February 20, 2013

Mr. Dennis Campbell
Planning and Development Services
County of San Diego
5510 Overland Avenue, Suite 310
San Diego, CA 92123

Dear Dennis:

On behalf of Rancho Cielo Estates, Ltd. (Applicant), I am pleased to provide you with the resubmittal of Cielo's revised Village Estates project in response to your letter of January 4, 2013. This resubmittal describes the Applicant's Preferred Project (Project 1, Attachment B) and other options that have been evaluated, along with documentation and analysis providing justification for the County's approval of the Applicant's Preferred Project.

RANCHO CIELO ESTATES, LTD.

The currently approved Rancho Cielo Specific Plan Amendment No. 6 identifies 42 Village Estate units on Parcel H within Rancho Cielo. The Applicant has invested in and completed extensive community infrastructure for the build-out of the 42 units, including roads, water and sewer improvements, and community recreation facilities – all as part of the 528 units approved for the Applicant's ownership within the entire Rancho Cielo Specific Plan area. The Applicant's Preferred Project seeks to reduce the overall density of the Specific Plan by spreading the 42 units on Parcel H (31 units) and the Village Center Parcel (11 units), and by forgoing any of the other higher density development options allowed in the approved Specific Plan on the Village Center property (Attachment O).

The environmental impact issues related to the Rancho Cielo Specific Plan were extensively analyzed in the 1980 Final EIR and 1984 Supplemental EIR (SEIR). Courts have acknowledged that the process of preparing an EIR is invariably expensive and time consuming so in order to give a degree of finality to the results, CEQA includes a strong presumption against requiring any further environmental review once an EIR has been prepared for a project. (Pub. Res. Code §21166; *San Diego Navy Broadway Complex Coalition v City of San Diego* (2010) 185 Cal.App,4th 924; *Moss v County of Humboldt* (2008) 162 Cal.App.4th 1041, 1049. This is particularly true here where the reason the Applicant is before the County is to implement the County's mitigation plan established in the EIR and SEIR.

The Board has already found that Parcel H and Village Center are the only viable locations to build the Village Estates within the Applicant's ownership because

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clustering the development along these ridgelines represents the Board's mitigation of the overall aesthetic impacts of its long-approved 0.27 du/acre density Rancho Cielo Specific Plan. In certifying the 1984 Supplemental EIR, the Board agreed with County staff and Environmental Review Board analysis that implementation of the project would modify the aesthetic environment of Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe, but that the aesthetic issue was a trade-off between a breakup of skyline/viewshed areas and retaining the native slopes in 1,635 acres. (SEIR at p. 39.) Additionally, the Board found that "[a]esthetic impacts created by the proposed project revisions are considered mitigated by the project design. The dedication of 1,710 acres of open space, preservation of steep slopes, major drainages, woodland areas, revegetation and landscaping of disturbed areas and clustering of units are aspects of the project which serve to mitigate aesthetic impacts." (SEIR at p. 4.) Spreading the development density out among the specific plan acres could create a worse aesthetic impact than clustering the development on this particular ridgeline. Therefore, the County induced the Applicant and other owners within the Specific Plan area to preserve the 1,710 acres of open space in exchange for permission to develop hundreds of residential units, including 42 units within Parcel H. (SEIR at p. 7.) Furthermore, the Board found that the redesign of this area in 1984 moved the Village Center to the southwest where it would be less visible from the Mt. Israel community creating "a positive effect on aesthetic impacts." (SEIR at p. 40.) Therefore, it would be directly contrary to the Board's express "cluster development" mitigation plan to move the 42 units to a new location and increase the visual impacts on Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe, or even other areas within the Cielo Specific Plan area.

The Applicant's proposal to construct 42 units on the ridgeline is not a new project with new aesthetic environmental impacts. The reason the Applicant is seeking a site development permit is also tied to the Board's visual impact mitigation plan. The Board found that "a major problem in the analysis of aesthetic impacts is a lack of information on individual lot development; the impact must therefore be assumed for all non-open space areas on the lots." (SEIR at p. A-6.) The Board's mitigation plan requires the Applicant to obtain a site development permit to address localized impacts resulting from a design of each phase of the project. (SEIR at p. 42.) The Board was clear that this requirement was not to second-guess the decision to locate 42 units on the ridgeline, but to address "cosmetic type improvement which rehabilitate or reduce visibility of impacted areas" and that "[t]he concern here is not for the specific placement of dwelling units, but for the overall effectiveness of the clustering of units amidst open space project design." (2001 Addendum to Final EIR at p. 200.) Therefore, the issue is not density or location. The issue is finding a design for the approved density that is compatible with the surrounding neighborhood so the Board can properly issue a site development permit. Although density and location are not the issue, in response to comments by members of the public, the Applicant thoroughly vetted alternate sites that were mentioned, and concluded that they are infeasible (Attachment J).

The Applicant has previously completed its obligations under the prior entitlements referenced above by processing tentative maps, having final maps recorded that grant the required open space areas to the public to preserve the steep hillsides, valleys and major drainages (Attachments D, E, H and I), and processing and obtaining environmental agency approval of the Rancho Cielo Habitat Loss Permit

(Attachment C) with the express understanding that preservation of steep hillsides, major drainages and woodland areas would accommodate the ridgeline development on these two sites and throughout the Cielo development.

The Applicant has gone to extraordinary effort and expense to produce a product design much earlier in the development process than normal. Based on comments by the Board of Supervisors and members of the public, the Applicant has enlisted the creative support of an acclaimed architect, Robert Hidey, to design the Village Estate product in response to input received, with emphasis on complementing the existing homes in Cielo and enhancing community compatibility. These design documents are submitted as part of the revised Site Plan package. The design now available for County consideration demonstrates a variety of floor plans (one and two story units with a variety of floor plan options), four distinct elevation treatments all independently found to be consistent with the Rancho Cielo Architectural Design Guidelines as confirmed by architects familiar with the Cielo community (Attachment M).

The Applicant has retained Helix Environmental, a County-approved environmental consultant, to prepare a Visual Impact Analysis for the revised project. This report, with its conclusions of no new significant impacts considering the County's CEQA significance thresholds, is included with this submittal. In addition, the Visual Impact Analysis includes visual simulations from within the Cielo project which are not otherwise required for formal review under CEQA guidelines, but that demonstrate consistency with the community character within Cielo.

Finally, the Applicant identified and evaluated four different Project scenarios for moving forward, described in the Updated Project Description (Attachment B), and concluded that **Project 1** is the Applicant's Preferred Project.

Project 1

42 Village Estates (31 on Parcel H, 11 on Village Center)

- Superior design found consistent with the Cielo Design Guidelines and complementing the community character of the homes in Cielo
- Four distinct floor plans including two single story units
- Four distinct elevations treatments of each floor plan – total of 16 distinct appearances
- Enhanced articulation of skyline and visual interest on the two parcels with visual impacts found to be less than significant using the County's CEQA thresholds, consistent with prior approvals of the Cielo Specific Plan

In summary, the applicant is proposing the Preferred Project consisting of 31 homes on Parcel H and 11 homes on the Village Center parcel:

- The Preferred Project is simply the implementation of the prior approvals of higher density development on the ridgetops of these two parcels within the Cielo Specific Plan as mitigation for visual impacts identified in the 1980 Final

EIR and 1984 Supplemental EIR, approved and certified by the County as long ago as 1980 and 1984. The Board of Supervisors approved four subsequent amendments to the Specific Plan since 1995.

- The Applicant has previously fulfilled its entire obligation for the mitigation of these visual impacts by granting open space easements and dedicating open space lots to preserve steep slopes, major drainages and woodland areas as a result of its processing and recording final maps on all of the properties owned by the applicant.
- The Applicant has completed both public and private infrastructure to support a total of 528 dwelling units, including these 42 units in reliance on these prior approvals and completion of all identified mitigation requirements.
- The proposed Preferred Project consists only of 42 residential dwelling units on the two sites resulting in an overall reduction of density within the Specific Plan area as the higher density options on the Village Center parcel are being deleted from the Specific Plan.
- There are no significant impacts caused by the proposed Preferred Project.
- The proposed Preferred Project has been found by County Staff to be in compliance with all of its land use regulations and no deviations are necessary.

Dennis, we appreciate the work that you and County Staff have and will continue to dedicate to review this project. We look forward to moving forward efficiently and effectively through the remaining process. Thank you for your efforts and consideration.

Sincerely,

Mark Rowson
President

Attachments:

A – Project Background
B – Updated Project Description
C – Habitat Loss Permit
D – County Board of Supervisors Resolution for Tentative Map 4229
E – Tentative Map 4229 Second Amendment to Improvement Agreement
F – Approved Development Footprint – Parcel H

G – Approved Development Footprint – Village Center Parcel

H – Final Map 12764

I – Final Map 12905

J – Alternative Site Analysis

K – 1981 EIR

L – 1984 SEIR

M- Rancho Cielo Design Guideline Consistency Determination

N – Visual Impact Analysis prepared by Helix Environmental

O – Approved Uses on Village Center from Approved Specific Plan Amendment #6.

Attachment A

Project Background

A. The Specific Plan for Rancho Cielo was initially approved in 1981.

B. In 1984, the County granted development rights to hundreds of dwelling units, including 42 units on the ridgetops within Parcel H (Lot 203 of Final Map 12764) and Village Center (Lot 109 of Final Map 12905), in order to secure over 1,600 acres of open space elsewhere within the specific plan area in order to mitigate visual impacts on the neighboring communities of Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe.

C. There have been six amendments to the Specific Plan. The most recent Sixth Amendment was approved by the County in December 2003. The Specific Plan approves 528 residential units to be built within the Applicant's ownership, including 42 Village Estate units on Parcel H and several choices of land uses to be built consistent with the County's C-36 commercial zone requirements.

D. In 1996, a Habitat Loss Permit (HLP) was approved by the County Board of Supervisors, the US Fish and Wildlife Service and the California Department of Fish and Game. The HLP identifies open space areas to mitigate the project's impacts to sensitive resources. Approximately 60 percent of the property within Cielo is designated in the Specific Plan and HLP to be preserved as Open Space.

E. Several Tentative Maps have been approved by the County implementing the land use approvals of the Specific Plan (Tentative Maps 4227, 4229, 4348 and 5309). TM 4229 covers the Parcel H and Village Center parcels.

F. Final Map Numbers 11978, 12154, 14014, 14104, 12904, 12905, 12764, 14920 have been recorded and associated bonded improvement permits have all been approved and permit issued by the County over the 20-plus year history of the project. Construction of tens of millions of dollars of infrastructure has been completed and accepted by the County of San Diego and other public utility agencies in reliance and consistent with the prior approvals of the project. Final Maps 12905 and 12764 create the Parcel H and Village Center lots, respectively.

G. Various grading permits have been issued to the Applicant for over 350 final mapped lots consistent with the approvals of the Specific Plan, HLP and Tentative Maps. The grading of these lots has been completed by the applicant in reliance and consistent with the prior approvals of the project. The vast majority of the graded lots have been accepted by the County.

H. More than 200 building permits for residential homes and community amenities have been issued by the County to implement the Cielo Specific Plan.

I. The Final Maps identify and grant to the public various open space lots and easements consistent with the Specific Plan, Tentative Maps and HLP, and also identify “developable areas” within each recorded lot in the project. Similar to the vast majority of the Custom Estate lots with the Cielo Specific Plan, the developable area within Lots 203 of Map 12905 and Lot 109 of Map 12764 is on the ridgetops of these lots. Open Space easements on these lots confine development to the designated developable area and prevent development anywhere else on the lots, protecting hillsides and sensitive resource areas.

Attachment B

Updated Project Description

Based on comments by the Board of Supervisors and members of the public, the Applicant reviewed potential alternative sites within Rancho Cielo, and determined that Parcels H and Village Center are the only locations within the Applicant's ownership that are appropriate and viable for the Village Estate units. Documentation is attached which demonstrates that Parcels H and Village Center are the only viable locations for the 42 Village Estates units (Attachment J – Alternatives), and can be approved consistent with all current County development regulations. Moving the 42 units to another location would directly contradict the Board's "cluster development" mitigation plan designed to preserve open space elsewhere in the specific plan and reduce visual impacts on neighboring communities.

Also in response to Board and public comments, the Applicant has committed to further define and enhance the architectural design of the Village Estate product, with emphasis on complementing design of the existing homes within the Cielo community and enhancing community compatibility, as well as diversifying the plotting of the product within these properties. The February 20, 2013, submittal has incorporated important improvements to the Project:

- Superior design found consistent with the Cielo Design Guidelines and complementing the community character of the homes in Cielo.
- Four distinct floor plans including two single story units
- Four distinct elevations treatments of each floor plan – total of 16 distinct appearances
- Enhanced articulation of skyline and visual interest on the two parcels with visual impacts found to be less than significant using the County's CEQA thresholds, consistent with prior approvals of the Cielo Specific Plan.

The Applicant has identified and vetted four different Project scenarios. **Project 1** is the Applicant's preferred option for development on Parcels H and Village Center.

Project 1

42 Village Estates (31 on Parcel H, 11 on Village Center)

- Based on Board of Supervisors and community comments, the Applicant has committed to further definition of architectural plans with an emphasis on complementing design of existing homes within the Cielo community and increasing community compatibility. (Updated design submitted February 20, 2013)
- Enhanced architectural design confirmed to be consistent with the Cielo Design Guidelines
- Variety of elevations – total of 16 distinct appearances among the 42 units
- Approximately one third of the units will be one story homes, creating variation in the skyline, and breaking up the massing of the homes.

- Two story units will have a minimum 15 foot setback from the single story element at the rear of the units also creating a variation in the skyline, and breaking up the massing of the units.
- Increased articulation of skyline and visual interest

The Applicant has completed construction of significant public and community infrastructure improvements to accommodate the 528 dwelling units allocated to its ownership in reliance upon prior County Board of Supervisors approval of the Rancho Cielo Specific Plan, Habitat Loss Permit (HLP), Tentative Maps, Final Maps, and County staff approvals of associated improvement and grading permits. These improvements include:

- Approximately 15 miles of roads within Rancho Cielo
- Water system elements including two major storage tanks, pump stations and pipelines
- Sewer system components including major pump stations, more than four miles of offsite force main, and gravity pipelines
- Storm drain pipes and water quality control devices
- Rancho Cielo Fire Station including contribution to long term operation and maintenance costs
- More than 15 acres of Community Recreation facilities – more than six acres in excess of what is required in the project approvals

As approved in the Rancho Cielo Specific Plan dating back to 1981, and most recently confirmed by the County Board of Supervisors in their approval of Amendment No. 6 in December 2003, the 42 units have been planned on Parcel H and higher density development was approved for Village Center as mitigation for aesthetic impacts to the surrounding communities of Del Dios, Mt. Israel, Elfin Forrest and Rancho Santa Fe.

Consistent with the prior entitlement approvals and the approval of the Rancho Cielo Habitat Loss Permit in December of 1996, approved by the County's Board of Supervisors, as well as the California Department of Fish and Game and the US Fish and Wildlife Service, in good faith, the Applicant dedicated more than 60 percent of its property as open space as a means of fulfilling its obligations under these previous environmental and entitlement approvals and in reliance of having the opportunity to develop 42 units on Parcel H and higher density development on the Village Center parcel.

As long ago as 1984, in adopting the update to the Cielo Specific Plan, the Board found that "[a]esthetic impacts created by the proposed project revisions are considered mitigated by the project design. The dedication of 1,710 acres of open space preservation of steep slopes, major drainages, woodland areas , revegetation and landscaping of disturbed areas and clustering of units are aspects of the project which serve to mitigate aesthetic impacts." (SEIR at p. 4.) Spreading the development density out among the specific plan acres could create a worse aesthetic impact than clustering the development on this particular ridgeline. Therefore, the County induced the owners within the Specific Plan Area to preserve

the 1,710 acres of open space in exchange for permission to develop hundreds of residential units, including 42 units within the Village Center and Parcel H. (SEIR at p. 7.)

The Applicant's proposal to construct 42 units is not a new project with new aesthetic environmental impacts. Rather, the Applicant is merely implementing the Board's required "cluster development" mitigation measure imposed on the Rancho Cielo Specific Plan in 1984.

Project 1 (42 Village Estate units on Parcels H and Village Center) is the most appropriate Project for approval by the Board of Supervisors.

Project 2

39 Village estates (29 on Parcel H, 10 on Village Center)

- 10% reduction in units
- Enhanced architectural design confirmed to be consistent with the Cielo Design Guidelines
- Variety of elevations – total of 16 distinct appearances among the 42 units
- Approximately one third of the units will be one story homes, creating variation in the skyline, and breaking up the massing of the homes.
- Two story units will have a minimum 15 foot setback from the single story element at the rear of the units also creating a variation in the skyline, and breaking up the massing of the units.
- Increased articulation of skyline and visual interest
- Reduced retaining walls

Based on the Applicant's reliance upon all prior approvals for the project as described in Project 1 above, because there have been no significant adverse environmental impacts identified, and because the Preferred Project (Project 1) has been found to be in compliance with all County land use regulations, a reduction in the number of units would not be justified.

Project 3

28 Village Estate units (21 on Parcel H, 7 on Village Center)

- 33 percent reduction in units
- The Applicant evaluated a 33 percent reduction and determined that the loss of 14 units is not justified

As identified in Project 1 above, Rancho Cielo Estates dedicated over 60 percent of its property as open space to fulfill its obligations under the County's previous environmental and Specific Plan approvals in good faith so that RCE could have the opportunity to develop 42 units on Parcel H when the time was appropriate. This agreement was set when the HLP was approved by the Board of Supervisors in December of 1996, and ratified by the Board of Supervisors in three subsequent SPA approvals. As a result of that agreement with the Board, RCE invested in and completed construction of public and

community infrastructure to accommodate 528 total dwelling units within its ownership, including 42 units on Parcel H.

Additionally, in order to meet the strict Cielo Design Guidelines and the direction of the Board of Supervisors in the September 26, 2012 hearing, the Applicant has developed a variety of floor plans and architecture treatments, consistent with the Cielo Design Guidelines. In order to justify this additional expense, a critical mass of units must be achieved to justify the added costs of construction.

In summary, approval of a substantially reduced project would represent an unjustified reduction in the Applicant's development rights and taking of property without honoring the previously approved development rights, especially considering the Applicant has already satisfied all of the required open space dedications and other mitigation and infrastructure requirements of the approvals.

Project 4

42 Village Estate units (31 on Parcel H, 11 on Village Center)

- As submitted for Board of Supervisors review on May 9, 2012 and September 26, 2012
- The Applicant is not pursuing Project 4 as previously submitted

Conclusions

1. Under the County certified EIR's mitigation plan, the owners within the Specific Plan area are required to dedicate more than 1,700 acres to reduce visual impacts in exchange for the ability for the Applicant to construct and sell 528 residential units within its ownership in the Cielo Specific Plan, including 42 Village Estate units on Parcel H and higher density development on Village Center. The Applicant has filed final maps creating legal Lot 109 of Final Map 12764 and Lot 203 of Final Map 12905 in order to construct these 42 units.
2. Attachments F and G reflect the area within Lots 109 and 203 that has been approved for grading and development. The final maps for these lots reflect the areas of the lots already dedicated as open space easements to protect steep slopes, major drainages and other sensitive resources in compliance with the prior entitlement approvals and the Cielo Habitat Loss Permit.
3. Project 1 is consistent with all land use regulations of the County of San Diego.
4. Project 1 (42 Village Estate units – 31 on Parcels H, 11 on Village Center) is the most appropriate Project for approval by the Board of Supervisors, reducing the overall density of the Cielo project by omitting the potential for higher density retail and institutional uses and proposing only 11 residential units on Lot 109 (Village Center), and reducing the number of units to be built on Lot 203 (Parcel H) from the 42 approved units to only 31 units.

County of San Diego

ROBERT R. COPPER
DIRECTOR (Acting)
(619) 694-2962

DEPARTMENT OF PLANNING AND LAND USE
5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (619) 694-2960

DECISION OF THE DIRECTOR
Habitat Loss Permit

Revised August 21, 1995
July 7, 1995

Mr. Mark Middlebrook
Senior Project Manager
Rancho Cielo Development Company
6119 La Granada
Post Office Box 2303
Rancho Santa Fe, California 92067

This Decision of the Director on Habitat Loss Permit ("HLP") 94-003 has been prepared based on all documents contained in the record for HLP 94-003, and has been made available to the California Department of Fish and Game ("CDF&G"), the United States Fish and Wildlife Service ("USF&W") and the public for a 45 day comment period pursuant to NCCP Process Guidelines Section 4.2. The public review period ended on June 16, 1995.

APPLICATION NUMBER: HLP 94-003, Log No. 94-8-12

ASSOCIATED PERMIT(S):

NAME OF APPLICANT: Rancho Cielo Development Company

LOCATION AND DESCRIPTION OF PERMITTED LOSS: The site is located in north-central San Diego County, north of the Del Dios Highway and east of Rancho Santa Fe in the San Dieguito Community Planning Area.

64.97 acres of coastal sage scrub (CSS) habitat will be graded.
Additionally, if the condition described in Condition of Approval #2 has not occurred with respect to any of the temporary easement lots at the end of the ten year easement term, this HLP shall permit the grading of any lot for which the condition has not been satisfied.
Of the lots to be graded and cleared, 27.12 acres will be revegetated. Up to 16.24 acres of CSS will be recovered associated with special

mitigation measures. Maps indicating the areas to be graded, revegetated, and put into additional permanent and temporary open space are attached hereto as Exhibits "A" and "B".

CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDING:

An Addendum to the Rancho Cielo Environmental Impact Report, dated May 2, 1995 has been completed in compliance with the California Environmental Quality Act ("CEQA"), and the State CEQA Guidelines. The Director has reviewed and considered the information contained therein, and finds that mitigation measures that have been imposed in connection with the issuance of this HLP, as summarized here, (and as set forth in full in the Mitigation Plan in support of applciation for coastal sage scrub habitat loss permit, Chapter 3) mitigate the environmental effects to a level of insignificance. The action relative to the Addendum reflects the independent judgment of the Director.

DECISION:

Your application for a HABITAT LOSS PERMIT is approved by the Director of Planning and Land Use. The decision of the Director will be submitted to the CDF&G and the USF&W for an additional 30 days. USF&W and CDF&G shall notify the County within 30 days of receipt of the permit if any modifications will be required. If no notification is provided within 30 days of submittal of the decision, the proposed habitat loss shall be deemed approved and activities may proceed pursuant to the terms of this permit. This permit allows the loss of the above described coastal sage scrub habitat and is valid for a period of one (1) calendar year after final approval. Use and reliance upon this permit must be established prior to August 15, 1996 for it to remain valid.

REASONS FOR APPROVAL:

Implementation of the proposed project will impact a total of 64.97 acres of coastal sage scrub (CSS) habitat prior to mitigation plus some additional impacts from fire clearing up to 61.5 acres (Figure 11 in the Mitigation Plan). These impacts are associated with onsite grading as well as grading associated with the construction of the offsite roads and infrastructure. The clearing and grading may result in the loss of four pairs of California gnatcatchers. The site is located in a Draft Biological Core and Linkage Area as mapped by the consultants for the Multiple Habitat Conservation Program ("MHCP"). In accordance with the Southern California Coastal Sage Scrub Natural Community Conservation Planning ("NCCP") Conservation Guidelines, the site has been ranked as having a high potential value for long-term conservation, since it meets all six of the categories/questions of the NCCP Conservation Guidelines Evaluation Flow Chart (see Appendix B of the Addendum attached here as Exhibit C).

Based on the analysis in Appendix B, the project site is determined to possess High Potential value for long-term conservation. Since development decisions cannot be deferred, special mitigation must take place if development is to take place in an area of High Value as provided in the NCCP Conservation Guidelines. Special mitigation measures have been required, including dedication of open space and revegetation of road cuts, utility lines and areas that had been cleared previously. When this project was approved in 1984, 847.32 acres of open space was dedicated to the County. Up to an additional 36.17 acres will be protected in open space as a condition of the approval of this permit, bringing the total amount of open space to 883.49 acres.

Additionally, the loss will not foreclose future preserve planning options, as required by the NCCP Conservation Guidelines. The permanent open space easement and the ten year easement will create a 1,000 foot wide habitable wildlife corridor as special mitigation for this project, allowing preserve planning to continue in this area using the newly created corridor.

The mitigation measures that are required to be implemented prior to the approval of this HLP, as set forth below, reduce impacts to below a level of significance through on-site habitat preservation and the process for preserving a 1000 foot wide corridor. The result will be preservation of 466.9 acres of on-site CSS. Preserved areas on-site will be contiguous to larger areas of open space of moderate to high quality habitat associated with a proposed focused planning area open space corridor area to the northwest on the MHCP and southeast to the Multiple Species Conservation Plan ("MSCP"). The easements secured as a result of this HLP are meant to be consistent with the MSCP and MHCP plans. Implementation of these measures is also consistent with the NCCP.

CONDITIONS OF APPROVAL:

Prior to use in reliance on this Permit, Conditions 1, 2 and 3 set forth below shall be met:

1. Within 30 days of HLP approval, and the concurrence by the USF&W, dedicate a permanent open space easement over, upon, across and under that area shown as "Open Space Easement" (see Exhibit D) as more particularly described in "Exhibit "A" to Permanent Easement", attached hereto and incorporated herein by reference. Except as expressly permitted within the terms of said easement, the easement prohibits all of the following on any portion of the land subject to said easement: grading, excavation, placement of soil, sand, rock, gravel or other material, clearing of vegetation, construction, erection or placement of any building or structure, vehicular activities, trash dumping or use for any purpose other than as open space. This open space will be granted to the County and will remain as open space in perpetuity. By separate document, dedicate the area described in "Exhibit "A" to Permanent Easement" to the California Department of Fish and Game and submit evidence to the Director of the San Diego County Department of Planning and Land Use that said dedication has taken place.

2. Within 30 days of HLP approval, and the concurrence by the USF&W, dedicate for ten years open space easement over, upon, across and under that area shown as "Open Space Easement" (see Exhibit E), as more particularly described in "Exhibit "A" to Ten Year Easement", (including land described as Parcels "D" through "I" therein, and Lot 102 of Map 12763), attached hereto and incorporated herein by reference. Except as expressly permitted within the terms of said easement, the easement prohibits all of the following on any portion of the land subject to said easement: grading, excavation, placement of soil, sand, rock, gravel or other material, clearing of vegetation for brush management associated with the Rancho Cielo fire management plan for the development of these lots or for other reasons, construction, erection or placement of any building or structure, vehicular activities, trash dumping or use for any purpose other than as open space. This open space will be granted to the County and will remain as open space for a period of ten years. If the applicant, or its successor or assign files a subdivision map and receives final subdivision map approval of more than 83 lots on the adjacent parcel (known as parcel M consisting of APN# 264-130-24, 272-170-04, 272-170-14, and 272-170-13) or if the parcels within the easement are purchased, this open space easement shall become permanent as provided in the Ten Year Open Space Easement. For each approved lot on the Area M Final map in excess of 83, that portion of this open space easement over one of the Parcels identified as Parcels "D", "E", "F", "G", "H" and "I" on Exhibit B to temporary easement hereto, shall become permanent, in that order. If 96 lots are approved on the Area M tentative map, the open space easement over lot 102 on Map 12763 shall also become permanent.

3. Within 45 days of this proposed approval, submit to the Director of Planning and Land Use a Revegetation Plan. The Director shall approve the Revegetation Plan. The Revegetation Plan, prepared by a County Certified Biologist and a State of California Licensed Landscape Architect shall include, but is not limited to, the following to ensure the establishment of the vegetation: objectives, map showing the revegetation areas, site preparation information, type of planting material, planting program, 80 percent success criteria and detailed cost estimate. The cost estimate shall include planting, plant materials, irrigation, maintenance, fencing around area to be revegetated (if required), monitoring and report preparation.

Enter into a Secured Agreement with the County of San Diego Department of Planning and Land Use consisting of a letter of credit, bond or cash for 100% of the estimated costs associated with the implementation of the Revegetation Plan and a 10 percent cash deposit not to exceed $30,000.00. A cost estimate shall be submitted and approved by the Director of Planning and Land Use which includes the cost of the plant stock and its installation, irrigation system and installation, cost of monitoring and maintenance of the revegetated area for the required 5 year period, and report preparation and staff time to review. This agreement is intended to guarantee commitment to project completion and success. The monitoring time and length of time the Secured agreement and cash deposit will be in effect, starts at the time the installation is accepted by a County staff representative. The Secured Agreement and cash deposit shall be released upon completion of the Revegetation Plan implementation provided the success criteria has been met.

Eighty percent success rate and 100% vegetative cover, excluding herbaceous species, shall be considered satisfactory completion of the Revegetation Plan.

4. By accepting this permit and commencing clearing and grading operations hereunder, the Applicant and its successors and assigns agrees to:

a. Defend, indemnify and hold harmless the County of San Diego, its agents, officers and employees, from any claim, action or proceeding against the County, its agents, officers or employees, brought by a third party to attack, set aside, void or annul the County's approval of Habitat Loss Permit No. 94-003 (including any amendment thereto) or any of the proceedings, acts or determinations taken, done or made prior to or in conjunction with the Permit's issuance. If the Applicant refuses to defend the County, following a written demand by the County for such defense, the County may provide its own legal defense, and the Applicant shall reimburse the County for all attorneys' fees and costs the County incurs in providing its own defense.

b. Reimburse the County, its agents, officers and employees for any court costs and attorneys' fees in favor of a third party, awarded against the County pursuant to a settlement or any order or final judgement from a court of competent jurisdiction which the County or its agents, officers and employees may be required to pay as a result of the approval of the Permit.

c. The County shall promptly notify the Applicant of any threatened litigation, claim or action of which it has knowledge and shall cooperate fully with the Applicant in the defense of any legal action or proposed alternative resolution.

d. Even if the Applicant defends the County as required in paragraph a above, the County may, at its sole discretion and at its own expense, participate in the defense of any such action. The County's participation shall not relieve the Applicant of any obligations imposed by paragraphs a and b above provided the County cooperates with Applicant in its defense of any action.

5. All construction in areas of coastal sage scrub (including construction and maintenance of trails, roads, infrastructure or other public facilities) and fire modification shall be limited to times outside of the breeding and nesting season of the coastal California gnatcatcher (February 15 to August 1, or until all nesting is complete), or shall not occur within 500 feet of the location of a gnatcatcher nest, as documented by preconstruction surveys by a qualified biologist completed in the breeding season in the year in which construction activities are being conducted.

If clearing occurs during the coastal California gnatcatcher breeding season in areas adjacent to coastal sage scrub, boundaries of the coastal sage scrub and areas within 500 feet of a location of gnatcatcher nest should be clearly marked by a qualified biologist prior to clearing. In this season, clearing shall not be permitted within marked areas of coastal sage scrub or within 500 feet of a nest.

6. The remaining mitigation measures contained in Chapter 3 of the Mitigation Plan In Support of Application for Coastal Sage Scrub Habitat Loss Permit are hereby made conditions of this permit, and are attached hereto, and hereby incorporated by reference as Exhibit F.

THE FOLLOWING FINDINGS ARE MADE IN SUPPORT OF THE ISSUANCE OF THE HABITAT LOSS PERMIT:

RANCHO CIELO HLP FINDINGS

The following findings are made based on all documents contained in the record for Habitat Loss Permit 94-003, and pursuant to Section 86.104 of Ordinance No. 8365 (N.S.) of the County of San Diego and Section 4.2.g of the NCCP Process Guidelines:

(1) The Proposed Habitat Loss is Consistent with the Interim Loss Criteria in the Conservation Guidelines and with Any Subregional Process if Established by the Subregion.

No formal subregional process has been established to date. The permit is consistent with the following criteria specified in the Conservation Guidelines, for the following reasons:

(a) **The Habitat Loss Does Not Cumulatively Exceed the Five Percent Guideline.**

The following chart tabulates the coastal sage scrub cumulative loss history in both the unincorporated area of San Diego County and within the Central Subregion:

	County-wide	Central-subregion
1. Total Loss allowed under 5 percent Guideline:	6,825.1 acres	1,870.1 acres
2. Cumulative loss of coastal sage scrub to date:	98.5 acres	30.7 acres
3. Net loss due to this project:	21.6 acres	21.6 acres

4. Total cumulative loss:	120.1 acres	52.3 acres
5. Remaining loss allowed under 5 percent Guideline:	6,705.1 acres	1,817.8 acres

As can be seen, when added to the total loss to date (subsequent to the March 1993 listing of the California gnatcatcher) of 98.5 acres, the net loss of 21.6 acres due to this project will bring the total loss to 120.1 acres, which is .09 percent of the 136,502 acres of coastal sage scrub remaining in the unincorporated San Diego County region. Therefore, the project will not result in the loss of greater than 5 percent of coastal sage scrub within the County's jurisdiction, or within the central subregion. Some additional loss may occur, up to 61.5 acres, as a result of the implementation of the fire management plan for the Rancho Cielo project. The exact amount will be determined prior to grading and will be tabulated in the County's 5%.

(b) <u>The Habitat Loss Will Not Preclude Connectivity Between Areas of High Habitat Values.</u>

1. The site contains approximately 488 acres of dense coastal sage scrub, qualifying the site as a "high value district" as defined in the NCCP Conservation Guidelines. The site provides a linkage between the San Dieguito River Valley and lands to the east, and the City of Carlsbad and lands to the northwest, both of which also contain high value habitat. The habitat on site is thus part of a continuous block of high quality habitat between these two areas.

2. The conditions of permit approval require the dedication of open space so as to establish a habitable primary wildlife corridor which will provide regional linkage between these lands. This area includes 16.24 acres of coastal sage scrub which will be preserved and 27.12 acres of coastal sage scrub which will be impacted but will be restored. Further, additional open space within the Rancho Cielo project provides a secondary wildlife corridor located generally to the north of and parallel to the primary corridor. The suitability of the corridor is enhanced by low density land uses planned adjacent to the northern edge of the primary corridor and corresponding low traffic volumes of the roads within the project.

3. The primary wildlife corridor will consist of a permanent open space easement approximately 700 feet wide, plus an additional open space easement area adding approximately
300 feet to the corridor width, which will remain for ten years. All or portions of this additional 300 foot corridor width may become permanent open space if the land owner obtains approval to develop a stated number of lots on

an adjacent parcel, or alternatively, if the six lots within this corridor area are purchased for preservation purposes, prior to the end of the ten-year period. The primary wildlife corridor is of an appropriate size, width, location, elevation, topography, orientation and vegetation type so that it will not preclude coastal California gnatcatcher movement, nor preclude connectivity between adjacent areas of high habitat value.

(c) The Habitat Loss Will Not Preclude or Prevent the Preparation of the Subregional NCCP.

1. The site is identified on the maps for the Multiple Habitat Conservation Program ("MHCP") and the Multiple Species Conservation Program ("MSCP")[1] as being within a focused planning area, suitable for preservation and necessary as a linkage between Carlsbad and lands to the east.

2. The creation of a wildlife corridor as described above will result in a habitable linkage between these two areas. The habitat loss will not foreclose continued planning and preparation of the subregional NCCP because the open space easement is consistent with the draft maps which have been prepared for these programs.

3. The net effect of the mitigation process is that 95.58 percent of the 488 acres of coastal sage scrub on the site will be incorporated into the subregional plan.

(d) The Habitat Loss Has Been Minimized and Mitigated To the Maximum Extent Practicable In Accordance With 4.3[2].

1. A net loss of 21.6 acres of coastal sage scrub is proposed. 95.58% of the coastal sage scrub existing on the site will be preserved. The 21.6 acres of habitat loss generally occurs in areas adjacent to, rather than within, the large open space polygons precluded from development by open space easements. Therefore the habitat value of the coastal sage scrub being preserved on site is maximized by preserving large areas of vegetation.

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[1] When adopted, these programs are meant to be the equivalent of a plan adopted under the NCCP Planning Guidelines.

[2] Section 4.3 of the NCCP Process Guidelines provides that any impacts to the coastal sage scrub habitat and the target species must be mitigated to insignificant levels as required by the California Environmental Quality Act ("CEQA"), by using one or more of several listed options.

2. The establishment of a regional linkage of coastal sage scrub habitat referenced above substantially mitigates the habitat loss.

(2) The Habitat Loss Will Not Appreciably Reduce the Likelihood of Survival and Recovery of the Listed Species in the Wild.

1. The Environmental Assessment undertaken by the United States Fish and Wildlife Service for the Special Rule under Section 4d of the Act resulted in a Finding of No Significant Impact for the listing the coastal California gnatcatcher as "threatened", and the adoption of loss criteria as identified in the NCCP Process Guidelines. The 4(d) Rule anticipated that up to 20,920 acres of coastal sage scrub and up to 116 pairs of gnatcatchers may be lost pursuant to the Interim Loss criteria identified in the Guidelines, without a significant impact on the survival of the gnatcatcher.

2. The impacts are consistent with the NCCP Process and Conservation Guidelines, and have been minimized through the imposition of restrictions on work being conducted during the breeding season and through on-site biological monitoring during construction.

3. The project currently proposes an extensive amount of coastal sage scrub to be preserved in open space. The preservation ratio represents an area equal to 95.58 percent of the habitat following implementation of the mitigation measures.

4. If the loss of habitat which supports 4 pair of coastal California gnatcatchers results in a take of the gnatcatchers, the loss would be approximately .2 percent of the gnatcatcher population in San Diego County.

5. The recovery of the gnatcatcher is enhanced by the provision of wildlife corridors within Rancho Cielo. This assists gnatcatcher populations to the northwest and southeast to maintain an adequate gene pool and overcome the effects of local population losses caused by events such as fire.

6. The design features of the project's development areas are favorable for preserving the biological value of open space due to (a) the low intensity of land use surrounding the habitat, (b) private roads with low traffic volume and (c) the vertical and horizontal separation of development from the open space polygons.

7. Approximately eighty percent (80%) of the open space within the project site is aggregated in 5 major interconnected open space polygons as depicted in the project. The open space polygons are of such a size, shape, elevation, topography and vegetation types to preserve the areas' significant biological value and assist the recovery of the gnatcatchers.

(3) The Habitat Loss is Incidental to Otherwise Lawful Activities.

The Rancho Cielo development project lies within the Rancho Cielo Specific Plan (SP81-04). The project has received Final Map approval on the

following maps: 4229-1, 4227-1, 4348-1, 4227-2, 4229-2, 4229-3, and 4229-4. The proposed Habitat Loss Permit addresses clearing which will take place on-site pursuant to the approved Final Maps and approved Improvement Drawings, as well as clearing associated with the grading for off-site roads and infrastructure which are required to be constructed as a condition of approval of several of the final maps associated with the project.

The foregoing tentative decision was approved by the Director of Planning and Land Use on May 2, 1995. A copy of this decision, and the documentation supporting such decision is on file in the office of the Director of Planning and Land Use. A copy was mailed to the applicant at the address shown on the application.

ROBERT R. COPPER, Director (Acting)
Department of Planning and Land Use

By

RRC:tao:cfa

Attachments

Exhibit "A" Areas of Open Space Within Rancho Cielo
Exhibit "B" Supplemental Mitigation to Enhance Wildlife Corridor
Exhibit "C" NCCP Conservation Guidelines Flow Chart (Appendix B of Addendum to Rancho Cielo Supplemental Environmental Impact Report).
Exhibit "D" Permanent Open Space Easement
Exhibit "E" Ten Year Open Space Easement
Exhibit "F" Mitigation Measures Identified in the Mitigation Plan

cc: Mr. Craig Beam Esq., Luce, Forward, Hamilton & Scripps, 600 W. Broadway, San Diego, CA 92101-3391
Ms. Nancy Gilbert, c/o U.S. Fish and Wildlife Service, Carlsbad Field Office, 2730 Loker Avenue West, Carlsbad, CA 92008
Mr. William Tippetts, c/o California Department of Fish and Game, Natural Community Conservation Planning, 4949 Viewridge Ave., San Diego, CA 92123

Eric Gibson, DPLU
Thomas Oberbauer, DPLU
City of San Diego, M.S. 5A
San Diego Association of Governments, M.S. 980
City of Carlsbad, 2075 Las Palmas Dr., Carlsbad CA 92009
Mr. Craig Benedetto, c/o Building Industry Association, 6336 Greenwhich Dr. Suite A, San Diego, CA 92122-5994
Laurie McKinley, c/o Alliance for Habitat Conservation, 416 University Ave, Suite 200, San Diego, Ca 92103
Lois Jones, San Dieguito Community Planning Group, P.O. Box 2789, Rancho Santa Fe, CA 92067
San Dieguito River Park JPA, M.S. A-22
Norma Sullivan, San Diego Audubon Society, 5858 Scripps St., San Diego, CA 92122
Nature Conservancy, 4824 Point Alto, La Mesa, CA 91941
California Native Plant Society, c/o San Diego Natural History Museum, P.O. Box 1390, San Diego, CA 92112
Sierra Club, 3820 Ray St., San Diego, CA 92104-3623
Desert Protective Council, 3750 El Canto Dr., Spring Valley, CA 91977
The Wildlife Society, 2104 Crenshaw St., San Diego, CA 92105
Endangered Habitats League, 1422 North Sweetzer Ave. #401 Los Angeles, 90069-1528

No. 35 WEDNESDAY, AUGUST 8, 1984

RESOLUTION OF THE BOARD OF SUPERVISORS)
APPROVING REVISED TENTATIVE MAP NO. TM 4229R)

ON MOTION of Supervisor Eckert , seconded by Supervisor Fordem , the following resolution is adopted:

WHEREAS, Revised Tentative Map No. 4229R proposing the division of property generally described as:

a portion of Sections 1, 11, 12, 14 and 15, T13S, R3W, S.B.B.M, County of San Diego, State of California

was filed with the County pursuant to the Subdivision Map Act and San Diego County Subdivision Ordinance on January 10, 1984; and

WHEREAS, by mutual consent of the subdivider and the County the time within which the County could act and report on said map was extended 76 days; and

WHEREAS, the subdivider proposes to file a final map of said subdivision; and

WHEREAS, this Board has considered said revised tentative map and recommendations of the Planning Commission, Department of Planning and Land Use, the County Department of Public Works, the Director of Park Development Division, the Director of Public Health, and the Olivenhain Municipal Water District with respect thereto and has determined that the conditions hereinafter enumerated are necessary to insure that the subdivision and the improvement thereof will conform to all ordinances, plans, rules, standards and improvement and design requirements of San Diego County; and

WHEREAS, the Board has considered and approved a Specific Plan Amendment in conjunction with this revised tentative map and found that the proposed usage made it impractical to conform fully to the Design/Dedication/Improvement standards and requirements of the County Subdivision Ordinance.

NOW, THEREFORE, BE IT RESOLVED that this Board hereby makes the following findings:

The revised tentative map is consistent with all elements of the San Diego County General Plan and the San Dieguito Community Plan, and with the Rancho Cielo Specific Plan (SP81-04), as amended, because it proposes a density in conformance with the plans; and

The design and improvements of the proposed subdivision are consistent with all elements of the San Diego County General Plan and with the San Dieguito Community Plan; and

The site is physically suitable for the proposed type of development; and

The site is physically suitable for the proposed density of development; and

The discharge of sewerage waste from the subdivision will be into a proposed wastewater treatment plant and public sewer system and therefore does not violate requirements applicable to an existing community sewer system which have been prescribed by the California Regional Water Quality Control Board pursuant to Division 7 (commencing with Section 13000) of the Water Code, as specified by Government Code Section 66474.6; and

The design of the subdivision or the type of improvements will not cause serious public health problems inasmuch as a sewer treatment plant is being constructed; and

The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat; and

The design of the subdivision or the type of improvements do not conflict with easements, acquired by the public at large, for access through, or use of property within the proposed subdivision, as defined under Section 66474 of the Government Code, State of California; and

IT IS FOUND, DETERMINED AND CERTIFIED that the Supplemental Environmental Impact Report is complete and in compliance with the provisions of the California Environmental Quality Act(CEQA) and the State EIR Guidelines and that the Board has reviewed and considered the information contained in said Supplemental EIR.

IT IS FOUND, DETERMINED AND CERTIFIED in accordance with the Supplemental Environmental Impact Report that TM 4229R would have a significant impact on the environment as identified by the Planning Commission in the document entitled "Significant EIR Findings" dated June 1, 1984, but changes or alterations have been required in, or incorporated into, the project design which mitigate or avoid the significant effects identified in the Supplemental Environmental Impact Report.

NOW, THEREFORE, BE IT FURTHER RESOLVED, DETERMINED AND ORDERED as follows:

A. Said revised tentative map is hereby approved pursuant to the County Subdivision Ordinance and no waiver of any requirement of said Ordinance is intended or implied except as specifically set forth in this resolution as follows:

1. Waive Section 3.1(B) of the San Diego County Standards for Private Streets which requires maximum grades fo 12% and vertical design speed of 35 MPH along streets proposed to have between 750 and 2,500 average daily trips. This waiver will permit 15% grade and 30 MPH design speed along Via Ambiente between Camino De Arriba and Camino Sin Puente, and a 15% grade along Via Ambiente between Cerca De Arroyo and Paseo De Las Suenos and between Los Plateros and Harmony Grove Road.

2. Waive Section 5.2(6) of the San Diego County Standards which requires a maximum grade of 6% within the intersection of any two streets. This waiver will permit grades of 8% through the following intersections along Via Ambiente: Camino De Arriba, La Milla, Camino Sin Puente, El Cielo, El Brazo, Via Rancho Cielo, Cerca De Arroyo, Paseo Esplanada and Los Plateros.

3. Waive Section 5.2 (6) of the County Standards to permit 8 percent grades through private road intersections.

B. The approval of this revised tentative map expires on December 9, 1984 at 5:00 p.m. The final map or maps conforming to this conditionally approved revised tentative map shall be filed with the Board of Supervisors in time so that said Board may approve the map before this approval expires unless prior to that date the Planning Commission, Board of Supervisors or Director of Planning and Land Use subsequently grants a three-year time extension for obtaining such approval of said final map or maps as provided by the County Subdivision Ordinance.

C. Said revised tentative map of the proposed subdivision is approved subject to the following conditions which shall be complied with before a final map thereof is approved by the Board of Supervisors and filed with the County Recorder of San Diego County:

(PLANS AND SPECIFICATIONS)

1. The subdivider shall submit plans and specifications for improvements of all public streets, rights-of-way, drainage easements, culverts, drainage structures and drainage channels to the County Department of Public Works for approval. Unless specifically waived herein, such plans and specifications shall provide for and be subject to the following conditions lettered a through ee:

   a. Street alignments and grades, including the change of any existing or proposed street alignment and grade, as required by the Director of the Department of Public Works.

b. A drainage system capable of handling and disposing of all surface waters originating within the subdivision and all surface waters that may flow onto the subdivision from adjacent lands. Said drainage system shall include any easements and structures required by the Director of the Department of Public Works to properly handle the drainage. Such improvement plan shall, to the extent feasible, mitigate existing off-site drainage problems, but in any event ensure that such existing off-site drainage problems are not made worse.

c. The improvement of all drainage easements by culvert or drainage channel of any adequate size, whichever is required by the Director of the Department of Public Works. Any required drainage channel shall be lined with a suitable material as specified by the Director of the Department of Public Works. All such drainage easements shall be monumented along property lines at locations approved by the Director of the Department of Public Works. An access easement shall be provided to each drainage system maintenance access point not directly accessible from a public roadway. Such access easement to be improved, fenced and aligned to the satisfaction of the Director of the Department of Public Works.

d. The installation (if required) of all, gas, electric, sewer, and water lines and any other below surface utilities to take place before the installation of any concrete curbs, gutters, and sidewalks, and the surfacing of the streets.

e. Portland cement concrete cross gutters to be installed where water crosses the roadways.

f. The exact depth of imported base material to be based on soil tests which have been approved by the Director of the Department of Public Works.

g. Construct a light system conforming to San Diego County Standards at no cost to the public subject to the following:

(1) Cut-off luminaires shall be installed which will prove true 90 degree cutoff and prevent projection of light above the horizontal from the lowest point of the lamp or light emitting refractor or device.

(2) All fixtures shall use a clear, high pressure sodium vapor light source.

(3) No mercury vapor, quartz, metal halide or diffuse coated high pressure sodium lamps shall be installed.

h. Sight distance requirements at all public street intersections to conform to the intersectional sight distance criteria as provided by the American Association to State Highway Officials in the publication "Geometric Design for Local Roads and Streets - 1971" or as revised.

i. If the improvement plans show a need to excavate in any public road right-of-way, the developer shall place a cash deposit with the Director of the Department of Public Works to insure that any damage to the existing roadway is repaired in a timely manner.

j. Unless specifically waived herein, the San Diego County Standards shall apply in preparing improvement plans irrespective of what is shown on the approved tentative map.

k. Construct, or agree to construct, the public improvements and private road improvements shown on the improvement plans as approved by the Director of the Department of Public Works.

l. A waiver and Release Agreement shall be obtained from each property owner who receives diverted runoff from this site, to the satisfaction of the Director of the Department of Public Works.

m. With the first unit filed, improve the intersection of Del Dios Highway (SF 728) and SA 680 in accordance with Exhibit A prepared by Ladera Associates, Inc., dated April 27, 1984.

n. With the first unit filed, improve SA 680 from Del Dios Highway (SF 728) to Via Ambiente to a graded width of 60 feet with 40 feet of A.C. pavement over approved base with A.C. dike at 20 feet from centerline.

o. With the first unit filed, improve Via Ambiente from SA 680 to the easterly boundary of Unit 2 to a graded width of 32 feet with 24 feet of A.C. pavement over approved base with A.C. dike at 12 feet from centerline. Additional grading may be required to control drainage and to provide for safe sight distance.

p. With Unit 3 secure for improvements and with Unit 7 improve Via Ambiente or other alignment satisfactory to the Director, Department of Public Works, offsite westerly and northerly to Harmony Grove Road to a graded width of 28 feet and surfaced width of 20 feet with 6 inches of approved decomposed granite. Additional grading may be required to provide for safe sight distance and to control drainage. Security required with Unit 3 shall include the portion of Via Ambiente within Unit 7.

q. If emergency access through TM 4225R has not been constructed with the first unit, provide emergency access from Via Ambiente to Mt. Israel Road at a location satisfactory to the Director of Public Works to a graded width of 24 feet with 20 feet of approved decomposed granite surfacing six inches deep.

r. If access other than emergency is proposed to Mt. Israel Road, Mt. Israel Road shall be improved to the satisfaction of the Director, Department of Public Works.

s. The subdivider shall deposit with the County Department of Public Works sufficient funds to cover the cost of inspection of the private improvements.

t. Each building lot shall have a flood-free site for a residence. The building site shall be safe from the flood flow peak of a 100-year storm.

u. An adequate energy dissipator is to be constructed at the outlets of the storm drains.

v. Hydrology and hydraulic calculations for determining the storm system design with water surface profile and adequate field survey cross sections data shall be provided satisfactory to the Department of Public Works.

w. Minimum improvements for Camino De Arriba, Camino Sin Puente, El Brazo, Via Rancho Cielo, Cerro Del Sol, Los Pesettas, Paseo De Las Suenos, Los Plateros, Paseo Piedras, and the unnamed street between Via Ambiente and Lot 183 shall be a graded width of 28 feet with 20 feet of A.C. surfacing over approved base with A.C. dike at 1[illegible] feet from centerline to the satisfaction of the Director, Department of Public Works. Additional grading may be required to provide for safe sight distance and to control drainage.

x. Minimum improvement for Vista Santa Fe, El Cielo, Circa De Arroyo, Via Cielito, El Tiempo and Calle De Salada shall be a graded width of 24 feet with 20 feet of A.C. surfacing over approved base with A.C. dike at 10 feet from centerline to the satisfaction of the Director, Department of Public Works. Additional grading may be required to provide for safe sight distance and to control drainage.

y. With Unit No. 4 construct the offsite portions of Camino De Arriba from the westerly boundary of this project to its intersection with Via Ambiente within TM 4227. Improvement shall be to the same standards as the onsite requirements.

z. Where a street is the boundary between two units full improvements shall be accomplished with the earliest unit.

aa. Where portions of private streets providing access to the subdivision lots are off-site, full improvements are required over said portions.

bb. Intersectional sight distance along Via Ambiente from all intersecting streets shall be a minimum of 300 feet. (There are several intersections with substandard intersectional sight distance along Via Ambiente.)

cc. Approximately 3,300 feet of guardrail is required along Via Ambiente. Specific locations will be determined with submittal of improvement plans.

dd. If dedicated, improve the Riding and Hiking Trail system to the following design standards to the satisfaction of the Director, Department of Public Works:

(1) The trail shall contain a minimum eight feet of tread width with drainage structures as necessary.

(2) The trail surface shall consist of the native soil, or where the soil is highly erosive or will not support the traffic, a tread surfacing material such as decomposed granite which will blend with the natural environment shall be provided.

(3) Trail gradients shall not exceed 15%. Where natural grades exceed 15% sufficient width for switchbacks shall be provided to accommodate a 15% gradient trail.

(4) Trails shall intersect roads at approximately 90 degree angles.

(5) The trail system shall be continuous through the subdivision and shall provide for local access within the subdivision.

(6) Points where the trail exits the subdivision shall be coordinated with existing or planned trail locations on adjacent property.

(7) Signs at trail entrances to provide identification, rules and regulations; and markers along the route to direct the users.

ee. The onsite and offsite private easement roads providing access to the lots within this project shall be maintained through private road maintenance agreements satisfactory to the Director, Department of Public Works.

(GRADING PLANS)

2. Prior to the issuance of a grading permit the subdivider shall comply with the following conditions lettered a through g:

a. The subdivider shall submit grading plans and grading permit application and all grading permit fees and deposits to the County Department of Public Works. Grading plans shall be approved prior to or concurrently with the approval of the Improvement Plans.

b. Said plans shall include the following provisions:

(1) The grading plan shall contain a certificate signed by a registered civil engineer that the grading plan has preserved a minimum of one hundred square feet of solar access for each dwelling unit and for each future building site within the subdivision.

(2) Prior to approval of any grading permit for road construction, grading plans shall show to the satisfaction of the Director of Planning and Land Use noise attenuating barriers or open space easements where necessary to reduce traffic noise to acceptable levels.

c. Construction vehicle access over Mt. Israel Road shall be prohibited and a note stating so shall be placed on the grading and improvement plans.

d. No grading shall be permitted within this subdivision until the subdivider obtains sewer commitment from the Special District empowered to operate the sewer plant.

e. The subdivider shall deposit with the County Department of Public Works $200.00 at the time the Lot Grading Plan or Improvement plan is submitted. The deposit will be made with whichever plan is first submitted. Said deposit shall be used to cover the cost of site inspection by a County Geologist to determine whether or not any geologic hazard exists and, if such is found, to review the geologic report prepared by the developer's Engineering Geologist. The developer shall reimburse the County Department of Public Works for any cost in excess of the deposit prior to recording the Final Map. Any unused portion of the deposit will be refunded.

f. Prior to issuance of any grading permits, a qualified archaeologist shall to the satisfaction of the Director of Planning and Land Use:

(1) Conduct the sample percentage micro-max surface collection at those sites listed on Table 9 of the Environmental Impact Report dated March 26, 1981, to be destroyed by the subject subdivision;

(2) Conduct test excavations at all sites listed on said Table 9 for sites within the subject subdivision for "Phase I" tests;

(3) Submit a report on the micro-mapping and test excavations and meet with the Environmental Analysis Division to obtain direction relative to "Phase II" salvage;

(4) Submit a research design to salvage, excavate and map the remaining scientific values at the sites to be impacted;

(5) Conduct a salvage operation and submit a salvage report which can be used by the public in their future appreciation of the lost aspects of their heritage.

(FIRE PROTECTION)

g. Prior to the issuance of a grading permit the subdivider shall comply with the following conditions:

1. Cause all the land within this subdivision to be annexed to the Rancho Santa Fe Fire Protection District.

2. Submit a letter from the Fire Protection District stating satisfaction that a fire protection program has been prepared and established by the District.

3. Submit a letter from the Fire Protection District stating that grading and improvement plans are in conformance with the established fire protection program.

4. Submit a letter from the Rancho Santa Fe Fire Protection District stating satisfaction with the type and location of fire hydrants and the minimum required water flow in gallons per minute together with a letter from the Olivenhain Municipal Water District or agency certifying that the fire department's minimum required water flow is available to serve the site.

5. Submit a letter from the Fire Protection District stating that development impact fees have been paid or secured to the District's satisfaction.

(ZONING ADMINISTRATION)

3. Obtain a zone reclassification to conform to the Specific Plan Amendment by the Board of Supervisors.

4. Obtain a Major Use Permit (P80-089) by the Planning Commission or Board of Supervisors.

5. Obtain approval from the Director of Planning and Land Use of a detailed landscaping plan. Said plan shall show the types and locations of all landscaping features for erosion control.

(FAIR HOUSING)

6. Submit to the Department of Public Works a letter from the Equal Opportunity Management Office stating its approval of an affirmative fair housing marketing plan.

(SANITATION)

7. Obtain the commitment of the public agency (County Sanitation District) to connect all lots within the subdivision to its public sewer system and obtain the consent of said district of the plans and specifications for the installation of a sewer system serving each lot within the subdivision. Where a conflict exists between these conditions and approved County Contract #20199A, #19329A, #20266A and #20225A, the terms and conditions of the County Contracts will prevail. In addition:

   a. Plans and specifications for the installation of a sewer system serving each lot must be approved by the Director, Department of Public Works. The subdivider shall dedicate all necessary easements along with that portion of the sewer system which is to be public sewer and obtain a commitment to serve.

   b. Prior to the formation of a County Sanitation District to operate and maintain a sewage collection and wastewater treatment facility, a financial plan and revenue program for the operation and maintenance of a collection, treatment and disposal system must be approved by the Department of Public Works. This approval by the Department of Public Works is required if the Board of Supervisors will be required to form a County Sanitation District. The plan and program must demonstrate a reasonable sewer service charge for operation and maintenance for individual property owners. The proposed wastewater reclamation facility shall be in compliance with Board of Supervisors' Policy I-78 Small Wastewater Treatment Facilities.

      Said financial plan and program shall assure failsafe operation of the treatment facility by providing bonds and/or secured agreements to mitigate any potential failures or operation and maintenance shortfall. In addition, this treatment plant shall be wholly operated and maintained by the applicants under the supervision of the ultimate serving district for a period of one year after construction. The facility shall be constructed by a firm licensed by the State to construct a secondary treatment facility.

      All construction, initial operation and maintenance costs of the treatment facility shall be borne by the aplicants and all future costs shall be the responsiblity of the Rancho Cielo property owners. A public agency (County Sanitation District) shall be established which includes the final map which shall be responsible for the ongoing maintenance costs of the treatment facility.

c. Prior to approval of the final map, the major use permit for the wastewater treatment plant shall be approved and discharge requirements for it shall have been obtained.

d. Prior to approval of the final map, the plans and specifications for the installation of a wastewater treatment plant and a public sewer system serving each lot must be approved by a public agency, authorized to operate and maintain sewage collection and wastewater treatment system.

e. Prior to issuance of building permits for any dwelling, the subdivider shall install the wastewater treatment plant and sewer system and shall dedicate that portion of the sewer system which is to be public sewer and all necessary easements to a public agency authorized to operate and maintain a sewage collection and wastewater treatment system.

f. Prior to issuance of building permits for any dwelling, the wastewater treatment plant and sewer system shall be approved by the Regional Water Quality Control Board.

(FINAL MAP)

8. The final map shall show or provide for the following lettered a through p:

a. All lots within this subdivision have a minimum of 100 square feet of solar access for each lot and for each future building site within this subdivision as required by Section 81.401(n) of the Subdivision Ordinance.

b. Dedicate all on-site drainage easements, including easements for access thereto, and show monumentation for such easements, as required by the Director of the Department of Public Works.

c. Lots nos. 1-A, 1-B, 1-E through J, 3-A through G, 4-A, 5-A through C, 6-A and 9-A shall be labeled "NOT A BUILDING SITE" on the final map. Lots 1-E through J, 3-A through F, 5-B, 5-C, 6-A and 9-A and all other lots or portions of lots designated as open space (o.s.) on the tentative map shall by separate document prior to the recording of the final subdivision map be granted to the County as open space easements. Said open space easements shall be approved as to form by County Counsel. Areas designated specifically for recreational uses shall be limited to recreational purposes including buildings, structures and improvements. All other areas of open space easements shall be maintained in a native state, precluding vegetation removal, except for firebreaks, sewer and water lines, access roads, driveways and sight distance on Circulation roads as approved by and to the satisfaction of the Director of Planning and Land Use.

d. Lots 1-D, 2-A, and 1-C are not residential building sites and shall be limited to the following uses:

1-D Village Center (Commercial,Administrative, Fire Station and Heliport)

2-A Equestrian Center

1-C Water reclamation facility

e. On the final map dedicate all onsite drainage easements, including access easements thereto, and show monumentation for such easements, as required by the Director, Department of Public Works.

f. Dedicate SA 680 from Del Dios Highway (SF 728/SC 1524) to Via Ambiente to a minimum width of 60 feet.

g. Offer to Dedicate Via Ambiente to a width of 60feet together with the right to construct and maintain slopes and drainage facilities. The final map shall be prepared to show the offer being rejected and shall show the ultimate limits of the slopes and drainage facilities.

h. Grant an Irrevocable Offer of Dedication for Via Ambiente from SA 680 to the southerly boundary of this project to a width of 60 feet together with the right to construct and maintain slopes and drainage facilities.

i. The developer may dedicate or offer to dedicate the San Diguito Community Plan Riding and Hiking trails. Easements shall be a minimum of 20 feet wide when separate from road right-of-way. When adjacent to road right-of-way, they shall be a minimum of 10 feet wide on each side (trails adjacent to road rights-of-way are discouraged).

j. With Unit 3 grant an Irrevocable Offer to Dedication for Via Ambiente or other alignment satisfactory to the Director, Department of Public Works offsite from Unit 2 to Harmony Grove Road to a width of 60 feet together with the right to construct and maintain slopes and drainage facilities.

k. The 100-year flood line of the natural channels crossing all lots, and draining watersheds in excess of 25 acres, shall be clearly delineated on the final map.

l. The Final Map shall show the cul-de-sac for Camino Sin Puente at the northern property line in a manner that would provide for access to the property to the north if at some future time the Specific Plan allows additional dwelling units along the ridgeline. Lot lines of affected lots shall be adjusted accordingly.

m. Access to each lot shall be provided by private road easement not less than 40 feet wide.

n. Notify the Director, Department of Public Works as to the final disposition of title (ownership) to the streets within the proposed project and place a note on the final map as to the final title status of said streets.

o. The offsite portion of Camino De Arriba shall be a private road easement not less than 40 feet wide.

p. If the subdivider does not have the real property rights necessary for public access or the construction of required improvements, he/she shall, prior to the filing of the Final Map, request the Board of Supervisors to direct County staff to begin eminent domain proceedings for acquisition of said access in accord with Board Policy J-33. The developer shall agree to pay full County costs of eminent domain proceedings, including all easement costs. The developer shall also agree to construct required improvements for said access.

(OTHER)

9. The subdivider shall accomplish the following lettered a through p:

a. The subdivider shall resubmit legal descriptions to the Department of Planning and Land Use of all use regulations whose boundaries have changed to bring said use regulations into conformance with the boundaries shown on the final map.

b. The subdivider shall grant to the appropriate agency by recorded document all required off-site easements and all on-site water main easements that serve fire hydrants.

c. The subdivider shall deposit with the County of San Diego, through the County Department of Public Works, a cash deposit sufficient to:

(1) Energize, maintain and operate the street lighting system until tax revenues begin accruing from the subdivision for those purposes.

(2) Augment the Contingency Fund of the existing District by an amount equal to three month's operating cost of the subdivision.

(3) Augment the Reserve Fund by one month's operating cost.

(4) Pay the cost of annexation to an appropriate special district including the cost of processing through the State Board of Equalization. After recording of the final map, the subdivision shall be annexed without notice or hearing, to an existing special district to operate and maintain the system.

d. The subdivider shall install or agree to install a sewer system as a subdivision improvement and dedicate to the public that portion of such system which is within an existing or proposed public right-of-way.

e. Streets shown on the Revised Tentative Map to be given street names approved by the Street Names Section of the Department of Planning and Land Use and the subdivider shall install all street name signs as a part of the subdivision street improvements. If the subdivider desires situs addresses for the lots created by the subdivision, the subdivider is to furnish a true scale final map to the Street Names Section. Said map is to show driveway locations for all lots and street names for all streets.

f. The subdivider shall deposit fees in the amount of Fifty-Four Thousand Eight Hundred dollars ($54,800.00) with the Clerk of the Board of Supervisors, or guarantee payment of those fees as may be required pursuant to Sections 810.106 and 810.107 of the County Park Lands Dedication Ordinance.

g. All new and existing utility distribution facilities, including cable television lines, within the boundaries of any new subdivision or within any half street abutting a new subdivision shall be placed underground. The subdivider is responsible for complying with the requirements of this condition, and he/she shall make the necessary arrangements with each of the serving utilities, including licensed cable television operators, for the installation of such facilities.

When the installation of cable television lines is required, the subdivider shall either provide the Director of the Department of Public Works with documentation from a licensed cable television operator stating arrangements for the underground installation of cable television lines have been made, or the subdivider shall provide the Director of the Department of Public Works with documentation that the Cable Television Review Commission has reported that no licensed cable television operator is willing and able to install cable television lines in the subdivision.

h. The subdivider shall deposit with the County of San Diego, through the County Department of Public Works, Cashier, a filing fee sufficient to process any formation or annexation to a County Service Area with the State Board of Equalization pursuant to Section 54900 et. seq. of the Government Code.

i. The developer shall participate in the cost of traffic signal installations at the intersections of a) Del Dios Highway (SF 728/SC 1524) at SA 680, b) Del Dios Highway (SF 728) at Mt. Israel Road (SC 1380) and c) SA 680 at Via Ambiente. The amount of the developers portion of the entire cost of the signals shall be $62,590.00.

j. The subdivider shall comply with Section 66436 of the Government Code by furnishing to the County Department of Public Works a certification from each public utility and each public entity owning easements within the proposed subdivision stating that: (a) they have received from the developer a copy of the proposed final map; (b) they object or do not object to the filing of the map without their signature; (c) in the case of a street dedication affected by their existing easement, they will sign a "subordination certificate" or "joint-use certificate" on the map when required by the governing body. In Director, Department of Public Works, that no new encumbrances have been created that would subordinate the County's interest over areas to be dedicated for public road purposes since submittal of the tentative map.

k. The subdivider shall secure recertifications satisfactory to the Director of Public Works of availability of adequate public services and utilities including but not necessarily limited to: fire, water and sewer services to the site, said recertifications dated within 90 days prior to Board of Supervisors approving final map.

l. The subdivider shall provide a letter from the Escondido Union High School District stating that a secured agreement has been entered into to the District's satisfaction.

m. The subdivider shall participate in the construction of planned drainage facilities for Zone 1 Planned Local Drainage Areas 47G and 47H, in accordance with the Drainage Fee Ordinance, by paying a drainage fee of $20,000.00 and $60,000.00 respectively.

n. Provide a contribution of $163,550.00 for the improvement of Del Dios Highway to a Collector road standard from the easterly end of improvements required for the intersection of SA 680 and Del Dios Highway (SF 728) to Mt. Israel Road.

o. Reciprocal easements shall be granted to all parties within the Specific Plan for access purposes to avoid landlocking of any parcels. Each owner shall be responsible for entering into a road maintenance agreement.

p. El Brazo shall be terminated in a cul de sac in lieu of a loop road as shown on TM4229.

10. This approval is further conditioned by the following instructions to staff:

a. This is a solar subdivision. All lots/dwelling units within this subdivision shall have a minimum of 100 (one hundred) square feet of solar access for each lot and for each future building site within the subdivision pursuant to Section 81.401(n) of the Subdivision Ordinance.

b. This subdivision has been approved for public sewer. If the sewer commitment terminates before connection to sewer and prior to the Board of Supervisor's final map approval, the Department of Health

Services will deny application(s) for individual subsurface sewage disposal system(s) within this subdivision, unless a Resolution Amendment has been obtained from the Planning Commission or Board of Supervisors which approves individual subsurface sewage disposal systems for this subdivision.

11. The protection of the public interest requires that the subdivider, contractors, builders, lot or parcel owner, and other persons, firms and corporations concerned with the development of said subdivision conform to the following standards, and all permits required by the County of San Diego will be issued pursuant to such standards:

    a. All domestic water supplied for this subdivision shall come from the Olivenhain Municipal Water District.

    b. All buildings constructed in this subdivision shall be connected to a public sewer system.

    c. Sewer and water lines shall not be laid in the same trench in any part of this subdivision.

    d. Proper drainage shall be maintained throughout this subdivision so as to prevent ponding and/or storage of surface water that would create a public health hazard or nuisance.

BE IT FURTHER RESOLVED that the mitigation measures imposed with respect to Hydrology (Drainage) in the Mt. Israel Road area are further supported by the following findings of fact made by this Board and supported by evidence in the record:

1. Property owners along Mt. Israel Road, to the east of the project site, have experienced substantial flooding and erosion problems in periods of heavy rainfall; and

2. The Department of Public Works has advised that drainage problems in this area will not be aggravated by this project in that only approximately 41 acres of this project drains to this basin.

BE IT FURTHER RESOLVED pursuant to the California Environmental Quality Act, this Board hereby finds with respect to the impacts on fire protection, that such impacts will be mitigated by the following means:

1. That the fire suppression capability of the area will be improved by the requirement that the applicant provide a fully equipped on-site fire station to be used by public fire protection agencies; and

2. That the response time to the area will be faster and the area will be more accessible to fire fighters as a result of the development; and

3. That the Rancho Santa Fe Fire Protection District will require, and the applicants have stated that their architectural review committee will impose, a requirement for fire retardant roofs on all dwellings; and

4. That there will be improved water reservoir systems available for fire emergencies in the area; and

5. That fuel breaks will be established as required by the Rancho Santa Fe Fire Protection District; and

6. That no further mitigation measures are necessary to mitigate the impacts.

BE IT FURTHER RESOLVED that the following evidence is incorporated herein by this reference and serves as further support for the findings included herein:

The maps, exhibits, written documents and materials contained in the files regarding the permits on record at the County of San Diego, the written documents referred to, and the oral presentation made at the public hearings.

PASSED AND ADOPTED by the Board of Supervisors of the County of San Diego, State of California, this 8th day of August, 1984, by the following vote:

AYES: Supervisors Hamilton, Fordem, Boarman, Williams, and Eckert

NOES: Supervisors None

ABSENT: Supervisors None

STATE OF CALIFORNIA) ss.
County of San Diego)

I, PORTER D. CREMANS, Clerk of the Board of Supervisors of the County of San Diego, State of California, hereby certify that I have compared the foregoing copy with the original resolution passed and adopted by said Board, at a regular meeting thereof, at the time and by the vote therein stated, which original resolution is now on file in my office; that the same contains a full, true and correct transcript therefrom and of the whole thereof.

Witness my hand and the seal of said Board of Supervisors, this 8th day of August, 1984 (35)

PORTER D. CREMANS
Clerk of the Board of Supervisors
By Maria A. Tiscareno
Deputy

SEAL

APPROVED AS TO FORM AND LEGALITY
COUNTY COUNSEL
BY William E. Smith
DEPUTY 7-16-84

Attachment E

SECOND AMENDMENT TO AGREEMENT
TO IMPROVE SUBDIVISION
(Extension of Time and Reduction in Security)
TM 4229-4 Map 12905

THIS AMENDMENT is made and entered into this 13th day of July 20 11, by and between the County of San Diego, State of California (hereinafter called the COUNTY) and Rancho Cielo Estates, Ltd., a California Corporation (hereinafter called OWNER).

WITNESSETH:

WHEREAS, on December 18, 1991, the COUNTY approved for recordation final map of County of San Diego Tract No. 4229-4, known as Recorded Map No. 12905; and,

WHEREAS, on said date an Agreement was made and entered into obligating OWNER to construct improvements for said subdivision, which Agreement was entitled, "AGREEMENT TO IMPROVE MAJOR SUBDIVISION COUNTY OF SAN DIEGO TRACT NO. 4229-4 (hereinafter called the AGREEMENT); and,

WHEREAS, OWNER now desires additional time to complete said improvements; and,

WHEREAS, COUNTY is willing to allow additional time so long as the security given for the AGREEMENT is reduced commensurate with the reduction in the remaining estimated construction and related costs, NOW THEREFORE,

The OWNER HERETO AGREES that the AGREEMENT shall be amended as follows;

1. The improvements as specified in the Second and Tenth Paragraph shall be completed on or before July 13, 2013 and are as follows:

PERFORMANCE BOND

(a) Remaining Improvement of the Streets and Drainage Facilities,	$5,137,300
(b) Remaining Improvement of Sewer facilities	$2,005,200
(c) Remaining Improvement of Water facilities	$1,254,800
(d) Remaining Landscape Improvements	$ 573,000
(e) Setting of Final Monuments	$ 40,000
	$9,010,300

LABOR AND MATERIAL BOND

Labor and Materials (retain original amount until completion)	$5,945,200

2. The security given for the AGREEMENT is currently above the required minimum of $9,010,300 for a current surplus balance of $11,890,400 a rider bond reducing by $2,880,100 for a total of $9,010,300 is subtracted from and attached hereto, THEREFORE,

3. All other terms and conditions of the AGREEMENT shall remain the same and in full force and effect.

TM4229-4
ATTACHMENT B

IN WITNESS WHEREOF, the parties have caused this AMENDMENT to be executed the date first above written.

COUNTY OF SAN DIEGO

By _____
Clerk, Board of Supervisors

Approved and/or authorized by the Board of Supervisors of the County of San Diego
Date 9/13/11 Minute Order No. 18
THOMAS J. PASTUSZKA
Clerk of the Board of Supervisors
By _____
Deputy Clerk

RANCHO CIELO ESTATES, LTD., A CALIFORNIA CORPORATION

BY: _____
MARK ROWSON, PRESIDENT

NOTE: (1) Signatures must be acknowledged.
(2) Substitute security must be attached.

TM4229-4

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of SAN DIEGO }

On MAY 4, 2011 (Date) before me, C M CASTANEDA NOTARY PUBLIC (Here Insert Name and Title of the Officer),

personally appeared MARK J. ROWSON (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature C M Castaneda (Signature of Notary Public)

C. M. CASTANEDA
Commission # 1925905
Notary Public - California
San Diego County
My Comm. Expires Feb 18, 2015

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: AMENDMENT TO AGREEMENT TO IMPROVE SUBDIVISION IM4229-4

Document Date: MAY 4, 2011 Number of Pages: 2

Signer(s) Other Than Named Above: NONE

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____
☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer's Name: _____
☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

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Attachment F
Approved Development Footprint

RANCHO CIELO PARCEL "H"
EXISTING CONDITIONS

DATA TABLE

L1 N55°23'25"W 15.90'

OPEN SPACE SIGNAGE NOTES

OPEN SPACE SIGNS SHALL BE PLACED ALONG THE BIOLOGICAL OPEN SPACE BOUNDARY AT 100' INTERVALS MINIMUM. SIGNS MUST BE CORROSION RESISTANT, A MINIMUM OF 6"x9" IN SIZE, ON POSTS NOT LESS THAN THREE (3) FEET IN HEIGHT FROM THE GROUND SURFACE, AND MUST STATE THE FOLLOWING:

SENSITIVE ENVIRONMENTAL RESOURCES AREA RESTRICTED BY EASEMENT
APPROVED ENTRY WITHOUT EXPRESS WRITTEN PERMISSION FROM THE COUNTY OF SAN DIEGO IS PROHIBITED. TO REPORT A VIOLATION OR FOR MORE INFORMATION ABOUT EASEMENT RESTRICTIONS AND EXCEPTIONS CONTACT THE COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND LAND USE.
REFERENCE:(TM 5441 & ER 86-06-026B)

N

SCALE: 1"=60'

DEVELOPABLE AREA

LOT 1

OPEN SPACE

LOT 207

LOT 206

LOT 205

LOT 204

LOT 203
CO. OF S.D. TRACT NO. 4228-4
MAP NO. 12905

CO. OF S.D. TRACT NO. 4228-4
MAP NO. 12905

LOT 53
CO. OF S.D. TRACT
NO. 4228-1
MAP NO. 11978

LOT 18
MAP NO. 11978

LOT 18

LOT 18

PCL C
B/C 00-0040
DOC. 2000-0181412

LOT 109
CO. OF S.D. TRACT
NO. 4228-2
MAP NO. 12784

OPEN SPACE LOT 303
CO. OF S.D. TRACT NO. 4228-4
MAP NO. 12905

OPEN SPACE
LOT 114
CO. OF S.D. TRACT
MAP NO. 12784

OPEN SPACE LOT 113

BIOLOGICAL OPEN SPACE FENCING. (SEE SIGNAGE NOTE)

EXISTING SEWER EASEMENT AND "NOT A BUILDING SITE" PER MAP NO. 11978 AND PROPOSED BIOLOGICAL OPEN SPACE EASEMENT

15' WIDE SEWER EASEMENT PER MAP NO. 12905

N65°48'35"E 104.64'

N89°04'42"E 296.92'

N48°46'46"W 88.90'

N29°47'18"W 150.69'

N70°06'35"E 229.52'

N19°53'25"E

RESOURCE AVOIDANCE AREA

EXISTING OPEN SPACE

OPEN SPACE EASEMENT PER MAP NO. 12905

N36°05'33"E 360.52'

N24°00'43"E 335.76'

N36°02'32"W 259.31'

N50°06'35"E 134.72'

D=74°30'00" R=330' L=429.09

VIA AMBIENTE
PRIVATE STREET
(LOT 54, MAP 11978)

EXISTING 300' CLEAR SPACE EASEMENT NO SIGHT OBSTRUCTIONS W/IN THIS SPACE

EXISTING SLOPE GRADING PER: PLANS FOR THE IMPROVEMENT OF VIA AMBIENTE 4229-1

EXISTING EASEMENT FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES

EC=1361.18
RT=1277.06

D=144°30'00" R=270' L=680.94'

VIA AMBIENTE

P/E=104+33.66

100+07.02 CL VIA AMBIENTE=
10+00 CL VIA RANCHO CIELO
1110.5

VIA RANCHO CIELO
PRIVATE STREET
(LOT 120, MAP 12784)

EL BRAZO
PRIVATE STREET
(LOT 119, MAP 12764)

97+50.35 VIA AMBIENTE =
10+00.00 EL BRAZO
1124.99

EL BRAZO

C1

BIOLOGICAL OPEN SPACE FENCING. (SEE SIGNAGE NOTE)

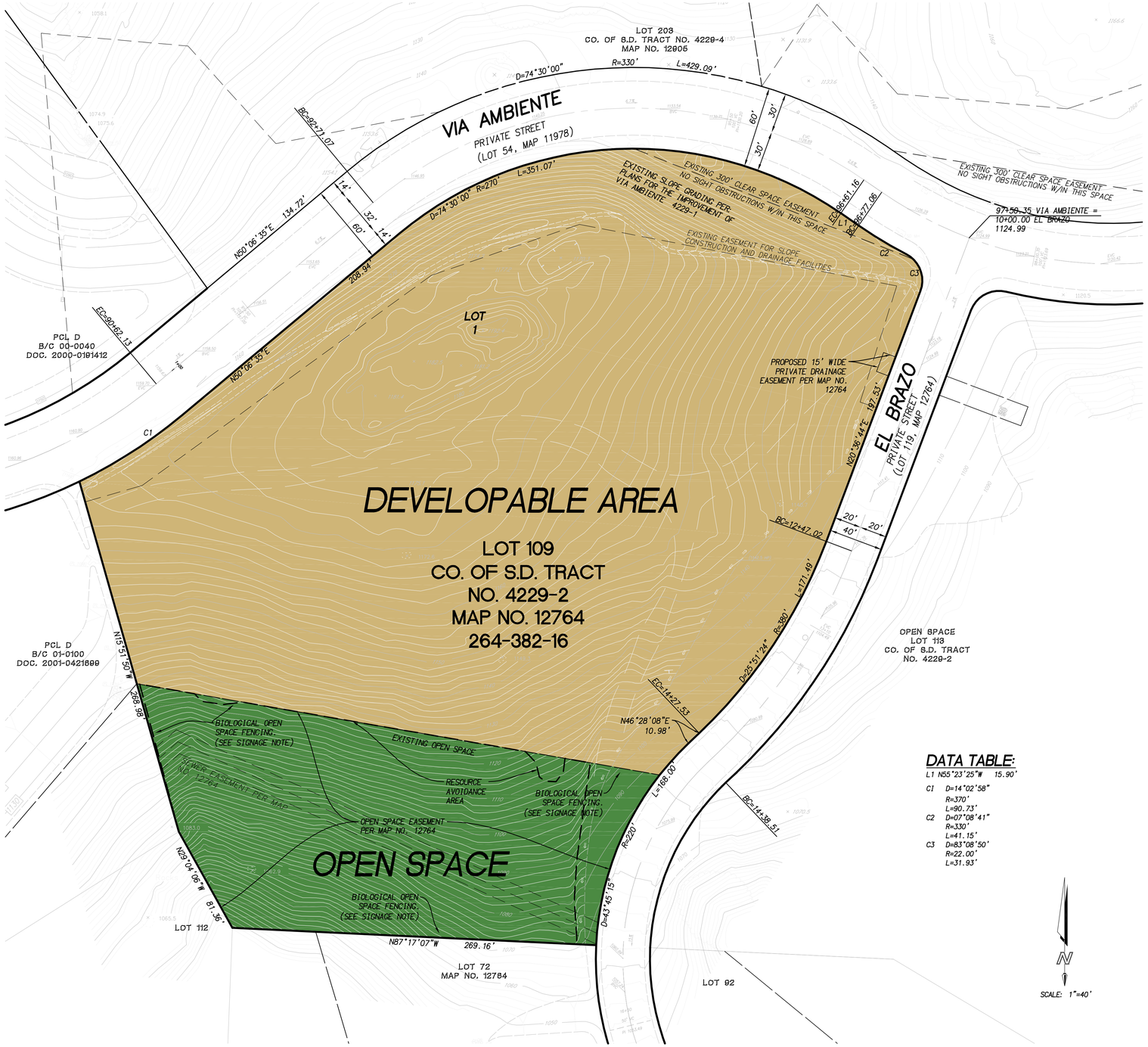
NO.	DATE	REVISION

FUSCOE ENGINEERING
6390 Greenwich Drive, Suite 170
San Diego, California 92122
tel 858.554.1500 ◦ fax 858.597.0335
www.fuscoe.com

G:\PROJECTS\5277\1 DESIGN\01-SHEETS\DISCRETIONARY\5277-11-DR-EX CONDITIONS AREA H.DWG 11-26-12 2:36:19PM Plotted by: cpeters

Attachment G
Approved Development Footprint

RANCHO CIELO VILLAGE CENTER
EXISTING CONDITIONS



LEGEND

ITEMS	SYMBOL
TRACT BOUNDARY	
RIGHT OF WAY	
PROPOSED LOT LINE	
EXISTING CONTOUR	1110
PROPOSED LOT NUMBER	1
EXISTING SEWER MAIN W/ MANHOLE	SS
EXISTING WATER MAIN	W
EXISTING STORM DRAIN	
EXISTING FIRE HYDRANT ASSEMBLY	
EXISTING CONCRETE BROW DITCH	
OPEN SPACE FENCING	X X X

OPEN SPACE SIGNAGE NOTES

OPEN SPACE SIGNS SHALL BE PLACED ALONG THE BIOLOGICAL OPEN SPACE BOUNDARY AT 100' INTERVALS MINIMUM. SIGNS MUST BE CORROSION RESISTANT, A MINIMUM OF 6"x9" IN SIZE, ON POSTS NOT LESS THAN THREE (3) FEET IN HEIGHT FROM THE GROUND SURFACE, AND MUST STATE THE FOLLOWING:

SENSITIVE ENVIRONMENTAL RESOURCES AREA RESTRICTED BY EASEMENT
APPROVED ENTRY WITHOUT EXPRESS WRITTEN PERMISSION FROM THE COUNTY OF SAN DIEGO IS PROHIBITED. TO REPORT A VIOLATION OR FOR MORE INFORMATION ABOUT EASEMENT RESTRICTIONS AND EXCEPTIONS CONTACT THE COUNTY OF SAN DIEGO, DEPARTMENT OF PLANNING AND LAND USE.
REFERENCE: (TM 5440 & ER 86-06-026B)

DATA TABLE:

L1 N55°23'25"W 15.90'

C1 D=14°02'58"
R=370'
L=90.73'

C2 D=07°08'41"
R=330'
L=41.15'

C3 D=83°08'50"
R=22.00'
L=31.93'

N

SCALE: 1"=40'

NO.	DATE	REVISION

FUSCOE ENGINEERING
6390 Greenwich Drive, Suite 170
San Diego, California 92122
tel 858.554.1500 ◦ fax 858.597.0335
www.fuscoe.com

G:\PROJECTS\12071.000\DGN\12071-000 EXHIBITS\2012-11-28 EX CONDITION AREA.DWG (11-28-12 3:53:33PM) Plotted by: cpalazzo

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

BEING A SUBDIVISION OF PORTIONS OF THE SOUTH HALF OF SECTION 11 AND 12, AND THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 13 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

FOR COMPLETE METES AND BOUNDS LEGAL DESCRIPTION OF THIS SUBDIVISION SEE CERTIFIED TITLE COMPANY DESCRIPTION AND REPORT ON FILE IN THE OFFICE OF THE COUNTY ENGINEER.

SUBDIVISION GUARANTEE FURNISHED BY FIRST AMERICAN TITLE INSURANCE COMPANY ORDER NO. 1000609 – 11.

WE HEREBY STATE THAT WE ARE THE OWNERS OF OR ARE INTERESTED IN THE LAND SUBDIVIDED BY THIS MAP AND WE CONSENT TO THE PREPARATION AND RECORDATION OF THIS MAP.

WE HEREBY DEDICATE TO THE COUNTY THE SEWER EASEMENTS AS SHOWN ON SAID MAP.

WE HEREBY GRANT TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT, A PUBLIC AGENCY, OR ITS SUCCESSORS, OR ASSIGNS, AN EASEMENT FOR WATER PIPELINES, OTHER DISTRICT FACILITIES, AND FOR ALL ACCESS PURPOSES OVER, UNDER, AND ACROSS ALL PRIVATE STREETS AS SHOWN ON THIS MAP, SUBJECT TO ALL TERMS AND CONDITIONS CONTAINED IN THE CERTIFICATE GRANTING EASEMENTS WITHIN PRIVATE STREETS TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT ON COUNTY OF SAN DIEGO TRACT NO. 4413, MAP NO. 11372, RECORDED NOVEMBER 21, 1985, WHICH TERMS AND CONDITIONS ARE HEREBY INCORPORATED BY REFERENCE.

WE HEREBY GRANT TO THE COUNTY OF SAN DIEGO AN EASEMENT OVER, UPON, ACROSS AND UNDER ALL OF LOTS 110-115 INCLUSIVE AND A PORTION OF LOTS 56-58 INCLUSIVE, 60-67 INCLUSIVE, 71-77 INCLUSIVE, 81-109 INCLUSIVE, EXCEPTING THEREFROM ANY EXISTING AND/OR PROPOSED SLOPE, DRAINAGE AND UTILITY EASEMENTS HEREAFTER REFERRED TO AS THE SUBJECT LAND, TO-WIT:

(1) A PERPETUAL EASEMENT FOR OPEN SPACE OVER, UPON, ACROSS AND UNDER THE SUBJECT LAND AND NO BUILDING, STRUCTURE OR OTHER THING WHATSOEVER SHALL BE CONSTRUCTED, ERECTED, PLACED OR MAINTAINED ON THE SUBJECT LAND EXCEPT AS MAY BE PERMITTED BY A MAJOR USE PERMIT ISSUED PURSUANT TO THE ZONING ORDINANCE OF THE COUNTY OF SAN DIEGO, AND ALL NECESSARY PUBLIC UTILITY LINES.

(2) THE PERPETUAL RIGHT, BUT NOT THE OBLIGATION, TO ENTER UPON THE SUBJECT LAND AND REMOVE ANY BUILDINGS, STRUCTURES OR OTHER THINGS WHATSOEVER CONSTRUCTED, ERECTED, PLACED OR MAINTAINED ON THE SUBJECT LAND CONTRARY TO ANY TERM, COVENANT OR CONDITION OF THIS EASEMENT AND TO DO ANY WORK NECESSARY TO ELIMINATE THE EFFECTS OF ANY EXCAVATION OR GRADING OR PLACEMENT OF SAND, SOIL, ROCK OR GRAVEL OR ANY OTHER MATERIAL DONE OR PLACED ON THE SUBJECT LAND CONTRARY TO ANY TERM, COVENANT OR CONDITION OF THIS EASEMENT. GRANTOR COVENANTS AND AGREES FOR ITSELF AND ITS SUCCESSORS AND ASSIGNS AS FOLLOWS:

(A) THAT IT SHALL NOT ERECT, CONSTRUCT, PLACE OR MAINTAIN, OR PERMIT THE ERECTION, CONSTRUCTION, PLACEMENT OR MAINTENANCE OF ANY BUILDING OR STRUCTURE OR OTHER THING WHATSOEVER ON THE SUBJECT LAND OTHER THAN SUCH BUILDINGS, STRUCTURES OR OTHER THINGS AS MAY BE PERMITTED BY A MAJOR USE PERMIT ISSUED PURSUANT TO THE ZONING ORDINANCE OF THE COUNTY OF SAN DIEGO AND ALL NECESSARY PUBLIC UTILITY LINES.

(B) THAT IT SHALL NOT USE THE SUBJECT LAND FOR ANY PURPOSE EXCEPT AS OPEN SPACE TO BE MAINTAINED IN A NATIVE STATE, PRECLUDING VEGETATION REMOVAL, EXCEPT FOR FIRE BREAKS, SEWER AND WATER LINES, ACCESS ROADS, DRIVEWAYS AND SIGHT DISTANCE ON CIRCULATION ROADS AS APPROVED BY AND TO THE SATISFACTION OF THE DIRECTOR OF PLANNING AND LAND USE WITHOUT THE WRITTEN AUTHORIZATION OF THE COUNTY OF SAN DIEGO OR ITS SUCCESSORS OR ASSIGNS.

(C) THAT IT SHALL NOT EXCAVATE OR GRADE OR PERMIT ANY EXCAVATING OR GRADING TO BE DONE, OR PLACE OR ALLOW TO BE PLACED ANY SAND, SOIL, ROCK, GRAVEL OR OTHER MATERIAL WHATSOEVER ON THE SUBJECT LAND WITHOUT THE WRITTEN PERMISSION OF THE COUNTY OF SAN DIEGO OR ITS SUCCESSORS OR ASSIGNS; PROVIDED HOWEVER, THAT GRANTOR MAY EXCAVATE, GRADE OR PLACE SAND, SOIL, ROCK OR GRAVEL OR OTHER MATERIAL ON THE SUBJECT LAND AS MAY BE PERMITTED BY A MAJOR USE PERMIT ISSUED PURSUANT TO THE ZONING ORDINANCE OF THE COUNTY OF SAN DIEGO, AND ALL NECESSARY PUBLIC UTILITY LINES.

(D) THAT THE TERMS, COVENANTS AND CONDITIONS SET FORTH HEREIN MAY BE SPECIFICALLY ENFORCED OR ENJOINED BY PROCEEDINGS IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA.

THE GRANT OF THIS EASEMENT AND ITS ACCEPTANCE BY THE COUNTY OF SAN DIEGO SHALL NOT AUTHORIZE THE PUBLIC OR ANY MEMBERS THEREOF TO USE OR ENTER UPON ALL OR ANY PORTION OF THE SUBJECT LAND, IT BEING UNDERSTOOD THAT THE PURPOSE OF THIS EASEMENT IS SOLELY TO RESTRICT THE USES TO WHICH THE SUBJECT LAND MAY BE PUT.

THIS EASEMENT SHALL BIND THE GRANTOR AND ITS SUCCESSORS AND ASSIGNS.

PACIFIC RIO DEVELOPMENT, INC., A CALIFORNIA CORPORATION, AS OWNER

BY _____
M. KAWABATA EXECUTIVE VICE PRESIDENT

BY T. Hoshino
T. HOSHINO SECRETARY/TREASURER

TICOR TITLE INSURANCE COMPANY OF CALIFORNIA, A CALIFORNIA CORPORATION, AS TRUSTEE UNDER DEEDS OF TRUST RECORDED MAY 25, 1984, AS FILE/PAGE 84-197022, IN BOOK 1984 OF OFFICIAL RECORDS; RECORDED JUNE 4, 1984, AS FILE/PAGE 84-208435, AND RE-RECORDED SEPTEMBER 28, 1984, AS FILE/PAGE 84-369955, BOTH IN BOOK 1984 OF OFFICIAL RECORDS;

RECORDED JUNE 11, 1984, AS FILE/PAGE 84-218200, IN BOOK 1984 OF OFFICIAL RECORDS.

BY _____
TITLE ASSISTANT VICE PRESIDENT

BY _____
TITLE ASSIST. SECRETARY

SECURITY UNION TITLE INSURANCE COMPANY, A CALIFORNIA CORPORATION, AS SUCCESSOR TRUSTEE UNDER DEEDS OF TRUST RECORDED JULY 30, 1981, AS FILE/PAGE 81-240965, IN BOOK 1981 OF OFFICIAL RECORDS; RECORDED AUGUST 11, 1981, AS FILE/PAGE 81-254964 IN BOOK 1981 OF OFFICIAL RECORDS;

BY: _____
TITLE _____

BY: _____
TITLE _____

WE, COUNTY TREASURER-TAX COLLECTOR OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA AND DIRECTOR, DEPARTMENT OF PUBLIC WORKS OF SAID COUNTY, HEREBY CERTIFY THAT THERE ARE NO UNPAID SPECIAL ASSESSMENTS OR BONDS WHICH MAY BE PAID IN FULL, SHOWN BY THE BOOKS OF OUR OFFICES, AGAINST THE TRACT OR SUBDIVISION, OR ANY PART THEREOF SHOWN ON THE ANNEXED MAP AND DESCRIBED IN THE CAPTION THEREOF.

PAUL BOLAND
COUNTY TREASURER/TAX COLLECTOR

BY: Denise S. Pelletier
DEPUTY

DATED: 12-27-90 DSP
~~10-31-90~~

GRANVILLE M. BOWMAN, DIRECTOR
DEPARTMENT OF PUBLIC WORKS

BY: Charles E. Moore
FOR DIRECTOR

DATED: 12-19-90.

THE OLIVENHAIN MUNICIPAL WATER DISTRICT HEREBY ACCEPTS THE GRANT OF EASEMENTS DESCRIBED HEREIN, INCLUDING ALL TERMS AND CONDITIONS CONTAINED IN THE CERTIFICATE GRANTING EASEMENTS WITHIN PRIVATE STREETS GRANTED TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT ON COUNTY OF SAN DIEGO TRACT NO. 4413, MAP NO. 11372, RECORDED NOVEMBER 21, 1985. THE OLIVENHAIN MUNICIPAL WATER DISTRICT CONSENTS TO THE RECORDATION OF THIS MAP AND HAS AUTHORIZED ITS GENERAL MANAGER TO SIGN THIS CERTIFICATE PURSUANT TO BOARD RESOLUTION NO. 87-01, ADOPTED JANUARY 15, 1987.

OLIVENHAIN MUNICIPAL WATER DISTRICT

DATE: 11-14-90

BY: William Hedrick

GENERAL MANAGER

THE SIGNATURES OF THE PARTIES LISTED BELOW, OWNERS OF EASEMENTS PER DOCUMENTS NOTED BELOW HAVE BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 SUBSECTION (a) (3) (A) (i) OF THE SUBDIVISION MAP ACT, THEIR INTEREST IS SUCH THAT IT CANNOT RIPEN INTO A FEE TITLE AND SAID SIGNATURES ARE NOT REQUIRED BY THE GOVERNING BODY.

1. SAN DIEGO GAS AND ELECTRIC COMPANY, HOLDER OF EASEMENTS RECORDED JULY 9, 1968 AS FILE NO. 114663, ALL OF OFFICIAL RECORDS.
2. THE COUNTY OF SAN DIEGO, HOLDER OF AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY FOR PUBLIC RIGHT OF WAY RECORDED NOVEMBER 13, 1987 AS FILE NO. 87-637446 OF OFFICIAL RECORDS.
3. THE SIGNATURE OF ROGER R. REVELLE, ET AL, HOLDER OF EASEMENTS RECORDED JANUARY 25, 1980 AS FILE NO. 80-028938 AND MARCH 3, 1982 AS FILE NO. 82-058708 BOTH OF OFFICIAL RECORDS.
4. THE SIGNATURE OF RANCHO CIELO 183, A CALIFORNIA GENERAL PARTNERSHIP, HOLDER OF AN EASEMENT RECORDED 1-10-91 AS FILE NO. 91-001282 4 OF OFFICIAL RECORDS.

I, KATHRYN A NELSON, CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO, CERTIFY THAT SAID BOARD OF SUPERVISORS HAS APPROVED THIS MAP, HAS ACCEPTED ON BEHALF OF THE COUNTY OF SAN DIEGO THE SEWER EASEMENTS AS DEDICATED ON SAID MAP AND HAS ACCEPTED THE GRANT OF AN EASEMENT FOR OPEN SPACE OVER, UPON, ACROSS AND UNDER ALL OF LOTS 110-115 INCLUSIVE AND A PORTION OF LOTS 56-58 INCLUSIVE, 60-67 INCLUSIVE, 71-77 INCLUSIVE, 81-109 INCLUSIVE, EXCEPTING THEREFROM ANY EXISTING AND/OR PROPOSED SLOPE, DRAINAGE AND UTILITY EASEMENTS.

KATHRYN A. NELSON
CLERK OF THE BOARD OF SUPERVISORS

BY: P. Simon Carballo
DEPUTY

DATED: 1-9-91

BOARD OF SUPERVISORS COUNTY SEAL SAN DIEGO COUNTY CALIFORNIA

I, DAVID L. GOERTZEN A LICENSED LAND SURVEYOR, STATE THAT THE SURVEY OF THIS SUBDIVISION WAS MADE BY ME OR UNDER MY DIRECTION BETWEEN AUGUST 1, 1988 AND DECEMBER 15, 1989 AND SAID SURVEY IS TRUE AND COMPLETE AS SHOWN; THAT THE MONUMENTS OF THE CHARACTER INDICATED HAVE BEEN SET OR FOUND OR WILL BE SET AS NOTED AT THE SUBDIVISION BOUNDARY CORNERS, AND I WILL SET ALL OTHER MONUMENTS OF THE CHARACTER AND AT THE POSITION INDICATED BY LEGEND IN THIS MAP WITHIN 30 DAYS AFTER THE COMPLETION OF THE REQUIRED IMPROVEMENTS AND SUCH MONUMENTS ARE OR WILL BE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED (SEE LEGEND ON SHEET 3).

DAVID L. GOERTZEN
LS 6030

MY REGISTRATION EXPIRES ON 6/30/93

LICENSED LAND SURVEYOR DAVID L. GOERTZEN Exp. 6/30/93 No. 6030 STATE OF CALIFORNIA

I, GRANVILLE M. BOWMAN, COUNTY ENGINEER, CERTIFY THAT I HAVE EXAMINED THIS MAP; THAT THE SUBDIVISION IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP, AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL THE PROVISIONS OF THE SUBDIVISION MAP ACT AND DIVISION 1 OF TITLE 8 OF THE SAN DIEGO COUNTY CODE HAVE BEEN COMPLIED WITH; AND THAT I AM SATISFIED THAT THIS MAP IS TECHNICALLY CORRECT.

GRANVILLE M. BOWMAN
COUNTY ENGINEER
RCE 13681

BY: Charles E. Moore
CHARLES E. MOORE L.S. 3068

LICENSED LAND SURVEYOR CHARLES E. MOORE No. L.S. 3068 Exp. 6-30-92 CALIFORNIA

FILE NO. 91-001442

I, ANNETTE EVANS, RECORDER OF THE COUNTY OF SAN DIEGO, HEREBY CERTIFY THAT I HAVE ACCEPTED FOR RECORDATION THIS MAP FILED AT THE REQUEST OF DAVID L. GOERTZEN THIS 9th DAY OF January, 19 91, AT 4:30 O'CLOCK, PM.

FEE: $ 47.00 RP
1.00 MG

ANNETTE EVANS
COUNTY RECORDER

BY: Edna R. Cruz
DEPUTY

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
4583 GREENWICH DR., SUITE 200, SAN DIEGO, CA 92122 (619) 457-1999

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229--2

COUNTY OF SAN DIEGO TRACT NO. 4229-2

STATE OF CALIFORNIA)
COUNTY OF San Diego)

ON November 29, 1993 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED David G. Pratt (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE ~~ASST. VICE~~ PRESIDENT AND Michael G. Dillon, (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE ASSISTANT SECRETARY OF TICOR TITLE INSURANCE COMPANY OF CALIFORNIA, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT AS TRUSTEE AND (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE PERSONS WHO EXECUTED THE SAME ON BEHALF OF SAID CORPORATION, AND ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE SAME AS TRUSTEE PURSUANT TO ITS BYLAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

WITNESS MY HAND.

MY COMMISSION EXPIRES 8-27-93.

Lisa M. Sheyday Lisa M. Sheyday
NOTARY PUBLIC IN AND FOR SAID STATE. (PRINT NAME)

PRINCIPAL PLACE OF BUSINESS San Diego.
COUNTY

STATE OF CALIFORNIA)
COUNTY OF San Diego)

ON 11-6-92 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED Richard A. Vallejo (PERSONALLY KNOWN TO ME) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE Asst Vice PRESIDENT AND Bill Schuffert (PERSONALLY KNOWN TO ME) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE ASST. SECRETARY OF SECURITY UNION TITLE INSURANCE COMPANY, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT AS TRUSTEE AND (PERSONALLY KNOWN TO ME) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSONS WHO EXECUTED THE SAME ON BEHALF OF SAID CORPORATION, AND ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE SAME AS TRUSTEE PURSUANT TO ITS BYLAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

WITNESS MY HAND.

MY COMMISSION EXPIRES 11/19/93.

John J. Vars, Jr.
NOTARY PUBLIC IN AND FOR SAID STATE. (PRINT NAME) John J. Vars, Jr.

PRINCIPAL PLACE OF BUSINESS San Diego.
COUNTY

STATE OF CALIFORNIA)
COUNTY OF Los Angeles)

ON 11/29/93 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED M. KAWABATA ~~(PERSONALLY KNOWN TO ME)~~ (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE EXEC. VICE PRESIDENT AND T. HOSHINO ~~(PERSONALLY KNOWN TO ME)~~ (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE ~~TREASURER~~ SECRETARY OF PACIFIC CIELO DEVELOPMENT, INC., A CALIFORNIA CORPORATION, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT ~~(PERSONALLY KNOWN TO ME)~~ (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSONS WHO EXECUTED THE SAME ON BEHALF OF SAID CORPORATION, AND ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE WITHIN INSTRUMENT PURSUANT TO ITS BYLAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

WITNESS MY HAND.

OFFICIAL SEAL
ROBERT I TREITLER
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My comm. expires MAR 12, 1993

MY COMMISSION EXPIRES ~~_____~~.

Robert I. Treitler Robert I. Treitler
NOTARY PUBLIC IN AND FOR SAID STATE. (PRINT NAME)

PRINCIPAL PLACE OF BUSINESS L.A.
COUNTY

FEB

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6353 GREENWICH DR., SUITE 200, SAN DIEGO, CA 92122 (619) 457-1515

JN 36700

GRADING PLAN L- NONE

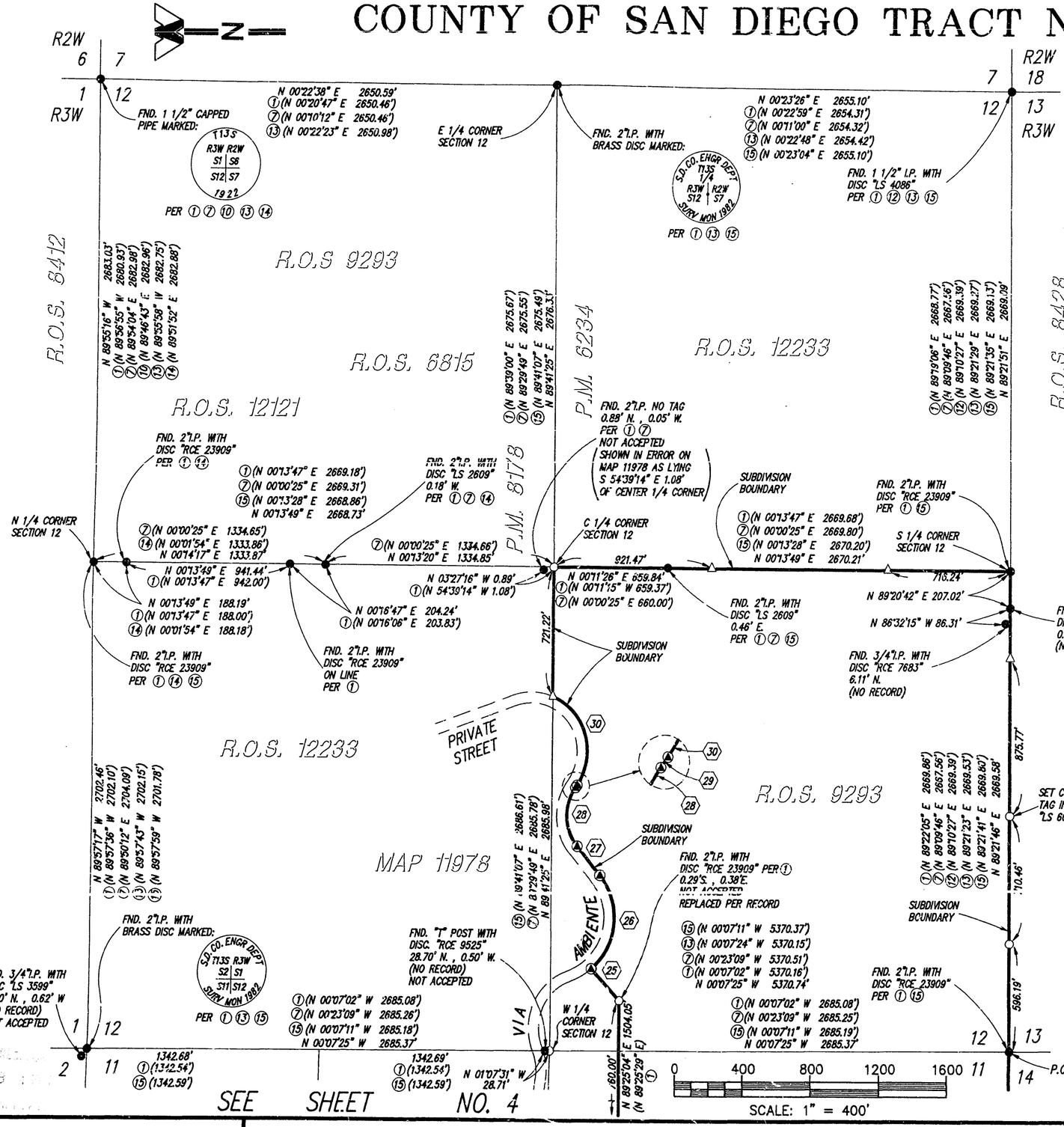
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

SHEET 3 OF 22 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-2



PROCEDURE OF SURVEY

LEGEND

- ○----SET 2" x 24" IRON PIPE AND DISC MARKED LS 6030 PER THIS MAP, UNLESS OTHERWISE SHOWN.
- △----INDICATES 2" x 24" IRON PIPE WITH DISC STAMPED LS 6030 SAID MONUMENT TO BE SET AFTER CONSTRUCTION AND PRIOR TO FINAL INSPECTION (SEE DEFERRED MONUMENTATION CERTIFICATE ON SHEET NO. 1).
- ●----INDICATES A FOUND MONUMENT AS DESCRIBED HEREON.
- ⊙----INDICATES 2" IRON PIPE WITH DISC STAMPED LS 6030. SAID MONUMENTATION WAS SHOWN ON MAP NO. COUNTY OF SAN DIEGO TRACT NO. 4227-2.
- ◭----INDICATES 2" IRON PIPE WITH DISC STAMPED RCE 23909. SAID MONUMENTATION WAS SHOWN ON MAP NO. 11978 COUNTY OF SAN DIEGO TRACT NO. 4229-1.
- (R) INDICATES A RADIAL BEARING.
- I.P. INDICATES AN IRON PIPE.
- FND. INDICATES FOUND.
- 17 SHEET NUMBER.
- — — — SHEET LIMITS.
- ( ) INDICATES RECORD DATA.

① RECORD PER MAP 11978
② RECORD PER MAP 12191
③ RECORD PER PARCEL MAP 963
④ RECORD PER PARCEL MAP 9706
⑤ RECORD PER RECORD OF SURVEY 2716
⑥ RECORD PER RECORD OF SURVEY 4651
⑦ RECORD PER RECORD OF SURVEY 6815
⑧ RECORD PER RECORD OF SURVEY 7106
⑨ RECORD PER RECORD OF SURVEY 7788
⑩ RECORD PER RECORD OF SURVEY 8412
⑪ RECORD PER RECORD OF SURVEY 8415
⑫ RECORD PER RECORD OF SURVEY 8428
⑬ RECORD PER RECORD OF SURVEY 9293 (CONVERTED GRID DISTANCES TO GROUND DISTANCES)
⑭ RECORD PER RECORD OF SURVEY 12121
⑮ RECORD PER RECORD OF SURVEY 12233

No.	Delta or Brg	Radius	Length
⟨1⟩	28°06'13"	270.00'	132.44'
	(28°06'07"	270.00'	132.43') ①
2	15°59'04"	1230.00'	343.15'
3	N26°18'35"E		206.00'
	(N26°19'00"E		206.00') ①
4	37°22'00"	490.00'	319.56'
5	N63°40'35"E		426.71'
6	(N63°41'00"E		426.71') ①
	44°28'00"	750.00'	582.07'
7	N19°12'35"E		144.26'
	(N19°13'00"E		144.26') ①
8	54°01'00"	570.00'	537.38'
9	N73°13'35"E		83.54'
	(N73°14'00"E		83.54') ①
10	68°16'00"	330.00'	393.19'
11	47°05'05"	270.00'	221.88'
12	71°43'02"	355.00'	444.35'
13	53°18'50"	270.00'	251.24'
14	N56°21'32"W (R)		242.00'
	(N56°21'07"W		242.00') ①
15	N72°17'34"E		170.00'
	(N72°17'59"E		170.00') ①
16	N10°18'32"W		295.00'
	(N10°18'07"W		295.00') ①
17	N70°25'26"W (R)		217.00'
	(N70°25'01"W		217.00') ①
18	19°46'17"	270.00'	93.17'
19	29°40'00"	330.00'	170.87'
20	40°58'44"	270.00'	193.11'
21	N50°39'35"E		120.11'
	(N50°40'00"E		120.11') ①
22	56°17'44"	270.00'	265.29'
23	N16°57'19"E (R)		130.00'
	(N16°57'44"E		130.00') ①
24	N45°24'27"W		325.48'
	(N45°24'02"W		325.48') ①
25	N46°58'15"E		239.42'
	(N46°58'35"E		239.42') ①
26	89°11'00"	370.00'	575.92'
27	N50°06'35"E		208.94'
	(N50°07'00"E		208.94') ①
28	74°30'00"	270.00'	351.07'
29	N55°23'25"W		15.90'
	(N55°23'00"W		15.90') ①
30	102°33'09"	330.00'	590.66'

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6343 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619)457-890

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

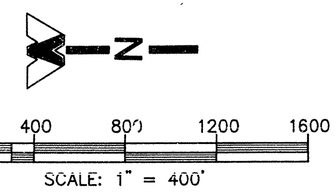
MAP NO. 12764

SHEET 4 OF 22 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SEE SHEET NO. 3

PROCEDURE OF SURVEY



NOTE:
FOR CURVE OR BEARING INFORMATION
SEE SHEET NO. 3

FND. 2"I.P. WITH BRASS DISC MARKED: SD. CO. ENGR. DEPT T13S R3W S2 S1 S11 S12 SURV MON 1982 PER ① ⑬ ⑮

FND. 3/4"I.P. WITH DISC "LS 3599" 0.20' N., 0.62' W (NO RECORD)

FND. 1"I.P. WITH DISC "LS 1162" PER ① ⑥ ⑨ ⑬ ⑮

FND. 2"I.P. WITH BRASS DISC MARKED: SD. CO. ENGR. DEPT T13S R3W S11 1/4 S14 SURV MON 1982 PER ① ⑬ ⑮

FND. 2"I.P. WITH DISC "LS 4368" PER ① ⑪ ⑮

FND. 2"I.P. WITH DISC "RCE 23909" PER ① ⑮

FND. "T" POST WITH DISC. "RCE 9525" 28.70' N., 0.50' W. (NO RECORD)

FND. 3/4"I.P. WITH DISC "LS 3599" 0.12'N., 0.09'E. PER ⑮

FND. 3/4"I.P. WITH DISC "LS 3599" 0.19'N., 0.06'W. PER ⑮

2" I.P. WITH DISC RCE 23909 PER ① NOT FOUND

FND. 2"I.P. WITH DISC "RCE 23909" PER ① 0.41'S., 0.51'E. NOT ACCEPTED REPLACED PER RECORD

FND. DISC IN ROCK "RCE 23909" PER ① 0.37'S., 0.60'E. NOT ACCEPTED REPLACED PER RECORD

FND. 2"I.P. WITH DISC "RCE 23909" PER ① 0.40'S., 0.76'E. NOT ACCEPTED REPLACED PER RECORD

FND. 2"I.P. WITH DISC "RCE 23909" PER ① 0.52'S., 0.78'E. NOT ACCEPTED REPLACED PER RECORD

SET TAG WITH EPOXY IN BOULDER "LS 6030"

SET TAG WITH EPOXY IN BOULDER "LS 6030"

FND. 5/8" "□" PIN WITH DISC "RCE 6404" 0.03'S., 0.06'W. ACCEPTED AS FND. 1/2" "□" PIN AS SHOWN PER ⑮

FND. 2"I.P. WITH DISC "LS 4306" PER R.O.S. 12265

FND. 2"I.P. WITH DISC "LS 3065" PER ① ② ⑨ ⑬ ⑮

FND 3/4"I.P. WITH DISC "LS 3599" PER ① ⑮

2" I.P. WITH DISC RCE 23909 PER ① NOT FOUND

FND. 2"I.P. WITH DISC "RCE 23909" PER ① ②

P.O.B.

N 01°07'31" W 28.71'

E 1/4 CORNER SECTION 11

N 1/4 CORNER SECTION 11

C 1/4 CORNER SECTION 11

N 1/4 CORNER SECTION 14

C 1/4 CORNER SECTION 14

W 1/4 CORNER SECTION 11

W 1/4 CORNER SECTION 14

SUBDIVISION BOUNDARY

VIA AMBIENTE

PRIVATE STREET

CALLE AMBIENTE (SA 680)

BASIS OF BEARINGS

R.O.S. 12233

R.O.S. 9293

R.O.S. 4651

R.O.S. 7788

R.O.S. 7106

R.O.S. 8415

R.O.S. 2716

R.O.S. 9296

MAP 11978

PM 9706

PM 963

MAP 11979

MAP 12191

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619)457-899

JN 36700

GRADING PLAN L- NONE

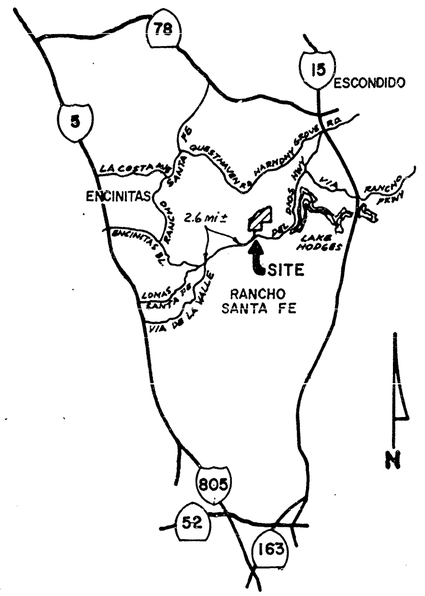
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

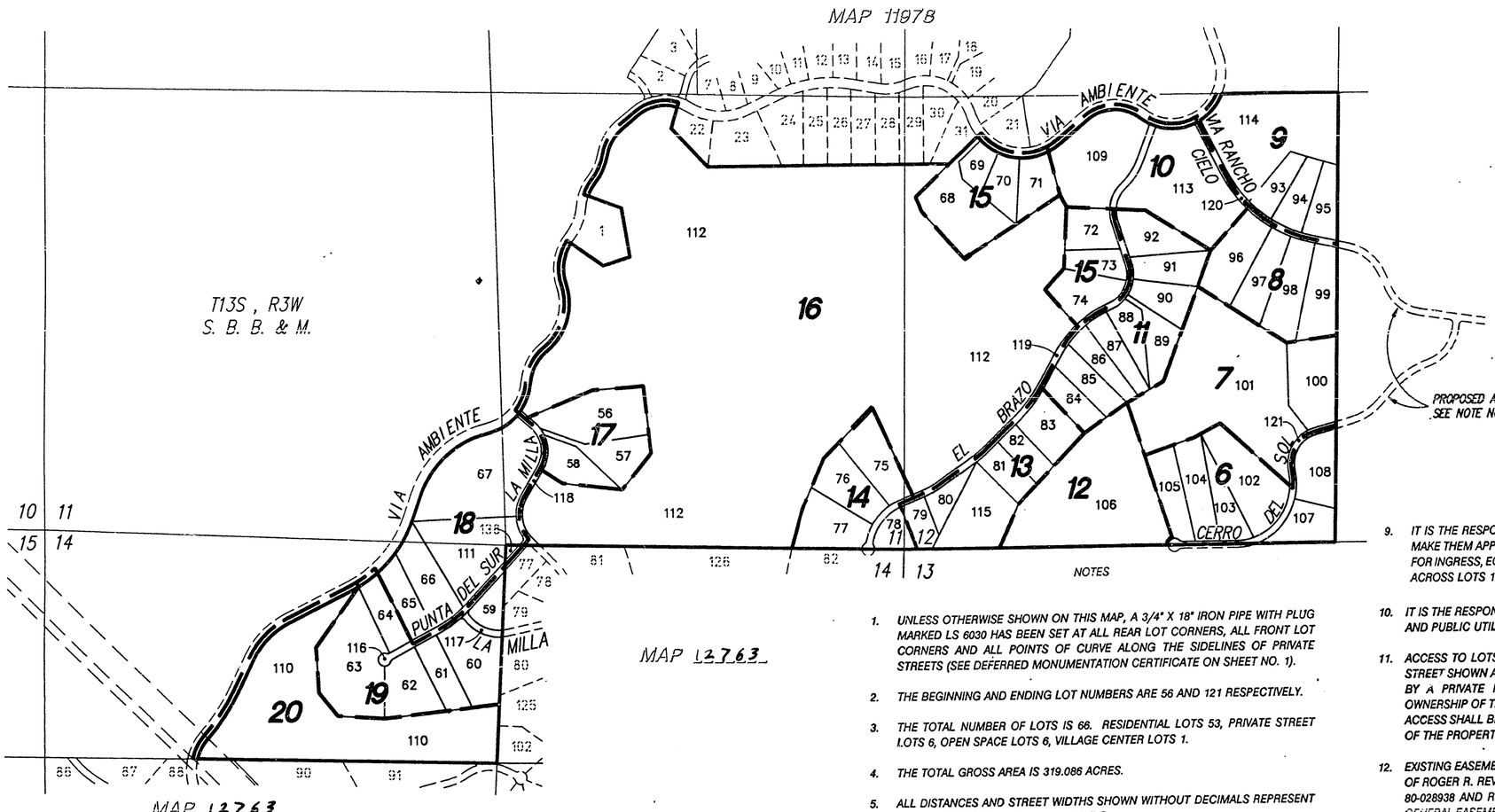
MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

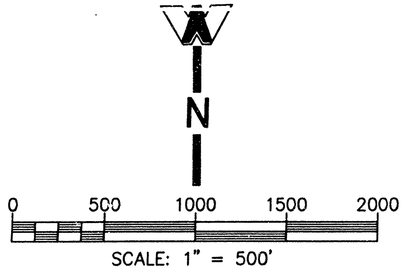
SHEET 5 OF 22 SHEETS



VICINITY MAP
NOT TO SCALE



KEY MAP



NOTES

1. UNLESS OTHERWISE SHOWN ON THIS MAP, A 3/4" X 18" IRON PIPE WITH PLUG MARKED LS 6030 HAS BEEN SET AT ALL REAR LOT CORNERS, ALL FRONT LOT CORNERS AND ALL POINTS OF CURVE ALONG THE SIDELINES OF PRIVATE STREETS (SEE DEFERRED MONUMENTATION CERTIFICATE ON SHEET NO. 1).
2. THE BEGINNING AND ENDING LOT NUMBERS ARE 56 AND 121 RESPECTIVELY.
3. THE TOTAL NUMBER OF LOTS IS 66. RESIDENTIAL LOTS 53, PRIVATE STREET LOTS 6, OPEN SPACE LOTS 6, VILLAGE CENTER LOTS 1.
4. THE TOTAL GROSS AREA IS 319.086 ACRES.
5. ALL DISTANCES AND STREET WIDTHS SHOWN WITHOUT DECIMALS REPRESENT THAT DISTANCE TO ZERO HUNDREDTHS.
6. THIS SUBDIVISION HAS A MINIMUM OF 100 SQUARE FEET OF SOLAR ACCESS FOR EACH EXISTING AND/OR PROPOSED DWELLING UNIT AS REQUIRED BY SECTION 81.401(N) OF THE SUBDIVISION ORDINANCE.
7. ACCESS FROM CALLE AMBIENTE, WHICH IS A PUBLICLY MAINTAINED ROAD, TO THE BOUNDARY OF THE SUBDIVISION CREATED BY THIS MAP WILL BE BY VIA AMBIENTE (LOT 76) OF MAP NO. 11979 AND (LOT 54) OF MAP NO. 11978 WHICH IS OVER PROPERTY THAT IS CONTIGUOUS OWNERSHIP OF THE SUBDIVIDER OF THE PROPERTY SHOWN ON THIS MAP.
8. ALL PRIVATE STREETS WILL BE VESTED IN RANCHO CIELO HOMEOWNERS ASSOCIATION. ALL LOT OWNERS WILL BE GRANTED A NON-EXCLUSIVE EASEMENT OVER SAID STREETS.
9. IT IS THE RESPONSIBILITY OF THE SUBDIVIDER TO GRANT EASEMENTS AND TO MAKE THEM APPURTENANT TO EACH RESIDENTIAL LOT AS SHOWN ON THIS MAP, FOR INGRESS, EGRESS, AND PUBLIC UTILITY PURPOSES OVER, UNDER, UPON AND ACROSS LOTS 116 - 121 INCLUSIVE AS SHOWN ON THIS MAP.
10. IT IS THE RESPONSIBILITY OF THE SUBDIVIDER TO PROVIDE INSURABLE ACCESS AND PUBLIC UTILITY EASEMENTS TO EACH LOT CREATED BY THIS MAP.
11. ACCESS TO LOTS 100 TO 108 AND 121 (CERRO DEL SOL) FROM THE PRIVATE STREET SHOWN AS VIA RANCHO CIELO (LOT 120) ON THIS MAP WILL BE SERVED BY A PRIVATE ROAD EASEMENT OVER PROPERTY THAT IS CONTIGUOUS OWNERSHIP OF THE SUBDIVIDER OF THE PROPERTY SHOWN ON THIS MAP. SAID ACCESS SHALL BE A MINIMUM OF 40 FEET WIDE AND FOR THE BENEFIT AND USE OF THE PROPERTY BEING DIVIDED.
12. EXISTING EASEMENTS FOR SEWER AND/OR WATER LINES AND ACCESS IN FAVOR OF ROGER R. REVELLE, ET AL, RECORDED JANUARY 25, 1980, AS FILE PAGE NO. 80-028938 AND RECORDED MARCH 3, 1982, AS FILE PAGE NO. 82-058708 ARE GENERAL EASEMENTS WITH NO LOCATION SET FORTH AND CANNOT BE PLOTTED ON THIS MAP.
13. EXISTING PRIVATE ROAD EASEMENT TO RANCHO CIELO 183, A CALIFORNIA GENERAL PARTNERSHIP RECORDED 1-10-91 AS FILE NO. 91-001824 OF OFFICIAL RECORDS.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS MAP IS THE NORTH LINE OF THE NW1/4 OF SECTION 14, T13S, R3W, S.B.M., SHOWN HEREON AS N88°06'35"W PER R.O.S. 9293. SAID BEARING AND THE BEARINGS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM (1927 DATUM) ZONE 6. QUOTED BEARINGS FROM REFERENCE MAPS OR DEEDS MAY OR MAY NOT BE IN TERMS OF SAID SYSTEM.

