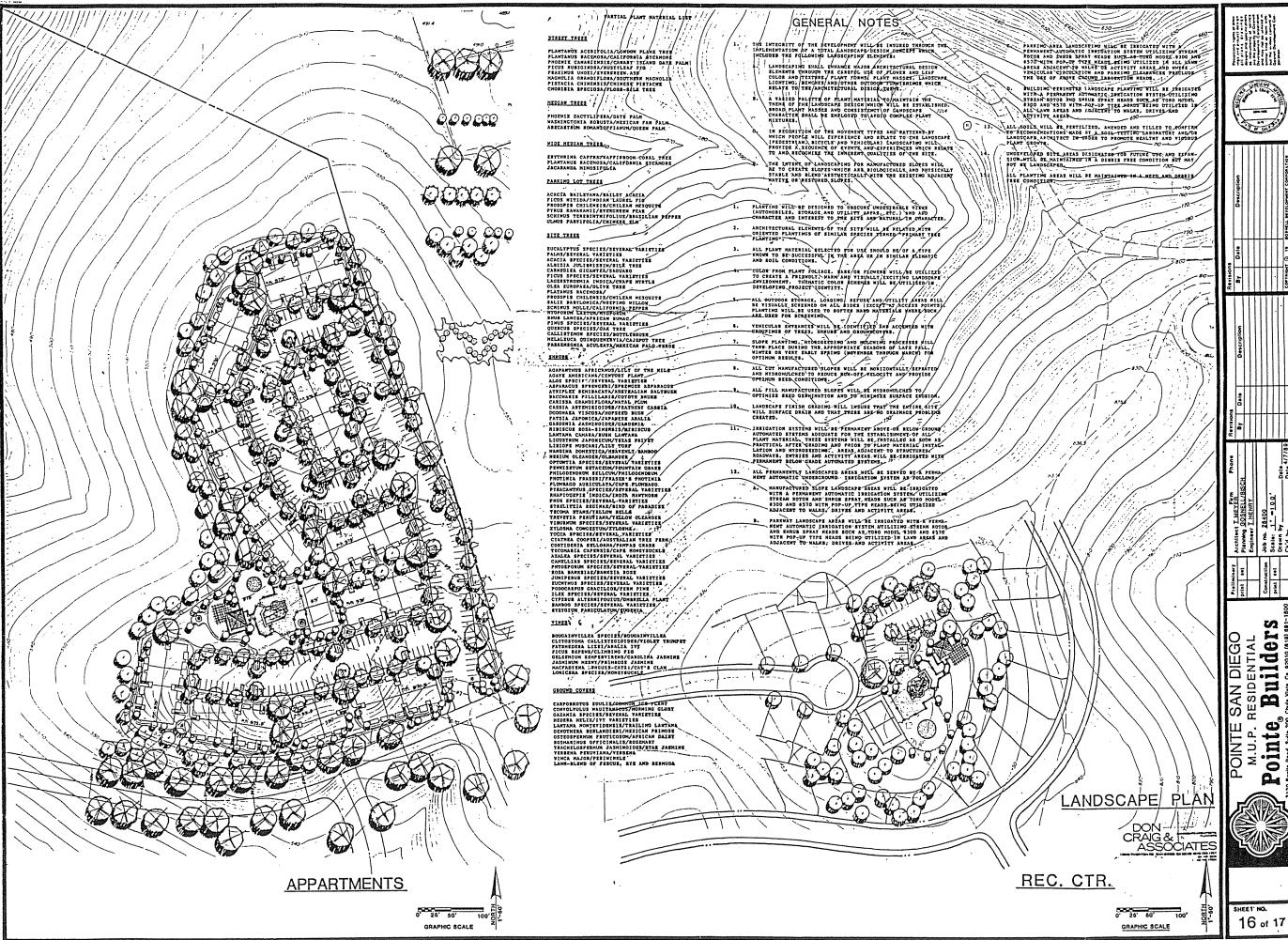
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Landscape Plan - West Side Recreation Center and Residential **The Pointe San Diego**



Note: Full size maps are filed and availa for review at the County of San Diego.

Plot Plan - East Side Recreation Center and Residential **The Pointe San Diego**



Residential Side and East San Diego Center Pointe

Plan Recreation Landscape E



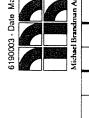
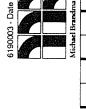
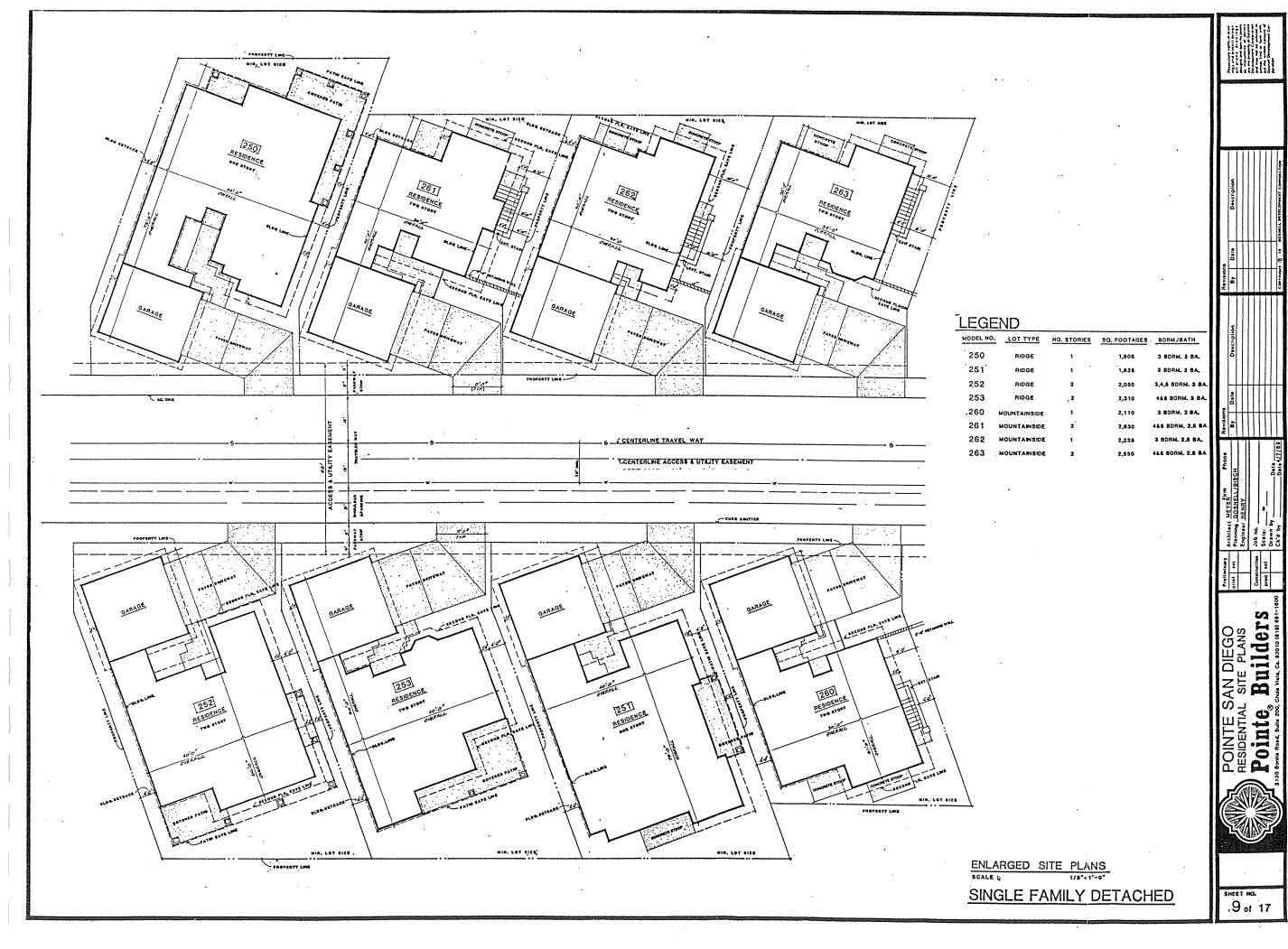
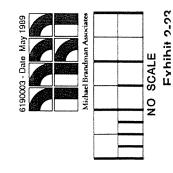


Exhibit 2-22









Note: Full size maps are filed an for review at the County of San I

Site Plan - Typical Single - Family Detached Units The Pointe San Diego To minimize grading, Pointe Builders clusters the housing development so that large contiguous areas of undisturbed open space are preserved. A majority of the homes are single-family detached consistent with the character of the single-family, suburban development surrounding much of the site (see Exhibit 2-23 for typical site plan of single-family units). Three types of single-family residential units are mountainside homes, ridge homes, and private drive homesites. mountainside homes are designed to conform with downhill slopes (see color palette 2) and the ridge homes are accommodated on flat terrain (see color palette 3). The private drive lots are located adjacent to the resort and Dictionary Hill and would be similar to the units that will be eventually constructed on Dictionary Hill (see color palette 4). In order to minimize the grading for the single-family homes and retain the maximum amount of the site in open space, a "zero-lot-line" concept is utilized (the lot line is actually a minimum of 4 feet from the unit, but the concept is the same). Approximately 426.4 acres are proposed to be retained in open space and 352.8 of these acres would be maintained by the homeowners association with participation by the Pointe resort. The remaining 73.6 acres would encompass the golf course and be maintained by the golf course.

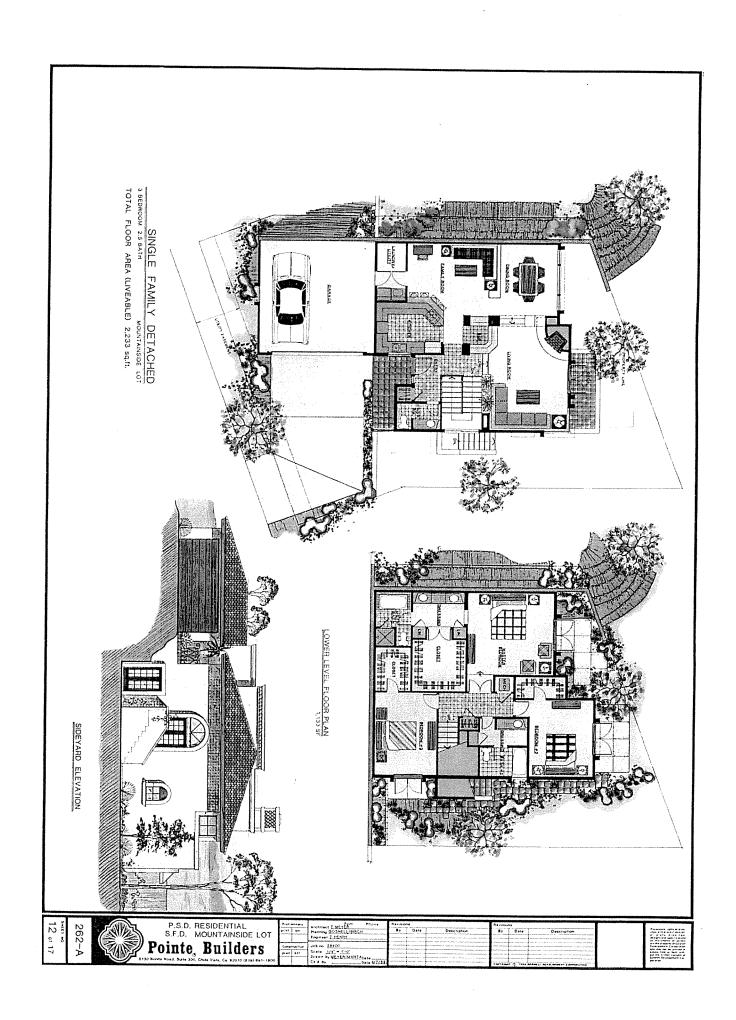
The single-family homes range in size from a single-story, 1,800-square-foot ridge home to a two-story plus, 2,500-square-foot mountainside unit. Typical layouts of the lots are shown in color palettes 2, 3, and 4. The ridge and mountainside homesites are skewed 20 degrees to allow for side garage entrances, except on culde-sacs, and improve conformance to the terrain at the rear of the lot (see Exhibit 2-24). The two Spanish Mediterranean style apartment complexes would consist of 8, 12, and 16 unit buildings (see Exhibit 2-19 and 2-21 for the plot plans of the apartments). The elevations of the apartments are shown in Exhibit 2-25. Also, the landscape plans for the apartments on the west and east side of the project site are illustrated in Exhibits 2-20 and 2-22, respectively.

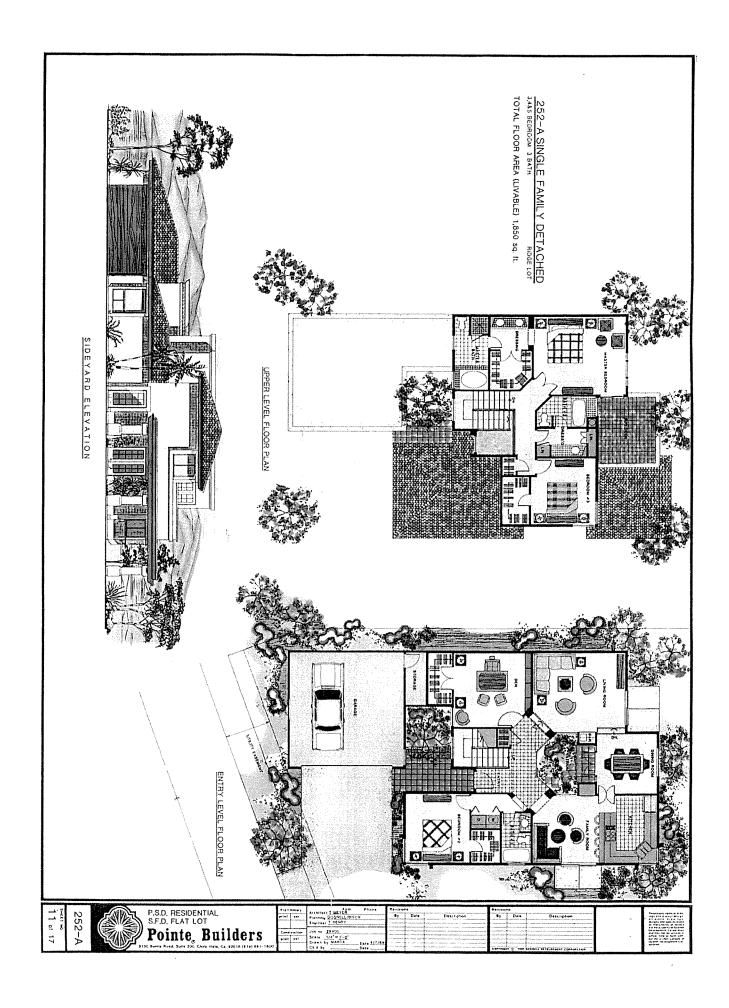
The tract maps for the residential units on the west side of the project site are located in Exhibits 2-26 and 2-27. The tract maps for the east side residential units are located in Exhibits 2-28 and 2-29. The plot plans for the west side residential units are in Exhibits 2-30 and 2-31. The plot plans for the east side residential units are in Exhibits 2-32 and 2-33.

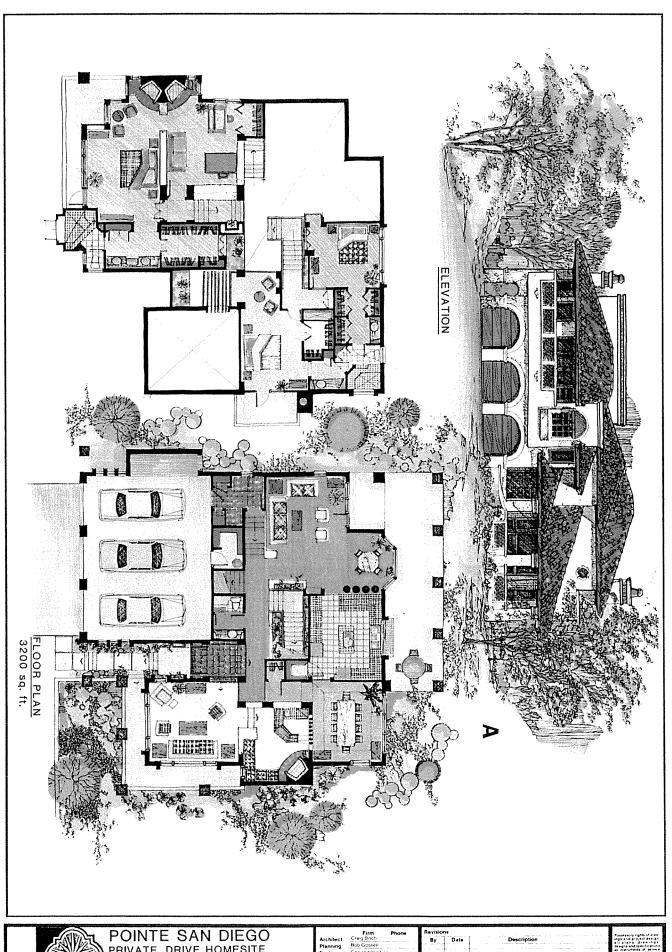
In addition to the land uses described above, The Pointe San Diego is proposing to include the following ancillary uses:

- 1. laundry facilities for the entire resort community located adjacent to the resort itself
- 2. maintenance areas for the equipment necessary to maintain the whole resort
- 3. telecommunications facilities located on the site of the current cable television receiving station
- 4. speciality and sundry shop(s)
- 5. administrative offices
- 6. cogeneration facilities for onsite electrical generation
- 7. day care and babysitting services for personnel, guests, and the public
- 8. sign making shop
- 9. plant nursery for onsite landscaping
- 10. catering support facilities
- 11. outdoor dining, entertainments, dancing, activities, etc.
- 12. sightseeing tours and travel agency
- 13. barber shop and beauty salon
- 14. florist and gift shops
- 15. bus and other transportation facilities
- 16. animal mascot (Texas Longhorn Steer) at Rustlers Rooste Restaurant
- 17. car rental

The proposed project also involves a revision to the Circulation Element of the San Diego County General Plan. Exhibit 2-34 illustrates the proposed roadway system on the site in comparison to the General Plan Circulation Element. The following general plan circulation element amendments are required:

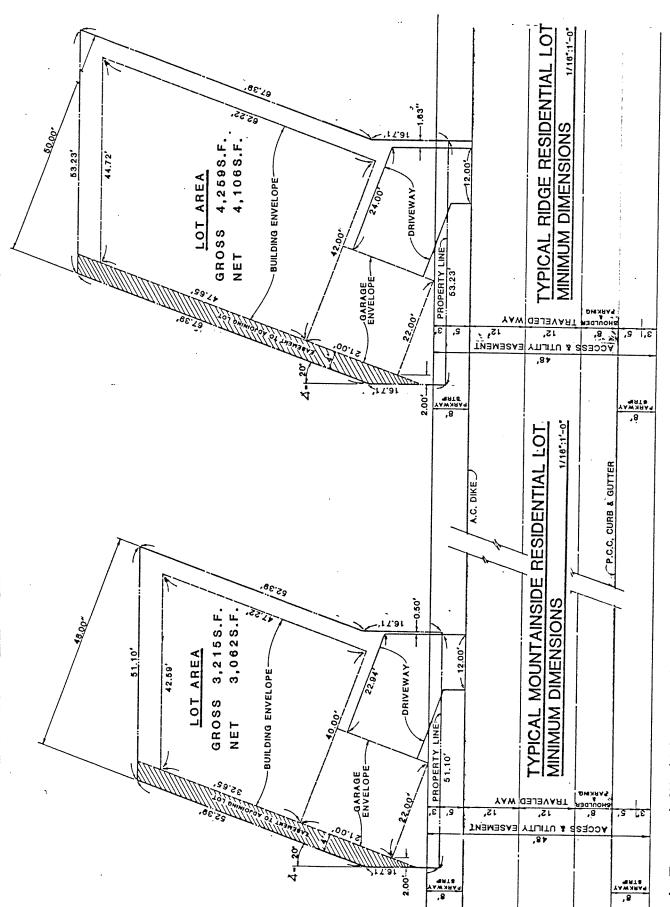




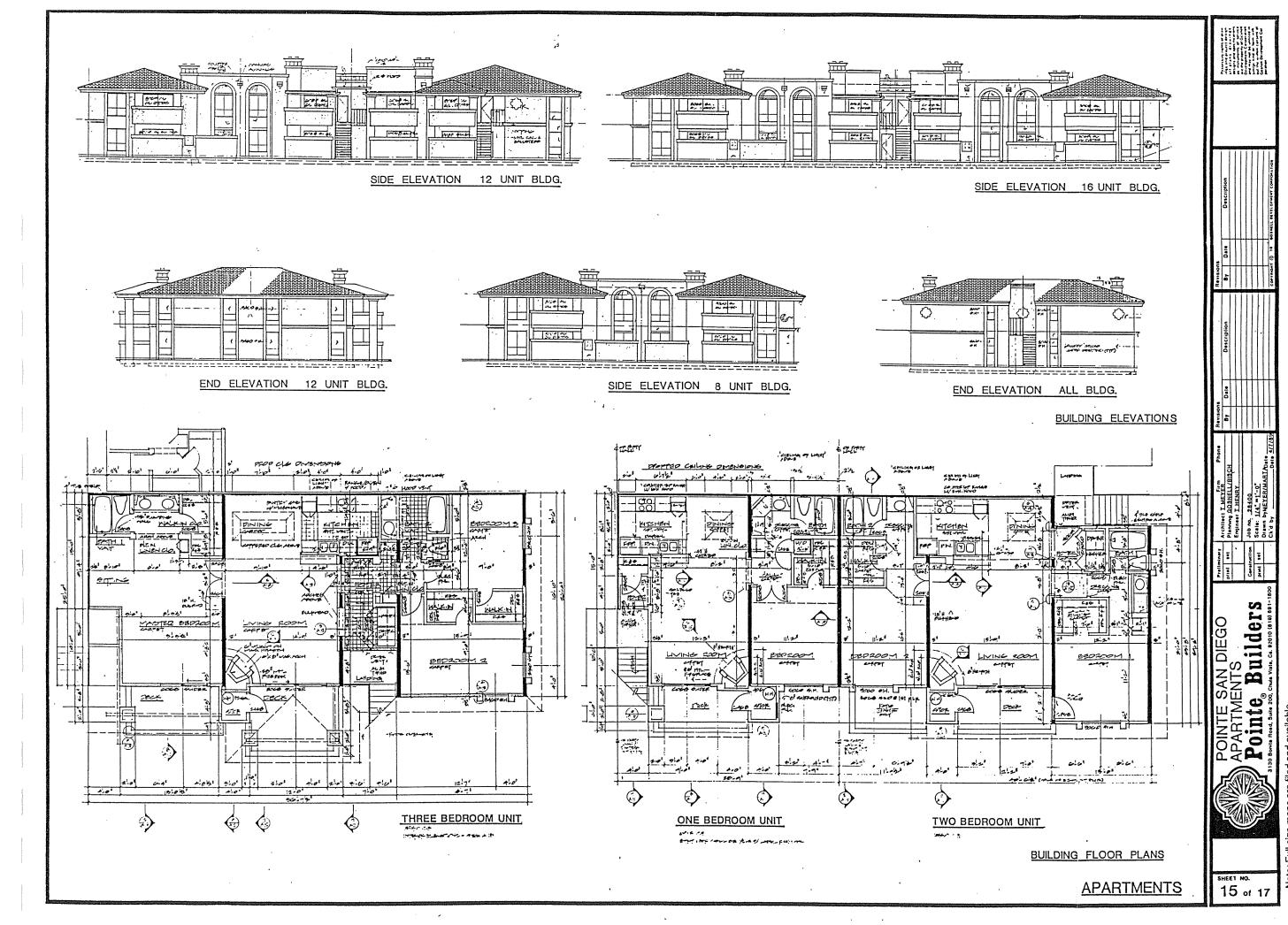




Archilect	Firm Craig Bisch	Phone
Planning	Bob Gosnell	
Engineer	Cog and Van L	92



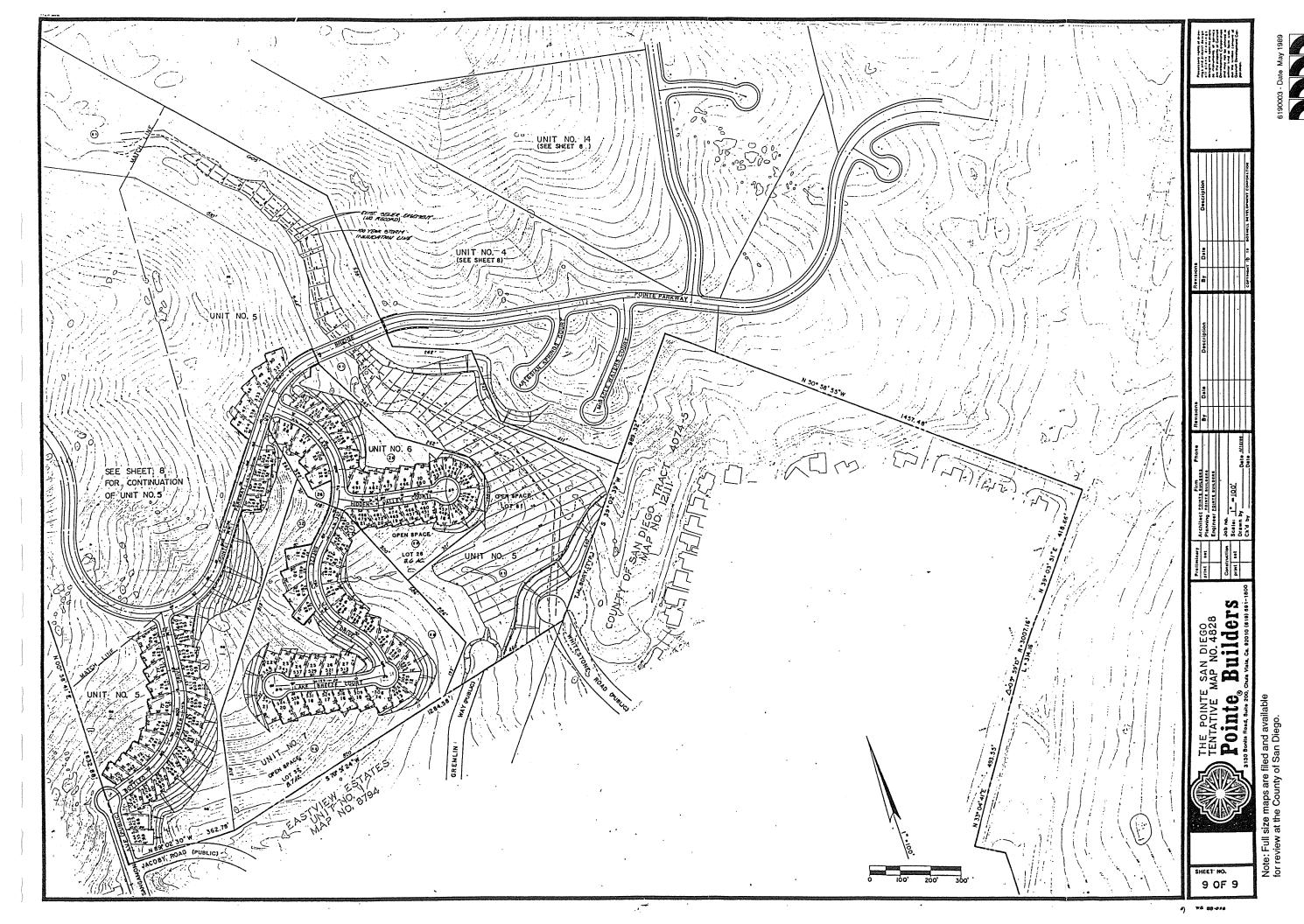
Typical Downhill (Mountainside) and Flat (Ridgeline) Residential Units The Pointe San Diego



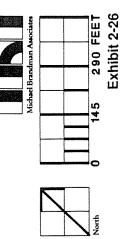
Apartment Elevations

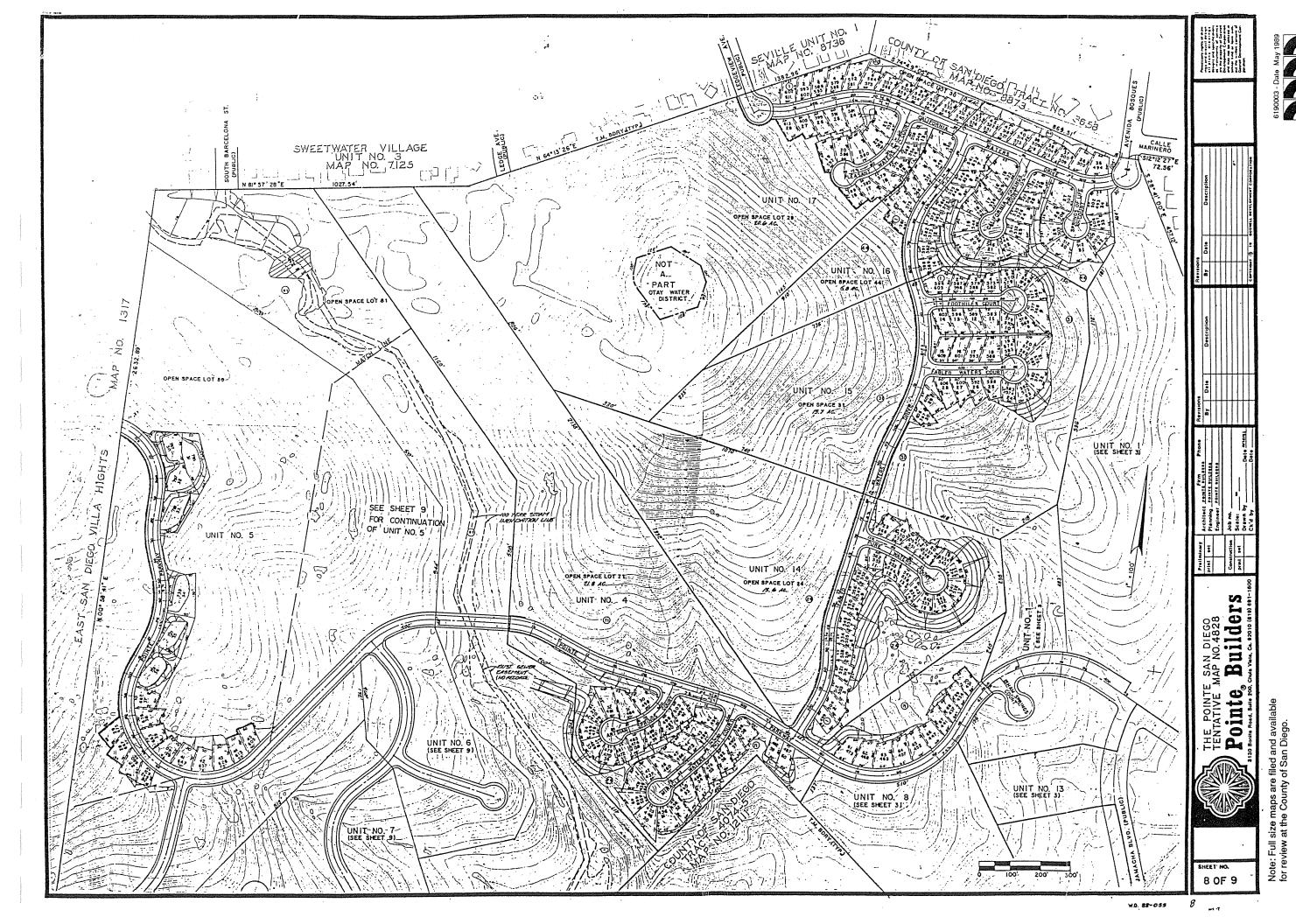
The Pointe San Diego

SCALE Exhibit 2-25



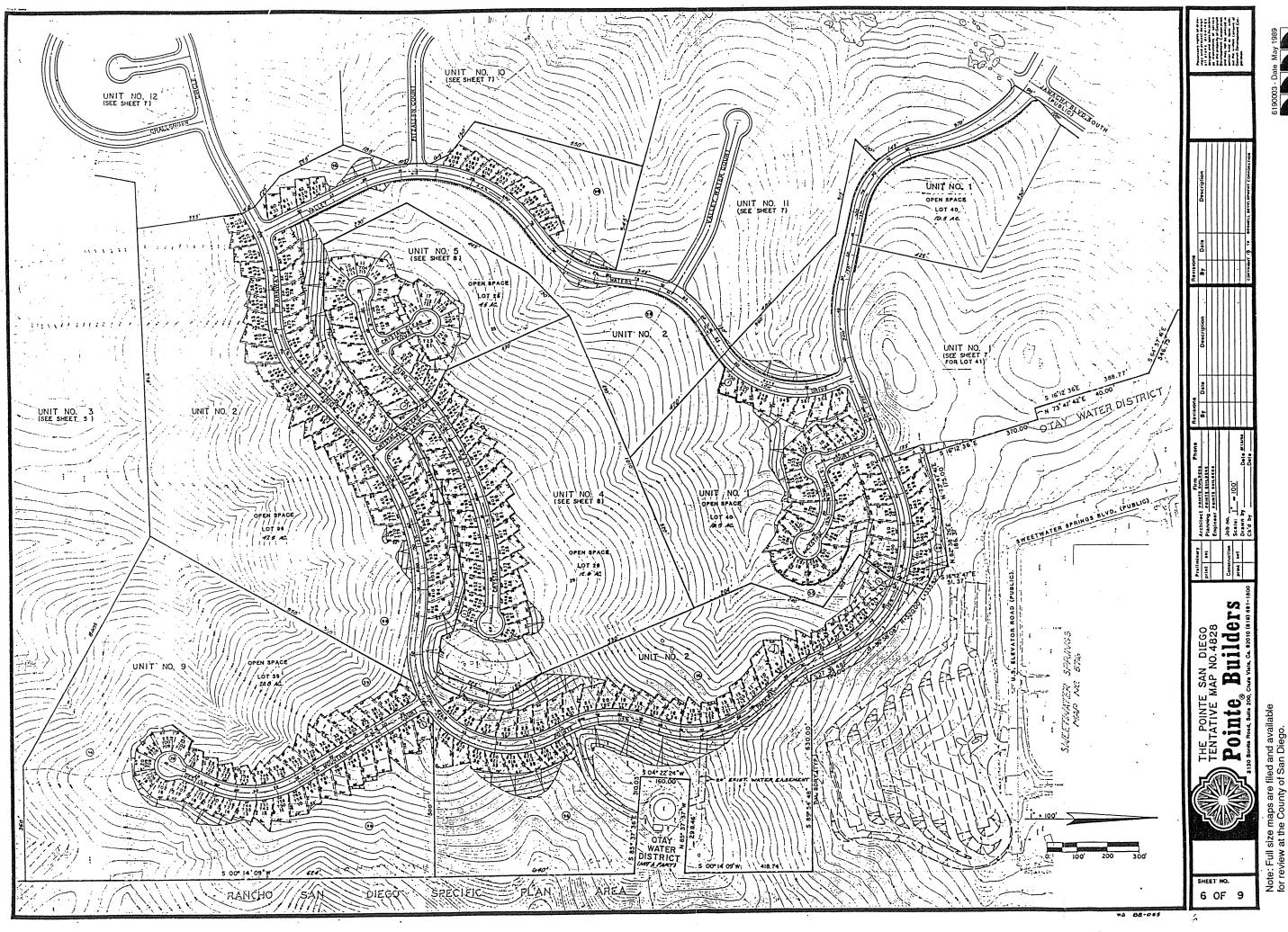
West Side Residential Tract Map The Pointe San Diego



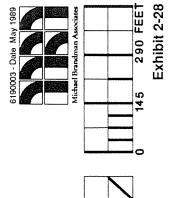


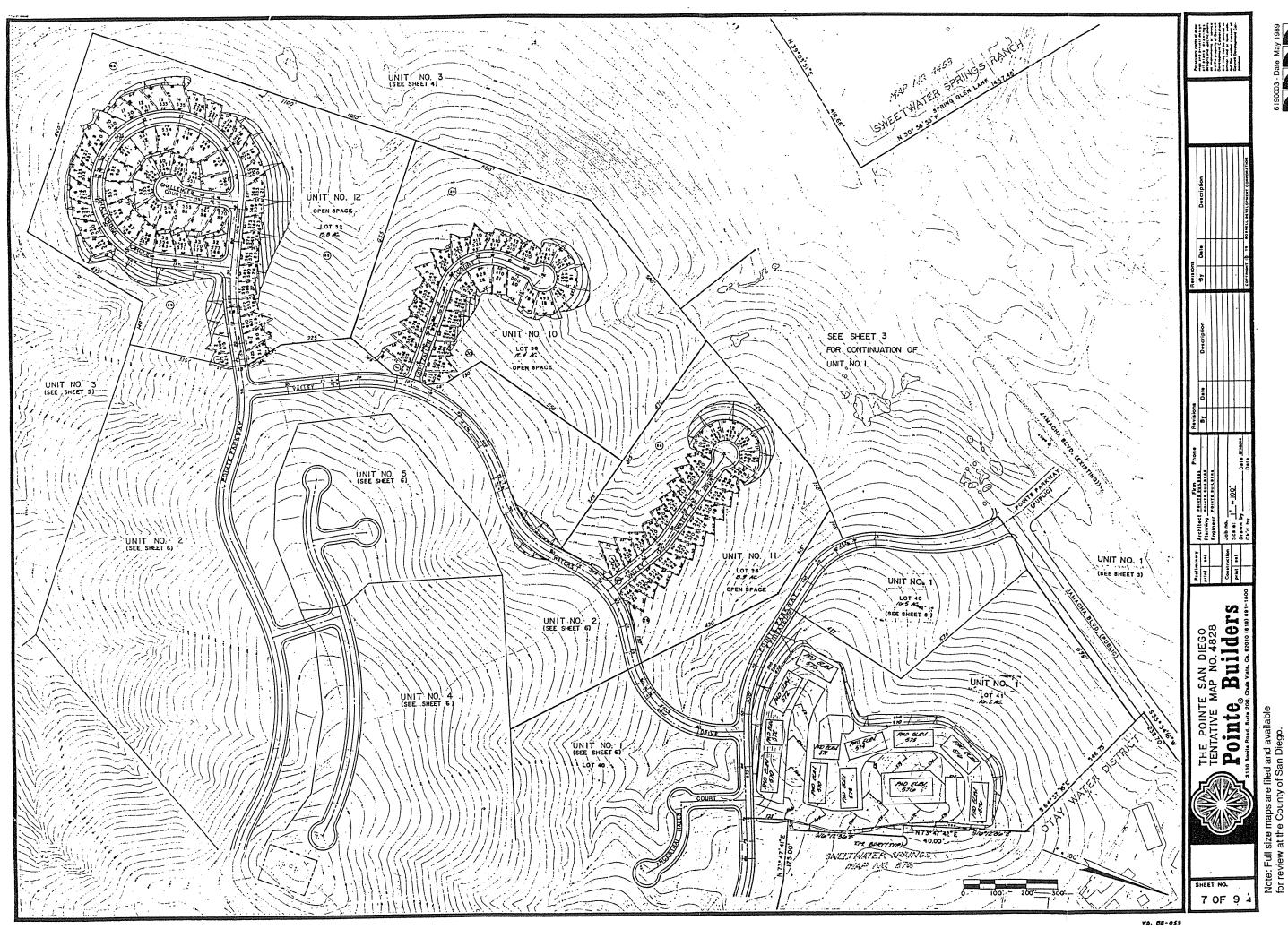
West Side Residential Tract Map

290 FEET Exhibit 2-27

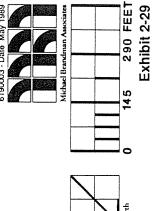


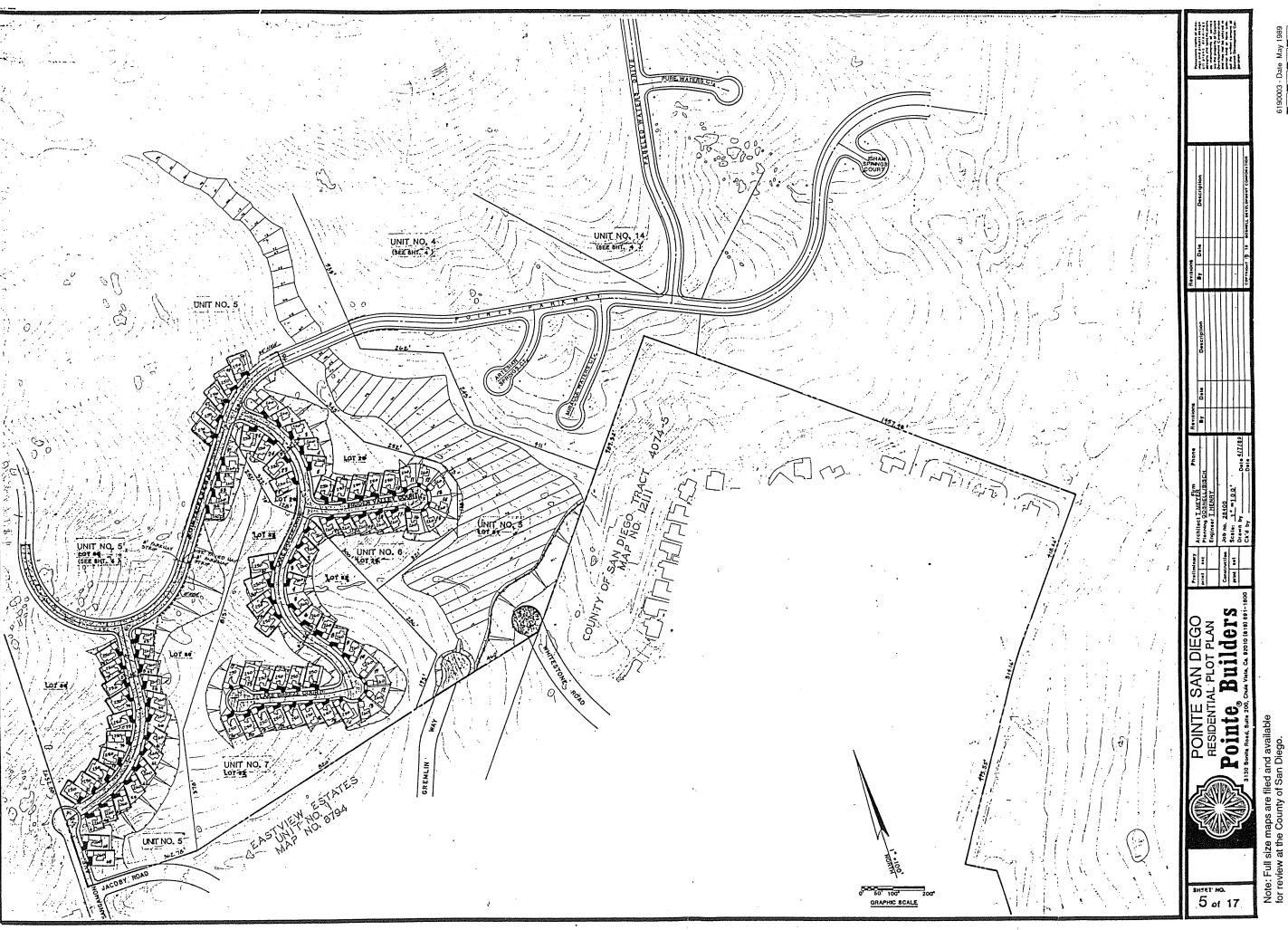
East Side Residential Tract Map **The Pointe San Diego**



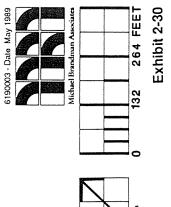


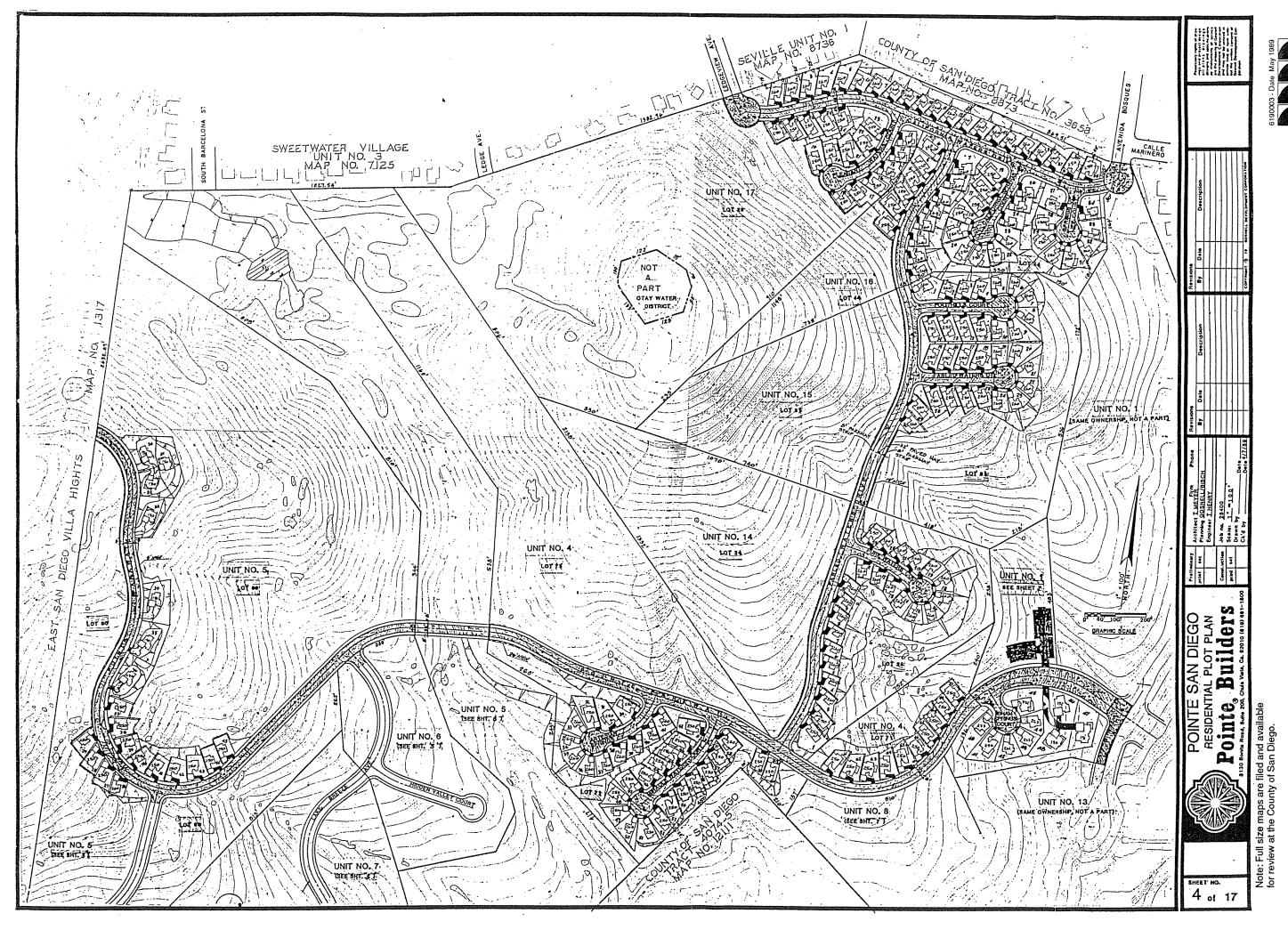
East Side Residential Tract Map



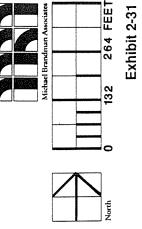


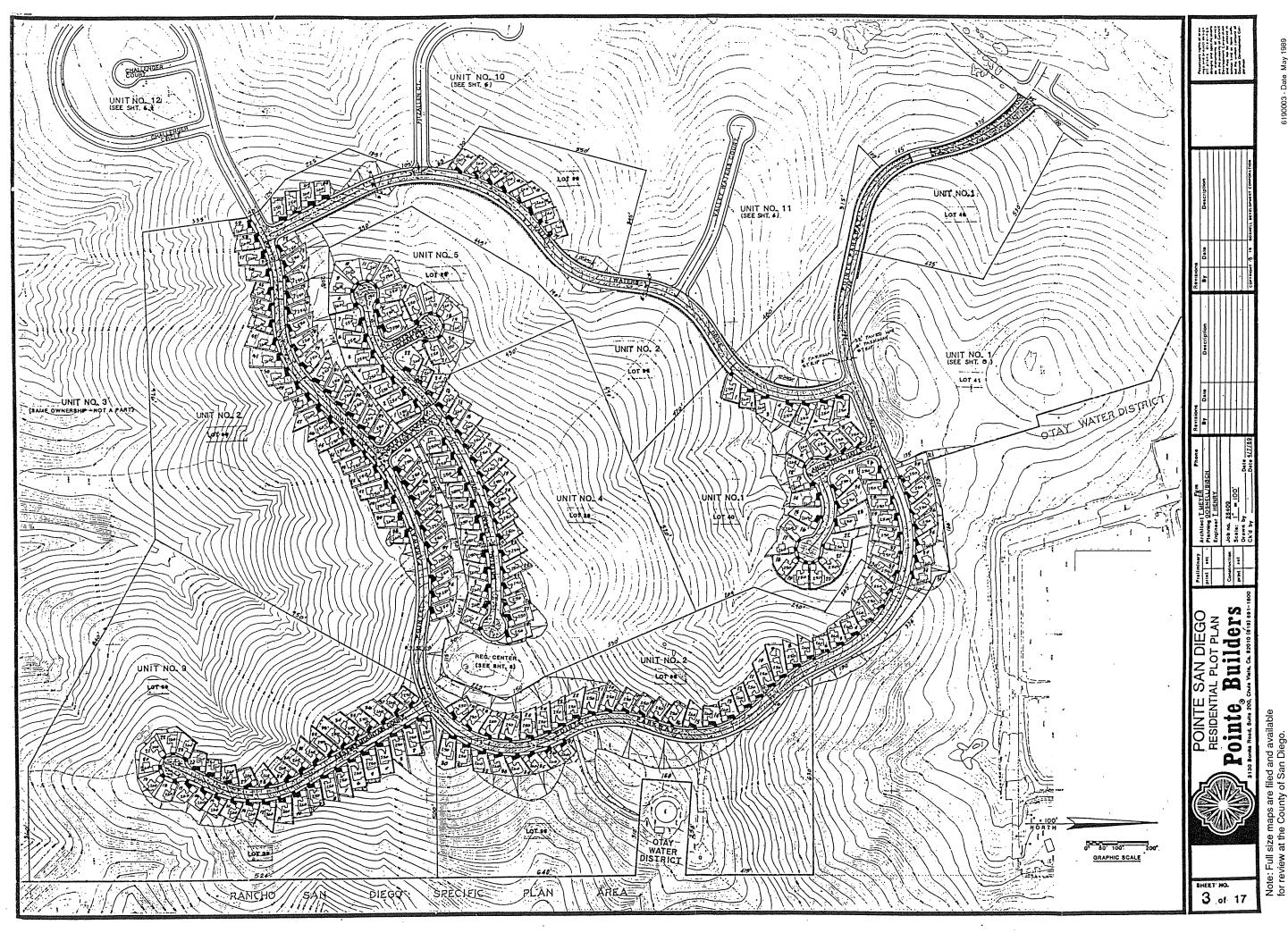
Plot Plan - West Side Residential **The Pointe San Diego**



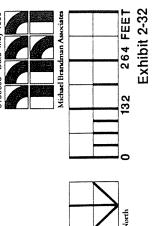


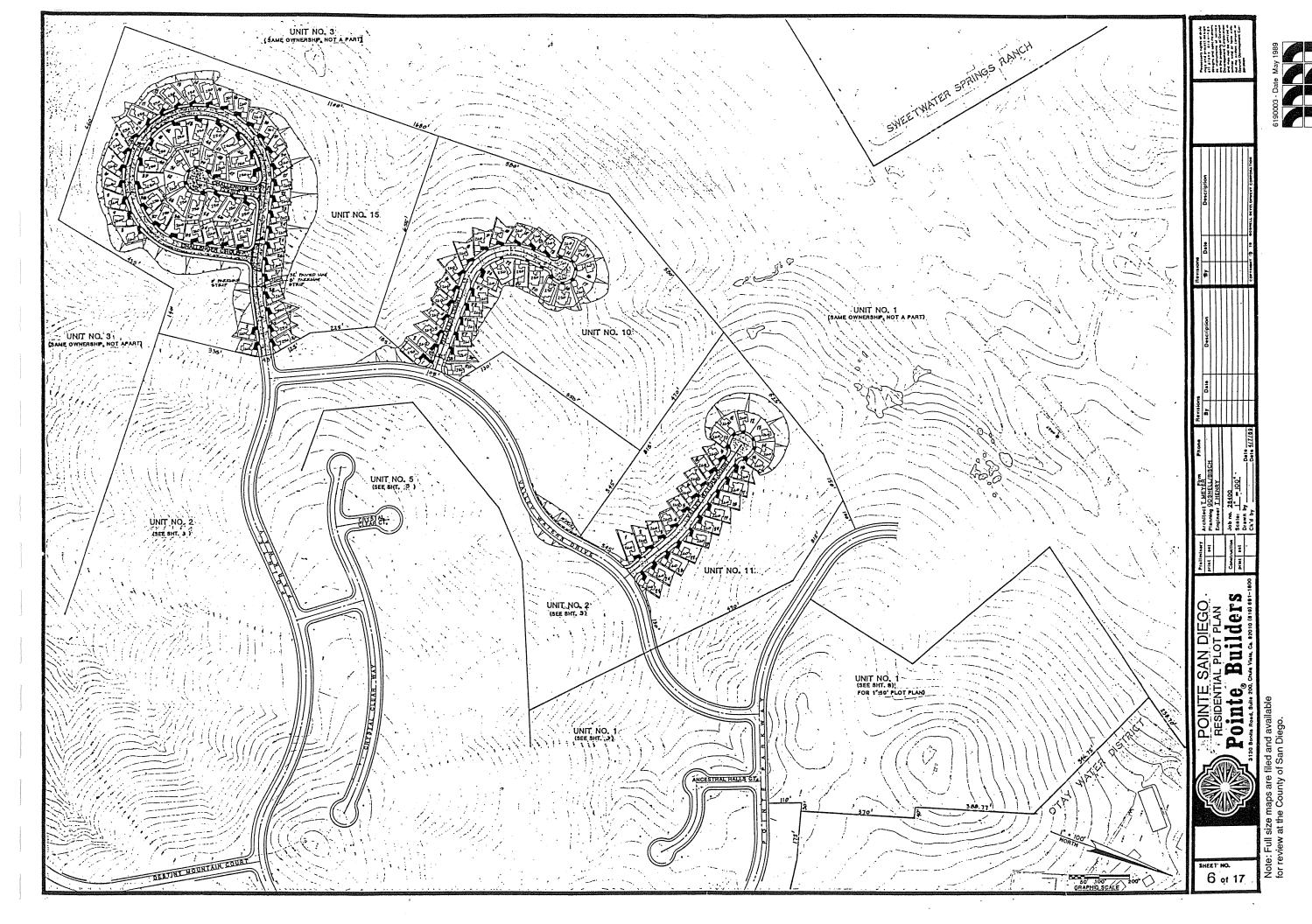
Plot Plan - West Side Residential **The Pointe San Diego**





Plot Plan - East Side Residential **The Pointe San Diego**

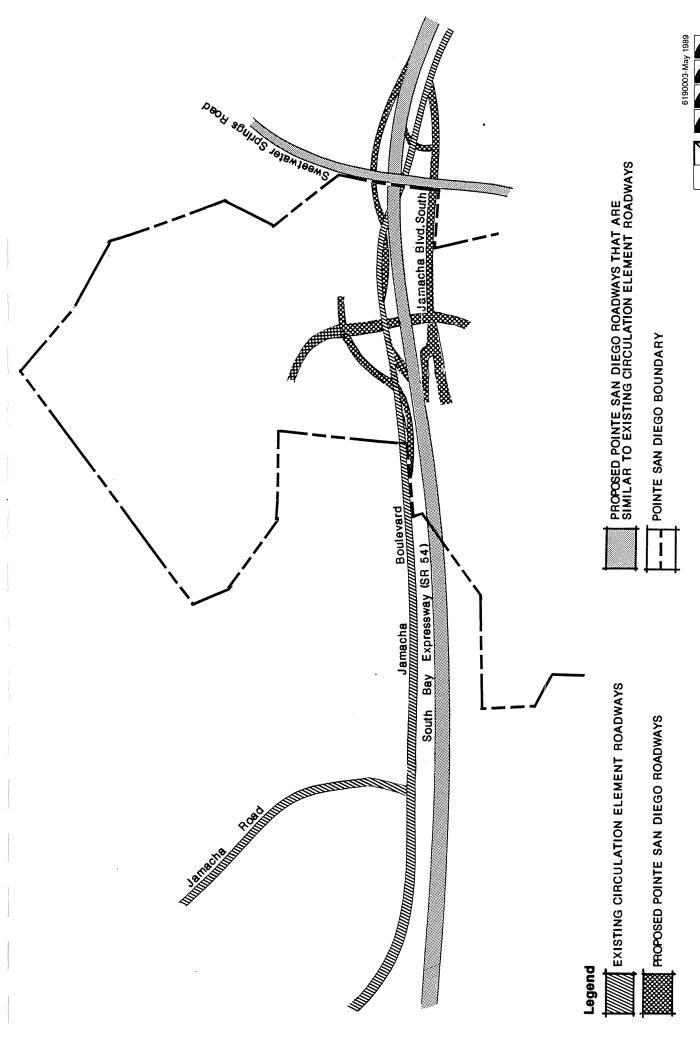




Plot Plan - East Side Residential **The Pointe San Diego**

Michel Brachman Associated to the Michel

Exhibit 2-33



Proposed Circulation Element Changes The Pointe San Diego

Michael Brandman Associates Exhibit 2-34

North

- Reclassify Jamacha Boulevard from Jamacha Road to Pointe Parkway from a major to a collector road.
- Add Pointe Parkway from Jamacha Boulevard to Jamacha Boulevard South as a collector street.
- Add Jamacha Boulevard from Pointe Parkway to Sweetwater Springs Boulevard as collector frontage roads on the north and south sides of Route 54.

2.3 PROJECT OBJECTIVES

The objective of The Pointe San Diego is to sensitively develop the 653.3-acre site with a balance of land uses focused around and supportive of the destination resort. The project will provide homes for 855 families, employment for 5,000 people in the resort and office space, and recreational and entertainment facilities for the community, as well as tourists. Approximately 352.8 open space acres will be owned, managed, and protected by a homeowners association with participation by the resort.

A specific plan was approved for a portion of the site in 1980 (the Hansen's Ranch Specific Plan) which also envisioned a mix of commercial, industrial, and residential uses. Extensive residential development of the hillsides was also proposed, but the plan proposed construction on stilts rather than graded house pads. Implementing tentative maps and major use permits were approved although some areas of the specific plan were not finalized. Improvement and grading plans were prepared for the northwesterly portion of the site; however, these plans were not finalized. The time allowed for the tentative maps and major use permit approvals has lapsed. The proposed General Plan and Specific Plan amendments are intended to permit development of the destination resort, consistent with the concept of the Hansen's Ranch Specific Plan area criteria, while at the same time minimizing the impact of the development on adjacent properties by retaining the maximum amount of land as permanent open space. The proposed revisions to the Spring Valley Community Plan text are shown on Exhibit 2-35.

2.4 PROJECT PHASING

Buildout of the Pointe San Diego Specific Plan area is anticipated to occur over a 5-to 7-year period. The Pointe San Diego would be constructed in six phases as depicted in Table 2-1 and illustrated in Exhibit 2-36. The units within each phase were selected upon a variety of criteria (i.e., grading balance, access, infrastructure, marketing, and environmental concerns). The resort is proposed to be constructed first along with the corporate office, apartments, and single-family residences on the east side of the South Bay Expressway, the golf course, and the Bancroft Creek mitigation area. The second, third, and fourth phases would continue to construct the residences along the hillsides located east and west of the South Bay Expressway.

The fifth phase will construct the corporate office buildings south of Pointe Parkway and west of the South Bay Expressway. Also incorporated within this phase are the single-family residences west of the resort. The sixth phase includes the single-family residences in the northwestern portion of the project site adjacent to the existing homes along Ledgeview Avenue and Avenida Bosque. Also included within this final phase is the construction of the office-professional park adjacent to the Sweetwater Reservoir. Furthermore, during the sixth phase, the mitigation area between Jamacha Boulevard and the proposed South Bay Expressway would be enhanced. This area consists of 2.4 acres.

2.5 DISCRETIONARY ACTIONS

The proposed project will require discretionary review and approval from several agencies, who will consider this EIR in their deliberations.

The County of San Diego is the lead agency and is processing or will process applications for:

- A General Plan amendment to amend the text and map of the Spring Valley community plan (see Exhibit 2-35) with respect to:
 - the area covered by the specific plan.
 - the location of the urban limit line.

HANSEN'S RANCH SPECIFIC PLAN AREA (1.5)

DESCRIPTION OF THE AREA

Specific Plan Area 1.5 includes some 650 653 acres located south and west of the intersection of Sweetwater Springs Boulevard and Jamacha Boulevard adjacent to the Sweetwater Reservoir. (See Land Use Map) The westerly boundary of the Specific Plan Area abuts Dictionary Hill (Specific Plan Area No. 2) whereas the easterly boundary abuts Rancho San Diego (Specific Plan Area No.1). The land is predominantly in steep slopes with two small ponds (Hansen's Ponds) located near the intersection of Jamacha and Sweetwater Springs Boulevard.

PROJECT BACKGROUND

This area was originally part of Rancho Jamacha and was purchased by Fred Hansen in 1926 (for whom the Ranch is presently named). The area has remained undeveloped and unsubdivided until now. In-1975 a large scale development plan for this area was submitted to the Gounty for initial review. A tentative analysis was completed on September 4, 1975 with a finding of "provisional conformance" meaning that conformity could only be found after additional information is available.

On February 27, 1980 a Specific Plan over 573.8 acres of the ranch which had been submitted by the Hansen's Trust, owners of the property, was approved by the County Board of Supervisors. This plan did not include 69.4 acres adjacent to Sweetwater Reservoir lying westerly of the southern portion of Hansen's Ranch.

In 1989 the areas designated (21) Specific Plan Area (1.5) were increased to 653.3 acres by adding several isolated areas into the specific plan designation. A new specific plan was approved which provides for a destination resort community including a resort with convention center, restaurants, office buildings, apartments and detached residential houses. 5.6 acres of undeveloped industrial land under different ownership was not a part of the plan.

The proposed Specific Plan Area designation for the 650 acres would provide a variety of residential styles including single family detached, attached residential units (clustered), mobilehome sites and apartments. — In addition, a small amount of industrial (adjecent to an existing industrial area), professional, and commercial uses will be permitted.

CONDITIONS

The Specific Plan Area shall be developed under the following conditions.

A. General

- Maximum overall residential density will be 1.5 dwelling units per acre.
- All goals, objectives, and policies of the Valle de Oro <u>Spring</u> Valley Community Plan shall apply.
- 3. Design should be compatible with the surrounding area.

B. Residential

- Single-family residential uses will have a minimum lot size of 10,000 square feet, or be designed as a planned residential development.
- 2:--Clustered-residential-uses-will-be-located-in-flat-areas-(U-15% slope)-and-will-provide-up-to-50%-of-the-total-number-of-dwelling
- Lot sizes will be minimized in order to preserve the maximum amount of open space.
- 3. Mobilehomes will be located in areas of less than 30% slope and will total only up to 10% of the entire plan area. Densities within the mobilehome areas shall not exceed 5.5 dwelling units per acre.
- 4. High density apartments shall be located in areas of less that 15% slope and adjacent to prime arterial or major road.

- C. Commercial, Professional, and Industrial and Resort.
 - 1---Approximately-10%-of-the-area-can-be-used-for-professional, commercial,-and-industrial-uses.
 - The gross acreage used for commercial, professional, industrial and resort shall not exceed 20% of the specific plan area.
 - 2. Industrial uses shall be adjacent to existing industrial areas.
 - 3. Intense uses shall be adjacent to prime arterial and major roads.

D. Conservation

- Significant resources will be conserved through the use of open space, relocation and/or isolation, enhancement, resource conservation area (RCA) designation, or other appropriate means.
- Provide a system of open space recreation areas providing linkages and buffers with surrounding areas with an emphasis being given to providing large blocks of natural open space.
- Protection of the Sweetwater Reservoir and the Sweetwater River floodplain from urban development such as urban wastewater and runoff.
- 4. AREA TO REMAIN UNDISTURBED. Based on the slope analysis submitted, a fixed percentage of the land within each slope category shall remain undisturbed. The percent of undisturbed area required shall not be transferred from one category of slope to another, and areas devoted to roads, driveways, parking lots, patios or paved play areas shall not be included in the undisturbed area. The installation of a leach system, golf course, environmental mitigation area, and underground utilities may be included in the undisturbed area.