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GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

No.	Delta or Brg	Radius	Length
1	44°57'09"	26.00'	20.40'
2	63°30'32"	39.00'	43.23'
3	71°26'37"	39.00'	48.63'
4	134°57'09"	39.00'	91.86'
5	44°57'09"	26.00'	20.40'
6	269°54'18"	39.00'	183.72'

SEE SHEET NO. 7

SEE SHEET NO. 12

100

101

106

105
2.012 AC.

104
2.285 AC.

103
1.593 AC.

102
3.906 AC.

108
2.284 AC.

107
1.787 AC.

CERRO DEL SOL
LOT 121
(PRIVATE STREET)

PROPOSED ACCESS EASEMENT SEE NOTE NO. 11, SHEET NO. 5

EXISTING WATERLINE EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT PER DEED REC. 10-05-90 F/P 90-547257

EXISTING SEWER EASEMENT TO RANCHO CIELO SANITATION DISTRICT PER DEED REC. 09-21-90 F/P 90-518407

WATERLINE, APPURTENANCES AND ACCESS EASEMENT OVER LOT 121 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.

SUBDIVISION BOUNDARY

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 102-105 GRANTED HEREON.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 107 AND 108 GRANTED HEREON.

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

SEE NOTE 13 SHEET NO. 5

SEWER EASEMENT OVER ALL OF LOT 121 DEDICATED HEREON.

EXISTING PRIVATE ROAD EASEMENT REC. 1-10-91 F/P 91-0012821

S 1/4 CORNER SECTION 12 T13S, R3W

FOUND 2"I.P. WITH DISC "RCE 23909"

SUBDIVISION BOUNDARY

SUBDIVISION BOUNDARY

N

0 60 120 180 240

SCALE: 1" = 60'

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

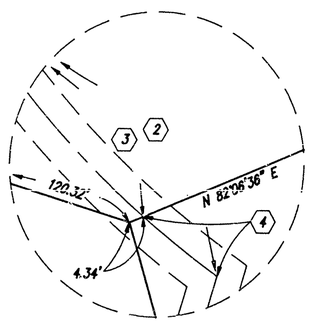
COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 7 OF 22 SHEETS

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-001287



DETAIL "A"
NO SCALE

SEE SHEET NO. 8

SEE SHEET NO. 11

SEE SHEET NO. 12

SEE SHEET NO. 6

91 96 97 98 99 90 89 88 87 86 85 106 105 104 103 102 101 100 121 108

58.68' R=700.00' L=186.99' D=15°18'20" 231.62' N 58°39'27" W 218.98' 647.52' 76.60' D=14°05'13" L=71.30' 120.32' 22.49'

N 63°47'26" W 41.00'

N 15°07'26" W 117.00'

N 82°06'36" E 306.43' 310.77'

N 00°13'49" E 2670.21' 488.76' 511.65'

0 80 160 240 320
SCALE: 1" = 80'

215.00' 599.13' N 20°14'04" E 828.06' 325.45'

N 74°52'34" E 114.98' D=46°54'15" L=237.40' D=60°59'28" R=290.00' L=308.70'

SEE DETAIL "A" THIS SHEET

52.88' 37.23'

OPEN SPACE EASEMENT OVER A PORTION OF LOT 100 GRANTED HEREON.

N 44°44'12" W 143.08' N 54°47'51" E 173.04' N 88°45'16" E 193.40' N 22°39'01" W 201.91'

N 45°22'04" E 413.28' N 31°17'35" E 119.36' 82.13'

N 01°51'40" W 212.26' R=290.00' D=41°49'11" L=211.68' 373.72' 108.58'

N 86°56'23" E 235.06'

391.63' N 22°46'32" E

N 39°30'30" E 270.61'

N 25°20'19" W (R) N 15°58'19" W (R) 191.47' D=45°26'59" R=290.00' L=230.04' 7.5' 15'

N 42°19'24" W 35.62'

N 74°01'41" E 143.68' N 74°01'41" E 137.87' 20.00' 41.65'

SUBDIVISION BOUNDARY

PROPOSED ACCESS EASEMENT SEE NOTE NO. 11, SHEET NO. 5

EXISTING WATERLINE EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT PER DEED REC. 10-05-90 F/P 90-547257

EXISTING SEWER EASEMENT TO RANCHO CIELO SANITATION DISTRICT PER DEED REC. 09-21-90 F/P 90-518407

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 121 GRANTED HEREON TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEE NOTE 13 SHEET NO. 5

SEWER EASEMENT OVER ALL OF LOT 121 DEDICATED HEREON.

N 77°58'43" W 137.61' (TIE)

N 27°10'50" W 81.48' N 83°10'34" E 152.85'

OPEN SPACE EASEMENT OVER A PORTION OF LOT 101 GRANTED HEREON.

N 19°17'58" W 332.43' 855.86' N 62°53'19" E 176.31' 134.56' 323.36' 137.38' 41.75' N 70°43'09" E 185.98'

N 49°27'40" W 474.59' 571.62' 97.05'

N 77°11'12" E (R) N 63°23'14" E (R)

D=77°28'29" L=397.48' R=290.00' D=60°29'25" L=232.27' R=220.00' D=86°50'29" L=303.73' R=200.00' D=86°50'29" L=303.16' 20' 20'

D=102°10'34" R=330.00' L=624.16' L=5.88' D=102°10'34" R=350.00' L=624.16'

CERRO DEL SOL (PRIVATE STREET)

No.	Delta or Brg	Radius	Length
1	09°41'46"	700.00'	118.46'
2	25°50'45"	290.00'	130.82'
3	20°26'15"	290.00'	103.44'
4	05°24'30"	290.00'	27.37'
5	09°22'00"	220.00'	35.97'
6	16°59'05"	220.00'	65.22'
7	13°47'58"	330.00'	79.48'

101
15.064 AC.

100
3.411 AC.

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GRADING PLAN L- NONE

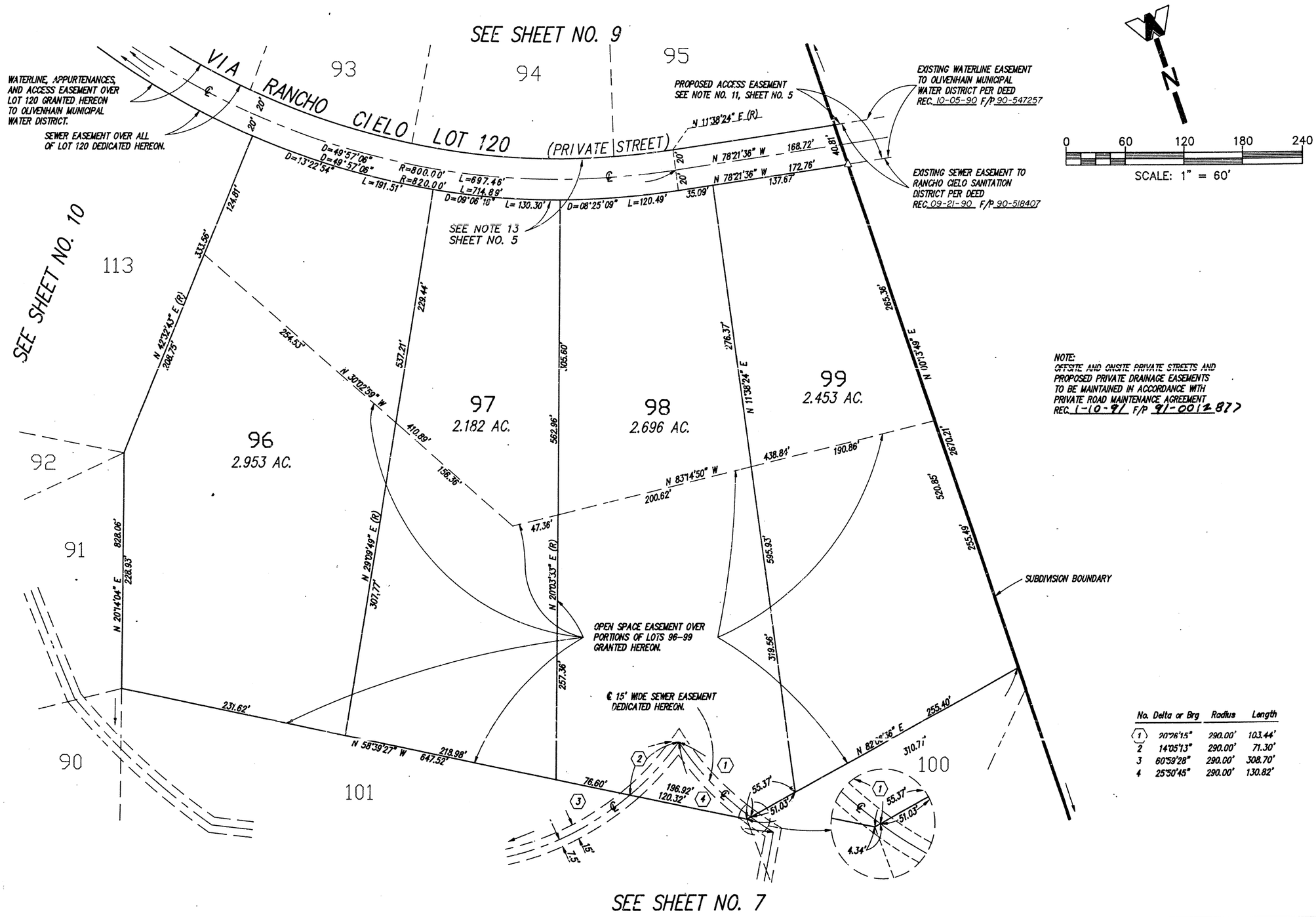
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 8 OF 22 SHEETS



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

No.	Delta or Brg	Radius	Length
1	20°16'15"	290.00'	103.44'
2	14°05'13"	290.00'	71.30'
3	60°59'28"	290.00'	308.70'
4	25°50'45"	290.00'	130.82'

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GRADING PLAN L- NONE

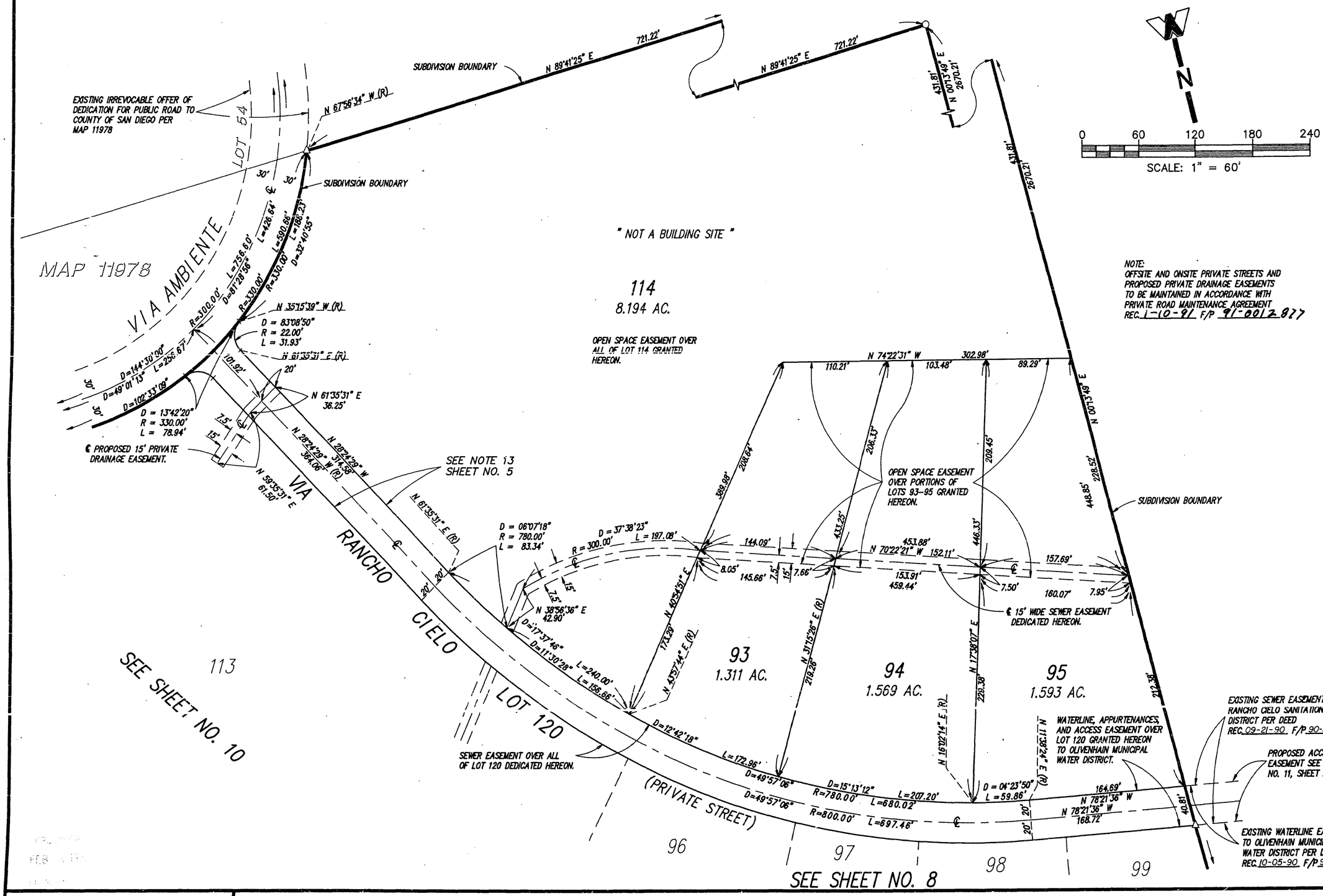
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 9 OF 22 SHEETS



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012827

N

0 60 120 180 240

SCALE: 1" = 60'

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 10 OF 22 SHEETS

No.	Delta or Brg	Radius	Length
1	N55°23'25"W	-----	15.90'
2	N55°23'25"W	-----	15.90'
3	07°08'41"	330.00'	41.15'
4	83°08'50"	22.00'	31.93'
5	N46°28'08"E	-----	10.98'
6	N46°28'08"E	-----	10.98'
7	08°13'11"	220.00'	31.56'
8	02°19'00"	220.00'	8.90'
9	N46°28'08"E	-----	10.98'
10	13°42'20"	330.00'	78.94'
11	83°08'50"	22.00'	31.93'
12	N79°00'25"W	-----	80.00'
13	N64°59'35"E	-----	50.41'
14	83°08'50"	22.00'	31.93'

MAP 11978

AMBIENTE

VIA

D=74°30'00" R=300.00' L=390.08'

D=74°30'00" R=270.00' L=351.07'

℄

SUBDIVISION BOUNDARY

LOT 54

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO. REC. 11-13-87 F/P 87-637446 O.R.

N 39°53'25" W (R)

N 50°06'35" E 208.94'

N 50°06'35" E 208.94'

N 53°59'35" E 264.00'

N 73°59'35" E

D=109°28'00" R=340.00' L=649.59'

D=99°11'00" R=370.00' L=575.99'

L=90.73' D=14°02'58"

227.84'

N 25°30'28" W (R)

N 15°57'30" W 155.29'

N 79°00'25" W 238.83'

N 27°27'53" E (R)

N 69°23'16" W (R)

N 70°59'35" E 116.00'

N 13°45'34" E (R)

D=144°30'00" R=300.00' L=756.60'

D=49°01'13" L=256.67'

D=102°33'09" R=330.00' L=590.66'

D=35°18'53" L=203.40'

L=102.69'

D=17°49'46"

N 21°33'20" W (R)

N 61°35'31" E (R)

N 69°23'16" W (R)

L=3.29' D=13°59'51"

247.02' 108.00'

N 17°29'35" E 90.00'

29.50'

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.

15' 7.5'

N 17°29'35" E 89.96'

N 69°23'16" W 114.00'

N 71°30'25" W 60.00'

"NOT A RESIDENTIAL BUILDING SITE"

VILLAGE CENTER

109

5.590 AC.

SEWER EASEMENT OVER ALL OF LOT 119 DEDICATED HEREON.

N 20°36'44" E 197.53'

N 20°36'44" E (R) 197.53'

N 69°23'16" W (R)

L=471.49' L=380.51' L=189.54'

D=25°51'24" R=380.00'

D=25°51'24" R=400.00'

D=25°51'24" R=420.00'

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 119 GRANTED HEREON TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT.

EL BRAZO LOT 119 (PRIVATE STREET)

"NOT A BUILDING SITE"

113

7.406 AC.

SUBDIVISION BOUNDARY

30' 30' 101.92' 20' 20' 20'

N 61°35'31" E 36.25'

15' 7.5'

N 28°24'29" W (R) 364.16'

N 28°24'29" W 314.58'

N 59°35'31" E 61.50'

SEE NOTE 13 SHEET NO. 5

114

SEE SHEET NO. 9

SEWER EASEMENT OVER ALL OF LOT 120 DEDICATED HEREON.

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 120 GRANTED HEREON TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT.

N 61°35'31" E (R)

L=99.46' D=06°56'56"

D=49°57'06" R=800.00' L=697.46'

D=19°02'49" R=820.00' L=272.59'

D=12°05'50" L=173.13'

℄ L=714.89'

7.5' 15'

402.46'

℄ 363.13'

N 38°56'36" E

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

N 42°32'43" E (R) 333.68'

OPEN SPACE EASEMENT OVER ALL OF LOT 113 GRANTED HEREON.

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-001(2877

71

N 80°06'04" W 392.30'

OPEN SPACE OVER A PORTION OF LOT 109 GRANTED HEREON.

N 25°51'24" W (R) 2550.79'

N 43°31'52" W (R)

N 43°31'52" W (R)

D=43°45'15" L=168.00' D=33°13'04" L=127.54' R=220.00' R=200.00' L=227.98'

D=43°45'15" L=205.19' R=180.00' L=137.46'

N 87°17'07" W (R) 180.00' 124.85' 55.15'

N 49°02'48" E 178.00' 55.90'

19.34'

N 65°27'12" W 340.44'

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

N 89°40'28" W 92.18'

61.69'

N 87°17'07" W (R) 269.16' 207.47'

112

72

92

96

N 59°09'19" W 487.37'

150.92'

SEE SHEET NO. 15

SEE SHEET NO. 8

SEE SHEET NO. 11

N

0 60 120 180 240

SCALE: 1" = 60'

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GRADING PLAN L- NONE

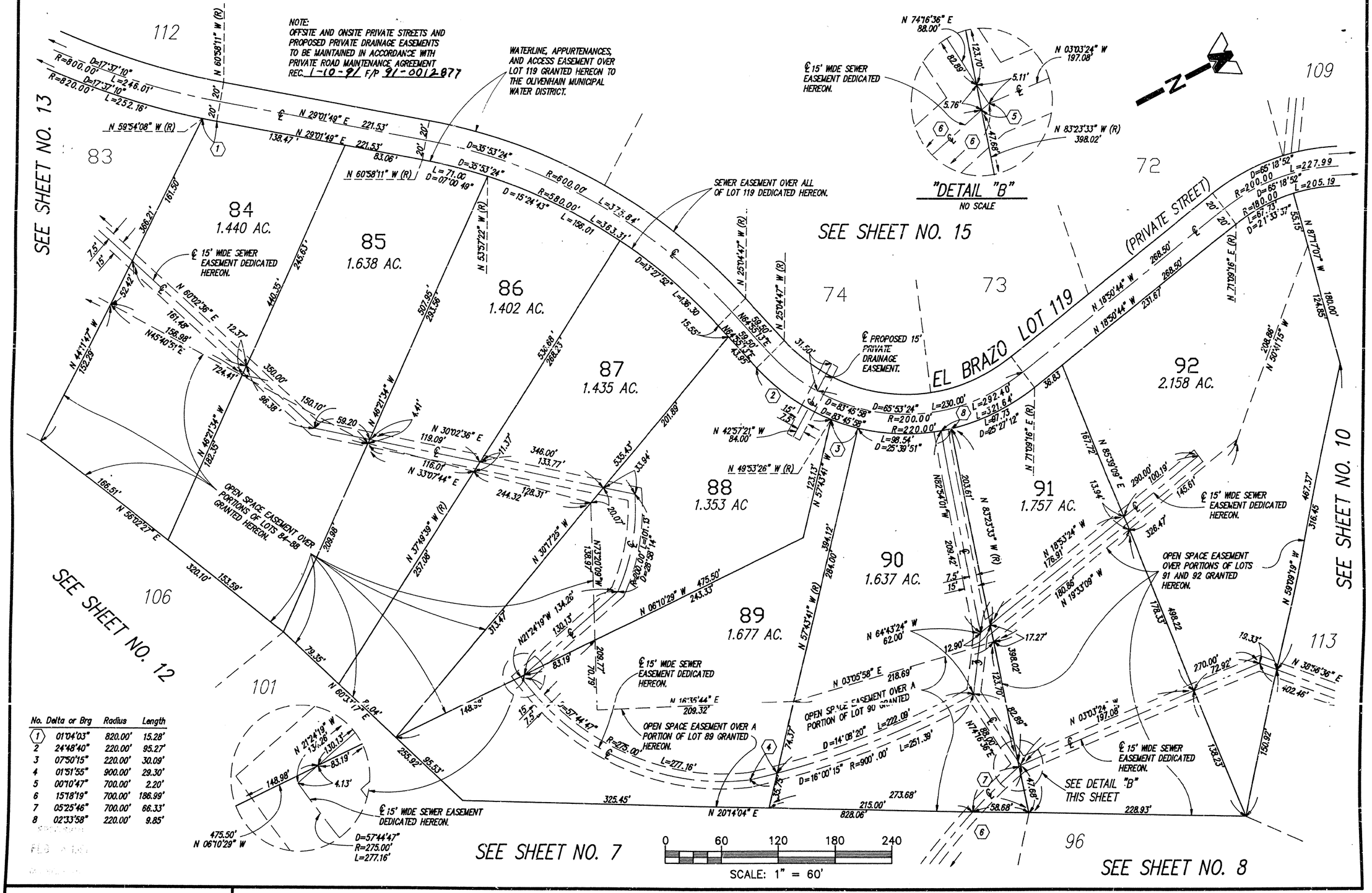
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

SHEET 11 OF 22 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-2



No.	Delta or Brg	Radius	Length
1	01°04'03"	820.00'	15.28'
2	24°48'40"	220.00'	95.27'
3	07°50'15"	220.00'	30.09'
4	01°51'55"	900.00'	29.30'
5	00°10'47"	700.00'	2.20'
6	15°18'19"	700.00'	186.99'
7	05°25'46"	700.00'	66.33'
8	02°33'58"	220.00'	9.85'

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GRADING PLAN L- NONE

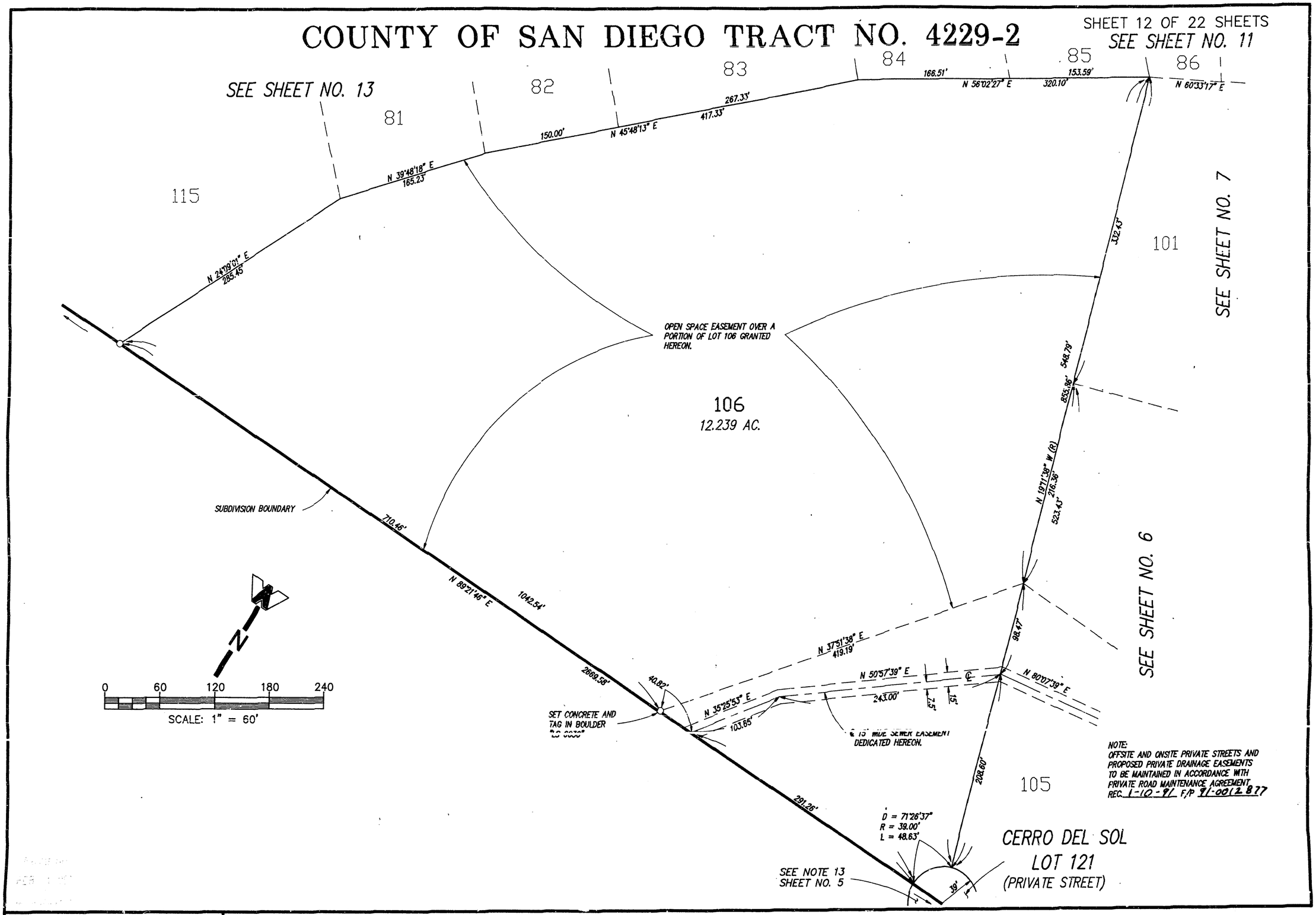
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 12 OF 22 SHEETS



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

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GRADING PLAN L- NONE

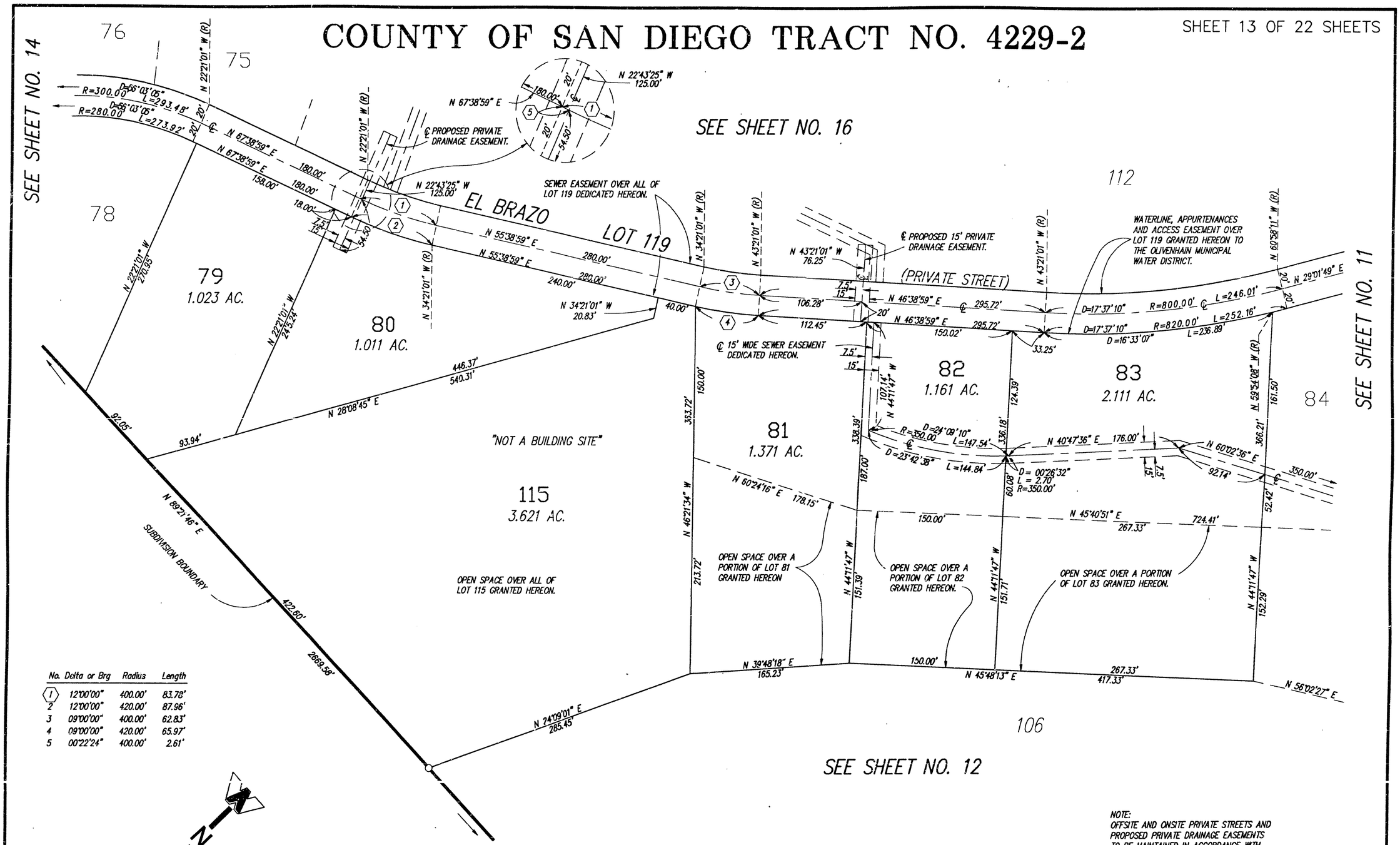
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 13 OF 22 SHEETS



No.	Delta or Brg	Radius	Length
1	12°00'00"	400.00'	83.78'
2	12°00'00"	420.00'	87.96'
3	09°00'00"	400.00'	62.83'
4	09°00'00"	420.00'	65.97'
5	00°22'24"	400.00'	2.61'

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

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JN 36700

GRADING PLAN L- NONE

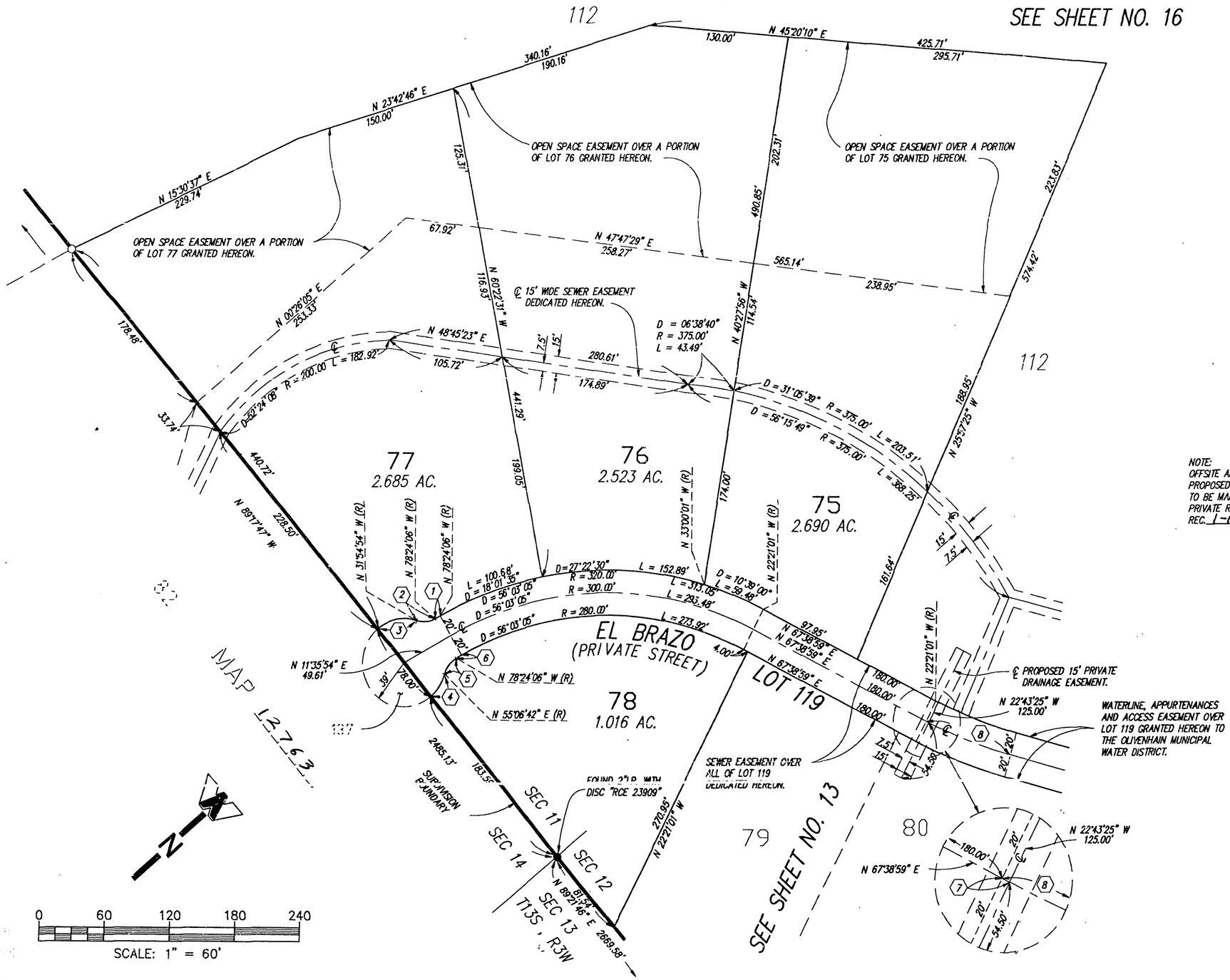
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

SHEET 14 OF 22 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-2



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

No.	Delta or Brg	Radius	Length
1	N11°35'54"E	----	5.37'
2	46°29'12"	22.00'	17.85'
3	57°22'53"	39.00'	39.06'
4	35°35'30"	39.00'	24.23'
5	46°29'12"	22.00'	17.85'
6	N11°35'54"E	----	5.37'
7	00°22'24"	400.00'	2.61'
8	12°00'00"	400.00'	83.78'

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GRADING PLAN L- NONE

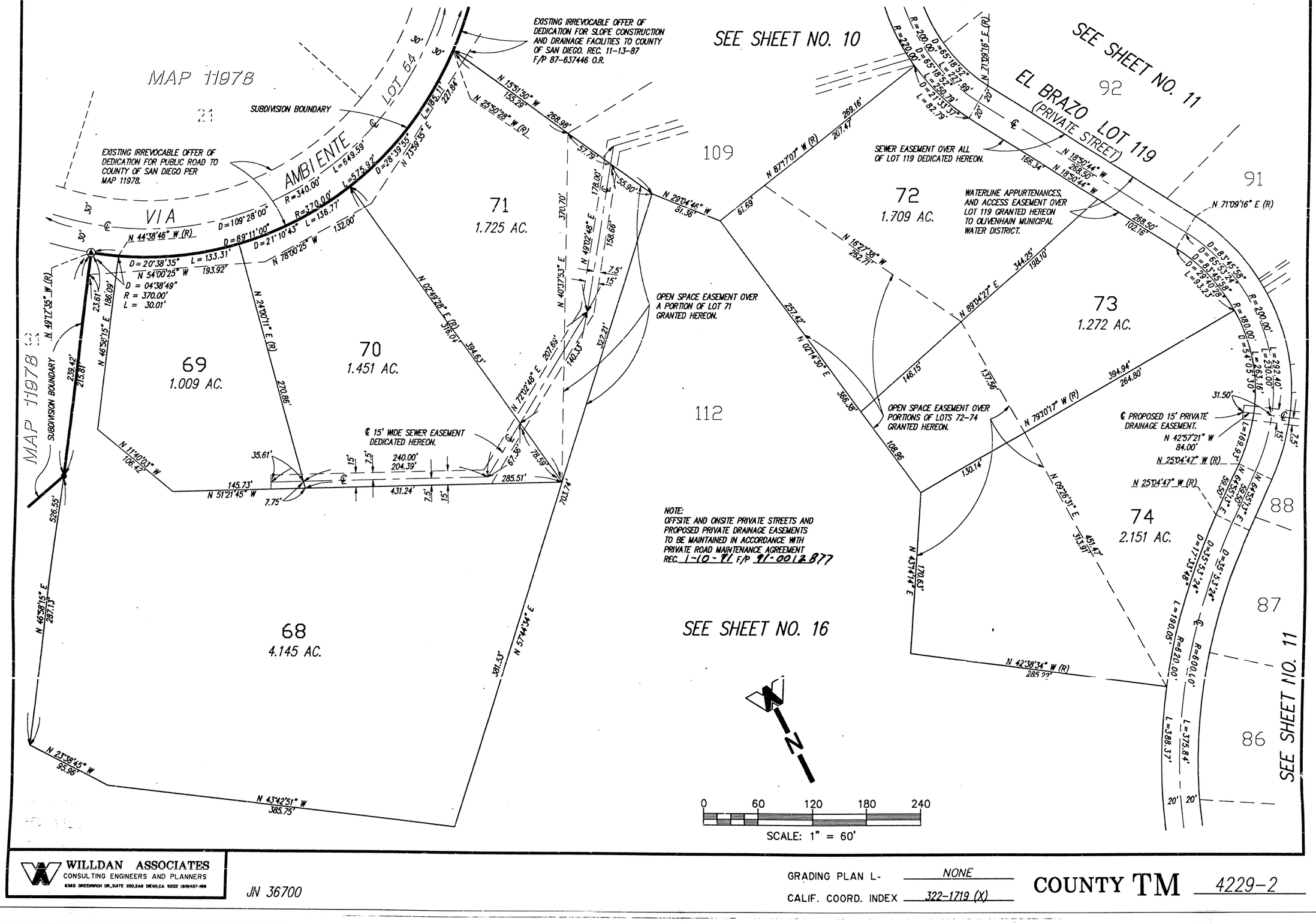
CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 15 OF 22 SHEETS



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CONSULTING ENGINEERS AND PLANNERS
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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

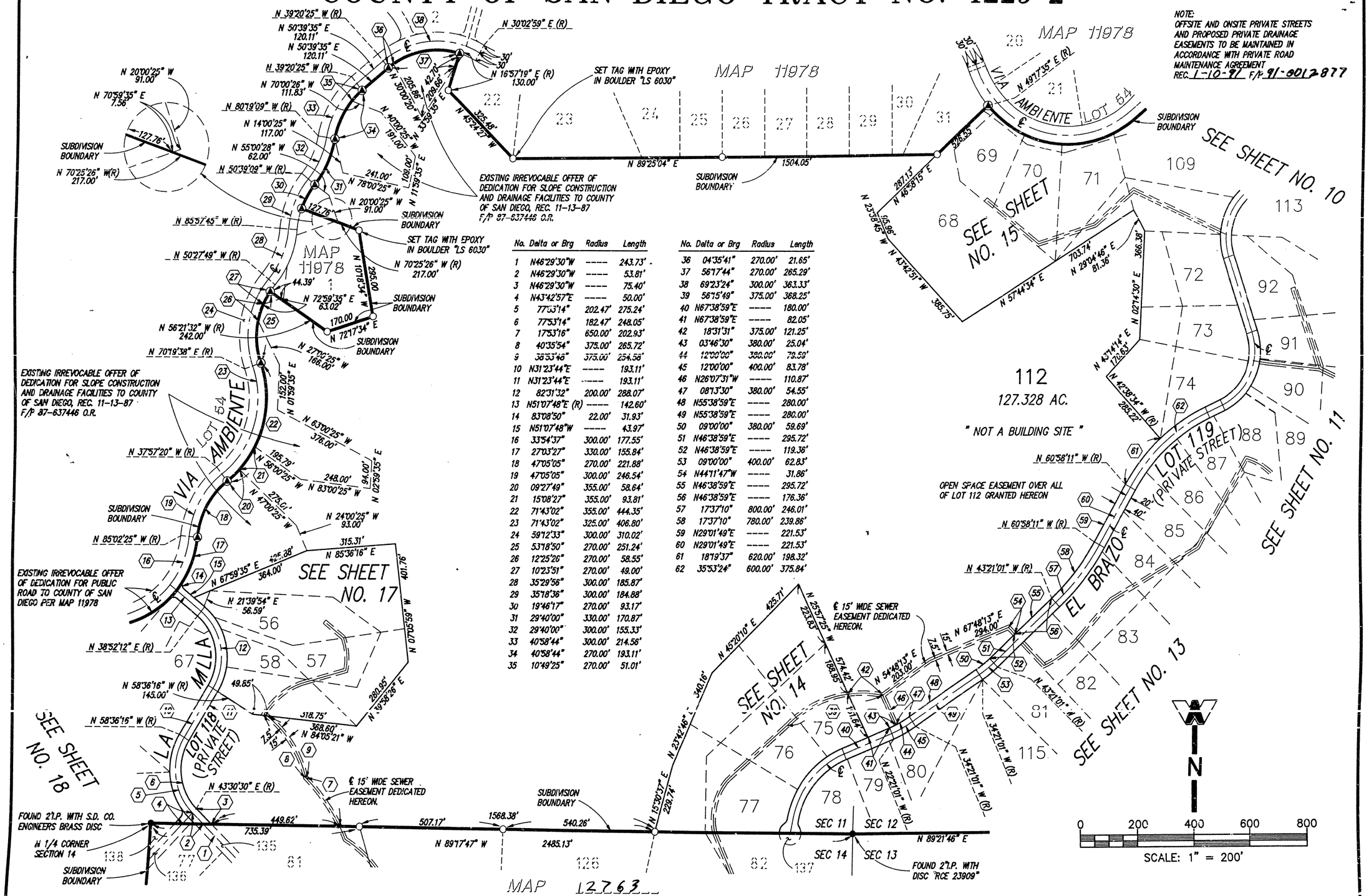
COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 16 OF 22 SHEETS

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877



No.	Delta or Brg	Radius	Length
1	N46°29'30"W	-----	243.73'
2	N46°29'30"W	-----	53.81'
3	N46°29'30"W	-----	75.40'
4	N43°42'57"E	-----	50.00'
5	77°53'14"	202.47'	275.24'
6	77°53'14"	182.47'	248.05'
7	17°53'16"	650.00'	202.93'
8	40°35'54"	375.00'	265.72'
9	36°53'46"	375.00'	254.56'
10	N31°23'44"E	-----	193.11'
11	N31°23'44"E	-----	193.11'
12	82°31'32"	200.00'	288.07'
13	N51°07'48"E (R)	-----	142.60'
14	83°08'50"	22.00'	31.93'
15	N51°07'48"W	-----	43.97'
16	33°54'37"	300.00'	177.55'
17	27°03'27"	330.00'	155.84'
18	47°05'05"	270.00'	221.88'
19	47°05'05"	300.00'	246.54'
20	09°27'49"	355.00'	58.64'
21	15°08'27"	355.00'	93.81'
22	71°43'02"	355.00'	444.35'
23	71°43'02"	325.00'	406.80'
24	59°12'33"	300.00'	310.02'
25	53°18'50"	270.00'	251.24'
26	12°25'26"	270.00'	58.55'
27	10°23'51"	270.00'	49.00'
28	35°29'56"	300.00'	185.87'
29	35°18'36"	300.00'	184.88'
30	19°46'17"	270.00'	93.17'
31	29°40'00"	330.00'	170.87'
32	29°40'00"	300.00'	155.33'
33	40°58'44"	300.00'	214.56'
34	40°58'44"	270.00'	193.11'
35	10°49'25"	270.00'	51.01'

No.	Delta or Brg	Radius	Length
36	04°35'41"	270.00'	21.65'
37	56°17'44"	270.00'	265.29'
38	69°23'24"	300.00'	363.33'
39	56°15'49"	375.00'	368.25'
40	N67°38'59"E	-----	180.00'
41	N67°38'59"E	-----	82.05'
42	18°31'31"	375.00'	121.25'
43	03°46'30"	380.00'	25.04'
44	12°00'00"	380.00'	79.59'
45	12°00'00"	400.00'	83.78'
46	N26°07'31"W	-----	110.87'
47	08°13'30"	380.00'	54.55'
48	N55°38'59"E	-----	280.00'
49	N55°38'59"E	-----	280.00'
50	09°00'00"	380.00'	59.69'
51	N46°38'59"E	-----	295.72'
52	N46°38'59"E	-----	119.36'
53	09°00'00"	400.00'	62.83'
54	N44°11'47"W	-----	31.86'
55	N46°38'59"E	-----	295.72'
56	N46°38'59"E	-----	176.36'
57	17°37'10"	800.00'	246.01'
58	17°37'10"	780.00'	239.86'
59	N29°01'49"E	-----	221.53'
60	N29°01'49"E	-----	221.53'
61	18°19'37"	620.00'	198.32'
62	35°53'24"	600.00'	375.84'

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GRADING PLAN L- NONE

CALIF. COORD. INDEX 322 - 1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

SHEET 17 OF 22 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-2

EXSISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978

SUBDIVISION BOUNDARY

VIA AMBIENTE

LOT 54

N 85°02'25" W (R)

30' 30'

L=177.55'

R=330.00' L=383.19'

D=27°01'27" L=165.84'

D=35°54'37" L=357.44'

R=300.00'

D=68°16'00" L=178.89'

D=34°21'23"

D=68°16'00"

N 16°46'25" W (R)

N 73°13'35" E

30'

30'

EXSISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO. REC. 11-13-87 F/P 87-637446 O.R.

N 24°00'25" W 95.00'

N 85°36'16" E 315.31'

112

364.00'

475.88'

N 67°59'35" E

N 57°58'58" E (R)

N 38°52'12" E (R)

N 51°07'48" W 46.84' 93.11'

N 51°07'48" W (R) 142.60'

61.88'

N 21°39'54" E 56.59'

N 87°24'42" W 432.05'

N 07°55'59" W 288.08'

401.76'

N 55°37'46" W 208.69'

56

3.955 AC.

N 38°52'12" E (R)

20' 20'

N 51°45'16" E (R)

N 64°09'56" E (R)

D=82°37'32" R=220.00' L=317.32'

N 71°08'44" W 291.79'

N 71°08'44" W 208.25'

15' 7.5'

N 50°52'11" W 86.06'

135.06' 399.96'

84.72'

180.18'

N 81°38'43" E

113.89'

N 24°01'50" E 204.04'

D=32°00'14" R=200.00' L=111.72'

D=32°03'33" R=200.00' L=111.91'

N 50°52'11" W 86.06'

N 81°38'43" 399.96'

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

OPEN SPACE EASEMENT OVER A PORTION OF LOT 56 GRANTED HEREON.

67

N 67°59'35" E 425.88'

N 51°07'48" W 46.84' 93.11'

49.15'

20'

N 21°39'54" E 56.59'

SEE SHEET NO. 16

SEE SHEET NO. 18

N 81°43'00" W 293.57'

464.89'

N 74°23'57" E 159.89'

4.27'

130.55'

171.32'

N 47°48'15" W 152.70'

58

1.736 AC.

D=57°13'42" R=330.00' L=329.58'

D=57°13'42" R=330.00' L=329.58'

D=40°04'04" L=131.01'

L=288.07'

L=316.88'

(PRIVATE STREET)

LA MILLA

LOT 118

20' 20'

N 17°23'44" E 93.11'

N 58°36'16" W (R) 145.00'

49.85'

D=39°05'15" R=250.00' L=170.55'

29.34'

382.15' 225.18'

OPEN SPACE EASEMENT OVER A PORTION OF LOT 58 DEDICATED HEREON.

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

OPEN SPACE EASEMENT OVER A PORTION OF LOT 57 GRANTED HEREON.

N 39°58'26" E 280.85'

N 84°05'21" W 368.60'

R=375.00' D=40°35'54" L=265.72'

112

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 118 GRANTED HEREON TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT.

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

No.	Delta or Brg	Radius	Length
1	13°42'20"	330.00'	78.94'
2	83°08'50"	22.00'	31.93'
3	12°53'05"	220.00'	49.47'
4	12°24'40"	220.00'	47.66'
5	01°42'06"	375.00'	11.14'
6	00°03'19"	200.00'	0.19'

N

0 60 120 180 240

SCALE: 1" = 60'

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GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 18 OF 22 SHEETS

N

0 60 120 180 240

SCALE: 1" = 60'

No.	Delta or Brg	Radius	Length
1	09°55'32"	222.47'	38.54'
2	80°16'56"	22.00'	30.83'
3	20°49'33"	180.00'	65.43'
4	83°08'50"	22.00'	31.93'
5	13°42'20"	330.00'	78.94'
6	01°11'17"	750.00'	15.55'
7	01°54'03"	680.00'	22.56'
8	03°54'34"	700.00'	47.76'

LOT 54 MAP 11978

AMBIENTE

VIA

SUBDIVISION BOUNDARY

N 70°47'25" W (R)

N 19°12'35" E 144.26'

D=54°01'00" R=600.00' L=565.66'

D=54°01'00" R=576.00' L=537.38'

N 49°59'35" E 237.00'

N 20°59'35" E 193.00'

N 16°46'25" W (R)

N 77°13'35" E 83.54'

D=68°16'00" R=300.00' L=357.44'

D=34°21'23" L=179.89'

D=68°16'00" R=330.00' L=393.19'

D=27°30'13" L=158.41'

N 62°10'25" W

444.87'

N 41°04'27" E

186.00'

N 76°59'35" E 73.00'

N 28°59'35" E 164.00'

N 65°30'25" W 91.00'

N 59°59'35" E 20.29'

N 44°16'38" W (R)

N 38°52'12" E (R)

N 51°07'48" W 142.60'

N 51°07'48" W 93.11'

N 38°52'12" E (R)

20' 20'

L=259.26'

L=288.07'

R=180.00'

R=210.00'

D=82°31'32"

D=82°31'32"

N 58°36'16" W (R)

N 31°23'44" E 193.11'

N 31°23'44" E 193.11'

N 58°36'16" W (R)

LA MILLA LOT 118 (PRIVATE STREET)

D=34°05'38" L=132.39'

R=222.47' L=131.50'

R=202.47' L=263.68'

D=33°52'04" L=119.00'

D=67°57'42" L=275.24'

D=77°53'14"

N 53°26'01" E (R)

N 43°30'30" E (R)

N 46°29'30" W 53.91'

N 89°17'47" W 2485.13'

112

SEE SHEET NO. 16

20' 20'

30.17'

50.00'

32.27'

N 43°42'57" E 198.83'

D = 89°47'32"

R = 22.00'

L = 34.48'

58.87'

9.64'

N 46°29'30" W

20' 20'

SEE SHEET NO. 17

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO. REC. 11-13-87 F/P 87-637446 O.R.

OPEN SPACE EASEMENT OVER A PORTION OF LOT 67 GRANTED HEREON.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 65 AND 66 GRANTED HEREON.

OPEN SPACE EASEMENT OVER ALL OF LOT 111 GRANTED HEREON.

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 118 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

WATERLINE APPURTENANCES, AND ACCESS EASEMENT OVER LOT 116 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-0012877

" NOT A BUILDING SITE "

67
7.224 AC.

65
1.673 AC.

66
2.601 AC.

111
4.464 AC.

PUNTA DEL SUR LOT 116 (PRIVATE STREET)

PUNTA DEL SUR LOT 116 (PRIVATE STREET)

SEE SHEET NO. 19

64

65

66

111

112

135

136

138

77

FOUND 2" I.P. WITH SD CO ENGINEERS BRASS DISC

N 46°17'03" W (R)

N 44°23'00" W (R)

N 27°53'19" W

N 32°01'14" W

N 62°06'41" E 152.00'

N 62°06'41" E 382.10'

N 64°05'31" E 324.86'

N 62°28'13" E 152.00'

N 43°42'57" E 514.55'

N 43°42'57" E 357.57'

N 43°42'57" E 553.04'

N 43°42'57" E 334.97'

N 43°42'57" E 312.37'

N 43°42'57" E 511.20'

N 02°12'45" E

SUBDIVISION BOUNDARY

D=16°29'40" L=195.76'

D=18°23'44" R=680.00' L=218.32'

D=18°23'44" R=700.00' L=224.74'

D=14°29'10" L=176.98'

D=12°19'14" L=161.28'

D=44°28'20"

D=44°28'00" R=720.00' L=558.78'

R=750.00' D=16°20'33" L=582.07'

L=213.92'

633.00'

N 53°15'36" W (R)

N 25°59'35" E

N 40°56'22" W (R)

N 69°36'09" W (R)

N 87°16'05" E (R)

651.78'

438.72'

600.82'

456.22'

290.53'

508.19'

232.30'

189.93'

181.10'

190.88'

511.52'

211.81'

35.03'

28.73'

33.04'

15' WIDE SEWER EASEMENT DEDICATED HEREON.

60.36'

92.76'

1282.54'

126.81'

168.07'

198.83'

84.06'

71.50'

53.91'

2485.13'

MAP 12763

WILLDAN ASSOCIATES
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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SEE SHEET NO. 18

SEE SHEET NO. 20

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

VIA AMBIENTE
MAP 11978

LOT 54

N 26°19'25" W (R)
N 40°56'22" W (R)
D=44°28'00" L=558.78'
D=44°28'00" L=558.07'
D=10°53'01" L=142.47'
R=720.00'
R=750.00'
30'
30'
℄

N 63°40'35" E 426.71'
N 63°40'35" E 426.71'

SUBDIVISION BOUNDARY

444.14'
N 71°59'35" E

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO REC. 11-13-87 F/P. 87-637446 O.R.

N 36°10'58" E

N 30°03'21" W (R)
N 26°19'25" W
232.30'
N 25°59'35" E 633.00'
N 27°53'19" W
306.00'
℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.
℄ SEWER EASEMENT DEDICATED HEREON.
214.13'
209.18'
16.54'
7.5'
9.04'
10.63'
31.54'
15'
7.5'
511.52
324.86'
N 64°05'31" E
137.74'
N 62°28'13" E
147.71'
33.04'
456.22'
190.88'

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 1-10-91 F/P 91-002877

111

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 116 GRANTED HEREON TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT.

PUNTA DEL SUR
(PRIVATE STREET)
LOT 116

60.36'
553.04'
334.97'
511.20'
N 43°42'57" E
312.37'
N 46°17'03" W (R)
20'
20'
351.40'
1292.34'

66

65

64
1.498 AC.

63
5.490 AC.

110

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 63-64 GRANTED HEREON.

15'
7.5'
387.05'
376.42'
369.60'
N 31°56'41" E
N 36°12'58" E
N 04°02'54" W
270.49'
N 40°37'52" W
179.15'
N 86°43'33" W
290.91'

N 17°03'50" E (R)
N 26°19'25" W (R)
191.88'
437.55'
N 27°53'19" W (R)
N 62°06'41" E
152.95'
℄ N 62°06'41" E
336.18'
382.10'
152.00'
31.23'
N 27°53'19" W (R)
D=18°23'44"
D=4°29'10"
D=11°14'28"
R=700.00'
R=720.00'
L=141.26'
L=205.74'
L=176.98'
N 39°07'47" E (R)
N 47°37'31" E (R)
N 45°37'11" W (R)
N 47°37'31" E (R)
N 47°37'31" E (R)
59
1.035 AC.
D=53°45'58"
D=36°51'27"
D=32°31'16"
R=230.00'
R=250.00'
R=270.00'
L=215.83'
L=231.66'
L=247.50'
L=161.04'
59.50'
40.36'
20'
135

WATERLINE, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 117 GRANTED HEREON TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT.

LA MILLA
LOT 117
(PRIVATE STREET)

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.
N 10°43'04" E
112.00'

60
3.125 AC.

61
1.601 AC.

62
2.460 AC.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.
73.41'
7.5'
15'
108.58'
N 40°08'56" W
N 81°26'12" W
261.92'
N 8°07'33" W
319.38'
℄ 15' SEWER EASEMENT DEDICATED HEREON.
310.53'
153.76'
54.79'
62.03'
N 00°11'48" W (R)
101.98'
N 27°53'19" W
189.38'
417.90'
152.00'
N 62°33'20" E
466.11'
152.06'
238.57'
314.05'
N 63°46'56" E
18.97'
429.53'
221.21'
27.33'
22.22'
N 89°58'54" E
305.64'
488.19'
275.70'
224.21'
400.02'
175.81'
N 02°12'45" E
SUBDIVISION BOUNDARY
387.51'
N 83°18'04" E
719.71'
163.02'
169.18'

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 60-62 GRANTED HEREON.

No.	Delta or Brg	Radius	Length
1	44°57'09"	26.00'	20.40'
2	197°15'38"	39.00'	134.27'
3	72°38'40"	39.00'	49.45'
4	269°54'18"	39.00'	183.72'
5	44°57'09"	26.00'	20.40'
6	11°05'15"	39.00'	7.55'
7	03°54'34"	700.00'	47.76'
8	00°39'52"	720.00'	8.35'
9	86°45'18"	22.00'	33.31'
10	N42°22'29"W	-----	20.96'
11	N42°22'29"W	-----	61.77'
12	86°45'18"	22.00'	33.31'
13	N42°22'29"W	-----	20.96'
14	06°29'23"	720.00'	81.55'

N

0 60 120 180 240

SCALE: 1" = 60'

MAP 12763

77
78
79
80

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JN 36700

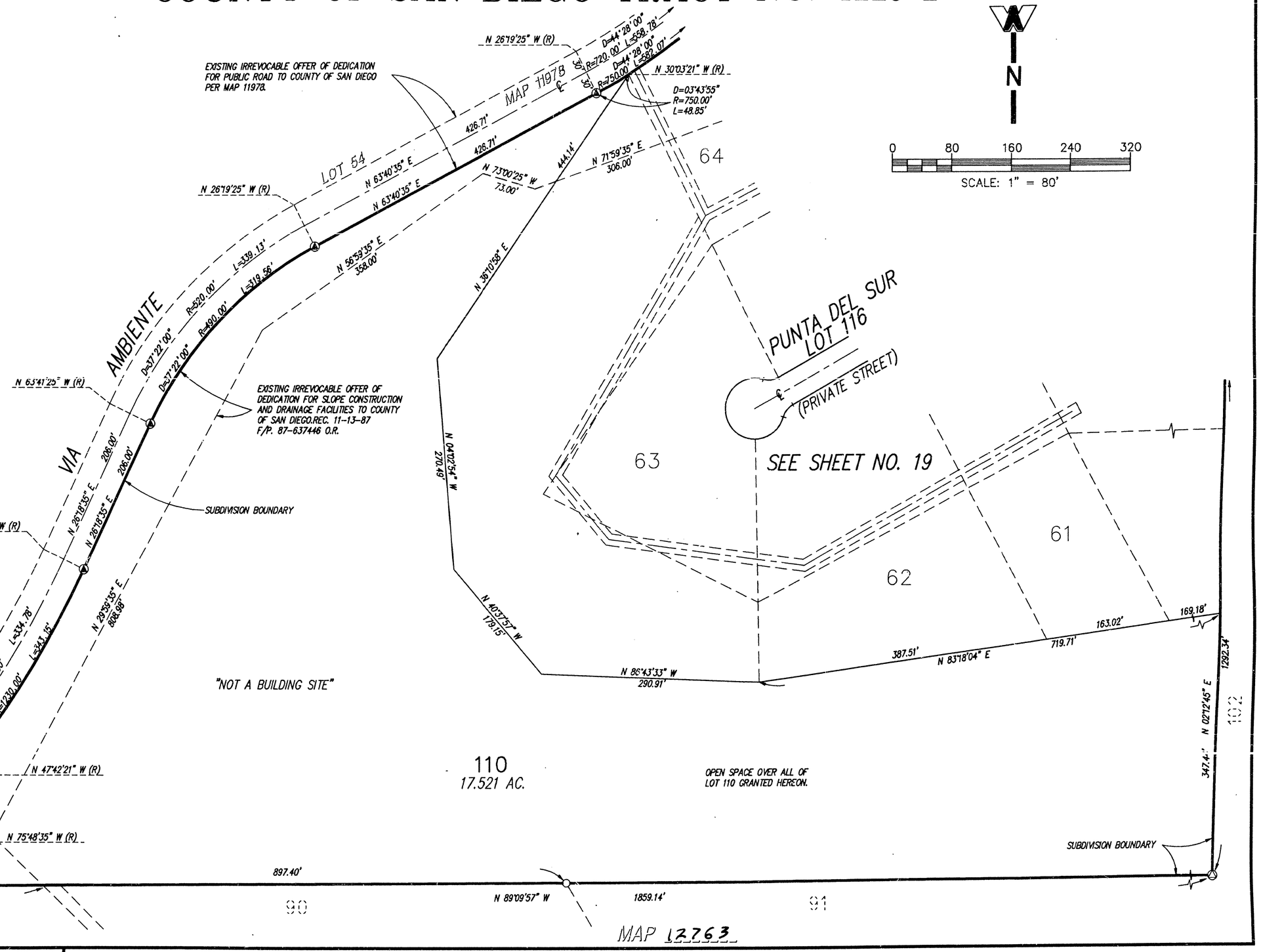
GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2



MAP 12763

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR.,SUITE 250,SAN DIEGO,CA 92122 (619)457-1199

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

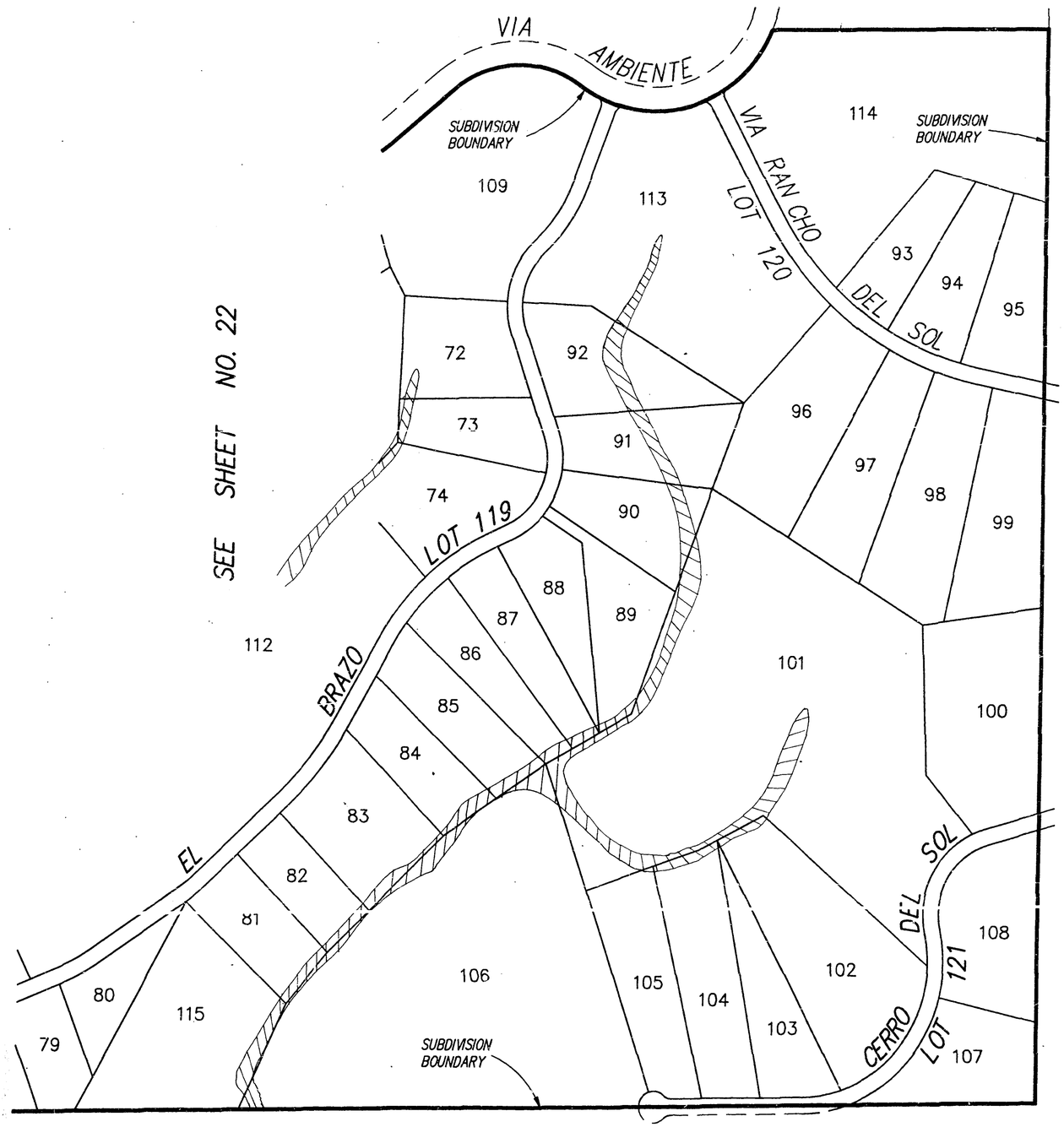
COUNTY TM 4229-2

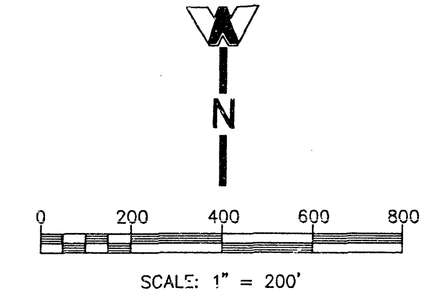
MAP NO. 12764

COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 21 OF 22 SHEETS

NONTITLE INFORMATION





LEGEND

APPROXIMATE AREA OF INUNDATION BY 100 YEAR FLOOD.

NOTES:

NOTE A:
INFORMATION SHOWN ON THIS SHEET IS ADVISORY ONLY AND IS NOT INTENDED TO AFFECT RECORD TITLE INTEREST.

NOTE B:
INFORMATION SHOWN HEREON IS COMPILED FROM PUBLIC RECORDS AND ITS INCLUSION IN THIS MAP DOES NOT IMPLY THE CORRECTNESS OR SUFFICIENCY OF THESE RECORDS OR REPORTS BY THE PREPARER OF THIS MAP.

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12764

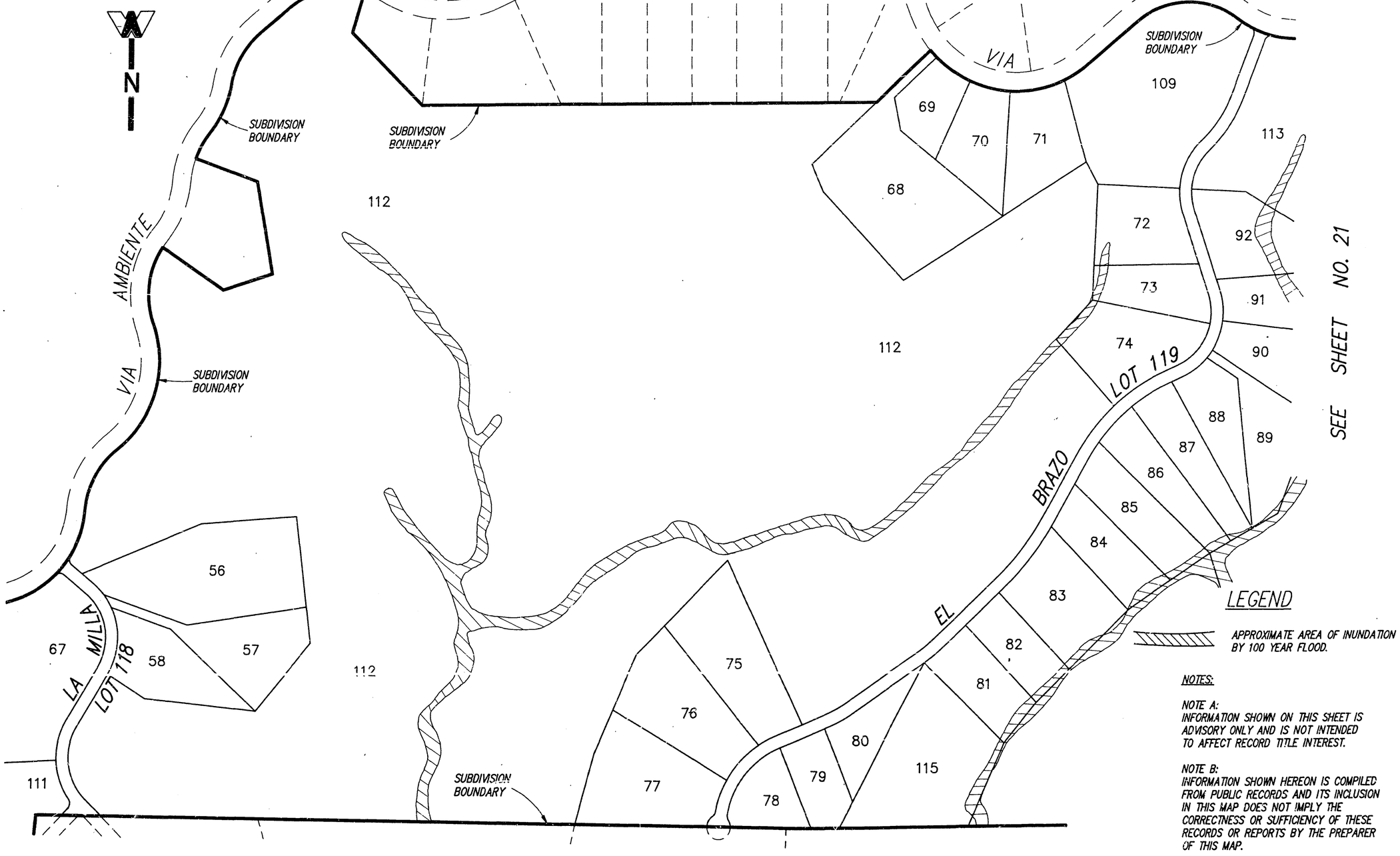
COUNTY OF SAN DIEGO TRACT NO. 4229-2

SHEET 22 OF 22 SHEETS

NONTITLE INFORMATION

0 200 400 600 800

SCALE: 1" = 200'



LEGEND

APPROXIMATE AREA OF INUNDATION BY 100 YEAR FLOOD.

NOTES:

NOTE A:
INFORMATION SHOWN ON THIS SHEET IS ADVISORY ONLY AND IS NOT INTENDED TO AFFECT RECORD TITLE INTEREST.

NOTE B:
INFORMATION SHOWN HEREON IS COMPILED FROM PUBLIC RECORDS AND ITS INCLUSION IN THIS MAP DOES NOT IMPLY THE CORRECTNESS OR SUFFICIENCY OF THESE RECORDS OR REPORTS BY THE PREPARER OF THIS MAP.

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6343 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-1100

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X)

COUNTY TM 4229-2

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 1 OF 24 SHEETS

BEING A SUBDIVISION OF A PORTION OF THE SOUTHWEST QUARTER OF SECTION 1, A PORTION OF THE WEST HALF AT SECTION 12 AND A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 13 SOUTH, RANGE 3 WEST, SAN BERNADINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

FOR COMPLETE METES AND BOUNDS LEGAL DESCRIPTION OF THIS SUBDIVISION SEE CERTIFIED TITLE COMPANY DESCRIPTION AND REPORT ON FILE IN THE OFFICE OF THE COUNTY ENGINEER.

SUBDIVISION GUARANTEE FURNISHED BY FIRST AMERICAN TITLE INSURANCE COMPANY ORDER NO. 1009923-11.

WE HEREBY STATE THAT WE ARE THE OWNERS OF OR ARE INTERESTED IN THE LAND SUBDIVIDED BY THIS MAP AND WE CONSENT TO THE PREPARATION AND RECORDATION OF THIS MAP.

WE HEREBY DEDICATE TO THE PUBLIC VIA AMBIENTE FOR USE AS A STREET. WE HEREBY DEDICATE TO THE PUBLIC THE SLOPE AND DRAINAGE FACILITY EASEMENTS AS SHOWN ON SAID MAP.

WE HEREBY DEDICATE TO THE COUNTY THE SEWER EASEMENTS AS SHOWN ON SAID MAP.

WE HEREBY GRANT TO THE COUNTY OF SAN DIEGO A BIOLOGICAL OPEN SPACE EASEMENT OVER, UPON, ACROSS AND UNDER ALL OF LOTS 302-304 INCLUSIVE AND A PORTION OF LOTS 203, 210-222 INCLUSIVE, 225, 229 & 230, 232-235 INCLUSIVE 242-244 INCLUSIVE, 250-252 INCLUSIVE, 263-269 INCLUSIVE 277, 278, 280, 281, 283, 285, 286, 291, 292, AND 297-301 INCLUSIVE, EXCEPTING THERE FROM ANY EXISTING AND/OR PROPOSED SLOPE, DRAINAGE AND UTILITY EASEMENTS HEREAFTER REFERRED TO AS THE SUBJECT LAND, TO WIT:

(1) *A PERPETUAL EASEMENT FOR OPEN SPACE OVER, UPON, ACROSS AND UNDER THE SUBJECT LAND AND NO BUILDING, STRUCTURE OR OTHER THING WHATSOEVER SHALL BE CONSTRUCTED, ERECTED, PLACED OR MAINTAINED ON THE SUBJECT LAND EXCEPT AND ALL NECESSARY PUBLIC UTILITY LINES.*

(2) *THE PERPETUAL RIGHT, BUT NOT THE OBLIGATION, TO ENTER UPON THE SUBJECT LAND AND REMOVE ANY BUILDINGS, STRUCTURES OR OTHER THINGS WHATSOEVER CONSTRUCTED, ERECTED, PLACED OR MAINTAINED ON THE SUBJECT LAND CONTRARY TO ANY TERM, COVENANT OR CONDITION OF THIS EASEMENT AND TO DO ANY WORK NECESSARY TO ELIMINATE THE EFFECTS OF ANY EXCAVATION OR GRADING OR PLACEMENT OF SAND, SOIL, ROCK OR GRAVEL OR ANY OTHER MATERIAL DONE OR PLACED ON THE SUBJECT LAND CONTRARY TO ANY TERM, COVENANT OR CONDITION OF THIS EASEMENT. GRANTOR COVENANTS AND AGREES FOR ITSELF AND ITS SUCCESSORS AND ASSIGNS AS FOLLOWS:*

(A) *THAT IT SHALL NOT ERECT, CONSTRUCT, PLACE OR MAINTAIN, OR PERMIT THE ERECTION, CONSTRUCTION, PLACEMENT OR MAINTENANCE OF ANY BUILDING OR STRUCTURE OR OTHER THING WHATSOEVER ON THE SUBJECT LAND OTHER THAN ALL NECESSARY OVERHEAD PUBLIC UTILITY LINES.*

(B) *THAT IT SHALL NOT USE THE SUBJECT LAND FOR ANY PURPOSE EXCEPT AS OPEN SPACE TO BE MAINTAINED IN A NATIVE STATE, PRECLUDING VEGETATION ADDITION OR REMOVAL, EXCEPT FOR FIRE BREAKS, SEWER AND WATER LINES, ACCESS ROADS, DRIVEWAYS, IMPLEMENTATION OF AN APPROVED REVEGATATION PLAN AND SIGHT DISTANCE ON CIRCULATION ROADS AS APPROVED BY AND TO THE SATISFACTION OF THE DIRECTOR OR PLANNING AND LAND USE WITHOUT THE WRITTEN AUTHORIZATION OF THE COUNTY OF SAN DIEGO OR ITS SUCCESSORS OR ASSIGNS.*

(C) *THAT IT SHALL NOT EXCAVATE OR GRADE OR PERMIT ANY EXCAVATING OR GRADING TO BE DONE, OR PLACE OR ALLOW TO BE PLACED ANY SAND, SOIL, ROCK, GRAVEL OR OTHER MATERIAL WHATSOEVER ON THE SUBJECT LAND WITHOUT THE WRITTEN PERMISSION OF THE COUNTY OF SAN DIEGO OR ITS SUCCESSORS OR ASSIGNS.*

(D) *THAT THE TERMS, COVENANTS AND CONDITIONS SET FORTH HEREIN MAY BE SPECIFICALLY ENFORCED OR ENJOINED BY PROCEEDINGS IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA.*

THE GRANT OF THIS EASEMENT AND ITS ACCEPTANCE BY THE COUNTY OF SAN DIEGO SHALL NOT AUTHORIZE THE PUBLIC OR ANY MEMBERS THEREOF TO USE OR ENTER UPON ALL OR ANY PORTION OF THE SUBJECT LAND, IT BEING UNDERSTOOD THAT THE PURPOSE OF THIS EASEMENT IS SOLELY TO RESTRICT THE USES TO WHICH THE SUBJECT LAND MAY BE PUT.

THIS EASEMENT SHALL BIND THE GRANTOR AND ITS SUCCESSORS AND ASSIGNS.

WE HEREBY GRANT TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT, A PUBLIC AGENCY, OR ITS SUCCESSORS, OR ASSIGNS, AN EASEMENT FOR WATER PIPELINES, OTHER DISTRICT FACILITIES, AND FOR ALL ACCESS PURPOSES OVER, UNDER, AND ACROSS ALL PRIVATE STREETS AS SHOWN ON THIS MAP, SUBJECT TO ALL TERMS AND CONDITIONS CONTAINED IN THE CERTIFICATE GRANTING EASEMENTS WITHIN PRIVATE STREETS TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT ON COUNTY OF SAN DIEGO TRACT NO. 4413, MAP NO. 11372, RECORDED NOVEMBER 21, 1985, WHICH TERMS AND CONDITIONS ARE HEREBY INCORPORATED BY REFERENCE.

LOT 203 OF THIS SUBDIVISION IS A PLANNED DEVELOPMENT AS DEFINED IN SECTION 6600 OF THE ZONING ORDINANCE OF THE COUNTY OF SAN DIEGO CONTAINING A MAXIMUM OF 42 DWELLING UNITS AND IS FILED PURSUANT TO THE SUBDIVISION MAP ACT.

PACIFIC CIELO DEVELOPMENT, INC., A CALIFORNIA CORPORATION, AS OWNER

BY: [signature]
M. KAWABATA, PRESIDENT

BY: [signature]
T. HOSHINO, SECRETARY/TREASURER

SECURITY UNION TITLE INSURANCE COMPANY, A CALIFORNIA CORPORATION, AS SUCCESSOR TRUSTEE UNDER DEEDS OF TRUST RECORDED JULY 30, 1981, AS FILE/PAGE 81-240965, IN BOOK 1981 OF OFFICIAL RECORDS; RECORDED AUGUST 11, 1981, AS FILE/PAGE 81-254964 IN BOOK 1981 OF OFFICIAL RECORDS;

BY: Cynthia D. McGhee
TITLE ASST. SECRETARY

BY: Richard A. Vallejo
TITLE Asst. Vice President

TICOR TITLE INSURANCE COMPANY OF CALIFORNIA, A CALIFORNIA CORPORATION, AS TRUSTEE UNDER DEEDS OF TRUST RECORDED MAY 25, 1984, AS FILE/PAGE 84-197022, IN BOOK 1984 OF OFFICIAL RECORDS; RECORDED JUNE 4, 1984, AS FILE/PAGE 84-208435, AND RE-RECORDED SEPTEMBER 28, 1984, AS FILE/PAGE 84-369955, BOTH IN BOOK 1984 OF OFFICIAL RECORDS.

BY: Barbara J. Richardson
TITLE ASSIST. VICE-PRESIDENT

BY: [signature]
TITLE ASSIST. SECRETARY

WE, COUNTY TREASURER-TAX COLLECTOR OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA AND DIRECTOR, DEPARTMENT OF PUBLIC WORKS OF SAID COUNTY, HEREBY CERTIFY THAT THERE ARE NO UNPAID SPECIAL ASSESSMENTS OR BONDS WHICH MAY BE PAID IN FULL. SHOWN BY THE BOOKS OF OUR OFFICES. AGAINST THE TRACT OR SUBDIVISION, OR ANY PART THEREOF SHOWN ON THE ANNEXED MAP AND DESCRIBED IN THE CAPTION THEREOF.

PAUL BOLAND
COUNTY TREASURER/TAX COLLECTOR
BY: [signature]
DEPUTY
DATED: 11-12-91

GRANVILLE M. BOWMAN, DIRECTOR
DEPARTMENT OF PUBLIC WORKS
BY: Philip J. Giurbino
FOR DIRECTOR
DATED: 12-4-91

THE OLIVENHAIN MUNICIPAL WATER DISTRICT HEREBY ACCEPTS THE GRANT OF EASEMENTS DESCRIBED HEREIN, INCLUDING ALL TERMS AND CONDITIONS CONTAINED IN THE CERTIFICATE GRANTING EASEMENTS WITHIN PRIVATE STREETS GRANTED TO THE OLIVENHAIN MUNICIPAL WATER DISTRICT ON COUNTY OF SAN DIEGO TRACT NO. 4413, MAP NO. 11372, RECORDED NOVEMBER 21, 1985. THE OLIVENHAIN MUNICIPAL WATER DISTRICT CONSENTS TO THE RECORDATION OF THIS MAP AND HAS AUTHORIZED ITS GENERAL MANAGER TO SIGN THIS CERTIFICATE PURSUANT TO BOARD RESOLUTION NO. 87-01, ADOPTED JANUARY 15, 1987.

OLIVENHAIN MUNICIPAL WATER DISTRICT
DATE: 11/12/91
BY: David C. McCollom
GENERAL MANAGER

I, THOMAS J. PASTUSZKA, CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO, CERTIFY THAT SAID BOARD OF SUPERVISORS HAS APPROVED THIS MAP, HAS ACCEPTED ON BEHALF OF THE COUNTY OF SAN DIEGO THE SEWER EASEMENTS AS DEDICATED ON SAID MAP, AND HAS ACCEPTED THE GRANT OF AN EASEMENT FOR OPEN SPACE OVER, UPON, ACROSS AND UNDER ALL OF LOTS 302-304 INCLUSIVE AND A PORTION OF LOTS 203, 210-222 INCLUSIVE, 225, 229 & 230, 232-235 INCLUSIVE 242-244 INCLUSIVE, 250-252 INCLUSIVE, 263-269 INCLUSIVE 277, 278, 280, 281, 283 285, 286, 291, 292, AND 297-301 INCLUSIVE EXCEPTING THEREFROM ANY EXISTING AND/OR PROPOSED SLOPE, DRAINAGE AND UTILITY EASEMENTS, AND HAS REJECTED ON BEHALF OF THE PUBLIC VIA AMBIENTE, AS OFFERED FOR DEDICATION ON SAID MAP, AND HAS REJECTED THE SLOPE AND DRAINAGE FACILITY EASEMENTS AS SHOWN ON SAID MAP.

NOTE: SECTION 66477.2 OF THE GOVERNMENT CODE OF THE STATE OF CALIFORNIA PROVIDES THAT A REJECTED OFFER SHALL REMAIN OPEN AND SUBJECT TO FUTURE ACCEPTANCE BY THE COUNTY.

THOMAS J. PASTUSZKA
CLERK OF THE BOARD OF SUPERVISORS
BY: Thomas J. Pastuszka
DEPUTY
DATED: 12-18-91

I, DAVID L. GOERTZEN A LICENSED LAND SURVEYOR, STATE THAT THE SURVEY OF THIS SUBDIVISION WAS MADE BY ME OR UNDER MY DIRECTION BETWEEN AUGUST 1, 1989 AND DECEMBER 15, 1989 AND SAID SURVEY IS TRUE AND COMPLETE AS SHOWN; THAT THE MONUMENTS OF THE CHARACTER INDICATED HAVE BEEN SET OR FOUND OR WILL BE SET AS NOTED AT THE SUBDIVISION BOUNDARY CORNERS, AND I WILL SET ALL OTHER MONUMENTS OF THE CHARACTER AND AT THE POSITION INDICATED BY LEGEND IN THIS MAP WITHIN 30 DAYS AFTER THE COMPLETION OF THE REQUIRED IMPROVEMENTS AND SUCH MONUMENTS ARE OR WILL BE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED (SEE LEGEND ON SHEET 3).

[signature]
DAVID L. GOERTZEN
LS 6030

MY REGISTRATION EXPIRES ON 6/30/93

LICENSED LAND SURVEYOR · DAVID L. GOERTZEN · Exp. 6-30-93 · No. 6030 · STATE OF CALIFORNIA

I, GRANVILLE M. BOWMAN, COUNTY ENGINEER, CERTIFY THAT I HAVE EXAMINED THIS MAP; THAT THE SUBDIVISION IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP, AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL THE PROVISIONS OF THE SUBDIVISION MAP ACT AND DIVISION 1 OF TITLE 8 OF THE SAN DIEGO COUNTY CODE HAVE BEEN COMPLIED WITH; AND THAT I AM SATISFIED THAT THIS MAP IS TECHNICALLY CORRECT.

GRANVILLE M. BOWMAN
COUNTY ENGINEER
RCE 13681
BY: Philip J. Giurbino
PHILIP J. GIURBINO L.S. 4424

LICENSED LAND SURVEYOR · PHILIP J. GIURBINO · No. LS4424 · Exp. 9-30-93 · STATE OF CALIFORNIA

I, THOMAS J. PASTUSZKA, CLERK OF THE BOARD OF SUPERVISORS, HEREBY CERTIFY THAT THE PROVISIONS OF THE SUBDIVISION MAP ACT (DIVISION 2 OF TITLE 7 OF THE GOVERNMENT CODE) REGARDING (A) DEPOSITS FOR TAXES, AND (B) CERTIFICATION OF THE ABSENCE OF LIENS FOR UNPAID STATE, COUNTY, MUNICIPAL OR LOCAL TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES EXCEPT THOSE NOT YET PAYABLE; HAVE BEEN COMPLIED WITH.

THOMAS J. PASTUSZKA
CLERK OF THE BOARD OF SUPERVISORS
BY: Thomas J. Pastuszka
DEPUTY
DATED: 12-18-91

FILE NO. 91-657944

I, ANNETTE EVANS, RECORDER OF THE COUNTY OF SAN DIEGO, HEREBY CERTIFY THAT I HAVE ACCEPTED FOR RECORDATION THIS MAP FILED AT THE REQUEST OF DAVID L. GOERTZEN THIS 18th DAY OF December, 1991, AT 2:50 O'CLOCK, P M.

FEE: $ 51.00 1.80

ANNETTE EVANS
COUNTY RECORDER
BY: [signature]
DEPUTY

BOARD OF SUPERVISORS · COUNTY OF SAN DIEGO · SAN DIEGO COUNTY CALIFORNIA

JAN 1 1992 MICROFILMED

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-891

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

COUNTY OF SAN DIEGO TRACT NO. 4229-4

STATE OF CALIFORNIA)
COUNTY OF San Diego)

ON Nov. 11, 1991 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED Richard A. Vallejo (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE Assistant Vice PRESIDENT AND Cynthia L. McGrew, (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE Assistant SECRETARY OF SECURITY UNION TITLE INSURANCE COMPANY, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT AS TRUSTEE AND (PERSONALLY KNOWN TO ME) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSONS WHO EXECUTED THE SAME ON BEHALF OF SAID CORPORATION, AND ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE WITHIN INSTRUMENT PURSUANT TO ITS BYLAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

WITNESS MY HAND.

MY COMMISSION EXPIRES 3-4-94

Melvyn J. Brav Melvyn J. Brav
NOTARY PUBLIC IN AND FOR SAID STATE. (PRINT NAME)

PRINCIPAL PLACE OF BUSINESS San Diego COUNTY.

STATE OF CALIFORNIA)
COUNTY OF Los Angeles)

ON Nov. 6, 1991 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED M. KAWASATA (~~PERSONALLY KNOWN TO ME~~) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE _____ PRESIDENT AND T. HOSHINO ~~(PERSONALLY KNOWN TO ME)~~ (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE TREASURER SECRETARY OF PACIFIC CIELO DEVELOPMENT INC., A CALIFORNIA CORPORATION, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT AND (PERSONALLY KNOWN TO ME) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSONS WHO EXECUTED THE SAME ON BEHALF OF SAID CORPORATION, AND ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE WITHIN INSTRUMENT PURSUANT TO ITS BYLAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

WITNESS MY HAND.

MY COMMISSION EXPIRES 3/12/93

Robert D. Trusten - ROBERT D. TRUSTEN
NOTARY PUBLIC IN AND FOR SAID STATE. (PRINT NAME)

PRINCIPAL PLACE OF BUSINESS Los Angeles COUNTY.

THE SIGNATURES OF THE PARTIES LISTED BELOW, OWNERS OF EASEMENTS PER DOCUMENTS NOTED BELOW HAVE BEEN OMITTED UNDER THE PROVISIONS OF SECTION 66436 SUBSECTION (a) (3) (A) (i) OF THE SUBDIVISION MAP ACT, THEIR INTEREST IS SUCH THAT IT CANNOT RIPEN INTO A FEE TITLE AND SAID SIGNATURES ARE NOT REQUIRED BY THE GOVERNING BODY.

1. THE SIGNATURE OF MARGERY HUTMAN, ET AL, HOLDER OF AN EASEMENT RECORDED MARCH 27, 1961 AS FILE NO. 61-053305 OF OFFICIAL RECORDS.

2. OLIVENHAIN MUNICIPAL WATER DISTRICT, HOLDER OF EASEMENTS RECORDED MAY 10, 1961 AS FILE NO. 61-080650, JUNE 1, 1961 AS FILE NO. 61-094168, JANUARY 31, 1962 AS FILE NO. 62-018557, JANUARY 23, 1976 AS FILE NO. 76-021179 AND OCTOBER 29, 1987 AS FILE NO. 87-609481 ALL OF OFFICIAL RECORDS.

3. SAN DIEGO GAS AND ELECTRIC COMPANY, HOLDER OF AN EASEMENT RECORDED DECEMBER 20, 1961 AS FILE NO. 61-219862 OF OFFICIAL RECORDS.

4. THE SIGNATURE OF REID C. NECKER AND MAXINE E. NECKER, ET AL, HOLDER OF AN EASEMENT RECORDED JANUARY 17, 1966 AS FILE NO. 66-009946 AND AUGUST 15, 1975 AS FILE NO. 75-217712 OF OFFICIAL RECORDS.

5. THE SIGNATURE OF ROGER R. REVELLE, ET AL, HOLDER OF EASEMENTS RECORDED JANUARY 25, 1980 AS FILE NO. 80-028938 AND MARCH 3, 1982 AS FILE NO. 82-058708 OF OFFICIAL RECORDS.

6. THE COUNTY OF SAN DIEGO, HOLDER OF AN IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY FOR SLOPES AND DRAINAGE STRUCTURES RECORDED NOVEMBER 13, 1987 AS FILE NO. 87-637446 OF OFFICIAL RECORDS.

7. RANCHO CIELO SANITATION DISTRICT, HOLDER OF EASEMENT RECORDED NOVEMBER 13, 1987 AS FILE NO. 87-637442 OF OFFICIAL RECORDS.

8. THE SIGNATURE OF BYRON F. WHITE AND SAN ELIJO VISTA-160 PARTNERSHIP, HOLDERS OF AN EASEMENT RECORDED OCTOBER 11, 1991 AS FILE NO. 91-528377 OF OFFICIAL RECORDS.

STATE OF CALIFORNIA)
COUNTY OF San Diego)

ON Nov. 11, 1991 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED Barbara J. Richardson (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE Assistant Vice PRESIDENT AND Michael G. Dillin, (PERSONALLY KNOWN TO ME) ~~(PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE)~~ TO BE THE Assistant SECRETARY OF TICOR TITLE INSURANCE COMPANY OF CALIFORNIA, THE CORPORATION THAT EXECUTED THE WITHIN INSTRUMENT AS TRUSTEE AND (PERSONALLY KNOWN TO ME) (PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSONS WHO EXECUTED THE SAME ON BEHALF OF SAID CORPORATION, AND ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE WITHIN INSTRUMENT PURSUANT TO ITS BYLAWS OR A RESOLUTION OF ITS BOARD OF DIRECTORS.

WITNESS MY HAND.

MY COMMISSION EXPIRES 3-4-94

Melvyn J. Brav Melvyn J. Brav
NOTARY PUBLIC IN AND FOR SAID STATE. (PRINT NAME)

PRINCIPAL PLACE OF BUSINESS San Diego COUNTY.

JAN 1 5 1992
MICROFILMED

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6345 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-299

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322 - 1719 (X) (27)

COUNTY TM 4229-4

C B A 1 5 10 A B C

MAP NO. 12905

SHEET 3 OF 24 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SEE SHEET NO. 4

PROCEDURE OF SURVEY

P.O.B.

FND. 2"I.P. WITH BRASS DISC MARKED: S.D. CO. ENGR. DEPT T13S R3W S2 S1 S11 S12 SURV MON 1982 PER ① ⑧ ⑩ ⑬

FND. 3/4"I.P. WITH DISC "LS 3599" 0.20' N., 0.62' W. PER ⑪ ⑬ NOT ACCEPTED

FND. 3/4"I.P. WITH DISC "LS 3599" 0.19'N., 0.06'W. PER ⑩ ⑬ REPLACED PER LEGEND AT TRUE CORNER

⑩ (N 00°07'11" W 5370.37')
⑧ (N 00°07'24" W 5370.15')
④ (N 00°23'09" W 5370.51')
① (N 00°07'02" W 5370.16')
N 00°07'25" W 5370.74'

R.O.S. 12233

1342.68'
① (1342.54')
⑩ (1342.59')

355.54'

1339.86'
① (1339.97')
⑩ (1340.02')

① (N 44°26'39" E 1875.39')
N 44°25'56" E 1875.32'

SUBDIVISION BOUNDARY

1000.00'

20.455 AC.

2"I.P. WITH DISC "RCE 23909" PER ① NOT FOUND SET PER LEGEND

SUBDIVISION BOUNDARY

600.00'

1330.20'
① (1329.89')
⑩ (1330.11')

N 00°07'25" W 2685.37'
① (N 00°07'02" W 2685.08')
④ (N 00°23'09" W 2685.26')
⑩ (N 00°07'11" W 2685.18')

① (1315.93')
⑩ (1315.89')
1315.75'

2631.50'
2631.84'
2631.78'

N 89°50'43" W
① (N 89°50'31" W
⑩ (N 89°50'43" W

MAP 11978

① (1329.90')
⑩ (1330.11')
1330.20'

N 01°08'44" W
① (N 01°09'11" W
⑩ (N 01°09'33" W

2660.40'
2659.79')
2660.22')

700.00'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

FND. 1"I.P. WITH DISC "LS 1162" PER ① ③ ⑧ ⑩ ⑬

① (1317.69')
⑩ (1318.07')
1318.17'

N 02°13'12" W
① (N 02°12'32" W
⑩ (N 02°13'05" W

2636.34'
2635.38')
2636.14')

N 1/4 CORNER SECTION 11

C 1/4 CORNER SECTION 11

954.60'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

R.O.S. 9293

① (N 89°47'39" W 2720.08')
⑩ (N 89°48'48" W 2718.86')
N 89°48'46" W 2718.50'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

① (N 00°32'48" W 2582.43')
⑤ (N 01°02'36" W 2582.39')
⑧ (N 00°32'32" W 2582.40')
⑩ (N 00°32'19" W 2582.36')
N 00°32'47" W 2582.64'

769.32'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

① (1291.21')
⑤ (1291.18')
⑩ (1291.18')
1291.32'

700.00'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

① (1291.22')
⑤ (1291.17')
⑩ (1291.18')
1291.32'

W 1/4 CORNER SECTION 11

FND. 2"I.P. WITH DISC "LS 4306" R.O.S. 12265 PER ⑬

FND. 2"I.P. WITH DISC "LS 6030" PER ⑬

R.O.S. 7788

① (N 89°15'59" W 2758.76')
⑩ (N 89°16'36" W 2757.94')
N 89°16'37" W 2757.45'

MAP 12904

R.O.S. 12233

FND. LEAD AND TAG IN BOULDER "LS 6030" PER ⑬

① (N 00°07'46" W 2628.05')
⑤ (N 00°36'32" W 2628.10')
⑧ (N 00°07'26" W 2627.80')
⑩ (N 00°07'16" W 2628.07')
N 00°06'43" W 2627.99'

923.09'

FND. 2"I.P. WITH DISC "LS 3065" PER ① ⑤ ⑧ ⑩ ⑬

781.22'

R.O.S. 7106

① (1291.77' (1292.00')

E 1/4 CORNER SECTION 11
N 01°07'31" W 28.71'

FND. "T" POST WITH DISC. "RCE 9525" 28.70' N., 0.50' W. PER ⑪ ⑬ NOT ACCEPTED

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪ ⑬

N 00°07'25" W 2685.37'
① (N 00°07'02" W 2685.08')
④ (N 00°23'09" W 2685.25')
⑩ (N 00°07'11" W 2685.19')

FND. 2"I.P. WITH DISC "RCE 23909" PER ① ⑩ ⑬

702.31'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪ ⑫ ⑬

1242.57'

R.O.S. 9293
MAP 12763

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪ ⑫ ⑬

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪ ⑫ ⑬

735.39'

R.O.S. 12233

① (N 89°16'53" W 2485.83')
② (N 89°44'46" W 2485.16')
⑧ (N 89°18'20" W 2485.39')
⑩ (N 89°18'06" W 2485.28')
N 89°17'47" W 2485.13'

FND. 2"I.P. WITH BRASS DISC MARKED: S.D. CO. ENGR. DEPT T13S R3W S11 1/4 S14 SURV MON 1982 PER ① ⑧ ⑩ ⑬

N 1/4 CORNER SECTION 14

VIA AMBIENTE (PRIVATE STREET)

① (N 02°13'12" W 2689.47')
(N 02°12'32" W 2688.99')

① (N 88°06'35" W 2857.81')
⑧ (N 88°06'35" W 2857.74')
① (N 88°06'35" W 2857.80')
N 88°06'35" W 2857.84'

BASIS OF BEARINGS

R.O.S. 9293

R.O.S. 4651

① (N 89°39'46" E 2681.64')
③ (N 86°29'22" E 2678.41')
⑧ (N 89°38'04" E 2680.15')
N 89°38'08" E 2679.79'

① (N 89°36'24" E 2680.03')
⑩ (N 89°36'10" E 2679.92')
③ (N 86°25'22" E 2679.41')
① (N 89°36'11" E 2679.94')
N 89°36'24" E 2679.72'

LEGEND

- ○---- SET 2" x 24" IRON PIPE AND DISC MARKED LS 6030 PER THIS MAP UNLESS OTHERWISE SHOWN.
- △---- INDICATES 2" x 24" IRON PIPE WITH DISC STAMPED LS 6030 SAID MONUMENT TO BE SET AFTER CONSTRUCTION AND PRIOR TO FINAL INSPECTION (SEE DEFERRED MONUMENTATION CERTIFICATE ON SHEET NO. 1).
- ●---- INDICATES A FOUND MONUMENT AS DESCRIBED HEREON.
- ⊙---- INDICATES 2" IRON PIPE WITH DISC STAMPED LS 6030. SAID MONUMENTATION WAS SHOWN ON MAP NO. 12764 COUNTY OF SAN DIEGO TRACT NO. 4229-2.
- ◭---- INDICATES 2" IRON PIPE WITH DISC STAMPED RCE 23909. SAID MONUMENTATION WAS SHOWN ON MAP NO. 11978 COUNTY OF SAN DIEGO TRACT NO. 4229-1.
- (R) INDICATES A RADIAL BEARING.
- I.P. INDICATES AN IRON PIPE.
- FND. INDICATES FOUND.
- 17 SHEET NUMBER.
- D INDICATES DELTA.
- — — — SHEET LIMITS.
- ( ) INDICATES RECORD DATA.
- ① RECORD PER MAP 11978
- ② RECORD PER PARCEL MAP 963
- ③ RECORD PER RECORD OF SURVEY 4651
- ④ RECORD PER RECORD OF SURVEY 6815
- ⑤ RECORD PER RECORD OF SURVEY 7788
- ⑥ RECORD PER RECORD OF SURVEY 8412
- ⑦ RECORD PER RECORD OF SURVEY 8428
- ⑧ RECORD PER RECORD OF SURVEY 9293 (CONVERTED GRID DISTANCES TO GROUND DISTANCES)
- ⑨ RECORD PER RECORD OF SURVEY 12121
- ⑩ RECORD PER RECORD OF SURVEY 12233
- ⑪ RECORD PER MAP 12764
- ⑫ RECORD PER MAP 12763
- ⑬ RECORD PER MAP 12904
- ⑭ DEED REC. 5-10-61 F/P 61-080650

SEE NOTES ON SHEET 5

N

0 400 800 1200 1600

SCALE: 1" = 400'

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

C B A 1 5 10 A B C

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 4 OF 24 SHEETS

PROCEDURE OF SURVEY

No.	Delta or Brg	Radius	Length
1	41°56'51"	330.00'	241.60'
2	N 19°53'25" W		475.35'
	(N 19°53'00" W		475.35') ①
3	58°04'00"	330.00'	334.44'
4	N 77°57'25" W		221.50'
	(N 77°57'00" W		221.50') ①
5	100°18'00"	270.00'	472.65'
6	N 22°20'35" E		326.27'
	(N 22°21'00" E		326.27') ①
7	35°37'00"	570.00'	354.33'
8	N 57°57'35" E		134.26'
	(N 57°58'00" E		134.26') ①
9	06°13'53"	770.00'	83.74'
10	N 52°27'10" W		486.79'
	(N 52°26'45" W		486.79') ①
11	N 76°30'06" W		631.71'
	(N 76°29'41" W		631.78') ①
12	N 19°53'25" W		475.35'
	(N 19°53'00" W		475.35') ①
13	58°04'00"	270.00'	273.63'
14	N 77°57'25" W		221.50'
	(N 77°57'00" W		221.50') ①
15	59°21'35"	330.00'	341.89'
16	N 33°39'56" E		392.43'
	(N 33°40'21" E		392.43') ①
17	N 47°17'18" W		28.83'
	(N 47°16'53" W		28.83') ①
18	N 62°55'00" W		171.99'
	(N 62°54'35" W		171.99') ①
19	N 04°00'18" E		335.76'
	(N 04°00'43" E		335.76') ①
20	N 36°05'33" E		360.52'
	(N 36°05'58" E		360.52') ①
21	N 56°58'59" E		95.00'
	(N 56°59'24" E		95.00') ①
22	N 09°26'47" W (R)		310.00'
	(N 09°26'22" W		310.00') ①
23	30°26'38"	310.00'	164.72'

No.	Delta or Brg	Radius	Length
24	N 50°06'35" E		208.94'
	(N 50°07'00" E		208.94') ①
25	74°30'00"	330.00'	429.09'
26	N 55°23'25" W		15.90'
	(N 55°23'00" W		15.90') ①
27	144°30'00"	270.00'	680.94'
28	N 89°46'38" W		248.31'
	(N 89°46'13" W		248.26') ①
29	N 79°54'50" E (R)		300.65'
	(N 79°55'15" E		300.65') ①
30	40°35'15"	330.00'	233.77'
31	N 50°40'25" W		370.96'
	(N 50°40'00" W		370.96') ①
32	36°18'00"	360.00'	228.08'
33	N 86°58'25" W		28.20'
	(N 86°58'00" W		28.20') ①
34	50°51'08"	270.00'	239.64'
35	67°48'48"	330.00'	390.58'
36	84°02'40"	270.00'	396.05'
37	N 19°53'25" W		527.75'
	(N 19°53'00" W		527.75') ①
38	14°34'00"	770.00'	195.76'
39	N 84°40'35" E (R)		60.00'
	(N 84°41'00" E		60.00') ①
40	04°04'33"	830.00'	59.04'
41	86°31'02"	22.00'	33.22'
42	24°02'48"	320.00'	134.30'
43	N 37°37'16" W		97.07'
	(N 37°36'37" W		97.00') ⑭
44	N 82°40'35" W		60.82'
	(N 82°36'37" W		60.81') ⑭
45	N 52°21'21" E		79.97'
	(N 52°23'23" E		80.00') ⑭
46	N 40°37'34" W		77.85'
	(N 40°36'37" W		78.00') ⑭

R2W R3W — T13S R2W S1 S6 S12 S7 1922 — R2W R3W — T13S R2W S1 S6 S12 S7 1922 — R2W R3W

N 00°22'38" E 2650.59' (①(N 00°20'47" E 2650.46') (④(N 00°10'12" E 2650.46') (⑧(N 00°22'23" E 2650.98')

FND. 1 1/2" CAPPED PIPE MARKED: 1135 R3W R2W S1 S6 S12 S7 1922 PER ①④⑥⑧⑨⑪

E 1/4 CORNER SECTION 12

FND. 2"I.P. WITH BRASS DISC MARKED: S.D.CO. ENGR DEPT T13S R3W 1/4 S12 S7 SURV. MON 1982 PER ①⑧⑩⑪

N 00°23'26" E 2655.10' (①(N 00°22'59" E 2654.31') (④(N 00°11'00" E 2654.32') (⑤(N 00°22'48" E 2654.42') (⑩(N 00°23'04" E 2655.10')

FND. 1 1/2" I.P. WITH DISC "LS 4086" PER ①⑦⑧⑩⑪

R.O.S. 8412 — R.O.S. 9293 — R.O.S. 6815 — R.O.S. 12121 — R.O.S. 12233 — P.M. 6234 — P.M. 8178 — R.O.S. 8428

N 89°55'16" W 2683.03' (①(N 89°56'55" W 2680.93') (④(N 89°54'04" E 2682.98') (⑥(N 89°46'43" E 2682.96') (⑧(N 89°55'58" W 2682.75') (⑨(N 89°51'52" E 2682.88')

N 89°33'00" E 2675.67' (①(N 89°29'49" E 2675.55') (④(N 89°41'07" E 2675.49') (⑩(N 89°41'25" E 2676.33')

N 89°19'06" E 2668.77' (①(N 89°19'46" E 2667.56') (④(N 89°10'27" E 2669.39') (⑦(N 89°21'29" E 2669.27') (⑧(N 89°21'35" E 2669.13') (⑩(N 89°21'51" E 2669.09')

FND. 2"I.P. NO TAG 0.88' N., 0.05' W. PER ①④⑪ NOT ACCEPTED SHOWN IN ERROR ON MAP 11978 AS LYING S 54°39'14" E 1.08' OF CENTER 1/4 CORNER

FND. 2"I.P. WITH DISC "RCE 23909" PER ①⑪ 0.00'E., 0.54'N. NOT ACCEPTED REPLACED PER LEGEND

FND. 2"I.P. WITH DISC "RCE 23909" PER ①⑨⑪

N 00°13'49" E 188.19' (①(N 00°13'47" E 188.00') (⑨(N 00°01'54" E 188.18')

(①(N 00°13'47" E 2669.18') (④(N 00°00'25" E 2669.31') (⑩(N 00°13'28" E 2668.86') N 00°13'49" E 2668.73'

FND. 2"I.P. WITH DISC "LS 2609" 0.18' W. PER ①④⑨⑪

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪

FND. 2"I.P. WITH DISC "RCE 23909" PER ①⑩⑪

N 1/4 CORNER SECTION 12

C 1/4 CORNER SECTION 12

S 1/4 CORNER SECTION 12

(①(N 00°13'47" E 2669.68') (④(N 00°00'25" E 2669.80') (⑩(N 00°13'28" E 2670.20') N 00°13'49" E 2670.21'

909.67' — 975.96' — 921.47' — 716.24'

C 1/4 CORNER SECTION 1

FND. 3/4"I.P. WITH DISC "LS 3599" PER ⑩ REPLACED PER LEGEND

N 00°13'28" W 2636.16' (⑥(N 00°32'34" W 2636.28') (⑩(N 00°13'02" W 2635.86') (①(N 00°12'57" W 2636.48')

SUBDIVISION BOUNDARY

SET LEAD AND TAG IN BOULDER "LS 6030"

FND. 2"I.P. WITH DISC "RCE 23909" PER ①⑨⑩⑪

N 00°13'49" E 941.98' (①(N 00°13'47" E 942.00')

(④(N 00°00'25" E 1334.65') (⑨(N 00°01'54" E 1333.86') N 00°14'17" E 1333.87'

BOUNDARY

P.O.B.

(④(N 00°00'25" E 1334.66') N 00°13'20" E 1334.85'

769.93'

1538.55' N 00°16'47" E 204.24' (①(N 00°16'06" E 203.83')

N 03°27'16" W 0.89' (①(N 54°39'14" W 1.08')

FND. 2"I.P. WITH DISC "LS 2609" 0.46' E. PER ①④⑩

FND. 2"I.P. WITH DISC "RCE 23909" PER ①⑩⑪

N 89°20'42" E 207.02'

N 86°32'15" W 86.31'

FND. "T" POST WITH DISC "RCE 9525" 0.06' S. PER ⑪

FND. 3/4"I.P. WITH DISC "RCE 7683" 6.11' N. PER ⑪

721.22'

SUBDIVISION BOUNDARY

N 67°56'34" W (R)

FND. 2"I.P. WITH DISC "RCE 23909" PER ① 0.07'E., 0.21'N. NOT ACCEPTED REPLACED PER LEGEND

FND. 2"I.P. WITH DISC "RCE 23909" PER ① 0.15'W., 0.36'N. NOT ACCEPTED REPLACED PER LEGEND

PRIVATE STREET

AMBIENTE VIA

N 25°48'32" W (R)

45.265 AC.

R.O.S. 12233

21.179 AC.

137.949 AC.

N 53°52'43" E (R)

N 80°36'02" E (R)

N 13°56'05" W (R)

N 12°52'56" W (R)

MAP 11978

N 71°24'10" E (R)

N 89°57'17" W 2702.46' (①(N 89°57'36" W 2702.10') (④(N 89°50'12" E 2704.09') (⑥(N 89°57'43" W 2702.15') (⑩(N 89°57'59" W 2701.78')

N 89°22'05" E 2669.86' (①(N 89°19'46" E 2667.56') (④(N 89°10'27" E 2669.39') (⑥(N 89°21'23" E 2669.53') (⑩(N 89°21'41" E 2669.80') N 89°21'46" E 2669.58'

875.77' — 710.46' — 596.19'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪

FND. 2"I.P. WITH DISC "RCE 23909" PER ①⑩⑬

(①(N 00°07'02" W 2685.08') (④(N 00°23'09" W 2685.25') (⑩(N 00°07'11" W 2685.19') N 00°07'25" W 2685.37'

(⑩(N 00°07'11" W 5370.37') (⑥(N 00°07'24" W 5370.13') (④(N 00°23'09" W 5370.51') (①(N 00°07'02" W 5370.16') N 00°07'25" W 5370.74'

FND. 2"I.P. WITH BRASS DISC MARKED: S.D.CO. ENGR DEPT T13S R3W S2 S1 S11 S12 SURV. MON 1982 PER ①⑧⑩⑬

(①(N 00°07'02" W 2685.08') (④(N 00°23'09" W 2685.26') (⑩(N 00°07'11" W 2685.18') N 00°07'25" W 2685.37'

FND. "T" POST WITH DISC. "RCE 9525" 28.70' N., 0.50' W. PER ⑪⑬ NOT ACCEPTED

SUBDIVISION BOUNDARY

N 00°07'37" E 2661.44' (①(N 00°06'45" E 2661.57') (⑩(N 00°07'35" E 2661.59') (⑧(N 00°06'58" E 2661.54')

FND. 3/4"I.P. WITH DISC "LS 3599" 0.20' N., 0.62' W. PER ⑪⑬ NOT ACCEPTED

1342.68' (①(1342.54') (⑩(1342.59')

1342.69' (①(1342.54') (⑩(1342.59')

N 01°07'31" W 28.71'

FND. 2"I.P. WITH DISC "LS 6030" PER ⑪⑬

W 1/4 CORNER SECTION 12

FND. 1"I.P. WITH DISC "LS 1162" PER ①⑩⑧③ REPLACED PER LEGEND

SEE SHEET NO. 16

512.87' — 543.22' — 630.28'

1345.58'

650.29'

P.O.B.

W 1/4 CORNER SECTION 1

SEE SHEET NO. 3

0 400 800 1200 1600

SCALE: 1" = 400'

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GRADING PLAN L- NONE

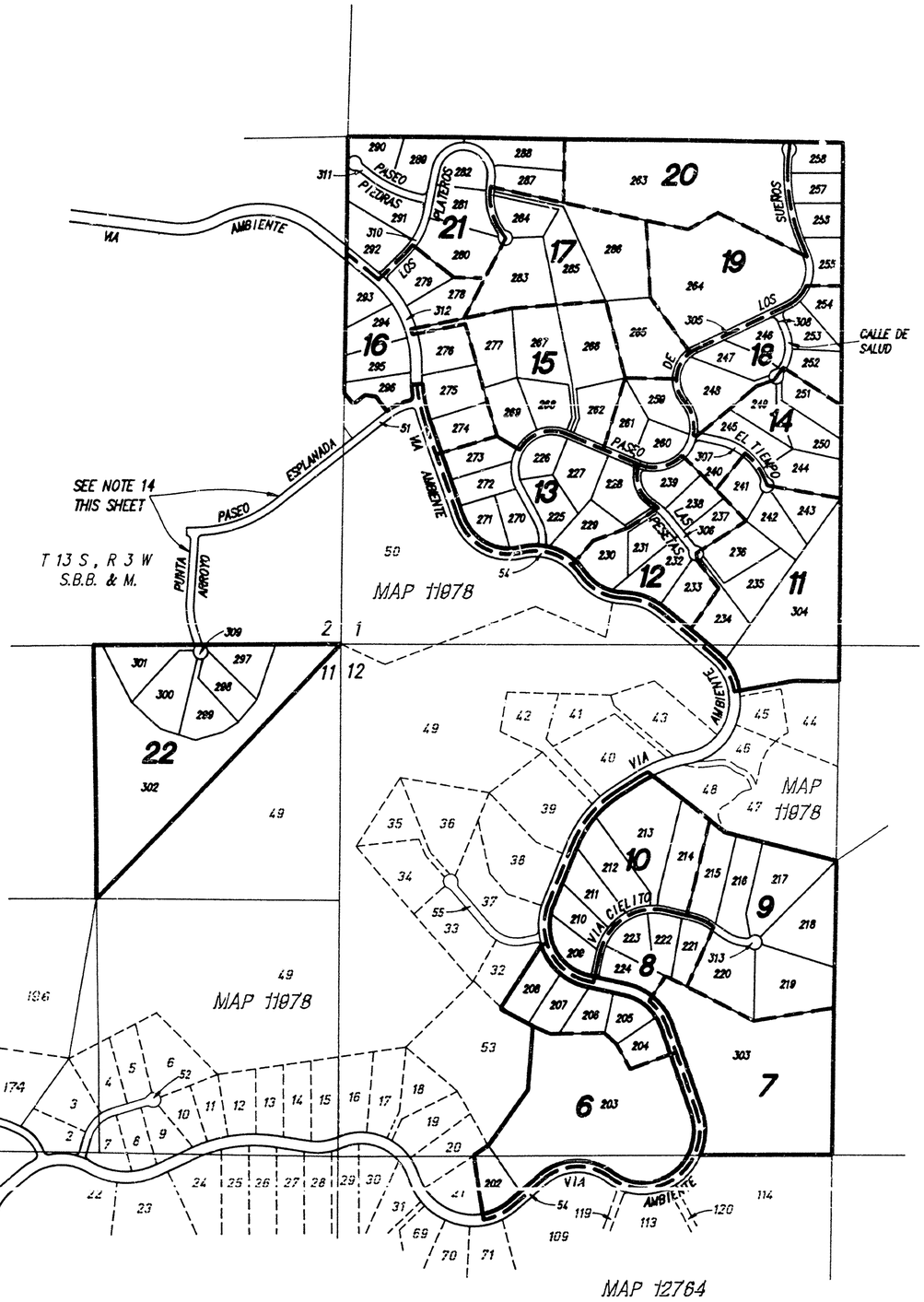
CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

JAN 1, 1992

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4



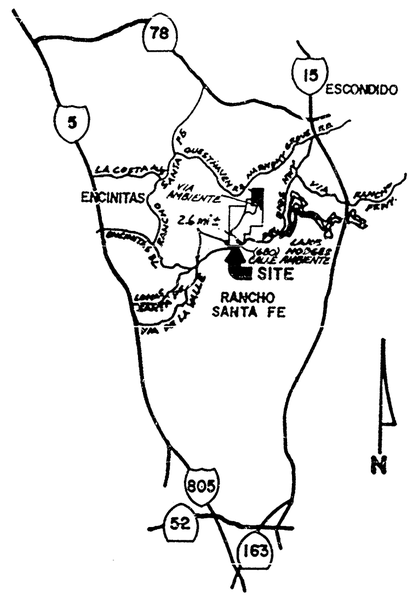
KEY MAP

0 500 1000 1500 2000

SCALE: 1" = 500'

NOTES

1. UNLESS OTHERWISE SHOWN ON THIS MAP, A 3/4" X 18" IRON PIPE WITH PLUG MARKED LS 6030 HAS BEEN SET AT ALL REAR LOT CORNERS, ALL FRONT LOT CORNERS AND ALL POINTS OF CURVE ALONG THE SIDELINES OF PRIVATE STREETS (SEE DEFERRED MONUMENTATION CERTIFICATE ON SHEET NO. 1).
2. THE BEGINNING AND ENDING LOT NUMBERS ARE 202 AND 313 RESPECTIVELY.
3. THE TOTAL NUMBER OF LOTS IS 112. RESIDENTIAL LOTS 99, PRIVATE STREET LOTS 9, OPEN SPACE LOTS 3, PLANNED DEVELOPMENT 1.
4. THE TOTAL GROSS AREA IS 224.848 ACRES.
5. ALL DISTANCES AND STREET WIDTHS SHOWN WITHOUT DECIMALS REPRESENT THAT DISTANCE TO ZERO HUNDREDTHS.
6. THIS SUBDIVISION HAS A MINIMUM OF 100 SQUARE FEET OF SOLAR ACCESS FOR EACH EXISTING AND/OR PROPOSED DWELLING UNIT AS REQUIRED BY SECTION 81.401(n) OF THE SUBDIVISION ORDINANCE.
7. ACCESS FROM CALLE AMBIENTE, WHICH IS A PUBLICLY MAINTAINED ROAD, TO THE BOUNDARY OF THE SUBDIVISION CREATED BY THIS MAP WILL BE BY VIA AMBIENTE (LOT 75 AND 76) OF MAP NO. 11979 AND (LOT 54) OF MAP NO. 11978 WHICH IS OVER PROPERTY THAT IS CONTIGUOUS OWNERSHIP OF THE SUBDIVISION OF THE PROPERTY SHOWN ON THIS MAP.
8. ALL PRIVATE STREETS WILL BE VESTED IN RANCHO CIELO HOMEOWNERS ASSOCIATION. ALL LOT OWNERS WILL BE GRANTED A NON-EXCLUSIVE EASEMENT OVER SAID STREETS.
9. IT IS THE RESPONSIBILITY OF THE SUBDIVIDER TO GRANT EASEMENTS AND TO MAKE THEM APPURTENANT TO EACH RESIDENTIAL LOT AS SHOWN ON THIS MAP, FOR INGRESS, EGRESS, AND PUBLIC UTILITY PURPOSES OVER, UNDER, UPON AND ACROSS LOTS 305 - 313 INCLUSIVE AS SHOWN ON THIS MAP.
10. IT IS THE RESPONSIBILITY OF THE SUBDIVIDER TO PROVIDE INSURABLE ACCESS AND PUBLIC UTILITY EASEMENTS TO EACH LOT CREATED BY THIS MAP.
11. EXISTING EASEMENTS FOR A SEWER AND/OR WATER LINES AND ACCESS IN FAVOR OF ROGER R. REVELLE, ET AL, RECORDED JANUARY 25, 1980, AS FILE PAGE NO. 80-028938 AND RECORDED MARCH 3, 1982, AS F/P NO. 82-058708 ARE GENERAL EASEMENTS WITH NO LOCATION SET FORTH AND CANNOT BE PLOTTED ON THIS MAP.
12. EXISTING PRIVATE ROAD EASEMENT IN FAVOR OF BYRON F. WHITE AND SAN ELIJO VISTA-160 PARTNERSHIP, RECORDED OCTOBER 11, 1991 AS FILE NO. 91-528377 O.R.
13. EXISTING EASEMENT IN FAVOR OF OLIVENHAIN MUNICIPAL WATER DISTRICT RECORDED MAY 10, 1961 AS FILE NO. 61-080650 IS A GENERAL EASEMENT WITH NO LOCATION SET FORTH AND CANNOT BE PLOTTED ON THIS MAP.
14. ACCESS FROM VIA AMBIENTE (SEE NOTE 7 ABOVE) TO LOTS 297 THROUGH 301 INCLUSIVE AND LOT 309 WILL BE BY THE PORTION OF PASEO ESPLANADA (LOT 51) ON MAP NO. 11978, WHICH IS OVER CONTIGUOUS OWNERSHIP OF THE SUBDIVIDER OF THIS MAP, AND BY PRIVATE ROAD EASEMENT RECORDED OCTOBER 11, 1991 AS FILE NO. 91-528378 O.R. SAID ACCESS SHALL BE A MINIMUN OF 40 FEET WIDE AND FOR THE BENEFIT AND USE OF THE PROPERTY BEING DIVIDED.
15. EXISTING EASEMENT IN FAVOR OF REID C. NECKER AND MAXINE E. NECKER, ET AL RECORDED AUGUST 15, 1975 AS FILE NO. 75-211712 IS A GENERAL EASEMENT WITH NO LOCATION SET FORTH AND CANNOT BE PLOTTED ON THIS MAP.