The minimum requirements for undisturbed areas are as follows:

Slope Categories	Minimum Percent of Undisturbed Area
10-20% slope	35%
20-30% slope	55% 50%
30-40% slope	85% 70%
40%+ slope and above	95 % 85%

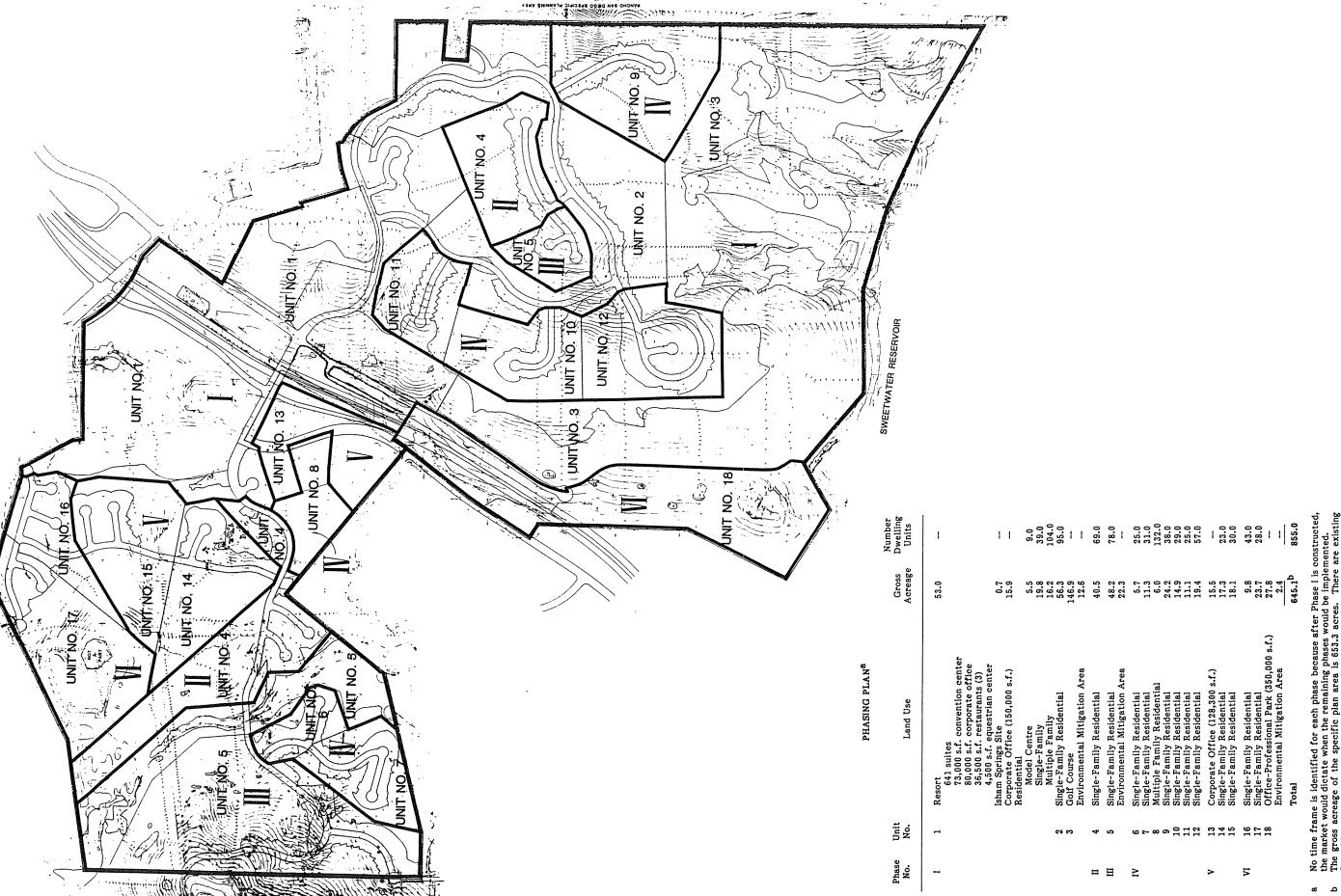
These percentages shall not apply to those isolated parcels of a slope category which are less than 500 square feet in size. Where an area of a slope category is less than 500 square feet, said area shall be included in the surrounding slope category; or, where bordered by more than one slope category, the steepest category shall apply.

E. Public Facilities

- Provision of the means by which all necessary public facilities shall be financed and provided including:
 - a. transportation access, including roads, bridges on/off site;
 - b. sewage and wastewater treatment aid disposal;
 - c. public schools:
 - d. fire protection;
 - e. parks; and
 - f. any other public facilities and services necessary to fulfill the requirements of public agencies affected by the Specific Plan.
- If a golf course is planned on the site it will be subject to the following:
 - a. the design will minimize disturbance to the site, eg. by using a hitting and landing area concept which leaves a majority of the course natural.
 - b. open space areas may be used subject to environmental review
 - c. a major use permit will be required
 - d. water conservation will be incorporated in the design where allowed including the use of drought tolerant vegetation.



Proposed Spring Valley Text Changes The Pointe San Diego



No time frame is identified for each phase because after Phase I is constructed, the market would dictate when the remaining phases would be implemented. The gross acreage of the specific plan area is 653.3 acres. There are existing Otay Water District Facilities and other uses that are located on 8.2 acres. These acres are a part of the specific plan area but are not proposed for development by the applicant.

Phasing Map

The Pointe

Source: Pointe Builders 1989

700 FEET Exhibit 2-36



- the location of Resource Conservation Area 15.
- the wording in the Hansen's Ranch specific plan area criteria.
- A General Plan amendment to change the configuration of Jamacha Boulevard and the South Bay Expressway on sheet 6 of the Circulation Plan and the road classification for Jamacha Boulevard (see Exhibit 2-34).
- A specific plan amendment to allow the development of the proposed resort community (see Color Palette 1 and Table 3-6 in Section 3.4).
- A zone change to reflect the uses proposed in the new specific plan (see Exhibit 3-22).
- Major use permits for the resort (see Exhibits 2-6, 2-7, and 2-8), golf course (see Exhibits 2-15, 2-16, and 2-17), residential uses (see Exhibits 2-30 through 2-33, 2-20, and 2-22), and environmental mitigation areas.
- One tentative tract map to implement the specific plan (see Exhibits 2-13, 2-14, and 2-26 through 2-29).
- Various administrative permits (grading plans, sand and gravel operation, building plans, etc.).

The project applicant will be requesting a permit for a sand and gravel operation; however, at this time, the impacts of processing sand and gravel cannot be assessed because detailed information is not available. Specific details of phasing, grading, and construction are not known at this time because they are typically identified after a project is approved.

In addition, alterations to the perennial streams on the site require a permit from the U.S. Army Corps of Engineers (ACOE) under Section 404 of the federal Clean Water Act, as amended. Also, a streambed alteration agreement must be signed with the California Department of Fish and Game (CDFG) under Section 1603 of the Fish and Game Code. Currently, the Section 404 permit has been granted (see Appendix E for approved 404 permit) and the 1603 permit will be submitted to CDFG once this EIR has been certified. Consultation has been going on with CDFG for over a year.

TABLE 2-1
PHASING PLAN^a

Phase No.	Unit No.	Land Use	Gross Acreage	Number Dwelling Units
I	1	Resort 641 suites 73,000 s.f. convention center 80,000 s.f. corporate office	53.0	
		36,500 s.f. restaurants (3) 4,500 s.f. equestrian center Isham Springs Site	0.7	
		Corporate Office (150,000 s.f.) Residential	15.9	
		Model Centre	5.5	9.0
		Single-Family	19.8	39.0
		Multiple Family	16.2	104.0
	2	Single-Family Residential	56.3	95.0
	3	Golf Course	146.9	
		Environmental Mitigation Area	12.6	
II	4	Single-Family Residential	40.5	69.0
III	5	Single-Family Residential	48.2	78.0
		Environmental Mitigation Area	22.3	
IV	6	Single-Family Residential	5.7	25.0
	7	Single-Family Residential	11.3	31.0
	8	Multiple Family Residential	6.0	132.0
	9	Single-Family Residential	24.2	38.0
	10	Single-Family Residential	14.9	29.0
	11	Single-Family Residential	11.1	25.0
	$\overline{12}$	Single-Family Residential	19.4	57.0
V	13	Corporate Office (128,300 s.f.)	15.5	
V	14	Single-Family Residential	17.3	23.0
	15	Single-Family Residential	18.1	30.0
VI	16	Single-Family Residential	9.8	43.0
	17	Single-Family Residential	23.7	28.0
	18	Office-Professional Park (350,000 s.f.)	27.8	
		Environmental Mitigation Area	$\frac{2.4}{}$	
		Total	645.1 ^b	855.0

a No time frame is identified for each phase because after Phase I is constructed, the market would dictate when the remaining phases would be implemented.

Source: Pointe Builders 1989.

b The gross acreage of the specific plan area is 653.3 acres. There are existing Otay Water District Facilities and other uses that are located on 8.2 acres. These acres are a part of the specific plan area but are not proposed for development by the applicant.

Design of the portion of the South Bay Expressway that bisects the site, as well as the interchanges with Pointe Parkway, Jamacha Boulevard, and Sweetwater Springs Boulevard, has been coordinated with the County Department of Public Works and CALTRANS. A six-lane expressway is expected to be adequate until the year 2005 or until traffic volumes justify a freeway.

Each of these agencies can require mitigation measures or conditions as part of their approvals. To the extent possible, these agencies have been consulted during the preparation of this EIR and their concerns and comments have been incorporated into the analysis of the relevant issues.

2.6 RELATED PROJECTS

There are 10 large-scale projects proposed in the vicinity of the Pointe San Diego Specific Plan. Exhibit 2-37 illustrates the location of these projects. When developed, these related projects will convert over 8,000 acres of open space to urban and suburban uses and may generate significant cumulative impacts. Table 2-2 describes the related projects in the area and Table 2-3 summarizes the development characteristics of these projects.

TABLE 2-2
RELATED PROJECTS

Project	Acreage	Characteristics
Mount Miguel Specific Plan	1,012	130 single-family units
Loma del Sol Specific Plan	544	183 single-family units 375 unit resort 1 golf course (27 holes)
Rancho San Diego Phase II Specific Plan	2,963	6,160 units (variable density) 51 acres commercial 61 acres industrial 47 acre town center 250 room hotel
Cottonwood Village Specific Plan	789	1,972 units (variable density)
Cottonwood Golf Course	14	165 room resort hotel
Las Montanos Specific Plan	700	600 room hotel 1 golf course (18 holes)
Hidden Valley Estates	1,400	532 units (variable density)
Dictionary Hill (Panorama Ridge)	180	355 single-family units
Singing Hills	730	401 (variable density) 54.5 acres commercial 1 golf course (18 holes)
California Hills ^a	736	77 single-family units 402 room hotel 1 golf course (18 holes) 48 casitas (bungalow)

a The California Hills project is a specific plan proposal; however, this project is not included in the cumulative analysis because the project is currently on deferment by the applicant and significant revisions to the project would be required prior to conforming to the San Diego General Plan.

Source: Department of Planning and Land Use, San Diego County, 1989.

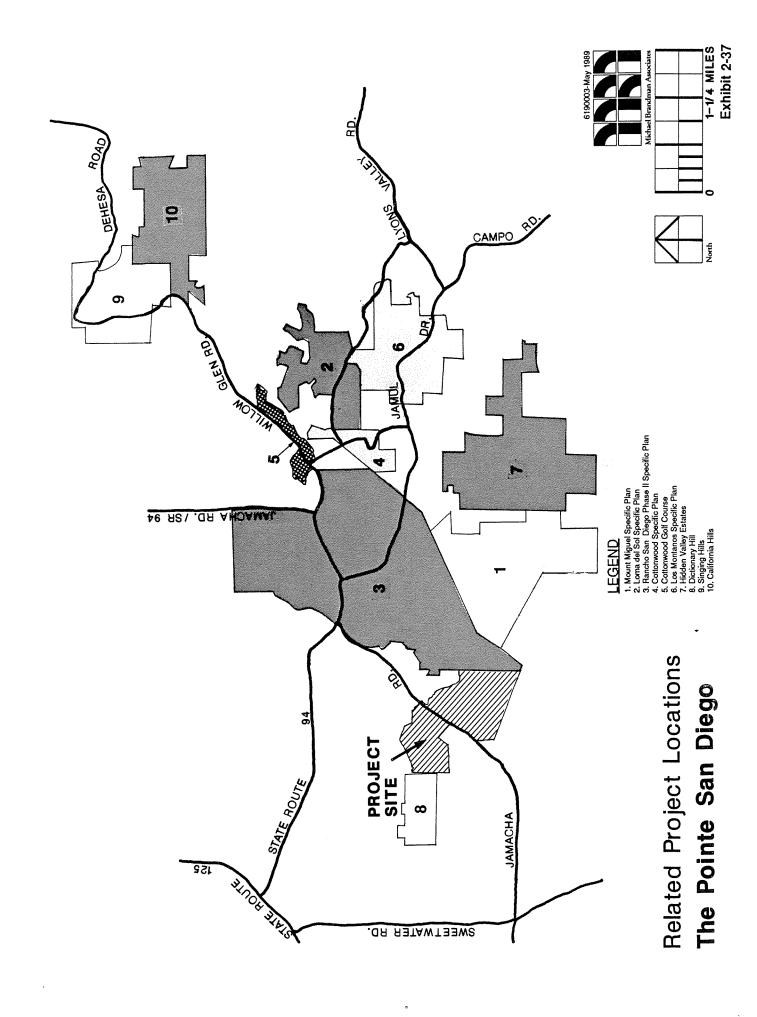


TABLE 2-3

RELATED PROJECT SUMMARY^a

Land Use	Units/Suites/Acreage		
Residential	9,733 units		
Resort/Hotel	1,390 suites		
Commercial	152.5 acres		
Industrial	61 acres		
Golf Course	4 courses (81 holes)		

a This summary does not include the California Hills because this project is currently on deferment by the applicant and significant revisions to the project would be required prior to conforming to the San Diego General Plan.

Source:

Michael Brandman Associates, Inc. 1989. Based on information in Table 2 which was provided by the Department of Planning and Land Use, San Diego County.

SECTION 3

ENVIRONMENTAL IMPACT ANALYSIS

3.1 GEOLOGIC RESOURCES

A geotechnical investigation of the project site was completed by Advance Planning and Research Associates in January 1978. A seismic investigation of the site was completed by Geocon Incorporated in January 1979. An updated geotechnical and soils investigation of the site was completed by Geocon Incorporated in January 1981 and April 1988 (revised May 1988). The principal findings of these reports are summarized below. The original reports are reproduced in Appendix B.

3.1.1 EXISTING CONDITIONS

Topography

The project site is dominated by two hills that are bisected by a valley in which a tributary stream of the Sweetwater River runs. Jamacha Boulevard is located in this valley. The elevations of the two hills are 906 feet above sea level southeast of Jamacha Boulevard and 839 feet above sea level northwest of Jamacha Boulevard. The elevation of the valley ranges from approximately 250 to 430 feet above sea level. The site also includes two ponds (Hansen's Ponds) built as livestock ponds on a perennial stream northwest of Jamacha Boulevard. The stream is also fed by a storm drain from residential areas north of the site. The stream crosses under Jamacha Boulevard approximately at Spring Glen Lane and runs southwesterly and parallel to Jamacha Boulevard, ultimately discharging into the Sweetwater Reservoir south of the site.

Geologic Setting

The project site is underlain by three principal rock units. These rock units are of the late Jurassic-age Santiago Peak Volcanics, the Miocene-age Sweetwater member of the Rosarito Beach Formation and Quaternary-age alluvium. Following is a description of each rock unit.

Santiago Peak Volcanics. The Santiago Peak Volcanics form a discontinuous belt from the Santa Ana Mountains south to the Mexican border. This belt roughly parallels the Pacific coast and varies from a few miles to tens of miles inland. Its maximum width in San Diego County is approximately 11 miles near the Mexican border. The majority of the project site is underlain by dense metavolcanic rock of the Santiago Peak Volcanics. The metavolcanic rock ranges in composition from rhyolite to basalt and includes dark grey tuffs, tuff-breccias and ash flows. Several outcrops of these metavolcanic rocks are found on the project site. Most solid rock onsite is covered by a thin soil layer derived from the weathering of these metavolcanic rocks.

Granitic rocks consisting primarily of highly weathered gabbro have intruded the Santiago Peak Volcanic complex. These rocks have been found in relatively small areas along the northern border of the project site. Decomposed rocks within this unit could be utilized as a major source of fill if fine-grained materials are needed for capping of building pads or mixing with rocky fills.

Sweetwater Member. The Sweetwater member is part of the Rosarito Beach Formation which extends south across the international border. This rock unit primarily extends along Jamacha Boulevard in the project area. The Sweetwater member consists of four lithologic facies: angular conglomerates, gritstones, mudstones, and sandstones. Most of the Sweetwater member within the project site consists of angular conglomerate.

The angular conglomerate ranges in size from pebble and sand to giant, angular to sub-rounded boulders. Locally, the sand is poorly sorted, clay-rich, and in some places iron oxide-stained. Local lenses of the angular conglomerate occur within the gritstone in the vicinity of the site.

The mudstone varies from brown, brick-like mixtures of clay, sand and grit to relatively clean pink and expansive claystones. Massive mudstone units measure as much as 26 meters in thickness in the vicinity of the project site and are at least 10 meters in thickness on the project site. Even the waxy, pink clays generally contain appreciable silt and are commonly studded with visible granules of quartz. On the project site, the majority of the mudstone is laminated with caliche. The presence of caliche gives the mudstone a white color.

The gritstone is found as lenses in the angular conglomerate and as massive beds up to 16 meters thick in the nearby vicinity of the project site. It also appears as thin interbeds in the mudstone. The gritstone has been found in most of the Sweetwater member rock units on the project site. The color ranges from bright white to tan. The gritstone commonly overlies and interfingers with the mudstone facies.

The non-gritty, relatively well sorted sandstones appear as lenses near the base of the mudstone facies. In the vicinity of the project site, muddy sandstones are intermixed with sandy mudstone. The sandstone on the project site makes up a very small proportion of Sweetwater rock unit.

Quaternary alluvium. Quaternary alluvium is located on a small portion of the project site. This rock unit comprises the majority of the exposed area leading into Sweetwater Reservoir. It is located in the vicinity of Hansen's Ponds and adjacent to Jamacha Boulevard. The source of the alluvium is believed to be river and stream deposits from the interior of San Diego County. The alluvial material consists of sand, small cobbles, mud and other coarse clastic material. The clasts found are typically from intrusive rocks and/or metamorphic rocks.

Faults/Seismicity

No active faults are known to exist at or in the immediate vicinity of the site, and none were encountered during the investigation by Geocon Incorporated. The nearest known active faults are the Rose Canyon Fault (12 miles to the northwest), the offshore Coronado Banks Fault (22 miles to the northwest) and the Elsinore Fault (34 miles to the northeast). The seismic history of the Rose Canyon Fault, according to the California Division of Mines Bulletin 200, indicates that no significantly damaging earthquake has occurred since records began to be kept approximately 200 years ago. Numerous earthquakes with magnitudes between 3 and 4 have occurred in the recent past, however, these earthquakes have not resulted in any significant damage to structures in the San Diego area. Recent work by seismologists and geologists in the San Diego area indicate that the Rose Canyon Fault is capable of producing a magnitude 6 to 6.5 earthquake and that the repeat interval for such an earthquake is probably between 700 and several thousand years. The likelihood of a

magnitude 6 or greater earthquake occurring on the Rose Canyon Fault within the lifespan of the proposed project is very low (Geocon, Inc., 1988). It is much more likely that the site will be subjected to several large magnitude earthquakes occurring on more remote faults such as the Elsinore Fault or the San Jacinto Fault (located approximately 50 miles to the northeast). In this regard, the site is similar to all other projects in the San Diego metropolitan area (see Appendix B).

The nearest potentially active fault in the Region of the project site is the La Nacion Fault Zone which lies six miles to the west. The maximum credible magnitude of an earthquake along the La Nacion fault is 6.75 on the Richter scale with maximum rock acceleration of .22 gs.

Landslides

A shallow landslide which involves topsoil, slopewash and highly fractured Santiago Peak Volcanics and granitic rocks is located in the northeast corner of the site. It was not practical to investigate the slide area with exploratory trenches because of the steep terrain. No other landslide areas were found on the site.

Volcanism

No recent or Tertiary-age volcanism has occurred within many miles of the project site. The risk is considered to be nonexistent.

Soils

The project site contains eight soil types that represent the Friant, Las Posas, San Miguel, Linne, Diablo and Olivenhain soil series. Exhibit 3-1 illustrates the location of each soil type on the project site. Except for the Olivenhain Series, Table 3-1 depicts the soil types and the slope conditions where they can be found. A description of each of the soil types is presented below.

TABLE 3-1
ONSITE SOILS

Soil Type	Slope	
Friant rocky fine sandy loam	30-70%	
Las Posas fine sandy loam	9-15%	
San Miguel-Exchequer rock silt loams	9-70%	
Linne clay loam	9-30%	
Diablo clay	8-15%	
Diablo-urban land complex	15-50%	
Diablo clay	15-30%	

Source: Advance Planning and Research Associates (1978).

Friant Series. The Friant series covers the majority of the southeastern portion of the site and approximately 25 percent of the northwestern portion of the site near Dictionary Hill. The Friant series consists of shale and very shallow, well-drained fine sandy loams that formed in material weathered from fine-grained metasedimentary rock. On the project site, the Friant rocky fine sandy loam is located on slopes of 30 to 70 percent. This slope is steep to very steep and the soil erodes readily. Soil is 3 to 12 inches deep over hard rock. The available water holding capacity is 0.5 inches to 1.5 inches. Runoff is rapid to very rapid, and the erosion hazard is high to very high.

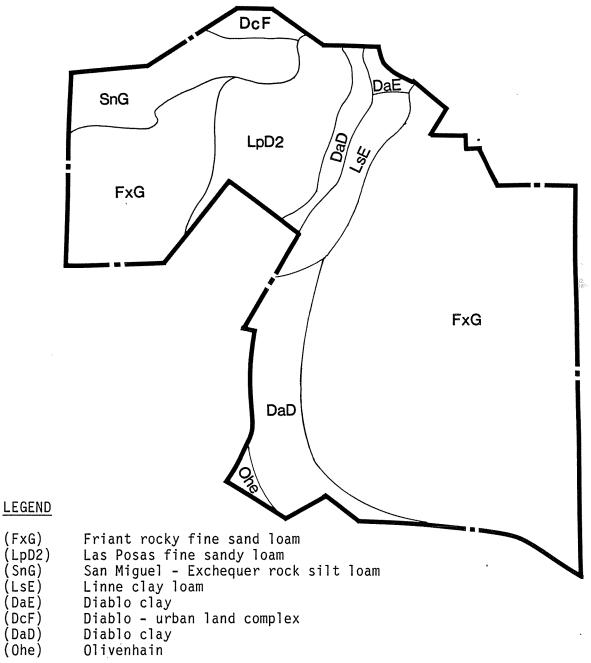
Las Posas Series. The Las Posas series is located along the southeasterly slopes of the hill in the northwestern area of the site. This series is located on the Santiago Peak Volcanics. According to the U.S. Department of Agriculture Soil survey for the San Diego area, Los Posas soils are primarily found on basic igneous rocks such as gabbro; however, there are areas of the county where this soil also occurs on basalt, which is a basic volcanic rock. Within the Santiago Peak Volcanics are metamorphased, basalts, andecites and other type of flow rocks derived from volcanic eruptions (see Appendix B, Geocon letter dated May 17, 1988).

The Las Posas series typically consists of well-drained, moderately deep stoney fine sandy loams that have a clay subsoil; however the Las Posas fine sandy loam located on the project site is not stoney. This soil is steeply sloping, has a 4 to 6 inch surface layer and is 26 to 40 inches deep over hard rock. Runoff is medium, and the erosion hazard moderate.

San Miguel Series. The San Miguel series is located on the northern and western slopes of the hill in the northwestern area of the site. The San Miguel series consists of well-drained shallow to moderately deep silt loams that have a clay subsoil. These soils are derived from metavolcanic rock. The San Miguel - Exchequer rocky silt loams that are located on the site are on 9 to 70 percent slopes. This soil is approximately 50 percent San Miguel silt loam and 40 percent Exchequer silt loam. San Miguel silt loam is slowly permeable in the subsoil and has 2.5 to 3 inches of water available in the 18 to 23 inches of effective rooting depth. Exchequer silt loam is moderately permeable and has 1 to 2 inches of water available in the 8 to 17 inches of effective rooting depth. For both soils fertility is very low, drainage is good, runoff is medium to rapid, and the erosion hazard is moderate to very high.

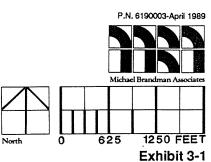
<u>Linne Series</u>. The Linne series is located along Jamacha Boulevard and consists of well-drained, moderately deep clay loams derived from soft calcareous sandstone and shale. The Linne clay loam onsite occurs on slopes of 9 to 30 percent. This soil type is primarily located in uplands. The permeability of the Linne clay loam is moderately slow. The available water holding capacity is 5 to 7 inches. Runoff is medium to rapid, and the erosion hazard moderate to high. The rooting depth is 28 to 40 inches.

<u>Diablo Series</u>. The Diablo series consists of well-drained, moderately deep to deep clays derived from soft, calcareous sandstone and shale. Three types of Diablo series soils are located on the site. Two soil types are Diablo clay (i.e., DaD and DaE; Exhibit 3-1). DaD is located on slopes of 8 to 15 percent while DaE is located on slopes of 15 to 30 percent (Table 3-1). The third Diablo soil type is Diablo-urban (DcF) land complex, 15 to 50 percent slopes. The Diablo clay, 15 to 30 percent slopes, is located on rounded hills in the project area. The permeability of this Diablo clay is slow. The available water holding capacity is 4 to 5 inches. Runoff is medium to rapid, and the erosion hazard moderate to high. The rooting depth is 25 to 36 inches.



Sources: Advance Planning and Researce Associates, 1978. Geocon, Inc., 1989

Soil Type Location The Pointe San Diego



The Diablo clay (located on 8 to 15 percent slopes) ranges from 26 to 37 inches deep over rock. The available water holding capacity is 4 to 5.5 inches. Runoff is medium, and the erosion hazard slight to moderate.

The Diablo-Urban land complex occurred on 15 to 50 percent slopes before these areas were subjected to cut and fill operations and leveling. The soil occurs on uplands, at elevations of 100 to 600 feet above sea level north of the site. A majority of the Diablo-Urban land complex soil onsite is fill from grading activities of the residential developments north of the site. The material in the fill is a mixture of dark-gray clay and light-gray, calcereous sandy loam, sandstone, and shale. The clay has a high shrink-swell potential.

Olivenhain Series. The Olivenhain Series consists of well-drained, moderately deep cobbly loams that have formed on gravelly and cobbly alluvium. The soils are a brown to reddish brown, cobble loam and susceptible to moderate erosion on steeper slopes.

Erosion

Bulldozing and/or tractor work has occurred previously on portions of the project site. From this activity, boulders of metavolcanic rock from one foot to eight feet in diameter are found grouped together in large piles. These piles of rock are generally found on the lower flanks of the hills on the site. The bulldozing and/or tractor work exposed and loosened much soil. The Friant, San Miguel-Exchequer and Linne soil types vary in depth but appear to average one foot in depth within the project site. The physical characteristics of the soils and the slopes on which they lie give these soils a high to very high erosion risk. The portions of the site covered by these soil types are susceptible to rapid erosion during a rainstorm of heavy and long duration, especially when the vegetation cover is removed. The exposed unweathered basement metavolcanic rock is extremely hard and erodes very slowly. Erosion of the metavolcanic rock presents no problems.

Shrink/Swell Soils

Onsite soils that contain a high shrink/swell potential include most of the topsoils overlying the entire project site. In addition, the Sweetwater Formation which primarily extends along Jamacha Boulevard from Springs Glen Road to Sweetwater Springs Road contains a high percentage of clay with high shrink/swell potential. This clay extends to a depth of 10 to 20 feet below existing ground grades.

3.1.2 PROJECT IMPACTS

Faults/Seismicity

Structural development on the project site could be subjected to moderate to severe ground shaking in the event of a major earthquake along the Rose Canyon Fault, Elsinore Fault, offshore Coronado Banks Fault or other active faults in the Southern California Region. However, the seismic risk at the site is not significantly greater than that present in surrounding development. The seismic risk resulting from earthquakes generated by local faults such as La Nacion Fault is considered to be very low.

Landslides

A shallow landslide exists in the northeast corner of the project site (see Exhibit 3-5). The area of the landslide is characterized by top soil, slopewash, and highly fractured Santiago Peak Volcanics. The location of this landslide is near the eastern onsite water tank. No development is proposed within the area of the landslide, and therefore, no significant impacts to project development would result from the existing landslide.

Volcanism

As previously discussed, no recent or tertiary age volcanism has occurred within the project vicinity and none is expected to occur. Therefore, no significant impacts to project development would result from volcanism.

Soils

The majority of the project site is covered with Friant rocky fine sandy loam, which has a low shrinking or swelling potential. The remaining areas are covered with soils that have a moderate to high shrinking or swelling potential. The proposed structures on the site could be affected by these soils; however, structural design measures would be incorporated in the proposed project to reduce the potential impact of expansive soils to a level below significance. In addition, potential seismically induced liquefaction could result from the unconsolidated alluvial deposits associated with the area surrounding the Sweetwater Reservoir. The potential liquefaction of the alluvial deposits could result in significant impacts, and would require special considerations during grading and development of that portion of the site.

Grading/Erosion

The project site would require grading to implement the planned building pad and road elevations and create the proposed riparian habitat mitigation area. Grading activities would include blasting and a gravel operation which would crush large rocks to use as fill. Grading activities would move approximately 3.8 million cubic yards of earth.

Exhibit 3-2 shows the existing onsite slopes and Exhibits 3-3 and 3-4 illustrate the proposed plan on the existing onsite slopes. Exhibit 3-5 illustrates the cut and fill slopes associated with the proposed project. Exhibit 3-6 illustrates a schematic comparison of finished contours with rounded slopes to standard slopes. Rounded slopes would result in reduced visual aesthetic impacts compared to standard slopes; however, slope rounding would require more area to be graded than standard slopes. The proposed project would result in the disturbance of approximately 267 acres of the total specific plan area. Included in this total, but not a part of the proposed development, are 8.2 acres (5.2 acres owned by the Otay Water District and 3.0 acres owned privately). The disturbance includes slope areas ranging from 0 to approximately 40 percent. Table 3-2 lists the amount of undisturbed area for the slope categories onsite, and compares this to the minimum undisturbed area required to remain onsite by the Hansen's Ranch Specific Plan. Approximately 386.4 acres

(which includes the golf course) onsite will remain undisturbed by the proposed Pointe project (taking the sensitive lands initiative into account), whereas the approved specific plan leaves 362.3 acres undisturbed. Given this, the proposed project would affect 24.1 acres less than the approved specific plan. The proposed project includes 62.5 acres of disturbed golf course acres; however, these acres are not considered disturbed under the sensitive lands initiative. In reality, the addition of the 62.5 acres of disturbed golf course acres to the project's disturbed acres would result in less undisturbed (more disturbed) area than the approved specific plan. Approximately 38.4 more acres would be disturbed under the proposed project compared to the approved specific plan (see Section 3.4 for a further discussion).

Also illustrated on Table 3-2 is the minimum undisturbed area required to remain onsite by the existing General Plan. As depicted in Table 3-2, both the proposed Pointe project and the approved specific plan would affect more acres than the existing general plan allows.

Exhibit 3-7 shows the proposed manufactured slope heights. One of the highest proposed manufactured slopes would be approximately 98 feet and would be located in the northwestern portion of the site, southwest of Isham Springs.

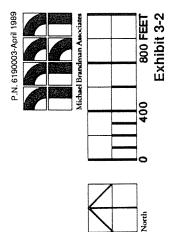
The steepest slope ratios included in the project are 1:1 and 1.5:1. The steep slope ratios would occur throughout the project site to limit the amount of grading for the site and to more closely conform to the existing slopes on the site. These slopes would be unusually steep and require special landscaping techniques. If the steepest slope ratios were limited to 1.5:1 and 2:1, grading volumes would increase and the aesthetic character of the site would be further reduced.

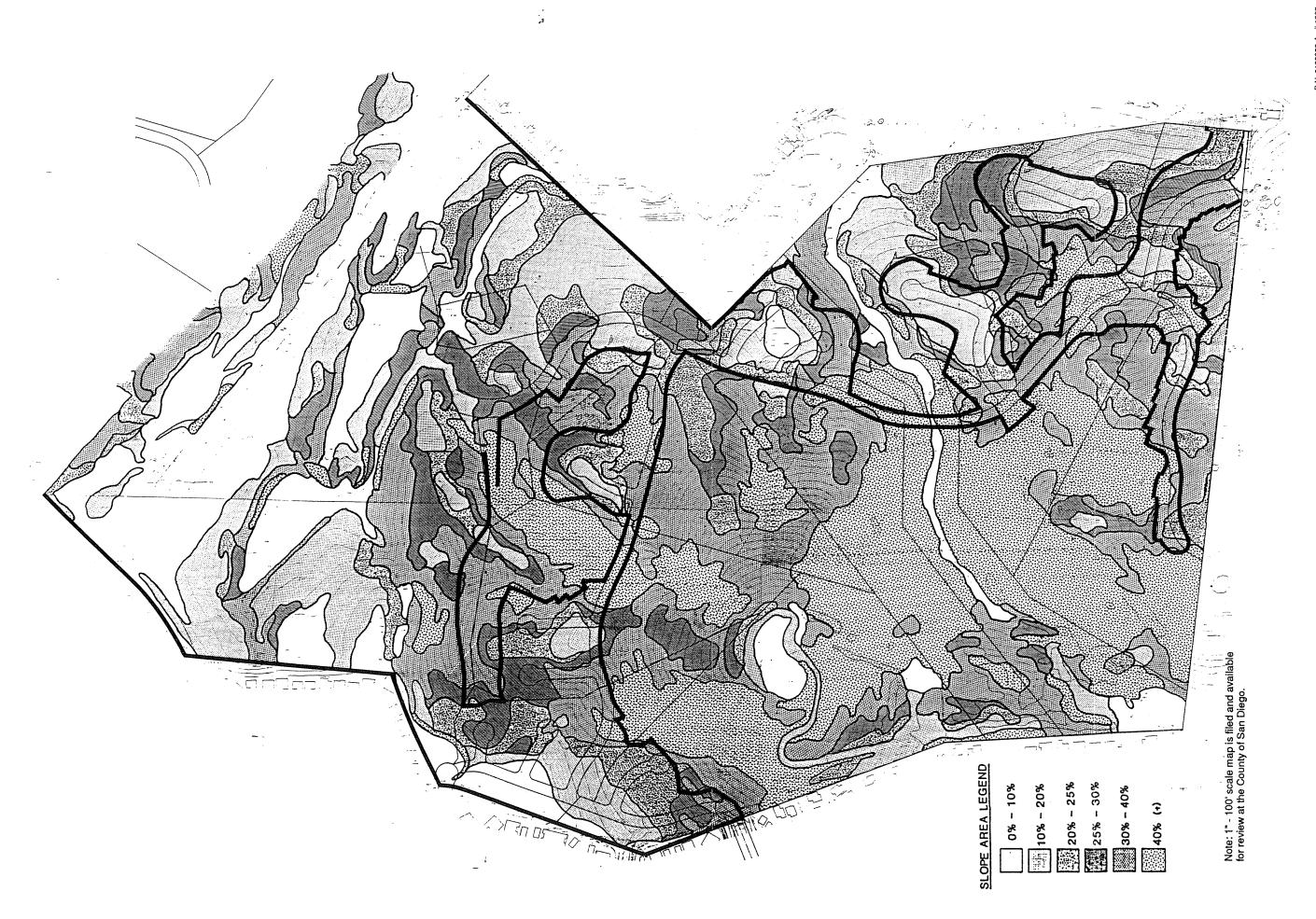
The slope ratios of 1.5:1 or flatter are expected to be grossly stable. Construction of cut slopes with ratios (inclinations) of 1:1 (1.0 horizontal to 1.0 vertical) may be made where necessary, provided an engineering geologist makes periodic inspections to determine whether the presence of fracturing of jointing will present a stability problem. If a stability problem occurs, rock-bolting or construction of retaining walls shall be implemented.



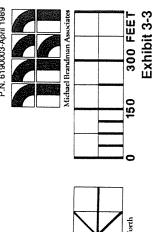
vote: 1" - 100' scale map is filed and available or review at the County of San Diego.

Existing Onsite Slope Areas **The Pointe San Diego**

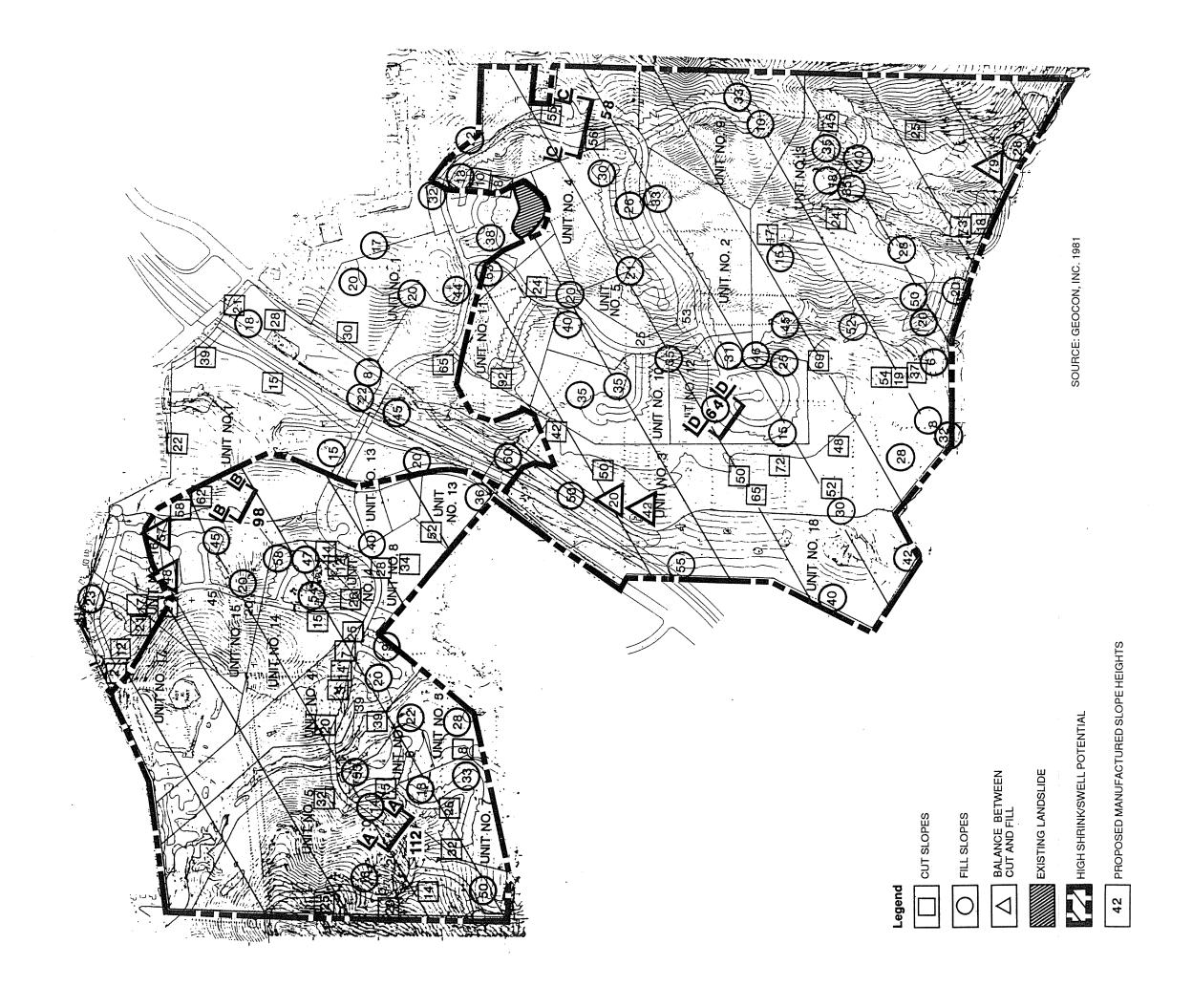




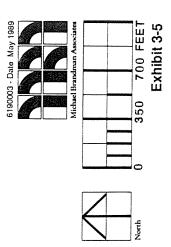


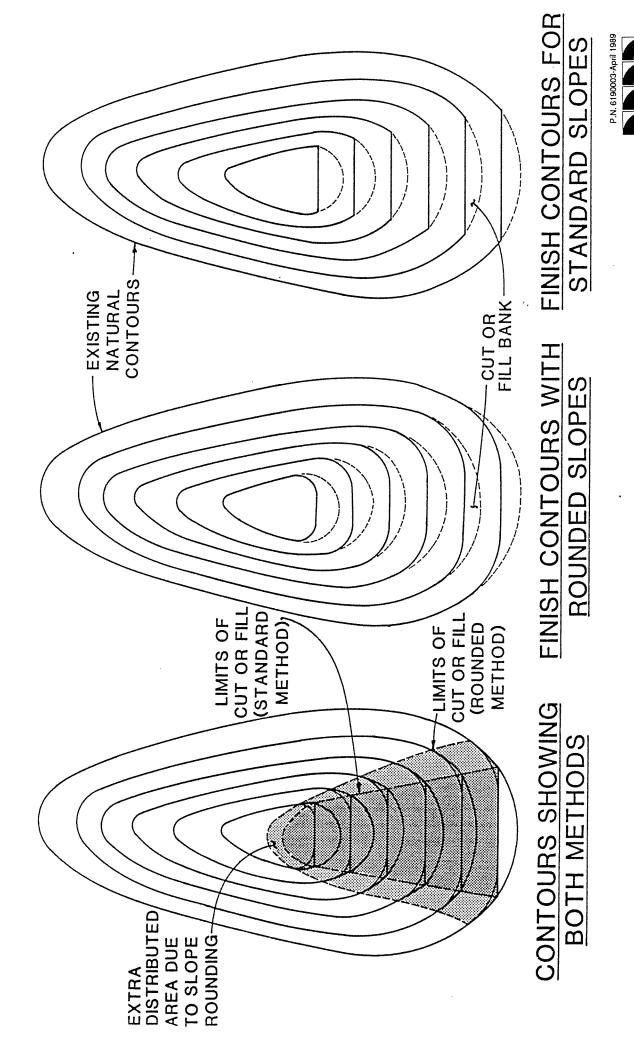










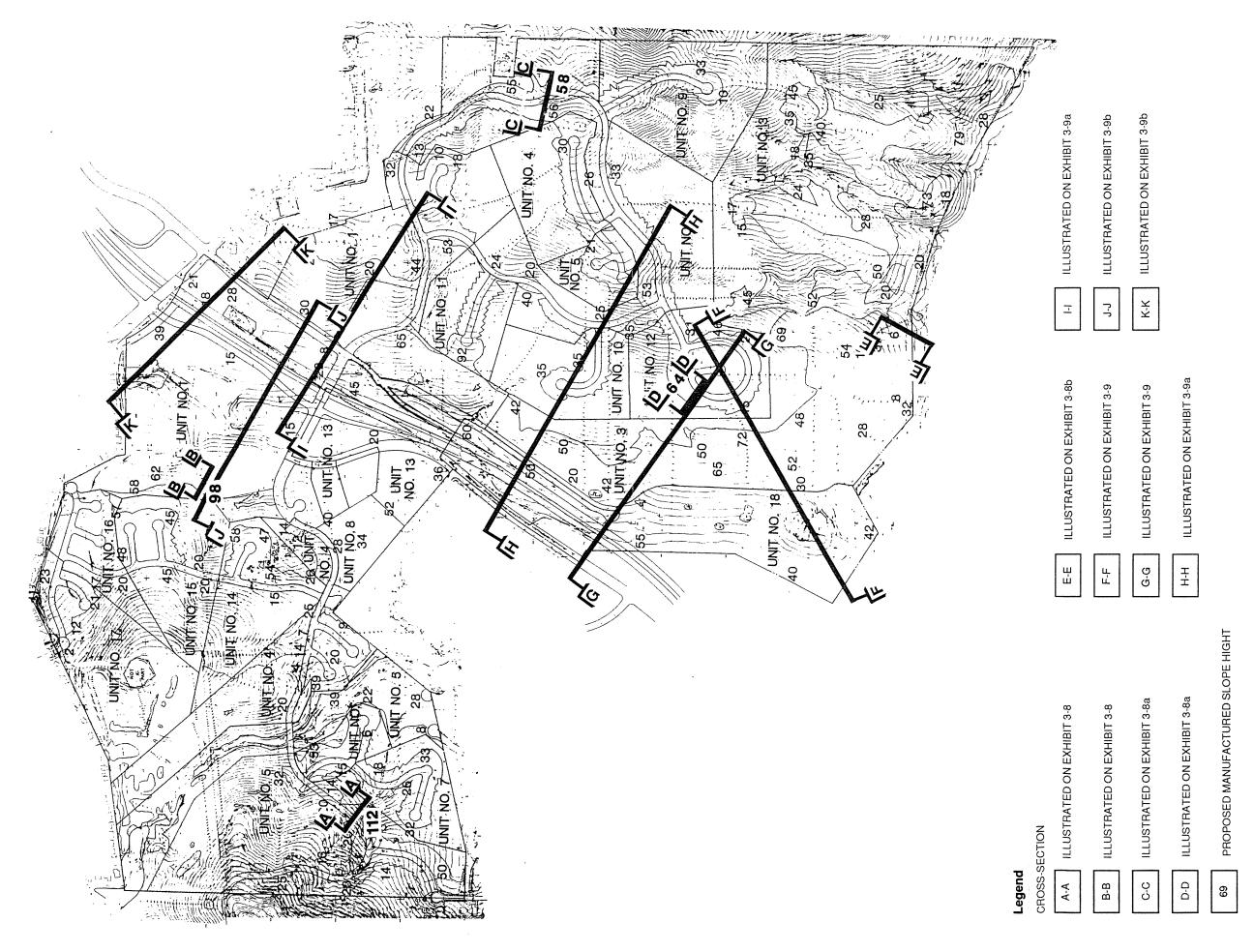


Contour Grading

The Pointe San Diego

Exhibit 3-6

Michael Brandman Associa



Proposed Manufactured Slope Heights **The Pointe San Diego**

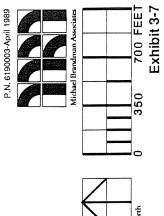


TABLE 3-2
UNDISTURBED SLOPES

Slope Category	Pointe San Diego Study Area	Pointe San Die Undistur Area ⁸	go bed	Minimum Undisturbed Area Required to Remain per the Existing General Plan	Minimum Undisturbed Area Required to Remain per Hansen's Ranch Specific Plan	Additional Pointe San Diego Area Could Be Disturbed Compared to Hansen's Ranch Specific Plan
%	Area (Acres)	Area (Acres		Area (Acres)	Area (Acres)	Area (Acres)
0 - 10	59.8	8.3	(0.3)	0	0	8.3
10 - 20	121.1	43.0	(19.1) 42.4	42.4	0.6
20 - 30	164.5	86.4 ^b	(23.5	90.5	82.3	4.1
30 - 40	160.7	113.3 ^b	(13.2) 136.6	112.5	6.8
+ 40	147.2	<u>129.4</u> b	(6.5)	139.8	125.1	4.3
TOTAL	653.3	386.4 ^b	(62.5	409.3	362.3	24.1

The total undisturbed area includes the golf course and mitigation area as undisturbed area. Approximately 62.5 acres of the total 73.6 golf course acres will require grading and 11.6 acres of the mitigation area will require grading; however, the applicant has requested that the 62.5 acres of disturbed golf course and 11.6 acres of disturbed mitigation (a total of 74.1 acres) be considered undisturbed. The acreage figures in parenthesis are the portion of the total acres that include the golf course area. It should be noted that the golf course acres for the 20-30 slope percentage consist of 13.5 acres for 20-25 percent slopes and 10.0 acres for 25-30 percent slopes (see Section 3.4 for a further discussion).

Source: Pointe Builders 1989.

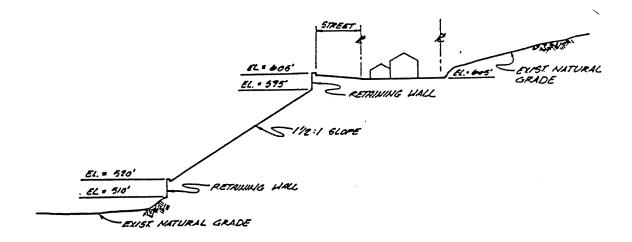
b As stated in the proposed General Plan Amendment.

Exhibit 3-8b (Section A-A) illustrates the cross section of the highest proposed manufactured slope onsite. This slope would be approximately 112 feet and would be located in the western portion of the site, east of Dictionary Hill. The proposed manufactured slope would descend to the south from the residential road at a 1.5:1 slope ratio. As shown in Exhibit 3-8, a 10-foot-high retaining wall would be located at the top and the bottom of the slope. It is anticipated that cut slopes at a 1:1 slope ratio; which is steeper than a 1.5:1 slope ratio, would not result in significant erosion or landslide effects. Furthermore, a vertical face of up to 5 feet in height at the toe of the cut slope would be acceptable. When unfavorable geologic conditions exist, slope stabilization measures such as rock-bolting or retaining wall would be required (see Appendix B).

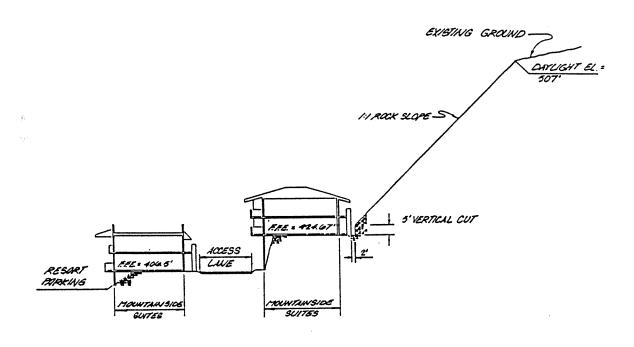
Exhibit 3-8 (Section B-B) illustrates a cross section through the proposed 98-foot manufactured slope. This cut slope would be developed at a 1:1 cut ratio, and would rise to the west behind the proposed mountainside suites in the resort area. A 5-foot vertical rock slope is proposed at the toe of the slope.

Exhibit 3-8a (Section C-C) depicts a cross section of an approximate 58-foot cut slope, which would be located near the eastern project boundary. The slope would gradually rise towards the east at a 1.5:1 ratio, with the foot of the slope adjacent to the proposed residential street. This slope would be located in an area of the site characterized by the Friant series (Exhibit 3-1). As previously stated, these soils exhibit a high to very high erosion hazard. However, metavolcanic rock, which is located below the highly erodible Friant soils, exhibits a low erosion hazard. Therefore, depending on the amount of cut necessary to create the proposed slope, significant impacts from erosion could result from the Friant soils. Measures to mitigate potential impacts from erosion are detailed in Section 3.1.4.

Exhibit 3-8a (Section D-D) depicts a cross section through a proposed 64-foot manufactured slope. The fill slope would be at a 1.5:1 ratio and also located in an area of the site characterized by the Friant series (see Exhibit 3-1).

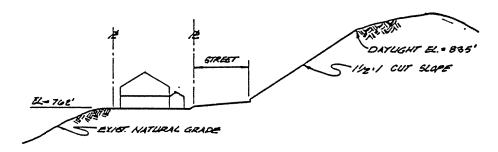


Cut Slope Section A-A Through Residential Area on Western Portion of Site

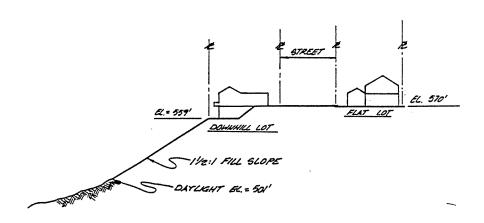


Cut Slope Section B-B Through Mountainside Suites





Cut Slope Section C-C Through Residential Area on Eastern Portion of Site Near Existing Water Tank



Cut Slope Section D-D Through Residential Area on Eastern Portion of the Site near Golf Course

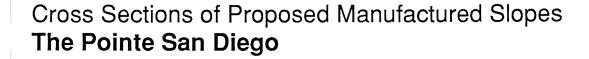




Exhibit 3-8b (Section E-E) illustrates a cross section from the proposed golf course to the Sweetwater Reservoir. As shown in Section E-E, the golf course fairway would require cuts and fills. The remaining portion of the project area (berm and golf course utility road) would require fills. The fill slope extending to the existing wire fence (property line) would be approximately 30 feet high and at a 2:1 ratio. No grading activities would occur south of the existing wire fence.

Exhibit 3-9 (Section F-F) illustrates a cross section from the residential area in the southeastern portion of the site to the office-professional park. As shown in Section F-F, the residential area, the golf course fairways, and business park will require grading cuts. The office-professional park would require the majority of the grading through this cross section. The maximum cut required through the cross section would be approximately 50 feet.

Exhibit 3-9 (Section G-G) depicts a cross section from the same residential areas as shown in Section F-F to Jamacha Boulevard. The residential area will primarily require grading cuts to accommodate the proposed residences. These grading cuts would be a maximum of approximately 30 feet. The golf course will require both cuts and fill, primarily for the fairways, and these grading activities through this cross section will be minimal as shown in Section G-G. No grading activities will occur in the wetlands area or along Jamacha Boulevard.

Exhibit 3-9a (Section H-H) illustrates a cross section from the residential area on the southeastern portion of the site to Jamacha Boulevard. As shown in Section H-H, the residential area furthest to the east would primarily require cuts. The remaining two residential areas on this cross section would require minimual cuts and fills. The golf course which is located on the western end of this cross section would require cuts and fills. The proposed Expressway (SR-54) would require a maximum cut of approximately 30 feet. As illustrated in Section H-H no grading activities are proposed for the wetlands area or Jamacha Boulevard.

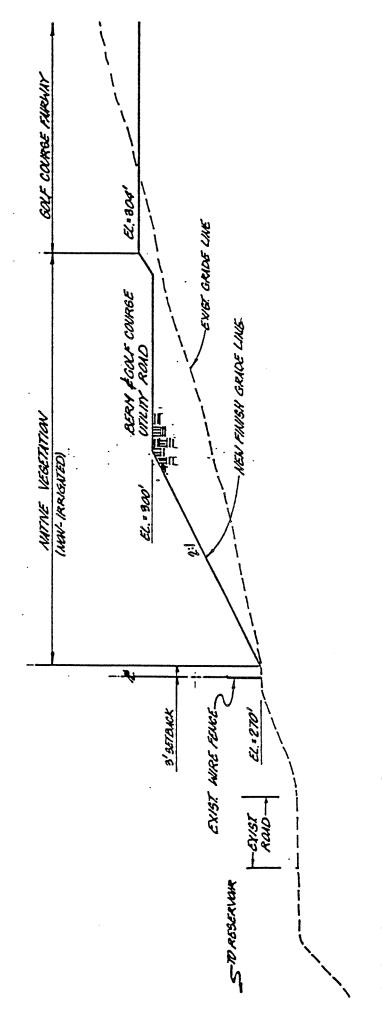
Exhibit 3-9a (Section I-I) depicts a cross section north of the proposed Pointe Parkway Bridge from the residential area in the northeastern portion of the site to the proposed offices in the resort area. As shown in Section I-I, minimal cuts and fills will be required in the residential area. The maximum cuts required along this

cross section would be approximately 40 feet at the proposed apartment complex. The proposed development adjacent to the existing Jamacha Boulevard will primarily require fills. The maximum fills required along this cross section are approximately 40 feet for the proposed offices that will be located above one of Hansen's Ponds.

Exhibit 3-9b (Section J-J) illustrates a cross section from the existing Otay Water District buildings to the existing Tres Lago Court residences. The proposed offices at the southeast corner of the SR-54/Sweetwater Springs Boulevard intersection will require maximum fills of approximately 40 feet. The proposed Jamacha Boulevard North will require fills of approximately 20 feet. The parking lot, lawn area, and tennis courts located northwest of Jamacha Boulevard North will require grading cuts and the maximum cut in this area of the cross section will be approximately 30 feet.

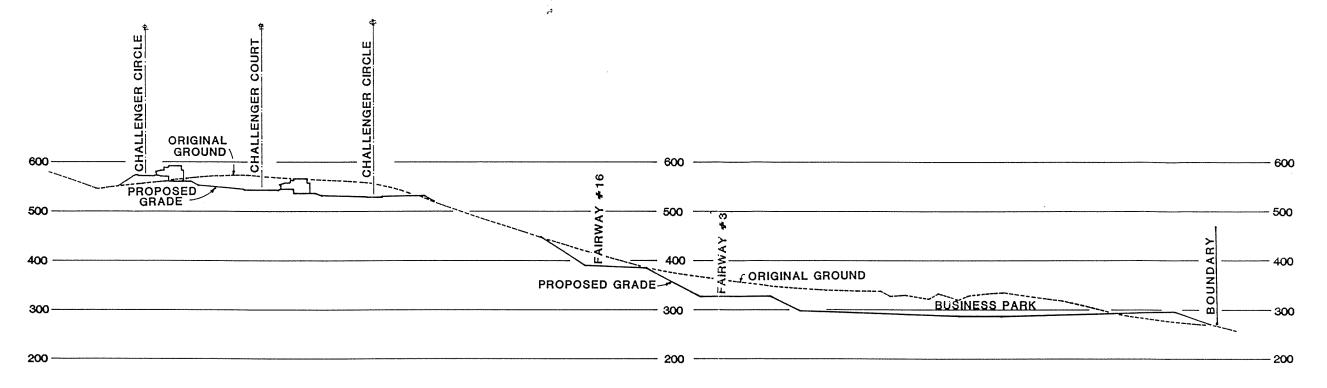
Exhibit 3-9b (Section K-K) depicts a cross section from Jamacha Boulevard South to the hillsides west of and adjacent to the resort mountainside suites. The proposed restaurant (Rustler's Rooste) is located between Jamacha Boulevard South and existing Jamacha Boulevard. The restaurant will require fills of approximatley 20 feet. Minimal cuts or fills will be required to construct the proposed SR-54 or Jamacha Boulevard North along this cross section. The main resort buildings will require a significant amount of fills and the maximum fill will be approximately 40 feet. The area including and adjacent to the proposed mountainside resort suites will require significant cuts. The maximum cuts in this area of the cross section will be approximately 60 feet.

The proposed project would include six phases of development, which would be characterized by six general phases of earthwork activity (the SR-54 hook off-ramp at Golf Course Drive would not significantly affect grading volumes identified in Table 3-3). Table 3-3 lists the quantity of earthwork anticipated for each development phase. The location of these phases onsite is illustrated in Exhibit 2-36 in Section 2.4. At present, approximately 100,000 cubic yards of fill is stockpiled on the site, and will be used during the grading activities.

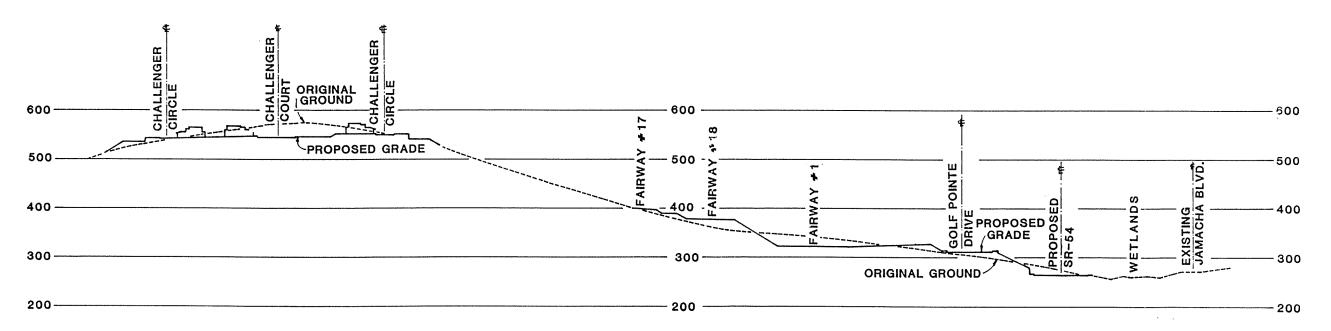


Cut Slope Section E-E Through the Sweetwater Reservior and Golf Course.

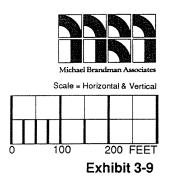
Cross Section of Manufactured Slope The Pointe San Diego



Section F-F From the Residential Area in Southeastern Portion of Site to the Office - Professional Park.

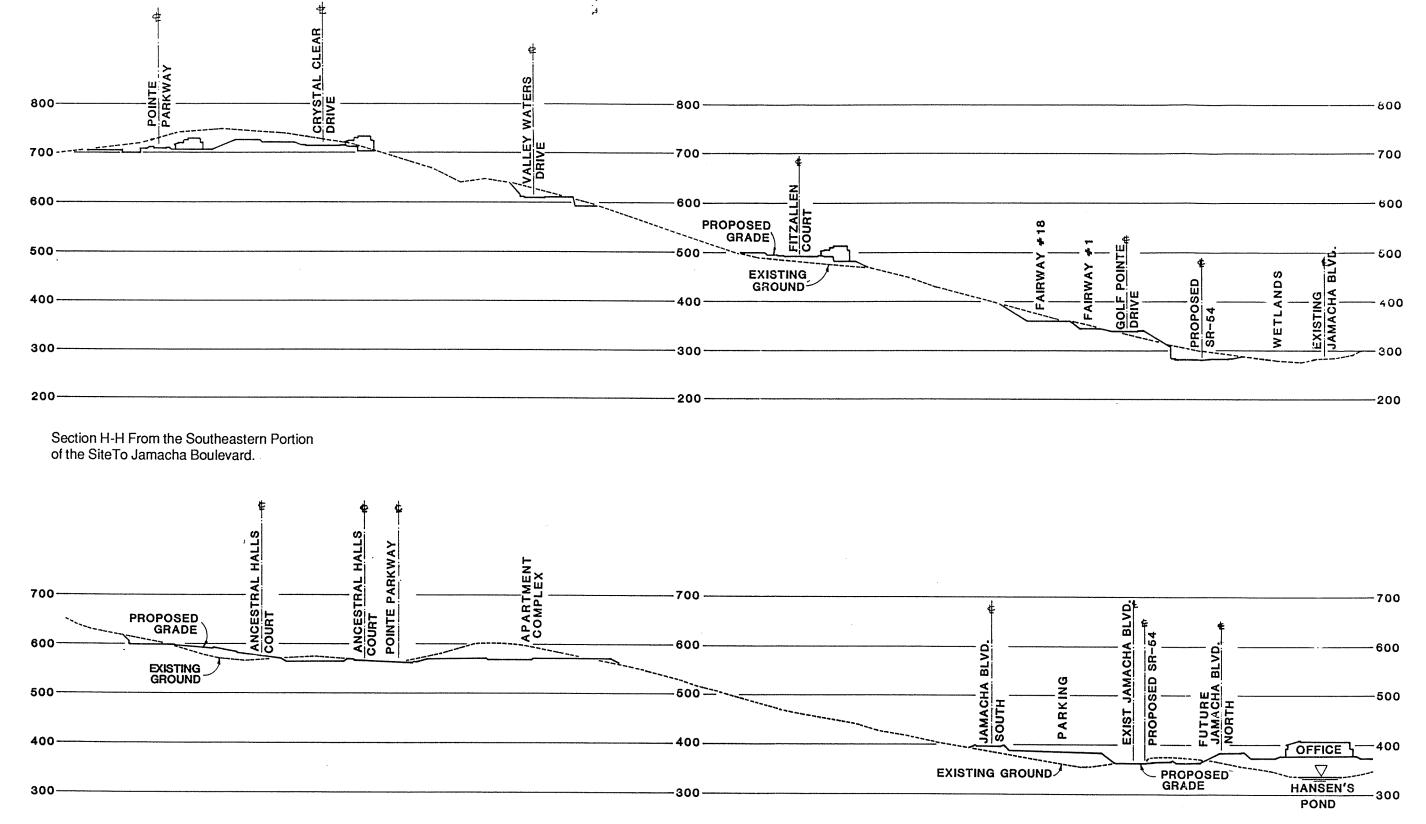


Section G-G From the Residential Area in Southeastern Portion of Site to Jamacha Boulevard.



Cross Sections of Project Site

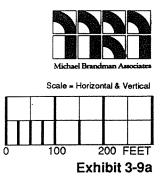
The Pointe San Diego

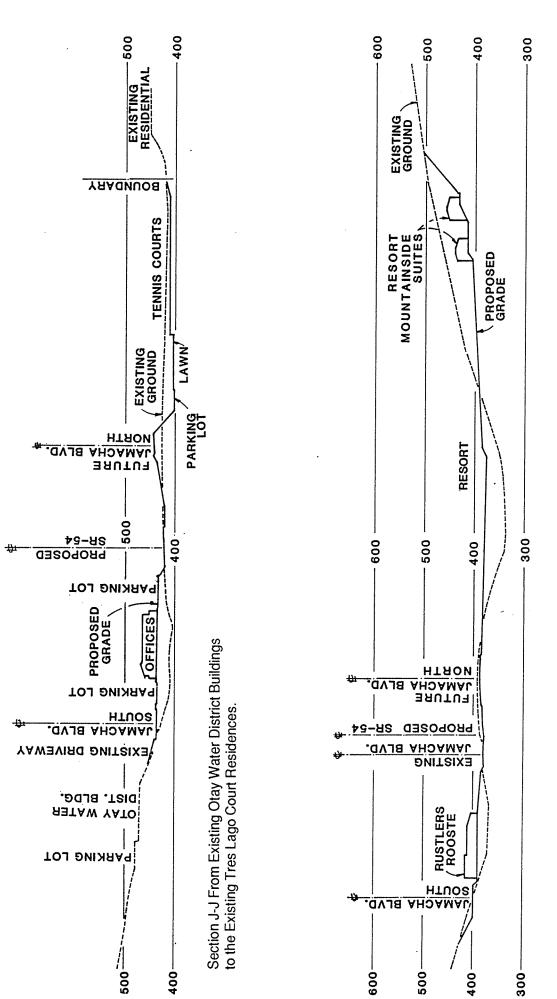


Section I-I North of Proposed Pointe Parkway Bridge From Residential Area in the Northeastern Portion of the Site to the Proposed Offices in the Resort Area.

Cross Sections of Project Site

The Pointe San Diego





Section K-K From Jamacha Boulevard South to Hillsides West of and Adjacent to the Resort Mountainside Suites.

Cross Sections of Project Site The Pointe San Diego

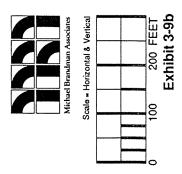


TABLE 3-3
CUT AND FILL BY PHASE AND UNIT

	Unit	Earthwork (Cubic Yards)				
Phase No.		Cut	Fill	Export/ <import></import>		
I	1	1,078,900	1,288,400	(209,500)		
	2	447,700	49,900	397,800		
	3	650,400	884,700	(234,300)		
Phase Total		2,177,000	2,223,000	<46,000>		
II	4 (East),a	136,700	500	136,200		
	(West) ^b	81,300	115,500	(34,200)		
Phase Total	, ,	218,000	116,000	102,000		
III	5 (East) ^a	97,300	700	96,600		
	5 (East) ^a (West) ^b	49,700	214,300	(164,600)		
Phase Total	(== . /	147,000	215,000	<68,000>		
IV	6	7,900	20,200	(12,300)		
	7	32,600	64,300	(31,700)		
	8	50,100	103,100	(53,000)		
	9	76,000	18,900	57,100		
	10	4,000	41,100	(37,100)		
	11	24,100	29,700	(5,600)		
	12	110,300	89,700	20,600		
Phase Total		305,000	367,000	<62,000>		
V	13	11,800	232,200	(220,400)		
	14	17,200	62,000	(44,800)		
	15	88,000	30,800	57,200		
Phase Total		117,000	325,000	<208,000 >		
VI	16	25,800	68,400	(42,600)		
	17	13,000	52,200	(39,200)		
	18	561,200	439,400	121,800		
Phase Total		600,000	560,000	40,000		
PROJECT TOTAL	-	3,564,000	3,806,000	<242,000>		

a These cut and fill quantities would occur on the eastern portion of the project area.

Source: Pointe Builders 1989.

b These cut and fill quantities would occur on the western portion of the project area.

Table 3-3 shows the anticipated raw earthwork quantities by unit and phase. The cut and fill amounts were not adjusted to balance since during construction, materials expand or shrink depending on their natural status, the stress applied during compaction, and the composition of the material. For example, alluvial material from the drainages on both sides of Jamacha Boulevard will be saturated and composed of organic matter which will be replaced by rock and compactible soil. The alluvium will be used in the mitigation area where it will not be compacted to facilitate vegetative growth, and therefore it will likely expand. The rock replacing it may expand due to an increase in voids, but this will depend on how it is blasted or graded (ripped).

The goal in most cases during grading operations will be to balance the material excavated with that used for embankment. The 46,000 additional cubic yards of material needed in Phase I, theoretically, will be obtained from the existing stockpile. This would leave approximately 56,000 cubic yards of material to be stockpiled at a new location. However, in practice, it is likely that the site will be raised or lowered slightly to accommodate the excess.

The grading of the entire golf course area will occur in Phase 1, Unit 3. As depicted on Table 3-3, Unit 3 would require approximately 650,000 cubic yards of earth to be cut and approximately 884,700 cubic yards as fill. The grading for the golf course area (the area for the 18 tees, fairways, and greens) will be balanced. Approximately 650,400 cubic yards will be cut and filled in the golf course area. The remaining 234,300 cubic yards of fill for Unit 3 would be required for the roadways, building pads, and the mitigation area that will be enhanced during Phase 1, Unit 3. If the golf course area was not implemented with the project, the net export/import of earth would remain unchanged because the grading for the golf course would be balanced onsite.

After grading in each phase, it is likely that excess materials will remain, such as after the grading of Phase II. This excess will be stockpiled in the subsequent phase in an area which will be graded during development of that following phase. Specific locations of the stockpiles shall be identified when the applicant submits detailed grading plans. The County of San Diego will have discretionary environmental review of the stockpile locations through review of grading permits and could require additional environmental analysis for the stockpile locations.

Once Phase IV is reached, fill material will be imported to the site. The source of this material is unknown and will remain so until it is needed due to the nature of the "dirt" business. Since more than 200 cubic yards will be required, a grading permit will also be necessary at the location where the dirt is excavated. Materials are usually obtained from a construction site such as a subdivision, highway project, sewer project, etc. The project applicant shall submit a haul route plan to the County of San Diego prior to hauling material. The County of San Diego will have discretionary environmental review of the haul route through review of grading permits and could require additional environmental analysis for the haul route. Prior to commencing hauling of material, the project applicant shall obtain an approval of a haul route by the County of San Diego.

As noted previously, soils on the site range from 2 to 33 feet in depth with shallow soils occurring predominantly on the hillsides. Therefore, in hillside areas the bedrock would need to be excavated by blasting. Large boulders that exist on the site, and those that would be created from the blasting, are anticipated to be crushed onsite and used in construction.

Construction and grading activities would also occur in the vicinity of the historic Isham Springs site. Underlying the springs is sedimentary and igneous crystalline rock. The crystalline rock forces subsurface water to the surface, which provides the surface water for the springs. Isham Springs exists due to the occurrence of fractured metavolcanic rock and favorable hydrologic conditions. The Sweetwater Formation which overlies the volcanic rock in this area may also be a factor, since it acts as a relatively impermeable cap over the fractured rock just above the springs. Geologic units in the area of the springs are rippable for excavation. Volcanic rock that may require blasting to excavate is located within approximately 400 to 500 feet of the springs. While it is not uncommon for major earthquakes to affect the flow of springs, not much case history is available on the effects of ground shaking on the springs due to blasting. Therefore, it is recommended that the size of the blasting charges be kept to a minimum by reducing the depth and number of drill holes loaded per shot. In addition, it is recommended that the water flow be monitored before and after each shot, if possible. If blasting is found to negatively affect spring flow, then alternative methods of excavation could be considered.

One potential effect, if springwater is reduced, is a reduction of water available for the Bancroft Creek Mitigation Area. The Bancroft Creek Mitigation Area is expected to require 375 acre-feet of water per year and current flow from the springs is substantially greater. Therefore, the springwater would need to be significantly affected by blasting before indirectly affecting the Bancroft Creek Mitigation Area. If blasting significantly affects the spring flow to the degree that the Bancroft Creek Mitigation Area would be affected, the project applicant shall provide an alternative source of water (i.e., groundwater or potable water) to the mitigation area.

Construction of a retaining wall and pedestrian bridge on fill material per Army Corps of Engineer's 404 permit requirements would take place within approximately 12 feet of the bottling house ruins and 6 feet of the catchment basin. The bottling house remains consist of rock and mortar walls retaining earth to a height of approximately 4 feet on the easterly side and tapering down to only one or two layers of stone on the westerly wall. Scattered in close proximity to the remaining walls are the stones which formerly made up the structure. The catchment basin is composed of heavily weathered concrete which is probably not reinforced as observed from the major displacement evident on the northerly wall. There is no evidence of debris in the general vicinity of this structure. The mitigation measures identified in Section 3.1.4 would be required to avoid damage to the remains of these structures during construction.

The proposed Pointe Specific Plan will involve a change to the slope disturbance criteria in the Spring Valley Community Plan because the categories to be disturbed differ. The project will involve more disturbance onsite (approximately 38.4 acres) than the existing specific plan; however, the applicant proposes that 62.5 acres of disturbed golf course acres are counted as undisturbed acres. Under these conditions, the project would involve less disturbance (approximately 24.1 acres) than the existing specific plan.

The adopted specific plan proposed construction of the 95 single-family homes and 461 duplexes to be constructed on winding streets in the hillsides. The houses were to be built on piers or stilts (pole houses) rather than on graded pads. Such construction involves grading for streets, driveways, the front side of the structure to anchor it securely to the site, and minor grading for the piers or poles which support the structure. Typically, less grading is required for pole construction than that involved to create a level pad for a standard foundation. Depending on the slope of the hill and the size of the structure, the beams supporting the house could be quite tall. In any case, the view from downhill would be of these braced poles and the underside of the structure and significant grading would have been required to build the roads to reach the hillside development. It would be difficult to landscape the downhill areas to disguise the view of the supporting beams. For these reasons, the adopted specific plan was found to have adverse and unmitigable impacts on landform and aesthetics.

Review of the EIR for the adopted specific plan indicates that the following assumptions were used to arrive at the slope disturbance calculations:

- 1,400 square feet per 2,450-square-foot duplex lot
- 4,000 square feet per 10,000-square-foot single-family lot

Each lot would be at least 50 feet wide, as required by code, and have a 20 foot front yard setback containing the driveway and entrance to the homes. That is, there would be 1,000 square feet of disturbed area in the front yard alone. In the case of the duplexes, that would leave only 400 square feet of disturbed area for the actual construction of the units—an unrealistically low figure, amounting to less than 10 feet of additional grading across the front of the lot for the front of the structure. In addition, there is the question of whether the area under the structure should be considered "undisturbed." Although major grading may not occur, the soil surface would be disturbed, along with the plants and animals living there. In other words, the calculations used to show that the adopted specific plan could meet the adopted slope criteria were incorrect. And, in fact, in the implementing tract maps submitted to the county, it is clear that more slope disturbance would be involved since pole construction was not considered feasible. The grading plans show graded pads.

As previously stated, the proposed Pointe San Diego Specific Plan would affect approximately 267 acres, whereas the approved specific plan would allow an additional 24 acres to be disturbed, resulting in a total of approximately 291 disturbed acres. The proposed project would result in significant grading and impacts to the natural terrain onsite, but would in fact reduce the amount of grading that could occur with implementation of the approved specific plan.

The project site is covered by soils that are susceptible to rapid erosion during a rainstorm of heavy and long duration. Grading and pad leveling would remove the vegetative cover and add to the bulk of loosened soil material. Therefore, potential for erosion onsite would exist during and following grading operations. The measures in Section 3.1.4 would reduce potential erosion to a level below significant.

Shrink/Swell

The existence of expansive soils on most of the project site would affect the proposed development. The Sweetwater Formation contains a high percentage of clay with high shrink/swell potential and extends to depths of 10 to 20 feet below existing ground grades. The areas of the project site with high shrink/swell potential are illustrated in Exhibit 3-5. The design of the proposed structures and improvements would need to be altered to compensate for the expansive soils. The proposed foundations for residential and commercial structures will need to be sized and reinforced such that they reflect the expansive conditions of the foundation bearing materials. Low expansive soils (those that possess less than an expansive index [EI] of 50) will need to be of standard depth of 12 or 18 inches and nominally reinforced. Foundations located on soils with high swell potential (EI-50 and above) will need to extend 18 to 24 inches below grade and be reinforced to reflect the underlying soil conditions. Specific recommendations can not be provided until completion of the grading operations. However, wherever possible soils with moderate to high expansive potential will need to be kept at least three feet below finished grade.

Compressible soils that presently exist on the project site are the alluvial soils, slopewash soils, topsoils, and undocumented fills. Portions of these materials would underlie the proposed structures and improvements. Wherever these soils exist

beneath the proposed structures and improvements, these soils will need to be removed to a depth where firm natural ground is encountered, replaced, and recompacted. In some instances, excavation materials will be transported to other areas of the site such as the Bancroft Creek Mitigation Area which is located in a deep canyon on the western portion of the project site.

The deepest fills that presently exist on the project comprise the dams associated with the ponds located west of Jamacha Boulevard. The onsite ponds will be completely covered by proposed structures and improvements. All the alluvial soils and uncompacted fills associated with the dams will need to be removed and recompacted. The depths of removals are anticipated to be 20 to 30 feet. Slopewash soil removals located east of Jamacha Boulevard are anticipated to be 5 to 10 feet in depth.

All cut slopes will need to be observed during the grading operation by the project engineering geologist. If materials are encountered in the cut slopes that possess strength parameters less than that required to achieve calculated factors of safety of at least 1.5, such materials will need to be excavated and replaced with stability fills or buttresses.

3.1.3 CUMULATIVE IMPACTS

Impacts to geology and soils are site specific and are not expected to be cumulatively affected by other developments.

3.1.4 MITIGATION MEASURES

The following measures are recommended to reduce the potential geologic and soils impacts to a level below significant.

1. Design of structures shall be in accordance with the latest Uniform Building Code, which is expected to satisfactorily mitigate the anticipated intensities of earthquake shaking at the site.

- 2. All grading should be performed in accordance with the "Recommended Grading Specifications" contained in the geotechnical report prepared by Geocon in January 1981 (see Appendix B). The specifications consist of clearing and grubbing, preparation of land to be filled, filling of the land, spreading and compaction and control of the fill.
- 3. The soil conditions encountered would be suitable for the use of conventional spread footings. Footings having a minimum depth and width of one foot may be designed for bearing capacity of 2,000 psf. All continuous footings should be reinforced with one No. 4 bar top and bottom. If moderate to highly expansive soils are present within 2.5 feet of finish grade, deeper footings and additional foundation reinforcement may be necessary.
- 4. Due to reduced lateral capacity near the top of fill slopes, it is recommended that improvements not be placed within 10 feet of the tops of slopes unless properly designed to address this condition.
- 5. Concrete slabs-on-grade should have a minimum nominal thickness of four inches and be reinforced with 6x6-10/10 welded wire mesh. A four-inch-thick sand blanket should be provided beneath the slab and where moisture sensitive floor coverings are planned, a visqueen moisture barrier should also be used.
- 6. Unrestrained retaining walls should be designed for an active soil pressure of 30 pounds per cubic foot (pcf). Where the top of the wall will be restrained from horizontal movement, a uniform lateral pressure of 50 psf should be added to the active pressure. These recommendations assume a drained and level backfill condition as well as a granular type of backfill material.
- 7. Good drainage is imperative to minimize soil expansion potential, settlement and erosion. All pads shall have drainage swales which direct storm and irrigation water away from the structures and into street gutters or other drainage facilities. No water should be allowed to pond adjacent to footings.
- 8. Cut slopes should be grossly stable for proposed slope heights at inclinations of 1.5:1.0 (33 degrees) or flatter. Construction of cut slopes with inclinations of 1.0 horizontal to 1.0 vertical (45 degrees) may be made where necessary, provided an engineering geologist makes periodic inspections to determine whether the presence of fracturing or jointing will present a stability problem.
- 9. A bench shall be installed near the bottom of all 1.0:1.0 (45 degrees) cut slopes to retain possible rock falls.

- 10. All graded slopes will be planted immediately upon completion of grading in each area to reduce the risk of erosion.
- 11. Cut slopes at 1:1 ratios in areas exhibiting unfavorable geologic conditions shall be stabilized by implementation of rock-bolting or construction of retaining walls.
- 12. The applicant shall submit a landscape plan for the project to the satisfaction of the Director of Planning and Land Use. Said plan shall be designed to mask grading and land form modification and blend the development into the surrounding natural environment.
- 13. All manufactured slopes shall be rounded to blend into the natural contours of the site. This rounding would disturb more area; however, grading volumes would not significantly increase.
- 14. Hillside units should be clustered to reduce disturbed area and maximize open space.
- 15. The project applicant shall submit a haul route plan to the County of San Diego prior to hauling material.
- 16. Specific locations of stockpiles during grading of each phase shall be identified when the applicant submits detailed grading plans to the county. Prior to obtaining a grading permit for each phase, the applicant shall obtain approval of the stockpile locations.

Following are measures to avoid damage to the remains of the historical structures during grading and construction activities.

- 17. A chain link fence should be placed 5 feet from the catchment basin and 10 feet from the bottling house to avoid disturbance by souvenir hunters or inadvertent encroachment during the construction period. The post should be on stands to avoid subsurface disturbance.
- 18. No equipment larger than a standard tractor backhoe should be used in the vicinity of either ruin.
- 19. Surcharging could occur 6 to 12 feet from the bottling house remains. As a safety measure, plywood shoring should be placed on the inside of the bottling house remains to avoid collapse should a surcharge inadvertently be applied to the walls. Placement of the plywood shoring shall be monitored by a qualified archaeologist.
- 20. The footings of the retaining wall and bridge abutments shall be designed so that they do not transmit any loads to the structures. All footings are to be built on fill.

- 21. Heavy earth moving equipment should not operate within 100 feet of the ruins to avoid potentially adverse vibrations.
- 22. No blasting is to occur within 400 to 500 feet of the historic structures and only small charges shall be used beyond that distance. The size of the charge will be determined according to the rock formation encountered and its ability to transmit shock waves. Also, the water flow of the springs shall be monitored before and after each blast. If blasting is negatively affecting spring flow, alternative methods of excavation shall be utilized. If blasting significantly affects spring flow to the degree that the Bancroft Creek Mitigation Area is affected, the project applicant shall provide an alternative source of water (i.e., groundwater or potable water) to the mitigation area.

Development of the proposed Pointe Resort Specific Plan will have significant impacts on the natural slopes on the site. These impacts are more than those associated with the adopted Hansen's Ranch Specific Plan; however, the applicant proposes that the golf course not be counted as disturbance because it is a recreational use. If the golf course was not counted as disturbance, the project would have less disturbed area than the adopted specific plan. These grading impacts cannot be mitigated to a level below significance.

To reduce grading impacts to a level below significance, development would need to be restricted to the lowland areas adjacent to Jamacha Boulevard. The onsite hills would need to remain undisturbed (see Section 4).

3.2 HYDROLOGIC RESOURCES

3.2.1 EXISTING CONDITIONS

Surface Hydrology/Drainage

The project site is located in the middle basin of the Sweetwater drainage system. The Sweetwater drainage system is an elongated strip stretching northeasterly upstream and consisting of approximately 230 square miles. The drainage system is divided into three sections by two drinking water reservoirs. The upper Sweetwater basin consists of approximately 99 square miles of relatively undeveloped land draining to the Loveland Reservoir. The middle basin, in which the project site is located, consists of approximately 84 square miles of rural, agricultural and limited urban areas draining into the Sweetwater Reservoir. The lower Sweetwater drainage basin is southwest of the Sweetwater Reservoir and includes portions of Chula Vista and National City and other incorporated communities.

Two small ponds, Hansen's Ponds, are located onsite and west of Jamacha Boulevard in the northcentral portion of the site. Hansen's Ponds are approximately one to two acres each and connected by a perennial stream (Hansen's Creek) that originates from Isham Springs and is also fed by a 72-inch storm drain north of the property. The storm drain has a 100 year storm flow of 500 cubic feet per second. Hansen's Creek flows southward across the site generally parallel to Jamacha Boulevard and then crosses under Jamacha Boulevard near Spring Glen Lane via three culverts. The capacity of the culvert is adequate to carry runoff from a heavy and long duration storm.

After passing through the culverts, Hansen's Creek parallels Jamacha Boulevard running southwesterly and discharges into Sweetwater Reservoir. Hansen's Creek is the major drainage outlet for the project site. The project site also contains two other small creeks. Little Hansen's Creek extends from north of the project site along the eastern side of Jamacha Boulevard to Hansen's Creek. The two creeks join where Hansen's Creek flows under Jamacha Boulevard. Bancroft Creek also drains the project site. Bancroft Creek traverses the western portion of the site and joins Hansen's Creek southwest of the project site.

Storm water flows that currently flow to and from the project site are depicted in Table 3-4 and shown in Exhibit 3-10. As shown in the exhibit, the primary flow from a 100-year flood on the site would occur along Hansen's Creek.

TABLE 3-4
STORM WATER RUNOFF

	1	2	Hydrolo 3	ogic Suba	area ^a 5	6	Total
The Pointe San Diego Drainage Area (100-year/6 hour event)							
Existing cfs Future cfs Difference cfs	5 -5 0	0 0 0	467 486 19	$\frac{133}{167}$ $\phantom{00000000000000000000000000000000000$	$\frac{77}{80}$	$\frac{866}{906} \\ \hline 40$	$\frac{1,548}{1,644}$
Entire Drainage Area (100-year/6 hour event)							
Existing cfs Future cfs Difference cfs	$\frac{911}{949}$	$\frac{636}{636}$	$\frac{1,996}{2,074}$	$\frac{236}{296}$	$\frac{485}{506}$	$2,937 \\ 3,073 \\ \hline 136$	$7,201 \\ 7,534 \\ \hline 333$

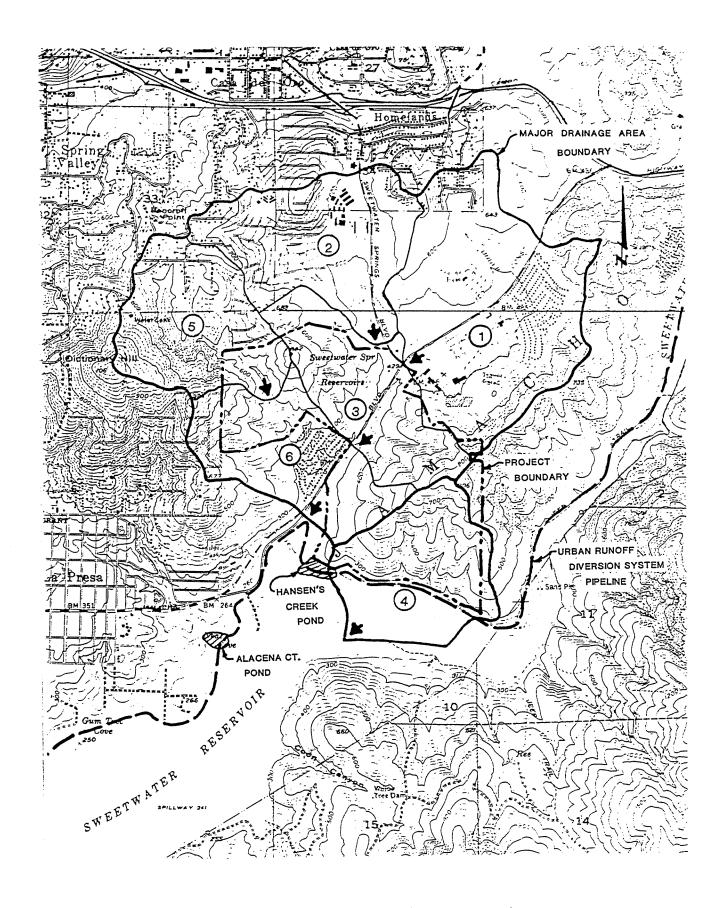
a See Exhibit 3-10 for location of hydrologic subarea.

Source: Pointe Builders 1989.

GROUNDWATER

A subsurface groundwater investigation was conducted by GEOCON, Inc. in March 1989. Activities from the subsurface investigation included a single boring for determining the depth of and characteristics of groundwater. The report is located in Appendix B.

The project site is underlain by the Santiago Peak Volcanics. Most or all of the groundwater production occurs from fractures in the relatively homogeneous



Existing and Future Storm Water Flows and The Proposed Urban Runoff Diversion System

The Pointe San Diego



lithology between 240 feet and 540 feet below ground surface. The well capacity is estimated at 17 gallons per minute (25,000 gallons per day). This value is in the low range for fractured rock aquifers, and suggests that the lithology at this location may not be densely fractured and/or well connected.

Water Quality

The Sweetwater Reservoir is one of 23 potable water reservoirs in San Diego County. In 1888, this reservoir was constructed becoming the primary water supply for the south coastal areas. Average rainfall in the middle basin of the Sweetwater drainage system is approximately 12.5 inches per year. Approximately 90 percent of the rain falling on the middle basin is stored in the upper few feet of the normally unsaturated topsoil. Annual rainfall is typically insufficient to saturate more than the top few feet of soil. During summer months, the water stored in the topsoil is transpired by native vegetation. As a result, a great portion of the rainfall is lost through transpiration. Thus, the groundwater does not receive significant recharge from rainfall percolating through the non-alluvial formations.

A small amount of water does enter the groundwater basin from percolation of rainfall and streamflow through the Sweetwater River alluvium. Much of this, however, is also lost through plant transpiration. Finally, a small fraction, approximately 5 percent, of the rainfall flows from the basin as surface runoff (Luke-Dudek 1981).

Historically, the reservoir has supplied an average of approximately 40 percent of the water needs of the Sweetwater Authority, which is the agency responsible for maintaining the Sweetwater Reservoir. The amount of water supplied by the reservoir has ranged from approximately 0 to over 90 percent. The remaining deficiencies are provided by a filtered blend of northern California and Colorado River water (Mooney-Levine and Associates 1987). The reservoir is often filled with potable water during the wet months of the year to provide water during the dry summer months.

During recent years, increasing quantities of urban runoff have entered the reservoir and reduced its water quality. Due to the anticipated continuation of development in the Sweetwater Reservoir watershed, water quality degradation from storm runoff and groundwater pollution is expected to become an increasing problem to the Sweetwater Authority. To reduce the future potential effects of urban runoff from the watershed, the Sweetwater Authority is proposing to construct a first flush "Urban Runoff Diversion System" to capture surface runoff before it reaches the Sweetwater River and the Sweetwater Reservoir. The runoff diversion system is proposed to contain storm drains and detention basins along the Sweetwater River and the Sweetwater Reservoir to capture urban runoff and divert the storm water past the Sweetwater Reservoir (see Exhibit 3-10). The "first flush" urban runoff diversion system is proposed to have a maximum capacity of a two-year 6-hour storm. During heavy rains, storm water quality is considered to be higher than initial rains (first flush). Rains that exceed the proposed maximum capacity of the runoff diversion system would flow into the reservoir since they are not expected to affect water quality in the reservoir. The diversion system would also divert nuisance water flow such as those that are created by over irrigation, car washing, etc.

Currently, the Hansen's Creek Ponds is a source of groundwater contamination as urbanized flows continue to increase. The dry weather urban flows coming across Sweetwater Springs Boulevard enter Hansen's Creek Ponds, which in themselves contribute to contamination of the groundwater by evaporating liquids and leaving salts and by acting as a vehicle to transmit other undesirable runoff which flows into the groundwater table. These ponds receive dry weather flows from existing urban areas and mix them with the waters of Isham Springs, which are subsequently contaminated by the poor quality of the urban runoff (Butterfield 1988).

3.2.2 PROJECT IMPACTS

Surface Hydrology/Drainage

Implementation of the proposed project would create impervious surfaces, thereby reducing the absorption rate and increasing the existing runoff potential of the site. Table 3-4 depicts the increase in storm water flow in hydrologic subareas 1, 3, 4, 5, and 6 from the implementation of the proposed project. An increase of

approximately 96 cfs in storm water flow during a 100-year flood would result from the project. Exhibit 3-11 illustrates the proposed drainage facilities for the project site.

As envisioned, the western portion of the site would have an extensive storm drain system consisting of reinforced concrete pipe ranging from 18-72 inches in diameter. This system would receive storm water conveyed from a 72-inch diameter concrete drainage line that terminates at the northern boundary of the project site. This 72-inch line receives storm water from the Tres Lagos development that is located north and adjacent to the site. The project drainage system would convey storm water from the northern portion of the site to a retention area south of the Pointe Parkway and Jamacha Boulevard intersection and to a proposed double 10 x 8 reinforced concrete box. Storm water conveyed to the 10 x 8 box would be diverted southwest along Jamacha Boulevard (South Bay Expressway) to the first flush diversion system (Pointe Builders, pers. comm., 1989).

The eastern portion of the site will incorporate a drainage network consisting of reinforced concrete pipe ranging in size from 18-96 inches. A 96-inch diameter reinforced concrete pipe would connect to Rancho San Diego's drainage line located north of the site. Storm water entering into the 96-inch line would be conveyed to an 8 x 8 reinforced concrete box, and finally merging with the planned double 10 x 8 reinforced concrete box in Jamacha Boulevard (South Bay Expressway). Storm drains are also proposed south of and adjacent to the proposed golf course. This system (urban runoff diversion system) would collect runoff from the golf course before it can reach the Sweetwater Reservoir. Runoff would then be routed first to flush ponds that would be implemented as part of the areawide runoff diversion system.

The spring water found westerly of Sweetwater Springs Boulevard would be collected in a retention pond located near Spring Glen Lane. The water in the retention area would be pumped to the upper end of Bancroft Creek to a retention area from which it would flow by gravity along the entire length of the biological mitigation area (see Exhibit 3-12 for proposed conditions). Appendix B depicts the location of the water line and pump station for the Bancroft Creek mitigation area. Retention basins would be designed along the drainage system to allow no more than a 25 year design storm to enter the mitigation area. The surface drainage system is designed to this capacity to avoid significant erosion or silting effects in the mitigation area.

The conveyance pipeline to the upper end of Bancroft Creek would be installed below ground similar to a water supply line (see Appendix B). Two pumps, each capable of supplying over one half the demand of the system would be used. Combined with the retention capacity, this allows for maintenance and breakdown time without affecting the mitigation area. Once the resort is constructed, a monitoring panel would be installed in the resort's engineering room to identify any failures. A routine maintenance schedule would be adhered to and any major repair work would be done during winter months, when possible.

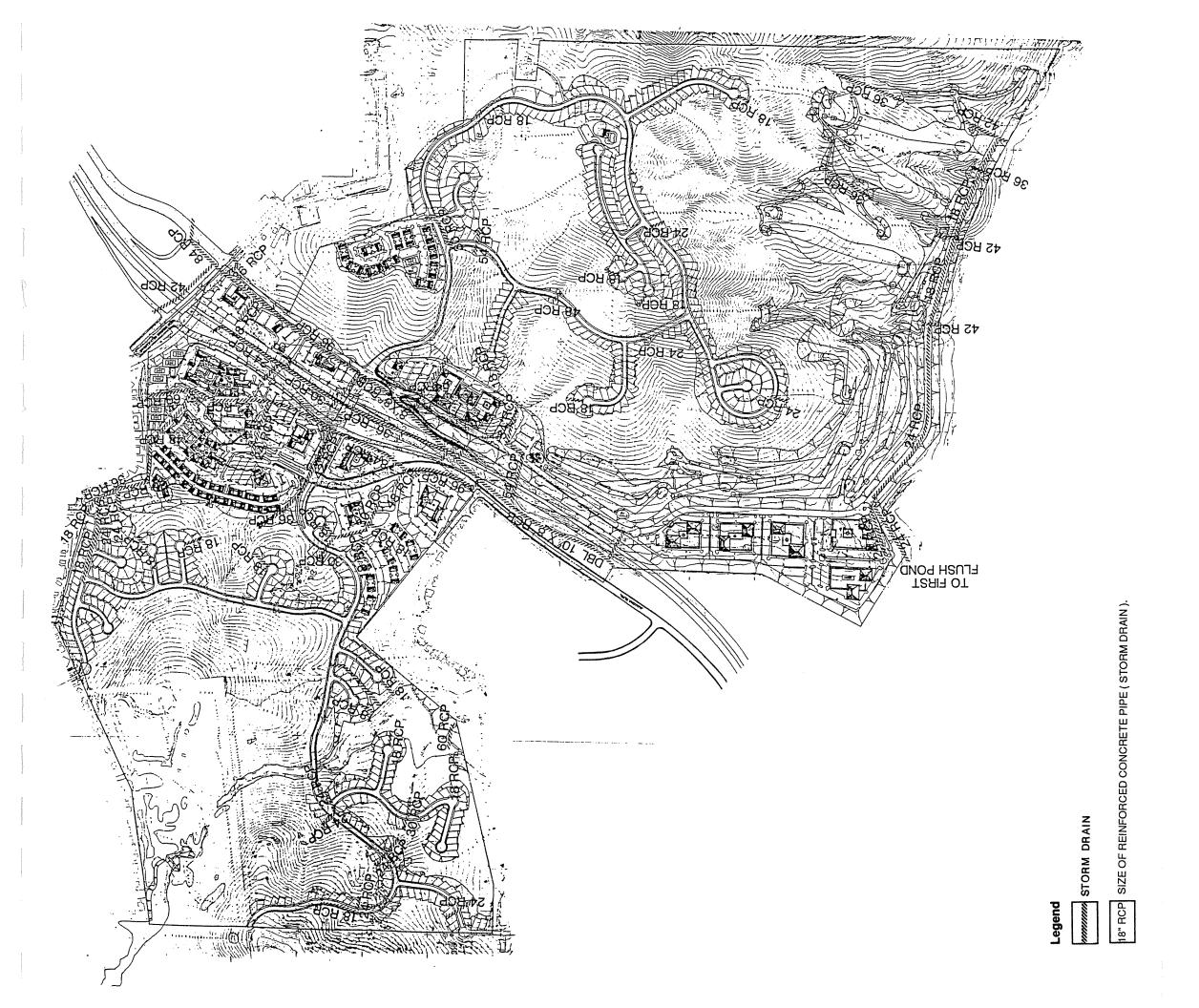
Landscaping personnel would inspect the area as a routine function and would be instructed to observe signs of equipment or plant failure. Should the system be without water for a period of seven days, arrangements would be made with the Otay Water District to recharge the system with purchased water from a fire hydrant.

If the spring water were to be reduced or stopped, the mitigation area could be affected. If the springwater were lacking for an extended period, the Bancroft Creek mitigation area would be affected similar to the current Hansen's Creek system (i.e., a riparian habitat could not be supported). However, since the spring water has flowed through the area for hundreds of years, it is unlikely that the spring water would stop.

Groundwater is not proposed to be used by the project including irrigating the proposed golf course. A combination of excess springwater and Otay Water District water would be used for public consumption and irrigation. If groundwater is used by the project, additional analyses on groundwater resources will need to be completed and reviewed by the county.

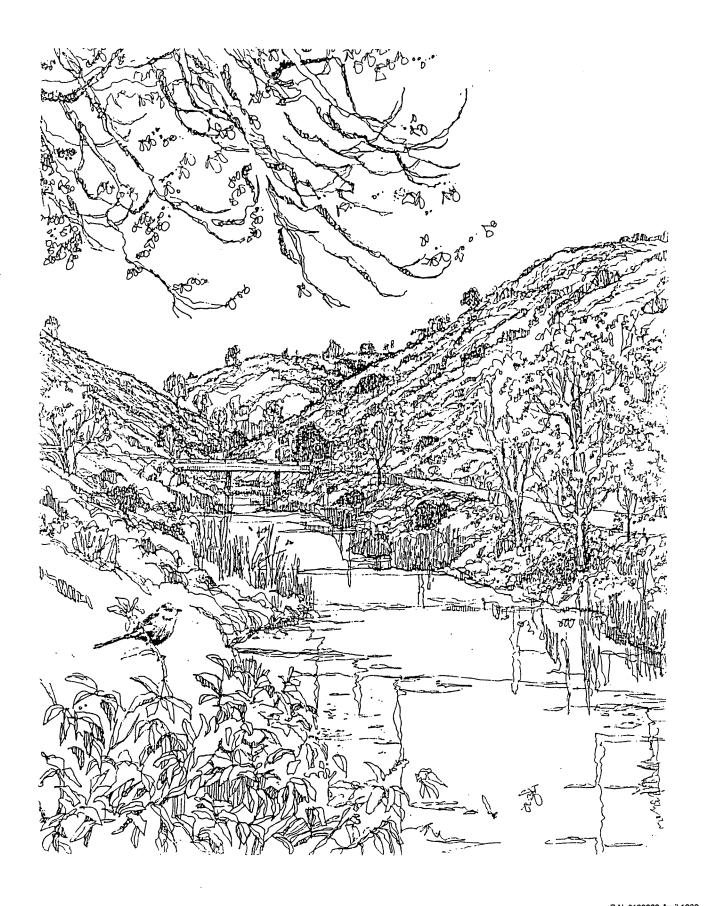
Water Quality

Development of the proposed project would increase storm water runoff and decrease the quality of surface water as a result of urban activities. The installation of an onsite storm drain system that conveys storm water to the proposed storm drainage system in the South Bay Expressway and eventually to the proposed first flush urban runoff diversion system would not result in significant water quality





700 FEET Exhibit 3-11



Proposed Biological Mitigation Pond The Pointe San Diego



impacts to the Sweetwater Reservoir. Rather, the design intent of the first flush runoff diversion system is to divert the initial storm flows which contain pollutants past the Sweetwater Reservoir.

During construction, the developer will construct temporary retention basins to contain runoff and associated silt. All graded and disturbed slopes will be planted to prevent erosion immediately upon completion of grading.

3.2.3 CUMULATIVE IMPACTS

Implementation of cumulative projects would increase impervious surfaces in the Sweetwater drainage basin. An increase in impervious surfaces would increase storm water flows to the proposed South Bay Expressway drainage facilities and also to the Sweetwater River and Sweetwater Reservoir (see Table 3-4). The proposed storm drainage structures in the South Bay Expressway are designed to contain adequate capacity to accept the additional flows from cumulative developments (Pointe Builders, 1988). Storm water that would flow to the Sweetwater River and then into the Sweetwater Reservoir would not enter into the drainage system constructed in the South Bay Expressway.

The storm water in the proposed South Bay Expressway drainage facilities and the Sweetwater River would enter into the proposed first flush runoff diversion system. A series of retention ponds are proposed along the Sweetwater River and the Sweetwater Reservoir to capture pollutants in storm water and divert them past the Sweetwater Reservoir. As future developments are proposed, the Sweetwater Authority should coordinate the implementation of the first flush runoff diversion system with future developments to ensure water quality impacts to the Sweetwater Reservoir do not result.

3.2.4 MITIGATION MEASURES

- 1. The project applicant shall submit and obtain approval of a drainage plan from the San Diego County Public Works Department.
- 2. The project applicant will comply with Resolution 84-8 of the Sweetwater Authority relating to funding for establishment of the first flush Urban Runoff Containment System. This would allow the Sweetwater Authority to construct the first phase of the system so that the project would not adversely affect the quality of the Sweetwater Reservoir.
- 3. The project applicant will monitor the two proposed springwater pumps for the mitigation area and provide necessary repairs to ensure adequate operation. Prior to issuance of major use permits for the proposed project, the project applicant shall post permanent bonds to provide adequate funding for the operation of the proposed spring water pumps.
- 4. If the mitigation area requires additional water on an emergency basis, the project applicant shall make arrangements to purchase water from the Otay Water District to recharge the mitigation area water system.
- 5. The onsite retention basins and system for the Bancroft Creek mitigation area should be designed to allow no more than a 25 year design storm to enter into the mitigation area. This would avoid significant erosion and silting effects in the mitigation area.
- 6. During construction the applicant shall construct retention/desiltation basins to the satisfaction of the San Diego County Department of Public Works and plant all disturbed slopes immediately upon completion of grading to prevent erosion.
- 7. Major grading will be limited to the dry season (April 15 to October 15) in order to minimize erosion potential.
- 8. The project applicant shall not use groundwater for the proposed project (including irrigating the golf course). If groundwater is proposed to be used, the project applicant shall conduct site-specific analyses on groundwater resources and the analyses shall be reviewed and approved by the county.

3.3 CULTURAL RESOURCES

A preliminary archaeological and historical evaluation of the Hansen's Ranch Property was conducted in August 1978 and a second evaluation was conducted in January 1979 by WESTEC Services, Inc. In the fall of 1981, an archaeological investigation was conducted by RECON, Inc. to mitigate sites found in previous surveys. A nomination for listing the Isham Springs site on the National Register of Historic Places as an archeological resource was filed in 1983. RECON completed a field survey of the areas added to the former specific plan site on May 20 and July 12, 1988. In addition, RECON performed an archaeological test investigation on October 24 through 26, 1988, for prehistoric and historic resources from archaeology site SDi-185. The following discussion summarizes the key findings of these studies. The reports are located in Appendix C.

3.3.1 EXISTING CONDITIONS

Archaeology

Regional Cultural History

Recent scholars have identified at least three major cultural patterns that have occurred in San Diego County. From approximately 12,000 to 8,000 years ago, the San Dieguito people were the sole inhabitants of this Region. Beginning about 8,000 years ago and extending to about 3,000 years ago, the La Jolla-Pauma culture was predominant, with the Pauma aspect being present in the inland regions. Commencing about 2,500 years ago and 1,000 years ago, the Kumeyaay (Diegueno) and Luiseno, respectively, lived and hunted in the area. A broad overview of the three major cultural patterns is provided below.

San Dieguito

The oldest well-documented inhabitants of the Region were the Paleo-Indian San Dieguito people. Typified as nomadic large-game hunters, these people occupied the mesas, mountains and deserts of San Diego County between 21,000 and 8,000 years ago. The culture of the San Dieguito people has been divided into three distinct phases.

The Phase I San Dieguito left little or no permanent record on the land. They are characterized by their manufacture and use of crudely formed stone flakes, blades, and scrapers. Evidence of Phase II San Dieguito culture is found in both the desert and western San Diego County. This phase remains basically unchanged from the earlier phase. Phase III is represented by a morphological and typological change, as indicated by an altered technology. The tool types become far more varied in style and functional design. The primary technological advances were the introduction of pressure-flaked blades and points. The resulting tools exhibit form, complexity and balance not found in the early phases of the San Dieguito people.

La Jolla Pauma

These people occupied the coastal and inland regions of San Diego County about 7,000 years ago. They were nomadic exploiters of maritime resources who also relied on seed gathering and vegetal processing. Characteristic traits of the La Jolla culture include fire hearths, shell middens, flexed inhumation, grinding implements, and absence of ceramics.

Kumeyaay/Northern Diegueno - Luiseno

The Yuman peoples moved into the San Diego Region 2,500 to 1,500 years ago. They possessed ceramics, operated a closely knit clan system, utilized a highly developed grinding technology, had elaborate and extremely complex kinship patterns, created rock art, and carried on extensive trade with the surrounding cultural area. This cultural group is known as the Diegueno.

About 1,000 to 1,500 years ago a group of Shoshonean intruders known as the San Luis Rey I and II Complex migrated into coastal San Diego County. When early Hispanic explorers contacted these people, they called them Luisenos. They were separated from the Northern Diegueno at the Agua Hedionda Lagoon. There are many similarities between these two peoples in ecological exploration, environmental setting and temporal placement. The Luiseno projectile points were made predominantly of quartz and the use of ceramics were a late development probably learned from the Northern Diegueno. The Diegueno had a large trade network, while the Luiseno were a mystically sensitive and religious people.

Protohistoric Period

The Hispanic intrusion (1769-1822) into native-American southern California affected the coastal tribes and peoples living in well-traveled river valleys. The Mexican Period (1822-1848) saw continued displacement of the native population by expansion of the land grant program and development of extensive ranchos. The Gold Rush and the concomitant granting of statehood, combined with an influx of Anglos caused a rapid displacement of the natives, as well as deterioration of their culture and lifeways.

Onsite Resources

The perennial creeks, level land, abundant riparian resources and lithic tool sources made the Hansen's Creek and Sweetwater River area the location of intense prehistoric and historic activity. A survey of 616 acres of the project site in 1978 revealed the presence of one previously recorded archaeological site, seven newly discovered archaeological sites and three artifact isolates. Additionally, evidence of another previously recorded archaeological site was noted in an area immediately adjacent to the southwestern boundary of Hansen's Ranch. Extensive archaeological investigation within the project area of Hansen Ranch began in the early 1920s when Malcolm Rogers of the San Diego Museum of Man surveyed the area. Subsequent field work has included several archaeological surveys for a variety of projects and two excavations. In 1981, as a part of the archaeological resources impact mitigation required as conditions of approval of the Hansen's Ranch Specific Plan (TM 3958, 4216 and 4252) RECON was retained to survey and assess the impacts to all cultural resources on Hansen's Ranch. A description of the recorded archaeological remains is detailed in the following discussion.

Previously Recorded Archaeological Resources

SDi-4774, SDi-4772

Site SDi-4774 was partially relocated during the field investigation in 1978. Record search data indicated that the major portion of this archaeological site lay

immediately beyond the southern boundary of the area surveyed; however this area is included within the current project site. SDi-4772 was said to lie east of Jamacha Boulevard near the roadway. Dense ground cover obscures much of this area at times during the year, and the area has been extensively farmed over the years. The August 1981, and May and July 1988 surveys by Recon found no resources on the site of SDi-4772 or in the surrounding area. However, the May and July 1988 surveys relocated and documented SDi-4774. The site consists of a broad scatter of primary and secondary flakes clustered around flat metavolcanic outcrops in the upper slopes of the H&S property site.

Newly Recorded Archaeological Resources

W-2086, W-2087, W-2088, W-2090, W-2091 and W-2092

The investigation conducted in 1978 by Westec Services, Inc. identified six previously unrecorded archaeological sites, all probable quarry sites, located within the southeastern portion of the proposed project site. Sites W-2086, W-2087, W-2088, W-2090, W-2091 and W-2092 exhibit Black Mountain metavolcanic flakes scattered around large exposed bedrock outcroppings of the same material. Specifically, at sites W-2086, W-2087, W-2090, and W-2091, only flakes and debitage were noted. However, site W-2088 contained a chopping tool of probable San Dieguito manufacture, as well as several cores indicative of tool-making activities and Site W-2092 contained several flakes and cores.

The 1981 survey by Westec Services, Inc. found no evidence of cultural materials at any of these sites, although they did locate the marking tape from the previous survey. The area has been extensively disturbed by offroad vehicle use and other unauthorized use.

W-2089

Located on a ridge extending from the highest elevation within the project site, archaeological locale W-2089 was said to consist of a small lithic scatter containing several flakes and a flake scraper by the 1978 archaeological survey. The 1981 survey found no cultural material. The site area had been disturbed by a dirt road and the dumping of trash.

W-172b(SDi-185b)

This site is a portion of a larger site originally labelled SDM-W-172, which encompassed the area around Hansen's Creek at Isham's Springs. The site was divided into SDM-W-172a and SDM-W-172b by Russell Kaldenberg in 1975 when the portion of Rancho San Diego immediately north of the springs was developed. A major investigation of the entire site and salvage of materials was conducted by RECON in 1975 prior to grading and development of the upstream area. The development resulted in up to thirty (30) feet of fill being placed on a portion of SDM-W-172, with the edge of the fill roughly corresponding to the property boundary.

The site was surveyed again in 1975 by Gary Fink of the County of San Diego, and Caltrans, in 1977 by Sue A. Cupples, and in 1978 by Westec Services, Inc. In August 1981, RECON surveyed the area again, digging trenches and test pits to determine the area of the site that contained cultural material, and the likely impact of the adopted Hansen's Ranch Specific Plan on SMD-W-172b. Over the years, some 7,000 artifacts have been recovered from both SMD-W-172 loci A and B. These materials are stored at the San Diego Museum of Man. Materials found at the site have included metates, manos, cores, flakes, scrapes, hoppers, one blade, sherds, shells, beads, glass, metal, and a 1907 coin. SMD-W-172 is a multi-cultural site - that is, one showing evidence of use by the San Dieguito, La Jolla, and Kumeyaay cultures as well as the historic Isham Springs bottling operation described below.

History

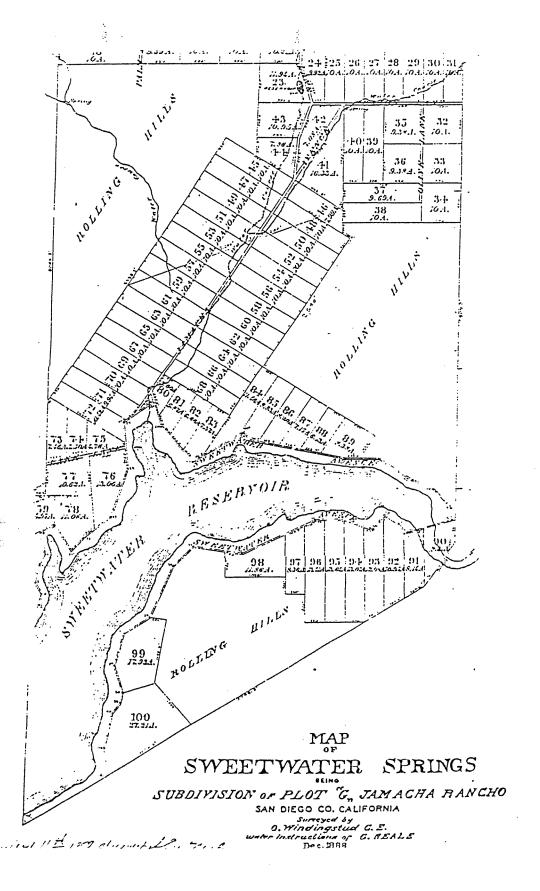
Background

The area around Isham Springs and Hansen's Ponds is designated a resource conservation area (RCA 15) not only because of its biological value, but also because of its cultural and historical importance.

The mineral springs near the northwestern boundary of the project site have been the focus of human settlement and activity since prehistoric times. Through the years they have been known by a variety of names--Jamacha Springs, Isham Springs, Baldhead Springs, Foster's Springs, Sweetwater Springs, and Hansen's Ponds. RCA 15 is located on Plat G of the Jamacha Rancho. Originally a Mexican land grant belonging to Dona Apolinaria Lorenzana, by 1881 ownership of the property was claimed by a number of individuals who held undivided interest in the original grant. The ownership controversy resulted in subdivision of the Jamacha Rancho among the various claimants. Plat G was granted to Mrs. E.A. Pendleton. Exhibit 3-13 shows the plot map for the area from 1881.

By 1885, the property containing the springs had been purchased by George Neale, a prominent San Diego attorney. Neale developed a small ranch on the land. He built a house on a knoll overlooking the springs and a barn near the spring site. In 1891, Neale built a cobblestone milkhouse at the springs which utilized the cold spring water for the milk's preservation.

Captain Charles Fitzallen (the caretaker hired by Neale) and Christian Jepson (owner of an adjacent ranch) claimed to have had their baldness cured by application of water from the springs. Captain Fitzallen told his friend Alfred H. Isham, promoter and business man. In 1892, Isham began to sell the California Waters of Life. The stream of water utilized in the milkhouse was said to be the source of the medicinal power and the milkhouse was undoubtedly used by Isham as his first bottling plant. Neale retained ownership of the property and leased Isham rights to sell the spring water. Isham also used the Neale house, built in 1885, as a residence for his children and employees. Sometime after 1892, a second bottling plant was erected northwest of the cobblestone milkhouse. This structure consisted of a cement reservoir constructed to collect the spring water. Remnants of this structure, as well as ruins of the cobblestone milkhouse still stand on the property. However, no evidence could be found to indicate when the cement reservoir was built. It did not exist in 1892 when Isham began to market the water, but must have been constructed prior to 1908 when he quit selling California Waters of Life.



Jamacha Rancho
The Pointe San Diego



In 1906 Isham ceased selling California Waters of Life after an expose of the exaggerated claims for the product was published in Colliers Weekly. Between 1908 and 1911, N.C. and E.J. Foster bottled and sold the water. They were prosecuted and closed, however, for violation of the Pure Food and Drug Act of 1906. A 1912 photograph of the spring site shows the Neale house and outbuildings in a good state of repair. In 1913 and again in 1922 and 1923, Messrs. Carlson and Hubbart attempted to promote the water. They enjoyed only limited success and after 1923 made no further attempts to sell the product.

During the mid-1920s, the Neale house was occupied by the Esterbloom family who were caretakers for the property. The spring waters still retained a reputation for providing medicinal benefit among the residents of San Diego and Spring Valley, and many local inhabitants regularly visited the springs to fill their own containers with water. One long-time resident of Spring Valley remembers visiting the spring during the mid 1920s to obtain water. She recalls that the bottling facilities were abandoned but still standing. Broken bottles were scattered around and inside the structures and troughs that used to fill the bottles remained intact. In 1926, real estate developer Fred J. Hansen purchased 1,500 acres of the original Jamacha Rancho which included the springs. A 1928 aerial photograph of the springs shows the Neale house and outbuildings still standing (see Exhibit 3-14).

By the mid-1930s, the buildings at Isham Springs had been abandoned. The area, however, still remained popular with local residents as a picnic site. After 1940, the only use of the spring site was by Fred Hansen who utilized the area as part of his ranch. During the 1940s, Hansen dammed the creek south of the springs, creating the two ponds which exist there today. The Neale house stood nearby until the mid-1960s when it was demolished.

The early years, Isham Springs became a local legend, both because of the escapades of Isham and because of the water's acclaimed medicinal value. Belief in its curative powers persisted for years after the water had gone off the market. The watering tanks created by Hansen for his livestock have been illegally used by area residents for swimming and fishing—inspite of no trespassing signs. This is a concern to the owner and the community as many dangers exist as evidenced by the drowning of two children in the past. It is likely that preventive action will be required for the safety of the public.

3.3.2 PROJECT IMPACTS

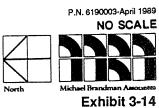
In August 1981, Susan Hector of RECON was retained by the property owner to survey, photograph, and recover materials from all of the archaeological sites likely to be affected by the development of the Hansen's Ranch Specific Plan. The work was conducted in accordance with the conditions of approval of the tentative subdivision maps implementing that specific plan, and in consultation with staff in the Environmental Analysis Division of the San Diego County Department of Planning and Land Use. Eight sites and two isolates were investigated on that portion of the property lying east of Jamacha Boulevard, including W-2086 through W-2092, isolates B and C, SDi-4772, and SDi-4774. All of these locations were examined and no significant cultural material was found at any of them. The sites were recorded in areas that had been disturbed by off-road vehicle activity and farming (on the lower slopes). It was determined that no significant impacts on cultural resources would occur through construction and development of the hillside areas south and east of Jamacha Boulevard. It should be noted that SDi-4774 could not be located during the August 1981 survey; however, it was located in 1988.

In addition to the August 1981 investigation, RECON performed an on-foot survey on May 20, 1988, to assess and provide information regarding the archaeological resources at sites SDi-4772 and SDi-4774. Shattered metavolcanic stone was found in the area of SDi-4772, but no flakes or other culturally modified materials were sighted. However, SDi-4774 consisted of a broad scatter of primary and secondary flakes, which were clustered around flat metavolcanic outcrops located in the upper slopes of the project area. RECON recommended further assessment of site SDi-4774 to determine its function and artifactual variability.

In July 1988, RECON conducted an archaeological study at site SDi-4774. The site was evaluated according to the California Archaeological Resource Identification and Data Acquisition Program for Sparse Lithic Scatters, and based on criteria for size, artifact density, artifact variability, and the lack of a discrete subsurface deposit, the site was determined to qualify as a sparse lithic scatter.



1928 Aerial Photograph of Springs The Pointe San Diego



The archaeological study included surface observations and subsurface testing. The site consists of two distinct loci. Locus A is located on a knoll, which has been disturbed by mechanized quarrying and off-road vehicle activity. Locus B is located east of Locus A and has also been heavily disturbed. Seventeen flakes were recovered from Locus A and 362 flakes were recovered at Locus B during surface observations.

Two 1 x 1-meter test units were excavated at site SDi-4774, one at Locus A, and one at Locus B. The unit at Locus A was excavated to 20 centimeters. Only two pieces of shatter were produced from this unit. The unit at Locus B was excavated to 30 centimeters and produced 112 flakes and shatter. This material was identical to the surface material found at Locus B. No other artifacts were recovered that would indicate a habitational component of the site.

Based on the results of the data recovery of site SDi-4774, it was determined that the site functioned as a rock quarry, and may have been utilized by inhabitants of site SMD-W-172. However, because of the lack of variability in the lithic collection and the lack of a discrete subsurface deposit, it was determined that site SDi-4774 was not characterized by unique archaeological resources, and therefore, no significant impacts would result from the proposed project.

West of Jamacha Boulevard, the 1981 investigation concentrated on defining the boundaries of site SMD-W-172b/SDi-185 and determining whether the proposed development and widening of Jamacha Boulevard and Sweetwater Springs Boulevard would affect it. The right-of-way areas and grading corridors of Jamacha Boulevard and Sweetwater Springs Boulevard were tested by excavation of backhoe trenches and 1 x 1-meter excavation units. With the exception of one flake, no other cultural materials were sighted. Therefore, it was determined that the widening of these two streets would not affect cultural resources at SMD-W-172b. Also in 1981, RECON and the County of San Diego concurred upon an easement encompassing SDi-185. This easement is depicted on Exhibit 3-15 as the RECON easement.

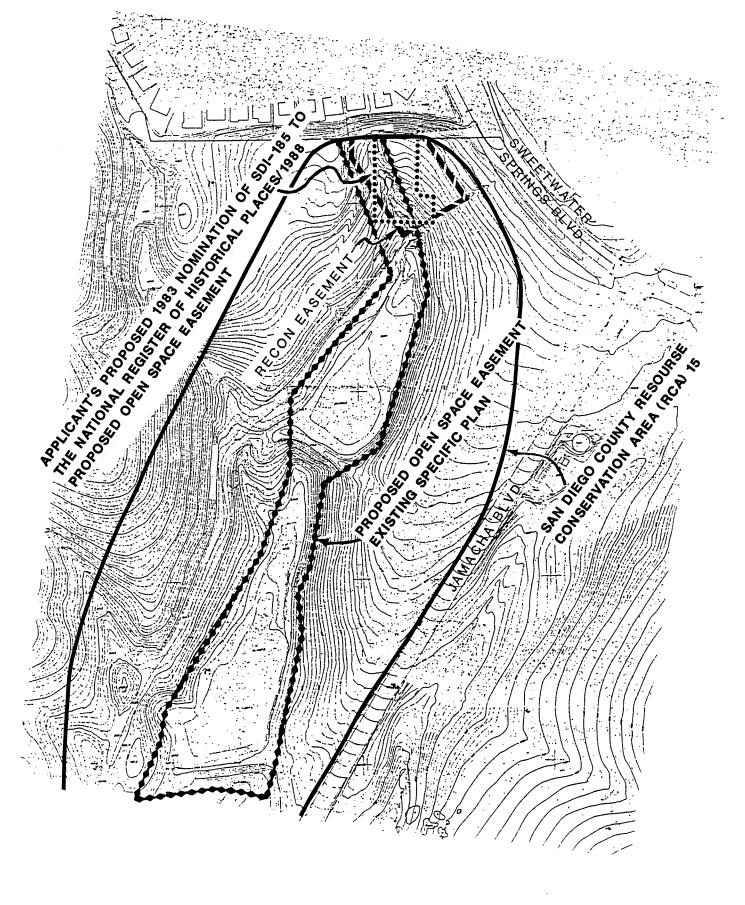
An area of approximately 0.7 of an acre immediately adjacent to Isham Springs is proposed by the applicant to be dedicated as an open space easement. This proposed easement has not been accepted by the County of San Diego Department of Planning

and Land Use. Exhibit 3-15 illustrates the area covered by the applicant's 1983 nomination of the site to the National Register of Historic Places, which was the area proposed as an amended resource conservation area (RCA) by Pointe in 1988, the easement identified by RECON, Inc. in 1981, the current RCA 15 boundaries as shown on the adopted specific plan, and the current RCA 15 boundaries as shown in the county's conservation element.

As previously stated, RECON performed another archaeological test investigation of site SDi-185 in October 1988. This investigation was in response to a request by the United States Army Corps of Engineers to determine if significant portions of site SDi-185 would be affected by the proposed drainage improvements and foot bridge. Under the current project, the Pointe San Diego proposes to develop a portion of the land within the 1981 easement, which would include drainage improvements to the existing 72-inch storm drain that terminates at the project boundary, and the construction of tennis courts. The proposed project includes a revised open space easement that surrounds the significant archaeological resources of site SDi-185. This easement was recommended by RECON following their October 1988 investigation, and is illustrated in Exhibit 3-16. This new easement is identified as the 1989 proposed open space easement/The Pointe San Diego resource conservation area. However, this proposed open space easement was not accepted by the County of San Diego Department of Planning and Land Use.

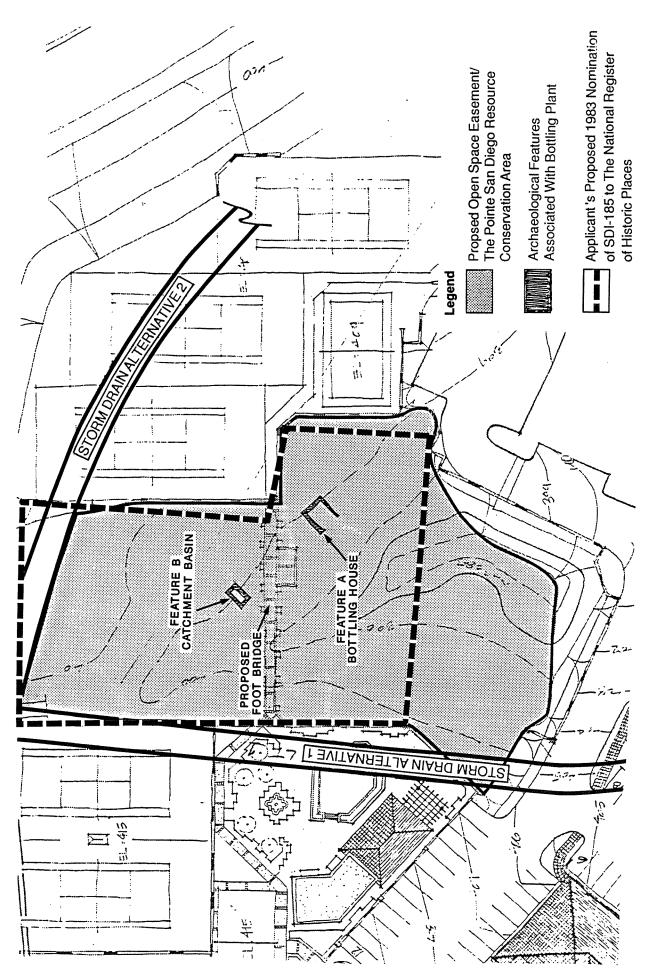
The October 1988 survey consisted of a surface examination of the entire Isham Springs area. Five 1 x 1-meter test units were excavated, three near the prehistoric deposits and two adjacent to the historic features (i.e., catchment basin and bottling house) of site SDi-185.

Three test units (Units 1, 2, and 3) were excavated within the area proposed for development of tennis courts, easterly of the drainage area. Concrete debris was found throughout Unit 1, which may indicate that this highly elevated area was developed to control erosion from the nearby culvert located to the north. Three flakes and one potsherd were located within Unit 2, and one flaked stone tool was recovered from Unit 3.



Resource Conservation Area (RCA) Comparison The Pointe San Diego





The Pointe San Diego Resource Conservation Area Proposed Open Space Easement/ The Pointe San Diego



The survey confirmed the location of historic features (i.e., Feature A and Feature B in Exhibit 3-16) previously identified by Westec Inc. in 1983. These features include the remaining cultural material from the bottling house (Feature A) and the catchment basin (Feature B) constructed in the late 1800s. Feature A has suffered from erosion and only portions of it were found during the October 1988 survey. An area characterized by bottle fragments, which represents a dump for the bottling house, was also found.

Feature B has been affected by slope wash, and the eastern wall was not located during the survey. In addition to Features A and B, a third feature (Feature C) was identified. Feature C is located approximately 10 meters north of Feature B near the edge of the creek. Feature C is characterized by the same concrete as Feature B, and therefore, may have been associated with each other during the California Waters of Life era.

Two additional test units were excavated east of Features A and B. Test Units 4 and 5 were excavated to determine if any prehistoric or historic deposits exist that may be associated with the historic features. No nearby artifacts were located at Unit 4; however, two flakes and historic glass, plaster, and metal occur to 20 centimeters below the surface. Glass and plastic remnants were recovered at Unit 5 from the ground surface to approximately 20 centimeters.

The prehistoric resources located in the test units surrounding features A, B, and C in the proposed open space easement on the property do not represent a significant resource, and therefore, would not be eligible for inclusion on the National Register of Historic Places. The prehistoric remains have been heavily disturbed by brushing, discing, and erosion. Furthermore, many of the prehistoric resources have been collected by previous investigators of the site and no longer exist within the project area.

However, significant historic resources exist within the proposed open space easement (Figure 3-16). These resources consist of surface features and subsurface deposits associated with the Neale homestead and the Isham California Waters of Life Bottling Plant. This portion of SDi-185 is potentially eligible for the National Register of Historic Places.

The Pointe is proposing two alternative storm drain systems near the proposed easement area (Exhibit 3-16). A storm drain would be extended from the existing 72-inch storm drain that terminates at the northern project boundary from the subdivision to the north. If this drain was not extended, the Isham Springs area and resort area would be flooded in a major storm (see Section 3.2 for a discussion of drainage in the area).

As shown on Exhibit 3-16, a portion of the Storm Drain Alternative 1 would be located within the western portion of the open space easement. However, no significant cultural resources were located within this area of the easement and none are expected to occur (Hector, pers. comm., 1989). Therefore, no significant impacts on cultural resources would result from construction of Storm Drain Alternative 1. Furthermore, Storm Drain Alternative 2 would be located beyond the proposed open space easement, and would not affect site SDi-185.

As discussed above, the proposed project includes tennis courts, which are planned to be located in the previously proposed 1981 RECON open space easement. The proposed open space easement does not include the area planned for tennis courts, because no significant cultural resources were located within this area of the site during the October 1988 survey and June 1989 testing. Therefore, no significant impacts on cultural resources are anticipated from development of the proposed tennis courts (Hector, pers. comm., 1989). The County of San Diego Department of Planning and Land Use has accepted the proposed open space easement.

The Pointe San Diego proposes to cut back the non-native vegetation that is currently obscuring site SDi-185, stabilize the foundations of the historic features, and construct a footbridge across the Isham Springs site (Exhibit 3-16) to permit people to view the historic features without endangering them. While removing non-native vegetation, a qualified archaeologist shall be present and monitor the removal to ensure that site SDi-185 would not be disturbed. In addition, the project includes placement of native vegetation in the drainage area of the springs. A combination of grade separation and fencing will be used to protect the site. The construction of the footbridge and placement of vegetation in the vicinity of the historic features could potentially result in significant impacts on cultural resources.

The existing RCA 15 boundary protects the archaeological and historical sites as well as the aquatic and riparian habitats of Hansen's creek and ponds. The adopted Hansen's Ranch Specific Plan preserved this area in an open space easement/resource conservation area (see Exhibit 3-15). The Pointe San Diego is proposing to reduce the area covered by the RCA designation and replace the aquatic and riparian habitat by an enhancement of the habitat on Bancroft Creek. Historic and archaeological resources cannot be replaced (they are by definition unique) and that is the motivation for preserving this area.

The applicant has obtained a permit from the U.S. Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act, as amended allowing replacement of the existing ponds and the aquatic and riparian habitat by enhancement of Bancroft Creek. All federal activities, including federal permits for actions to be taken by states, local jurisdictions, or private parties must take into account the effects of the proposed undertakings on properties included in or eligible to the National Register of Historic Places, in compliance with federal regulations (36 CFR Part 800). These regulations require the federal agencies, to the maximum extent possible, to minimize the harm to any national historic landmark that may be directly and adversely affected by an undertaking, and to afford the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to review and comment on the project.

3.3.3 CUMULATIVE IMPACTS

Impacts to cultural resources are site specific and are not expected to be cumulatively affected by other development.

3.3.4 MITIGATION MEASURES

The following measures are recommended to mitigate significant impacts on historic resources.

- 1. The proposed project shall be redesigned to exclude the proposed footbridge across SDi-185 or design a footbridge that places the footings on a minimum of 12 inches of clean, sterile fill to preserve any artifacts and avoid disturbance of Features A, B, or C of SDi-185.
- 2. If a footbridge is implemented, all final plans for the footbridge must be reviewed by the Corps archaeological staff prior to construction. During construction, a qualified archaeologist must be onsite to monitor the placement of any required footings to ensure that subsurface historic deposits will be avoided.
- 3. Planting of native plants within the proposed open space easement, and more specifically, within the drainage area of the springs, shall be limited to reduce potential disturbance to the historic features. If any landscaping is to be planted within the site area, a minimum of 12 inches of clean, sterile fill shall be placed on the site to protect it from disturbance. A qualified archaeologist shall be present to monitor the placement of any fill material.
- 4. All irrigation systems within the boundaries of the site shall be constructed above ground or within the minimum 12-inch sterile fill material. Vegetation removal shall be monitored by a qualified archaeologist to ensure that the site SDi-185 will not be disturbed.
- 5. The project design shall include development of fences, walls, or grade differences around the boundaries of the proposed open space easement to reduce potential disturbance by visitors.
- 6. An archaeological monitoring program shall be implemented subsequent to project development to ensure that indirect impacts from vandalism will not occur. In addition, a qualified archaeologist should inspect the site on a regular basis in order to monitor any disturbance of the site.
- 7. Letter reports from the archaeologist shall be provided to the ACOE at the completion of construction or improvement activities on site SDi-185. The ACOE shall be informed of any project changes associated with this preservation program.
- 8. All archaeological work to preserve site SDi-185 shall be carried out by, or under the direct supervision of, a person or persons meeting or exceeding the appropriate qualifications set forth in the Professional Qualifications Standards section of the "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation" (Fed. Reg., Volume 48, No. 190, September 29, 1980, pp. 44716-42).
- 9. A U.S. Army Corps of Engineers 404 permit is required prior to destruction of the existing ponds and replacement of the aquatic and riparian habitat within Bancroft Creek. It should be noted that the steps involved in compliance with 36 CFR Part 800 for the 404 permit have been approved and the 404 permit has been issued to the applicant (see Appendix E).

- 10. Prior to issuance of an occupancy permit for the resort, the project applicant shall retain a qualified professional to prepare and submit a nomination of the Isham Springs site to the National Register of Historic Places as a historic resource.
- 11. Prior to issuance of an occupancy permit for the resort, the applicant shall submit a nomination of the Isham Springs site to the County Historic Site Board under Section 7550 of the Zoning Ordinance of the County of San Diego.
- 12. Grading activities (i.e., surcharging) could occur within 6 to 12 feet of the bottling house remains. As a safety measure, plywood shoring should be placed on the inside of the bottling house remains to avoid collapse should a surcharge inadvertently be applied to the walls. Placement of the plywood shoring shall be monitored by a qualified archaeologist.