VICINITY MAP

NOT TO SCALE

SEE LEGEND SHEET 3

BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS MAP IS THE NORTH LINE OF THE NW1/4 OF SECTION 14, T13S, R3W, S.B.M., SHOWN HEREON AS N88°06'35"W PER R.O.S. 9293. SAID BEARING AND THE BEARINGS SHOWN HEREON ARE IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM (1927 DATUM) ZONE 6. QUOTED BEARINGS FROM REFERENCE MAPS OR DEEDS MAY OR MAY NOT BE IN TERMS OF SAID SYSTEM.

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

MAP NO. 12905

SHEET 6 OF 24 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-4

N

0 80 160 240 320

SCALE: 1" = 80'

SEE SHEET NO. 8

SEE SHEET NO. 7

208 207 206 205 204 303

203
14.418 AC.

202
1.176 AC.

53 MAP 11978

20 21 109 113 114 54

VIA AMBIENTE

N 62°55'00" W 171.99'

15' 7.5'

SEE DETAIL "H" THIS SHEET

SUBDIVISION BOUNDARY

N 66°48'35" W 91.35'

N 89°04'42" E 296.92'

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

N 49°46'46" W 88.90'

N 29°47'18" W 150.69'

N 70°06'35" E 229.52'

N 04°20'18" E 335.76'

N 32°27'26" W 588.94'

N 17°00'25" W 201.00'

N 19°53'25" W 330.44'

N 31°00'25" W 168.00'

N 19°53'25" W 475.35'

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-350320

N 70°06'35" E (R)

N 00°00'25" W 177.00'

30' 30'

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

N 24°59'35" E 184.00'

N 08°43'34" W 224.67'

N 33°59'35" E 73.00'

N 42°00'25" W 89.00'

N 71°59'35" E 165.00'

N 85°00'25" W 126.00'

D = 17°54'02" L = 103.10'

D = 42°26'30" L = 244.45'

D = 74°30'00" R = 330.00' L = 429.09'

D = 74°30'00" R = 300.00' L = 390.08'

D = 144°30'00" R = 270.00' L = 680.94'

D = 144°30'00" R = 300.00' L = 756.60'

N 34°36'35" E (R)

N 39°53'25" W (R)

N 36°05'33" E 360.52'

N 56°58'59" E 95.00'

N 85°00'25" W 109.00'

N 42°00'25" W 97.00'

N 36°02'23" W 299.51'

N 78°59'35" E 123.30'

N 05°00'25" W 267.00'

N 09°26'47" W (R) 310.00'

N 50°06'35" E 208.94'

134.72'

74.22'

D = 30°26'39" L = 164.72'

D = 109°28'00" R = 310.00' L = 592.27'

D = 109°28'00" R = 340.00' L = 649.59'

OPEN SPACE EASEMENT OVER A PORTION OF LOT 203 GRANTED HEREON

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

SUBDIVISION BOUNDARY

SUBDIVISION BOUNDARY

SUBDIVISION BOUNDARY

℄ EXISTING 15' SEWER EASEMENT DEDICATED ON MAP 11978

MAP 12764

DETAIL "H"
NO SCALE

N 62°55'00" W 171.99'

13.29'

91.35'

26.99'

N 04°20'18" E 335.76'

No.	Delta or Brg	Radius	Length
1	N 55°23'25" W		15.90'
2	N 55°23'25" W		15.90'
3	14°09'28"	330.00'	81.54'
4	09°37'20"	310.00'	52.06'
5	N 32°27'26" W		40.00'

JAN 16 1992
MICROFILMED

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229--4

C B A 1 5 10 A B C

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 7 OF 24 SHEETS

SEE SHEET NO. 8

SEE SHEET NO. 9

SEE SHEET NO. 8

SEE SHEET NO. 6

220

219

205

204

203

303
14.152 AC.

114

MAP 11978

MAP 12764

VIA AMBIENTE

N 64°00'25" W 193.00'

N 37°29'16" E 126.45'

N 63°59'47" W 532.59' 894.68'

N 80°50'29" E 445.86'

IDENTICAL POINT

N 80°50'29" E 445.86'

SUBDIVISION BOUNDARY

IDENTICAL POINT

N 00°13'49" E 2668.73' 1538.55' 769.93'

SUBDIVISION BOUNDARY

0 60 120 180 240

SCALE: 1" = 60'

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-22-91 F/P 91-550320

D = 58°04'00" R = 300.00' L = 304.04'

D = 32°05'20" R = 330.00' L = 184.82'

N 39°01'15" E (R)

N 21°00'25" W 164.00'

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

30' 30'

N 02°59'35" E 169.98'

N 70°06'35" E (R)

SUBDIVISION BOUNDARY

N 19°53'25" W 110.36'

N 57°00'25" W 110.00'

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

OPEN SPACE EASEMENT OVER ALL OF LOT 303 GRANTED HEREON.

SUBDIVISION BOUNDARY

475.35' 475.35'

N 17°39'35" E 1080.10'

49.97'

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

30' 30'

N 70°06'35" E (R)

D = 41°58'51" R = 330.00' L = 241.80'

D = 144°30'00" R = 330.00' L = 832.26'

D = 144°30'00" R = 330.00' L = 758.89'

N 67°36'34" W (R)

SUBDIVISION BOUNDARY

N 89°41'25" E 721.22'

FND. 2"I.P. WITH DISC "LS 6030" PER (11)

C 1/4 CORNER SECTION 12

JAN 13 1992

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

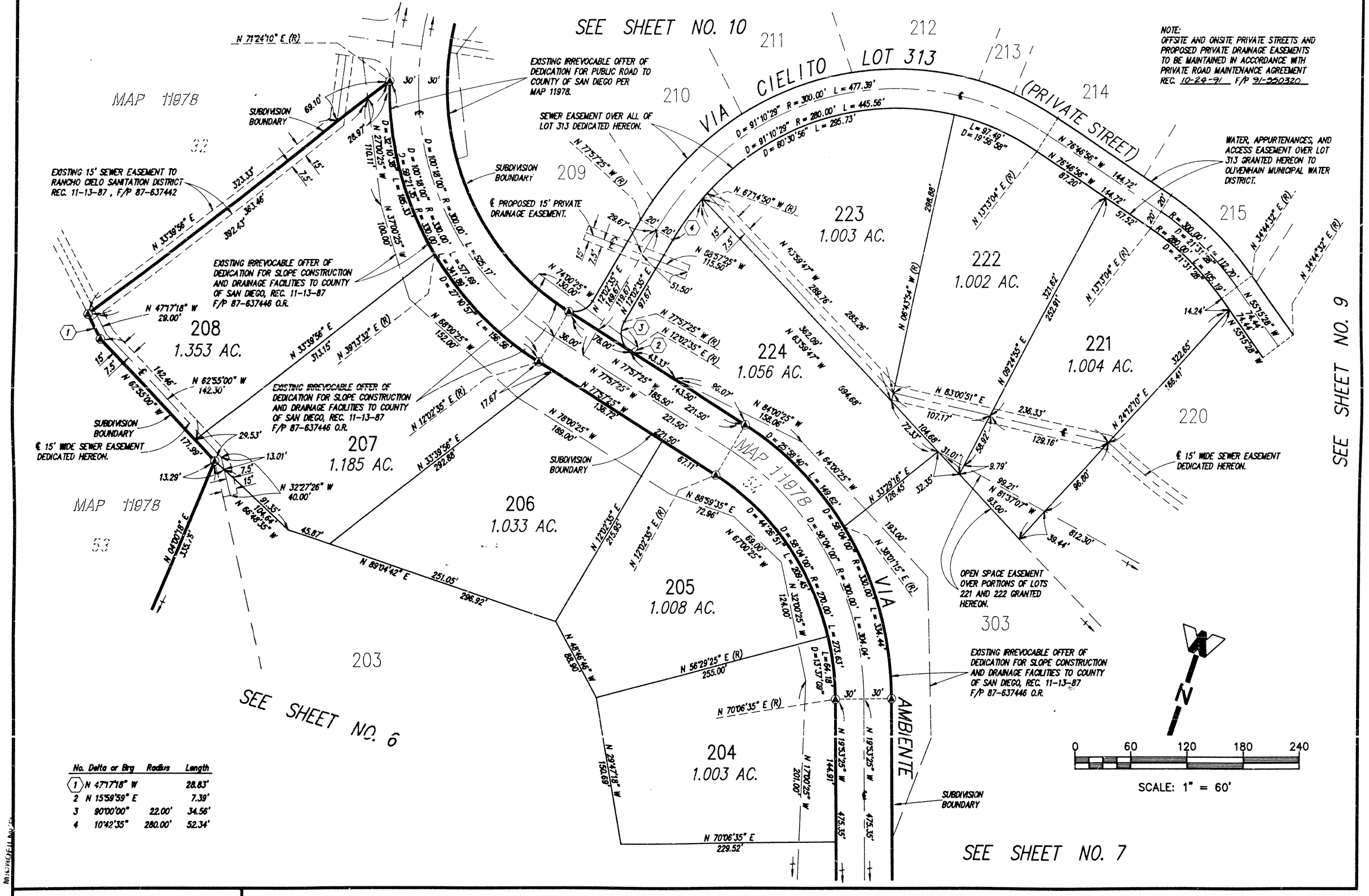
COUNTY TM 4229-4

C B A 1 5 10 A B C

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 8 OF 24 SHEETS



No.	Delta or Brg	Radius	Length
1	N 47°17'18" W		28.83'
2	N 15°59'59" E		7.39'
3	90°00'00"	22.00'	34.56'
4	10°42'35"	280.00'	52.34'

JAN 13 1992

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-1459

JN 36700

GRADING PLAN L- NONE

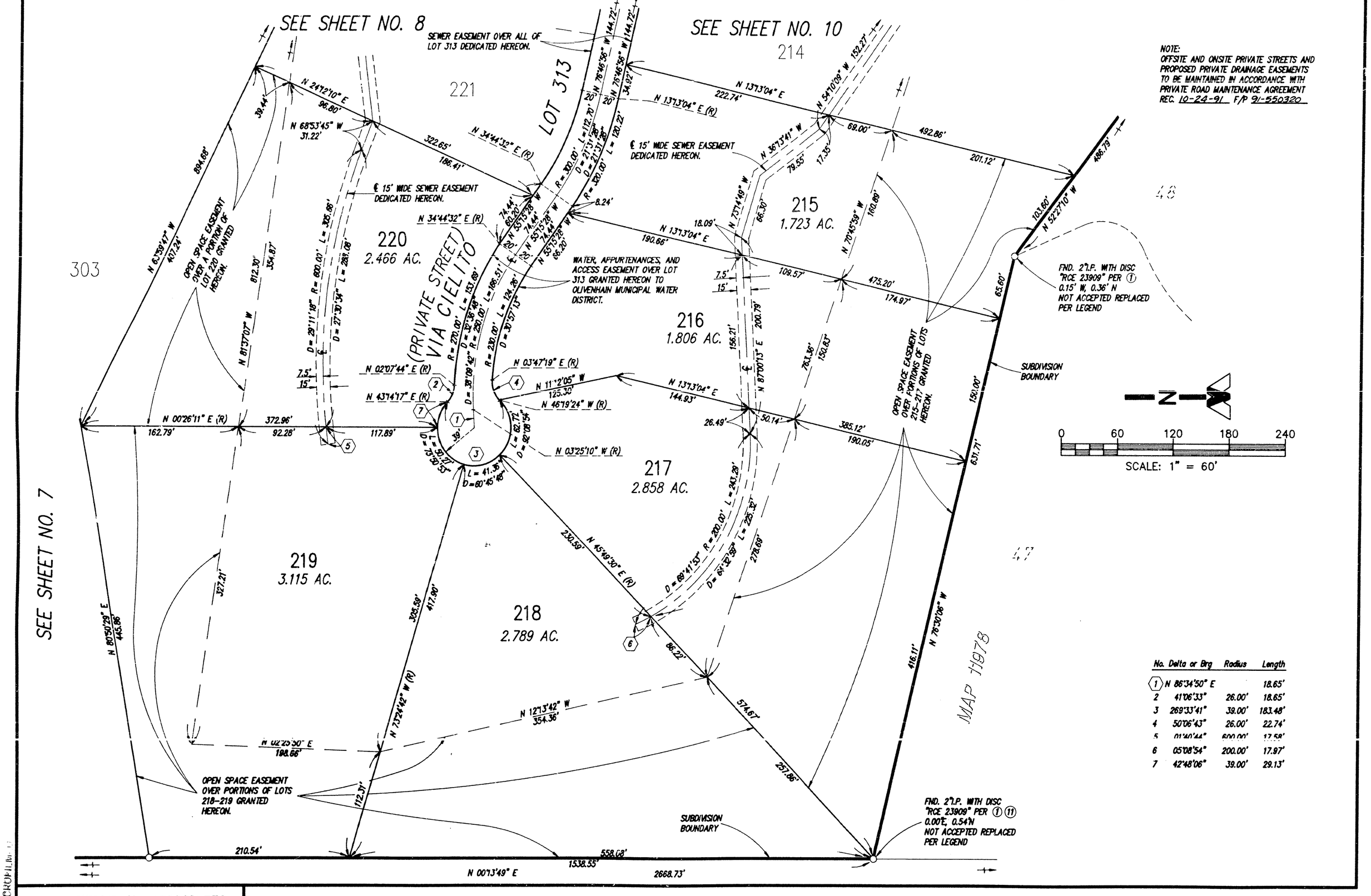
CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 9 OF 24 SHEETS



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

SCALE: 1" = 60'

No.	Delta or Brg	Radius	Length
1	N 86°34'50" E		18.65'
2	41°06'33"	26.00'	18.65'
3	269°33'41"	39.00'	183.48'
4	50°06'43"	26.00'	22.74'
5	01°40'44"	600.00'	17.58'
6	05°08'54"	200.00'	17.97'
7	42°48'06"	39.00'	29.13'

WILLDAN ASSOCIATES
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6343 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-1999

JN 36700

GRADING PLAN L- NONE
CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

JAN 1 5 1992
MICROFILMED

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 10 OF 24 SHEETS

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDACE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

MAP 11978

VIA AMBIENTE

VIA CIELITO LOT 313 (PRIVATE STREET)

SCALE: 1" = 60'

0 60 120 180 240

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

SUBDIVISION BOUNDARY

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 210-214 GRANTED HEREON

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

SEWER EASEMENT OVER ALL OF LOT 313 DEDICATED HEREON.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 313 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

209 1.003 AC.
210 1.079 AC.
211 1.351 AC.
212 1.969 AC.
213 3.679 AC.
214 2.097 AC.
215
222
223
224
205
206

SEE DETAIL "F" THIS SHEET

SEE SHEET NO. 8

SEE SHEET NO. 9

DETAIL "F"
NO SCALE

No.	Delta or Brg	Radius	Length
1	91°23'11"	22.00'	35.09'
2	N 22°59'35" E	---	12.00'
3	10°32'02"	270.00'	49.64'
4	31°57'53"	270.00'	150.63'
5	N 54°59'35" E	---	11.54'
6	23°15'48"	270.00'	109.63'
7	09°41'49"	270.00'	45.70'
8	03°25'34"	210.00'	12.56'
9	14°09'16"	200.00'	49.41'
10	07°10'51"	320.00'	40.11'
11	20°00'51"	210.00'	73.36'
12	N 79°22'58" E (R)	---	40.00'
13	04°05'56"	320.00'	22.89'
14	N 74°00'25" W	---	130.00'
15	N 12°02'35" E	---	97.60'
16	53°30'13"	200.00'	186.76'
17	01°23'11"	270.00'	6.53'

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

JAN 13 1992

C B A 1 5 10 A B C

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 11 OF 24 SHEETS

MAP 11978

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

SUBDIVISION BOUNDARY

SEE SHEET NO. 12

SEWER EASEMENT OVER ALL OF LOT 306 DEDICATED HEREON.

LAS PESETAS
LOT 306
(PRIVATE STREET)

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 306 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

EXIST. 30' WATER EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT RECORDED 10-29-87 F/P 87-609481 O.R.

VIA AMBIENTE

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 307 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

EL TIEMPO
LOT 307
(PRIVATE STREET)

SEWER EASEMENT OVER ALL OF LOT 307 DEDICATED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT

OPEN SPACE EASEMENT OVER A PORTION OF LOT 234 GRANTED HEREON

234
1.532 AC.

235
1.722 AC. GROSS
1.655 AC. NET

236
1.631 AC.

237

238

240

241
1.080 AC.

242
1.257 AC.

243
1.251 AC.

244

304
7.769 AC. GROSS
3.231 AC. NET

EXIST. 12' UTILITY EASEMENT TO SDG&E RECORDED 12-20-61 F/P 61-219862 O.R.

EXISTING 20' WATER EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT RECORDED 6-1-51 F/P 61-094168 O.R.

EXIST. ROAD AND UTILITY EASEMENT TO REID C. AND MAXINE E. NECKER RECORDED 1-17-66 F/P 66-008946 O.R.

"NOT A BUILDING SITE"

EXIST. 20' WATER EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT RECORDED 1-31-62 F/P 62-018557 O.R.

OPEN SPACE EASEMENT OVER ALL OF LOT 304 GRANTED HEREON.

℄ EXIST. 60' PRIVATE ROAD AND UTILITY EASEMENT TO MARGERY HUTMAN, ET AL, RECORDED 3-27-61 F/P 61-053305 O.R.

FND. 2"I.P. WITH DISC "RCE 23909" PER ① 0.07' E, 0.21' N NOT ACCEPTED REPLACED PER LEGEND

FND. 2"I.P. WITH DISC "RCE 23909" PER ① ⑨ ⑪

SEE DETAIL "A" THIS SHEET

FND. 2"I.P. WITH DISC "RCE 23909" PER ① ⑤ ⑩ ⑪

N 1/4 CORNER SECTION 12

DETAIL "A"
NO SCALE

OPEN SPACE EASEMENT OVER A PORTION OF LOT 235 GRANTED HEREON

OPEN SPACE EASEMENT OVER A PORTION OF LOT 242 GRANTED HEREON

OPEN SPACE EASEMENT OVER LOT 243 GRANTED HEREON

SEE SHEET NO. 14

No.	Delta or Brg	Radius	Length
①	03°11'26"	330.00'	18.38'
2	08°29'52"	330.00'	48.95'
3	30°51'07"	39.00'	21.00'
4	30°51'07"	39.00'	21.00'
5	52°33'38"	39.00'	35.78'
6	61°42'14"	39.00'	42.00'
7	49°07'53"	26.00'	22.30'
8	81°39'57"	39.00'	55.59'
9	66°39'43"	39.00'	45.38'
10	44°51'21"	39.00'	30.53'
11	269°39'21"	39.00'	183.55'
12	08°42'27"	350.00'	53.19'
13	01°29'01"	500.00'	12.95'
14	01°17'41"	500.00'	11.30'
15	01°26'34"	500.00'	12.59'

0 60 120 180 240

SCALE: 1" = 60'

JAN 1 6 1992

WILLDAN ASSOCIATES
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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 12 OF 24 SHEETS

SEE SHEET NO. 14

SEE SHEET NO. 11

SEE SHEET NO. 13

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

No.	Delta or Brg	Radius	Length
1	10°59'52"	230.00'	44.15'
2	97°27'59"	22.00'	37.42'
3	06°21'09"	380.00'	42.13'
4	03°08'50"	380.00'	20.87'
5	18°46'41"	380.00'	124.54'
6	44°57'09"	26.00'	20.40'
7	61°16'47"	39.00'	41.71'
8	42°49'15"	39.00'	29.15'
9	61°42'14"	39.00'	42.00'
10	44°57'09"	26.00'	20.40'
11	269°54'18"	39.00'	183.72'
12	12°25'02"	330.00'	71.52'
13	11°52'51"	270.00'	55.99'
14	N 86°58'25" W	--	28.20'
15	N 86°58'25" W	--	28.20'
16	05°06'28"	360.00'	32.09'
17	51°32'24"	39.00'	35.08'
18	13°50'05"	50.00'	12.07'
19	34°54'55"	50.00'	30.47'
20	N 38°55'58" W	--	89.56'
21	59°32'01"	50.00'	51.95'

DETAIL "I"
NO SCALE

DETAIL "J"
NO SCALE

0 60 120 180 240
SCALE: 1" = 60'

JAN 13 1992

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6343 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-2999

JN 36700

GRADING PLAN L- NONE

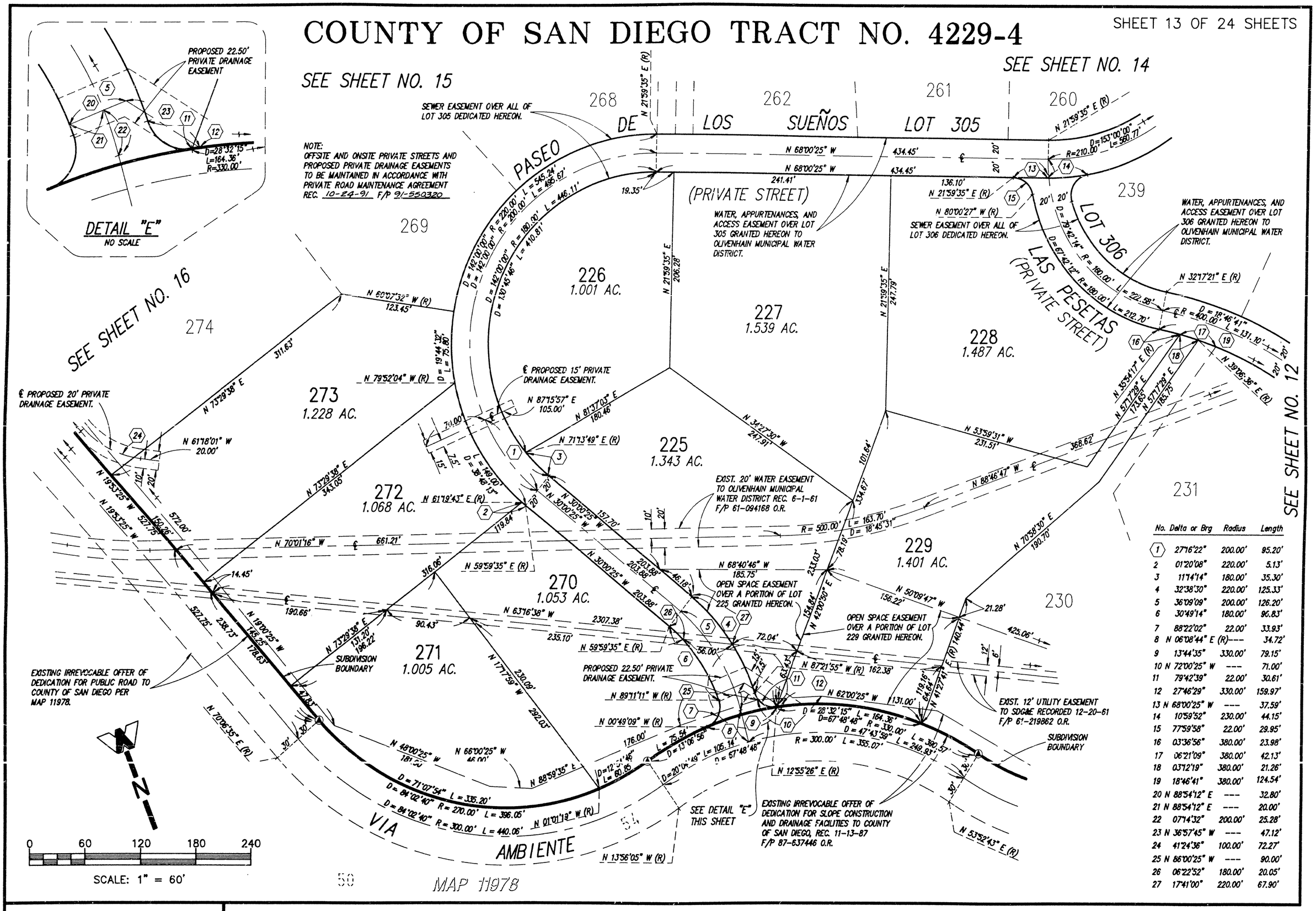
CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 13 OF 24 SHEETS



No.	Delta or Brg	Radius	Length
1	27°16'22"	200.00'	95.20'
2	01°20'08"	220.00'	5.13'
3	11°14'14"	180.00'	35.30'
4	32°38'30"	220.00'	125.33'
5	36°09'09"	200.00'	126.20'
6	30°49'14"	180.00'	96.83'
7	88°22'02"	22.00'	33.93'
8	N 06°08'44" E (R)	---	34.72'
9	13°44'35"	330.00'	79.15'
10	N 72°00'25" W	---	71.00'
11	79°42'39"	22.00'	30.61'
12	27°46'29"	330.00'	159.97'
13	N 68°00'25" W	---	37.59'
14	10°59'52"	230.00'	44.15'
15	77°59'58"	22.00'	29.95'
16	03°36'56"	380.00'	23.98'
17	06°21'09"	380.00'	42.13'
18	03°12'19"	380.00'	21.26'
19	18°46'41"	380.00'	124.54'
20	N 88°54'12" E	---	32.80'
21	N 88°54'12" E	---	20.00'
22	07°14'32"	200.00'	25.28'
23	N 36°57'45" W	---	47.12'
24	41°24'36"	100.00'	72.27'
25	N 86°00'25" W	---	90.00'
26	06°22'52"	180.00'	20.05'
27	17°41'00"	220.00'	67.90'

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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

JAN 13 1992
MICROFILMED

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 14 OF 24 SHEETS

SCALE: 1" = 60'

SEE SHEET NO. 15

SEE SHEET NO. 17

SEE SHEET NO. 18

SEE SHEET NO. 13

SEE SHEET NO. 12

SEE SHEET NO. 11

CALLE DE SALUD
LOT 308
(PRIVATE STREET)

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 308 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEWER EASEMENT OVER ALL OF LOT 308 DEDICATED HEREON.

WATER APPURTENANCES, AND ACCESS EASEMENT OVER LOT 305 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

EXIST. 30' WATER EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT RECORDED 1-23-76 F/P 76-021179 O.R.

SEWER EASEMENT OVER ALL OF LOT 305 DEDICATED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 307 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEWER EASEMENT DEDICATED HEREON

SEWER EASEMENT OVER ALL OF LOT 307 DEDICATED HEREON.

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

SUBDIVISION BOUNDARY

OPEN SPACE EASEMENT OVER A PORTION OF LOT 251 GRANTED HEREON

OPEN SPACE EASEMENT OVER A PORTION OF LOT 250 GRANTED HEREON

OPEN SPACE EASEMENT OVER A PORTION OF LOT 244 GRANTED HEREON

SUBDIVISION BOUNDARY

No.	Delta or Brg	Radius	Length
1	19°11'20"	230.00'	77.03'
2	80°57'29"	22.00'	31.09'
3	79°51'10"	22.00'	30.66'
4	08°42'27"	350.00'	53.19'
5	269°39'21"	39.00'	183.55'
6	76°28'21"	39.00'	52.05'
7	41°31'32"	26.00'	18.84'
8	07°10'03"	370.00'	46.29'
9	269°54'17"	39.00'	183.72'
10	54°06'42"	39.00'	36.83'
11	46°14'52"	39.00'	31.48'
12	50°17'06"	39.00'	34.23'
13	47°24'56"	39.00'	32.27'
14	44°48'36"	26.00'	20.33'
15	04°35'28"	220.00'	17.63'

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-1515

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

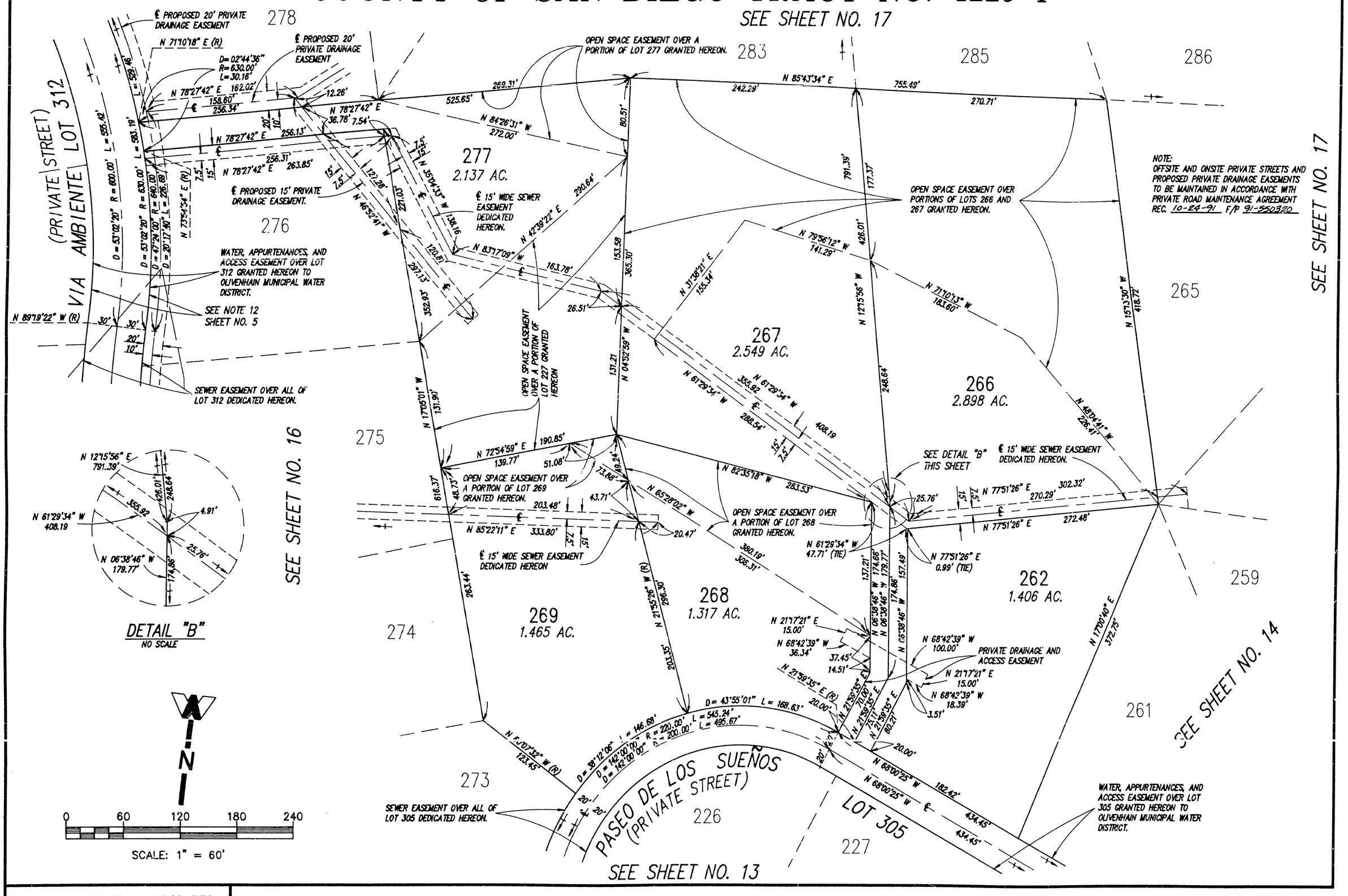
JAN 1 5 1992
MICROFILMED

C B A A B C

MAP NO. 12905

SHEET 15 OF 24 SHEETS

COUNTY OF SAN DIEGO TRACT NO. 4229-4



WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

JAN 1 4 1992
MICROFILMED

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SCALE: 1" = 60'

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-350320

SEE SHEET NO. 17
SEE SHEET NO. 15
SEE SHEET NO. 21
SEE SHEET NO. 13

283, 277, 269, 280, 279 1.259 AC., 278 1.484 AC., 276 1.367 AC., 275 1.602 AC., 274 1.355 AC., 273, 291, 292, 296 1.052 AC., 295 1.342 AC., 294 1.213 AC., 293 1.104 AC.

LOT 310 LOS PLATEROS (PRIVATE STREET)

VIA AMBIENTE (PRIVATE STREET)

LOT 312

PASEO ESPLANADA

VIA AMBIENTE

SUBDIVISION BOUNDARY

OPEN SPACE EASEMENT OVER A PORTION OF LOT 278 GRANTED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.

℄ PROPOSED 20' PRIVATE DRAINAGE EASEMENT.

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

SLOPE AND DRAINAGE FACILITY EASEMENT DEDICATED HEREON AND PROPOSED PRIVATE SLOPE AND DRAINAGE EASEMENT.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR SLOPE CONSTRUCTION AND DRAINAGE FACILITIES TO COUNTY OF SAN DIEGO, REC. 11-13-87 F/P 87-637446 O.R.

EXISTING IRREVOCABLE OFFER OF DEDICATION FOR PUBLIC ROAD TO COUNTY OF SAN DIEGO PER MAP 11978.

MAP 11978

SEWER EASEMENT OVER ALL OF LOT 310 DEDICATED HEREON.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 310 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 312 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEE DETAIL "G" SHEET NO. 21

SEE NOTE 12 SHEET NO. 5

PROPOSED PRIVATE DRAINAGE EASEMENT

FOUND 3/4" IP WITH OMWD MARKER NEXT TO I.P. NOT ACCEPTED. ON LINE 0.17 NW OF TRUE POINT PER (10) REPLACED PER LEGEND AT TRUE CORNER

FOUND 3/4" IP WITH OMWD MARKER NEXT TO IP. PER (10) REPLACED PER LEGEND

FOUND 3/4" IP WITH OMWD MARKER NEXT TO I.P. 0.05S 0.29W PER (10) NOT ACCEPTED

No.	Delta or Brg	Radius	Length
1	06°54'16"	630.00'	75.92'
2	91°05'31"	22.00'	34.98'
3	02°44'36"	630.00'	30.16'
4	01°32'47"	830.00'	22.40'
5	04°27'17"	830.00'	64.53'
6	06°00'04"	830.00'	86.93'
7	06°00'04"	800.00'	83.79'
8	06°00'04"	770.00'	80.65'
9	02°47'06"	770.00'	37.43'
10	N84°40'35"E (R)	---	60.00'
11	04°04'33"	830.00'	59.04'
12	06°53'59"	800.00'	96.34'
13	14°34'00"	770.00'	195.76'
14	86°31'02"	22.00'	33.22'
15	N 77°46'36" E (R)	---	47.03'
16	07°40'01"	800.00'	107.05'
17	41°24'36"	100.00'	72.27'
18	02°47'32"	600.00'	29.24'
19	00°10'14"	640.00'	1.91'
20	02°33'01"	830.00'	36.94'
21	N 33°59'35" E	---	25.02'
22	N 45°31'00" E	---	43.16'
23	N 02°30'50" W	---	24.47'
24	05°45'00"	630.00'	63.22'
25	N 45°31'00" E	---	60.12'
26	04°31'34"	570.00'	45.03'
27	05°03'59"	770.00'	68.09'

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
8363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619)457-899

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

JAN 1, 1992

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 17 OF 24 SHEETS

SEE SHEET NO. 21

SEE SHEET NO. 20

SEE SHEET NO. 19

SEE SHEET NO. 21

SEE SHEET NO. 16

SEE SHEET NO. 15

SEE SHEET NO. 18

SEE SHEET NO. 14

LOS PLATEROS (PRIVATE STREET) LOT 310

LOS PASEO DE SUEÑOS (PRIVATE STREET) LOT 305

SEWER EASEMENT OVER ALL OF LOT 310 DEDICATED HEREON.

℄ 15' WIDE SEWER EASEMENT DEDICATED HEREON.

OPEN SPACE EASEMENT OVER A PORTION OF LOT 286 GRANTED HEREON.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 310 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 283, 285 & 286

OPEN SPACE EASEMENT OVER A A PORTION OF LOT 265 GRANTED HEREON

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 305 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEWER EASEMENT OVER ALL OF LOT 305 DEDICATED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.

℄ SEWER EASEMENT DEDICATED HEREON.

No.	Delta or Brg	Radius	Length
1	26°00'43"	175.00'	79.45'
2	N 05°08'45" E	----	49.36'
3	04°05'29"	280.00'	20.24'
4	269°54'18"	39.00'	183.72'
5	44°57'09"	26.00'	20.40'
6	N 36°03'34" W	----	7.72'

SCALE: 1" = 60'

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

WILLDAN ASSOCIATES
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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

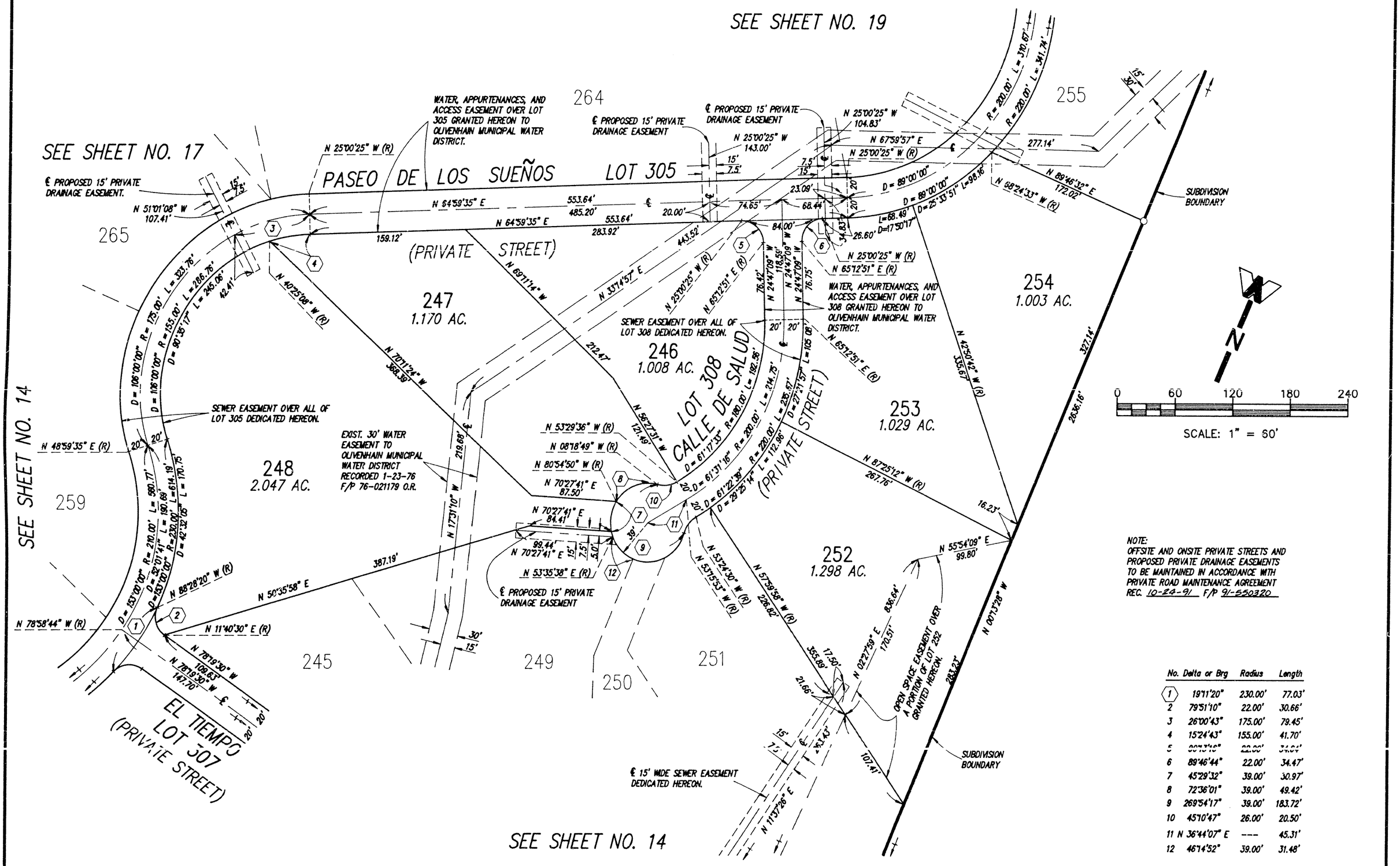
COUNTY TM 4229-4

JAN 15 1992
MICROFILMED

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 18 OF 24 SHEETS



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

No.	Delta or Brg	Radius	Length
1	19°11'20"	230.00'	77.03'
2	79°51'10"	22.00'	30.66'
3	26°00'43"	175.00'	79.45'
4	15°24'43"	155.00'	41.70'
5	90°36'16"	22.00'	34.64'
6	89°46'44"	22.00'	34.47'
7	45°29'32"	39.00'	30.97'
8	72°36'01"	39.00'	49.42'
9	269°54'17"	39.00'	183.72'
10	45°10'47"	26.00'	20.50'
11	N 36°44'07" E	---	45.31'
12	46°14'52"	39.00'	31.48'

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CONSULTING ENGINEERS AND PLANNERS
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JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

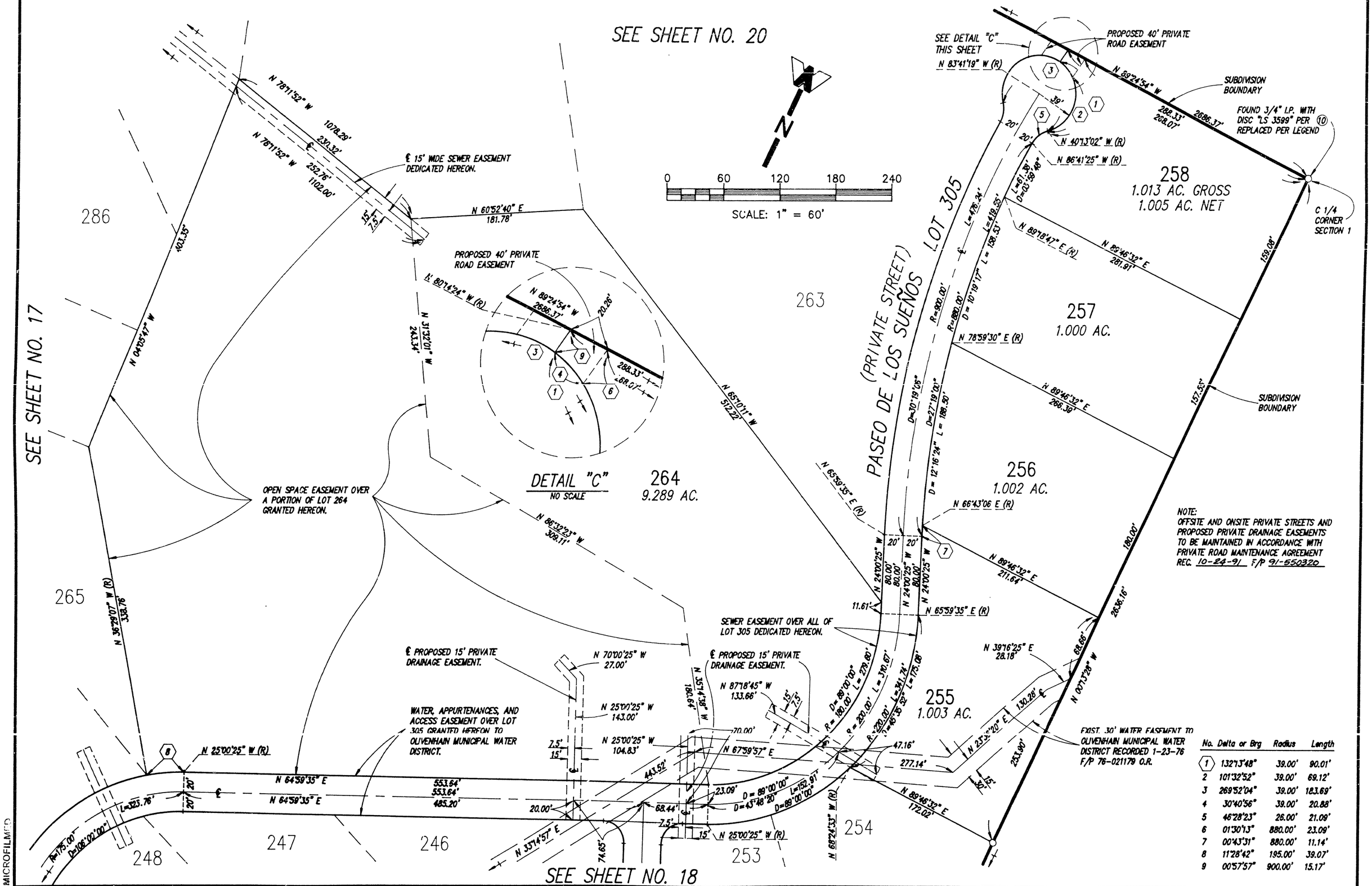
JAN 16 1992
MICROFILMED

C B A 1 5 10 A B C

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 19 OF 24 SHEETS



NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

No.	Delta or Brg	Radius	Length
1	132°13'48"	39.00'	90.01'
2	101°32'52"	39.00'	69.12'
3	269°52'04"	39.00'	183.69'
4	30°40'56"	39.00'	20.88'
5	46°28'23"	26.00'	21.09'
6	01°30'13"	880.00'	23.09'
7	00°43'31"	880.00'	11.14'
8	11°28'42"	195.00'	39.07'
9	00°57'57"	900.00'	15.17'

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

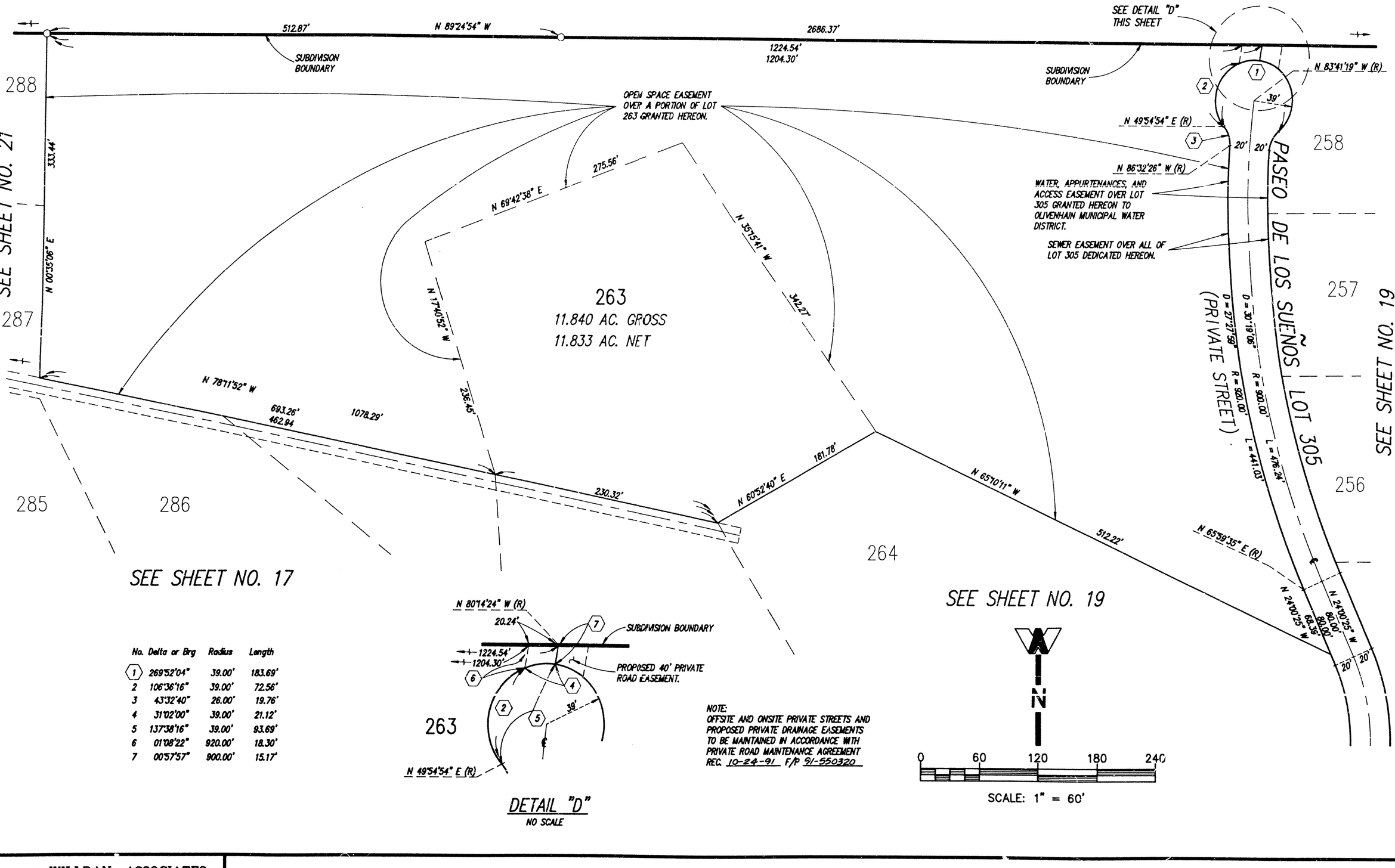
COUNTY TM 4229-4

JAN 13 1992
MICROFILMED

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 20 OF 24 SHEETS



No.	Delta or Brg	Radius	Length
1	269°52'04"	39.00'	183.69'
2	106°36'16"	39.00'	72.56'
3	43°32'40"	26.00'	19.76'
4	31°02'00"	39.00'	21.12'
5	137°38'16"	39.00'	93.69'
6	01°08'22"	920.00'	18.30'
7	00°57'57"	900.00'	15.17'

DETAIL "D"
NO SCALE

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

SCALE: 1" = 60'

JAN 1 1992
MICROFILMED

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CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-1515

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (21)

COUNTY TM 4229-4

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 21 OF 24 SHEETS

0 60 120 180 240

SCALE: 1" = 60'

FND. 1" I.P. WITH DISC "LS 1162" PER (1) (10) (8) (3) REPLACED PER LEGEND

SUBDIVISION BOUNDARY

290 1.129 AC. GROSS 1.119 AC. NET

PROPOSED PRIVATE ROAD EASEMENT.

(PRIVATE STREET) PASEO PIEDRAS

LOT 311

289 1.433 AC.

288 1.560 AC.

287 1.225 AC.

282 1.017 AC.

281 1.426 AC.

280 2.143 AC.

279

278

291 1.691 AC.

292 1.648 AC.

284

283

263

LOT 310

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 310 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 311 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 312 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEWER EASEMENT OVER ALL OF LOT 310 DEDICATED HEREON.

SEWER EASEMENT OVER ALL OF LOT 311 DEDICATED HEREON

SEWER EASEMENT OVER ALL OF LOT 312 DEDICATED HEREON.

℄ PROPOSED 15' PRIVATE DRAINAGE EASEMENT.

℄ PROPOSED 20' PRIVATE DRAINAGE EASEMENT

℄ PROPOSED 20' PRIVATE DRAINAGE EASEMENT.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 291 AND 292 GRANTED HEREON.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 280 AND 281 GRANTED HEREON.

EXISTING 60' WIDE IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY FOR PUBLIC ROADWAY PURPOSES PER DEED REC. 10-11-91 AS F/P 91-528382 O.R.

SLOPE AND DRAINAGE FACILITY EASEMENT DEDICATED HEREON AND PROPOSED PRIVATE SLOPE AND DRAINAGE EASEMENT

VIA AMBIENTE LOT 312 (PRIVATE STREET)

LOS PLATEROS

SEE DETAIL "G" THIS SHEET

SEE NOTE 12 SHEET NO. 5

SEE SHEET NO. 20

SEE SHEET NO. 16

SEE SHEET NO. 17

DETAIL "G" NTS

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDANCE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

No.	Delta or Brg	Radius	Length
(1)	50°14'48"	600.00'	526.18'
2	53°02'20"	600.00'	555.42'
3	02°47'31"	600.00'	29.24'
4	06°34'16"	630.00'	75.92'
5	26°56'06"	640.00'	300.86'
6	82°00'13"	22.00'	31.49'
7	N 52°21'41" W	---	5.78'
8	00°10'14"	640.00'	1.91'
9	89°17'05"	22.00'	34.28'
10	N 77°43'53" W	---	16.89'
11	44°57'09"	26.00'	20.40'
12	99°06'31"	39.00'	67.46'
13	66°41'45"	39.00'	45.40'
14	170°47'47"	39.00'	116.26'
15	44°57'09"	26.00'	20.40'
16	269°54'18"	39.00'	183.72'
17	01°08'36"	700.00'	13.97'
18	N 77°43'53" W	---	15.85'
19	90°42'55"	22.00'	34.83'
20	03°06'51"	420.00'	22.83'
21	35°39'17"	150.00'	93.34'
22	N 05°08'45" E	---	49.36'
23	N 36°03'34" W	---	7.72'
24	44°57'09"	26.00'	20.40'
25	269°54'18"	39.00'	183.72'
26	08°06'50"	705.00'	99.84'
27	47°24'00"	640.00'	529.46'
28	01°21'50"	630.00'	15.00'
29	N 02°30'50" W	---	24.47'
30	05°45'00"	630.00'	63.22'

JAN 15 1992

MICROFILMED

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
8363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619)457-899

JN 36700

GRADING PLAN L- NONE

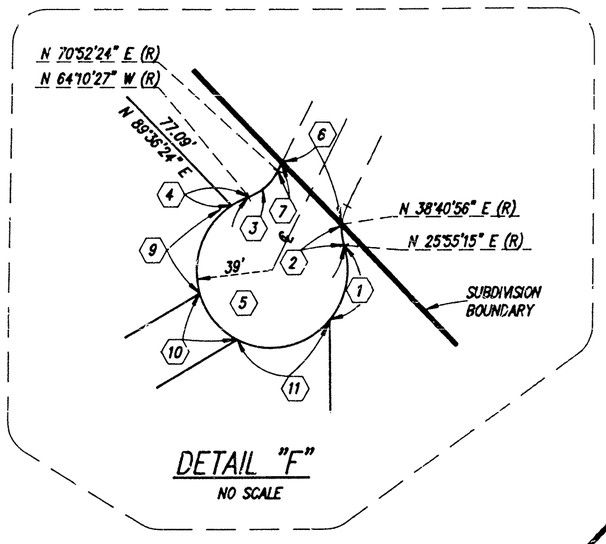
CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

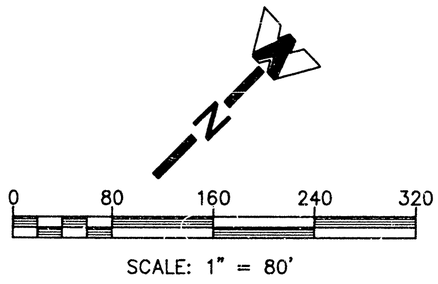
MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 22 OF 24 SHEETS



DETAIL "F"
NO SCALE



SCALE: 1" = 80'

FND. 3/4" I.P. WITH DISC "LS 3599" 0.19' N, 0.03' W PER (10) (13) REPLACED PER LEGEND AT TRUE CORNER

PUNTA ARROYO LOT 309 (PRIVATE STREET)

EXISTING WATERLINE EASEMENT TO OLIVENHAIN MUNICIPAL WATER DISTRICT PER DEED REC. 10-11-91 F/P 91-528373 O.R.

EXISTING PRIVATE ROAD EASEMENT PER DEED REC. 10-11-91 F/P 91-528378 O.R.

EXISTING SEWER EASEMENT TO RANCHO CIELO SANITATION DISTRICT PER DEED REC. 10-11-91 F/P 91-528381 O.R.

SEE DETAIL "F" THIS SHEET

WATER, APPURTENANCES, AND ACCESS EASEMENT OVER LOT 309 GRANTED HEREON TO OLIVENHAIN MUNICIPAL WATER DISTRICT.

SEWER EASEMENT OVER ALL OF LOT 309 DEDICATED HEREON

NOTE:
OFFSITE AND ONSITE PRIVATE STREETS AND PROPOSED PRIVATE DRAINAGE EASEMENTS TO BE MAINTAINED IN ACCORDACE WITH PRIVATE ROAD MAINTENANCE AGREEMENT REC. 10-24-91 F/P 91-550320

No.	Delta or Brg	Radius	Length
(1)	58°25'39"	39.00'	39.77'
2	12°45'41"	26.00'	5.79'
3	44°57'09"	26.00'	20.40'
4	14°15'43"	39.00'	9.71'
5	269°54'18"	39.00'	183.72'
6	N 89°36'24" E	---	46.46'
7	N 19°07'36" W	---	1.07'
8	N 19°07'36" W	---	40.21'
9	74°16'26"	39.00'	50.56'
10	45°56'32"	39.00'	31.27'
11	76°59'58"	39.00'	52.41'

301
1.576 AC.

300
1.909 AC.

302
12.949 AC.

299
1.424 AC.

298
1.152 AC.

297
1.329 AC.

OPEN SPACE EASEMENT OVER ALL OF LOT 302 GRANTED HEREON.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 299-301 GRANTED HEREON.

OPEN SPACE EASEMENT OVER PORTIONS OF LOTS 297-299 GRANTED HEREON.

SUBDIVISION BOUNDARY

IDENTICAL POINT

FND 2" I.P. WITH DISC "LS 6030" PER (13)

FND. 2"I.P. WITH BRASS DISC MARKED:
SAN DIEGO CO. ENGR DEPT
T13S R3W
S2 S1
S11 S12
STATE MON 1962
PER (1) (8) (10) (13)

JAN 15 1992
MICROFILMED

49

MAP 11978

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR., SUITE 250, SAN DIEGO, CA 92122 (619) 457-1515

JN 36700

GRADING PLAN L- NONE

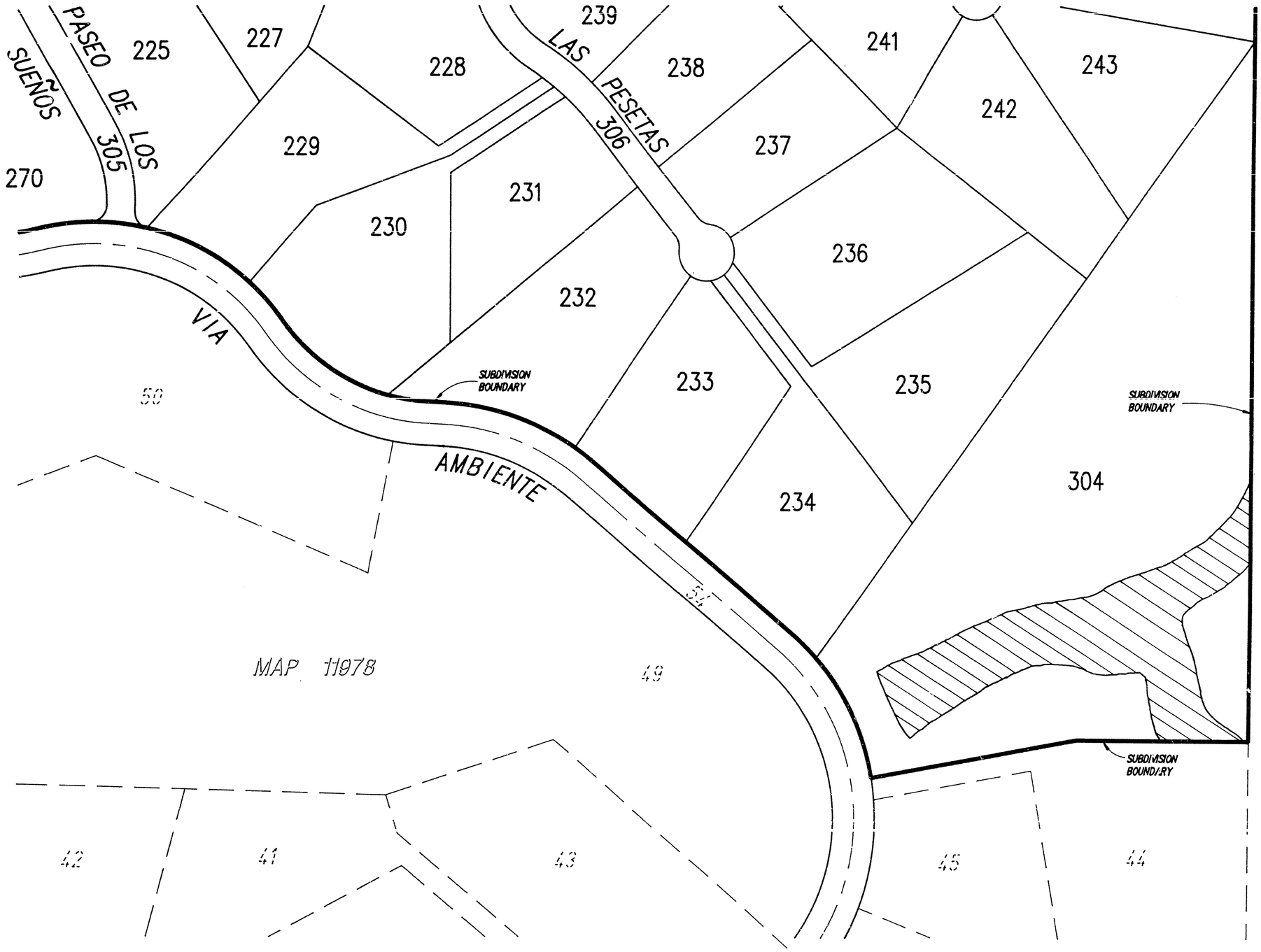
CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

NONTITLE INFORMATION



N

0 100 200 300 400

SCALE: 1" = 100'

NOTES:

NOTE A:
INFORMATION SHOWN ON THIS SHEET IS ADVISORY ONLY AND IS NOT INTENDED TO AFFECT RECORD TITLE INTEREST.

NOTE B:
INFORMATION SHOWN HEREON IS COMPILED FROM PUBLIC RECORDS AND ITS INCLUSION IN THIS MAP DOES NOT IMPLY THE CORRECTNESS OR THE SUFFICIENCY OF THESE RECORDS OR REPORTS BY THE PREPARER OF THIS MAP.

LEGEND

APPROXIMATE AREA OF INNUNDATION BY 100 YEAR FLOOD.

JAN 15 1992
MICROFILMED

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
8343 GREENWICH DR.,SUITE 260,SAN DIEGO,CA 92122 (619)467-499

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

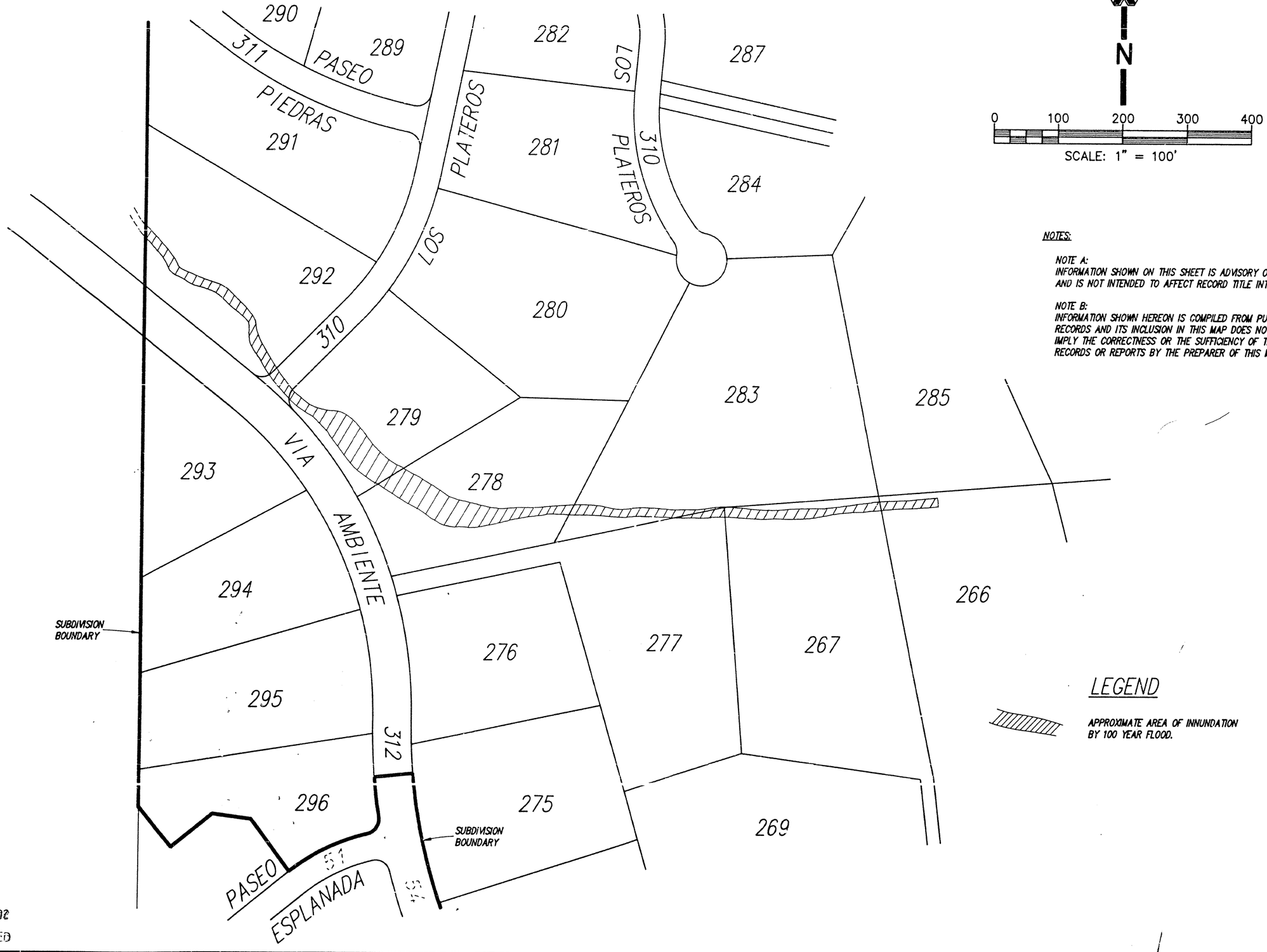
C B A 1 5 10 A B C

MAP NO. 12905

COUNTY OF SAN DIEGO TRACT NO. 4229-4

SHEET 24 OF 24 SHEETS

NONTITLE INFORMATION



NOTES:

NOTE A:
INFORMATION SHOWN ON THIS SHEET IS ADVISORY ONLY AND IS NOT INTENDED TO AFFECT RECORD TITLE INTEREST.

NOTE B:
INFORMATION SHOWN HEREON IS COMPILED FROM PUBLIC RECORDS AND ITS INCLUSION IN THIS MAP DOES NOT IMPLY THE CORRECTNESS OR THE SUFFICIENCY OF THESE RECORDS OR REPORTS BY THE PREPARER OF THIS MAP.

LEGEND

APPROXIMATE AREA OF INNUNDATION BY 100 YEAR FLOOD.

JAN 15 1992

JAN 15 1992
MICROFILMED

WILLDAN ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS
6363 GREENWICH DR.,SUITE 250,SAN DIEGO,CA 92122 (619)457-1999

JN 36700

GRADING PLAN L- NONE

CALIF. COORD. INDEX 322-1719 (X) (27)

COUNTY TM 4229-4

C B A 1 5 10 A B C

Attachment J

Alternative Site Analysis

Based on Board of Supervisors and public comments, the Applicant has reviewed potential alternative sites suggested for the 42 Village Estate units within Cielo. Following is analysis of the potential alternative sites that have been identified by the public:

- **Alternative A** – One site, the existing 50,000 sf retail center at Del Dios Highway and Calle Ambiente consists of a large site with existing retail shops and offices on the developable portion of the property. The balance of the property is encumbered by dedicated open space and a 200 foot wide SDG&E easement. There is no potential for locating Village Estate units on this site.
  The Applicant no longer owns this property and therefore has no rights to further develop the property.

- **Alternative B** - The second site consists of Lots 102 through 108 at the end of Cerro del Sol in the south, central portion of Cielo. There is only 1.6 acres of useable area on these lots to plot the Village Estate units. A yield study indicates only eight Village Estate units could be accommodated on these seven lots, far less than the 42 units allowed in the approved Specific Plan (See attached Exhibit **A**). Therefore, the Applicant would have to give up its rights to 42 units in the Specific Plan and seven Custom Estate lots, to yield only eight Village Estate units. The net effect would be to diminish the 528 units in the approved Specific Plan to only 487 total units (528 units approved, minus 42 units from Parcel H, minus seven Custom Estates units, plus eight Village Estate units equals 487 total units).

  In addition, this cluster of lots is visible from at least as many, if not more, lots within Cielo than the Parcel H and Village Center sites, thereby simply moving the potential concern over this project to other residents within Cielo. These lots are already entitled, final mapped, graded, and all utility infrastructure has been built to accommodate the Country Estate lot land use at great expense to the Applicant over a period of over 15 years. The existing permits from the environmental agencies, including the Habitat Loss Permit previously submitted to Staff, have all been approved by the Agencies based on the higher density being located on the ridgetops of Village Center and Parcel H, preserving the more sensitive biological resources on the steep hillsides and valleys within the project. Additionally, the development of lots 102 through 108 with the Village Estate land use would require a new Specific Plan Amendment, new environmental analysis of all impacts including visual impacts, obtaining a new Tentative Map and a new Site Plan, re-grading the entire site, and changing the mitigation requirement from the original HLP, all with no certainty to the timing or even potential success of modifying the prior approvals. It is likely the original EIR would need to be reopened, as the previously approved mitigation of visual and aesthetic impacts on the surrounding communities of Del Dios, Mt. Israel, Elfin Forrest and Rancho Santa Fe would need to be changed. All of these steps would require a substantial financial and time commitment, with no guaranteed

outcome, all in order to achieve a yield of 41 units less than allocated in the already approved and amended Specific Plan.

It is neither prudent nor feasible for the Applicant to pursue this Alternative.

- **Alternative C** – This third Alternative site consists of Lots 76 through 96 at the far east end of Cielo. These lots, along with 21 others in this area of the project, are currently in escrow and are not available for other use by the Applicant. Nevertheless, the Applicant has provided the following analysis:

  There are approximately 7.8 acres of useable area on these lots to plot the Village Estate units. A yield study indicates 32 Village Estate units could be accommodated on these 20 lots, again far less than the 42 units allowed in the approved Specific Plan (See attached Exhibit **B**). Therefore, the applicant would have to give up its rights to 30 total units in the Specific Plan if this alternate were pursued, 20 of which would be the more highly valuable Custom Estate lots (528 units approved, minus 42 units from Parcel H, minus 20 Custom Estate lots, plus 32 Village Estate units would equal 498 total units).

  These lots are visible from many locations within Cielo, and also visible from the communities of Mt. Israel, Del Dios, 4S Ranch, Del Sur, Santa Luz, the Crosby, and as far east as Rancho Bernardo and Poway. This is precisely the impact the Board sought to prevent by clustering the development at its ridgeline location, mandating the location of this product type and higher density development on Parcels H and Village Center. These lots are also already entitled, final mapped and graded over a period of 15 years to accommodate the Country Estate lot land use. The existing permits from the environmental agencies, including the Habitat Loss Permit previously submitted to Staff, have all been approved by the Agencies based on the higher density being located on the ridgetops of Village Center and Parcel H, preserving the more sensitive biological resources on the steep hillsides and valleys within the project.

  Additionally, to develop lots 76 through 96 with the Village Estate land use, a new Specific Plan Amendment, new environmental analysis of all impacts including visual impacts to surrounding communities, new Tentative Map and a new Site Plan would all be required, all with no certainty to the timing or potential of modifying the prior approvals. It is likely the original EIR would need to be reopened, as the previously approved mitigation of visual and aesthetic impacts on the surrounding communities of Del Dios, Mt. Israel, Elfin Forrest and Rancho Santa Fe would need to be changed. Lastly, it is likely the sites would have to be re-graded and the already permitted improvements for utilities and road layouts would likely need to be revised. All of these steps would require a substantial financial and time commitment, with no guaranteed outcome, all in order to achieve a yield of 30 units less than that allocated in the already approved and amended Specific Plan.

  The Applicant is not able to pursue this Alternative as it no longer controls the property.

Regarding Alternates B and C analyzed above, the Board of Supervisors has already found that Parcel H and Village Center are the only viable locations to build the Village Estates within the Applicant's

ownership because clustering the development along these ridgelines represents the Board's mitigation of the overall aesthetic impacts of its long-approved 0.27 du/acre density Rancho Cielo Specific Plan. In certifying the 1984 Supplemental EIR, the Board agreed with County staff and Environmental Review Board analysis that implementation of the project would modify the aesthetic environment of Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe, but that the aesthetic issue was a trade-off between a breakup of skyline/viewshed areas and retaining the native slopes in 1,635 acres. (SEIR at p. 39.) The Board found that "[a]esthetic impacts created by the proposed project revisions are considered mitigated by the project design. The dedication of 1,710 acres of open space preservation of steep slopes, major drainages, woodland areas, revegetation and landscaping of disturbed areas and clustering of units are aspects of the project which serve to mitigate aesthetic impacts." (SEIR at p. 4.) Spreading the development density out among the specific plan acres could create a worse aesthetic impact than clustering the development on this particular ridgeline. Therefore, the County induced the Applicant to preserve the 1,710 acres of open space in exchange for permission to develop hundreds of residential units, including 42 units within the Village Center and Parcel H. (SEIR at p. 7.) Furthermore, the Board found that the redesign of this area in 1984 moved the Village Center to its current location where it would be less visible from the Mt. Israel community creating "a positive effect on aesthetic impacts." (SEIR at p. 40.) Therefore, it would be directly contrary to the Board's express "cluster development" mitigation plan to move the 42 units to a new location, increase the visual impacts on Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe, and potentially vacate hundreds of acres of already dedicated open space to allow the density to be spread over hundreds of acres within the Specific Plan area, in direct conflict with prior approvals of the environmental agencies and the Cielo Habitat Loss Permit.

Conclusion

The Applicant has thoroughly vetted alternate sites as identified by the public, and found them to be infeasible.

- Locating the 42 Village Estate units on these alternate locations would be inconsistent with the Board's "cluster development" mitigation plan thus shifting visual impacts and other issues to other owners within Cielo, and many other communities within the County.
- Alternate locations would result in a substantially reduced yield of units previously approved by the County and already accommodated for through the dedication of over 60 percent of the Applicant's property as open space, and by the Applicant's completion of public and private infrastructure in support of the development of 528 units approved in the Specific Plan
- The Applicant and other owners within the Specific Plan area were induced to grant conservation easements on over 1,700 acres of open space in exchange for the development of these units and higher density development on the Parcel H and Village Center sites.

Parcels H and Village Center are the only viable locations for Village Estates, and can be approved consistent with all current County of San Diego land development regulations.

DEVELOPABLE AREA:
1.60 ACRES
8 HOMES

Exhibit A
to Attachment J

PARCEL E
RANCHO CIELO

VIA RANCHO CIELO

AVENIDA ORILLA

OPEN SPACE

N

100 0 50 150

Scale 1" = 50 ft

AREA H AND VC HOME FOOTPRINT

DEDICATED OPEN SPACE

EXISTING CONDITION:

DEVELOPABLE AREA: 7.80 ACRES
20 CUSTOM HOMES SITES
20 DRIVEWAYS
20 SEWER LATERALS
20 WATER SERVICES
20 SDG&E, TELEPHONE, CATV SERVICES

OPPORTUNITY FOR SITING AREA H AND VC HOMES::

32 HOMES

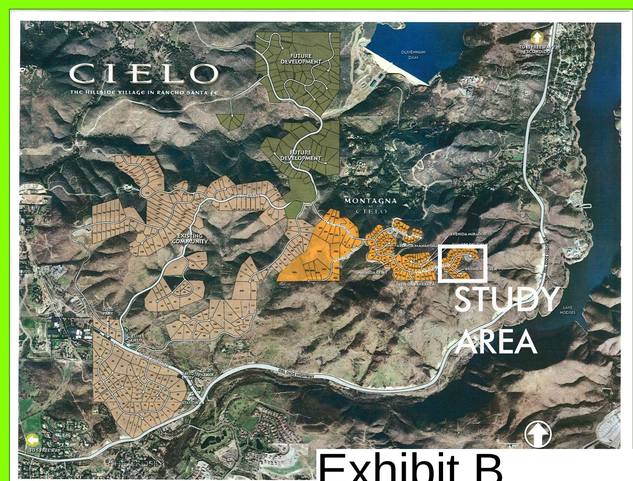


Exhibit B
to Attachment J

PARCEL M
RANCHO CIELO

RANCHO CIELO

ENVIRONMENTAL IMPACT REPORT

(PART I)

brian f mooney
associates
planning, design & environmental studies

Received
4-11-81

COUNTY OF SAN DIEGO

DATE March 26, 1981

TO: PLANNING COMMISSION 0173

FROM: ENVIRONMENTAL REVIEW BOARD 0175

SUBJECT: Environmental Impact Report for Rancho Cielo, LSP80-03, TM4225, TM4226, TM4227, TM4229, P79-89, R80-083, EAD Log #80-8-120.

The Environmental Review Board (ERB) has reviewed the enclosed Environmental Impact Report (EIR). Based on the discussion of the issues that follow, the ERB recommends that:

1. The EIR be certified as being comolete and in compliance with the provisions of the California Environmental Quality Act (CEQA).

2. It be found that the project as proposed will have Significant but Mitigable impacts to Traffic/Circulation, Biology, Noise, Fire Protection, Soil and Geology, Archaeology, Dark Sky, Hydrology, Aesthetics, Energy; Unresolved Water Quality/Liquid Waste; Not Significant Air Quality.

3. The mitigation measures that appear in Enclosure "A", the EIR Discusssion, be made conditions of project approval.

ERB DELIBERATIONS

On motion of members Escher/Smith, it is recommended that the EIR be certified as being complete and in compliance with the provisions of CEQA.

Ayes: 4 -- Hurlburt, Escher, Heilman. Smith

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill, Weeks

On motion of members Smith/Escher, it is recommended that the Major Issue of Traffic/ Ciruclation be found Significant but Mitigable.

Ayes: 5 -- Hurlburt, Escher, Heilman, Smith, Weeks

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill

On motion of members Escher/ Smith, it is recommended that the Major Issue of Biology be found Significant but Mitigable.

Ayes: 5 -- Hurlburt, Escher, Heilman, Smith, Weeks

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill

On motion of members Heilman/Smith, it is recommneded that the Major Issues of Noise, Soils/Geology, Archaeology, Dark Sky, Hydrology, Energy be found Significant but Mitigable.

Ayes: 4 -- Hurlburt, Escher, Heilman, Smith

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Weeks, Hill

On motion of members Escher/Heilman, it is recommended that the Major Issue of Water Quality/Liquid Waste be found Unresolved.

Ayes: 4 -- Hurlburt, Escher, Heilman, Smith

Noes: 0 -- None

Abstentions: 0- None

Absent: 3 -- Oberbauer, Weeks, Hill

On motion of members Escher/Smith, it is recommended that the Major Issue of Aesthetics be found Significant but Mitigated by Design.

Ayes: 4-- Hurlburt, Escher, Heilman, Smith

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 3 -- Oberbauer, Weeks, Hill

On motion of members Weeks/Heilman. it is recommended that the Major Issue of Air Quality be found Not Significant.

Ayes: 5-- Hurlburt, Escher, Heilman, Smith, Weeks

Noes: 0-- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill

EAD RECOMMENDATIONS TO THE ERB

The Environmental Analysis Division (EAD) has identified the following Major Issues, and our recommendations for findings of significance are as follows:

1. Traffic/Circulation : Significant But Mitigable
2. Biology: Significant But Mitigable
3. Noise: Significant But Mitigable
4. Water Quality/Liquid Waste: Unresolved
5. Soils and Geology Significant But Mitigable
6. Archaeology: Significant But Mitigable
7. Dark Sky: Significant But Mitigable
8. Hydrology: Significant But Mitigable
9. Aesthetics: Significant But Mitigable by Design
10. Energy: Significant But Mitigated by Design
11. Air Quality: Not Significant

Respectfully submitted,

Kathy Lehtola

KATHLEEN A. LEHTOLA, Secretary
Environmental Review Board

KAL:RVM:

Enclosures:
A. Environmental Impact Report Discussion, Pages A-1 to A-7
B. Letters of and Responses to Public and Other Agency Co-ment, Pages B-1 to B-10
C. Draft-EIR, prepared by APEC, 9925-C Businesspark Avenue, San Diego, CA 92131

Copies: Project Planning, Department of Planning and Land Use, #0173
Project Planner, #0173: Harry Trax
Lorena Quintana, A651

ENCLOSURE A-1

ENVIRONMENTAL IMPACT REPORT DISCUSSION

PROJECT: RANCHO CIELO, LSP80-03, TM4225, TM4226, TM4227, TM4229, P79-89, R80-083, EAD Log #80-8-120

PROJECT DESCRIPTION

Rancho Cielo is a three phase Large Scale project to divide 3,525 acres into a series of Tentative Maps. Implementation of this project will necessitate four Tentative Maps in Phase I; TM4225, TM4226, TM4227, and TM4229. Phases II and III will be developed at a future date. Site Plans with specific landscaping detail will be required at the commercial center and an access area. Rezones will be required to cluster residences and create open space areas. Grading Permits will be necessary to grade Via Ambiente and the development of the Tentative Maps. Specific grading and impacts of lot layouts in Phases II and III will have to be evaluated at a future date. The project will create 892 residential units, two commercial centers, a fire station, a wholesale nursery, and street system.

PROJECT LOCATION

The project is located two miles east of Rancho Santa Fe, four miles south of the City of San Marcos, seven miles east of Leucadia and Encinitas and immediately north and west of Lake Hodges and Del Dios Highway. Thomas Bros. Maps page 26:C-3,4;D-2,3,4,5;F-2,3,4,5. (Supv. Dist. V).

LAND USE FACTORS AND SURROUNDING LAND USES

Most of the property (2,632 acres) is designated as Specific Plan Area with a maximum dessity of .27 du/acres (700 units). Unique resources and a rural environment must be preserved. The Hillside Policy is in effect in the SPA. Outside the SPA in four separate areas is 590 acres of Estate designation. In the northeast area, there is an area designate as public/semi-public.

The zoning on the property is very complicated in thaat 15 different zones exist. The details are listed on page 40 of the draft EIR. The five residential zones (R-R-1, R-V-2, R-S-3, R-R-5, R-R-25) allow from 1 to 3 du/acre. There is a C-36 general commercial (40 du/acre) and a M-54 general industrial (6000 square foot lots). There are four distinct Limited Agriculture Zones (A-70-8, A-70-8 (flood plain), A-70-8AP) which allow 1 du.4-8 acres. Finally, there is S-80 (open space) and S-88 (Specific Plan Area) which allow 1 du/8 acres.. The property is currently in a native state with some off-road vehicle trails in the canyons. Development lies to the east in the community of Del Dios, northwest of Elfin Forest, and southwest at Del Dios. Most of the surrounding landscape is in a natural state, but the least impacted vegetational area is the subject property.

BACKGROUND

Rancho Cielo was created as a Specific Planning Area on October 24, 1979 under GPA79-02 to insure development in concert with the preservation of unique environmental resources. The SPA limits developments to a density of .27 dwelling units to the acre (1 du/3.76 acres). The Board of Supervisors was additionally concerned that commercial development be adequately justified. Four additional parcels of land are now being considered under LSP80-03 and the project now encompasses 3,525 acres and 15 ownerships.

Rancho Cielo
Log #80-8-120

ENCLOSURE A-2

MAJOR ISSUES

1. Traffic and Circulation: (See the following Mitigation Measure)

This project will generate approximately 12,852 ADT into the San Dieguito Community, which will create potential circulation problems along the existing Mount Israel Road and the intersections along Del Dios Highway at Via Ambiente, Mount Israel Road, and Via Rancho Parkway. Del Dios Highway is currently operating at Service Level C, but peak traffic hours are anticipated to exceed that level to Service Level D. Impacts to Mount Israel Road currently A could approach Service Level E without mitigation with mitigation to C. However, impacts can not be entirely evaluated due to a disagreement between the applicant who wants Via Ambiente to be private and the Department of Public Works who desire public access. Another problem with evaluating this issue is the status of SA680 which has yet to be approved or denied.

Mitigation Measures

Prior to approval of any Grading Permits on LSP80-03, TM4225, TM4226, TM4227, or TM4229, the applicant shall provide to the satisfaction of the Department of Public Works:

1-A. Signalization for the intersection of Del Dios Highway and Via Rancho Parkway;

1-B. Signalization at the intersection of Mount Israel Road and Del Dios Highway;

1-C. Modify Mount Israel Road to provide for 2 uphill lanes;

1-D. Provide acceleration and deceleration lanes along Del Dios Highway at Via Ambiente and Mount Israel Road;

1-E. Provide signalization at Via Ambiente and Del Dios Highway upon approval of Phase III.

1-F. On site road sections to be reviewed and approved by the Fire Marshall.

2. Biological Resources (Significant but Mitigable)

Project implementation will segment and disrupt one of the largest undisturbed, undeveloped coastal tracts of native chaparral and wildlife habitat remaining in San Diego County.

The entire property is considered significant with respect to the continuity of the undisturbed vegetation and diversity of wildlife habitats onsite: oak woodland, riparian woodland, chaparral, inland sage, large rocky cliffs, a perennial freshwater stream (Escondido Creek) and native grassland. Additionally the rugged topography of the site with its ridges, steep sided canyons and dranages which serve as corridors for wildlife movement as well as sensitive raptor and large mammal foraging areas adds to the significance of the site as a biological resource. Twelve sensitive plant species are located onsite. Most of the species are of low relatively low sensitivity and large percentages of their populations will be preserved in the proposed open space areas which total 58% of the property. Two species which are very rare and of very limited distribution, Baccharis vanessae (Encinitas Baccharis) and Dudleya viscida (Sticky Dudleya), should be preserved wherever they occur. The populations of these plants onsite are proposed for open space easement and should theoretically, therefore, be protected, with the exception of a Dudleya population near the proposed water treatment plant. However, a potential conflict with required clearing for fire protection exists in those areas where open space easements are in close proximity or included within residential lots. A number of sensitive faunal species occur onsite. Of particular concern are the potential impacts to an active Golden Eagle nest located just offsite of the project area. This nest is presently being used by a pair of eagles and is visible from portions of five lots in the extreme northern portion of the plan. It is beleived that these birds will not tolerate human activities within close proximity or in locations elevated above the nest. If development of this project were to cause abandonment of this nest, it would represent a significant impact on San Diego County's ealge population. Additionally, the project will probably eliminate Mountain Lion from the site, and possibly the region north of the San Dieguito River.

A large portion of the project lies within three Resource Conservation Areas, Escondido Creek, Harmony Grove Road, and San Dieguito River- Lake Hodges-Lusardi Canyon. The impact of the project will be to lower the biological quality of these RCA's. The project design, however, allows for wildlife corrodors and breeding areas, preserves a majority of the very rare and less rare plants on the property, and less rare plants on the property, and should prevent major disruption of the resources within the conservation area.

2-A As a condition of the LSP and the future tentative map to be located in the extreme northern portion of the propoerty, 5 lots shall be eliminated which are in line of vision of the active eagle's nest. Either A or a Site Plan to eliminate line of sight.

2-B As a condition of the LSP, tentative maps, and grading plans, all open space lots and open space easements shall be maintained in their native condition with no clearing for firebreaks.

3. Noise (See the Following Mitigation Measures)

Traffic generated by the 12,852 vehicular trips and emergency helicopter port could result in significant noise impacts in excess of 60dB(A). Changes in the County Noise Element of the General Plan in December of 1980 have lowered the acceptable threshold to 60dB(A) and thus the findings in the draft by APEC must be reconsidered to reflect that change. Areas to receive the most impact will be along Del Dios Highway at Via Ambiente, along Via Ambiente, and along Mount Israel Road. If SA680 is constructed, noise levels could be significant in the southwest portion of the project site. Although an uncommon experience, the emergency helicopter could create noise levels in excess of 85dB(A). Traffic around the commercial centers are anticipated to also be high. It must be cautioned, however, that insufficient data exists to adequately assess noise impacts along Del Dios Highway.

Mitigation Measures

3A. Prior to approval of any grading plans for road construction on the Large Scale Project or any of the tentative maps, the applicant shall submit copies of the grading plans to the satisfaction of the Environmental Analysis Coordinator with noise attenuating barriers or open space easements which reduce traffic noise to acceptable levels.

3B. Prior to approval of TM 3229, the applicant shall obtain a major use permit to regulate noise attenuation in buildings and residences surrounding the heliport to the satisfaction of the Environmental Analysis Coordinator.

4. Water Quality/Liquid Waste (See the Following Mitigation Measure)

Implementation of this project would create a sanitation district to manage a water reclamation system to handle 260,000 gallons of waste water a day. The "reclaimed" water would then be discharged into Escondido Creek or the San Dieguito River or used for irrigation. At this time, it remains unclear whether the Regional Water Quality Control Board standards can be met in reducing the total dissolved solids (TDS) and nutrient concentrations. Failures in the system would degrade the local groundwater and could inbalance the ecology of the San Dieguito or San Elijo Lagoons. The Department of Public Works has expressed concerns that the method proposed by the applicant is too costly, will consume too much energy, and may not be feasible.

Mitigation Measure

4A. Prior to approval of the Final Map, the applicant shall obtain approval from both the Health Department, and the Regional Water Quality Control Board, to the satisfaction of the Department of Public Works.

5. Soils and Geology (See the Following Mitigation Measure)

Implementation of this project will result in 3,000,000 cubic yards of grading which will cut into highly fractured blocky volcanic rock and clayey soils. Without proper treatment in graded areas, moisture can lubricate the clayey soils along fracture and joint lines and minor landslides or block falls can occur. A combination of engineering designs and landscaping can reduce surface water penetration and block slippage. Graded cuts will range from 10' to 30' feet in height along roads and streets. Structural pod locations will be placed along natural ridges and will not be in areas prone to slippage.

Mitigation Measure

5A. Prior to approval of any grading plans, the applicant shall obtain specific geotechnical analyses for TM4225, TM4226, TM4227, TM4229 and the use permits, and submit provisions to carry out the recommended remedial actions to the satisfaction of the Department of Public Works.

6. Archaeology (See the Following Mitigation Measures)

Implementation of this project will result in the destruction of 16 scientifically significant archaeological sites and potential indirect impacts to four sites located in open space areas. Of the four to be preserved, two are considered to be very significant to the understanding of the 12,000 to 7,500 year old San Dieguito Complex which is so poorly understood at this writing.

Most of the sites to be lost are thought to be locations where the earliest people in San Diego County mined/quarried the green colored fine-grained volcanic felsite which was then carried down to camps along the San Dieguito River and made into knives, paints, scrapes, and other tools. Archaeologists are especially concerned about preserving examples of these quarries. A few milling stations of the late Milling Horizon will also be lost.

Mitigation Measures

Prior to approval of the Tentative Maps, Major Use Permits, or issuance of any grading permits, a qualified archaeologist shall to the satisfaction of the Environmental Analysis Coordinator:

6A. Conduct the sample percentage micro-max surface collection at those sites listed on table 9, to be destroyed;

6B. Conduct test excavations at all sites listed on Table 9 of the Draft-EIR for "Phase I" tests;

6C. Submit a report on the micro-mapping and test excavations and meet with the Environmental Analysis Division to obtain direction relative to Phase II salvage;

6D. Submit a research design to salvage, excavate and map the remaining scientific values at the sites to be impacted;

6E. Conduct a salvage operation and submit a salvage report which can be used by the public in their future appreciation of the lost aspects of their heritage.

7. Dark Sky (See the Following Mitigation Measure)

Implementation of this project will result in an incremental increase in night illumination which will reduce to a slight degree the effectiveness of the Mount Palomar Observatory. The major sources of this pollution is street and parking lot lighting at the commercial center and tennis courts. The topographic elevation of the property increases this impact. The draft EIR indicates that High Pressure Sodium Lamps are required by the Department of Public Works; Low Pressure Sodium Lamps are more desirable.

Mitigation Measure

7A. Prior to approval of the grading plans for Via Ambiante on LSP or TM4225, TM4226, TM4227, or TM4229, the applicant shall provide plans to utilize Low-Pressure Sodium lamps along steeets and parking lot areas to the satisfaction of the Department of Public Works.

8. Hydrology (See the Following Mitigation Measure)

Implementation of this project will create impervious surfaces in the form of streets, driveways, and patios, resulting in a 12% increase of runoff into the Escondido Creek, 16.4% increase into the San Dieguito River, and 15.7% increase into the San Dieguito Resevoir. This increase would only occur during a 100 year storm and after full build out of all three phases. Sediments in these drainage basins will ultimately impact the floodplains and lagoons downstream; Elfin Forest Lake and the south Rancho Santa Fe floodplain.

Mitigation Measure

8A. Prior to approval of any grading plans on TM4225, TM4226, TM4227, TM4229, or the major use permits, the applicant shall provide adequate plans to control erosion and sedimentation reduction measured to the satisfaction of the Department of Public Works.

9. Aesthetics (Mitigated by Project Design)

Implementation of this project will result in a modification of the aesthetic environments of the neighboring communities of Del Dios/Mt. Israel, Elfin Forest, and Rancho Santa Fe. A major problem in the analysis of aesthetic impacts is a lack of information on individual lot development; the impact must therefore be assumed for all non-open space areas on the lots. Del Dios Highway is a Second Priority Scenic Route on the General Plan and SA680 (if ever built) will be a Third Priority Scenic Highway.

Staff assesses the aesthetic issue to be a trade off between a breakup of skyline/viewshed areas and retaining the native slopes in 1695 acres of open space. The entire Escondido Creek will be retained in open space. The majority of the viewsheds along Lake Hodges and Del Dio Highway will involve native vegetated slopes. Between the open space areas, open space easements on residential lots, and site plan landscaping for the commercial center, the project design has mitigated aesthetic impacts.

10. Energy (Mitigated by Project Design)

Implementation of this project will result in future energy consumption beyond the levels projected from previous land use plans. The Draft-EIR indicates that the construction of streets, dwellings, and utilities will consume approximately 340,357 barrels of oil over a five year period. The project will result in an increase of San Diego Gas and Electric services by .325%; 12,736,032 KwH, Gas and Electric services 610,889 therms. Project residents will travel about 154,224 miles a day which will consume about 2,462,807 gallons of gasoline a year by 1990. Topographic orientation and slope will probably limit solar access to insufficiant levels to meet the Solar Ordinance. Mitigation of these impacts, according to the Draft-EIR, has been incorporated into the project design.

11. Air Quality (No Mitigation Proposed)

Implementation of this project will contribute a 2.9 parts per million increase in carbon monoxide to the San Diego Air Basin. This figue will rise to 3.3 ppm million by 1995. According to Hal Brown, Meteorologist for APCE, this would not be a significant increase. The Federal Standard is 35 ppm.

12. Fire Protection (No Mitigation Proposed)

This project would place 892 residential units in an area of high fire potential. However, the plan is designed to include an onsite fire station fully equipped to meet emergency needs. Homesites will have fire breaks between 50' feet and 150' feet, depending upon the discretion of the Fire Marshall.

ENCLOSURE B-1

LETTERS OF AND RESPONSES TO PUBLIC AND OTHER AGENCY COMMENT

During the 45 day public review period that commenced on February 24, 1981, and ended on March 9, 1981, three (3) letters of public and other agency comment were received.

On February 27, 1981, the San Dieguito Community Planning Group wrote a letter concerning Traffic, Noise, Air Quality, Drainage, Runoff, Schools, Fire Protection, The Village Center, Recreational Facilities, Water Reclamation, Biology, and Density.

Staff Response: The issues of Traffic, Air, Noise, Hydrology, have been addressed in the Final EIR; issues 1, 2, 3, 5, and 8. The other issues are for Project Planning to deal with and are not considered environmental. The Rancho Santa Fe Fire Department believes that they can handle any fires in that project. The RSFFD states that they will try not to create fire breaks in biological open space, but there may be a problem with the ultimate decision by the lot owners in where they place their homes.

On March 10, 1981 the Director of the Department of Public Works commented on the wastewater reclamation plant and expressed concern that the plant will be too expensive to operate.

Staff Response: The essence of this letter was incorporated into Major Issue 3.

On March 16, 1981, the Department of Public Works forwarded another copy of the March 10, 1981 letter and comments on the safety of roads and intersections.

Staff Response: The eight comments on intersections and roads were incorporated into Major Issue #1 and the Mitigation Measures.

On March 25, 1981, APEC provided a letter responding to the letter by the San Dieguito Community Planning Group.

On March 30, 1981, the San Diego County Archaeological Society noted concurrance with the mitigation, although noting certain irregularities in the bibliography.

ENCLOSURE B

san dieguito citizens planning group
post office box 647 solana beach, calif. 92075

RECEIVED
MAR 4 1981
ENVIRONMENTAL ANALYSIS DIVISION

February 27, 1981

Department of Planning & Land Use
Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

Re: EAD Log #80-8-120
Rancho Cielo EIR and Specific Plan

Attn: Ron May, Project Analyst

Dear Mr. May:

The San Dieguito Citizens Planning Group has reviewed the referenced documents and our comments, concerns and recommendations are as follows:

1. Traffic, Noise and Air Quality. The proposed plan will put over fifty percent of the project traffic on Mt. Israel Road, yet this is not supposed to be the main entrance or access point. The suitability of the design to place project initiated ADT's of 6,652 on this steep, winding road is questioned. The EIR projects that associated noise levels will increase to those experienced in noisy urban residential areas by an increase of some 15 dB over current levels. However, no specific measurements were made for the Mt. Israel Road area, taking into consideration the amplification that would occur due to the narrow valley corridor and steeply rising topography, resulting in an echo chamber effect. The EIR did not discuss the degradation of air quality from automobile emissions resulting from this high traffic volume nor the fact that the existing residences along Mt. Israel Road are affected currently, to varying degrees, by an inversion factor due to topography. Other problems associated with air quality and noise are discussed below in comments with regard to the location of the proposed Village Center.

It should also be noted that traffic studies were based on only those projects approved as of March, 1980 in surrounding areas. No consideration was given to the properties, now designated in the community plan to be developed to Estate Residential 17 and Multiple Rural Use 18 categories, which will have Mt. Israel Road as their only access. In the current Circulation Element, Mt. Israel Road was downgraded from a through Collector to a Light Collector without extension to Harmony Grove Road. Because

of the 15-20 year buildout period predicted for the Rancho Cielo project, some assumption should be made that other properties using Mt. Israel Road will also develop and add to the traffic burden.

2. Drainage and runoff. While the EIR cites projected increases in runoff of between 12-16%, these calculations refer only to the cumulative effect on the three major drainage basins and do not address specific or localized drainage problems. It should be noted that Mt. Israel Road residents have experienced varying degrees of problems associated with drainage and run-off during the recent periods of heavy rains. In some instances, Federal Disaster Relief loans were approved. Special conditions should be applied, if necessary, to this project, because of its large scale, severe topography and geology, and potential for production of increased run-off, to assure that these problems are fully addressed at the tentative map stage.

3. Schools. While the need for schools would not be immediate, the approval of the project would make a commitment that adequate facilities would be available. The EIR states that the project would have a significant impact on all serving districts with unmitigable impacts in the areas served by Rancho Santa Fe Elementary and San Dieguito Union High School unless new, permanent facilities are acquired.

4. Fire protection. Although annexation is proposed to the Rancho Santa Fe Fire Protection District, some of the areas in the northwestern area of the project would be more accessible to serve from the Elfin Forest Volunteer Fire Department. Some resolution should be made as to specific areas that would be served by Elfin Forest and a clarification of what agreements are necessary.

5. Village Center. The location of this facility as proposed will impose further negative impacts on the existing Mt. Israel Road community resulting from noise, lighting and diminished air quality associated with the recreational, commercial and residential activities of the center as well as the location of the heliport nearby. These impacts are aggravated by the prevailing wind patterns which will carry the noise and air pollution to the Mt. Israel Road valley directly to the east and below the village center site. This is in conflict with Page VI-73, D-2 of the San Dieguito Community Plan which speaks directly to the Rancho Cielo Specific Plan and states: "Neighborhood Commercial use areas shall be located and designed so as not to interfere with adjacent or nearby residences."

Another criteria for the Rancho Cielo Specific Plan is stated on Page VI-72, B-3: "Special consideration shall be given to protecting the rural atmosphere of this and adjacent communities through sensitive lot design, . . ." The proposal to place 40 condominiums on the slopes surrounding the Village Center is inconsistent with this guideline.

6. Commercial Center. The placement of a commercial center on Del Dios Highway is in conflict with all previous recommendations of the planning group and their conviction that such uses are in conflict with the intent of designated scenic routes. The Del Dios Town Council, as well as the Mt. Israel community, have also expressed on many occasions similar objections to commercial uses along Del Dios Highway. Because the primary purpose of this proposed neighborhood commercial center is to serve the future residents of Rancho Cielo, and the commercial feasibility study indicates that the projected population of Cielo could support over 30,000 sq. ft. of commercial, it is recommended that the facility be located well within the project boundaries or combined with the Village Center facility.

7. Recreational Facilities/Riding and Hiking Trails. The security system of controlled access to Rancho Cielo should in no way inhibit the use or access to riding and hiking trails by riders and hikers from the surrounding areas and provision should be made for reasonable access to and from all existing trails that intersect with the project boundaries.

8. Water Reclamation Facility. The EIR clearly points out that "the establishment of a sanitation district to install and operate sewage treatment facilities for the proposed development is necessary to achieve the unit density allowed by the current land use." Consequently, approval of any specific plan or density thereof should be subsequent to the issuance of any permits, licenses and requirements necessitated by such a facility and an identified means of financing.

9. Open Space/Biology. While it is noted that significant open space easements have been allocated to areas of constraint due to biological and geological sensitivity, another goal of the Open Space Element of the County General Plan is to encourage and preserve those open space uses that distinguish and separate communities. Because the project will disturb large areas of previously undeveloped land, open space should be provided as a buffer between Rancho Cielo and adjacent developed properties to achieve this goal as well as to provide some measure of mitigation associated with the displacement of large populations of rodents and reptiles inherent to significant amounts of grading. Open space buffers should also be used as the method for noise mitigation, on and off site. There is concern, too, with the actual levels of impact on the integrity of the wildlife and plant habitat due to the incursion of domestic pets and equestrian uses of the open space easements as well as the degree of disturbance due to the installation of sewage and water lines and other utilities.

10. Density. This is a somewhat complex issue due to some of the project being in the SPA with an overall density of 0.27 and some being in the Estate 17 category with a 2-4 acre minimum lot size. There is also the phasing plan involved and the submission of tentative maps by ownership. However, of the four first phase tentative maps submitted, three are within the SPA boundaries and individually and collectively exceed the 0.27 density. It is also understood that

at the present time one of the ownerships within the SPA is requesting to be removed through the GPA process. This issue should be resolved and an appropriate adjustment made to the Specific Plan and Phase One tentative maps prior to approval.

11. Specific Recommendations. Because unproportionate impacts will be imposed on the Mt. Israel Road community with respect to traffic, noise, air quality, and possibly drainage and run-off, a more focused and specific study should be made of this area with consideration also given to what future development under current land use designations will contribute and what specific mitigations will be required. Additional or alternate access/egress routes should be investigated to determine the feasibility of limiting the traffic now being proposed for Mt. Israel Road.

Relocation of the Village Center should be considered so that it is more centrally located to the project and does not interfere with existing developed properties as well as parcels that already have final maps and now will be adjacent to the much higher densities and more intensive uses being proposed under the specific plan.

12. Summary. The whole purpose of applying a Specific Planning Area use to this area was to protect the considerable and very sensitive resources for which it is known. The Planning Group has already taken a position that while recognizing the benefits of the Specific Plan process, the density tradeoff that was made diminished these benefits significantly. Basically this is a case of the San Dieguito Community Plan having been amended to conform with a proposed project rather than the project being created to conform with the plan as intended. It is also apparent that through the Specific Plan process, the premature development of the San Dieguito backcountry is unavoidable.

It is acknowledged that a tentative ERB hearing date has been set for March 19. We would like to retain the option of asking that this date be set forward if we feel it necessary to allow more time for public review within the 45 day review period.

Sincerely,

SAN DIEGUITO CITIZENS PLANNING GROUP

Helen Hiebert

Helen Hiebert, Secretary

cc: Harry Trax, Project Planner, DPLU
Tony Letteiri, Austin & Hansen

ENCLOSURE B

COUNTY OF SAN DIEGO

DEPARTMENT OF PUBLIC WORKS
BUILDING 2 5555 OVERLAND AVENUE
SAN DIEGO, CALIFORNIA 92123
TELEPHONE: (714) 565-5177

R. J. MASSMAN, Director
Offices of:
County Engineer
County Road Commissioner
County Surveyor
County Airports
Flood Control
Liquid Waste
Solid Waste
Transportation Operations

March 10, 1981

RECEIVED
ENVIRONMENTAL ANALYSIS DIVISION

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Second District
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Third District
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Fourth District
PAUL ECKERT
Fifth District

TO: Environmental Analysis Division (0175)

FROM: Director, Department of Public Works (0332)

SUBJECT: Rancho Cielo, EAD Log No. 80-8-120

Staff of the Liquid Waste Division of the Department of Public Works, has reviewed the Draft Environmental Impact Report (EIR) for the Rancho Cielo Project. Staff has also reviewed supplemental information regarding wastewater collection, treatment, disposal and energy requirements, which was requested from the consulting engineer for the project. Comments will be limited to wastewater aspects of the project at this time.

It is our opinion that the proposed alternative for wastewater collection, treatment and disposal is capital, energy, labor and resource intensive, with very high annual operation and maintenance costs. The cost of construction of a 260,000 gallon per day system is in excess of $10,000,000. This equates to about $10,000 per dwelling unit. Although the capital cost will be paid by developers, this cost will pass on to the home buyer.

Estimates of the cost of operation and maintenance, utilizing several sources of information indicate costs which range between $650 to $750 per year per dwelling unit. This compares to a range of charges of $240 to $500 per year for similar small plants in the County.

It appears that project site physiography is responsible for much of this high cost. The most recent proposed alternative would require 16 pumping stations and 37 miles of sewer lines. In addition, to physiographical constraints, the project will require advanced wastewater treatment for water reclamation. Water quality requirements for water reclamation, reuse and for monitoring, will add substantially to energy usage and costs.

Since the sewerage facilities must be owned and operated by a public agency, a County Sanitation District would be reluctant to accept the facilities and

be responsible for operation, maintenance and collection of very high sewer service charges.

It is our opinion that the most logical and reasonable way to sewer this area is either by individual on-site subsurface systems, or by a public system maximizing the use of gravity flow, if possible. The gravity flow system could be connected to a downstream regional treatment and reclamation facility with connection to an ocean outfall for failsafe operation and disposal of excess reclaimed water during periods of diminished needs. The regional approach with ocean disposal capability makes the most sense environmentally. Other specific comments are provided below:

Page 157, Mitigation Item No. 5

We doubt seriously that reclaimed water at this location would be at a lower energy cost than imported water. It would depend on the final treatment and use alternative. Our estimates show 4416 kwh of electricity per acre foot of reclaimed water (less brine). Imported water now requires 2030 kwh per acre foot from the Colorado River and 3300 kwh per acre foot from Northern California. Our estimates do not include energy for collection, irrigation system, monitoring of use areas, and part of the secondary treatment which would be required regardless of whether reclaimed water or potable water is used for irrigation.

Page 198 - Capacity Rights in Ocean Outfall

Capacity is 24 MGD (based upon agreement)
Escondido 79% of 24 MGD = 18.96 MGD
San Elijo 21% of 24 MGD = 5.04 MGD

Page 199 - Impacts

Present proposal is for 16 pump stations. The statement regarding "relatively low capital and operation cost," should be substantiated or disregarded.

Page 204 - Brine Disposal

The problem of brine disposal has not been adequately resolved. Disposal could pose a real problem due to volume and quality. Costs of disposal could be substantial, depending on disposal alternatives.

Should you have any questions, please contact Mr. Joseph Barry at 565-5819.

R. J. MASSMAN, Director
Department of Public Works

RJM:JNB:tly

cc: Engineering and Review Division (0332)

ENCLOSURE B —6

COUNTY OF SAN DIEGO

DEPARTMENT OF PUBLIC WORKS
BUILDING 2 5555 OVERLAND AVENUE
SAN DIEGO, CALIFORNIA 92123
TELEPHONE: (714) 565-5177

R. J. MASSMAN, Director
Offices of:
County Engineer
County Road Commissioner
County Surveyor
County Airports
Flood Control
Liquid Waste
Solid Waste
Transportation Operations

March 16, 1981

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ENVIRONMENTAL

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Fourth District
PAUL ECKERT
Fifth District

TO: Environmental Analysis Division (0175)
Attn: Mike Evans

FROM: Director, Department of Public Works (0332)

SUBJECT: Draft Environmental Impact Report, Rancho Cielo Specific Plan (LSP 80-03 EAD Log No. 80-8-120)

Staff of the Department of Public Works has reviewed the Draft Environmental Impact Report (DEIR) for the Rancho Cielo Specific Plan with respect to circulation and liquid waste collection, treatment and disposal.

We are forwarding with this letter comments of major concern from our Liquid Waste Division and Traffic Engineering Section regarding this project. It should be noted that this response in no way precludes future comments and recommendations from the Department of Public Works during review of this project.

Should you have further questions regarding this project, please call Dwight Smith at 565-5678 or Richard Brown at 565-5675.

for R. J. MASSMAN, Director
Department of Public Works

RJM:JAR:aej

Attachments

cc: Richard L. Brown (0336); Joseph Hill (0382); Rancho Santa Fe Enterprises, 7170 Caminito Pepino, La Jolla, CA 92037; Austin-Hansen AIA Architects, 240 Lomas Santa Fe Drive, Solana Beach, CA 92075; Neste, Brudin & Stone, 10920 Via Frontera, San Diego, CA 92127

ENCLOSURE B

COUNTY OF SAN DIEGO

DEPARTMENT OF PUBLIC WORKS
BUILDING 2 5555 OVERLAND AVENUE
SAN DIEGO, CALIFORNIA 92123
TELEPHONE: (714) 565-5177

March 10, 1981

R. J. MASSMAN, Director
Offices of:
County Engineer
County Road Commissioner
County Surveyor
County Airports
Flood Control
Liquid Waste
Solid Waste
Transportation Operations

BOARD OF SUPERVISORS
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PAUL ECKERT
Fifth District

TO: Don Holmes (0336)

FROM: Bill Lorenz (0338)

SUBJECT: Rancho Cielo EIR

We have reviewed the Rancho Cielo EIR and have the following comments:

1. The intersection of Del Dios Hwy/Via Rancho Parkway is approaching signal warrants under existing conditions. Any portion of the Rancho Cielo development will push the volumes over those required to meet signal warrants.

2. The intersection of Del Dios Hwy/Mt. Israel is not close to meeting signal warrants under existing conditions, but even with just the residential portion of this development signal warrants will easily be met.

3. The intersection of Via Ambiente/Del Dios Hwy probably will not meet signal warrants until the entire development is operational.

4. Del Dios Hwy, at the above three intersections, should be widened for accel/decel lanes.

5. Mt. Israel Rd will have to be widened to at least 40 feet in order to handle 6,652 vehicles per day. Mt. Israel will hav e to be striped with two lanes uphill.

6. The intersection of Via Ambiente/Mt. Israel will meet rural 1 lane signal warrants once the development is complete.

7. The Rancho Cielo development is going to decrease the level of service on Del Dios Hwy from a level of service "C" to level of service "E." Del Dios Hwy should be widened to sufficient width to allow two lanes of traffic in each direction from Mt. Israel to the Escondido City Limits.

8. The Rancho Cielo development will double the traffic volume on Via Rancho Parkway. The level of service will drop from "C" to "D/E." Because of the numerous driveways along this roadway, the road should be widened to sufficient width to allow the installation of a two-way left turn lane.

If you have any questions please call me at 565-5660 or Allen Holmquist at 565-5870.

Very truly yours,

Allen Holmquist

FOR W. C. LORENZ
Traffic Engineer

WCL:AH:phh

B-7

apec corporation
american pacific environmental consultants

RECEIVED

March 25, 1981

Mr. Ron May
Environmental Analysis Division
County of San Diego
9150 Chesapeake Dr.
San Diego, Ca. 92123

Re: Response to San Dieguito Citizens Planning Group Concerns

Dear Mr. May:

A more focused look at air and noise quality in the Mt. Israel Road area was undertaken to better determine the effects of increased traffic.

Air quality was examined with a shortened version of a computer program that predicts levels of carbon monoxide emanating from traffic. The computer program is CALINE III, developed by CALTRANS, and only carbon monoxide (CO) is predicted by such state-of-the-art programs. Roadside levels of CO are usually indicative of the overall air quality near the roadway.

Present noise levels were monitored during two one-hour periods and the impact of traffic and the canyon's echo effect are addressed.

Air Quality

Using worst case meteorological conditions, 1995 peak-hour traffic on Mt. Israel Road, and a 2.9 parts per million background concentration of carbon monoxide in a methodology developed by CALTRANS, a roadside carbon monoxide level of 3.3 parts per million is predicted for 1995. This level is based on assumptions and limitations described below, but is still far enough below the federal standard (35 ppm for 1 hour) and California standard (40 ppm for 1 hour) that little impact on adjacent property is expected.

environmental and planning research
scripps ranch commercenter
9925-c businesspark avenue
san diego, california 92131
(714) 578-8964 or (714) 484-3180

Input for Estimation Procedure

•Peak hour volume (1995)	668 vehicles per hour
•Speed	35 miles per hour
•CO composite emission factor (1995)	7.35 grams/mile
•Atmospheric stability	F (very stable)
•Wind angle (to roadway)	10°
•Receptor distance (from roadway)	15 meters
•Wind speed	1 meter per second
•Background CO concentration (from APCD)	2.9 parts per million

The above data produce an interim concentration of 2.5 ppm. This concentration must then be adjusted to estimate the concentrations near Mt. Israel Road, as shown below:

$$(2.5 \text{ ppm}) \left(\frac{\text{Mt. Israel vehicles per hour}}{\text{CALINE III assumed VPH}} \right) = 2.5 \left(\frac{668}{4000} \right)$$

$$= 0.4 \text{ ppm}$$

The background level of 2.9 ppm plus the estimated level of 0.4 ppm combine for a total CO level of 3.3 ppm.

Limitations

This program is a shortened version of a well-accepted computer program, CALINE III, developed by the California Department of Transportation's Transportation Laboratory.

The assumptions and limitations and their effect on the resultant CO concentration are described below.

HORIZONTAL DISPERSION - because the road is cut into a mountainside, the horizontal dispersion of pollutants will be restricted.
Effect - the estimated concentration of 0.4 ppm will be lower than the actual future concentration.

LOW LEVEL INVERSIONS - these will usually exist in the morning after a cool, clear night. They usually break up by midmorning, but their effect before break-up is important.

Inversions of this type may have a "lid" less less than 50 meters from the ground which does not permit pollutants to disperse above this height. The graphic procedure used here assumes a mixing height of 1000 meters (or a "lid" 1000 meters from the ground). CALINE III does not recommend the use of mixing heights less than 1000 meters unless accurate and detailed wind data is compiled for the specific site.

Therefore, this limitation is not unique to this simple graphic method, but is a difficult problem to address at all levels of analysis.
Effect - The predicted CO concentration of 0.4 ppm will be lower than the actual future concentration.

It is evident that a degree of uncertainty exists when attempting to model roadways in mountaineous terrain. However, when these uncertainties are identified and accounted for, reasonable conclusions about air quality can be made.

Noise

Current noise levels along Mt. Israel Road were measured on 3/18/81 and 3/19/81. One hour measurements were taken from 8:15 to 9:15 am and 4:36 to 5:36 pm, with a General Radio (GR) 1945 Community Noise Analyzer and a GR 1962 microphone. The analyzer was checked for accuracy with a GR1562A calibrator before and after each session.

A total of 21 vehicles traversed Mt. Israel during the evening reading and 13 vehicles used the road during the morning reading. Del Dios Highway accounted for a very low-level hum, making the overall contribution of traffic noise insignificant. A large part of the recorded noise was from aircraft, and the remainder was from the wind, woodpeckers, other birds, falling water, and crickets.

The sound levels ranged from 50-53 dBA Leq. This represents the average energy level of the time-varying sound levels. The L_{90}, or background noise level, varied between the very low levels of 33-36 dBA. The L_{50} level, or the sound level exceeded 50% of the time, varied from 37-41 dBA.

The large variation of about 17dB between the background level and the Leq indicates that transportation noise, particularly aircraft, has a moderate impact on the very quiet noise levels in this canyon.

With the very low noise levels that exist in this canyon, a noise or disturbance will often seem louder than it actually is; amplification or echo is a reasonable justification of this phenomena.

The evening monitoring session attempted to measure the effect of echo or reflection on noise levels. A site was chosen where the canyon wall was close to the far side of the road. Measurements were taken and compared to the National Reference Energy Mean Emission Levels for cars and trucks. The sound levels for the few vehicles that passed were about 0-4dB quieter than the standards indicate. From this limited test it appears that reflection is not a major problem in the canyon, because if it was, the measured noise levels would have been slightly higher than the standards, indicating some amount of sound reflection or reinforcement.

If we can be of further assistance in clarifying the issues associated with the Rancho Cielo Draft EIR, please call me at 578-8964.

Respectfully submitted,

Thomas Weber
Environmental Engineer

TW:dmb

B-10

San Diego County Archaeological Society, Inc.

Environmental Impact Report Review Committee
P. O. Box A-81106 San Diego, Ca. 92138

March 28, 1981

To: Environmental Analysis Division
County of San Diego
9150 Chesapeake Drive
San Diego, California 92123

Subject: Draft Environmental Impact Report
Rancho Cielo
EAD Log #80-8-120

Gentlemen:

I have reviewed the cultural resource aspects of the subject Draft Environmental Impact Report on behalf of this committee of the San Diego County Archaeological Society.

Based on the contents of the report, we concur in the impact analysis and mitigation recommendations made therein. Our only adverse comment on the report is a minor one, that there are several references cited in the text of the archaeological technical report which are omitted from the bibliography of that report. The ones noted during my reading of it are:

Polan, 1978, cited on page 289 and earlier
Carrico and Ezell, 1978, cited on page 270
Chace, 1978, cited on page 270
Crabtree and Davis, 1968, cited on page 280

We appreciate the opportunity to comment on the DEIR for Rancho Cielo.

Sincerely,

James W. Royle, Jr.
Chairperson, EIR Review Committee

cc: APEC, Inc.
SDCAS President
file

STATE OF CALIFORNIA—RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF FISH AND GAME
350 Golden Shore
Long Beach, California 90802
(213) 590-5113

April 3, 1981

San Diego County
Environmental Analysis Division
9150 Chesapeake Drive
San Diego, California 92123

Gentlemen:

We have reviewed the Draft EIR for Rancho Cielo (EAD Log #80-8-120) for residential development on 3,525 acres of hilly terrain located four miles southwest of the City of Escondido and immediately north and west of Lake Hodges. We find this project is well conceived and the report's description of biological resources through mapping and tabulation is adequate for our review purposes. However, the document is lacking in essential mitigation measures for protection of the biological resources since this project will allow development into portions of three Resource Conservation Areas on this property.