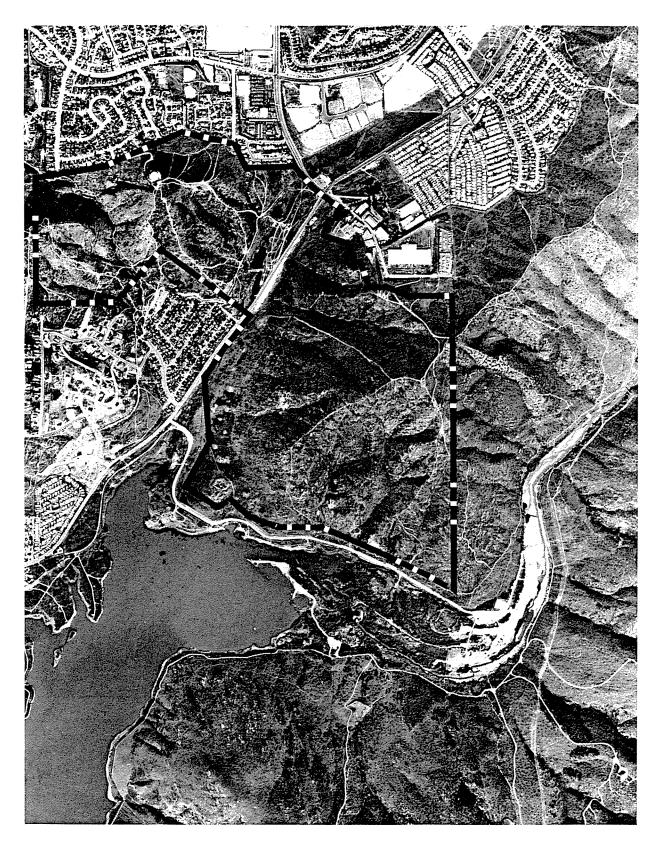
3.4 LAND USE

3.4.1 EXISTING CONDITIONS

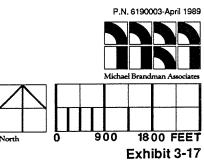
The project site is located south and west of the intersection of Sweetwater Springs Boulevard and Jamacha Boulevard in the Spring Valley community. The site is locally known as "Hansen's Ranch." Exhibit 3-17 is an aerial view of the site and surrounding development. To the west of the site are the Dictionary Hill and La Presa neighborhoods. Development in this area is predominantly residential, and much of it was built prior to World War II. North of the site is a Rancho San Diego residential neighborhood, with commercial uses along Sweetwater Springs Boulevard, and industrial development just east of the intersection of Sweetwater Springs Boulevard and Jamacha Boulevard. Also east and north of the Pointe San Diego site is the remaining 3,000 acres of the Rancho San Diego Specific Plan Area, which will contain 6,160 dwelling units of varying densities, 51 acres of commercial development, 61 acres of light industrial uses, and a 47-acre towne centre. Full buildout of this project is expected to take approximately 10 years, with the areas nearest to the Pointe project proposed as open space. South of the Pointe site is the Sweetwater River and southwesterly of the site is the Sweetwater Reservoir.

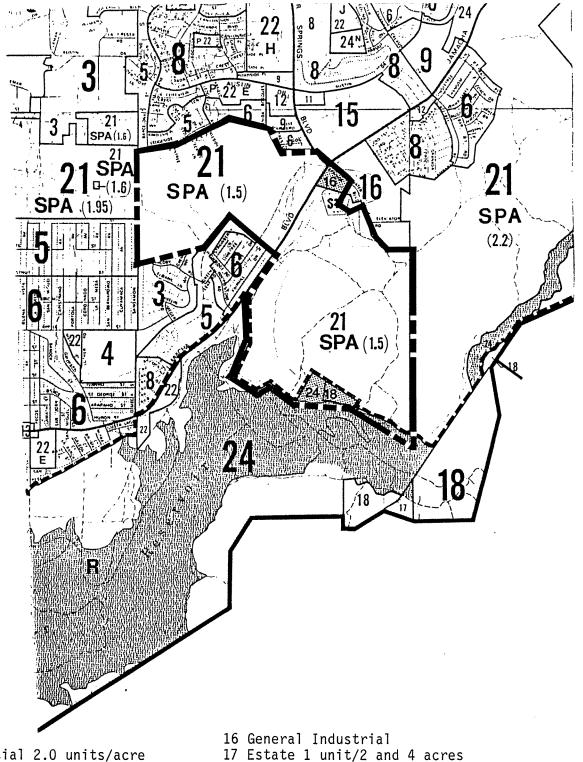
The Pointe San Diego site itself is unimproved, except for two Otay Water District water tanks and one pumping station and a cable television receiving station. Also located onsite are two ponds (Hansen's Ponds). The television station and water tanks are located on top of the hills on the site and the ponds and pumping station are near Jamacha Boulevard. Except for Hansen's Ponds, the developed portions of the site will not be disturbed by the proposed resort community.

Most of the project site is shown as Specific Plan Area (SPA) 1.5, the Hansen's Ranch Specific Plan area, on the Spring Valley community plan. However, the applicant is proposing to add three parcels to the SPA designation which are not currently included in this land use designation. The current land use designations for the entire site are shown on Exhibit 3-18 and described as follows:



Aerial Photograph of The Pointe San Diego Site **The Pointe San Diego**





LEGEND

3 Residential 2.0 units/acre

4 Residential 2.9 units/acre

5 Residential 4.3 units/acre 6 Residential 7.3 units/acre

8 Residential 14.5 units/acre 9 Residential 43.0 units/acre

11 Office Professional Commercial

12 Neighborhood Commercial

15 Limited Industrial

18 Multiple Rural Use 1 unit/4.8 and 20 acres

21 Specific Plan Area

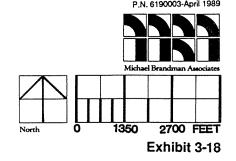
22 Public/Semi-Public

24 Impact Sensitive Area 1 unit/4.8 and 20 acres

—-Current Urban Development Boundary

Flood Plain

Existing Sweetwater Community Plan Land Use Designations The Pointe San Diego



Specific Plan Area 1.5 (use category 21)	632.8 acres
Multiple Rural Use	7.4 acres
General Industrial	5.3 acres
Impact Sensitive Area	
mom 4.7	
TOTAL	653.3 acres

In 1980, the Board of Supervisors approved a specific plan for a portion of the subject site (573 acres) which did not include all of the area designated as SPA 1.5 or the three parcels currently proposed for addition to the SPA designation. Implementing tentative subdivision maps and major use permits for a majority of this specific plan were approved, but the subdivision maps were never recorded and the implementing approvals have now expired. Land uses permitted under the Hansen's Ranch Specific Plan and the Lake View Terrace Plan are shown in Table 3-5. The Hansen's Ranch Specific Plan Map is Exhibit 3-19, and the Lake View Terrace plan is Exhibit 3-20. The Pointe San Diego will occupy both sites.

All of the site is within the urban limit line designated by the Regional Growth Management Plan (RGMP) with the exception of a 15.2-acre parcel immediately adjacent to the Sweetwater Reservoir property. The project applicant is requesting that the urban limit line be moved to include this parcel within the current urban development area (CUDA).

The Conservation Element of the San Diego County General Plan shows two Resource Conservation Areas (RCA) located on the project site, RCAs 10 and 15. In addition, 7.8 acres adjacent to Sweetwater Reservoir have a land use designation of "impact sensitive area." The Pointe Resort will result in the removal of Hansen's Ponds and relocation of a portion of RCA 15 (the aquatic and riparian habitat but not Isham Springs) to the Bancroft Creek area. For a discussion of the biological issues related to this proposed relocation, see Section 3.5. The impacts on cultural (archaeological and historic) resources are discussed in Section 3.3.

The underlying zoning on most of the site is currently S-88 (Specific Planning Area) which is overlaid by various provisional zones as required to implement the approved Hansen's Ranch Specific Plan. Exhibit 3-21 shows the existing zoning of the site and surrounding areas. The project applicant is requesting a zone change to implement the proposed Pointe San Diego Specific Plan.

COMPARISON OF PERMITTED AND PROPOSED LAND USE TABLE 3-5

(HANSEN'S RANCH SPECIFIC PLAN AND

EXISTING PLAN

LAKE VIEW TERRACE PLAN)

PROPOSED PLAN

Land Use Category	Gross Acreage	Units/Sq. Ft.	Gross Acreage	Units/Sq. Ft.
Single-family Detached	147.1 acres	95 units	325.8 acres	619 units
Hillside Duplex	347.4 acres	461 units	1	-
Multi-family Res./Apartments	15.6 acres	150 units	24.6 acres	236 units
Mobile Homes	70.0 acres	105 units ^a		-
Commercial/Office-Professional Park	15.9 acres	162,000 sq. ft.	27.8 acres	350,000 sq. ft.
Office	37.1 acres	377,800 sq. ft.	31.4 acres ^D	358,300 sq. ft.
Industrial	12.0 acres	28,000 sq. ft.	8.2 acres	!
Resort	1	. 1	53.0 acres	641 Suites/164,000 sq. ft.
Convention Center	!	:	!	73,000 sq. ft.
Restaurants (3)	1		ນ	36,500 sq. ft.
Golf Course/Clubhouse	1	1	149.0 acres	7,500 sq. ft.
Equestrian Center		-	ນ ເ	4,500 sq. ft.
Health Center	!	40-00	υ e	5,300 sq. ft.
Child Care Center	1		יי	4,500 sq. ft.

general plan. Therefore, only 105 units are used for this analysis. The Lake View Terrace Plan included more units than permitted by the general plan because a sales agreement allowed the H&S site to use the unused permitted units of the Hansen's Ranch Specific The Lake View Terrace Plan included 292 units; however, only 105 units are permitted on the project site according to the existing

855 units, 641 suites and

33.5 acresd 653.3 acres

8.2 acres^d 653.3 acres

Open Space TOTAL

a

1,003,600 sq. ft.

567,800 sq. ft. 811 units and

80,000 square feet of office space is included in the resort acreage.

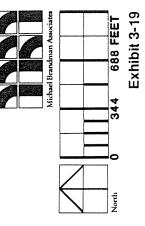
These gross acreages are included in the resort acreage. o o o

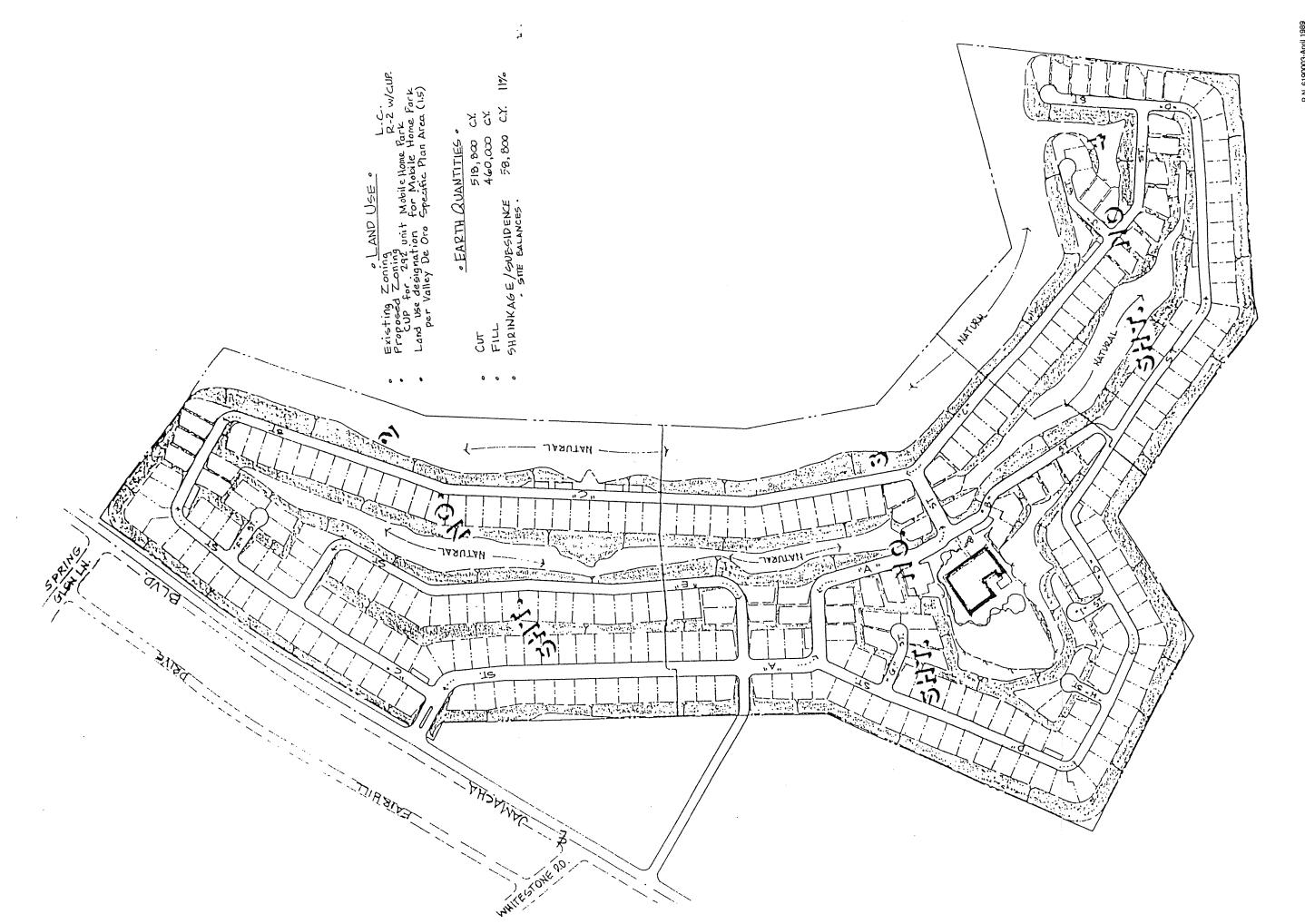
The open space acreages for the existing plan and proposed plan are not gross or net acres. These open space acres are the area that will be zoned for open space. The gross open space acreage for the proposed plan is 426.4 acres and the gross open space acreage for the existing plan is unknown.

Source: Michael Brandman Associates, Inc. 1989



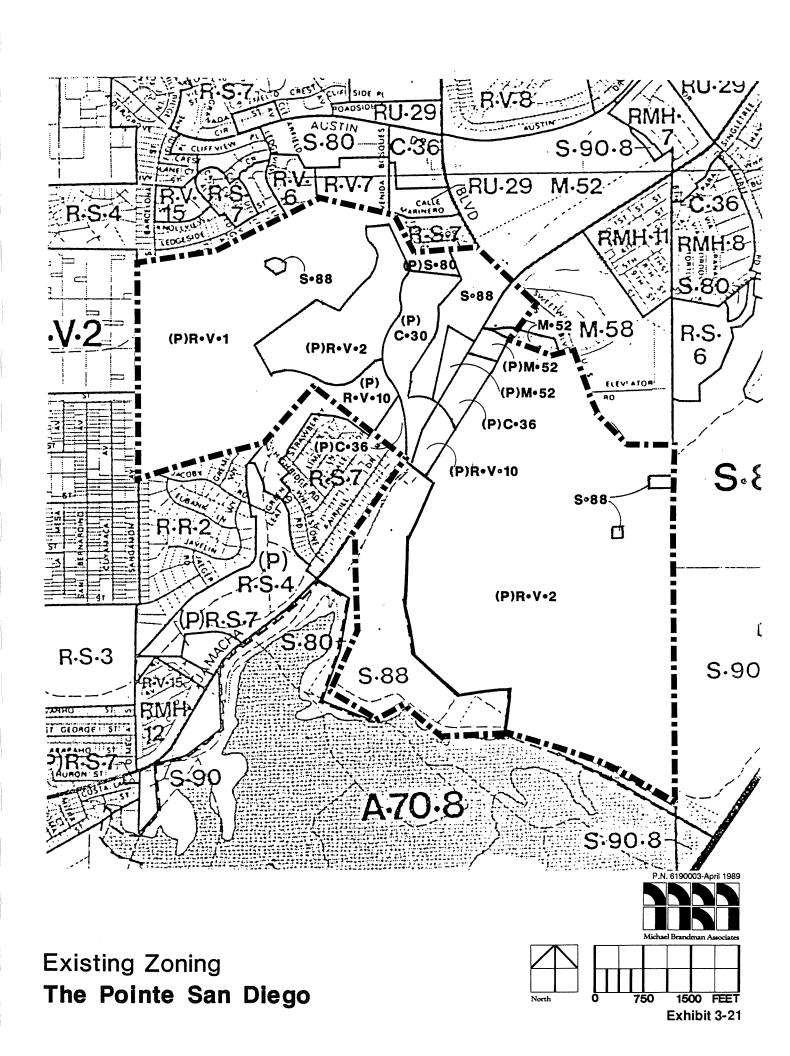
Hansen's Ranch Specific Plan **The Pointe San Diego**











3.4.2 PROJECT IMPACTS

The project proponent is proposing to develop a luxury destination resort community in six phases. Land uses will include 358,300 square feet of corporate offices, restaurants, low-density residential units, apartments, a golf course, an office-professional park, and the resort itself. Color palette 1 in Section 2 illustrates the proposed project and Table 3-6 summarizes the proposed development. As part of the proposed project, the applicant is providing approximately 25 acres for the ultimate South Bay Expressway right-of-way through the site.

The project proposes private roads built to private road standards which would be maintained by the project. This standard is especially appropriate in the steeper portions of the site because its use precludes the more extensive grading that would be required with full public-standard road construction. It is anticipated that these private roads will not be used extensively by adjacent residents taking "short-cuts" through the site. Most residents would probably take more direct access to major streets on existing roads, rather than going on the more narrow onsite streets. However, the county recommends public roads on segments that serve 250 units or more.

The proposed Pointe San Diego Specific Plan would concentrate more intense uses (the resort, the three restaurants and corporate offices), in the area along Jamacha Boulevard, well away from existing residential uses. In addition, the resort itself will be tucked into the valley where Hansen's Creek is located, using grade separation to protect the privacy of residents north of the complex. No mechanical equipment will be located on roofs adjacent to these homes. The existing specific plan allows office development on the same grade and immediately adjacent to the homes (area S-80 on Exhibit 3-21).

In order to reduce the amount of grading necessary to develop the low density residential units, and efficiently incorporate them into the rugged terrain, the developer is proposing to construct 609 single-family detached homes with a "zero-lot line" concept retaining the majority of the site in open space. The resort complex and corporate office uses will be separated from these residential areas by elevation differences, effective screening, and landscaping. (For a more detailed

discussion of the visual impacts of the proposed project on the surrounding land uses, see Section 3.10.)

TABLE 3-6
PROPOSED LAND USES: THE POINTE SAN DIEGO SPECIFIC PLAN

Land Use	units/sf/ac
Resort	641 suites
Convention Center	73,000 sf
Health Center	5,300 sf
Child Care Center	4,500 sf
Single Family	619 units
Apartments	236 units
Office	358,300 sf
Equestrian Center	4,500 sf
Restaurants (3)	36,500 sf
Golf Course/Clubhouse	18 holes/7,500 sf
Business Park	350,000 sf
Single Family Apartments Office Equestrian Center Restaurants (3) Golf Course/Clubhouse	619 units 236 units 358,300 sf 4,500 sf 36,500 sf 18 holes/7,500 sf

The Spring Valley Community Plan specifies the following general conditions for development of the site:

- 1. Maximum overall residential density will be 1.5 dwelling units per acre.
- 2. All goals, objectives, and policies of the Spring Valley Community Plan shall apply.
- 3. Design should be compatible with the surrounding area.

At a density of 1.5 units per acre, 967 units would be permitted on the 645.1 acres of the site under the control of the applicant. However, only 855 units are proposed, for an overall residential density of 1.33 units per acre. (The Resort Complex proposes a total of 641 suites on the site; these are not classified as residential dwelling units.)

Design considerations are discussed in Section 3.10 (Aesthetics). Table D-1 in Appendix D summarizes the conformance of the proposed Pointe San Diego Specific Plan with the goals, objectives, and policies of the San Diego County General Plan

and the Spring Valley Community Plan. The project proponent is requesting a General Plan amendment to include the following changes:

- adjust the urban limit line to include all of the area which would be controlled and intended for development in this project
- change sheet 6 of the circulation map for the county to reflect the proposed design of the South Bay Freeway (SR 54) and Jamacha Boulevard through the site
- revise the specific plan text in the Spring Valley Community Plan
- relocate the majority of the resource conservation area designation for RCA 15 to the area in which the replacement aquatic and riparian habitat will be located

These are the major impacts of the proposed project on the general plan and community plan for the area.

In addition to the general plan amendments described previously, the Pointe San Diego will require an amendment to the specific plan for the area to reflect and permit the proposed project. The proposed revisions to the Spring Valley Community Plan relating to the adopted specific plan are shown in Section 2. The major changes would be:

- Permit use of the planned residential development concept as an alternative to the 10,000 square foot lots now required
- Revise the disturbed slope criteria to allow differences similar to the approved specific plan using a graded pad concept
- Add an office-professional park, corporate office uses, and an 18-hole golf course
- Increase the percentage of the total site that can be devoted to professional, commercial, and industrial uses from 10 percent to 20 percent based on gross acreage
- Adjust the percentage of undisturbed slopes to represent criteria derived from the final engineered grading plans for the existing specific plan and eliminate the golf course and environmental mitigation areas from the disturbed slope criteria.

The effect of the first of these amendments would be to maintain more of the site in open space under the ownership and control of the homeowners association with resort participation, because the area owned by each unit would be reduced. The development would not be any more dense, nor given the proposed development type, would it appear to be more dense than surrounding developed areas, even though the minimum lot size would be eliminated. Participation by the resort in the homeowners association would ensure the availability and continuity of maintenance and protection for the open space areas.

Elimination of the requirement that half the residential units be located on slopes of less than 50% would permit development of more housing in the hillsides. Modification of the disturbed slope criteria, although it results in more extensive grading than the approved plan, allows more clustering of units and a higher density to support a master planned community and resort. The approved Specific Plan planned to reduce the grading by the use of partially pole-mounted foundations. Upon detailed analysis, this planned procedure was found to be infeasible; the presently proposed project has been designed to have conventional building footings with split-level foundations to minimize grading and visual effects. In addition, evaluation of the number of dwellings previously proposed and the amenities necessary to support those dwellings indicated that additional dwellings would be needed to support the expected amenities. The proposed project design also allows the homesites to be located generally away from the high levels of noise and air pollution associated with the South Bay Expressway. The Pointe San Diego proposes to develop office commercial uses adjacent to the expressway, which to a limited extent buffer the residential areas.

The public golf course could be developed on 73.6 acres of the site near the Sweetwater Reservoir. Development of the golf course would reduce the amount of natural open space as well as commercial and residential development, but increase the amount of private park and public recreation space on the site and in the community. The golf course has the dual use classification as both a commercial and a community recreation amenity. Both the golf course and the office-professional park buffer the Sweetwater Reservoir from proposed residential areas, thereby reducing some of the impacts of suburban residential uses adjacent to sensitive biological habitats such as the reservoir. As shown on Exhibit 3-8b in Section 3.1,

the golf course is buffered from the reservoir by a berm and golf course utility road and a slope. The office-professional park is buffered from the reservoir by a small slope. The golf course and the office-professional park are also separated from the reservoir by a wire fence along the southern boundary of the site.

The increase in the total gross area that can be devoted to commercial, professional, and industrial uses will permit more intensive use of the site; however, the gain in net developed acreage is only slightly above the approved plan. The amount and location of land area proposed for commercial, professional, and industrial uses can be considered appropriate land use since it is located adjacent to Jamacha Boulevard and the South Bay Expressway; areas not appropriate for lower-density residential uses. The resort area is located on the flatter areas of the site, in some places adjacent to Jamacha Boulevard, because these areas allow resort-style development better than the adjacent slope areas. Visitors utilizing the resort may be subject to the greater ambient noise and air pollution levels than residents in the single-family residential areas, but their exposure to these impacts is limited to their short stays at the resort.

The general design philosophy for the project is to create a combination of land uses which will be a successful response to the land use market forces, combining destination resort and golf course, single- and multi-family residential uses and office commercial use. In order to design some of the more rugged portions for single-family residential uses, and to minimize extensive grading in these areas, the project proposes to make use of privately maintained roads which require reduced widths and therefore reduced grading.

The golf course is necessary to support the destination resort use. The golf course was designed with isolated "pocket greens," with successive greens areas folded back on one another to try to reduce the amount of disturbance as much as possible, into a limited area.

The proposed general plan amendment restates the permitted industrial land use area criteria to be based on gross acreage as opposed to being undefined. An analysis of net acreage shows the proposed project would use 69.9 net acres including the golf course club house. An additional 7.8 acres of non-residential land owned by others

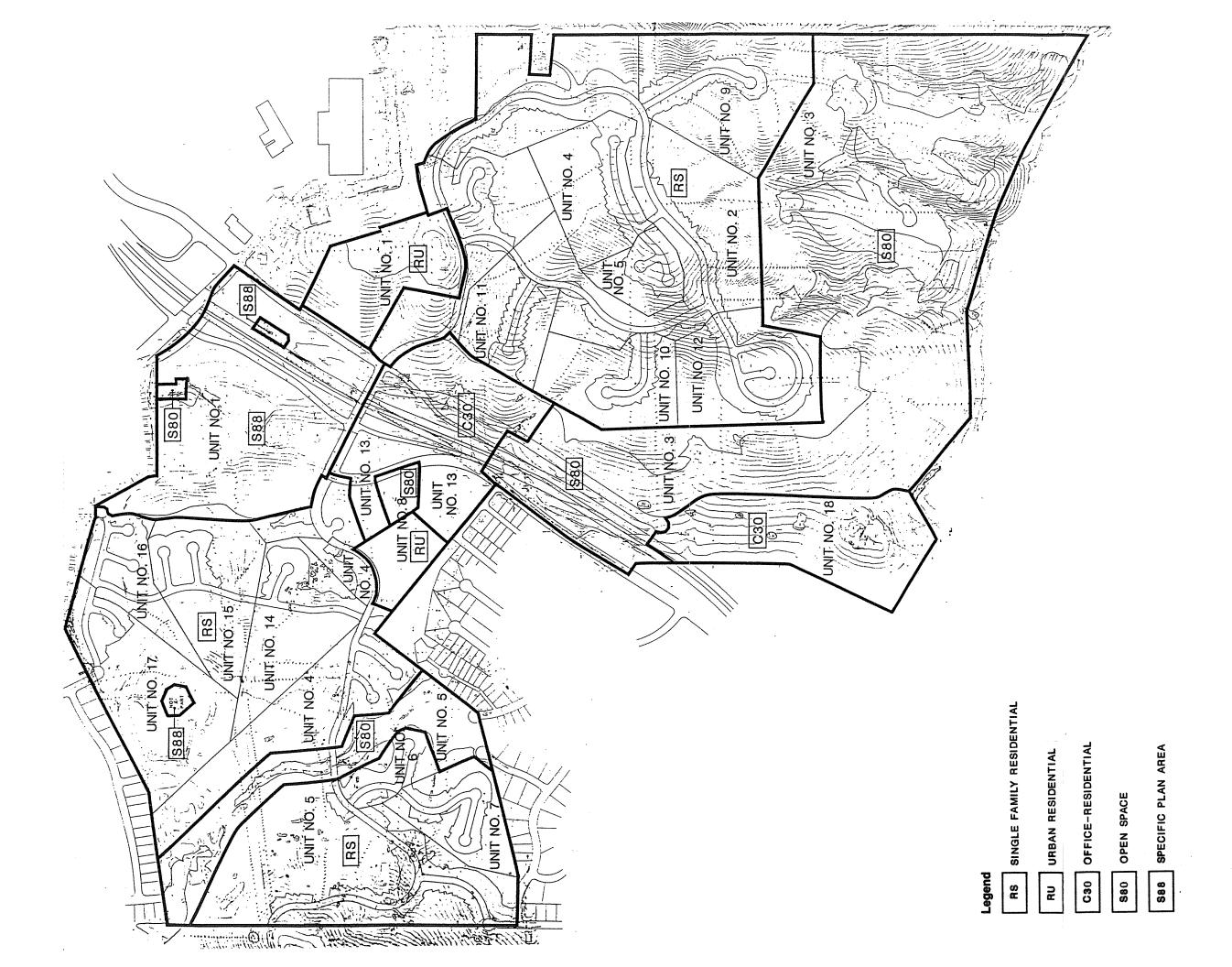
brings the total to 77.7 acres of net useable land under the assumption the entire 7.8 acres is useable. This total net acreage represents 11.9 percent of the total site which could easily be argued is within the present general plan guidelines of "approximately 10 percent." The change to gross acreage with an upper limit of 20 percent much better defines the guidelines while not varying the amount of net acreage that practically can be produced on this site.

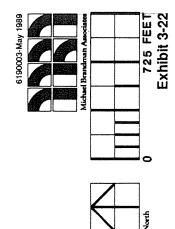
The existing specific plan does not propose as much commercial land, however, the 70 acres containing the office-professional park were not included in the plan. Regardless, the placing of commercial uses adjacent to a proposed expressway is reasonable, especially considering Spring Valley is a bedroom community which is in need of all the local jobs it can get.

When final engineering for the approved Hansen's Ranch specific plan, which theoretically met the "minimum percent of undisturbed area" criteria, was being done it was determined a graded pad concept which disturbed more area was the only buildable approach. Since this concept was approved by County staff it is used to revise the percentages of disturbance allowed based on a slope analysis using the approved specific plan grading plans.

The environmental mitigation areas are undergoing only a "temporary" disturbance and therefore, should not be considered as part of the disturbed area. Golf courses are zoned open space even though they are not native vegetation. They disturb the land but the final product is a low intensity, public recreational facility which is pleasing to the eye as verified by the higher prices golf course homes command. The County's proposed sensitive lands ordinance excludes public recreational facilities from the criteria which is consistent with removing it from the undisturbed slope criteria in the specific plan text.

In addition to the general plan amendments including specific plan text amendments described previously, a rezone of the entire property is necessary to remove the provisional zoning overlays created by the previous Hansen's Ranch project and to implement zoning consistent with the planned Pointe San Diego. The use regulations for this zone are contained in Section 2888b of the County Zoning Ordinance. The proposed zoning is shown on Exhibit 3-22. In addition to the land uses described above, the Pointe San Diego is proposed to include the following ancillary facilities:





- 1. laundry facilities for the entire resort community located adjacent to the resort itself
- 2. maintenance areas for the equipment necessary to maintain the whole resort
- 3. telecommunications facilities located on the site of the current cable television receiving station which is not a part of this project but subject to separate regulations
- 4. specialty and sundry shop(s)
- 5. administrative offices
- 6. cogeneration facilities for onsite electrical generation
- 7. day care and babysitting services for personnel, guests, and the public
- 8. sign making shop
- 9. plant nursery for onsite landscaping
- 10. catering support facilities
- 11. outdoor dining, entertainments, dancing, activities, etc.
- 12. sightseeing tours and travel agency
- 13. barber shop and beauty salon
- 14. florist and gift shops
- 15. bus and other transportation facilities
- 16. animal mascot (Texas Longhorn Steer) at Rustlers Rooste Restaurant
- 17. assembly for outdoor activities such as concerts, cookouts, bonfires, etc.
- 18. car rental agency

Development standards for the Pointe San Diego will be customized for the project by selecting development designators consistent with the proposed uses and the Spring Valley community. Table 3-7 shows the proposed development designators for the project and these designations are consistent with the rezone application filed with the County of San Diego. In addition, the project applicant is requesting modifications to the planned development standards as described below:

TABLE 3-7

PROPOSED DEVELOPMENT DESIGNATORS THE POINTE SAN DIEGO

Single Family Residential Units: 1, 2, 4-7, 9-12, 14-17		Open Space Units: 1, 3, 5 & 8	
Use Regulations	RS	Use Regulations	S80
Neighborhood Regulations	Q	Neighborhood Regulations	Q
Development Regulations		Development Regulations	
Density	5	Density	
Lot Size	3,000	Lot Size	30,000
Building Type	D	Building Type	X
Maximum Floor Area		Maximum Floor Area	
Floor Area Ratio		Floor Area Ratio	
Height	G	Height	C
Coverage	60%	Coverage	
Setback	V	Setback	V
Open Space	Å	Open Space	Å
Special Area Regulations	P	Special Area Regulations	
opecial Area Regulations	ı	opecial Area itegulations	
Urban Residential		Specific Plan Area	
Units: 1 & 8		Units: 1	
Use Regulations	RU	Use Regulations	S88
Neighborhood Regulations	Q	Neighborhood Regulations	F
Development Regulations		Development Regulations	
Density	22	Density	
Lot Size	7 acres	Lot Size	1 acre
Building Type	K	Building Type	X
Maximum Floor Area		Maximum Floor Area	
Floor Area Ratio		Floor Area Ratio	
Height	G	Height	Q
Coverage	60%	Coverage	
Setback	V	Setback	V
Open Space	A	Open Space	\mathbf{A}
Special Area Regulations	P	Special Area Regulations	
Office-Professional Units: 1, 13 & 18			
Use Regulations	C-30		
Neighborhood Regulations			
Development Regulations			
Density			
Lot Size			
Building Type	X		
Maximum Floor Area			
Floor Area Ratio			
Height	G		
Coverage			
Setback	V		
Open Space			
Special Area Regulations	D		
-			

- Section 6621 b, c, d, and e refers to the density of a PRD having mixed uses, but does not consider the density relative to specific plan criteria. If the density calculation is based on only the residential area using the 1.5 dwelling units (DU) per acre set forth in the specific plan, only 522 units would be allowed. If open space were also included, an additional 279 units for a total of 801 would be permitted. Since 855 units are proposed which is 113 units less than the 968 allowed by the specific plan, a waiver of this planned development criteria is necessary.
- Section 6645a requires the 5-foot setback be measured from the private road easement. As shown on Exhibit 2-19 in Section 2, the property line is 5 feet from the face of the curb or AC dike, and therefore this waiver is necessary.
- Section 6645b must be modified to allow for ten feet (10 ft.) or shorter driveways on cul-de-sacs to facilitate the hillside housing concept proposed.
- Section 6645e must be reduced to eight feet (8 ft.) between buildings to accommodate four foot (4 ft.) side yards.
- Section 6645f must be waived to allow for "the zero lot line" concept, which reduces grading.
- Section 6645f must be modified to allow for four foot (4 ft.) areas on the sides and five foot (5 ft.) areas in the back of buildings to permit reduced grading.
- Section 6648b which refers to usable open space and its definition must be waived. The site and THE POINTE concept are unique, and the value of the resource is reduced if this section is applied.

Sensitive Lands Ordinance

The San Diego County Board of Supervisors adopted an Interim Sensitive Lands Ordinance (ISLO) on August 10, 1988, and later extended the ordinance through June 30, 1989. The board then directed staff to return with a permanent version of that ordinance to provide a means of ensuring the protection of sensitive lands through the County's land use decision-making process in the unincorporated area. The Sensitive Lands Ordinance (SLO) in effect at this time controls the development in areas of sensitive lands resources, including environmentally sensitive lands, flood-prone areas, riparian and other native vegetation, significant prehistoric and historic sites, and steep slope lands. The discussion presented here assesses the conformance of the proposed project to the SLO as it exists at the present time.

Steep Slopes

The project site contains approximately 653.3 acres, of which 255.8 acres are in the slope category 0-25 percent, and 397.5 acres contain slopes over 25 percent (see Exhibit 3-2). The approved specific plan and the additional property proposed for addition ("H&S") would disturb approximately 108.3 acres of the land with slopes over 25 percent, while the proposed project would disturb 97.7 acres of slopes over 25 percent. Thus, the proposed project would disturb fewer acres of steep slopes than the already approved project, and should not violate the requirements of the SLO dealing with steep slopes.

Disturbance in Natural Habitat Areas

The most significant wildlife habitats on the site are Diegan coastal sage scrub, which supports the sensitive California black-tailed gnatcatcher (see Section 3.5). As can be seen in Table 3-14 in Section 3.5, the approved (existing) specific plan would impact 165.4 acres of this habitat, while the proposed project would have an impact on 190 acres of the same habitat. Thus, in terms of gross sensitive habitat lost, the proposed plan would impact 24.5 acres more of this habitat than the approved plan. This impact is significant and not mitigable onsite, because there is no location onsite suitable for revegetation of coastal sage scrub.

Open Space

The proposed project would result in approximately 426.4 acres of open space, including 73.6 acres of golf course and 352.8 acres of disturbed (i.e., slopes, banks, and mitigation area) and undisturbed natural open space, compared to 371.7 acres of open area in the approved plan. Comparing undisturbed areas of natural open space between the two alternatives, the proposed plan includes 11.1 acres of undisturbed natural area as part of the golf course and 301.2 acres elsewhere in the project, for a total of 312.3 acres undisturbed, compared to the 371.7 acres in the approved plan. Thus, the approved plan would have 59.4 acres more undisturbed land than the proposed plan, the difference resulting from the inclusion of the public golf course/recreational facility as part of the destination resort complex. Thus, the proposed project more closely meets the criteria of the SLO with respect to open space since the SLO does not include public recreation facilities.

Exemptions from the Sensitive Lands Ordinance

The SLO contains an extensive set of definitions and use limitations to protect the abovementioned types of resources without adequate mitigation. In addition, Article V of the ordinance includes seven classes of exemptions from the ordinance. Exemptions 4f and 4q are the only two that apply to the proposed project. They are as follows:

- "f. All or any portion of a specific plan which has at least one tentative map or tentative parcel map approved prior to the effective date of this Ordinance, provided that the Planning Commission or, an appeal, the Board of Supervisors, makes the following findings at a noticed public hearing:
 - (1) The applicant has, with regard to the portion sought to be exempted on or before the effective date of this Ordinance, incurred substantial public facilities or infrastructure expenditures and performed grading or construction of physical improvements to serve the portion outside of the approved map in good faith.
 - (2) If there are located wetlands or floodplains or riparian habitat on the portion sought to be exempted, that (i) none of said lands is affected directly or substantially by the project, or (ii) that measures have been taken to avoid development on said lands.

This ordinance shall also not apply to any amendment to such specific plan which does not increase the density of the specific plan and which is in closer conformity to this Ordinance with respect to the preservation of environmentally sensitive lands nor to any amendment to a specific plan which is required by a condition of a specific plan approved on or before the effective date of this Ordinance in order to apply for a tentative map or use permit for an area within the specific plan, provided such area has previously been found to satisfy the requirements of this section."

"q. Any community recreational facility (including, but not limited to, playing fields, equestrian facilities and golf courses) for public use when the Board of Supervisors makes the following findings:

- (1) The facility is consistent with adopted community and/or subregional plans;
- (2) All possible mitigation measures have been incorporated into the facility, and there are no feasible, less environmentally damaging location, alignment or non-structural alternatives that would meet project objectives"

The golf course has been designed to fit the terrain with a minimum of grading and generally is placed in areas of non-native grassland. However, the construction of the golf course would require removing substantial areas of black-tailed gnatcatcher habitat and result in significant impacts to that species (see Section 3.5). The golf course is a necessary land use element in the destination resort and marketing studies indicate that the resort requires the golf course to be successful. There does not appear to be any feasible, less environmentally damaging location, alignment or non-structural alternative that would meet the project objectives.

Considering the other required findings, the project does not encroach into a wetland (Finding c.). The project does encroach on steep slopes (Finding d.) but will substantially use native vegetation to revegetate cut and fill areas. No mature riparian woodland would be destroyed or reduced in size due to otherwise allowed encroachments (Finding e.).

3.4.3 CUMULATIVE IMPACTS

There are nine large scale projects proposed for the area northeast of the Pointe San Diego Specific Plan. When and if developed, as currently envisioned, these projects would convert over 8,000 acres to urban and suburban uses. Most of this land is undeveloped, or very sparsely developed at this time.

The area under discussion, the Sweetwater River and associated drainage basins, is a key biological resource because the river and several streams in the area (including Hansen's Creek) represent a year round source of water in an arid climate. The river itself is home to several rare and endangered species, including the least Bell's vireo. Upland areas support sensitive wildlife such as San Diego Horned Lizard and California black-tailed gnatcatchers, and a number of sensitive plants. Section 3.5 discusses the biological resources on the Hansen's Ranch site and the potential impacts of the Pointe San Diego resort development on these resources.

The presence of a year round source of water, the plants and animals associated with it, and the metavolcanic rocks which form the mountains in the area attracted prehistoric man to the area, and there is evidence of significant settlement, toolmaking and vegetal processing all along the Sweetwater River and its tributaries. The remains of these activities are threatened with disturbance or destruction by development in the area—either directly, or indirectly by increasing the potential for vandalism of the sites.

Several important sites have been disturbed or destroyed already as a result of the buildout of the first phase of development on Rancho San Diego. There is a major prehistoric village site (the Village of Jamacha) on the Rancho San Diego property. The area north of Hansen's Ranch and Sweetwater Springs Boulevard was originally a part of the creek now known as Hansen's Creek. Development of the residential subdivisions, Sweetwater Springs Boulevard and commercial areas along it channelized this stream and buried a portion of the major archaeological site W-172b/SDi-185. The remainder of this site will be disturbed by the proposed Pointe San Diego Specific Plan. The impact of the proposed project is further discussed in Section 3.3.

Construction of all of these projects would convert a large area along the Sweetwater River and in Spring Valley from open space and predominantly rural uses to predominantly suburban and urban uses altering, forever, the appearance and functioning of the area. These projects would add approximately 9,700 housing units, commercial and industrial development, three golf courses, and four resorts or hotels with 1,390 guest rooms or suites.

In addition to the loss of natural open space and disturbance of archaeological and historic resources, this cumulative development would impact all of the infrastructure and public service systems in the area. The traffic and circulation impacts of these developments are discussed in Section 3.6. The public service and utility impacts of this growth are discussed in Section 3.9. The change for current residents of the area would be the loss of views of vacant rural land, increased traffic, access to a wider variety of commercial and resort/recreational opportunities, increased numbers of school children, and a more urban character to their communities.

The proposed development is primarily consistent with the relevant County and regional growth forecasts and land use plans. Most of it will occur within the urban limit line established by the Regional Growth Management Plan a decade ago. The use of specific plans has enabled the County to affect design and impose mitigation measures to reduce some of the adverse impacts of development on surrounding areas and on public agencies and facilities which serve the area.

3.4.4 MITIGATION MEASURES

Mitigation measures to reduce the impact of the change in land use are also included under several other sections. Measures reducing the visual impact of the proposed project have been incorporated into the site design by the project applicant. These include contour grading, landscaping and screening, minimal grading for individual house pads, clustering, and the use of architectural styles which fit into the terrain. These measures are discussed in Section 3.10 (Aesthetics).

Mitigation measures to reduce the biological impacts of relocating the biological resources protected by Resource Conservation Area 15 (Hansen's ponds), particularly those required by federal and state agencies which must approve any alteration to wetlands habitat, are described in Section 3.5 (Biological Resources). Maintenance of over 66 percent of the site in open space, will improve the ability of the Pointe San Diego to ensure that valuable biological resources are protected, especially since maintenance of these open spaces and biological resources will be monitored by the federal and state permitting agencies.

The proposed mitigation of the disturbance of the aquatic and riparian habitats remaining along Hansen's Creek and Hansen's ponds is an unusual approach to the requirement to replace the affected habitats. The applicant is proposing to impound the water now flowing in the stream and pump it to the head of Bancroft Creek to permit the enhancement of the riparian habitat now located there. The area around Hansen's Creek and the ponds is relatively flat, and has been extensively graded and farmed over the years. It represents the largest contiguous relatively flat area on the site. In contrast, Bancroft Creek is not developable because of the steep slopes, and the existing riparian areas are restricted by the limited water supply. The Pointe San Diego will increase the water supply in the area and install check dams

and similar measures to increase the area supplied with water. The proposed system will utilize two pumps, each supplying approximately half the water, so that should one fail, the area will continue to receive one half its water supplement, in addition to the natural drainage in the area. The pumps will be monitored by resort personnel, along with all the mechanical systems necessary to the operation of the Pointe San Diego.

Water from Hansen's Creek will continue to flow toward the Sweetwater Reservoir, only some of it will arrive there via the Bancroft Creek mitigation area. There will be little or no reduction in water reaching the reservoir and that which does will have gone through a natural cleansing process. The U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game who must also approve the mitigation plan and issue permits for it, will require the Pointe San Diego resort to file an annual report for each of the first five years that the mitigation is in place, describing the extent of coverage of the specified replacement species, mortality, insect damage, etc. At the end of five years, the report must summarize and evaluate the mitigation effort, and if necessary contain provisions to replace any portion of the mitigation area which is deemed a failure. The Pointe Resort will also be required to ensure the long-term maintenance of the Bancroft Creek mitigation area, and to incorporate measures to protect the downstream resources represented by Sweetwater Reservoir from damage resulting from development of the resort and the mitigation area.

The proposed mitigation plan is a technologically sophisticated approach to the habitat replacement requirements of the federal permit process, as well as an attempt to maintain and enhance the indigenous biological resources on the same site. Such an approach would be unlikely to win federal approval without sufficient assurances that there would be one entity continuously responsible for the maintenance and protection of the mitigation areas. In that respect, the continued presence of the developer as the operator of the resort is a big advantage in ensuring that the homeowners association will monitor and maintain the open space areas as envisioned. There is always the possibility that the resort could fail either in the short-term or twenty or thirty years down the line, jeopardizing the artificially maintained habitat areas. The worst case would be abandonment of the development after the Hansen's Creek habitat had been destroyed, but before the mitigation area was well established. Once the mitigation area is established, the threat would not

be so great because the system is designed to be simple to operate and maintain, and the replacement habitat will tolerate fluctuations in water supply. The homeowners association and any subsequent owner/developer of the commercial and resort areas would assume responsibility for the maintenance of the areas. The proposed mitigation plan is discussed in Section 3.5 and reproduced in full in Appendix E.

Mitigation measures to reduce the impact on traffic and circulation are discussed in Section 3.6. While the project would increase traffic on local and regional streets, its location at a critical juncture in the regional circulation system will facilitate development onsite. In order to ensure that the South Bay Expressway (SR 54) is extended through the site in time to accommodate all the other expected growth in the Region, some development on the Hansen's Ranch site must occur to allow the Pointe Resort to contribute fees or to construct improvements to the expressway and Jamacha Boulevard, including the intersection with Sweetwater Springs Boulevard. Alternatively, that segment of SR 54 adjacent to the reservoir and the Pointe San Diego could be built using sales tax revenues generated under the recently approved Proposition A. That portion of the route is not currently planned for Proposition A funding. As a result, the improvements would probably not be constructed before the turn of the century.

The impact of constructing the resort and office commercial development could be reduced by setting height limits, setbacks and other criteria which ensure that this development is low profile and compatible with the surrounding open space. In order to further reduce the impacts to land use plans, it would be necessary to reduce the density and intensity of the proposed development. Alternatives to the proposed development which would do just that are discussed in Section 5.

3.5 BIOLOGICAL RESOURCES

3.5.1 EXISTING CONDITIONS

The descriptions of the biotic composition of the project site provided in this report is based upon information compiled through field reconnaissance, by several biiological consultants working on the site between 1978 and 1988. Surveys were conducted by: R. M. Beauchamp, R. Brimm, and R. Burger of PSBS during December to March of 1978 (PSBS 1978); S. Lacy and Dr. K. Kline of WESTEC in the winter of 1983 and 1986 (WESTEC 1983 and 1986); and RBR and Associates in 1987 (RBR 1987).

In order to complete the analysis and to update the technical information, the site was surveyed on foot by Michael Brandman Associates, Inc. (MBA). Surveys were conducted for flora and vegetation by Karen Swirsky and Fred Roberts on November 12 and 30, 1987 and February 5, 1988. The property was surveyed for birds by Brian Daniels on March 20 and 21, 1988. Detailed observations of the black-tailed gnatcatcher were made during this period. A total of approximately 52 field hours was spent examining the site during these surveys. The hours of survey ranged from 6:30 a.m. to 7:00 p.m. The physical nature of the property permitted a direct systematic examination of all terrain within its confines. Floral constituents encountered were recorded in terms of relative abundance and host habitat type. Faunal constituents were determined through the use of field identification, combined with documented habitat preferences of regional wildlife species that, whether or not detected during the survey, are thought to include the site within their range.

Habitat types were located and mapped in the field with the aid of a 200-scale (1" = 200') topographic map and a ± 500 -scale black and white aerial photograph (flown January 21, 1987).

HABITAT TYPES

Habitat types on the project site can be grouped into two categories: upland and wetland. Upland vegetation consists almost entirely of Diegan coastal sage scrub (Holland 1986) in various stages of disturbance, nonnative grassland (Holland 1986)

and a small area of chamise chaparral (Holland 1986). Wetland vegetation on the site consists of coastal freshwater marsh (Holland 1986), southern willow scrub (Holland 1986), southern cottonwood-willow riparian forest (Holland 1986) and open water. A number of upland and wetland areas that may have once supported a native plant community have been altered by past or ongoing land uses. These areas have been categorized as disturbed for the purposes of this survey. The approximate areal extent of each habitat type on the site is summarized in Table 3-8.

A total of 227 plant species representing 56 families was recorded in the site survey. Of the recorded species, 85 (37 percent) are nonnative. A list of all plant species recorded during the various surveys is provided in Table 1 of Appendix E. A number of late-spring and summer-flowering plant species may have been omitted from the floral compendia due to the times of the surveys. These species are expected to represent a small percentage of the total site flora; however, the omissions could include at least two sensitive species.

The distribution of each habitat type on the site is shown in Exhibit 3-23. All wetland communities are mapped as a single type (Riparian) due to the constraints of scale (for detailed wetland maps of the site, see RBR 1987). The floral composition of each habitat type on the site is described in Table 3-8.

The habitat types present on the site support many species of wildlife. Some species are restricted either to upland or wetland habitats; frequently, wildlife will utilize both. Wildlife typically found in upland habitats for the greatest portion of their life cycle are discussed below under that heading; species predominantly associated with wetland habitats are discussed in turn under that heading.

UPLAND

Vegetation

Diegan Coastal Sage Scrub

The project site is dominated by steep, well-drained slopes that largely support an arid Diegan coastal sage scrub association. Sage scrub vegetation in California occurs in comparatively dry, hot and exposed areas, frequently on south- or

TABLE 3-8

APPROXIMATE AREAL EXTENT OF HABITAT TYPES ON THE PROJECT SITE

Habitat Type	Acres	
Upland		
Diegan Coastal Sage Scrub (including disturbed areas)	514.1 acres	
Chamise Chaparral	3.2 acres	
Nonnative Grassland	94.2 acres	
Disturbed	30.5 acres	
Wetland		
Coastal Freshwater Aquatic	6.9 acres	
Southern Willow Scrub	2.3 acres	
Southern Cottownwood-Willow Riparian Forest	0.1 acre	
Open Water	2.0 acres	
Total	653.3 acres	

southwest-facing slopes. The vegetation consists generally of semiwoody subshrubs, 1 to 4 feet high, for which the principal adaptation is the exploitation of moisture in the thin upper soil during the cool winter season.

Diegan coastal sage scrub is the dominant plant association of the site. On north-and west-facing slopes, Diegan coastal sage scrub is dominated by California buckwheat (Eriogonum fasciculatum), coastal sagebrush (Artemisia californica), red bush monkey-flower (Mimulus puniceus), golden yarrow (Eriophyllum confertiflorum) and laurel sumac (Malosma laurina). On south-facing and east-facing slopes, the association is similar, but often dominated by San Diego County viguiera (Vigueira laciniata). In these areas, the red bush monkey-flower drops out of the association and coastal sagebrush and golden yarrow are much less abundant. On the east slope of Dictionary Hill, mesa bushmallow (Malocothamnus fasciculatus) is a dominant species. On both hills west of Jamacha Boulevard, Munz's sage (Salvia munzii) is a dominant member of the Diegan coastal sage scrub, primarily on southern slopes.

Other shrubs found in this association include redberry (Rhamnus crocea), white sage (Salvia apiana), broom baccharis (Baccharis sarothroides) and California adolphia (Adolphia californica). Several native perennial grasses are scattered in this community. South of Barcelona Street, coast range melic (Melica imperfecta) and small-flowered needlegrass (Stipa lepida) are common, while in association with the San Diego County viguiera, small-flowered needlegrass, San Diego needlegrass (Stipa diegoensis) and tall melic (Melica frutescens) are found.

The mesic slope south of Barcelona Street also presented the only concentration of fern species, including California polypody (<u>Polypodium californicum</u>), goldenback fern (<u>Pityrogramma triangularis</u>) and California maiden-hair (<u>Adiantum jordani</u>). Other plants found in this mesic association included the chalk dudleya (<u>Dudleya pulverulenta</u>), live-forever (<u>Dudleya edulis</u>), western lady's mantle (<u>Achemilla occidentalis</u>) and many-fruited meadow-rue (<u>Thalictrum polycarpum</u>).

Chamise Chaparral

The chaparral community in California comprises an assemblage of evergreen shrubs that characteristically occupy thin, rocky soils. Chaparral shrubs typically grow from 4 to 8 feet high; however, in more mesic areas they may become treelike in aspect.

The chaparral subtype found on the project site is chamisal chaparral, made up of an almost pure stand of chamise (Adenostoma fasciculatum). Mission manzanita (Xylococcus bicolor) has also been reported in the onsite chamise chaparral (WESTEC 1986), but was not relocated during the present survey. Munz's sage is a component of the onsite chamise chaparral as well as the Diegan coastal sage scrub. Chamise chaparral is restricted on the project site to the top and a small area of the southern slope of the hill between Dictionary Hill and Jamacha Boulevard. The southern stand is relatively thin. The northern portion of the project site, including the onsite chamise chaparral, burned in 1981.

Non-native Grassland

Grasslands typically occur in well-drained areas on a variety of soils, most of which are medium to heavy in texture, granular in structure and moderate in organic matter content. The soils are usually relatively deep, as contrasted with the thin, rocky soils of the Diegan coastal sage scrub community. The species composition of the grassland varies in response to local variation in soil nutrients, moisture and north/south slope temperature differences. Additionally, the time, degree and method of past disturbance, such as grazing or cultivation, and the elapsed time since abandonment, are important factors in determining floristic composition.

Non-native grassland in California typically supports a dense to sparse cover of annual grasses 8 to 20 inches high. Germination occurs with the onset of the late fall rains; growth, flowering and seed-set occur from winter through spring. With a few exceptions, the grasses are dead through the summer-fall dry season, persisting as seeds. Often, non-native grasslands have replaced native grasslands as a result of disturbance. Non-native grasslands may also result from conversion of scrub communities by fire or mechanical disturbance.

Non-native grassland on the site borders the riparian stream course west of Jamacha Boulevard, the Otay Water District complex on Sweetwater Springs Boulevard and the southwestern portion of the parcel east of Jamacha Boulevard. The grassland is dominated by the exotic slender wild oat (<u>Avena barbata</u>), red brome (<u>Bromus rubens</u>) and rat-tail fescue (<u>Vulpia myuros</u> var. <u>hirsuta</u>), with scattered other grasses and introduced herbaceous dicots such as black mustard (<u>Brassica nigra</u>) and tocalote (<u>Centaurea melitensis</u>). Patches of annual grassland also occur sporadically in the sage scrub association.

Disturbed Habitat

Areas of disturbance due to human activities are located generally in the central portions of the property (around Hansen's Ponds) and on the periphery (adjacent to existing subdivisions). Extensive off-road vehicle use scars are also evident on the site. Hansen's Ponds are used extensively for fishing by local residents and the slopes between the ponds and Jamacha Boulevard have been largely denuded of native shrub vegetation by this and other forms of unauthorized recreation. Species such as tree

tobacco (Nicotiana glauca), tocalote and various mustards (Brassica spp.) and brome grasses (Bromus spp.) predominate. Interspersed among them are shrubs characteristic of the Diegan coastal sage scrub. Similar vegetation can be found adjacent to the older subdivisions along the northern periphery of the property. Areas immediately adjacent to Jamacha Boulevard have been disturbed for the construction of a 36-inch water line along Jamacha Boulevard by the Otay Water District. Areas north of Jamacha Boulevard have been disturbed by the stockpiling of fill materials.

Wildlife

Wildlife utilization of the upland areas reflects, in part, the stature, maturity of, and level of disturbance to, the Diegan coastal sage scrub vegetation. Areas north of Jamacha Boulevard experience a lower wildlife utilization than areas south of Jamacha Boulevard. To a large extent, this is due to the amount of development surrounding the northern portions of the project site. The proximity of dogs, cats and humans undoubtedly exerts an adverse effect on wildlife species diversity. Areas south of Jamacha Boulevard are continuous with relatively natural open space both to the east along the Sweetwater River and to the south through the San Miguel Mountains.

The wildlife species utilizing the Diegan coastal sage scrub of the project site are typical of that habitat type. Common reptiles in the Diegan coastal sage scrub and chaparral communities include the western fence lizard, gopher snake, two species of rattlesnakes (red diamond and western), common kingsnake and racer. Sandy open areas may provide habitat for the San Diego coast horned lizard and the orange-throated whiptail, both of which are sensitive species. The hillsides of the project site contain numerous rocky outcrops that support such reptile species as the granite spiny lizard and granite night lizard, both of which have been observed on the project site (PSBS 1978). A number of arthropods also use the site, including many species of moths and butterflies (Table 3-9).

A variety of bird species resides in the sage scrub and chaparral or include it as part of their foraging area. These include songbirds such as the brown towhee, wrentit, bushtit, scrub jay, Bewick's wren, cactus wren, California black-tailed gnatcatcher, California thrasher, California quail and greater roadrunner.

The project site is noteworthy for the abundance of raptor species found there. The sharp-shinned hawk, Cooper's hawk, red-tailed hawk, red-shouldered hawk, northern harrier, golden eagle, American kestrel and black-shouldered kite, as well as several owl species, have been observed onsite (PSBS 1978; WESTEC 1983; RBR 1987; and present survey). This high level of utilization is likely due to the presence of large rock outcrops on the hillsides, which provide perching places near or within the grassland areas; the latter serve as foraging habitat for the raptors. The proximity of the Sweetwater Reservoir also contributes to this abundance and diversity of raptor species.

Small mammals commonly encountered include the following rodents: deer mouse, cactus mouse, California mouse, Pacific kangaroo rat, San Diego pocket mouse, little pocket mouse, dusky-footed woodrat, desert woodrat and house mouse. Mediumsized species include the California ground squirrel, striped and spotted skunks, desert cottontail and brush rabbit. Larger predators including the coyote and, less commonly, the bobcat are also expected in the scrub and chaparral communities. Deer utilize sage scrub for browse. Mountain lions may occasionally enter the less disturbed portions of the site.

WETLAND

Wetland plant communities are characterized by plant species adapted to and, frequently, dependent upon at least the seasonal presence of water. Since the Southern California Region is relatively arid, the local occurrence of standing or running water or near-surface groundwater may result in vegetation quite different from the surrounding area.

As on the project site, drainages or other moist areas often support vegetation that is markedly denser, taller and more robust than on the more arid slopes above them. However, in delineating the wetland areas of Hansen's Ranch, topography cannot be used as the single criterion. For example, areas adjacent to Hansen Creek may be only two to three feet above the water surface and occupied entirely by various upland plant species; areas immediately adjacent may be in the same relative topographic position but due to microscale structural differences in the soil are saturated to the surface, even during late summer. In other areas the stream course

TABLE 3-9

LEPIDOPTERA COLLECTED BY OAKLEY SHIELDS ON THE SUMMIT OF DICTIONARY HILL (FROM SHIELDS 1967)

Hilltoppers

Battus philenor Papilio eurvmedon Papilio zelicaon Anthocaris cethura Pieris protodice Chiosvne leanira wrightii Euphydryas editha Euphydryas chalcedona Speveria callippe comstocki Vanessa atalanta Vanessa cardui Atlides halesus Callophrys dumetorum Celastrina arquiolus echo Incisalia iroides Leptotes marina Satvrium saepium Strvmon melianus Erynnis tristis

Non-Hilltoppers

Anthorcharis sara

Lycaena helloides

Erynnis funeralis
Helioptes ericetorum
Hyllephila phyleus
Ochlodes sylvanoides
Pyrqus communis

Colias eurytheme Colias hardordii Zerene cesonia Eurema nicippe Phoebis sennae Pieris rapae Agrulis vanillae Chlosyne babbi Coenonympha tullia californica Danaus plexippus Danaus gilippus berenice Junonia coenia Nymphalis antiopa Apodenia mormo virgulti Brephidium exilis **Everes** comvntas Glaucopsyche lygdamus australis

Philotes battoides bernardino

is incised into a small gully, and the wetland vegetation may be limited to a mere 5 to 10 feet in width while adjacent benches a few feet above the water surface support upland vegetation.

Of the 11.3 acres of wetlands onsite, 10.8 (96 percent) are found in the central valley portion of the site. The complex of wetlands formed specifically by Sweetwater Springs, Hansen Creek and Hansen's Ponds is the largest and most diverse wetland within the project site. The segment of Hansen Creek from the storm drain outlet (northern boundary of Hansen's Ranch) to the upper reaches of the first pond is narrow and deeply incised into the alluvium. Sweetwater Spring lies immediately adjacent to and south of this segment of the creek. The spring is located above the

floor of the creek. The banks of the creek in this area support a dense growth of coastal freshwater marsh and southern willow scrub species.

A short distance downstream from the spring the creek widens and flows into the first of the ponds. During the four decades since dam construction, the upper reaches of the pond have been partially filled with sediment. This area supports southern cottonwood-willow riparian forest, southern willow scrub and the upper coastal freshwater marsh vegetation of the pond. The cattail border on both ponds has been disturbed by human activity. Overflow is through a spillway in the southwest corner of the dam.

Water also appears to be seeping under or through the second dam near its southeast corner. This flow appears to be relatively stable and the resultant stream channel supports riparian scrub.

Little Hansen Creek, on the southeast side of Jamacha Boulevard, supports primarily coastal freshwater marsh vegetation throughout its length on the project site. Relatively small areas of southern willow scrub occur near the water pumping station and in the lower reaches of the creek.

Bancroft Creek, in the northwestern portion of Hansen's Ranch, supports the most limited area of wetland vegetation. The creek drops at a relatively steep angle and the resulting high-energy storm flows have restricted accumulation of alluvium in the streambed. In its present state, the potential for natural aquatic and riparian vegetation development is limited along Bancroft Creek. Only small areas of southern cottonwood-willow riparian forest, southern willow scrub and coastal freshwater marsh vegetation are found there.

Vegetation

The project site contains three types of wetland plant communities: coastal freshwater marsh, southern willow scrub and southern cottonwood-willow riparian forest. Open water is considered a fourth category. Although not a plant community in the strict sense, open water does play a distinct role in the local ecosystem. These plant communities are briefly described below, and have been previously mapped in detail (RBR 1987). Vegetation nomenclature follows Holland (1986) with the equivalent Thorne (1976) or other name in parentheses.

Coastal Freshwater Marsh

Coastal freshwater marsh plant communities develop where standing or slowly moving water allows the accumulation of sufficient nutrients to support stands of moisture- dependent species. Where standing water predominates, most of these species are low shrubs or forbs.

Typical of the coastal freshwater marsh plant community found onsite are slender cattail (Typha domingensis), spiny rush (Scirpus acutus) and yerba mansa (Anemopsis californica). The coastal freshwater marsh association is distributed along the edges of most of the drainages and of Hansen's Ponds onsite.

Southern Willow Scrub (Riparian Scrub)

Depositional areas of streams are frequently scoured during heavy rainfall, and the resultant soil is usually cobbly or sandy and quickly drained. Shrub-sized plants usually dominate these plant communities and a seasonal, herbaceous understory is often an important component.

The southern willow scrub plant community is the most complex of the wetland communities onsite. Willows (Salix spp.) form a tall shrub element, accompanied by occasional stands of the invasive, nonnative tamarisk (Tamarix parviflora) and giant reed (Arundo donax). A lower layer consists of the moderately tall shrub mulefat (Baccharis glutinosa), California rose (Rosa californica) and San Diego marshelder (Iva hayesiana). The southern willow scrub plant community is found in association with the coastal freshwater marsh plant community throughout the project site.

Southern Cottonwood-Willow Riparian Forest (Riparian Woodland)

Southern cottonwood-willow riparian forest consists generally of relatively dense stands of riparian tree species such as sycamores, cottonwoods and some species of willow, dependent upon a year-round water supply. On the project site, however, the southern cottonwood-willow riparian plant community is very restricted and may, in the strictest interpretation of Thorne's (1976) definition, actually be more appropriately considered mature riparian scrub. Southern cottonwood-willow

riparian species onsite are limited to mature arroyo willow (Salix lasiolepis) and a few black willows (S. gooddingii).

Open Water

Open water is a relatively scarce resource in Southern California, although Sweetwater Reservoir is found in the vicinity of the project site. Open water on the project site is restricted to Hansen's Ponds. These steep-sided ponds are surrounded largely by the coastal freshwater marsh and southern willow scrub and woodland plant communities that have developed over nearly half a century since the ponds were created. Active recreational use of the ponds has disturbed the marsh and southern willow scrub vegetation.

Wildlife

Wetland habitats are typically areas of great faunal concentration. Many invertebrate and lower vertebrate species complete their life cycles in this setting; higher vertebrates utilize this habitat for water and to feed upon wetland-dependent biota. In addition, the vegetation of the riparian setting provides protective cover, enhancing its environmental value to wildlife. However, the fauna of the wetland areas on the project site is less abundant and diverse than might be expected. This is due to the relatively high levels of disturbance generated by recreational use of the area.

The open water of Hansen's Ponds reportedly provides habitat for several fish species. These may include bluegill, catfish, bass and mosquito-fish (RBR 1987).

The Pacific treefrog, bullfrog, western toad and western spadefoot toad have been observed in riparian habitats on the project site (PSBS 1978). In addition, the nonnative African clawed frog is suspected to occur on the project site (RBR 1987).

Reptiles reported in the wetland areas of the project site include the native western pond turtle, a sensitive species discussed below (PSBS 1978), and the introduced spiny softshell (RBR 1987) and painted turtle (present survey). Lizards expected in or adjacent to wetland habitats include the western fence lizard, western skink and southern alligator lizard. Snakes expected include the ringneck snake, common

kingsnake, common garter snake, western aquatic garter snake and the western rattlesnake.

Typically, wetland habitats are heavily utilized by bird species. However, it appears that heavy recreational use of Hansen's Ponds and Hansen Creek has limited bird use of these areas. The coastal freshwater marsh and southern willow scrub habitats of the project site may support small numbers of wetland-associated bird species such as the green-backed heron, American bittern, Virginia rail, sora, common moorhen, long-billed marsh wren, red-winged blackbird, common yellowthroat and song sparrow, all of which have been observed on the site (PSBS 1978; WESTEC 1983; RBR 1987; and present survey). The open water of Hansen's Ponds attracts small numbers of migrating waterfowl, such as the pied-billed grebe, northern shoveler, mallard and ruddy duck, all of which have been observed on the site (PSBS 1978; RBR 1987; present survey).

Observations along Hansen's Ponds and Hansen Creek resulted in the identification of little mammalian wildlife sign. Despite the availability of water, cover is limited and the area surrounding the northern portion of the project site is largely urbanized.

Observations along Little Hansen Creek, south of Jamacha Boulevard, suggest that more wildlife utilize this area, especially as a water resource. Coyote and raccoon tracks were seen along Little Hansen Creek but not on Hansen Creek or around Hansen's Ponds (PSBS 1978 and present survey). This is probably due to the less intense human utilization of the area to the south, the much larger adjacent block of open space, and the better cover afforded by the upland vegetation in that area.

It is also expected that the riparian habitats of the site would attract the Virginia opossum, striped skunk, ornate shrew, western harvest mouse and California vole.

SENSITIVE BIOLOGICAL RESOURCES

Discussed within this section are: (1) species present in the project vicinity that have been given special recognition by federal, state or local resource conservation agencies and organizations due to declining, limited or threatened populations, resulting in most cases from habitat reduction; and (2) habitat areas that are unique,

of relatively limited distribution or of particular value to wildlife. Sources used for determination of sensitive biological resources are as follows: wildlife - U.S. Fish and Wildlife Service (USFWS) (1987), California Natural Diversity Data Base (CNDDB) (1988), California Department of Fish and Game (CDFG) (1980, 1986), Remsen (1978) and Tate (1986); plants - USFWS (1987), CDFG (1985), CNDDB (1988) and Smith and Berg (1988); and habitats - CNDDB (1988).

No species of plant or animal specifically designated as threatened or endangered by USFWS or CDFG was located on the project site during this or past surveys. However, eight sensitive plant species were located during the present survey, one other was located during a past survey (WESTEC 1986), and the potential exists for the occurrence of eight additional species, although these have been searched for and not located. One sensitive butterfly species was located in a previous survey. One sensitive reptile has been located on the site (PSBS 1978); the potential exists for the presence of four others, although they have been searched for and not located. Six sensitive bird species were observed on the site during the present survey, one other was located during past surveys (PSBS 1978) and the potential exists for the presence of two others. The onsite status of all sensitive species recorded or potentially occurring on the project site, except for the butterfly species, is summarized in Tables 3-10, 3-11, and 3-12. Two sensitive habitat types are also found onsite.

VEGETATION

The following is a brief description of the locations of the sensitive plant species found on the site. For exact locations, see Exhibit 3-23.

- California adolphia is found in the Diegan coastal sage scrub plant community on two ridges in the southeastern portion of the project site.
- San Diego barrel cactus is found on the south slope of the hill between Dictionary Hill and Jamacha Boulevard, along the eastern boundary of the property and on the west face of the hill east of Jamacha Boulevard.
- Palmer's grappling-hook is located in two populations in the southeastern portion of the site on barren ground at the interface of Diegan coastal sage scrub and non-native grassland.

TABLE 3-10
SENSITIVE PLANT SPECIES POTENTIALLY OCCURRING
ON THE PROJECT SITE

	STATUS ^a			Located During Past	Located During	
SPECIES	USFWS	CDFG	CNPS	Surveys	Present Survey	
Acanthomintha ilicifolia San Diego thorn-mint	C2 ^b	Endangered	1B ^c	No	No	
Adolphia californica California adolphia			2 ^d	Yes	Yes	
Ambrosia pumila San Diego ambrosia	C2		1B	No	No	
Artemisia palmeri San Diego sagewort			2	No	No	
Dichondra occidentalis western dichondra			4	Yes	No	
Dudleya variegata Variegated dudleya	C2		₄ e	No	No	
Ericameria palmeri Palmer's ericameria		eth use	2	No	No	
Ferocactus viridescens San Diego barrel cactus	C2		2	Yes	Yes	
Harpagonella palmeri Palmer's grapplinghook		******	2	No	Yes	
Hemizonia conjugens Otay tarplant	C2	Endangered	1	Yes	No	
<u>Iva hayesiana</u> San Diego marsh elder			2	Yes	Yes	
Opuntia parryi var. sepentina snake cholla	C2		1B	No	No	

TABLE 3-10 (Continued)

SENSITIVE PLANT SPECIES POTENTIALLY OCCURRING ON THE PROJECT SITE

	STATUS ^a			Located During	Located During	
SPECIES	USFWS	CDFG	CNPS	Past Surveys	Present Survey	
Salvia munzii Munz's sage			2	Yes	Yes	•
Selaginella cinerascens Ashy spike-moss	rea sian		4	Yes	Yes	
Stipa diegoensis San Diego County needle gra	 SS		$3^{\mathbf{f}}$	No	Yes	
Viguiera laciniata San Diego County viguiera			2	Yes	Yes	

- Listing agencies:
 USFWS U.S. Fish and Wildlife Service
 CDFG California Department of Fish and Game
 CNPS California Native Plant Society
- b C2: Federal Category 2 Candidate. Decline of the species is suspected; however, threat and/or distribution data are insufficient to support federal listing as threatened or endangered at this time.
- c 1: CNPS List 1B Plants rare or endangered in California and elsewhere.
- d 2: CNPS List 2. Plants rare threatened or endangered in California but more common elsewhere.
- e 4: CNPS List 4. Plants of limited distribution (a watch list).
- f 3: CNPS List 3. Plants about which we need more informatio (a review list).

TABLE 3-11

SENSITIVE AMPHIBIANS AND REPTILES POTENTIALLY OCCURRING
ON THE PROJECT SITE

-	STATUS ^a		Located During Past	Located During Present	
SPECIES	USFWS	CDFG	Surveys	Survey	
Bufo microscaphus californicus Arroyo toad	C2 ^b		· No	No	
Rana aurora draytoni California red-legged frog	C2		No	No	
Clemmys marmorata Western pond turtle	C2	400 Mar	Yes	No	
Phrynosoma coronatum blainvillei San Diego coast horned lizard	C2	wide wide	No	No	
Cnemidophorus hyperythrus Orange-throated whiptail	C2		No	No	

- a Listing agencies:
 CDFG California Department of Fish and Game
 USFWS U.S. Fish and Wildlife Service
- b C2: Federal Category 2 Candidate. Decline of the species is suspected; however, threat and/or distribution data are insufficient to support federal listing as threatened or endangered at this time.

TABLE 3-12

SENSITIVE BIRD SPECIES POTENTIALLY OCCURRING ON THE PROJECT SITE

SPECIES	Federal (USFWS)	STATUS State (CDFG)	a NAS	Located During Past Surveys	Located During Present Survey
Northern harrier (Circus cyaneus)		SC2 ^b	Blue- listed ^c	Yes	Yes
Red-shouldered hawk (Buteo lineatus)		SC3 ^d	Blue- listed	Yes	Yes
Cooper's hawk (Accipiter cooperii)		SC3	Blue- listed	Yes	Yes
Sharp-shinned hawk (Accipiter striatus)		SC3		Yes	Yes
Golden eagle (Aquila chrysaetos)		SC3		Yes	Yes
Burrowing owl (Athene cunicularia)		SC2		Yes	No
California black-tailed gnatcatcher (Polioptila melanura californica)	C2 ^e	SC2		Yes	Yes
Yellow warbler (Dendroica petechia)	-	SC2		No	No
Tricolored blackbird (Agelaius tricolor)	C2	_		No	No

a Listing agencies: USFWS--U.S. Fish and

USFWS--U.S. Fish and Wildlife Service

CDFG--California Department of Fish and Game

NAS--National Audubon Society

b State Species of Special Concern, List 2: species warrants active monitoring due to population decline

c A periodically updated watch list for birds that relies upon input from the public to remain current.

d State Species of Special Concern, List 3: species not in immediate danger of extirpation; however, warrants observation because of small population sizes

e Candidate for federal listing (Category 2) - decline of the species is suspected; however, insufficient data exist to support a proposed listing.

- San Diego marshelder is found in Bancroft Creek in the northwestern portion of the site, as well as along portions of Hansen and Little Hansen Creek.
- Munz's sage grows in two pure stands on the northwest portion of the site with numerous individual plants found on the side of the hill facing Jamacha Boulevard. Munz's sage appears to be associated with the occurrence of the Las Posas soil formation on the site. The fine, sandy loam of the Las Posas soil type has been reported to support a number of rare plants.
- Ashy spike-moss is found in numerous populations on the site, particularly on the slopes west of Jamacha Boulevard. It is also found on Dictionary Hill, just within the project boundary, and on the ridges of the southeastern portion of the site.
- San Diego County needlegrass was located as a single individual in the southern portion of the site on the ridge south of the existing cable television antennas.
- San Diego County viguiera is found on south- and east-facing slopes throughout the site. It reaches its greatest density and dominance in the southeastern portion of the site.
- Otay tarplant (Hemizonia conjugens) was found onsite by H. Wier in 1985 during the survey of the Sweetwater Reservoir Urban Runoff Control Project (Wier Biological 1985). This species was found to be uncommon in the annual grassland on south-facing slopes along the southern property boundary east of Jamacha Boulevard. Approximately 15 acres of habitat containing this plant were noted in 1985. Otay tarplant is an annual species that exhibits wide population fluctuations from year to year, evidently due to variable environmental conditions. Years of high and low abundance have been noted recently. The surveys conducted on the site in recent years may have occurred prior to flowering and/or the species was simply not evident due to environmental conditions. The grassland is considered adequate habitat for this species.

The following is a brief discussion of the plant species potentially occurring, but not located, on the project site.

- The San Diego thornmint is typically found in clay depressions on mesas and slopes within sage scrub and chaparral habitats. No appropriate habitat has been located on the project site during any of the surveys, all of which included searches for this habitat. However, the thornmint has not been searched for during its flowering period of April through May.
- The California copperleaf is a species often found on dry granite slopes within the chaparral and oak woodland. Small areas of appropriate habitat are found onsite; however, the copperleaf was not located during

surveys that included its flowering period of January through June. This species is no longer listed as sensitive by the CNPS (Smith and Berg 1988).

- The San Diego ragweed (Ambrosia pumila) a grassland species, has not been located on the site; however, it has not been searched for during its flowering period of June through September.
- The San Diego sagewort is a species often found in mesic scrub and woodland habitat with a flowering season of July-September. However, since the sagewort is perennial and recognizable outside its flowering season it is unlikely that it has been overlooked by site surveys.
- The variegated dudleya, a species often found on dry stony places in the sage scrub and chaparral habitats, was searched for and not located during the past and present surveys. However, it has not been searched for during its flowering season of May through June.
- Western dichondra is typically found as an understory species in coastal sage scrub, chaparral or oak woodland. This perennial species was not relocated during the present survey; however, the unusually cold winter and dry spring of this year may have suppressed the plants. The flowering season, March through May, was partially encompassed by the present survey.
- Palmer's ericameria, a perennial shrubby plant found in the sage scrub habitat, flowers in September through October. Even outside this season, however, the ericameria is a large shrub and easily recognizable, and it is unlikely that it was missed during site surveys.
- The snake cholla, a cactus species of the sage scrub, has been searched for and not located on the site. This species is obvious even outside of its flowering period of April through May.
- Coastal scrub communities in general and in particular the floristically rich Diegan coastal sage scrub plant community is considered sensitive, depleted habitats. Coastal sage scrub in San Diego County had been reduced by over 72% of its original extent as of 1987 (Oberbauer 1988).

WILDLIFE

Following is a brief description of sensitive wildlife species known to occur on the site. Locations of sensitive wildlife species are depicted on Exhibit 3-23.

• The California black-tailed gnatcatcher (<u>Polioptila melanura californica</u>) occurs on the site as a population of approximately 28 individuals estimated to comprise approximately 18 pairs (based upon a spring survey of singing territorial males). The gnatcatchers occur in Diegan coastal sage scrub habitat on both sides of Jamacha Boulevard (Exhibit 3-23).

The California black-tailed gnatcatcher is a Category 2 candidate for listing as endangered or threatened by the federal government, and has been recognized as a species of special concern in San Diego County at least since 1979 (Everett 1979). This sub-species individually has no special status with the state of California, although the species inclusive of the subspecies lucida and californica is listed as a second priority species of special concern by the California Department of Fish and Game (Remsen 1978). The U.S. Fish and Wildlife Service is currently actively reviewing the status of the California black-tailed gnatcatcher as as step toward proposing it for listing as endangered within the next one or two years. No reliable estimate of either the overall or regional population is available (R. Bransfield, personal communication 1988), although Atwood estimated a total of 1200 pairs in California in 1980 (Atwood 1980). Regionally, California black-tailed gnatcatchers are known throughout coastal sage scrub in the remaining non-urbanized portions of the coastal plain of San Diego County; populations are small or non-existent in the many small habitat islands within the urbanized areas. Populations are known from several sites along the coast and as far inland as San Pasqual, Poway, Lakeside, and Otay. The Sweetwater River Valley contains a substantial amount of the remaining habitat south of Camp Pendleton; documented occurrences of gnatcatcher populations exist between Sweetwater Dam and Dehesa. The subject property occurs along this band of habitat; the onsite populations are contiguous with gnatcatcher populations downstream on lands surrounding the Sweetwater Reservoir and upstream on private land controlled by Home Capital Corporation and other development interests.

Following is a brief description of and discussion of sensitive wildlife species which potentially occur on the site.

- The hermes copper butterfly (Lycaena hermes), a federal Category 2 candidate species, was collected from the site on the hillside above Sweetwater Reservoir prior to 1965 (F. Roberts, University of California at Irvine, Museum of Systematic Biology, personal communication). Redberry, the food plant for this butterfly, is still located in this area. The hilltops of the site may be important to many butterfly species, as discussed below under Sensitive Habitats.
- The Wright's checkerspot butterfly (Euphydryas editha wrightii) has been reported as occurring in the project vicinity (PSBS 1978). This species was once thought to be threatened; however, it has since been found to be more abundant and widespread than originally believed (USFWS 1984).
- Five sensitive raptor species have been observed on the project site: the northern harrier, red-shouldered hawk, Cooper's hawk, sharp-shinned hawk and golden eagle. All of these species use the site mainly for forage, since available perching or roosting sites are limited onsite. However, a number of prominent rock outcroppings, both in the northern and southern portions of the site, show signs of raptor use.



NONNATIVE GRASSLAND

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Sensitive Species Location San Diego and Habitat Types Pointe



• The least Bell's vireo, a federal- and state-listed endangered subspecies, occurs in the immediate project vicinity, on the mouth of the Sweetwater River at the Sweetwater Reservoir (SANDAG 1988). The vireo is not expected to occur on the project site due to the absence of suitable habitat, but the proximity of the site to known populations warrants recognition.

Subsequent to the listing of the least Bell's vireo as endangered (USFWS 1986), a Least Bell's Vireo Task Force was formed under the auspices of the San Diego Association of Governments to prepare a Comprehensive Species Management Plan (CSMP) that would serve to foster survival of the species, encourage it to expand its numbers and range, and allow compatible public and private improvement projects. One element of the CSMP is the Sweetwater River Habitat Conservation Plan (HCP). This document is presently available in draft form (Vail Speck Associates, Inc. 1987; WESTEC Services, Inc. 1987). Hansen's Ranch lies partially within Reach 3 of the Sweetwater River HCP. Those portions of the ranch located within Reach 3 have been designated by the HCP as either "uplands" (Resource Management Category N-2) or as "aquatic, salt, brackish, freshwater wetlands" (Resource Management Category N-1: Non-Riparian Habitat). As such, these areas of the ranch are not suitable for the vireo and the HCP makes no recommendations for habitat enhancement.

HABITATS

- Two San Diego County-designated Resource Conservation Areas (RCA) cover portions of the proposed project site. These are RCAs Nos. 10; and 15 of the Spring Valley Community Plan (County of San Diego 1979). RCA No. 10 covers the Dictionary Hill area and was designated to cover habitats of rare and endangered plant species, including the San Diego barrel cactus, Munz's sage and ashy spike-moss. RCA No. 10 resources also includes excellent examples of Diegan coastal sage scrub habitat. RCA No. 15 includes Hansen's Ponds and Isham Springs.
- The wetland habitats onsite (including RCA 15), described in detail above, are a valuable biological resource, and, as such, fall under the regulatory jurisdiction of CDFG and the U.S. Army Corps of Engineers (ACOE). CDFG must be notified prior to disturbance of a wetland or its associated vegetation (Section 1603, California Fish and Game Code) and a formal agreement must be reached as to the means by which any loss of wildlife habitat value will be mitigated. A permit must be obtained from ACOE prior to the placing of any fill into a wetland (Section 404, Clean Water Act) and, for projects such as the one under discussion which involve more than 10 acres of fill, a mitigation plan for replacement of lost wildlife habitat values will be a condition of that permit.

• In addition, two hilltops on the project site, one at 906 feet in elevation near the eastern boundary and another at 842 feet near the northwestern boundary, have been identified as areas used for "hilltopping" behavior by lepidoptera (butterflies and moths). Hilltopping, a behavior common in lepidoptera throughout the world, is considered an essential part of the reproductive process. The butterflies and moths congregate on hill summits each spring, the males establishing territories and attracting the females.

3.5.2 PROJECT IMPACTS

The project as proposed will result in the loss of vegetation and wildlife, as discussed below. The net impact to biological resources is significant and adverse.

Implementation of a project such as the one proposed may result in two types of impacts to biological resources: (1) the primary impacts of habitat loss, and (2) the secondary impacts of increased human presence and activity in and adjacent to natural areas.

In the case of the Pointe San Diego Specific Plan, there are the additional short term impacts of grading and construction of the proposed mitigation area along Bancroft Creek. The existing riparian habitat will be removed; the area will be graded to reduce the slope and widen the area suitable for riparian habitat; and then the area will be planted with species approved by the Army Corps of Engineers, U.S. Fish and Wildlife Service and the California Department of Fish and Game.

VEGETATION AND WILDLIFE

Primary Impacts

The project as proposed would result in the loss of 308.4 acres of habitat (49 percent of the total). This conversion would include the loss of 297.6 acres of upland habitat (47 percent of the total, including disturbed habitat); 10.8 acres of wetland habitat (95 percent of wetlands) would be lost. These impacts and their significance are summarized in Table 3-13. Table 3-14 compares the primary impacts of the existing specific plan and the two alternatives with those of the proposed specific plan.

Impacts to the California black-tailed gnatcatcher are considered significant and not mitigable on the site. Habitat modification or loss would affect over 80 percent of the onsite population.

Impacts to the state-listed endangered Otay tarplant are considered significant and are not mitigable on the site. The entire site population would be lost.

Impacts to other sensitive species of wildlife and plants are less important and are not considered significant given provisions for open space on the site.

TABLE 3-13
IMPACTS TO HABITAT TYPES, DIRECT CONVERSION

Habitat Type	Acres Impacted (Percent of Total)	Significance
Upland		
Diegan coastal sage scrub	190.0 (30%)	Highsubstantial impact to sensitive animal species; significant loss of a declining habitat type
Chamise chaparral	0 (0.%)	Lowno direct impact
Non-native grassland	85.9 (13.6%)	High-requisite habitat for one endangered plant species, important raptor foraging habitat; buffer to Sweetwater Reservoir
Disturbed	21.7 (3.4%)	Lowlow wildlife habitat and plant value
Wetland		
Southern willow scrub	2.1 (0.3%)	Highregional scarcity, high wildlife value
Southern cottonwood-willow riparian forest	0.1 (0%)	Moderatevery small area affected
Coastal freshwater marsh	6.6 (14%)	Moderateregional scarcity, high wildlife value
Open water	2.0 (0.3%)	Moderate-regional scarcity, wildlife value somewhat compromised by disturbance
TOTAL	308.4 (48.6%)	

TABLE 3-14

COMPARISON OF DIRECT IMPACTS TO HABITAT TYPES OF PROPOSED SPECIFIC PLAN WITH EXISTING SPECIFIC PLAN AND TWO ALTERNATIVES

		Approximate Acres Impacted			
Habitat Types	Pointe San Diego 1988 Submittal	Existing Specific Plan	Reduced Hillside Development	Proposed Project	Reduced Intensity
Upland					
Diegan Coastal Sage Scrub	122.4	165.4	58.4	190.0	58.4
Chamise Chaparral	0	0	0	0	0
Non-native grassland	90.4	90.4	30.0	85.9	30.0
Disturbed	18.6	18.6	18.6	21.7	18.6
Wetland					
Southern willow scrub	2.1	unknown	2.1	unknown	unknown
Southern cotton- wood-willow riparian forest	0.1	unknown	0.1	unknown	unknown
Coastal fresh- water marsh	6.6	unknown	6.6	unknown	unknown
Open water	2.0	0	2.0	0	0

Upland Habitat

Diegan Coastal Sage Scrub

The retention of 307.6 acres of Diegan coastal sage scrub in open space will allow for a measure of the existing wildlife value to persist on the site after project implementation, however, certain species will be impacted to a greater degree than others. Representative populations of Munz's sage, California adolphia, San Diego barrel cactus, ashy spikemoss, and San Diego County viguiera will remain in open space. Much of the preserved Diegan coastal sage scrub habitat will exist in small habitat islands. These islands will have reduced wildlife value and will be of no use to the California black-tailed gnatcatcher, a variety of larger mammals, and numerous other common species.

Dr. Michael Soule of the University of Michigan is presently conducting research on extinction rates of animal species in the coastal canyons of San Diego County. Preliminary results show that smaller canyons isolated by development are most susceptible to rapid extinction of various wildlife species, whereas larger isolated canyons are able to retain a balance of wildlife much longer. One substantial patch of habitat north of Jamacha Boulevard will connect with open space offsite, and may be useful habitat.

Another substantial patch of habitat south of Jamacha Boulevard may also be useful to wildlife, but will be separated form natural open space on Rancho San Diego by the proposed golf course. Thinning of natural vegetation to effect fuel reduction surrounding the development will further impact habitat, sensitive plants and sensitive animals, and will render the smaller preserved areas even less useful to wildlife.

The loss of 190.0 acres (38 percent loss) of Diegan coastal sage scrub will incrementally impact populations of the black-tailed gnatcatcher, San Diego coast horned lizard, orange-throated whiptail, and other wildlife through the reduction of available habitat.

The Diegan coastal sage scrub of the project site presently supports an approximate maximum population of 18 pairs of black-tailed gnatcatchers (based upon a spring survey of singing territorial males). According to the identified locations for the gnatcatchers and the configuration of the developed areas and habitat islands that would be created, it is likely that one or two pairs could remain north of Jamacha Boulevard, and no pairs could remain south of Jamacha Boulevard. The existing specific plan would displace approximately 8 pairs (44%); the reconfiguration alternative, approximately 4 pairs (22%); and the reduced hillside development and less intense development alternative, approximately 2 pairs (11%). In addition, although the majority of the Diegan coastal sage scrub that would be converted by the proposed project appears to be presently unoccupied by the black-tailed gnatcatcher, conversion of unoccupied appropriate habitat precludes its future use by the gnatcatcher.

This loss of essential habitat for the California black-tailed gnatcatcher appears significant and not mitigable within the general design goals of the project. Mitigation of the impacts to this resource to an insignificant level would only occur with substantial redesign of the project to avoid direct and indirect disturbance of the known Diegan coastal sage scrub habitat inhabited by the species. Such a redesign would effectively elminate the golf course and single-family residential areas in the extreme northern part of the project (see Exhibit 3-23). Similarly, in order to avoid significant impacts to the Otay tarplant, the golf course and the adjacent southerly office-professional park would have to be substantially redesigned or reduced in areal extent.

Impacts to the Diegan coastal sage scrub in general resulting from the proposed specific plan would be greater than those resulting from the existing specific plan. The reduced hillside development alternative would require the conversion of approximately one-half the area of Diegan coastal sage scrub that would result from implementation of the proposed specific plan, and the reconfiguration alternative would result in the conversion of approximately one-fourth of the area that would result from the proposed specific plan.

Grassland

The majority of the onsite non-native grassland would be converted for project implementation. Floristically, non-native grassland is not normally considered a unique or sensitive vegetation type. However, the onsite grassland supports a population of the state-listed endangered Otay tar plant (Hemizonia conjugens). The proximity of the onsite non-native grassland to the Sweetwater Reservoir also increases the wildlife habitat value of the grassland, especially for foraging raptors, including sensitive species known to use the site, such as the northern harrier, red-shouldered hawk, Cooper's hawk, sharp-shinned hawk and golden eagle. Since this area is essentially the only grassland on the site, although other grasslands exist in the area its conversion would result in a reduction of raptor use of the site and possibly the general area. Also potentially present in the grassland is the sensitive bird species grasshopper sparrow; this species was noted in a previous survey of the site.

Impacts to grassland habitat, due primarily to the loss of a population of Otay tarplant, are considered significant and not mitigable.

Impacts to the grassland habitat resulting from the proposed specific plan would be greater than to those that would result from the existing specific plan due to the golf course occurring planned for this area. The reduced intensity and reduced hillside development and reconfiguration alternatives would conserve approximately two thirds to one-half of the grassland area that would be converted by either the adopted or proposed specific plan.

Wetland Habitat

Wetlands are an intrinsically valuable biological resource due to their high wildlife use and regional scarcity. However, the majority of onsite wetlands (Hansen's ponds, Hansen Creek and Little Hansen Creek) are disturbed by past and ongoing activities such as recreation and dumping. In addition, the close proximity of a major roadway (Jamacha Boulevard) further diminishes the wildlife value of these areas. project plan proposes to convert Hansen's Ponds, Hansen Creek (except for Isham's Spring), and the majority of Little Hansen Creek to a developed resort complex. The wildlife value of these areas will be replaced on Bancroft Creek, an ephemeral drainage in the northern portion of the site (see Exhibit 3-12 in Section 3.2 for proposed conditions). The Bancroft Creek drainage is located within RCA No. 10, which will be permanent open space on the site. The replacement plan is described in detail below, under Mitigation Measures. It is anticipated that the implementation of this wetland replacement and enhancement, located in a large, protected natural area, will result in an improvement of wetland-associated wildlife habitat values on the site. Creation of the mitigation area will involve grading to reduce the slope of the streambed and construction of weirs and check dams to help retain water in the area to be planted.

Impacts to wetland habitats resulting from the proposed specific plan would differ from those that would result from the existing specific plan in that the existing plan would retain Hansen's Ponds in place. However, under the existing plan the ponds would be surrounded by development, reducing their wildlife value. The reconfiguration alternative would result in a similar situation as the existing plan. The reduced hillside development alternative would result in the removal of Hansen's

Ponds and their replacement in the mitigation area, as outlined for the proposed specific plan.

Secondary Impacts

In addition to the direct conversion of plant communities and wildlife habitat, a number of secondary impacts may potentially be generated by the project. These are listed below.

- Fragmentation of wildlife habitat. This impact is less important in the northern portion of the site, where habitat is already somewhat isolated. than for the southern portion, where what is presently a large block of Diegan coastal sage scrub and non-native grassland will be divided by development along the ridgetops and the slope along the southwestern boundary between the site and the Sweetwater Reservoir. development will result in a diminishment of wildlife movement through the area and an avoidance of the area by some species. In addition, the potential isolation of remaining wildlife populations in open space areas surrounded by development may result in a decline of both diversity and abundance. The permanent natural open space of the northern portion of the site ties into the open space of Dictionary Hill. This connection will maintain the usefulness of the area for wildlife, particularly once the proposed wetland habitat creation (described below) is complete. The eastern part of the golf course effectively separates a substantial amount of onsite natural open space (Diegan sage scrub) from the Sweetwater Reservoir and from required open space easements (Diegan sage scrub) on the Rancho San Diego project to the east.
- Increased human presence. The northern portions of the site and Hansen's Ponds presently receive fairly high levels of human usage in the form of off-highway vehicle traffic and fishing. However, the southern portion of the site presently receives relatively low levels of human usage. The presence of people, their pets, nightlighting, and roads with their associated noise and traffic hazard, will decrease the usefulness of remaining on and offsite open spaces for wildlife in the immediate vicinity of the development. This impact would reach its greatest potential impact along the southwestern boundary of the site, where planned land uses abut the Sweetwater Reservoir.
- Impact to Least Bell's Vireo The golf course and a maintenance road will be constructed on a slope within about 80 to 150 feet of existing riparian habitat along the Sweetwater River and are also separated by over 30 vertical feet. The Draft Habitat Conservation Plan for the Sweetwater River (SANDAG 1988) provides guidelines for these situations, and the Pointe project is consistent with these guidelines for development adjacent to riparian habitat. For "wide conserved habitat" a biological buffer of 50-100 feet and an additional planning buffer of 50 feet is recommended by SANDAG.

3.5.3 CUMULATIVE IMPACTS

The project as proposed would result in an addition to the ongoing regional conversion of open space to urban uses. This conversion represents a loss of wildlife habitat and the fragmentation of remaining habitat. As the urbanization increases, the result will be a degradation of remaining wildlife habitat at the interface between development and open space. The net result of these cumulative impacts is a gradual reduction of wildlife diversity and abundance throughout Southern California.

This cumulative loss of wildlife habitat is particularly acute with respect to southern willow and sage scrub habitats. Twenty-five years ago, in 1963, southern willow habitat represented only 0.2 percent of the total County average. Since then, the distribution of this valuable plant community has diminished further. Sage scrub has undergone rapid destruction or modification in recent years (Oberbaurer 1987). This habitat supports many sensitive plant and animal species.

The proposed project, after mitigation, would not contribute to the cumulative loss of southern willow habitat; the project would add southern willow woodland habitat in the Bancroft Creek mitigation area. It would however, contribute to the cumulative loss of sage scrub habitat.

3.5.4 MITIGATION MEASURES

Approximately 312.3 acres (including 11.1 acres of undisturbed golf course acres) of the project site (48 percent of the total site area) will be retained in natural, undisturbed open space. Habitat quality in the natural open space will be enhanced through removal of access for off-highway recreational vehicles and by stopping illegal dumping and other forms of human intrusion, all of which are currently causing extensive damage to the existing habitats. Portions of the open space will be actively enhanced through the creation and enhancement of wetlands and associated habitats. A detailed mitigation plan has been developed to describe the process by which habitat creation and enhancement would be accomplished (MBA and LRA 1988). This plan, which has been approved by the ACOE and will be submitted to the CDFG in compliance with the jurisdictional requirements of this agency, is included in its entirety as Appendix E to this document. Exhibit 3-24 shows the proposed

mitigation plan map for the project and Exhibit 3-25 illustrates the existing aquatic vegetation and proposed mitigation area of Bancroft Creek. The following is a summary of the plan's most important features.

Habitat Replacement and Enhancement

The mitigation plan is designed to fully compensate on a 1-to-1 basis for the loss of 10.8 acres of aquatic and riparian habitat, including 2.0 acres of deep open-water habitat, 6.5 acres of coastal freshwater marsh, 0.1 acre of southern willow scrub and 2.2 acres of southern willow scrub. The mitigation for this loss includes the creation of 9.3 acres of riparian habitat on Bancroft Creek, the creation of 0.4 acre of riparian habitat on Little Hansen Creek, and creation of a 0.8-acre Hansen Creek Mitigation Pond and an adjacent 0.3 acre of riparian habitat. The mitigation has been designed to result in the establishment of wetlands that are of higher value to wildlife than the habitat lost through project implementation. The wetland creation will consist of areas varying from very wet, with cattail, rushes and willows predominating, to drier cottonwood and California sycamore woodlands (see Exhibit 3-12 in Section 3.2 for proposed conditions).

The U.S. Army Corps of Engineers (ACOE) and Fish and Wildlife Service (FWS) mitigation policy require the agency to request 1-to-1 mitigation by value (but not less than 1-to-1 by area). Frequently, when mature, slow-growing habitats are to be replaced, FWS requests greater than 1-to-1 mitigation in order to compensate for the temporal loss of habitat that will occur as the mitigation area matures to a level equivalent to the original habitat.

FWS recognizes that the wetland habitat to be displaced at Hansen's Ranch is not of unusual value and is already somewhat impacted by its proximity to Jamacha Boulevard and the habitat's frequent use and abuse.

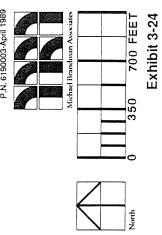
The proposed mitigation plan, developed in coordination with FWS, EPA and The Army Corps of Engineers, is recognized as replacing the existing wetland habitat with one of greater value at a nearby location less likely to be affected by human interaction. Therefore, FWS has indicated that, in this case, it will favorably "entertain" 1-to-1 mitigation with the proposed guarantees and monitoring.

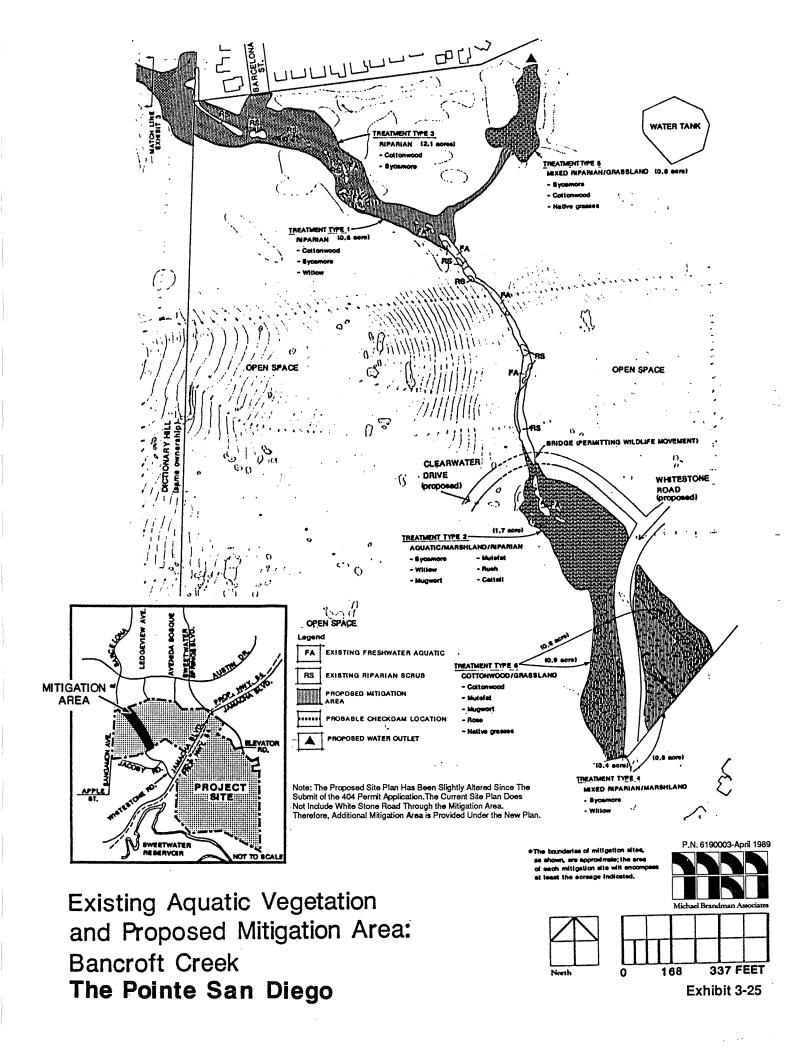


GOLF COURSE (73.6 acres)

OPEN SPACE AND RESOURCE CONSERVATION AREAS TO BE SUBJECT TO SPECIFIC PROVISIONS PROHIBITING ANY FUTURE BUILDING ACTIVITY (352.8 acres)

San Diego Areas Space The Pointe Open





The majority of the mitigation sites are located along Bancroft Creek, situated in rugged topography within the proposed 244-acre open space area. This area is immediately adjacent to the portion of the RCA 10 (Dictionary Hill) which is a part of this project. Existing vegetation consists of a narrow, very intermittent band of southern willow scrub and coastal freshwater marsh. Care has been taken in the design of mitigation features to minimize disturbance of existing wetland vegetation at the mitigation sites. However, extensive grading and construction of weirs and check dams will occur in other reaches of the stream in order to create an area conducive to the riparian species.

An additional area of mitigation will be located on a portion of Little Hansen Creek, where proposed construction of the South Bay Expressway and widening of Jamacha Boulevard will allow for the creation of 0.4 acre directly adjacent to 2.6 acres of existing southern willow scrub and marsh habitat. The existing 2.6 acres also will be enhanced through the planting of additional willows, resulting in a protected willow woodland approximately 3.0 acres in extent.

In addition, the Hansen Creek Mitigation Pond, a man-made feature of the proposed resort, to be used for storage of spring water prior to pumped transfer to the headward reach of Bancroft Creek, will be planted with native riparian vegetation. The planting of wetland vegetation will enhance the wildlife value of the pond, which will be stocked with fish. The approximate area of open water in the pond will be 0.8 acre; the wetland planting around the pond will amount to 0.3 acre.

Creation of the wetland mitigation sites will require some modification of the existing environment. Proposed landform alterations include:

- Construction of small drop structures to hold water and collect sediments. Several small structures are proposed for Bancroft Creek to provide for two areas of high water table.
- Excavation to lower ground elevation closer to the existing groundwater level for the establishment of willow woodlands. These areas are located in the middle reaches, of Bancroft Creek.

Provision of a continuous water supply, maintaining the newly established wetland vegetation in Bancroft Creek, a drainage that presently receives primarily ephemeral rainfall and urban runoff. Water from Sweetwater Springs (Isham's Springs) will be utilized as a flowing water landscape element in the resort. As the spring water reaches the end of the resort proper it will form Hansen Creek Mitigation Pond, which will be surrounded by native wetland vegetation. Water will be pumped from this pond to the upper reaches of the proposed Bancroft Creek mitigation site. A series of small dams and weirs will reduce water velocity as it flows down Bancroft Creek and encourage the accumulation of sediment and the creation of coastal freshwater marsh and southern willow scrub and woodland habitats. After traversing the mitigation site, the spring water will return to its natural drainage through Hansen's Creek. The use of this spring water provides the mitigation area with water from the same source that is presently sustaining the wetlands onsite. efficient use of spring water avoids the impact of irrigating a mitigation area with a new water source in water-scarce Southern California. (As an alternative, portions of the water draining from Bancroft Creek may occasionally be recycled to the headward reaches of the creek.)

As measured in August, a conservative estimate of the water available to Bancroft Creek from Isham Springs is 375 acre-feet per year. An average acre of riparian wetland utilizes on the order of 4 to 5 acre-feet of water annually to a maximum of 6 to 7 acre-feet annually. The 10.8 acres of wetlands to be created would thereby utilize a maximum of 76 acre-feet of water per year (10.8 acres times 7 acre-feet per year). Because the bedrock rises to the surface along most of the mitigation area, little, if any, water would be lost to groundwater recharge. Thus, more than sufficient water is available to support a wetland the size of the one proposed for Bancroft Creek with a substantial margin of safety.

A greater diversity of riparian species is proposed by the mitigation plan than is presently found on the site. This increase reflects the intention that the existing disturbed, early successional vegetation will be replaced with species that are postulated to have been present on the site in its original state. Table 3-15 is a partial list of proposed wetland mitigation species.

Additional Mitigation Measures

In addition to the mitigation plan described above, the following mitigation measures are offered to offset the potential diminishment of wildlife habitat values on the site from the effects of secondary impacts.

Most mitigation areas will be protected from trespass by fencing and signing. Resort personnel will assist the County Sheriff's Department with enforcement.

TABLE 3-15

REPRESENTATIVE PLANT SPECIES TO BE INCLUDED IN THE MITIGATION AREAS

AQUATIC

Azolla filiculoides (duckweed fern)

Lemna spp. (duckweed)

Ludwigia peploides (marsh purslane)

Marselia vestita (hairy pepperwort)

Oenanthe sarmentosa (American oenanthe)

Myriophyllum exalbescens (water milfoil)

Potamogeton spp. (pondweed)

Ranunculus aquatilis var. capillaceus (water buttercup)

COASTAL FRESHWATER MARSH

Anemopsis californica (yerba mansa)

Carex schottii (Schott's sedge)

Carex spissa (San Diego sedge)

Cyperus odoratus (coarse cyperus)

Eleocharis macrostachya (pale spike-rush)

Juncus spp. (rush)

Marselia vestita (hairy pepperwort)

Oenanthe sarmentosa (American oenanthe)

RIPARIAN

Baccharis glutinosa (mulefat)
Clematis ligusticifolia (clematis)
Elymus triticoides (beardless wild rye)
Iva hayesiana (San Diego marshelder)
Melica imperfecta (small-flowered melic)
Platanus racemosa (California sycamore)
Pluchea odorata (marsh fleabane)
Populus fremontii (Fremont's cottonwood)
Rosa californica (California wild rose)
Salix gooddingii (black willow)
Salix hindsiana (sandbar willow)
Salix lasiolepis (arroyo willow)

- Off-highway vehicle use will be prohibited throughout the site.
- Dogs will be required to be leashed outside of privately fenced yards.
- The potentially adverse effects of night lighting on natural open space areas will be mitigated by the use of one or more of the following alternatives: (1) low intensity street lamps at the edge of development, especially along the northern portion of the site; (2) low elevation lighting poles; and (3) shielding by internal silvering of the globe or external opaque reflectors.
- Landscaping in areas immediately adjacent to open space will emphasize the use of native and/or drought-tolerant species and will prohibit the use of recognized invasive non-natives such as pampas grass (Cortaderia spp.), German-ivy (Senecio mikanioides), periwinkle (Vinca major) or iceplant (Carpobrotus spp.). This restriction includes fire breaks or buffers adjacent to development.
- Grading activities within areas of identified black-tailed gnatcatcher habitat will not be conducted during the breeding or nesting season (February through May).
- Prior to destruction of Hansen's Ponds, the applicant shall establish a mechanism to ensure that the mitigation area will be protected and maintained in perpetuity to the satisfaction of the Director of Planning and Land Use. Such mechanism could include establishment of a trust or posting a bond to finance continued maintenance of the area as well as giving the mitigation area to a recognized conservation agency.

In addition, the mitigation plan is designed to integrate the created wetlands with the surrounding uplands. Thus, the mitigation plan includes an upland restoration component involving the repair of long-term damage caused by years of agricultural activities, such as grazing, and off-highway vehicle use. The surrounding upland habitats will be enhanced to attract and support native wildlife species, utilizing both Diegan coastal sage scrub species presently found on the site as well as tree species such as coast live oak (Quercus agrifolia), not presently found on the site.

Any sensitive plant species that are located in areas proposed for conversion will be transplanted, or collected seeds will be dispersed in appropriate habitat within protected open spaces of the project site.

3.6 TRANSPORTATION/CIRCULATION

The following discussion summarizes a traffic/circulation study prepared for the project by Urban Systems Associates, Inc. in May 1989. The report is reprinted in Appendix F.

3.6.1 EXISTING CONDITIONS

Circulation Characteristics

Regional access to the project area is provided via the South Bay Freeway (Route 54) and Route 94. The South Bay Freeway currently terminates at Jamacha Boulevard near the western portion of the Sweetwater Reservoir and is proposed to extend along the northwestern side of the Reservoir through the project site and then connect with Route 94. Arterial highway access to the site is provided via Jamacha Boulevard and Sweetwater Springs Boulevard. Current average daily traffic (ADT) flows on existing streets and freeways in the vicinity of the project are shown in Exhibit 3-26.

As shown on Exhibit 3-26, existing Jamacha Boulevard is a two-lane arterial carrying approximately 20,400 two-way trips per day. Sweetwater Springs Boulevard is a four-lane divided arterial currently carrying 20,700 two-way trips per day and Route 94 west of Campo Road/Sweetwater Springs Boulevard now has approximately 47,000 two-way trips per day. Avenida Bosque, which is a two-lane light collector street north of the site, carries 1,400 average trips per day (ADT) and has a capacity for 7,100 ADT. Therefore, only 20 percent of the available capacity for Avenida Bosque is currently used. Austin Drive is constructed as a major road with a capacity of 27,400 ADT, but is currently striped for two lanes and is carrying approximately only 8,200 ADT, or 30 percent of its design volume. Sangamon Avenue is a two-lane collector street with a capacity for 7,100 ADT. Sangamon Avenue currently carries less than 500 ADT, or 7 percent of its design capacity. Calle Marinero and Ledgeview Ave. are also two-lane residential collectors with a capacity of 7,100 ADT. Calle Marinero currently carries 1,000 ADT (14 percent of its design volume) and Ledgeview Ave. carries approximately 1,900 ADT, and is operating at 27 percent of its capacity. In general, the roadway system in the vicinity of the project site is well under capacity.

Circulation Planning

The circulation element of the Spring Valley Community Plan as amended in 1987 shows Jamacha Boulevard as a continuous major road through the project site. State Route 54 is designated as an expressway and Sweetwater Springs Boulevard is classified as a major road. Sangamon Avenue, Calle Marinero, and Ledgeview Ave. are depicted as residential collectors.

The South Bay Expressway (SR54) is a state adopted route which Caltrans envisions as an expressway, i.e. with at-grade intersections. County traffic volume projections, however, indicate a freeway with interchanges will be necessary in the future. If these projections are correct then the ultimate facility would be the responsibility of Caltrans and not the County. Any designs for the site would therefore allow for a design compatible with Caltrans standards. The circulation system proposed for the Pointe San Diego Specific Plan has been reviewed by Caltrans and County staff and found generally acceptable.

Because the Pointe Resort Specific Plan is proposing a realignment of SR54 and Jamacha Boulevard through the site, adoption of the specific plan will also entail amendment of Sheet 6 of the circulation system map contained in the circulation element of the San Diego County General Plan.

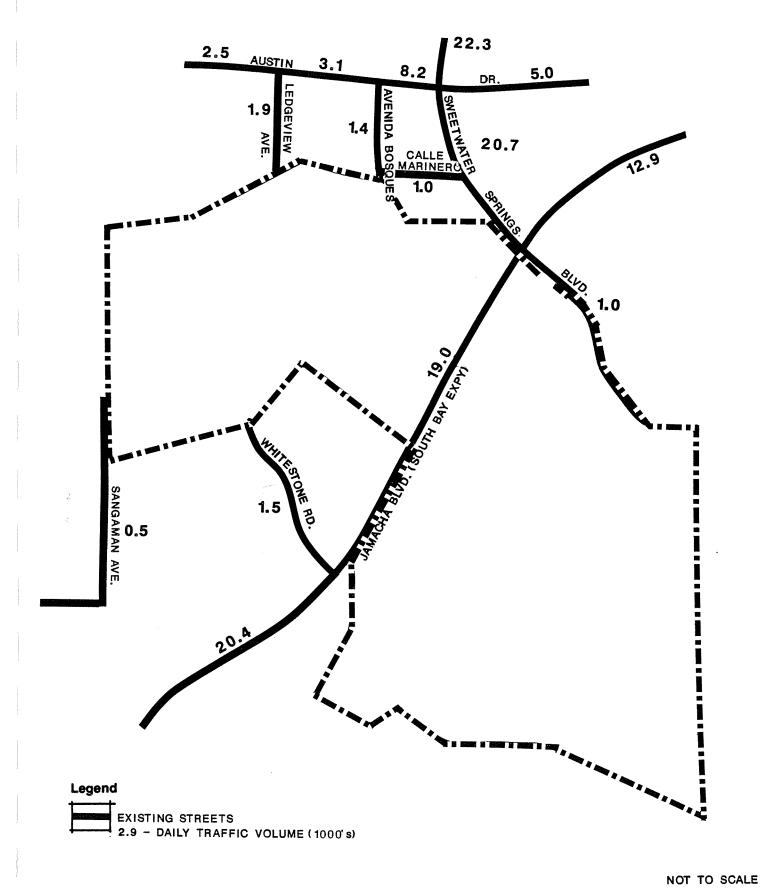
3.6.2 PROJECT IMPACTS

Trip Generation

To estimate project-related traffic volumes, traffic generation rates were obtained from the San Diego Association of Governments (SANDAG). The traffic volumes are determined by multiplying the traffic generation rates by land use quantities. Table 3-16 depicts the traffic generation rates and volumes for the proposed project.

Traffic Impact

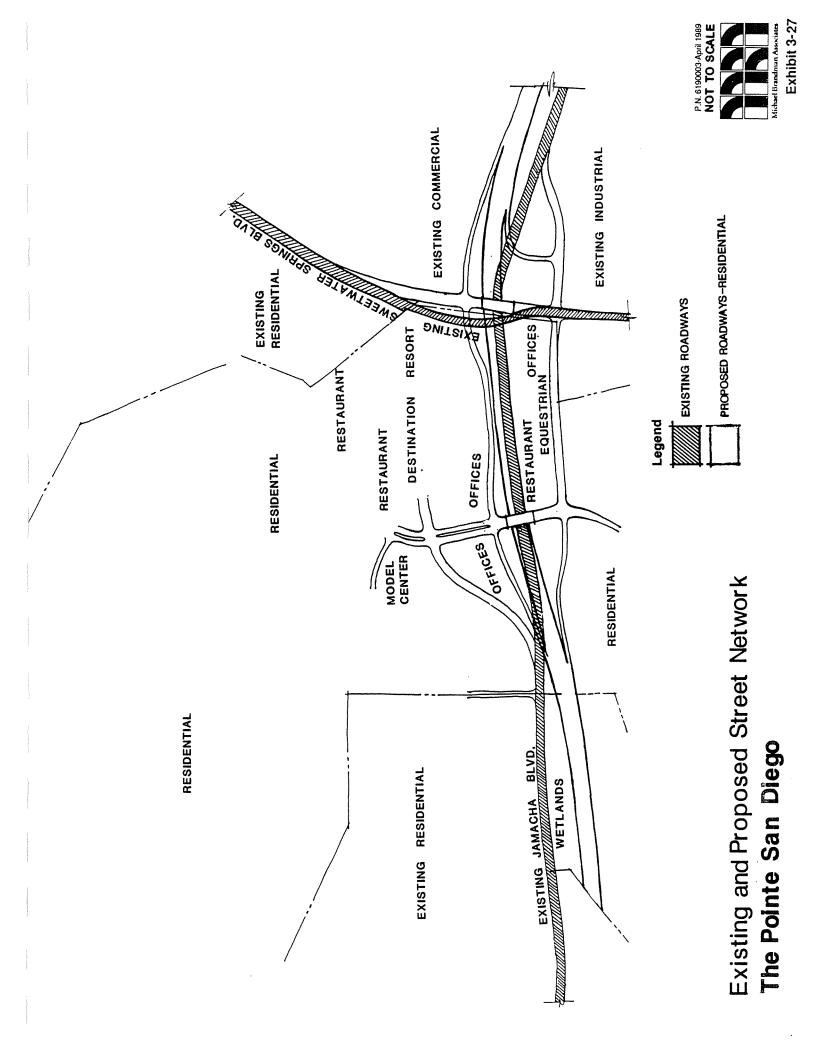
To analyze the project-related traffic, the buildout volumes are added to the existing volumes and then assigned to the existing and proposed street network. Exhibit 3-27



Existing Average Daily Traffic **The Pointe San Diego**







illustrates the existing and proposed street network and Exhibit 3-28 depicts the existing plus project traffic conditions.

TABLE 3-16
TRAFFIC GENERATION

Land Use	Units/Suites sq. ft./acreage	Daily Generation Rate	Average Daily Traffic
Resort (includes convention facilities)	641 suites	10/suite	6,410
Single Family	619 units	10/unit	6,190
Apartments	236 units	6/unit	1,416
Office	358,000 sq. ft.	20/KSF	7,166
Equestrian Center	1.8 acres	40/acre	75
Restaurant	36,500 sq. ft.	100/KSF	3,650
Golf Course	18 holes	600/golf course	600
Office-Professional Park	350,000 sq. ft.	20/KSF	7,000
Total			32,507

Source: Urban Systems Associates, Inc., 1989.

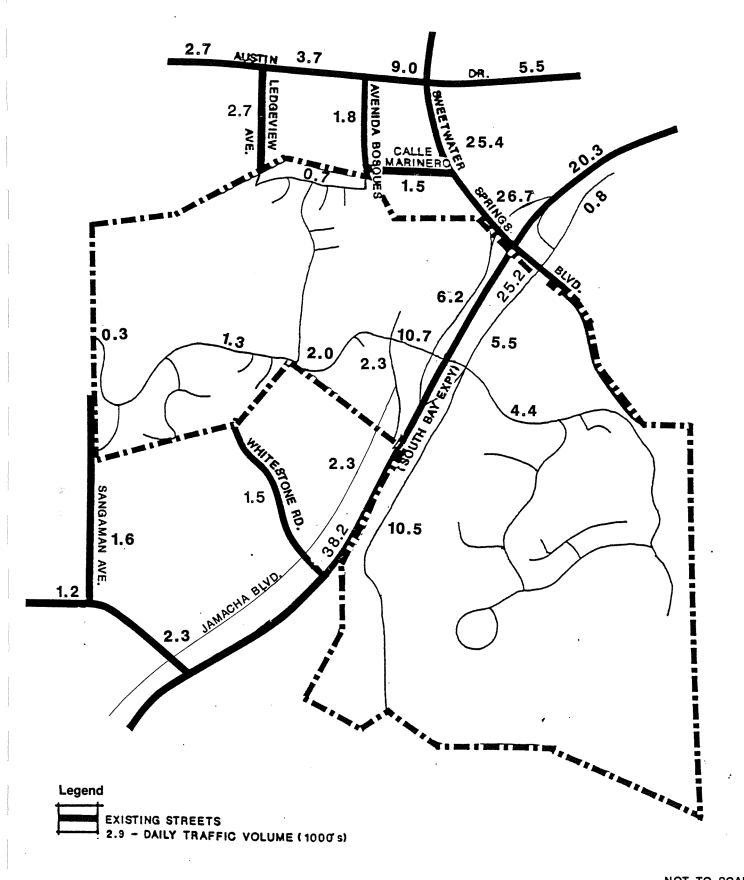
As shown in Exhibit 3-28, traffic on Sweetwater Springs Boulevard between Calle Marinero and the proposed South Bay Expressway (existing Jamacha Boulevard) would increase approximately 5,000 ADT from 20,700 ADT to 26,700 ADT. Traffic on the South Bay Expressway (existing Jamacha Boulevard) would increase by 7,400 ADT and 17,800 ADT northeast of Sweetwater Springs Boulevard and southwest of Pointe Parkway, respectively. Traffic on Avenida Bosque would increase approximately 400 ADT resulting in a total of 1,800 ADT, approximately 25 percent of capacity, after project implementation. With a project contribution of approximately 800 ADT, Austin Drive would increase to 9,000 ADT, which represents 33 percent of its

ultimate capacity. Traffic on Sangamon Avenue would increase about 1,100 ADT. Project implementation would, therefore, result in 1,600 ADT on Sangamon Avenue, which represents 23 percent of its capacity. Calle Marinero would experience an increase of 500 ADT, resulting in a total of 1,500 ADT, or 21 percent of its design capacity. In addition, Ledgeview Avenue would increase to 2,700 ADT and would operate at 38 percent capacity with project development. Avenida Bosque, Austin Drive, Sangamon Avenue, Calle Marinero, and Ledgeview Ave. can accommodate the additional traffic generated by the proposed project and remain operating well below their service capacity.

Project Roads

The proposed project includes the development of a public street system that would be connected with adjacent public roads. The project roads in the southeastern portion of the site would primarily connect with Jamacha Boulevard/South Bay Expressway. Jamacha Boulevard South would also connect with Sweetwater Springs Boulevard. The project roads in the northwestern portion of the site connect with several public roads including Jamacha Boulevard, South Bay Expressway, and Sweetwater Springs Boulevard. The project roads in the northwestern hill area of the site would be connected with Sangamon Avenue, Ledgeview Avenue, Avenida Bosque, and the planned residential development of Dictionary Hill. At each of the public roads that are adjacent to the northwestern hill area of the site, a cul-de-sac would be constructed at the project boundaries and the project roads would extend from each cul-de-sac. No gates are proposed on any of the project roads.

The project applicant proposed narrower street rights-of-way for the project roads in the northwestern portion of the site than identified by county public road standards; however, the travel lanes that are proposed would be the same as county standards. The county has concurred with the proposed street rights-of-way for the project roads in the northwestern portion of the site.



Existing Plus Project Daily Traffic
The Pointe San Diego





Exhibit 3-28

3.6.3 CUMULATIVE IMPACTS

Following is a discussion of future traffic conditions reflecting ultimate buildout of the proposed project and other developments planned in the Spring Valley Community. Land use information from Willdan Associates, the County of San Diego and current land use information on related projects along with the SANDAG/El Cajon regional traffic model were used to obtain a cumulative travel forecast for buildout conditions.

The County of San Diego and Willdan Associates jointly prepared travel forecasts for the Spring Valley/Valley de Oro Community Plan and Rancho San Diego Specific Plan Amendment 87-02. These travel forecasts reflected ultimate buildout within these communities.

The computer model used for the Pointe San Diego cumulative traffic forecasts and the County/Willdan forecasts was TRANPLAN which is used by SANDAG. Both buildout traffic forecasts are similar. There are some traffic link volumes that are different between the two forecasts primarily because of network load points or a more detailed network and zone system in the Pointe San Diego forecast.

Traffic Generation

Traffic generation for the ultimate buildout of the Spring Valley Community is shown on Exhibit 3-29. Exhibit 3-29 depicts the cumulative average daily traffic volumes on the proposed roadways on the site and in the immediate vicinity of the project site.

As shown on Exhibit 3-29, Route 54 (South Bay Expressway) will carry 59,000 average daily trips at buildout of cumulative projects. Sweetwater Springs Boulevard and Jamacha Boulevard will carry a maximum of 23,100 and 10,700 average daily trips per day, respectively.

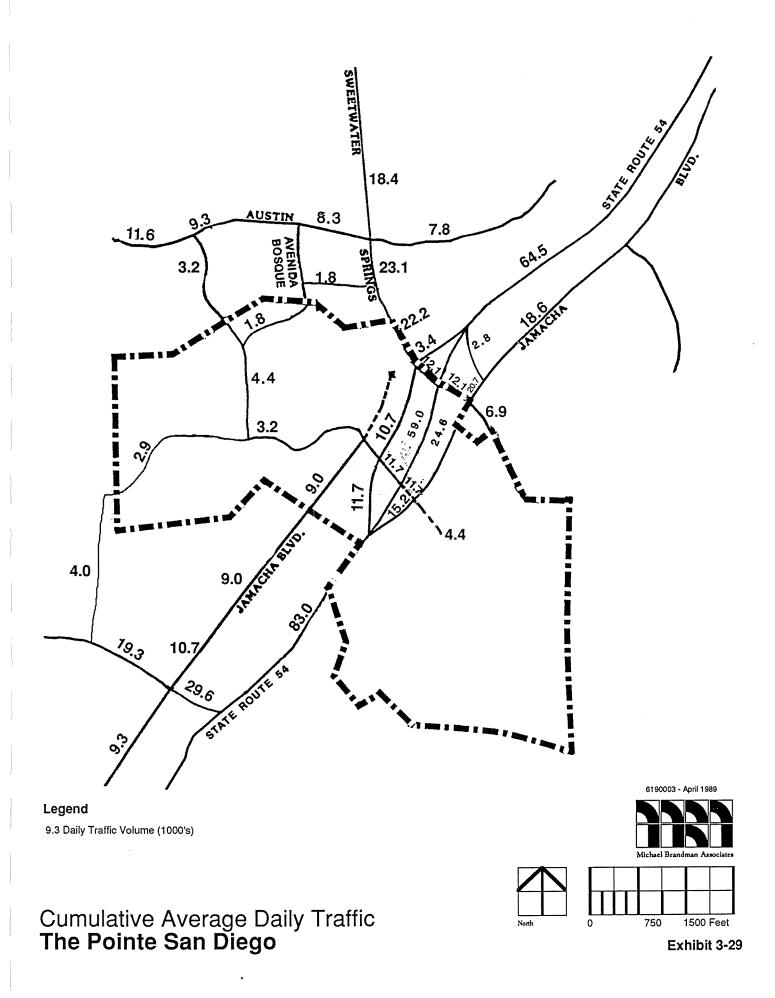
To solve the difficult situation where Jamacha Boulevard and the South Bay Expressway converge, The Pointe incorporates a frontage road system combined with a split diamond interchange at Sweetwater Springs Boulevard and Pointe Parkway. Jamacha Boulevard is proposed as a collector road with four lanes southwest of

Pointe Parkway and northeast of Sweetwater Springs Boulevard. Between Pointe Parkway and Sweetwater Springs Boulevard, two frontage roads, Jamacha Boulevard North frontage road and Jamacha Boulevard South frontage road, are proposed.

Pointe Parkway is proposed as a four-lane divided road that narrows to a two-lane undivided road northwest of the resort entrance and southeast of Jamacha Boulevard South frontage road. Sweetwater Springs Boulevard will be realigned for the interchange and will become a four-lane divided roadway.

The South Bay Expressway will have a right-of-way (hinge point to hinge point) width of 128 feet. At full development, it will be constructed as a six-lane road with a standard CalTrans median. Offramps and onramps are proposed at Pointe Parkway and Sweetwater Springs Boulevard in a modified diamond interchange configuration. These onramps and offramps have been reviewed and approved by Caltrans and a profile drawing and a description of the staged improvements of these ramps are located in Appendix F. Full expressway improvements and interchanges will not be needed along the South Bay Expressway until volumes reach 50-60,000 ADT which are the upper capacity limits of a conventional six-lane prime arterial. Since the current traffic flow in the Jamacha Boulevard Corridor within the project area is 20,400 ADT, approximately 30,000 to 40,000 ADT capacity is available to accommodate project and regional traffic growth. Construction of full expressway/freeway improvements is not proposed until traffic levels warrant it. In the interim, Jamacha Boulevard would be signalized at Pointe Parkway and Sweetwater Springs Boulevard, and the northerly frontage road would not be constructed. Some design adjustments are proposed to ease the transition from the interim to the ultimate condition.

Currently Caltrans contains two alignments of the proposed SR-54. One is the expressway alignment and this alignment is adjacent to the existing Jamacha Boulevard. This alignment would eliminate the riparian habitat adjacent to the existing Jamacha Boulevard. The second alignment is the freeway alignment. This alignment is further east of the existing Jamacha Boulevard and implementation would not eliminate the existing riparian habitat. The project applicant is proposing to implement the Caltrans freeway alignment for SR-54.



The proposed Pointe Office-Professional Park Road (Golf Pointe Drive) during the interim will intersect Pointe Parkway directly across from Jamacha Boulevard South (see Exhibit 3-30). This intersection would be signalized during both the interim and ultimate period, allowing vehicles to make a left turn onto Pointe Parkway.

Jamacha Boulevard at the intersection with Sweetwater Springs Boulevard will be constructed initially as a four-lane facility with two left turn lanes northbound and one southbound. However grading will be done and full right-of-way provided for a six-lane facility between Sweetwater Springs Boulevard and Pointe Parkway.

When the resort is constructed, the two-lane offsite portion of Jamacha Boulevard southwest of Pointe Parkway will need to be widened to four lanes.

Regional traffic growth for the Jamacha Boulevard (South Bay Expressway) corridor has averaged about 7 percent per year for the past six years (1983-1988). At buildout Pointe project traffic using the South Bay Expressway is estimated to be distributed approximately 60 percent to the west and 40 percent to the east. If project and cumulative project buildout traffic is added to projected traffic on the South Bay Expressway, capacity of a six-lane arterial would be reached in 2001.

Buildout of the Pointe Resort Specific Plan is expected in approximately 5-7 years. Based on this assumption, less than 35,000 ADT would travel along the expressway. Therefore, the South Bay Expressway will provide sufficient capacity to accommodate project and regional growth traffic with four lanes until approximately 1995. After 1995, the South Bay Expressway would need to be widened to six lanes. If regional traffic continues to grow at 7 percent per year, the six-lane South Bay Expressway with at-grade intersections would reach capacity in the year 2001.

Intersection Capacity

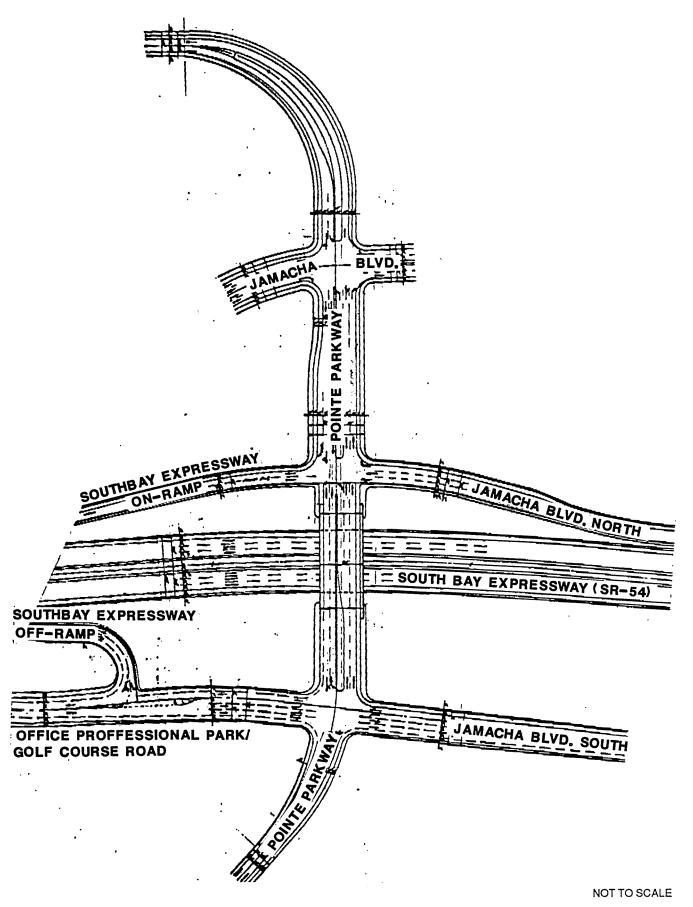
An intersection capacity utilization (ICU) calculation was completed for buildout traffic volumes at seven intersections. ICUs are usually presented in a percentage and correspond to five level of service (LOS) categories. These categories range from LOS 'A' which represents free flowing traffic, to LOS 'F' which represents slow moving bumper to bumper traffic. LOS 'C' or better is an ideal rural standard.

As shown in Table 3-17 the intersections in the proposed roadway system would result in a level of service 'C' or better after buildout of cumulative projects. Therefore, these intersections would operate within capacity.

TABLE 3-17
INTERSECTION CAPACITY UTILIZATION
AND LEVEL OF SERVICE CUMULATIVE PROJECTS

	ICU		LO	LOS	
Intersection	AM	PM	AM	PM	
Jamacha Boulevard North/Resort Entrance at Pointe Parkway	.59	.44	A	A	
Jamacha Boulevard North Frontage Road at Pointe Parkway	.42	.47	A	A	
Golf Pointe Drive at ramp	.69	.68	В	В	
Pointe Parkway at Golf Pointe Drive	.68	.79	В	С	
Jamacha Boulevard North Frontage Road at Sweetwater Springs Boulevard	.59	.65	A	В	
Sweetwater Springs Boulevard at Jamacha Boulevard South Frontage Road	.66	.81	В	С	
Route 54 Eastbound On-Ramp at Jamacha Boulevard South Frontage Road	.46	.38	A	A	

Source: Urban Systems Associates, Inc. 1989.