The losses of sensitive habitat cannot be considered insignificant merely because they involve a relatively small area compared to the relatively larger area covered by this project. The project as proposed would eliminate 15 acres of southern oak woodland and 3 acres of riparian woodland without any mitigation (Table 4). We therefore believe that specific mitigation measures for reducing adverse impacts to the biological resources of this property must be discussed in the Final EIR. In this regard, we offer the following comments for your consideration:

1. Replacement of oak trees should be provided on a 3:1 basis. This would provide conversion into southern oak woodland of at least 15 acres, and preferably more, of the disturbed habitat proposed to be left in open space. Such conversion would reduce the long-term and cumulative impacts of this project to only short-term impacts. This is urgently needed because such reserves are rapidly diminishing in San Diego County.

2. The project would eliminate approximately 3 acres of riparian woodland. Under our Resources Agency's Wetlands Protection Policy, we are required to object to such losses unless they are fully mitigated. We therefore recommend that an equal or greater low lying area in close proximity to one or more of the streams on this property be selected and used for creation of riparian habitat of equal or better quality. Please note that our policy does not exempt wetlands that have degraded in quality in recent years due to natural factors or human interference.

3. The project sponsor should be advised that alteration within the high water mark of any streambed, whether it be permanent or intermittent, will require notification to the Department of Fish and Game pursuant to Section 1603 of the Fish and Game Code. This notification and the subsequent agreement must be completed prior to commencement of the streambed alteration. It should be noted that this state law may require significant changes in project features associated with streams or streambeds. For this reason, we strongly urge compliance with this code section prior to finalization of the specific project design.

4. We believe that such a large-scale project requires the review of the Draft EIR to be coordinated through the State Clearinghouse to assure that all state agencies having interest or concerns will be able to provide appropriate review as required by the California Environmental Quality Act.

Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Kris Lal or Jack L. Spruill of our Environmental Services staff at (213) 590-5137.

Sincerely,

Fred A. Worthley Jr.
Regional Manager
Region 5

cc: Office of Planning & Research

CLOSED
BOX 189
FILE 4659

Rancho Cielo

Draft
Environmental Impact Report

Volume I

american pacific
environmental consultants

Rancho Cielo

VOLUME I

EAD Log #80-8-120

State Clearinghouse SCH #80071615

prepared for

Rancho Cielo Property Owners Association

September 22, 1980

AMERICAN PACIFIC ENVIRONMENTAL CONSULTANTS

9925-C Businesspark Avenue San Diego CA 92131 ✧578-8964✧

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SECTION

I

I. INTRODUCTION

The Rancho Cielo Specific Plan consists of a detailed plan for land use, capital facilities, and ultimate lot design on 3,525 acres of land located within the San Dieguito Community Planning Area, two miles northeast of Rancho Santa Fe, four miles southwest of the City of Escondido, and immediately north and west of Lake Hodges. A complete description of the Specific Plan and project components is included in Section III of this report. This draft Environmental Impact Report (EIR) addresses all aspects of the proposed land use plan for Rancho Cielo including the preliminary lot design; circulation system; facilities infrastructure; future permits and tentative maps; as well as the formation of a sanitation district to provide sewer service via a water reclamation plant, and annexations of the land area to the Rancho Santa Fe Fire District. All of these aspects of the Specific Plan are analyzed here with respect to their immediate and cumulative impacts on the region's unique environmental resources.

The scope of this EIR is necessarily broad to illuminate the overall effects which may be anticipated with project implementation and ultimate development; but, is also specific in analysis of on-site resources and potential impacts from all aspects of the plan including such details as lot placement, road alignment, future residence construction and habitation. Off-site impacts are extensively addressed in areas of road extension, surrounding roads and residential areas which have viewsheds of Rancho Cielo, and areas subject to growth inducement with project implementation.

Thus, the intent of this EIR is to provide an extensive data base with a level of analysis that can serve as a Master Environmental Assessment for the adoption of the Rancho Cielo Specific Plan and subsequent Tentative Maps, Major Use Permits, and other discretionary actions which require environmental review. It is not intended in this report that all potential impacts are to be mitigated at the planning level, but that subsequent projects should require only a minimal amount of supplemental information to complete any further analysis and design of mitigation measures. This approach allows for a measure of flexibility in the final design while ensuring that adequate mitigation measures or design alternatives do exist and can be applied at the appropriate project level (e.g., grading permit and major use permit). Those aspects of future development which will require additional specific analysis and recommendations and which are not addressed fully in this report are included in Section III.

All other aspects are believed to have been adequately addressed in both the planning and the EIR phases of the Specific Plan.

Purpose

Guidelines for the preparation of Environmental Impact Reports have been established in the State of California EIR Guidelines (Section 21082 of the California Public Resources Code). These guidelines are further clarified at the local jurisdiction level under the provisions of Sections 15014 and 15015 of the California Administrative Code (Title 14). Primarily, these two guidelines are used to establish and clarify the intent of the California Environmental Quality Act of 1970 for local implementation. Their purpose is to provide consistency in the objectives, criteria and procedures used in project review.

The Environmental Impact Report is the heart of the California Environmental Quality Act, serving as an informational document to assist decision-makers and the general public in their review of projects which may have significant impacts on the environment. The purpose of the EIR is to identify any significant impacts and to recommend mitigation measures and project alternatives. This draft EIR conforms to all State and local guidelines and represents a full disclosure of the Specific Plan, Sanitation District and all subsequent development within the Rancho Cielo Specific Planning Area.

Process

This draft EIR contains two volumes of reports consisting of all mandatory sections in Volume I, and technical appendices in Volume II. The scope of this document has been defined through coordination with the County of San Diego (Lead Agency) and publication of a Notice of Preparation as defined by the State EIR Guidelines.

This draft EIR has been submitted to the County of San Diego Environmental Analysis Division (EAD), who as a local agency are responsible for review of the draft EIR (for adequacy) and publication of a Notice of Completion. At the time the draft EIR is determined to be adequate and the Notice of Completion is published, all documents will be available for public review for a specified period of time at public libraries, public jurisdictions, private agencies which might be affected by the proposed project, and at the

Department of Planning and Land Use (DPLU). During this time, public and agency input is solicited. This review will culminate in the first public hearing, the Environmental Review Board (ERB). This hearing is set by EAD staff for the project and the date can be obtained by contacting DPLU at 236-4083 or 565-5936.

The purpose of the ERB hearing is to consider the findings and recommendations of the draft EIR and the EAD staff report, together with public comments. The ERB will make recommendations regarding the significance of potental impacts, appropriateness of mitigation measures, and the adequacy of the Environmental Impact Report. These recommendations will be incorporated into a final EIR and forwarded to the Planning Commission and subsequently the Board of Supervisors. The hearing dates can be obtained by contacting the Department of Planning and Land Use at 565-5936. The Board of Supervisors will have the final authority for the certification of the EIR and approval or denial of the proposed project. Public input is encouraged at all public meetings and hearings.

Organization

The report is broken down into several sections to facilitate coherent and orderly analysis of the project. Section I is the Introcuction explaining the use and scope of the EIR. A summary of the impacts and findings is included in Section II as a brief overview of the analysis sections which follow. Section III provides a detailed description of all aspects of the Specific Plan, sanitation district, lot design, facilities infrastructure and all other issues associated with subsequent development. The bulk of the text is included in Section IV, where the environmental analysis is thoroughly documented. Each issue addressed includes three sections.

Present Setting. This section describes the existing resources and setting germane to the subject addressed. The information presented here allows the reader to evaluate the significance of any changes the proposed project might have on the environment.

Impacts. All changes in the present setting which may result with project implementation are discussed here including immediate, potential, cumulative, on-site and off-site effects. Both positive and negative impacts are analyzed with discussion focused on the level of significance of each impact.

Mitigation. Those aspects of the project design which have been incorporated to avoid or minimize environmental impacts are discussed. Where appropriate, mitigation measures are recommended to accompany the project design. The purpose of these measures is to reduce the impacts to a level of insignificance. Specific attention is also given to impacts which cannot be mitigated within the scope of the project or the EIR. For these impacts conditions are recommended which would require further review of specific development phases such as grading permits, special use permits and tentative maps. This section is specific in targeting locales or subsequent projects which may require additional review; but in each case, the scope of additional analysis is described.

The final sections V through X are those mandatory sections of the EIR guidelines. Pertinent issues such as growth inducement, long-term versus short-term uses of the area, irreversible effects of the project, and project alternatives are discussed.

A separate document of technical appendices is also an integral part of the EIR. Within this document are Geology, Hydrology, Waste-Water Reclamation, Biology, Archaeology, Circulation, Noise, Solar Feasibility, Commercial Feasibility, Public Utilities, and Financing technical reports. Each of these reports have been extensively summarized in the Environmental Analysis section of this report.

Additionally, a Specific Plan text which describes all aspects of the Rancho Cielo Specific Plan as they relate to the County of San Diego General Plan, the San Dieguito Community Plan, and the Regional Growth Management Plan is available. This document is provided as a separate document and is utilized to further define the scope and timing of development. All documents are available at the Department of Planning and Land Use, 9150 Chesapeake Drive, San Diego, California, 92123.

Executive Summary

It should be noted at the onset that substantial environmental investigation and planning was pursued at the earliest stages of designing the Rancho Cielo Specific Plan. The purpose of this environmental planning was to provide a sensitive framework of constraints, around which a development could be planned with minimal or no impact to the unique

resources present in Rancho Cielo and the surrounding area. In view of the fact that the entire 3,525-acre site is vacant and virtually undisturbed, any development would constitute significant change in the character and environment of the area.

The key, therefore, is planning. The previous land use designation of Estate, and the designation recommended by County staff, Multiple Rural Use, did not provide any measure of actual site-planning. Development via a Specific Plan (as required under the Specific Plan Area designation), places much greater emphasis on the planned development approach. Thus, the EIR must focus on two levels of impact: first, the impact of the proposed land use plan on the possible land use plan alternatives; and second, the impacts of the plan and associated projects on the local and regional environmental resources. This EIR attempts to fully examine both levels of impact and provide additional mitigation measures which would serve to determine the appropriateness of the plan as it relates to environmental factors and fine-tune the project design at subsequent development stages. It is the intent of the EIR to be used for all future projects on Rancho Cielo, where appropriate. Although various regional aspects are discussed in text, no other projects outside of the area included within the Specific Plan are meant to be addressed.

SECTION II

II. SUMMARY

This draft Environmental Impact Report addresses the Rancho Cielo Specific Plan, consisting of a phased development plan on 3525 acres, located in North San Diego County. The analysis addresses all aspects of the project including 892 residential units, two commercial areas, recreational and public utilities areas, open space, and subsequent discretionary actions required for project implementation.

Based on a comprehensive review of the issues addressed, several significant impacts may be anticipated. Mitigation measures have been proposed to reduce the level of impact to insignificance; with the exception of Schools, for which the impacts remain significant and unresolved. All aspects of the project are considered here to present a concise summary of potential impacts and mitigation measures. In some cases the project design serves as adequate mitigation for potential impacts. Potentially significant impacts are those which the plan does not mitigate and further measures are required.

Result of the analysis performed indicate that those issues which will not incur significant impacts include the following:

Land Use	Astronomical Dark Skies
Landform	Agriculture
Climate	Recreation
Hydrology	Public Services
Air Quality	Socio-economics

The remaining issues are considered "major issues" and may incur significant impacts. The following is a brief summary of the potential significant effects and the recommended mitigation measures.

Soils and Geology

Several potentially hazardous conditions may arise with project development. Erosive, shallow soil conditions present over much of the site may be subject to slope failure or erosion. Block fall potential on slopes in excess of 35% grade may also result in slope failure in isolated graded locations. Drainage problems associated with seepage in areas of fracturing or faulting may pose potential hazards to structural stability.

Mitigation measures include supervised grading; engineering of all culverts, bridge footings, and foun-

dations; site specific analysis of the reservoir and water reclamation plant locations based on facility design; proper drainage and erosion control devises installed with grading; and approval of grading and landscape plans prior to site development.

Water Quality

The proposed project includes the formation of a sanitation district to utilize sewage disposal facilities. Treated effluent may be used for irrigation, or discharged directly into Escondido Creek or San Dieguito River. The potential impact here is to the quality of groundwater in the basins. The proposed facility is designed to meet Regional Water Quality Control Board (RWQCB) water quality standards, such that discharge of treated effluent into the basins would not be a significant impact to regional water resources.

The project proposes to utilize a water reclamation system that is capable of treating the effluent to within RWQCB standards with the assurance that the system will not fail. It is proposed that this can be accomplished to the satisfaction of the RWQCB and that the treated effluent quality will be better than existing streamflow water quality.

Biology

Significant biological resources on Rancho Cielo include extensive undisturbed wildlife habitat; populations of Coast White Ceanothus, Encinitas Baccharis, Sticky Dudleya and other sensitive plant species. Three Golden Eagles nest sites, one of which is currently active; Southern Oak Woodland and Riparian Woodland; and a perennial water course. Potential significant impacts which may be incurred with project implementation include possible loss of Encinitas Baccharis habitat, possible failure of the active eagle nest site, and overall degredation of the biological resources on Rancho Cielo.

Dedication of open space areas as designated on the land use plan will mitigate nearly all potential impacts to on and off-site resources with the exception of the Encinitas Baccharis and the active eagles nest site. The Encinitas Baccharis can be protected by insuring that the populations are located within the open space when Tentative Maps are received. To protect the eagle nest site viability an open space easement should be placed over the five lots which are contained in the nest's viewshed. These lots may be developed, however, with a site plan, if it can be shown that the residence will be placed in an area outside the nest's viewshed.

Archaeology

Eighteen archaeological sites and 13 isolates were identified in an extensive field survey and record search of Rancho Cielo. Sixteen of the archaeological sites consist of a quarry or lithic scatter which may contain additional significant cultural resources. A phased text program is recommended for the 16 sites; after which, additional testing, open space easements, or no further work may be assessed. All sites have been described in site forms and recorded with the San Diego State University Clearinghouse.

Traffic

The proposed development, including residential, commercial and recreational uses will contribute approximately 12,852 daily vehicle trips onto circulation routes in the project area. Del Dios Highway will recieve the majority of these trips. Potential areas of impact are associated with the three intersections on Del Dios Highway: Via Ambiente, Mt. Israel Road, and Via Rancho Parkway.

Via Ambiente and Mt. Israel Road will require acceleration/deceleration lanes, left turn pockets, and left and right turn lanes for egress onto Del Dios Highway. Signalization of these intersections may be required in the future when development on Rancho Cielo has progressed. The Via Rancho Parkway intersection will require immediate signalization due to existing capacity volumes. The signalization may be constructed in conjunction with the Escondido Regional Shopping Center (Kit Carson Park) or by Rancho Cielo, depending on development timing.

Noise

Noise impacts are anticipated for several residential units along Del Dios Highway and Via Ambiente. Community Noise Equivalent Levels (CNEL) for these roads will exceed the Development Standards (65 and 60 dBA, respectively) for 1995 traffic volumes. Noise attenuation barriers or open space easements (building setbacks) are proposed to insure that residential uses are not implemented where unacceptable noise levels occur.

Additionally, the proposed heliport may generate hazardous noise levels on the project site. This potential impact should be extensively addressed at such time a Major Use Permit is requested and a site plan submitted. Mitigation measures should be designed around the site plan.

Aesthetics

The project area is visible from the communities of Del Dios, Rancho Santa Fe, and Elfin Forest; as well as from two scenic highways (Del Dios Highway and proposed SA-680), and the Lake Hodges recreational area. Uncontrolled grading and construction may significantly impact aesthetics viewsheds from these locations. Grading and landscaping plans will be required to reduce visual impacts. The open space areas proposed with the project will also serve to minimize visibility of site development.

Schools

Students generated from Rancho Cielo will attend Escondido Union Elementary and High School School Districts, San Dieguito Union High School District and the Rancho Santa Fe Elementary School District. The increase in student enrollment within each district is considered a significant impact to the level and quality of education. Payment of fees to accommodate the student influx will mitigate impacts to the two Escondido Districts; however, the Rancho Santa Fe and San Dieguito Districts have indicated that the impacts cannot be mitigated until permanent buildings and facilities can be assured to serve the students within the districts.

SECTION III

III. PROJECT DESCRIPTION

Rancho Cielo Specific Plan

The Rancho Cielo Specific Plan proposes a phased development plan of 892 residential units, two commercial centers, fire station, equestrian center, heliport, wholesale nursery, and open space on 3,525 acres within the San Dieguito Community Planning Area of San Diego County. The project is broad in scope, including land use planning for the entire property, of which 2,632 acres are designated Specific Plan Area, 529 acres are designated Estate and Impact Sensitive, and 364 acres of Public Land (included for planning only); the formation of a sanitation district to provide sewer facilities to the site; construction of substantial road and water facilities to serve future residents; annexation to a fire district; and design for lot placement and road alignment. All Tentative Maps will be submitted under a three-step phasing plan within the first five years after project approval. Construction of residential or commercial buildings will be pursued subsequently by individual property owners.

Project History

On October 24, 1979, the Board of Supervisors of the County of San Diego approved a General Plan Amendment (GPA 79-02) in which the 2,632-acre Rancho Cielo property (previously known as Prados San Dieguito) was changed from Category 17 (Estate Residential) to a Specific Planning Area (SPA). The intent of this approval was to ensure development of the property in concert with construction of the necessary infrastructure facilities and the preservation of unique environmental resources. A density of .27 dwelling units per acre (one du per 3.76 acres) was designated with a maximum yield of 700 residential units.

The Board of Supervisors provisioned approval of the plan change with the concern that any future land use plan for site development substantiate project sensitivity to the natural environment and to adequately justify any commercial uses on the basis of demand for services. The Rancho Cielo Association subsequently proposed the Specific Plan and the Board initiated Rancho Cielo as a Large Scale Project under the provisions of Board of Supervisors Policy I-62.

Since the Specific Plan was initiated, four additional parcels of land have been included for the purpose of planning.

The Rancho Cielo Plan now totals 3,525 acres and encompasses parcels under 15 ownerships, one of which is the Bureau of Land Management (364 acres). This EIR will address all issues of the Specific Plan including the Specific Plan Area (SPA), the additional 529 acres outside the SPA boundaries, and the appurtenances to the land use plan described in this section.

Project Location

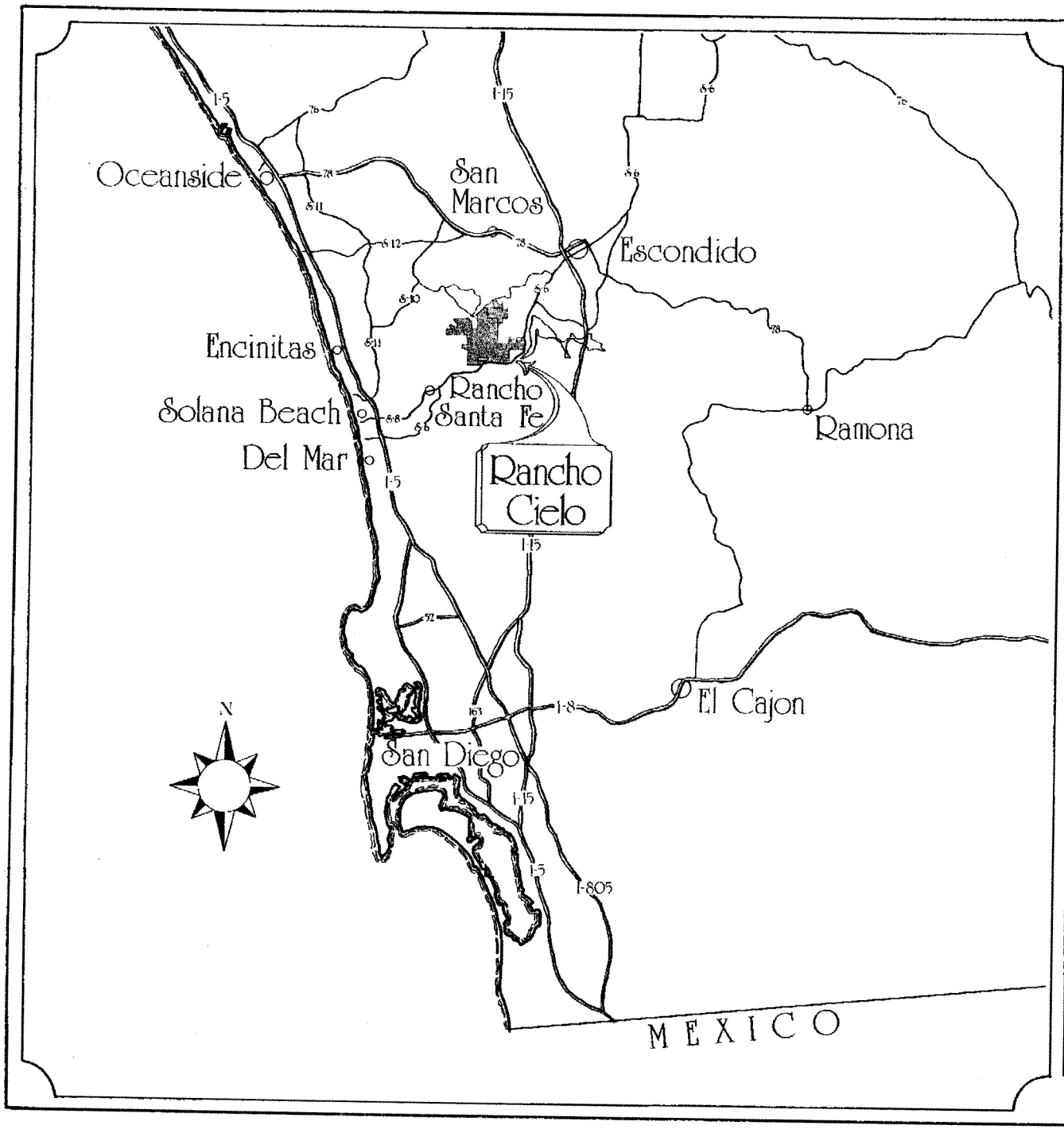
Rancho Cielo consists of 3,525 acres in north San Diego County within a portion of the San Dieguito Planning Area. The property lies within eight miles of the Pacific Ocean in a portion of a north-south trending coastal range. With respect to community development, the site is located two miles east of Rancho Santa Fe, four miles southwest of the City of Escondido, four miles south of the City of San Marcos, seven miles east of Leucadia and Encinitas, and immediately north and west of Lake Hodges and Del Dios (see Figure 1). The property is also described as a portion of Section 36, Township 12 South, Range 3 West; a portion of Sections 1, 2, 3, 10, 12, 13, 14, 15 and all of Section 11, Township 13 South, Range 3 West; and a portion of Section 17, Township 13 South, Range 2 West.

Land Use Plan

The Rancho Cielo Specific Plan proposes a plan of land usage for the entire 3,525 acres including the 2,632 acres designated as Specific Plan Area (SPA) on the San Dieguito Community Plan and the additional 529 acres outside the SPA but within the planning boundaries of the Specific Plan (see Figure 2). The level of specificity of the plan includes designation of collector and residential roads, special use areas, lot placement, and locations of residential and commercial areas. A detailed analysis of land use is included in Section IV of this report.

A total of 892 dwelling units are proposed and shown on the plan. The areas shown as Village Estates and Planned Development will include 40 townhomes and 38 single-family units (in two locations) respectively. The actual site development plans are not proposed at this stage. Lot sizes range from one to in excess of three acres. Overall density of units within Rancho Cielo Specific Plan (3,161 acres, public land excluded) is one dwelling per 3.54 acres. Within the Specific Planning Area (2,632 acres) 700 units are proposed with a density of one dwelling unit per 3.76 acres. The actual

FIGURE 1



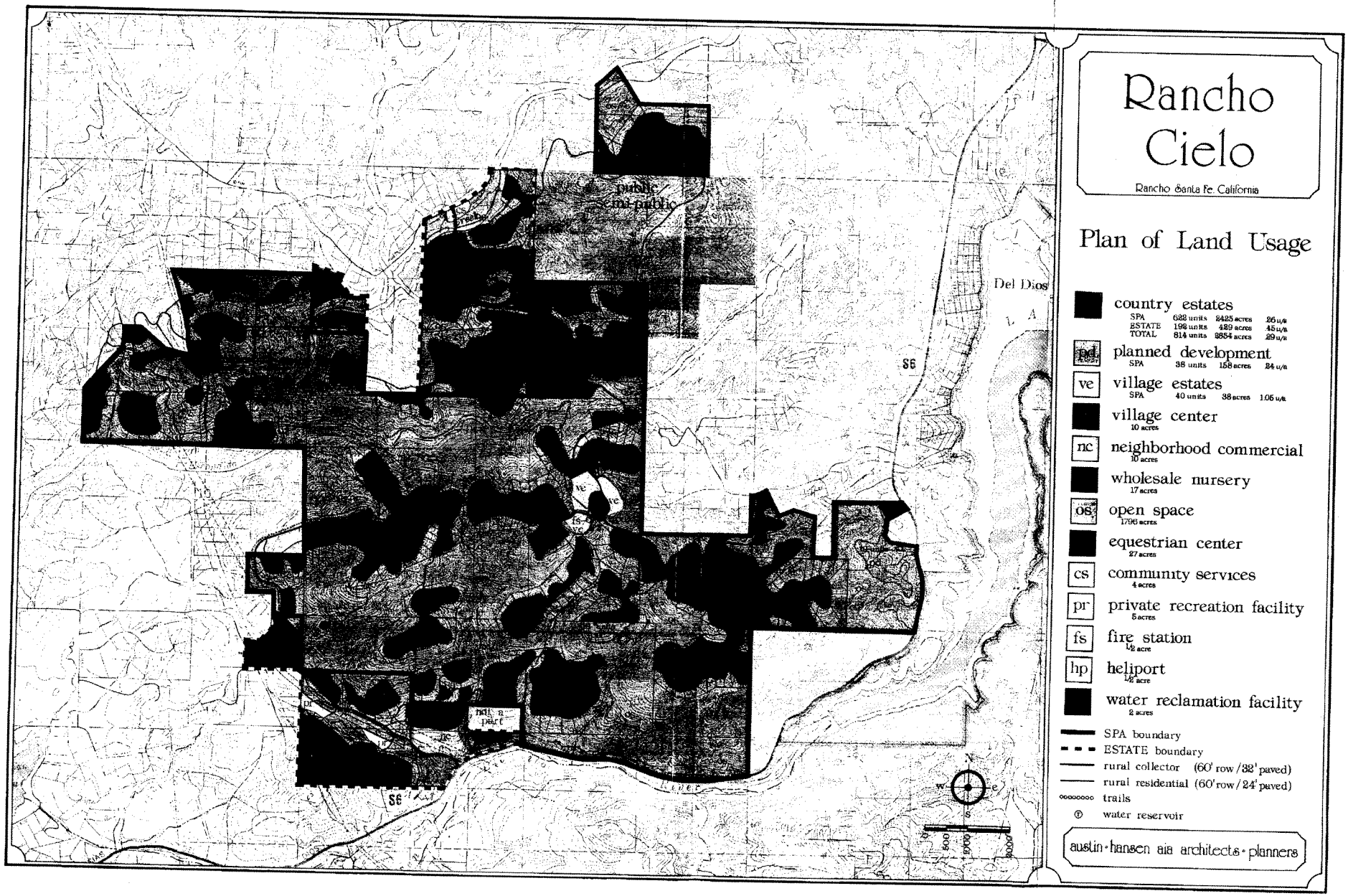
Rancho Cielo

Rancho Santa Fe, California

Vicinity Map

austin·hansen aia architects·planners

FIGURE 2



Rancho Cielo

Rancho Santa Fe, California

Plan of Land Usage

- country estates
  - SPA 622 units 2425 acres 26 u/a
  - ESTATE 192 units 429 acres 45 u/a
  - TOTAL 814 units 2854 acres 29 u/a
- pd — planned development
  - SPA 38 units 158 acres 24 u/a
- ve — village estates
  - SPA 40 units 38 acres 1.06 u/a
- village center
  - 10 acres
- nc — neighborhood commercial
  - 10 acres
- wholesale nursery
  - 17 acres
- os — open space
  - 1796 acres
- equestrian center
  - 27 acres
- cs — community services
  - 4 acres
- pr — private recreation facility
  - 5 acres
- fs — fire station
  - ½ acre
- hp — heliport
  - ½ acre
- water reclamation facility
  - 2 acres

- SPA boundary
- ESTATE boundary
- rural collector (60' row / 32' paved)
- rural residential (60' row / 24' paved)
- trails
- water reservoir

austin • hansen aia architects • planners

SECTION IV

approval and development of lots will be accomplished through subsequent Tentative Maps.

In addition to residential uses on the site, two commercial areas, an equestrian center, fire station, heliport, water reclamation facilities, wholesale nursery, and substantial open space areas are delineated on the plan. Site plans will be required for subsequent development of these areas, with the exception of the nursery, the Village Center commercial site, and the open space. The nursery will provide plant material for landscaping within Rancho Cielo and will not be used for outside sales. Open space areas will be granted to the County of San Diego in conjunction with the subdivision process. Ownership and maintenance of the bulk of open space will be governed by the Rancho Cielo Property Owners Association (RCPOA). The open space areas included within the residential lots will also be managed by the RCPOA but ownership will remain with the land holders.

Phasing

Development of the Rancho Cielo property is proposed in three phases over a five-year period. The phases are further broken down into sub-units to incrementalize subdivision of the site over the full five years. Actual construction of residences or other structures may proceed on a lot-by-lot basis after final approval of the Tentative Maps. Full buildout is estimated to occur over a 20-year period.

The three phases and sub-units are described below and in Figure 2.

Phase I. The areas encompassed by the first phase of development can generally be described as those adjacent to existing development and access routes, and those required to establish public services and circulation plans. This phase includes approximately 1,632 acres of land and 487 dwellings. Construction of the primary access routes to Del Dios Highway (Via Ambiente and Mt. Israel Road) is provided to accommodate initial circulation requirements in the southern half of the site. The water reclamation plant, water service facilities, village centers, village estates, heliport, fire station, and equestrian center will be part of this phase; however, actual construction of dwellings or other structures will be dependent upon market demand. Four sub-units are proposed allowing development to commence in the west and proceed toward the east along Via Ambiente.

Phase II. Areas included in this phase are immediately adjacent to Phase I and which allow for further extension of roads and public service facilities to presently unserved areas. Approximately 935 acres and 292 dwelling units are proposed in this phase. Construction of improvements in Phase I will be completed prior to Phase II initiation. Improvements in Phase II include extension of Via Ambiente and water, sewer and utility lines to serve the Phase II units.

Phase III. The final development phase will incorporate all remaining areas which were not previously adjacent to or proximate to areas of development or access. Minor road and utility extensions will be required for the remaining 594 acres and 113 dwelling units. All public improvements will be completed in conjunction with this phase.

Subsequent residential and commercial development of the site is anticpated to occur into 1995. All vital services, however, will be available as necessary within the time frame of the five-year phasing.

Facilities Infrastructure

Roads

Three Circulation Element Roads are located on the site: Del Dios Highway, Mt. Israel Road, and Camino Del Norte (SA-680). Improvement or construction of these roads is not proposed but will be completed as necessary to satisfy the circulation needs of area residents and the requirements of the Department of Transportation. Intersection improvement at Del Dios Highway, Elfin Forest Road and Harmony Grove Road will be completed with the phasing plan. Internal roads serving the project site are private for the use of local residents in the Rancho Cielo area. These roads will be classified as Rural Residential (24 feet paved width) and Rural Collector (32 feet paved width). Hiking and riding trails will also be provided.

Water

Water service facilities proposed for Rancho Cielo are designed to serve the entire project area as well as some areas outside the Rancho Cielo boundaries. Approximately 27 miles of waterline are proposed in the preliminary design with four pump stations (one existing) and five reservoirs (two existing). Six pressure zones will be established within the property boundaries to a maximum elevation of 1,492 feet MSL. The water facilities design includes adequate capacity

to supply service to all 892 future dwellings and the commercial/public buildings.

Sewer

The formation of a sanitation district contiguous with the Rancho Cielo boundaries is a key component of the project design. A water reclamation plant located on the western portion of the site is proposed for tertiary treatment and reuse of approximately 260,000 gallons of effluent per day. All equipment, sewer lines, pump stations and other appurtenances will be constructed in conjunction with each phase of development with completion projected in conjunction with the five year phasing plan.

Public Services

Several aspects of the project design are intended for improving public services in the area. These include dedication of land for a fire station, as well as construction of the fire station itself, and construction of a heliport for emergency access.

With respect to utilities, electric and natural gas lines will be extended onto the property to serve future residences. Facility sites will be located and donated as necessary to satisfy the requirements of San Diego Gas and Electric. All utilities and telephone lines are proposed as underground services.

Permits

In addition to the Specific Plan and sanitation district, several other projects requiring discretionary actions will be requested in conjunction or subsequent to approval of the plan. The primary permits involved with development of the site are the following:

a. Planned Development Permits. These permits are involved with the Specific Plan to allow for changes in conventional use regulations and development standards. In essence, this permit is to provide for flexible design standards for roads and structures where environmental resources may be affected. Three permits will be required: two for the Planned Development areas and one for the Village Estates.

b. Tentative Maps. Creation of the separate lots shown on the land use plan is accomplished through approval

of Tentative Maps. It is not known at this time how many maps will be submitted, but the timing of submittal and development will be coincident with the phasing program. It is through the subdivision map process that open space areas will be dedicated and that actual construction of road, water, and sewer facilities will commence.

c. Zone Reclassification. A zone reclassification will be required for Rancho Cielo to bring the zoning into conformance with the General Plan (as specified in Board of Supervisors Policy I-65).

d. Grading Permits. These permits will be issued during two levels of development: Tentative Maps and residential construction. The grading permits issued for road construction will be issued through the Tentative Map process. Other grading permits are associated with residential construction and will allow for driveway and pad construction. These permits will be issued individually for the lots as applied for by future owners.

e. Major Use Permits. Major Use Permits will be required for construction of the heliport, private recreational facility, and the water reclamation plant. The purpose of this permit process is to ensure consistency of the proposed project with the zoning regulations and surrounding uses.

f. Minor Use Permits. Minor Use Permits may be required for construction of public facility sites. The intent of this permit process is similar to the Major Use Permit but under the jurisdiction of the Zoning Administrator rather than the Planning Commission.

g. Site Plan Review. The intent of this review is directed toward physical design, siting, and interior vehicular and pedestrian access. The fire station and neighborhood commercial center will require submittal of site plans. Other developments may be subject to this review also, but are subject to the discretion of the Department of Planning and Land Use.

h. Regional Water Quality Control Board. RWQCB approval of the sewage disposal system is required by the State of California. This approval incorporates the National Pollutant Discharge Elimination System (NPDES) permit issued by the Environmental Protection

Agency if this permit is necessary. Approval by the regional board is necessary to ensure that regional water quality objectives are achieved.

i. Local Agency Formation Commission. LAFCO approval is required for the annexation procedures involved with the Rancho Santa Fe Fire Protection District. LAFCO is also a responsible agency authorized to approve or deny the formation of a sanitation district to establish the water reclamation facilities.

j. Vacation Permit. An open space easement for biological resources located in the northwest will be vacated in conjunction with this project. New easements will be dedicated with each Tentative Map.

k. Boundary Adjustments. Several boundary adjustments may be required to implement the phasing and subdivision of Rancho Cielo in an orderly and consistent manner.

All of these permits are considered in the scope of this EIR and are addressed specifically where possible. Those portions of the project which will require additional environmental analysis are described below.

Issues Not Addressed

Certain aspects of the Rancho Cielo Specific Plan are not fully addressed in the EIR and will, therefore, require further analysis at the time permits are applied for. These components of the plan have been analyzed and considered, however, for their potential impacts and cumulative effects on the project area. Mitigation measures are believed to be available for each component, but these should be applied as site-specific measures. The following aspects need further environmental consideration.

Neighborhood Commercial Center on Del Dios Highway

The primary concern here is for aesthetic and geologic impacts. Site plans should be submitted with the permit application for the commercial center including complete grading and landscape plans. Site-specific geotechnical analysis may also be required depending on the grading and drainage features.

The intent of the analysis is to ensure that geologic hazards have been mitigated with appropriate engineering features; and, that the proposed design will not be a significant visual impact to vehicular traffic on Del Dios Highway.

Planned Development on Del Dios Highway

The exposure of this site, and the access to Del Dios Highway make this area sensitive to aesthetics and traffic safety impacts. The Tentative Map and Use Permit for site development should include grading and landscape plans to ensure that visual impacts to Del Dios Highway, Lake Hodges, and the Del Dios Community are substantially mitigated. Also, ingress/egress from the site should be analyzed to ensure safe traffic conditions on Del Dios Highway.

Water Reclamation Plant

When plans for the water reclamation plant are available, specific geotechnical analysis may be required to ensure structural stability for the plant components. This analysis may include subsurface testing and review of drainage and erosion control features at the discretion of the project geologist.

It is also necessary that the plant be capable of satisfying the Regional Water Quality Control Board (RWQCB) water quality requirements for basin effluent discharges. This may require additional more detailed analysis but could be done in conjunction with the RWQCB's waste water approval and County of San Diego Use Permit processing.

Heliport

The heliport site is located within an area of residential and commercial uses which may be severely impacted by noise generated from helicopter activity. The Major Use Permit application should show specific analysis of noise impacts from this use type. Mitigation measures should be designed and approved prior to any site development.

Additional environmental analysis is required to mitigate previously identified impacts of the Rancho Cielo project. This analysis is discussed thoroughly in the EIR and summarized in Section II. This additional analysis is intended to serve as mitigation measures to reduce or eliminate those areas of anticipated significant environmental impacts.

FIGURE 3

IV. ENVIRONMENTAL ANALYSIS

LAND USE

PRESENT SETTING

Land use issues are discussed here for Rancho Cielo under five topics: Existing Uses, Regional Growth Management Plan, San Dieguito Community Plan, Zoning, and Policies. All of these parameters combined, make up the land use constraints on the property to which development is intended to conform. These constraints take into account topographic considerations, location with respect to urban and rural development, environmental resources, facilities infrastructures and transportation routes.

◦Existing Uses

Currently the Rancho Cielo property exists as undeveloped, unimproved land with uses limited to open space and occasional recreational activity. No residences exist on the site; although two water tanks have been installed, one on the ridge in the southeast corner and one in the north-central area south of Elfin Forest Lake. Other facilities on the property include a portion of the San Diego Aquaduct and San Diego Gas & Electric transmission lines, both of which skirt the planning areas western boundary. Numerous trails traverse the site serving primarily for fire protection. Other disturbed areas are limited to two historic mine and quarry sites in the southwest corner; and, the trails and graded areas along portions of Escondido Creek. The large majority of the land remains in native vegetation cover with infrequent, passive uses (see Figure 3).

Adjacent uses are localized into three areas: Del Dios/Mt. Israel Road to the east and southeast, Elfin Forest to the north, and Rancho Santa Fe to the west. These areas are primarily developed in a large lot residential fashion with the principal exceptions being a mobile home park in Elfin Forest and small lots located in the Del Dios community. Development south of the property is extremely limited due to the lack of access roads and to the physical barrier posed by the San Dieguito River. The Revelle Agricultural Preserve is located along a portion of the western boundary of Rancho Cielo. This preserve consists of approximately 120 acres, of which only a small portion has been farmed with vegetable crops. This land shares approximately 9,000 feet of contiguous boundary with Rancho Cielo.

Land uses in surrounding areas are primarily residential; although small agricultural plantings of citrus, avocados, tomatoes and row crops are also present. The majority of

surrounding acreage has been parcelled into small lots ranging from four to 40 acres in size. Larger parcels lie to the northeast in the area between Harmony Grove Road, Del Dios Highway and Mt. Israel Road. The Bureau of Land Management also owns a large parcel consisting of 364 acres located in the northern project vicinity with contiguous Rancho Cielo boundaries along the north, west and south.

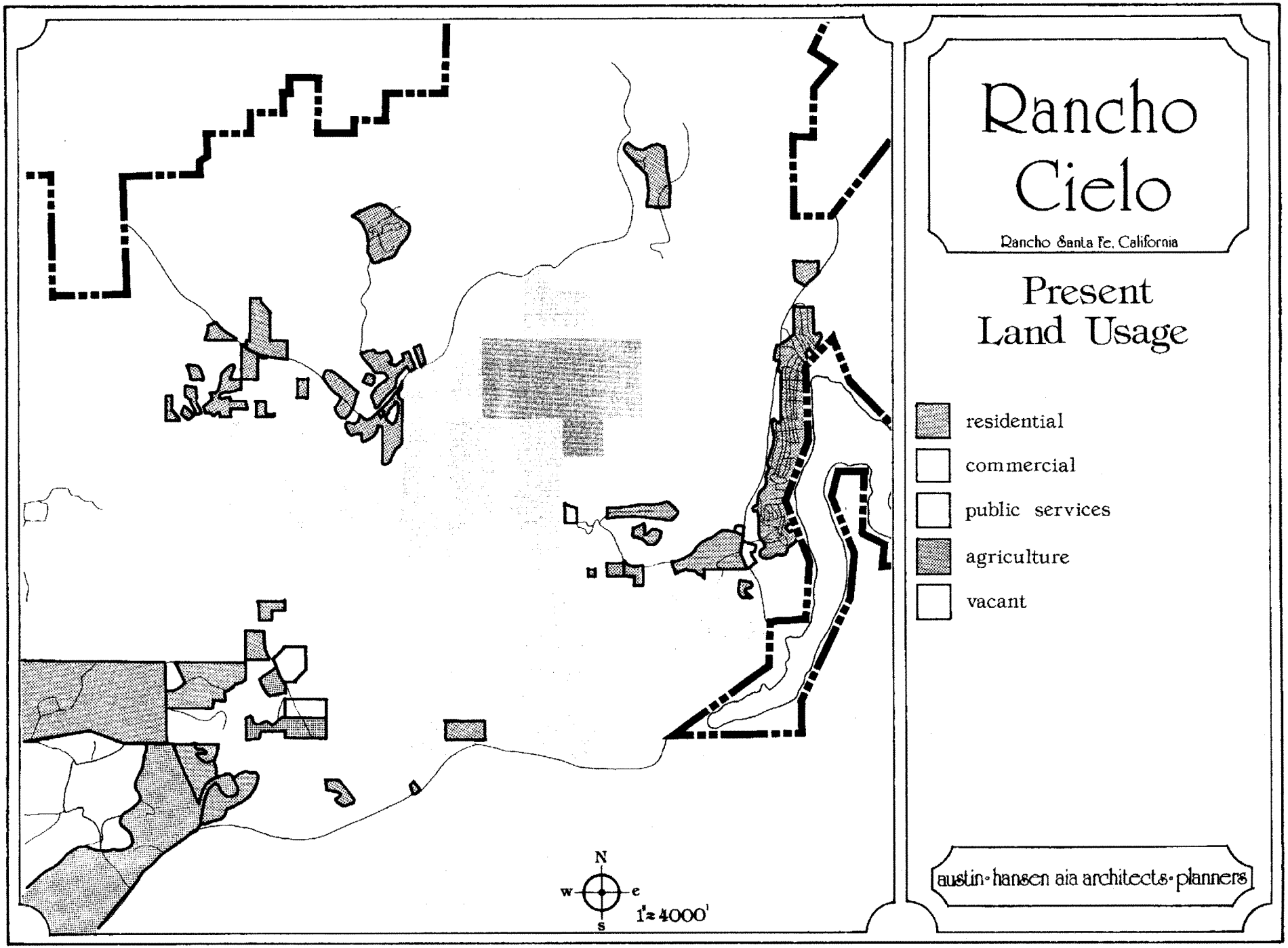
°Regional Growth Management Plan

The Regional Growth Management Plan was adopted in June, 1978, as a comprehensive directive for growth in unincorporated areas of San Diego County. The purpose of this plan is to provide the necessary constraint and impetus to direct growth in a manner reflective of public values and regional needs. Among the concerns incorporated into the plan are locations of urban and rural areas as typified by development density and community lifestyle, locations and provisions for adequate facilities infrastructure, presence of significant environmental resources, locations of regional transportation facilities, and provisions for affordable housing in balanced communities.

Seven land use categories and sub-categories were established accompanied by development recommendations for density, service levels, parcel sizes and environmental considerations. The Regional Land Use Element Map (1979) was adopted with the regional categories delineated for all of the unincorporated area.

Under these constraints the San Dieguito Planning Area is divided into three categories: 1985 Current Urban Development Area (CUDA), Estate Development Area (EDA), and Environmental Constraint Area. The Current Urban Development Area consists of the coastal communities and central Rancho Santa Fe. These areas are intended to be fully developed to urban or suburban standards by 1985. The majority of San Dieguito is occupied by Estate Development Area which combines agricultural and low density residential uses. The third category, Environmentally Constrained Area, covers floodplains, rock and mineral resources, sensitive plant and animal populations and agricultural preserves.

Rancho Cielo lies within two of these designations: Estate Development Area and Environmentally Constrained Area. The extent to which these affect planning and development is discussed below:


Rancho
Cielo
Rancho Santa Fe, California
Present
Land Usage
residential
commercial
public services
agriculture
vacant
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1. Estate Development Areas. This category provides for low density agricultural and residential developments. As many unique topographic, and biological features exist in this category, lot clustering is encouraged for parcels greater than 40 acres in size. Additional constraints on clustering are that at least forty percent of the project area must be left in open space and that no urban levels of service be required. In essence, development within this category will maintain a rural atmosphere and preserve unique resources. This category covers the majority of Rancho Cielo with the only exception being the Escondido Creek.

2. Environmentally Constrained Areas. This designation lies contiguous with the Escondido Creek floodplain along the north and northwest project area. Developments within these areas must be accompanied by site specific Environmental Impact Reports to assure adequate protection of constrained lands. Other planning tools such as the Conservation Element of the General Plan, Resource Conservation Areas, and various action programs and policies have been adopted to facilitate implementation of the intent of this land use category.

Adjacent areas lie predominantly within the Estate Development Area, although Environmentally Constrained Areas are located along the San Dieguito River to the south and the Revelle Agricultural Preserve to the west.

◦San Dieguito Community Plan

The land use element of the Community Plan incorporates the San Dieguito planning group's objectives for land use, growth, and development of the planning area. There are three land use designations underlying the Rancho Cielo Planning Area which include Specific Plan Area (SPA), Estate, and Impact Sensitive. The Specific Plan Area encompasses 2,632 acres (see Figure 4) and occupies the majority of the land. The Estate designation (17) occupies approximately 500 acres in four separate sites outside the SPA boundaries, with a small remaining section of Escondido Creek lying within the Impact Sensitive Area (24). Each of these land use categories are accompanied by specific development criteria.

1. Specific Plan Area. This category is designed to provide specific site-planning for development proposals where the level of detail of the community plan is not sufficient for project planning.

The Rancho Cielo Specific Plan Area was adopted with several specific criteria for designing future development. Among these are summarized the following:

a. Maximum density shall be 0.27 du/acre (700 units).

b. The Specific Plan shall conform to the San Dieguito Community Plan and General Plan Land Use Element objectives and policies.

c. Conservation of the unique resources and rural environment of the project area should be considered in the Specific Plan.

d. The Specific Plan and subsequent development shall conform to the Hillside Development Policy, and feasibility of solar heating shall be analyzed.

e. Commercial uses shall demonstrate sufficient demand in the project area to justify size and location of facilities.

f. Site development shall be concurrent with the extension and availability of all public services.

2. Estate. This designation provides for non-urban residential development, meaning that urban densities, improvement standards, and levels of services are not intended or desired. Estate allows for minor agricultural uses with low-density residential uses. Minimum parcel sizes are based on slope with 0-25% slope at two acres, and 25% or greater at four acres.

3. Impact Sensitive. Impact Sensitive Areas are those areas unacceptable for urban development due to safety conditions or environmental resources. The portion of Escondido Creek contains floodplains, wildlife habitat and perennial water course. Development within these areas is limited to large lots for residential, agricultural, recreational, mineral extraction or open space uses. Minimum parcel sizes range from four to forty acres depending on slope.

FIGURE 4

All of these Community Plan land use designations are consistent with the Regional Growth Management Categories previously discussed. Adjacent land use designations are predominantly Estate, allowing one dwelling per two and four acres. Other designations include Multiple Rural Use (one dwelling unit/4, 8, 20, 40 acres) along portions of the northeast and southeast; Public/Semi-Public, including a public utilities site along the west perimeter and a 364-acre parcel owned by the Bureau of Land Management contiguous to Rancho Cielo in the northern part of the property; and, a 120-acre Agricultural Preserve adjacent to the western boundary.

◦Zoning

The San Diego County Zoning Ordinance implements the General Plan and Community Plan land use designations in a consistent manner throughout the unincorporated area of San Diego County. Numerous zones exist in the project area including residential, agricultural, manufacturing, and special use regulations. Figure 5 illustrates the existing zoning for the project area.

Four use regulation categories exist in the area. Residential uses (R-designations) are intended for rural, suburban or urban areas where adequate public services are available and where residential communities are desirable. These zones are widespread north, east and west of Rancho Cielo to the Cities of Escondido and San Marcos. Portions of Rancho Cielo lie within these zones.

Commercial zones (C-designations) are very limited in the area, occurring at two isolated locations in Del Dios. The C-36 zone provides for retail goods and services to enhance the local community. Manufacturing and Industrial uses (M-designations) are limited to locations along Escondido Creek several miles northeast of Rancho Cielo. The M-54 zone allows industrial and non-industrial uses which do not have high nuisance characteristics.

Agricultural zones (A-designations) are common to the south and southwest of Rancho Cielo as well as over a large portion in Rancho Cielo's southernmost areas. Agricultural use regulations allow residential and agricultural uses with the intent of creating and preserving areas of crop production. The A-70 zone allows limited agricultural use compatible with residential areas. The A-72 zone allows more intensive agricultural uses in areas distant from large urban centers to avoid creating nuisances resulting from agricultural activities.

Special Purpose uses (S-designations) are intended to provide a greater measure of control over development to conserve unique resources. These may include sensitive environmental resources, mineral resources, or open space.

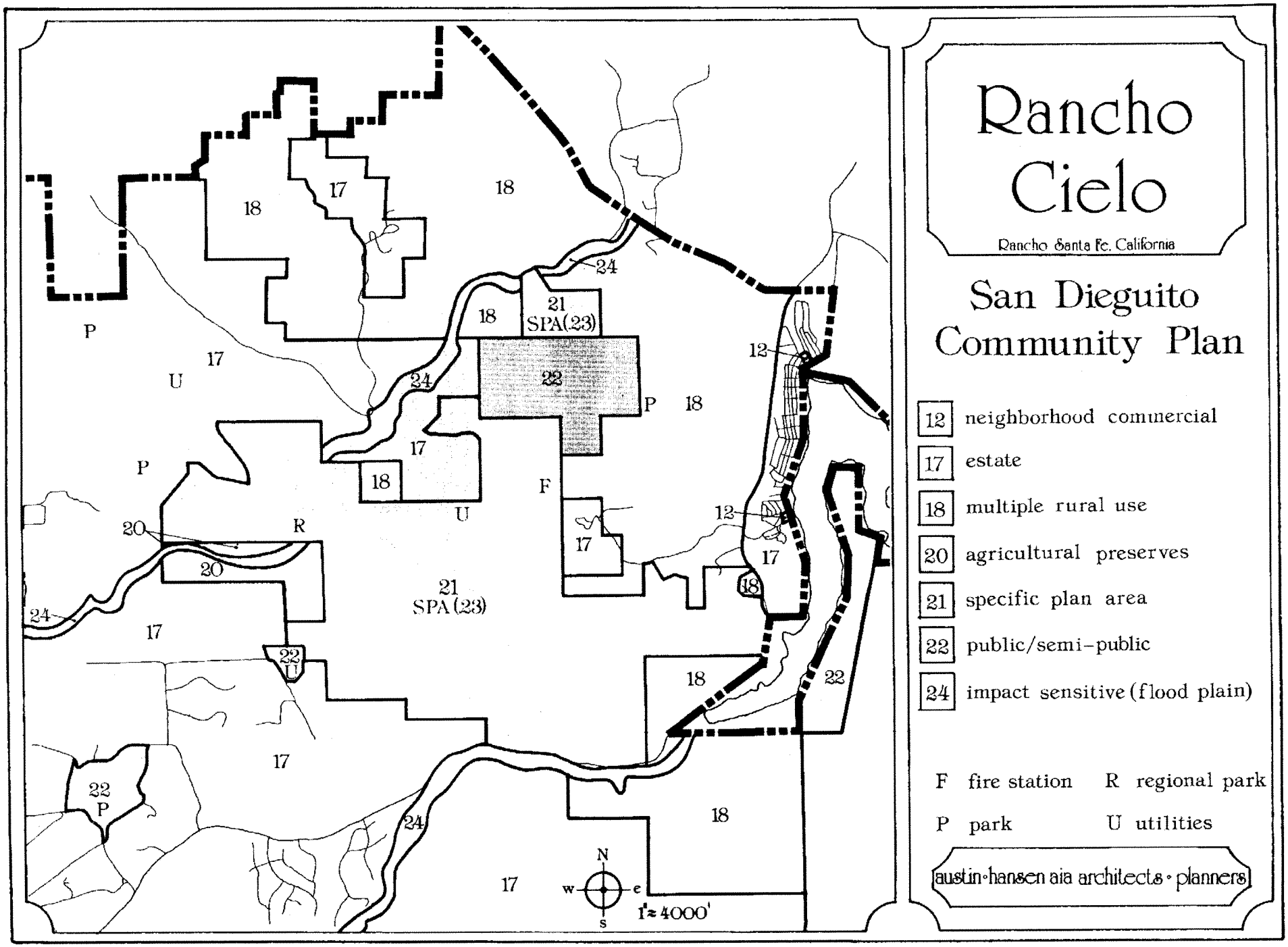
The following table outlines the zones for the project area.

Zone	Use	Density
R-S-3	Single Family Residential	3 du/acre
R-V-2	Variable Family Residential	2 du/acre
R-R-.25	Rural Residential	1 du/4 acres
R-R-.5	Rural Residential	1 du/2 acres
R-R-1	Rural Residential	1 du/acre
C-36	General Commercial	40 units/acre
M-54	General Impact Industrial	6000 square foot lots
A-70-4	Limited Agriculture	1 du/4 acres
A-70-8	Limited Agriculture	1 du/8 acres
A-70-8*	Limited Agriculture (floodplain)	1 du/8 acres
A-70-8AP	Limited Agriculture (Agricultural Preserve)	1 du/8 acres
A-72-8	General Agriculture	1 du/8 acres
A-72-8A	General Agriculture (Agricultural Preserve)	1 du/8 acres
S-80	Open Space	1 du/8 acres
S-88	Specific Plan Area	1 du/8 acres

Zoning for Rancho Cielo includes R-R-.5, S-88 and A-70-8. Surrounding zones are predominately R-R-.25 and R-R-.5. The R-V-2 zone lies adjacent to the north boundary where the Elfin Forest mobile home park and recreation area is located.

◦Policies

Numerous policies, ordinances, and action programs have been adopted which place additional constraints on land use. The discussion here will be limited, however, to Resource Conservation Areas and Hillside Development Policy (Board of Supervisors Policy I-73, December, 1979). Resource Conservation Areas (RCA) act as implementation of the Conservation Element of the General Plan; the intent of which is to preserve unique and sensitive resources. Three RCA's extend into the boundaries of Rancho Cielo: San Diequito River/Lake Hodges/Lusardi Canyon, Escondido Creek, and Escondido Creek/Harmony Grove Road. The resources of these RCA's include primarily oak and riparian woodlands, wildlife habitats, and sensitive plant and animal species. The use of focused EIR's


Rancho Cielo
Rancho Santa Fe, California
San Dieguito Community Plan
12 neighborhood commercial
17 estate
18 multiple rural use
20 agricultural preserves
21 specific plan area
22 public/semi-public
24 impact sensitive (flood plain)
F fire station
R regional park
P park
U utilities
austin·hansen aia architects · planners
21 SPA(23)
N
w
e
s
1"≈4000'

is encouraged to identify the resources present and the effect any development proposal might have. These RCA's are more thoroughly discussed in the Biology section.

The Hillside Development Policy has the intent of providing specific analysis of development on slopes steeper than 25% gradient. Emphasis is placed on site specific development with minimal grading. The issues of concern are geologic hazards, aesthetics, solar access, unique features and special mitigation measures necessary to accompany the development of the hillside. These issues are also addressed in later sections of this text.

IMPACTS

The Rancho Cielo Specific Plan is a multi-faceted project but can be viewed as three major components from the perspective of land use: the Specific Plan Area (SPA) consisting of 2,632 acres as initiated by the Board of Supervisors; four separate contiguous land parcels outside the SPA, but included in the total project; and, the formation of the sanitation district and the provisions for sewer service for the entire 3,161 acres to be developed. There are numerous other aspects of the project and these will be discussed where appropriate.

°Specific Planning Area

The 2,632 acres under designation SPA is proposed to include 700 dwelling units, one commercial center, equestrian center, heliport, and fire station site. The overall density of the SPA is .27 dwelling units per acre and conforms to the conditions adopted by the Board of Supervisors when the SPA was initiated and incorporated into the San Dieguito Community Plan. This density is consistent with Regional Growth Management Plan and is, therefore, not considered an impact to the long-range planning for the area. Specific use types will be discussed later in this section.

°Contiguous Parcels

Four contiguous parcels to the SPA are also included in the Rancho Cielo Specific Plan. These parcels total 529 acres and yield an additional 192 residential lots for a density of .36 dwellings per acre (one dwelling per 2.75 acres). Development density for each parcel is less than one dwelling unit per two acres and conforms to the Regional Growth Management Plan and San Dieguito Community Plan designation for unit density. The development plan proposed for

these parcels will not impact land use planning for the project area due to the proposed densities. There may, however, be some positive effect in that the parcels have been incorporated into the master plan of the entire 3,525 acres in Rancho Cielo, thus affording a greater continuity of development with surrounding areas. A neighborhood commercial center, health spa and water reclamation plant site are located within these parcels.

◦Sanitation District

The formation of the Sanitation District to serve the 3,525 acres in Rancho Cielo greatly affects the completion of any development proposal on the site. Sewer availability enhances the ability of clustering units due to the potentially smaller lots which may be created. Approval of the Sanitation District and construction of the water reclamation facilities may result in increased necessity of completing all development phases within the first five year plan to spread costs over a larger base. The actual pressure on phase completion and the potential for project failure cannot be assessed, however, due to unknown economic conditions. The impact associated with this aspect of the project is that longer phasing alternatives are less feasible. The impact created by the financial burden of the sewer facilities on phasing is not significant.

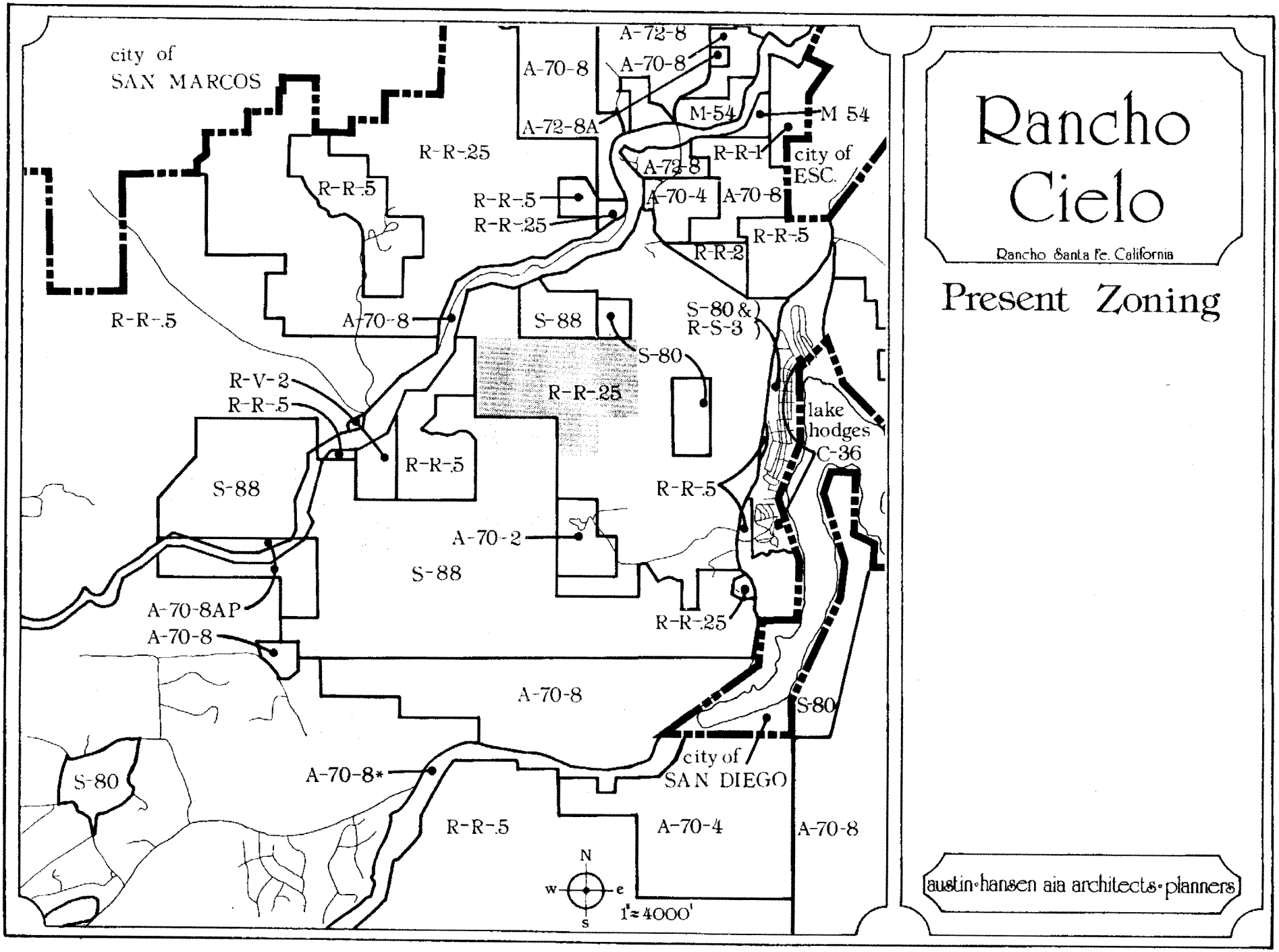
The ability to cluster lots when sewer is available is considered positive in that greater considerations may be given to environmental resources. This is consistent with the intent of the Specific Plan Area designation and the goals of the San Dieguito Community Plan. With regard to the Regional Growth Management Plan and the Estate Development Area category, provisions for sewer service does not constitute an urban level of service. Minimum lot sizes are one acre with 58% of the site in open space. The development is thus considered to be rural in nature, and in keeping with the community setting of Rancho Santa Fe to the west. The overall effect of the Sanitation District will be to allow development of the property in conformance with regional and local planning concerns.

Due to the specificity of the project plan, secondary impacts to land use and environmental resources can be assessed directly. These impacts are elaborated in the following section of Section IV.

◦Specific Plan

The zone reclassification of the Specific Plan is shown in Figure 6. These zones are compatible with the land use designations and will accommodate all of the proposed uses

FIGURE 5



Rancho Cielo

Rancho Santa Fe, California

Present Zoning

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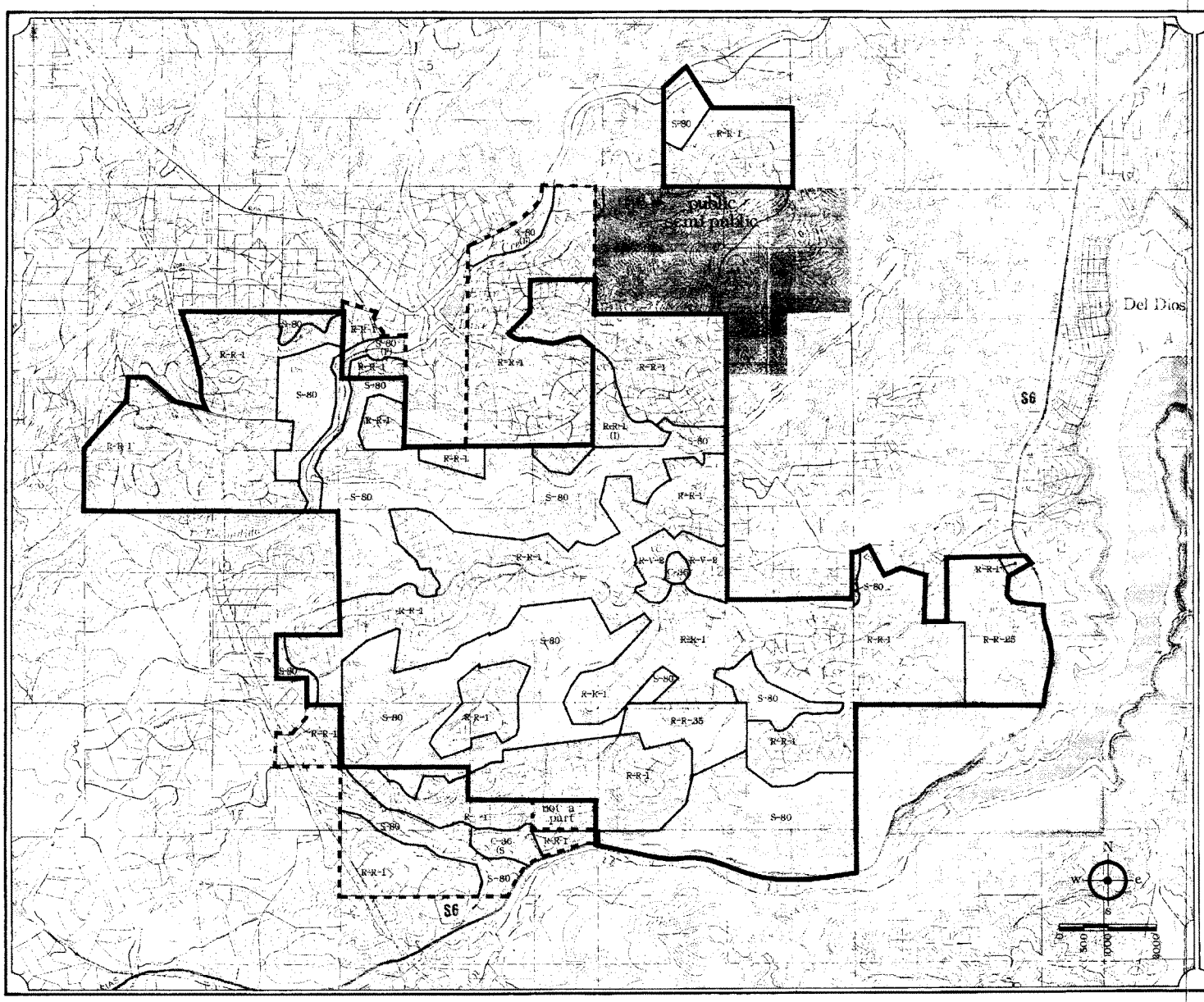
FIGURE 6



Rancho Cielo

Rancho Santa Fe, California

Implementation of New Zoning

R-R-1

USE REGULATIONS	R-R-1
NEIGHBORHOOD REGS	J
DEVELOPMENT REGULATIONS: Density	1
Lot Size	1 Ac.
Building Type	C
Max Flr Area	--
Flr Area Ratio	--
Height	G
Coverage	--
Setback	G
Open Space	--
SPECIAL AREA REGS	--

R-R-1 (I)

USE REGULATIONS	R-R-1
NEIGHBORHOOD REGS	I
DEVELOPMENT REGULATIONS: Density	1
Lot Size	1 Ac.
Building Type	C
Max Flr Area	--
Flr Area Ratio	--
Height	G
Coverage	--
Setback	G
Open Space	--
SPECIAL AREA REGS	--

R-R-35

USE REGULATIONS	R-R-35
NEIGHBORHOOD REGS	A
DEVELOPMENT REGULATIONS: Density	35
Lot Size	--
Building Type	L
Max Flr Area	--
Flr Area Ratio	--
Height	P
Coverage	60%
Setback	V
Open Space	A
SPECIAL AREA REGS	P

R-R-35

USE REGULATIONS	R-R-35
NEIGHBORHOOD REGS	A
DEVELOPMENT REGULATIONS: Density	35
Lot Size	--
Building Type	L
Max Flr Area	--
Flr Area Ratio	--
Height	P
Coverage	60%
Setback	V
Open Space	A
SPECIAL AREA REGS	P

R-V-8

USE REGULATIONS	R-V-8
NEIGHBORHOOD REGS	A
DEVELOPMENT REGULATIONS: Density	8
Lot Size	--
Building Type	L
Max Flr Area	--
Flr Area Ratio	--
Height	P
Coverage	60%
Setback	V
Open Space	A
SPECIAL AREA REGS	P

C-36

USE REGULATIONS	C-36
NEIGHBORHOOD REGS	Q
DEVELOPMENT REGULATIONS: Density	89
Lot Size	--
Building Type	T
Max Flr Area	--
Flr Area Ratio	--
Height	Q
Coverage	--
Setback	Q
Open Space	A
SPECIAL AREA REGS	--

C-36 (S)

USE REGULATIONS	C-36
NEIGHBORHOOD REGS	Q
DEVELOPMENT REGULATIONS: Density	89
Lot Size	--
Building Type	T
Max Flr Area	--
Flr Area Ratio	--
Height	Q
Coverage	--
Setback	Q
Open Space	A
SPECIAL AREA REGS	S

S-80

USE REGULATIONS	S-80
NEIGHBORHOOD REGS	U
DEVELOPMENT REGULATIONS: Density	1/80
Lot Size	80Ac.
Building Type	C
Max Flr Area	--
Flr Area Ratio	--
Height	G
Coverage	--
Setback	G
Open Space	--
SPECIAL AREA REGS	--

S-80 (F)

USE REGULATIONS	S-80
NEIGHBORHOOD REGS	U
DEVELOPMENT REGULATIONS: Density	1/80
Lot Size	80Ac.
Building Type	C
Max Flr Area	--
Flr Area Ratio	--
Height	G
Coverage	--
Setback	G
Open Space	--
SPECIAL AREA REGS	F

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FIGURE 7

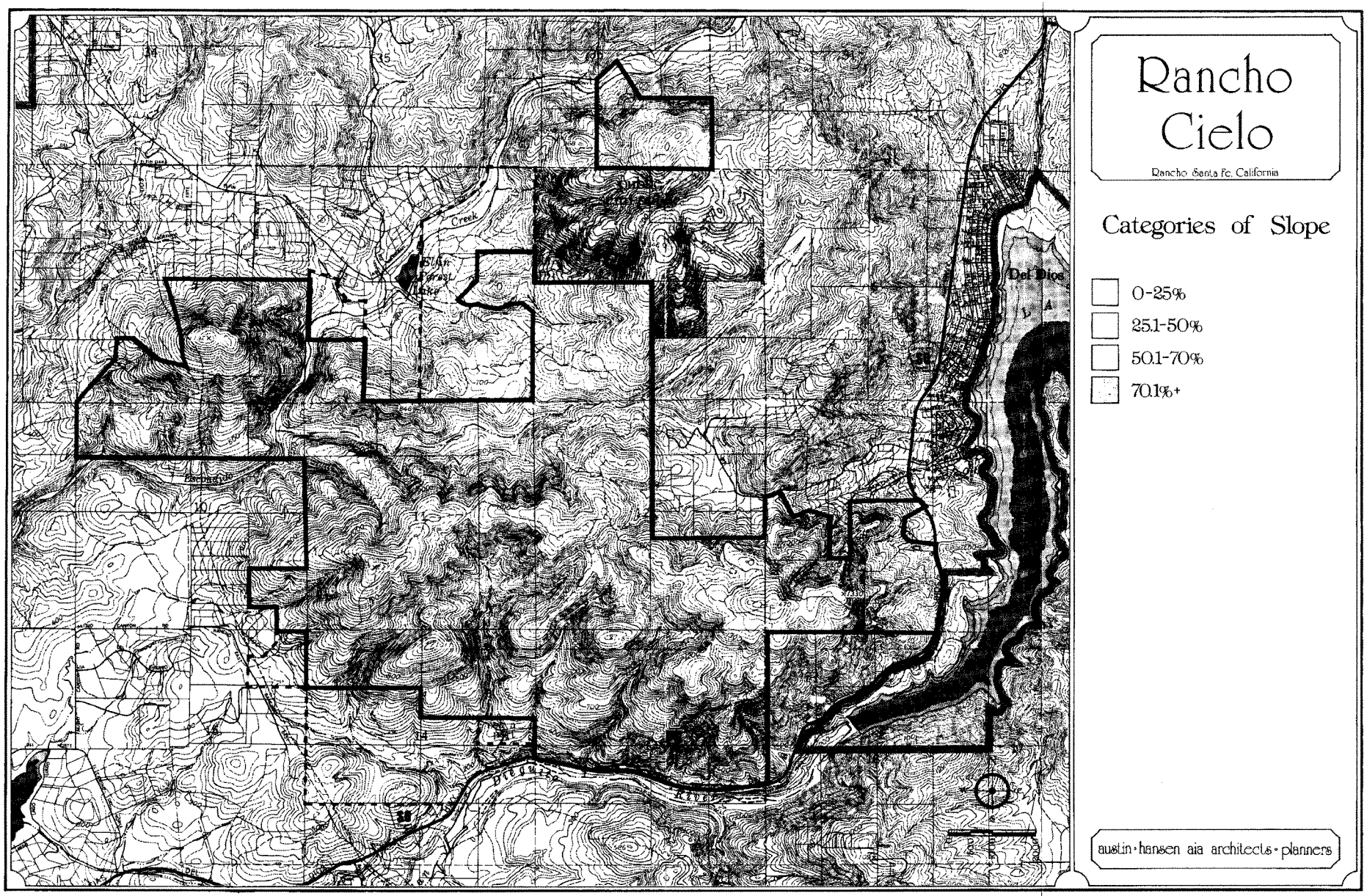
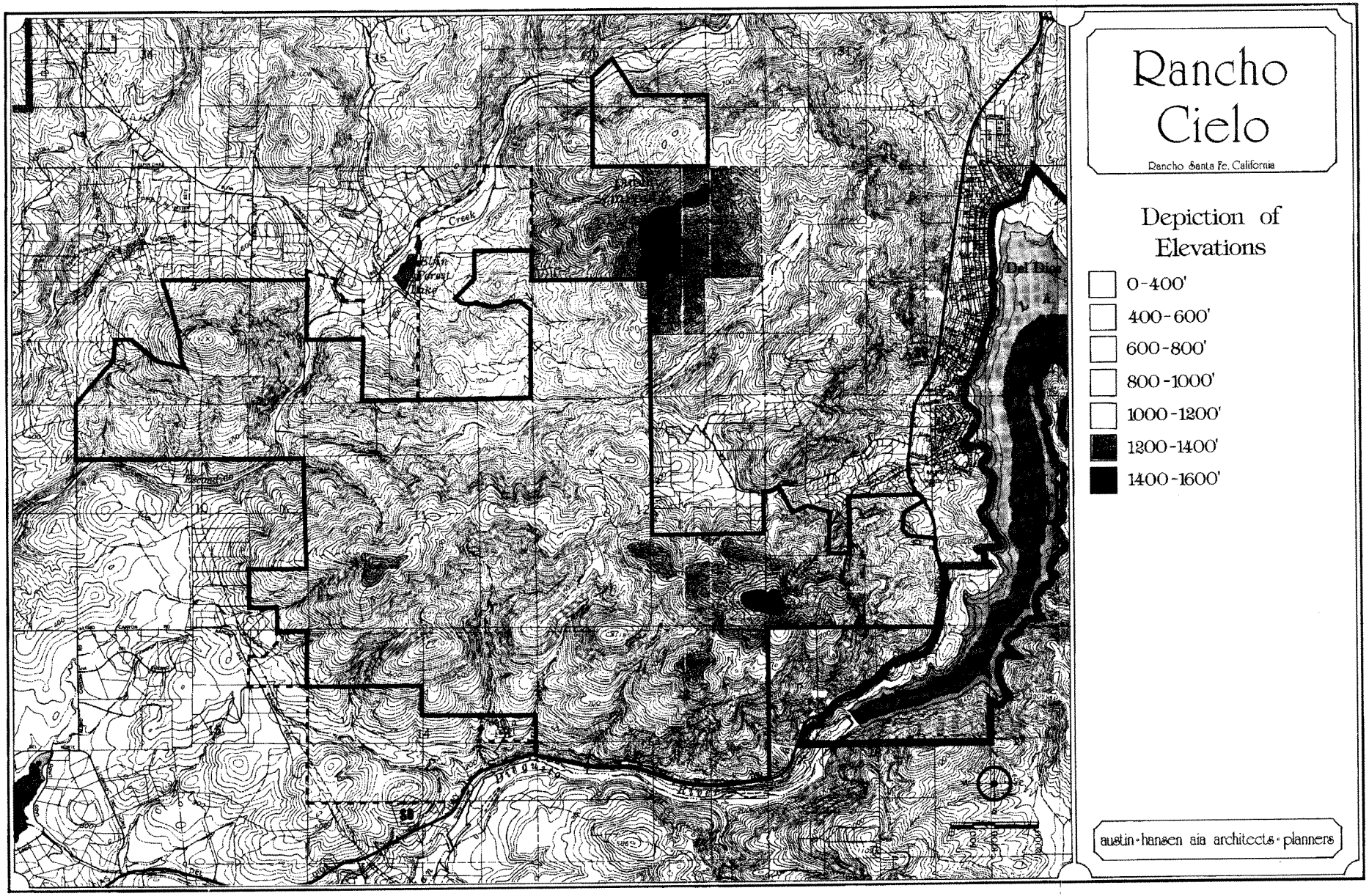

Rancho
Cielo
Rancho Santa Fe, California
Categories of Slope
0-25%
25.1-50%
50.1-70%
70.1%+
Del Dios
austin·hansen aia architects·planners

FIGURE 8


Rancho
Cielo
Rancho Santa Fe, California
Depiction of
Elevations
0-400'
400-600'
600-800'
800-1000'
1000-1200'
1200-1400'
1400-1600'
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on Rancho Cielo. A further breakdown of all land use types are as follows.

Residential. Residential areas comprise approximately 1,120 acres of Rancho Cielo under three separate use types: Village Estates, Country Estates, and Planned Development.

Village Estates consist of an approximate thirty-eight-acre site (gross acreage) centrally located near one of the commercial centers. Forty townhomes are proposed with a density of 1.05 dwelling units per acre. Development of this lot will require a Planned Development Permit when construction of units is contemplated.

Country Estates occupy approximately 1,080 acres with lot sizes ranging from one to three acres in size, each lot to be built on individually by private property owners. This land use type contains the majority of the residential units including 814 units or 91% of the total 892 units.

Planned Development areas provide for clustering of units, each of which will have separate lot ownership. Approximately 158 acres and 38 lots are proposed in this use type.

Commercial. Two commercial areas are proposed. The Village Center located along the central region in the plan area includes a ten-acre site, approximately half of which is proposed for recreational uses and half proposed for commercial and office professional uses. Within this area a heliport is proposed to service transportation and emergency evacuation needs. Development of the heliport will require a Major Use Permit and other possible permits prior to construction. Also located in this area is a Post Office, Fire Station, and Association Offices.

The second commercial area is located at Del Dios Highway at Via Ambiente. This site includes ten acres of land for commercial uses and will be open to vehicle traffic along Del Dios Highway. Development of this center will require a site plan prior to construction.

A commercial study for the project area analyzed traffic flow patterns, residential areas, population, existing commercial facilities and community character. The conclusion of this study was that the Rancho Cielo

community and surrounding areas could support two neighborhood commercial centers; one of 30,000 to 50,000 square feet serving Del Dios Highway, and one of 5,000 square feet within the Rancho Cielo Planning Area.

Open Space. Approximately 1,830 acres or 58% of Rancho Cielo has been designated open space. Three types of open space areas are evident: the major open space areas (1,015 acres) over steep slopes, canyons and Escondido Creek; smaller wildlife corridor easements and greenbelts (781 acres) into which residential lots extend; and equestrian center (27 acres). These smaller areas are contiguous with the larger easements and provide interconnection of all open space areas. Passive recreational uses such as hiking and horseback riding will be allowed within the open space areas.

Recreation. The open space areas previously mentioned will provide some recreational uses. A 27-acre equestrian center is proposed to compliment the system of trails through the area. The Village Center and other private facilities will include other recreational uses such as tennis courts, pool and other possible features.

Public. Provisions have also been made for reclamation plant site on 2.1 acres, and fire station site on 0.5 acres. The Bureau of Land Management property consists of 364 acres in the northern portion of Rancho Cielo. This land has been designated Public/Semi-Public on the Land Use Plan but is not considered in the calculations of Open Space acreage.

All of these land uses appear to be consistent with existing regional and local land use planning constraints. The project will, however, result in a marked conversion of vacant land into a residential community. Although development on the subject property will be noticeable to existing residents in surrounding areas, the extensive open space areas and large lots proposed will substantially maintain the rural environment of the region. Impacts on existing uses and local residents resulting from project implementation are not considered significant.

MITIGATION

Several steps must be taken prior to actual site development which will serve as mitigation measures for land use impacts.

To ensure that all development projects are consistent with the proposed land use, conformancy findings made by the Board of Supervisors will preceed any development approval. Timeliness of project approvals is analyzed by Department of Planning and Land Use (DPLU) staff for each project submitted. This review procedure ensures that adequate public services are available and that the development does not place burdens on other land uses or facilities. These measures are standard procedures of the subdivision process and are not specific for Rancho Cielo. No additional mitigation measures are recommended.

LANDFORM

PRESENT SETTING

Landform features of the Rancho Cielo Specific Planning Area are relatively diverse and conspicuous to extensive surrounding areas. Its location and proximity to the Pacific Ocean, inland valley and areas of development make this area unique within both a regional and local context. The analysis in this section is strictly associated with the spatial characteristics of the project site and their relationship to regional landforms. Landform is presented here primarily as an informational section relating to planning and land use constraints. Certain aspects relating to visual quality and geologic constituents are more extensively addressed in the Aesthetics and Geology sections of this report.

◦Regional Context

The Rancho Cielo Specific Planning Area is located approximately eight miles inland from the Pacific Ocean in an area where a mixture of geographic features exists. Typically, the coastal mesas and plains extend from the bluff-bordered coastline to a transition of foothills into the Peninsular Range. The land west of Rancho Cielo may be generally categorized as coastal plain with a high degree of disection from numerous drainages and valleys. Notably, the San Dieguito River Valley, the San Elijo Lagoon/Escondido Creek drainage basin and the Batiquitos Lagoon/San Marcos Creek drainage basins create the major deviations in relief. Elevations in this area generally occur between several feet above sea level to around 500 feet Mean Sea Level (MSL).

The Rancho Cielo property occupies a portion of the foothills and ridges which separate the coastal areas from the inland valleys and mountain ranges. Steep slopes, numerous drainages and irregular relief are common characteristics of the subject property and the terrain to the north and south. To the east and north lie a series of inland valleys including San Pasqual Valley, Escondido Valley and the long, low-lying corridor connecting Carlsbad and San Marcos.

◦On-Site Topography

Slopes on the site are broken down into the following categories: 0-25%, 726 acres (20.6%); 25.1-50%, 1954 acres (55.4%); 50.1-70%, 801 acres (22.7%); over 70%, 44 acres (1.3%). Figure 7 provides a detailed slope analysis of the project area and Figure 8 provides a spatial analysis.

The long east-west trending ridgeline near the center of the property divides most of the slopes into two drainage basins. The portion of land north of the ridgeline generally forms part of the Escondido Creek watershed. This creek disects the western appendage to the property where it meets Cielo Creek, a major tributary, traversing the center of the site parallel to the ridgeline. The elevation of Escondido Creek at the lowest point on the property is 280 feet MSL. The slopes adjacent to the creek and tributary rise abruptly to an excess of 1100 feet MSL within one-half mile of the drainage course. Paint Mountain (Peak 1192) located west of Escondido Creek is a prominent, locally known topographic feature visible to most of the surrounding area. The other peaks, although of similar or greater elevation are not associated as local landmarks.

The steepest slopes (50 to 100% gradient) occur at the southern border of the project area adjacent to Del Dios Highway, Lake Hodges Dam and the San Dieguito River. Elevations rise from approximately 120 feet MSL to the peak at 1470 feet MSL.

The areas of gentle slope are located primarily across the ridgelines and hilltops. The irregularity of the site topography provides numerous knolls, spurs, peaks and ridgelines with relatively gentle slope.

Some grading of the natural slopes has already occurred, but is of minor importance. Several graded trails access the site with a large area recently brushed and roads graded in the southeast portion of the site. Nearly all of the ridgelines have graded access. The tailings and escarpments of a previously operated slate quarry in the southwest area are still visible to nearby residents. For the most part, however, the topography can be considered undisturbed.

IMPACTS

The project design isolates development to the areas of gentle slope, namely, the main ridgeline, and the knoll tops and moderate slopes in the north and west portions of the site. The majority of the land (1,830 acres) has been left in open space; thus, preserving nearly all of the steep slope areas.

Grading for access roads and residence pads will be the primary impacts to landforms of the project site. Grading is estimated to require approximately three million cubic yards of cut and fill for the construction of roads and an additional

1.4 million cubic yards for residential development. The lots created will be one acre or larger, indicating that grading for residential construction will occur only on a portion of each lot and that the configuration of the land after grading will be substantially the same. Cut and fill banks are estimated at ten feet in height but may range to thirty feet. The impacts on the landform characteristics from this grading are not considered significant. Impacts associated with aesthetics and geology are discussed in separate sections.

A second area of potential impact not yet discussed is concerned with the road extensions through Escondido Creek and Cielo Creek in the northern portion of the site. The development plans indicate construction of bridges or box culverts across both drainages. Access through the drainage area may result in a temporary disruption of the stream course. This impact is not significant, however, if permanent and maintained access can be insured. The impacts associated with the temporary and long-term alteration of the drainage resulting from bridge or culvert construction are negligible.

In summary, minor alterations of the site topography must accompany development through grading of roads and pads. These alterations have been minimized, however, by the project design through preservation of steep slopes, bridge construction, and confining development to areas of gentle or moderate slopes. The cumulative impacts to landforms on the site are not significant.

MITIGATION

Several aspects of the project design have reduced the potential impacts to an insignificant level, such that the subsequent development of the entire area, if conducted under typical development practices, will not require special mitigation measures. As previously mentioned, the preservation of steep slopes, clustering of development, large lot size, private road improvement standards, and bridge and culvert construction all serve as practical mitigation measures. No additional measures are considered necessary.

CLIMATE

PRESENT SETTING

The Pacific Ocean is the dominant influence on climatic conditions in the coastal regions of Southern California. Moist air masses are carried into the coastal plains and valleys creating cool temperatures and morning fog in the summer and warm temperatures in the winter. This moderating effect decreases greatly with distance inland or increase in elevation. Drier, warmer air masses from the desert and interior valleys also have a diminishing effect on the coastal climates. As the cool, moist coastal air masses are carried inland, the warmer, drier continental air masses occurring at the higher altitude form a ceiling or inversion layer limiting the upward penetration of cool, moist air. The result, many times, is to have cool westerly breezes limited to the canyons with warmer air occurring at higher elevations.

The Rancho Cielo project area is located approximately eight miles inland from the coastal communities of Encinitas and Solana Beach. Climatic conditions of this area are characteristic of both the coastal climate and the transition climate. The western slopes and low elevation drainages are primarily affected by the cool, moist ocean breezes. The higher elevations and the slopes in the eastern portion of the site experience less of the moderating effect of the ocean and more of the temperature, humidity, and precipitation fluctuation characteristic of transitional and interior climate conditions.

Warm summers and cool winters are typical climatic conditions throughout San Diego County. Daily and seasonal temperature ranges generally increase with distance inland or increase in elevation. There is expected to be a slight noticeable climatic difference from the west and east portions of the planning area, but these differences are of little significance. Summer fog is expected to occur at low elevations on the western slopes and drainages, occassionally reaching higher elevations. Weather reporting stations at Encinitas, Lake Hodges Dam and Escondido provide meteorological data. Temperature and precipitation data are included in Table 1. In general, the western low-elevation portions of the planning area will experience conditions similar to those recorded at the Encinitas station; the eastern and high-elevation portions of the planning area experience conditions similar to those recorded at the Escondido station.

WEATHER REPORTING STATION LOCATIONS

Station	Elevation	Latitude	Longitude	Section	Township	Range	Years Recorded: Temp.	Years Recorded: Prec.
Encinitas	200	33 03	117 17	16	13S	4W	4	5
Escondido	660	33 07	117 05	22	12S	2W	30	30
Hodges Dam	320	33 03	117 08	18	13S	2W	--	21

Temperature Means and Extremes (°F)

Station/Data	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Encinitas													
Highest	78	90	78	90	82	75	80	81	107	95	87	85	107
Mean Maximum	65.7	65.6	66.3	68.1	71.0	71.1	74.4	76.0	76.7	74.2	71.7	67.9	70.7
Mean Temperature	54.9	54.9	56.4	58.9	61.5	63.7	66.6	67.9	66.9	63.1	58.8	56.3	60.8
Mean Minimum	44.0	44.2	46.6	49.7	52.0	56.3	58.8	59.8	57.0	52.0	46.0	44.7	51.0
Lowest	32	29	36	40	42	47	52	54	45	40	32	35	29
Escondido													
Highest	89	91	95	99	100	102	107	105	108	104	96	96	108
Mean Maximum	65.3	66.3	69.5	72.6	75.9	80.7	87.8	87.9	86.8	79.5	74.2	68.0	76.2
Mean Temperature	51.0	52.7	55.7	59.6	63.2	67.3	73.1	73.4	71.4	64.2	57.3	53.0	61.8
Mean Minimum	36.7	39.1	41.9	46.6	50.5	53.9	58.4	58.9	55.9	48.9	40.4	37.9	47.4
Lowest	17	24	26	31	34	39	43	44	39	31	24	23	17

Average Monthly and Seasonal Precipitation (inches)

Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season
Encinitas	.01	.01	.41	.94	.85	3.21	2.83	3.06	2.82	1.79	.18	.04	16.15
Escondido	.01	.15	.21	.84	1.30	3.21	2.94	3.23	2.56	1.36	.32	.09	16.22
Hodges Dam	.01	.15	.07	.55	1.35	2.46	2.80	2.12	2.60	1.23	.37	.09	13.80

Rancho Cielo

Temperature and Precipitation Data
for the Encinitas, Escondido and
Hodges Dam Weather Stations

table 1

american pacific environmental consultants

IMPACTS

The impacts from development of this project on climatic conditions are necessarily localized to the project area. There will be no major alterations of landforms which would affect cold air drainage or penetration of westerly winds and oceanic conditions into inland areas.

Humidity in the project area may increase slightly due to irrigation of lawns, greenbelts and firebreak areas. Reclaimed water from the sewage disposal plant will be used for irrigation of greenbelt and firebreaks. Evaporation will occur for most of the estimated 258,000 gallons of wastewater generated daily from the project area..

Temperatures may rise incrementally due to heat exchange from energy consumption of residential and transportation activities. None of the anticipated impacts are significant, neither are they expected to be noticeable.

MITIGATION

No mitigation measures are deemed necessary in view of the limited degree of impact on local and regional climatic conditions.

SOILS AND GEOLOGY

PRESENT SETTING

A preliminary soils and geology investigation was conducted by Allied Geotechnical Engineers Inc. in March, 1980. The purpose of this investigation was to evaluate the surface soil and geologic conditions within the Rancho Cielo Specific Plan area and to make recommendations for preparation of the land use plan and the subsequent Tentative Maps. Included in this investigation were extensive field mapping and analysis of geologic and soil features, review of available geotechnical reports and maps of the area, and stereographic analysis of aerial photographs of the planning area.

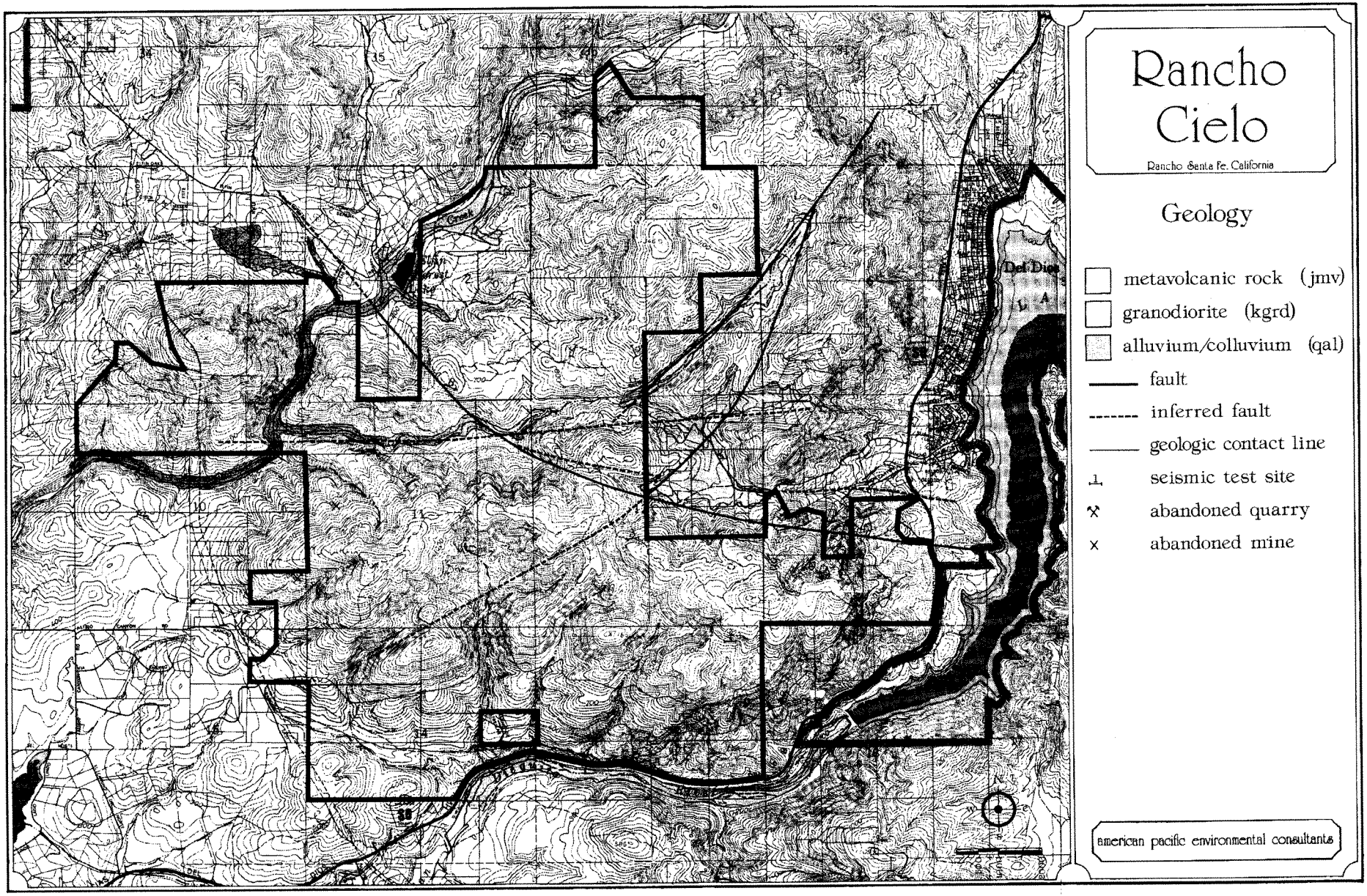
The topography of the area is generally characterized by steep slopes with high ridges; numerous drainages, cliffs and rock outcrops; and substantial rises in elevation. Two perennial water courses are associated with the planning area, Escondido Creek in the western portion and San Dieguito River immediately south of the project boundary. An additional major tributary to Escondido Creek, now named Cielo Creek, runs laterally across the midsection of the planning area. A more complete description of the project area topography is included in the Landform section of this report.

Geologic Units

The property within the planning area is comprised of three geologic units: metavolcanic rock, granodiorite, and alluvial deposits (see Figure 9). The majority of the land (2099 acres) is underlain by the metavolcanic rock including most of the southern and western portions of the property. The northern appendage to the property and the ridgeline in the southern portion (1,359 acres) is underlain by granodiorite rock with the alluvial deposits isolated to the drainage bottoms (67 acres) of Escondido Creek and the major east-west-trending drainage (Cielo Creek).

The metavolcanic rock unit consists of a complex series of metamorphosed volcanic rocks representative of pre-batholithic formation of the Jurassic age (±45,000,000 BP). The rock is comprised of various composites including andesites, felsites and ash deposits disected by mafic dikes and possibly basaltic flows. During the formation of this rock unit, stress from extensive temperature fluctuations resulted in several rock fracture cleavages and joints. This jointing, or fracturing, creates a disection and foliation (breaking away) of larger rock masses into smaller units. Large intrusions of granodiorite are also present as dikes and outcrops in the southern portion of the property.

FIGURE 9


Rancho
Cielo
Rancho Santa Fe, California
Geology
metavolcanic rock (jmv)
granodiorite (kgrd)
alluvium/colluvium (qal)
fault
inferred fault
geologic contact line
seismic test site
abandoned quarry
abandoned mine
american pacific environmental consultants

The granodiorite unit is part of the Peninsula Ranges Batholith of the Cretaceous age (±65,000,000 BP). The rock material is comprised of a homogeneous fine to medium grained hornblende biotite granodiorite. This rock may be well weathered near the surface as a coarse sandy material, or may be exposed as hard gray "granitic" outcrops or mantle. This unit is less fractured and jointed than the metavolcanic rock. Like the metavolcanics, the fracturing and jointing contributes to the breaking down of large rock masses to corestones and smaller units.

The alluvial deposits are present in the major drainages and in some flat portions of the project area. The deposits are generally of alluvial and colluvial sand and boulders with clayey surface soils derived from weathering and erosion of upstream and upslope surface materials. Alluvium is relatively thin on the property and limited to narrow corridors of deposition averaging 300 feet in width in the drainages.

Surface Soils

All of the surface soils on the property have been derived by weathering of the underlying rock materials. Surface soils along ridges and steep slopes are patchy and relatively thin. The depth of the surface soil mantle generally ranges from one to three feet where developed on metavolcanic rock and an average of six feet where developed on granodioritic rock. Erosion in many areas has removed the surface soils entirely to the parent bedrock.

Soil textures range from coarse sand in alluvial deposits and weathered granodiorite to clay rich residual soils developed on alluvial and metavolcanic parent material. All of the soils on the property are expected to have a significant clayey component which may result in expansive material unsuited to structural use within three feet of grade for residence pad and slab construction. These soils are suitable, however, for fill materials for roads and for pads when placed three feet below grade or when special foundation design is employed.

All of the surface soils are subject to erosion hazard. A breakdown of soil units based on the USDA Soil Survey is included in the Agriculture and Hydrology sections of this report. Due to the steep slopes and the shallow soil mantle, soil erosion is listed as severe for nearly all of the property. Numerous gullies and drainages evidence this as the soil has been completely eroded to bedrock. The presence of native chaparral vegetation provides a large margin of stability and shelter to the soil regimes which are present.

°Seismicity

The County of San Diego Fault and Epicenter Map (County of San Diego, 1974) shows two faults disecting the project area (see Figure 9). Both are considered to be of Pre-Quaternary age (1,000,000 BP) and inactive. Two additional faults were located during the field reconnaissance and review of the aerial photographs. None of these faults show evidence of recent activity and are not expected to experience tectonic activity of any appreciable magnitude. The presence of these faults does, however, place some structural constraints on development as they represent areas of possible instability.

The previously mentioned map also identifies several historic earthquake epicenters in the project vicinity, the closest located approximately six miles to the northwest. All of the epicenters have recorded Richter magnitudes of 2.0 to 2.9. This activity does not appear to be associated with any known faults and the seismic risk relating to future events of similar magnitude is negligible.

Numerous lineaments or joints, are present in the area. These lineaments cross both drainages and rock units, but are believed to be associated with batholithic formation and stresses resulting from cooling and uplift. Thus, these lineaments are not considered to pose any seismic risk to development. Again, although tectonic activity is not considered a factor, the lineaments do represent potential weak structural areas and should be considered with development.

Regional faults in the area include the potentially active Rose Canyon Fault, ten miles to the west, and San Clemente Fault 55 miles to the northeast. Two active fault zones, Elsinore and San Jacinto, are located 22 and 46 miles for the site, respectively. A seismic event along any of these faults would result in ground shaking at the project site, although the Elsinore and San Jacinto fault zones have the greatest probability of activity. Peak bedrock acceleration is calculated to be on the order of 0.10g to 0.15g for a seismic event of maximum Richter magnitude 7.5 and minimum epicentral distance of 40 miles from the project site.

Ground settlements resulting from seismic activity is not of concern due to the nature of the hard underlying rock units. Potential liquefaction may result in alluvial deposits, however, and warrant evaluation of roadbed preparation, bridge and culvert footings, and any residence pads where alluvium occurs.

◦Landslides and Slope Stability

Results of the field reconnaissance and aerial photograph review do not reveal the presence of any ancient or recent landslides on the property, nor would they be expected on the stable underlying rock units. Minor forms of landslides may occur on the subject property, such as block falls, debris flows and downslope mass movement (creep). The highly fractured nature of the rock units result in partial instability when unsupported or in areas of steep slopes. This is especially true within the upper five to ten feet where fracturing is most intense.

Clayey constituents resulting from weathering of the surface and subsurface rock material are deposited into the fractures and joints of the rock unit, moisture accumulation tends to lubricate the rock surfaces along fractures which create unstable conditions. This effect is compounded in areas where joints dip out of slope and are unsupported. Examples of these conditions can be observed on the steeper slopes along Del Dios Highway where fracturing and block falls are common.

The native vegetation (primarily chaparral) provides some degree of slope stability through the establishment of root systems, surface water uptake, and the organic matter covering the soil surface impeding erosion.

Groundwater and surface runoff also play parts in the potential for landslide occurrences. The joints and fractures within the basement rock units provide an interwoven reservoir system for water filtration, movement, and storage. Seepage in areas of steep slopes, whether man-made or natural, will also contribute to slope instability.

◦Engineering Capabilities

Engineering capabilities of the surface soils and basement rock material are important here due to their effect on the construction techniques which will be required to construct roads, pads and other facilities. The methods of construction will partially determine the degree of alteration of the existing topography which will occur with development.

Soil rippability is a primary factor in road construction. Seismic refraction surveys were conducted on the property at eight sites to determine the rippability of the upper layers of soil and rock mantle. The depth of surface soil

to hard rock where materials are considered generally rippable with earthmoving equipment (D-9 Dozer) ranges from four to nine feet in areas of metavolcanic and granodiorite rock units. The depth is expected to be greater in areas of alluvial deposits. Drill and shoot methods (blasting) may be required, however, for cuts below five feet in metavolcanic rock and for cuts below eight to ten feet in granitic rock.

All the soils on the site are believed to be suitable for road fill material; however, the size of rock pieces excavated or resulting from blasting may limit their use. The soil is also suitable for foundation fill material but may require selection, capping with non-expansive material, or use of special slope grading.

Slope stability is of major concern due to the highly fractured nature of the rock material and the steep natural slopes which occur on the property. Generally, cut slopes will be stable at gradients of 1-1/2:1 or less and fill slopes will be stable at gradients of 2:1. Steeper cut and fill slopes may be stable in certain areas but must be inspected during grading.

The project area is generally unsuitable for septic tanks and leaching facilities. This is due to several factors including steep slopes, shallow groundwater table, slow percolation rates, and a thin soil mantle. These conditions occur over much of the site and limit the use of septic systems to isolated locations.

IMPACTS

All of the information contained in the preliminary soils and geology report has been incorporated into the land use plan and lot design shown in Figure 3. Areas of moderate or severe geologic hazard are isolated from the development area and included within the open space easement. In general, all of the steep slopes (slopes in excess of 35% grade) have been excluded from development. Thus, development will be concentrated on ridgelines, peaks, and slopes of mild gradient.

Many of the potential impacts on development and future landowners which might result from hazardous geologic conditions have been eliminated through the project design. The specificity of the land use plan and lot layout also facilitates analysis of potential impact areas associated with subsequent Tentative Maps and construction of dwellings. To summarize the possible level of impacts from geologic conditions on future development, there is adequate justification in stating that potential impacts will not be significant nor will they require undue mitigation measures in excess of the conditions required under grading and building permits. Several aspects of the plan which need clarification or additional work are also described here below.

Slope Stability

Structural stability of natural and man-made slopes is the primary area of potential impact to future improvements. Future grading of the major roads on the site (including Mt. Israel Road and Via Ambiente) will result in three million cubic yards of balanced grading. Cut and fill slopes are in the range of ten feet but occasionally exceed 20 and 30 feet, respectively. Isolated sections of roadway cut slopes may be subject to block falls depending on the dip orientation of joints and fractures, and depending on the potential for groundwater seepage in any given area. These factors are expected to be of much lesser concern on mild sloping areas than on steeper sloping areas. Substantial block falls could result in road closures or road hazards similar to the conditions observed along Del Dios Highway.

Fill slopes are not expected to experience instability impacts if suitable fill materials are used. Rock materials with pieces greater than six inches in maximum dimension are considered unsuitable for road fill. A portable rock crushing plant is proposed for road construction, however, so rock particle size is not expected to be of concern.

Cut and fill slopes for future residences are not expected to exceed 30 feet. Nor are they expected to incur significant impacts, if they are inspected and approved through the County of San Diego building permit or grading permit processes. The land use plan was designed with only the areas of 35% slope or less intended for development. Areas with greater slope have been included within the open space areas. All of the lots proposed have suitable area for residential construction.

Drainage

Due to the groundwater reservoirs created by the extensive jointing and faulting, seepage may occur in road cuts and in pad areas. Impacts associated with this occurrence are mainly associated with the waterlogging and possible degredation of the structural integrity of roadbeds, foundations and steep slopes. These impacts are expected to exceed a threshold of significance; however, standard drainage facilities and engineering practices completed during construction would serve as sufficient mitigation. Again, these potential impacts may be more clearly evaluated in the building permit or grading permit processes during implementation of the future Tentative Maps.

In addition to seepage impacts on graded areas, residential and agricultural irrigation may raise the water table and increase seepage in areas where it is not now occurring. This effect may not be noticeable until several years after construction is completed. The actual areas of impact are expected to be on natural slopes or on isolated road sections which would be easily reparable with drainage facilities. Thus, the potential increase in groundwater seepage is not considered a significant impact.

Structural Stability

Three areas of potential impact exist in future development phases of Rancho Cielo. Specifically, the areas of bridge and culvert construction need to be further evaluated when construction plans are submitted; the water reclamation plant facilities also require additional analysis specific to the type and location of the plant proposed; finally, the faults need to be considered in the placement of residence pads or other permanent structures. The potential impacts associated with construction of these facilities are significant if site specific review is not incorporated into the construction plans.

Potential impacts associated with construction of bridges and water reclamation facilities are slope instability, erosion and inadequate drainage. Impacts relating to fault location are primarily associated with potential groundwater seepage where adequate drainage is not provided. Impacts from earthquake activity along the faults are insignificant.

It should be noted that actual grading plans are not available at this time and that several alternatives for road construction exist which will determine the amount of import or export of material. Included in these alternatives are use of a rock crusher (to avoid importation of fill material and disposal of rock), sale of rock material for local use as a construction resource (to avoid rock disposal), and use of rock material to fill abandoned quarry sites. All of these alternatives will be considered at the grading stage of the project and are subject to environmental review with the grading permit.

MITIGATION

As previously mentioned, most of the potential impacts of geologic hazards on future site development have been considered in the formulation of the land use plan and have been mitigated through design. In general, the development is concentrated on the ridgelines, knolls, valleys and spurs with slope gradients

of less than 35%. Typical construction practices are believed to be adequate for residential and commercial structures within this area and, therefore, need no further mitigation. Only in areas where faults intersect parcels will additional analysis and mitigation be necessary. Thus, additional field work should be required for subsequent Tentative Maps to locate the faults and design any drainage facilities or setbacks for each lot which may be affected.

Roads on the project site will be private with paved widths of 24 and 32 feet; Mt. Israel Road being the exception here, being publicly maintained outside Rancho Cielo boundaries with paved width of 40 feet. The grading plans for these roads should accompany Tentative Maps and be reviewed by a qualified soils engineer. Inspection of cut banks by the soils engineer and construction of any special drainage facilities will adequate mitigate potential impacts from slope instability, seepage and erosion.

The bridges and culverts on the site also serve to mitigate potential erosion and flooding. To ensure, however, that footings and spans are adequate for the construction, plans should be reviewed by the soils engineer with any structural changes designed and approved prior to construction. This same precaution is necessary for the water reclamation plant construction. Prior to approval of a construction permit, site specific geotechnical analysis should ensure that the soils and bedrock are suitable for the plant design. Any mitigation measures or engineering changes should be made at that time.

No further mitigation measures are believed necessary for approval of the Specific Plan or subsequent Tentative Maps. The review processes for grading permits and building permits are adequate to ensure that future grading and construction conform to acceptable County standards.

It is noted here that the level of work conducted in the preliminary soils and geology report is adequate for the preparation and approval of future Tentative Maps. Additional work may be required during subsequent phases of development including review of all maps and grading plans, building permits, construction of bridges and culverts, water reclamation facilities, and other utilities, and spot checking of high cut or fill slopes proposed with grading. All of this work is standard procedure for the building and grading permit processes and should be addressed by the appropriate department when these permits are requested.

HYDROLOGY AND SOIL EROSION

PRESENT SETTING

◦Hydrology

The purpose of this section is to evaluate the effect of site development on existing flood flow volumes for all of the drainage basins in which the project lies. Erosion is considered specifically here also, as the increase in runoff is directly related to the increase in erosion and siltation.

Physiography of the project site is described at length in the Landform section of this report; but can be summarized as steep slopes throughout most of the property with high ridges, canyons and drainages disecting the site into a variety of topographic features. Approximately one percent of the site consists of slopes greater than 70% gradient. Where these steep slopes occur, however, the average gradient is estimated at 75%. The actual areas of development are within 35% gradient. Gullies and minor drainages are of similar slope, and stream gradients (Escondido Creek and Cielo Creek) are on the order of three to seven percent.

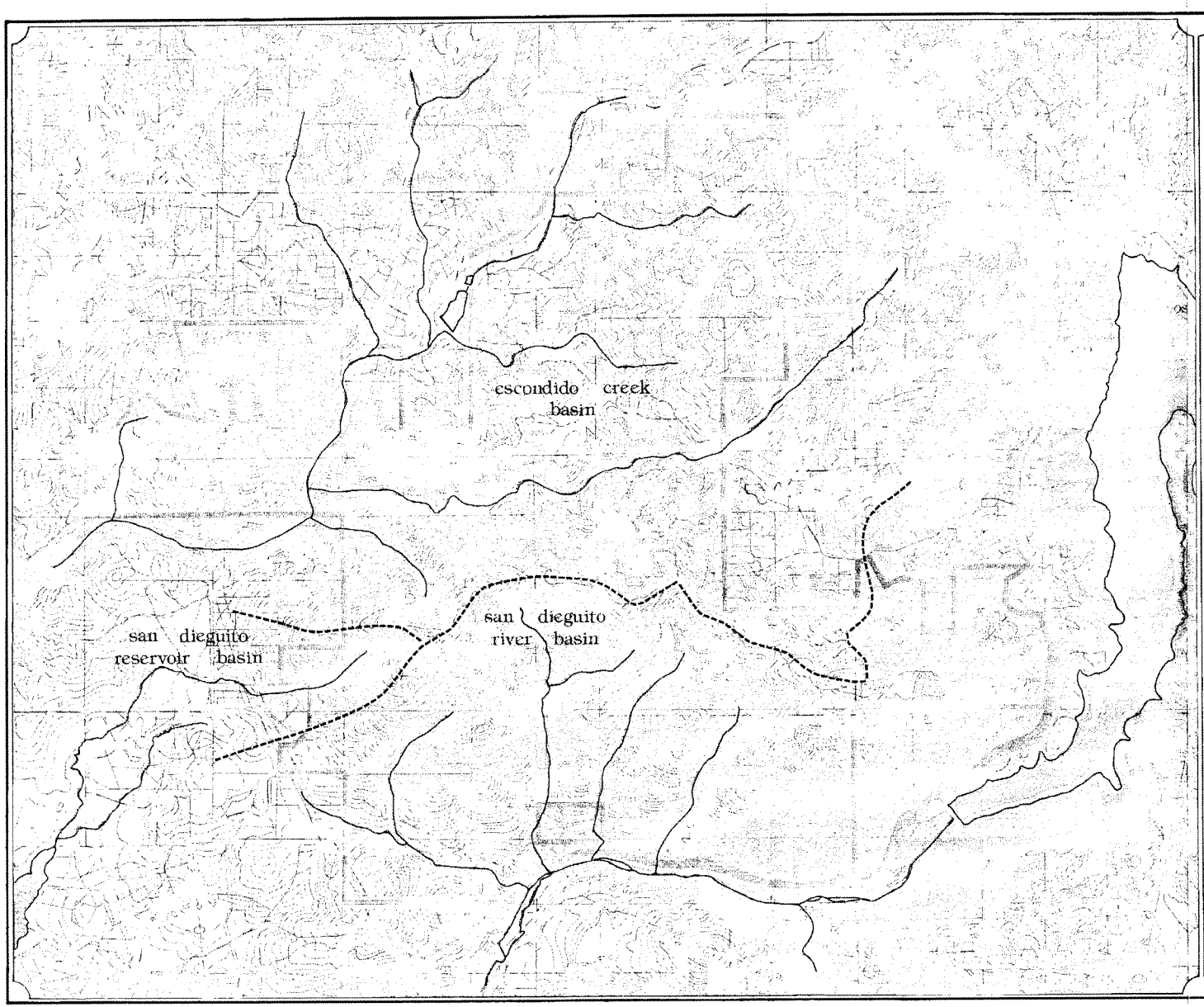
Rancho Cielo is located within portions of three drainage basins: Escondido Creek, San Dieguito River, and San Dieguito Reservoir (see Figure 10). These basins are described briefly below.

1. Escondido Creek Drainage Basins

This basin includes approximately 89 square miles and encompasses the City of Escondido (16 square miles), and portions of the communities of Olivenhain, Rancho Santa Fe, and Cardiff-by-the-Sea. Lake Wohlford lies at the eastern head waters of the basin some 20 miles northeast of San Elijo Lagoon, at the mouth of Escondido Creek.

Within this basin, extensive development has occurred. The City of Escondido and the Escondido Valley drains almost entirely into the concrete-lined flood control channel which bisects the valley. This channel also receives runoff from the slopes and canyons south of Valley Center and west of Lake Wohlford. These waters are deposited into Escondido Creek near Harmony Grove Road on the western outskirts of the City of Escondido. From this point, Escondido Creek flows year-round through the narrow, steep walled canyon, passing through Rancho Cielo and Elfin Forest to the broader floodplain in Olivenhain. The San Elijo Lagoon integrates the floodplain with the Pacific Ocean at the mouth near Cardiff-by-the-Sea.

FIGURE 10



Rancho Cielo

Rancho Santa Fe, California

Hydrology

escondido creek

existing peak flow	878 cfs*
future peak flow	983 cfs*

san dieguito river

existing peak flow	696 cfs*
future peak flow	810 cfs*

san dieguito reservoir

existing peak flow	108 cfs*
future peak flow	135 cfs*

* volume of water entering stream course from rancho cielo during 100-year flood

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Approximately 2,984 acres of Rancho Cielo lies within this drainage basin. This represents approximately 3.85% of the total basin area, located approximately midway in the basin alignment. Flooding of Escondido Creek has occurred in numerous previous wet years, severing access roads and driveways from the end of the flood control channel in Escondido to Interstate 8 near the coast. Siltation is an on-going process and occurs throughout the drainage areas.

2. San Dieguito River Drainage Basin

This basin is the largest of the three drainage basins occupying approximately 1,349 square miles. Portions of the City of Escondido, Del Mar, and San Diego are located within the basin, as well as the communities of Ramona, Green Valley (Poway), Rancho Santa Fe, and Solana Beach. The basin extends from the mountainous regions of the Cleveland National Forest, Rancho Santa Ysabel and Lake Southerland in the east, to the San Dieguito Lagoon at the Pacific Ocean. The water flow runs over approximately 40 miles of drainage to the mouth of the San Dieguito River in Del Mar.

In the eastern end of the basin, two major tributaries, the Santa Maria and Santa Ysabel, drain the regions occupied by the National Forest and Ramona. The San Pasqual Valley and San Dieguito River begins at the confluence of those water courses and continues uninterrupted through farming areas on the broad floodplain until it reaches Lake Hodges.

The elevation differential between peak elevations in the National Forest (5,700 feet MSL) and the Lake Hodges Spillway (314 feet MSL) is approximately 5400 feet. Beyond the spillway at Lake Hodges Dam, the elevation drops from 200 feet MSL to sea level. Steep canyon walls with boulders and riparian vegetation line the San Dieguito River for nearly one and one-half miles to the west until the drainage becomes less deeply cut and merges with broader floodplain areas. The San Dieguito River generally contains some perennial water flow; however, in drier years, and where percolation rates are high, intermittent streambeds exist.

This river continues from the coastal areas and canyons of San Dieguito to the floodplain and wetlands near Del Mar and Rancho Santa Fe. The San Dieguito Lagoon forms the mouth of the river where it enters the Pacific Ocean.

Development and urbanization occurs in several locations within the drainage, beginning as far east as Ramona, and continuing west through Escondido, San Diego (Rancho Bernardo area), Rancho Santa Fe and Del Mar. Flooding has recently occurred over portions of the drainage basin; notably, the Ramona area, San Pasqual Valley, and Whispering Palms Golf Course.

Approximately 1,465 acres of Rancho Cielo lie within the San Dieguito River Basin representing approximately 0.2 percent of the total basin area. That portion of Rancho Cielo within the basin consists of steep south-facing slopes and drainages abutted on the south by Del Dios Highway.

3. San Dieguito Reservoir Drainage Basin

This drainage basin is very small extending from Rancho Cielo (eastern end) to the eastern end of the San Elijo Lagoon. Approximately 75 acres of Rancho Cielo drain into this basin and into the San Dieguito Reservoir. The drainage then continues to the San Elijo Lagoon through the Rancho Santa Fe Community and over a portion of the Rancho Santa Fe Golf Course. Numerous roads cross this intermittent drainage in various locations and flooding is very uncommon due to the limited watershed area.

- Soil Erosion

Soils are a prime consideration for analyzing both runoff and potential erosion. Table 2 indicates that approximately 97% of the project site consists of soils of the San Miguel-Exchequer series or the Cieneba-Fallbrook series. These soils are rated for erosion hazard and permeability. Erosion hazard is rated as severe for 3,300 acres or 93% of the site. Permeability ratings vary greatly but are generally rated as moderate.

The major factors contributing to the runoff/erosion hazard are steep slopes (over 30% gradient) and shallow soils (20 to 40 inches) underlain with rock. Sheet and gully erosion are evident on the property to a moderate extent. This is mainly associated with steeper slopes while the gentle sloping areas are more resistant to erosion. Vegetation greatly reduces erosion and runoff by stabilizing surface soils, increasing soil permeability, and creating a protective cover of organic matter over the soil surface which reduces raindrop impact and water flow velocity.

*Soil Type	Acres	Erosion Hazard	Permeability	Runoff	Infiltration Rate	Drained
Altamont clay, 9-15% slope (AtD)	4.5	slight-moderate	slow	slow-medium	very slow	very poor
Auld clay, 5-9% slope (AwC)	10.2	slight-moderate	slow	slow-medium	very slow	very poor
Auld clay, 9-15% slope (AwD)	6.4	slight-moderate	slow	slow-medium	very slow	very poor
Cieneba coarse sandy loam, 15-30% slope eroded (CIE_2)	66.2	moderate-high	rapid	slow-rapid	moderate	well
Cieneba very rocky coarse sandy loam, 30-75% slope (CmrG)	5.5	severe	rapid	medium-very rapid	moderate	well
Cieneba-Fallbrook rocky sandy loams, 9-30% slope eroded (CnE_2)	45	high-very high	slow-rapid	slow-rapid	moderate-slow	well-moderate
Cieneba-Fallbrook sandy loams, 30-65% slope eroded (CnG_2)	726	severe	moderate-rapid	medium-very rapid	moderate-slow	well-moderate
Escondido very fine sandy loam, 15-30% slope eroded (EsE_2)	10.9	severe	moderate	medium-rapid	slow	poor

Rancho Cielo

Classification and Characteristics
of the Project Site Soils
(continued)

table 2

*Soil Type	Acres	Erosion Hazard	Permeability	Runoff	Infiltration Rate	Drained
Exchequer rocky silt loam, 9-30% slope (ExE)	26.6	severe	moderate	medium-very rapid	very slow	very poor
Exchequer rocky silt loam, 30-70% slope (ExG)	54.4	severe	moderate	medium-very rapid	very slow	very poor
Huerhuero loam, 9-15% slope (HrC_2)	4.7	slight-moderate	very slow	slow-medium	very slow	very poor
Huerhuero loam, 9-15% slope eroded (HrD_2)	15.7	slight-moderate	very slow	slow-medium	very slow	very poor
Placentia sandy loam, 209% slope (PeC)	4.0	slight-moderate	very slow	slow-medium	very slow	very poor
San Miguel rocky silt loam, 9-15% slope (SmE)	27.2	moderate-high	slow	medium-very rapid	very slow	very poor
San Miguel-Exchequer rocky silt loam, 9-70% slope (SnG)	2478	severe	slow-moderate	medium-very rapid	very slow	very poor
Visalia sandy loam, 2-5% slope (VaB)	9.3	slight	moderate-rapid	slow-medium	moderate	well
Visalia sandy loam, 5-9% slope (VaC)	4.5	slight-moderate	moderate-rapid	slow-medium	moderate	well

Rancho Cielo

Rancho Santa Fe, California

table 2

Classification and Characteristics
of the Project Site Soils
(continued)

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*Soil Type	Acres	Erosion Hazard	Permeability	Runoff	Infiltration Rate	Drained
Vista rocky coarse sandy loam, 5-15% slope (VvD)	20.5	moderate	moderate-rapid	slow-rapid	moderate	well

Cieneba series - 10-20 inches over weathered granodiorite.