Street Design Concept for Office - Professional Park/ Golf Course Road

The Pointe San Diego





3.6.4 MITIGATION MEASURES

- 1. The following general plan circulation element amendments are required:
 - Reclassify Jamacha Boulevard from Jamacha Road to Sweetwater Springs Boulevard from a major to a collector road.
 - Add Pointe Parkway from Jamacha Boulevard to Jamacha Boulevard South as a collector street.
 - Add Jamacha Boulevard from Pointe Parkway to Sweetwater Springs Boulevard as collector frontage roads on the north and south sides of Route 54.
- 2. Except for the ultimate South Bay Expressway, the project applicant will construct the proposed roads according to the recommendations described in the traffic report. Construction shall proceed in accordance with the phasing recommended in the traffic report (Appendix F).
- 3. Right-of-way within the project for the ultimate expressway, frontage road and interchange system will be provided. Grading of the six-lane expressway and construction of a four-lane arterial will occur during Phase I of the development. An interim six-lane prime arterial is recommended for the South Bay Expressway until traffic volumes exceed capacity which should occur in approximately 2005. This interim facility is proposed to be signalized at Pointe Parkway and Sweetwater Springs Boulevard.
- 4. The developer shall prepare a transportation demand management plan and establish a program to encourage ridesharing and use of public transit.
- 5. The County of San Diego may require the applicant to construct the Pointe Parkway Bridge and the Sweetwater Springs Boulevard Bridge. The county may also require construction of the Jamacha Boulevard North frontage road. Pointe Builders disagrees with the funding for this construction.

3.7 AIR QUALITY

3.7.1 EXISTING CONDITIONS

Meteorology/Climate

The project site is located in the Spring Valley Community Planning Area which lies in a transitional zone between the coastal climate dominated by the ocean influence, and the interior uplands climate. Some of the time, the area is under the moderating influence of the coastal climate while at other times the more extreme interior climate conditions prevail. The fluctuation in weather are controlled by landward or seaward air mass movements resulting from changes in large-scale atmospheric patterns.

The most significant large-scale feature of the San Diego coastal climate is the large, semi-permanent Pacific high atmospheric pressure system. San Diego County lies under the eastern extremity of this system that stretches from Hawaii to California. The dynamics of this high pressure system provide a persistent, elevated temperature inversion that defines the top of a shallow layer of cool, relatively moist, marine air. Most importantly, this inversion puts a "lid" on the thermal or mechanical mixing that otherwise could disperse atmospheric pollutants higher into the atmosphere and thence out of the Region altogether.

Winds in the Spring Valley Planning Area show a moderately strong diurnal land and sea breeze cycle. Generally, the sea breeze condition occurs between 10:00 p.m. and 5:00 p.m. with an average direction from the west-southwest and speeds of 5.5 to 11 miles per hour during the summer months. The sea breeze is much weaker and more variable during the winter when air flow is conditioned by large-scale upper atmospheric storm tracks moving across Southern California (Mooney-Levine and Associates 1987).

During the night hours, a strong land breeze develops. The flow is oriented along the axis of the valley, drawing air masses from the higher elevations into the lower portions of the planning area. Night land breezes are usually established by 7:00 p.m.

and continue until sunrise (approximately 6:00 a.m.). The general wind direction is normally from the east-northeast. Nighttime wind patterns, while flowing generally from land to sea, fluctuate depending upon terrain. In the Spring Valley area, typical diurnal winds blow down the canyons and through the Sweetwater River Valley.

Two reversal periods, in which a temporary equilibrium is reached and stable conditions prevail, occur in the Rancho San Diego area. One reversal period occurs in the early morning hours between 6:00 a.m. and 10:00 a.m.; a second reversal period occurs at dusk or between 5:00 p.m. and 7:00 p.m. These reversal periods are characterized by light and variable winds that have no specified direction. Basically, the reversals are due to the variable heating and cooling of the land and sea.

Significant periods of stagnation occur during the summer. In July and August, the number of days over 90 degrees corresponds roughly to the number of days that the sea breeze does not effectively penetrate as far as Spring Valley. The lack of pollutant dispersion results in high ambient concentrations of oxidants.

Each year one to four Santa Ana episodes affect the planning area, mainly in fall and winter. The strong easterly winds, caused by an extreme buildup of high atmospheric pressure over the inland deserts, can have a generally favorable effect on air quality in transitional areas, such as Spring Valley, by blocking the incursion of pollutant-laden air from the urbanized coast. However, Santa Anas can also have detrimental effects on air quality, particularly when they break down and coastal breezes push polluted air back to the mainland.

Mixing depth, the vertical distance between the ground and the inversion base, is an indicator of the volume of air available for pollutant dispersion. Generally, the greater the mixing depth the lower the pollutant concentration. Maximum mixing depths coincide with the onset of the sea breeze in mid- to late-morning. If there are light winds and clear skies during early morning, mixing is inhibited and morning ground inversions are prevalent. In winter, drainage from the foothills creates a strong, ground-based inversion at night, at least 75 percent of the time.

The following four pollutants are of primary concern in the Valle de Oro area: oxidant ("photo-chemical smog" or ozone), carbon monoxide (CO), nitrogen oxides

(NOx) and particulates (TSP). Oxidant concentrations are highest during the summer and somewhat lower during spring and fall. The potential for carbon monoxide and nitrogen dioxide "hot spots" is greatest on winter mornings. Particulates are a problem throughout the year, but especially during the dry summer months.

The project site is a downwind receptor area for oxidants generated in two areas: the Los Angeles Air Basin and the San Diego metropolitan area. Most smoggy days caused by pollutants transported from Los Angeles occur during the spring or fall. The episodes caused by San Diego pollution occur mainly in the summer. The pollutants and pollutant precursors are transported into the planning area by the westerly sea breeze. Oxidant concentrations are generally lower in the morning and increase throughout the day as sunlight reacts with reactive hydrocarbons and nitrogen oxides to produce more oxidants. Later in the afternoon as the land heats up and rising air breaks up the inversion layer, the pollutants disperse.

The Spring Valley area has a potential for the buildup of high carbon monoxide and nitrogen dioxide levels along the major arterials during the winter mornings because of the prevalence of ground based inversions. By mid-morning the sun heats up the ground and the inversion disperses.

Particulates are a serious problem throughout San Diego County because of the semiarid climatic conditions. Particulate volumes increase with increased human activities including farming, construction and the use of automobiles and off-road vehicles.

Existing Air Quality. State and Federal air quality standards have been established to protect the public health and welfare. Federal standards, called the National Ambient Air Quality Standards (NAAQS), have been promulgated by the Environmental Protection Agency. To enforce the NAAQS, federal policy requires that each state prepare and implement an air quality management plan to achieve the NAAQS by established dates.

In California, the Air Resources Board (ARB) is the agency responsible for preparing and implementing an Air Quality Management Plan. To do this, the ARB has compiled the State Implementation Plan (SIP) which outlines air quality conditions in each of the state's 14 air basins and details measures to achieve the NAAQS. In addition, the ARB has established more strict standards for some pollutants due to unique circumstances in California.

The SIP is compiled from "revisions" prepared by each air basin. In the San Diego Air Basin (SDAB), the Air Pollution Control District (APCD) is responsible for preparing the basin's "revisions," as contained in the 1982 SIP Revisions (APCD, 1982). The basic premise of the 1982 SIP Revisions was to achieve the federal clean air standard for ozone by the end of 1987 by reducing emissions with consideration for growth. The standard for ozone was not met. The 1982 SIP showed that its forecast for the present years, between 1987 and 1990, would be the closest the basin would ever get to the attainment of clean air.

Overall, the SDAB is currently in compliance with all of the air quality standards except those for carbon monoxide, ozone, and particulate matter. Although there has not been any air quality monitoring on the Hansen's Ranch site, the air flow patterns in the western portion of the County are fairly predictable and data from the El Cajon monitoring station can be considered representative of the Spring Valley area. Table 3-18 summarizes the number of days which exceed the state and federal standard for ozone, carbon monoxide, nitrogen dioxide, total suspended particulates, and sulfur dioxide at the El Cajon monitoring station for the years 1983 through 1986. The El Cajon area, including the project site, is a downwind receptor for pollutants generated along the coast.

Ozone/Oxidant

The state standard (0.10 ppm, 1-hour) was exceeded an average of 57 days each year at the El Cajon Station. The federal standard (0.12 ppm, 1-hour) was exceeded an average of 10 days each year during 1982-1986. The highest 1-hour oxidant level reached was 0.21 ppm in 1984.

TABLE 3-18
SUMMARY OF AIR STANDARD VIOLATIONS
EL CAJON AIR QUALITY MONITORING STATION

	1983	1984	1985	1986	1987
Ozone (O ₃)					
State/federal standard (1-hr avg) 0.10/0.12 ppm Highest concentration	0.18	0.21	0.18	0.14	0.14
Number of days state/federal standard exceeded	63/3	60/9	48/13	55/13	25/3
Carbon Monoxide (CO)					
State/federal standard (1-hr avg) 20.0/35.0 ppm Highest concentration	11	12	10	10	10
Number of days state/federal standard exceeded	0/0	0/0	0/0	0/0	0/0
Nitrogen Dioxide (NO ₂)					
State/federal standard (1-hr avg) 0.25/0.25 ppm Highest concentration	0.15	0.13	0.17	0.22	0.15
Number of days state/federal standard exceeded	0/0	0/0	0/0	0/0	0/0
Sulfur Dioxide (SO ₂)	•				
State/federal standard (24-hr avg) 0.05/0.14 ppm Highest concentration	0.04	0.03	0.04	0.02	0.02
Number of days state/federal standard exceeded	0/0	0/0	0/0	0/0	0/0
Total Suspended Particulates (TSP) ^a					
State/federal standard (24-hr avg) 100/260 ug/m ³ Highest concentration	120	141	104	145	149
Percentage of samples that exceeded state/federal standard	3/0	2/0	3/0	3/0	3/0
Particulate Matter (PM ₁₀) ^a State standard (24-hr avg) 50 ug/m ³					
State standard (24-hr avg) 50 ug/m ³ Highest concentration	NM	NM	NM	74	94
Percentage of samples that exceeded state standards	_	_	_	0/19	0/19
state standards				0,10	U/ I U

NM = Not Monitored

ppm = parts per million

ug/m³ = micrograms per cubic meter

Source: California Air Resources Board Air Quality Data, 1983-1986.

a The state TSP standard was superseded by the state PM10 standard in 1986 and the federal TSP standard was superseded by the federal PM10 standard in 1987.

Carbon Monoxide

The state carbon monoxide standard (0.20 ppm, 1-hour) and the federal carbon monoxide standard (0.35 ppm, 1-hour) was not exceeded during 1983 to 1987.

Nitrogen Dioxide

The El Cajon Station did not exceed the one-hour state or federal standard of 0.25 ppm between 1984 and 1987. The highest concentration was 0.22 ppm during 1986.

Sulfur Dioxide

State and federal sulfur dioxide standards of 0.05 ppm and 0.14 ppm, respectively, have not been exceeded at the El Cajon Station during the past four years. The highest concentration was .04 ppm in 1985.

Total Suspended Particulates

The state 24-hour total suspended particulates standard (100 ug/m^3) was exceeded in approximately 3 percent of the samples taken during 1983 to 1986.

Particulate Matter

Particulate matter was not monitored at the El Cajon Station until 1986. Nineteen percent of the samples exceeded the state standard of 50 ug/m^3 in 1986 and 1987. The maximum sample was 94 ug/m^3 .

3.7.2 PROJECT IMPACTS

The California Environmental Quality Act (CEQA) indicates that a project will be considered to have a significant impact on air quality if the project "violates" any ambient air quality standard, contributes measurably to an existing air quality violation, or exposes sensitive receptors to substantial levels of pollutants.

The approval of the proposed project allows development of a destination resort community including a luxury resort with 624 guest suites, 855 residential units, 358,300 square feet of office uses, a restaurant, recreational facilities, and a 350,000-square-foot business park, resulting in increased stationary and mobile source emissions in the basin. Stationary sources include emissions onsite from construction activities and natural gas combustion, as well as emissions associated with any electrical requirements for power and lighting. Mobile source considerations include short-term construction activities and long-term traffic generation. The following impact discussion is organized into two general categories for ease of presentation: short-term impacts (fugitive dust and construction equipment emissions) and long-term impacts (stationary and mobile sources).

Short-Term Impacts

The presentation of the study area for building construction produces two types of air contaminants: exhaust emissions from construction equipment and fugitive dust generated as a result of soil movement, and sand and gravel operations. These construction impacts could be expected during each phase of development. The emissions produced during grading and construction activities, although of short-term duration, could be troublesome to workers, even though prescribed wetting procedures are followed.

Exhaust Emissions from Construction Equipment

Exhaust emissions from construction activities include those associated with the transport of workers and machinery to the site, as well as those produced onsite as the equipment is used. Appendix G presents exhaust emission factors for various types of equipment used during construction operations.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial temporary impact on local air quality. Building and road construction are the prevalent construction categories with the highest emission potential. Emissions are associated with land clearing, ground excavation, sand and gravel operations, grading operations and construction of structures.

Dust emissions vary substantially from day to day, depending on the level of activity, the specific operations and the prevailing weather. A large portion of the emissions would result from equipment traffic over temporary roads at the site. The quantity of fugitive dust generated is proportional to the area of land being worked and the level of construction activity. Emissions from heavy construction operations are directly proportional to the silt content of the soil (that is, particles smaller than 75 microns in diameter) and inversely proportional to the square of the soil moisture. Based on the U.S. EPA-42 emission factor for construction operations of 1.2 tons of fugitive dust per acre of construction per month of activity, and using 291.5 acres of disturbed area on the 653-acre site, an estimated total of 349.8 tons of fugitive dust could be generated for each month of construction activity. However, due to both the short-term duration of grading activity and the amount of grading anticipated during project construction, the estimated quantity of fugitive dust generated by project implementation would appear to represent an extreme worst-case condition. It is anticipated that actual fugitive dust generated due to construction activity will be less than the 349.8 tons estimated.

Long-Term Impacts

A computer model URBEMIS 2, published by the State of California Air Resources Board, was used to estimate the pollutant emissions from mobile sources resulting from various land uses within the project area. Input variables include the types and extent of the land uses, trip generation rates, trip lengths, speeds, temperature, etc. Table 3-19 shows the trip generation rates in URBEMIS 2 for each of the land uses within the Pointe Specific Planning Area. Traffic from these uses will generate a significant volume of pollutants. However, the Pointe Resort has been designated to incorporate land planning features, as originally established by the Regional Ambient Air Quality Strategies (RAAQS), to reduce dependence on motor vehicles.

Table 3-20 summarizes the projected mobile emissions for buildout of The Pointe at Isham Springs. The Pointe Specific Planning Area will generate 4,136.7 pounds/day of carbon monoxide, 430.7 pounds/day of total organic gases, and 682 pounds/day of nitrogen oxides. These primary pollutants will also react to form ozone, thereby incrementally increasing the ozone levels downwind of the project.

TABLE 3-19

THE POINTE SAN DIEGO TRIP GENERATION RATES

Land Use Type	Trip Generation Rates	Dwelling Units, Rooms, Sq. Footage, or Acres		
ResidentialSingle Family	10/d.u.	624 d.u.		
Apartment	6/d.u.	240 d.u.		
Resort/Convention Facilities	10/suite	624 suites		
Office	20/1,000 sq. ft.	358,300 sq. ft.		
Restaurants	100/1,000 sq. ft.	36,500 sq. ft.		
Equestrian Center	40/acre	0.3 acre		
Golf Course	8.1/acre	75 acres		
Office-Professional	20/1,000 sq. ft.	350,000 sq. ft.		

TABLE 3-20

THE POINTE SAN DIEGO TOTAL MOBILE POLLUTANT EMISSIONS AT BUILDOUT pounds/day

Carbon Monoxide	Total Organic Gases	Nitrogen Oxides
4,136.7	430.7	682

Stationary Source Emissions

The stationary source emissions were quantified based on the various proposed land uses and gas and electric consumption rates, recommended by San Diego Gas and Electric Company. Emission factors were obtained from the U.S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors, AP-42.

Appendix G contains the computer runs for these emission. Table 3-21 indicates the project's stationary source emission as well a mobile source emissions.

TABLE 3-21

PROJECTED MOBILE AND STATIONARY SOURCE EMISSIONS pounds/day

Primary Pollutant	Stationary	Mobile	Total
	Sources ^a	Sources ^b	All Sources
Carbon Monoxide	26	4,137	4,163
Hydrocarbons	3	431	434
Nitrogen Oxides	147	682	829

a Based on a natural gas usage rate of 256,765 cubic feet per day and an electricity usage rate of 55,236 kwh per day.

As shown, stationary-source related emissions generated as a result of the proposed project represent 3 percent of the total project emission burden from all sources. In 1995, motor vehicle emissions will account for 97 percent of the total, although exhaust control technology or legislation, as well as more stringent stationary-source emissions control measures, may reduce the total. It should be noted that the bulk (76 percent) of the total air pollutant emissions from all sources will be carbon monoxide issuing from motor vehicles.

Local Air Quality

Assessing the impact of the proposed project on local air quality and the impact of the local air quality on the proposed project is accomplished through the use of Caltrans Caline 4 air quality model, which allows microscale carbon monoxide (CO) concentrations to be estimated along roadway corridors or intersections. Exhibit 3-31 shows the locations for which the Caline 4 model was completed. Because of the relative inertness of carbon monoxide in the photochemical smog formation process and the limitations of dispersion characteristics of the other air pollutant species, carbon monoxide is the most suitable tracer pollutant of microscale modeling. Secondary pollutants are a large-scale phenomenon, and are analyzed on a regional basis, rather than a local one.

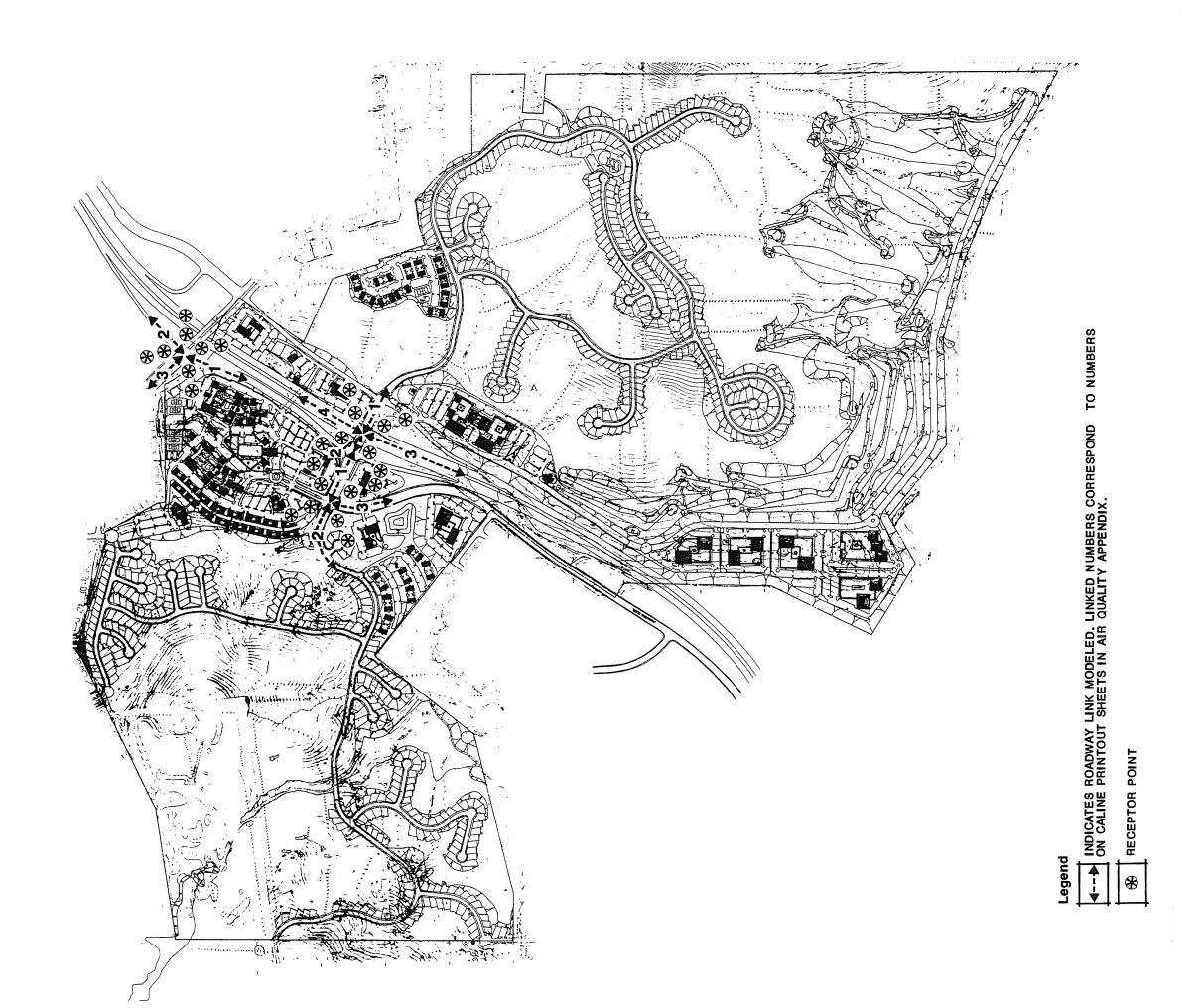
b Based on Urbemis 2 Computer Model.

Computer readouts appear in Appendix G and a brief discussion on input to the model follows. Table 3-22 presents the results of the analysis for the worst-case wind angle and windspeed condition and is based on the following assumptions:

- The traffic volumes reflect existing, existing plus project and project plus cumulative for the Jamacha Boulevard/Sweetwater Spring Boulevard intersection and project and project plus cumulative for the Jamacha Boulevard/Pointe Parkway and South Bay Expressway/Pointe Parkway intersections.
- The calculations assume a meteorological condition of almost no wind (1.0 meters/second), a flat topographic condition between the source and receptor and a mixing height of 700 meters.
- CO concentrations are calculated for both a 1-hour and 8-hour averaging period, and then compared to the federal 1-hour and 8-hour standards.
- Concentrations are reported in units of parts per million (ppm) at the receptor locations shown in Exhibit 3-31.
- The average speed (worst-case assumption) was assumed to be 25 miles per hour. For the existing conditions, the 1988 CO emission factor was used; for project conditions, the 1995 CO emission factor was used; and for cumulative conditions the 2002 CO emission factor was used.
- Ambient (background) CO concentrations that represent the second worst-case CO concentrations measured at the El Cajon Station in 1987 were added to the model results. These background concentrations are 10.0 ppm for the 1-hour average and 6.0 ppm for the 8-hour average.

As indicated in Table 3-22, the carbon monoxide concentrations at the existing intersection of Sweetwater Springs and Jamacha Boulevards will be the same or somewhat lower than occur today. This is because, although traffic volumes will be greater in 1995 and 2005, it is anticipated the emissions from future vehicles will be lower due to engineering advances, more stringent regulations and stricter enforcement. The proposed interactions of roadways including the realignment of

¹ The CO emission factors used are from the State Air Resources Board EMFAC7 (CARB 1987).



Caline Modeling Locations The Pointe San Diego

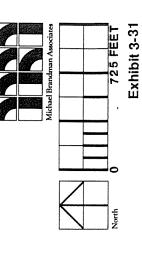


TABLE 3-22

MAXIMUM CARBON MONOXIDE CONCENTRATIONS^a
(parts per million)

	Carbon Monox	tide Concentration	ons ^b (1-hr/8-hr)
Intersection	Existing	Project	Project + Cumulative
Sweetwater Rd./Jamacha Blvd.	***************************************		
Receptor 1	10.9/6.9	10.8/6.8	11.1/7.1
Receptor 2	10.6/6.6	10.5/6.5	10.7/6.7
Receptor 3	10.9/6.9	10.8/6.8	11.2/7.2
Receptor 4	10.5/6.5	10.5/6.5	10.7/6.7
Receptor 5	11.2/7.2	10.9/6.9	11.3/7.3
Receptor 6	10.7/6.7	10.5/6.5	10.7/6.7
Receptor 7	11.1/7.1	10.8/6.8	11.2/7.2
Receptor 8	10.7/6.7	10.5/6.5	10.7/6.7
Jamacha Blvd./Pointe Pkwy.			
Receptor 1		10.2/6.2	10.4/6.4
Receptor 2		10.1/6.1	10.2/6.2
Receptor 3	esse ness	10.2/6.2	10.4/6.4
Receptor 4	***	10.1/6.1	10.2/6.2
Receptor 5		10.4/6.4	10.9/6.9
Receptor 6		10.3/6.3	11.0/7.0
Receptor 7		10.4/6.4	10.7/6.7
Receptor 8		10.4/6.4	10.6/6.6
Southbay Expressway/Pointe Pkwy.			
Receptor 1		10.8/6.8	11.2/7.2
Receptor 2	*** ***	10.5/6.5	10.7/6.7
Receptor 3		10.8/6.8	11.2/7.2
Receptor 4		10.5/6.5	10.7/6.7
Receptor 5		11.0/7.0	11.3/7.3
Receptor 6		10.6/6.6	10.7/6.7
Receptor 7	***	11.0/7.0	11.2/7.2
Receptor 8		10.6/6.6	10.7/6.7
-			

a The federal standards are 35 ppm (1-hour average) and 9.1 ppm (8-hour average); state standards are 20 ppm (1-hour average) and 9.0 ppm (8-hour average).

Source: Michael Brandman Associates, 1989.

b Concentrations of carbon monoxide in ppm, measured from the intersection centerpoint. Background CO levels of 10.0 ppm have been added to the 1-hour average concentration and 6.0 ppm has been added to the 8-hour average concentration.

Jamacha Boulevard, Pointe Parkway and the South Bay Expressway will add carbon monoxide emissions to the atmosphere; however, concentrations will not exceed state or federal standards.

The additional local emissions of nitrogen oxides could, likewise, have a minor adverse impact on local air quality. The Spring Valley area often experiences surface-based inversions on winter mornings. Because of these inversions, dispersion of primary pollutants is inhibited creating a potential for elevated ground level concentrations of nitrogen oxides and sulfur oxides.

Particulate levels will increase throughout the Pointe Specific Planning Area and the immediate downwind vicinity with the implementation of the project. These levels will be highest during the construction phase of the project. Upon completion of the project, particulate levels will be highest during the drier months and the months with highest outdoor activity levels. Also, the provision of equestrian trials will contribute slightly to increased particulate levels.

Air Quality Management Plan

The San Diego Air Basin is a non-attainment area for carbon monoxide, ozone, and particulates. Under the Federal Clean Air Act of 1970, a comprehensive basin-wide plan for attaining and maintaining air quality standards is required. The State Implementation Plan Revisions forecast the level of emissions anticipated in the future, including the planned growth of new sources. The San Diego Association of Governments population projections (Series VI) were used for such forecasts. Since the location of emission sources is a significant factor in the air pollution meteorology and chemistry, the conformance of actual growth with regional planned growth patterns is important in achieving air quality goals.

The Pointe Specific Plan (Hansen's Ranch Specific Plan area) is consistent with the Series VI population forecast. In the Spring Valley Community Planning Area, the Series VI forecast was for a population of 106,296 people in the year 2000, thereby accommodating a significant level of growth including the growth from implementation of the Hansen's Ranch Specific Plan.

3.7.3 CUMULATIVE IMPACTS

Implementation of the proposed project and related projects will incrementally increase air emissions in the Region. Table 3-22 indicates projected local air quality based on cumulative projects at two intersections in the project area. State and federal CO standards are not exceeded at either intersection.

3.7.4 MITIGATION MEASURES

Short-Term Impacts

It is recommended that the following measures be implemented to reduce the shortterm (construction) impacts associated with implementation of the proposed project.

- 1. Control fugitive dust by regular watering and paving construction roads or other dust palliative measures.
- 2. Since emissions from sand and gravel operations usually are in the form of fugitive dust, control techniques applicable to fugitive dust sources are appropriate. Some successful control techniques used for haul roads are application of dust suppressants, paving, route modifications, soil stabilization, etc.; for conveyors, covering and wet suppressions; for storage piles, wet dust suppression, windbreaks, enclosure and soil stabilizers; and for conveyor and batch transfer points (loading and unloading, etc.), wet suppression and various methods to reduce freefall distances (e.g., telescopic chutes, stone ladders, and hinged boom stacker conveyors); for screening and other size classification, covering and wet suppression.
- 3. Maintaining equipment engines in proper tune.
- 4. Phasing and scheduling construction activities to level emission peaks.

Long-Term Impacts

The Pointe Specific Plan has been designed to incorporate land use planning features which are aimed at reducing pollutant emissions from motor vehicles by promoting transit use, ridesharing, bicycling, and providing jobs where people live.

The project is oriented along the proposed South Bay Expressway which is now Jamacha Boulevard. The commercial area has excellent access from both the expressway and the local road system.

The Pointe Specific Plan also includes an extensive system of riding, hiking and bicycling trails throughout the community. These trails are designed to link residential areas with employment. Additional measures should be implemented during the design review of commercial and industrial projects. Such measures include the provision of safe and convenient pedestrian and bicycle access through or around large parking lots. Such access should serve to assist pedestrians and bicycles in the transition from trails, pathways, etc. to their destinations. Also, where appropriate, push-buttons should be installed on stop lights to activate a "walk" light.

The Pointe is a luxury destination resort which appeals to convention groups and vacationers planning a week or more stay. All amenities needed, both recreational and business types, are available thereby decreasing the need to use transportation. The resort also provides group transportation to and from the airport which reduces the number of vehicles coming to and going from the resort.

In addition to design features, the Pointe project is consistent with the County Regional Growth Management Plan and the Spring Valley Community Plan. These plans are part of a regional process for coordinated land use and transportation actions intended to improve air quality.

Other measurements which should be taken to improve air quality in the Pointe Specific Planning Area, include tactics which reduce vehicle miles travelled. Such tactics require cooperation between employers and local governmental agencies, including Caltrans. These include ridesharing programs and subscription transit programs.

Ridesharing programs may involve carpools or vanpools. Employers should promote the ridesharing concept with their employees and collect and distribute materials to assist individuals in joining a carpool or vanpool. Employers should also appoint a ridesharing coordinator to carry out these tasks. Commuter Computer, the region's principal ridesharing program (operated by Caltrans), is primarily a computerized

carpool matching service. Commuter Computer also provides other services which include park-and-ride and carpool promotion, support and marketing of private bus and vanpool operations, organizational services, and special demonstration projects. All employers should be encouraged to become members of Commuter Computer. Vanpools are initiated by the employer who purchases a van which is driven by an employee. That employee drives a group of employees to and from work.

Ridesharing is an excellent money-saving energy conservation and traffic congestion relief tactic which also provides positive air quality benefits. In addition, industries and businesses should be encouraged to provide incentives for ridesharing by designating preferential parking areas for carpools and vanpools. These spaces could be closer to the destination building, or in a covered area protected from the weather, or in another desirable location. Employers should also be encouraged to permit flexible work hours for carpoolers and transit riders. Additionally, an employer may choose to pay the operating expenses of the vanpools, and/or charge all employees for parking except those who rideshare.

A subscription transit program entails the charter of buses by employers from public or private transit operators to provide employees with subscription buspool service. Subscribers are ensured that they will have a space on the bus. In addition, the employer sometimes guarantees a minimum number of passengers or subsidizes a portion of the subscription fare. Buspools are comparable to carpools in that the same individuals may ride together each day and the same advantages accrue to the employer and employee.

The Pointe San Diego Specific Plan includes community and regional bicycle trails which link employment and residential areas (refer to the Traffic section and the Specific Plan text). Such trails should be designed and maintained, when feasible, to eliminate bicycle hazards and barriers, including storm sewer grates parallel to the roadway, insufficient roadway width, glass and debris in the bicyclist's path, dangerous intersections, steep grades and non-continuous routes. In addition to the provision of bicycle trails within the area, employers should offer both incentives and facilities. Such facilities include theft resistant racks, connections with express bus service, showers and locker rooms. Cities and counties should draft and adopt ordinances that employers with a moderate number of employees should provide

lockers and showers (e.g., City of Palo Alto). Secure and convenient bicycle racks and/or storage facilities should be provided at all employment, shopping, school, and ridesharing pick-up areas and selected transit stops. Employers should assist local governmental agencies (i.e., SANDAG) in educational and promotional programs designed to encourage commuting by bicycle.

Other appropriate tactics which will further reduce motor vehicle emissions should be implemented by appropriate agencies during review of building design and upon completion of the Pointe Resort. These include designating official transit and ridesharing pickup stations in activity centers to provide convenience and easy identification for users. Sections should be safe and comfortable, and include shelters and benches. Also, buses should be routed through shopping centers. Another tactic is to reduce commercial and industrial parking requirements for employees who commit to the operation of ridesharing programs and/or provide transit and bicycle facilities.

3.8 NOISE

Noise is defined as "unwanted sound" which is annoying and/or harmful because of its loudness, pitch or duration. Noise is commonly measured in terms of "decibels" (dB). The "A-weighted" decibel scale (dBA) is a measure of loudness to give more "weight" to sound to which the human ear is most sensitive.

3.8.1 EXISTING CONDITIONS

The principal source of noise within the area is roadway traffic along Jamacha Boulevard and Sweetwater Springs Boulevard. Sensitive noise receptors in the project vicinity include existing residential areas located north and southwest of the project area.

Compatibility Criteria

Noise pollution is measured using criteria related to annoyance and environmental health. Excessive noise levels not only cause annoyance, but can also cause both physical and psychological damage. Noise impacts are commonly evaluated in the Community Noise Equivalent Level (CNEL) noise index. CNEL is a method of representing in a single number the combined effect of noise exposure averaged over 24 hours. The CNEL methodology applies weightings for time of day. Weighting factors of 3 and 10 are employed to account for increased sensitivity to noise in the evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.)

State of California

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, freeway noise affecting classrooms, sound transmission, occupational noise control and airport noise. The sound transmission control standard would apply to the proposed project.

The California Sound Transmission Control Standards are found in California Administrative Code, Title 24, Building Standards, Chapter 2.5 as adopted March 1, 1986. The purpose of the standards is to establish minimum noise insulation performance standards to protect persons within new hotels, motels, apartment houses and dwellings other than detached single-family dwellings.

The standards state that interior noise levels with windows closed attributable to exterior sources shall not exceed an annual noise level of 45 dB CNEL in any habitable room. In addition, residential buildings or structures within a 60 dB CNEL from airport, vehicular or industrial noise sources shall require an acoustical analysis indicating that the proposed building has been designed to limit intruding noise to the allowable 45 dB CNEL interior noise level.

County of San Diego

The County of San Diego has adopted a noise element of the general plan. Major policies of the element are the need for simultaneously controlling noise at its source, along its transmission path, and at the receiver's site; placing a higher priority on noise problems in residential rather than other areas; a survey to monitor and record community noise; full use of county, state and federal regulations to control noise; and coordination of the actions of any departments of county government. Noise standards for residential and non-residential projects are as follows:

- 1. Whenever possible, development in San Diego County should be planned and constructed so that noise sensitive areas are not subject to noise in excess of CNEL equal to 55 dB.
- 2. Whenever it appears that new development will result in any (existing or future) noise sensitive areas being subjected to noise levels greater than 60 dB CNEL, an acoustical study should be required.
- 3. If the acoustical study shows that noise levels at any noise sensitive area will exceed 60 dB CNEL, the development should not be approved unless:
 - a. Modifications to the development have been or will be made which reduce the exterior noise level below 60 dB CNEL;
 - b. If the current noise abatement technology is infeasible to reduce exterior to 60 dB CNEL, then modifications to the development have been or will be made which reduce interior noise level below 45 dB CNEL. Particular attention shall be given to noise sensitive interior spaces such as bedrooms; and
 - c. If finding "b" above is made, a further finding is made that there are specifically identified overriding social or economic considerations which will warrant approval of the development without modification as described in "a" above.
- 4. If the acoustical study shows that noise levels at any noise sensitive area will exceed 75 dB CNEL, the development should not be approved.

The San Diego County Code includes a noise ordinance (Sections 36.401 through 36.443) which prescribes noise regulations for a wide variety of noise sources. According to the noise ordinance, construction hours should be limited to Monday through Saturday, 7:00 a.m. to 7:00 p.m. and construction noise cannot exceed 75 dB.

Existing Traffic Noise Levels

Existing traffic along the major roadways was computer modeled with the Federal Highway Administration's Highway Traffic Noise Prediction Model, FHWA-RD-77-108, December 1978. This model was modified to generate CNEL values. Model input data include average daily traffic levels, day/evening/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors and roadway widths. Vehicle mix percentages were obtained from a field study conducted by Acoustical Impacts International in June 1989. Appendix H contains the noise modeling assumptions for each roadway segment. These assumptions are based on the traffic study in Appendix F.

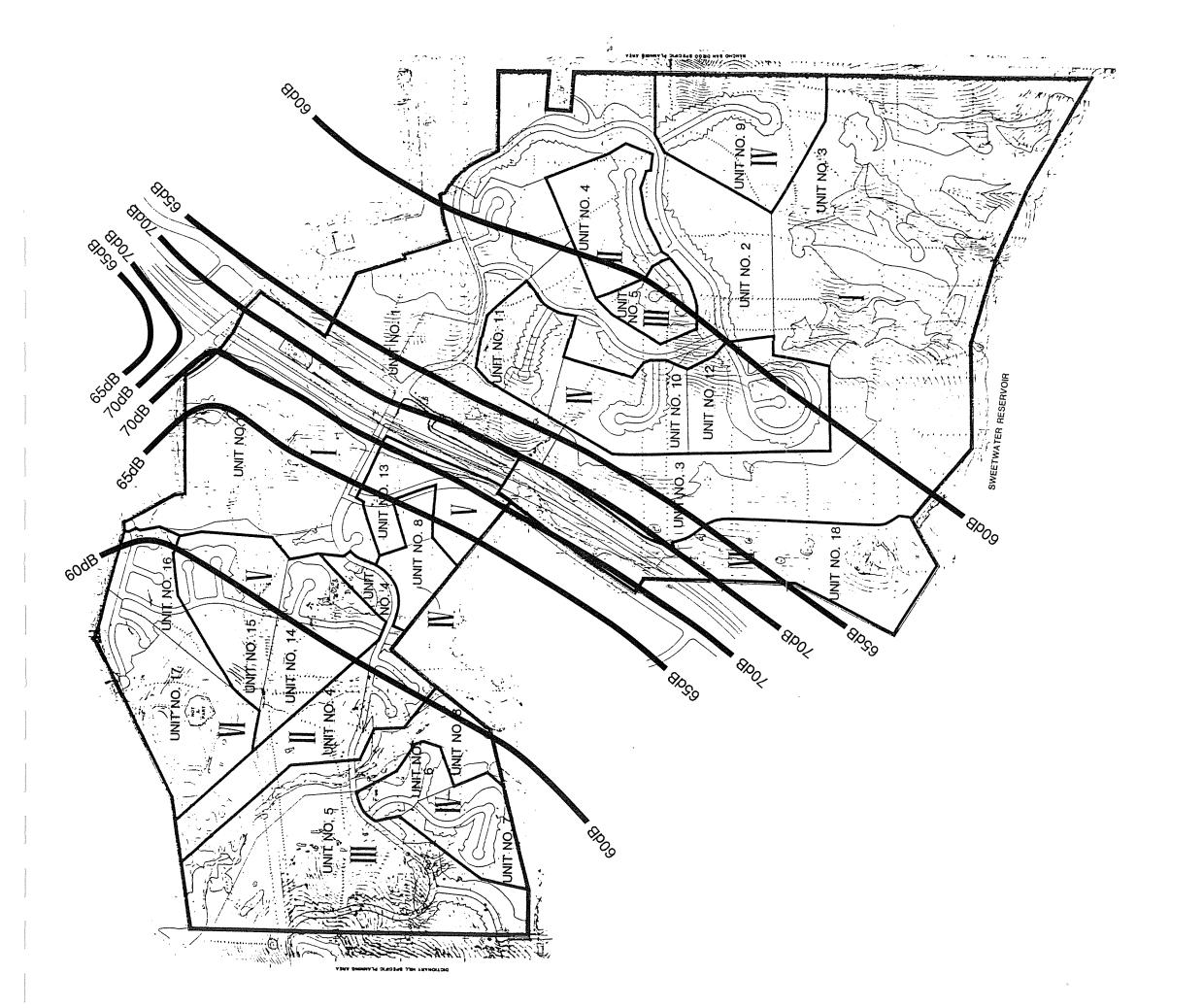
The distances from existing roadway centerlines to the 60, 65, and 70 dB CNEL contour lines are provided in Table 3-23 and depicted in Exhibit 3-32. These data were derived from noise monitoring at the project site vicinity for a 24 hour period. These contours are worst-case since they do not assume any attenuation due to atmospheric absorption, topography, or barriers to the noise path. The existing 60 dB CNEL contour from Jamacha Boulevard extends a maximum of 1,713 feet from the centerline of roadway and the 60 dB CNEL contour for Sweetwater Springs Boulevard, north of Jamacha Boulevard, extends a maximum of 875 feet from the centerline of the roadway. Residences located north of Jamacha Boulevard in the Edgewater Estates and on the southwest side of Sweetwater Springs, north of Jamacha Boulevard, are presently exposed to noise levels greater than 60 dB CNEL.

TABLE 3-23
EXISTING ROADWAY NOISE LEVELS²

Roadway Segment	from Cen	ce to CNEL C terline of Ros 65 dB CNEI	adway (ft)	CNEL at 100 feet from Roadway Centerline EL
Sweetwater Springs Blvd.				
North of Austin	875	277	89	70
Austin to Marineo	812	257	83	69
Marineo to Jamacha	812	257	83	69
Jamacha Boulevard				
West of Pointe Parkway	1,723	546	177	73
Pointe Pkwy. to Sweetwate	r 1,605	509	166	73
East of Sweetwater	1,090	347	117	71

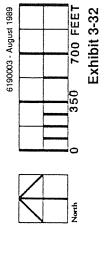
a Contour differences are worst-case since they do not assume any attenuation due to atmospheric absorption, topography, or barriers to the noise path.

Source: Acoustical Impacts International 1989.



*NOTE: NOISE CONTOUR DISTANCES ARE WORST-CASE BECAUSE THEY DO NOT CONSIDER ADDITIONAL NOISE ATTENUATION FROM TOPOGRAPHIC FEATURES, ATMOSPHERIC ABSORBTION, OR BARRIERS.

Existing Traffic dB CNEL Contours The Pointe San Diego



3.8.2 PROJECT IMPACTS

Traffic Noise Levels

The development of the project will introduce additional traffic into the area. Table 3-24 quantifies the distances to the 60, 65 and 70 dB CNEL contours and compares these values to existing conditions. The contours, assuming no barrier to the noise path, topographic elevation changes, or atmospheric absorption are considered worst-case conditions. Table 3-24 indicates that noise levels will increase as a result of increased traffic volumes and new roadways. The 60 dB CNEL from the South Bay Expressway would extend 1,090 to 3,226 feet from the centerline of roadway depending on roadway segment. For Sweetwater Springs Boulevard, the 60 dB CNEL contour would extend up to 1,079 feet from centerline of roadway. Exhibit 3-33 indicates those areas that are within the 60, 65, and 70 dB CNEL project-generated traffic noise contours.

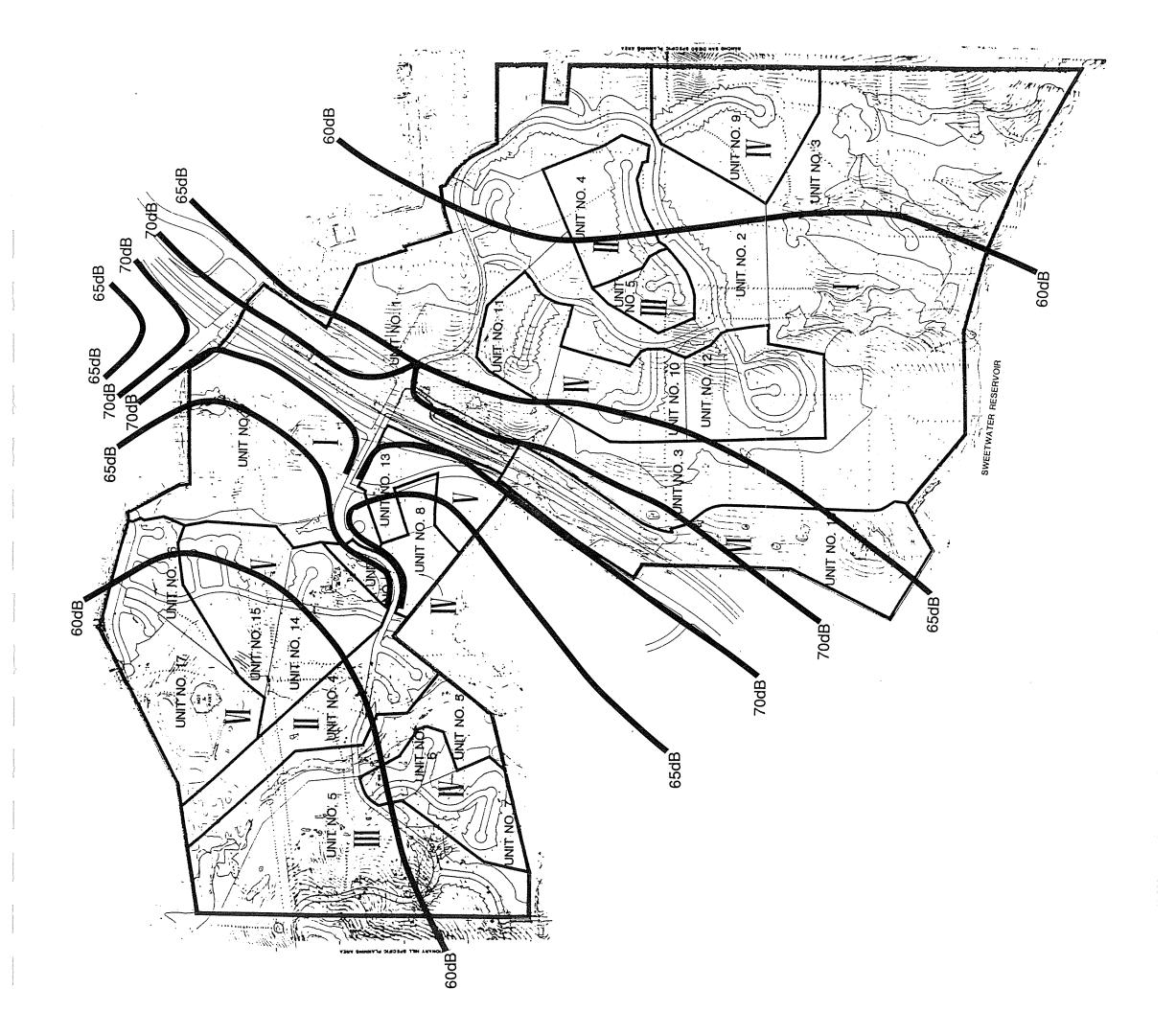
Proposed sensitive receptors that would be located within the 60 dB CNEL include the single-family and multiple-family residences located southeast of the proposed South Bay Expressway (Units 1, 2, 4, 5, 10, 11, and 12) and single-family, multiple-family, and a portion of the resort suites located northwest of the proposed South Bay Expressway (Units 1, 4, 5, 6, 7, 8, 14, 15, and 16). With the construction of the South Bay Expressway, the proposed project would also contribute to additional noise exposure to the existing Edgewater Estates. The existing residences southwest of Sweetwater Springs Road would also experience an increase in noise levels. The 60 dB CNEL would extend from 997 to 1,079 feet from the centerline of Sweetwater Springs Road. Residences located adjacent to Sweetwater Springs Road would be exposed to exterior noise levels greater than 60 dB CNEL for residential areas. However, as indicated in Table 3-23 and discussed in Section 3.8.1, existing residences adjacent to the South Bay Expressway (Edgewater Estates) and Sweetwater Springs Road are currently exposed to traffic noise levels greater than 60 dB CNEL.

Increase over Distance to CNEL Contour **Existing CNEL** from Centerline of Roadway (ft) at 100 Feet Roadway Segment 60 dB CNEL 65 dB CNEL 70 dB CNEL Existing Roadways Sweetwater Springs North of Austin 1,079 342 109 0.91 Austin to Marineo 997 316 101 0.89 Marineo to Jamacha 1,048 332 106 1.19 South Bay Expressway (Jamacha Blvd) West of Pointe Pkwy. 3,226 1,021 325 2.73 Pointe Pkwy. to Sweetwater 1,605 509 166 0 East of Sweetwater 347 1,090 117 0 Proposed Roadways Pointe Parkway Calle Marineo to Jamacha 105 37 21 Jamacha to Southbay Expressway 556 177 58 South Bay Expressway to Jamacha Blvd. South 229 74 29 Jamacha Blvd (new alignment) West of Pointe Pkwy. 59 22 13 Pointe Pkwy. to Sweetwater (N) 155 50 20 Pointe Pkwy. to Sweetwater (S) 27 19 18

Source: Acoustical Impacts International 1989.

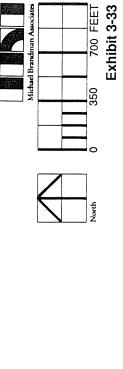
⁻⁻ No existing vehicular traffic

a Contour distances are worst-case since they do not assume any attenuation due to atmospheric absorption, topography, or barrier to the noise path.



*NOTE: NOISE CONTOUR DISTANCES ARE WORST-CASE BECAUSE THEY DO NOT CONSIDER NOISE ATTENUATION FROM TOPOGRAPHIC FEATURES, ATMOSPHERIC ABSORPTION, OR BARRIERS.

Source: Pointe Builders 1989



As indicated in Table 3-24, noise levels along the South Bay Expressway and Sweetwater Springs Road would increase by approximately 1.0 to 3.0 dB CNEL at 100 feet. A 100-foot distance was used because it frequently corresponds to a typical residential building setback. Typically, noise levels that increase within 1.0 dB CNEL would not be expected to be normally detected by the human ear. Therefore, the noise level increase from project traffic along Sweetwater Springs Road would not be considered significant.

The County of San Diego's noise goal for residential areas is to achieve 60 dB CNEL or less for outdoor living areas and 45 dB CNEL or less for interior inhabitable rooms. Based on existing plus project noise levels with no noise attenuation, outdoor single-family and multiple-family living areas would be exposed to greater than 60 dB CNEL. The proposed resort suites would also be located within the 60 dB CNEL. Therefore, the single-family, multiple-family, and resort suites would be significantly affected by existing plus project traffic noise levels. Noise mitigation measures will need to be implemented to meet the County of San Diego Noise Ordinance criteria of 60 dB CNEL or less for outdoor living areas and 45 dB CNEL or less for interior inhabitable rooms. A more detailed discussion of noise effects on the proposed residential units and the resort suites is located in the cumulative traffic noise analysis, which follows.

Stationary Source Emissions

The proposed destination resort community would include a variety of noise sources, including electrical and mechanical equipment to supply the occupants with a suitable quantity of air at a comfortable temperature and moisture content. In addition, pumping and piping systems would be used to circulate water and fluid, elevators would be used to move materials. Tennis courts are located in the vicinity of the closest existing residences. The nearest building is located approximately 350 feet south of existing residences. While it is difficult to predict the potential noise levels from the proposed resort and surrounding facilities, all equipment would be required to meet the applicable one-hour noise limit as identified in the County of San Diego Code, Noise Abatement Control, Section 36.404 county noise ordinances.

Construction Noise

Facility Construction

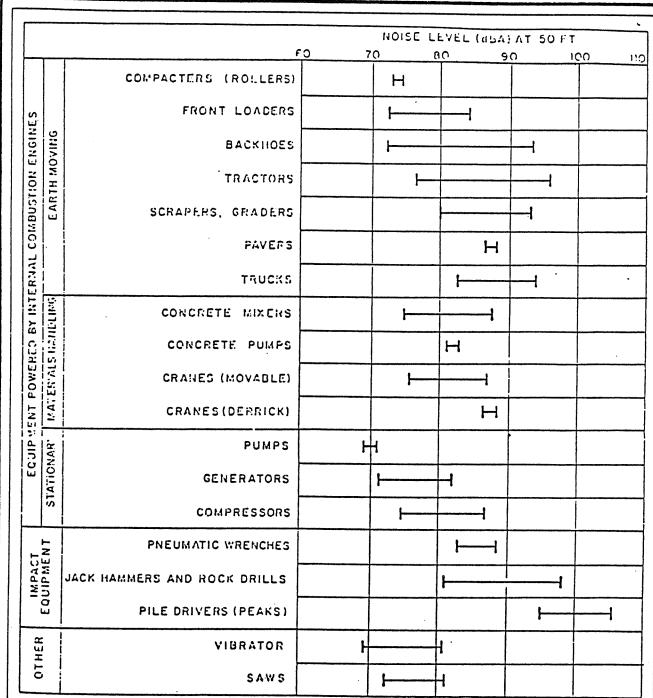
Construction activities will temporarily increase background noise levels. Construction activities are carried out in stages, each of which has its own mix of equipment and, consequently, its own noise characteristics. During these stages, the character of noise levels surrounding the construction site will change as work progresses. Despite the variety in type and size of construction equipment, similarities in the dominant noise sources and patterns of operation do exist.

Table 3-25 illustrates the typical construction phases for site development. Exhibit 3-34 illustrates the type of construction equipment that operates during the phases depicted in Table 3-25 and the equipment's noise level. As shown in Exhibit 3-23, earth-moving equipment such as compactors, scrapers, graders, and pavers is the most-prevalent construction noise equipment. Noise levels at 50 feet from earth-moving equipment ranges from approximately 73 to 96 dBA. Noise levels at 50 feet range for stationary construction equipment such as pumps, electric power generators, and air compressors range from approximately 70 to 80 dBA.

Construction activities that occur on the project site may result in significant noise effects on existing residences and onsite residences. Onsite construction activities will be required to meet the County of San Diego Noise Ordinance which does not permit construction noise in excess of 75 dB for more than 8 hours in any 24-hour period at any existing residential land use.

Sand and Gravel Operations

If a sand and gravel operation is to be temporarily set up as a cost-effective means of expediting construction, it must be located away from both existing offsite residential locations and any onsite residents so that the County Noise Ordinance criteria are satisfied. At this time no location has been selected nor has the extent of the operations been defined.



Note: Based on Limited Available Data Samples

Source: EPA PB 206717, Environmental Protection Agency, Dec. 31, 1971, "Noise From Construction Equipment & Operations"



TABLE 3-25

TYPICAL SITE DEVELOPMENT PHASES AND PROCEDURES

Mass and Precise Grading

- 1. Site Clearing
- 2. Rock Removal/Earth Moving
- 3. Compaction of Soil

Building Construction

- 1A. Clearing
- 1B. Demolition
- 1C. Site Preparation
- 2. Excavation
- 3. Placing Foundations
- 4A. Frame Erection
- 4B. Floors and Roof
- 4C. Skin and Windows
- 5. Finishing
- 5A Cleanup

City Streets

- 1. Clearing
- 2. Removing Old Roadbed (where present)
- 3. Laying New Subbase, Paving
- 4. Finishing and Cleanup

Public Works

- 1. Clearing
- 2. Excavation
- 3. Compacting Trench Floor
- 4. Pipe Installation, Filling Trench
- 5. Finishing and Cleanup

A noise survey of a rock crusher was conducted by Dykes Noise Control on June 16, 1988. At the time of the noise survey, the rock crusher was operating at the Spring Valley burrow pit near Whitestone Road in the vicinity of the project site. Simultaneous, time integrated averaged, A-weighted sound level measurements were taken at 50 feet and 150 feet from the rock crusher on the loudest side of the unit to determine noise levels. At 50 feet, the maximum noise level was 94.0 dB and at 150 feet the maximum noise level was 80.9 dB. As stated in the survey, doubling the distance from the noise source would decrease average noise levels by approximately

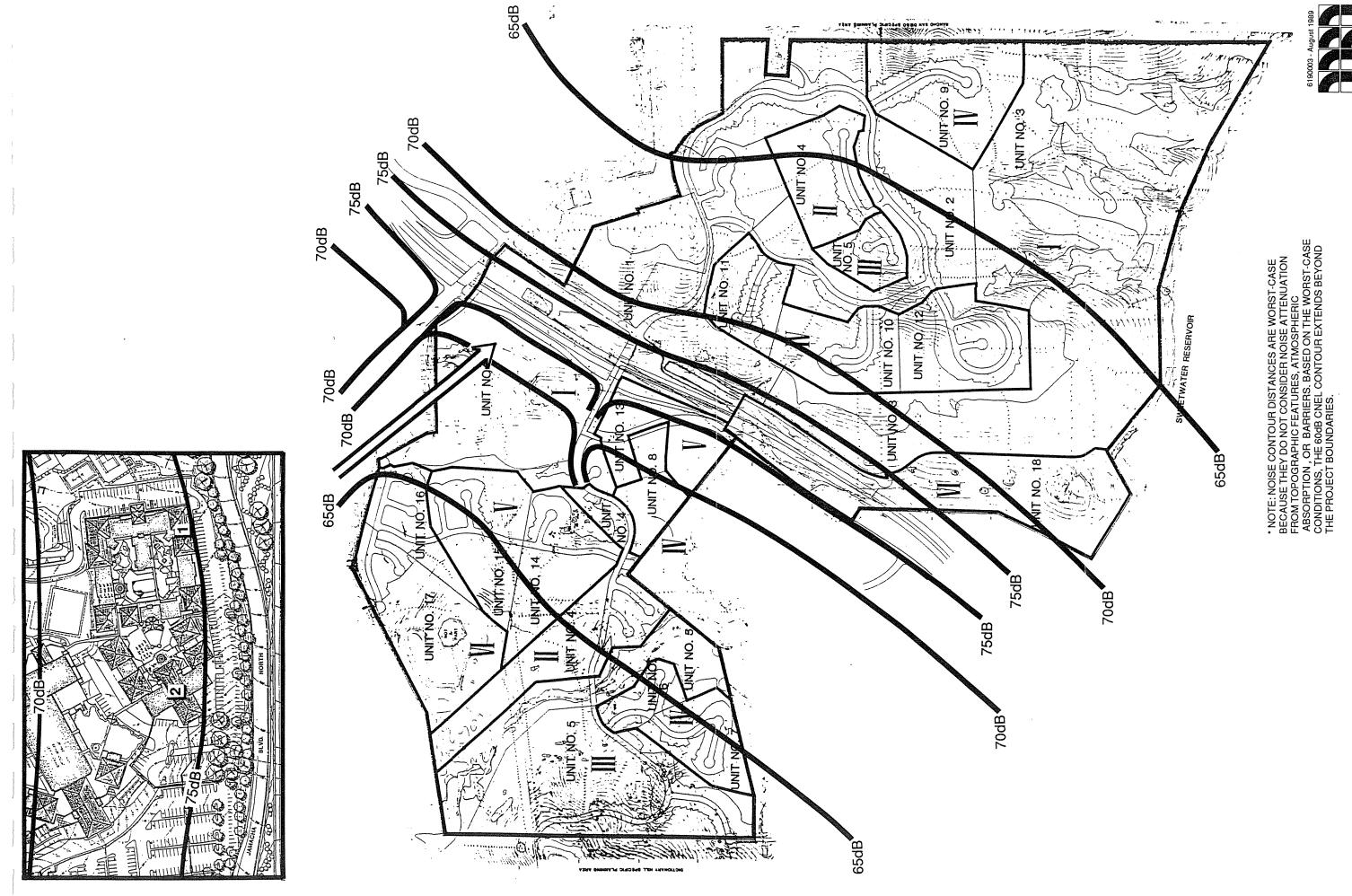
6 dB. According to Acoustical Impacts International, rock crusher noise, based on an unobstructed line of sight, no topographic attenuation, and no atmospheric absorption, would decrease by 32.5 dB at 2,100 feet from the rock crusher. At 2,100 feet from the rock crusher, the average noise level would be reduced to less than 55 dBA and the maximum level to less than 60 dBA. If a rock crusher is used in an unsheltered area located on the project site, the rock crusher shall be located 2,100 feet from the nearest residence to reduce noise at the residences to acceptable noise levels. If smaller separation distances than 2,100 feet are used, significant noise effects could result. If a location on the project site is chosen for the rock crusher and the location takes advantage of topographic shielding or if shielding is constructed for the rock crusher, small separation distances may be acceptable.

Blasting noise is another major consideration for the proposed project. By its nature, blasting noise will generate a rapid rise and fall in noise levels. The loudness and startle effects can contribute to increased annoyance. The amount of annoyance will depend on the difference between the background noise level and peak blasting noise level. Other factors such as the number of blasts, the impulse waveform and reverberation contribute to the degree of annoyance. Because of the uncertainties regarding specific blasting locations, explosive requirements, and number of blasts, it is virtually impossible to predict the degree of annoyance to existing residences. Blasting operations will be required to meet County Noise Ordinance criteria.

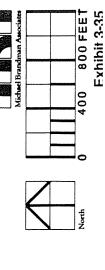
Cumulative Traffic Noise Impacts

Cumulative traffic noise impacts are quantified in Table 3-26 and compared to existing noise levels. Roadways with substantial traffic and noise increases include Sweetwater Springs Boulevard, South Bay Expressway, Pointe Parkway and the newly aligned Jamacha Boulevard. Exhibit 3-35 indicates the 65, 70, and 75 dB CNEL cumulative traffic noise contours. The 60 dB CNEL contour extends beyond the project boundaries.

As shown in Table 3-26, the South Bay Expressway would be the only roadway that cumulative traffic conditions would increase noise significantly over the existing noise levels at 100 feet. As stated previously, noise level increases of 1.0 to 3.0 dB CNEL would not be normally detected by the human ear. Therefore, cumulative traffic on the remaining roadways would not increase noise significantly.







Noise generated from cumulative traffic volumes along the South Bay Expressway would significantly affect the resort suites in Unit 1, the single-family units in Units 10, 11, and 12 and the apartments in Unit 1 (southeast of the South Bay Expressway/Sweetwater Springs Road intersection).

TABLE 3-26

PROJECT PLUS CUMULATIVE ROADWAY NOISE LEVELS^a

Roadway Segment	Distance to CNEL Contour from Centerline of Roadway (ft) 60 dB CNEL 65 dB CNEL 70 dB CNEL			Increase Over Existing CNEL L	
Sweetwater Springs					
North of Austin	875	89	33	0	
Austin to Marineo	926	293	94	0.6	
Marineo to Jamacha					
Boulevard ·	983	297	95	0.9	
South Bay Expressway					
West of Pointe Pkwy	7,009	2,217	702	6	
Pointe Pkwy to	4 000	1 570	=00	E	
Sweetwater	4,983	1,576	500 546	5 5	
East of Sweetwater	5,447	1,723	346	Э	
Pointe Parkway					
Calle Marineo to Jamacha Jamacha to South Bay	229	74	29	445 444	
Expressway	628	199	65		
South Bay Expressway					
to Jamacha Blvd. South	208	68	27		
Jamacha Boulevard (new alignm	nent)				
West of Pointe Pkwy	225	72	26	***	
Pointe Pkwy to					
Sweetwater (N)	268	85	29		
Pointe Pkwy to					
Sweetwater (S)	620	197	65		

⁻⁻ No existing vehicular traffic.

Source: Acoustical Impacts International 1989.

As stated previously, the County of San Diego's noise goal for residential areas is to achieve 60 dB CNEL or less for outdoor living areas and 45 dB CNEL or less for

a Contour distances are worst-case since they do not assume any attenuation due to atmospheric absorption, topography, or barrier to the noise path.

interior habitable rooms. In addition, noise levels in excess of 75 dB CNEL at any noise sensitive area is unacceptable. Various noise authorities have calculated the exterior to interior noise reduction of dwelling units with standard construction practices. These construction practices can typically provide a 30 dB noise reduction. With this reduction in mind, to achieve an interior noise level of 45 dB CNEL or less at the proposed resort complex, the exterior noise level should be 75 dB CNEL or less, which is consistent with the County of San Diego's maximum noise level for residential areas.

Based on a worst-case unshielded exposure at the proposed resort suites, projected cumulative CNEL noise levels at Locations 1 and 2 are approximately 75 dB CNEL (see Exhibit 3-35). Implementation of standard construction practices and noise attenuation measures could achieve an interior noise level of 45 dB CNEL. Specific noise mitigation measures cannot be determined at this time until detailed noise analyses based on final building and roadway plans are prepared.

The single-family units proposed in Units 10, 11, and 12 (southeast of South Bay Expressway) would be exposed to an approximate 66 to 71 dB CNEL based on a worst-case unshielded exposure and no atmospheric absorption. Atmospheric absorption would provide approximately 1.0 dB of attenuation. Based on a 6-foothigh barrier at a top-of-slope building pad edge for each single-family unit, a minimum 5.0 dB reduction could be achieved when the line-of-sight between the South Bay Expressway and the unit pad is broken. If atmospheric absorption and a 6-foot-high barrier is taken into account, noise at the at-grade outdoor living space would reduce to 60 to 65 dB CNEL. Detailed noise analyses on the single-family units would be required prior to issuances of building permits in order to reduce noise at outdoor living areas to below CNEL 60 dB.

The apartments located in Unit 1 (southeast of the South Bay Expressway/-Sweetwater Springs Road intersection) are proposed approximately 800 feet from the South Bay Expressway. Based on worst-case unshielded cumulative noise levels along the South Bay Expressway, the proposed apartment units would be exposed to 67 to 72 dB CNEL noise levels, which would represent a significant noise impact. At a distance of 800 feet from the South Bay Expressway, atmospheric absorption would reduce noise levels by 1.0 dB. In addition, balcony edge shielding for upstairs units could reduce levels by approximately 5.0 to 7.0 dB. Based on a potential noise

reduction of 6.0 dB, noise levels at the apartment units would be approximately 61 to 66 CNEL. Therefore, additional mitigation measures such as complete enclosure or relocation of outdoor living areas, etc., need to be applied to reduce noise to CNEL 60 dB or less. The sides of the apartment units (sides of the units that are at a 90 percent angle to the South Bay Expressway) would receive a natural 3 dB reduction and the backs of these units would receive approximately 10 dB reduction due to self screening. Second row units would be shielded by intervening buildings and these units would receive an approximate 5.0 dB reduction. Detailed noise analyses on the apartments located in Unit 1 would be required prior to issuance of building permits.

3.8.3 MITIGATION MEASURES

Although the proposed project has significant potential noise impacts to Planning Unit 1 and existing residential units, the incorporation of the following noise mitigation measures into the project can reduce noise impacts to acceptable levels.

- 1. The entire area of the proposed project shall be designated as a Noise Protection Easement.
- 2. Residential development within the Noise Protection Easement can be allowed upon approval of a Site Plan. At the time of the Site Plan processing, a complete acoustical analysis shall be provided to the satisfaction of the Director, Department of Planning and Land Use. The acoustical analysis shall demonstrate the following:
 - a. No residential uses are located in an area which might be impacted by traffic noise exceeding CNEL=75 dB limit.
 - b. Traffic noise impacts within the outdoor "noise sensitive" living areas are reduced to CNEL=60 dB or less.
 - c. Interior noise levels in habitable rooms of multi-family as well as single-family residences will not exceed CNEL=45 dB limit.
- 3. Mining activities at the site shall not be allowed until a complete acoustical analysis is provided to the satisfaction of the Director, Department of Planning and Land Use. The analysis shall demonstrate that noise impacts from the proposed mining activities to the adjacent residential land uses will not exceed the property line sound level limits specified in the County of San Diego Noise Ordinances.

3.9 PUBLIC SERVICES AND UTILITIES

The potential impacts of the Pointe San Diego resort community on various public services and utilities is discussed below and is based upon correspondence with the service agencies and utilities that have jurisdiction over the proposed project site. Responses from the various agencies are provided in Appendix I and summarized below.

3.9.1 FIRE PROTECTION SERVICES

Existing Conditions

The Spring Valley Water District in Consolidation with the Grossmont/Mt. Helix Fire District on July 1, 1988 formed the San Miguel Consolidated Fire Protection District which will provide fire protection services to the project site as well as Dictionary Hill and the area west of Sweetwater Reservoir. The district operates three stations which provide service to the site. Table 3-27 shows address, response times, equipment, and personnel for these facilities.

Three more stations will also provide service to the site. The stations are located at 8853 Ray Street, 10105 Vivera Way and 2140 Dehesa Road. Each station has one first line engine and three firefighters. The Ray Street station has one state OES engine and the Dehesa Road station has one brush engine. In addition, there are two ladder companies that are available to respond to the site. One ladder company would respond from La Mesa and the other from the City of San Diego. The three stations also have automatic aid with the cities of San Diego, Lemon Grove, La Mesa, El Cajon and the Grossmont/Mt. Helix District.

TABLE 3-27
FIRE STATIONS SERVING THE PROJECT SITE

Station	Equipment	Personnel	Response Times
10102 Ramona Drive	1 first line engine	4 firefighters	3-4 min
905 Gillespie Drive	1 first line engine 2 reserve engines	4 firefighters 1 Division Chief	4-5 min
8853 Troy Street	1 first line engine 1 state OES engine	3 firefighters	4.5 min
10105 Vivera Way	1 first line engine	3 firefighters	NA
2249 Jamacha Road	1 first line engine	3 firefighters	4-5 min
2140 Dehesa Road	1 first line engine 1 brush engine	3 firefighters	NA

NA = Data not available

Project Impacts

Implementation of the proposed project would add to the number of incidents responded to by the San Miguel Consolidated Fire Protection District. However, the proposed project is not expected to significantly affect the service capabilities of the stations currently serving the site. To reduce the effect of new developments on the district, the district has implemented a mitigation fee program and has required fire sprinkler systems in all structures including residential units, unless specific conditions can be met. Furthermore, the installation of fire hydrants on the project site would significantly improve the district's ability to fight brush fires.

Cumulative Impacts

Development of the proposed project and the cumulative projects is expected to affect the San Miguel Consolidated Fire Protection District. The proposed project would incrementally add to the cumulative impact of expected development on the district's fire protection services. The San Miguel Consolidated Fire Protection District has implemented a mitigation fee program for additional personnel and equipment to reduce the potential cumulative effects on fire service to a level below significance.

Mitigation Measures

- 1. The project applicant will provide funding to the San Miguel Consolidated Fire Protection District in accordance with the department's mitigation fee program. The current fee program is based on the type of construction, defined as structures with ordinary construction, fire resistant systems or sprinklers. The San Miguel Consolidated Fire Protection District requires sprinklers or standpipes in most structures including residential units. Therefore, the fee for sprinklered structures will be \$.05 per square foot.
- 2. The project applicant will coordinate with the San Miguel Consolidated Fire Protection District to ensure that adequate fire safety precautions are implemented in the proposed project.
- 3. Fire Protection District approval for all site plans and building plans must be received prior to issuance of building permit approval, as is current county policy.
- 4. The project applicant will submit and obtain approval of a fire hydrant plan and a roadway access plan from the San Miguel Consolidated Fire Protection District.

No further mitigation is required to reduce project impacts below the significant level.

3.9.2 POLICE

Existing Conditions

Police services to the project area are provided by the San Diego County Sheriff's Department. The proposed project is located within Sheriff's Master Beats 623 and 624. The entire site would be served by the Lemon Grove station located at 7859 Broadway in the City of Lemon Grove. The Lemon Grove station is located approximately 5 miles from the project site. The average response time for priority calls to the site is 10.7 minutes while the average response time for nonpriority calls is 16.8 minutes. There are currently two 24 hour units that serve the project site. One 24-hour unit is defined as one car with one person for 8 hours, 3 times a day. The station has mutual aid agreements with Spring Valley, Santee, and other Lemon Grove Beats (Commander Clippert 1989).

Project Impacts

The proposed project would generate approximately 2,400 residents, using a population factor of 2.8 persons per unit. The project would also generate additional resort and day-time population with the proposed non-residential uses. The San Diego County Sheriff's Department has established a standard for additional police personnel which is one 24-hour unit per 10,000 residents. This standard does not include associated resort and employment uses (Clippert 1989).

Because the department's standard is based on the number of residents, it is difficult to estimate the impacts of the non-residential uses. However, because of the magnitude of the proposed project and the proposed types of land uses (i.e., convention center, resort, etc.), the department has estimated that two additional 24 hour patrol units would be needed to provide adequate police services for the proposed project (Clippert 1989).

The project applicant is proposing to employ its own private security force which will routinely patrol the resort area. This would provide some relief to the Lemon Grove Station; however, the Sheriff's department would still remain the primary enforcing agency. It is anticipated that the private security, in conjunction with Sheriff's Department staff, would provide adequate police protection within the project area. The proposed project is expected to generate tax revenue to the county that could be used to provide funding for additional sheriff protection services in the project area. The Sheriff's Department would have to request additional funding to cover the cost of the additional services to the project area from the Board of Supervisors as a part of the annual budget process. Funding through the annual budget process is currently the only mechanism for the sheriff's department to obtain revenues for additional personnel and equipment.

Cumulative Impacts

Implementation of the proposed project and the cumulative projects would adversely affect the police services currently provided by San Diego County Sheriff's Department. The proposed project may generate a demand for two additional 24 hour patrol units while the cumulative projects would require individual review by the department. No developer fees have been proposed to fund the additional

personnel and equipment, but according to the San Diego Sheriff Department the feasibility of assessing certain fees is being considered (Clippert 1989). Otherwise, funding would be obtained through the County's general fund. The Sheriff's Department would have to request additional funding to cover the cost of the added units from the Board of Supervisors as a part of the annual budget process.

Mitigation Measures

- 1. The San Diego County Sheriff's Department shall increase its police protection to adequately serve the proposed project. The department has indicated that the project may require two additional 24 hour patrol units. Funding for the additional personnel would be provided through the county's general fund and/or developer fees which are under consideration. The proposed project is expected to generate tax revenues to the county general fund that could be used to provide additional sheriff protection services in the project area. The County Sheriff's Department would include the cost for the additional personnel within their budget which would require approval by the County Board of Supervisors.
- 2. The Pointe San Diego resort will maintain its own security force to patrol the project and assist the Sheriff's Department in responding to any emergency.

No further mitigation is necessary to reduce project impacts below the significant level.

3.9.3 SCHOOLS

Existing Conditions

The project site is located within the La Mesa-Spring Valley School District and the Grossmont Union High School District. The development lies within the 1988/89 attendance boundaries of Monte Vista High School, La Presa Middle School, Spring Valley Middle School, Loma Elementary School, and La Presa Elementary School. Table 3-28 identifies the locations, grades, and enrollment factors of schools that would serve the site.

TABLE 3-28
SCHOOLS SERVING THE POINTE SAN DIEGO

Enrollment

School	Location	Grades	Current	Capacity	Remaining Capacity
Monte Vista High	3230 Sweetwater Springs Boulevard	9-12	2,007	2,068	61
La Presa Middle	1001 Leland Avenue	6-8	1,002	1,210	209
Spring Valley Middle	3900 Conrad Drive	6-8	1,001	1,074	73
Loma Elementary	10355 Loma Lane	K-5	580	666	86
La Presa Elementary	519 La Presa Avenue	K-5	538	591	53
Total			5,128	5,609	

Source: Jack W. Kriege, Ph.D., Grossmont Union High School District and Chris Eldred, La Mesa-Spring Valley Elementary School District (1989).

As shown in Table 3-28, additional capacity exists within elementary, middle, and high schools in the area. The student generation factors shown in Table 3-29 are currently utilized by the Grossmont Union High School District and the La Mesa-Spring Valley School District. The generation rates may vary depending on the amount of dwelling units per acre and the type of residential development. These factors, however, provide a general approximation of student generation.

TABLE 3-29
PROJECT STUDENT GENERATION

	Dwelling	Student Generation Factors for	ation		eneration	Total ation Student	
	Units	K-5, 6-8, 9-12	K-5	6-8	9-12	Generation	
Single-Family	619	.39 (K-5) .08 (6-8) .256 (9-12)	242	50	159	242 50 159	
Multi-Family	Subtotal					451	
Apartments	236	.14 (K-5) .04 (6-8) .085 (9-12)	33	10	21	$\begin{array}{c} 33 \\ 10 \\ \underline{21} \end{array}$	
	Subtotal					64	
TOTAL			275	50	180	515	

Source:

Jack W. Kriege, Ph.D., Grossmont Union High School District and Chris Eldred, La Mesa-Spring Valley School District, 1989.

Michael Brandman Associates, 1989.

Project Impacts

Development of the project would have a significant effect on the Loma and La Presa Elementary Schools, and Monte Vista High School. The La Presa and Spring Valley middle schools would contain adequate capacity to serve the project. The proposed project would increase enrollment at the two elementary schools to a total of 1,393 students from a current combined enrollment of 1,118 students. The current combined capacity at the two elementary schools is 1,257 students. Therefore, the project would exceed the combined capacity of the elementary schools by 136 students. Project implementation could raise enrollments at La Presa and Spring Valley middle schools to approximately 2,053 students which is 231 under the school's capacity. Enrollment at Monte Vista High School could increase to 2,187 after project implementation which would be 119 students over its current capacity of 2,068 students.

Currently, no new elementary or middle schools are planned to be constructed by the La Mesa Spring Valley School District in the vicinity of the project site. The Grossmont Union School District is constructing a new high school in Santee and may potentially construct another high school in the community of Jamul.

Recently, the La Mesa-Spring Valley School District and the Grossmont Union High School District have increased developer fees in accordance with AB 2926 to provide adequate school facilities for future development. Developer fees have increased to \$1.56 from \$1.53 per square foot of residential and fees for commercial developments have increased to \$0.26 from \$0.25 per square foot. These developer fees have increased because the old fees were not providing adequate funding for new school facilities (Geisler and Theodore, pers. comm., 1989). The increased developer fees are expected to provide adequate school facilities for students generated by the proposed project. Neither the La Mesa-Spring Valley School District nor the Grossmont High School District has identified a need for a school site to be located on the project site.

Cumulative Impacts

Students generated by the proposed project and the related projects are expected to result in a significant cumulative effect on the La Mesa-Spring Valley School and the Grossmont Union High School Districts. The potential significant impacts from cumulative development are expected to be mitigated with the recent increase in developer fees in accordance with AB 2926 funding to the school districts.

Mitigation Measures

The following measure is required to be implemented by the project proponent prior to development.

1. The project proponent will provide funding to the Grossmont Union High School District and the La Mesa-Spring Valley School District in accordance with State Assembly Bill 2926. AB 2926 allows school districts to obtain up to \$1.56 per square foot for residential structures and \$0.26 per square foot for commercial structures. These fees would be used to provide interim educational facilities and the construction of new facilities as a result of overcrowding.

No further mitigation is required to reduce impacts below the significant level.

3.9.4 PARKS AND RECREATION

Existing Conditions

The goal of the San Diego County Recreation Element is to "support the establishment of a well-balanced system of natural parks and recreational facilities which preserve natural terrain, vegetation and wildlife sanctuaries, and will enrich the lives of all residents within the community."

The element requires 15 acres of local parks be provided for every 1,000 people. Currently, the county has 3 acres per 1,000 people which is only one-fifth of the county standard. There are currently 12 local parks and 1 regional park within a 5-mile radius of the proposed development (see Table 3-30). The local parks fall within the Spring Valley Community planning areas, while the regional park is within the Sweetwater Community planning area. Three local parks are proposed in the project vicinity-one of which will be built within 6-7 months.

TABLE 3-30

EXISTING PARKS

Local Parks

Regional Parks

Spring Valley County Park
Goodland Acres County Park
Mt. Helix County Park
La Mar County Park
Bancroft County Park
Estrella County Park
Avocado County Park
Damin Lane County Park
Eucalyptus County Park
Cottonwood 1 County Park
Cottonwood 2 County Park
Cottonwood 3 County Park

Sweetwater County Park

Source: R.B. Claire, San Diego County Department of Parks and Recreation, 1988.

In addition, the San Diego County Recreational Element designates regional riding and hiking trails throughout the county. A regional riding and hiking trail is currently designated along the eastern side of the Sweetwater Reservoir and the Sweetwater River. Currently, only the portion along the Sweetwater Reservoir exists. The Spring Valley Community Plan also designates community riding and hiking trails. The plan currently designates one trail extending from the regional trail along the northern boundary of the Sweetwater Reservoir. This community trail along the Sweetwater Reservoir currently exists as an access road on Hansen's Ranch. A new trail was recently developed across the ranch that extends along the hillsides north of the community trail. This trail was funded by the project applicant and coincides with open space in the proposed project.

Project Impacts

Development of the Pointe San Diego is expected to generate approximately 2,400 residents. According to the County of San Diego standard of 15 acres of parkland per 1,000 people, the proposed project would require approximately 36 acres of county local parkland to adequately serve the residents of the project.

The project applicant is proposing to provide two private recreational areas as well as the resort facilities that would be available to residents of the project.

Riding, hiking and jogging trails are proposed to traverse the project site and complement the existing regional trail network. A stable and tack area is proposed as the focal point of an equestrian system, providing horses for use by both resort guests and the public. The resort will offer many activities such as tennis, racquetball, squash, handball, volleyball, bicycling, horseshoes, croquet, and skating, which will also be available to both residents of the project and the general public.

The riding and hiking trail that was recently developed in the southeasterly portion of the site is proposed as the primary trail while the trail along the northern portion of the Sweetwater Reservoir will be modified or eliminated. The project applicant is proposing to extend the recently developed trail to an equestrian area (stable and tack area) proposed on the east side of Jamacha Boulevard. The trail would extend under Jamacha Boulevard and the South Bay Expressway to the northwest portion of the site continuing to the northwesterly boundary.

In addition, the resort wil include an 18-hole golf course adjacent to Sweetwater Reservoir which will be open to residents, guests of the resort, and the public.

Implementation of the proposed golf course, recreational facilities and trail system is expected to provide adequate recreational opportunities to the residents and guests of the proposed project. Therefore, the Pointe San Diego is not expected to generate a significant demand on existing recreational facilities.

Cumulative Impacts

Development of the proposed project is not expected to significantly affect the existing parks and recreational facilities in the Spring Valley community. However, the project could contribute to the need for additional local parks as a result of the development of cumulative projects. Cumulative projects that would primarily utilize local public parks and recreational facilities should be subject to the San Diego County Department of Parks and Recreation developer fee of \$1,000 per dwelling unit. Implementation of the developer fee should provide adequate local parks to serve future residents.

Mitigation Measures

No significant impacts to existing recreational facilities are expected from the implementation of the project. Therefore, no additional mitigation measures are necessary, other than development of the recreational facilities proposed for the project. However, the San Diego County Department of Parks and Recreation has enacted a developer fee of \$800 per dwelling unit to develop local parks. The Parks and Recreation Department shall determine if the proposed project is subject to the department's developer fee program, and the developer will pay the fee if necessary.

3.9.5 **SEWER**

Existing Conditions

The project site is located in the service boundaries of the Spring Valley Sanitation District (SVSD) and the Otay Water District. Most of the sewage generated within the SVSD is conveyed to the San Diego Metropolitan System through the Spring Valley Outfall. The San Diego Metropolitan (Point Loma) treatment facilities currently treat approximately 185 mgd and have a current capacity to treat approximately 240 mgd (Dwayne Zimmerman 1989). The Spring Valley Sanitation District currently conveys approximately 11.8 mgd to the Point Loma treatment facility through the Spring Valley Outfall. The Spring Valley Outfall has a capacity to convey 14.3 mgd, therefore, the outfall has approximately 2.5 mgd of remaining capacity (Elder, 1989). The Spring Valley Outfall extends from the intersection of Sweetwater and Jamacha Boulevard southwesterly through the Sweetwater River Valley, discharging into the Metro Interceptor Sewer in the vicinity of Interstate 5.

The main line serving the areas to the east of the proposed project is the Rancho San Diego Interceptor. Although this line passes through the project in the form of an inverted siphon lying below Jamacha Boulevard, it will not be used by the Pointe project.

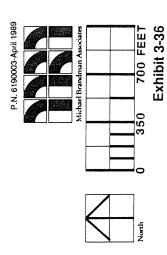
There are two available lines that could service the proposed project. One is the La Presa trunk which is a gravity line that runs through the northwesterly portion of the project site along the base of the foothills into the La Presa system. Peak capacity for the La Presa trunk is 2.5 million gallons per day (mgd) and approximately 0.5 mgd is currently conveyed in the trunk line. The Jamacha line which runs along Jamacha Boulevard is the second sewer line. The 8-inch Jamacha sewer line has a peak capacity of 0.5 mgd and approximately 0.25 mgd is currently conveyed in the sewer line. This line is not the same as the previously discussed Rancho San Diego Interceptor or outfall line.

Completion of the interceptor in Jamacha Boulevard diverted approximately 1.3 mgd of sewage from the La Presa trunk to the regional trunk. This diversion increased the available capacity in the La Presa trunk.

Implementation of the regional sewer line (Rancho San Diego Outfall) resulted in County Board of Supervisor Policy I-107. This policy restricted areas east of the county adopted urban limit line, which is east of the proposed project, from contributing sewage to this regional sewer line (Hatfield, 1988).

Project Impacts

Sewage generated by the proposed project would be discharged into the existing Jamacha line and into the La Presa trunk line. Based on generation factors from the San Diego County Department of Public Works, the proposed development would generate approximately 0.6 mgd (see Table 3-31). The existing sewer lines (La Presa trunk and Jamacha line) currently have adequate capacity to serve the project's anticipated sewage flows. The sewage lines proposed on the project site are shown in Exhibit 3-36. The addition of 0.6 mgd of wastewater would minimally contribute to the existing flow of approximately 11.8 mgd in the Spring Valley Outfall. The project's contribution to the outfall would represent approximately 5 percent of its current flow and approximately 24 percent of its remaining capacity (2.5 mgd). The 0.6 mgd that is expected to be generated by the project would also minimally contribute to the existing flow (approximately 185 mgd) to the Point Loma treatment plant. The project's flow would represent 1.1 percent of the treatment plant's remaining capacity of 55 mgd.



Proposed Sewer Facilities The Pointe San Diego

TABLE 3-31
PROJECT SEWAGE GENERATION

Land Use	Dwelling Units/Suites Square Footage (net acres)	Sewage Generation Factors ^a	Sewage Generation (gpd)
Residential Single-Family Multi-Family	619 d.u. 236 d.u. ^b	280 gpd/d.u. 280 gpd/d.u.	173K 66K
Resort	641 suites	140 gpd/suite	89K
Restaurants	36,500 (2.1 acres)	3,500 gpd/acre	7K
Corporate Office	358,300 sq. ft. (20.5 acres)	5,000 gpd/acre	103K
Office-Professional Park	350,000 sq. ft. (20.0 acres)	5,000 gpd/acre	100K
Convention Center	73,000 sq. ft. (4.2 acres)	3,500 gpd/acre	15K
Resort Support facilities ^c	14,300 sq. ft. (0.9 acre)	5,000 gpd/acre	4K
Golf Course	3,500 sq. ft.	5,000 gpd/acre	2K
TOTAL			559K (0.6 mgd)

gpd = gallons per day
mgd = million gallons per day
K = thousand

Source: Michael Brandman Associates, Inc. 1989.

a Factors were obtained from the San Diego County Department of Public Works 1988, 1989.

b Assumes worst case sewage generation.

c Resort support facilities include health center, child-care center, and equestrian center.

Cumulative Impacts

Development of the proposed project would incrementally add to the cumulative generation of wastewater. As shown in Table 3-32, the related projects are expected to generate approximately 3.7 mgd while the proposed project is expected to generate 0.6 mgd. Cumulatively, the proposed project and the related projects are expected to generate 4.3 mgd. The 3.7 mgd of wastewater that is expected to be created by the related projects would be conveyed in the Rancho San Diego Interceptor to the Metro Interceptor Sewer. Therefore, the related projects listed in Table 2-2, Section 2.6, would not contribute to the Spring Valley Outfall, and the outfall would not be affected by wastewater created by related projects. In addition, the cumulative generation of wastewater (4.3 mgd) would be within the approximate 55 mgd of available treatment capacity of the Point Loma plant. Payment of a sewer fee to fund development and maintenance of the wastewater system is expected to reduce potential cumulative impacts to a level that is below significant.

TABLE 3-32
CUMULATIVE SEWAGE GENERATION

Land Use	Units/Suites Acreage	Sewage Generation Factor ^a	Sewage Generation (mgd)
Residential	9,733 units	280 gpd/d.u.	2.7 mgd
Resort/Hotel	1,390 suites	140 gpd/suite	0.2 mgd
Commercial	152.5 acres	3,500 gpd/acre	0.5 mgd
Industrial	61 acres	5,000 gpd/acre	0.3 mgd
Subtotal-Related Projects			3.7 mgd
Proposed Project			0.6 mgd
Total-Cumulative Projects			4.3 mgd

gpd = gallons per day
mgd = million gallons per day

Source: Michael Brandman Associates, Inc. 1989.

a Factors were obtained from the San Diego County Department of Public Works 1988, 1989.

Mitigation Measure

The proposed project would not significantly affect existing sewer lines, however, the following measure is required.

1. The project applicant shall pay a sewer fee to the Spring Valley Sanitation District in accordance with the district's fee program.

3.9.6 WATER

Existing Conditions

The project site is within the Otay Water District. Currently, the Otay Water District imports its water supply from the County Water Authority pipeline number 3 of the second San Diego Aqueduct, and the La Mesa/Sweetwater extension.

Two water storage tanks exist within the project area. A 3.0 million gallon (mg) tank is located northwesterly of Jamacha Boulevard and a 1.15 mg tank is located southeasterly of Jamacha Boulevard. Both tanks are at an elevation of 850 feet above sea level. In addition, two reservoirs are located approximately 0.5 mile west of the site. One is located near Apple Street and San Bernardino Avenue and has a capacity of 1.0 mg. The other reservoir is located on Dictionary Hill and has a capacity of 0.4 mg. One additional reservoir is located approximately 3.5 miles northeast of the site near Jamacha Road and Hillsdale Road and has a capacity of 3.0 mg. Water capacity within all these storage tanks is utilized for operational and emergency uses.

The annual domestic water flow for the Otay Water District is approximately 16,500 acre feet. The annual amount of available domestic water varies depending on operational limits of the Otay Water District or any typical water system. The Otay Water District does not allocate domestic water to communities. Allocation is on a case by case basis depending upon the developments circumstances and that of the Districts water system.

Otay Water District plans in June 1989 to impose limits on the allocation of water to meet new requirements according to a formula developed by the district staff and approved by the district's Board of Directors. The district decided these measures were necessary to maintain estimated peak demands resulting from existing and new requirements within its capability to supply water during hot weather periods of the year. These limitations will remain in place until enough terminal storage is constructed to reduce hot weather peak demands to manageable levels.

The formula allows for the addition of 200 equivalent dwelling units (EDUs) of service per project per quarter, but the formula is flexible to provide for variances based on construction of terminal storage and other service requests. The Otay Water District has recognized the need to work closely with developers on water service to allow processing of projects through public agencies.

The project site is currently vacant and no district transmission lines are located onsite. The Otay Water District operates and maintains a 12-inch water distribution pipeline and a 36-inch water transmission pipeline along Jamacha Boulevard. Also the 18 inch La Mesa/Sweetwater extension under Jamacha Boulevard is currently used by Otay Water District for potable water distribution although eventually it will revert back to a raw water supply for the Sweetwater Reservoir. In addition, the district operates and maintains the La Presa Pump Station adjacent to the site near the intersection of Jamacha Boulevard and Sweetwater Springs Boulevard.

Project Impacts

Development of the proposed project would result in the consumption of approximately 1.0 million gallons per day as shown in Table 3-33. During the implementation of the proposed project, development shall not exceed the quarterly limitations of 200 dwelling units imposed by the Otay Water District allocation formula unless variances to the allocation formula are approved by the Otay Water District. These variances for projects can only occur if the total dwelling units requesting new service in a year from the district is less than 1,900 units. The district has indicated a water service limitation of 1,900 new units each year. Therefore, if a project receives a service variance, no significant impacts to water supply are expected because the district has established a yearly limitation.

The project's water consumption also includes water needed for the golf course, which is estimated at 124,000 gallons per day. The water consumption for the golf course was estimated by using 3 acre-feet of water per acre per year and applying this factor to only 46.3 acres of the golf course because only 46.3 acres will require irrigation. The project applicant intends to use groundwater to irrigate the golf course. A test well has shown multiple wells will be necessary to serve the golf course with groundwater. The use of excess springwater to irrigate the golf course is also being studied. The use of groundwater and excess springwater for the golf course would reduce the amount of these onsite water sources that could be available for other uses (i.e., the environmental mitigation area). Since the project site is part of the Otay Water District, groundwater could not be used for any potable supply.

The proposed project is expected to receive water from the five reservoirs mentioned previously. The five reservoirs are located in three pressure systems. Since the project applicant is proposing development above 750 feet in elevation, a hydropneumatic system is proposed to ensure adequate domestic water and fire flows for those areas. A combination of existing pipelines and new pipelines with respect to the development will provide adequate delivery capacity (Peasley, 1988). Exhibit 3-37 illustrates the proposed onsite water facilities.

Cumulative Impacts

Development of the proposed project would incrementally add to the demand for water from the Otay Water District. The related projects are expected to demand approximately 8.4 mgd (see Table 3-34). The proposed project is expected to demand 1.0 mgd, which represents approximately 11 percent of the cumulative demand for water. The use of groundwater to irrigate the proposed project (golf course) would incrementally reduce the amount of groundwater available in the vicinity of the project site.

TABLE 3-33
PROJECT WATER CONSUMPTION

Land Use	Dwelling Unit/Suites/ Square Footage/Net Acres	Water Consumption Factor	Water Consumption (gpd)
Residential Single-Family Multi-Family	619 d.u. 236 d.u.	650 gpd/d.u. ^a 650 gpd/d.u.	402K 153K
Resort	641 suites	161 gpd/suite ^b	103K
Restaurants	36,500 sq. ft. (2.1 acres)	4,025 gpd/acre ^b	8K
Corporate Office	358,300 sq. ft. (20.5 acres)	5,750 gpd/acre ^b	118K
Office-Professional Park	350,000 sq. ft. (20.0 acres)	5,750 gpd/acre ^b	115K
Convention Center	73,000 sq. ft. (4.2 acres)	4,025 gpd/acre ^b	17K
Resort Support facilities ^c	14,300 sq. ft. (0.9 acre)	5,750 gpd/acre ^b	5 K
Golf Course	73.6 ^d	2,679 gpd/acre ^e	<u>124K</u>
Total			1,045K (1.0 mgd)

gpd = gallons per day
mgd = million gallons per day
K = thousand

a Otay Water District's residential water consumption factor for single-family and multi-family uses.

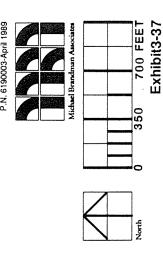
b Assumes a 15 percent increase over the sewage generation factors. The 15 percent is for irrigation and cooling systems.

c Resort support facilities include health center, child-care center, and equestrian center.

d The proposed golf course will contain 73.6 acres; however, only 46.3 acres will be irrigated. The remaining acres will be undisturbed area that would not require irrigation.

e Assumes a consumption of 3 acre-feet per acre per year, which is 977,700 gallons of water per year. Approximately 977,700 gallons of water per year per acre is equal to 2,679 gallons of water per acre per day.

Source: Michael Brandman Associates, Inc. 1989.



Proposed Water Facilities The Pointe San Diego

TABLE 3-34
CUMULATIVE WATER CONSUMPTION

Land Use	Units/ Suites/ Acreage/Holes	Water Consumption Factor	Water Consumption (gpd)
Residential	9,733 units	650 gpd/d.u. ^a	6.3 mgd
Resort/Hotel	1,390 room/suites	161 gpd/suite or room ^b	0.2 mgd
Commercial	152.5 acres	4,025 gpd/acreb	0.6 mgd
Industrial	61 acres	5,750 gpd/acreb	0.4 mgd
4 Golf Courses	81 holes	200,000 gpd/18-hole course ^C	0.9 mgd
Subtotal-Related Projects			8.4 mgd
Proposed Project			1.0 mgd
Total-Cumulative Projects			9.4 mgd

gpd = gallons per day
mgd = million gallons per day

a Otay Water District's residential water consumption factor.

b Assumes a 15 percent increase over the sewage generation factors. The 15 percent is for irrigation and cooling systems.

c Assumes 18-hole golf courses use 200,000 gallons of water per day. 200,000 gallons per day was obtained through calculations described in note "d" on Table 3-35.

Source: Michael Brandman Associates, Inc. 1989.

Mitigation Measures

1. The project applicant shall submit construction drawings of the proposed water system on the project site to the Otay Water District for approval.

- 2. The project applicant shall provide funding to the Otay Water District in accordance with the district's fee program.
- 3. To ensure adequate domestic water and fire flows, the project applicant is proposing a hydropneumatic system to serve residential units at elevation 750 feet above sea level. This system will be designed to the standards set by the Otay Water District and the San Miguel Consolidated Fire Protection District.
- 4. Development of the proposed project shall not exceed the quarterly limitations of 200 dwelling units imposed by the Otay Water District allocation formula unless variances to the allocation formula are approved by the Otay Water District.
- 5. Prior to the use and reliance of a Major Use Permit for the proposed golf course, the project applicant shall conduct a site specific hydrogeologic investigation in accordance with San Diego County guidelines to evaluate the quantity and quality of groundwater available for golf course irrigation. Any development of groundwater extraction capability shall only be allowed by the County of San Diego and issuance of a county groundwater extraction permit.
- 6. To reduce water demand, the following water conservation measures should be implemented.

Required by Law:

- a. Low-flush toilets (see Section 17921.3 of the Health and Safety Code).
- b. Low-flow showers and faucets (California Administrative Code, Title 24, Part 6, Article 1, T20-1406F).
- c. Insulation of hot water lines in water recirculating systems (California Energy Commission regulations).

Recommendations to be Implemented Where Applicable:

a. Interior:

- Flush valve operated water closets: recommended 3 gallons per flush.
- Drinking fountains equipped with self-closing valves.
- Pipe insulation: recommended all hot water lines in the resort to be insulated to provide hot water faster with less water and to keep hot pipes from heating cold water pipes.

- Restaurants: use of water-conserving models of dishwashers.
- b. Exterior (including the golf course area):
 - Landscape with low water-consuming and drought tolerant plants wherever feasible.
 - Use mulch extensively in all landscaped areas. Mulch applied to top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.
 - Preserve and protect existing trees and shrubs. Established plants are often adapted to low water conditions and their use saves water needed to establish replacement vegetation.
 - Install efficient irrigation systems which minimize runoff and evaporation and maximize the amount of water which will reach the plant roots. Use of drip irrigation, soil moisture sensors and automatic irrigation systems will increase irrigation efficiency.

3.9.7 SOLID WASTE

Existing Conditions

Solid waste generated in the project area would be disposed of at the Otay Landfill located approximately one mile east of Interstate 805 on Otay Valley Road. The landfill is expected to reach capacity in 1998 in a worst-case scenario (Swanson, 1988). The Otay Landfill currently has 20 million cubic yards of available capacity. The San Diego County Department of Public Works Solid Waste Division is currently studying alternative sites for a future landfill in south San Diego County. This future landfill is expected to be active before the Otay Landfill reaches capacity. If this future landfill does not become active before Otay Landfill reaches capacity, future solid waste would be transported to the Sycamore Landfill located in Santee (Severson, pers. comm., 1989).

Project Impacts

The proposed project is expected to generate approximately 11,840 tons of solid waste per year (see Table 3-35). The project's contribution of solid waste to the

Otay Landfill would incrementally reduce the life expectancy of this landfill. Currently, the county is studying alternative sites for a future landfill. This landfill is expected to be active before the Otay Landfill reaches capacity. No significant impacts on solid waste disposal are anticipated to result from the implementation of the Pointe San Diego because the Otay Landfill and the future south county landfill are expected to provide adequate landfill capacity.

TABLE 3-35
PROJECT SOLID WASTE GENERATION

Land Use	Population/ Employees	Solid Waste Generation Factor ^a	Solid Waste Generation (tons/year)
Residential	2,400 population	1.6 tons/yr/person	3,840
Resort Facilities ^b	5,000 employees	1.6 tons/yr/person	8,000
Total			11,840

a Provided by the Solid Waste Division of the San Diego County Department of Public Works

Source: Michael Brandman Associates, Inc. 1989.

Cumulative Impacts

Development of the proposed project and cumulative developments will incrementally decrease the life expectancy of landfills serving the area. The Pointe San Diego project is expected to generate approximately 11,840 tons of solid waste per year while the related projects are expected to generate approximately 61,000 tons of solid waste per year (see Table 3-36). The proposed project represents an approximate 16 percent contribution to the cumulative generation of solid waste. The county is currently analyzing sites to provide future landfill capacity. The potential generation of solid waste could be reduced by the implementation of recycling programs.

b Resort facilities include resort support facilities (convention center, health center, child care center, and equestrian center), restaurant, golf course, corporate office, and the office-professional park.

TABLE 3-36
CUMULATIVE SOLID WASTE GENERATION

Land Use	Units/Suites Acreage (population/ employees)	Solid Waste Generation Factor ^a	Solid Waste Generation (tons/yr)
Residential	9,733 units (27,252 persons) ^b	1.6 tons/yr/person	43K
Resort/Hotel	1,390 suites (695 employees) ^c	1.6 tons/yr/person	1K
Commercial	152.5 acres (9,964 employees) ^d	1.6 tons/yr/person	16K
Industrial	61 acres (800 employees) ^e	1.6 tons/yr/person	<u>1K</u>
Subtotal-Related Projects			<u>61K</u>
Proposed Project			12K
Total-Cumulative Projects			73K

K = thousand

- a Factors were obtained from the San Diego County Department of Public Works Solid Waste Division, 1988
- b Assumes 2.8 persons per unit
- c Assumes 0.5 employees per suite
- d Assumes 5 employees per 1,000 square feet and 30 percent of each acre devoted to structures
- e Assumes 2 employees per 1,000 square feet and 30 percent of each acre devoted to structure.

Source: Michael Brandman Associates, Inc. 1989.

Mitigation Measures

No mitigation measures are required, however, the implementation of recycling programs and development of waste-to-energy plants are recommended to conserve energy and minimize the project's generation of solid waste.

3.9.8 ELECTRICITY

Existing Conditions

The proposed project is located within the service boundaries of San Diego Gas and Electric Company (SDG&E). An above ground 12KV electrical line currently exists along Jamacha Boulevard through the project site.

<u>Impacts</u>

Development of the proposed project is expected to consume approximately 27.5 million kilowatt hours per year (see Table 3-37).

Cumulative Impacts

The development of the proposed project would add to the cumulative consumption of electricity. As shown in Table 3-38, the related projects are expected to generate demand for approximately 192.1 million kilowatt hours per year, while the proposed project is expected to generate demand for 27.5 million kilowatt hours per year.

Cumulatively, approximately 219.6 million kilowatt hours per year will be consumed. The project would represent approximately 12 percent of the cumulative consumption of electricity.

Mitigation Measures

- 1. Building construction shall comply with the Energy Conservation Standards set forth in Title 24 of the California Administrative code.
- 2. The project applicant shall consult with SDG&E during the building phase, to implement energy conservation techniques whenever feasible.

TABLE 3-37
PROJECT ELECTRICITY CONSUMPTION

Land Use	Units/Square Feet Consumption Facto		Total Consumption Kwh Per Year	
Residential Single-Family Multi-Family	619 units 236 units	489 Kwh/mo/unit ^a 219 Kwh/mo/unit ^a	3,632,292 620,208	
Resort	641 suites	12,218 Kwh/suite/yr ^d	7,831,740 ^b	
Restaurants	36,500 sq. ft.	46.6 Kwh/sf/yr ^b	1,700,900	
Corporate Office	358,300 sq. ft.	17.1 Kwh/sf/yr ^b	6,126,930	
Office- Professional Park	350,000 sq. ft.	17.1 Kwh/sf/yr ^b	5,985,000	
Convention Center	73,000 sq. ft.	17.1 Kwh/sf/yr ^b	1,248,300	
Resort Support facilities ^e	14,300 sq. ft.	17.1 Kwh/sf/yr ^b	244,530	
Golf Course	7,500 sq. ft.	17.1 Kwh/sf/yr ^b	128,250	
Total			27,518,150 (27.5 million Kwh)	

mo - month sq. ft. - square feet yr - year Kwh - kilowatt hours

a Mike Schlei, San Diego Gas and Electric, 1989.

- b Southern California Edison factor, at John Sigman's (SDG&E) recommendation.
- c Total consumption based on assigned accounts with SDG&E (Sigman, 1988).
- d Factor obtained from John Sigman, SDG&E based on electrical consumption rates of similar resort/hotel.
- e Resort support facilities include health center, child-care center, and equestrian center.

Source: Michael Brandman Associates, Inc. 1989.

TABLE 3-38 CUMULATIVE ELECTRICITY CONSUMPTION

Land Use	Units/Suites Square Feet	Consumption Factor	Total Consumption (Kwh/Year) million
Residential	9,733 units	445/Kwh/mo ^a	51.9
Resort/Hotel	1,390 suites	647 Kwh/mo ^a	10.8
Commercial	2,657,160 sf (152.5 acres)	46.6/kwh/sf/yr ^b	123.8
Industrial	1,062,864 sf (61.5 acres)	5.3/kwh/sf/yr ^b	5.6
Subtotal-Related	Projects		192.1
Proposed Project			27.5
Total-Cumulative	Projects		219.6

sf - Square feet mo - Month kwh - Kilowatt hours

yr - year

а

Factors obtained from San Diego Gas & Electric. Factors obtained from John Sigman of San Diego Gas & Electric, based on b average electrical consumption rates of a variety of resorts/hotels.

3.9.9 NATURAL GAS

Existing Conditions

The Pointe San Diego site falls within the service boundaries of San Diego Gas and Electric Company (SDG&E).

Project Impacts

Implementation of the proposed project is expected to consume approximately 753,221 therms of natural gas per year as shown in Table 3-39.

Cumulative Impacts

As shown in Table 3-40, the proposed project and the related projects are expected to consume approximately 6,096,820 therms of natural gas per year. The proposed project would represent approximately 12 percent of the cumulative consumption of natural gas.

Mitigation Measures

- 1. Building construction shall comply with the Energy Conservation Standards set forth in Title 24 of the California Administrative Code.
- 2. Energy conservation techniques should be implemented wherever possible.
- 3. The applicant should consult with SDG&E during the design and building phase to ensure efficient development and installation of natural gas facilities.

TABLE 3-39
PROJECT NATURAL GAS CONSUMPTION

Land Use	Natural Gas Units/Square Feet	Natural Gas Consumption Factor	Natural Gas Consumption (Therms/Year)
Residential Single-Family Multi-Family	619 units 236 units	34 therms/mo/unit ^a 7 therms/mo/unit ^a	252,552 19,824
Resort	641 suites	35 therms/mo ^e	269,220
Restaurants	36,500 sf	2.9 cf/mo/sf ^b	13,084
Corporate Office	358,300 sf	2.0 cf/mo/sf ^b	88,578
Office-Profession Park	al 350,000 sf	2.0 ef/mo/sf ^a	86,527
Convention Center	73,000 sf	2.0 cf/mo/sf ^a	18,047
Resort Support facilities ⁰	14,300 sf	2.0 cf/mo/sf ^b	3,535
Golf Course	7,500 sf	2.0 cf/mo/sf ^b	1,854
Total			753,221

mo - Month sf - Square feet cf - Cubic feet

Source: Michael Brandman Associates, Inc. 1989.

a Mike Schlei, San Diego Gas and Electric Company.

b Southern California Gas Company factor as recommended by SDG&E.

c Based on associated projects of SDG&E, Sigman, 1988.

d Resort facilities include health center, child-care center, and equestrian center.

TABLE 3-40
CUMULATIVE NATURAL GAS CONSUMPTION

Land Use	Natural Gas Units/Suites Square Footage	Natural Gas Consumption Factors	Consumption (Therms/Year)
Residential	9,733 units	29 therms/mo ^a	3,387,084
Resort/Hotel	1,390 suites	34.2 therms/mo ^a	570,456
Commercial	2,657,160 sf (152.5 acres)	2.9/cf/mo/sf ^b	952,505
Industrial	1,062,864 sf (61.5 acres)	3.3 cf/mo/sf ^C	433,554
Subtotal-Related Projects			5,343,599
Proposed Project			753,221
Total-Cumulative Projects			6,096,820

mo - Month cf - Cubic feet 100 cf - 1 therm NA - Not available

- a Factors obtained from SDG&E.
- b Factors obtained from SCE as recommended by SDG&E.
- c City of Los Angeles Planning Department, "EIR Manual for Private Projects," 1975.

Source: Michael Brandman Associates, Inc. 1989.

3.10 AESTHETICS

3.10.1 EXISTING CONDITIONS

The project site is dominated by two hills that are bisected by a valley containing Jamacha Boulevard. Elevations of the site range from approximately 850 to 900 feet above sea level on the hill crests to approximately 250 to 430 feet in the valley. A cable television receiving station is on the peak of the southeasterly hill and an Otay Water District pumping station is adjacent to Jamacha Boulevard near Sweetwater Springs Boulevard. The Otay Water District has two water tanks on the site, one located on each hill. The slopes of the two hills have a dendritic drainage system creating a variety of ridges and valleys that are covered primarily with sage scrub. Over half of the site consists of slopes of 30 percent or greater in steepness. The ridges and valleys in the northwestern and southeastern portions of the site also contain numerous offroad vehicle paths.

Hansen's Ponds are located northwest of Jamacha Boulevard. Hansen's Ponds are approximately an acre each and connected by a stream (Hansen's Creek) that originates from springwater and a storm drain emanating from the Tres Lagos housing development near the Isham Springs site. The drain conveys water from the original creek which is supported by the natural Isham Springs, and storm water and urban runoff from the residential areas north of the site. Hansen's Creek connects Hansen's Ponds and flows southward across the site generally parallel to Jamacha Boulevard until it crosses under Jamacha Boulevard near Spring Glen Lane. After crossing Jamacha Boulevard, Hansen's Creek continues southwesterly parallel to the roadway until it discharges into the Sweetwater Reservoir. A small creek (Little Hansen's Creek) runs parallel to the southeastern side of Jamacha Boulevard and empties into Hansen's Creek.

Views of the project site have a rural quality that is primarily undisturbed. There are some areas that have been disturbed by human activity such as the area surrounding Hansen's Ponds, the stockpile area adjacent to Sweetwater Springs Boulevard, and the numerous offroad vehicle paths throughout the site.

The rural atmosphere of the project site is surrounded by urban development to the northeast, north, west, and southwest. Development northeast of the site includes the Otay Water District offices, industrial uses, Rancho San Diego residential units, and a business park along Sweetwater Springs and Jamacha Boulevard. North of the site are residential units that form an urban edge along the project boundary. West of the site is the Dictionary Hill area, which is partially developed with residential units. A portion of the area that is currently undeveloped is planned for residential units. Southwest of the site are the Edgewater Estates, Eastview Estates, and Stone Point housing developments. These developments form an urban edge southwest of the project site. Southeast of the site is the Sweetwater Reservoir, which fluctuates in water level since it is used as a water supply impoundment. During rainy seasons, the water level of Sweetwater Reservoir can reach within 100 feet of the project site. During dry seasons, the water often recedes over 1 mile. East of the site is proposed open space for the Rancho San Diego project consisting of hilly terrain that contains several vegetative communities.

The State Route (SR) 54 Corridor (South Bay Expressway) is designated as a second priority scenic highway in the County of San Diego General Plan. Primary views from the proposed alignment in the vicinity of the project site are of San Miguel Mountain, Mother Miguel Mountain, and the Sweetwater Reservoir.

There are numerous panoramic views from the project site. Photographs of the project site and surrounding area are provided in Exhibits 3-39 through 3-41. Exhibit 3-38 provides a photograph index map to assist in orienting the reader.

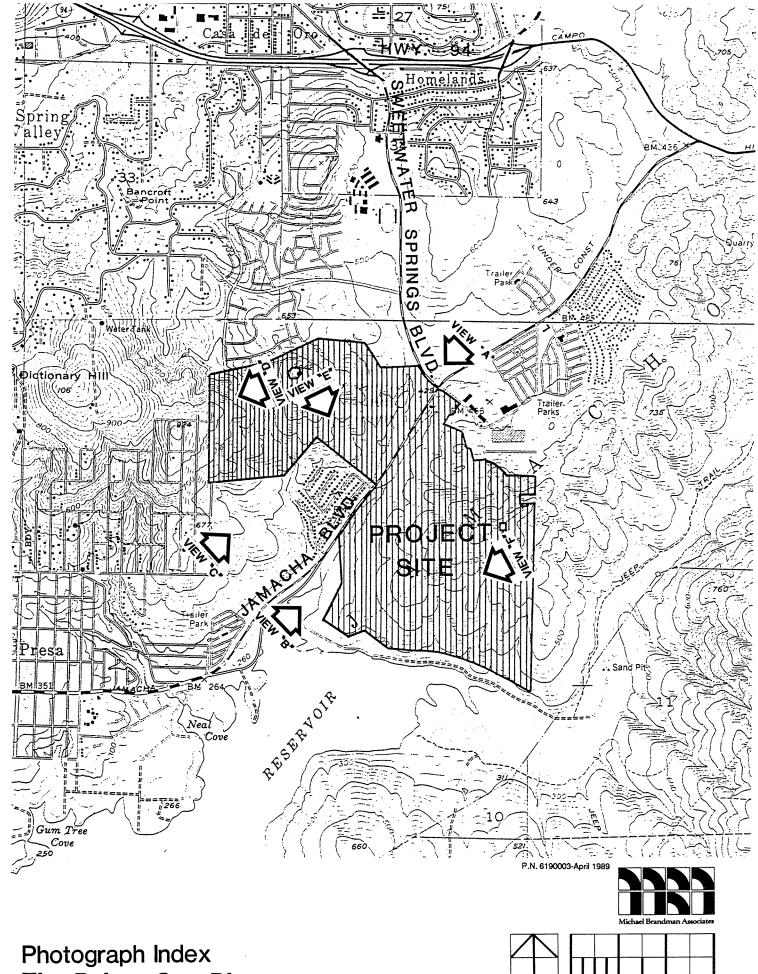
View A: This viewpoint is from Sweetwater Springs Boulevard in the northern portion of the project site and views are to the southeast, south, southwest, west, and northwest. Background views are limited to San Miguel Mountain to the southeast and the Sweetwater Reservoir to the south, due to the two hills on the project site. Middleground views consist of the project site, Dictionary Hill Housing development, and Tres Lagos Court Housing development. The prominent middleground view consists of the two hills on site and the valley that bisects the two hills. Other middleground views include the Otay Water District offices to the southeast, Hansen's Ponds to the south, and the Isham Spring site to the southwest. Foreground views consist of Sweetwater Springs Boulevard and an aesthetically

unpleasing stockpiling area adjacent to Sweetwater Springs Boulevard. This stockpile was placed on the project site by the applicant with a permit issued by the County of San Diego. The stockpiles were created from excess fill of surrounding residential developments and will be used as fill for the earthwork on the proposed project.

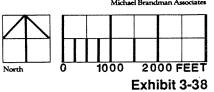
View B: This viewpoint is south of the project site along Jamacha Boulevard and the proposed South Bay Expressway, looking toward the east, northeast, and north. Background views are limited to the north due to an embankment, and trees and housing adjacent to Jamacha Boulevard. A portion of the northwesterly hill on the project site is visible. Background views are open to the east and northeast. Mother Miguel Mountain and San Miguel Mountain are visible to the southeast, and the southeasterly hill on the project site is visible to the east. Views of the project site are limited from this vantage point, even though this is the future location of the South Bay Expressway (SR-54), which is designated a secondary priority scenic highway. Middleground and foreground views consist of a dirt road entrance to the Sweetwater Reservoir and sand mining area to the east, sage brush and trees to the northeast, and Jamacha Boulevard and residential housing areas to the north.

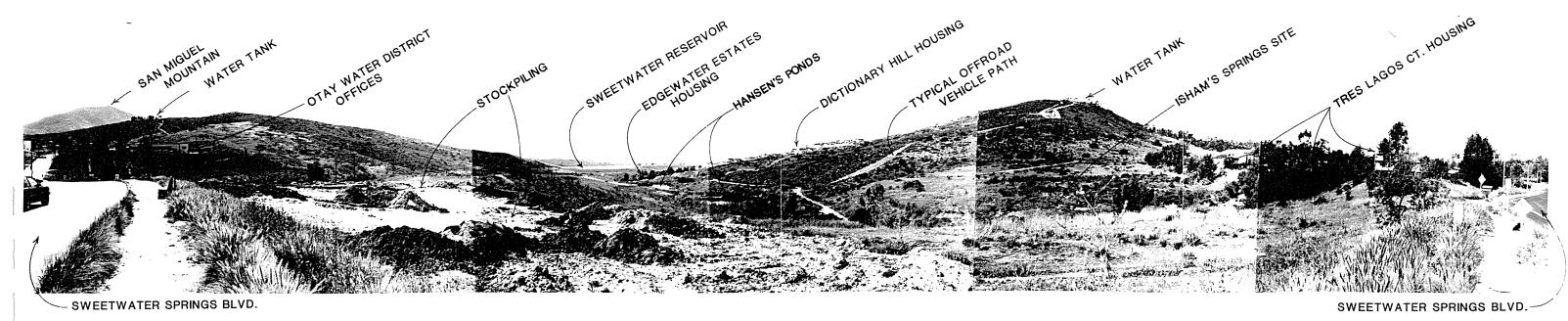
View C: This viewpoint is southwest of the project site along Sangamon Court in the Dictionary Hill area. Views are to the north, northeast, and east. Background views to the north are obstructed by Dictionary Hill and the northwesterly hill on the project site. Background views to the northeast and east consist of a distant mountain range and valley between the two onsite hills, the southwesterly hill on the project site, and San Miguel Mountain. Middleground and foreground views consist of Eastview Estates and Edgewater Estates housing developments on the hillsides rising from Jamacha Boulevard to Dictionary Hill. The Dictionary Hill housing development is also visible to the north along Sangamon Court.

View D: This viewpoint is from the northwesterly Otay Water District tank on the project site. Views are to the northwest, west, southwest, and south. Background views consist of a limited panoramic view to the south. Mother Miguel Mountain and the Sweetwater Reservoir are visible to the south and Dictionary Hill obstructs distant views to the southwest and west. Middleground and foreground views consist of housing developments in the valley to the south and northerly of Dictionary Hill. The Bancroft Creek mitigation area and an above-grade sewer line are visible in the valley on the east side of Dictionary Hill.

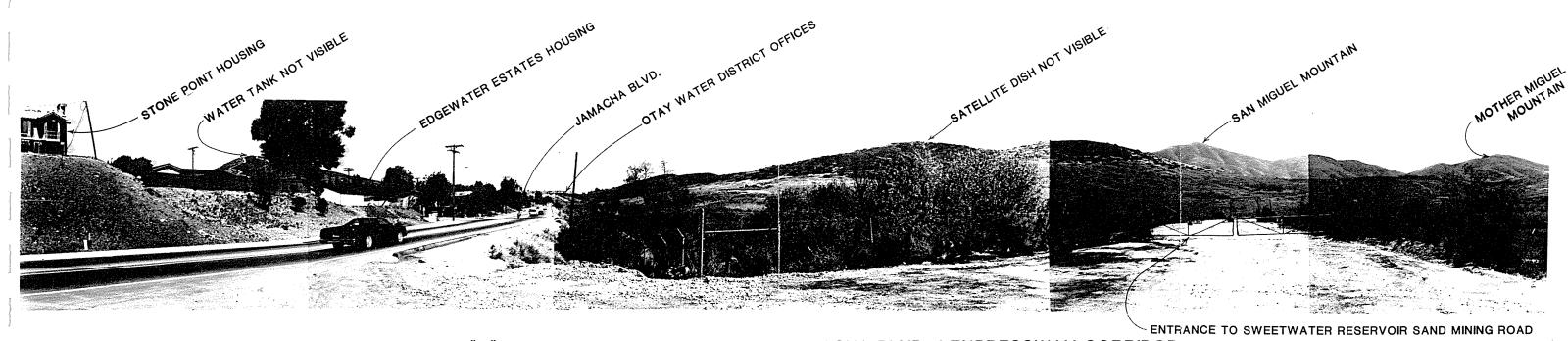


The Pointe San Diego





VIEW "A" FROM SWEETWATER SPRINGS BLVD. LOOKING SOUTHWESTERLY

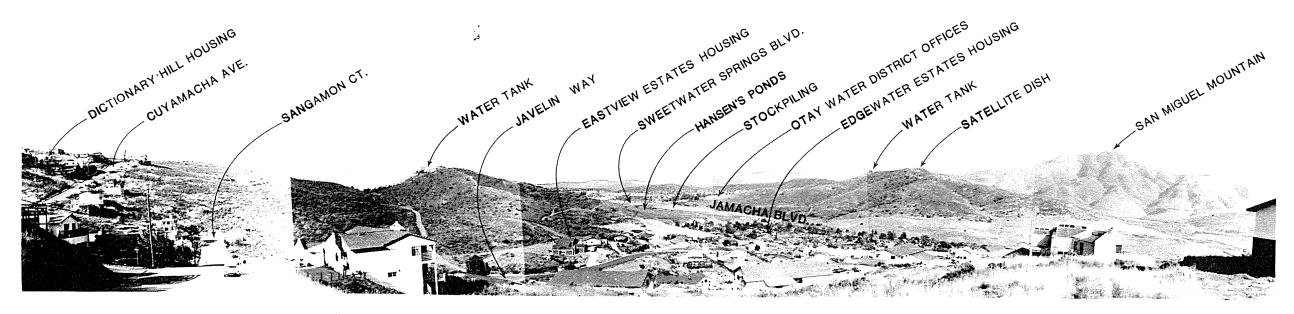


VIEW "B" LOOKING NORTHEASTERLY UP JAMACHA BLVD. / EXPRESSWAY CORRIDOR

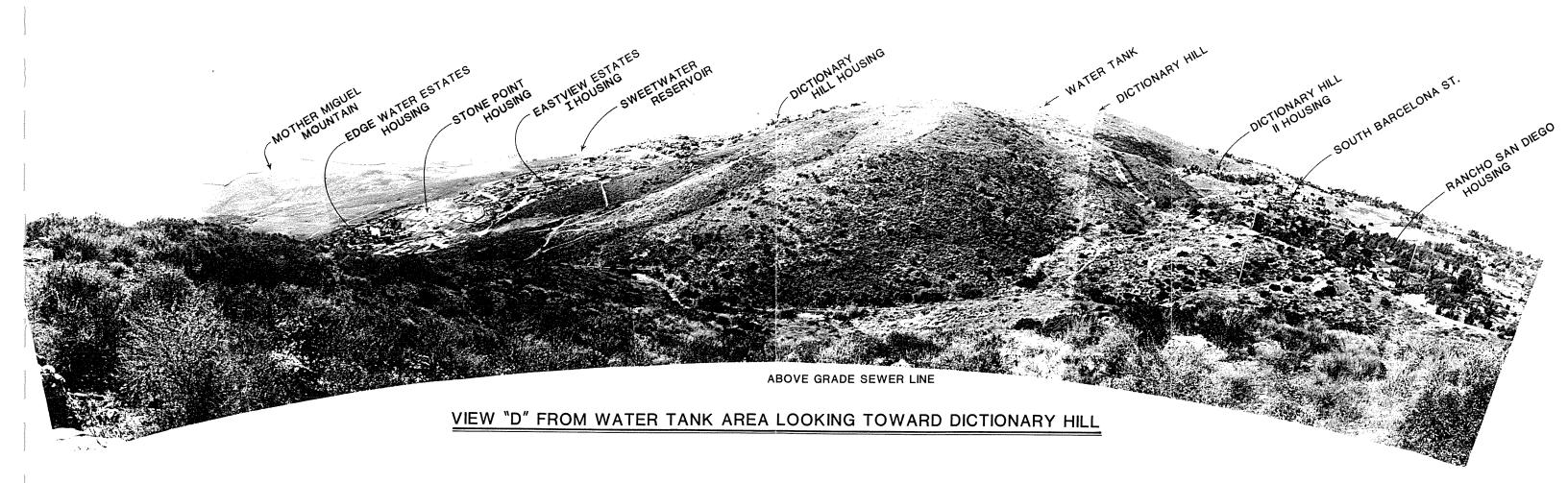
Note: Photographs taken with a 50mm lens.



Onsite and Surrounding Views
The Pointe San Diego



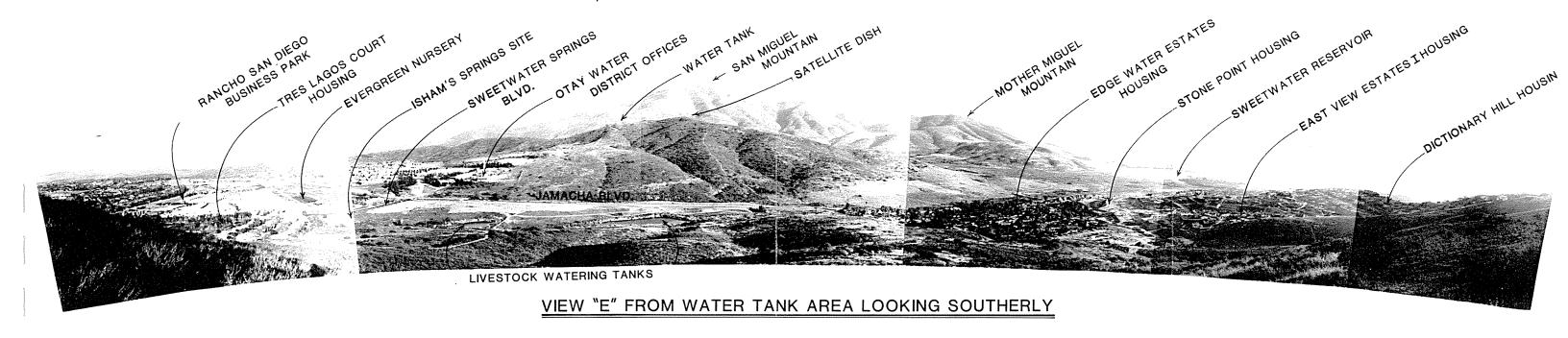
VIEW "C" FROM DICTIONARY HILL AREA ON SANGAMON DRIVE LOOKING EASTERLY

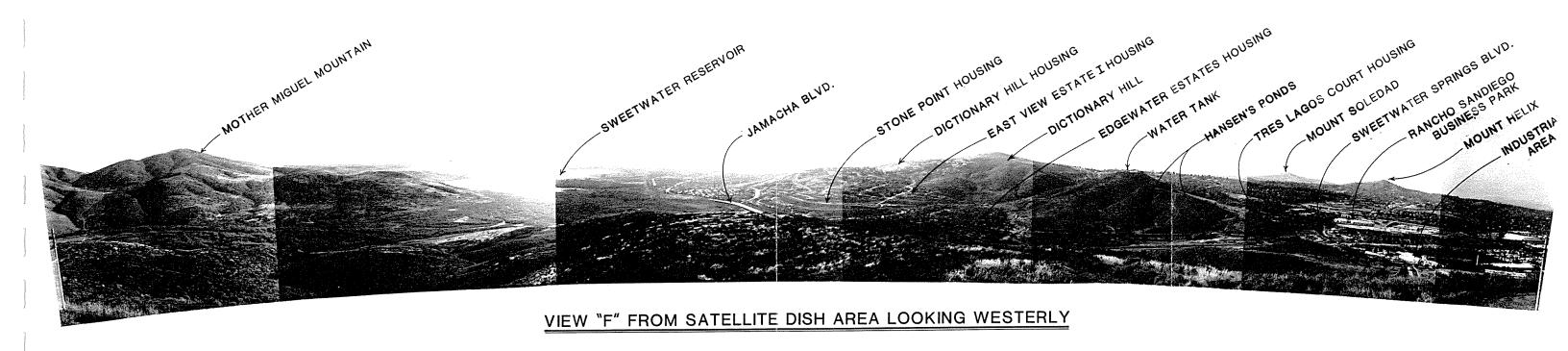


Note:Photographs taken with a 50 mm lens.



Onsite and Surrounding Views
The Pointe San Diego





Note:Photographs taken with a 50mm lens.



View E: This viewpoint is also from the northwesterly Otay Water District water tank on the site and panoramic views can be obtained to the northeast, east, southeast and south. Background views consist of a distant mountain range to the northeast, San Miguel Mountain to the east, Mother Miguel Mountain to the southeast, and the Sweetwater Reservoir to the south. Middleground views consist of Rancho San Diego to the northeast, a large portion of the project site to the east, and housing developments to the south. Isham Springs, Hansen's Ponds, the Otay Water District water tank, and the cable television site on the southeasterly hill are visible on the project site from this viewpoint. In addition, Jamacha Boulevard and Sweetwater Springs Boulevard are visible. Foreground views consist of sage scrub on a slope near the northwesterly Otay Water District water tank.

View F: This viewpoint is from the satellite dish area on the southeasterly hill of the site. Panaramic views are from the south to northeast turning in a westerly direction. Background views consist of Mother Miguel Mountain to the south, Sweetwater Reservoir and residential development to the southwest, and Cowles Mountain and Mount Helix to the north and northeast. Distant views to the west are obstructed by Dictionary Hill and the northeasterly hill on the site. Middleground views consist of the Sweetwater River to the south in the valley between the southwesterly hill and Mother Miguel Mountain. Also, Dictionary Hill and the northeasterly hill on the site are visible to the west and the Rancho San Diego Business Park to the northeast. Foreground views consist of sage scrub on the slopes near the satellite dish area.

3.10.2 PROJECT IMPACTS

Implementation of the proposed project would create a long-term unavoidable adverse impact on the visual and natural aesthetic character of the site. The residential units proposed along both hills on the site and the resort, and office uses and commercial uses proposed in the valley would transform the site from a rural open space area to a more urban area.

Development of the site would create pockets of residential units on both hillsides. The development would expose several bands of development designed to conform with the natural topography. Slope rounding would be implemented in graded areas. A schematic comparison of finish contours with rounded slopes to standard slopes is shown in Exhibit 3-6 in Section 3.1. Sharp or radical changes in contour lines would affect the visual character of the site, while smooth contours would reduce visual affects of the project. Slope rounding would, however, disturb more area than standard slopes.

Exhibit 3-7 in Section 3.1 illustrates the proposed manufactured slope heights. The steepest proposed manufactured slope height would be 112 feet in the western portion of the site near Bancroft Creek. Other significant manufactured slope heights in the western portion of the site include 98-, 58-, and 57-foot slopes northwest of the resort area, a 50-foot slope near Sangamon Court; a 52-foot slope near the proposed retention pond, and a 39-foot slope along Sweetwater Springs Boulevard.

The eastern portion of the site is also proposed to contain significant manufactured slope heights. The steepest slope on the eastern portion of the site is a 92-foot slope adjacent to residential units and east of corporate offices. Other significant slopes proposed for the eastern portion of the site include a 65-foot slope along Pointe Parkway; a 58-foot slope near the water tank (see Section C-C on Exhibit 3.8); a 64-foot slope adjacent to residential units near the golf course; and 72-, 73- and 79-foot slopes in the golf course.

As motorists travel along Jamacha Boulevard and the South Bay Expressway, a combination of the proposed manufactured slope heights and the proposed structures would significantly alter the existing visual character of the site.

Retaining walls will be required to be implemented along the South Bay Expressway. The southeastern side of the South Bay Expressway, south of Pointe Parkway, will require three retining walls that will obstruct motorists view to the southeast for approximately 1,200 feet. The maximum height of these retaining walls will be approximately ten feet. One retaining wall will be required west of the South Bay Expressway and south of Pointe Parkway. This retaining wall will be

approximately 300 feet in length and a maximum height of ten feet. This retaining wall will obstruct motorists view to the northwest for a short period of time while these motorists travel through the project site.

However, a substantial amount of open space is planned adjacent to the residential areas on the two hills. The largest concentration of onsite development would be in the valley adjacent to Jamacha Boulevard and Sweetwater Springs Boulevard.

Color palette 5 illustrates an existing view of the hillsides near the Sweetwater Reservoir as observed by a motorist on Jamacha Boulevard. This view shows the existing vegetation in the area. Color palette 6 depicts a simulation of the proposed project from the same viewpoint as color palette 5. Views of color palette 6 include the business park, golf course, and the residences along the hillside. As shown in color palette 6, a significant amount of open space would surround the proposed structures.

Color palette 7 illustrates an existing view of San Miguel Mountain in the background from a hillside northwest of Jamacha Boulevard. The southeastern portion of the project site, near the Sweetwater Reservoir and the existing Edgewater Estates and Eastview Estates that are located south of the western portion of the site are in the middleground view. Color palette 8 shows the simulation of the proposed project on the southeastern portion of the site and at the same viewpoint as color palette 7. As shown in color palette 8, the proposed residences are designed to conform to the hillsides and create pockets of development. Also illustrated in color palette 8 is the golf course located south of the hillside residences and the proposed business park which is located southwest of the golf course.

Views from adjacent uses would be altered during the daytime hours due to structures built on the site. During the nighttime hours, views from adjacent uses would be altered by llumination of onsite structures and vehicle lights. Views from surrounding residential areas are the most sensitive compared to views from office and industrial areas adjacent to the site.