Exchequer series - 10-14 inches over hard metabasic rock.

*See attached figure

Source: Soil Survey, U.S. Department of Agriculture

Rancho Cielo

Classification and Characteristics of the Project Site Soils

table 2

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In summary, the majority of the site is prone to erosive, high runoff conditions. Steep slopes are the primary factor, and where slopes are less than 30%, erosion and runoff will be substantially less.

IMPACTS

The amount of runoff and erosion resulting from subsequent site development depends on the total area to be developed, its location, and the types of uses proposed. From this information, increases in runoff can be calculated to establish flow rates during a 100-year flood. These rates are presented below for each drainage basin.

Drainage Basin	Acres in Rancho Cielo	Area to be developed (Ac)	Existing Peak Flow (c.f.s.)	Future Peak Flow (c.f.s.)	Increase * (%)
Escondido Creek	1,984	90	878	983	12
San Dieguito River	1,465	240	696	810	16.4
San Dieguito Reservoir	75	6	108	125	15.7

*Indicates increase in peak flow based upon maximum build out of Rancho Cielo.

The peak flow volume is indicative of floodwaters during a 100-year storm, and would be of lesser magnitude during drier years. A very important point here, is that this peak flow volume realized (including waters originating upstream) may be much greater. The effect of this increase represents a very small increase in peak flow volume for the entire basin area and is considered insignificant.

The resulting impacts downstream on floodplains, lagoons and improvements due to the incremental increases in 100-year flood peak flow volumes is not significant. This is not to say that a 100-year flood will not impact the basin; this is unavoidable without major flood control improvements. The effect of the increased runoff due to the project, however, will not be significant.

A second area of consideration is erosion and siltation. Increased runoff may increase siltation to downslope areas. Due to the nature of the soils present on Rancho Cielo, it can be expected that erosion may increase commensurate with runoff. The effects of erosion such as rilling, slope failure

and other direct results of water flowing across a soil surface, have been discussed in the Soils and Geology section of this report. Erosion is evaluated here in terms of downslope siltation.

Siltation may be a problem on and off the project within areas where fast-moving water is accumulated and its velocity reduced. This phenomena results in a decrease in bedload. That is, the total suspended solids which can be carried by the moving water is reduced as velocity is reduced. When velocity is reduced due to deepening, widening, or damming of the watercourse, siltation occurs.

The two locations which will be most affected by the siltation will be Elfin Forest Lake, located adjacent to Harmony Grove Road and the northern portion of Rancho Cielo; and the broad floodplain south of Rancho Santa Fe. Both of these areas received extensive silt deposits due to runoff from the 1979-1980 winter storms. Other areas are undoubtedly subject to siltation within each of the basins; but to a possible lesser degree. Siltation is not expected to be significant at the San Elijo and San Dieguito Lagoons due to the low velocity of the water in the drainage and the floodplain areas to the east. The effect of increased siltation is negligible in comparison to existing runoff and siltation factors, but incremental to local siltation problems.

The impacts from potential erosion/siltation hazards, therefore, may be significant if proper control measures are not implemented with development. Grading, resurfacing with impervious substances, construction of dwellings, landscaping with sparse ornamental vegetation, and other residential/commercial improvements will increase the volume of runoff, and thereby increase downslope siltation.

MITIGATION

One major factor of the project design which will minimize erosion on the site, is the clustering of dwelling units along ridgelines where slopes have less than 35% slope gradient. Surface erosion in these areas will be slight to moderate and controllable by using erosion control devices and landscaping. This channeling of waterflow will contribute to downslope erosion, and requires construction of sufficient structures or improvements to reduce or eliminate the erosive power of the runoff. This can be accomplished in connection with each Tentative Map, Grading Permit, or Use Permit by requiring

these improvements as conditions of approval. Such devices would include berms or brow ditches along all cut and fill slopes, immediate landscaping and irrigation of graded areas; rip-rap and culverts to direct water flows; and energy dissipators with desilting basins to reduce bedload and velocity of runoff as it leaves the property. Additional improvements may be required by the Department of Transportation for each development project submitted.

Specific engineering calculations will be required for all culverts and bridges to ensure their adequacy in handling potential peak flow volumes. All of these mitigation measures are considered standard improvements which are typically required by the Department of Transportation. No potential impacts are apparent which cannot be mitigated by these measures.

It is further recommended that whenever feasible, no grading operations be made during the rainy season (November 1 to April 15). Cut and fill slopes should be stabilized immediately with hydromulch mixture or equal treatment. Sand bag check dams should be placed in unpaved streets with gradients in excess of two percent.

WATER QUALITY

PRESENT SETTING

Water quality considerations must take into account regional standards for the entire basin analyzed. With these standards, groundwater and surface waters are important factors when evaluating effluent disposal, whether by public sewerage or private septic systems. Factors which contribute to water quality management include soil and topographic conditions, proximity of water resources (ground and surface waters), methods of sewage disposal, uses of local waters, and water quality objectives for each basin.

The soils and geology investigation indicates that the project area is generally unsuitable for septic tanks and leaching facilities. This is due to the steep slopes, shallow groundwater table and slow percolation test rates. Sewer services are not presently available to Rancho Cielo and there is no adjacent sanitation district to which it can be annexed. The establishment of a sanitation district to install and operate sewage treatment facilities for the proposed development is necessary to achieve the unit density allowed by the current land use.

In addition to complying with the County's regulations for sewage disposal, waste-water reclamation and disposal, the system must be consistent with the California Regional Water Quality Control Board's (RWQCB) policies and requirements. If the reclaimed water is eventually discharged into navigable waters, a National Pollutant Discharge Elimination System (NPDES) permit is also required. These permits can be issued by the Federal Environmental Protection Agency (EPA) or by the various RWQCB's. RWQCB requirements and the NPDES permit are usually combined into one document by one Regional Board action. Policies of other regulatory agencies such as the State Health Department and the State Department of Fish and Game also bear upon the Board's action. The State of California Department of Health has certain requirements which specify treatment methodologies and the details of facilities needed to assure safe operation (Title 22 of the California Administrative Code).

The RWQCB's discharge requirements are intended to protect public health and the quality of surface and groundwaters. Established criteria for the protection of surface and groundwaters are delineated in the Water Quality Management Plan prepared by RWQCB and adopted by the State Water Resources Contol Board (SWRCB). These criteria are used in deciding the specific discharge requirements for individual facilities. Table 3 describes the criteria appropriate to the Rancho Cielo area.

Hydrographic Unit and Subunit	Concentrations Not to be Exceeded More Than 10% of the Time During Any One Year Period[1]											
	TDS	Cl	%Na	SO_4	NO_3	Fe	Mn	MBAS	B	Turbidity (JTU)	Color (units)	F
Carlsbad												
Escondido	750	300	60	300	10	0.3	0.05	0.5	0.5	5	15	1.0
San Dieguito												
San Dieguito	1500[2]	500[2]	60	500[2]	45[2]	0.85[2]	0.15[2]	0.5	0.5[2]	5	15	1.0
Hodges	1000[2]	400[2]	60	500[2]	10[2]	0.3[2]	0.05[2]	0.5	0.5[2]	5	15	1.0

1 - Concentrations given in mg/l or as noted.

2 - Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharges. On the basis of existing data, the tabulated objectives would probably be maintained for most areas. Upon completion of the salt balance studies, significant water quality objective revisions may be necessary. In the interim period of time, projects of groundwater recharge with water quality inferior to the tabulated mineral values may be permitted following individual review and approval by the Regional Board if such projects do not degrade existing groundwater quality in the aquifers affected by the recharge.

Rancho Cielo

Rancho Santa Fe, California

table 3

Water Quality Objectives for Groundwater Basins Within Rancho Cielo

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Basin standards for San Dieguito and Lake Hodges subunits are currently being reanalyzed on the basis of salt balance studies now being performed. At present, the RWQCB requires that all wastewater discharge should meet or exceed the water quality objectives. Reclaimed water receiving only secondary treatment cannot meet these objectives. Tertiary treatment is designed to remove additional dissolve solids and nutrients to achieve basin standards for the specific type of reuse. Title 22 requirements for bacterial concentration is provided below for various reuse alternatives.

TITLE REQUIREMENTS

Anticipated Reuse	Level of Treatment	Required Coliform Count
Spray Irrigation of Food Crops	Direct Filtration	2.2/100ML
Surface Irrigation of Food Crops	Secondary	2.2/100ML
Irrigation of Fodder Crops	Primary	No limit
Pasture Irrigation for Milking Animals	Secondary	2.3/100ML
Non-restricted Recreational Improvement	Direct Filtration	2.2/100ML
Restricted Recreational Improvement	Secondary	23/100ML
Landscape Impoundment	Secondary	23/100ML
Greenbelt Irrigation (Existing Requirements)	Secondary	23/100ML
Landscape (Playground)	Direct Filtration	2.2/100ML
Landscape (Golfcourse)	Secondary	23/100ML

Water uses in the two hydrographic units (Carlsbad and San Dieguito) include wells and impoundment for domestic and recreational use at Lake Hodges and Elfin Forest Lake within the immediate proximity of Rancho Cielo. Recreational uses of these lakes consist of fishing, picnicing, and limited boating activities. Lake Hodges is owned by the City of San Diego, whereas the smaller Elfin Forest Lake is privately owned. In addition to these existing impounds, a future reservoir is being considered for the Cielo Creek drainage just east of Rancho Cielo. This future reservoir and Lake Hodges serve as sources of domestic water for the San Dieguito area and City of San Diego. Runoff feeds both of these basins.

Wells are present at various locations in these hydrographic units, most of which are used for agricultural irrigation. The hydrographic units are currently receiving treated effluent from several sewage disposal plants. No direct stream discharge is occurring in either basin; however, irrigation reuse and percolation are employed at Ramona, Cleveland National Forest, San Pasqual Wild Animal Park, Whispering Palms, Rancho Santa Fe, and Elfin Forest. All but the last location (Elfin Forest) utilize groundwater recharge in the San Dieguito basin.

The primary sources of groundwater (and surface water) degredation are runoff from agricultural areas, and septic tank failure. Agricultural runoff from dairies, groves, pasture, or field crops contributes high concentrations of nutrients and salts into basin waters. This leaching occurs in all areas of San Diego County. The intent of the RWQCB objectives is to bring discharged waters to levels below those found in basin waters. Thus, discharge waters may be of lower TDS and nutrient content than the existing conditions.

IMPACTS

Included in the proposed development is the establishment of a sanitation district with supporting facilities to serve the residences and commercial centers of Rancho Cielo, and will be under the jurisdiction of the County of San Diego or the Olivenhain Municipal Water District (to be determined later). The sanitation district will consist of a water reclamation system which recycles approximately 260,000 gallons of water per day. The proposed treatment facilities will not handle or discharge any toxic or hazardous industrial wastes. Only wastewater generated from the residential, recreation, and commercial uses will be treated. A treatment plant is proposed which meets Title 22 criteria for reliability and performance. The treatment system will provide the appropriate level of treatment according to the reuse alternative. Other standby and alarm systems will be implemented where necessary. The table below identifies required treatment levels for the water reuse alternatives.

On-Site Reuse	Off-Site Reuse	Stream Discharge
Biological Oxidation	Biological Oxidation	Biological Oxidation
(Secondary Treatment)	(Secondary Treatment)	(Secondary Treatment)
Two-Hour Chlorination	Two-Hour Chlorination	Two-Hour Chlorination
Filtration	Filtration	Filtration
Demineralization	Demineralization	Demineralization
		Nutrient Removal

Thus, in each case, secondary treatment is provided using the oxidation ditch method. Tertiary treatment provided by filtration, demineralization (reverse osmosis proposed) and nutrient removal for stream discharge will meet Basin Plan standards (0.05 mg/l for phosphorus, 0.5 mg/l for nitrogen). These applications, and the resultant effluent disposal are not anticipated to impact water resources.

It is proposed that these facilities will achieve adequate performance levels and safeguard procedures to ensure that all discharge water meets basin objectives.

Water quality impacts are associated with discharge of inadequately treated effluent into groundwater basins. This discharge may be directly into the basin via Escondido Creek or San Dieguito River, or indirectly by groundwater recharge through reuse of reclaimed waters for irrigation. In any case, disposal of effluent must meet the Regional Water Quality Control Board standards for the individual basin. If these standards cannot be met, effluent disposal would create a significant impact on regional water resources by increasing total dissolved solids (TDS) and nutrient concentrations on an incremental scale.

These impacts may be experienced as degradation of local groundwater by increasing TDS and decreasing its utility for agricultural or domestic use. Downstream effects may be experienced at the San Dieguito or San Elijo lagoons if nutrient levels or TDS exceed basin standards.

Impacts such as those described are potential impacts only. The sewage treatment facilities proposed for Rancho Cielo include tertiary treatment adequate to achieve the regional standards.

Two things remain to be shown before definite conclusions can be drawn for the impacts of effluent disposal into the basins: RWQCB water quality objectives can and will be met by the proposed reclamation facilities, and that these facilitites will provide a sufficient level of performance and safeguard to ensure adequate treatment of all discharge waters. These two items are major components in the RWQCB consideration of the project and will be thoroughly investigated by that board.

MITIGATION

To ensure mitigation of potential impacts to water quality from effluent discharge, the design and operation of the treatment and disposal facilities must satisfy the requirements of the RWQCB. Due to the approval process required for the federal permit (NPDES), the RWQCB review

and approval will be a mandatory step in the process of implementing the proposed reclamation plant. It is thus recommended that this measure be applied as a condition of approval, completion of which must precede any portion of site development.

In addition to the RWQCB requirements, the requirements of the State Health Department and the County of San Diego must be satisfied at the appropriate levels of permit processing. No further mitigation measures are believed necessary at this phase of project consideration.

BIOLOGY

PRESENT SETTING

Biological resources within the planning area are extremely unique both from a regional and local perspective. Although the site is located in a rapidly growing and well developed area of north San Diego County, it represents a portion of one of the largest undeveloped coastal tracts of chaparral in southern California. The absence of development and human occupation coupled with the large expanse, lends the area to extensive wildlife usage and stable plant communities. Several canyons and drainages serve as corridors for wildlife movement which further enhances the area's floral and faunal diversity. Significant resources of the property include the extensive continuous coverage of native vegetation, Riparian and Southern Oak Woodlands, canyons and steep-walled drainages serving as wildlife corridors and habitat, a perennial stream, nesting and foraging habitat for large mammals and raptors (including the Golden Eagle), numerous sensitive plant species, and large populations of two extremely rare plant species (Encinitas Baccharis and Sticky Dudleya).

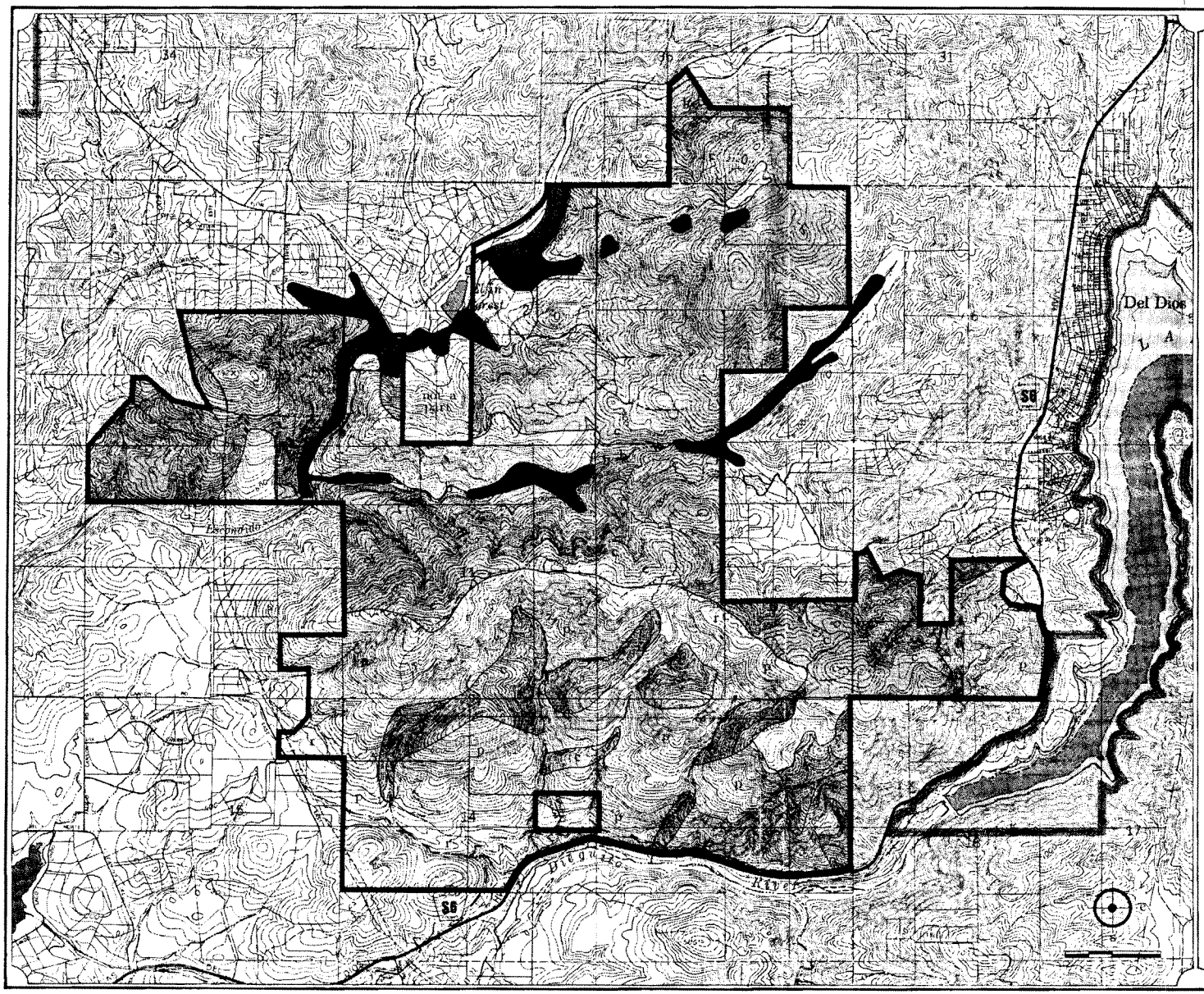
°Vegetation

Vegetation within the planning area is relatively diverse and undisturbed. The extreme variety of topographic conditions provide suitable elements for several plant communities including Chaparral, Inland Sage Scrub, Southern Oak Woodland, Riparian Woodland, freshwater marsh, and native Grassland (see Figure 11). The most extensive of these is the Chaparral (62%), occurring on all but the south-facing slopes and in moist drainages. Two forms are present, Mixed Chaparral and Ceanothus Chaparral. Mixed Chaparral consists of a relatively diverse species composition dominated by Scrub Oak (Quercus dumosa) and Mission Manzanita (Xylococcus bicolor). This form is found on most slopes and reaches to in excess of ten feet in height. (See Table 4)

The second form is more abundant and is dominated by Coast White Ceanothus (Ceanothus verrucossus). This Ceanothus Chaparral is much less diverse with 50 to 100% of the total vegetative cover represented by the Coast White Ceanothus. The height of this vegetation is somewhat lower (six feet) but it is much more dense and impenetrable.

Inland Sage Scrub predominantly occurs on the south-facing slopes and rock outcrops (1078 acres). This vegetation consists of a lower, less dense form, three to four feet in height and easily penetrable. Black Sage (Salvia mellifera),

FIGURE 11



Rancho Cielo

Rancho Santa Fe. California

Biology

- southern oak woodland
- riparian woodland
- chaparral
- inland sage scrub
- disturbed
- grassland

sensitive plants:

- e encinitas baccharis
- d sticky dudleya
- b orcutt's brodiaea
- h summer-holly
- a california adolphia
- p pygmy club-moss
- c coast white ceanothus
- w san diego poverty weed
- s palmer's sagebrush
- r bush rue
- m smooth mountain-mahogany

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Vegetation	Rancho Cielo acres (percent)	Open Space acres (percent)	Develop-ment Area acres (percent)	Open Space Treatment of Vegetation by Type (percent)	Development Area Treatment of Vegetation by Type (percent)
Southern Oak Woodland	104(3.0)	89(2.5)	15(.5)	85.5	14.5
Riparian Woodland	58(1.6)	55(1.5)	3(0.1)	94.8	5.2
Chaparral	2186(62.0)	1213(34.0)	973(28.0)	57.4	42.6
Inland Sage Scrub	1078(30.6)	430(12.2)	648(18.4)	38.2	61.8
Disturbed	86(2.4)	35(1.0)	51(1.4)	41.0	59.0
Grassland	13(0.4)	8(.3)	5(.1)	61.5	38.5
Total	3525(100%)	1830(52%)	1694(48%)	---	---

Rancho Cielo

Vegetation Types Effected by the Project in Acreage and Percent

table 4

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California Sagebrush (Artemisia californica), Bushrue (Cneoridium dumosum) and Flattop Buckwheat (Eriogonum fasciculatum ssp. fasciculatum) dominate with several annuals and perennials occurring in open areas. The rock outcrops have a less diverse form of scrub but with several moisture-adapted plants isolated to this habitat.

Southern Oak Woodland is found in scattered groves along steep slopes and ridgetops. Coast Live Oak (Quercus agrifolia) is the predominant tree species, although Englemann Oak (Q. englemannii) is occasional. Understory vegetation is generally comprised of Mixed Chaparral components.

Riparian Woodland is confined to the two major drainages, Escondido Creek and the major east-west trending tributary which crosses the site. Both of these drainages are steep-walled and maintain pooled water year-round. Escondido Creek is a perennial stream creating occasional areas of open water. Limited freshwater marsh occurs here occupied by Cattail and Giant Cane. The woodlands are primarily represented by Coast Live Oak (predominantly), Black Willow (Salix goodingii) and Eucalyptus. Understory components are primarily Palmer's Sagebrush (Artemisia palmeri) and Poison Oak (Toxicodendron diversilobum). Disturbance of Escondido Creek through domestic activities, grading and Eucalyptus invasion has partially reduced the native character of this stream.

Native Grassland vegetation is uncommon on the site and limited to two locations where shallow groundwaters occur. The principal species are Deer grass (Muhlenbergia rigens), Blue-eyed-grass (Sisyrinchium bellum), and Foothill needlegrass (Stipa pulchra).

°Flora

The floral community of the planning area is diverse and well represented with 197 native species and 28 non-native species. Most of the species are commonly found and typical of those plant communities occurring on the site. Eleven of the observed species are considered sensitive in California, based on their rating by the California Native Plant Society (Powell, 1980). The list of sensitive plant species and a description of the CNPS code is included in Table 5. Also included in this table is a general description of on-site occurrence, habitat, location, and known distribution.

Those species of highest concern are Encinitas Baccharis (Baccharis vanessae) and Sticky Dudleya (Dudleya viscida). The Baccharis is an extremely rare plant species, known only in Encinitas and portions of the project area. At this time,

only about 360 individuals of this species have been observed. Approximately 50 plants of Encinitas Baccharis have been located within the Rancho Cielo Planning Area in two separate areas (see Figure 11). Additional smaller populations may also be present, but were not located.

Sticky Dudleya is also very rare, known only to five populations between Orange County and Rancho Santa Fe. The population observed within the planning area is the sixth known locality consisting of several thousand individuals on two to three acres of land. Portions of the population have been disturbed through grading and flooding of Escondido Creek, but in all, it is considered of excellent vigor and comparable size with the other known populations. Both this population of Sticky Dudleya and Encinitas Baccharis are considered highly significant botanical resources.

Most of the other sensitive plant species are of lesser concern (based on CNPS rating) but are present in large vigorous populations. These populations are also considered significant in the context of their common occurrence and their integrity within a larger undisturbed area.

c. Fauna

Due to the high variety of habitat conditions present on the property, faunal species diversity is also high. A total of 95 species were observed including 62 avian species, 14 reptiles and amphibians, and 20 mammals. Several of the faunal species observed are considered sensitive by state and federal lists as well as non-governmental lists. Those species of concern are listed in Table 6 along with their status and occurrence on the property.

Of particular concern are the raptor species associated with the area. Many of these use the property for nesting and roosting sites, and all utilize the site for foraging. Several Golden Eagle nest sites have been located in the project area. Two of the three eagle nest sites, one of which is active and one inactive, are located outside the planning area; one in Section 31 of T12S, R2W to the northeast of the SPA; and one in Section 18 of T13S, R2W. The third eagle nest (inactive) is located on the property near Del Dios Highway in Section 13, T13S, R3W, and is included within the open space. The impacts of the land use plan are associated with subsequent development of roads and residences within sight distance of the nests. The approximate locations of nest sites are shown in Figure 12. The loss of nest sites and habitat from disturbance, human occupation and development are the primary reasons for the declining or uncommon status of several of the bird species of concern on the property.

SPECIES	PLANT HABIT	HABITAT	DISTRIBUTION ON-SITE	CNPS STATUS (POWELL 1980)	WORLD DISTRIBUTION
Selaginella cinerascens (Pygmy Club-Moss)	Prostrate Fern (less than 1 cm)	Dry slopes of chaparral and especially Inland Sage Scrub	Very common in southern sector 4 and east-facing slope of peak in sector 1, elsewhere.	1-2-1-1	Limited distribution but common: southwestern San Diego Co. and northern Baja Ca.
Baccharis vanessae (Encinitas Baccharis)	Weak shrub (1-1.5 m)	North-facing slopes	Head of a canyon in sector 2, slope in southeast part of sector 4.	3-3-3-3	Very narrow distribution, very rare: amout Del Dios, Chicarita Creek, Horseman's Park, Encinitas.
Artemisia palmeri (Palmer's Sagebrush)	Weak shrub (1-1.5 m)	Wet slopes and drainages	Several locations	1-1-1-1	Limited distribution, fairly common: foothills from northern Baja Ca. to about this latitude in San Diego Co.
Iva hayesiana (San Diego Poverty Weed)	Low, flexible shrub (0.5-1 m)	Seasonally wet drainages, marshy spots	Main creek in sector 2, Escondido Creek	1-1-1-1	Limited distribution, uncommon: coastal plain and foothills of So. San Diego County and northern Baja Ca.
Dudleya viscida (Sticky Dudleya)	Low succulent, perennial (0.2 m)	Rocky walls of canyons	Portion of Escondido Creek, about 5 acres (Sector 2)	2-2-2-3	Very narrow distribution and very rare: three canyons of San Diego Co.
Comarostaphylis diversifolia var. diversifolia (Summer-Holly)	Large, long-lived shrub (2-4 m)	North-facing slopes of chaparral	Northwest sector 4, mid-sector 4	1-2-1-2	Limited distribution, uncommon: coastal and near-coastal foothills from No. San Diego Co. to northern Baja Ca.

Rancho Cielo

Sensitive Floral Species Found on the Project Site (continued)

table 5

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SPECIES	PLANT HABIT	HABITAT	DISTRIBUTION ON-SITE	CNPS STATUS (POWELL 1980)	WORLD DISTRIBUTION
Adolphia californica (California Adolphia)	Low, stiff shrub, 0.5-1 m)	Various slopes in sparser scrub vegetation, usually on heavy soils	Both sides of Escondido Creek, along Del Dios Highway, elsewhere.	1-2-1-1	Limited distribution, uncommon: coastal plain about as far inland as Rancho Bernardo; San Diego Co. and northern Baja Ca.
Ceanothus verrucosus (Coast White Ceanothus)	Stiff shrub	Dry slopes and shrubs	Predominant shrub over much of property, in chaparral.	1-2-1-1	Limited distribution, generally dominant where it occurs.
Cercocarpus minutiflorus (Smooth Mountain Mahogany)	Tall,stiff shrub (2-4 m)	North slopes and ravines	Common	List 4	Limited distribution, very common: coastal and foothill canyons and slopes of Orange, Riverside and San Diego Counties, northern Baja Ca.
Cneoridium dumosum (Bush Rue)	Stiff shrub (0.5-1 m)	Dry slopes, mostly Inland Sage Scrub	Common in southern sector 3 and 4, north and west sector 2, eastern sector 1.	List 4	Limited distribution, common: from coast to middle foothills of Orange and San Diego Counties as well as northern Baja Ca.
Brodiaea orcuttii (Orcutt's Brodiaea)	Herbaceous bulbous perennial	Creek bottoms	Uncommon in main creek in mid-sector 2.	1-2-2-2	Very limited and rare: Vernal pools, creeks and mountain meadows, San Diego Co.

Rancho Cielo

Sensitive Floral Species Found on the Project Site

table 5

SPECIES	SENSITIVITY STATUS	SAN DIEGO STATUS	HABITAT (and property location where appropriate)
Northern Harrier	Blue List-Category I; Remsen-Category III	Uncommon, serious habitat losses and disturbances.	Nests in open fields, marshes or in low brush. Forages over open country.
American Kestrel	Blue List-Category I	Common	Needs holes (in trees or cliff) for nesting and perches.
Barn Owl	Blue List-Category I	Common near woodlands and cliffs.	Needs cavities in trees or cliffs for nesting.
Spotted Owl	Blue List-Category II; Remsen-Category II	Uncommon; very unusual on Pacific slope - habitat loss.	Canyons with dense woodlands (coniferous or deciduous).
Bewick's Wren	Blue List-Category II	Abundant	Brush and occasionally woodlands.
Cactus Wren	none official	Uncommon on Pacific slope-probably declining - habitat loss. Erratic distribution.	Areas containing cactus patches (usually several) commonly in open terrain or sparse brush.
Black-tailed Gnatcatcher	Blue List-Category III; Remsen-Category III	Uncommon - probably declining - habitat loss - apparent erratic distribution	Sparse sage scrub or occasionally chaparral.
Ruby-crowned Kinglet	Blue List-Category II	Common winter resident	Brush and woodland
Loggerhead Shrike	Blue List-Category I	Common	Open terrain with perches

SPECIES	SENSITIVITY STATUS	SAN DIEGO STATUS	HABITAT (and property location where appropriate)
+San Diego Horned Lizard	IUCN-depleted	Fairly common but probably declining due to habitat loss.	Brush with at least some sandy spots.
+Orange-throated Whiptail	IUCN-depleted	Fairly common and even abundant where found. Erratic distribution.	Essentially same as above species.
Two-striped Gartersnake	CDFG-protected reptile	Common near aquatic or mesic systems. Commonly collected as pet.	Ponds or streams or areas adjacent to these habitats.
Turkey Vulture	Blue List-Category I	Uncommon, declining due to reduced food supply, less open range, possibly pesticide problems.	Open country, all habitats.
White-tailed Kite	CDFG-fully protected	Fairly common in some woodlands but not often abundant. Possibly declining due to habitat loss; apparently not critical at present.	Riparian Woodland and surrounding fields.
Cooper's Hawk	Blue List - Category I, Remsen-Cat.II	Declining due to habitat loss and habitat disturbance.	Oak and Riparian Woodland, sensitive to disturbance.
Red-shouldered Hawk	Blue List - Category I	Fairly common in woodlands, probably declining due to habitat loss, probably not critical at present.	Woodland; can tolerate some types of human disturbance.
Golden Eagle	CDFG-fully protected; Remsen-Category III	Declining due to nest site disturbance. Vulnerable to shooting.	Nests in large rock outcrops, forages in fields and open brush. See Figure A for nest areas.

SPECIES	SENSITIVITY STATUS	SAN DIEGO STATUS	HABITAT (and property location where appropriate)
Savannah Sparrow	Blue List-Category III	Probably declining due to habitat loss - probably not presently critical.	Open fields
+Mountain Lion	none official	Probably fairly stable in remote areas. In developing areas near den sites, probably being displaced.	Brush or woodland. Den sites

+ - not observed during survey, expected on property.

Rancho Cielo

Sensitive Faunal Species Found on the Project Site

table 6

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FIGURE 12

LIMITED DISTRIBUTION

(on file at the Environmental Analysis Division, County of San Diego)

Additional species of concern that are expected on the property are Mountain Lion, Orange-throated Whiptail and Coast Horned Lizard. In all cases, the resource associated with sensitive faunal species is habitat (in addition to specific sites for Golden Eagles). The viability of faunal populations depends greatly upon the quality and extent of the habitat upon which they depend. Thus, the presence of these sensitive species further enhances the biological value of the undisturbed vegetation.

Habitat

Six wildlife habitats exist on the site including oak woodland, riparian woodland, brush, large cliffs, perennial freshwater stream and disturbed fields. Associated with these are canyons, rock outcrops and intermittent streams.

The oak and riparian woodlands which line Cielo Creek and Escondido Creek are of primary importance for providing nesting, watering and foraging sites as well as an access corridor for wildlife movement. Evidence of the value of these habitats is the abundance of species observed in association with the woodlands.

The "Biological Survey Guidelines" are intended to provide a uniformity in biology surveys and analysis (County of San Diego, 1979). These guidelines identify several of those habitats which occur on the project site as sensitive habitats for San Diego County. The sensitive habitats are freshwater marsh, riparian and oak woodlands, mountain peaks, coastal mixed chaparral, grassland, and nesting and foraging areas of the Golden Eagle.

The Conservation Element of the General Plan delineates portions of the site within the Escondido Creek Resource Conservation Area (RCA), the Escondido Creek/Harmony Grove Road RCA and the San Dieguito River/Lake Hodges/Lusardi Canyon RCA (County of San Diego, 1979). (See Figure 13). The purpose of these RCA's is to target specific resources which deserve special consideration for planning and project implementation.

The main feature of this area is the unique Riparian woodland along the perennial stream in the Escondido Creek canyon. The area also includes undisturbed Mixed Chaparral on north-facing slopes, a known deer population and the endangered Del Mar Manzanita, the threatened Sticky Stonecrop (Dudleya viscida) and the rare Sea Dahlia (Coreopsis maritima), Adolphia californica, Coast White Lilac and Coast Spice Bush. This RCA stretches from the eastern end of Rancho Cielo and Cielo Creek westward to the San Elijo Lagoon/San Dieguito Park RCA (see Figure 14). Escondido Creek is the dominant factor within this RCA resulting in a narrow configuration approximately 1,500 feet in width

and four miles long from Rancho Cielo westward. Large parcels exist in the eastern end of the RCA near Rancho Cielo. Smaller parcels with residential development occur two miles to the west of Rancho Cielo in the Lake Val Sereno/Olivenhain area.

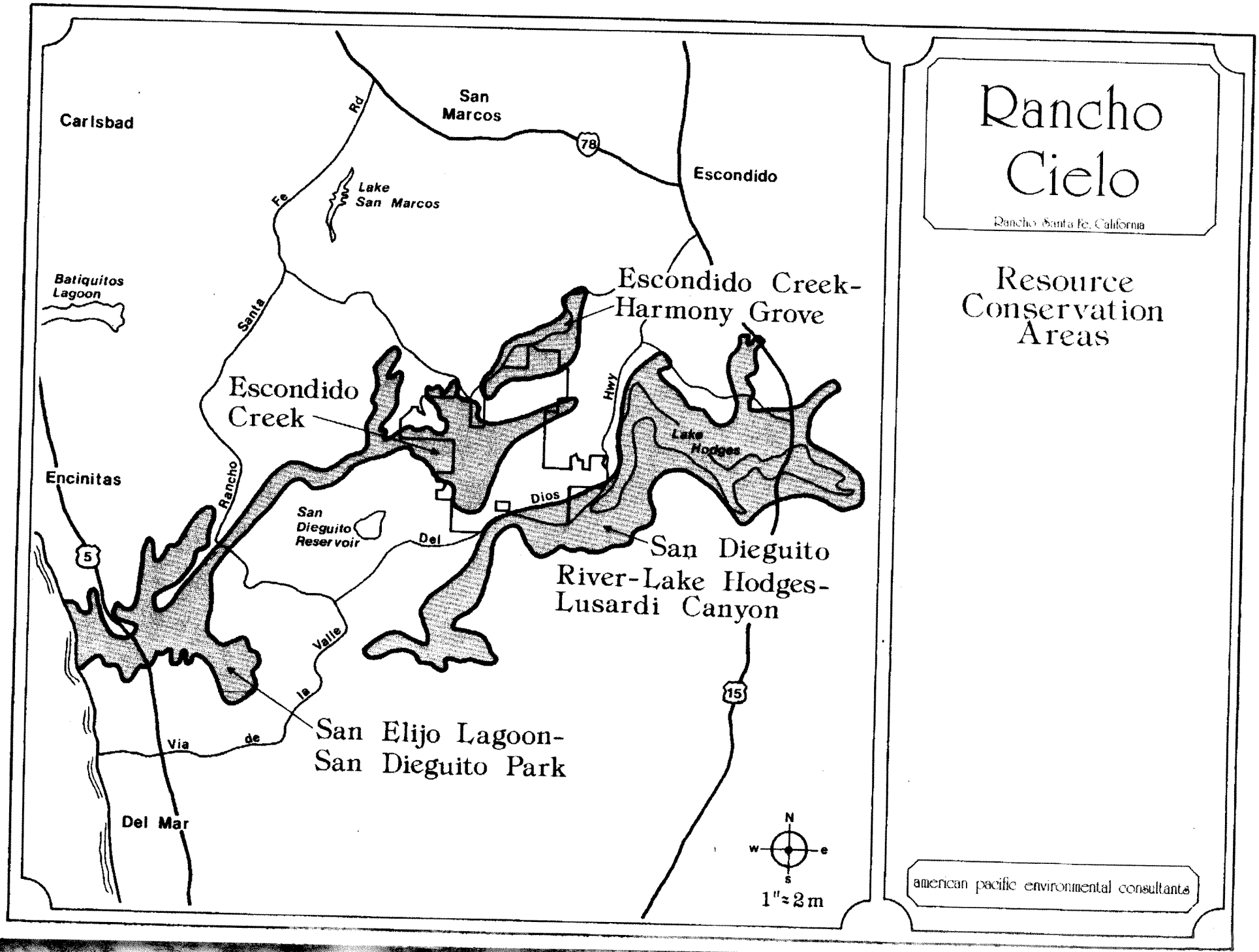
Several resources of the Escondido Creek RCA are well represented on the project site including the creek itself with the riparian woodland and adjacent Mixed Chaparral. Evidence of the deer population was observed on the property also. Numerous sensitive plant species are also present as previously noted. The oak woodlands and Mixed Chaparral are also present along the north fork of Escondido Creek and in Cielo Creek, the east-west tributary on the site. Portions of the Rancho Cielo Planning Area comprise highly representative components of those resources targeted in this RCA. Development and disturbance increase to the west and north of the project area.

The Escondido Creek/Harmony Grove Road RCA continues northeast of Elfin Forest over the Escondido Creek alignment. A small portion of Rancho Cielo lies within the RCA, an even smaller portion of which is occupied by the creek area itself.(See Table 7) The RCA occupies approximately one and one-half square miles in an elongated northeast to southwest alignment over Escondido Creek. The area encompassed begins at the intersection of Harmony Grove Road and Questhaven Road, and continues northeast to the intersection of Country Club Drive and Harmony Grove Road. The lateral extension generally follows topographic features. Adjacent ridgelines define the extent of the RCA along canyon walls except where localized topography is more consistent with the intent of the RCA. This area includes Riparian and Oak Woodlands in a canyon bottom, surrounding Mixed Chaparral for wildlife habitat and unusually large populations of the rare Coast White Lilac.

Southern Oak Woodlands and Riparian Woodlands are present throughout the drainage areas. Eucalyptus trees have invaded most of the riparian areas, however, and are a common component. Adjacent canyon walls and slopes are covered by Chaparral or Inland Sage Scrub, except in areas where disturbance has introduced non-native grasses and forbs; or, where avocados or other landscape species have been planted.

Residential development has been concentrated in the northeast portion, with roads and residences commonly located in areas of gentle slope. Parcelization is more pronounced north of the project site, where numerous parcels of one to four acres exist. Larger parcels lie to the southwest of the project site. The primary disturbance factor is Harmony Grove Road itself, which was graded adjacent to Escondido Creek.

FIGURE 13



Rancho Cielo

Rancho Santa Fe, California

Resource Conservation Areas

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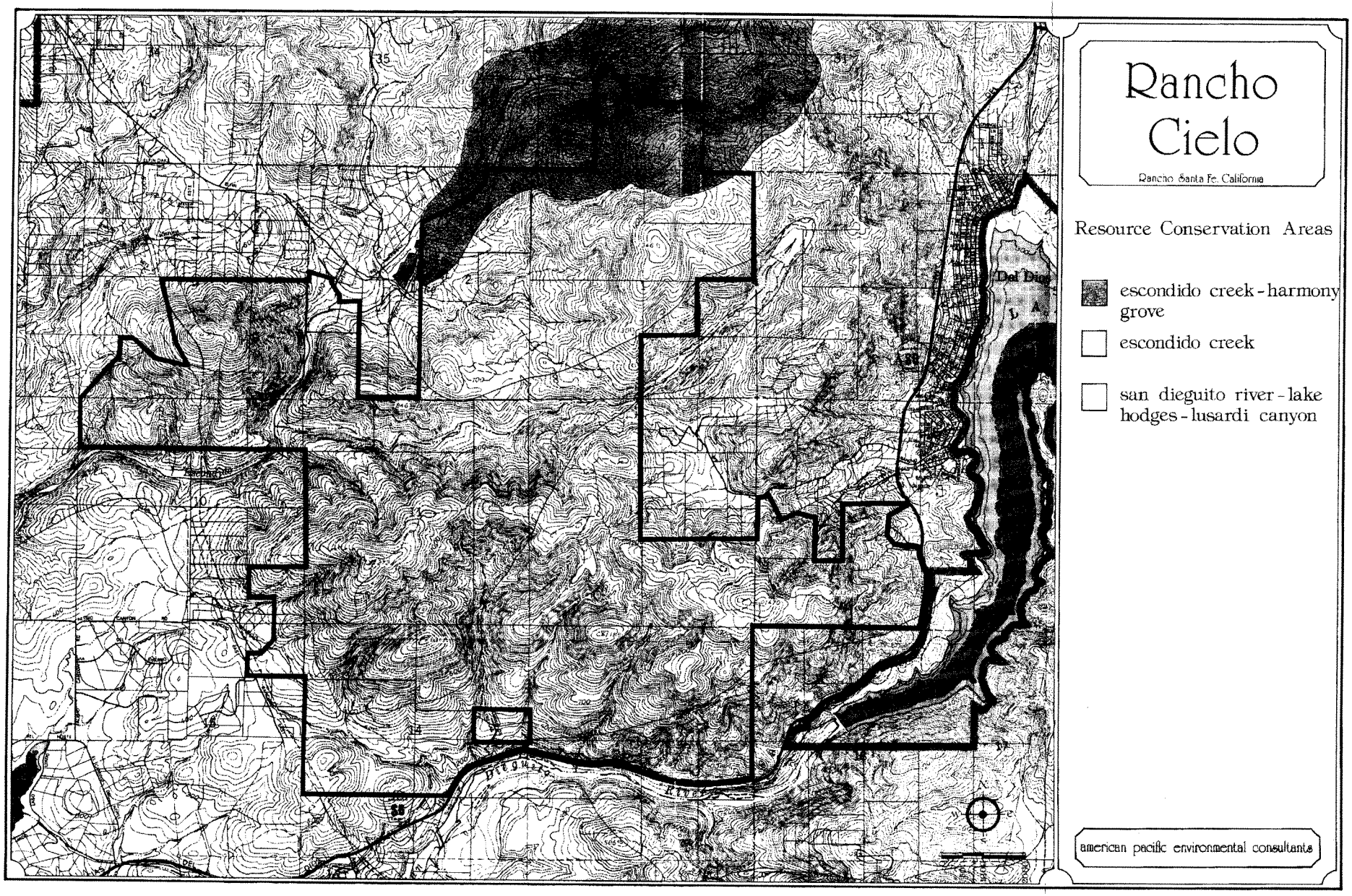
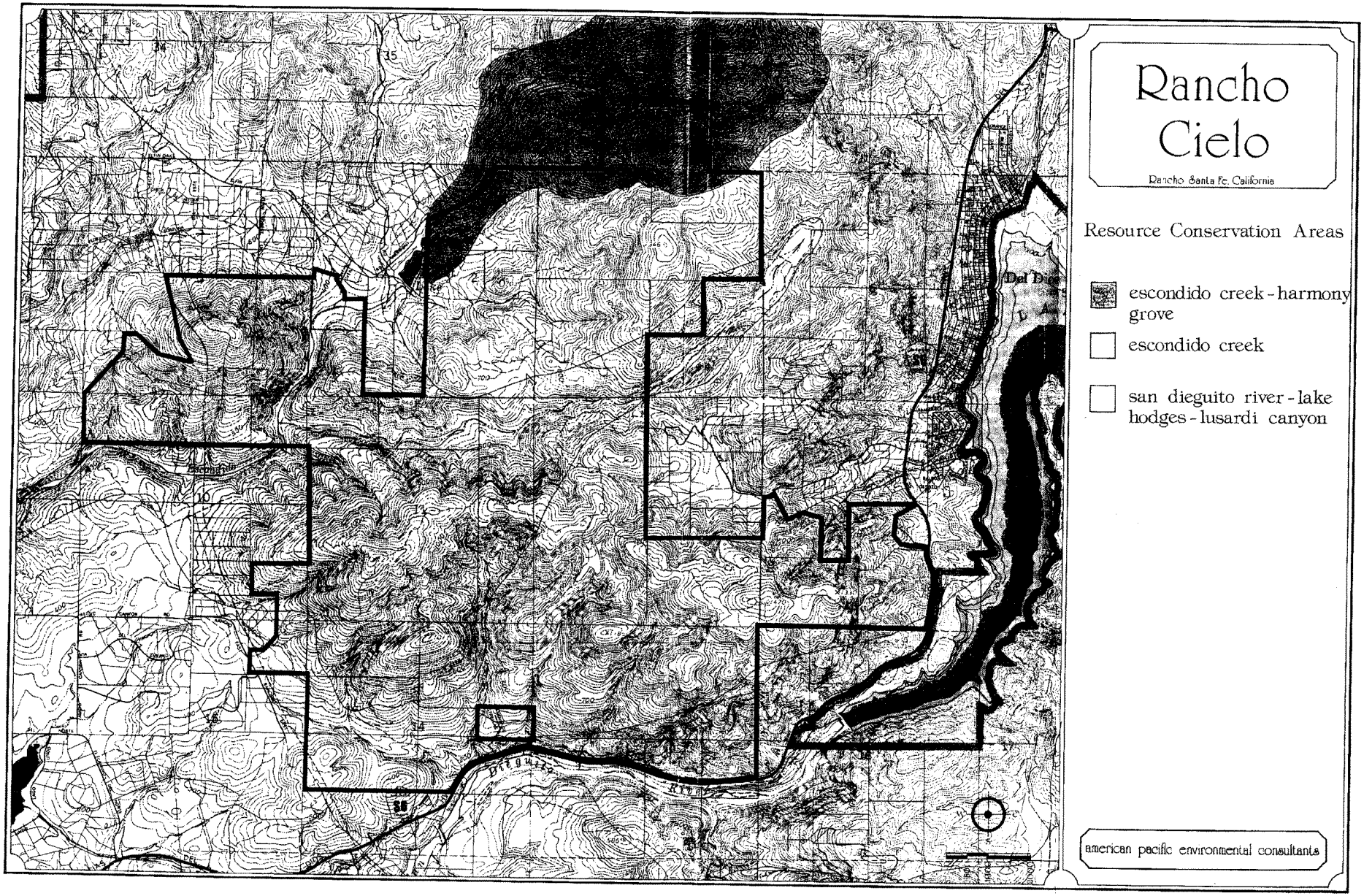
FIGURE 14


Rancho
Cielo
Rancho Santa Fe, California
Resource Conservation Areas
escondido creek - harmony grove
escondido creek
san dieguito river - lake hodges - lusardi canyon
american pacific environmental consultants


Rancho
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Escondido Creek RCA

	Acres	Portion of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	2650	100	---
RCA in Rancho Cielo	601.6	23.5	100
Development Area	204.8	8	34.0
Open Space	396.8	15.5	66.0

Escondido Creek/Harmony Grove Road RCA

	Acres	Portion of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	435.2	100	---
RCA in Rancho Cielo	153.6	35.3	100
Development Area	77.0	17.7	50.1
Open Space	76.6	17.6	49.9

San Dieguito River/Lake Hodges/Lusardi Canyon RCA

	Acres	Portions of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	2726.4	100	---
RCA in Rancho Cielo	76.8	2.8	100
Development Area	7.3	.3	9.5
Open Space	69.5	2.5	90.5

Rancho Cielo

Rancho Santa Fe, California

table 7

Resource Conservation Areas Effected by the Project in Acreage and Percent

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The San Dieguito River/Lake Hodges/Lusardi Canyon RCA primarily targets the perennial creek in Lusardi Canyon. This area also contains a notable riparian woodland along the perennial San Dieguito River, and several sensitive plant species. All of Lake Hodges is included within the RCA in the eastern extent channel and Lusardi Canyon.

The resources of concern within the Lusardi Canyon/San Dieguito River RCA do not occur within the project area. The Lusardi Canyon lies to the south of Rancho Cielo by about two miles. The southern perimeter of Rancho Cielo forms a portion of the northern canyon wall for San Dieguito River RCA. These slopes are Chaparral covered with numerous minor drainages intersecting the river. Del Dios Highway acts as a physical barrier to the continuity of the canyon and basin.

One open space easement exists on the property. It is located atop Paint Mountain (Peak 1192) in the northwest corner of Rancho Cielo. The purpose of this easement is to protect a population of Coast White Ceanothus and an Oak Woodland.

IMPACTS

Specific areas of concern are those biological resources which have been identified as sensitive or unique in San Diego County. The entire property is considered significant with respect to the continuity of the undisturbed vegetation and wildlife habitat. Any development, therefore, would constitute an impact to some degree, on the integrity of the resources present. Those resources which are of value due to the sheer quantity present are the canyons and drainages which serve as corridors for wildlife movement; the scrub vegetation which serves as wildlife habitat, raptor foraging area and habitat for large numbers of rare plants; and the unique absence of disturbance over such a large area. The proposed land use plan and subsequent tentative maps will disrupt this large area and create smaller areas of undisturbed environments. Principally, road extensions, residential construction, riding and hiking trails, all will tend to segment the existing expanse. This impact can only be termed significant due to the level of resources present.

The finding of significant impacts associated with development must be qualified, however, in view of the fact that development is being isolated to areas lacking in significant resources. Approximately 58% of the property is designated open space on the land use map, including all of the canyons

and major drainages, Escondido Creek, all woodland areas, habitat for Sticky Dudleya and Encinitas Baccharis, an eagle nest site, and large continuous blocks of Chaparral containing Coast White Ceanothus and other sensitive plant species.

Potential impacts from the proposed land use of the Specific Plan must be evaluated against the potential impacts of alternative land use plans. Separate development of the 14 existing privately held parcels within the Planning Area would undoubtedly result in a far less consistent open space configuration and a much greater impact to the integrity of the biological resources present. In comparison to alternative unplanned development, the land use plan as proposed will have a positive effect on biological resources.

Impacts on Specific Resources

Removal of vegetation is unavoidable with any project proposal. As proposed, Rancho Cielo would result in potential removal of approximately 1,695 acres of chaparral and scrub vegetation, including portions of populations of Coast White Ceanothus and other less important plant species. This loss of vegetation represents only 42% of the project site, however, and is not considered significant. Vacation of the biological open space easement is proposed with this project. The potential impacts to the resources present within this easement are negligible and are further considered in the context of other resources and impacts.

The populations of Sticky Dudleya and Encinitas Baccharis are located within portions of the proposed open space, and thus, will not be impacted from development. Secondary impacts from erosion or access by residents are expected to be limited and not significant.

Another area of direct impact is the proposed road extensions through the Cielo Creek and Escondido Creek. A bridge or box culvert assembly will be required for these crossings to accommodate peak flow water volumes in the drainage. Impacts on these drainages and the vegetation from access construction is unavoidable, but will be temporary in nature. These impacts are not considered significant if conducted within the road easement areas.

Impacts to the eagle nest sites are associated with the encroachment of development (roads, residences, people) into areas adjacent to the nests. Although not yet proven, it is believed that these birds will not tolerate human activities within close proximity or in locations elevated above the nest. The result of development, it is hypothesized, will be to cause the birds now using the nests to

abandon these sites. Abandonment of one nest would be considered significant if it was a result, either directly or indirectly, from the development within the planning area. The two nests along Del Dios Highway appear to be well isolated from the development area, both spatially and visually. These nests are also inactive at this time. The viability of these nest sites is not expected to be significantly impacted by the planned development proposed in this Specific Plan.

The third nest located to the northeast of the planning area is presently being used by a pair of eagles and is visible from portions of five lots in the extreme northern portion of the planning area. Improvement of these lots is proposed as a latter phase of development and will include road construction, vegetation clearing, and residential construction. The impacts of these activities on the eagle pair presently utilizing the nest are not quantifiable, but are potentially significant if construction activities and residence placement are within the viewshed of the nest. Although it is certainly possible for the nesting birds to habituate to human activities nearby, the level of activity and the birds' adaptability is unknown at this time. The worst case, namely extirpation from the nest, is considered a significant impact on San Diego's eagle population.

Impacts to the water quality of Lake Hodges and Escondido Creek are addressed more specifically in the Water Quality section of this report. The effect of water reuse, however, is not expected to impact biological resources in aquatic areas if adequate treatment is performed. Although additional unforseen impacts may occur, both directly and indirectly, none are expected to exceed a threshold of significance.

MITIGATION

Numerous aspects of the project design have been included to mitigate potential impacts on biological resources which are inevitable with development. Some of the major aspects include clustering of lots in low sensitivity areas; special road design criteria to minimize grading; extensive open space area intended to preserve rare plants, woodland, chaparral, scrub and marsh habitat; and the design for continuous and expansive wildlife habitat and corridors. The sensitivity of the lot design and land use plan are considered adequate to mitigate all expected or potential impacts to regional and local biological resources to a level of insignificance.

One potential impact not mitigated through project design is the impact of development on the active eagle nest to

the northeast of the planning area. This impact may be mitigated through careful placement of residences near the roadway and out of the nest viewshed. To ensure that the future Tentative Map for these few lots accommodates this concern, the map should be evaluated and an open space easement placed over the exposed areas. The easement should be designed to allow for residential construction but ensure residence placement out of the nest viewshed. The value of the nest site should be re-evaluated when the map is submitted to determine the need for special attention. No further mitigation measures are recommended or necessary.

It is noted that riding and hiking trails are proposed within the open space areas. These trails will remain unpaved and of minimal dimensions, and thus, are not anticipated to degrade the quality of the open space as a preservation measure.

ARCHAEOLOGY

PRESENT SETTING

A regional overview of the Rancho Cielo project area should provide a context in which to view archaeological resources located within Rancho Cielo. This overview has been accomplished through record searches at the San Diego Museum of Man and at San Diego State University. Records of sites found within a 77-square-mile region surrounding Rancho Cielo are summarized here as a limited cultural resource inventory which has been accumulated through numerous field surveys over the past years.

Prehistoric cultural resources for the San Diego region have been identified as three distinct horizons or cultural affiliations. These horizons include Paleo-Indian (San Dieguito people) who occupied coastal and inland regions of the county from approximately 12,000 to 7,500 years before present (BP); Early Milling (La Jollan people) who occupied more specialized environs of the coast, including sloughs and bays from 7,500 to 2,000 BP; and, Late Milling (Kumeyaay and Luiseno people) which continued through Spanish contact. Each of these cultural horizons are identified by diagnostic artifacts or resources. Each of these cultural horizons are represented in the Rancho Cielo project area.

Individual archaeological sites can thus be classified by cultural horizon if enough diagnostic resources are present. These sites may be further broken down into site types depending on the type of artifacts present and the possible activities which occurred at these locations. The following table categorizes the 71 previously recorded sites in the 77-square mile study area which exhibited diagnostic artifacts or assemblages. Some sites contained diagnostic characteristics of more than one horizon and are divided among those horizons.

	Cultural Horizon		
Site Type	Paleo-Indian	Early Milling	Late Milling
Campsite	7.5	2	8.5
Village	--	--	4
Lithic Scatter	4	--	8
Milling Station	--	--	28.5
Quarry	2	--	--
Pictograph	--	--	4.5
Isolate	--	--	2
Total (N/71)	13.5	2	55.5
Frequency (%)	19.0	2.8	78.2

In the immediate vicinity of Rancho Cielo, the majority of previously recorded archaeological sites lie near Escondido Creek or San Dieguito River. One such site, known as the Harris site, is located directly south of the subject property on the south side of the San Dieguito River. This site is of regional significance as a type-site for the Paleo-Indian Horizon (San Dieguito) and represents a major habitation area. Habitation sites are also located in the Escondido Creek area. Sites occurring in more rugged topography or greater distances from a water source are generally representative of some extractive type use associated with daily subsistence level chores.

°Rancho Cielo Reconnaissance

Results of the field reconnaissance of the Rancho Cielo property were positive with the identification of 18 archaeological sites and 13 isolates (see Figure 15). Eight out of ten previously recorded sites were located. The remaining two are presumed destroyed or mismapped. A brief tabular summary of the archaeology sites location is provided in Table 8.

To summarize the cultural resources on Rancho Cielo the majority of archaeological sites are located along the main east-west trending ridgeline. These are primarily quarry sites or lithic scatters associated with metavolcanic rock outcrops. Cultural horizons are not determined for most sites due to the lack of diagnostic artifacts; however, it is strongly believed that these sites are associated with the early cultures of the Paleo-Indian and Early Milling Horizon. The remaining archaeological sites not located on ridge tops or adjacent slopes are located in the drainages within Rancho Cielo. These sites are characteristically lithic scatters or milling stations. Isolates occur in numerous locations on Rancho Cielo.

Significance of resources must be evaluated from a cumulative as well as individual perspective. In each case, consideration is given to the potential for data recovery and the significance of the information collected for future research and heritage value. Sixteen of the archaeological sites observed on the project site are considered significant. Each of these sites are classified as either lithic scatter or quarry for site type. The two milling stations (SDi-7955, 7981), and all isolates (RC-2-6; 10; 11; 14-20; 24-30) have been fully documented and are not expected to contain additional valuable cultural information.

FIGURE 15

LIMITED DISTRIBUTION

(on file at the Environmental Analysis Division, County of San Diego)

RESOURCES*	SITE TYPE	DESCRIPTION	CULTURE HORIZON
SDi-7956/ W-156B	Quarry	Large dense scatter of fine-grained volcanic detritus & tools in a region of outcropped volcanic rock	--
SDi-5498/ W-1647 **	Lithic Scatter	Large scatter of flakes	--
SDi-5815/ W-1923A & B	Quarry	Dense outcroppings of volcanic breccia, andesite, and felsite. Region scattered w/detritus, observable as 2 loci. Great difficulty w/artifact identification	--
SDi-7123/ W-2062	Quarry	Thinly scattered quarry area w/flakes, debitage & quarry scars; no finished tools	--
SDi-7118/ W-1695	Quarry	Quarry, tool manufacturing area, & possible floral/ faunal processing	--
SDi-147	Lithic Scatter	Light scatter of felsite and andesite flakes and core fragments	--
SDi-148	Lithic Scatter	Light scatter of felsite and andesite flakes	--
SDi-7953	Lithic Scatter	Highly disturbed hilltop w/a small vestige of flaked, fine-grained volcanic detritus	--
SDi-7954	Lithic Scatter	Light scatter of andesite flakes (7) along stream-bed	--
SDi-7955	Milling Station (Isolate)	Single bedrock milling slick on outcrop overlooking highland transverse valley	Late Milling

RESOURCES*	SITE TYPE	DESCRIPTION	CULTURE HORIZON
RC-17 **	Isolate	Andesite flake	--
RC-18 **	Rock Ring (Sleeping Circle)	Outer rock ring 8 ft. diameter. Inner rock ring 1 ft. diameter.	--
RC-19 **	Isolate	5 flakes, 1 hammerstone/ core, 1 chopper	--
RC-20 **	Isolate	8 basalt flakes, 1 chopper	--
RC-2	Isolate	Flake scraper	--
RC-4	Isolate	Chert projectile point fragment	Late Milling
RC-5	Isolate	2 andesite flakes in region measuring 50 meters in diameter	--
RC-6	Historic Cairn	Approximately 2.5 ft.in height constructed of cobbles without any deed or storage container	Historic
RC-10	Isolate	Andesite flake	--
RC-11	Isolate	Andesite flake	--
RC-24	Isolate	Triangular quartz projectile point	--
RC-25	Isolate	1 felsite and 1 andesite flake	--
RC-26	Isolate	2 felsite flakes	--
RC-27	Isolate	3 felsite flakes	--
RC-28	Isolate	2 andesite flakes ande water-worn cobbles	--
RC-29	Isolate	4 felsite flakes	--
RC-30	Isolate	4 felsite flakes	--

* Site designations are as follows: SDi/W-, numbers of permanent record; RC-, temporary system employed during the current investigation.

** Not relocated in current field investigation.

RESOURCES*	SITE TYPE	DESCRIPTION	CULTURE HORIZON
SDi-7957	Quarry	Quarry scarred bedrock outcrops, detritus and cores on knolltop volcanic exposure	--
SDi-7958	Quarry	Thinly scattered quarry area w/flakes, debitage	--
SDi-7959	Lithic Scatter	Scatter of andesite flakes, utilized flakes and percussion tools	--
SDi-7960	Lithic Scatter	Light scatter of andesite flakes	--
SDi-7961	Lithic Scatter	Low density scatter of felsite and quartz flakes, cores, and 1 mano fragment	--
SDi-7962	Lithic Scatter	Light scatter of felsite flakes, projectile point fragment, and historic china and oyster shell fragments	Historic
SDi-7963	Lithic Scatter	Light scatter with 10+ felsite flakes and 2 felsite scraper fragments	--
SDi-7980	Lithic Scatter	Med. to high density scatter w/ 15+ domed scrapers, 2 bifacial choppers, 3+ hammerstones, 8+ unifacial scrapers, 200+ felsite & andesite flakes	Paleo-Indian
SDi-7981	Bedrock Milling Station	Metavolcanic outcrop w/ 1 mortar and 1 slick	--
RC-14**	Lithic Scatter	Light scatter of andesite flakes	--
RC-15	Isolate	Andesite flake	--
RC-16**	Isolate	Andesite flake	--

Site	Phase I			Phase II*
	Surface Mapping	Surface Collection	Excavation Units ($1m^2$)	
SDi-7956	yes	1-5%	8	definite
SDi-5815	yes	5-25%	8	possible
SDi-7123	yes	5-25%	8	possible
SDi-7118	yes	5-25%	8	probable
SDi-147	yes	100%	2	possible
SDi-148	yes	100%	2	possible
SDi-7957	yes	5-25%	4	possible
SDi-7958	yes	25-100%	4	possible
SDi-7953	yes	100%	2	possible
SDi-7954	yes	100%	2	possible
SDi-7959	yes	100%	2	possible
SDi-7960	yes	100%	2	possible
SDi-7961	yes	25-100%	2	possible
SDi-7962	yes	25-100%	2	possible
SDi-7963	yes	25-100%	2	possible
SDi-7980	yes	1-25%	8	probable
SDi-5498	---	---	---	none (isolate, disturbed)
SDi-7955	---	---	---	none (milling station)
SDi-7981	---	---	---	none (milling station)
Isolates (RC)	---	---	---	none (isolates)

*Potential for Phase II mitigation is estimated here. Actual measures may be preservation, data recovery or none.

Rancho Cielo
Rancho Santa Fe, California

table 9

Proposed Phase I Mitigation Measures

IMPACTS

Impacts of the Rancho Cielo Specific Plan and subsequent development projects are associated with potential loss of those archaeology sites which contain lithic scatters or quarry artifacts. Impacts may be incurred through grading, construction, trenching, accelerated erosion, and other activities which may accompany site development and domestic occupancy. Potential significant impacts may be incurred through loss or damage to cultural resources of the 16 lithic scatters or quarry sites. Impacts to milling features or isolate sites are not considered significant.

These significant impacts can be further analyzed with respect to the proposed land use plan which delineates areas of open space, street right-of-ways, and residential and commercial uses. Four of the archaeological sites and one isolate (RC-2) are located within the proposed open space. Of these, two are considered significant (SDi-7954 and SDi-7956). The remaining two sites are isolates or milling features (SDi-7955 and SDi-7981). All other archaeological sites are located within areas proposed for development.

Obviously the area proposed for development poses more immediate potential impacts than does the open space. All the archaeological sites observed, however, are considered to be subject to potential adverse impacts due to the present lack of adequate protection.

MITIGATION

Mitigation measures are recommended here to facilitate protection of potential cultural information which may exist in the 16 lithic scatter and quarry sites found on the property. No further mitigation measures are considered necessary for those sites consisting of isolates or milling features. These sites have been documented and recorded where appropriate and do not justify further mitigation.

For the sixteen sites requiring mitigation measures, the extent of observed surface resources and the potential for subsurface resources are the primary factors used for determining the need for testing and/or preservation. These measures are outlined in Table 9. In each case, surface mapping, surface collection, and test excavation units are recommended.

This limited test program is proposed to establish the extent of cultural resources present at each site prior to designing open space easements or additional data recovery programs. This approach may also determine that no additional mitigation is necessary.

Upon completion of the Phase I mitigation, open space easements may be applied to preserve those sites which are considered to contain additional cultural data. The other alternative available if open space is not feasible, as is the case for many of the Rancho Cielo sites, is a Phase II mitigation program, designed on data recovered in Phase I. Subsequent phases may be required depending on Phase II results. These test programs may be implemented for individual sites when Tentative Maps or other permits are submitted. Typically, this type of mitigation is required as a condition of approval for discretionary permits.

In addition to the phased test programs, it may be necessary to examine those sites which are proposed for preservation, to ensure that they do not encroach into areas proposed for development. This may require the placement of accurate boundary markers and surveying of the archaeology site.

No further mitigation measures are recommended or considered necessary. It is emphasized, however, that results of the Phase I testing may require additional mitigation measures such as preservation and/or data recovery programs.

TRAFFIC CIRCULATION

PRESENT SETTING

Traffic circulation is addressed at two levels for the project area: planning for future circulation needs, and determining capacities of existing facilities. Both are important because the adequacy of the circulation system is essential for growth, and type of roads and their locations greatly affect the environment of the community in which they serve.

◦Planning Considerations

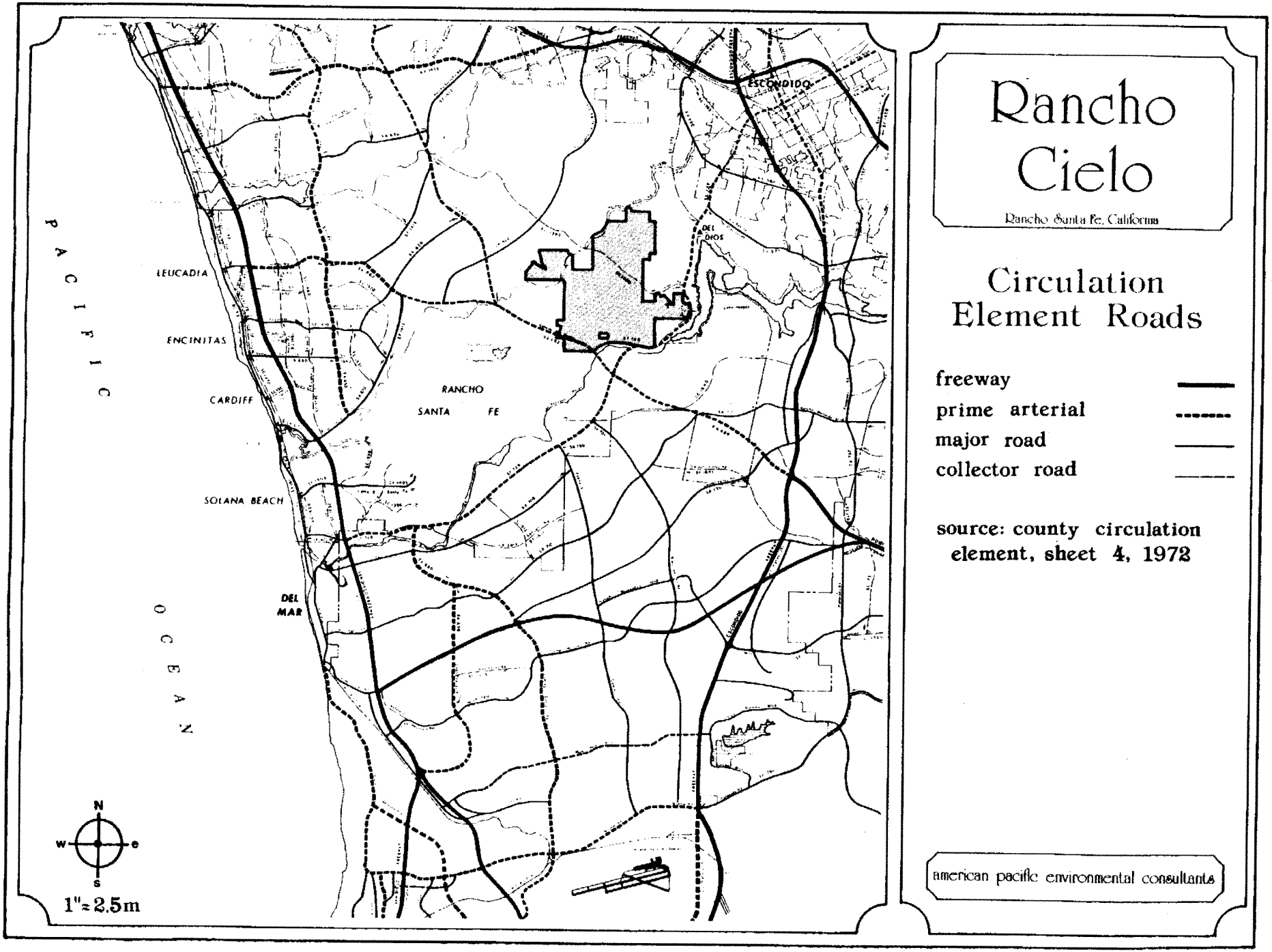
The Circulation Element of the General Plan (1972) is the primary instrument used for long-range circulation planning in the County. The Element consists of a text describing the intent of the planning document, a bicycle network plan, and a set of nine maps for the County. Sheet Four shows circulation routes for the San Dieguito/North County Metropolitan area. Circulation Element Roads are those roads which are planned to provide the base circulation system for the area. As development occurs along these roads, construction or improvement is required in accordance with the road design shown in the Circulation Element. Those Circulation Element Roads in the project area are shown in Figure 16.

The Rancho Cielo property contains frontage or access on four Circulation Element Roads:

a. Del Dios Highway (SF-728). This road is designated Prime Arterial and Major Road, the purpose of which is to satisfy requirements for mobility, intraregional travel, and access between the coastal communities and Escondido. Del Dios Highway, together with Paseo Delicias, its western counterpart, and Valley Parkway, its eastern counterpart, provides interconnection between I-5 and I-15 with roadway conditions consisting of two lanes and an average speed of 50 miles per hour. Another important link to this system is Via Rancho Parkway. This Major Road connects Del Dios Highway with I-15 in a direct east-west route south of the City of Escondido. The average speed limit is 45 miles per hour with two lanes.

b. Camino Del Norte (SA-680). This prime arterial, as yet not constructed, connects the coastal communities of Leucadia, Encinitas, and Carlsbad with the inland communities of Rancho Bernardo and Poway. This road is intended to provide mobility and major

FIGURE 16



Rancho Cielo

Rancho Santa Fe, California

Circulation Element Roads

freeway
prime arterial
major road
collector road

source: county circulation element, sheet 4, 1972

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intraregional circulation in the mid-San Dieguito area. Portions of this road exist north of Del Dios Highway as a narrow, winding two-lane collector. This road will improve Del Dios Highway, Olivenhain and Encinitas.

c. Mt. Israel Road (SC-1380). This collector road provides a link between the southwest San Marcos/ La Costa area and Del Dios Highway. This route provides direct east-west circulation for residents living within the road's vicinity. Presently only portions of this road have been completed and through-traffic circulation does not exist. In hilly terrain and low density development north of Del Dios Highway this road is narrow, with sharp turns and steep grades, serving the few residents in the area.

d. Harmony Grove Road (SC-1370). This collector road provides north-south circulation between the communities of Elfin Forest/La Costa and the City of Escondido. Harmony Grove Road, Elfin Forest Road (Mt. Israel Road) and Questhaven Road are the only roads in the area between Del Dios Highway and San Marcos which provide for the circulation requirements of those residents living in that area. The collector designation applies not only to Harmony Grove Road but also to Elfin Forest Road which comprises the western extension of Harmony Grove Road between Elfin Forest and Rancho Santa Fe Road. Elfin Forest Road is fully improved while Harmony Grove Road remains a narrow, winding roadway.

It should be noted that these roads may change in status and/or location during the General Plan Amendment process currently underway in GPA-80-CE.

°Capacity and Level of Service

Traffic volumes are recorded in Table 10 for all roads in the project area. In addition to these recorded volumes, trips generated by all approved projects in the vicinity were considered:

Fairbanks Ranch (620 dwelling units; 6820 daily trips)
Lomas Serenas (306 dwelling units; 2270 daily trips)
El Rancho Grande (84 dwelling units; 840 daily trips)
San Marcos Landfill (150 daily trips)

Trip distribution for each of these projects was determined and added to the recorded volumes to calculate capacity and level of service. A breakdown of trip distribution of these approved projects is shown below.

TRAFFIC VOLUMES

Location	Source	Average Daily Traffic (ADT)	Peak Hour Volumes	Date
Del Dios Highway				
S/O Via Rancho	(CPO)	7,700	*770	5/79
N/O " "	(CPO)	11,700	*1170	5/79
N/O " "	(DOT)	6,800	720 @ 1650	12/78
N/O Rancho Dr.	(DOT)	5,753	750 @ 1650	7/77
S/O " "	(DOT)	9,154	930 @ 1650	6/79
E/O Via de La Valle	(DOT)	7,420	770 @ 1650	9/78
Paseo Delicias				
E/O Via de la Valle	(DOT)	3,510 WB	240 @ 1575	3/77
W/O " " " "	(DOT)	2,280 EB	240 @ 1525	3/77
E/O La Valley Planta	(DOT)	7,420	770 @ 1650	9/78
W/O La Femontia	(DOT)	1,910 EB	210 @ 1600	/75
Valley Parkway				
S/O Avenida Del Diablo	(DOT)	14,600	1440 @ 1675	2/77
S/O " " "	(CPO)	11,700	*1170	5/79
S/O " " "	(ESC)	4,050 NB	424 @ 1600	1978
S/O " " "	(ESC)	7,600 WB	*760	1978
S/O " " "	(ESC)	7,500	*750	1978
N/O " " "	(CPO)	11,700	*1170	5/79
N/O " " "	(ESC)	7,600 SB	736 @ 1700	1978
S/O I-15	(CPO)	11,000	*1100	5/79
N/O "	(ESC)	15,200	*1520	1976
S/O 9th	(ESC)	10,000	*1000	1977
Via Rancho Parkway				
E/O Del Dios	(CPO)	3,700	*370	5/79
E/O " "	(DOT)	3,710	410 @ 725	12/78
E/O " "	(ESC)	4,000	*400	1977
E/O Felicita	(CPO)	4,700	*470	5/79
E/O I-15	(CPO)	10,300	*1030	5/79
E/O "	(ESC)	14,590	*1459	1977
W/O "	(ESC)	4,660	*466	1977
W/O Quiet Hills Dr.	(DOT)	3,960	440 @ 725	12/78
Rancho Santa Fe Rd.				
N/O Questhaven	(CPO)	8,400	*840	5/79
S/O "	(CPO)	3,800	*380	5/79
N/O Encinitas Blvd.	(DOT)	5,380	480 @ 1650	7/78
S/O Linda Vista	(DOT)	7,820	860 @ 1550	5/79
N/O Redwing (SM)	(DOT)	5,594	850 @ 700	9/76
S/O San Marcos Blvd.	(SM)	11,455	*1146	8/79
N/O " " "	(SM)	10,230	*1023	1/77
Bridge @ Highway 78	(SM)	24,000	*2400	1979

TRAFFIC VOLUMES

Location	Source	Average Daily Traffic (ADT)	Peak Hour Volumes	Date
Elfin Forest Rd.				
E/O Questhaven	(DOT)	426	70 @ 1200	8/76
E/O San Marcos City Limits	(DOT)	643	70 @ 1275	8/78
Questhaven Rd.				
E/O Carlsbad City Limits	(DOT)	580	100 @ 1000	8/76
E/O San Marcos City Limits	(DOT)	970	120 @ 1325	8/78
E/O Rancho Santa Fe Rd.	(SM)	1,440	96 @ 1500	10/79
Harmony Grove Rd.				
W/O Country Club Lane	(DOT)	610	70 @ 1525	2/78
E/O Kauana Loa Dr.	(DOT)	1,330	140 @ 1550	2/78
Via de la Valle				
S/O Del Dios	(CPO)	5,200	*520	5/79
S/O Paseo Delicias	(DOT)	1,960	270 @ 1650	3/77
Country Club Dr.				
N/O Kauana Loa Dr.	(DOT)	790	90 @ 1600	2/78
I-15				
N/O Via Rancho Pkwy.	(CPO)	47,400	*4740	5/79
N/O " " "	(CLT)	46,000	----	1/78
N/O " " "	(CLT)	46,000	----	3/79
S/O " " "	(CPO)	55,800	*5580	5/79
S/O " " "	(CLT)	53,000	----	1/78
S/O " " "	(CLT)	56,000	-----	3/79
NB offramp	(CLT)	6,780	840 @ 1625	3/79
			440 @ 1100	3/79
NB onramp	(CLT)	1,730	160 @ 1575	3/79
			150 @ 0725	3/79
SB offramp	(CLT)	1,516	140 @ 1450	3/79
			210 @ 0700	3/79
SB onramp	(CLT)	5,810	370 @ 1525	3/79
			880 @ 675	3/79

* = Peak hour volume estimated @ 10% ADT
CPO = Comprehensive Planning Organization
SM = City of San Marcos
ESC = City of Escondido
DOT = County of San Diego, Department of Transportation
CLT = Caltrans

NOTE: Volumes are for two-way traffic unless otherwise noted.

Rancho Cielo
Rancho Santa Fe, California

Present Traffic Volumes in the Project Vicinity

table 10

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Project	El Camino Del Norte	Downtown Rancho Santa Fe	Via de la Valle	Paseo Delicias	Del Dios Hwy. (S/O Via Rancho)	Via Rancho Pkwy. (E/O Lomas Serenas	Del Dios Hwy. (N/O Via Rancho
Fairbanks Ranch	negligible	680	5120	1020	1020	918	102
Lomas Serenas	23	60	144	204	227	227	negligible
El Rancho Grande	84	73	137	210	546	491	55
Totals	107	813	5401	1434	1793	1636	157

Levels of service (LOS) were calculated for all roadway sections based on peak-hour volume to capacity ratios. These factors represent "worst case" conditions during an average weekday. Levels of services are described below as set forth in the Highway Capacity Manual (Highway Research Board, 1965).

Level of Service A describes a condition of free flow, with low volumes and high speeds. Traffic density is low, with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay.

Level of Service B is in the zone of stable flow, with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable, with a low probability of traffic flow being restricted. The lower limit (lowest speed, highest volume) of this level of service has been associated with service volumes used in the design of rural highways.

Level of Service C is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained, with service volumes perhaps suitable for urban design practice.

Level of Service D approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Drivers have little freedom to maneuver, and comfort and convenience are low, but conditions can be tolerated for short periods of time.

Level of Service E cannot be described by speed alone, but represents operations at even lower operating speeds than in Level D, with volumes at or near the capacity of the highway. At capacity, speeds are typically, but not always, in the neighborhood of 30 mph. Flow is unstable, and there may be stoppages of momentary duration.

Level of Service F describes forced flow operation at low speeds, where volumes are below capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. The section under study will be serving as a storage area during parts or all of the peak hour. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of the downstream congestion. In the extreme, both speed and volume can drop to zero.

All roads in the project vicinity operate at LOS A, B or C. These service levels are acceptable free or stable road conditions. Service Level D represents tolerable but incovenient congestion and delay and Service Level E represents capacity traffic volumes with unstable flows and stoppages.

Intersection analyses were conducted for T-intersection capacities at the Via Rancho Parkway/Del Dios Highway/Valley Parkway intersection and at the Mt. Israel/Del Dios Highway and Via Ambiente/Del Dios Highway (proposed) intersections. The Via Rancho Parkway/Del Dios Highway/Valley Parkway intersection is currently operating at acceptable levels of service except for left turns from Via Rancho Parkway onto Del Dios Highway (LOS E). Long turning delays during peak hour volumes are characteristic for traffic entering Del Dios Highway. Traffic entering Via Rancho Parkway will experience little or no delay (LOS A).

T-intersections on Del Dios Highway experience LOS A and B for right turns onto Del Dios Highway from the Via Ambiente and Mt. Israel Road locations respectively. Left turns from Del Dios Highway against oncoming traffic into either access road will experience little or no delays with LOS A at both intersections. Very long delays and LOS E is expected, however, for left turns onto Del Dios Highway. This results from traffic volumes and 55 miles-per-hour traffic speeds along Del Dios Highway.

°Summary

To summarize, the existing traffic circulation system serving the project area is light and dispersed with Del Dios Highway and its east and west components serving as the primary distribution link between Escondido and the coastal communities within the San Dieguito area. Traffic volumes generally do not reach or exceed capacity for roadways and there is only limited need for access controls under present conditions.

There are a few areas, however, which appear to be sensitive to increasing traffic volumes and development: Mt. Israel Road, T-intersections on Del Dios Highway (Mt. Israel Road and Via Ambiente - LOS E), and the Via Rancho Parkway/Del Dios Highway/ Valley Parkway intersection (LOS E). Since Mt. Israel Road will be used as one access road to the proposed development, its existing low capacity would be sensitive to the development. Each of the intersections currently experience long delays for turns. Additionally, Via de la Valle is currently experiencing unstable traffic flow conditions (LOS E).

Other projects which need to be considered but are not approved as yet are the two regional shopping centers proposed in Escondido and Penasquitos, and the future extension of SA-680 from Encinitas to Rancho Bernardo. All of these projects will greatly affect traffic volumes and circulation patterns in the San Dieguito area, and the project vicinity in particular. The completion of SA-680 is expected to have a positive effect on San Dieguito's circulation by providing a more direct east-west route between inland and coastal communities. The two shopping centers, however, will have adverse effects due to the increased traffic attracted to the centers. Access to these centers will be over Del Dios Highway, Via Rancho Parkway and SA-680 (pending construction).

IMPACTS

Impacts from the Rancho Cielo Specific Plan on traffic circulation are expected to be both positive and negative. The positive impacts are associated with the proposed uses within Rancho Cielo which will decrease external vehicle traffic from project residents and from area inhabitants which will patronize these facilities.

The neighborhood commercial center proposed at the intersection of Del Dios Highway and Via Ambiente will provide goods and services for local residents, thereby reducing the number of trips into Escondido and the coastal areas. This reduction will not be substantial but is nevertheless positive by incrementally reducing overall vehicular activity in the project area.

Negative impacts are associated with the increased vehicle trips generated by residents of the proposed project and trips required for servicing the two commercial areas. Both short-term impacts and long-term impacts can be expected with project implementation. Short-term impacts are those which will be incurred during the construction phases of the project, whereby heavy construction vehicles and materials trucks will be active. The effect of these heavy vehicles will be to slow traffic movement on Del Dios Highway and a possible reduction in level of service from C to D The actual impact is difficult to assess, but due to the short-term nature of this phase, the impacts are not expected to be significant.

Long-term impacts are two-fold: impacts to regional circulation planning in San Dieguito, and impacts incurred as a result of increased vehicular trips beginning with project approval and continuing indefinitely for the life of the community. Impacts to planning are directly related to the status of Circulation Element Roads SA-680 and Mt. Israel Road. Rancho Cielo does not propose construction or improvement of any portion of SA-680 and will improve Mt. Israel Road as necessary to accommodate the increase in traffic. Mt. Israel Road will not be extended to Harmony Grove Road. Right-of-way will be granted for SA-680 but not for an extension of Mt. Israel Road. Impacts to circulation planning are considered significant if the project does not improve these roads as necessary at the direction of the Department of Transportation or the Board of Supervisors.

Direct long-term impacts associated with increased vehicle trips are focused on here to determine any changes in traffic flow or safety factors on specific roads in the project area.

◦Trip Generation

A trip generation factor of 10 trips per dwelling unit was established after reviewing the factors currently used by the Cities of Escondido, Vista, San Marcos, and San Diego; the County of San Diego; CPO/Caltrans; and Federhart and Associates for Fairbanks Ranch. This 10-trip factor can be derived by trip purpose as follows:

Trip Purpose	Daily Trips Generated
Work	2
Shopping	2
School/Recreation	4
Service	2
Total daily trips per dwelling unit	10

This factor is compatible with those used by other jurisdictions and is believed to be representative of the average trip generation rate of residences in a rural community. Thus, with 892 proposed dwelling units, an estimated 8920 one-way daily trips would be generated from residents of the project site.

In addition to trip generation by residents, vehicle trips will also be generated by clientele, service, and maintenance of the two commercial areas; and the water and sewer facilities. For the purpose of analysis, trip generation factors were estimated for each use.

Commercial trip generation rates in San Diego range from 400 to 1700 trips/acre. A rate of 500 trips/acre is assigned to the two commercial centers due to the rural nature of the project area. The two commercial sites (five and ten acres each) will contribute an estimated 7500 daily trips to the project. Of these, approximately 3000 trips will originate within Rancho Cielo and 4500 will be externally based. The majority of these external trips (approximately 90%) will occur on Del Dios Highway.

Service and maintenance trips for the equestrian center, heliport, fire station, and water and sewer facilities are included within the total trip generation for the 892 units. A factor of five percent is established for these service trips (8920 trips x (.05) - 446 trips).

Total vehicle trips which may be expected at project completion include trips resulting from Rancho Cielo residents, commercial center patronage and service requirements, and facilities service and maintenance.

Trip Source	# Units	Trips/Unit	Total Trips
Rancho Cielo residents	892	10	8920
Rancho Cielo Village Commercial Center	(5 ac)	1500	1500
Del Dios Highway Commercial Center	(10 ac)	3000	3000
TOTAL PROJECT RELATED TRIPS			13,420

◦Trip Distribution

Trips generated by the project may be divided into two groups for impact analysis: internal and external. Internal trips may be broken down by land use for trips generated by Rancho Cielo residents.

Land Use Type	Trips Generated	% Total Trips
Neighborhood commercial	1784	20
Village Center	1338	15
Other (including equestrian center, heliport)	446	5
Totals	3568	40

An estimated 40% of all trips made by Rancho Cielo residents will remain within the project boundaries. The remaining external trips include 5352 trips made by Rancho Cielo residents, and 4500 trips for the two commercial centers. Total external distribution of project related trips is anticipated to approximate 9852 daily trips over roads serving the project site.

External trip distribution has been tabulated below for all external trips (see Figure 17).

Trip Origin/Destination	Resident Trips	Commercial Trips	Total Trips	% Total Trips
1. Escondido/I-15 to San Diego via Del Dios Highway, Via Rancho Parkway, and Valley Parkway.	3479	2925	6404	39
2. La Jolla/I-15 to San Diego via Paseo Delicias, Via de la Valle, and Linea del Cielo.	1338	1125	2463	15
3. Rancho La Costa/ Beaches via Elfin Forest Road, Questhaven Road	428	360	788	5
4. Escondido via Harmony Grove Road	107	90	197	1
Totals	5352	4500	9852	60

The increase in trips over the project area roads is shown schematically in Figure 18 and presented numerically in Table 9.

°Roadway Impacts

The level of impact for each affected roadway can be seen in the peak-hour level of service designations. Some of the roadways will operate at a lower level of service than at present. In the peak hours, project-generated trips will contribute to "approaching unstable flow" conditions (LOS D) on Del Dios Highway, "forced flow" conditions (LOS F) on Mt. Israel Road (if left unimproved), and "unstable flow" conditions (LOS E) on Via de la Valle. While there will be a substantial increase in traffic on Del Dios Highway north of Mt. Israel Road, the projected traffic volume will be lower than the LOS E capacity of the road and the impact is not considered significant. Once improved to Light Collector standards, Mt. Israel Road will operate at acceptably high levels of service. Rancho Cielo will contribute an estimated 93 peak hour trips (6 percent of the pre-development volume) over Via de la Valle at full build-up. This increase is slight and not considered significant in proportion to existing traffic volumes.

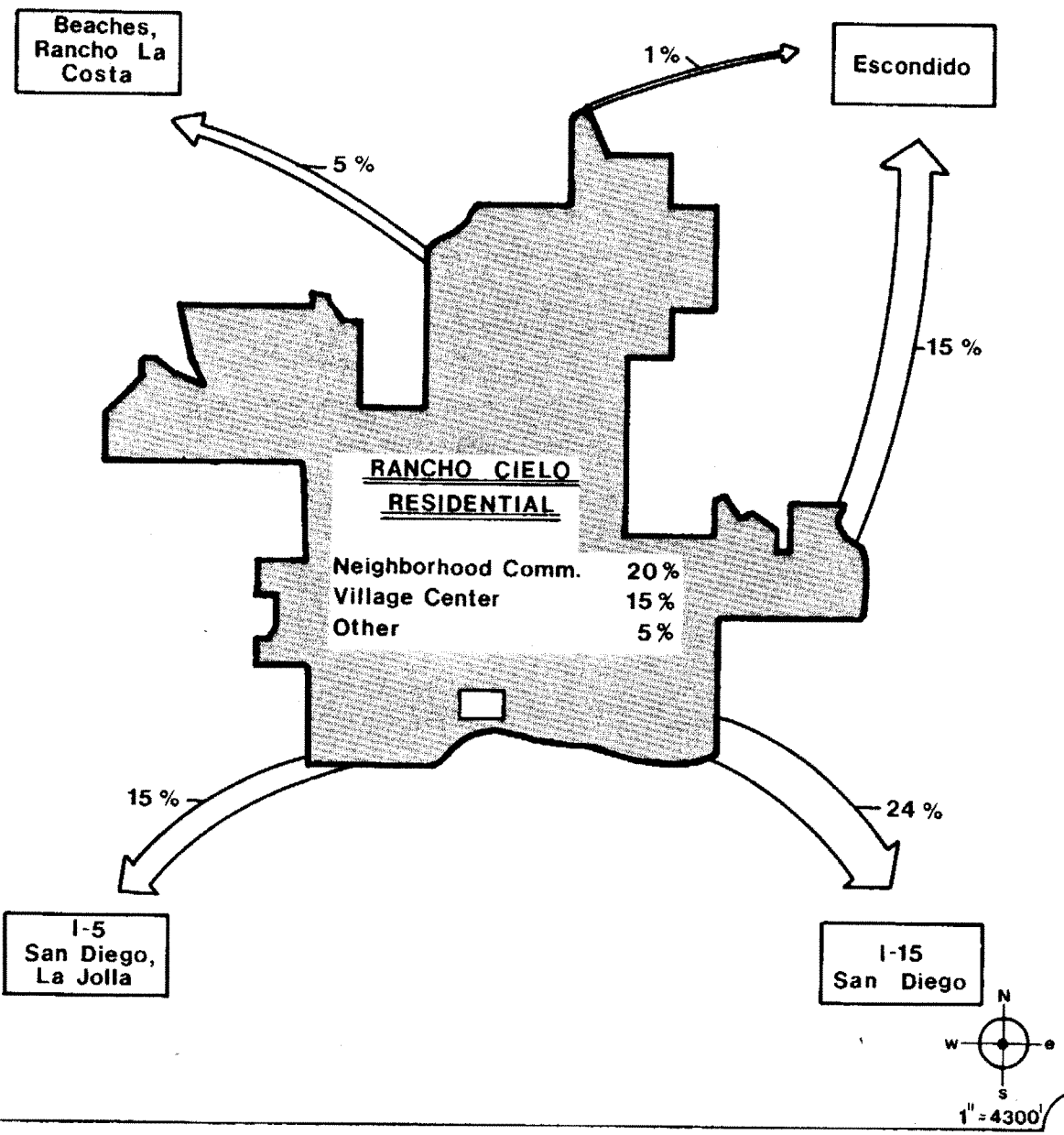
°Intersection Impacts

Intersection analysis indicates LOS A and C for left turns from Del Dios Highway and right turns onto Del Dios. Highway condition is still acceptable requiring short or no turning delays. Left turns onto Del Dios Highway from Mt. Israel Road or Via Ambiente will experience very long delays with LOS E and F.

Intersection	Turn Approach	Levels of Service
Via Ambiente/Del Dios Highway	Rt. onto Del Dios	C
	Lt. onto Via Ambiente	A
	Lt. onto Del Dios	E
Mt. Israel Road/ Del Dios Highway	Rt. onto Del Dios	C
	Lt. onto Mt. Israel	C
	Lt. onto Del Dios	E
Via Rancho Parkway/ Del Dios Highway/ Valley Parkway	Rt. onto Valley Parkway	D
	Lt. onto Via Rancho	C
	Lt. onto Del Dios	E

The Via Rancho Parkway/Del Dios Highway/Valley Parkway intersection will, however, experience a decrease in reserve capacity with LOS E. An estimated 74 left turns from Via Rancho Parkway onto Del Dios Highway are expected from the project during the afternoon peak hour. The result of LOS E (failure) conditions may exper-

FIGURE 17



Rancho Cielo

Rancho Santa Fe, California

Total Trip Distribution

external	60%
internal	40%

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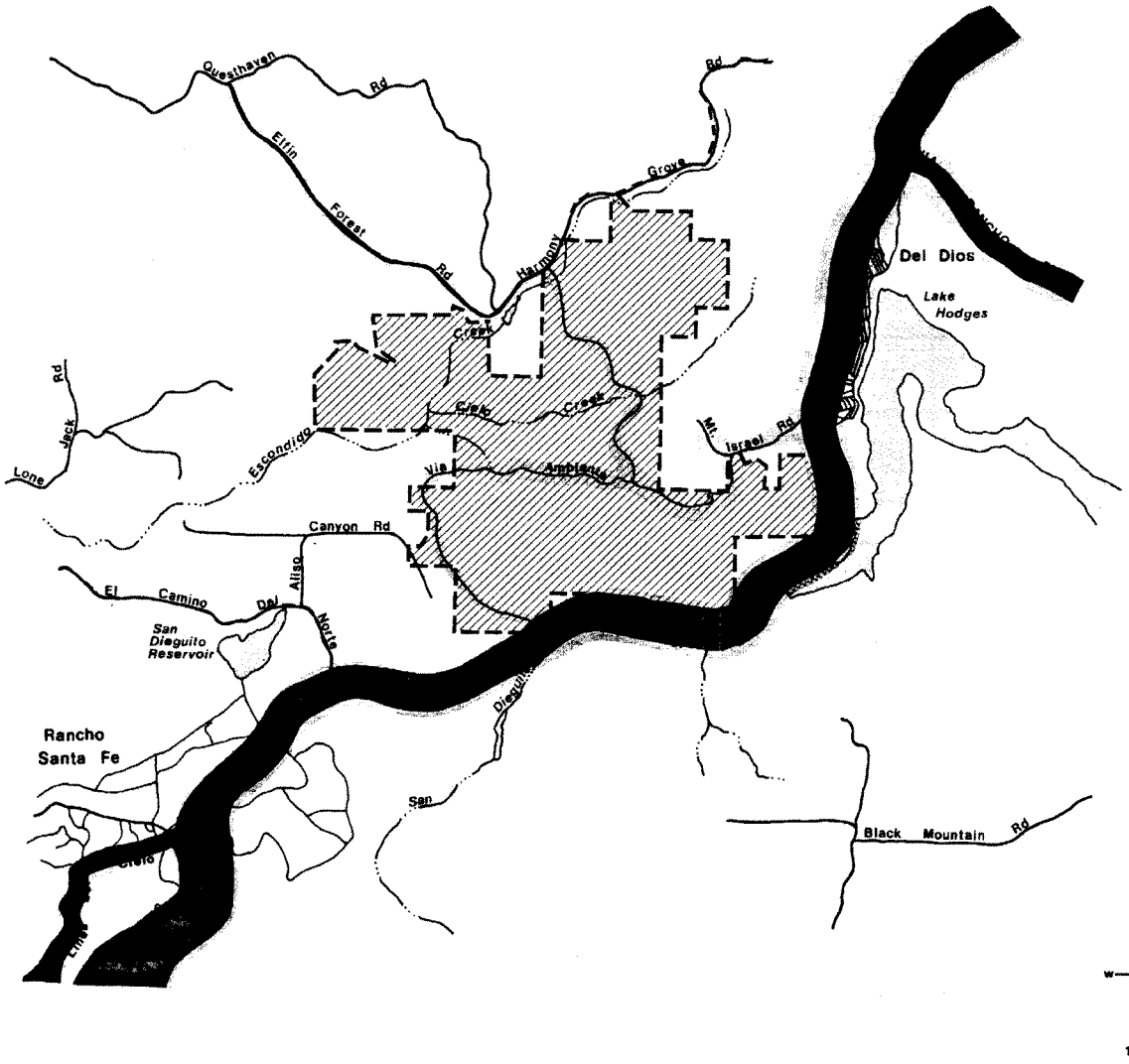
FIGURE 18



Rancho Cielo

Rancho Santa Fe, California

Traffic Volume and Distribution

pre-development adt*

post-development adt*

15
10 adt*
5 (in thousands)

_____ less than one thousand

* average daily trips

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ROAD	PEAK HOUR VOLUME (PHV) (Both Directions; 10% total ADT) Pre-project	Post-project	% PHV Due to Project	LOS E Capacity (Both Directions)	Peak Hour Volume/Capacity Pre-project	Post-project	Peak Hour Level of Service Pre-project	Post project
MT. ISRAEL ROAD	20	668	97%	529	.04	1.25	A	F[2]
DEL DIOS HIGHWAY (N. of Mt. Israel Rd)	949	1552	39%	1700	.56	.91	C	D
Via Rancho Pkwy.	534	901	41%	1700	.31	.53	B	C
Valley Pkwy.	1186	1421	17%	1700	.70	.84	C	D
DEL DIOS HIGHWAY (between Mt. Israel & Via Ambiente)	1000	1330	25%	1700	.59	.78	C	D
(S. of Via Ambiente)	949	1181	20%	1700	.56	.69	C	C
Paseo Delicias	885	1071	17%	1666	.53	.64	C	C
El Camino del Norte	64	110	42%	1000	.06	.11	A	A
Via De la Valle	1540	1633	6%	1666	.92	.98	E	E
Linea del Cielo	500	593	16%	1000	.50	.59	C	C
QUESTHAVEN ROAD	110	185	40%	1666	.07	.11	A	A
HARMONY GROVE (between Quest-Haven & project access road)	80	218	63%	1000	.08	.22	A	A
HARMONY GROVE	66	84	21%	500	.13	.17	A	A

[1]Determined from Highway Capacity Manual, Special Report 87 (Washington, D.C., Highway Research Board, 1965).

[2]Capacity can be increased by improving Mt. Israel Rd. (consistent with the County Circulation Element) to Light Collector standards, resulting in much higher levels of service.

Rancho Cielo

Vehicle Distribution over Project Area Roads

table 11

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ience very long delays and extreme congestion. This reduction in Level of Service is considered a significant impact to traffic safety and circulation in the project vicinity. The increased traffic volumes at this intersection will also cause a decrease in Level of Service for right turns onto Valley Parkway (LOS B to LOS D). This is significant with respect to the overall inadequacy of this intersection to handle existing and future volumes.

In summary, potential significant traffic circulation impacts may be incurred for the existing Mt. Israel Road and for the intersections along Del Dios Highway at Via Ambiente, Mt. Israel Road, and Via Rancho Parkway.

MITIGATION

Impacts to circulation planning associated with the status of SA-680 and Mt. Israel Road are mitigable through two approaches: construction of improvements and dedication of right-of-way as may be required by the Department of Transportation and Board of Supervisors, or amending the Circulation Element to change the status of the subject roads. It should be noted that the first approach is required as part of the subdivision process and no project will be approved without satisfying the Department of Transportation and the Board of Supervisors. The second approach, amending the Circulation Element, is feasible and currently in progress as a part of GPA-80-CE. Results of this amendment will be applied to Rancho Cielo. Compliance with the subsequent requirements will mitigate impacts to long range planning.

Mitigation measures for impacts to circulation from traffic generated as a result of Rancho Cielo should be directed towards increasing the levels of service for Mt. Israel Road and for the three intersections along Del Dios Highway. Several previously mentioned aspects of the project serve as partial mitigation to traffic impacts. Specifically, provisions for commercial centers, the equestrian center, the village center, and riding and hiking trails will reduce the number of trips onto external roads by approximately 40%. The commercial center located at Via Ambiente and Del Dios Highway will also contribute to reduced trip length for local residents outside Rancho Cielo.

Additionally, alternate access is provided to the north onto Elfin Forest Road and Harmony Grove Road. Although these routes will carry low traffic volumes, the effect on circulation over Del Dios Highway is positive.

Specific on-site improvements should also be implemented for each of the impacted areas. The following recommendations are made to achieve increased levels of service and accommodate existing and future circulation needs.

a. Via Ambiente/Del Dios Highway Intersection

Separate lanes should be provided on Via Ambiente for right and left turns onto Del Dios Highway. This will minimize turning delays and traffic backup at the intersection. Acceleration and deceleration lanes should be added on Del Dios Highway at the intersection to improve access onto Del Dios from the project site. A left-turn pocket on Del Dios Highway for traffic entering the project will also eliminate congestion from eastbound traffic waiting to enter Rancho Cielo. These improvements are considered adequate for short-term traffic increases. Upon full project build-out, however, signalization at both intersections may be required to ensure safe, non-congested vehicle movement.

b. Mt. Israel Road/Del Dios Highway Intersection

This intersection should have the same improvements as those at Via Ambiente including left and right turn lanes for Mt. Israel Road, acceleration and deceleration lanes for Del Dios Highway, and a left turn pocket for eastbound Del Dios Highway traffic.

c. Via Rancho Parkway/Del Dios Highway/Valley Parkway Intersection

Major improvements to this intersection are planned as a part of the development of the regional shopping centers in Escondido and Rancho Penasquitos. Should these projects fail to be approved or the improvement plans altered to such an extent that this intersection will not be improved, signalization should be implemented in conjunction with the first phase.

d. Mt. Israel Road

This roadway should be improved to provide greater capacity for projected traffic from Rancho Cielo. Mt. Israel Road is designated as a Light Collector on the County Circulation Element, with a standard of 40 feet paved roadway on 60 feet of right of way.

No additional measures are believed necessary for mitigation of identified potential impacts associated with Rancho Cielo. It must be noted, however, the impending approval and implementation of the two regional shopping centers, and the contested status of SA-680 could substantially alter circulation patterns in San Dieguito, particularly over Del Dios Highway. The need for additional improvements (other than those discussed) is not apparent at this time, but should be considered in light of any unexpected revisions regarding these major components affecting circulation in the San Dieguito region.

NOISE

PRESENT SETTING

Noise regulation in the County of San Diego has been incorporated into land planning with the "Noise Element to the General Plan" under the predication that excessive noise levels may pose environmental problems and health hazards. The County of San Diego has formulated development standards for noise levels in residential areas. These standards incorporate existing neighborhood noise levels with projected noise levels to establish acceptable/unacceptable thresholds with which to analyze a proposed project. The table below provides an outline of these standards.

County of San Diego Development Standards: Noise

	Residential Areas where pre-existing noise levels are CNEL 55 or less	Residential Areas where pre-existing noise levels are CNEL 56-64	Residential Areas where pre-existing noise levels are CNEL 65 or greater
Acceptable	CNEL≤55dBA	CNEL≤60dBA	CNEL≤65dBA
Normally acceptable	CNEL=55/75dBA	CNEL=60/75dBA	CNEL=65/75dBA
Unacceptable	CNEL≥75dBA	CNEL≥75dBA	CNEL≥75dBA

Based on these standards, it can be seen that "acceptable" noise levels range from 55dBA to 65dBA depending on the pre-existing community noise level. Pre-existing noise levels can be established through field monitoring and noise calculation. California Noise Standards are similar allowing 60dBA levels in residential areas.

The predominant noise source in San Diego County is traffic. The higher the traffic volume, the higher the noise generation. Other noise sources in San Diego County include airplane noise, construction vehicles, and localized activities such as industry, schools, recreation areas, sports events, and other special use areas. The "Noise Element" indicates that noise levels generally increase with population density in urban areas. It is also apparent as shown in the table below, that noise levels ranging from 55 to 65dBA are common.

Residential Area	Average Ldn 14 decibels	Estimated percentage of urban pop.	Average pop. per square mile
Quiet suburban residential	50	12	630
Normal suburban residential	55	21	2000
Urban residential	60	28	6300
Noisy urban residential	65	19	20000
Very noisy urban residential	70	7	63000

Field measurements to establish ambient noise conditions on Rancho Cielo were conducted in March, 1980. Results of these measurements indicated that low ambient noise levels below 45 decibels for a one-hour average currently exist. Night time levels are probably in the 30 to 35dBA range. These low noise levels are expected due to the lack of noise sources in the area. Occassional off-road vehicles and airplanes provide the sole source of interrupting noise.

Noise levels near Del Dios Highway and Harmony Grove Road are substantially higher. Noise levels range between 65 and 70dBA at 50 feet from the nearest traffic lane at Del Dios Highway and between 55 and 60dBA at 50 feet from the nearest lane at Harmony Grove Road. The effect of traffic on the surrounding roadways of Rancho Cielo is negligible on interior noise levels.

Site topography plays an important part in noise transmission and alteration. Elevated or depressed roadways will have a diminishing effect on traffic noise over roadways with a direct line of sight to the residential area. Landscaping, vegetative cover and local relief also play a part in noise attenuation and contribute to low ambient noise levels.

Climate plays a lesser part; but, in the area of Rancho Cielo, thermoclines in the valley and canyon areas tend to convey or amplify noise disturbances, especially in early morning and cool evenings.

IMPACTS

Ambient noise levels on Rancho Cielo will undoubtedly increase with project implementation. The consideration must, however, focus on Community Noise Equivalent levels, locations of 55, 60, and 65dBA contours from noise sources, and acceptable/unacceptable classification for residential areas. Short-term and long-term impacts are addressed separately.

°Short-Term Impacts

Construction noise would represent the most significant source of short-term noise impacts. Short-term impacts created by construction would be greatest during grading operations and road construction. Project phasing would affect the significance of these short-term noise sources by determining the percentage of residential occupation. During the initial phases, noise would be of relatively minor consequence as no residents would reside within the project area. Residential areas are most sensitive to construction noise. As the project is built-out and residential development completed, construction noise will become increasingly significant.

The U.S. Environmental Protection Agency has attempted to quantify the noise generated during construction in its report entitled "Noise From Construction Equipment and Operations, Building Equipment and Home Appliances." Construction is divided into five phases: ground clearing, excavation, foundations, erection, and finishing. Four construction types are identified: domestic housing, commercial building, industrial plants and public works. The following table shows the noise levels resulting from construction using the above categories.

TYPICAL RANGES OF NOISE LEVELS AT CONSTRUCTION
(SITE WITH A 50 dB(A) AMBIENT)

Noise Levels dB(A)	Domestic Housing		Office & Schools		Industrial & Parking		Roads, Sewers & Trenches	
Operation	I.	II.	I.	II.	I.	II.	I.	II.
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	88	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I. - All pertinent equipment present at the site.
II. - Minimum required equipment present at the site.

The construction of roads within the project is expected to utilize a rock crusher to transform unused granitic material generated during excavation into road base material. Rock crushers represent a major noise generator with sound levels expected to range between 85 to 90 decibels Maximum Sound Level (A) at 50 feet. If roads are constructed early in the project, noise generated by the rock crusher would not have the impact it would if residential development is located near the rock-crushing machinery.

◦Long-Term Impacts

Traffic within the project would generate long-term noise impacts affecting property adjacent to streets. These impacts are the result of combustion engine and tire noise. Noise generated by automobile and truck traffic cannot be avoided. Every land use proposed by the Rancho Cielo Specific Plan would generate traffic, including 8920 daily trips by the residents and 3932 trips associated with commercial uses (total 12,852 trips).

Based on the Noise Development Standards, noise levels for traffic volumes must be at or below 55dBA. Table 12 outlines the extent of 55, 60 and 65dBA contours from the centerline of the nearest traffic lane of roads associated with Rancho Cielo. It can be seen from this table that noise levels of 55dBA or greater extend onto residential areas for up to 306 feet from the traffic source. The 60 and 65dBA contours are of considerably less extent (142 and 66 feet, respectively at the deepest penetration).

Thus, numerous residential lots adjacent to Via Ambiente and Del Dios Highway will experience unacceptable noise levels for residential uses according to County standards.

The effect of various noise levels in residential areas is illustrated below.

Noise Level (dBA)	Harmful Effect
35-45	Interruption of sleep
50-65	Speech interference
65-75	Extra auditory-physical effects
75-85	Hearing loss

Location	Average Daily Traffic (ADT)	CNEL at Property Line	*Current Noise Development Standard	55 dB	60 dB	65 dB
Del Dios Hwy.						
-Mt. Israel Rd. to Via Ambiente						
(current)	9,493	65.34 dB	65 dB	244 ft	113 ft	53 ft
(1995)	13,302	66.80 dB	65 dB	306 ft	142 ft	66 ft
-E/O Mt. Israel Rd.						
(current)	9,493	65.34 dB	65 dB	244 ft	113 ft	53 ft
(1995)	15,523	67.47 dB	65 dB	339 ft	157 ft	73 ft
-W/O Via Ambiente						
(current)	9,493	65.34 dB	65 dB	244 ft	113 ft	53 ft
(1995)	11,814	66.29 dB	65 dB	283 ft	131 ft	61 ft
Via Ambiente						
-Just N/O Del Dios Hwy.						
(1995)	3,138	60.53 dB	55 dB	117 ft	54 ft	NA
-S/O Village Center						
(1995)	4,907	62.47 dB	55 dB	157 ft	73 ft	NA
-N/O Village Center						
(1995)	5,011	62.56 dB	55 dB	160 ft	74 ft	NA
-Just S/O Harmony Grove						
(1995)	2,870	60.14 dB	55 dB	110 ft	51 ft	NA
Mt. Israel Rd.						
(1995)	6,652	63.79 dB	60 dB	193 ft	89 ft	42 ft
Elfin Forest Rd.						
(current)	1,100	55.98 dB	60 dB	58 ft	NA	NA
(1995)	1,742	57.97 dB	60 dB	79 ft	NA	NA
Harmony Grove Rd.						
-W/O Via Ambiente						
(current)	660	53.76 dB	55 dB	41 ft	NA	NA
(1995)	1,715	57.91 dB	60 dB	78 ft	NA	NA
-E/O Via Ambiente						
(current)	660	53.76 dB	55 dB	41 ft	NA	NA
(1995)	840	54.81 dB	55 dB	49 ft	NA	NA
SA-680						
-N/O Del Dios Hwy.						
(1995)	14,000	69.52 dB	55 dB	465 ft	216 ft	100 ft

NOTE: Some of the streets above do not carry significant traffic at this time; consequently, only the 1995 levels are shown.

*Based on County Development Standards for Noise using pre-existing noise levels and traffic volumes.

Rancho Cielo

Rancho Santa Fe, California

Current and Future Noise Levels on the Project Site

table 12

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As indicated, health problems may occur when noise levels exceed 65dBA. From this finding and the fact that 65dBA noise levels are acceptable under certain pre-existing conditions, it is concluded that significant health impacts from noise may occur if residential uses are allowed within areas of 65dBA or greater. This only occurs for lots along Del Dios Highway and a portion of Mt. Israel Road (see Figure 19).

There is an additional impact, however, from allowing residential uses within areas which do not meet acceptable standards. The effect of this deviation from established noise criteria for County-wide land use planning is to impact the integrity of County planning efforts. If these standards cannot be met for the project area through site planning or additional mitigation measures, approval of the project would represent an impact to the "Noise Element to the General Plan." This must be considered significant due to the regional importance of the Element and the legal standards that the General Plan represents.

Additionally, if SA-680 is constructed as a prime arterial, approximately 14,000 daily vehicles are projected to use the portion of roadway north of Del Dios Highway in 1995. Noise levels along this road will extend 465, 216 and 100 feet for 55, 60, and 65dBA, respectively. An open space corridor along the proposed right-of-way provides for approximately a 200-foot buffer to residential areas.

Other potential noise sources are associated with the heliport, village center, and general activities. The operation of the heliport would create the most significant noise source on the project. As presently shown in the land use concept plan, the heliport is located adjacent to the town-center and surrounded on three sides by townhome development. This location near residential development constitutes a major land use conflict with respect to noise impacts. From helicoptor noise studies conducted at the Imperial Beach Naval Air Station and the United States Border Patrol Heliport in San Diego, Sound Exposure Levels associated with heliports range between 85 and 95 decibels. These high noise levels result from a phenomenon called blade slap. As propeller blades come in contact with the rarified air pressure wave from the preceeding blade rotation a sound wave known as blade slap is emitted.

The Village Center's commercial activities would generate noise which would effect the residential development in adjacent areas. The impact of the sound levels produced by the Village Center is not expected to be significant due to the relatively small size of the proposed commercial area.

Noise sources which normally accompany commercial centers of this type include increased traffic, particularly delivery trucks, unloading of trucks and mechanical ventilation units located on roofs. Traffic increases may not markedly increase as residents tend to combine convenience shopping trips to the center with other trips. The delivery activity is not expected to be great. Most of the shops are proposed to be small stores and service businesses which do not require frequent deliveries. Lastly, mechanical ventilation requirements for the businesses within the commercial center are expected to be low. No large stores are planned which would require extensive heating and cooling systems.

Population noise on the property would emanate from residential and recreational activities. While not representing a significant long-term impact, population noise does represent an intermittent nuisance impact. Residential activities contributing to background population noise include lawnmowers, swimming pool pumps, loud radios, barking dogs and "backyard" mechanics.

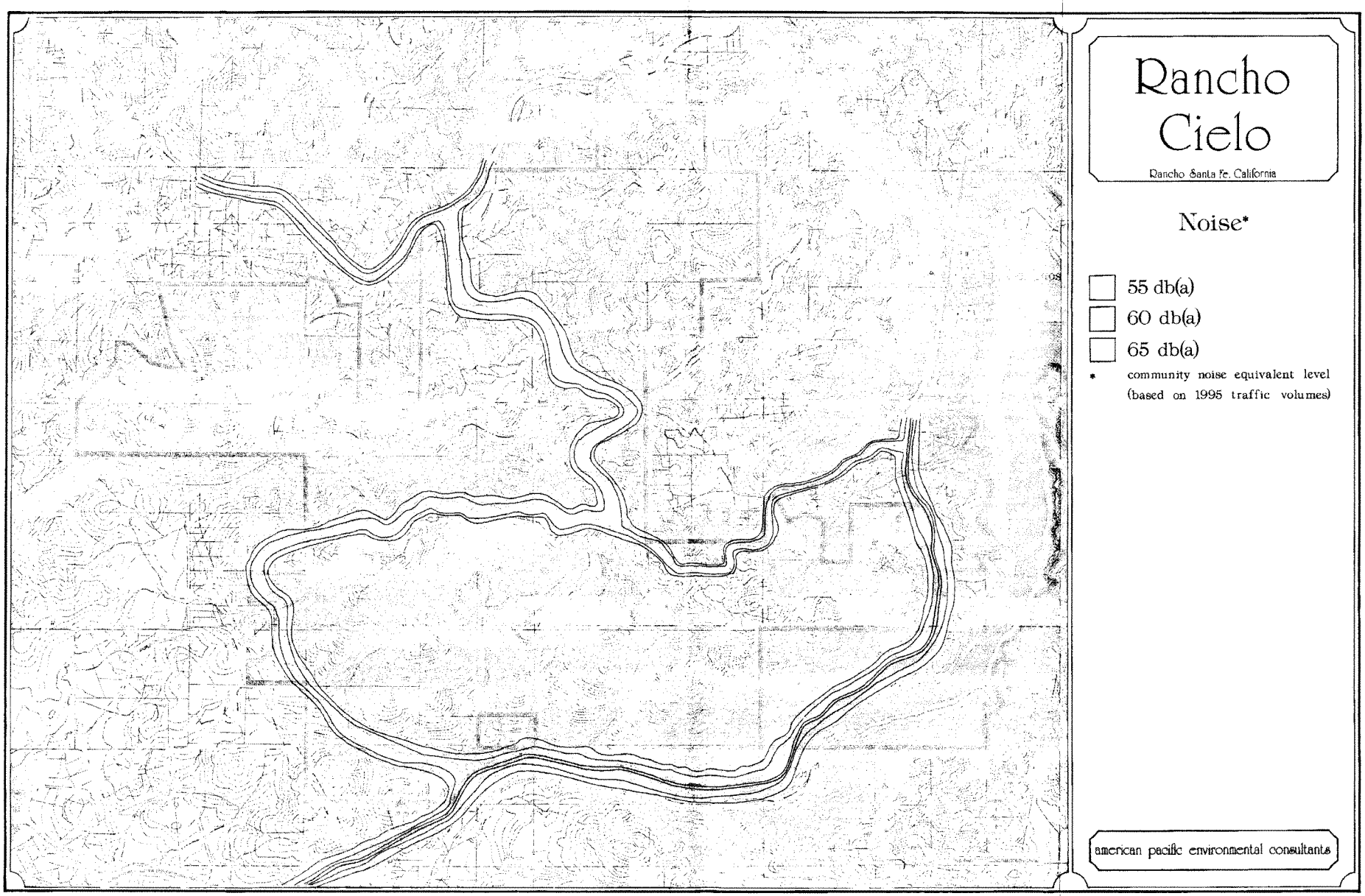
MITIGATION

Mitigation measures which follow are intended to suggest feasible alternatives to avoid or reduce the potential noise impacts. Incorporation, as appropriate, of the mitigation measures discussed below should reduce all noise impacts associated with the project to a level of insignificance.

The most pervasive noise impact would be created by traffic. Preliminary noise contour analysis indicates that Del Dios Highway and Via Ambiente would carry enough traffic to create unacceptable noise levels. There are two common mitigation measures applied to reduce noise impacts to an insignificant level: construction of a noise attenuation barrier (earthen berm or block wall), or placement of an open space easement over areas with unacceptable noise levels (to prohibit residential use). The noise attenuation barrier has been calculated at 10 feet in height for Via Ambiente and Del Dios Highway. This does not appear to be a feasible or acceptable approach to noise reduction since it requires approximately five miles of walled roadway and may create additional traffic and aesthetic impacts.

Placement of an open space easement to ensure adequate setback from noise sources is also unfeasible for most of the residential areas along Via Ambiente (55dBA Noise Development Standard) since this easement would occupy most or all of the total area of many lots. The open space easements or attenuation barriers are either unnecessary or will be minimal in extent for the 65dBA noise level.

FIGURE 19



Rancho Cielo

Rancho Santa Fe, California

Noise*

- 55 db(a)
- 60 db(a)
- 65 db(a)

* community noise equivalent level (based on 1995 traffic volumes)

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It appears that noise impacts in the form of health hazards (65dBA or greater) can be easily mitigated; whereas, noise impacts in the form of non-conformity with the Noise Development Standards cannot be mitigated. There is a paradox here in that 65dBA noise levels are acceptable in residential areas under certain conditions (pre-existing noise of 65dBA or greater) and yet unacceptable in residential areas under other conditions (pre-existing noise of 55dBA or less).

A compromise which appears to be consistent with the intent of the noise element and which would be feasible for site development is to plan the development in accordance with California Noise Standards of 60dBA (Title 25). This noise level (on Via Ambiente) extends into fewer lots. To a lesser extent, either open space easements or noise attenuation barriers (preferably earthen berms) may be utilized for individual lots.

The major mitigation available to reduce noise impacts associated with construction is limiting the hours of operation. Within the County of San Diego, construction activities are restricted to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday. Any construction noise which exceeds 75 decibels averaged over eight hours within a 24-hour period is in violation of the noise abatement codes established by the County. In order to assure conformance with County guidelines, all machinery should comply with State and Federal standards and muffling systems should be serviced regularly and maintained in good working condition.

The localized noise impacts associated with the rock crusher can be mitigated by constructing barriers and locating the machinery away from residential areas. Rock crushing should not begin until 9:00 a.m. and conclude by 5:00 p.m. Containment of the noise produced by the rock crusher would require the construction of earthen barriers or or enclosures over the conveyor belts.

Reducing the impact of the heliport is a more complex problem. Two principal alternatives exist which would diminish, but not eliminate, noise impacts. One alternative uses spatial isolation from residential areas while the other is aimed at limiting the hours of operation of the heliport. Ideally, successful mitigation may involve each of these alternatives; however, more information about the heliport would be required before a final decision can be made. Mitigation could be accomplished through conditions placed on the Major Use Permit which must be obtained by the project proponent prior to operation of the heliport. Processing the Major Use Permit ensures subsequent environmental review to establish special mitigation measures.