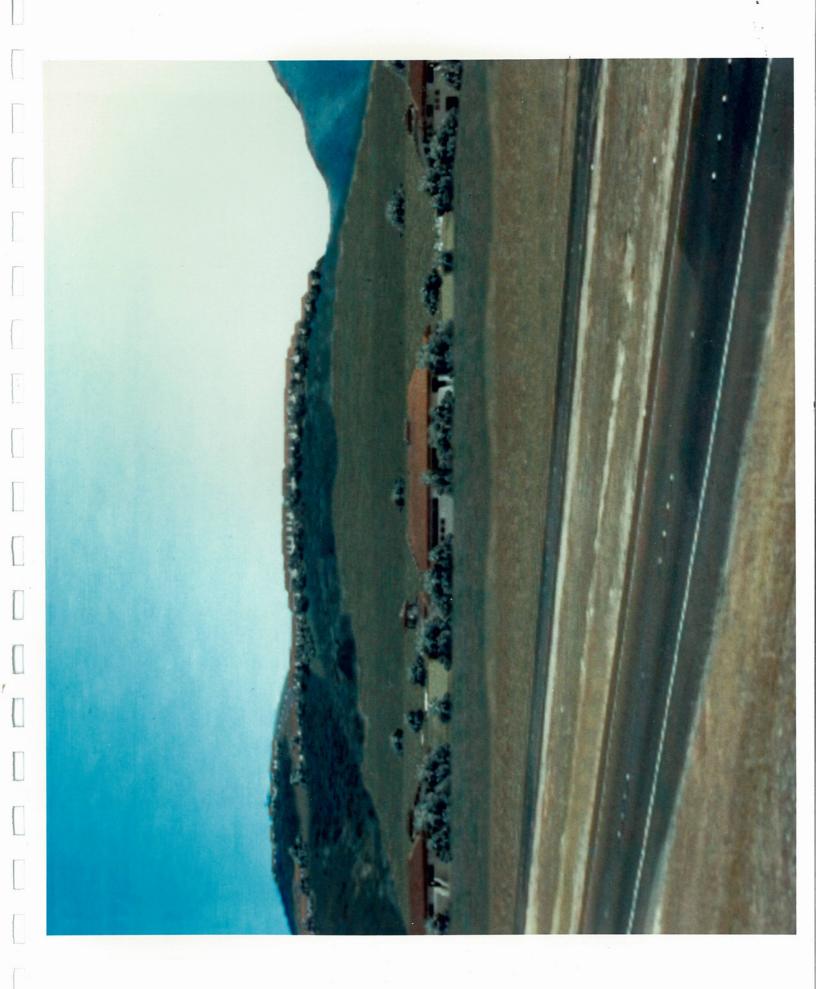
Views from the adjacent Tres Lagos residential development north of the site would be affected by the resort buildings, due to their proximity. As shown in Exhibit 3-39, a portion of the residences of the Tres Lagos Court would have an elevated view of the tennis court area. These residences would also have a view of the resort buildings. As shown in Exhibit 3-42, the elevation of the resort building roof is approximately 5 feet above the ground-level elevation of the residential units. Due to the distance between the residences and the resort buildings (approximately 200 feet) and the line of sight which is approximately 5 feet above ground, distant views for these residences would be maintained. However, there are a few residences directly adjacent to the mountainside resort buildings that would lose a portion of their distant views because the resort buildings would be two stories and so would obstruct views from the ground level of the residences.

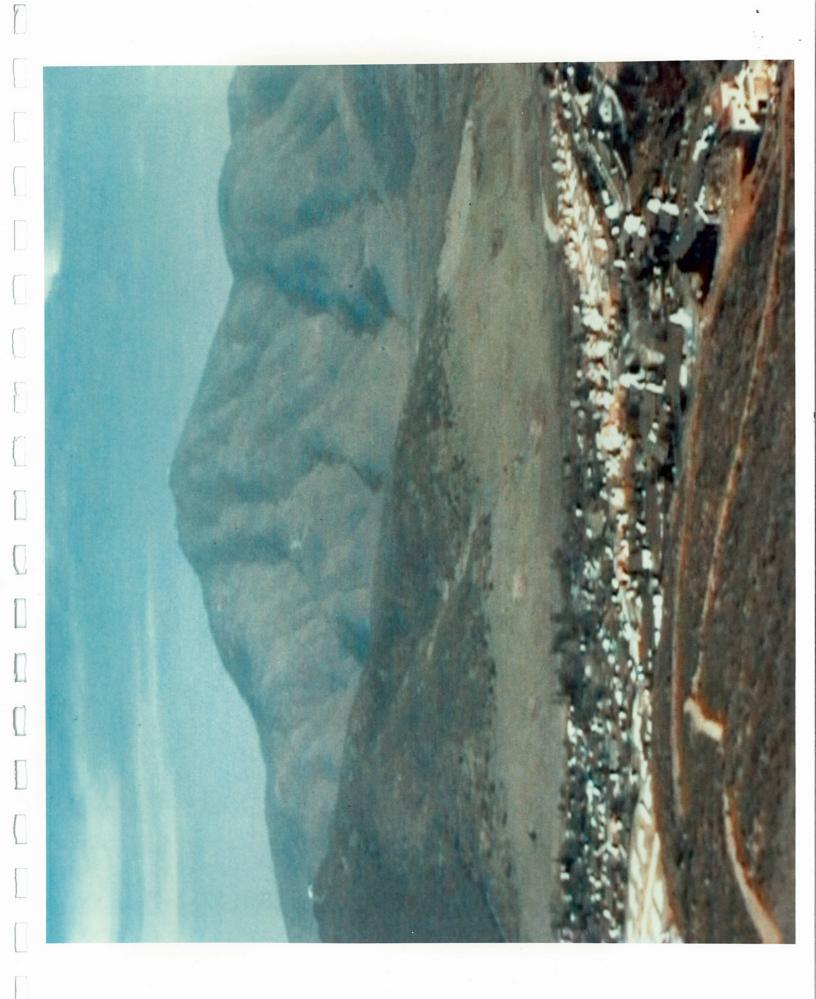
Existing residential areas (Edgewater Estates and Eastview Estates) will adjoin open space, housing, or offices. Northeastern short-range views for residents along Spring Glen Lane (Edgewater Estates residents) will be obstructed by the proposed apartment complex and the offices proposed adjacent to Springs Glen Road. Northern and northwestern views for residents within Edgewater and Eastview estates would be altered because residences would be constructed along the hillsides.

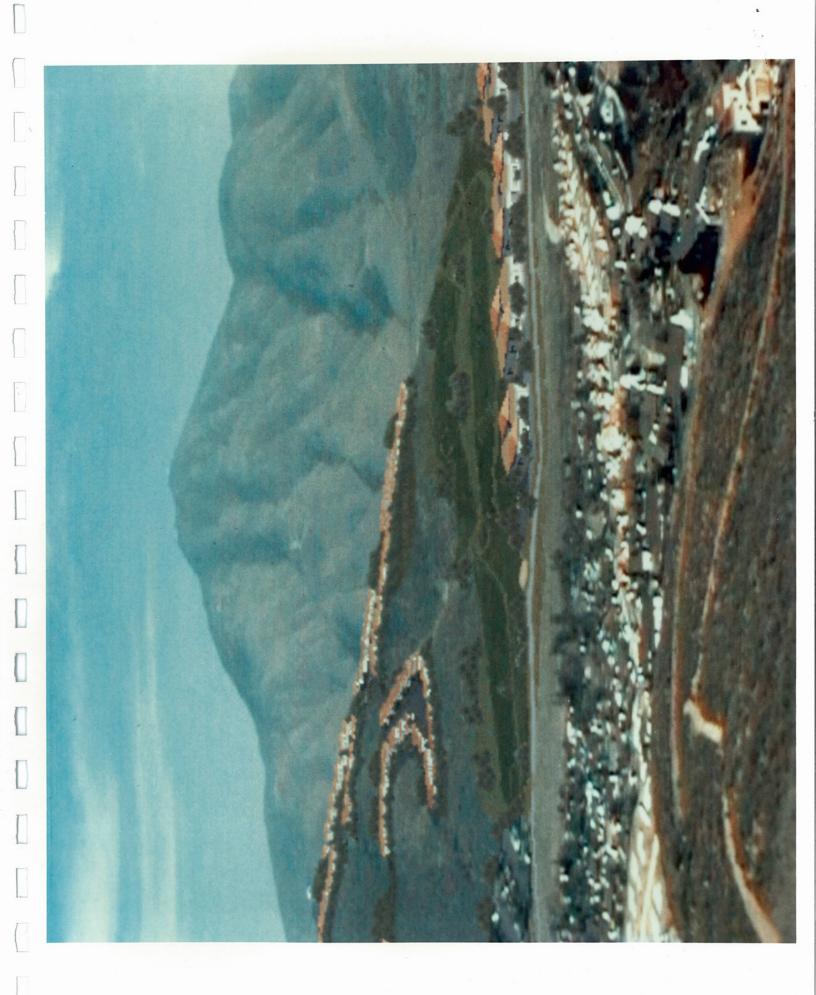
Residences north of the project site (north of the Bancroft Creek area) would also experience a change in the visual character of the site. Short-range views would primarily consist of open space, while midrange and long-range views would consist of bands of development surrounded by open space. The structures have been architecturally designed to blend into the steep terrain. The proposed buildings hide many of the banks and provide diversity with walls and vegetation that softens the effect of the structure. Residential units have been designed with a level below street grade to utilize this concept.

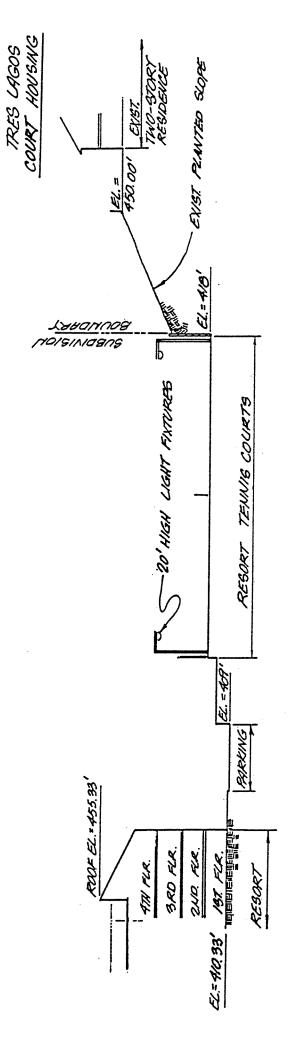
The proposed development would also alter the view of motorists along Jamacha Boulevard and the South Bay Expressway. The two onsite hillsides would not provide motorists a complete natural view although the substantial amount of open space (426.4 acres) would reduce the potential visual impact of the project. As stated previously, the primary views from the SR 54 corridor (second priority scenic highway) are to the south and southeast. San Miguel Mountain, Mother Miguel Mountain, and the Sweetwater Reservoir provide aesthetically pleasing sights.











Cross Section Through Tres Lagos Court Housing, Tennis Courts, and Resort Building **The Pointe San Diego**



Overall, the existing rural character of the site (particularly east of Jamacha Boulevard) would be inevitably lost. The proposed design would result in a significant alteration of views and natural aesthetics. The project would, however, provide pockets of development with landscaping in the hill areas and approximately 426.4 acres of open space, approximately 65 percent of the project site.

3.10.3 CUMULATIVE IMPACTS

Development of the proposed project would contribute to the development and continuing loss of natural open space in the Spring Valley Community. This loss of open space reduces the natural visual quality of the hillsides and valleys that currently contain vegetative communities. Cumulative projects in the community contain substantial acreage of both open space and development. Each project is subject to separate environmental review by county staff to ensure that visual effects are minimized.

3.10.4 MITIGATION MEASURES

The project applicant shall implement the following measures to reduce the potential aesthetic and visual changes of the proposed project.

- 1. Native vegetation shall be planted on all manufactured slopes. When combined with slope rounding and variation in steepness of the slope face, the man-made slopes will better blend with the native areas.
- 2. Color selection for building materials of the residential units shall be compatible with the surrounding environment.
- 3. Design of the residential units shall fit into the steep terrain and help screen cut slopes.

3.11 SOCIOECONOMICS

3.11.1 EXISTING CONDITIONS

For consistency among the various planning programs administered by regional and local agencies (e.g., development policies, wastewater management, transportation strategy, air quality management), it is necessary to have a consistent set of growth projections. The San Diego Association of Governments (SANDAG) is the responsible agency for developing and adopting regional growth forecasts for the County of San Diego.

The San Diego Association of Governments has been producing both short- and long-range forecasts of regional growth for a wide selection of variables since 1971. The agency's forecasting methodologies are explained in a pair of technical and policy reports (SANDAG 1984). The preparation of the original elements of the Regional Comprehensive Plan in the early 1970s was the initial impetus for the production of regional forecasts of population, employment, and land use. SANDAG's most recent forecasting effort is the Series 7 Regional Growth Forecasts.

The Series 7 Regional Growth Forecasts are a refinement of the currently adopted Series 6 Forecasts. Adoption proceedings for the Series 7 Forecasts are scheduled to begin in July 1989. The Series 6 Regional Forecasts include the years 1980, 1990, 1995, and 2000. However, several of the Series 6 Forecasts have underestimated the San Diego County growth rate within the last few years. The Series 7 Regional Forecasts include the years of 1986, 1995, 2000, and 2010. When adopted, the Series 7 Forecasts will supercede the Series 6 Forecasts.

For the purpose of this study, both the Series 6 and Series 7 Forecasts are presented for the proposed study area. Table 3-41 depicts the Series 6 Regional Forecasts. Table 3-42 depicts the Series 7 Regional Forecasts.

TABLE 3-41
SERIES 6 GROWTH PROJECTIONS

	1980		1990			
	Emp	Units	Pop	Emp	Units	Pop
Spring Valley Subregional Area (SRA)	7,900	15,800	47,300	11,200	24,300	69,600
East Suburban Major Statistical Area (MSA)	85,200	119,900	335,720	107,500	151,200	423,360
County	722,100	670,100	1,876,280	930,200	865,800	2,424,240
		1995			2000	
	Emp	Units	Pop	Emp	Units (2)	Pop
Spring Valley Subregional Area (SRA)	12,200	26,900	75,700	13,100	26,900	73,700
East Suburban Major Statistical Area (MSA)	115,400	164,200	459,766	123,700	175,700	491,960
County	1,010,200	957,400	2,680,720	1,087,400	1,043,200	2,920,960

Emp - Employment Pop - Population

Source: San Diego Association of Governments 1988.

TABLE 3-42
SERIES 7 GROWTH PROJECTIONS

	1986		1995			
	Emp	Units	Pop	Emp	Units	Pop
Spring Valley Subregional Area (SRA)	10,939	19,672	61,993	15,440	24,096	72,136
East Suburban Major Statistical Area (MSA)	116,966	136,688	386,304	143,059	161,292	439,740
County	1,034,328	765,243	2,149,507	1,263,391	958,023	2,567,193
		2000			2010	
	Emp	Units	Pop	Emp	Units	Pop
Spring Valley Subregional Area (SRA)	17,943	27,595	81,112	22,786	33,453	97,382
East Suburban Major Statistical Area (MSA)	155,397	176,251	474,001	182,545	201,326	37,910
County	1,366,140	1,051,006	2,765,421	1,589,260	1,204,899	3,133,851

Emp - Employment Pop - Population

Source: San Diego Association of Governments 1988.

Growth Projections

As mentioned previously, numerous agencies incorporate growth projections into their planning projections. As a result of the different needs and levels of analysis, the regional growth forecast is divided into a variety of analysis areas. This section reviews the study area from three types of analysis areas: Countywide, Major Statistical Area (MSA), and Subregional Area (SRA).

Countywide

The proposed project site is located in southeastern unincorporated San Diego County. The study area is in the vicinity of the cities of National City, Chula Vista, El Cajon, Lemon Grove, and La Mesa. These areas have experienced a strong level of economic growth over the past several years, and the level of growth is expected to continue into the foreseeable future.

Major Statistical Area (MSA)

The study area is included in the East Suburban MSA. The East Suburban MSA is the third largest of seven MSAs in the San Diego County area.

Subregional Area (SRA)

The study area is included within the Spring Valley Subregional Area. The SRA presents detailed information for a smaller geographic area, compared to the larger geographic area of the MSA.

Within the Series 7 Regional Forecasts (Table 3-42), population, housing, and employment projections are depicted for the years of 1986, 1995, 2000, and 2010. The Series 6 Regional Forecasts include the years 1980, 1990, 1995, and 2000. As stated previously, the Series 7 Regional Forecasts are more accurate than Series 6 Regional Forecasts, even though Series 7 has not yet been officially adopted.

3.11.2 PROJECT IMPACTS

Population

The proposed project will have a minimal and insignificant effect on the study area's residential population due to the addition of only 855 dwelling units. Assuming 2.8 persons per household, the project will increase the area's residential population by approximately 2,400, which is less than the potential increase on the project site because fewer dwelling units are proposed than permitted. This incremental population increase represents approximately 3 percent of the Series 7 population forecasted for the Spring Valley Subregional Area for 1995. The proposed project will also increase the visitor population in the Spring Valley/Valle de Oro Community. A resort with 641 suites is proposed on the site, which would add an additional 1,000(±) people in the area. SANDAG does not include visitor populations in its projections; therefore, only the residential population is analyzed for conformance with growth forecasts.

The proposed project would result in less of a residential population increase than under the existing specific plan and proposed mobile home development for the site, because the proposed project contains less dwelling units. Under the existing specific plan and proposed mobile home development, 968 units are permitted on the site. Using a population factor of 2.8 persons per household, approximately 2,710 people could be generated. Therefore, the proposed project would generate approximately 310 less people than permitted under the existing plans for the site.

Housing

The proposed project will add 855 residential dwelling units to the area's housing stock. This incremental housing unit increase is not significant because it represents approximately 3.6 percent of the Series 7 housing unit forecast for the Spring Valley Subregional Area for 1995. As stated previously, the number of proposed dwelling units for the site is less than permitted under the existing plans for the site.

Employment

The proposed project will result in approximately 5,000 employment opportunities (Pointe Builders 1988). This incremental increase is expected to be significant because this increase represents approximately 32 percent of the Series 7 employment forecast for the Spring Valley Subregional Area for 1995. In 2010, the proposed project is projected to contain approximately 18 percent of the employment in the Spring Valley Subregional Area, which is still considered high.

Currently the Spring Valley area is considered a bedroom community that requires long commuting distances to major employment areas. Development of the proposed project would contribute to a balanced community. Under the existing plans, 300,000 square feet of commercial, 400,000 square feet of office, and 200,000 square feet of industrial uses are permitted on the project site. Development of these uses would also create significantly more employment, but would not provide the diversity of jobs which a resort creates.

Summary

Development of the proposed project would not significantly alter the existing growth trends in the Spring Valley Subregional Area. As noted previously, growth under the proposed project would be less than under the existing specific plan and proposed mobile home development for the site. The creation of jobs would be a beneficial impact to the area.

3.11.3 CUMULATIVE IMPACTS

The implementation of the cumulative projects will add approximately 10,000 dwelling units in the Spring Valley Community area. As a result of developing housing units, the population in these areas will significantly increase. In addition, the cumulative projects are expected to provide approximately 210 acres of commercial and industrial uses, which will significantly increase employment in the area, but still not overcome the deficiencies which currently exist.

3.11.4 MITIGATION MEASURES

No measures are necessary.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Although the project would result in unavoidable and adverse impacts in a number of issue areas, mitigation measures have been identified to reduce the level of significance for many potential impacts. The mitigation measures identified in this environmental impact report will, if incorporated in the project, reduce the impacts below the threshhold of significance for the following issues:

- soils and geology,
- hydrology and drainage
- archaeological and historical resources,
- transportation and circulation,
- air quality
- noise
- public services and utilities (including police, fire, schools, water service, sewer service, solid waste disposal, consumption of gas and electricity, and parks and recreation services), and,
- social and economic impacts.

However, staff has determined that the impacts of the proposed project are significant and adverse, and cannot be mitigated in three issue areas. The areas and the reasons for this determination are:

• Visual Impacts, because the proposed Pointe San Diego Specific Plan includes extensive grading and development of homes on the steep hillsides overlooking the Sweetwater Reservoir. This development will be visible for long distances, and will permanently alter the natural backdrop of the reservoir.

Biological Resources, because of the removal of relatively rare and rapidly disappearing riparian and aquatic habitat and its replacement with habitat that will be dependent on an artificial water supply. Should the resort fail, continued support of the replacement habitat area could be in jeopardy.

In addition, development of the proposed project would significantly affect the black-tailed gnatcatcher; over 80 percent of the onsite population would be lost. Also the project would significantly affect the state-listed endangered Otay tarplant; the entire population would be lost. No feasible mitigation measures are available for these significant effects; therefore, they are considered unavoidable significant effects.

• Land Use, because the intensity of the resort use in combination with the other uses proposed in the Pointe San Diego Specific Plan is greater than the adopted specific plan. More grading would also be involved with the proposed project than the adopted specific plan. The project would also result in the destruction of most of RCA 15, which has archaeological and historical as well as biological value.

Therefore, it will be necessary to adopt a statement of overriding considerations in order to approve this project.

Following is a discussion of the changes to the proposed specific plan that would be necessary to reduce the impacts of each of the three above-mentioned unavoidable effects to a level of below significance. Implementation of the following mitigation measures is not economically feasible due to the extensive amount of land that would require to remain free of development.

- Visual Impacts -- To reduce visual effects to a level below significance, development should be restricted to the lowland areas adjacent to Jamacha Boulevard. The onsite hills should remain in their natural state to continue to provide a rural atmosphere.
- Biological Resources -- To reduce the significant effects to the riparian and aquatic habitat of the existing Hansen's Pond and Creek, the ponds and creek should be retained and an adequate buffer should be provided adjacent to them.

To reduce the significant effect to the black-tailed gnatcatcher, the proposed golf course and portions of the residences on the west and east sides of the site would require redesign. The southern portion of the golf course should remain free of development and the areas where residences are located near black-tailed gnatcatchers should also remain free of development. An adequate buffer should also be provided.

To reduce the significant effect to the Otay tarplant, the proposed golf course would also need to be redesigned. Again, the southern portion of the golf course should remain free of development.

• Land Use -- To reduce the land use effects to a level below significance, the above-mentioned measures for visual and biological resources effects would be adequate.

ALTERNATIVES

This section discusses a range of alternatives to the proposed project, including changes in the intensity of development and changes to the layout of the project, as well as an alternative location for the proposed resort. By analyzing a range of reasonable alternatives, it is possible to gain an understanding of the comparative advantages and disadvantages of the proposed project in relation to each alternative. The purpose of the alternatives section is to determine whether it is feasible to develop the proposed property in a way which would reduce or eliminate the significant adverse impacts to the environment which will occur if the proposed project is implemented. This discussion of alternatives has been prepared in compliance with Section 15126(d) of the guidelines for the implementation of the California Environmental Quality Act (CEQA) of 1970, as amended.

Six alternatives have been identified for the project on this site:

- 1. The no project alternative, which would leave the site undeveloped until another proposal was put forward or development under the adopted specific plan occurred.
- 2. Development of the specific plan approved in 1980, including both the Hansen's Ranch Specific Plan and development of the H&S property adjacent to Sweetwater Reservoir at densities permitted in the General Plan (1.5 units per acre).
- 3. More intensive development of the site with residential, industrial, and commercial uses but no resort. This alternative would require a General Plan amendment to increase residential densities from 1.5 units per acre to the 2.2 units per acre permitted on the adjoining Panorama Ridge site.
- 4. Less intense development of the site, including reduction of residential development on the hillsides and development of a hotel (instead of a resort) at the intersection of Jamacha Boulevard and Sweetwater Springs Boulevard in order to preserve all of RCA 15 as adopted in the existing specific plan.
- 5. Alternative project design reflecting the proposal initially submitted for county review in January 1988. This alternative has a larger resort facility but reduced office and commercial development. This has fewer residential limits than the proposed project, but they are more strung out across the hillsides rather than clustered to minimize grading and visual impacts.

6. Location of the Pointe San Diego Resort Community on an alternative site—in this case, the property known as Loma del Sol on the edge of the Valle de Oro community, east of Willow Glen Drive, and adjacent to Jamul Road.

Table 5-1 compares the characteristics of the five alternatives for development of the site and the one alternative location for the proposed project with the proposed Pointe San Diego Resort. Table 5-2 summarizes the expected quantitative impacts of development for each alternative. Table 5-3 compares their economic impacts and Table 5-4 compares the slope disturbance that would occur with each alternative. Although each alternative may mitigate to some degree the expected adverse impacts of the proposed Pointe San Diego Specific Plan, other impacts would be caused or one or more of the project objectives would not be achieved. Only the no project (i.e., no development) alternative would have no new adverse impacts on the environment, although some existing deficiencies would not be corrected.

5.1 NO PROJECT ALTERNATIVE

The CEQA requires that an EIR include a comparative evaluation of the no project alternative. With this alternative, the proposed project actions would not occurthat is, there would be no development on the site. The Pointe San Diego Specific Plan and associated general plan, community plan, specific plan, and zoning amendments would not be approved and the project would not be built.

This alternative would eliminate the short- and long-term impacts associated with implementation of the proposed project. Particularly, the no project alternative would alleviate the project's impacts of increased traffic and noise generation and increased air pollution in the Spring Valley community. In addition, this alternative would eliminate all proposed grading impacts and preserve all of the existing natural open space on the site, including RCAs 10 and 15. The expected impacts of the proposed project on the existing water, sewer, and drainage systems in the area would also be avoided.

However, under this alternative, none of the benefits which could be expected from the development of the Pointe San Diego would be realized either. These benefits include:

- 1. Improvement of Jamacha Boulevard and the South Bay Expressway through the site.
- 2. Drainage system improvements, including a substantial financial contribution to the planned urban runoff containment system proposed by the Sweetwater Authority to protect the Sweetwater Reservoir from contamination.
- 3. Increased revenues to the county from transient occupancy taxes paid by guests at the resort and sales taxes from the restaurants and other resort facilities.
- 4. Increased employment opportunities for residents of the project and surrounding area.
- 5. Elimination of the off-road vehicle use and illegal dumping on the site that is threatening the biological resources there and degrading the appearance of the site.
- 6. Dining and recreational facilities unduplicated in the region would not be built and available to area residents.
- 7. Revitalization of the project site.

The no project alternative is likely to be only a short-term solution to the environmental impacts of development of the site. According to the San Diego County General Plan and the Spring Valley Community Plan, the site is appropriate for urban development subject to the approval of a specific plan. It is within the urban growth boundary. Urban services (water, sewer, and storm drains) are available to the site and have sufficient capacity to serve development there. In addition, the site is surrounded by developed areas and substantial development is occurring in the region.

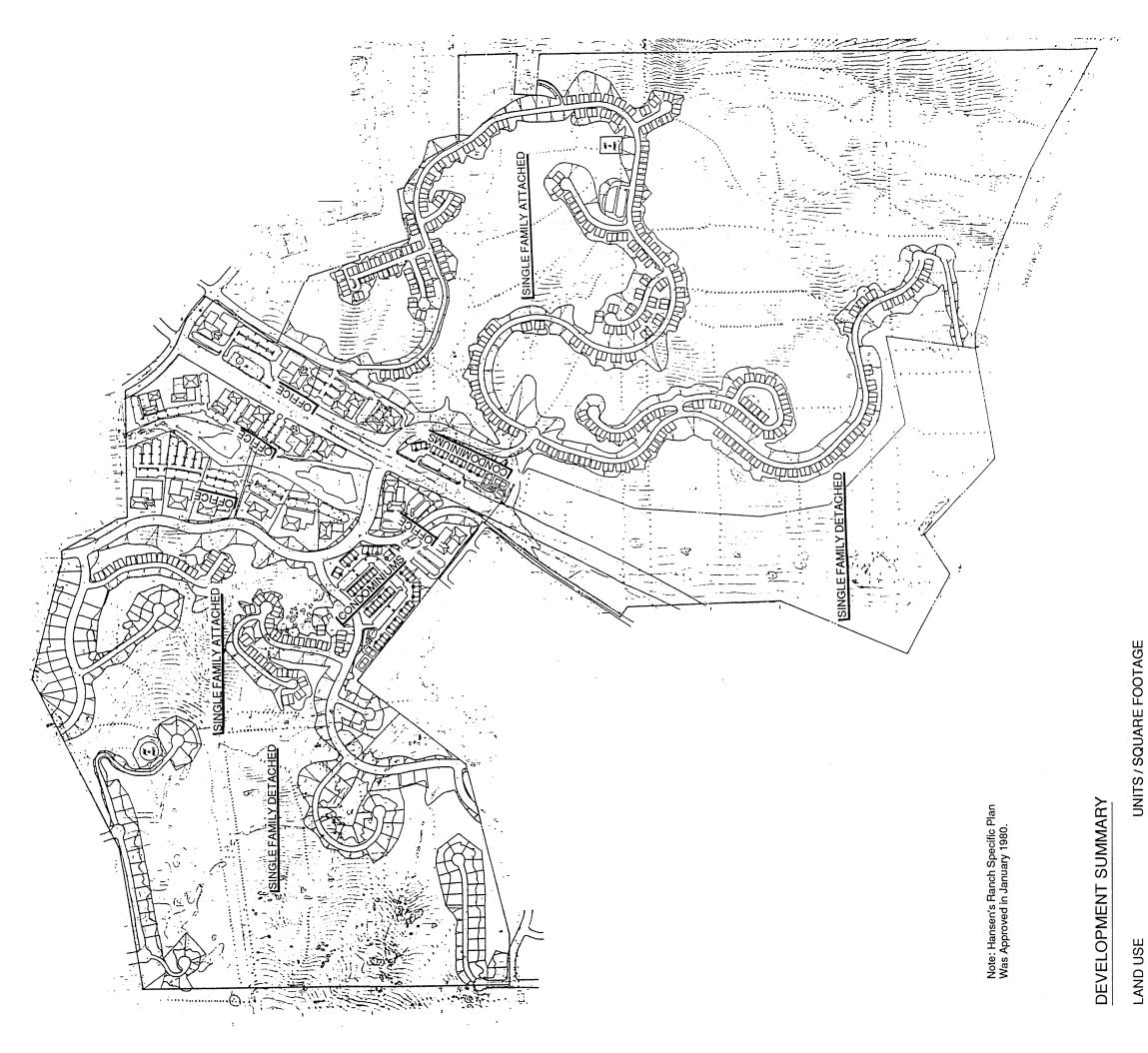
5.2 DEVELOPMENT OF APPROVED SPECIFIC PLAN

The site of the proposed Pointe San Diego includes an area for which a specific plan was previously approved (Hansen's Ranch Specific Plan) and a parcel for which a mobile home development was previously proposed, as well as three smaller parcels which are landlocked, and, therefore, should logically be planned and developed with the larger parcels included in the proposed project.

Under this alternative, the property owners would file subdivision maps, use permits, and other implementing actions to develop the property as proposed in the General Plan. This could result in development of 95 single-family detached units, 461 hillside duplex units, 150 multi-family units, 105 units on the H&S property, approximately 162,000 square feet of commercial space, approximately 377,800 square feet of office space, and approximately 28,000 square feet of industrial space on the site. Exhibit 5-1 illustrates this development. The previous environmental review of these projects found the impacts on landform (grading), visual, and biological resources to be significant and unmitigable. Under this alternative, there was no requirement to replace the degraded riparian and aquatic habitats as there is for the proposed project, because Hansen's Creek and Ponds would not be destroyed although their biological value would be substantially reduced by intensive development immediately adjoining them. The EIR on the adopted specific plan found the impacts on biological resources significant and unmitigable for this reason.

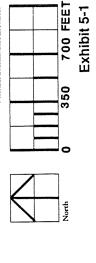
The other area of major environmental concern with the adopted specific plan was the potential impact on landform (grading) and the resulting visual impacts. This issue has increased in importance with the adoption of the sensitive lands policy by the Board of Supervisors in 1988. The adopted specific plan has become the baseline against which all alternative proposals must be evaluated. Table 5-4 gives both the undisturbed slope analysis required for comparison with adopted community plan standards, and the disturbed slope analysis required to judge compliance with the sensitive lands policy. The proposed project would leave more land undisturbed than this alternative (the adopted specific plan), and particularly more in the steeper slope categories (above 25 percent). In two categories, however, more area would be disturbed—slopes of 10 to 20 percent (1.2 acres more disturbance) and slopes of 20 to 30 percent (8.9 acres more disturbance). The proposed project would alter grading to protect the steepest and most sensitive slopes more effectively than this alternative, the adopted specific plan for the area.

Table 5-2, which summarizes the quantitative impacts of the proposed project in comparison to this alternative indicates that development of the existing specific plan and H&S property would reduce the expected impacts of the proposed project on infrastructure. Traffic would be 21,406 ADT as opposed to 32,581 ADT from the proposed project. The traffic analysis is somewhat academic since the design did not



811 Units 539,800 S.F. 28,000 S.F. Residential Office / Commercial Light Industrial

Approved Hansen's Ranch Specific Plan **The Pointe San Diego**





anticipate the county circulation change of 1987 which added an expressway. Therefore, major revisions would be necessary to make the approved project compatible. Water and sewer demand would also decrease, as would the number of school children to be accommodated by local schools. However, as Table 5-3 illustrates, the economic benefits from the proposed project would not be realized. In addition, the equestrian, recreational, and dining facilities in the proposed project would not be built.

5.3 INCREASED INTENSITY

Under this alternative, the development of the site would be minimized consistent with surrounding development patterns. The alternative would include 1,095 residential units and extensive (802,700 square feet) office, commercial and business park development in the flatter areas. The 18-hole golf course would also be constructed. Exhibit 5-2 illustrates this alternative.

The residential density of 2.2 units per acre envisioned under this project is consistent with the adjoining Panorama Ridge (Dictionary Hill) specific plan area and less than the density of residential development north of the site. The size and configuration of the proposed commercial and office development are similar to that in the adopted specific plan with the addition of an office-professional park on the H&S property. However, this alternative does not include the Pointe Resort and, therefore, makes no changes to the Caltrans preliminary configuration of Jamacha Boulevard and State Route 54 through the site. Hansen's Ponds and Isham Springs would be removed so there would be a federal requirement to construct the mitigation area on Bancroft Creek, similar to the proposed project.

Because the resort and associated restaurants and recreational facilities are not included in this alternative, the impacts on infrastructure in the area would be reduced. This alternative would result in 4,977 fewer daily trips than the proposed project but 6,198 more than the adopted specific plan. The impacts on water, sewer, and solid waste are likewise less than the proposed project but more than the adopted specific plan (see Table 5-2).

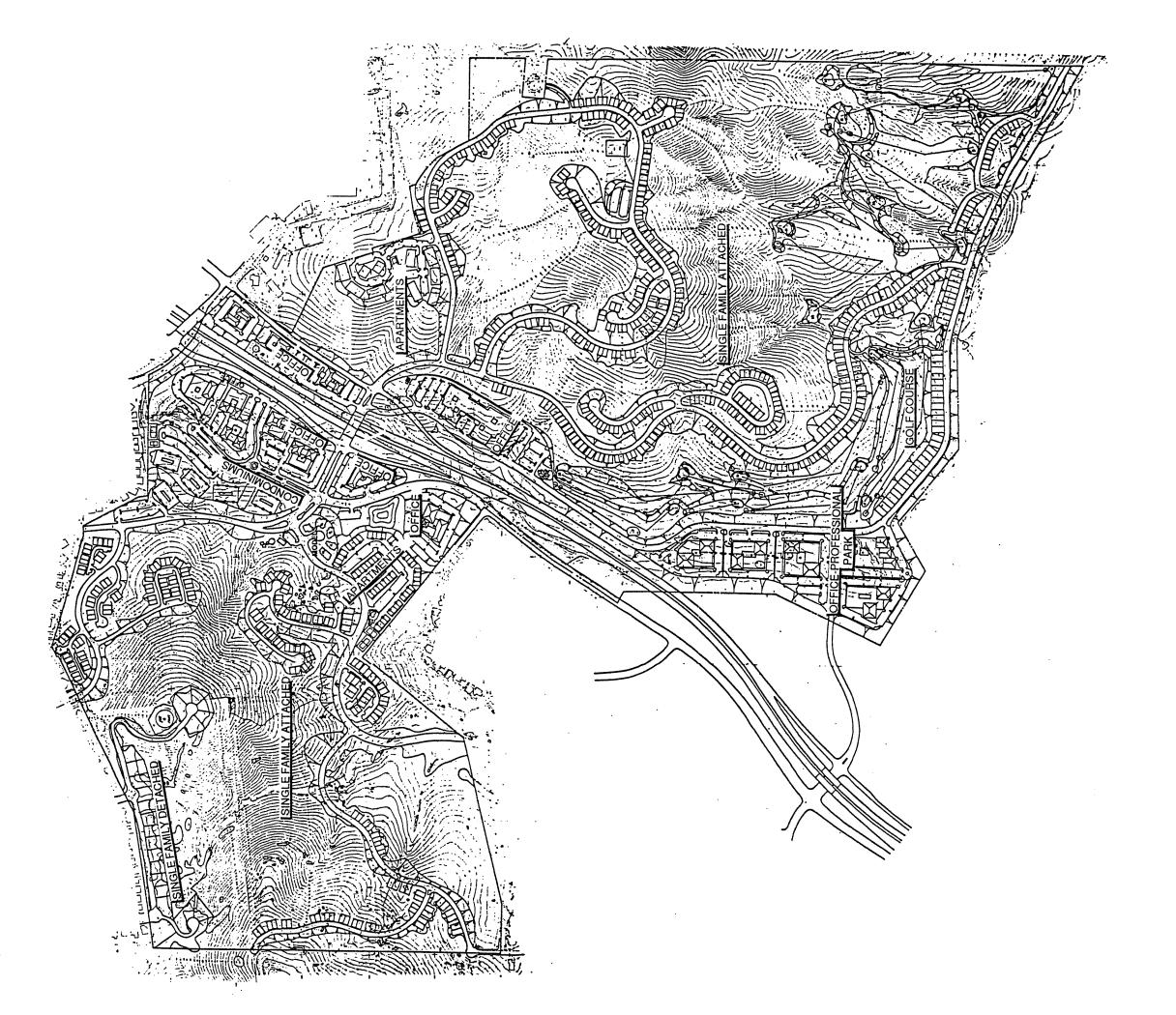
The more intensive development alternative would disturb 301 acres as opposed to 282 acres for the adopted specific plan and 267 acres for the proposed project. As shown on Table 5-4, the disturbance of the steepest slopes would be greater than for either the proposed project or the adopted specific plan. Therefore, the more intensive alternative would be likely to have significant, adverse, and unmitigable impacts on landform (grading), visual, and biological resources. It would not meet the criteria for approval of the necessary general plan and specific plan amendments under the sensitive land policy.

5.4 LESS INTENSE DEVELOPMENT

Under this alternative, the overall intensity of the proposed project would be reduced, but particularly residential development of hillside areas. Reducing the size of the resort development is considered as a means to permit retention of Hansen's Creek and Ponds, as well as Isham Springs and the historic and archaeological resources located there. No circulation element amendment would be required for this alternative either. Unfortunately, such a redesign would not leave enough space for a destination resort as proposed by Pointe Builders, because the supporting recreational and convention facilities and at least one restaurant would have to be eliminated. However, the site could be used for a large hotel (250 to 300 rooms) and other office or commercial development.

If this development pattern were to occur, the hotel would probably locate adjacent to the intersection of Jamacha Boulevard and Sweetwater Springs Boulevard, in order to maximize exposure. Across the creek, office development would be likely to occur, perhaps with some supporting commercial (approximately 4,000 square feet of restaurants, stationers, banks, etc.). As a result, there would be approximately 350,000 square feet of office space on the entire site. Exhibit 5-3 shows this alternative.

Elimination of the ribbon road on the hillside above Sweetwater Reservoir and reconfiguration of hillside development would result in a total of 626 housing units. Elimination of the residential development from the hillsides would eliminate the reason for the developer to continue to pursue the purchase of the H&S property (Lakeview Terraces) and the two landlocked parcels adjacent to it. The owners of



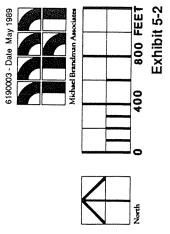
DEVELOPMENT SUMMARY

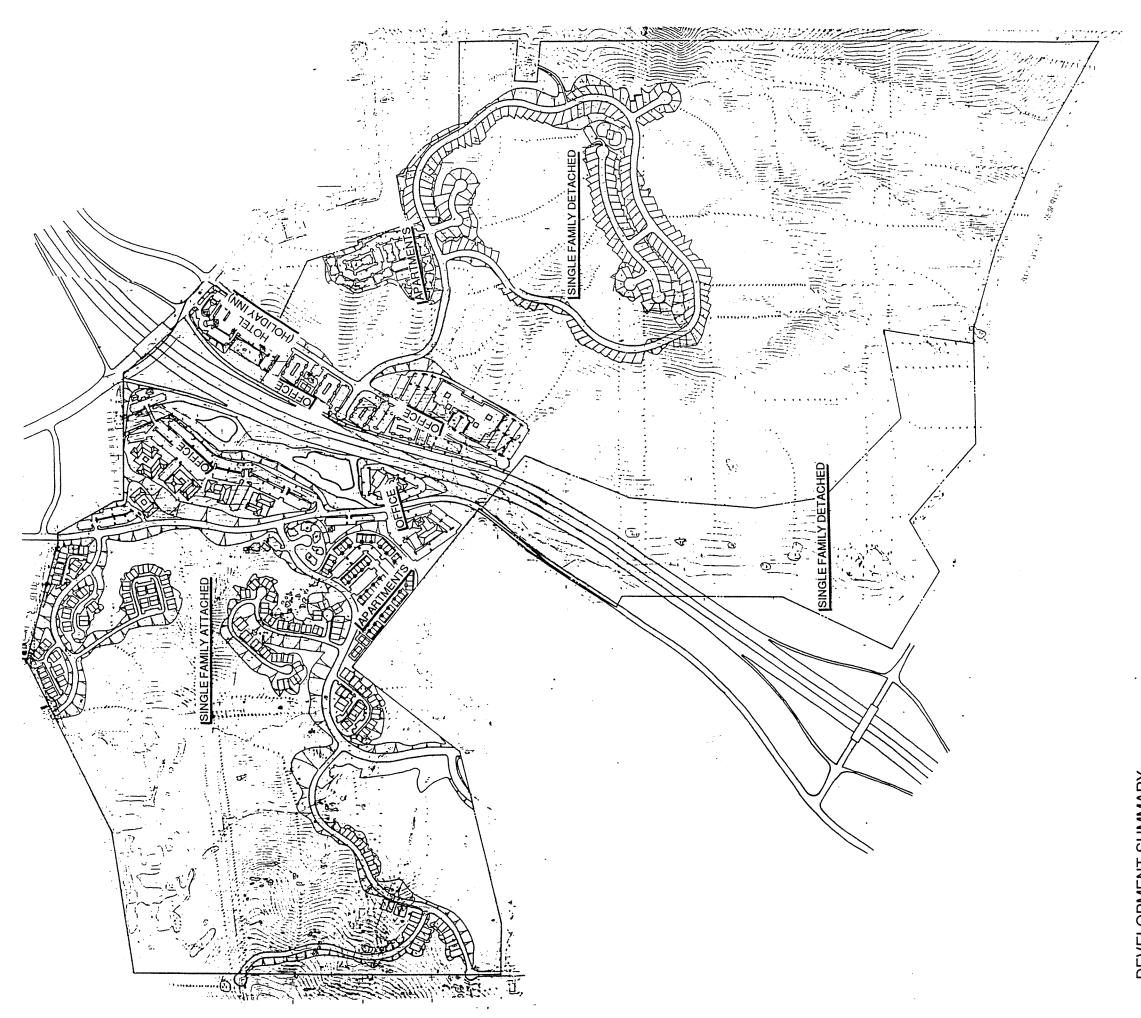
LAND USE UNITS / SQUARE FOOTAGE / ACRES

Residential Office Office-Professional Park Golf Course

1,095 Units 452,700 S.F. x 350,000 S.F. 73.6 Acres Increased Intensity Site Plan

The Pointe San Diego



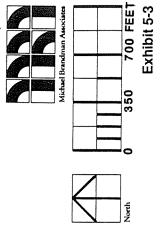


DEVELOPMENT SUMMARY

UNITS / SQUARE FOOTAGE / ROOMS LAND USE Hotel Residential Office Restaurant

300 Rooms 626 Units 350,000 S.F. 4,000 S.F.

Less Intense Development Site Plan The Pointe San Diego



these parcels would be likely to apply separately at a later date for development. Under the existing general plan and zoning designations on these sites 105 units could be built on this land with commercial development along Jamacha Boulevard.

The impacts of this alternative on slope disturbance would be less than the adopted specific plan and similar to the proposed project. The impacts to upland habitats would be greatly reduced. Although Hansen's Creek and Ponds would be preserved, the biological value of these habitats would be reduced by the increase in noise, light, and human activity adjacent to them (similar to the impacts of development of The close proximity of the preliminary Caltrans the adopted specific plan). alignment would be a major factor in these adverse impacts. The dams creating the ponds would have to be reinforced or replaced to protect downstream development, temporarily removing vegetation and further compromising the value of the habitat. This impact would not require mitigation by enhancement of the Bancroft Creek area as proposed by the Pointe San Diego Specific Plan because there would be no need to replace the Hansen's Ponds riparian and aquatic habitat in order to obtain permits from the U.S. Army Corps of Engineers and the California Department of Fish and Game. However, the county could require such mitigation as a condition of approval of the plan.

By preserving Hansen's Creek and Ponds, a potential source of groundwater contamination would be retained. As dry weather urban flows continue to increase by crossing Sweetwater Springs Boulevard and entering Hansen's Ponds, contamination of groundwater could increase by evaporating liquids and retention of salts by the ponds. In addition, the dry weather flows would mix with the quality waters of Isham Springs in the ponds and reduce the quality of the springwater (Butterfield 1988).

Elimination of some of the hillside residential development would reduce the impacts to landform from grading, as well as the associated visual impacts of the grading and development itself. This alternative meets the criteria for approval of specific plan and general plan amendments set forth in the county's sensitive lands policy. The reduced residential development would result in reduced impacts on water, sewer, schools, police, and fire services. Concentration of residential development along the expressway would result in exposure of more people to the noise and air pollution associated with that facility.

The development of the parcels east of Jamacha Boulevard adjacent to the Sweetwater Reservoir would proceed separately from this project, with the potential for adverse impacts on the reservoir (runoff contamination, trespassing, habitat disturbance). Adverse impacts on the Sweetwater Reservoir from runoff contamination could be reduced with the implementation of the runoff diversion system.

The Pointe San Diego resort would not be developed on the site, resulting in reduced revenues from transient occupancy and sales taxes from a smaller hotel (see Table 5-3). The recreational amenities associated with the resort would not be constructed for area residents to use. The applicant does not consider this a feasible alternative, because it would eliminate the destination resort which is the focus of his proposal, and as a result it would not be built. According to Pannel, Kerr, Forster, commercial hotels are generally located close to demand generators such as major office parks, central business districts, airports, hospitals, and other concentrations of business activity. These demand generators are currently not within the Sweetwater area. The project site is relatively located in a remote area, separated from major business activity. Commercial hotels usually have excellent accessibility and visibility to major freeway and secondary roads. Due to the site's relative remoteness, the only feasible opportunity for a hotel development would be one in which the project creates at least a portion of its own demand such as a destination resort. For hotels to generate a portion of its own demand, a complement of recreational services such as golf and tennis would be needed. Commercial hotels usually do not provide these recreational services; therefore, these types of hotels do not appear to be feasible on the project site (see Appendix J).

In addition, reducing the number of lots on the project site would price homes out of the existing market, resulting in less affordable homes. Fewer units would result in higher priced homes because of land value and infrastructure expense. A reduced number of units would reduce infrastructure expense but not significantly.

Although the impacts on the landform, visual, and archaeological resources on the site would be reduced by this design, the impacts to the biological resources on Hansen's Creek and Ponds would remain significant, adverse, and unmitigated.

5.5 ALTERNATIVE DESIGN

This alternative is shown in Exhibit 5-4 and its characteristics are summarized in comparison to the other alternatives on Table 5-1. This configuration for the Pointe resort community represents the project originally submitted for county review in January 1988. The layout of the residential areas is similar to the adopted Hansen's Ranch Specific Plan with long ribbon roads cutting across the hillsides on the site. Development in the valley is more intensive than the specific plan because it includes 957 suites in two resorts and 325,000 square feet of office space.

Pointe Builders redesigned the proposed resort community to reduce the visual and grading impacts of the development. Table 5-4 shows that this alternative would have more severe impacts on slopes over 20 percent than either the adopted specific plan or the proposed project. As such, it is not consistent with the sensitive land policy.

The impacts to infrastructure and community services under this alternative are slightly less than the proposed project, because the golf course, which was not designed for the initial submittal (and, therefore, not evaluated), has been included in the proposed project. The golf course was described as a subsequent phase of the initial submittal requiring separate environmental review.

The impacts of this alternative are greater than those of the adopted specific plan for traffic, water, sewer, and solid waste (see Table 5-2). Biological impacts would require mitigation through replacement and enhancement of lost riparian and upland habitats under this alternative, but such mitigation was not required of the adopted specific plan.

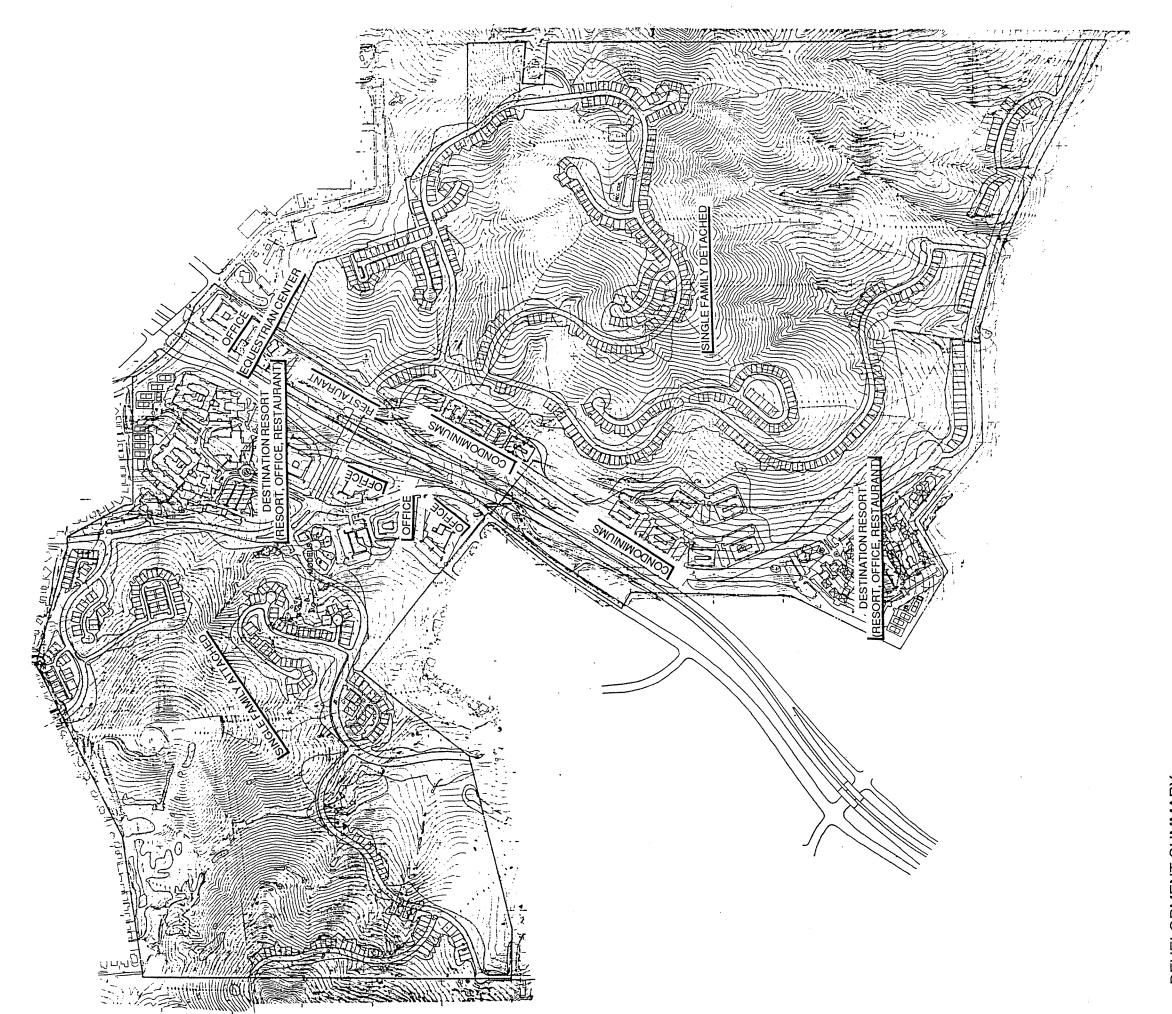
In summary, this redesign alternative has more adverse impacts on landform and visual resources than the proposed project or adopted specific plan, and similar biological resource impacts to the proposed project with more mitigation of biological impacts than required by the adopted specific plan.

TABLE 5-1

CHARACTERISTICS OF ALTERNATIVES

		, ve	nites	re.	f.	ro.	ئە	Ñ	đị.	
		Alternative Site	641 resort suites	855 units	358,300 s.f.	1.8 acres	36,500 s.f.	73.6 acres	350,000 s.f.	•
	Alternative Design	January 1988 Pointe Project	957 resort suites	830 units	325,000 s.f.	1.8 acres	60,520 s.f.	1	I	!
	Holidey Inn	Less Intense Development	300 hotel rooms	626 units	350,000 s.f.	1	4,000 s.f.	1	ŀ	1
		Increased Intensity	!	1,095 units	452,700 s.f.	ł	ł	73.6 acres	350,000 s.f.	ł
Existing Specific	Plan and	Development Plan	I	811 units	539,800 s.f.	1	1	1	1	28,000 s.f.
		No Project	ŀ	!	i i	1	ł	1	1	1
		Pointe San Diego	641 resort suites	855 units	358,300 s.f.	1.8 acres	36,500 s.f.	73.6 acres	350,000 s.f.	1
		Land Use	Resort/Hotel	Residential	Office	Equestrian Center	Restaurant	Golf Course	Office-Professional Park	Light Industrial

Source: Michael Brandman Associates, Inc. 1989. Based on data from Pointe Builders.



DEVELOPMENT SUMMARY

UNITS / SQUARE FOOTAGE / ACRES / SUITES LAND USE

957 Suites 830 Suites 325,000 S.F. 1.8 Acres 60,520 S.F.

Resort Residential Office Equestrian Cener Restaurant

Alternative Design Site Plan The Pointe San Diego

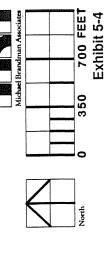


TABLE 5-2

IMPACTS OF THE ALTERNATIVES

	0.3 mgd 0.5 mgd 5,305 tons/yr10,353 tons/yr	1.0 mgd 0.5 mgd 1,353 tons/yr	0.6 mgd 0.3 mgd 5,711 tons/yr	0.8 mgd 0.4 mgd 10,178 tons/yr	1.0 mgd 0.6 mgd 11,870 tons/yr
	298	331	188	288	337
Intermediate 337	29	72	41	61	337
Senior 180	181	215	122	188	180

Source: Michael Brandman Associates, Inc. 1989.

TABLE 5-3

ECONOMIC IMPACTS OF THE ALTERNATIVES

			A	Alternatives		
Component	Proposed Project	1 No Project	2 Adopted Plan	3 More Intense	4 Less Intense	5 Alternative Design
Business Park SF Value	350,000 $52,500,000$	1 1	28,000 \$2,240,000	350,000 \$28,000,000	00	350,000 \$28,000,000
Office SF Value	358,000 $53,745,000$		539,000 SF \$80,970,000	452,700 SF \$67,905,000	330,000 SF \$49,500,000	325,000 SF \$48,750,000
Hotel/Resort Units ^a Value	641 128,200,000	1 1	00	18 holes \$9,000,000	300 rooms \$21,800,000	957 suites \$999,240,000
Apartment Units Value	236	1 1	150 \$10,500,000	384 \$26,880,000	486 \$34,020,000	144 \$10,080,000
For Sale Units Value	619	1 1	661 \$145,420,000	711 \$156,420,000	402 \$88,440,000	686 \$150,920,000
Property Tax	1,118,614	1	\$669,564	\$806,974	\$542,752	\$1,145,172
Sales Tax	770,309	1	0	18,831	130,050	1,171,374
T.O.T./Misc.	3,319,251	!	212,572	284,490	801,885	4,811,499
Employment Payroll	105,923,250	1 1	2,783 \$78,845,100	3,377 \$89,247,750	1,803 $$48,195,000$	4,993 \$1,018,490,000

Includes golf course and restaurants.

Source: Michael Brandman Associates, Inc. 1989. Based on data from Pointe Builders.

TABLE 5-4

SLOPE DISTURBANCE ANALYSIS OF THE ALTERNATIVES

						Und	Undisturbed Area	l Area				
į		į	Propo	Proposed Pointe	Alte Projec	Alternative 2 ⁸ Project Approved	Alte	Alternative 3 Most Intense	Alter Less	Alternative 4 Less Intense	Altern Alter	Alternative 5 Alternative
Slope Category	Existin	Existing Site Acres Percent	Com Acres	Percent	Acres	in 1980 Percent	Acres	Development Acres Percent	Acres	Development Acres Percent	Acres	Design Acres Percent
0-10%	59.8	59.8 9.2	8.3	13.9	2.4	4.0	4.0	6.7	14.0	23.4	6.0	10.0
10-20%	121.1	18.5	43.0	35.5	44.2	36.5	44.1	36.4	49.7	41.0	46.9	38.7
20-30%	164.5	25.2	86.4	52.5	95.3	57.9	87.0	52.9	98.4	59.8	88.0	53.5
30-40%	160.7	24.6	119.3	74.2	103.0	64.1	97.6	60.7	114.5	71.3	99.3	61.8
40+%	147.2	22.5	129.4	87.9	126.8	86.1	119.9	81.5	127.3	86.5	86.5 121.5	82.5
Total	653.3	100.0	386.4	59.2	371.7	56.9	352.6	54.0	403.9	61.8	361.7	55.4

5-13

							Disturbed Area	d Area				
			£	£	Alte	Alternative 28	Alte	Alternative 3	Alt	Alternative 4	Alt	Alternative 5
5	ŗ		ro Pro	roposed Pointe	Proje.	Project Approved	MOS	Most Intense	, Fe	Less Intense	A	Alternative
Slope	EXISTI	Existing Site	ာ	Community Increase/b		in 1980 Increase/b	Dev	Development Increase/b	Dev	Development Increase/b		Design Increase/b
Category	Acres	Percent	Acres	(Reduction)	Acres	(Reduction)	Acres	(Reduction)	Acres	(Reduction)	Acres	(Reduction)
0-25%	255.8	39.2	169.2	(4.1)	173.3	0.0	178.6	5.3	152.9	(20.4)	173.1	(0.2)
25+%	397.5	60.8	97.7	(10.6)	108.3	0.0	122.1	13.8	96.5	(11.8)	118.5	10.2
Total	653.3	100.0	266.9	(14.7)	281.6	0.0	300.7	19.1	249.4	(32.20)	291.6	10.0

a Allowed--graded concept on approved plan plus standard application of 1980 slope criteria on H&S property. b Increase/reduction in disturbed area from baseline project. i.e., the project approved in 1980 (Alternative 2).

Source: Michael Brandman Associates, Inc. 1989. Based on information from Pointe Builders.

5.6 ALTERNATIVE SITE

An alternative site for the proposed development was identified based on its suitability for the uses proposed. Due to the limited number of sites within the urban areas of the Sweetwater Valley that have sufficient acreage to accommodate the proposed resort community, a site on the urban periphery has been chosen for evaluation. The site is the Loma del Sol property located on the edge of the Valle de Oro community, east of Willow Glen Drive and adjacent to Jamul Drive. Immediately west of the site is the Cottonwood Golf Course and to the southwest are single-family residences and Rancho San Diego. East of the site is scattered residential development and north of the site is natural open space. Recreational opportunities would be similar at each site. There is a regional trail adjacent to the Loma del Sol site, just as there is adjacent to the Hansen's Ranch site, so the project's equestrian theme could be maintained.

The Loma del Sol site contains a valley floor and mountainous terrain, and would likely require grading similar to that proposed on Hansen's Ranch. Landscaping and architectural design could reduce the visual impact of the grading to some extent.

There is agricultural land on the site which is under a Williamson Act contract. Development of the proposed project at this site would necessitate abandonment of the agricultural use and, therefore, an unavoidable adverse impact which would not occur with the development of Hansen's Ranch.

The Loma del Sol site is less accessible than the proposed project site. Jamul Drive, the primary access road, is a rural collector road, where Jamacha Boulevard and Jamacha Road will provide regional access to the Loma del Sol area, the traffic generated by the resort community would represent a larger proportion of total traffic on Jamul Drive, and a substantial impact on the circulation system in the area.

Development of the proposed project will require urban levels of water, sewer, police, and fire service. The impact on service providers in the more remote Loma del Sol site could be more severe than will be the case on Hansen's Ranch site. In

addition, there is the possibility of growth-inducing impacts which will not occur on the proposed site. Impacts to schools would be similar at both sites. School districts in the Sweetwater valley have experienced increasing enrollment and capacity problems.

Development of the Pointe San Diego Resort Community on the Loma del Sol site is not considered desirable because of the greater potential impacts on existing public services and infrastructure (including the circulation system). In addition, there would be the added impact of loss of agricultural land on the Loma del Sol site.

RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The principal effect of this project is to commit basically undeveloped land to urban uses. Development of this site for residential, resort, commercial and office uses in terms of an average 50- to 75-year lifespan of structures, represents a short-term use of the environment. However, implementation of the project would represent a relatively long-term commitment to urbanization and population support systems. It is logical to assume that the proposed uses would, in turn, be replaced by another productive activity as the development and redevelopment of land progresses through time and responses to human needs.

The site is currently undeveloped. The proposed project would increase the productivity of the study area in terms of land efficiency and greater economic return generated from these uses. Though the project would serve to increase the productivity and human use of the land, implementation of the project would contribute to the permanent loss of vacant land.

Major advantages to near-term development include greater economic productivity from the land and an increased revenue base for the County of San Diego. The advantages in reserving the study area are difficult to quantify since the long-term alternatives for urban uses are largely unpredictable. In terms of impact on the physical environment, future development would likely involve impacts similar to those associated with the current project (i.e., loss of open space, increased noise levels, alteration of drainage and flooding and air quality impacts).

Development of the Pointe San Diego Specific Plan would result in the permanent removal of the aquatic and riparian habitat associated with Hansen's Ponds and the disturbance and partial covering of archaeological site SDi-185 (SDM-W-172b). Although the lost habitat would be replaced, some animals and plants would not be moved [i.e., animals and plants in the archaeological site (185-SDi) area]. There is no way to replace the archaeological resources. To the extent that this precludes future research of the site, the disturbance and partial covering of site SDi-185 represents a loss of long-term opportunities.

However, the project applicant is proposing to eliminate some non-native vegetation that could be affecting the archaeological resources due to presence of roots. The applicant would also provide protection and stabilization of the remaining historic resources.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES SHOULD THE PROJECT BE IMPLEMENTED

The environmental changes produced by the implementation of the proposed project would occur mainly as a result of alterations to the physical environment in the form of residential, resort, commercial and office uses and increased land use density. If the project is approved and subsequently implemented, structures will be built, utilities installed and a network of streets will be constructed, all of which will compose an urban infrastructure.

The transformation of the site to a resort community is a relatively short-term irreversible commitment of the land. After the 50- to 75-year structural lifespan of the buildings is reached, it would be feasible to redevelop the site to an alternative land use; however, it is probable that once developed for urban uses, the site would not be returned to its current undeveloped nature. The potential for such a reversion of the study area becomes highly infeasible due to the large capital investment that will have already been committed.

Loss of vacant land constitutes an irreversible and irretrievable commitment of the project area, which will incrementally add to the more significant areawide loss of such lands in Spring Valley and San Diego County. This is a particular concern because the project involves destruction of a portion of Resource Conservation Area 15, including Hansen's Ponds. This area was designated RCA 15 because of its biological (aquatic and riparian habitat) value, the presence of an archaeological site (SDM-W-172b) and the presence of the remains of Alfred Isham's water bottling plant (a National Register eligible site). The ponds would be destroyed by development, irreversibly removing all chance of in situ research or enjoyment of them. The principal effect of the proposed project is to commit vacant lands to urban uses. Development of the project would transform a portion of the vacant land into residential, resort, commercial and office uses. The remaining areas would be maintained as open space and resource conservation areas.

SECTION 8 GROWTH-INDUCING IMPACTS

Growth-inducing impacts fall into two general categories; direct and indirect. Direct growth-inducing impacts are generally associated with the provisions of urban services and extension of infrastructure to an undeveloped area. The provision of these services and facilities to a site can reduce development constraints for nearby areas, and can serve to induce other landowners in the vicinity to convert their property to urban uses. Indirect, or secondary growth-inducing impacts consist of growth induced in the Region by the additional demands for housing, and goods and services associated with a new project.

The proposed project would not result in any direct growth inducing impacts because the proposed project is surrounded by existing development on the northeast, north, northwest, west and southwest. In addition, Rancho San Diego is planned adjacent and east of the project site. The Sweetwater Reservoir is also southwest of the site. Since existing development primarily surrounds the project site, existing urban services are provided. (The project will use the existing Jamacha and La Presa sewer lines and existing Jamacha water lines.) Therefore, the proposed project would not directly induce growth by providing urban services to uses beyond the project site.

Indirect growth could be induced by additional development associated with the proposed commercial, resort and office uses. These uses would provide additional employment opportunities and may result in additional housing demands. However, since the Spring Valley area is primarily a bedroom community, proposed uses that generate employment opportunities would contribute to future balanced growth. In addition, the proposed project is providing right-of-way for the South Bay Expressway (SR 54), thereby indirectly reducing traffic constraints along a portion of the SR 54 corridor.

ORGANIZATIONS AND PERSONS CONTACTED

9.1 PUBLIC AGENCIES

County of San Diego	County	of	San	Diego
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Department of Planning and Land Use Dennis Verrilli Ron May Curt Gonzales Tom Oberbauer
Department of Parks and Recreation
San Miguel Consolidated Fire DistrictBarry Alsobrook Don Butz
San Diego County Sheriff's Department
Grossmont Union High School District
<u>La Mesa-Spring Valley Elementary School District</u>
San Diego County Air Pollution Control District Lynn Eldred
San Diego Association of Governments Kim Pugh
Point Loma Treatment Facility Jim Lesire
PRIVATE AGENCIES
San Diego Gas and Electric CompanyJohn Sigman Mike Schlei

9.2

PREPARERS OF THE REPORT

10.1 CONSULTANTS

 $\frac{\text{Michael Brandman Associates, Inc.}}{(714)\ 250\text{-}5555}$

Principal-in-Charge Regional Director Senior Project Manager Project Planner Noise and Air Quality Analysts	Mike EvansLaura HudsonMichael E. Houlihan
Director of Resources Management	Dr. H. Lee Jones Karen Swirsky
Environmental Analysts	Howie Weir Lori Apperson Dan Lowery
Graphics	Jason Brandman
Word Processing	Shaun Martin Linda Burns
Urban Systems Associates, Inc. (619) 560-4911	Andy Schlaefli
Acoustical Impacts International	Otto Bixler
RECON (619) 275-3732	Dr. Susan Hector
Keller Environmental Associates, Inc. (619) 544-1414	Christine Keller
10.2 PROJECT APPLICANT	
Pointe Builders (619) 691-1800	Tom Henry Ric Williams

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