ENERGY

PRESENT SETTING

Substantial effort has been directed toward energy planning by the County of San Diego and by San Diego Gas and Electric Company (SDG&E). Long-term energy requirements are of primary concern; such as electricity, natural gas, and gasoline demands associated with habitation of future dwellings. Some of the energy goals and planning constraints are discussed here to illuminate energy considerations as they apply to development.

The Energy Element of the County of San Diego General Plan was adopted in November, 1977 as an attempt to develop a strategy for energy conservation and planning within the County. The primary goal set forth in the element is to assure adequate energy supplies for San Diego County needs. Emphasis is placed on use of alternative energy sources and conservation with minimal impacts to environmental and economic conditions. A series of policies have been designed with three major emphases: conservation, supply, and resource information and coordination. Action programs serve to implement the policies in specific measures. These action programs range in targets from energy consumption of County buildings and vehicles to building codes, tax incentives, industrial processes, solid waste disposal, development density, circulation networks, utility rate structures, offshore drilling, and alternative energy sources. The Energy Element serves as a guide to growth planning for all departments of the County of San Diego; but, the primary implementation responsibility lies with the Department of Planning and Land Use.

The Regional Growth Management Plan (County of San Diego, 1978) incorporates energy demand factors into growth planning through projections of energy and future population sizes expected under the Plan's land use strategies. The importance of the Energy Element is exemplified in the Growth Management Plan findings that implementation of the Element serves as a mitigation for impacts of growth on energy resources.

The use of solar power for water and space heating has been addressed more recently with the adoption of the Board of Supervisors' Hillside Development Policy (I-73), the Solar Ordinance (5589), and the Subdivision Ordinance (5228). Portions of these statutes have the intent of incorporating the use of solar power with land development. Solar access must be provided for all lots created after November 1, 1979; and all dwellings constructed after November 1, 1980 must have solar water heaters.

Building Codes have been amended in accordance with the Energy Element to require insulation of walls and ceilings. SDG&E also encourages conservation during construction by providing incentives to install adequate insulation and energy efficient appliances.

Gasoline conservation is targeted primarily by the federal government by establishing fuel economy performance standards for new cars. Optional carpool and mass-transit systems are also encouraged to reduce per capita gasoline consumption. Bus service is currently available to the project area via North County Transit Districts' Route 308 between Escondido and Cardiff over Del Dios Highway. The bus schedule will operate daily as of May 25, 1980, with hourly stops from 4:45 a.m. to 8:45 p.m. Further connections to other areas in the County are available at Escondido or Cardiff.

Factors which must be analyzed to determine the availability of energy resources to accommodate development are SDG&E service areas; existing facilities and resources; climate; solar access; locations of services and recreation facilities; and projected consumption rates of electricity, natural gas, and gasoline for the County.

◦ SDG&E

SDG&E supplies natural gas and electricity to San Diego County users as the sole distributor (except for several liquid petroleum gas distributors). Due to the lack of native energy resources most of the County's fuel supply is imported. Natural gas supplies are primarily purchased from the Southern California Gas Company. Natural gas supply currently does not meet demand. Service priorities have been established with residential use as first priority, commercial uses as second through fourth priorities, and electricity generation as fifth priority. Only priority one is fully met at this time; however, agreements have been made to provide additional natural gas for priorities one through four.

Electricity generating plants operated by SDG&E plus power contracts with other companies provide a total of 2,656 megawatts of power for the SDG&E service area. Additional contracts for power commit energy resources to meet peak demands through 1988. Other contracts and plans are being negotiated by SDG&E for acquiring additional power resources for future peak demand requirements.

Rancho Cielo is not within the current service area for natural gas. The closest locations for gas service are Encinitas (Rancho Santa Fe Road), San Marcos (south of Highway 78), and Escondido (Valley Parkway). Requests for service have

been made throughout the Rancho Santa Fe area but no gas lines have been extended to serve new developments.

Electric transmission lines in the project area are located along Del Dios Highway to the south, and along Elfin Forest/Harmony Grove Roads to the north.

◦Climate

Climatic conditions affect energy requirements through heating and cooling needs. The County is divided into three climatic zones based on heating degree-days for SDG&E's use in determining lifeline allowances. Climatic zone one extends from the coast, eastward to approximately mid-County, east of the communities of Valley Center, Ramona, Alpine and Dulzura. In general, less than 2500 degree-days occur within this zone. Degree-days are determined by the difference in average temperature from 65°F on a daily basis. Thus, as the temperature range becomes greater from winter to summer, more degree-days will occur; and thus, additional energy requirements are expected.

Heating degree-days are estimated at 2,000 for the project area based on data in Climates of San Diego County (Close, 1970). In general, the climatic conditions of the site are very moderate due to its proximity to the Pacific Ocean. Climatic conditions are further discussed in the climate section of this report.

◦Solar Access

The Subdivision Ordinance (Section 81.40(n)) requires that all subdivision maps received after October 1, 1979 shall provide unobstructed solar access to a 100 square foot area, ten feet above final grade, for each proposed lot. Solar access must be unobstructed between the hours of 9:00 a.m. and 3:00 p.m. on December 21. This area is also described as the skyview between azimuths of the sun between 45 degrees to the east or west of due south on December 21 (winter solstice). The purpose of this section is to facilitate the use of solar water heater units and reduce energy consumption.

Numerous exceptions to this section are provided for projects which are not able to comply with the requirements due to physical or economic constraints. Topographic features which may obstruct solar access are associated with steep slopes oriented to the north, east and west. The angle of elevation of the sun at 45° to the east or west of due south is approximately 18°. It can be calculated from this

angle that a slope steeper than 32.5% facing northeast or northwest may obstruct solar access for portions of the morning or afternoon hours respectively. This same relationship holds true for any point between 45° east or west of due south with the angle of elevation of the sun rising to 58° and the slope gradient criteria increasing to 154% at due south. The slope analysis provided in Figure 7 indicates slopes range from zero to in excess of 70% gradient. Much of the slopes are oriented to the northeast and west such that solar access will be limited. The ridges, knolls, south-facing slopes, and other slopes generally do not exceed the criteria of slope gradient and orientation previously described.

Climatic conditions such as precipitation and fog are not anticipated to reduce the viability of solar collectors for water heating.

◦Facilities

The proximity of commercial facilities, employment centers, and recreational facilities to the project site is an important factor in projecting the vehicle miles travelled by future project residents and the services which may cater to them. The project site is located approximately five miles from the City of Escondido, ten miles from San Marcos, and eight miles from Encinitas and Solana Beach. These communities provide a variety of urban services for shopping, repair, and employment needs.

Employment centers are primarily located in the San Diego area for San Dieguito residents. This is further discussed in the Socio-Economics section of this report. Travel distances may, therefore, range from 15 to 29 miles for work-related trips. The local communities do provide, however, professional, commercial and industrial space for employment closer to the project site.

Recreational facilities are also associated with the more urbanized areas in Escondido and the coastal communities. Country Clubs, golf courses, tennis and racquet clubs are all available in Rancho Santa Fe or Escondido (within seven miles). Felicita Park is located four miles to the east and Lake Hodges is located immediately east of the property. Entertainment centers are located in Escondido, Rancho Santa Fe and the coastal communities.

IMPACTS

The impacts of the proposed Rancho Cielo Specific Plan on energy resources are twofold: impacts of the land use plan which may result in future consumption beyond the levels

projected from previous land use plans, and the direct consumption impacts of growth and development on the site resulting from project implementation. The impacts associated with the land use plan revolve around population density and growth patterns allowed in the land use designations, and project implementation schedule. As discussed in the Land Use section of this report, the Specific Plan allows for a unit density lower than Regional Growth Management Plan category provisions. Thus, the number of dwelling units, population size, trip generation and energy consumption associated with the land use designation and zoning changes are not adverse for this reason, and the discussion of impacts will, therefore, focus on impacts associated with project implementation.

Immediate energy impacts are those required for construction of roads, water and sewer lines, and residences. Based on data provided by Mr. Eric Pulliam of the Department of Planning and Land Use, County of San Diego, energy consumption is estimated as follows for project construction:

Construction Type	Units	Btu/unit	Total Btu	Equivalent Barrels of Oil
Streets (w/facilities)	31 miles	$6.256 \times 10^5 \frac{Btu}{foot}$	1.024×10^{12}	176,128
Dwellings	928 du	$1.006 \times 10^9 \frac{Btu}{du}$	9.339×10^{11}	160,631
Sewer	plant	1.046×10^{10}	1.046×10^{10}	1,799
Water	pump stations	1.046×10^{10}	1.046×10^{10}	1,799
Total				340,357

These figures represent rough estimates for total construction energy costs, but are suitable for comparison purposes.

Undoubtedly, this amount of energy consumption is substantial; however, street construction will be spread over a five-year period and dwelling construction will be spread over an estimated 20-year period. In addition, much of the energy consumed during construction of materials is not consumed during the actual construction phase. The impacts on energy resources associated with project construction are not considered significant, but are incremental in contribution to rising energy demands.

More important in terms of energy consumption is the long-term usage of electricity, natural gas and gasoline required by future residents of the project site.

- Natural Gas and Electricity

Future residents of the project will be served by both natural gas and electric services. Energy consumption by use type is included in the table below for the proposed project.

Use Type	Annual Energy Consumption Per Unit: Electricity (KwH)	Annual Energy Consumption Per Unit: Gas (therms)	Total Annual Electric Consumption (KwH)	% Increase of SDG&E Service	Total Annual Natural Gas Consumption (therms)	% Increase of SDG&E Services
Single family dwellings	6378.29	688.12	3,689,434	.00003	591,873	.313
Townhomes	3678.70	477.65	147,148	.00001	19,106	.010
Commercial (per.sq.ft.)	24	0	1,128,000	.00001	0	----
Water reclamation plant	1,271,000	0	1,271,000	.00001	0	----
Water pump stations	4,467,600	0	4,467,600	.00004	0	----
Street lighting	32,850	0	32,850	---	0	----
Total Uses	----	1165.77	12,736,032	.000085	610,889	.323

The consumption of electricity and natural gas by future residents will increase incrementally to the estimated amounts shown in the table above over a 20-year period as dwellings are constructed and inhabited. This represents a negligible annual increase for electricity and gas consumption if prorated over a 20-year development period. The additional energy requirements on SDG&E production is expected to be accommodated through SDG&E's growth projections for San Diego County. These projections anticipate a 2.6% annual growth rate of households in San Diego County, for which energy consumption may be correlated. These increases in themselves, are not considered significant; however, due to the uncertainty of future SDG&E energy provisions and the effects of legislation passed by the state and federal governments and the Public Utilities Commission (PUC), certain energy conservation measures must be examined for possible incor-

poration into planning for all large scale projects. These measures are discussed in the mitigation section following this analysis of impacts.

Another aspect of energy analysis involves energy demand. Electricity usage can be estimated for peak demand based on the following usage types.

Usage Type	Units	Demand/Units	Total Demand (Kw)	% SDG&E * Peak Demand
Residential	892	5 Kw/residence	4460	.1996
Commercial	47,000 sq.ft.	7.5 watts/sq.ft.	352.5	.0158
Water service	675 h.p.	.75 Kw/h.p.	510	.0228
Sewer service	plant and pump station	142 Kw	142	.0064
Street lighting	60 lights	100-250 w/light	9	.0004

*Based on SDG&E adopted 2,234 MW Peak Demand Forecast

Again, the increase in peak demand on electricity is not significant but may contribute to future shortages in some areas of the County if additional long-term energy resources and facilities are not accounted for.

◦Gasoline

The traffic and circulation analysis provided in the Traffic section of this report describes trip generation and distribution rates for the project upon completion. Based on the figures provided, trip lengths and trip sources, total vehicle trip miles, and gasoline consumption are estimated.

Vehicle Trip Miles

Trip Source	Trips Per Day	Average Trip Length (miles)	Total Trip Miles Day	Total Trip Miles Year
Residential Units	10/dwelling	12	107,040	3.9070×10^7
Commercial Areas	3932	12	47,184	1.7222×10^7
Total			154,224	5.6292×10^7

Gasoline Consumption

Year	Project Vehicle Miles (yr)	Automobile Average Fuel Consumption (mpg)	Total Gasoline Consumption (gal/year)	Total County-wide Gasoline Consumption	% Consumption
1980	$5.6x10^7$	16.3	3,444,908	*790,000,000	.436
1985	$5.6x10^7$	19.8	2,835,960	767,000,000	.370
1990	$5.6x10^7$	22.8	2,462,807	*783,000,000	.315
1995	$5.6x10^7$	24.1	2,329,939	799,000,000	.292

*Gasoline consumption estimated from 1978, 1985, 1995 consumption figures.

As discussed for gas and electric consumption, the increase in gasoline consumption will be graduated over an estimated 20-year period with consumption proportionate to the number of dwellings constructed. Although the increase in gasoline consumption is not significant, land use planning and development of a large acreage such as in Rancho Cielo may be considered a significant energy consumption impact if certain facilities are not included in planning to reduce the total trip generation and trip length. Thus, impacts to gasoline resources will be from two areas: direct consumption from vehicle trips, and indirectly from project planning to provide for facilities and services needed by area residents.

The latter area (planning for facilities and services) is exemplified in comparisons of the project-related trip length (i.e., 12 miles per trip) and the County-wide average trip length (i.e., 7.5 miles) (Howells, 1979). The 7.5 mile figure represents a composite of rural and urban areas; where urban areas require shorter trip lengths due to close proximity of services, and rural areas require longer trips due to the infrequency of services. Average trip lengths of 12 miles are not considered excessive, but are representative of rural areas lacking in neighborhood services. Several aspects of the Rancho Cielo Specific Plan serve to reduce trip lengths and are discussed under Mitigation.

◦Solar Access

It is estimated that several lots may have insufficient solar access to satisfy the requirements of the Solar Ordinance. Solar access is obstructed on these lots for portions of the morning or afternoon hours due to topographic orientation and slope parameters. The actual decrease in potential water heating capabilities on these lots is insignificnat, however, and is not considered to be a significant impact on energy resources or energy planning.

In addition to the adverse impacts previously discussed, certain aspects of the land use plan are positive in their effect on energy consumption in the project area. These aspects are the commercial center at Del Dios Highway and the water reclamation facility. The commercial center will provide a source of goods and services for local residents, whereby occasional trips into Escondido or the coastal communities might be substituted by a shorter trip to the neighborhood commercial center. Although net gasoline savings cannot be calculated, the effect is anticipated to be positive, with overall reduced gasoline consumption. The second aspect, the water reclamation plant, is expected to provide reclaimed water at a lower energy cost than imported water, thus producing a savings in regional energy expenditures.

MITIGATION

Mitigation measures described here are primarily aspects of the project design which have been incorporated to reduce energy consumption. Reduction in electricity and natural gas consumption is difficult to incorporate into land use plans or subdivision maps; however, the following items are expected to reduce consumption incrementally.

1. Implementation of the Solar Ordinance, which requires all dwellings constructed after October 1, 1980 to install solar water heating devices, will reduce daily energy consumption for water heating needs.

2. Proposed building plans will require approval by the Rancho Cielo Association Design Review Committee for construction. One proposed criteria for approval is consideration for passive solar heating in house design and orientation.

3. Street lighting will be minimized except for safety purposes, with lights placed at street intersections and at the commercial and recreation sites.

4. Natural gas lines will be extended to the site to reduce electricity consumption.

5. The water reclamation plant will provide approximately 260,000 gallons of water per day at a lower energy cost than imported water.

The primary components of the project which will reduce gasoline consumption due to vehicle trips are the accommodations for commercial and recreational uses. Forty percent

of the total trips generated by Rancho Cielo residents are expected to have destinations within the project boundaries. These components will provide goods, services, and recreational uses to the project area that are currently lacking.

These conservation efforts to reduce energy consumption are adequate for mitigating potential long-term impacts on energy resources. All construction is expected to comply with Uniform Building Codes with regard to insulation, weatherstripping, and building materials. No further mitigation measures are proposed.

AIR QUALITY

PRESENT SETTING

Air quality has become an issue of increasing concern in San Diego with guidelines and standards for levels of pollution being set at both the state and national levels. Local concern is also well represented with widespread participation of public and private agencies in evaluating the conditions and future of San Diego's air quality. The primary impetus of attention to air quality planning comes from the federal government which describes pollutant level standards. Exceeding these standards may result in serious sanctions imposed in the form of withholding federal funds for highway and sewage disposal projects. The intent of the federal emission standards is to ensure healthy air quality conditions uniformly throughout the country. To facilitate reducing the volume of emissions to meet air pollution standards, a Regional Air Quality Strategy (RAQS, APCD, 1978, 1979) has been adopted. The RAQS contains specific tactics which target pollution sources and types of pollutants on local, state, and national levels.

Air pollution in San Diego County is primarily associated with the San Diego Air Basin which includes the area between the coast and the Peninsular Range. Three factors are primarily responsible for the air quality conditions within the basin: emissions, meteorology and topography. A brief discussion of each factor follows to facilitate understanding of the conditions and potential impacts of the project area.

The primary emission sources in San Diego County are the automobile and industry. These sources are generally concentrated in the western portion of the County in population centers. Other emission sources which are associated with residential development are the gasses produced through consumption of natural gas for domestic heating, power plant emissions associated with electricity consumption and use of wood-burning fireplaces. Ozone (oxidant) is the major pollutant in the air basin which is directly related to carbon monoxide (CO) emission from automobiles. Particulate matter is also a large contributor to air pollution within the basin. Additional pollutants which presently exceed standards are carbon monoxide, nitrogen dioxide and sulfur dioxide. High pollutant levels may be expected in areas where traffic is heavy or numerous industries occur.

Meteorological conditions alter the basin's pollution profile substantially. Although emissions are generally produced in the western portion of the County, prevailing westerly winds disperse the pollutants to the east. These

winds tend to reduce air pollution along the coast while concentrating pollutants in inland areas. During Santa Ana conditions, however, the opposite occurs, with offshore winds carrying pollutants from San Diego, Los Angeles and Orange Counties out over the ocean. As the Santa Ana subsides and the prevailing winds return, the accumulated pollutants of all three coastal counties are carried into the San Diego Air Basin, resulting in the highest levels of pollution.

Another meteorologic phenomenon of the San Diego Air Basin is the inversion layer. This layer consists of the interface between the cool, moist ocean breezes at low altitudes and the warm, dry continental air masses at higher altitudes. As the cool air is warmed over the earth's surface, convection currents carry pollutants upward to a level where the air temperatures and pressures have more or less equilized. The actual height of this inversion layer varies with topography, humidity, temperatures and wind conditions but generally occurs at around 1500 feet MSL on the coast to around 3000 feet MSL in inland areas. Ground-level inversion can occur in valleys where low lying fog acts as the inversion layer, thus trapping pollutants at or near ground level. This is a common occurrence along roads in the County. Usually this condition is relieved as temperatures increase during the day and the fog dissipates.

Thus, pollutants are carried from their source locations in the west, upward by convection and eastward by wind transport. The upward dispersion is limited by the inversion layer, the easterly dispersion is limited by topography; namely, the Peninsular Range. Topography acts as a barrier to easterly dispersion when the inversion layer is low enough to intersect with elevated hills and mountains. This can occur throughout the basin in isolated locations, but is consistent and widespread in the East County due to the higher elevations (in excess of 3,000 feet).

The result of inhibited easterly transport is an accumulation of pollutants in the receptor areas. Communities such as Ramona, Glen Oaks and Alpine are located within this area and are typically the areas of highest pollutant count and most frequently exceeding standards.

Other topographic features also have an effect on the local and regional air quality conditions. East-west-trending valleys and canyons act as wind transport avenues for pollutants through the lower elevation corridors. Sheltered valleys which do not have such east-west air drainage are more likely to retain those pollutants generated within them until upward dispersion allows for their removal. Thus, air quality conditions vary from locale to locale and are not entirely dependent on the proximity of pollutant source to the receptor area.

◦Project Area

Analysis of the air quality conditions of the project area should also include a discussion of the same factors which contribute to regional air quality conditions. Pollutant sources for the Rancho Cielo vicinity are primarily automobiles, but to some extent include the San Diego Gas and Electric power plant in Carlsbad, domestic energy consumption, and smoke from fireplace usage.

Vehicle traffic is concentrated to the west of Rancho Cielo in the communities of Solana Beach, Cardiff, Encinitas, Leucadia, Carlsbad, Olivenhain and Rancho Santa Fe. Interstate 5 also carries substantial traffic volumes within seven miles of Rancho Cielo. Del Dios Highway is the closest source of vehicle emissions carrying approximately 7,700 daily vehicles along the southern boundary of the property.

The coastal on-shore winds have a large effect in aiding pollutant dispersal from the project area due to the proximity of the site to the ocean. The coastal and inland valleys located in Vista-San Marcos, Escondido Creek, and San Dieguito River also provide avenues for easterly wind transport during periods of low altitude inversion.

The site is not considered to be a receptor area and would not experience the generally higher oxidant levels characteristic of receptor areas. The altitude at which pollutants are trapped occurs generally at or around 1400 feet MSL on the coast and between 1500 and 3000 feet MSL in the inland areas. While the property lies below the base of the inversion layer, cooler air could be trapped closer to the ground for longer than normal periods due to absence of wind and slower warming. This action would inhibit dispersion of pollutants until the late morning hours for some areas within the project boundaries.

Pollutant levels are monitored at thirteen stations throughout the County by the Air Pollution Control District (APCD). Data recorded at these stations are recorded and published annually in the APCD Annual Air Monitoring Report. Pollution levels at Rancho Cielo are expected to be an average of the data recorded at the Solana Beach and Escondido stations. The Solana Beach station is relatively new and its information is limited; therefore, Oceanside data is included for further comparison. This data is presented in Table 13. Based on the average of data from the Oceanside and Escondido stations the planning area exceeded the ozone standard on an average of 15 days between the years of 1978-1979. In 1979, the maximum one-hour level measured was 32 pphm which is 20 pphm greater than the standard. With respect to particulates,

OXIDANT (1 hr. average = 12 pphm)

Station/year	Days exceeding standards				Hours exceeding standards				Max. 1-hr.				Annual Average			
	1976*	1977*	1978	1979	1976*	1977*	1978*	1979	1976*	1977*	1978	1979	1976	1977	1978	1979
Escondido	97	73	6	13	356	233	295	---	25	16	18	17	---	---	---	---
Oceanside	69	87	20	22	259	394	272	---	29	25	35	36	---	---	---	---
Solana Beach	---	---	17	16	---	---	241	---	---	---	39	32	---	---	---	---

NITROGEN DIOXIDE (1 hr. average = 25 pphm)

Escondido	0	0	0	0	0	0	0	---	22	22	22	---	4	4	4	---
Oceanside	4	2	2	0	5	2	2	---	33	36	32	---	3	3	3	---
Solana Beach	---	---	---	0	---	---	---	---	---	---	---	---	---	---	---	---

CARBON MONOXIDE (8 hr. average = 9 pphm)

Escondido	3	0	0	1	---	---	---	---	11	9	15	---	---	---	---	---
Oceanside	0	0	0	0	---	---	---	---	10	8	9	---	---	---	---	---
Solana Beach	---	---	---	0	---	---	---	---	---	---	---	---	---	---	---	---

SULFUR DIOXIDE (1 hr. average = 50 pphm)

Escondido	0	0	0	0	0	0	0	---	0	4	6	---	0	0	0	---
Oceanside	0	0	0	0	0	0	0	---	6	0	3	---	0	0	0	---
Solana Beach	---	---	---	0	---	---	---	---	---	---	---	---	---	---	---	---

PARTICULATES (24 hr. average = 100 ug/m^3) Max. 24 hr.

Escondido	36	41	29	0	---	---	---	---	159	166	167	---	82	86	---	---
Oceanside	20	21	40	0	---	---	---	---	146	173	219	---	82	82	---	---
Solana Beach	---	---	---	0	---	---	---	---	---	---	---	---	---	---	---	---

*Based on Federal standard of 8 pphm which was changed in 1979

Rancho Cielo

Air Pollutant Levels
in the Project Area
for 1976, 1977, 1978 and 1979

table 13

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Escondido exceeded the standard an average of 21 days between 1977 and 1978.

The annual average in Escondido for ozone and particulates exceeds the allowable standards. The annual average statistic is an attempt to measure the "background" pollutant levels to access the long-term exposure in Escondido to ozone and particulates. In general, Rancho Cielo would not be expected to possess a higher-than-average background level of ozone and particulates.

IMPACTS

Impacts on air quality associated with implementation of the proposed land use plan and subsequent Tentative Maps are two-fold: impacts which reduce the effectiveness of the RAQS, and direct increases in emissions. Impacts on the RAQS are related to changes in planning which might induce a faster rate of growth or a higher density of development than that allowed in the Regional Growth Management Plan (RGMP). Increased density can be correlated with increased emissions. When these emissions are in excess of the RGMP densities, this renders the RAQS impotent in the effort of achieving air quality standards within the allowed time periods.

The land use section of this report more fully describes the impacts of the proposed land use land and subsequent development on existing land use plans, including the General Plan of San Diego County, the San Dieguito Community Plan, the Land Use Element, Zoning and the Regional Growth Management Plan. The proposed land use plan is consistent with all regional community planning efforts.

Increases in emissions will occur from additional vehicle trips, energy consumption, wood-burning fireplace usage, and use of various architectural coatings during subsequent development and construction of units. Emissions generated as the result of vehicular use associated with the project would represent the main impact of the project on air quality. Residential, commercial and public land uses proposed in the project area would all increase the number of trips and vehicle miles travelled in the immediate area. It is estimated that the number of trips resulting from completion of the proposed development would be approximately 12,820. The traffic section of this report elaborates on the basis for this number of trips as well as the total vehicle miles travelled which is estimated to be 154,224 miles. Table 14 provides estimates of the emissions resulting from implementation of the project.

*SUMMARY OF EMISSIONS
Tons/Year

Emission Source		Particulates (TSP)	Sulfur Dioxide (SO2)	Carbon Monoxide (CO)	Nitrogen Oxide (NOx)	Hydrocarbons (HC)
Vehicles	Resid.	---	---	970.2147	134.2596	114.1978
	Comm.	---	---	427.6776	59.1825	50.3402
Residential**		11.0437	0.1200	54.5236	10.1952	2.2077
Commercial		0.3890	0.0208	0.1945	1.3890	---
Water Reclamation		0.4290	0.0229	0.2195	1.5314	---
Pump Station		1.5406	0.0822	0.7703	5.4998	---
Street Lighting		0.0113	0.0006	0.0057	0.0404	---
Total		13,4136	0.2465	1453.6059	211.1347	166.7457

*Based on full occupation of 892 parcels and 47,000 ft^2 of commercial space.

**Includes emissions from electricity, natural gas and fireplace usage.

Rancho Cielo

Estimated Project-Related Emissions

table 14

In addition to the mobile sources, emissions produced by stationary sources would also increase with development of Rancho Cielo. The production of the 12.7 million kilowatt hours per year to serve the project would increase emissions by a proportionate amount (.000085% at the power plant site). Combustion of natural gas and use of wood-burning fireplaces to heat buildings within the project would add to the air pollution within the project vicinity and ultimately, the air basin in general.

During construction, short-term sources of emissions would be operating on the site. Exhaust emissions from trucks, generators and grading equipment would contribute to the air pollution of the Rancho Cielo property and the air basin in general. Fugitive dust generated during the construction would add to the particulate load which already is a problem in the Escondido area. Grading and travel along dirt roads represent the biggest sources of fugitive dust.

The influence of short-term construction impacts on air quality will depend on the timing of construction. Single-phase development would result in a high volume of exhaust emissions and particulates over a smaller period of time. By phasing development, the volume at any given time is reduced but the time frame is extended. On a regional level, there would be little change in impact with the different construction timing. However, the phasing of construction is more important on the local level. Single phase construction would create the additional exhaust emissions and particulates at a time when no one would be living on the project.

The tendency of the project's topography to trap pollutants in low areas would not affect the project to a large degree. Residential areas are located on the high points within the SPA. Canyons and valleys are, for the most part, in open space.

The effect of regional topography and meteorology on distribution of emissions generated on the project site would be to accumulate pollutants in the Escondido, San Pasqual, Poway and Ramona valleys. The increase in pollution in these valleys is difficult to quantify with the existing limited air quality data but might be compared to population increases for the purpose of analysis only.

The County Data Base (County of San Diego, 1980) for housing unit estimates in July, 1979 indicate that 892 units proposed for Rancho Cielo represent an increase of 0.65% over the number of houses in North County in 1979. The additional units represent a 4.15% increase in dwelling units in the San Dieguito area. The increase in emissions associated

with this amount of growth is not significant. It is noted further, that development of the property will be phased over a five-year period with actual construction of dwellings continuing into a longer period. Thus, project implementation is expected to be spread over as much as a 20-year period, further incrementalizing the impacts of increased emissions.

MITIGATION

Mitigation measures which can be achieved through direct action of this project are limited. As discussed earlier, air quality is a regional concern. While local impacts do occur, their magnitude is negligible when viewed against the entire San Diego Air Basin. Meteorology and topography control the movement of pollutants within the entire air basin. Degredation of the air quality in the Rancho Cielo area is a function of a number of emission sources operating throughout the basin, nearly all of which are beyond the control of this project.

Those aspects of the project design which may contribute to reduced emission volumes are water reclamation and reuse for irrigation, construction of Neighborhood Commercial Centers for local needs, on-site recreation facilities, riding and hiking trails, and use of a minimal energy efficient street lighting system. Additionally, County Ordinance 5234 and Policy TP5324 of the Department of Planning and Land Use require residential structures constructed on lots created after October 1, 1979 to have solar water heating systems. This will contribute to natural gas conservation and reduction of emissions. A solar analysis of the site is included in the Energy section (Section V) of this report.

Improvements in local air quality will depend primarily upon the implementation by the local governing agencies of the Revised Regional Air Quality Strategy (RAQS). This document is designed to bring the San Diego Air Basin into conformance with the required state and federal standards within specific time frames. The majority of the implementation of the RAQS lies within the responsibility of the County of San Diego Board of Supervisors acting as the Air Pollution Control Board.

The Revised RAQS contains strategies aimed at reducing levels of ozone, nitrogen dioxide, particulates and carbon monoxide. Each of these strategies contain specific tactics designed to reduce emissions generated by a variety of sources within the basin. Emission sources associated with the project which would likely be controlled as the RAQS are implemented include vehicular use, power production, space heating and construction activities. State-wide implementation of these

tactics is conducted through the Air Resources Board (State of California). The mode of implementation for the State and County is through legislation, policies, ordinances, action programs, building codes, and planning and zoning amendments. Thus, there are no conditions required of this project to ensure that future development will conform to RAQS strategies and tactics.

ASTRONOMICAL DARK SKIES

PRESENT SETTING

Astronomical dark skies is an important issue in San Diego County due to the presence of two major observatories located at Mt. Palomar and Mt. Laguna. The Palomar observatory is located approximately 25 miles northwest of Rancho Cielo and consists of the 200-inch Hale reflector telescope operated by California Institute of Technology. The Mt. Laguna observatory is located approximately 45 miles to the southeast and consists of a 60-inch telescope operated by San Diego State University.

Extensive research has been conducted throughout the United States to locate high quality astronomical research sites. A criteria has since been established in evaluating possible locations for observatory use. San Diego County has been targeted as an exceptional location for optical astronomy for several reasons. A primary consideration in selecting research sites is, of course, clear, cloud-free night skies. The Mt. Palomar and Mt. Laguna sites are outstanding in this area with an average 6.4 cloud-free hours per night and approximately 300 clear nights per year. Several factors come into play here which contribute to clear sky conditions. First of all, the elevation of the observatory sites is optimum between 5000 and 9000 feet MSL. Within this elevation range, light diffusion in the atmosphere is minimal. Lower elevation sites tend to have obscured visibility due to the scattering effect of the gasses, moisture, and particulates in the air. Higher elevation sites are more subject to rain, snow and clouds.

The stable high-pressure air masses over the Pacific Ocean also contribute greatly to clear sky conditions. The cleansing effect of westerly winds and the stable air masses result in relatively dust-free and motionless atmospheric conditions at higher elevations.

Another important criteria is the extent of local sources of light, dust and smoke pollution. Urban centers in San Diego County are generally located along the coast with the highest concentration in the southwest. The effect of urban lighting and air pollutant generation is to increase the light diffusion at higher altitudes. As the metropolitan areas expand, the affected area of increased diffusion also expands, both horizontally and vertically. The closer the light source or polluted atmosphere to either of the observatories, the greater the degredation of dark skies.

The primary light and air pollutant sources in the project vicinity are the coastal communities between Del Mar and Oceanside and the inland communities of Rancho Bernardo, Ramona, Vista, San Marcos and Escondido. Due to their relative location, the Mt. Palomar observatory is more greatly affected by these sources. Although the central areas of San Diego and Los Angeles emit more light, the proximity of the light source from smaller communities in North County is of equal importance. Rancho California in Riverside County is becoming a large contributor of light pollution in the northern sky at Mt. Palomar.

At the present time, the Palomar observatory is capable of examining stars of the twenty-second magnitude. The effect of light pollution is to increase haze and reduce the capability of observation. The angle of elevation required for stellar observation is also important here. Even a relatively small degree of light pollution will deter observation along the horizon; whereas, the effect is greatly diminished where the angle of elevation is greater.

Michael Leite of the San Diego Gas and Electric Company estimates point source emissions at 1.5% to 10% above the horizontal in the direction of Mt. Palomar will have the greatest effect (Leite, 1980). Direct unshielded light is estimated to contribute approximately 50% of the unnatural night sky illumination and that the other 50% results from reflected light.

Night sky illumination has been the subject of recent investigations by astronomers. Research indicates that the San Diego sky brightness is approximately 25% above the natural sky brightness due to urban lighting (Faber, 1980). The effect of sky brightness is rather dramatic because it directly relates to telescope efficiency decreases by the square foot of that same factor (Faber, 1980). Thus, the 25% increase in sky brightness in San Diego due to urban lighting reduces the efficiency of telescope viewing through this sky by five percent. This effectively reduced the efficiency of the 200-inch Palomar telescope to that of a 190-inch telescope in unpolluted sky.

The illumination of night sky that is apparent to observers is not necessarily of great concern to astronomers. Most astronomical observations occur in the ultraviolet range. Narrow wavelengths spread toward the infrared are of much lesser concern because they are easily separated and identified in spectrographic analysis. Thus, the extent of light pollution is not directly related to the sky glow visible to observers.

FIGURE 20

The Conservation Element of the General Plan addresses dark skies as an environmental resource to be considered in planning and development policies. Dark skies is considered a locally significant resource under the provision of the State of California Guidelines for the provisions of the Conservation Element (Government Code Section 65302(d)). It is the County's policy to act in such a way to minimize the impact of development on the useful life of observatories. Four action programs have been recommended to facilitate implementation of this policy, but none have been initiated as of this writing.

The director of the Palomar Observatory, Dr. Gerry Neugebauer of California Institute of Technology has indicated that Low-Pressure Sodium lamps and cut-off fixtures should be used for street lighting in areas within a 30-mile radius. Rancho Cielo lies totally within this designated area at the perimeter. Low-Pressure Sodium lamps have narrow emission lines which can be isolated astronomically.

IMPACTS

Several aspects of the proposed land use and subsequent development will increase the night illumination of the project area, and thus, incrementally reduce dark sky conditions. The impacts are primarily associated with the Palomar observatory due to the close proximity to the planning area and to the greater capabilities of this telescope.

Vehicle emissions and emissions from fireplace usage and energy consumption will increase the amount of pollutants in the air, thus contributing to the light scattering effect of the atmosphere. A greater potential impact is from street lighting, parking lot lighting at the commercial center, illumination for recreational uses on tennis courts and entertainment areas and from residential lighting. Due to the elevation of the developable areas (approximately 1100 feet MSL) the effect of lighting systems on dark sky illumination is accentuated. Due to the distance from Mt. Palomar and to the existing night illumination in the San Dieguito and Escondido areas, the impact is somewhat lessened.

The primary impacts would be from use of Mercury Vapor lamps for area lighting. This type of lamp has been installed throughout most of San Diego County and the City of San Diego. The County of San Diego, however, has adopted street lighting standards prescribing the use of High-Pressure Sodium lamps for street lighting facilities. This type of luminare eliminates approximately 98% of the ultraviolet emissions of Mercury Vapor lamps. These are the same type as are located along Highway 101 in Encinitas to the west. Although these High-

Pressure Sodium lamps are a vast improvement over Mercury Vapor lamps, the optimum lamp would be Low-Pressure Sodium. Impacts from County-wide implementation of High-Pressure Sodium lamps is considered cumulatively significant.

The use of incandescent bulbs is expected for driveway and landscape lighting around residences. The impact of this light emission is expected to be minimal due to the limited sky illumination ability of this type of luminare

MITIGATION

Several mitigation measures are available which would effectively eliminate light pollution from street, parking lot and recreation area lighting. Compliance with the street lighting standards in the system design will reduce most of the upward illumination while still providing adequate light for safety. Using 90° cut-off fixtures will eliminate nearly all light emitted directly into the sky and focus the light onto the ground where it is easily dispersed and absorbed.

The use of both the Low-Pressure Sodium lamps and the 90° cut-off fixtures should be the basis of any lighting system designed for commercial, recreational or street lighting uses. This will ensure mitigation of impacts on San Diego's dark sky resource. This mitigation should be qualified in that it only pertains to dark skies impacts. The ability of these lamps to meet minimum safety, lighting, and energy requirements has not been evaluated.

AGRICULTURE

PRESENT SETTING

Agriculture is an important industry in San Diego County contributing approximately $324,000,000 in 1978 in gross revenue to the local economy (Weights and Measures, 1978). The San Dieguito area contributes 4.11% of the County's agricultural acreage and represents a major producing area of foliage and flowers in California. Crop revenues have been estimated to achieve an upward adjustment of 10% over county-wide revenues based on a number of factors (Kubota et al., 1978).

Numerous studies have been recently initiated due to the concern of the Board of Supervisors over diminishing agricultural resources resulting from increasing urbanization (Agricultural Element Basic Data Report, 1979). The Agriculture Element to the General Plan (GPA 79-02) was prepared and subsequently rejected for adoption. The intent of this element was to target the areas suited for agriculture and to provide a means of preservation through land use constraints. The Board has recently reviewed an agriculture policy for the Environmental Review Board to provide guidelines for recommendations of significant effects on agriculture (Environmental Review Board , Policy 13, 1980).

The approach of this report will be to analyze the agricultural resources on the project site and surrounding area to determine both the agricultural potential of the property and the effect this project may have on the local agriculture industries.

Agricultural potential of any given area may be assessed through evaluation of four major factors: climate, soils, topography and water. These factors generally contribute to the productivity of the land in terms of produce yield. Potential economic return from agriculture endeavors is necessarily dependent on numerous other factors such as land values, labor costs, market areas, property taxes and so forth. It is not the intent of this report to address the economic potential of agriculture in the area, but to determine the nature and quality of those resources present which contribute to sustained agricultural production.

°Climate

Climate is a prime factor in considering agricultural resources of the project area. As previously mentioned in the cimate section of this report, the moderating effects of the Pacific Ocean create a mild temperature and precipitation regime along the coastal plains, valleys and foothills.

Vegetable crop production is closely linked to this area where frost and high temperature occurrences are minimal. Cut flowers, potted nursery stock, citrus, avocados, strawberries, tomatoes and other vegetable crops are widely planted along the coastal plain to take advantage of the favorable climatic conditions.

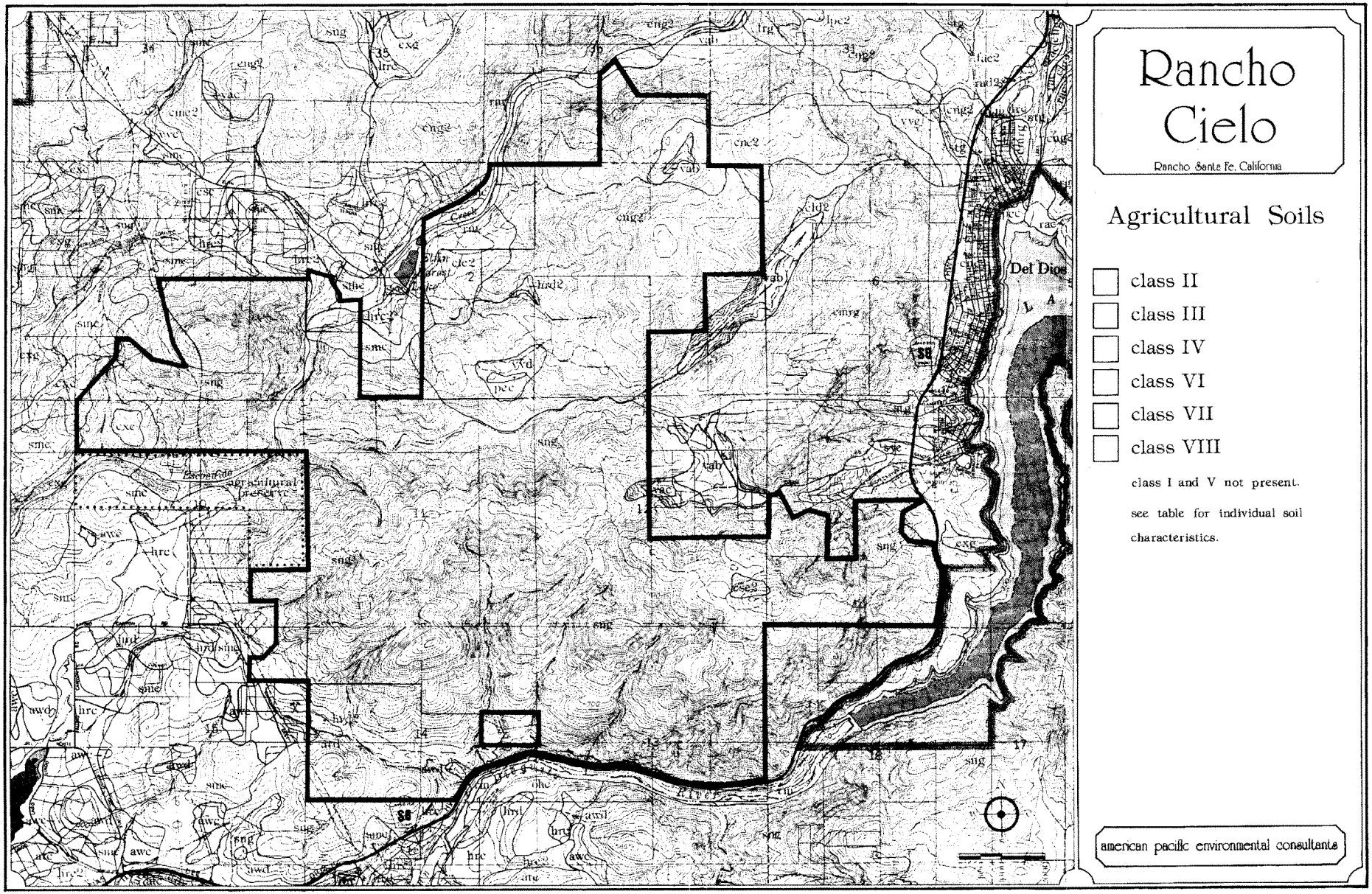
Moving inland, where the ocean effect rapidly diminishes, greater fluctuations in temperature, humidity and precipitation requires a more selective group of crops for production. Many of the inland areas where adequate cold air drainage exists are highly suited for citrus and avocado production.

Examination of the Rancho Cielo property in relation to subregional area climates indicates that climatic conditions representing coastal and transitional zones may be expected. The property lies almost entirely within the citrus zone described by Daniel H. Close et al., in Climates of San Diego County (Close et al., 1970). This zone is well suited for a variety of citrus crops including oranges, lemons, limes and grapefruit. This climate zone is also ideally suited for avocados. Summer fog may be expected to occur on lower elevations on the western periphery of the Planning Area, but this is not expected to reduce the agricultural potential from a climate standpoint. Table 1 includes additional data for temperature and precipitation variations for the project area.

- Soils

Soils of the north coastal plain have been described as marginal for agricultural use. Typically, they are well-drained, shallow and of low fertility (Kubota et al., 1978). Pockets of alluvial deposition also occur with deeper soil strata and higher fertility. In the foothill regions, soils are usually less suited for agriculture. Soil associations of the Rancho Cielo area consist predominantly of the Cieneba-Fallbrook series and the Exchequer-San Miguel series. These are generally described as well-drained, sandy loams and rocky components. Soils are shallow and underlain by decomposed granodiorite or metavolcanic rock. It is apparent that soils in the project area may tend to limit agriculture rather than enhance it.

Soils on the Rancho Cielo property have been summarized from the Soil Survey (USDA, 1973). Figure 20 and Table 13 describe the location and agricultural capabilities of the soils present. The property is primarily comprised of two soil types, San Miguel-Exchequer (SnG) and Cieneba-Fallbrook (CnG2) loams. These soils cover approximately 91% of the



Rancho Cielo

Rancho Santa Fe, California

Agricultural Soils

- ☐ class II
- ☐ class III
- ☐ class IV
- ☐ class VI
- ☐ class VII
- ☐ class VIII

class I and V not present.

see table for individual soil characteristics.

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subject 3,525 acres. The remainder of the land is covered by 16 additional soil types, generally in plots of 50 acres or less.

The Soil Survey rates agricultural soils in two ways: the Capability Unit and the Storie Index. The Capability Unit consists of eight classes designated in Roman Numerals I through VIII. Class I contains few limitations that restrict their use for agriculture, while Class VIII contains limitations that preclude their use for commercial crop production. The Storie Index consists of a numerical rating from 0 to 100 based on soil profile, texture, slope and other factors which effect the suitability of the land for general intensive agriculture. Soils rated 0 to 10 are generally not suited for farming, while soils rated 80 to 100 have few or no limitations restricting cultivation. Further description of Capability Units and Storie Index ratings is included in Table 13.

Prime agricultural soils have been described by the Land Conservation Act of 1965, of the California State Legislation, as those soils that are in capability classes I and II, or that produce $200.00 or more gross income for three years out of five. Based on the former criteria, approximately 24 acres of the property contain prime soils (Class II: VaB, VaC, AwC). Furthermore, the majority of land (2,592 acres) is not rated for agricultural crops. The most viable area for any large scale agriculture is the northern projection of the property. The soil in this locale is a Cieneba-Fallbrook loam mix rated Class VII and fair for avocados. Although surface soils are shallow, the underlying rock unit consists of decomposed granodiorite, which provides good drainage for avocado crops. Approximately 904 acres have been described as suitable for growing selected crops Table 15a and b). Overall, however, the soils present on the site cannot be considered a significant resource with respect to agriculture.

More extensive areas of suitable agricultural land (Classes II, III and IV) lie to the southwest in the Rancho Santa Fe area. Small citrus groves, tomato fields and nurseries are common in this area, although development is well established in this rural setting.

- Topography

Topography of the Rancho Cielo Specific Plan Area represents an important factor in determining the agricultural potential of the area. Due to the extensive areas of steep slope, intensive labor crops such as vegetables or flowers

SOIL CLASSIFICATION

*Soil Type	Acres	Capability[1] Unit	Storie[2] Index	Fertility	Erosion Hazard	Permeability	Suitable Crops
Altamont clay, 9-15% slope (AtD)	4.5	IIIe-5(19)	39	medium-high	slight-moderate	slow	tomatoes-fair (slope)
Auld clay, 5-9% slope (AwC)	10.2	IIe-5(19)	47	medium-high	slight-moderate	slow	tomatoes-good
Auld clay, 9-15% slope (AwD)	6.4	IIIe-5(19)	39	medium-high	slight-moderate	slow	tomatoes-fair (slope)
Cieneba coarse sandy loam, 15-30% slope eroded (ClE_2)	66.2	VIe-1(19)	15	low	moderate-high	rapid	avocados-fair (depth)
Cieneba very rocky coarse sandy loam, 30-75% slope (CmrG)	5.5	VIIs-8(19)	5	low	severe	rapid	N/R
Cieneba-Fallbrook rocky sandy loams, 9-30% slope eroded (CnE_2)	45	VIe-7(19)	18	low-medium	high-very high	slow-rapid	avocados-fair (depth)
Cieneba-Fallbrook sandy loams, 30-65% slope eroded (CnG_2)	726	VIIe-7(19)	7	low-medium	severe	moderate-rapid	avocados-fair (depth)

Rancho Cielo

Classification and Agricultural Characteristics of the Project Site Soils (continued)

table 15a

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SOIL CLASSIFICATION

*Soil Type	Acres	Capability[1] Unit	Storie[2] Index	Fertility	Erosion Hazard	Permeability	Suitable Crops
Escondido very fine sandy loam, 15-30% slope eroded (EsE_2)	10.9	VIe-8(19)	32	medium	severe	moderate	citrus-fair (depth)
Exchequer rocky silt loam, 9-30% slope (ExE)	26.6	VIIs-8(19)	5	very low	severe	moderate	N/R
Exchequer rocky silt loam, 30-70% slope (ExG)	54.4	VIIs-8(19)	5	very low	severe	moderate	N/R
Huerhuero loam, 9-15% slope (HrC_2)	4.7	IVe-3(19)	38	low-medium	slight-moderate	very slow	truck crops-fair (perm), tomatoes-good, flowers-fair (texture)
Huerhuero loam 9-15% slope eroded (HrD_2)	15.7	IVe-3(19)	36	low-medium	slight-moderate	very slow	tomatoes-fair (slope), flowers-fair (texture)
Placentia sandy loam, 2-9% slope (PeC)	4.0	IVe-3(19)	49	low-medium	slight-moderate	very slow	Tomatoes-fair (depth), flowers-good

SOIL CLASSIFICATION

*Soil Type	Acres	Capability[1] Unit	Storie[2] Index	Fertility	Erosion Hazard	Permeability	Suitable Crops
San Miguel rocky silt loam, 9-15% slope (SmE)	27.2	VIIe-8(19)	19	low	moderate-high	slow	N/R
San Miguel-Exchequer rocky silt loams, 9-70% slope (SnG)	2478	VIIe-8(19)	8	very low	severe	slow-moderate	N/R
Visalia sandy loam, 2-5% slope (VaB)	9.3	IIe-1(19)	81	high	slight	moderate-rapid	avocados-good, citrus-good, truck crops-good, tomatoes-fair (text), flowers-good
Visalia sandy loam, 5-9% slope (VaC)	4.5	IIe-1(19)	73	high	slight-moderate	moderate-rapid	avocados-good, citrus-good, truck crops-fair (slope), tomatoes-fair (text), flowers-good
Vista rocky coarse sandy loam, 5-15% slope (VvD)	20.5	VIe-7(19)	27	medium	moderate	moderate-rapid	avocados-good, citrus-fair (depth)

Rancho Cielo

Classification and Agricultural Characteristics of the Project Site Soils (continued)

table 15a

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[1]Capability Units: e = main limitation is erosion
1 = erosion hazard
7 = cobblestones, stones or rocks
s = soil is limited because it is shallow, droughty, stony.
3 = slow or very slow permeability of the subsoil or substratum.
8 = nearly impervious bedrock or a hardpan.

I Few limitations that restrict their use.
II Moderate limitations that reduce the choice of plants or that require moderate conservation practice.
III Severe limitations that reduce the choice of plants, require special conservation practices, or both.
IV Very severe limitations that reduce the choice of plants, require very careful management, or both.
VI Severe limitations that make them generally unsuited to cultivation.
VII Very severe limitations that make them unsuited to cultivation.
VIII Soils and landforms have limitations that preclude their use for commercial crop production.

[2]Storie Index

0-10 Soils and land types generally not suited for farming.
10-20 Not suited to cultivated crops.
20-40 Severely limited for crops; require special management.
40-60 Suited to few or special crops; require special management.
60-80 Suitable for most crops; few special management needs; may narrow crop choice.
80-100 Few or no limitations restricting cultivation.

Cieneba series - 10-20 inches over weathered granodiorite.

Exchequer series - 10-14 inches over hard metabasic rock.

*See attached figure.

Source: Soil Survey, U.S. Department of Agriculture

Rancho Cielo

Classification and Agricultural
Characteristics of the Project Site Soils

table 15a

Soil Type	% Coverage	Acres
AtD	0.1	4.5
HrC_2	0.1	4.7
PeC	0.1	4.0
VaC	0.1	4.5
AwD	0.2	6.4
CmrG	0.2	5.5
AwC	0.3	10.2
EsE_2	0.3	10.9
VaB	0.3	9.3
HrD_2	0.4	15.7
VvD	0.6	20.5
ExE	0.8	26.6
SmE	0.8	27.2
CnE_2	1.3	45.4
ExG	1.5	54.4
ClE_2	1.9	66.2
CnG_2	20.6	726
SnG	70.3	2478
X	0.1	5.0
	100	3525

Rancho Cielo

Rancho Santa Fe, California

Acres and Percent Coverage of Project Site Soils

table 15b

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are necessarily precluded except on the more level ridges and valleys. Soil erosion and rocks would further preclude production of row crops even on the most gentle areas. The steep slopes do provide excellent cold air and surface water drainage which is necessary for avocado production. Citrus would also do well in areas of gentle to moderate slope as is represented by the citrus groves to the southwest in Rancho Santa Fe.

In general, tree crops (primarily avocados) are the most suited for production in the steeper areas. In the lower elevations, where more suitable agricultural soils occur, more flexibility in crop selection is feasible.

◦ Water

Commercial agriculture in San Diego County is generally dependent on district-supplied water due to the low salinity and high volume requirements for irrigation. Climate and soil type play a direct role on amount of water required for crop irrigation. The entire property is located within the Olivenhain Municipal Water District. Although limited water storage and transmission facilities are available to serve most of the subject property, water service would be available for agricultural use upon extension of the necessary facilities. In summary, water does not appear to be a factor which would limit agricultural productivity.

◦ Existing Agriculture

None of the Rancho Cielo property has been developed into agricultural production at this time, or in previous years. Agricultural activities in the vicinity of the project site are primarily located in the Rancho Santa Fe area. Citrus groves are common throughout the Rancho Santa Fe area; but, these are small and generally not suited for long-term agricultural use. Tomato, and vegetable crops are also grown on occasional plots of land in this area but do not account for a large production. Some agricultural areas now lie fallow where tomatoes were historically grown. Other areas of agricultural use are localized in the Elfin Forest area, to the northwest of the property; and in the Harmony Grove area to the northeast. Avocados are the primary crop for nearly all the agricultural land north and east of the property. Several agricultural preserves exist in the area including a 190-acre parcel adjacent to the Rancho Cielo westerly boundary (Revelle Agricultural Preserve in Section 10). A second agricultural preserve is located approximately one mile to the southwest. This preserve consists of in excess of 2,000 acres and is separated from the project site by Lake Hodges, Del Dios Highway and the San Dieguito River.

◦Existing Policy and Criteria

The Department of Planning and Land Use of the County of San Diego has expended effort in the attempt to locate and categorize agricultural resources in the county. Two such informational and policy documents are described here with respect to the subject property.

The recently adopted agriculture policy of the Environmental Review Board (Policy 13) establishes two criteria for recommending findings in respect to agriculture. The Rancho Cielo project is subject to these criteria because of its location in an area of the west county, delineated as suitable for truck crops. Specifically, the policy states that "the Environmental Review Board should not make or recommend significant findings in respect to agriculture if both the following criteria are met:

1. At least one-half the project property is composed of soils rated in capability Classes VI, VII or VIII as defined by the United States Department of Agriculture Soil Conservation Service Soil Survey; and,

2. Any portion of the project property composed of soils rated in capability Classes I, II, III, or IV that are part of a substantially contiguous undeveloped area of similarly rated soils smaller than 100 acres."

The proposed Agricultural Element recommended a portion of the property to be designated as an agricultual resource area. This portion consists primarily of Cielo Creek, the major tributary of Escondido Creek which disects the property in the northern area of the project site.

There are no contiguous areas of soils rated Class I, II, III, IV of any significant size. The largest block is located to the southwest. These soils are of the Huerhuero series (HrC, HrD) and are rated in Classes III and IV. Approximately 300 acres are within this area. Small parcels of ten to twenty acres subdivide this area, and a Major Subdivision known as El Rancho Grande (TM 3921, Log #79-8-40) was recently approved by the Board of Supervisors.

Two isolated pockets of Class II soils are located in Cielo Creek (east of Rancho Cielo) and in the Mt. Israel Road area. These contain approximately 65 acres each. The Cielo Creek area intersects a portion of the Public Land and is, therefore, not directly influenced by the project.

This area is also being contemplated for use as a future reservoir site by the Olivenhain Municipal Water District. Parcel sizes are predominately 40 acres in this area.

The Mt. Israel Road area contains smaller parcel sizes and some residential development. Oak woodlands occupy most of the drainage area where the Class II soils are located. Thus, the soils on and adjacent to the property are not considered significant resources for agricultural use and do not exist in contiguous undeveloped blocks of land.

IMPACTS

Impacts associated with implementation of the Rancho Cielo Specific Plan and subsequent Tentative Maps on agricultural resources may be divided into two categories: impacts on resources located on the subject property and impacts on resources located in adjacent areas.

◦On-Site Impacts

The land use plan for the Rancho Cielo Specific Plan proposes commitment of approximately 1,695 acres to residential, commercial and public uses. The majority of the land is proposed as open space (1,830 acres) with the intent of prohibiting development (construction and/or agriculture) and preserving the natural resources. The results of adopting this plan would be to limit agricultural activities to individual lots. These lots will range from one to four acres in size with much of the area utilized for driveways, residences and residential landscaping. The remaining area available for agricultural use will be somewhat less. Agriculture of this nature will necessarily be of small scale with limited potential for long-term commercial productivity.

Implementation of the proposed Specific Plan may be considered as a commitment of the 3,525 acres to uses other than commercial agriculture. The impacts associated with this commitment, however, cannot be considered significant when the agricultural resources of the site are examined. Only 904 of the 3,525 acres are rated as good or fair for the crops listed in the Soil Survey. Approximately 364 acres of this land is owned by the Bureau of Land Management (BLM) and cannot be developed. What remains is approximately 569 acres suitable for agriculture according to the criteria set by the Soil Survey. Only 59 acres of land are rated in Classes I through IV. The balance is rated as VI, VII, and VIII.

Alternative forms of agriculture, such as greenhouses, which do not rely directly on soil capabilities, may also be limited in use due to topographic considerations.

°Off-Site Impacts

Off-site impacts from development on agriculture are associated with the effect growth and facilities improvement have on land values and cost of development of adjacent areas. As land is improved with roads and water service, and residential or commercial buildings are constructed, the use and value of the land increases. The increased value has a similar effect on adjacent land, even though it may be vacant, because it encourages increased use. A higher value may be placed on the property simply due to its proximity to developed areas and to the increased availability of services. The effect has been informally termed "development pressure", implying that the potential for receiving a higher economic return creates a pressure on the land owners to divert from agricultural use to residential or commercial use.

Property values within the Rancho Cielo Specific Plan Area are expected to be comparable to those in the Rancho Santa Fe area to the southwest, and therefore, are not anticipated to induce development of agricultural areas to the west. To the north and east, however, property values may be somewhat escalated as a result of this project. The result may be to encourage conversion of now vacant land into residential and potential agricultural land.

The extensions of Via Ambiente, Elfin Glen, Fortuna Del Este, and Aliso Canyon Road over relatively undeveloped vacant land is also expected to encourage development indirectly by decreasing off-site improvement costs. The extension of water lines will have the same effect. The impacts on off-site agricultural resources, however, is not significant.

Special attention to the potential impacts to the Revelle Agricultural Preserve is also warranted (see Figure 19). Two roads are proposed for extension through this 190-acre parcel (Via Ambiente and a smaller residential road as shown in the Land Use Plan). Additionally, water and sewer service will be more readily available to the site. The effect of these improvements on the potential disestablishment of the agricultural preserve must be examined in light of the El Rancho Grande Subdivision and the existing services available. Approval of the El Rancho Grande has the effect of isolating this preserve from other areas suited to agriculture. Access and utility services to the site will accompany this development such that the impacts on the preserve from the

services provided by the Rancho Cielo development are not significant. The proposed road extensions will not disect previously cultivated land. It is also pointed out here, that disestablishment of an agricultural preserve requires approval of the Board of Supervisors in the public hearing process. It is concluded, therefore, that implementation of the Rancho Cielo Specific Plan will not directly result in disestablishment of the Revelle Agricultural Preserve. The improved road access may, however, encourage residential construction or resubdivision within the confines of the contractual agreement defining the preserve. It is concluded that the approval of Rancho Cielo will not have significant impacts on agriculture.

MITIGATION

Mitigation of impacts relating to agriculture does not appear to be necessary due to the insignificance of impacts anticipated. The increased availability of water service in areas to the east where limited pressure and volume is available may encourage limited agricultural development. This area is primarily designated for larger lots capable of sustained crop production (Multiple Rural Use, 4, 8 and 20 acre lots). Mitigation of the impacts to the Revelle Agricultural Preserve is not considered necessary. Redesign of the roads which cross the preserve would minimize the impacts from the Rancho Cielo project but would not mitigate the impacts from the approved Rancho Grande Subdivision, with the improvements to accompany it, and the impacts from small lots disrupting the contiguous acreage adjacent to the preserve.

AESTHETICS

PRESENT SETTING

Aesthetic quality becomes important in project evaluation due to the size of the project area and its visibility from surrounding locations. Considerable attention has been given to local and regional aesthetic resources and their conservation. The primary planning documents addressing aesthetic resources and their role in land use planning are outlined here as they are appropriate to the project area.

San Dieguito Community Plan

Many of the goals and objectives of this plan focus on encouraging growth and development in harmony with the natural environment. Consideration is given to open space, steep slopes, floodplains, lagoons, scenic views, groundwater, lighting, and other aesthetic charcteristics of the region. The Escondido Creek and San Dieguito River floodplains are specifically mentioned for open space and development considerations. Wildlife corridors, vegetation and the lagoons are also noted for inclusion in land planning efforts.

Open Space Element of the General Plan

The overall intent of this Element is to provide for comprehensive and long-range preservation and conservation of open space within the San Diego region. Included in the objectives of the plan are public lands, shorelands, rare or unique plants and wildlife, natural features, water and air quality, and historic and cultural resources. San Elijo Lagoon and Escondido Creek are mentioned with respect to the San Elijo Regional Park and the floodplain areas. Agricultural Preserves and open space easements are described as permanent or temporary holdings for land. Planned Residential Developments (PRD) are encouraged as they provide for open space areas in conjunction with development. Corridor easements are encouraged along trails, water courses, roadways and scenic highways.

Conservation Element of the General Plan

This element identifies natural resources in San Diego County and documents action programs and policies for their conservation. Several resources are mentioned in the text; however, those resources associated with aesthetics appear to be limited to biological resources

and physical features. It is noted that lagoons and wetlands enhance community identity. Development in areas of unique aesthetic resources can minimize impacts by modification of design standards.

A principal tool for implementing the objectives of this Element is the Resource Conservation Area (RCA). RCA's are drawn over "blob" areas which contain known sensitive resources (including aesthetic resources). Design considerations should be made in concert with the objectives of each particular RCA. Scenic area resources have been identified as visual landmarks, riparian areas, bluffs, scarps, rock formations, ridges and mountains. RCA's which extend onto the Rancho Cielo property are the Escondido Creek (#5), Escondido Creek-Harmony Grove Road (#7) and San Dieguito River-Lake Hodges-Lusardi Canyon (#8). Aesthetic resources within these RCA's include riparian and oak woodlands, and perennial water courses in canyon bottoms.

Scenic Highway Element

This element encourages protection of identified scenic resources along rural and urban highways in San Diego County. Scenic highway corridors have been established in the County under a set of design standards and given a priority rating. At this time only two official scenic highways exist: State Route 78 and a portion of State Route 125. Numerous other routes are included for initiation as scenic highways under three priorities. Del Dios Highway from Highway 101 north to Via Rancho Parkway is listed as a Second Priority Scenic Route. The proposed extension of El Camino Del Norte (SA-680) is listed as a Third Priority Scenic Route. The scenic resources within these corridors are not listed specifically, but may include a variety of items: topography, vegetation, structures, distance visibility, natural and man-made features, landscape character, and legal boundaries.

Due to the size of the subject property and its varied topographic relief, it is visible from several local and distant locations. Viewsheds have been quantified for the site for several locations, including the Del Dios Highway corridor; the proposed Camino Del Norte (SA-680) corridor; and, the communities of Del Dios, Rancho Santa Fe, and Elfin Forest (see Figure 21).

The most obvious visual characteristic of the site itself is the steep chaparral-covered slopes, which are generally apparent from all vantage points. Along Del Dios Highway slopes rise continuously for as much as 800 feet in elevation

and range from 25% to 75% in gradient. Due to this steep terrain and numerous minor drainages, the actual visibility from Del Dios Highway is limited to several hundred feet in most places. The primary viewshed is to the south over the San Dieguito River/Lake Hodges, and the adjacent canyon walls. Irregardless of the extent of the viewshed, the aesthetic resources of the corridor are significant.

The Del Dios community appreciates virtually the same persepctive of the area; however, the east and north-facing slopes on the eastern extension of Rancho Cielo are the only visible portions.

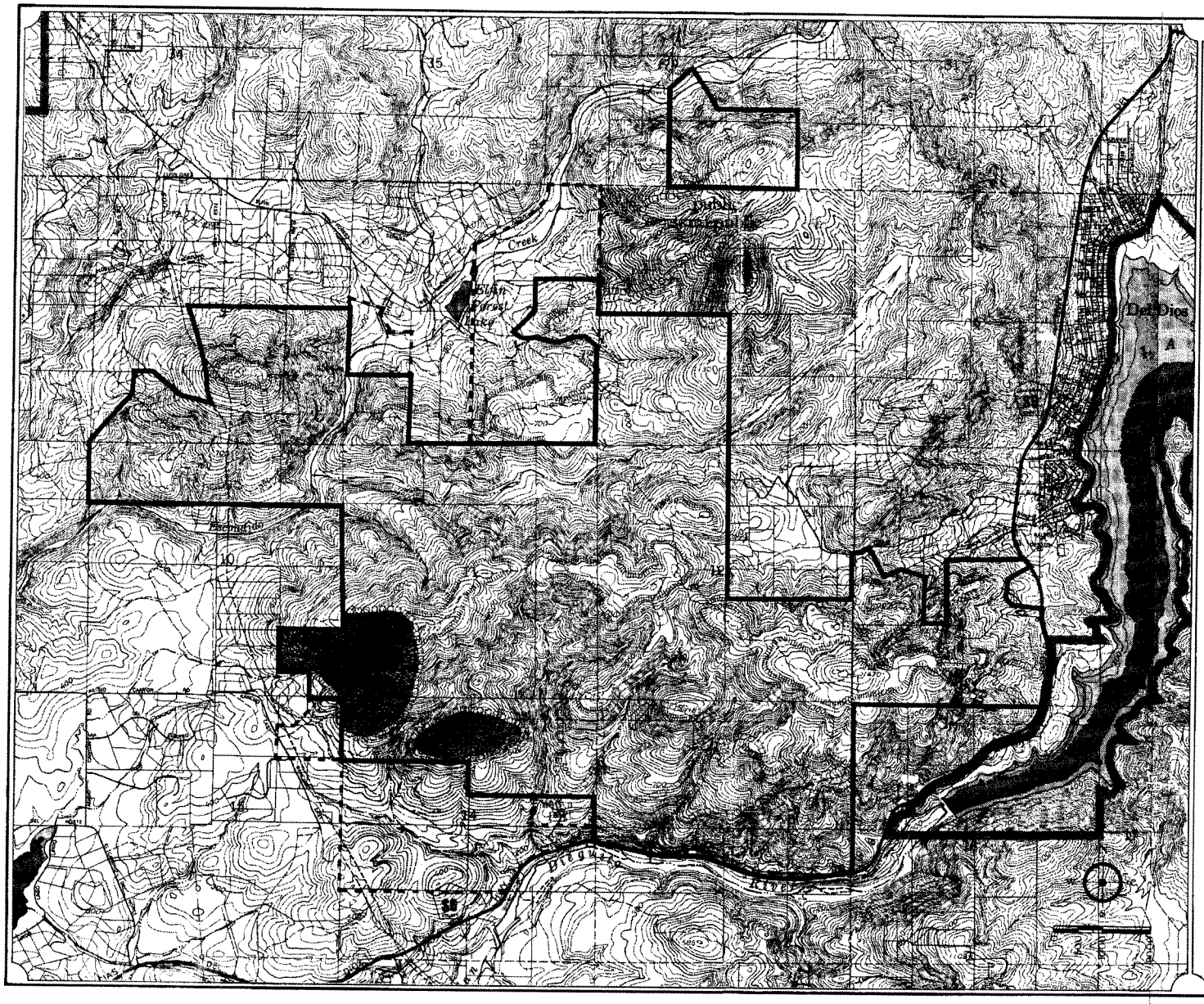
Visibility from the west along the Camino Del Norte corridor and from Rancho Santa Fe is very good due to the elevation differential between the rolling hills of Rancho Santa Fe (approximately 300-400 feet MSL) and the high ridges of western Rancho Cielo (approximately 1100-1200 feet MSL). Several peaks (elevations 1011, 1272, 1192) are visible for long distances to the west and south. The west and south-facing slopes are plainly visible to most of the surrounding area. These slopes will be exposed to future traffic volumes over SA-680 and portions of Del Dios Highway.

From the north and the community of Elfin Forest, north-facing slopes, rock outcrops and the riparian vegetation of Escondido Creek are the primary components of the viewshed. Slopes are generally less steep, and visiblity is largely obscured by the woodland along the creek. The presence of perennial water in Escondido Creek provides a unique and extensive riparian community stretching from the outskirts of the City of Escondido to San Elijo Lagoon.

The Resource Conservation Areas further emphasize the uniqueness of the riparian vegetation in the canyon and valley setting. Cielo Creek, the major tributary to Escondido Creek which disects the north-central Rancho Cielo property, contains some of the same components that are present in the Escondido Creek and San Dieguito River drainages, but is, on the whole, drier and typically chaparral-covered on the slopes. Wildlife habitat throughout the site is good and the undisturbed nature of the area lends a pristine character to even the common aesthetic resources located there.

Also of consideration, although located off-site, are the two lagoons in San Dieguito: San Elijo Lagoon and San Dieguito Lagoon on the mouths of Escondido Creek and San Dieguito River, respectively. These are regional, aesthetic, and biological resources which are pertinent due to their dependence on the two water sources. These are located eight to ten miles to the southwest and are not associated, aesthetically, with Rancho Cielo.

FIGURE 21



Rancho Cielo

Rancho Santa Fe, California

Visual Features

- high quality distant views
- view from scenic highways
- view from adjacent communities

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In summary, Rancho Cielo contains extensive aesthetic resources throughout the property. Escondido Creek and San Dieguito River are important not only on or adjacent to the project but from much of the San Dieguito subregion. Steep slopes with chaparral and rock outcrops are very clearly included within the viewsheds of roads, highways, residential communities, Lake Hodges, and surrounding hillsides. The value of all these resources in their contribution to the rural character of the San Dieguito area cannot be discounted and must be considered significant.

IMPACTS

Aesthetic impacts from future development on the resources of Rancho Cielo can be broken down into two main areas: impacts on the overall aesthetic environment of the area, and impacts to specific resources which have been identified as regionally significant or unique. The first area of impact can be analyzed using Figure 21 which shows the overlap of development locations into viewshed areas from surrounding communities. Examination of the land use plan clearly indicates that development will be concentrated along the ridgelines while slopes are left in open space. This will have two effects: provides a majority of the viewshed for long-term natural conditions, and reduces the amount of grading required for roads, residence pads, and other improvements. Lot sizes are generally one acre or greater in size, with the exception of the Village Estates townhome area. This factor will further reduce the amount of grading required.

The land use plan shows sensitivity to the viewshed aesthetics of the property; however, no specific evaluation can be made for future grading required for each tentative map and subsequent construction. Indiscriminant grading and brushing of the property may result in short or long-term scarps, fill debris, and devegetated areas exposed to substantial surrounding areas. This impact is considered potentially significant but can be avoided or mitigated with the appropriate mitigation measures.

One aspect of the project which cannot be overlooked is the committment of approximately 1695 acres of the total 3525 acres of Rancho Cielo to uses other than open space. This acreage is considerable, but must be viewed from the perspective of the resources present and the integrity of those resources after project approval. On the broader scope, the combination of large clustered lots, extensive open space areas, preservation of steep slopes, and sensitive lot placement preserve the rural environment of San Dieguito and the continuity of aesthetic resources on Rancho Cielo, which

achieves the development standards allowed by the General Plan. On a narrower scope, any development of the site will impact the undisturbed nature of the area. All things considered, the committment of the areas shown on the land use plan for development does not constitute significant impacts to the aesthetic integrity of Rancho Cielo. This opinion is substantiated by the project's commitment of approximately 1830 acres of open space, preservation of steep slopes and drainages, clustering of lots, and previous findings made by the Board of Supervisors allowing development in the form of a Specific Plan.

Focusing on specific resources is intended to illuminate future appearance and identify elements of the project which will require mitigation measures. These resources and specific aspects of the project design have been isolated here for close scrutinization.

- Escondido Creek

Alteration of Escondido Creek will be minimal due to the buffer open space areas on either side of the watercourse. The buffer is intended to include all riparian and woodland resources as well as the adjacent canyon walls. Access over the Creek is proposed for two locations, both of which require bridge or box culvert construction. The viewshed from Elfin Forest and surrounding areas will be altered to include residences on the higher slopes. These residences will be spread at a relatively low density with minimum one-acre lots amidst open space areas. The overall effect is not considered significant.

Discharge of treated effluent into Escondido Creek will have some effect, not only on the immediate creek area but also in San Elijo Lagoon. The effect of this will be to increase stream flow intermittently during winter months. The impacts of this condition are generally positive in nature and are discussed in the Water Quality section of the report.

- San Dieguito River/Lake Hodges

The project will have a much lesser effect on the San Dieguito River than on Escondido Creek since the river is located off the property. Nonetheless, certain impacts should be discussed for clarification. Runoff and erosion hazards are discussed in the Hydrology section, but can be summarized as contributing to the stream flow of the river. Siltation impacts have been addressed in the Hydrology section and are not considered significant for aesthetics.

The viewshed of Rancho Cielo from Lake Hodges can only be impacted for isloated locations due to obstruction by steep slopes. From the north end of the lake, only the eastern extension of Rancho Cielo, including the north and east-facing slopes of Peak 1470 down to Del Dios Highway, is visible. The Planned Development Area designated for 19 units along Del Dios Highway will accommodate six-acre lots and will require grading for residence pads and access roads. As previously discussed, grading impacts could be significant if done without grading and landscape plans.

◦Scenic Highway Corridors

The viewshed from Del Dios Highway covers portions of the south-facing slopes in the south, southwest, and east portions of Rancho Cielo. Impacts from development (i.e., grading, brushing, construction) will be visible from isolated sections near Del Dios and Lake Hodges where the eastern undivided 103 acres meets the roadway; and from longer sections east and west of the intersection with Via Ambiente. Site development encroaches to within several hundred feet in this west part of the highway and the commercial center will be in plain view to eastbound traffic. The topography in this southwest area is somewhat irregular, however, and limits visibility substantially. Also, several residences presently exist in the vicinity of the proposed commercial center, located north and upslope of the site.

The density of proposed development will allow for large areas of open space between developed areas. The large lot sizes and open space areas will greatly reduce the visual impact of developed areas on the ridges and slopes within the scenic highway corridors.

Overall, visual impacts to the scenic highways are not considered significant. This is due to the open space preservation and large lot development. Two areas of the project may significantly impact the Del Dios Highway scenic corridor: the commercial center at Via Ambiente on the west end, and the planned development area in the east end.

◦General Plan

All of the expected and potential impacts have been analyzed above for the specific resources which exist on Rancho Cielo. Impacts to Elements of the General Plan are not significant. Even where project impact may be potentially significant, they are not of such magnitude that they violate the intent of these regional guidelines. Subsequent site development plans will be responsible for localized impacts resulting from a design of each phase of the project.

The Resource Conservation Areas will not be significantly impacted due to the substantial open space areas. The resources within the RCA's and the overall integrity of the RCA's will be preserved with the proposed open space areas of the project design.

MITIGATION

Many aspects of the project design serve as mitigation for potential impacts: preservation of steep slopes, drainages and woodland areas; clustering of units; and the provisions for adequate public services to accommodate the development. Additional mitigation measures are necessary, however. These measures are designed to be placed as conditions of approval for subsequent site develoment plans, and are mainly associated with cosmetic type improvement which rehabilitate or reduce visibility of impacted areas.

Site plans and their approval will be required for the commercial center on Del Dios Highway to ensure that the architectural design and exposure is compatible with the aesthetic character of Del Dios Highway and the surrounding San Dieguito community. Development of the Planned Development Area in the east end by Del Dios Highway should be developed in a manner consistent with the Rancho Cielo design. The land should be developed via a Tentative Map to ensure timely and complete improvements to serve each lot. A site plan may be required for the ingress/egress points at Del Dios Highway. This can be determined by staff review at the Department of Planning and Land Use.

All grading associated with Tentative Maps or Use Permits which is subject to a Major Grading Permit will require landscape plans. Landscaping should accomplish slope stability as well as provide a visual buffer to grading and construction impacts. Grading for roads should be minimized where possible. Cut banks of 1:1 should be utilized where the soil is deemed suitable by a qualified soil engineer.

Additional mitigation measures of the types discussed may be required for each development phase. Again, these are appropriate as conditions of approval. Additional analysis may be required if subsequent development plans are substantially different than the plans analyzed in this report. The concern here is not for the specific placement of dwelling units, but for the overall effectiveness of the clustering of units amidst open space project design.

SEWER

PRESENT SETTING

Sewer service is discussed in this section solely regarding the availability, feasibility, and alternatives of sewer service for Rancho Cielo. Associated issues such as energy requirements, soil conditions, aesthetics and growth inducement are considered here but are more thoroughly discussed in their respective sections. The formation of the sanitation district and the construction of a water reclamation plant are treated as major project components and are addressed throughout this report.

Of primary consideration in the analysis of sewer service is the soil conditions which prevail on the site. The Geology section of the report points out that surface soils on the property are very thin and underlain by hard metavolcanic or granodioritic rock, impermeable to effluent percolation. These soils place rigid constraints on the mode of sewage disposal by limiting the use of septic tanks and leach lines to isolated locations where the soil mantle is relatively thick.

Sewer service in San Dieguito is primarily concentrated within the coastal communities where urban levels of development are prevalent. Other sewer facilities are available in the Rancho Santa Fe area west of the project site. There are currently six sanitation districts operating sewage facilities within San Dieguito: Solana Beach, Cardiff, Whispering Palms, Rancho Santa Fe, Leucadia County Water District, and Encinitas Sanitary District. Additionally, the Fairbanks Ranch development south of Rancho Santa Fe is in the process of establishing a sanitation district.

Included in the Rancho Cielo Specific Plan is the establishment of a sanitation district to serve the project site. Sewage facilities within this district will consist of a water reclamation system which recycles approximately 260,000 gallons of wastewater per day. This reclamation system has been designed solely to serve Rancho Cielo, however, there is a potential for expansion into other areas outside the project. These areas will be required to comply with the annexation proceedings, and construct all necessary additional facilities prior to admission into the sanitation district and the extension of services.

There are numerous alternatives to the actual design and operation of the wastewater reclamation system. These alternatives consist of various combinations of wastewater collection, reuse, and disposal. The following discussions address each of these alternatives.

◦Wastewater Collection and Treatment Alternatives

Wastewater generated by the planned development must be collected through trunk sewers and delivered to one treatment plant capable of processing the entire flow; or, to two smaller plants each treating a portion of the sewage flow. The benefit of two separate treatment plants is that less pumping will be required to deliver the wastewater over irregular terrain for treatment. Although having one plant will require more lineal feet of trunk sewers and pump stations, it will have lower capital construction and maintenance costs, and will require less energy for operation.

◦Reuse Alternatives

After the wastewater has been treated through tertiary levels it can be distributed through transmission mains for on or off-site reuse. On-site reuse will primarily consist of irrigating landscape strips along roads, recreation areas and other locations. Golf courses, parks and some agricultural crops in close proximity to the planned development can also be irrigated with the reclaimed water. This could require an extensive transmission system to deliver water to off-site reuse areas and does not promote water conservation and a demand for reclaimed water in the project vicinity.

◦Disposal Alternatives

The demand for on or off-site reuse of treated wastewater has seasonal variations primarily due to climatic changes. In seasons of low demand, sewage treatment plant effluent must be either stored or disposed. Storage ponds can be used to hold excess reclaimed water until there is a demand for it. This will require a great amount of land in order to construct ponds large enough to store the water. An alternative to seasonal storage is stream discharge. This may be classified as a type of reuse because of its benefits to stream enhancement. Effluent from the proposed treatment plant can be discharged into Escondido Creek or San Dieguito River after meeting the strict standards set by the Regional Water Quality Control Board. A reverse osmosis unit, large enough to treat the entire plant effluent is needed for effective nutrient removal before it is allowed to enter a stream.

Another alternative is to utilize an existing outfall which disposes plant effluent directly into the ocean. This may be accomplished in either of two ways: 1) connect with the Escondido land outfall which carries effluent from the City of Escondido to the San Elijo ocean outfall; or, 2) construct another land outfall parallel to the Escondido

outfall which will then merge with the San Elijo ocean outfall. In order to use either existing outfall system, rights must be purchased from either San Elijo (County of San Diego) or Escondido (City of Escondido), with their mutual consent. Escondido owns 100% of the land outfall capacity and approximately 80% (presently 21 million gallons per day) of the ocean outfall capacity. San Elijo owns the remaining 20% (four million gallons per day) of the ocean outfall capacity. Due to treatment plant limitations these outfalls have a current flow rate of approximately one-half their capacity as shown below.

	Existing Capacity (mgd)	Existing Use (mgd)
Escondido Land Outfall	21	8.6
San Elijo Ocean Outfall	25	12.1

The Escondido and San Elijo plants do, however, have future expansion plans and may not be in a position to sell any capacity rights.

Demineralization of all or portions of the wastewater will be required for each of the alternatives. This may be accomplished through either reverse osmosis or solar distillation. A concentrated solution of dissolved salts is a by-product associated with the process of demineralization. The solution is referred to as brine, and is approximately 15% of the system's raw sewage flow. Disposal of brine is a major cost of operating a demineralization system. Methods of disposal include discharge into an outfall system, discharge to evaporation ponds, or hauling the brine to an outfall or to a Class I sanitation fill. Capacity in an existing outfall may be obtained for brine disposal due to the nature of brine and the relatively small quantities generated. Construction of evaporation ponds or a new outfall may require too large a land area or capital expenditure for the brine quantities involved.

The remaining alternative, brine hauling, requires very high transportation costs, especially considering rising fuel costs. If capacity cannot be obtained in the outfall system then brine must be hauled to the closest Class I sanitary fill located in Otay Valley, 35 miles south of Rancho Cielo. This sanitary fill, however, is approaching capacity and may close down in the near future. The alternative Class I fill is located 80 miles north of the project in West Covina.

◦ Operation Alternatives

The Olivenhain Water District or the County of San Diego, Department of Sanitation and Flood Control, are the two possible operators of the Rancho Cielo water reclamation system. The County of San Diego would be more expedient operators because of their experience and expertise in such a system. In addition, the County already owns a portion of San Elijo outfall capacity, therefore making it possible to dispose of brine in this outfall. The Water District would be taking on a new area of expertise requiring additional staff and facilities.

Eight alternatives for collection and disposal of the water reclamation facilities have been proposed. These alternatives incorporate the various component possibilities described above and are summarized in Table 16.

IMPACTS

The proposed development of Rancho Cielo will consist of 892 residential units with 15 acres of commercial property. An estimated 250 gallons per dwelling unit per day, and 2300 gallons per acre per day for the commercial property, was used to determine the average annual flows of sewage to be treated. Thus, a treatment plant capacity of approximately 260,000 gallons per day is needed to treat the entire flow. A preliminary system design is shown in Figure 22 and includes one reclamation plant, 6 pump stations, and 37 miles of sewer line.

Due to the steep terrain and geology on the project site, sewer service is necessary to accommodate clustering of units and achievement of the maximum allowable density of development. Through the formation of a sanitation district, sewage treatment and reuse allows for long-term disposal with a low frequency of failure. This system also prevents adverse impacts to groundwater which may be associated with septic tank disposal methods. In addition, reuse will promote water conservation and increase water availability.

The particular combination of alternatives recommended is on-site reuse, stream discharge (in lieu of seasonal storage) and brine hauling. This method of reclamation was selected based upon its relatively low capital and operation costs, small land requirements and on-site water conservation potential. Although alternatives exist which combine various methods of treatment and disposal, no alternative has yet been confirmed for use. The exact process must be determined jointly by the

	Treatment		Reuse		Effluent Disposal				
	Secondary	Tertiary	Off-Site	On-Site	Seasonal Storage	Escondido/ San Elijo Outfall	Parallel/ San Elijo Outfall	Stream Discharge	Brine Hauling
ALT 1	yes	yes	no	yes	yes	no	no	no	yes
ALT 2	yes	yes	no	yes	no	no	yes	no	no
ALT 3	yes	yes	no	yes	no	no	no	yes	yes
ALT 4	yes	yes	yes	no	yes	no	no	no	yes
ALT 5	yes	yes	yes	no	no	no	yes	no	no
ALT 6	yes	yes	yes	no	no	Brine only	no	yes	maybe
ALT 7	yes	yes	no	no	no	Brine only	no	yes	maybe
ALT 8	yes	no	no	no	no	no	yes	no	no

Rancho Cielo

Rancho Santa Fe, California

table 16

Sewage Disposal Alternatives

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County of San Diego and the Regional Water Quality Control Board. Impacts of the various components can be outlined, however, to assist the decision-making process. Many of these issues are discussed in depth in other sections. In such cases, the section is cited for further analysis.

◦Wastewater Collection and Treatment

A collection system requiring two treatment facilities was analyzed initially for feasibility and was not considered practical. Impacts of this approach are associated with higher energy, capital, construction, and maintenance costs.

A single collection and treatment facility allows for lower energy and capital requirements primarily due to economics of scale.

◦Reuse

On-site reuse encourages water and energy conservation as well as providing a cash flow income to supplement the fees for sewer service. Impacts from on-site reuse on erosion/runoff and water quality are insignificant due to the volume of water used, the balance between irrigation rate and evaporation rate, and the degree of treatment to achieve groundwater standards (see Hydrology and Water Quality sections).

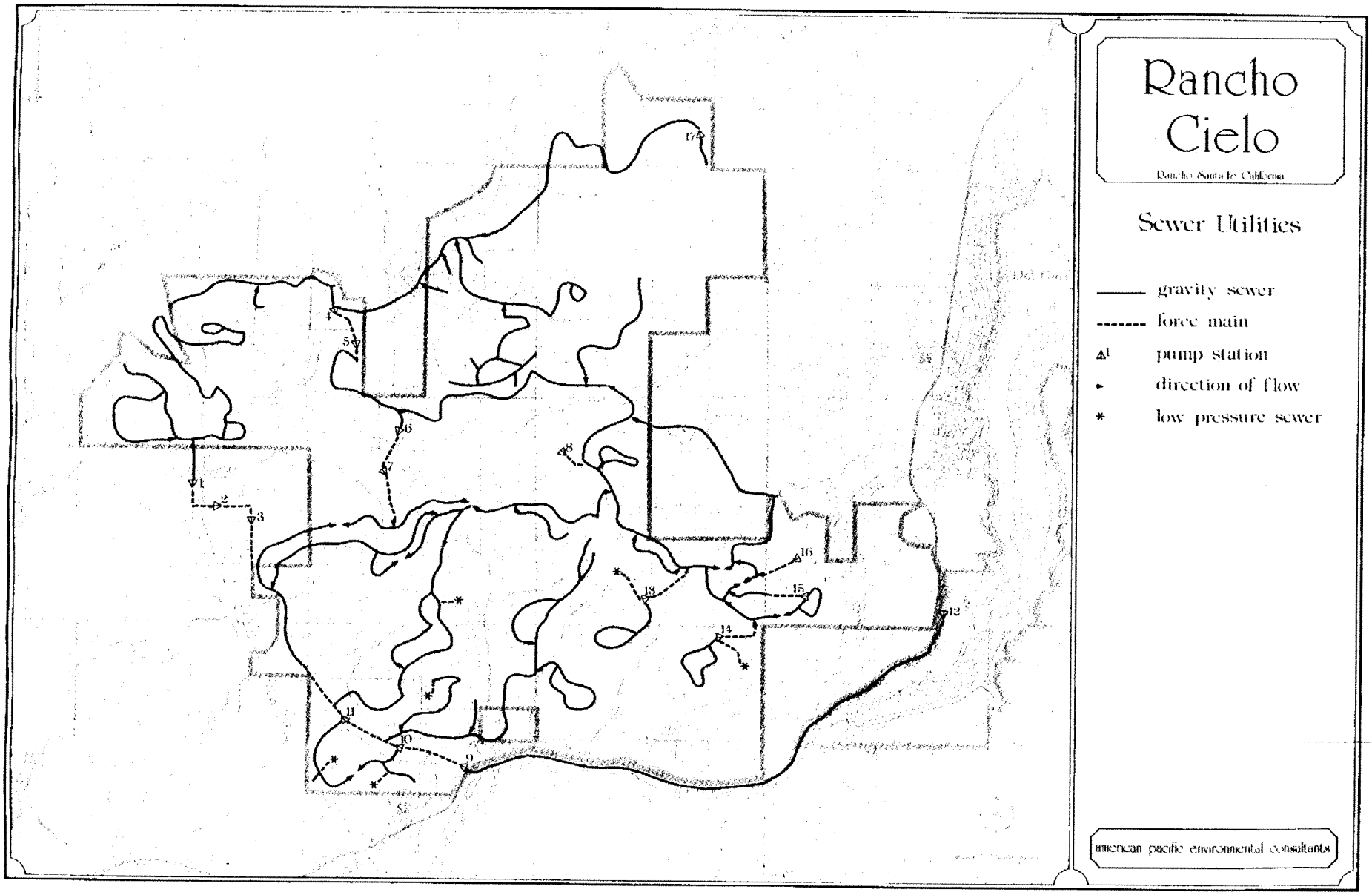
Off-site reuse is similar to on-site reuse. It provides a source of water to local users which is less expensive and which requires less energy than imported water.

◦Disposal Alternatives

Year-round reuse will require seasonal storage which requires additional land area to construct holding ponds for water. Impacts from this alternative are not significant, although available sites for storage may require that some holding ponds be placed off-site.

Disposal of effluent into the Escondido or San Elijo outfalls may significantly impact the long-term capacity requirements of the sewer districts which presently own rights in the outfalls. Capacity for Rancho Cielo effluent disposal may be available for interim periods; however, permanent capacity does not appear to be available. Disposal of effluent into the Escondido outfall may be accomplished by connection at Escondido Creek. Disposal into the San Elijo outfall would require construction of a new pipeline from Rancho Cielo to the ocean outfall running parallel to the existing land outfall. Impacts of either approach are primarily associated with outfall capacities and not the location of disposal.

FIGURE 22


Rancho Cielo
Rancho Santa Fe, California
Sewer Utilities
gravity sewer
force main
pump station
direction of flow
low pressure sewer
american pacific environmental consultants

Stream discharge of plant effluent which is not used in irrigation may be in Escondido Creek or San Dieguito River. In either case, water quality standards would have to be met before disposal would be allowed. At this time there does not appear to be any significant impacts associated with stream discharges into either basin.

°Brine Disposal

Disposal of only brine into the outfall system would pose substantially less of an impact due to the reduced volume of waste (39,000 gpd). Brine disposal is potentially significant for the Escondido outfall due to the City of Escondido's growing populace. Disposal into the ocean outfall may be equally significant, but as a cumulative impact from this and other future demands for capacity.

Brine disposal in the Otay landfill may be short-term due to the capacity status of this Class I landfill. It is anticipated that this landfill will be at capacity in the near future, and unable to accommodate on-going disposal. In this case, alternate disposal measures would be required such as acquiring capacity in the Encina or Point Loma outfalls, or hauling the brine to the West Covina landfill. Additional impacts such as energy consumption or financial responsibilities are presented in Table 17 but are more thoroughly discussed in their appropriate sections of this report.

MITIGATION

Mitigation measures here are primarily designed to alert decision-makers of the standards and requirements which must be met prior to the approval of any of the above-mentioned alternatives. The alternatives for water reclamation facilities will be required to meet the individual basin water quality objectives established by the Regional Water Quality Control Board.

Compensation for disposal capacity allotment into either of the outfalls must accompany the approval of permits for the water reclamation plant if outfall disposal is required. Fees or improvements required for acquisition of outfall capacity may be established jointly by the County of San Diego and the City of Escondido.

Prior to final approval of any subsequent Final Map or Use Permit of the Rancho Cielo Land Use Plan, all necessary permits should be acquired to ensure sewer availability. This assurance may be accomplished by placing this condition of approval on Tentative Maps or other development projects which might be pursued.

	Land	Capital Construction Cost ($)	Operation and Maintenance Cost ($/yr)	Energy Requirements (KWH/yr)	Outfall Capacity (gallons/day)		Water Reuse
					Escondido Land	San Elijo Ocean	
ALT 1	17.5	4,877,300	301,250	1,279,600[2]	0	14,260	On-site reuse/ seasonal storage
ALT 2	2	4,020,800	235,700	995,000	0	*	On-site reuse/ outfall capacity
ALT 3	2	3,541,000	331,700	1,244,000[2]	0	39,000	On-site reuse/ stream discharge*
ALT 4	17.5	4,567,400	290,600	884,500[2]	0	14,260	Off-site reuse/ seasonal storage
ALT 5	2	3,710,900	213,500	599,900	0	*	Off-site reuse/ outfall capacity
ALT 6	2	3,258,900	313,800	848,900	39,000	39,000	Off-site reuse/ stream discharge*
ALT 7	2	3,437,000	285,200	1,283,700	39,000	39,000	Stream discharge*
ALT 8	2	2,265,100	138,300	273,700	0	260,000	Outfall capacity

1. As a result of the increased energy consumption (Section IV-J) air pollution impacts should also be considered (Section IV-K).
2. These alternatives include brine hauling which will involve gasoline consumption; an additional energy requirement.

* - To accommodate seasonal variations in reclaimed water reuse the outfall or stream may receive up to 260,000 gallons of treated effluent per day or 14,260 gallons of brine per day.

Rancho Cielo

Cost, Energy, Capacity and Water Reuse Comparison of Sewage Disposal Alternatives

table 17

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WATER

PRESENT SETTING

The Metropolitan Water District supplies San Diego County with a blend of Colorado River water (60%) and Northern California water (40%). This blend is delivered to Lake Skinner (Riverside County) and eventually enters one of four pipelines which traverse southward through San Diego County. The water is then distributed by the San Diego County Water Authority which encompasses a total of 898,607 acres and serves approximately 1,758,737 people. In the 1978-79 fiscal year, the Authority sold 289,261 acre-feet (a.f.) or 94,122,394,000 gallons of imported water to its various member agencies. In addition to the Authority's water, member agencies receive local water through impounding reservoirs and from wells. Total water production of the 23 member agencies during 1978-79 was 433,009 a.f.

The San Diego County Water Authority is entitled to 10.9% of the water capacity of the Metropolitan Water District should this resource come into short supply. This portion, however, has been historically exceeded with volumes received in the drought years of 1975-1977 reaching 34% of the Metropolitan Water District's supply. When faced with the loss of approximately half of the Colorado River supply, the Metropolitan Water District amended its contract with the State of California to provide an additional 500,000 a.f. per year via the Peripheral Canal. Other changes have also increased the State Water Project contract to a total of 2,011,500 a.f. per year. Construction of the canal has been approved by Governor Brown but is not expected to be completed until 1985 (approximately). In that same year the Arizona project should be completed and California will lose half of its Colorado River water supply. San Diego is dependent on the Peripheral Canal water in order to keep up with continual growth in the County. Completion of the project should assure adequate water supplies until at least the year 2000. Legislation is pending (i.e., Assembly Bill No. 442) regarding a new water plan for California in order to increase the amount of water available through the State Water Project so that the state can fulfill contractual commitments to the Metropolitan Water District and other state contractors. This single piece of legislation, however, is not expected to have a significant effect on California's water supply.

◦Olivenhain Municipal Water District

The project area is located within the Olivenhain Municipal Water District (OMWD), a member agency of the SDCWA which is responsible for 37,367 acres and approximately 22,000 people.

Water consumption within the District for 1978-79 was 5,154 a.f., approximately 1.8% of the Authority's water supply. Per capita consumption is assumed to be 150 gallons per day. The Olivenhain MWD does not receive water from local sources and does not have any seasonal storage at this time. The district's long-term improvement plans include the development of a 250-acre reservoir site adjacent to Rancho Cielo, along with two other reservoirs in the District for a total of 30.5 million gallons of seasonal storage. The purchasing of land and facilities for these improvements will be financed through a recent 9.8 million dollar revenue bond.

Existing water facilities in the project area include a one-half million gallon reservoir in the approximate center of the subject property, a 10" water pipe which bisects the property in an easterly direction; several pipes located near the western boundary running in a northerly direction; a pump station located approximately 2.5 miles southeast of Elfin Forest; a portion of the Second San Diego Aquaduct; and a portion of the flume which transports water from Lake Hodges to the San Dieguito Reservoir.

An extensive water facilities improvement system is proposed in conjunction with Rancho Cielo and will include two reservoirs, four pump stations and approximately 27 miles of water lines (see Figure 23). This system will be capable of serving a larger area than Rancho Cielo at the system's ultimate development. It is the objective of the design to meet all ultimate demands along with fire flows, storage and pressure requirements. Olivenhain Municipal Water District storage and pumping requirements are summarized below.

	Rancho Cielo Average Annual Demands (gallons/ minute)	Total System Average Annual Damands (gallons/ minute)	Fire Re-charge of Reservoirs (gallons/ minute)	Total* Required Storage (million gallons)	Total Required Pumping Capacity (gallons/ minute)
Existing System (1980)	0.0	26.1	42**	2.02	120
Ultimate System	781.7	1640.7	230-1688***	23.42	4208-6672

* Total Required Storage = Forebay + Emergency + Fire

** Fire recharge of reservoir in three days for a fire demand of 1500 gpm of a 2-hour duration.

*** Fire recharge of reservoir in three days for a fire demand of 3500 gpm of a 3-hour duration.

FIGURE 23

IMPACTS

Implementation of the planned development will allow for the construction of 892 residential units. Based on the Olivenhain MWD's figures of 3.7 persons per household consuming 150 gallons of water each day, water consumption would increase by approximately 495,000 gallons per day as a result of the proposed project. Until the hydraulic analysis has been completed on the property the District cannot commit to servicing the development. Upon completion, however, it is anticipated that water service will be available with the construction of all necessary facilities on and off-site.

The existing water system serving the property is inadequate to serve a large scale development such as Rancho Cielo. Presently, water cannot be delivered to all areas within Rancho Cielo at a normal operating pressure of no less than 25 pounds per square inch due to the irregular terrain and large area involved. In addition, the existing system could not meet fireflow requirements for the development.

It is therefore concluded that impacts to existing water service facilities, including the Olivenhain MWD, will be significant if the necessary facilities do not accompany the project, and not significant if they do accompany the project.

MITIGATION

The water reclamation plant proposed to serve the planned development will recycle approximately 260,000 gallons of sewage per day for reuse primarily as irrigation. Together with individual voluntary water conservation practices, the demand for water from the Olivenhain MWD may, in the long term, be reduced. In addition, the water reclamation plant will encourage water conservation in any future developments in the surrounding area. The Rancho Cielo Property Owners Association has assured the water district that all necessary improvements to mitigate the impacts will be constructed to the satisfaction of the Olivenhain MWD. The District has indicated that these improvements are consistent with their long-term capital improvement plans and are viewed as a benefit to the District as a whole.

SCHOOLS

PRESENT SETTING

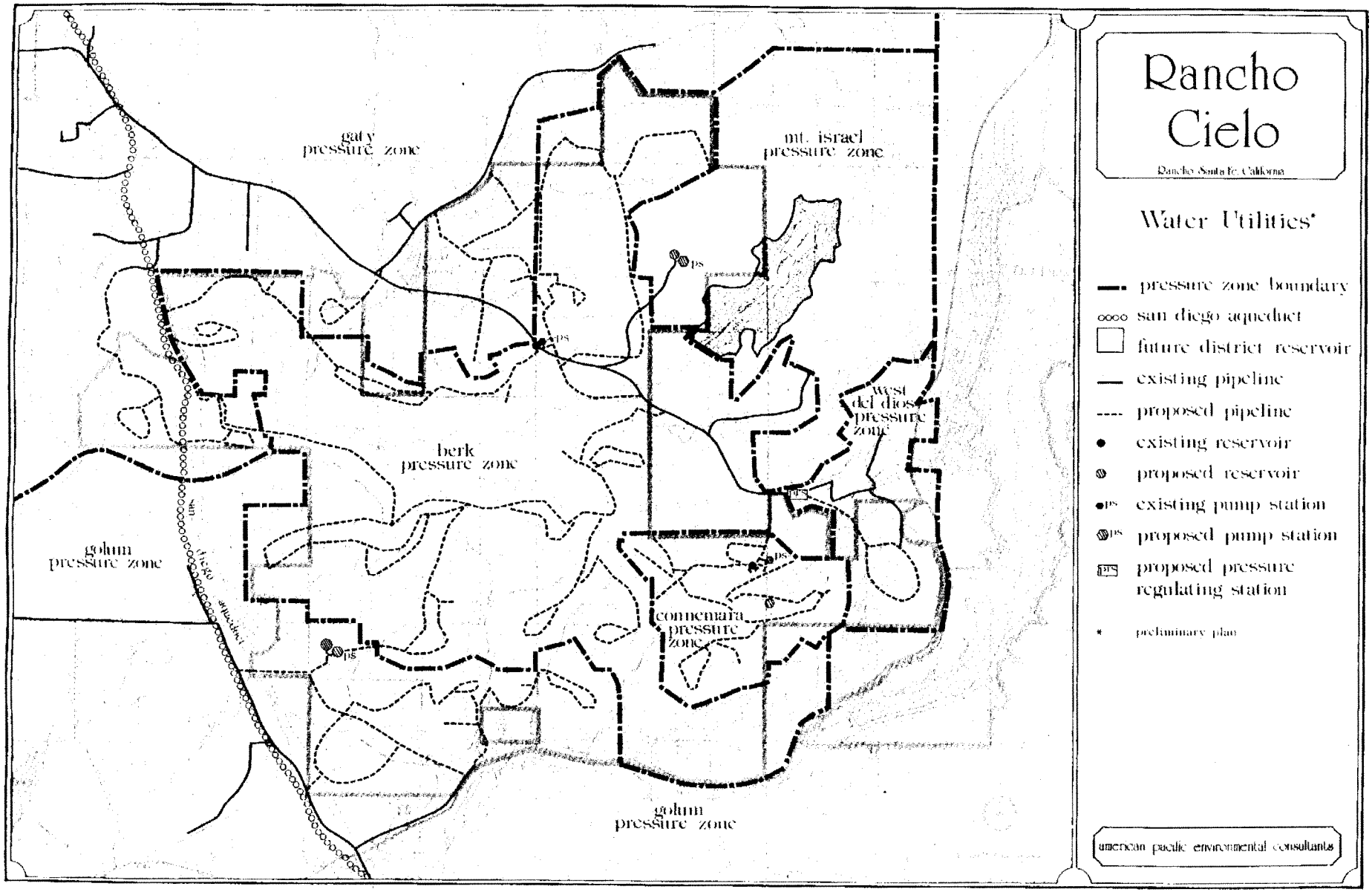
The present school district boundaries indicate that students generated by the proposed project will attend four different school districts. The eastern half of the site is within the Escondido Union School District and the Escondido Union High School District while the western half lies within the Rancho Santa Fe Union School District and the San Dieguito Union High School District (See Figure 24). All these districts are at or near capacity and are operating under the terms of Senate Bill 201 and Board of Supervisors Policy I - 43. This legislation provides for the dedication of land and/or payment of fees by residential developers to school districts serving proposed development areas for the purpose of providing additional facilities to accommodate growth. These fees are to be used for interim classrooms and related facilities, but make no provisions for long-term, permanent improvements needed to relieve overcrowded conditions. Board of Supervisors Policy, I - 43, goes beyond this legislation to ensure that adequate school services will be available concurrently with the need for such services.

The Rancho Santa Fe School District (K-8) consists of an Elementary and Middle School located on Avenida De Acacias, approximately 12 miles southwest of the site. Bus transportation is not provided by the District. The school is currently operating over capacity and has remodeled the unified arts room and made use of the auditorium to provide for increasing enrollment.

The San Dieguito Union High School District is comprised of two junior high schools (6-8) and two high schools (9-12). Project generated high school students within the District will attend San Dieguito High School, located at 880 Santa Fe Drive in Solana Beach six miles southwest of Rancho Cielo. Bussing is available for students who live three miles or more from the school. This school is presently exceeding capacity by approximately 184 students, and is considered to be extremely overcrowded. During the past eight years over 50 portable buildings have been added to accommodate increasing enrollment. Potential future school sites within the district include a 20-acre site in La Costa, and a site in North City West which is currently under negotiation. Presently there are no development plans for expansion into these areas.

As of November 29, 1979, the San Dieguito Union High School District has issued letters regarding proposed residential developments, indicating that their district cannot provide adequate service to any additional students. Numerous development projects have not been approved as a result of this defacto

FIGURE 24


gaty
pressure zone
mt. israel
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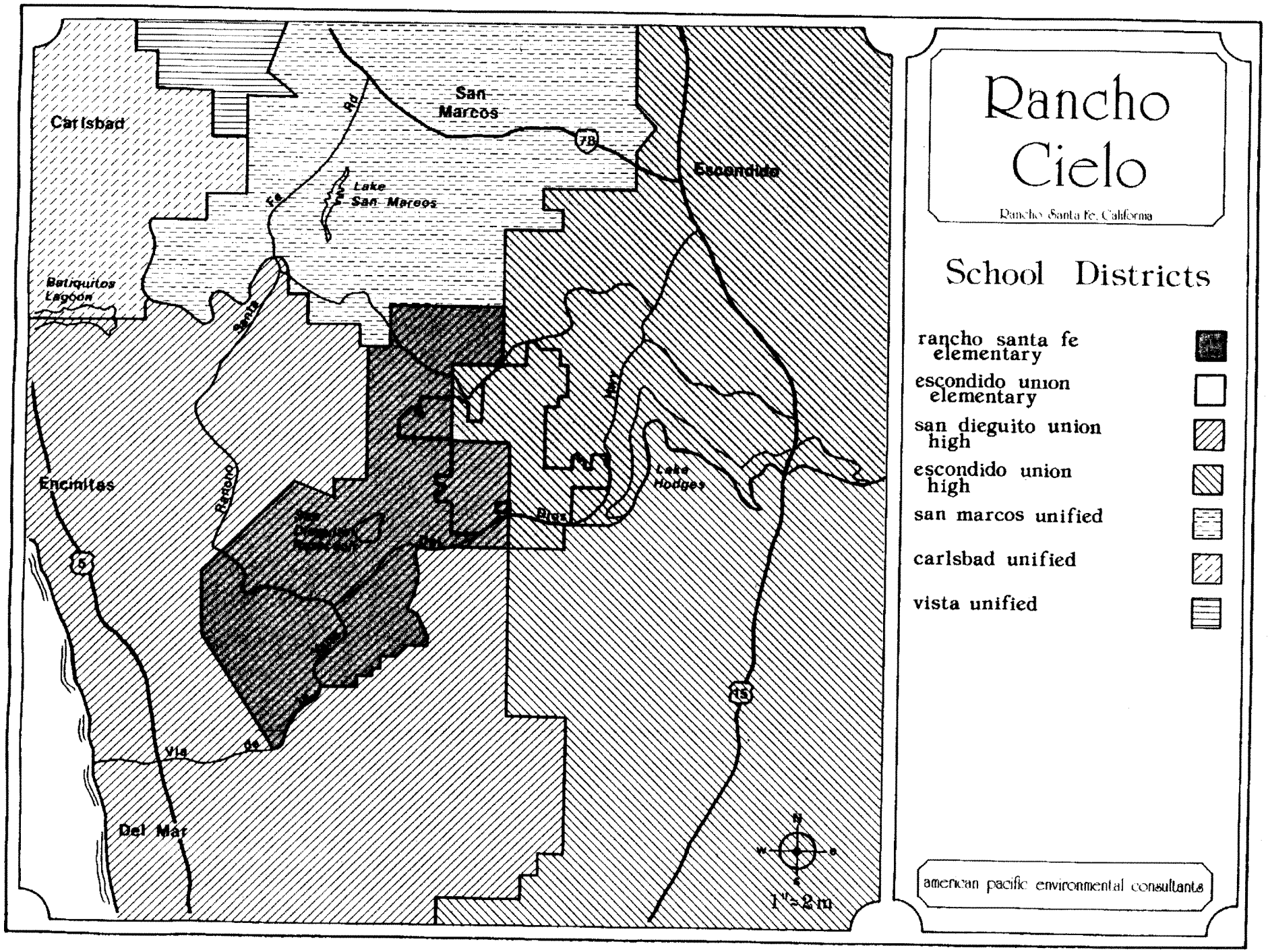
west
del dios
pressure
zone
berk
pressure zone
golum
pressure zone
san
diego
aqueduct
commenara
pressure
zone
golum
pressure zone
PS
PRS
Rancho
Cielo
Rancho Santa Fe, California
Water Utilities*
pressure zone boundary
san diego aqueduct
future district reservoir
existing pipeline
proposed pipeline
existing reservoir
proposed reservoir
existing pump station
proposed pump station
proposed pressure
regulating station
* preliminary plan
american pacific environmental consultants


Rancho Cielo
Rancho Santa Fe, California
School Districts
rancho santa fe elementary
escondido union elementary
san dieguito union high
escondido union high
san marcos unified
carlsbad unified
vista unified
Carlsbad
San Marcos
Escondido
Encinitas
Del Mar
Lake San Marcos
Batiquitos Lagoon
Lake Hodges
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1" = 2 m
american pacific environmental consultants

moritorium. A committee, established by the Construction Industry Federation, has been meeting with the San Dieguito School Board to discuss solutions to the schools overcrowded conditions. The San Diego County Board of Supervisors has taken no action at this time and is allowing negotiations between the district and the construction industry to proceed.

The Escondido Union High School District consists of three schools. Project generated students will attend San Pasqual High School located at 3300 South Bear Valley Road 5.5 miles northeast of Rancho Cielo. Currently this school is operating at capacity and enrollment is expected to increase next year. Expansion plans for the school are currently under construction and will be completed in two to three years. After the expansion of San Pasqual High School to a capacity of 1800 students, it is anticipated that the current rate of growth will generate students in excess of the new capacity.

The Escondido Union School District presently has 10 elementary and three junior high schools in operation at this time. The three schools serving the project area are Felicita Elementary at 737 West Thirteenth Av., Miller Elementary 1975 Miller Avenue, and Del Dios Middle School at 1400 West Ninth Avenue. All three schools are located approximately six miles from Rancho Cielo, and no bus service is available. Although these schools presently remain below capacity, ongoing development in their area may result in overcrowded conditions in the near future. Expansion plans within the district are limited to the development of a new elementary school (K-5), located on North Broadway near Rincon Road in Escondido. The preliminary plans for the school estimate a capacity of 756 students with approximately twenty-one 900 square foot classrooms. It is not known when this school will be constructed. Table 18 includes additional information for each district.

Two Community Colleges serve the proposed development area; Miracosta College located at One Berard Drive, Oceanside, and Palomar College at 1140 W. Mission Road, San Marcos. Both schools offer a wide variety of course subjects and educational opportunities.

IMPACTS

Development of the proposed project will result in the creation of 892 new residential units within the project boundaries. Typically, each residential unit is expected to contribute some school-aged children to attend the local schools. Rancho Cielo residents are expected to include a lesser number of school-aged children than the average; on the assumption that upper-income households have fewer children than lower or middle-income households. Any increase in student

	San Dieguito Union High School District		Escondido Union School District			Escondido Union High School District
	San Dieguito High (9-12)	Rancho Santa Fe School District (9-12)	Felicita Elementary (K-5)	Miller Elementary (K-5)	Del Dios Middle (6-8)	San Pasqual High (9-12)
Capacity	1881	428	936	648	1,080	1400+
Enrollment	1995	454	748	555	1,010	1350
Student Generation Rate	0.25	.33	.30			.31
Projected Generated Students*	78	103	174			180
Fees per Single Family	$1,001	$1,357	$1,284			$1,589.00
Projected Fee Contribution*	$312,312	$423,384	$744,720			$921,620.00
Bussing Available	yes	no	no			no
Student/Teacher Ratio	25 /1	26/1	29/1			---
Households served by District	---	225	28,482			---
Tax Revenue Ratio	.018141805	.001772793	.022188873			.020518308

*Figures based on approximately 312 dwelling units within the San Dieguito Union High School District and Rancho Santa Fe Union School District, and 580 dwelling units within the Escondido Union High School District and Escondido Union School District.

Rancho Cielo

Enrollment, Student Generation, Development Fees and Other Data on School Districts Serving the Project Area

table 18

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enrollment, however, must be considered a significant impact on the level of education and an incremental contribution to overcrowded conditions. Using the current student generation rates issued by each district, the project would generate a total of 535 school aged children; 78 to San Dieguito Union High School District, 103 to Rancho Santa Fe School District, 174 to Escondido Union School District and 180 to Escondido Union High School District.

San Dieguito Union High and Rancho Santa Fe School Districts will be severely impacted by this increase in enrollment. The Escondido Union High and Escondido Union School Districts have also indicated that the increased enrollment will significantly impact their educational programs. Increased enrollment will put an added burden on existing school facilities, student/ teacher ratios and the overall level of education offered by each school, and therefore is considered to have significant impacts. No impacts are anticipated for the Community College Districts.

MITIGATION

Building fees imposed by each district are intended to offset the cost of providing additional facilities to service the project-generated students. The fees will be paid by the developer at the time of construction in the amounts of $744,720 for the Escondido Union School District, $921,620 for the Escondido Union High School District, $423,384 for Rancho Santa Fe Union School District, and $312,312 for San Dieguito Union High School District (see Table 16). These fees will be used to purchase temporary relocatable units for immediate relief from overcrowded conditions, and to construct new permanent educational facilities to accommodate long term growth.

Impacts on the Escondido Union High School District will be adequately mitigated through the collection of fees and the completion of San Pasqual High School expansion. Since Escondido Union School District is operating below its capacity, the required development fees will substantially mitigate any potential impacts resulting from the proposed project. The San Dieguito Union High and Rancho Santa Fe School Districts have reached a point where additional relocatable units would place a severe strain on permanent facilities such as the library, physical education facilities, locker areas, and rest rooms. In the views of the districts, permanent facilities must be assured before impacts can be fully mitigated.

FIRE PROTECTION

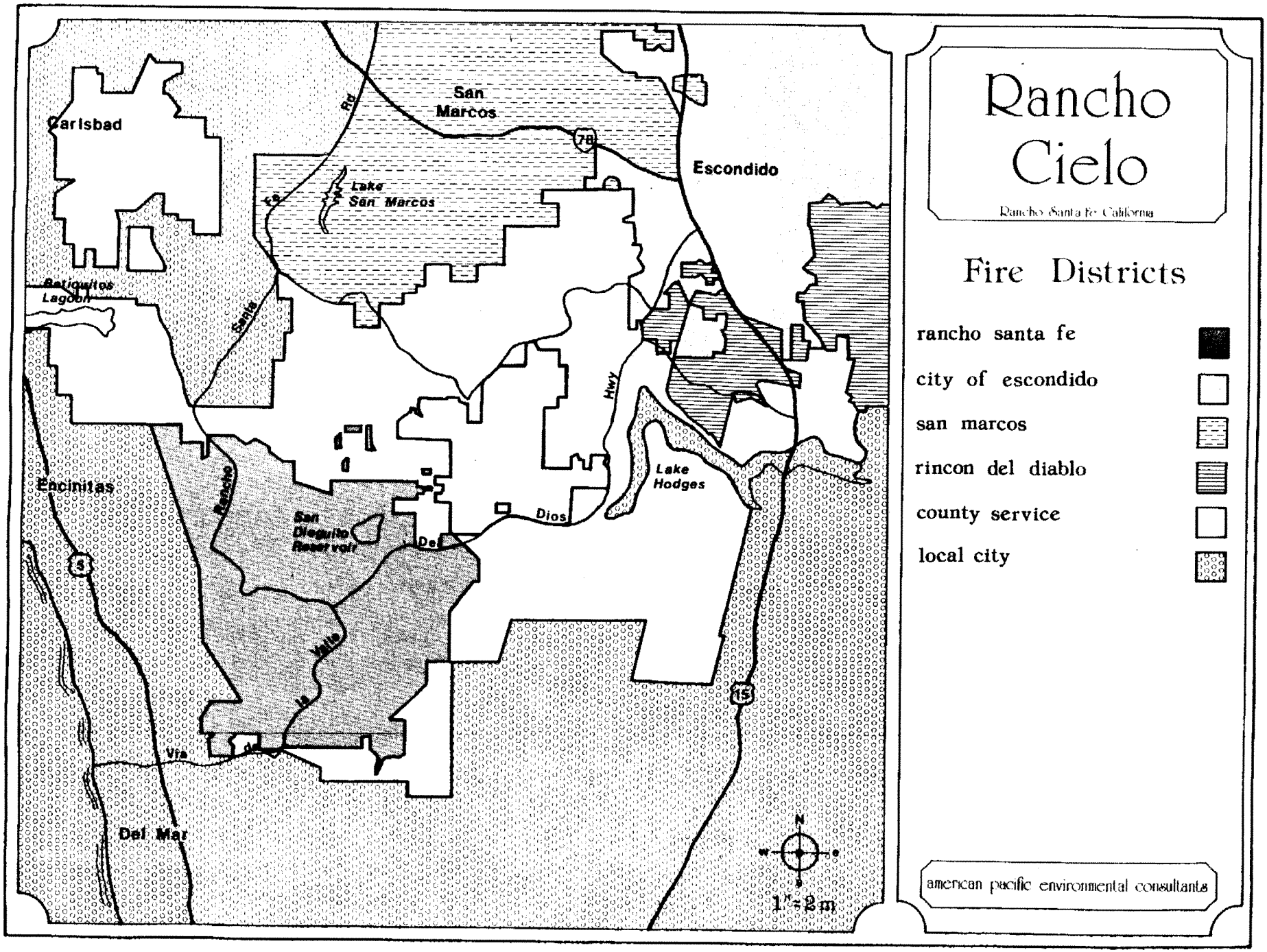
PRESENT SETTING

Presently, the subject property does not lie within the service boundaries of any fire protection district. In areas that are not covered by a fire district, County Fire Services provide protection. The closest fire stations are Del Dios and Elfin Forest Volunteers located adjacent to the property to the north and east, with a total of three engine companies. The Rincon Municipal Water District located one mile to the east would also respond because of their part in the County volunteer system. When the department was formed it had agreed to continue to provide County volunteer service for the first five years. This agreement ends in June 1981, at which time the Department will only respond to fires within their boundaries. The Department presently has three pumpers and six full time paid firefighters, along with numerous volunteers. The full time firefighters at Rincon Del Diablo Fire Department have a primary responsibility to attend fires within their service area. They do, however, respond with the volunteers to fires outside their area. The number of volunteer firefighters available at the time of a fire is basically unpredictable; therefore the response times of Del Dios and Elfin Forest Volunteers may be slower than the Rincon Del Diablo Fire Department. Response times are also dependent on where in the 3,525 acre site the fire is located and the conditions of access.

Other fire services in the area include Rancho Santa Fe Fire Protection District, one-quarter mile to the west; San Marcos Fire Protection District, two miles to the north; the City of Escondido's Fire Department, one mile to the northeast; and the Poway Fire Department (within the Poway Municipal Water District), five miles to the southeast (See Figure 25). Rincon Del Diablo Fire Department has Mutual Aid Agreements with San Marcos and Rancho Santa Fe Fire Districts. In case of a major fire, each will assist the other.

Due to the extreme size and character of the proposed development, volunteer fire protection is not considered adequate. The alternatives for protection are to form a new fire protection district or annex into an existing one. The formation of a fire protection district encompassing the subject property, whether it be independent or under the Olivenhain Municipal Water District, is very complex and appears to be economically and politically unfeasible. The Poway, Escondido and Rincon Del Diablo Municipal Water Districts provide fire protection to areas within their district; however, since the project lies within the Olivenhain Municipal Water District contracting to another water district for fire protection is not desirable. The San Marcos Fire Protection District is

FIGURE 25


Rancho Cielo
Rancho Santa Fe California
Fire Districts
rancho santa fe
city of escondido
san marcos
rincon del diablo
county service
local city
american pacific environmental consultants
Carlsbad
San Marcos
Escondido
Lake San Marcos
Batiquitos Lagoon
Encinitas
San Dieguito Reservoir
Lake Hodges
Del Mar
Rancho Santa Fe Rd
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located in such a way that annexation would be spacially and economically impractical. The remaining alternative, annexation into Rancho Santa Fe Fire Protection District, is the most logical approach. In fact, the Board of Directors have approved annexation pending a final design and Local Agency Formation Commission (LAFCO) approval. The Rancho Santa Fe Fire Protection District presently consists of two fire stations serving approximately 25 square miles. After final approval of annexation the closest station (Station 1-Headquarters) located on El Fuego will respond to all emergencies within the project site. This station's facilities and staff include two tankers, two pumpers, one pickup, one ambulance and 17 full time firefighters. Station 2 located at 2011 Village Parkway will provide back up protection with two pumpers, one pickup and one ambulance. The estimated average response time for the District is 4 minutes with an ISO fire protection class rating of five.

Fire protection would also be available from the California Department of Forestry (CDF). The CDF's primary responsibility is to respond to wildland fires during the designated fire season; normally April through December. The nearest CDF station is located at 3660 East Mission Road (Red Mountain) responding in 18 minutes with one engine company. The Valley Center and Miller stations, respectively located at 28741 Cole Grade Road and 405 Lilac Road, will provide backup protection with three more engine companies. Response time for these stations to the project area is 20 minutes. In addition, three retardant-carrying aircraft stationed at Ramona Air Attack Base could respond in 12 minutes. Also, the CDF is involved in designing fuel management plans for fire hazard brushland areas. They are presently working on a County-wide fuel management plan along with several smaller site specific plans.

IMPACTS

The proposed project includes the eventual development of 892 single family homes and two commercial areas that will require fire protection services. The Rancho Santa Fe Fire Protection District facilities are adequate to protect the existing land uses. As residential and commercial land uses develop, new local fire protection facilities will become essential. If fire protection facilities are not available within Rancho Cielo commensurate with need, the impact on the level of service for fire protection will be significant, resulting in potentially hazardous fire safety conditions. Construction of roads and a full scale water system are essential to adequate water service and will greatly improve service to the project area. The large open space corridors may pose a serious fire hazard in the future as the vegetation is left undisturbed and fuel is allowed to build up. This is not viewed as a significant impact but does require some attention as a fire hazard.

MITIGATION

The planned development includes a fire station to be located in central Rancho Cielo and operated by the Rancho Santa Fe Fire Protection District. The development association will construct the new facilities and purchase the necessary equipment. The Fire District has indicated that one engine company, one tanker, five full time firefighters, and an ambulance would be sufficient to protect the development area. When the station is in operation it will respond to all emergencies in the project area with Station 1 in Rancho Santa Fe providing back up protection.

All impacts on the District resulting from development will be mitigated through the completion of the Rancho Cielo Station and the water facilities. Annexation fees will finance the station's first year of operation and property tax revenues will finance the facility from then on. Additional funding for the District is through a per-dwelling-unit fee of no more than $100. Annexation will also give the Rancho Santa Fe Fire Protection District a much larger operating base in which to generate funds and manpower.

The CDF has indicated that some form of a fuel management plan should be prepared for the large open space corridors in order to reduce the potential fire hazard they represent. Such a fuel management plan may consist of fuel breaks, prescribed burning, thinning and other fuel management practices. Fire resistant landscaping along the easement edges will also prevent the spread of fires to residential areas.

LAW ENFORCEMENT

PRESENT SETTING

Law enforcement for the project area is by the San Diego County Sheriff's Department, and is under the command of the Sheriff's Northern Field Operations program. This program serves 147,000 residents and covers 539 square miles which includes coastal and agricultural areas of North County and the contract cities of Del Mar, San Marcos, and Vista. The project falls within Master Beat 22 which is assigned to the Encinitas Patrol Station, located eight miles west of the site. This station serves approximately 60,350 residents and patrols an area of 46.4 square miles. Estimated response time to the project area is approximately 12 minutes for priority calls and 31 minutes for non-priority calls. Master Beat 22 consists of four units during the morning (6:00 a.m. - 2:00 p.m.); four units during the evening (2:00 p.m. - 10:00 a.m.); and three units during the evening overlap (6:00 p.m. - 2:00 a.m.).

Impact analyses of law enforcement services are based on projected population increases for future developments. San Diego County population forecasts indicate an increase of 40,000 people in North County during the next five years. A county-wide standard for law enforcement (i.e., base level of service) is presently one 24-hour patrol unit per 13,272 population. The Sheriff's Department has indicated that one 24-hour patrol for every 10,000 people provides for more adequate protection, and that positions should be added incrementally over the next five years in order to meet this goal. The yearly cost of operating one deputy car is $91,508. The 1979-80 Sheriff's budget approximated $27 million with '80-81 budget deliberations beginning in mid-June.

IMPACTS

The proposed development of Rancho Cielo would create an additional 892 residential units and two commercial areas that would require law enforcement services. An additional 3,300 persons will reside in the area based on the Sheriff's population generation rate of 3.7 persons per household. The Sheriff's Department of San Diego County has indicated that this increase in population would not have a significant impact on the current level of law enforcement service. However, the cumulative effect of population of this and other developments in the area over the next five years will require that additional officers and/or equipment be added.

Access to the property is served via Harmony Grove Road, Elfin Forest Road, Mt. Israel Road and Del Dios Highway. These routes are expected to provide adequate ingress alternatives so as not to limit response time.

MITIGATION

Via Ambiente, the primary road through the site will be a privately maintained road with proposed controlled access at all points of entry. The controlled access will consist of information booths which are expected to substantially eliminate transient traffic through the site. The effect of this condition will be to reduce the frequency of calls to the Sheriff's Department. Private security systems may also be implemented but cannot be considered at this time.

Due to the Sheriff's Department statement that no significant impacts are expected, no specific mitigation measures are necessary. It is understood, however, that future development will contribute to the Sheriff's budget requirements through property tax allotments.

RECREATION

PRESENT SETTING

San Diego County, offers a wide variety of parks and recreational facilities. Within a 25-mile radius of the proposed development area there are approximately 12 major parks (not including the numerous beaches), 20 golf courses, and 10 large shopping areas. The La Costa Country Club and Torrey Pines Golf Course are located five and twelve miles to the west and are open to the public. Rancho Santa Fe Whispering Palms Golf Courses are located three and five miles to the south, and require private membership to use the facilities. Major shopping malls in Carlsbad and Escondido, as well as shopping centers in Rancho Bernardo, Solana Beach and Encinitas, are also considered recreational attractions in close proximity to the project. In addition, San Diego enjoys several unique regional attractions which include the San Diego Wild Animal Park, Sea World, and Balboa Park.

Park land also plays an important part in serving the recreational needs of the local community. Park lands are defined as publicly owned land designated for local, regional or state parks, school play grounds or riding and hiking trails. The National Recreation and Park Association recommends that a minimum of 25% of any planned unit development or large subdivision be devoted to park land and open space. The Board of Supervisors' Park Land Dedication Ordinance states that San Diego County should provide a minimum of five acres of park land per 1,000 population as outlined in the County General Plan (Recreation Element). Presently, only one to two acres of park land exists per 1,000 people in the San Dieguito area. In order to purchase additional property and develop park facilities, the County requires the developer to contribute funds according to the following fee schedule:

Density (units/acre)	Fee (per unit)
1-8	$200
9-15	$145
16+	$115

A more complete fee schedule is contained in the Park Lands Dedication Ordinance (810.101). Prior to the issuance of a building permit these fees are due and payable to the County of San Diego, and are deposited in the County's General Fund. Funding for recreational facilities within San Diego County

has been inadequate to meet the goals of the General Plan. Potential sources of funds for park development and trail construction include a day-use fee to enter a park and a head tax on all pleasure horses.

The San Dieguito Community Planning Group has identified many park sites and an integrated system of riding, hiking, and bicycling trails to provide for recreation needs. Most of the park sites are located along the coast; however, there are several in the project vicinity. A proposed San Elijo Regional Park site is located just north of the project along with three natural resource park sites; one situated in the northeastern corner of the property, and two off-site to the east and west. Due to the lack of available public funds, these park sites have not been purchased or developed.

There are many proposed riding, hiking, and bicycling trails in the San Dieguito area; however, only portions of them are developed at this time. The only bicycle trail shown in the project area is along Del Dios Highway. Riding and hiking trails are proposed along Questhaven Road and across the western portion of the property. Although the above-mentioned facilities are intended for public use, the San Dieguito Community Plan states that private as well as public recreation facilities should be encouraged.

IMPACTS

Residential development of the 892 parcels within Rancho Cielo is expected to generate approximately 3,300 people. This increase in population will increase the demand for recreational facilities in the San Diego region. The increase in recreation demand as a result of the proposed development is not significant in itself, but represents an incremental impact on the recreational opportunities available to San Diego residents. The proposed development is responsible for providing additional recreation facilities for the residents of Rancho Cielo as well as other residents of the County. The increase in population is equivalent to an increase in park land requirements totaling 16.5 acres based on the Park Land Dedication Ordinance.

MITIGATION

Open space dedication within Rancho Cielo will amount to approximately 1,830 acres, which will be maintained as natural vegetation, riding, and hiking trails, and aesthetic viewshed. Additionally, it is anticipated that numerous recreation facilities, including an equestrian center and

Village Center, either private or publicly owned, will be available within the boundaries of Rancho Cielo. Although these resources are expected to satisfy most of the recreation needs of local residents, they are not considered equivalent to the park land requirements previously discussed.

Two alternatives exist which will accommodate regional planning objectives for park land. Payment of fees in an amount estimated at $178,400 for purchasing public park land, or dedication of approximately 16.5 acres of land for public use will mitigate impacts of the proposed project on recreational resources.

SOCIO-ECONOMICS

PRESENT SETTING

Socio-Economics is an important issue in land use planning and large scale development when the project is associated with community development. Numerous avenues of analysis of socio-economic trends may be taken; but, for the purpose of this report several issues are isolated: growth trends, population sizes, ethnic groups, income levels, employment opportunities, housing, and community environment. Other sections of the report include greater detail of discussion regarding land uses, facilities infrastructure, and aesthetics of the project area.

A variety of sources for socio-economic data exist in San Diego County. The two sources used as a data base for this analysis are the Comprehensive Planning Organization (CPO) and the County Department of Planning and Land Use (DPLU). The County Data Base reports issued by DPLU utilize the 1975 Special Census and population estimates made by the State Department of Finance. The information released by the CPO is based upon a variety of sources including the 1975 Special Census, County and local estimates, and CPO's own evaluation of general plans in the area. Each source does have a common denominator in that each uses the same census tracts and subregional areas. The analysis made in this section uses both the above sources. The Rancho Cielo Planning Area straddles two census tracts and two subregional areas (SPA). For the sake of comparison, the San Dieguito SRA was used to provide insight into the demography of the project site. Subregional Areas provide a more reliable information base when compared to individual census tracts due to the larger sample size. The San Dieguito SRA was also chosen because the subject property lies within the San Dieguito Community Plan area which is somewhat contiguous with the boundaries of the San Dieguito SRA.

The San Dieguito Plan Area is a fast-growing area of the County. According to the Comprehensive Planning Organization, the population in 1978 was 51,181. The Preliminary Series V Projections for the San Dieguito SRA predicts that the area's population will rise to 80,973 by the year 2000 which represents a 61 percent increase. To illustrate the rapid growth occurring in the project area, between April 1975 and January 1979, the County population increased at an annual rate of 3%, while San Dieguito experienced an 8% annual increase during that same period. The San Dieguito area is expected to grow at a somewhat slower 3.7% annual growth rate up to the year 1995. San Diego County is projected to grow at a 2.5% annual rate.

The rapid growth which San Dieguito is experiencing is

bringing about a change in the population. A greater diversity of ethnic backgrounds, job skills, income and education levels has taken place. The age composition has shifted and a greater percentage of the population is older. Traditionally, the majority of the population is centered along the coastal communities and inland urban areas.

The vast majority (91%) of residents within San Dieguito are white, according to the 1975 Special Census. The only other ehtnic groups comprising close to one percent of the total population, are Latinos (1%) and blacks (0.4%). This information is based on a survey of households within the San Dieguito SRA.

Income in San Dieguito is, on the average, higher than other areas in the County; Median household income in San Dieguito was $13,407.00 in 1975 and County-wide average income was $10,982.00. In the San Dieguito SRA, 18% of the population earns over $20,000 per year while the County-wide percentage is only $16,000; six percent of San Dieguito residents earn over $40,000 per year as opposed to one percent for the County. Other annual income figures and the percent of the San Dieguito population falling within those income ranges are as follows: $0-$4,999 (16%); $5,000-$9,999 (21%); $10,000-$14,999 (19%); $15,000-$19,999 (16%).

Income levels in San Dieguito are expected to increase. A report prepared in 1979 by the County's Planning and Land Use Department projects that in 1980, the mean income for San Dieguito will be $21,600.00. In Rancho Cielo, incomes will most likely be higher due to land and home values in the area.

Employment opportunities within the San Dieguito SRA are more limited than in other areas in the County. According to the San Dieguito Community Plan text, only 12% of the residents are employed within the Plan Area; 54% travel to the north central part of the County and 35% are employed in the City of San Diego. Professional and sales/clerical are the most common jobs held by residents of the area, comprising 22% and 20% of the work force, respectively. Crop and flower production provide good sources of income within the San Dieguito area. According to a 1978 CPO report on employment, 19% of the residents of San Dieguito SRA are involved in agriculture.

According to the Community Plan, an industrial belt is developing around the fringes of the Plan Area. While offering excellent employment opportunities for residents of San Dieguito, it fails to provide income to those agencies required to provide services. This situation is burdening landowners within San Dieguito, particularly those on low and fixed incomes.

Housing within the San Dieguito SRA, according to the 1979 County Data Base report issued by Department of Planning and Land Use, is primarily comprised of single-family residences (61%). Multi-family units represent 36% (7,390 units) and mobile homes make up the remainder of the dwelling units with 777 units or 3%. The vacancy rate of the area is estimated to be 3.1% as compared with a County-wide vacancy rate of 4.6%. Cost of housing is comparable to income levels, with San Dieguito demanding the highest rate for single-family detached housing in the County (Regional Growth Management Plan, Volume 2,1978).

IMPACTS

Of primary importance in the socio-economic growth of a community is the availability of services: social services including commercial and recreation facilities, and public services infrastructure including water, sewer, fire protection, law enforcement and roads. These services are considered a vital part of community development and tend to enhance community stability and identity. Impacts to community socio-economics must, therefore, not only be associated with alterations in growth, population mix, and economic trends, but also with the services provided by the development to accommodate the needs of existing and future residents.

Development of the Rancho Cielo Planning Area would continue the growth trend in San Dieguito which was discussed earlier. An estimated 3300 residents will ultimately occupy the now vacant property, representing a three percent increase over the 1978 population of the San Dieguito SRA. As the proposed project conforms with the overall densities specified in the San Dieguito Community Plan and the Regional Growth Management Plan, the increase in population is consistent with population growth projections.

Property values are also expected to be consistent with the current trend in San Dieguito. Lot prices and construction costs of future residences are expected to be high due to the high development costs of the site and the extensive improvements of roads, water, sewer, and other public facility services provided in the project design. The effect of the high property values will be to exclude low and moderate income families from purchasing lots or residences within the area. The impact of this effect is not significant due to the nature of adjacent areas experiencing similar trends. Surrounding property is expected to increase in value as development and habitation occurs. This trend is typical throughout the County and will not be unique to the project area alone.

Several aspects of the design are very positive in nature in that the services and improvements accompanying project

implementation will be of benefit and use to Rancho Cielo; residents of Rancho Santa Fe, Del Dios, Elfin Forest; and commuters along Del Dios Highway. The extension of natural gas lines and the reclamation of water for irrigation will provide a means of relatively low cost service and resources to several adjacent areas. Additionally, a fire station will be constructed and equipped as necessary to meet the needs of the project area.

Another major area of concern is associated with the type of growth and development which may occur. In addition to the need for facilities and services, the density of development, rate of growth and the social characteristics of future residents must be compatible with the surrounding neighborhoods. In general, the Rancho Cielo project area will be very consistent with the surrounding rural environment even upon ultimate development. Extensive open space areas and large lot sizes (one to four acres) with predominantly private roads will tend to maintain the existing setting. As discussed in the Land Use section of this report, the project is consistent with all planning constraints maintained by the County of San Diego and the special districts serving the area.

The neighborhood commercial centers planned within the project boundaries will satisfy a need for everyday goods and services which will develop in the area as the project is built out. Nieghborhood centers of the type proposed, commonly have a trade area made up of residents living within a ten-minute drive. According to a computer program developed by CPO, a total of 13,557 persons will live within a ten-minute radius by the year 1995. Therefore, the neighborhood commercial center could be utilized by residents who will be moving into the area around the project. The commercial feasibility study indicates that the 700 dwelling units proposed within the Specific Plan Area alone represent approximately $1,050,000.00 of potential revenue to the neighborhood commercial center. This revenue figure is based on an estimate made by the U.S. Bureau of Labor Statistics that in 1977 approximately 35% of a family-of-four's budget (after taxes) was spent on items sold in neighborhood shopping centers.

The impact of the proposed development with respect to socio-economics is not expected to be adverse. Due to the compatibility of the design with surrounding land uses and trends, and the accompanying services and improvements, the Land Use plan as well as subsequent development of the site is expected to be positive with respect to community socio-economics.

MITIGATION

In the case of the Rancho Cielo Specific Plan, much of the mitigation measures appropriate for socio-economic impacts have been incorporated into the plan itself. As previously mentioned, these include improved capital facilities infrastructure (fire protection, law enforcement, water, sewer, utilities, roads, recreational facilities) as well as large open space areas, and commercial centers. No other measures are believed necessary to accommodate existing or future needs of residents in the project area.

SECTION

V

V. GROWTH INDUCEMENT

Growth Inducement is defined as the effect a project may have on stimulating or encouraging growth in adjacent and outlying areas. Growth itself is not assummed to be necessarily beneficial, detrimental, or of little significance to the environment; but, must be considered in light of existing public service infrastructure community development, and land use planning for short and long-term uses.

The proposed land use plan for 892 residential units and commercial and recreational uses, if approved, will allow phased growth and development within the project boundaries. It is also anticipated that the availability of new services on Rancho Cielo could stimulate growth outside the boundaries in areas geographically similar that do not currently have services.

In view of this potential it is important to know the existing parcelization and lot size in surrounding areas to accurately assess the possibility for growth inducement. This is discussed in other sections of this report but can be summarized as follows.

a. To the north. Smaller parcels of 2.5 to 10 acres, including the Elfin Forest Mobil Home Park, are predominant. Residential areas are well established in close proximity to the site along Elfin Forest Road and Harmony Grove Road.

b. To the west. Parcels vary greatly in size from 10 to 160 acres. Several roads and residences exist here, as well as the recently approved El Rancho Grande subdivision (84 units on 280 acres).

c. To the south. The San Dieguito River, Lake Hodges and Del Dios Highway form a physical barrier between Rancho Cielo and other property. These physical barriers have the effect of further removing potential developable areas to the south from Rancho Cielo and the proposed improvements.

d. To the east. The residential areas in Del Dios and along Mt. Israel Road are developed with lots ranging in size from less than one-half acre to two and four acres. Larger parcels from 40 to 200 acres lie to the northwest with little or no improvements to the area.

The ability of the project to encourage growth in surrounding areas depends primarily on the extent of infrastructure improvements made available to undeveloped areas. This includes roads,

water, sewer, and to a limited extent, fire protection. Road construction and improvements extend beyond the Rancho Cielo boundaries in three locations basically: in the northwest at Fortuna Del Este, in the west where Via Ambiente intersects the Revelle Agricultural Preserve, and in the north in the Public Land area adjacent to Escondido Creek. For the most part access is already available for these areas. It is anticipated, however, that improved access may provide an impetus for some growth in these location due to the decreased on and off-site road improvement costs. Overall, the off-site road improvements are not expected to encourage significant growth under adverse conditions.

Water service will be more readily available to adjacent areas since the proposed facilities have been designed to serve not only Rancho Cielo but also the surrounding residential areas. For the most part, this growth is not anticipated to be significant due to the extent of existing development and parcelization. An increase in population may be anticipated, however, since water service may be plentiful. Any growth resulting from water availability will first have to extend facilities from the Rancho Cielo improvements.

Sewer service may encourage growth in adjacent areas; however, extension of facilities outside Rancho Cielo will require annexation of those areas to the district. The environmental review procedures for annexation are such that the effects of any growth may be evaluated at the time of proposed annexation.

Fire protection will be greatly improved for Rancho Cielo; but, the district annexation will not effect adjacent areas. Future annexation to the fire district may be feasible, however, to surrounding properties.

In summary, substantial growth will be induced from implementation of Rancho Cielo but not under adverse conditions. This is due to the extent of parcelization and residential development in the surrounding areas and to the limited extension of vital services. The proposed facilities (predominatly water and roads) will strengthen the services infrastructure to accommodate growth and reduce the adverse effect of the growth.

SECTION VI

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

Implementation of the Rancho Cielo Specific Plan will result in one unavoidable significant effect. This effect is the committment of a large undeveloped area which currently exists as open space, aesthetic viewshed, and wildlife habitat, to residential, commercial and recreational uses. The effect deals not only with the Rancho Cielo property, but, to some extent, with the adjacent rural areas.

This effect is considered significant due to the proximity of the project to well-developed communities, and to the rural community environment that such a large property represents. Certain considerations have been made, however, that allow the project to be implemented without causing the overall effect to be adverse. These considerations include preservation of significant environmental resources in open space (1830 acres), lot clustering in non-environmentally-sensitive areas, and improving the facilities infrastructure to meet future demands.

Thus, there will be a significant conversion of the property from passive to more active uses, and a change in the environmental setting of this region. The net effect of Rancho Cielo, however, will be significant but not adverse.

SECTION VII

VII. SIGNIFICANT ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Significant environmental changes resulting from the proposed project are thoroughly discussed in Section IV of this report and are only summarized below. Due to the broad scope of the Rancho Cielo project and the specificity of the land use plan, most of the significant environmental changes are associated with regional or subregional resources. Development of any form on the site may be expected to alter the environmental setting of the area due to the expanse of the property and its present undisturbed nature. Many aspects of the land use plan itself will have positive effects but are not discussed here.

This section is primarily associated with long-term commitments of non-renewable resources resulting from project implementation. Commitments may begin immediately upon construction approval, or may be impending on unavoidable growth, access, or development in the region.

1. Biology. Development of the site will fragment one of the largest undisturbed areas remaining in coastal San Diego County. This area serves as an extensive wildlife system and contains numerous sensitive plant and animal species. Conversely, the land use plan commits approximately 1830 acres (58%) for permanent open space with the intent of preserving habitat and movement corridors for sensitive species on the site.

2. Traffic. The project will contribute 12,852 daily vehicle trips onto roads in the San Dieguito area. This increase will reduce the level of service for certain intersections to an unacceptable level. These conditions are mitigated with the appropriate improvements but the increase in vehicle trips must be considered as a permanent addition to circulation aspects of the region.

3. Energy. Project construction and habitation will require indefinite commitment of energy resources in the form of gasoline, electricity and natural gas. At full project build-out, the estimated annual energy consumption totals 3.4 million gallons of gasoline, 12.7 million Kwh of electricity and 610,000 therms of natural gas based on 1980 use rates. Although this commitment may be reduced in measure, if necessary, at a later date, the commitment to serve

is considered irreversible.

4. Public Services. There will be a long-term demand for public services such as law enforcement, schools, fire protection, and water services to satisfy the needs of project constituents. Currently, these needs are limited due to the absence of residents and improvements to the property.

Further examination of these impacts and the mitigation measures proposed to reduce the short-term and long-term commitments is available in Section IV.

SECTION VIII

VIII. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENCHANCEMENT OF LONG-TERM PRODUCTIVITY

This section addresses the scope of the proposed project and the potential ramifications of the project on the long term needs of the community in which Rancho Cielo lies. Cumulative impacts have been addressed as much as possible within Section IV. All recently approved major projects in the area were considered in the analysis. Land and resources contiguous to Rancho Cielo have been considered where appropriate, to assess the extent to which off-site growth may be induced.

As previously discussed, the broad scope of the Rancho Cielo project allows flexibility in planning to accomodate various long-term uses and alternatives for the property. Although development of residential, commercial and public facilities is proposed, the 1830 acres of open space retain options for a variety of alternative uses which may be necessary in the future. Regardless of any future contemplated uses of this open space area, the most valuable environmental resources will not be committed to use by the project. As local and regional concerns may change, this land and its resources may be considered for alternate uses. Thus, there are no significant ramifications of the project which narrow the range of beneficial uses of the environment or pose long-term risks to health or safety.

Short-term uses are also provided for with the project by accomodating 892 residential units, two commercial areas and recreational uses. Housing demand has been on the increase in San Diego County and the additional units will provide an increase in local supply.

In summary, the clustering of units in areas of low environmental sensitivity has provided for short-term development commitments as well as long-term options for future uses.

SECTION IX

IX. ALTERNATIVES TO THE PROPOSED PROJECT

This section is provided to assist decision-makers in their evaluation of the best long-term use of the property. Alternatives should reflect a capacity for reducing significant environmental impacts while considering the basic objectives of the project. Those impacts which have been identified as significant or potentially significant are Biology, Archaeology, Circulation, Energy, Soils and Geology, Aesthetics, Noise and Public Services. All of these with the exception of school impacts, can be mitigated with the appropriate measures. Noise impacts from the Heliport are also potentially significant but will be addressed more critically when the Major Use Permit is applied for by the developers. This section is not intended to provide alternate projects which may be approved or adopted; but is intended to provide a broad perspective from which to consider the proposed project.

Alternatives to the project may be selected from a variety of approaches. Some of these approaches, as well as the mandatory "No Project" consideration are included here.

1. Project Type. Due to the large acreage present in the Rancho Cielo area, a wide variety of alternative project types may be feasible.

    a. Regional Park. The San Elijo Canyon/Escondido Creek area is listed as a potential regional park site for the San Dieguito community in the Community Plan. This alternative could be incorporated into the existing project with the open space areas dedicated for a regional park. Regional park conditions, however, may result in significant impacts to the biological resources of Escondido Creek due to increased human activities. Additional impacts to circulation may be encountered. The park area could also include a larger portion of the property and reduce the area of development. Again, this alternative may incur greater impacts than the proposed project. Restricted uses of the park area may limit the degree of impact by visitors but is difficult to assess directly. There does not appear to be any necessity to reduce the Rancho Cielo project while implementing a regional park. Economic ramifications are unknown at this time.

    b. Open Space. Similar to the regional park alternative, retaining the undeveloped character of the

area in an open space designation would effectively be the same as a "no project" alternative except that any alteration of the land at all would require a permit and a discretionary action. This would eliminate any potential impacts but would be opposite to the project objectives.

2. Project Location. Alternatives relating to project location are difficult to assess due to the financial implication with land projects. Alternatives are presented here, however, for both on and off-site development locations.

   a. Land Trade. To avoid development of this particular site, a land trade for developable land in the County's possession for all or a portion of the Rancho Cielo property may be feasible. This trade may reduce all significant impacts depending on the selectiveness of the trade. This alternative may also incur severe economic impacts to the County of San Diego or to the Rancho Cielo property owners. Furthermore, this alternative may not accomplish more than the Rancho Cielo project may accomplish with the proposed planned community approach and large open space areas.

   b. On-site Relocation. On-site relocation would require greater clustering and smaller lot sizes based on the technical report findings. Biology, energy, and public service impacts may be reduced by concentrating the development areas. A development of this type could reach a significant level of impact on land use and aesthetic concerns in San Dieguito.

3. Project Scope. Alternatives of varied scope are feasible within the project boundary, which may be compatible with the project objectives, but substantially change the complexion of the community environment. These alternatives may take the form of changes in density or in uses.

   a. Higher Density. A higher density development could be achieved by reducing the number of units greater than one acre in size to allow more one-acre units. An increase in density would be consistent with the Regional Growth Management Plan and population and growth projections for the area, but it would not satisfy the condition to the Specific Plan Area adopted by the Board of Supervisors. A higher lot

yield for the property would increase the traffic, energy, and public service demands in a proportionate amount to the number of additional units. Additional mitigation measures for traffic circulation may be required.

b. Lower Density. As discussed for a higher density alternative, a lower density development would be consistent with all planning constraints, and would lessen the demand for services, energy and traffic circulation improvements. This alternative would primarily impact the project proponents by reducing the lot yield on the property and consequently the increasing cost of development on a per unit basis.

c. No Commercial. Eliminating the commercial areas of the project would contribute to the rural environment of the region, but would not provide for the growing needs of the project site and surrounding areas. The no-commercial option would increase vehicle trips and mileage to outside commercial centers resulting in greater energy consumption, air pollution, and traffic circulation impacts. The environmental ramifications of this alternative are generally considered to be adverse for the long-term needs of this local community. This alternative may be interpreted, however, as consistent with the San Dieguito Communtiy Plan.

4. Project Timing. Implementing the proposed project over a longer phasing period or entirely postponing the project would allow for incremental accumulation of impacts and a reservation of long-term use commitments.

a. Longer Phasing Period. Implementation of the project over a period longer than the proposed five year plan would further segment the increase in demand for public services, energy and traffic improvements. This would also reserve a commitment to development of specific uses on the project proponents due to the cost of the infrastructure facilities spread over a fewer number of units initially. The ultimate development of the proposed project would pose the same long-term impacts regardless of the phasing plan.

b. Delayed Implementation. This approach would provide for approval of the land use plan without the approval of Tentative Maps for development. By this, future development of the site would be constrained

to satisfy the Specific Plan requirements, but the actual site development would be postponed to a later date. This alternative would postpone project related impacts but would not avoid them.

5. "No Project". Discussion of the "no project" alternative is a mandatory section under the California Environmental Quality Act. This alternative would maintain land in its present state with no development option available until a land use plan and zoning is adopted (for the Specific Plan Area of the Project). This approach would not preclude future development proposals and may result in a project of greater or lesser environmental impact. Negative aspects of this alternative would be the voided commitment to long-term preservation of approximately 1830 acres of open space. Additionally, provision for extensive infrastructure improvement may be unfeasible in future development proposals.

A second alternative to the "no project" consideration is redesign of the Specific Plan. This approach does not appear to be of great value since many aspects of the proposed plan reflect a consideration of existing environmental resources. A revised Specific Plan may be expected to result in equivalent environmental impacts unless substantial changes, such as previously mentioned, are pursued.

Certainly numerous additional alternatives exist which have not been discussed. It is not expected, however, that these are of significant potential for consideration. The alternatives provided here are designed to allow a flexibility in project evaluation from a land use planning perspective and does not specifically address site development aspects. These aspects have been thoroughly analyzed in the Environmental Analysis Section of the report (Section IV).

SECTION X

X. CERTIFICATIONS

This Draft Environmental Impact Report presents a full disclosure and independent analysis of all the identified environmental effects as required by the County of San Diego and the California Environmental Quality Act. As the intent of this report is to provide a master environmental assessment of the project area incorporating a broad range of planning and development phases, the analysis presents a local and regional perspective to resources and potential ramifications resulting from full or partial project implementation.

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SECTION XI

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SECTION XII

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22. County of San Diego Board of Supervisors, "County Parks and Recreation Facilities-User Fees, Policy G-6", County of San Diego,March 25, 1980.

23. County of San Diego Board of Supervisors, "Local Parks (Utilization of Park Fees), Policy G-6, County of San Diego, May 22, 1979.

24. County of San Diego Board of Supervisors, "Fire Protection, Policy I-61", County of San Diego, May 30, 1978.

25. County of San Diego Board of Supervisors, "Adequacy of Public School Services and Facilities in Connection with Proposals for Development of Land. Policy I-43", County of San Diego, October 2, 1979.

26. Environmental Review Board, "Agriculture", County of San Diego, Policy 13, 1980.

APPENDICES

APPENDIX A

Notice of Preparation

Department of Planning & Land Use

County of San Diego
Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123
Telephone: (714) 565-5757

received

NOTICE OF PREPARATION

TO: See attached lists
(Responsible Agency)
(Trustee Agency)

FROM: County of San Diego
(Lead Agency)

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The County of San Diego will be the Lead Agency and will prepare an Environmental Impact Report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the probable environmental effects are contained in the attached materials. A copy of the Initial Study ☐ is, ☒ is not, attached.

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but not later than 45 days after receipt of this notice.

Please send your response to Bradford K. Williams, EIR Section at the address shown above. We will need the name for a contact person in your agency.

PROJECT TITLE: Rancho Cielo Specific Plan (no permit numbers assigned), EAD Log # 80-8-120

PROJECT APPLICANT, IF ANY: Rancho Cielo Property Owners Association

DATE:
July 3, 1980

Signature Bradford K. Williams
for KATHLEEN A. LEHTOLA

Title: Environmental Analysis Coordinator

Reference: California Administrative Code, Title 14, Sections 15035.7, 15054.3, 15066.

RANCHO CIELO SPECIFIC PLAN

Project Description

The Rancho Cielo Specific Plan proposes a planned development of 900 residential units, two commercial centers, fire station, equestrian center, heliport, and open space on 3,525 acres within the San Dieguito Community Planning Area of San Diego County. The project is broad in scope, including land use planning for the entire property, of which 2,990 acres are designated Specific Plan Area and 535 acres are designated Estate and Impact Sensitive; the formation of a sanitation district to provide sewer facilities to the site; construction of substantial road and water facilities to serve future residents; annexation to a fire district; and design for lot placement and road alignment. All Tentative Maps will be submitted under a three-step phasing plan within the first five years after project approval. Construction of residential or commercial buildings will be pursued subsequently by individual property owners.

Environmental Effects

The project will result in a committment of the 3,525 acres to several land uses and subsequent project construction. The following issues may be affected either directly or indirectly through implementation of the Rancho Cielo Specific Plan.

- Land Use
- Land Form
- Socio-Economics
- Soils/Geology
- Water Quality
- Biology
- Archaeology
- Circulation
- Astronomical Dark Skies
- Air Quality
- Noise
- Energy
- Aesthetics
- Public Services
- Agriculture
- Recreation
- Growth Inducement

It is anticipated that many of these effects may be avoided or mitigated through sensitive project planning and construction of the necessary improvements.

The following agencies are solicited for input as to the contents of the Environmental Impact Report for the Rancho Cielo Specific Plan.

Responsible Agencies

Bureau of Land Management
Olivenhain Municipal Water District, C/O Boyle Engineering
Water Quality Control Board
Local Agency Formation Commission
State Clearinghouse
Rancho Santa Fe Fire District
Escondido Union Elementary School District
Escondido Union High School District
San Dieguito Union High School District
Rancho Santa Fe School District

Trustee Agencies

State Lands Commission
California Department of Fish and Game
Native American Heritage Commission

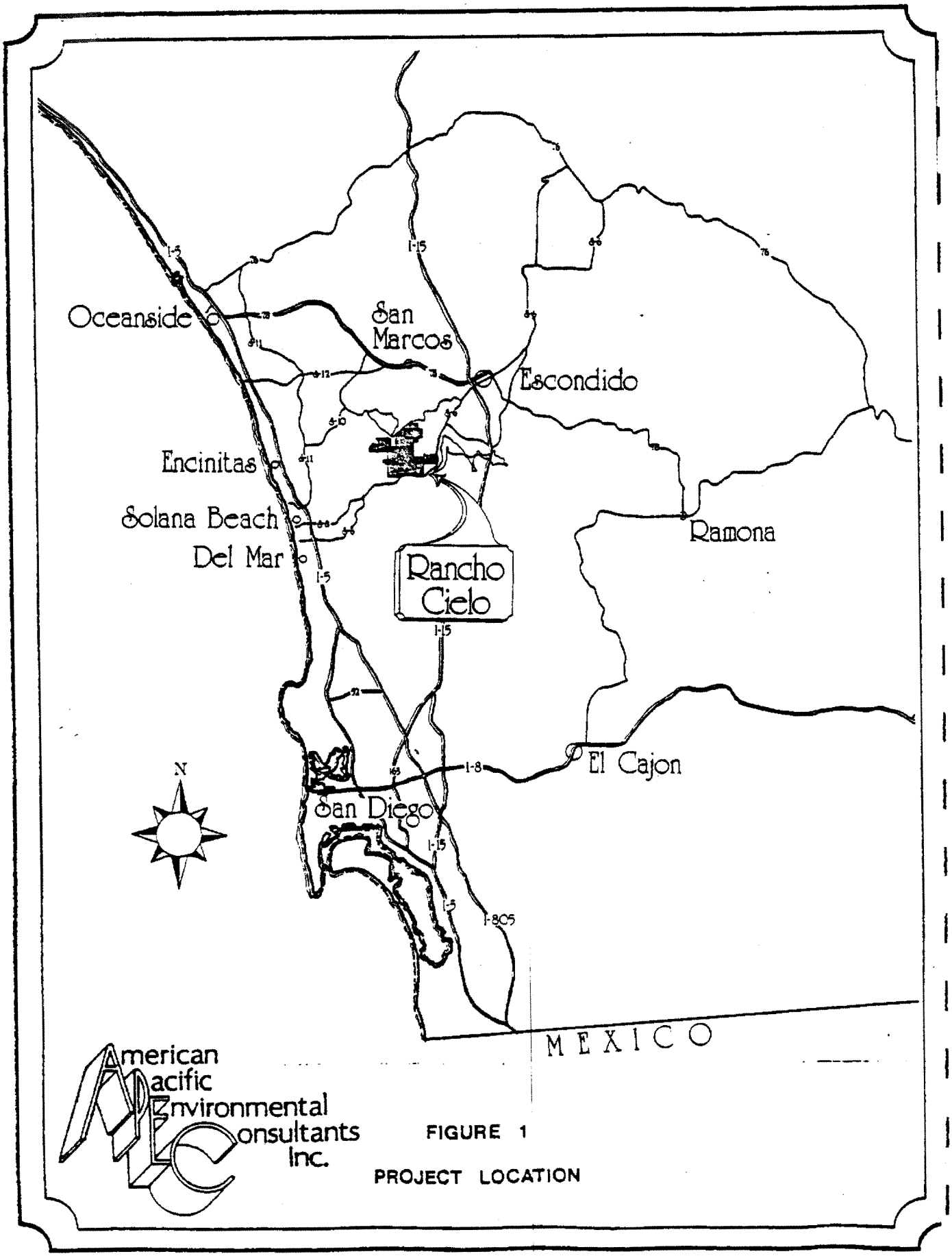

FIGURE 1

PROJECT LOCATION

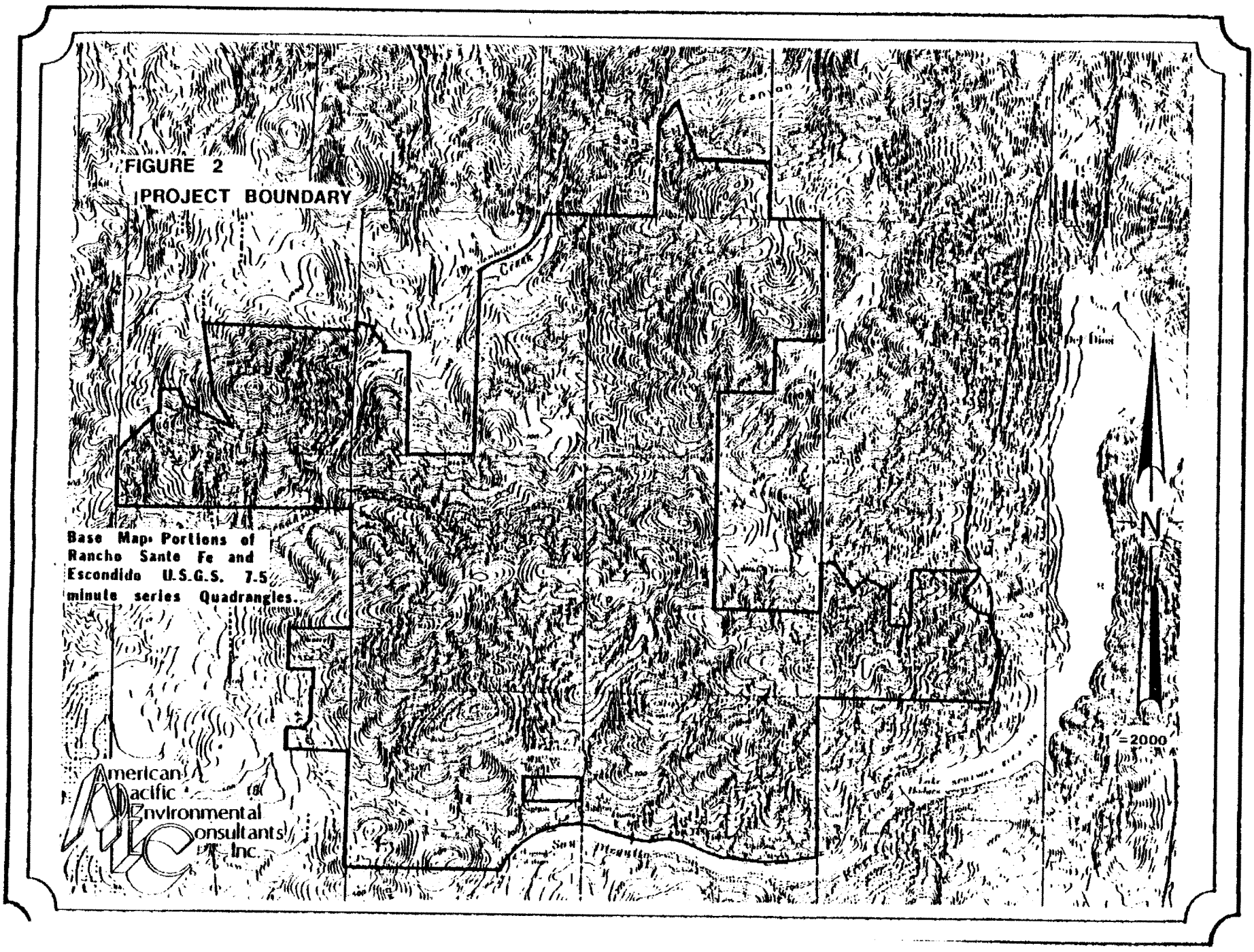
FIGURE 2
PROJECT BOUNDARY
Base Map: Portions of Rancho Sante Fe and Escondido U.S.G.S. 7.5 minute series Quadrangles.
American Pacific Environmental Consultants, Inc.
N
1" = 2000'

Responsible Agencies

Bureau of Land Management
Attn: Dave Mari
333 So. Waterman
El Centro, Ca. 92243

Olivenhain Municipal Water District, c/o
Boyle Engineering
Attn: Mr. Jerry Campbell
7807 Convoy Ct., Suite 200
San Diego, Ca. 92123

Water Quality Control Board
6154 Mission Gorge Rd., Suite 205
San Diego, Ca. 92120

Local Agency Formation Commission
Attn: Ms. Ann Bricklemyer
1600 Pacific Hwy.
San Diego, Ca. 92101

State Clearinghouse
Attn: Kathryn J. Tobias
1400 Tenth St.
Sacramento, Ca. 95814

Rancho Santa Fe Fire District
Attn: Chief Fox
P.O. Box 410
Rancho Santa Fe, Ca. 92067

Escondido Union Elementary School District
Attn: Mr. Salvatore J. Veneziano
930 No. Ash St.
Escondido, Ca. 92027

Escondido Union High School District
240 So. Maple
Escondido, Ca. 92025

San Dieguito Union High School District
Attn: Dr. Rodney E. Phillips
625 No. Vulcan Ave.
Leucadia, Ca. 92024

Rancho Santa Fe School District
Attn: R. Roger Rowe
P.O. Box 809
Rancho Santa Fe, Ca. 92067

Trustee Agencies

State Lands Commission
100 Ocean Gate Ave., Suite 300
Long Beach, Ca. 90802

California Department of Fish and Game
350 Golden Shore
Long Beach, Ca. 90802

Native American Heritage Commission
1400 Tenth St.
Sacramento, Ca. 95814

Del Dios Town Council
Route 3, Box 341
Escondido, Ca. 92025

Elfin Forest Town Council
8040 Harmony Grove Rd.
Escondido, Ca. 92025

San Dieguito Planning Group
Attn: Marjorie Gaines
P.O. Box 92
Solana Beach, Ca. 92075

Rancho Santa Fe Association
Attn: Planning
Avenida De Acacias
Rancho Santa Fe, Ca. 92067

Department of Planning & Land Use

County of San Diego

Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123
Telephone: (714) 565-5757

August 11, 1980

Apec, Inc.
9925 C Business Park Avenue
San Diego, California 92123

SUBJECT: RANCHO CIELO SPECIFIC PLAN, EAD LOG #80-8-120

Please find enclosed copies of responses received to date concerning the subject project's Notice of Preparation.

Michael U. Evans

MICHAEL U. EVANS
Environmental Impact Report Coordinator

MUE:ps

Enclosures: Responses from:
1. Calif. Dept. Conservation
2. Calif. Dept. Parks and Recreation
3. State Water Res. Control Board

STATE OF CALIFORNIA — RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF CONSERVATION
DIVISION OF MINES AND GEOLOGY
DIVISION OF OIL AND GAS

SACRAMENTO, CA 95814
1416 Ninth Street
(916) 445-8733

July 24, 1980

Bradford K. Williams
San Diego County
Department of Planning and Land Use
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

Project Name: Rancho Cielo Spec. Plan EAD LOG 80-8-120

SCH Number: 80071615

The Department of Conservation will act as:

____ a responsible agency

__X__ a commenting agency

for the above project. The scope and content of environmental information required for our review is included in the attached forms and/or lists.

Patrick G. Nevis

Patrick G. Nevis (pn)
Environmental Program Coordinator
Office of the Director

Attachments

CALIFORNIA DIVISION OF MINES AND GEOLOGY

CDMG NOTE 46

1416 Ninth Street, Room 1341, Sacramento CA 95814 Phone: 916-445-0514

GUIDELINES FOR GEOLOGIC/SEISMIC CONSIDERATIONS IN ENVIRONMENTAL IMPACT REPORTS

The following guidelines were prepared by the Division of Mines and Geology with the cooperation of the State Water Resources Control Board to assist those who prepare and review environmental impact reports.

These guidelines will expedite the environmental review process by identifying the potential geologic problems and by providing a recognition of data needed for design analysis and mitigating measures. All statements should be documented by reference to material (including specific page and chart numbers) available to the public. Other statements should be considered as opinions and so stated.

1. CHECKLIST OF GEOLOGIC PROBLEMS FOR ENVIRONMENTAL IMPACT REPORTS

GEOLOGIC PROBLEMS		Could the project or a geologic event cause environmental problems?			Is this conclusion documented in attached reports?	
PROBLEM	ACTIVITY CAUSING PROBLEM	NO	YES	ENVIRONMENTAL PROBLEMS	NO	YES
EARTHQUAKE DAMAGE	Fault Movement					
	Liquefaction					
	Landslides					
	Differential Compaction; Seismic Settlement					
	Ground Rupture					
	Ground Shaking					
	Tsunami					
	Seiches					
	Flooding					
	(Failure of Dams and Levees)					
LOSS OF MINERAL RESOURCES	Loss of Access					
	Deposits Covered by Changed Land-Use Conditions					
	Zoning Restrictions					
WASTE DISPOSAL PROBLEMS	Change in Groundwater Level					
	Disposal of Excavated Material					
	Percolation of Waste Material					
SLOPE AND/OR FOUNDATION INSTABILITY	Landslides and Mudflows					
	Unstable Cut and Fill Slopes					
	Collapsible and Expansive Soil					
	Trench-Wall Stability					
EROSION, SEDIMENTATION, FLOODING	Erosion of Graded Areas					
	Alteration of Runoff					
	Unprotected Drainage Ways					
	Increased Impervious Surfaces					
LAND SUBSIDENCE	Extraction of Groundwater, Gas, Oil, Geothermal Energy					
	Hydrocompaction, Peat Oxidation					
VOLCANIC HAZARDS	Lava Flow					
	Ash Fall					

II. CHECKLIST OF GEOLOGIC REPORT ELEMENTS

REPORT ELEMENTS	yes	no
A. General Elements Present		
1. Description and map of project	☐	☐
2. Description and map of site	☐	☐
3. Description and map of pertinent off-site areas	☐	☐
B. Geologic Element (refer to checklist)		
1. Are all the geologic problems mentioned?	☐	☐
2. Are all the geologic problems adequately described?	☐	☐
C. Mitigating Measures		
1. Are mitigating measures necessary?	☐	☐
2. Is sufficient geologic information provided for the proper design of mitigating measures?	☐	☐
3. Will the failure of mitigating measures cause an irreversible environmental impact?	☐	☐
D. Alternatives		
1. Are alternatives necessary to reduce or prevent the irreversible environmental impact mentioned?	☐	☐
2. Is sufficient geologic information provided for the proper consideration of alternatives?	☐	☐
3. Are all the possible alternatives adequately described?	☐	☐
E. Implementation of the Project		
1. Is the geologic report signed by a registered geologist?*	☐	☐
2. Does the report provide the necessary regulations and performance criteria to implement the project?	☐	☐

*Required for interpretive geologic information

III. PUBLISHED REFERENCES (selected)

A. California Division of Mines and Geology Publications

1. Alfors, J.T., et al., 1973, Urban geology master plan for California: Bulletin 198
2. Greensfelder, R.W., 1974, Maximum credible rock acceleration from earthquakes in California: Map Sheet 23
3. Jennings, C.W., 1973, Preliminary fault and geologic map: Preliminary Report 13
4. Oakeshott, G.B., 1974, San Fernando, California, earthquake of 9 February 1971: Bulletin 196
5. Note No. 37, Guidelines to geologic/seismic reports, 1973
6. Note No. 43, Recommended guidelines for determining the maximum credible and the maximum probable earthquakes, 1975
7. Note No. 44, Recommended guidelines for preparing engineering geologic reports, 1975
8. Note No. 45, Recommended guidelines for preparing mine reclamation plans, 1975

B. Other Publications

1. Allen, C.R., et al., 1965, Relationship between seismicity and geologic structure in the southern California region: Bulletin of the Seismological Society of America, v. 55, no. 4
2. Bolt, B.A., and Miller, R.D., 1971, Seismicity of northern and central California, 1965-1969: Bulletin of the Seismological Society of America, v. 61, no. 6
3. California Department of Water Resources, 1964, Crustal strain and fault movement investigation: Bulletin No. 116-2
4. Coffman, J.L., and von Hake, C.A., ed., 1973, Earthquake history of the United States: U.S. Department of Commerce, Publication 41-1
5. _____, et al., 1974, United States earthquakes, 1972: U.S. Department of Commerce
6. Hileman, J.A., et al., 1973, Seismicity of the southern California region, 1 January 1932 to 31 December 1972: California Institute of Technology, Contribution 2385

IV. PUBLIC AGENCIES WITH GEOLOGIC DATA

Source	Data Needed			
	Seismicity	Geology	Ground Water	Soils
Libraries and Geology and Engineering Departments of California Universities	X	X	X	X
California Institute of Technology	X			
California Division of Mines and Geology (Sacramento, San Francisco, Los Angeles, CA)	X	X		
California Department of Water Resources (Sacramento, CA)		X		X
California Department of Transportation (District Offices)				X
County Soil & Water Conservation Districts				X
County Engineer and Departments of Building and Safety	X	X		X
County Highway Departments				X
County Flood Control District				X
U.S. Geological Survey (Menlo Park, CA)		X		
U.S. Corps of Engineers (District Engineer)		X		
U.S. Bureau of Reclamation (Regional Offices)		X		
U.S. Soil Conservation Service and Forest Service				X

STATE OF CALIFORNIA—THE RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 2390
SACRAMENTO 95811
(916) 445-8006

RECEIVED
AUG 05 1980
ENVIRONMENTAL
ANALYSIS SECTION

July 29, 1980

To: Bradford K. Williams
San Diego County
Department of Planning and Land Use
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

Subject: San Diego County's NOP for Rancho Cielo Spec. Plan EAD LOG 80-8-120. SCH #80071615.

Thank you for your notice requesting our views on the scope and content of cultural resource information to be included in a DEIR for the referenced proposal.

Identification of recorded cultural resources located within the project's potential area of environmental impact is the first step in compiling complete cultural resource information. We suggest that your agency routinely consult the following sources for this purpose:

1. National Register of Historic Places

   a. The complete National Register of Historic Places is published annually as part of the Federal Register in either the first or second week of February.

   b. National Register of Historic Places - Periodic Updates. Weekly editions of the Federal Register appear on Tuesday and may contain information--again listed under California and by county--on properties pending or declared eligible for inclusion in the National Register. The section number for these notices is 4310-03M, and they are provided by the Heritage Conservation and Recreation Service, Department of the Interior. Notices appear under the title National Register of Historic Places.

2. California Historical Landmarks

   a. The State Department of Parks and Recreation publishes a booklet listing all California Historical Landmarks with a brief description of each.

b. Updated information can best be obtained from minutes of the State Historical Resources Commission meetings. The booklet may be purchased by writing to Central Distribution, Department of Parks and Recreation, P. O. Box 2390, Sacramento, CA 95811. A request to be placed on the mailing list for the Commission's minutes should be submitted to Mrs. S. Elder, Office of Historic Preservation, at the address given above.

3. California Inventory of Historic Resources

Last published in March of 1976, this book may be useful for identifying cultural properties not already included in the previously mentioned publications. While it occasionally duplicates information found in the letter, it also contains listings based on local and regional surveys as well as the only published compilation of California State Points of Historical Interest. Copies may be ordered by writing to Central Distribution at the address given above.

4. Local Historical Societies or Similar Organizations

Such groups can be of great assistance in providing information not found in the publications mentioned or readily available in this office.

5. California State Archaeological Site Survey

Current archaeological site information may be obtained from the Regional Officer of the California Archaeological Site Survey. For information regarding archaeological sites which may be located in your area, you should contact Mr. Underwood by calling (714) 787-3885. We urge you to contact the Regional Officer for any projects that may involve considerable ground disturbance such as grading, trenching, excavation, etc. Impacts which should also be considered are the increased likelihood for vandalism due to growth-inducing projects, and other indirect effects. The information the Regional Officer should be able to give you should indicate: (a) the presence of archaeological sites in the project's potential impact area; and (b) the absence of such sites, either because field surveys of the area have encountered nothing or because the area has never been subjected to a scientific study to locate cultural resources.

Based upon his knowledgeability, the Regional Officer may recommend a field survey and may make additional suggestions for mitigation or avoidance of potentially adverse effects. With the exception of specific archaeological site locations, complete archaeological site data, including the person responsible for preparing the documentation, should be included in the DEIR.

6. Additional Information

Visual inspection of the project area, either by the agency or a consulting professional, may locate buildings or other structures not previously recorded. If these structures appear to be approximately 50 or more years old or are in some other respect noteworthy, they should be photographically recorded and described in the DEIR.

7. Consultation with Local Ethnic Groups

There may be situations in which a project could impact cultural resources of particular interest or value to a local ethnic or cultural group. If this is the case, the agency should make an effort to ascertain the existance of specific groups and attempt to solicit their views on the undertaking. Typical examples are: archeological or other sites which have religious and medicinal value to Native Americans; burial sites; cemeteries; or other features to which an ethnic community may attach peculiar significance.

As we have said, these steps represent routine avenues of inquiry pertaining to cultural resource identification. The material should be analyzed and used as CEQA and the State EIR Guidelines require. To provide further guidance in the area of cultural resource surveys, a copy of our checklist is attached. This may be used by consultants preparing reports or by your own staff to evaluate the scope and the adequacy of survey reports submitted.

We would be pleased to assist you further at any time. In this regard, please contact Nicholas Del Cioppo of this Office by calling (916) 322-8703.

Sincerely yours,

Knox Mellon

Dr. Knox Mellon
State Historic Preservation Officer
Office of Historic Preservation

cc: State Clearinghouse
Governor's Office of Planning and Research
1400 10th Street
Sacramento CA 95814

Department of Planning & Land Use

County of San Diego

Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123
Telephone: (714) 565-5757

received

July 18, 1980

APEC, Inc.
125 West Mission Avenue, Suite 202
Escondido, CA 92025

SUBJECT: Notice of Preparation, Rancho Cielo Specific Plan, EAD Log # 80-8-120

Please find enclosed copies of responses received to date re. the subject Notice of Preparation.

Bradford K. Williams

BRADFORD K. WILLIAMS
Environmental Impact Report Coordinator

BKW:jm

Enclosures: Responses from:

1. Regional Water Quality Control Board
2. Rancho Santa Fe Fire Department
3. LAFCO

STATE OF CALIFORNIA

EDMUND G. BROWN JR., GOVERNOR

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

6154 Mission Gorge Road
(Mail: Suite 205/Enter: Suite 106)
San Diego, California 92120
Telephone: (714) 265-5114

July 15, 1980

Mr. Bradford K. Williams
Environmental Analysis Division
County of San Diego
9150 Chesapeake Drive, Room 136
San Diego, California 92123

Dear Mr. Williams:

Re: Notice of Preparation, Rancho Cielo Specific Plan, EAD Log No. 80-8-120

We have reviewed the notice of preparation of a draft Environmental Impact Report (EIR) for Rancho Cielo, a planned community including 900 residential units west of Lake Hodges. No sewer facilities are available and the project may require on-site treatment of waste. It appears, therefore, that waste discharge requirements may be required.

If the subject EIR is to be used to satisfy the requirements of the California Environmental Quality Act in applying for waste discharge requirements, the following information should be included:

1. Description of project

   a. Applications and permits required.
   b. Detailed discussion of kinds and quantities of materials to be treated, transported, discharged or released to the environment.
   c. Methods of treatment, transport and disposal.
   d. Photographs, charts or figures to show location and interrelationships of project components.

2. Description of environmental setting

   a. Location (USGS topographic map and description) including the immediate vicinity of the project and regional setting.
   b. Quality of surface water and groundwater.
   c. Beneficial uses of the water.

3. Impacts

   a. Changes in surface water and groundwater quantity and quality including resultant impacts on waste disposal facilities.
   b. Impacts on other users.

4. Alternatives

5. Mitigation

Thank you for providing this notice of preparation for our review. If you have any questions, please contact me at 714/265-5114.

Very truly yours,

ARTHUR L. COE
Senior Engineer

(714) 236-2015 · san diego
Local agency formation commission
1600 pacific highway · san diego, ca. 92101

chairman
Lucille V. Moore
County Board of Supervisors

counsel
Donald L. Clark

members
Ralph W. Chapman
Otay Municipal Water District

Tom Hamilton
County Board of Supervisors

Dr. Charles W. Hostler
Public Member

Dr. Lucy Killea
Councilwoman, City of San Diego

Gloria McClellan
Councilwoman, City of Vista

Stanley A. Mahr
San Marcos County Water District

alternate members
Alex L. Adams
Padre Dam Municipal Water District

Paul Eckert
County board of Supervisors

Marjorie Hansom
Alpine Fire Protection District

Dell Lake
Councilman, City of Lemon Grove

July 14, 1980

TO: Kathy Lehtola, Environmental Analysis Coordinator

FROM: Ann Brickelmaier AB, Environmental Administrator

RE: Rancho Cielo Specific Plan Notice of Preparation (EAD Log #80-8-120)

Thank you for sending a Notice of Preparation for the above-referenced project. The topics you have identified cover the areas we would be most concerned with, specifically:

1) The affects on public services and the ability of existing agencies to provide service;

2) An evaluation of alternative methods of providing services, particularly sewer and fire protection;

3) Potential effects on any on-site or off-site prime agricultural land (as defined by the Williamson Act);

4) A detailed discussion of secondary impacts resulting from the growth-inducing effects of extension of public services and facilities.

Again, thank you for the opportunity to comment early in the project planning stage. Such an approach allows for more efficient processing of the proposal when it reaches LAFCO.

Rancho Santa Fe Fire Department
P.O. BOX 410 / EL FUEGO RANCHO SANTA FE, CALIFORNIA 92067
TEL. 756-1522

BOARD OF DIRECTORS
R. GRISET
D. B. DEWEY
HARLEY L. DENK
FIRE CHIEF
J. A. FOX, F.I. Fire E.

July 14, 1980

County of San Diego
Department of Planning and Land Use
Environmental Analysis Division
9150 Chesapeake Dr.
San Diego, CA 92123

Reference: Rancho Cielo - EAD Log# 80-8-120
For the attention of Mr. Bradford K. Williams

Dear Mr. Williams,

The concerns of this department pertain to water flow, hydrants, access to project, gradients and adequate capital facilities. The developer has assured this department that these concerns can be mitigated.

Sincerely,

James A. Fox
Fire Chief

Department of Planning & Land Use

received

County of San Diego

Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123
Telephone: (714) 565-5757

July 22, 1980

APEC, Inc.
125 West Mission Avenue, Suite 202
Escondido, CA 92025

SUBJECT: Rancho Cielo Specific Plan, EAD Log# 80-8-120 , State Clearinghouse number SCH #80071615

Please find enclosed a copy of the State Clearinghouse notice of receipt letter dated July 15, 1980. Note that the letter provides the State Clearinghouse number assigned to this project, and per the State EIR Guidelines, this number should be provided on the front cover (title page) of the Draft-EIR.

Bradford K. Williams

BRADFORD K. WILLIAMS
Environmental Impact Report Coordinator

BKW:jm

Enclosure: Copy, letter from the State Clearinghouse to EAD, dated July 15, 1980

State of California
GOVERNOR'S OFFICE
OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

EDMUND G. BROWN JR.
GOVERNOR

July 15, 1980

TO: Reviewing Agencies

FROM: Gary D. Mickiff Gary D. Mickiff

SUBJECT: San Diego County's NOP for
Rancho Cielo Spec. Plan EAD LOG 80-8-120
SCH #80071615

Attached for your comment is San Diego County's Notice of Preparation of a draft Environmental Impact Report (EIR) for Rancho Cielo Specific Plan EAD Log 80-8-120.

Responsible agencies must transmit their concerns and comments on the scope and content of the EIR, focusing on specific information related to their own statutory responsibility, within 45 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Bradford K. Williams
San Diego County
Department of Planning and Land Use
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call me at (916) 445-0613.

GDM:njs

Attachments

cc: Bradford K. Williams

DISTRIBUTION LIST

SCH #80071615

Plans and Project Evaluation Unit
Air Resources Board
1800 - 18th Street
Sacramento, CA 95814
916/445-0960

William Travis
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, CA 94105
415/543-8555

Dave Maul
California Energy Commission
1111 Howe Avenue, Room 331 B
Sacramento, CA 95825
916/920-6405

Burd Miller
CalTrans - Division of Aeronautics
1120 N Street
Sacramento, CA 95814
916/322-9954

K. Hall
Dept. of Boating and Waterways
1629 S Street
Sacramento, CA 95814
916/322-4165

Rik Nevis, Environ. Program Coord.
Dept. of Conservation
1416 Ninth Street, Room 1354
Sacramento, CA 95814
916/445-8733

John Turner
Dept. of Fish and Game
1416 - 9th Street
Sacramento, CA 95814
916/445-1393

Dr. Gordon Snow
Dept. of Food and Agriculture
1220 N Street
Sacramento, CA 95814
916/445-0632

Paul Cox
Dept. of Forestry
1416 Ninth Street, Room 1506-17
Sacramento, CA 95814
916/445-9144

James Hargrove
Dept. of General Services
1015 L Street
Sacramento, CA 95814
916/445-0780

Kenneth Buell
Dept. of Health
714 P Street, Room 430
Sacramento, CA 95814
916/322-2308

Dave Williamson
Dept. of Housing & Community Dev't.
921 - 10th Street, 6th Floor
Sacramento, CA 95814
916/445-4728

James Tryner
Dept. of Parks and Recreation
1220 K Street Mall, Third Floor
Sacramento, CA 95814
916/322-2431

Nick del Cioppo
Office of Historic Preservation
1220 K Street Mall, Third Floor
Sacramento, CA 95814
916/322-8703

Robert Penny
Public Utilities Commission
1210 Fox Plaza
San Francisco, CA 94108
415/557-1249

Mel Schwartz
Reclamation Board
1416 Ninth Street
Sacramento, CA 95814
916/445-3624

Robert Batha
S.F. Bay Cons. & Dev't. Comm.
30 Van Ness Avenue, Room 2011
San Francisco, CA 94102
415/557-3686

Bob Sleppy
Solid Waste Management Board
1020 Ninth Street, Room 300
Sacramento, CA 95814
916/322-4915

Ted Fukushima
State Lands Commission
1807 - 13th Street
Sacramento, CA 95814
916/322-7213

Fred Lercari
State Water Resources Control Board
2125 - 19th Street
Sacramento, CA 95814
916/322-3583

Ken Fellows
Dept. of Water Resources
1416 Ninth Street
Sacramento, CA 95814
916/445-7416

DISTRIBUTION LIST

SCH #80071615

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Fresno, CA 93778

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Jim Cheshire
Department of Transportation
District 11
2829 Juan Street
San Diego, CA 92138

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Redding, CA 96001

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Rancho Cordova, CA 95670

E. Toffoli, Regional Manager
Department of Fish and Game
Yountville Facility, Bldg. C
Yountville, CA 94599

A. Naylor, Regional Manager
Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93726

Fred A. Worthley Jr., Regional Manager
Department of Fish and Game
350 Golden Shore

Department of Planning & Land Use

County of San Diego

Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123
Telephone: (714) 565-5757

25 July 1980

APEC, Inc.
125 West Mission Avnue, Suite 202
Escondido, CA 92025

SUBJECT: Rancho Cielo Specific Plan, EAD Log#80-8-120

Please find enclosed copies of responses received to date re. the subject project's Notice of Preparation.

BRADFORD K. WILLIAMS
Environmental Impact Report Coordinator

BKW:jm

Enclosures: Responses from:

1. San Dieguito Union High School District
2. Escondido Union School District
3. BLM

625 North Vulcan Avenue
Leucadia, California 92024
714/753-6491

San Dieguito
Union High School District

July 21, 1980

Mr. Bradford K. Williams
Environmental Analysis Coordinator
Department of Planning and Land Use
County of San Diego
Environmental Analysis Division
9150 Chesapeake Drive - Room 136
San Diego, California 92123

Re: Rancho Cielo Specific Plan
EAD Log # 80-8-120

Dear Mr. Williams:

The following comments are offered in response to your request over the potential impact of the proposed project on the San Dieguito Union High School District:

1. District facilities at the high school level (9-12) are currently overcrowded and the Board is unable to certify the availability of adequate school facilities for students who may be generated from new housing developments within the District. The District has authorized the filing of an application for building funds from the State under the Lease Purchase Law of 1976. The District is also working with local developers in an effort to determine appropriate ways for the latter to assist the District in providing the facilities necessary to serve new residents. Until these matters are resolved, schools are likely to remain overcrowded for the foreseeable future.

2. The proposed project lies within the boundaries of more than one school district offering services to the same grade levels. The developers have proposed school boundary changes that should be given consideration prior to approval of the project. The San Dieguito High School District currently renders service to students located on both sides of the proposed development and it is most critical that the matter of school boundary changes, if any, be determined at the earliest possible time.

The District's concerns over boundary adjustments have been communicated to the developer and have been shared with other districts that may be affected.

Sincerely,

William A. Berrier
Superintendent

PARENTS
STUDENT
SCHOOL

ESCONDIDO UNION SCHOOL DISTRICT

980 NORTH ASH STREET ESCONDIDO, CALIFORNIA 92027 (714) 745-7000

July 17, 1980

Mr. Bradford K. Williams
Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123

Re: Rancho Cielo Project

Dear Mr. Williams;

Referencing your letter of July 3, 1980, requesting information for an Environmental Impact Report (EIR), the following should fulfill your requirements from us:

1. The schools serving this project area are: Felicita and Miller K-5 schools at 8½ and 7½ miles respectfully, and Del Dios Middle School at a distance of 6½ miles.

2. The current enrollments of these schools are 748 students at Felicita, 523 students at Miller, and 982 students at Del Dios Middle School. The capacities for these schools are 936 at Felicita, 648 at Miller, and 1,080 at Del Dios Middle School.

3. Considering the other projects anticipated in the area, there is an impact on the District. Rooms may or may not be available.

If you have any further questions, please feel free to contact me at 745-7000, ext. 139.

Sincerely,

Salvatore J. Veneziano
Facilities Coordinator

SJV/sp

United States Department of the Interior

IN REPLY REFER TO
1790.2(C-067.01)

BUREAU OF LAND MANAGEMENT
333 S. Waterman Avenue
El Centro, CA 92243

JUL 16 1980

Mr. Bradford K. Williams
E12 Section
Environmental Analysis Div.
9150 Chesapeake Dr., Rm. 136
San Diego, California 92123

Subject: Rancho Cielo Specific Plan (EAD #80-8-120).

Dear Mr. Williams:

In review of the proposed action, public lands administered by the Bureau of Land Management are within the proposed boundary of this specific plan. This land is described as:

T. 13 S., R. 3 W., SBM
Section 1-N½, NW¼SE¼

At present this land is designated as multiple-use as defined by 43 CFR 2420 (attached) and cannot be sold for private use. There currently exists a right-of-way granted to the local Water District for a pipeline, crossing this land. This right-of-way was granted in 1978, and has a time period of 30 years.

Enclosed please find a copy of the plat map which shows ownership and classification of public lands. The yellow area represents the parcel of public land in question and the orange approximates the boundary of the planning area.

In the planning and use of this public land please be advised that the Bureau of Land Management is required to review and approve any use. Under the current multiple-use designation this land can be used for the siting and development of public facilities (i.e. Fire Station, Water Plant, Sewage Plant). Application for use (R&PP) must be made to the Bureau of Land Management by one of three groups: A) Government Agency, B) publicly owned utility, or C) non-profit organization.

Also be advised that in the future the Bureau of Land Management has determined it to be in the best interest of the public to dispose of many of the smaller parcels of public lands in San Diego County. Whether or not this parcel is one of those to be disposed of is not known at this time. Further, if this land is designated for disposal, first consideration will go to Public Agency request for ownership.

If there are any questions please call Joseph Edney at 352-5842 of this office. This office is open to assist in any way we can with the ongoing land use planning of public lands in San Diego County.

Sincerely yours,

David L. Mari
Area Manager
El Centro Resource Area

encs

PART 2410—CRITERIA FOR ALL LAND CLASSIFICATIONS

Subpart 2410—General Criteria

Sec.
2410.1 All Classifications.
2410.2 Relative value, disposal or retention.

§ 2410.1 All Classifications.

All classifications under the regulations of this part will give due consideration to ecology, priorities of use, and the relative values of the various resources in particular areas. They must be consistent with all the following criteria:

(a) The lands must be physically suitable or adaptable to the uses or purposes for which they are classified. In addition, they must have such physical and other characteristics as the law may require them to have to qualify for a particular classification.

(b) All present and potential uses and users of the lands will be taken into consideration. All other things being equal, land classifications will attempt to achieve maximum future uses and minimum disturbance to or dislocation of existing users.

(c) All land classifications must be consistent with State and local government programs, plans, zoning, and regulations applicable to the area in which the lands to be classified are located, to the extent such State and local programs, plans, zoning, and regulations are not inconsistent with Federal programs, policies, and uses, and will not lead to inequities among private individuals.

(d) All land classifications must be consistent with Federal programs and policies, to the extent that those programs and policies affect the use or disposal of the public lands.

(35 FR 9560, June 13, 1970)

§ 2410.2 Relative value, disposal or retention.

When, under the criteria of this part, a tract of land has potential for either retention for multiple use management or for some form of disposal, or for more than one form of disposal, the relative scarcity of the values involved and the availability of alternative means and sites for realization of those values will be considered. Long term public benefits will be weighed against more immediate or local benefits. The tract will then be classified in a manner which will best promote the public interests.

(35 FR 9560, June 13, 1970)

PART 2420—MULTIPLE-USE MANAGEMENT CLASSIFICATIONS

Subpart 2420—Criteria for multiple-use management classifications

Sec.
2420.1 Use of criteria.
2420.2 Criteria.

§ 2420.1 Use of criteria.

In addition to the general criteria in Subpart 2410, the following criteria will be used to determine whether public lands will be retained in Federal ownership and managed for domestic livestock grazing, fish and wildlife development and utilization, industrial development, mineral production, occupancy, outdoor recreation, timber production, watershed protection, wilderness preservation, or preservation of public values that would be lost if the land passed from Federal ownership.

(35 FR 9561, June 13, 1970)

§ 2420.2 Criteria.

Lands may be classified for retention under the Classification and Multiple Use Act of September 19, 1964 (78 Stat. 986, 43 U.S.C. 1411-18), if they are not suitable for disposal under the criteria set forth in Part 2430 and such classification will do one or more of the following:

(a) Assist in effective and economical administration of the public lands in furtherance of the several objectives of such administration as expressed in the various public land laws.

(b) Further the objectives of Federal natural resource legislation directed, among other things towards:

(1) Stabilization and development of the livestock industry dependent upon Federal lands, such as sections 1 and 15 of the Taylor Grazing Act (43

U.S.C. 315 and 315m), and the Alaska Grazing Act (48 U.S.C. 471-471o).

(2) Provision or preservation of adequate areas of public hunting and fishing grounds and public access thereto, and maintenance of habitat and food supplies for the fish and wildlife dependent upon the public lands and maintained under Federal and State programs, such as section 9 of the Taylor Grazing Act (43 U.S.C. 315h) and the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c).

(3) Fostering the economy of the nation by industrial and mineral development, such as through the materials sales and mineral leasing laws (Group 3000 of this chapter) and the rights-of-way laws (Group 2800 of this chapter).

(4) Realization of the beneficial utilization of the public lands through occupancy leases, such as under the Recreation and Public Purposes Act (43 U.S.C. 869-869-4) and the Small Tract Act (43 U.S.C. 682a-682e).

(5) Provision of needed recreation, conservation, and scenic areas and open space (42 U.S.C. 1500-1500e) and assurance of adequate outdoor recreation resources for present and future generations of Americans (16 U.S.C. 460l-1 et seq.).

(6) Stabilization of the timber industry and dependent communities and sustained-yield production of timber and other forest products, such as the Materials Sales Act (30 U.S.C. 601-604), and, in connection with management of other Federal lands, the O and C Act (43 U.S.C. 1181a-1181f, 1181g-1181j).

(7) Protection of frail lands, conservation of productive soils and water supplies, and prevention of damage and loss due to excessive runoff, flooding, salination, and siltation, such as the Soil and Moisture Conservation Act (16 U.S.C. 590a et seq.) and section 2 of the Taylor Grazing Act (43 U.S.C. 315a).

(c) Preservation of public values that would be lost if the land passed from Federal ownership (43 U.S.C. 1411-1418) such as where

(1) The lands are needed to protect or enhance established Federal programs, by such means as provision of buffer zones, control of access, maintenance of water supplies, reduction and prevention of water pollution, exclusion of nonconforming inholdings, maintenance of efficient management areas, provision of research areas, and maintenance of military areas or sites for other government activities.

(2) The lands should be retained in Federal ownership pending enactment of Federal legislation, which would affect them.

(3) The lands should be retained in Federal ownership pending their acquisition by a State or local government.

(4) The lands are best suited for multiple use management and require management for a mixture of uses in order to best benefit the general public and such management could not be achieved if the lands were in private ownership.

(5) The lands contain scientific, scenic, historic, or wilderness values which would be lost to the general public if they were transferred out of Federal ownership.

(6) Transfer of the lands would be inconsistent with national objectives for the preservation of natural beauty of the country and the proper utilization of open space.

[35 FR 9561, June 13, 1970]

PART 2430—DISPOSAL CLASSIFICATIONS

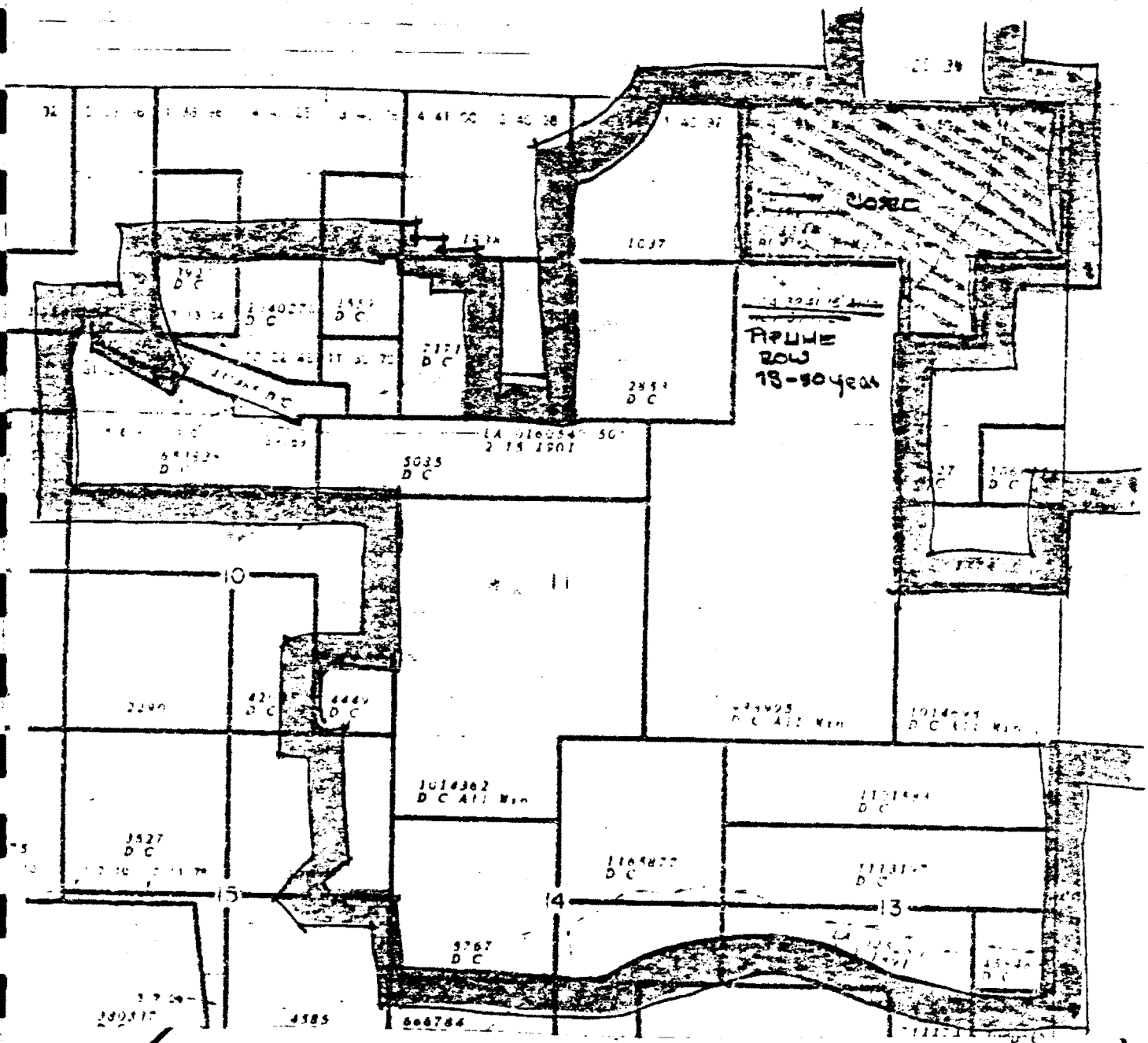
Subpart 2430—Criteria for Disposal Classifications

Sec.

2430.1 Use of criteria.
2430.2 General criteria for disposal classification.
2430.3 Additional criteria for classification of lands needed for urban or suburban purposes.
2430.4 Additional criteria for classification of lands valuable for public purposes.
2430.5 Additional criteria for classification of lands valuable for residential, commercial, agricultural, or industrial purposes.
2430.6 Additional criteria for lands valuable for other purposes.

SOURCE: 35 FR 9561, June 13, 1970, unless otherwise noted.

ID 13 SOUTH RANGE 3 WEST



PUBLIC LANDS
BLM MULTI-USE

APPROXIMATE BOUNDARY
OF RANCHO CIELO SPECIAL PLA

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION

EDMUND G. BROWN JR., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11, P.O. BOX 81406, SAN DIEGO 92138

August 29, 1980

11-SD-15
PM R026

Mr. Bradford K. Williams
San Diego County
Department of Planning and Land Use
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

Dear Mr. Williams:

Notice of Preparation of Draft EIR on
Rancho Cielo Spec. Plan EAD LOG 80-8-120,
SCH #80071615

CalTrans probably does not have a responsible agency role in relation to this project. We are, however, interested in the impact of project-generated traffic on Interstate Routes 5 and 15, especially on the interchange ramps at Via Rancho Parkway and at Via De La Valle.

Should you wish to consult us regarding traffic data, our contact person is Jim Roy, Systems Planning, (714) 294-5415.

Sincerely,

Jacob Dekema
District Director of Transportation

By James T. Cheshire
James T. Cheshire
Chief, Environmental Planning Branch

DLP:rs

LFIN FOREST TOWN COUNCIL

"Dedicated to a Continuing Rural Atmosphere"

12 August 1980

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ENVIRONMENTAL ANALYSIS DIVISION

County of San Diego
Department of Planning and Land Use
Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123

Attention: Mr. Bradford K. Williams

Re: Rancho Cielo Specific Plan
EAD Log #80-8-120

Dear Mr. Williams:

The Elfin Forest Town Council appreciates the opportunity to provide it's residents an opportunity to respond to your request for Trustee Agent comments regarding the reference EIR.

The Board of Directors and the General Membership of the Town Council has for some months been gathering information regarding the referenced development. Mr. Tony Lettieri of the architectural planning firm, Austin/Hansen has made a formal presentation before the council and has provided much data for use in our studies.

The Town Council in the broadest terms has no opposition to the development and in fact at present we feel the nature of the development is very compatible with the area. There are however a number of issues which we wish to address and express the concern of our membership. These issues and our position follows:

Issue 1: Circulation;

Mt. Israel Road: The original plan called for an 80' collector with 60' paved road (presently known as Mt. Israel) from Del Dios Highway thru the development and connecting with Harmony Grove Road. The route of the proposed road follows Mt. Israel Road an existing jeep trail to the East end of the Elfin Forest Vacation Ranch.

Concern;

Our membership has taken a position in oppostion to the parameters of the collector. We have concluded the more appropriate dimensions would be for a 40' easement with 20' of paved surface and to carry a designation as a private road.

Issue 2: Astronomical Dark Skies

The addition of 900 residential units, commercial centers, and the attendant necessary lighting.

Concern:

Although we do not have specific scientific data, we are firmly convinced the volume of additional light will seriously impair the beauty of our night skies and reduce the rural atmosphere we so greatly treasure.

In recognition of the physical necessity of and protection offered by adequate street and structure lighting, we propose every effort be undertaken to decrease the upward radiation of these lights. The manner in which this may be accomplished can be selected from a number of presently available economical alternatives.

Issue 3: Noise

The proposed addition of a heliport to the development.

Concern:

The addition of the heliport will create a continuing source of imposing noise. The level of noise attendant to an approaching or departing helicopter is a recognized irritant and will invariably disturb and disrupt the life cycle of both domestic and non-domestic animal life of the area.

We suggest the proposed heliport be restricted to limited hours of operation, flight paths and planning approaches. Additionally, in the absence of certain knowledge of the proposed location we suggest consideration of a location adjacent to Del Rios Highway.

Issue 4: Public Services

The Elfin Forest Community and surrounding area (including the proposed development) has an absolute minimum of adjacent and local public services. The area is supported by volunteer fire services, county Sheriff police protection, private sewage treatment and typically rural services normal for such an area.

Concern:

While we generally support the nature of the development, the membership of the Town Council is concerned regarding the drain on the existing public service. The addition of 900 residences will undoubtedly impact existing services. Therefore a close and

professional observation of this impact with the purpose of adjusting services accordingly to meet increasing demand should be the position for each agency.

Issue 6: Growth Inducement

The addition of two commercial centers, a fire station, an equestrian center and the basic fact of 900 additional residences are all factors which contribute to growth inducement.

Concern:

The Elfin Forest Area is primarily zoned Estate 17. The surrounding areas are similarly zoned and the entire area has a traditional rural personality. The residents have each sought and herein found a rural atmosphere compatible with a quality of life style which has long and justifiably been defended in this county.

The potential growth inducement of the Rancho Cielo development can quickly and almost totally eliminate the rural atmosphere of our area. Such elements as the proposed sanitation treatment plant, schools, and expanded circulation, as well as other factors contribute to growth inducement.

We propose limiting the capacity of the sewage treatment plant and the schools to the present number of proposed residences. Additionally we question the need for two commercial centers.

Issue 7: Undefined

Tentative maps submitted under a three-phase planning procedure and supporting documentation is presently unavailable to our study groups for evaluation.

Concern:

The non-availability of pertinent data severely limits our capability to evaluate the total impact of the proposed development on our area. Such factors as: restrictions to be imposed on off-road vehicles; covenants, conditions and restrictions on building structures, access thru other roads to the property, buffer zones for protection of wild life and botanical flora, and specific parcel division maps are of concern.

To permit the presently good relationship between the developers and the Elfin Forest Community to continue, we request the earliest possible release of such information.

The above stated issues are of concern to the general membership of the Elfin Forest Town Council and the positions

taken reflect the majority opinion of the general membership. Your evaluation of our proposals and attention to these concerns is greatly appreciated.

Sincerely,

Cody Lofton, Chairman
Elfin Forest Town Council

CL:ls

DEL DIOS TOWN COUNCIL
Rt. 3, Box 341
Escondido, CA 92025

August 11, 1980

Dept. of Planning & Land Use
Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

Attn: Bradford K. Williams

Subject: Notice of Preparation of Draft Environmental Impact Report
Rancho Cielo Specific Plan - EAD Log #80-8-120

Dear Mr. Williams:

We appreciate being included on your mailing list with reference to the subject project. Because of the size and scope of Rancho Cielo we are extremely concerned with the ultimate effect it will have on our community. Consequently we would strongly recommend that the EIR include for study all of the issues you listed under Environmental Effects.

Other specific issues which we are presently aware of and which we feel should be considered at an early stage of this project are:

1) Preservation of the year-round pond existing on the property.
2) Potential run-off and drainage problems to surrounding properties at lower elevations.
3) Specific impacts associated with the proposed heliport.

Please keep us advised of any pertinent hearings or other sources of information so that we have an opportunity to review the project in its initial planning stage and provide our input at the appropriate times.

Sincerely,

Brenda Lewis

Brenda Lewis, Secretary
Del Dios Town Council

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AUG 13 1980
ENVIRONMENTAL

San Dieguito Citizens Planning Group

P.O. Box 647, Solana Beach, CA 92075

August 20, 1980

Department of Planning & Land Use
Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, CA 92123

Attn: Bradford K. Williams

Subject: Notice of Preparation of Draft Environmental Impact Report
Rancho Cielo Specific Plan - EAD Log #80-8-120

Dear Mr. Williams:

Because of the significance of this project to the San Dieguito Community Plan the Planning Group requested a site tour which was originally scheduled for mid-August. At the request of the Rancho Cielo Association this tour has been postponed until September 6. We would appreciate being able to give additional input after we have had the opportunity to view the area first-hand which would enable us to more accurately identify and address the environmental issues.

However, to respond with the 45-day review period, we would recommend at this time that all Environmental Effects as outlined in your Notice of Preparation should be covered in the EIR. In addition, concerns have been expressed to us by residents living in surrounding areas on the following issues:

1. Runoff, erosion and silting. Virtually all of the land involved is situated at elevations above existing development. Runoff problems have been experienced during the recent periods of heavy rainfall and there is concern with regard to the ultimate effect of disturbing large areas for new development.

2. Preservation of a sensitive habitat. Many unique and threatened plants and animals are known to be present. For example, a Biological Survey dated January, 1980 on 72 acres of an adjacent area reported the presence of the Golden Eagle, a significant stand of Encinitas Baccharis, etc.

3. Commercial centers. It is our understanding that one of the proposed commercial areas will be adjacent to the Del Dios Highway. Impacts related to traffic and scenic aspects should be addressed as well as the compliance of such commercial development with that outlined for this SPA in the San Dieguito Community Plan. (See page VI-73, para. D, San Dieguito Comm. Plan.)

RECEIVED
AUG 22 1980
ENVIRONMENTAL

4. Circulation. We are presently reviewing the Draft EIR prepared for the San Dieguito Circulation Element and hearing dates have been established for this matter in September and October by ERB, the Planning Commission and the Board of Supervisors. We would recommend that traffic impact studies for the Rancho Cielo project be postponed until adoption of the new Circulation Element rather than using the 1972 version that is currently in effect.

The concerns expressed above are based on the limited knowledge we presently have regarding this project. As I mentioned above, we would appreciate the opportunity to add to this after our September 6 site review. Please be assured we will forward any additional information at the earliest date possible.

Sincerely,

Marjorie Gaines

Marjorie Gaines, Chairperson
Development Review Subcommittee
San Dieguito Citizens Planning Group

Department of Planning & Land Use

County of San Diego

Environmental Analysis Division
9150 Chesapeake Drive, Room 136
San Diego, California 92123
Telephone: (714) 565-5757

October 23, 1980

Mr. Brian Mooney
American Pacific Environmental Consultants
9925-C Businesspark Avenue
San Diego, CA 92131

Dear Mr. Mooney:

SUBJECT: Preliminary Draft Environmental Impact Report for Rancho Cielo
EAD Log #80-8-120

The Environmental Analysis Division has completed its review of the preliminary Draft-EIR for the above proposed project. Please provide the following information, providing three copies, so that we may continue the processing of your Draft-EIR:

1. The EIR does not clearly point out that the proposed development is on mountain tops, and, as such, should have a pronounced visual effect: discuss this condition and impact(s).

2. There should be a summary of the per cent of slopes in the following ranges: 0-25, 25-50, 50-70, and 70+ on site.

3. Slope categories on the map should be in standard colors so that:
   a) reviewers will be able to relate to colors they are used to
   b) it will be easier to distinguish between categories.

4. The geology and hydrology reports by Allied Geotechnical should be augmented in the Draft-EIR by discussing:
   a) fill may have to be imported, and large rocks disposed of
   b) area is not suitable for septic tanks
   c) erosion/siltation is adequately emphasized in the geotechnical report, but not in the EIR (no grading during rainy season; minimum clearing of vegetation).

5. Increase in flow shown on chart on Page 78 is in %, not c.f.s.

6. While the archaeology report is undeniably above standard in many aspects, there are certain aspects which need to be clarified as modified to prepare the report for public review:

a) Staff has learned that parcels were added and deleted in the course of preparing the LSP. Please provide the name of the Lead Archaeologist who field supervised the survey crew by parcel, date, and number of hours. Please give the names of each crew person in that same breakdown.

Staff is concerned that the public may mis-read the archaeology report and interpret that Mr. Dittmar or Mr. Graham surveyed, recorded, or interpreted sites in the field alone without direct supervision by Mr. Eckhardt. Staff believes that this issue would certainly be challenged by the public as neither Graham nor Dittmar have been approved by the County as qualified consultants. Also, please clarify that the conclusions drawn by Mr. Dittmar in his section of the archaeology report have been reviewed and approved by Field Supervisor Eckhardt.

b) In the discussion of SDI-7956, an interpretation is presented in which Russell Kaldenberg is attributed to have said that this site was the prime source for flaked stone material for the Great Western Site. However, in personal conversations with Kaldenberg in 1975, the Meadowlark Junction Quarry, recorded as Cal:A:16:23 in Section 33 of Township 125, Range 3W, was stated as the rock source. Meadowlark Junction is some 3 miles west/southwest and about 3 miles northwest of the GreatWestern Site. While staff agrees that these quarries are critical to understanding the trade in flaked stone materials in the San Dieugito and La Jollan (Encinitas Tradition) Horizon, this site network is far more complex than presented in the draft survey report, and ought to be so stated.

c) Please have the Supervisory Archaeologist re-assess Section VIII of his report, as it is incorrect to assume that the Rancho Cielo LSP will be approved as designed and therefore adverse impacts are irreversable at this stage of the project. Staff is very concerned with apparent conflicts between site locations and project designs, and equestrian activities will significantly disrupt the surviving surface associations. Furthermore, the high incentive to conduct unscientific relic excavations at sites with large assemblages present on the surface will result in total disruption of the sites. Thus, surface artifacts become red flags and liabilities to buried sites. Section 15069 mandates staff to consider the cumulative effects as initiated by a project at its inception. APECS recommendation to recover only fractions of the current surface assemblage is not acceptable mitigation method. If surface collection is financially impossible, then it would appear that the issue of archaeology is not only significant but not mitigable. Staff wishes to be consistent with past mitigations, thus would require 100% mapping and recovery as a proven demonstration of 95% confidence in data replication under a research design approved by staff and peers. Even so, all surface artifacts must be removed to protect the buried deposit. The few artifacts to erode out in the future would not be

significant to negate this mitigation.

d) Please delete Figure 15 from the version of the Draft-EIR destined to be mailed out for public review.

e) Please revise the archaeology report and appropriate Draft-EIR areas to reflect specific cut and fill impacts, percent of each site to be within home lots, streets, equestrian facilities, and all other improvements in the LSP submitted by Austin-Hansen. Staff believes that in order to resolve the question of apparent conflicts, data must be provided which demonstrates the sites' boundaries. Thus, testing appears appropriate prior to releasing the Draft-EIR for public review.

f) Please revise Figure 6, Page 231, in the archaeology report such that the illustrations are keyed to the letters designations of "6A", "6B", etc.

g) Please revise the discussion of site RC-6 to include a defense of the interpretation that it is "historic". Please reference any historic mines, property boundaries, or other evidence. Could the cairn be a prehistoric feature? Please have the Field Supervisor reassess this site feature. Furthermore, cairns deserve SDI-numbers. Please record RC-6 and substitute the record number in both the archaeology and Draft-EIR reports. Staff is also considering requiring recovery of these historic artifacts as they might be significant to some research lives in the region.

h) Provide a sketch of the triangular quartz projectile point at RC-24 and explain whether it is interpreted to have been made in the San Dieguito, La Jolla, Pauma, San Luis Rey, or other complexes.

i) Staff requires that isolates be recovered during surveys or at least well-documented by photos and sketches, as the effort to return to them after project approval does not seem a likely consideration. Please explain if the flakes were hard or soft hammer produced and were they cored, struck in sharpening, struck in secondary reduction, or some expended tool. Describe the presence or absence of patina, varnish, oxidation or other weathering. Could these isolates indicate ancient and long since vanished trails?

7. Please revise the Project Description and Scenic Visual Quality sections to reflect the proposed grading to create the project. This information is critical to the Draft-EIR, as it actually affects archaeology and biology as well. Staff realizes that not all of this work has been done as yet, but projections need to be made at this time.

8. Please provide a detailed plan which demonstrates the ability of the Rancho Santa Fe Fire Protection District to provide and finance adequate fire protection. There is concern that there will be substantial problems in pumping reclaimed water uphill to structural or brush fires. There is further concern that protection of significant biological and archaeological resources and containment of erosive sediments would be in direct conflict with fire control procedures. Please clarify and pinpoint these conflicts. Furthermore, please clarify the effect this project would have on the Elfin Forest Volunteer Fire Department.

9. Please provide specific plans and details of the proposed water reclaimation system, including the fail-safe connection, system capacity, and methods of disposal.

10. General comments on Noise:

a) We can concur with the results of the acoustical calculations in relation to the existing and future traffic noise levels.

b) We also concur with the conclusion that the heliport noise may have siginificant unmitigable impact to the nearest to the heliport residences, and, depending on helicopter flight altitude, number of flyovers, and time of operation, siginificant noice impacts may be anticipated along the typical helicopter routes.

c) Because of practically unmitigable noise impact from the helicopter activities, it seems to be impossible at the present time to designate areas for residential or commercial use within the heliport without detailed study and determination of the areas of possible unmitigable noise impact. The possible helicopter routes, number nad time of operation shall be taken into consideration.

d) Because noise levels in the vicinity to certain traffice routes (Del Dios Hwy, Mt. Israel Rd., SA-680) may exceed CNEL=60 db and even CNEL=65 db threshold, we can not agree with the conclusion that only by landscaping noise can be reduced to acceptable by the County levels.

Therefore, noise mitigation programs shall be developed on the case-by-case base for the residential developments, located in areas where CNEL exceed 60 db, or CNEL exceed 65 db for "preexisting" high noise level areas (CNEL > 65 db, at the present time).

e) The noise from construction equipment will be for a limited period of time and will result in significant noise impact.

However, it is not recommended to operate rock crusher after 5:00 PM and before 8:00 AM, and also on Saturdays and Sundays. Rock crusher shall not be located closer than at 300' from any existing residences, or noise attenuation barriers, enclosures, and similar sound attenuation devises shall be used.

11. Biological Resources Discussion: For the Draft-EIR:

a) Provide table indicating percentages and acreages of various vegetation types present on the site. Indicate the percentage and acres lost or effected by project for each vegetation type.

b) Indicate percentage and area of each RCAs covering the site; indicate percentage and area lost or indirectly effected by development.

c) Present a project scale map showing project features and improvements along with RCAs; vegetation types and sensitive biological resources.

d) Include the General Plan description of the resources identified ~~in the~~ RCAs effected by the project.

12. For the Biological Technical Report:

a) Provide a summary of findings of report.

b) Provide a signature page of the report authors/field researchers.

c) Provide a brief project description.

d) Summarize field conditions during surveys; provide a route map, or indicate which areas surveyed at what time.

e) Indicate for each plant and animal species, the habitat or vegetation community it was found in.

f) For the vertebrate species involved, please indicate number of indivisuals or some indication of abundance.

g) On Page 151, expand discussion of why sensitive plants noted were not found or expected on project site.

h) There appears to be a page missing after Page 152. There is no discussion of sensitive animals on the site, the impacts of the project and potential mitigating measures.

i) Comments 1, 2, 4 for the Draft-EIR should be included here, also.

j) Apparently the Native Grassland discussion on Page 139 belongs under Vegetation, Page 140; is this so?

k) Why is RESOURCE/HABITAT EVALUATION discussion (Page 145) placed between Amphibians and Reptiles and Birds?

l) Discuss species by species (for sensitive species) status on site (Number, or population size), impacts of project.

This information should be provided as additional information for review by this Division. If you supply the additional information by revising the Draft EIR please provide a cover letter to EAD indicating which pages of the Draft-EIR were modified, and how they were modified. You may wish, however, in order to avoid duplication of time and effort, to delay such revisions until after the additional information is reviewed.

If the above specified information resolves our concerns, you will be asked to incorporate the additional information verbatim into the Draft-EIR, and then, at that time, you will be asked to use one of the following options at your discretion:

1. Provide 45 copies of the Draft-EIR and Technical Reports, providing all the technical reports in one single volume as a separate and detached volume from the Draft-EIR, or,

2. Provide 45 copies of the Draft-EIR with the Technical Reports contained in the

Draft-EIR, as one intact single volume.

However, in view that we will not know the exact number of copies that will be required for public review purposes until the time when we release the Draft-EIR for public review, it is possible that we may require more than the above indicated quantities. If this does not prove to be the case, we will notify you of the extra copies needed at the time the Draft-EIR is released for public review. In order to avoid the possibility of duplicate costs, it is recommeneded that you delay producing the anticipated number of copies for public review until notification by this division that the requested additional information has resolved the questions addressed in this letter.

For mailing purposes, of the total number of copies requested, 25 copies (Draft-EIR plus Technical Reports) should be without envelopes, and the remainder provided in unmarked plain brown manilla envelopes (or equivalent) suitable for U.S. Post Office mailing.

Also, in case you have not already done so, clearly indicate in the Draft-EIR all discretionary permits that you desire to be covered by this EIR, and provide a brief and concise project description on the first page of the Draft-EIR (example: "John Doe Estates, a subdivision of 100 acres into 80 lots, with associated rezone(s).").

If annexations or deannexations will be involved, in order to comply with Notice of Preparation requirements, please provide this office with a list of names and addresses of all such agencies; and on a plain non-letterhead a project description, description of project location, the names of the agencies, plus a 8½ x 11 inch map showing the project boundaries with sufficient landmark information at 1 inch to 2000 foot or other suitable scale.

In addition, because of simultaneous processing of project permits by a number of different county departments in order to expedite processing, the need for off-site improvements may become known after the Draft-EIR preparation phase of permit processing. As such, you should be prepared to supplement the Draft-EIR at that time to address related off-site impacts. In order to minimize the need for such a supplement, if you have not already done so, we encourage you to explore off-site improvement questions with the County Department of Transportation and the Department of Sanitation and Flood Control at this time.

During the 1977 legislative session the California State Legislature adopted AB884, a Bill intended to place time limits on the processing of applications for development permits. Therefore, in order to continue to meet there time limits, you are advised that the requested additional information and all copies of your Draft-EIR and Technical Reports required by this division must be received within ninety (90) days or your application will be terminated.

Respectfully,

Ronald V. May for

MICHAEL U. EVANS
Environment Impact Report Coordinator

MUE:RVM:CL:MUE:LS;kt

cc: Project Processing M0175

Additional Information
for the
Rancho Cielo
Environmental Impact Report

log #80-8-120

Prepared by:

American Pacific Environmental Consultants, Inc.
9925-C Businesspark Ave.
San Diego, CA. 92131

January 8, 1980

apec corporation
american pacific
environmental
consultants

December 12, 1980

Ms. Kathleen A. Lehtola
Director, Environmental
Analysis Division
County of San Diego
9150 Chesapeake Dr.
San Diego, Ca. 92123

Re: Rancho Cielo EIR (Log #80-8-120)

Dear Ms. Lehtola:

American Pacific Environmental Consultants, Inc. is pleased to submit the following information in response to comments received from the Environmental Analysis Division in the letter dated October 23, 1980. In some cases, new work has been initiated to resolve the issue of comment. Other issues, however, are adequately addressed in the EIR and references are provided. Thus, it is our intent to provide both new information and clarification by reference to resolve questions by staff. The information is itemized below corresponding to the items in the Environmental Analysis Division letter.

1. The Rancho Cielo property is described as steep slopes and ridges occupying a portion of the Coastal Range. The area proposed for development is described as ridgelines and knoll tops, with steep slopes and valleys maintained as open space. This description is entirely adequate and accurate (see pages 50, 55, 66, 67, 68, 188, 192).

2. Percent coverage of slope gradients will be added to page 50 amending paragraph 4 to read as follows:

> "Slopes on the site are broken down into the following categories: 0-25%, 726 acres (20.6%); 25.1-50%, 1954 acres (55.4%); 50.1-70%, 801 acres (22.7%); over 70%, 44 acres (1.3%). Figure 7 provides a detailed slope analysis of the project area and Figure 8 provides a spatial analysis."

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3. Slope categories are adequately displayed in the text in brown tones (Figure 7). The legend provides a key to associate color tones with slope gradients. No changes are considered necessary for the figure. A supplementary slope analysis in black and white on a full scale map will be submitted to assist staff in their review.

4.a. Page 68 of the draft EIR will be amended to include the following as paragraph four: "It should be noted that actual grading plans are not available at this time and that several alternatives for road construction exist which will determine the amount of import or export of material. Included in these alternatives are use of a rock crusher (to avoid importation of fill material and disposal of rock), sale of rock material for local use as a construction resource (to avoid rock disposal), and use of rock material to fill abandoned quarry sites. All of these alternatives will be considered at the grading stage of the project and are subject to environmental review with the grading permit."

4.b. Septic tank suitability is briefly discussed in the Water Quality section of the draft EIR. The Geology section will be amended on page 66 to include the following as paragraph four: "The project area is generally unsuitable for septic tanks and leaching facilities. This is due to several factors including steep slopes, shallow groundwater table, slow percolation rates, and a thin soil mantle. These conditions occur over much of the site and limit the use of septic systems to isolated locations."

4.c. Erosion/siltation is substantially addressed in the draft EIR (see pages 63, 65, 74, 78, 79, 80, Table 2). No further discussion appears warranted; however, the following recommendations will be included on page 80 of the text: "It is further recommended that whenever feasible, no grading operations be made during the rainy season (November 1 to April 15). Cut and fill slopes should be stabilized immediately with hydromulch mixture or equal treatment. Sand bag check dams should be placed in unpaved streets with gradients in excess of two percent."

5. Page 78 of the Draft EIR will be amended to read "%" in place of "c.f.s."

6.a. Vitaes for William R. Graham and Edward I. Dittmar are attached. John R. Cook was Principal Investigator for the project and certification will be inserted. Revision of page 286 in order to identify field supervisors (F.S.) and assistant archaeologists (A.A.) per parcel is as follows:

1) Air Logistics: F.S. - William Graham; A.A. - George Harris, Geoff Harley, Morgan Fox, John Cook, Nessa Carpenter, Jonathon Vartanian, Charles French.

2) Danob: F.S. - Ed Dittmar; A.A. - George Harris and Jonathon Vartanian.

3) Wexford: F.S. - William Eckhardt; A.A. - Ed Dittmar, George Harris, Geoff Harley, Jonathon Vartanian.

4) Viglotti: F.S. - William Eckhardt; A.A. - Jonathon Vartanian, William Graham.

5) Rancho Santa Fe Views: F.S. - William Eckhardt; A.A. - Jonathon Vartanian, William Graham.

6) Choumas et. al: F.S. - William Eckhardt; A.A. - Jonathon Vartanian, William Graham.

7) James/Revelle: F.S. - Ed Dittmar; A.A. - George Harris and Jonathon Vartanian.

8) Tabing: F.S. - William Eckhardt: A.A. - George Harris and Jonathon Vartanian.

9) White: F.S. - Ed Dittmar and William Eckhardt; A.A. - George Harris, Jonathon Vartanian and John Cook.

10) White (in trust): F.S. - William Eckhardt; A.A. - Ed Dittmar, George Harris, Jonathon Vartanian, and William Graham.

11) Risbrudt: F.S. - William Eckhardt; A.A. - Ed Dittmar, Jonathon Vartanian and Kre Easland.

12) San Elijo Vista: F.S. - William Eckhardt; A.A. - Jonathon Vartanian.

13) Hewitt et. al.: F.S. - William Eckhardt; A.A. - Jonathon Vartanian.

14) Botzner/Allen: F.S. - William Eckhardt; A.A. - Jonathon Vartanian, Kre Easland, William Graham and Ed Dittmar.

15) White/Peterson: F.S. - William Eckhardt; A.A. - Jonathon Vartanian, Kre Easland, William Graham and Ed Dittmar.

16) Pacini/Baker: F.S. - William Eckhardt; A.A. - Jonathon Vartanian, Kre Easland, William Graham and Ed Dittmar.

BLM lands: F.S. - John Cook; A.A. - George Harris, Ed Dittmar, William Eckhardt, Charles French.

6.b. The complexity of archaeological site SDi-7956 is acknowledged by the report authors. Qualifying statements on page 260 of the report put the interpretation into proper perspective. No further comment is necessary.

6.c. Worst case impacts to archaeological sites have been addressed in the report and adequate mitigation measures are outlined. The mitigation measures are specifically provided as a phased test program for evaluation of significance and subsequent determination of impacts. Final mitigation cannot be proposed at this stage.

6.d. Figures 15, 12, and 2 (Volume II) will be deleted for the public review copies.

6.e. Worst case impacts to archaeological sites have been assessed in the report and are not limited to grading and land use impacts. The mitigation program takes into account all potential impacts and addresses all sites on the property.

6.f. Artifact illustrations provided in Figure 6 of the archaeology report are adequately labeled by accession number. This method is more appropriate than alphabetical registration.

6.g. The cairn was inferred to be historic because of the recency of scars on the rock surfaces which suggested that the age of construction was within 20-30 years of the present. Information added with regards to mining activities will be included as an addendum on page 330 as follows:

"Mining activities are recorded in the general vicinity of the Rancho Cielo project area as early as 1877 (Weber, 1963). However, no active mines are situated within the project boundaries. Mineralized breccias containing copper were worked sporadically at the Encinitas (Danes Lea) mine between 1877 and 1917 (Van Slyke, 1966). This mine is located to the northwest of the project area in Section 4 of Township 13 South, Range 3 West. Another local mine is the Harris phyrophylite depost located between Del Dios Highway and the San Dieguito River just south of the project area. Two abandoned crushed stone quarries occur in the vicinity. According to Van Slyke (1966), the quarries were in operation from 1940 into the late 1950's. Both of the quarries are situated just outside of the western boundaries of the present project area.

Although several relatively recent small isolated prospect pits occur on ridge tops in the northwest, northeast, and southwest areas of the project, no significant mining activities were evident in association."

6.h. Figure 6 on page 231 provides the requested sketch. Page 230, paragraph three will be amended to include: "The point is ascertained to be of Late Prehistoric origin."

6.i. Diagnostic isolates were collected in the field and recorded. Non-diagnostic artifacts were recorded in the field and not collected. These latter isolates have minimal research value and the documentation provided exhausts any contribution to research potential.

7. Grading is addressed in several sections of the report (see pages 55, 56, 67, 69, 79, 116). Page 192 of the draft EIR describes grading impacts on aesthetics as potentially significant. Preliminary grading plans for the Phase I tentative maps will be provided to EAD staff. Cut and fill banks are predominantly under ten feet in height with maximum heights of 50 to 90 feet. Grading visibility is substantially limited by topography. The visible

portions of Via Ambiente are not significant if landscaped as stated in Grading Ordinance. Grading impacts on archaeological and biological resources have been considered in the analysis of impacts and mitigation. Worst case impacts have been evaluated and are not limited to grading. No change is proposed for the EIR text; however, a graphic representation of preliminary grading plans for the Phase I tentative maps will be attached as an appendix.

8. A letter supplied by the Rancho Santa Fe Fire Department (dated October 21, 1980) adequately summarizes the impacts and mitigation measures for the annexation. Use of reclaimed water for fire protection is not proposed. A fuel break 100 feet in width will be created along the margin of the open space. This fuel break will be created through selective thinning of highly flammable species and partial revegetation with fire retardant species. The Elfin Forest Fire Department will be positively affected by reducing the service area responsibilities and by providing a higher level of service from the Rancho Santa Fe Fire Department.

9. The EIR explains that there are eight alternatives for sewage disposal which are thoroughly examined in both the technical support document and in the draft EIR. All of these alternatives are feasible approaches to sewage disposal, but have various ramifications. The final alternative chosen will be arrived at by the Regional Water Quality Control Board as the licensing agency. Therefore, specific plans of the potential system cannot be designed at this point. A typical oxidation ditch plant layout is provided on page 109 of Volume II.

10.a. No comment.

10.b. No comment.

10.c. A preliminary noise analysis specific to the proposed heliport will be provided to assist staff in their analysis of the proposed use and the potential for designing mitigation measures for noise impacts.

10.d. One method recommended for noise attenuation is construction of earthen berms with landscaping. The berms will be designed to lower noise levels to within acceptable standards. Open space easements may also be employed in areas of unacceptable noise levels where berms are not feasible.

10.e. Future operation of the rock crusher will be limited to acceptable daytime hours and with acceptable setbacks and noise attenuation barriers.

11.a. Percentages and acreages of vegetation types will be added to page 88 as the Table below.

Vegetation	Rancho Cielo acres (percent)	Open Space acres (percent)	Development Area acres (percent)	Open Space Treatment of Vegetation by Type (percent)	Development Area Treatment of Vegetation by Type (percent)
Southern Oak Woodland	104 (3.0)	89 (2.5)	15 (.5)	85.5	14.5
Riparian Woodland	58 (1.6)	55 (1.5)	3 (0.1)	94.8	5.2
Chaparral	2186 (62.0)	1213 (34.0)	973 (28.0)	57.4	42.6
Inland Sage Scrub	1078 (30.6)	430 (12.2)	648 (18.4)	38.2	61.8
Disturbed	86 (2.4)	35 (1.0)	51 (1.4)	41.0	59.0
Grassland	13 (0.4)	8 (.3)	5 (.1)	61.5	38.5
Total	3525 (100%)	1830 (52%)	1694 (48%)	---	---

11.b. Percentage of RCA's affected by the project will be included on page 105 as the Table below.

Escondido Creek RCA

	Acres	Portion of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	2650	100	—
RCA in Rancho Cielo	601.6	23.5	100
Development Area	204.8	8	34.0
Open Space	396.8	15.5	66.0

Escondido Creek/Harmony Grove Road RCA

	Acres	Portion of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	435.2	100	—
RCA in Rancho Cielo	153.6	35.3	100
Development Area	77.0	17.7	50.1
Open Space	76.6	17.6	49.9

San Dieguito River/Lake Hodges/Lusardi Canyon RCA

	Acres	Portions of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	2726.4	100	—
RCA in Rancho Cielo	76.8	2.8	100
Development Area	7.3	.3	9.5
Open Space	69.5	2.5	90.5

11.c. The full project scale vegetation map will be provided with the additional information.

11.d. Paragraph five of page 99 will be amended to read:

> "The Conservation Element of the General Plan delineates portions of the site within the Escondido Creek Resource Conservation Area (RCA), the Escondido Creek/Harmony Grove Road RCA and the San Dieguito River/Lake Hodges/Lusardi Canyon RCA (County of San Diego, 1979)." The purpose of...project implementation.

The Escondido Creek RCA description will be included in paragraph six of page 99 as amended below:

> "The main feature of this area is the unique Riparian woodland along the perennial stream in the Escondido Creek canyon. The area also includes undisturbed Mixed Chaparral on north-facing slopes, a known deer population and the endangered Del Mar Manzanita, the threatened Sticky Stonecrop (Dudleya viscida) and the rare Sea Dahlia (Coreopsis maritima), Adolphia californica, Coast White Lilac and Coast Spice Bush." This RCA stretches from the eastern...in the Lake Val Sereno/Olivenhain area.

The Escondido Creek/Harmony Grove Road RCA description will be added to paragraph three on page 100 as follows:

> "This area includes Riparian and Oak Woodlands in a canyon bottom, surrounding Mixed Chaparral for wildlife habitat and unusually large populations of the rare Coast White Lilac.

The San Dieguito River/Lake Hodges/Lusardi Canyon RCA is described in the text in paragraph one, page 105.

12.a-b. (to be provided prior to submittal).

12.c. The project description is provided in the beginning of Volume II of the EIR.

12.d-l. (to be provided prior to submittal).

The above information and additional analyses should adequately resolve any questions regarding the Rancho Cielo EIR and the proposed project. We are available at any time to assist staff in their review and understanding of this project. Please contact us if there are any questions.

Respectfully submitted,

Michael R. Rider
Project Manager

MRR:dmb

cc: Mr. Tony Lettieri
Austin-Hansen AIA

apec corporation
american pacific
environmental
consultants

January 19, 1981

Mr. Michael U. Evans
Environmental Analysis Division
County of San Diego
9150 Chesapeake Dr.
San Diego, Ca. 92123

Re: Rancho Cielo EIR, Log #80-8-120

Dear Mr. Evans:

As indicated in our previous submittal on Jaunary 8, 1981 additional information responding to comment 12 of your DEIR letter (dated October 23, 1980) is now provided herein. The information submitted will be incorporated into the biology report (Volume II of the EIR) verbatim. Responses are provided below corresponding to the order of your comments.

12.a. The Summary of Findings will be included after page 137 (see attachment).

b. The signature page will be included after page 15a (see attachment).

c. The project description is provided on page 3 of Volume II for consistency in the technical reports.

d. A calendar of personnel involved in the Rancho Cielo and previous biology surveys will be provided after page 138 (see attachment).

e. Tables 1 through 4 will be amended to include habitat references.

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f. The field research for this project did not include attempts to find the relative or absolute abundance for any organism. For several species there are no reliable estimates available in the field notes of the researchers. For rare species such as Golden Eagle and Dudleya viscida, population estimates were made. For others, only relative terms can be applied, and at this time would have to be done using retrospective habitat evaluation. The Amphibian, Reptile, Bird, Mammal and Resource/Habitat Evaluation sections are meant to indicate the value of the habitat to wildlife, and from this one should be able to obtain general population levels. No change to the text is proposed.

g. Page 152 will be amended to include the following discussion:

"Initially, other sensitive plant species than those detected and reported in Table 5 were thought to be potential inhabitants of the property. The field surveys, although fairly detailed and efficient in terms of seasonality, are not complete. A few sensitive species may have escaped detection. The species discussed below are known from the area and were searched for.

Woolly Horsemint (Monardella hypoleuca ssp. lanata) was found near College Biological Supply by T.A. Oberbauer (pers. comm.) in habitat similar to that on the site. It may occur as a rare understory element. Other known localities for this Monardella are much more distant.

Rush Goldenbush (Haplopappus junceus) has been found in several chaparral areas in the region, particularly near Poway and Valley Center. The openness of sage scrub in many areas here would seem to favor this low shrub, which however, is often inconspicuous and probably overlooked in surveys. Most places that we have found it

have a granitic substrate, which is largely lacking on-site.

Adder's Tongue Fern (Ophioglossum lusitanicum spp. californian) has been found on a variety of soil types in vernal pools and on slopes not associated with vernal pools. It is a small, easily overlooked, ephemeral plant that may occur on seasonally moist slopes.

San Diego Thornmint (Acanthomintha ilicifolia) is an extremely rare and endangered annual plant that occurs on clay soils. Soils over most of the site appear unsuitable, except in a few areas of grassland or with California Adolphia. No localities are known from within several miles.

Chocolate-lily (Fritillaria biflora) also prefers clay soils, and for similar reasons as Acanthomintha is not expected; except, possibly in localized areas that were, however, searched.

A population of Del Mar Manzanita (Arctostaphylos glandulosa spp. crassifolia) occurs on the south side of San Dieguito River west of the project site, associated with a porphyry outcrop. The subspecies crassifolia has not been reported from the site, and since it is a large, woody shrub, probably was not overlooked.

h. Amend page 152, paragraph 7 to read as follows:

"A number of sensitive species occur on the property. These are listed below as well as in Table 6 of the Appendix".

A listing and discussion of sensitive species will be added here. This listing is attached for your review.

i. The comment is to include the information provided for comments 11a, b, and d into the technical report. The following vegetation table will be added to the bottom of page 142.

Vegetation	Rancho Cielo acres (percent)	Open Space acres (percent)	Development Area acres (percent)	Open Space Treatment of Vegetation by Type (percent)	Development Area Treatment of Vegetation by Type (percent)
Southern Oak Woodland	104(3.0)	89(2.5)	15(.5)	85.5	14.5
Riparian Woodland	58(1.6)	55(1.5)	3(0.1)	94.8	5.2
Chaparral	2186(62.0)	1213(34.0)	973(28.0)	57.4	42.6
Inland Sage Scrub	1078(30.6)	430(12.2)	648(18.4)	38.2	61.8
Disturbed	86(2.4)	35(1.0)	51(1.4)	41.0	59.0
Grassland	13(0.4)	8(.3)	5(.1)	61.5	38.5
Total	3525(100%)	1830(52%)	1694(48%)	—	—

Percentage of RCA's affected by the project will be included on page 154 as the Table below.

Escondido Creek RCA

	Acres	Portion of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	2650	100	—
RCA in Rancho Cielo	601.6	23.5	100
Development Area	204.8	8	34.0
Open Space	396.8	15.5	66.0

(continued)

Escondido Creek/Harmony Grove Road RCA

	Acres	Portion of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	435.2	100	—
RCA in Rancho Cielo	153.6	35.3	100
Development Area	77.0	17.7	50.1
Open Space	76.6	17.6	49.9

San Dieguito River/Lake Hodges/Lusardi Canyon RCA

	Acres	Portions of Total RCA %	Portion of RCA within Rancho Cielo %
Total RCA	2726.4	100	—
RCA in Rancho Cielo	76.8	2.8	100
Development Area	7.3	.3	9.5
Open Space	69.5	2.5	90.5

The RCA descriptions will be included by amending page 154. Add a new paragraph 4 prior to the RCA table presented above.

"The RCA's present on the property are described below:

Escondido Creek - Harmony Grove Road - This area includes Riparian and Oak woodlands in a canyon bottom, surrounding Mixed Chaparral for wildlife habitat and unusually large populations of the rare Coast White Lilac.

Escondido Creek - The main feature of this area is the unique Riparian woodland along the perennial stream in the Escondido Creek canyon. The area also includes undisturbed Mixed Chap-

arral on north-facing slopes, a known deer population and the endangered Del Mar Manzanita, the threatened Sticky stonecrop (Dudleya viscida) and the rare Sea dahlia (Coreopsis maritima), Adolphia californica, Coast White Lilac and Cost Spice Bush.

San Dieguito River-Lake Hodges-Lusardi Canyon - This area is designed to protect the small perennial stream in Lusardi Canyon, an area with petrified logs and a slate rock formation as well as several rare and endangered species of plants.

j. Amend pages 139 and 142. Delete paragraph 7 from page 139 and add it to page 142 as paragraph 3. The paragraph is provided below.

"Native grassland vegetation is uncommon on the property, and occurs in only a few good stands. It occurs on moderate slopes (as near Escondido Creek) and in bowls or sinks. The principal species are herbaceous perennials such as Blue-eyed-Grass (Sisrinchium bellum), Foothill Needlegrass (Stipa pulchia), Deergrass (Mublenbergin rigens), Western Rogweed (Ambrosia psilostachya var. california) and Checker (Sidalcea Malvaeflora var. sparsiflora)."

k. Amend pages 145 and 147. Delete paragraphs 1, 2 and 3 under "ZOOLOGY" and add it to page 147 after paragraph 4, before "Birds".

l. Sensitive plant species are discussed in Table 5 of the report as indicated on page 150, paragraph 4. Sensitive animal species are discussed in Table 6 and in the new information provided above under comment 12h.

This information should satisfy all the previous questions raised regarding the adequacy of the draft EIR. This information will be incorporated into the EIR (textual changes) and resubmitted for public review. It is our understanding that the Notice of Completion may now be issued and publicly noticed. If there are any questions regarding the above, please contact us at your earliest opportunity.

Respectfully submitted,

Michael R. Rider
Project Manager

MRR:dmb

encl/

a) Summary of Findings.

The project area exhibits diverse vegetation types. Present are chaparral (2186 acres), which exists as Ceanothus verrucosus and mixed phases; Inland Sage Scrub (1078 acres); Southern Oak Woodland, which exists as hillside and canyon types; Riparian Woodland, confined to Escondido Creek and San Elijo Creek; Southern California Grassland; and Freshwater Marsh. The flora is typical for coastal southern California, however several Californian endemics and two very restricted endemics occur on the site (Dudleya viscida and Baccharis vanessae).

Wildlife habitats parallel the vegetation types, but are enhanced by numerous rock outcrops and cliffs, perennial fresh water in two streams and a few ponds. The large size and low disturbance factors of the site are also important wildlife resources. Most of the common coastal vertebrate species exist on the property. In addition, several declining species occur there, such as California Black-tailed Gnatcatcher and Golden Eagle.

Twelve sensitive plant species were found on the property. The most sensitive are Baccharis vanessae and Dudleya viscida, which are localized. Most of the other less sensitive species are widespread on the property. Nineteen sensitive animals are discussed as present or probable residents. Of primary concern are San Diego Horned Lizard, Golden Eagle, which nests very near the site, Northern Harrier, Cactus Wren and Black-tailed Gnatcatcher.

The following sensitive habitats are described: localities of Baccharis vanessae and Dudleya viscida, Riparian and Oak Woodlands, freshwater streams, rock cliffs and Ceanothus verrucosus chaparral.

Impacts of the proposed land use on the biology of three Resource Conservation areas are discussed. Biological impacts on-site include reduction in brushland habitat for common and sensitive plants and animals, interruption of wildlife movement routes, fragmentation of habitat areas and disturbance to breeding Golden Eagles and other raptors. Wildlife will also be affected by noise, and the activities of humans and pets. The potential for brush fire will increase, which may result in habitat conversion. Off-site impacts may occur to San Elijo Lagoon, Escondido Creek and San Dieguito River.

Recommendations to reduce biological impacts are tempered by the design of the project, which avoids several areas of conflict. Six recommendations are 1) avoid the line-of-sight of Golden Eagle nest areas, 2) outlaw firearms, pet collecting and loose pets on-site, 3) forbid all motorized activity in open space areas, 4) construct no hiking or riding routes in canyon open space areas, 5) initiate habitat management program, and 6) replant disturbed wildlife corridor areas with cover vegetation.

d) Calendar of Personnel Involved and Field Conditions

November 1977

25 - S. J. Montgomery (zoology) 1000-1500; clear sky, low wind, air temperature 88° F at 1100. (San Elijo Vista in part).

27 - S. J. Montgomery (zoology) 1700-2400; mostly clear sky; no wind; moon up at 2000 and nearly full; traps set. (same as above).

28 - S. J. Montgomery (zoology) 0000-1030; hazy sky; low wind; air temperature 70° F at 1000. (same as above).

December 1977

6 - S. J. Montgomery (zoology) 1600-1830; hazy sky; low wind; air temperature ca. 65° F; moon about half full; traps set. (same as above).

7 - S. J. Montgomery (zoology) 0800-1100; sky totally obscured by fog initially and later clear; low wind; air temperature 44° F initially, then 68° F. (same as above)

- R. M. Beauchamp (botany) no date or time available.

August 1978

1-2 - Conditions and personnel data not available. (Air Logistics).

October 1978

10 - S. J. Montgomery (zoology) 1600-1900. Mostly clear sky; moderate wind; air temperature 81° F. (Rancho Santa Fe Views)

17 - S. J. Montgomery (zoology), H. A. Wier (botany) 0810-1400; mostly overcast sky; light to moderate wind, air temperature 65° F at 0815. (Rancho Santa Fe Views).

February 1979

5 - Not specified, either Stephen B. Lacy or Roberta A. Herdes. 0900-1400. (Wexford).

6 - S. B. Lacy and R. A. Herdes 0800-1400 (Wexford)

July 1979

11 - Randy M. Brimm (zoology) 0600-1200; clear and sunny with some haze in morning; air temperature ca. 60-76° F (Air Logistics, Viglotti, western White, Risbrut)

12 - Randy M. Brimm (zoology) 0800-1100; clear and sunny with some haze in morning; air temperature ca. 60-76° F, (same).

20 - H. A. Wier (botany) 0810-1500, (same).

23 - H. A. Wier (botany) 1000-1315; fog breaking into bright sky, little breeze, (same).

December 1979

3 - S. J. Montgomery (zoology) times and conditions unknown.

February

12 - H. A. Wier (botany and zoology) 0900-1100; sky clear, sunny, low wind (Danob).

22 - S. J. Montgomery and H. A. Wier (zoology and botany) times and conditions unknown (Air Logistics, overview (Tabing, Botzner/Allen; Pacini/Baker, Hewitt, White/Peterson, Choumas)

May

1 - H. A. Wier (botany) ca. 0800-1400; overcast, cool. (portion of Air Logistics, Wexford, and White (east)).

2 - H. A. Wier (Botany and zoology) ca. 1400-1800; sky clear, low wind, warm. (White (west), Risbrut, White (in trust).

Surveys conducted by PSBS, Inc. were always done using a topographic map onto which resources were immediately plotted. Zoological inventories were done using binoculars of either 7 x 35 or 8 x 30 power, and occasionally with a zoom spotting scope. All plants observed were identified. Animals were identified by observation or through their calls, scats, tracks, nests or burrows. Surveys done by other biologists were used in the report (Recon, Westec), however these areas were re-visited by PSBS prior to preparation of this report.

h. List of Sensitive Animals

San Diego Horned Lizard This lizard was relatively frequently encountered during spring visits, and is apparently common in openingsof scrub vegetation. The project will impact open ridge habitat throughout the area, so there will be an incremental loss. Collection, harrassment and domestic animals will be a problem. Open space areas should allow the horned lizard to persist on-site, however.

Orangethroat Whiptail This species was not found on the property, but is known from the vicinity in similar habitat and probably occurs on-site. It is expected to be locally common in the lower, more open areas. The project will eliminate some habitat, but if the lizard occurs as expected, it should persist.

Two-striped Gartersnake This species occurs in riparian habitats, probably both in Escondido Creek and the large tributary that bisects the site. The site should support a large population. The project should have a minimal impact on population levels, unless collection by people becomes a problem.

Turkey Vulture This animal occurs only as a foraging species on the property and will lose forage area along the open ridgetops.

White-tailed Kite No nests were found of this species, however, adequate nesting habitat exists along Escondido Creek, the main on-site canyon and on some brushy slopes. Animals were only observed foraging. At present, there is no adverse impact foreseen to the Kite.

Cooper's Hawk This raptor was consistently seen along Mount Israel Road and probably has a nest in those dense woodlands near the Biological Supply. This is a shy species that may be displaced from the site as a breeding species by the project. Wintering individuals will be less affected.

Ruby-crowned Kinglet. This species is strictly a winter resident that may quite easily be benefitted by the project due to cultivation of exotic plants. Loss of woodland would reduce its winter habitat.

Loggerhead Shrike. The resident portion of the population will probably persist on the property, especially through the conversion of dense habitat to more open vegetation.

Savannah Sparrow. The grassland-inhabiting subspecies which occurs on-site may be impacted by loss of that habitat, however creation of other dense grassy areas through chaparral conversion may open up additional habitat. The population on-site is limited to the field and grassy areas.

Mountain Lion. Occasional reports indicate this animal still may inhabit the area in typically low numbers. The project will probably eliminate Mountain Lion from the site, and possibly the region north of San Dieguito River.

Red-shouldered Hawk. Commonly observed along Escondido Creek, this hawk may nest in Riparian Woodland. Population levels are typical and low. The project should not reduce nest habitat or breeding opportunities, except through harrassment.

Golden Eagle. This species is discussed in the Bird section of the report.

Northern Harrier. No nests of this hawk were found, and the animal was only occasionally observed on the property. It may breed there as one pair at the probable maximum. The project will reduce open field forage area, thus further reduce this declining species' opportunities. A more likely nest location would be in the Lake Hodges basin.

American Kestrel. This small falcon nests on the Rancho Cielo property in cliffs, and possibly also in trees in woodland. Any nesting would indicate a healthy local population; the project will probably have a minimal effect on the Kestrel.

Barn Owl. Owl nests in cliffs were located, but not positively identified as to their occupant. The Barn Owl population is unknown on the site, however these birds are relatively adaptable and will probably continue to utilize the site. They may be benefitted by creation of open habitats, greater rodent populations and tree planting.

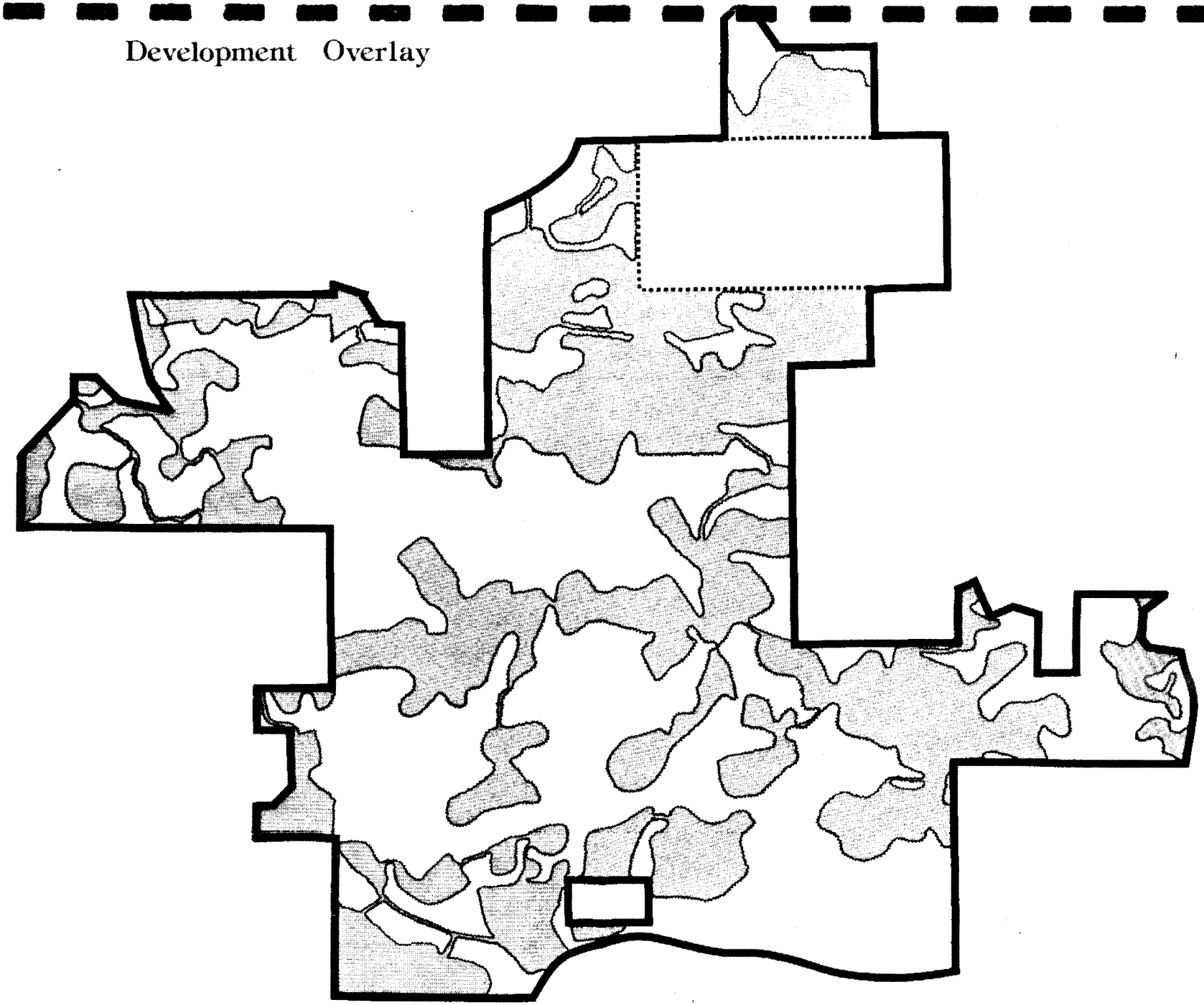
Spotted Owl. The animal detected on the site was probably not a breeding bird, but more likely a transient. The population level on-site is very low. The species should not be significantly affected by the project.

Bewick's Wren This bird is very common in chaparral and at woodland edges on the property. The project will eliminate some habitat, but a healthy population should remain, possibly enhanced in some limited areas by plantings.

Cactus Wren. Limited to stands of platyopuntia and cylindropuntia on the property, which occur only on dry slopes along Escondido Creek near the main confluence, this bird is uncommon even in the appropriate habitat. The habitat area is not proposed for development.

Black-tailed Gnatcatcher. This bird was observed a few times in the southern areas in open sage scrub habitat and once in Ceanothus verrucosus-chaparral, however it is expected over much of the southern part of the site. Apparently adequate habitat also exists south of Elfin Forest Lake on gentler slopes. The site could support a very important portion of this subspecies' distribution, based on our current knowledge (Atwood 1980, other sources). The chief impacts to this bird here will probably revolve around the potential for avocado or citrus culture on the appropriate habitat. Appropriate soils for agriculture are found over about 410 acres of apparently appropriate gnatcatcher habitat.

Development Overlay



SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT
FOR THE
RANCHO CIELO PROJECT

Prepared by:

Brian F. Mooney Associates
(Formerly Mooney-Lettieri & Associates)
9903-B Businesspark Avenue
San Diego, CA 92131

June 1, 1984

Amended
Specific Plan (SP-A84-01)

for

RANCHO CIELO
(SP81-04)

brian f mooney associates
planning, design & environmental studies

Rancho Cielo Specific Plan
(a large-scale project)

Certificate of Adoption

I hereby certify that this Plan consisting of this text, maps and appendices, is Specific Plan, SP-A84-01 (Rancho Cielo) and that it was approved by the San Diego County Planning Commission.

Date JUNE 1, 1984 Elizabeth K. Ackerman

Chairperson

Certificate of Adoption

I hereby certify that this Plan consisting of this text, maps and appendices, is Specific Plan, SP-A84-01 (Rancho Cielo) and that it was approved by the San Diego County Board of Supervisors on the 8th day of AUGUST, 1984.

Date _____ Thomas F. Hamilton Jr.

Chairperson

Attest: Porter D. Cremans

Porter D. Cremans
Clerk of the Board

COUNTY OF SAN DIEGO
Department of Planning & Land Use

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June 1, 1984

WN0137

TO: PLANNING COMMISSION

FROM: DEPARTMENT OF PLANNING AND LAND USE

FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT: Rancho Cielo, Supplemental EIR

Permit/Map: SPA84-01, TM4225R, TM4227R, TM4229R R84-002, P80-89W2

Log #84-8-3 (80-8-120)

The Planning Department has reviewed the enclosed draft Environmental Impact Report (EIR). Based on that draft, public and agency comments received and staff analysis recommends the Planning Commission find that:

1. The attached final EIR has been completed in compliance with CEQA and that the Commission has reviewed and considered the information contained therein prior to approving the project.

2. The project will have the following environmental impacts:

   A. Significant But mitigable:

      1. Traffic Circulation
      2. Aesthetics
      3. Soils and Geology
      4. Water Quality/Liquid Waste
      5. Biology
      6. Noise
      7. Archaeology
      8. Dark Sky
      9. Hydrology

   C. Not Significant:

      1. Growth Induction

3. The Mitigation Measures that apply in Enclosure "A", the EIR Discussion, have been made conditions of the project approval.

Robert E. Asher, Chief
Regulatory Planning

REA:RVM:sh

Enclosures: A. Environmental Impact Report Discussion, Pages A-1 to A-5
B. Letters of and Responses to Public and Other Agency Comment, Page B-1.
C. Draft EIR, prepared by Mooney-Lettieri & Associates, 9925-C Businesspark Ave., San Deigo, CA 92131.

cc: Project Planner (0650)
Lorena Quintana (0650)
Applicant:
Agent:

ENCLOSURE A-1

ENVIRONMENTAL IMPACT REPORT DISCUSSION

PROJECT: Rancho Cielo, SPA84-01, TM4225R, TM4227R, TM4229R, R84-002, P80-89W2
EAD LOG #84-8-3

PROJECT DESCRIPTION

This project is a revision to the Specific Plan adopted by the Board of Supervisors on December 9, 1981. This includes a relocation and redesign at the Village Center and Village Estates, redesign of the Neighbrohood Commercial area, deletion of private recreation area at the entrance to the project, deletion of the wholesale nursery from the SP, deletion of two Country Estate lots on the south boundary and two more from the northwestern boundary, specific location of potable water reservoirs, addition of two reclaimed water storage reservoirs, and various minor lot relocations and modifications. This plan wil show SA 680 to be built, realign Via Ambiente, delete the connection to Mt. Israel Road, and include various minor road deletions and relocations. There will also be deletions of Bureau of Land Management and other property ownerships. A zone reclassification will be done to bring the uses into conformance with the SPA.

PROJECT LOCATION:

This project lies north of Del Dios Highway and the San Dieguito River, west of the community of Del Dios, south of Harmony Grove/Elfin Forest, and stretches in the northwest to cross the Escondido Creek. A piece is now isolated to the northeast with the deletion of the BLM land.

LAND USE FACTORS AND SURROUNDING LAND USES

The Rancho Cielo Specific Plan proposes a land use plan usage for 2815 acres. It will include 770 dwelling units with lot sizes ranging from 10 to 2.43 acres. The density overall is 1 du/3.66 acres. It also includes a neighborhood commercial area, Village Center, fire station and heliport, and open space area. A water treatment facility on the western portion of the land will treat 265,600 gallons of effluent each day. The area to the north is a mixture of a mobilehome park and large lot residences. The land to the west/southwest are large lot residences, as are those to the east, Del Dios Highway is south.

MAJOR ISSUES

1. Traffic Circulation (See the Following Mitigation Measure)

   This revised project has created two major changes from the original EIR which will have substantial changes in traffic circulation. Deletion of Mt. Israel Road as a primary or secondary access will increase ADT onto Via Ambiente. The change in status in the Neighborhood Commercial and Village Center and drop in residential units will decrease the previously forecasted 12,240 ADT down to 9,700. While the numbers are still significant, the mitigation provided in the original EIR is sufficient to resolve this impact.

Mitigation Measure

Prior to issuance of any grading permits or use and reliance permits or finalization of any maps, the applicant shall to the satisfaction of the Department of Public Works and the Department of Planning and Land Use:

1-A. Install signalization for the intersection of Del Dios Highway and Via Rancho Parkway;

1-B. Provide acceleration and deceleration lanes along Del Dios Highway at Via Ambiente and Mt. Israel Road;

1-C. Provide signalization at Via Ambiente and Del Dios Highway upon approval of Phase III, and;

1-D. Provide on-site road sections to be reviewed and approved by the Fire Marshall.

2. Aesthetics (Mitigated by Project Design)

The redesign not only expanded open space area by 73 acres (3%), but also rearranged access road cuts to take advantage of intervening landforms to reduce visual impact to both Rancho Santa Fe and the Del Dios/Mt. Israel areas. The siting of the two reclaimed water storage reservoirs in a canyon west of the Village Estates and Via Ambiente in a northeast trending canyon. The views to the San Dieguito River and Lake Hodges have not changed. There will be more of an impact to the Scenic Corridor along Del Dios Highway due to development of the commercial areas near SA 680, but the overall issue remains unchanged. There will be minor development encroachments to the Escondio Creek RCA and open space area of the previous design due to the development of several lots and one 90 day storage reservoir.

3. Soils and Geology (See the Following Mitigation Measures)

This project design has not reduced the 3,000,000 cubic yards of grading, but has relocated the majority of the 25 foot to 30 foot graded cuts to areas less visible than in the previous design. A substantial change is the placement of two open reservoirs with 105 foot and 90 foot high dam faces.

The primary geology issue remains cutting into the highly fractured blocky volcanic rock and associated clayey soils. Grading must be in conformance to the provisions recommended by Leighton and Associates to reduce the possibility for landslides and block faults.

Mitigation Measures

3-A. Prior to approval of the Final Maps, or issuance of any grading permit or use and reliance permits, the applicant shall demonstrate to the satisfaction of the State Division of Dam Safety and the County Department of Public Works that all the conditions of Leighton and Associates concerning geologic hazards and remedial work be carried out to ensure safe grading and development areas.

4. Water Quality/Liquid Waste (See the Following Mitigation Measure)

The project revisions request an increased sewage treatment capacity from the 260,000 gpd allowed under P80-89 to 265,600 gpd under P80-89W[1]. This increase is said to be provided for in the original wording of the MUP (dEIR, p.31), but not as a specific number. The line of reasoning for this modification is that the Rancho Cielo Sanitation District was formed in 1983 and the annexation of Elfin Forest Village Mobilehome Park, 364 acres of Bureau of Land Management property, and four private residences were included beyond the property of Rancho Cielo. The draft EIR discusses wording in the MUP for future expansions to provide for growth potential in the surrounding area. Of course, any such expansion would require further permit modifications, LAFCO review, and an amendment to the LAFCO Sphere of Influence.

The primary issue in the original EIR was whether or not the Regional Water Quality Control Board standards could be met. On October 3, 1983, the RWQCB approved a request from the Rancho Cielo County Sanitation District to lower standards to allow secondary instead of tertiary treatment; from 1,500 mg/l TDS to 2,700 mg/l TDS. However, reclaimed water will not be used in the San Dieguito hydrographic unit and there will be no potential for impacts to the ecology of the San Dieguito or San Elijo Lagoons.

Mitigation Measure

4-A. Prior to approval of the Final Maps or establishment of use and reliance on the major use permits, the applicant shall obtain approval from both the Department of Health and the Regional Water Quality Control Board for the treatment and disposal of liquid waste.

5. Biology (Mitigated by Project Design)

The revised project will increase conservation of wildlife habitat over what was approved by the Environmental Review Board on March 26, 1981. The redesign places a total of 1710 acres in native open space, whereas the 1981 project planned for 1637 acres. This raises the native area from 58% to 61%. The easement areas form a continuous natural habitat for the 36 noted pairs of Black-tailed Gnatcatchers, as well as other species of birds, reptiles, and mammals.

The habitats are primarily chaparral, Inland Sage Scrub, and rocky cliffs, but some Oak Woodland and Riparian Woodland are involved. Living within these communities are the very rare Baccharis vanessae and very limited distribution Dudleya viscida, as well as a hunting and nesting area for Golden Eagles.

6. Noise (See the Following Mitigation Measure)

This issue of Noise changed very little in the redesign, in that 12,852 ADT will eventually circulate and flow off the project onto Del Dios Highway. The Mt. Israel community will receive less noise due to the deletion of the primary access in that area. The impact of noise from SA 680 remains unchanged from the original consideration in the old EIR.

Mitigation Measures

6-A. Prior to the approval of any grading plans for road construction on the Large Scale Project or in preparation for any Final Maps, the applicant shall submit copies of the grading plans to the satisfaction of the Director of the Department of Planning and Land Use with noise attenuating barriers or open space easements which reduce traffic noise to acceptable levels.

7. Archaeology (See the Following Mitigation Measure)

The redesign does not change this issue from the previous Final EIR. Grading will impact 16 prehistoric San Dieguito quarry and tool-blank reduction areas, which are key to understanding the resource economics and material trade ystems of this 7500-12000 year old hunting culture.

Staff has met with Archaeologist John Cook and approved his research design for Phase II salvage archaeology. Mr. Cook's field work involves mapping of the work areas, reconstructing the pieces to their original nodules, matching the pieces with finished tools from the famous Harris Site, and excavating certain key site blocks. His report will be completed prior to finalization of this project.

Mitigation Measure

7-A. Prior to approval of the Final Maps or issuance of any grading permits or use and reliance permits, the applicant shall submit the report on the research-designed salvage to the satisfaction of the Director of Department of Planning and Land Use.

8. Dark Sky (See the Following Mitigation Measure)

The issue of dark sky is not substantially affected by the redesigns. All the residential, commercial, and traffic lighting on that elevated landform will add night illumination to the visual window of the Mount Palomar Observatory. The condition for low sodium lighting will ensure that astronomers can filter out the interfering light rays.

Mitigation Measure

8-A. Prior to the approval of any Final Maps or issuance of any grading permits or reliance on any use permits, the applicant shall to the satisfaction of the Department of Public Works provide plans to utilize low pressure sodium lamps along streets and parking areas.

9. Hydrology (See the Following Mitigation Measure)

The reduction from 892 units in the original design to 770 units will reduce the area of impervious surfaces and thus reduce the hydrologic run-off during peak rainfall periods. This is also true of the reduction of 1.25 miles of internal streets.

Mitigation Measure

9-A. Prior to the issuance of any grading plans or construction of any internal streets, the applicant shall provide adequate plans to control erosion and sedimentation to the satisfaction of the Director of the Department of Public Works.

10. Growth Induction (No Mitigation Measures Proposed)

This issue was determined in the prior EIR to be not an issue. Since the Rancho Cielo Sanitation District now exists and no roads or services as a result of this redesign would substantially increase growth over what was prevously considered, this "issue" appears to be not significant. It is assumed that unacceptable growth from future expansion of the RCSD would be reviewed and regulated by LAFCO.

ENCLOSURE B-1

LETTERS OF AND RESPONSES TO PUBLIC AND OTHER AGENCY COMMENT

From the dates of April 3, 1984 to May 3, 1984, the draft EIR received a 30 day public review period. No letters were received.

SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT
FOR THE
RANCHO CIELO PROJECT

Prepared by:

Brian F. Mooney Associates
(Formerly Mooney-Lettieri & Associates)
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June 1, 1984

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I. EXECUTIVE SUMMARY

The Rancho Cielo Specific Plan consists of a detailed land use plan, capital facilities and ultimate lot design on 2,815 acres of land located within the San Dieguito Community Planning Area, two miles northeast of Rancho Santa Fe, four miles southwest of the City of Escondido and immediately north and west of Lake Hodges. The Board of Supervisors approved the Rancho Cielo Specific Plan (81-04), Major Use Permit (P80-89), Rezone (R80-083), and four first phase tentative maps (TM 4225, TM 4226, TM 4227, TM 4229) on December 9, 1981. The Rancho Cielo Environmental Impact Report (EAD Log #80-8-120, SCH #80071615) was also certified on that date.

The intent of the Environmental Impact Report (EIR) was to provide an extensive data base with a level of analysis that could serve as a Master Environmental Assessment for the adoption of the Rancho Cielo Specific Plan and subsequent Tentative Maps, Major Use Permits, and other discretionary actions which require environmental review. It was intended that subsequent projects should require only a minimal amount of supplemental information to complete any further analysis and design of mitigation measures. The Rancho Cielo EIR addressed all aspects of the proposed land use plan for Rancho Cielo including the preliminary lot design; circulation system; facilities infrastructure; future permits and tentative maps; as well as the formation of a sanitation district to provide sewer service via a water reclamation plant, and annexations of the land area to the Rancho Santa Fe Fire District.

At this time, the project proponents propose certain limited changes to the adopted Rancho Cielo Specific Plan and three of the four first phase tentative maps as well as a modification of the approved Major Use permit and a zone reclassification to ensure that zoning is in conformance with the revised Specific Plan. This supplemental analysis is based on the original Environmental Impact Report prepared by Mooney-Lettieri and Associates, (formerly American Pacific Environmental Consultants) dated September 22, 1980 and the adopted Environmental Review Board (ERB), recommendations and findings dated March 26, 1981, which became part of the certified EIR. Portions of the staff report have been excerpted and are incorporated herein as noted. The ERB staff report, consisting of a discussion of the Rancho Cielo EIR and staff recommendations and findings is included in its entirety in the appendix of this report. The reader should note that both the EIR and ERB staff report addressed an original project of 892 units on 3,525 acres. During the review process two ownerships were removed from the specific plan, and consequently the project approved by the Board of Supervisors consisted of 774 units on 2,818 acres. The proposed revised project which this supplement addresses consists of 770 units on 2,815 acres.

This report is a Supplemental Environmental Impact Report as defined in Section 15163 of the California Environmental Quality Act (CEQA). Section 15163 stipulates that a supplemental EIR rather than a subsequent EIR may be prepared if only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. As such, this supplement addresses the relationship of the changes which have been made in the Specific Plan to the environmental findings of the original EIR. Of the issues identified in the Environmental Review Board report, the changes in the Specific Plan affect the conclusions associated with the following major issues:

- Traffic
- Biology
- Water Quality/Liquid Waste
- Aesthetics
- Soils/Geology

All other major issue analyses are minimally affected by the revised Specific Plan and tentative maps. A summary discussion of each of the other major issues identified by the ERB is provided and includes the following issues: Noise, Archaeology, Dark Sky, Hydrology, Energy and Air Quality.

A revised discussion of growth inducement and a summary discussion of alternatives is provided herein.

All impacts associated with the revised Specific Plan and tentative maps are found not to be significant based on previous conditions of approval and design considerations incorporated into the project. The following is a brief summary of the effects created by the proposed changes and the recommended mitigation measures.

Traffic

Impacts

There are two major changes which affect the previous traffic impact analysis: deletion of Mt. Israel Road and the limitation of commercial space at the Neighborhood Commercial Center to 50,000 square feet . While the deletion of Mt. Israel Road increases the travel distance to Del Dios Highway for a portion of the project, this is not considered to be a significant impact. Deletion of the road will, in fact, eliminate traffic impacts to Mt. Israel Road and the Mt. Israel Road/Del Dios Highway intersection.

Because of the new commercial square footage and the reduction in total residential units, the total number of average daily trips generated by the project has been reduced from the previously forecasted 12,240 to 9,700. Impacts to traffic have therefore been reduced.

Mitigation

The previously adopted conditions of approval relating to traffic concerns which focus on SA 680, Del Dios Highway and Via Ambiente will fully mitigate traffic impacts. Original mitigation measures requiring improvements to Mt. Israel Road and signalization of the intersection at Del Dios Highway do not, at this time, appear necessary.

Biology

Impacts

Development of the revised project will result in an impact to one of the four principal wildlife corridors. In addition, recent concern for the loss of Black-tailed Gnatcatcher habitat on the property was examined. Approximately 394 acres of suitable Black-tailed Gnatcatcher habitat will be impacted by the development, and as such, is considered a significant biological impact. By virtue of the project design however, 311 acres (44%) of suitable habitat will be preserved in open space. The realignment of Via Ambiente in a wildlife corridor does not constitute a significant impact to the wildlife corridor system.

Mitigation

The revised project has increased the identified open space area from 1,637 acres to 1,710 acres. These open space areas include adequate habitat for the Black-tailed Gnatcatcher. While new localized impacts are present they appear to be mitigated through the preservation methods previously identified and the maintenance of contiguous open space for both wildlife and floral species of interest. Open space easements as previously required, should be dedicated to the County of San Diego to ensure preservation of important identified biological features.

Water Quality/Liquid Waste

Impacts

The project change associated with water quality/liquid waste is the change in the level of wastewater treatment from tertiary to secondary treatment. Treated plant effluent will be used for on-site irrigation and stored in open reservoirs when irrigation is unnecessary. A recently approved change in the basin standards for the Escondido basin allows the use of secondarily treated water for irrigation.

Mitigation

The Rancho Cielo wastewater treatment facility will be required to meet all of the established criteria for the

protection of surface and ground waters. The mitigation measure recommended by the ERB requiring that the applicant obtain approval from both the Health Department and the Regional Water Quality Control Board to the satisfaction of the Department of Public Works remains adequate to mitigate impacts to water quality.

Aesthetics

Impacts

Project revisions which affect aesthetic impacts are: realignment of Via Ambiente, addition of two seasonal reclaimed water storage reservoirs, and increase in cut and fill slopes due to change in grading standards for roads. The redesign of the Village Estates and Village Center has a positive affect on aesthetic impacts by reducing the visibility of the Village Center from the Mt. Israel community. The proposed project revisions do not create new significant aesthetic impacts.

Mitigation

As with the original project, aesthetic impacts created by the proposed project revisions are considered mitigated by the project design. The dedication of 1,710 acres of open space, preservation of steep slopes, major drainages, woodland areas, revegetation and landscaping of disturbed areas and clustering of units are aspects of the project which serve to mitigate aesthetic impacts.

Soils and Geology

Impacts

Proposed revisions potentially affected by geologic conditions are the addition of two reclaimed water reservoirs and the realignment of Via Ambiente. A review of the proposed road alignments by the project geologist reveals no unusual geologic hazards associated with the roads if constructed per standard engineering practices. Several geologic concerns exist in association with design and construction of the reservoir dam sites including slope stability, seepage and settlement and characteristics of the underlying geographic strata such as faulting and seismicity. However, since dam design is not completed, insufficient data exists to address these concerns in this document.

Mitigation

Detailed environmental, and specifically geologic review of the reservoirs will be handled through the dam construction permit process required by the Division of Safety of Dams as well as the County grading permit process. The review processes for the grading permits, building permits, and dam design approval are adequate to ensure that no significant geologic impacts would be created by construction of the reservoirs.

II. PROJECT DESCRIPTION

Project Location

Rancho Cielo consists of 2,815 acres in north San Diego County within a portion of the San Dieguito Planning Area. The property lies within eight miles of the Pacific Ocean in a portion of a north-south trending coastal range. With respect to community development, the site is located two miles east of Rancho Santa Fe, four miles southwest of the City of Escondido, four miles south of the City of San Marcos, seven miles east of Leucadia and Encinitas, and immediately north and west of Lake Hodges and Del Dios (see Vicinity Map, Figure 1). The property is also described as a portion of Section 36, Township 12 South, Range 3 West; a portion of Sections 1, 2, 3, 10, 12, 13, 14, 15 and all of Section 11, Township 13 South, Range 3 West; and a portion of Section 7, Township 13 South, Range 2 West.

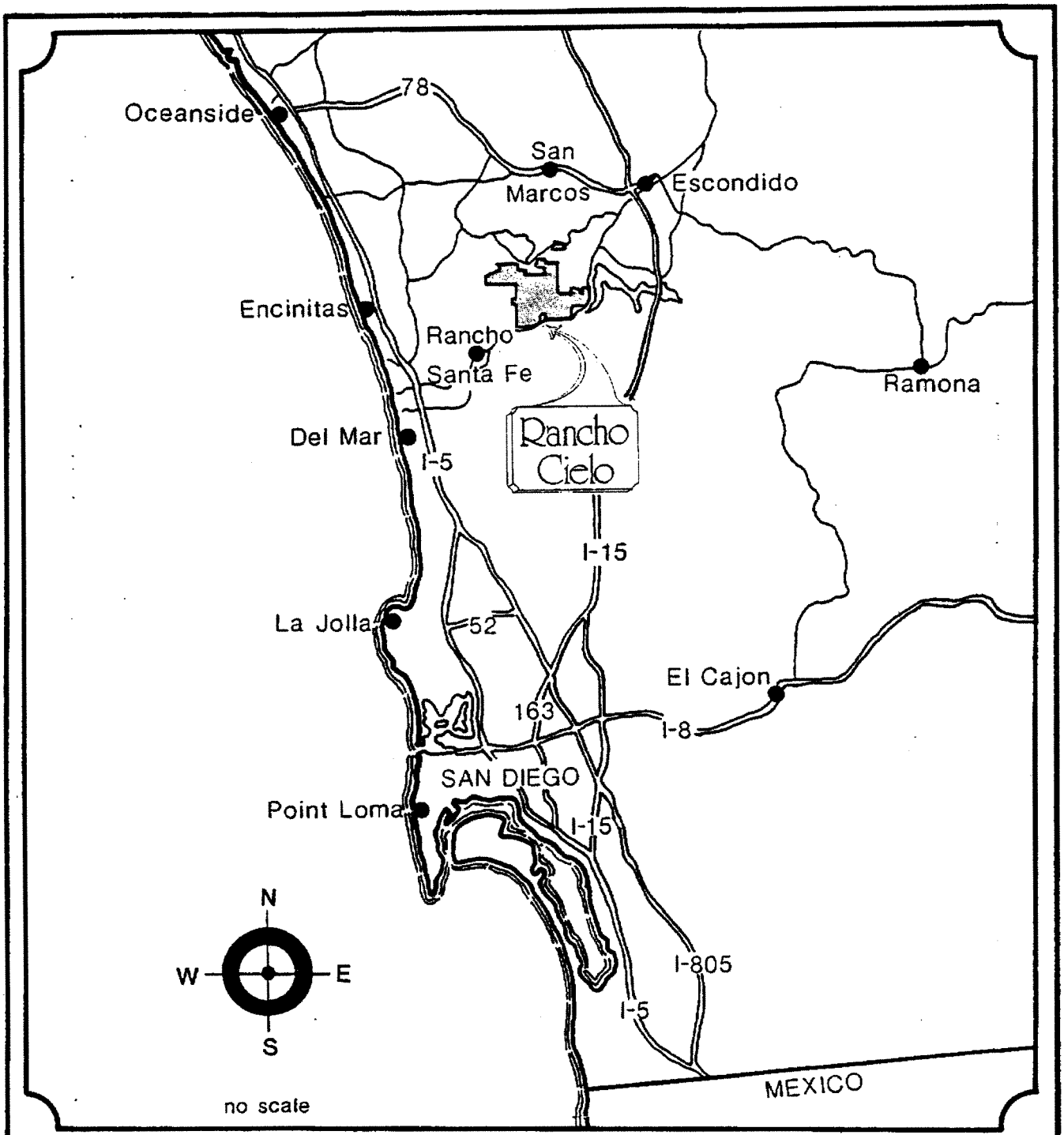
Project History

In August 1979, the Rancho Cielo Association was formed. The Association, composed of 15 individual ownerships, was created to obtain approval from the County Board of Supervisors to prepare the Rancho Cielo Specific Plan. On October 24, 1979, the Board of Supervisors approved a General Plan Amendment for the San Dieguito Community Plan from Medium Estates Category (1 du/2 acres) to Designation 21, Specific Planning Area (SPA 0.27 du/ac). The Rancho Cielo Association subsequently proposed the Specific Plan and the Board initiated Rancho Cielo as a Large Scale Project under the provisions of Board of Supervisors Policy I-62. On December 9, 1981, the Board of Supervisors approved the Rancho Cielo Specific Plan and other supporting applications.

Since the approval of the project, several other discretionary actions have been processed. On October 19, 1983, the Board of Supervisors ordered the formation of the Rancho Cielo Sanitation District. This County dependent district was created for the purpose of providing sewer service to the project. The Local Agency Formation Commission approved the annexation of the first phase of the project to the Rancho Santa Fe Fire District on July 11, 1983. An amendment to the Escondido Creek drainage basin standards permitted a change in the wastewater treatment operation to allow secondary instead of tertiary treatment. This amendment was approved by the Regional Water Quality Control Board on October 3, 1983.

Revisions to the Rancho Cielo Specific Plan

The proposed revisions to the Rancho Cielo Specific Plan and tentative maps represent a response to changes in engineering detail availability and current conditions, as well as an opportunity to make changes that improve the overall viability of the project. The major reason for the majority of the design



Rancho Cielo

Rancho Santa Fe, California

Vicinity Map

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changes has been the preparation of accurate topographic maps. Other revisions to the plan have been the result of changes in ownership, minor deletions of land and response to subsequent County actions (i.e., S.A. 680) and citizen concerns.

The Rancho Cielo Specific Plan proposes a phased development plan of 770 residential units, a commercial center, village center/fire station and heliport, equestrian center, and open space on 2,815 acres within the San Dieguito Community Planning Area of San Diego County (see Land Use Plan, Figure 2). The project is broad in scope, including land use planning for the entire property, of which 2,593 acres are designated Specific Plan Area, 222 acres are designated Estate; the formation of a sanitation district to provide sewer facilities to the site; construction of substantial road and water facilities to serve future residents; annexation to a fire district; and design for lot placement and road alignment. All Tentative Maps will be submitted under a two-step phasing plan. Construction of residential or commercial buildings will be pursued subsequently by individual property owners.

The following is a summary of the proposed project revisions which are highlighted on Figure 3.

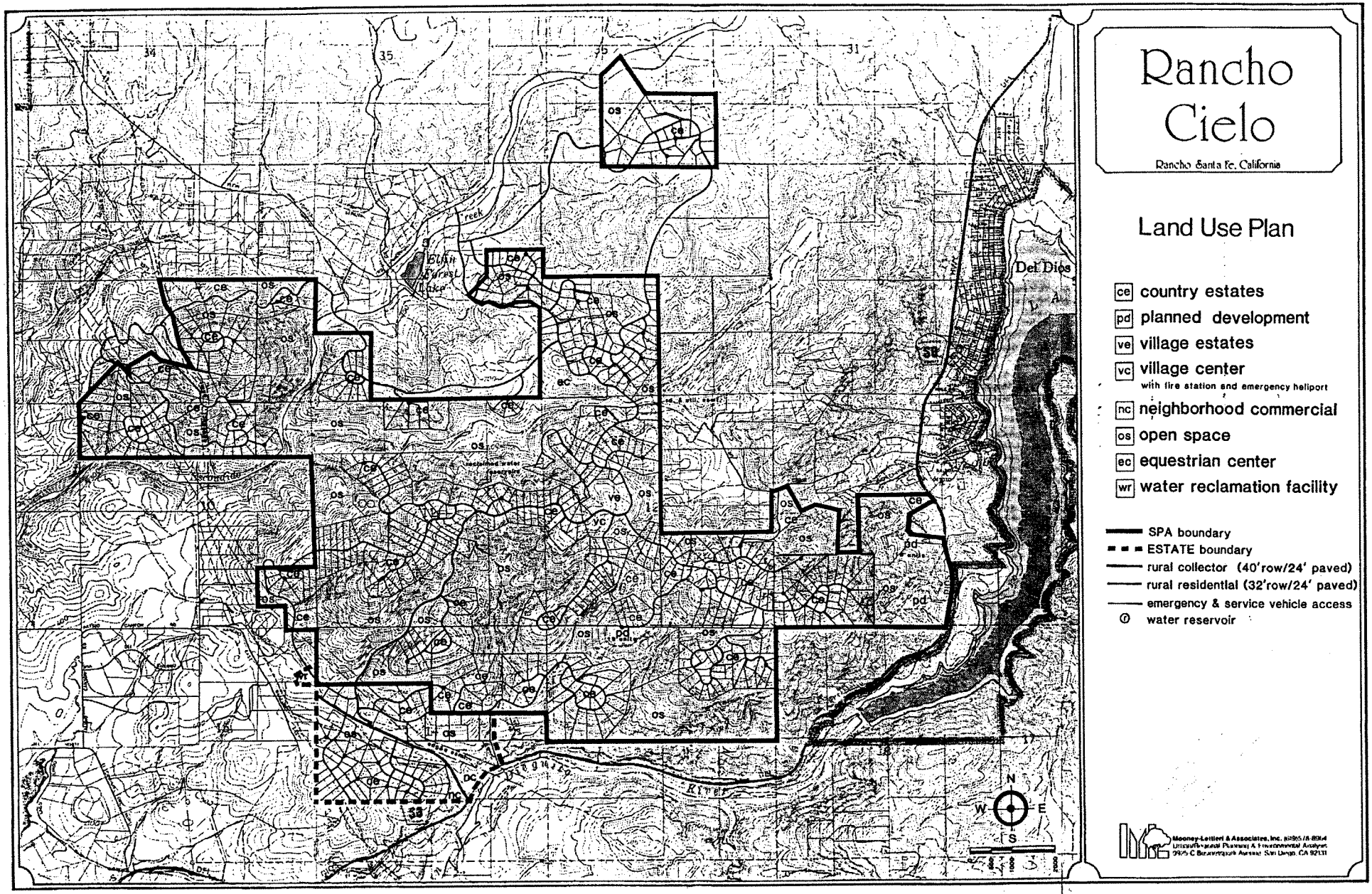
A. LAND USE

1. Relocation and redesign of the Village Center and Village Estates.

   This amendment lessens the visual impact on neighboring residents and provides for more effective use of the Village Center by combining various civic uses, including: the fire station/heliport, Rancho Cielo Association offices and minor commercial and recreational uses. The total acreage for the combined Village Center/Fire Station has been reduced from 10 to 6 acres. The Village Estates has changed from 40 to 42 units and 23 to 15 acres.

2. Redesign Neighborhood Commercial area.

   The Neighborhood Commercial Center has been redesigned to allow commercial uses on either side of the intersection at Del Dios Highway and SA 680. The commercial center, which will require a site plan, proposes the same type of community uses as the original plan (retail commercial establishments such as a market, pharmacy, and bank, and leasable office space). The total number of developable acres for the Neighborhood Commercial Center has been increased from 10 to 15 acres. The proposed building size is approximately 50,000 square feet and the total commercial lot size is 28 acres.


Rancho Cielo
Rancho Santa Fe, California
Land Use Plan
ce country estates
pd planned development
ve village estates
vc village center
with fire station and emergency heliport
nc neighborhood commercial
os open space
ec equestrian center
wr water reclamation facility
SPA boundary
ESTATE boundary
rural collector (40'row/24' paved)
rural residential (32'row/24' paved)
emergency & service vehicle access
water reservoir
Del Dios
San Dieguito River
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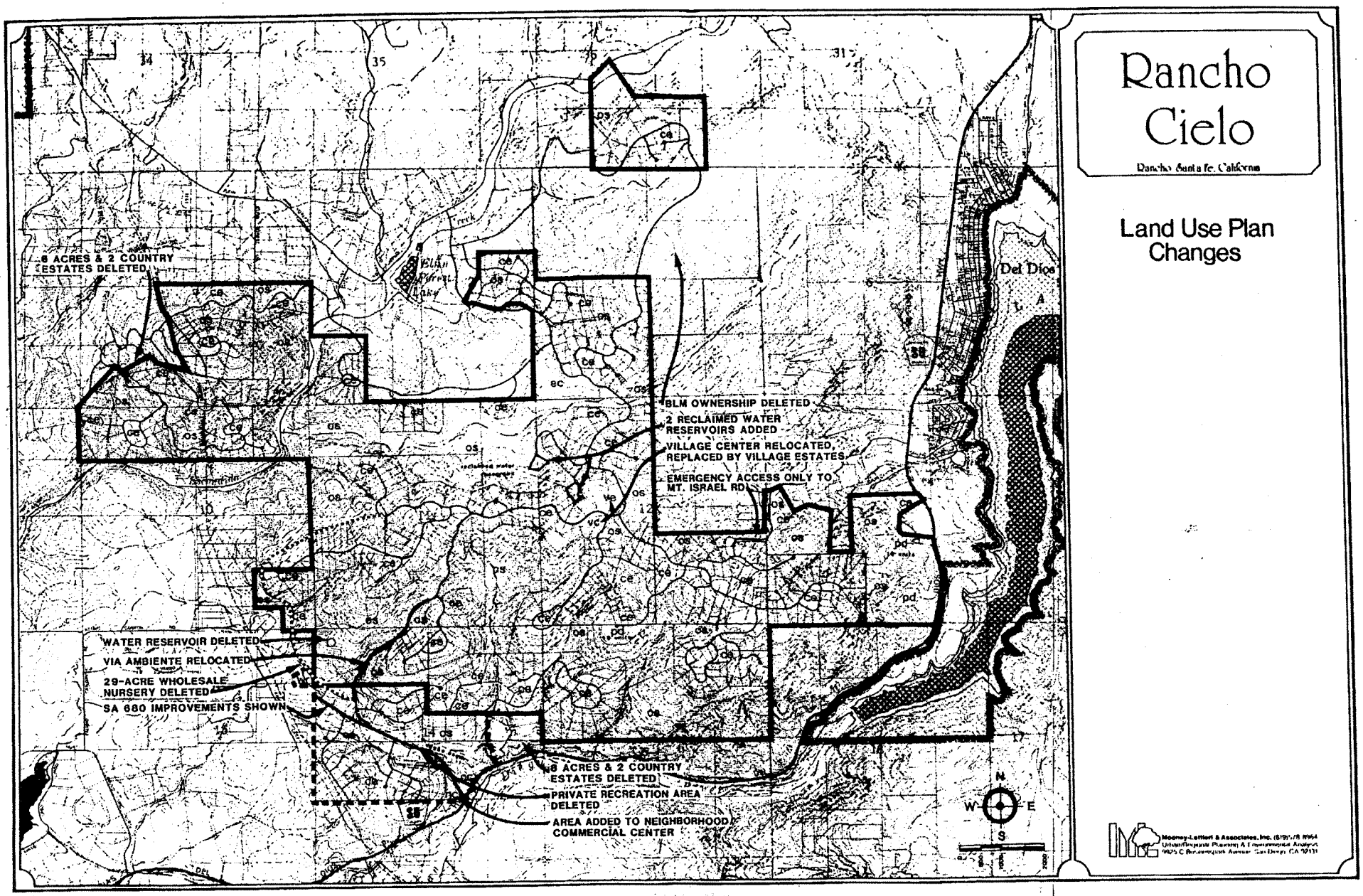


Rancho Cielo

Rancho Santa Fe, California

Land Use Plan Changes

3. Deletion of private recreation area at entrance to the project.

Subsequent studies have determined that this 2-acre area is an inappropriate location for private recreational uses. Recreation facilities are currently proposed in association with the Village Estates and the Village Center.

4. Deletion of the wholesale nursery from the Specific Plan.

A wholesale nursery is still proposed for this area. However, the property owner proposes to remove the 29-acre parcel from the Specific Plan. The San Dieguito Community Plan designation for the site is Estate 17.

5. Deletion of two Country Estates lots (eight acres) from the southern boundary of the property and two Country Estates lots (six acres) from the northwestern boundary of the property.

The respective property owners have requested that these parcels be removed from the Specific Plan due to the fact that they are either existing legal lots or have access independent of the remainder of the project.

6. Specify location of potable water reservoirs.

Since the inception of the Rancho Cielo Specific Plan in 1979, there have been on-going communications with the Olivenhain Municipal Water District regarding the location of their potable water reservoirs. With the availability of accurate topographic data, the proposed sites have now been located as shown on the revised land use plan. The relocation of the one reservoir from its previous southern location will significantly reduce visual impacts from Del Dios Highway, SA 680 and Rancho Santa Fe.

7. Addition of two relaimed water storage reservoirs.

Since the level of sewage treatment has been changed from tertiary to secondary treatment, two open storage reservoirs are now shown on the plan near the Village Estates. Per RWQCB regulation, the reservoirs must be able to store reclaimed water for a maximum 90-day period for times when irrigation is unnecessary. The reservoirs must be located in the Escondido Creek drainage basin. The site selected for the two reservoirs was chosen to avoid any significant environmental disturbance.

8. Various lot relocations and modifications.

Minor adjustments to the Country and Village Estate lots have been made to conform to more accurate topographic data. The number of Village Estates has increased from 40 to 42. Open space areas and the equestrian center have been defined to accommodate road and lot modifications. While adjustments to the open space have become necessary the actual acres of open space has increased from 1,637 acres to 1,710 acres or 58% to 61% of the total project area. The extent of the areas to be developed has changed only slightly.

B. CIRCULATION

1. SA 680 shown to be constructed.

When this document was originally written the status of SA 680 was undecided. This revision reflects the 1983 Circulation Element which designates SA 680 as a Major Road with a requirement to construct to Light Collector standards. However, the EIR addressed all issues related to the construction of SA 680 if it was approved to be constructed.

2. Realignment of Via Ambiente.

This realignment provides a more direct access to the majority of the project from SA 680. The original alignment started at Del Dios Highway and went around the westerly end of the project, curving to the east until it intersected with the top of the major east-west ridge. The proposed realignment begins at SA 680 approximately 2800 feet from Del Dios Highway and connects with a previously approved street (La Milla) and then continues northerly to the east-west ridge. A portion of the original Via Ambiente alignment will still be used for access to residential lots.

3. Deletion of connection to Mt. Israel Road.

Mt. Israel Road has been deleted as a primary access to the project but would be available for emergency access and access to two adjacent lots. This amendment eliminates the traffic impacts associated with Mt. Israel Road. SA 680 is now the project's primary entrance and Harmony Grove Road is a secondary access.

4. Various road deletions and relocations.

The internal private road system has been adjusted to serve the newly designed lots. In most cases road length has been reduced and double frontage lots eliminated. The total amount of road length has decreased by 1.25 miles.

OTHER

1. Delete phasing of project by ownership

   Due to the multi-ownership nature of the project, it is being proposed that the development phasing designations be revised and clarified. Essentially the project now consists of two phases: the four first phase tentative maps consisting of 1,636 acres, and the remaining 1,179 acres is the second phase of the project. The development phasing "standards", however, remain intact and no second phase map will be recorded prior to construction of phase I infrastructure. Phase II tentative maps may be processed at any time subject to conditional approval.

2. Deletion of discussions of Bureau of Land Management ownership.

   The original Specific Plan included the 364-acre Bureau of Land Management parcel for the purpose of connecting one ownership that wanted to be included in the Specific Plan but was physically non-contiguous due to the BLM ownership. However, the BLM parcel was never actually part of the Rancho Cielo Specific Plan. Because the BLM land acreage was originally included in the density calculations, the SPA density was .23 du/ac. The approved density for the Rancho Cielo Specific Plan Area is .27 du/acres. For clarity's sake, all discussions of the BLM land have been deleted in this revision.

Land Use Plan

The Rancho Cielo Specific Plan proposes a land use plan usage for the entire 2,815 acres including the 2,593 acres designated as Specific Plan Area (SPA) on the San Dieguito Community Plan and the additional 222 acres outside the SPA but within the planning boundaries of the Specific Plan (see Figure 2). The level of specificity of the plan includes designation of collector and residential roads, special use areas, lot placement, and locations of residential and commercial areas.

A total of 770 dwelling units are proposed and shown on the plan map. The areas shown as Village Estates and Planned Development will include 42 townhomes and 38 single-family units (in two locations) respectively. The actual site development plans are not proposed at this stage. However, typical building sites are shown on the tentative maps and those lots requiring special design considerations are noted. Lot sizes range from one to in excess of 10 acres and average 2.43 acres. Overall density within Rancho Cielo Specific Plan is one dwelling per 3.66 acres. Within the Specific Plan Area's 2,593 acres, 690 units are proposed with a density of one dwelling unit per 3.76

acres. The actual approval and development of lots will be accomplished through present and subsequent tentative maps.

In addition to residential uses on the site, a neighborhood commercial area, Village Center and fire station/heliport, an equestrian center, water reclamation facilities, and substantial open space areas are delineated on the plan. An adjacent wholesale nursery will provide plant material for landscaping within Rancho Cielo. Open space areas will be granted to the County of San Diego in conjunction with the subdivision process. Ownership and maintenance of the bulk of open space will be governed by the Rancho Cielo Association. The open space areas included within the residential lots will also be managed by the Association but ownership will remain with the individual land holders.

Facilities Infrastructure

Roads

Three Circulation Element Roads are located on the site: Del Dios Highway, Mt. Israel Road, and SA 680. Improvements to/or construction of these roads is only partially proposed and will be completed as necessary to satisfy the circulation needs of area residents and the requirements of the Department of Public Works. Intersection improvement at Del Dios Highway, Elfin Forest Road and Harmony Grove Road will be completed in conjunction with the phasing plan. Internal roads serving the project site are private for the use of local residents in the Rancho Cielo area. These roads will be classified as Rural Residential (24 to 28 feet paved width) and Rural Collector (32 to 36 feet paved width). Hiking and riding trails will also be provided.

Water

Water service facilities proposed for Rancho Cielo are designed to serve the entire project area as well as some areas outside the Rancho Cielo boundaries. Approximately 27 miles of waterline are proposed in the preliminary design with four pump stations (one existing) and four reservoir sites (two existing). Four pressure zones will be established within the property boundaries to a maximum elevation of 1,492 feet MSL. The water facilities design includes adequate capacity to supply service to all 770 future dwellings and the commercial/public buildings.

Sewer

The formation of a sanitation district contiguous with the Rancho Cielo first phase is a key component of the project design. A water reclamation plant located on the western portion of the site is proposed for secondary treatment with on-site reuse of approximately 265,600 gallons of effluent per day. All equipment, sewer lines, pump stations and other appurtenances will be constructed in conjunction with each phase of development.

Public Services

Several aspects of the project design are intended to improve public services in the area. These include dedication of land for a fire station, construction of the fire station itself, and construction of a heliport for emergency access.

With respect to utilities, electric, cable television, and natural gas lines will be extended to the property to serve future residences. Facility sites will be located as necessary to satisfy the requirements of San Diego Gas and Electric. All utilities and telephone lines are proposed as underground services.

Permits

In addition to the revised Specific Plan and revised tentative maps several other permits requiring discretionary actions will be requested in conjunction or subsequent to approval of the revised plan. The primary permits involved with development of the site are the following:

a. Planned Development Permits. These permits are involved with the Specific Plan to allow for changes in conventional use regulations and development standards. In essence, this permit is to provide for flexible design standards for roads and structures where environmental resources may be affected. Three permits will be required: two for the Planned Development areas and one for the Village Estates.

b. Tentative Maps. Creation of the separate lots shown on the land use plan is accomplished through approval of Tentative Maps. Three of the four approved first phased maps are being submitted with revisions. It is through the subdivision map process that open space areas will be dedicated and actual construction of road, water, and sewer facilities will be implemented.

c. Zone Reclassification. A zone reclassification will be required for Rancho Cielo to bring the zoning into conformance with the revised Specific Plan.

d. Grading Permits. These permits will be issued during two levels of development: Tentative Maps and residential construction. The grading permits issued for road construction will be issued through the Tentative Map process. Other grading permits may be associated with residential construction and will allow for driveway and pad construction. These permits will be issued individually for the lots as applied for by future owners and required by the County.

e. Major Use Permits. Major Use permits are required for the water reclamation plant and planned developments. The Major Use Permit for the wastewater reclamation plant was approved with the other applications on December 9, 1981. A modification of the existing permit is currently being requested to conform to the treatment plant specifications presently being designed. The purpose of this permit process is to ensure consistency of the proposed project with the zoning regulations and surrounding uses.

f. Minor Use Permits. Minor Use Permits may be required for construction of public facility sites. The intent of this permit process is similar to the Major Use Permit but under the jurisdiction of the Zoning Administrator rather than the Planning Commission.

g. Site Plan Review. The intent of this review is directed toward physical design, siting, and interior vehicular and pedestrian access. The fire station/heliport and neighborhood commercial center will require submittal of site plans. Other developments may be subject to this review subject to the discretion of the Department of Planning and Land Use.

h. Regional Water Quality Control Board. RWQCB approval of the sewage disposal system is required by the State of California. Approval by the regional board is necessary to ensure that regional water quality objectives are achieved.

i. Vacation permit. An open space easement for biological resources located in the northwest will be vacated in conjunction with this project. New easements will be dedicated with each Tentative Map.

j. Boundary Adjustments. Several boundary adjustments may be required to implement the phasing and subdivision of Rancho Cielo in an orderly and consistent manner.

All of these permits are considered in the scope of the original EIR and this supplement and are addressed specifically where possible. Those portions of the project which will require additional environmental analysis are described below.

Issues Not Addressed

Certain aspects of the revised Rancho Cielo Specific Plan are not fully addressed in the EIR and will, therefore, require further analysis at the time permits are applied for. These components of the plan have been analyzed and considered, however, for their potential impacts and cumulative effects on the project area. Mitigation measures are believed to be available for each component, but these should be applied as

site-specific measures. The following aspects need further environmental consideration:

Neighborhood Commercial Center on Del Dios Highway

The primary concern here is for aesthetic and geologic impacts. Site plans should be submitted with the permit application for the commercial center including complete grading and landscape plans. Site-specific geotechnical analysis may also be required depending on the grading and drainage features.

The intent of the analysis is to ensure that the proposed design will not have significant visual impacts to vehicular traffic on Del Dios Highway.

Planned Development on Del Dios Highway

The exposure of this site, and the access to Del Dios Highway make this area sensitive to aesthetic and traffic safety impacts. Geologic impacts are also a consideration on this site. The Tentative Map and Use Permit for site development should include grading and landscape plans to ensure that visual impacts to Del Dios Highway, Lake Hodges, and the Del Dios Community are substantially mitigated. Also, ingress/egress from the site should be analyzed to ensure safe traffic conditions on Del Dios Highway.

Heliport

The heliport site is located within an area of residential and commercial uses which may be severely impacted by noise generated from helicopter activity. The fire station site plan application should show specific analysis of noise impacts from this use. Mitigation measures should be designed and approved prior to site development.

Reservoir Sites

The two open storage reservoirs shown on the land use plan near the Village Estates require site specific geotechnical investigation prior to their final placement and design. Geologic hazards associated with construction of the dam sites relate to slope stability, seepage, and settlement as well as faulting and seismicity. Specific geologic review should be required prior to issuance of grading permits and prior to the application for dam construction approval required by the Department of Water Resources, Division of Safety of Dams.

Water Reclamation Plant

When final plans for the water reclamation plant are available, specific geotechnical analysis may be required to ensure structural stability for the plant components. This analysis may include subsurface testing and review of drainage and erosion control features at the discretion of the project geologist.

III. ENVIRONMENTAL ANALYSIS

The following is an analysis of the proposed revisions to the Rancho Cielo project with respect to each Major Issue identified by the ERB in its report dated March 26, 1981. Under each major issue affected by the proposed changes there is a description of the existing resources and environmental setting; a discussion of the original Environmental Review Board findings and recommended mitigation measures; a discussion of the proposed project revisions and potential impacts; and an analysis of whether the approved mitigation measures are adequate to mitigate any new impacts created by the proposed revisions. The major issues affected by the proposed changes include; Traffic/Circulation, Biology, Water Quality/Liquid Waste, Soils/Geology and Aesthetics.

A summary discussion of each of the issues minimally affected by the changes is provided without a present setting discussion. Those issues include: Noise, Archaeology, Dark Sky, Hydrology, Energy and Air Quality. Issues addressed by the EIR but concluded to be not significant by the ERB are summarized at the end of this section. These include: Climate, Agriculture, Public Services, Recreation and Socio-Economics.

Please refer to the Rancho Cielo Environmental Impact Report for a comprehensive analysis of each issue.

MAJOR ISSUES AFFECTED BY THE PROPOSED REVISIONS

TRAFFIC CIRCULATION

Present Setting

Traffic circulation is addressed at two levels for the project area: planning for future circulation needs, and determining capacities of existing facilities. Both are important because the adequacy of the circulation system is essential for growth, and type of roads and their locations greatly effect the environment of the community in which they serve.

oPlanning Considerations

The Circulation Element of the General Plan (1983) is the primary instrument used for long-range circulation planning in the County. The Element consists of a text describing the intent of the planning document, a bicycle network plan, and a set of nine maps for the County. Sheet Four shows circulation routes for the San Dieguito/North County Metropolitan area. Circulation Element Roads are those roads which are planned to provide the base circulation system for the area. As development occurs along these roads, construction or improvement is required in accordance with the road design shown in the Circulation Element.

The Rancho Cielo property contains frontage or access on four Circulation Element Roads:

a. Del Dios Highway. This road is designated Prime Arterial, Major Road and Collector, the purpose of which is to satisfy requirements for mobility, intraregional travel, and access between the coastal communities and Escondido. Del Dios Highway, together with Paseo Delicias, its western counterpart, and Valley Parkway, its eastern counterpart, provides interconnection between I-5 and I-15 with roadway conditions consisting of two lanes and an average speed of 50 miles per hour. Another important link to this system is Via Rancho Parkway. This Major Road connects Del Dios Highway with I-15 in a direct east-west route south of the City of Escondido. The average speed limit is 45 miles per hour with two lanes.

b. Camino Del Norte (SA-680). This major road, which is to be constructed as a light collector, will connect the coastal communities of Leucadia, Encinitas, and Carlsbad with the inland communities of Rancho Bernardo and Poway. This road is intended to provide mobility and major intraregional circulation in the mid-San Dieguito area. Portions of this road exist north of Del Dios Highway as a narrow, winding two-lane collector.

c. Mt. Israel Road (SC-1380). This light collector road provides a link for several residences on Mt. Israel Road to Del Dios Highway. This route provides direct easterly circulation for residents living within the road's vicinity. Presently only portions of this road have been completed and through-traffic circulation does not exist. In hilly terrain and low density development north of Del Dios Highway this road is narrow, with sharp turns and steep grades, serving the few residents in the area.

d. Harmony Grove Road (SC-1370). This collector road provides north-south circulation between the communities of Elfin Forest/La Costa and the City of Escondido. Harmony Grove Road, Elfin Forest Road and Questhaven Road are the only roads in the area between Del Dios Highway and San Marcos which provide for the circulation requirements of those residents living in that area. The collector designation applies not only to Harmony Grove Road but also to Elfin Forest Road which comprises the western extension of Harmony Grove Road between Elfin Forest and Rancho Santa Fe Road.

Staff Findings and Recommendations

The Environmental Review Board found that the approved project would generate approximately 12,240 ADT into the San Dieguito Community, which would create potential circulation problems along the existing Mt. Israel Road and the intersections along Del Dios Highway at Via Ambiente, Mt. Israel Road, and Via Rancho Parkway. Del Dios Highway is currently operating at Service Level C, but peak traffic hours are anticipated to exceed that level to Service Level D.

Impacts to Mt. Israel Road would reduce the level of service from A to C with circulation element improvements required as mitigation measures.

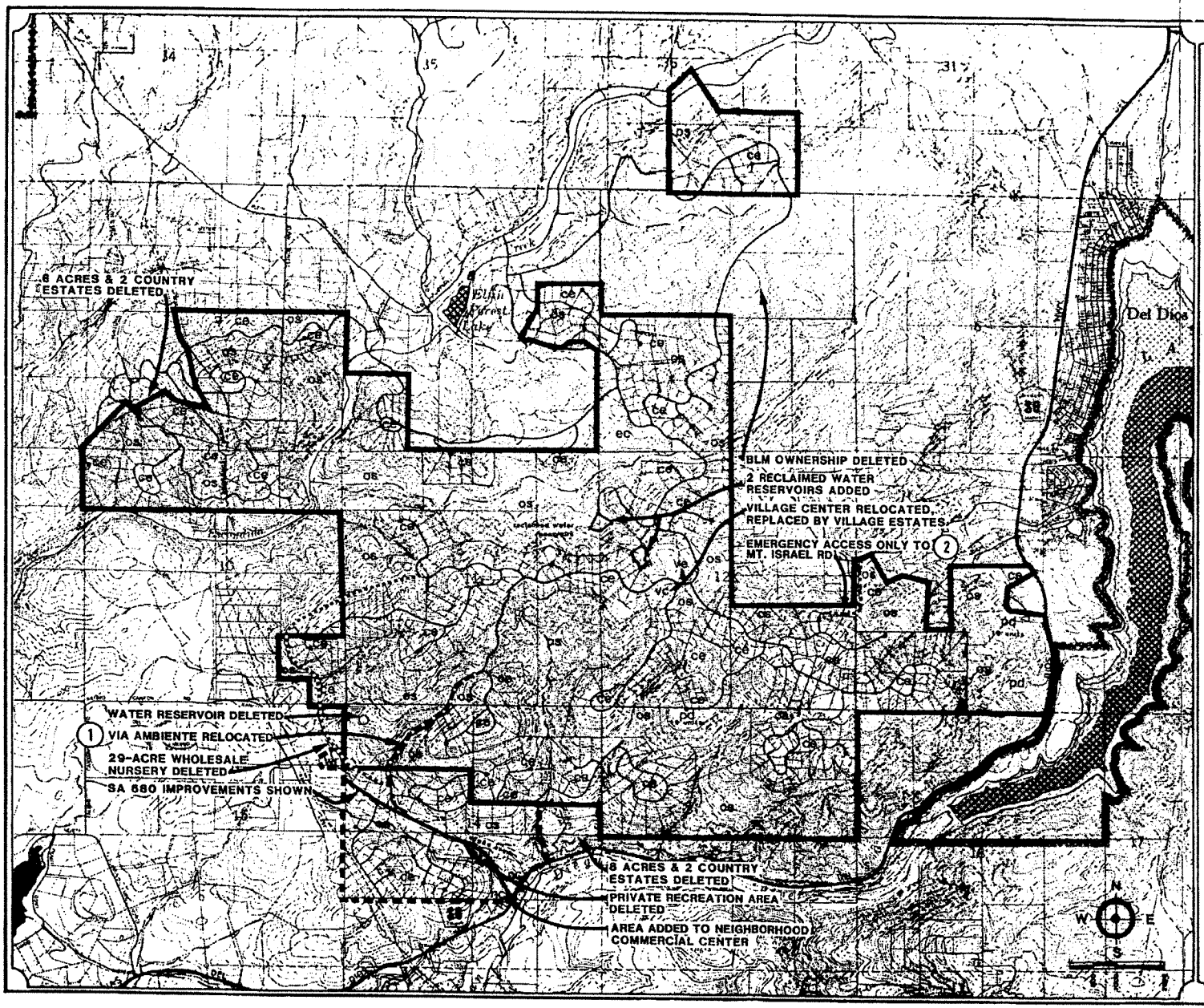
Mitigation Measures required by the ERB included:

- Signalization for the intersection of Del Dios Highway and Via Rancho Parkway,
- Signalization at the intersection of Mount Israel Road and Del Dios Highway,
- Modify Mount Israel Road to provide for 2 uphill lanes,
- Provide acceleration and deceleration lanes along Del Dios Highway at Via Ambiente and Mount Israel Road,
- Provide signalization at Via Ambiente and Del Dios Highway upon approval of Phase III, and
- On site road sections to be reviewed and approved by the Fire Marshall.

Project Revisions and Impacts

The revised Specific Plan for Rancho Cielo includes several elements which effect the previous impacts analysis. Willdan Associates has prepared a report to supplement the original traffic study (see appendix Willdan Associates, 1984). The supplemental study analyzes the impacts of the project revisions on projected traffic flows and trip distribution.

There are two major changes which affect the previous impacts analysis (see Traffic/Circulation Revisions, Figure 4). The first is the deletion of Mt. Israel Road as a primary or secondary access and its proposed use as an emergency access, eliminating impacts to the road system and intersection at Del Dios Highway and Mt. Israel Road. Deletion of the Mt. Israel Road connection will increase the travel distance to Del Dios Highway up to two miles in some areas of the project. However, since 90 percent of the external trips will travel through the Del Dios Highway/SA 680 intersection it is more appropriate to compare the travel distance to that point. Using the relocated Via Ambiente, the distance from the east edge of Rancho Cielo is 2.7 miles compared to 3.8 miles using Mt. Israel Road.



Rancho Cielo

Rancho Santa Fe, California

Traffic/Circulation Revisions

(1) Via Ambiente realignment

···· approved alignment

–– revised alignment

(2) Mt. Israel Road deletion

–· deletes connection to Mt. Israel Road as a primary access

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The second revision which affects the projected number of trips is the limitation of commercial acreage at the Village Center and the projection of 50,000 square feet of commercial space at the Neighborhood Commercial Center. The Neighborhood Commercial Center consists of 10-15 developable acres. Using a trip generation rate of 40 trips per 1,000 square feet (from Traffic Generators representing commercial shops or strip commercial) the Neighborhood Commercial Center will now generate 2,000 daily trips.

In addition to the change in the status of the commercial areas, the total number of units within the Specific Plan boundaries has been reduced from 774 to 770 units. The total number of trips generated by the project is therefore expected to decrease from the previously forecasted 12,240 to 9,700.

Also analyzed were potential impacts resulting from a revised trip distribution pattern. The updated analysis is based on SANDAG's 1983 Series 6 population and additional transportation analysis which provides information to the trip distribution pattern from this project. Based on the Series 6 information there is a shift in trips from the Escondido area to Del Dios Highway south and SA 680 west. This shift in trip distribution is probably due to changes in land use, most significantly the development of Fairbanks Ranch and the North City West area.

In terms of actual roadway volumes the Series 6 redistribution reduces the volume on Del Dios Highway north of the site by 1,200 vehicles per day, but increases it to the south by 1,000 vehicles. The change on Del Dios to the south would increase the post development traffic volume from approximately 12,000 to 13,000 ADT, and the year 2000 volumes from 20,000 to 21,000. These volumes, however, can be accommodated on a four lane Del Dios Highway at level of service C to D.

The level of service at the intersection of SA 680 with Del Dios Highway was also calculated. Adding traffic from the revised Rancho Cielo Specific Plan to the existing traffic yields a projected level of service A at this intersection. When the Rancho Cielo traffic is added to the year 2000 traffic, volumes forecast as part of the EIR for the San Dieguito Circulation Element (San Diego County, 1981) the level of service drops to level C.

Mitigation

Based on the supplemental analysis completed, the previously adopted conditions of approval relating to traffic concerns, which focus on SA 680, Del Dios Highway and Via Ambiente will fully mitigate traffic impacts. Mitigation measures requiring signalization and improvements to Mt. Israel Road at its intersection with Del Dios Highway do not, at this time, appear necessary.

BIOLOGY

Present Setting

Biological resources within the planning area are extremely unique both from a regional and local perspective. Although the site is located in a rapidly growing and well developed area of north San Diego County, it represents a portion of one of the largest undeveloped coastal tracts of chaparral in Southern California. The absence of development and human occupation coupled with the large expanse, lends the area to extensive wildlife usage and stable plant communities. Several canyons and drainages serve as corridors for wildlife movement which further enhances the area's flora and fauna diversity. Significant resources on the property include the extensive continuous coverage of native vegetation, Riparian and Southern Oak Woodlands, canyons and steep-walled drainages serving as wildlife corridors and habitat, a perennial stream, nesting and foraging habitat for large mammals and raptors (including the Golden Eagle), numerous sensitive plant species, and large populations of two extremely rare plant species (Encinitas Baccharis and Sticky Dudleya).

oVegetation

Vegetation within the planning area is relatively diverse and undisturbed. The extreme variety of topographic conditions provide suitable elements for several plant communities including Chaparral, Inland Sage Scrub, Southern Oak Woodland, Riparian Woodland, freshwater marsh, and native Grassland. The most extensive of these is the Chaparral (62%), occurring on all but the south-facing slopes and in most drainages.

oFlora

The flora community of the planning area is diverse and well represented with 197 native species and 28 non-native species. Most of the species are commonly found and typical of those plant communities occurring on the site. Eleven of the observed species are considered sensitive in California, based on their rating by the California Native Plant Society (Powell, 1980).

Those species of highest concern are Encinitas Baccharis (*Baccharis vanessae*) and Sticky Dudleya (*Dudleya viscida*). The Baccharis is an extremely rare plant species, known only in Encinitas and portions of the project area. At this time, only about 360 individuals of this species have been observed. Approximately 50 plants of Encinitas Baccharis have been located within the Rancho Cielo Planning Area in two separate areas. Additional smaller populations may also be present, but were not located.

Sticky Dudleya is also very rare, known only to five populations between Orange County and Rancho Santa Fe. The population observed within the planning area is the sixth known locality consisting of several thousand individuals on two to three acres of land. Portions of the population have been disturbed through grading and flooding of Escondido Creek, but in all, it is considered of excellent vigor and comparable size with the other known populations. Both this population of Sticky Dudleya and Encinitas Baccharis are considered highly significant botanical resources.

oFauna

Due to the high variety of habitat conditions present on the property, faunal species' diversity is also high. A total of 95 species were observed including 62 avian species, 14 reptiles and amphibians, and 20 mammals. Several of the faunal species observed are considered sensitive by state and federal lists as well as non-governmental lists.

Of particular concern are the raptor species associated with the area. Many of these use the property for nesting and roosting sites, and all utilize the site for foraging.

Additional species of concern that are expected on the property are Mountain Lion, Orange-throated Whiptail and Coast Horned Lizard. In all cases, the resource associated with sensitive faunal species is habitat (in addition to specific sites for Golden Eagles). The viability of fauna populations depends greatly upon the quality and extent of the habitat upon which they depend. Thus, the presence of these sensitive species further enhances the biological value of the undisturbed vegetation.

oHabitat

Six wildlife habitats exist on the site including oak woodland, riparian woodland, brush, large cliffs, perennial freshwater stream and disturbed fields. Associated with these are canyons, rock outcrops and intermittent streams.

The oak and riparian woodlands which line Cielo Creek and Escondido Creek are of primary importance for providing nesting, watering and foraging sites as well as an access corridor for wildlife movement. Evidence of the value of these habitat is the abundance of species observed in association with the woodlands.

Staff Findings & Recommendations

The ERB made the following conclusions with respect to Biological resources: the entire property is considered significant with respect to the continuity of the undisturbed vegetation and diversity of wildlife habitats onsite: oak woodland, riparian woodland, chaparral, inland sage, large rocky

cliffs, a perennial freshwater stream (Escondido Creek) and native grassland. Additionally, the rugged topography of the site with its ridges, steep side canyons and drainages which serve as corridors for wildlife movement as well as sensitive raptor and large mammal foraging areas adds to the significance of the site as a biological resource. Twelve sensitive plant species are located onsite. Most of the species are of low, to relatively low sensitivity and large percentages of their populations will be preserved in the proposed open space areas which total 58% of the property. Two species which are very rare and of very limited distribution, Baccharis vanessae (Encinitas Baccharis) and Dudleya viscida (Sticky Dudleya), should be preserved wherever they occur. The populations of these plants onsite are proposed for open space easement and should, therefore, be protected, with the exception of a Dudleya population near the proposed water treatment plant. However, a potential conflict with required clearing for fire protection exists in those areas where open space easements are in close proximity or included within residential lots. A number of sensitive faunal species occur onsite. Of particular concern are the potential impacts to an active Golden Eagle nest located just offsite of the project area. This nest is presently being used by a pair of eagles and is visible from portions of five lots in the extreme northern portion of the plan. It is believed that these birds will not tolerate human activities within close proximity or in locations elevated above the nest. If development of this project were to cause abandonment of this nest, it would represent a significant impact on San Diego County's eagle population. Additionally, the project will probably eliminate the Mountain Lion from the site, and possibly the region north of the San Dieguito River.

A large portion of the project lies within three Resource Conservation Areas (RCA): Escondido Creek, Harmony Grove Road, and San Dieguito River-Lake Hodges-Lusardi Canyon. The impact of the project will be to lower the biological quality of these RCA's. The project design, however, allows for wildlife corridors and breeding areas, preserves a majority of the very rare and less rare plants on the property, and should prevent major disruption of the resources within the conservation area.

As further mitigation all areas identified as open space will require the dedication of an open space easement to the County of San Diego with particular attention paid to the north-eastern-most five lots in the vicinity of the Golden Eagle nesting site.

Project Revisions and Impacts

Several modifications have been made in the Specific Plan which will change the biological impacts of the original project; however, these changes are not considered significant. In general, the open space easements shown on the original project remain intact and, in fact, total open space has increased from the original 58% to a current total of 61%. The

changes in the lot lines do not result in any important biological impacts and the siting of additional lots near Cielo Creek has included adequate setbacks and open space areas.

Of the various changes noted on Figure 3, only three warrant further discussion here: (1) the realignment of Via Ambiente, (2) the proposed construction of SA 680 and (3) two reclaimed water reservoirs. In addition to the proposed changes in the Specific Plan, concern for the impacts of development on a bird species, the Blacktailed Gnatcatcher, is much greater now than at the time the original biological survey was conducted. As a consequence, a discussion of the potential effects of the Rancho Cielo project is considered warranted and has been included here.

The various botanical and wildlife impacts associated with the proposed Specific Plan revisions are discussed below.

Vegetation Impacts

The vegetation impacts of the proposed changes are not considered significant. The additional loss of Chaparral and Inland Sage Scrub which would result from the construction of the proposed SA 680 and Via Ambiente, and the reclaimed water reservoirs would be minor. The additional open space included in the project serves to further reduce the potential vegetation impacts.

The new Specific Plan realigns Via Ambiente, with the major result being the deletion of a segment which ran east/west through the west central portion of the Specific Plan and the addition of a new segment in the southwestern portion. In terms of overall disturbance, the new alignment is similar to the old alignment because of the two segments are essentially the same length and both pass through Chaparral. The location of the new segment along the bottom of a relatively large drainage would result in the loss of Chaparral which is more well developed than along the original alignment; however, this is not considered a significant increase in vegetation impact. Both the old and the new segments could impact a sensitive plant (Warty-stemmed Ceanothus). Potential impacts to this species are not considered significant because it is adequately preserved in open space within the Specific Plan.

The two reclaimed water reservoirs are located in drainages but would not impact any riparian vegetation. Approximately 3.6 acres of Chaparral would be eliminated by the two ponds. The only sensitive plant which could be impacted is Warty-stemmed Ceanothus and, as stated earlier, this species is adequately protected by the Specific Plan.

The construction of SA 680 is an impact which is the result of a mandate in the County's Circulation Element rather than a proposal made by the project proponents. The segment of SA 680 within the Specific Plan, may eventually be constructed with or

without this Specific Plan. This road will remove approximately 5.5 acres of Inland Sage Scrub and possibly impact a stand of Pygmy-club Moss; this plant species is common throughout San Diego County and any plants lost due to SA 680 would not be significant. It should also be noted that the original Specific Plan proposed a road which closely paralleled the current alignment of SA 680 and would have resulted in vegetation impacts similar to SA 680.

Wildlife Impacts

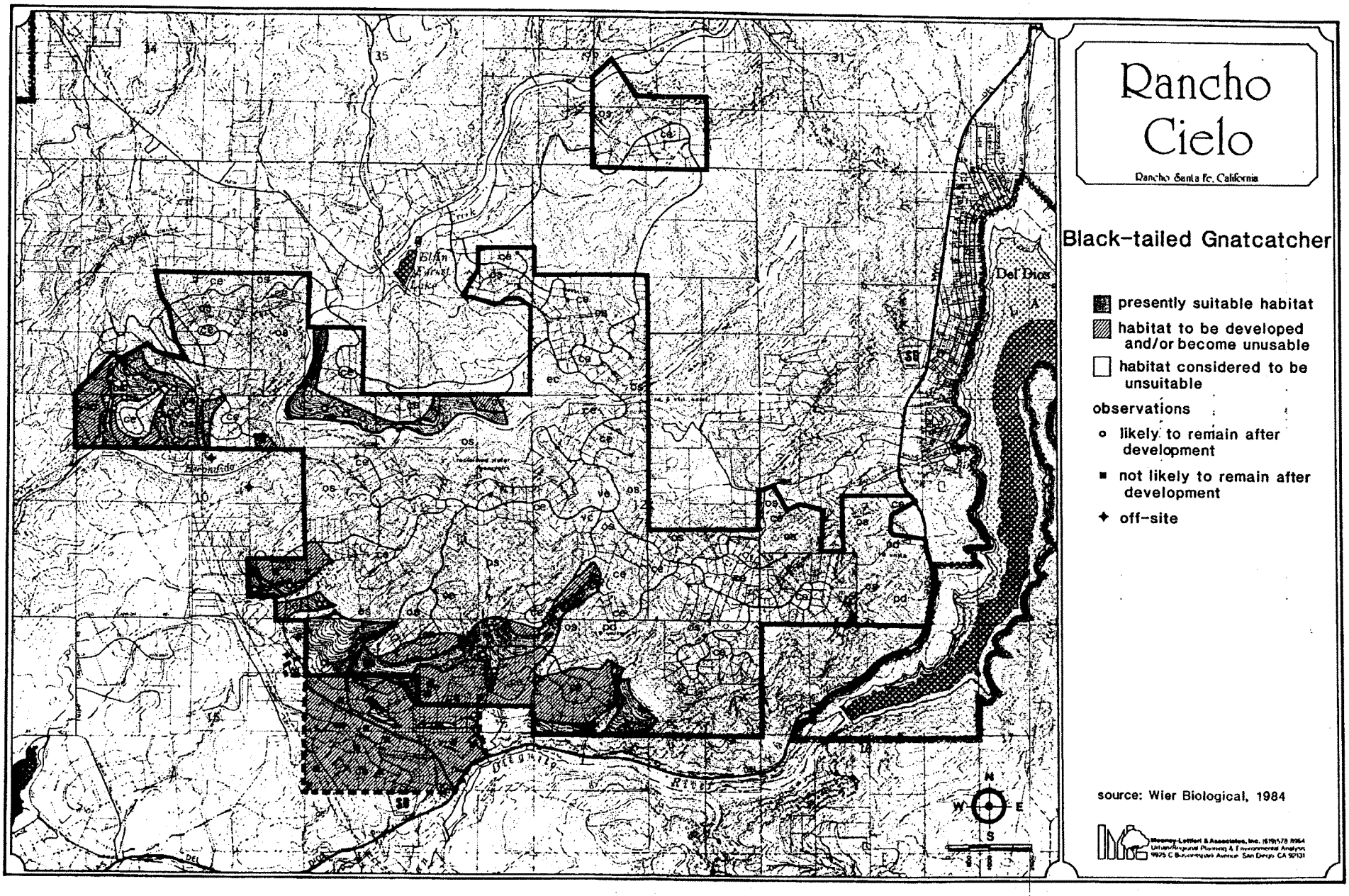
A survey of the property by Wier Biological (see appended Biology Report) concluded that the site is a valuable habitat for the Black-tailed Gnatcatcher. Using the sage scrub vegetation on the property as the preferred habitat and confirming its value by field observations, a total of 704 acres of suitable habitat for the Black-tailed Gnatcatcher is believed to exist on the property (see Figure 5). Sightings during repeated field visits to the site suggest that up to 36 breeding pairs may utilize the Specific Plan area.

The potential direct and indirect impacts associated with development under the proposed Specific Plan are not considered significant with respect to the Black-tailed Gnatcatcher due to the amount of habitat preserved in open space.

Approximately 394 acres of presently suitable Black-tailed Gnatcatcher habitat would be directly or indirectly impacted by development. However, an estimated 311 acres of suitable habitat would remain adequately protected in open space. The location of the preserved habitat is illustrated in Figure 5. Development of the property under a Specific Plan is considered desirable because it enables larger, more contiguous open space than might otherwise be achieved through individual tentative maps.

In addition to the Black-tailed Gnatcatcher issue, the proposed realignment of Via Ambiente and the construction of SA 680 would substantially reduce the future use of a wildlife corridors which currently exists in the area of the proposed roads. The original biology report in 1980 concluded that four major wildlife movement corridors transect the Specific Plan area for Escondido Creek to the San Dieguito River.

The loss of the wildlife corridor from Via Ambiente and SA 680 is not considered a significant impact by virtue of the fact that several other corridors through the property will remain in open space. Also, the original Specific Plan proposed a road parallel to SA 680 and a residential street which would have crossed the canyon, through which the new alignment of Via Ambiente passes. Consequently, the original Specific Plan circulation system would have substantially diminished the value of this area as a wildlife corridor. Therefore, the proposed realignment of Via Ambiente and the construction of SA 680 would not create a significant impact.


Rancho Cielo
Rancho Santa Fe, California
Black-tailed Gnatcatcher
presently suitable habitat
habitat to be developed and/or become unusable
habitat considered to be unsuitable
observations
likely to remain after development
not likely to remain after development
off-site
source: Wier Biological, 1984
Del Dios
San Dieguito River
N
S
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Mitigation Measures

The revised Specific Plan will increase the previously identified open space area from 1,637 acres to 1,710 acres (an increase from 58% of the total project area to 61%). These open space areas include adequate habitat for the Black-tailed Gnatcatcher. While new localized impacts are present they appear to be mitigated through the preservation methods previously identified and the maintenance of contiguous open space for both wildlife and floral species of interest. Open space easements should be dedicated to the County of San Diego to ensure preservation of important identified biological features.

WATER QUALITY/LIQUID WASTE

Present Setting

Water quality considerations must take into account regional standards for the entire basin analyzed. With these standards, groundwater and surface waters are important factors when evaluating effluent disposal, whether by public sewerage or private septic systems. Factors which contribute to water quality management include soil and topographic conditions, proximity of water resources (ground and surface waters), methods of sewage disposal, uses of local waters, and water quality objectives for each basin.

The soils and geology investigation indicates that the project area is generally unsuitable for septic tanks and leaching facilities. This is due to the steep slopes, shallow groundwater table and slow percolation test rates. Sewer services are presently available to Rancho Cielo via the recently formed Rancho Cielo Sanitation District. The establishment of a sanitation district to install and operate sewage treatment facilities for the proposed development was necessary to achieve the unit density allowed by the current land use.

In addition to complying with the County's regulations for sewage disposal, wastewater reclamation and disposal, the system must be consistent with the California Regional Water Quality Control Board's (RWQCB) policies and requirements. Policies of other regulatory agencies such as the State Health Department and the State Department of Fish and Game also bear upon the Board's action. The State of California Department of Health has certain requirements which specify treatment methodologies and the details of facilities needed to assure safe operation (Title 22 of the California Administrative Code).

The RWQCB's discharge requirements are intended to protect public health and the quality of surface and groundwaters. Established criteria for the protection of surface and groundwaters are delineated in the Water Quality Management Plan prepared by RWQCB and adopted by the State Water Resources Control Board (SWRCB). These criteria are used in deciding the specific discharge requirements for individual facilities.

Staff Findings and Recommendations

The Environmental Review Board concluded that the issue of water quality was unresolved for Rancho Cielo. At the time the EIR was written there were several alternative designs being considered for the wastewater reclamation system. The EIR addressed eight possible combinations of wastewater collection reuse and disposal. The alternative chosen would need to meet the individual basin water quality objectives established by the Regional Water Quality Control Board, (RWQCB). At that time, County Staff would not consider water quality issues resolved until RWQCB approval. The specific concern was whether RWQCB standards could be met in reducing total dissolved solids and nutrient concentrations. There was also concern that if stream discharge was employed, failures in the system could imbalance the ecology of the San Dieguito or San Elijo Lagoons. Other issues with the treatment system were cost feasibility and high energy consumption.

The mitigation recommended by the ERB required that the applicant obtain approval from both the Health Department and the Regional Water Quality Control Board, to the satisfaction of the Department of Public Works.

Project Revisions and Impacts

Sewage collection and water reclamation facilities for the development will be operated by the County of San Diego Department of Public Works, (DPW) staff. The Rancho Cielo Sanitation District, a County-dependent special district governed by the Board of Supervisors, was created to provide sewer service to the project. The district formation process included a comprehensive review of the feasibility of the proposed wastewater treatment system by the County Department of Public Works, (DPW) staff. A preliminary operations and maintenance budget for the district was also approved by the County public works staff.

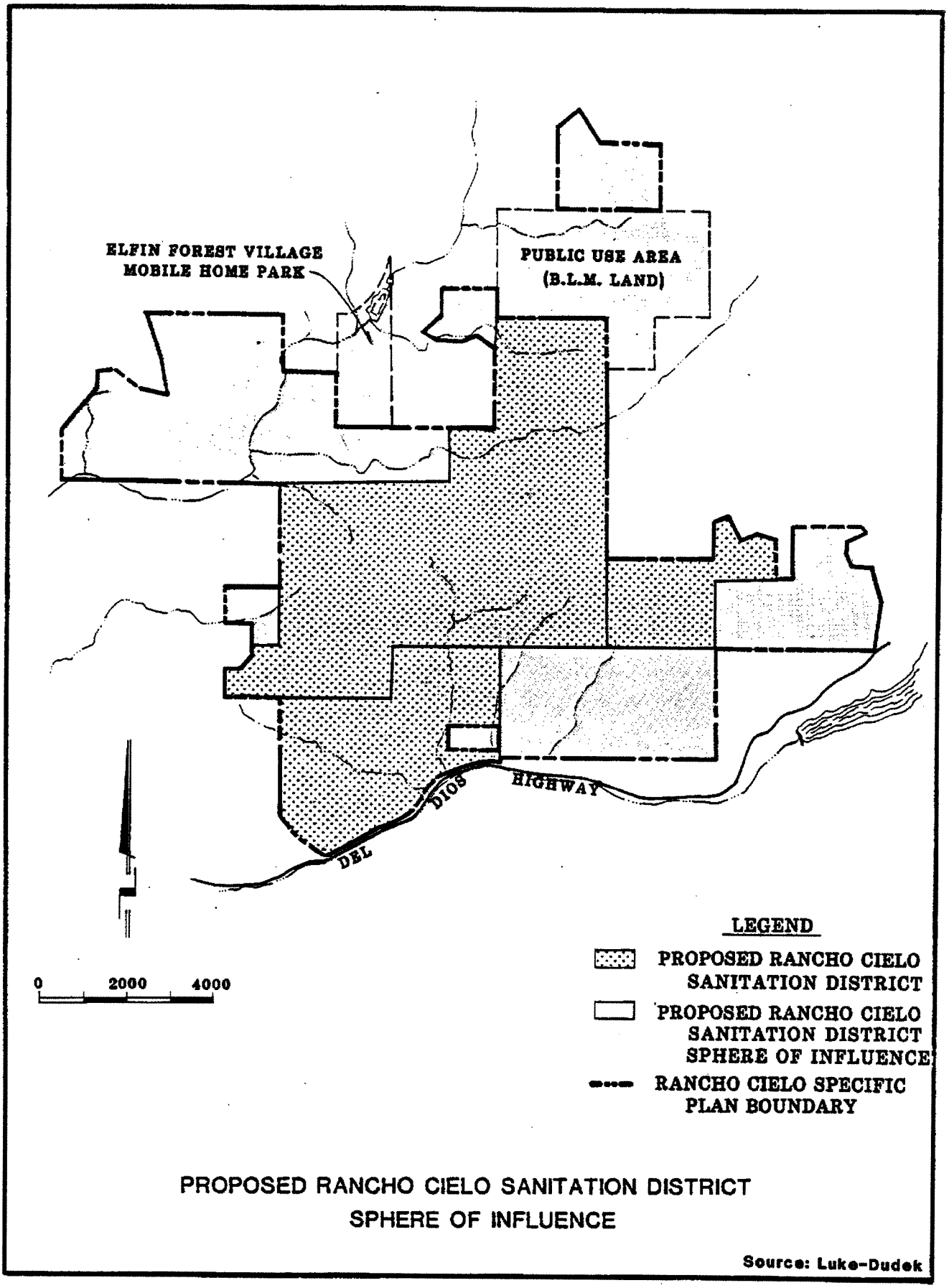
A sphere of influence was adopted by the Local Agency Formation Commission for the Rancho Cielo Sanitation District as part of the LAFCO review process. Pursuant to LAFCO policy, the Sphere of Influence includes the probable physical boundaries and service area for the Rancho Cielo Sanitation District for the next 10-15 years. The Rancho Cielo Sanitation District boundaries encompass four approved tentative maps. Of the four, three are included in the Phase I development of the Rancho

Cielo Specific Plan. The other tentative map, (TM 4348) lies outside the Specific Plan but is under the same ownership as one of the first phase maps. The Sphere of Influence for the District essentially includes; the existing District, the area encompassed by the entire Rancho Cielo Specific Plan, the proposed Elfin Forest Village Mobile Home Park, the 364-acre BLM parcel and four existing residences not included within the Rancho Cielo Specific Plan (see Figure 6, Rancho Cielo Sanitation District Sphere of Influence). The territory included within the sphere boundary is, by definition, within the design service area of the Rancho Cielo Sanitation District and could be sewered by the District when public sewer becomes necessary.

The wastewater reclamation system which is currently being designed for the Rancho Cielo project is an on-site treatment plant which will provide secondary treatment of effluent, (see Wastewater Reclamation Facilities diagram, Figure 7). Major Use Permit, P80-89, provides for the treatment of 260,000 gallons per day (gpd) for the entire project. The original permit has been modified by Major Use Permit P80-89 W1, approved July 16, 1982, to allow for an increase in sewage treatment capacity to a volume of 265,600 gpd for 20-lot tentative map, TM 4348.

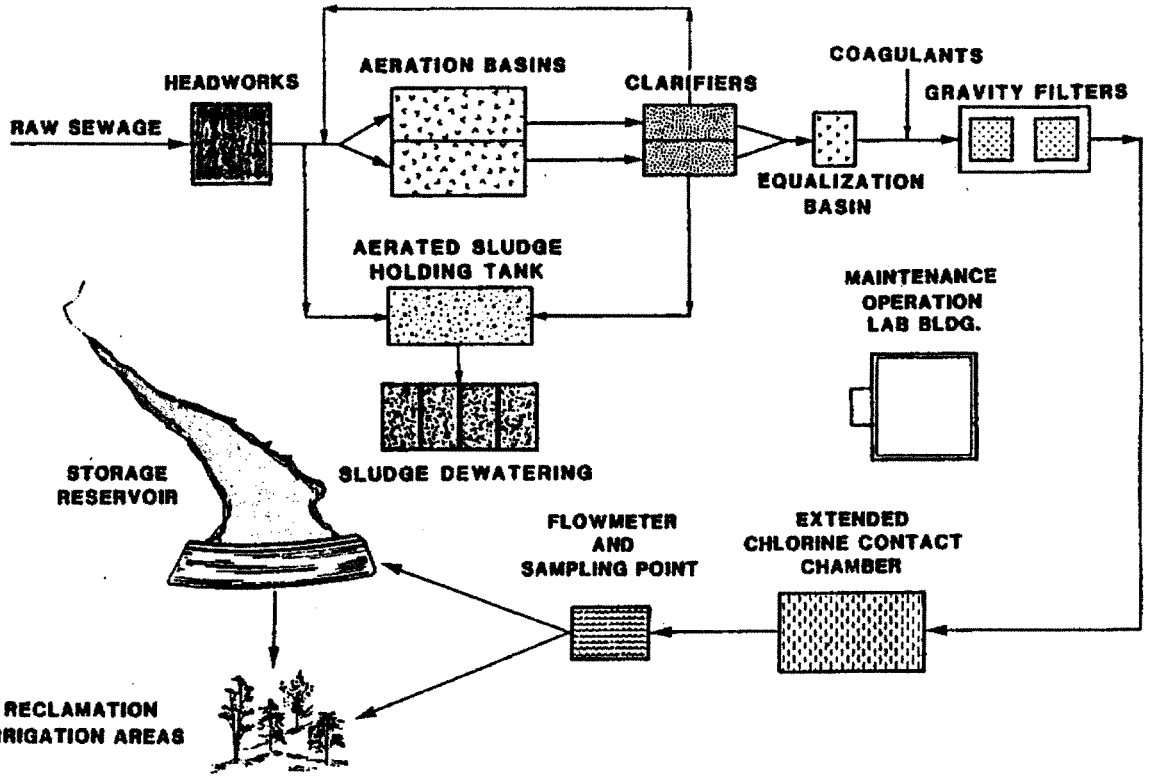
As documented in the Report of Waste Discharge for the Rancho Cielo Water Reclamation Facility, the initial phase of the wastewater facilities will be designed for an average daily dry weather flow of 200,000 gpd. The Rancho Cielo Sanitation District is expected to use approximately 156,500 gpd of that capacity with a remaining 43,500-gpd capacity which could be made available to subsequent Rancho Cielo phases when the need exists. The Major Use Permit provides that; "the public agency shall include that portion of the Rancho Cielo Specific Plan as service is required. That portion of the Rancho Cielo Specific Plan which is not originally included in the public agency may annex at a later date and receive sewer service." It should be noted that subsequent Rancho Cielo phases as well as any future capacity users would require approval from the Rancho Cielo Sanitation District and the Local Agency Formation Commission.

At ultimate buildout, Rancho Cielo would utilize approximately 265,600 gpd capacity as indicated in the Major Use Permit. The wastewater treatment facilities are designed to be constructed in 200,000 gpd increments. Approximately 134,400 gpd excess capacity could be available due to the phased design of the plant, for potential future annexations to the District from adjacent areas. The Major Use Permit stipulates that the ultimate plant design provide for expandable sewer operation beyond the immediate project requirements and provide for potential growth in the surrounding area. The Rancho Cielo wastewater facilities are being designed to meet the projected immediate needs of the District and, as mandated, additional capacity is being planned for if and when the need arises. The



PROPOSED RANCHO CIELO SANITATION DISTRICT
SPHERE OF INFLUENCE

Source: Luke-Dudek



Source: Luke-Dudek

Rancho Cielo

Rancho Santa Fe, California

Wastewater Reclamation Facilities

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provision of sewer to property outside of the Rancho Cielo Sphere of Influence will require modification of the existing major use permit to provide for additional capacity, approval from LAFCO, including amending the existing Sphere of Influence, and approval from the Rancho Cielo Sanitation District, of which the Board of Supervisors is the Board of Directors.

The reclamation plant would provide initial flow metering and solids removal, secondary biological oxidation, clarification, coagulation, filtration, disinfection and sludge dewatering. The plant effluent would be pumped to open storage reservoirs designed to hold seasonal storage and 100-year storm runoff. The reservoirs are located in the Escondido Creek drainage basin with Reservoir No. 1 adjacent to the back lot line of the Village Estates. The closest lot line is approximately 30 feet from the maximum surface elevation of Reservoir 1. In no case are lots located downstream of the dam. Access to the Reservoir No. 1 will be through an easement between two lots fronting on Via Ambiente Road. Access will be restricted to most residents by virtue of the remote location of the Reservoir No. 1.

Reservoir Site No. 2 is located downstream of Reservoir No. 1. Access to the reservoir is from a cul-de-sac off of Via Ambiente Road. The nearest lot line to Reservoir No. 2 is approximately 250 feet away. For both reservoirs, the only access to the sites is by the reservoir access roads or through private lots. At this time, fencing around the reservoirs is not planned. Reclaimed water would be pumped from the seasonal storage reservoir for on-site landscape irrigation usage.

The State of California Department of Health Services (State Health Department) has provided regulations for the use of reclaimed water in a pamphlet entitled "Wastewater Reclamation Criteria, An Excerpt from the California Administrative Code, Title 22, Division 4, Environmental Health" (Title 22 Standards). The Title 22 Standards define various impoundment classifications for reclaimed water, and state what level of wastewater treatment is required for each type of reclaimed water impoundment. The most stringent standards are established for reclaimed water stored in a "Nonrestricted Recreational Impoundment", which is defined as follows:

> **"Nonrestricted Recreational Impoundment.** A nonrestricted recreational impoundment is an impoundment of reclaimed water in which no limitations are imposed on body-contact water sport activities."

The Title 22 Standards go on to describe what level of treatment is required for reclaimed water stored in a nonrestricted recreational impoundment as follows:

> **60315. Nonrestricted Recreational Impoundment.** Reclaimed water used as a source of supply in a nonrestricted

recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater. The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed."

The State Health Department allows in-line coagulation and extended chlorination detention times as a substitute for clarification based on research known as the "Pomona Virus Study".

At Rancho Cielo for landscape irrigation, wastewater will be treated to a level identical to the standards established for a nonrestricted recreational impoundment. Thus, no isolation of the reclaimed water storage reservoir is required by State regulations to protect the populace from contact with the reclaimed water, therefore, the reclaimed water storage reservoirs do not represent a public health threat.

Requirements with respect to plant reliability will be met by providing multiple treatment units capable of treating the entire District flows with one unit out of service. A standby generator will also be provided for uninterrupted power supply to all critical plant functions.

The Report of Waste Discharge for the Rancho Cielo Water Reclamation Facility, prepared by Luke-Dudek, Civil Engineers, has been submitted and is currently being processed by the California Regional Water Quality Control Board, San Diego Region. This report is required for the application for Facility Permit/Waste Discharge and provides detailed information regarding plant design, water quality, soils and geology, drainage, and reclaimed water uses. The document will serve to demonstrate that the Rancho Cielo sewer system will meet the RWQCB water quality standards. Please refer to this document (Luke-Dudek, 9-23-83) for a more detailed description and analysis of these issues.

Reclaimed water would be used in the San Elijo Hydrographic Subarea of the Carlsbad Hydrographic Unit to irrigate landscaped areas. An amendment to the basin standards in this area recently approved. On October 3, 1983, the RWQCB approved a request made on behalf of the Rancho Cielo County Sanitation District to lower the groundwater standards which would allow secondary instead of tertiary treatment. Essentially this amendment changes the total dissolved solids level from 1500 mg/l TDS to 2700 mg/l TDS. The Proposed Revision Basin Plan Objectives; San Elijo Hydrographic Subarea, (Luke-Dudek, March 25, 1983), is an analysis of the now approved basin plan

amendment. The report discusses the beneficial uses of groundwater in the study area, groundwater quality, potential impacts created by the requested change, and demonstration of the consistency between the requested changes and the state's nondegradation policy.

Reclaimed water will not be used in the San Dieguito hydrographic unit with the possible exception of irrigation of containerized plants in the wholesale nursery. Thus, the basin objectives for the San Dieguito and Lake Hodges subunits of the San Dieguito Hydrographic unit will be met.

Since stream discharge will not be employed, potential impacts to the ecology of the San Dieguito or San Elijo Lagoons have been resolved. No significant adverse impacts will result from the operation of the wastewater treatment facility as planned.

Mitigation

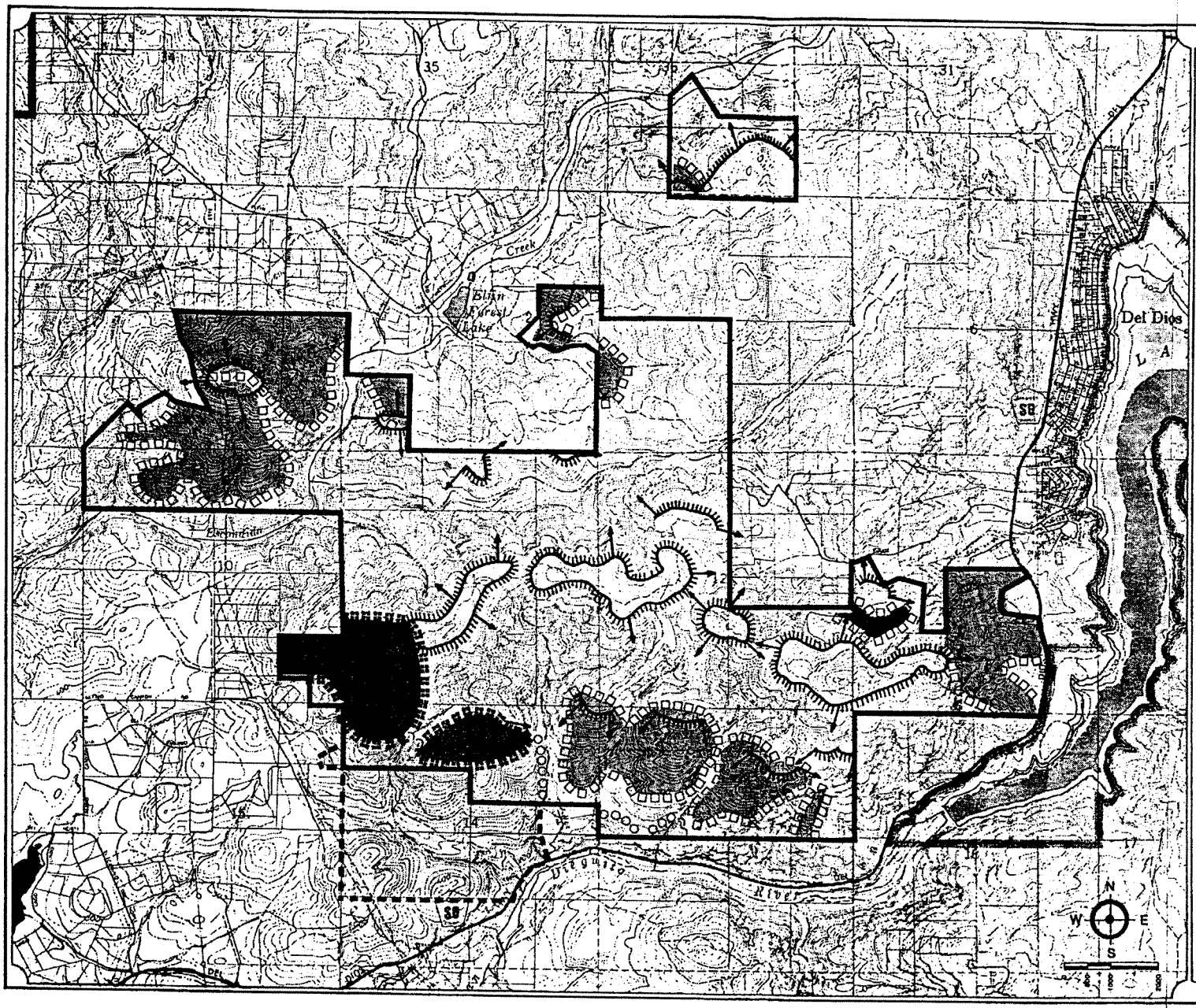
Since a wastewater treatment alternative has been selected and refined for the project and water quality standards will be met the issue of water quality is considered resolved. The Rancho Cielo wastewater treatment facility will be required to meet all of the established criteria for the protection of surface and groundwaters as delineated in the Water Quality Management Plan adopted by the State Water Resources Control Board. Thus, the mitigation measure recommended by the ERB requiring that the applicant obtain approval from both the Health Department and the Regional Water Quality Control Board, to the satisfaction of the Department of Public Works, is still an acceptable mitigation measure. Further mitigation is not required.

AESTHETICS

Present Setting

Aesthetic quality becomes important in project evaluation due to the size of the project area and its visibility from surrounding locations. Considerable attention has been given to local and regional aesthetic resources and their conservation.

Due to the size of the subject property and its varied topographic relief, it is visible from several local and distant locations. Viewsheds have been quantified for the site for several locations, including the Del Dios Highway corridor; the SA 680 corridor; and, the communities of Del Dios, Rancho Santa Fe, and Elfin Forest (see Visual Features, Figure 8).



Rancho Cielo

Rancho Santa Fe, California

Visual Features

- high quality distant views
- view from scenic highways
- view from adjacent communities
- view from scenic highways and adjacent communities

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The most obvious visual characteristic of the site itself is the steep chaparral-covered slopes, which are generally visible from all vantage points. Along Del Dios Highway slopes rise continuously for as much as 800 feet in elevation and range from 25% to 75% in gradient. Due to this steep terrain and numerous minor drainages, the actual visibility from Del Dios Highway is limited to several hundred feet in most places. The primary viewshed is to the south over the San Dieguito River/Lake Hodges, and the adjacent canyon walls. Irregardless of the extent of the viewshed, the aesthetic resources of the corridor are significant.

The Del Dios community has virtually the same perspective of the area; however, the east and north-facing slopes on the eastern extension of Rancho Cielo are the only visible portions.

Visibility from the west along the Camino Del Norte corridor and from Rancho Sante Fe is very good due to the elevation differential between the rolling hills of Rancho Santa Fe (approximately 300-400 feet MSL) and the high ridges of western Rancho Cielo (approximately 1100-1200 feet MSL). Several peaks (elevations 1011, 1272, 1192) are visible for long distances to the west and south. The west and south-facing slopes are plainly visible to most of the surrounding area. These slopes will be exposed to future traffic volumes over SA 680 and portions of Del Dios Highway.

From the north and the community of Elfin Forest, north-facing slopes, rock outcrops and the riparian vegetation of Escondido Creek are the primary components of the viewshed. Slopes are generally less steep, and visibility is largely obscured by the woodland along the creek. The presence of perennial water in Escondido Creek provides a unique and extensive riparian community stretching from the outskirts of the City of Escondido to San Elijo Lagoon.

The Resource Conservation Areas further emphasize the uniqueness of the riparian vegetation in the canyon and valley setting. Cielo Creek, the major tributary to Escondido Creek which disects the north-central Rancho Cielo property, contains some of the same components that are present in the Escondido Creek and San Dieguito River drainages, but is, on the whole, drier and typically chaparral-covered. Wildlife habitat throughout the site is good and the undisturbed nature of the area lends a pristine character to even the common aesthetic resources located there.

In summary, Rancho Cielo contains extensive aesthetic resources throughout the property. Escondido Creek and San Dieguito River are important not only on or adjacent to the project but from much of the San Dieguito subregion. Steep slopes with chaparral and rock outcrops are very clearly included within the viewsheds of roads, highways, residential

communities, Lake Hodges, and surrounding hillsides. The value of all these resources in their contribution to the rural character of the San Dieguito area cannot be discounted and must be considered significant.

Staff Findings and Recommendations

The ERB concluded that implementation of the project will result in a modification of the aesthetic environments of the neighboring communities of Del Dios/Mt. Israel, Elfin Forest and Rancho Santa Fe. County staff found that the aesthetic issue was a trade off between a breakup of skyline/viewshed areas and retaining the native slopes in 1,635 acres of open space (based on the approved project). The entire Escondido Creek was proposed to be retained in open space. The majority of the viewsheds along Lake Hodges and Del Dios Highway involved native vegetated slopes. It was determined that because of the substantial open space areas, open space easements on residential lots, site plan requirements and landscaping plans for the commercial center, aesthetic impacts were mitigated by design.

Project Revisions and Impacts

The original EIR discussed the aesthetic impacts from future development under two main areas; impacts on the overall aesthetic environment of the area, and impacts to specific resources which have been identified as regionally significant or unique.

Examination of the revised land use plan (Figure 2) and the summary of changes plan (Figure 3) indicates that the majority of development remains concentrated along the ridgelines while slopes are left in open space. The major change which deviates from this is the realignment of Via Ambiente which has been relocated from the west facing slopes of the property to a northeasterly trending drainage area. This realignment significantly reduces the visual impacts created by this road to areas within the community of Rancho Santa Fe. While the road will degrade somewhat the quality of this canyon area, the overall impact of the realignment is not considered significant since the canyon area is not visible from off-site.

Generally, roads are located on ridgetops and other areas of slopes less than 25 percent. To the greatest extent possible, roads have been designed so that they are not in visually prominent areas. Project development will incorporate a substantial landscaping and revegetation program.

Generally cut and fill slopes average 25 and 30 feet respectively. However, there are a few areas where cut slopes are as high as 105 feet and fill slopes, 80 feet. The highest cut slope is located on the north side of the main east-west ridge adjacent to the potable water reservoir sites. The slope

is north facing and is not visible from off-site. Due to the location of this slope away from the majority of the project, and its north facing orientation, which lends itself to easier revegetation on-site impacts are minimized.

Other areas containing large cut and fill slopes are associated with the cosntruction of roads in canyon areas, (i.e. southern portion of Via Ambiente and Via Dora). These roads are minimally viewed from off-site areas due to intervening landforms. Potential on-site aesthetic impacts are reduced because of their location from the majority of residential development. While certain areas of the project contain relatively high cut and fill slopes, potential impacts to regionally significant aesthetic resources are minimized due to limited views from off-site locations.

The approved project specified that 1,637 acres would remain in open space. The revised Specific Plan proposes a total of 1,710 acres of open space. The overall commitment of the open space areas shown on the revised land use plan are not significantly altered from the original plan and do not constitute significant impacts to the aesthetic integrity of Rancho Cielo.

Two reclaimed water storage reservoirs have been sited in a canyon in a canyon west of the Village Estates (see Land Use Plan Changes map, Figure 3). The reservoirs will be used for storage of reclaimed water during winter months. The surface area for the primary (southernmost) reservoir is 2.7 acres; the dam height is 105 feet. The second reservoir has an area of 0.9 acres and dam height of 90 feet. The dams will be of earthenfill-type construction and will be revegetated to avoid erosion and landscape screened to reduce visual impact.

The visual impacts of the reservoirs on surrounding areas is expected to be very minimal. The only areas where they could be seen from an off-site location is vacant land to the northwest. On-site visual impacts of the reservoirs are reduced due to their location within a deep canyon. Impacts to residences located above the reservoirs are potentially significant if the sites are not appropriately landscaped. It is anticipated that the reservoirs will be approximately three-quarters full during the winter months, empty during the summer months and partially full the remainder of the year. Water level will fluctuate depending on weather and use of reclaimed water. Except during the construction phase, aesthetic impacts associated with the reservoirs are not considered significant.

The redesign of the Village Center/Village Estates area of the project moves the Village Center to the southwest where it will be less visible from the Mt. Israel community (see Land Use Plan Changes map, Figure 3). Therefore this change has a positive effect on aesthetic impacts.

The following discussion focuses on the impact of the proposed changes on specific resources. The intent, as outlined by the original EIR, is to illuminate future appearance and identify elements of the project which may require mitigation measures.

oEscondido Creek

Alteration of Escondido Creek will remain minimal due to the buffer space areas on either side of the water course. Some of the lots located on the south side of the creek in the eastern portion of the site intrude into areas which were previously shown as open space, thus reducing the area of canyon walls that are preserved. No other proposed project revisions impact the Escondido Creek. The overall impacts are not considered significant.

oSan Dieguito River/Lake Hodges

The EIR determined that the project would have minimal aesthetic impacts on Lake Hodges and a much lesser impact on the San Dieguito River than on Escondido Creek. The project revisions do not alter the effects to the Lake Hodges or San Dieguito River viewshed.

oScenic Highway Corridors

The viewshed from Del Dios Highway covers portions of the south-facing slopes in the south, southwest, and east portions of Rancho Cielo. It was determined that impacts from the development (i.e. grading, brushing construction) would be visible from isolated sections near Del Dios and Lake Hodges. Near the intersection of SA 680 site development encroaches to within several hundred feet in this west part of the highway. The commercial center, which has increased in size from 10 to 15 developable acres will be in plain view to eastbound traffic. This proposed change, which adds commercial uses to either side of SA 680, will increase the aesthetic impacts to Del Dios Highway. Several residences presently exist in the vicinity of the proposed commercial center, located north and upslope of the site.

The EIR concluded that the large lot sizes and open space areas will greatly reduce the visual impact of developed areas on the ridges and slopes within the scenic highway corridors. Overall, visual impacts to the scenic highways are not considered significant because of substantial open space preservation and large lot development.

The two areas of the project which were identified as contributing potentially to impacts to the Del Dios Highway scenic corridor: were the commercial center at S.A. 680 and the planned development on the east end. These two areas remain the most visually significant for the revised project as well.

oGeneral Plan

The original EIR concluded that impacts to the elements of the General Plan are not significant. The proposed changes are not substantial enough to alter this conclusion. Subsequent site development plans will still be responsible for localized impacts resulting from a design of each phase of the project.

The Resource Conservation Areas were determined not to be significantly impacted due to the substantial open space areas. Since the open space acreage has been increased with the revised project, there will continue to be minimal impacts to RCA's. One of the 90-day storage reservoirs is located within the Escondido Creek RCA. The majority of the resources within the RCA's will be preserved with the proposed open space areas within the project design.

Mitigation

The ERB determined that aesthetic impacts created by the project were mitigated by project design. Since the proposed project revisions do not create new significant adverse aesthetic impacts, the revised project is also considered mitigated in relation to aesthetics. Many aspects of the project design serve as mitigation for potential impacts: preservation of steep slopes, major drainages and woodland areas, and clustering of units. Aesthetic impacts associated with grading disturbance are considered mitigated by revegetation and landscaping.

SOILS AND GEOLOGY

Present Setting

A preliminary soils and geology investigation was conducted by Allied Geotechnical Engineers Inc. in March, 1980. The purpose of this investigation was to evaluate the surface soil and geologic conditions within the Rancho Cielo Specific Plan area and to make recommendations for preparation of the land use plan and the subsequent tentative maps. Included in this investigation were extensive field mapping and analysis of geologic and soil features, review of available geotechnical reports and maps of the area, and stereographic analysis of aerial photographs of the planning area.

The topography of the area is generally characterized by steep slopes with high ridges; numerous drainages, cliffs and rock outcrops; and substantial rises in elevation. Two perennial water courses are associated with the planning area, Escondido Creek in the western portion and San Dieguito River immediately south of the project boundary. An additional major tributary to Escondido Creek, now named Cielo Creek, runs

laterally across the midsection of the planning area. A more complete description of the project area topography is included in the Landform section of the original report.

oGeologic Units

The property within the planning area is comprised of three geologic units: metavolcanic rock, granodiorite, and alluvial deposits. The majority of the land is underlain by the metavolcanic rock including most of the southern and western portions of the property. The northern appendage to the property and the ridgeline in the southern portion is underlain by granodiorite rock with the alluvial deposits isolated to the drainage bottoms of Escondido Creek and the major east-west-trending drainage (Cielo Creek).

oSurface Soils

All of the surface soils on the property have been derived by weathering of the underlying rock materials. Surface soils along ridges and steep slopes are patchy and relatively thin. The depth of the surface soil mantle generally ranges from one to three feet where developed on metavolcanic rock and an average of six feet where developed on granodioritic rock. Erosion in many areas has removed the surface soils entirely to the parent bedrock.

Soil textures range from coarse sand in alluvial deposits and weathered granodiorite to clay rich residual soils developed on alluvial and metavolcanic parent material. All of the soils on the property are expected to have a significant clayey component which may result in expansive material unsuited to structural use within three feet of grade for residence pad and slab construction. These soils are suitable, however, for fill materials for roads and for pads when placed three feet below grade or when special foundation design is employed.

All of the surface soils are subject to erosion hazard. A breakdown of soil units based on the USDA Soil Survey is included in the Agriculture and Hydrology sections in the original EIR. Due to the steep slopes and the shallow soil mantle, soil erosion is listed as severe for nearly all of the property. Numerous gullies and drainages evidence this as the soil has been completely eroded to bedrock. The presence of native chaparral vegetation provides a large margin of stability and shelter to the soil regimes which are present.

oSeismicity

The County of San Diego Fault and Epicenter Map (County of San Diego, 1974) shows two faults dissecting the project area as shown in the original EIR. Both are considered to be of Pre-Quaternary age (1,000,000 BP) and inactive. Two additional faults were located during the field reconnaissance and review

of the aerial photographs. None of these faults show evidence of recent activity and are not expected to experience tectonic activity of any appreciable magnitude. The presence of these faults does, however, place some structural constraints on development as they represent areas of possible instability.

Numerous lineaments or joints, are present in the area. These lineaments cross both drainages and rock units, but are believed to be associated with batholithic formation and stresses resulting from cooling and uplift. Thus, these lineaments are not considered to pose any seismic risk to development.

oLandslides and Slope Stability

Results of the field reconnaissance and aerial photograph review do not reveal the presence of any ancient or recent landslides on the property, nor would they be expected on the stable underlying rock units. Minor forms of landslides may occur on the subject property, such as block falls, debris flows and downslope mass movement (creep). The highly fractured nature of the rock units result in partial instability when unsupported or in areas of steep slopes.

oEngineering Considerations

Leighton and Associates was recently contracted to provide updated information regarding the geotechnical constraints associated with the revised road alignments. The report which presents this information (Leighton and Associates, October, 1983) is located in the appendices of this document. The methods used to provide this design evaluation were field mapping and a subsurface investigation utilizing seismic refraction techniques. In addition, existing cut slopes in the immediate vicinity of the proposed development were inspected.

The Leighton and Associates analysis concludes that all the soils on the site are believed to be suitable for road fill material; however, the size of rock pieces excavated or resulting from blasting may limit their use. The soil is also suitable for foundation fill material but may require selection, capping with non-expansive material, or use of special slope grading. Based on the Leighton report, cut slopes will be stable when constructed at a gradient of 1 1/2:1 or flatter and fill slopes will be stable at 2:1.

Staff Findings and Recommendations

The ERB report summarized that implementation of the project would result in 3,000,000 cubic yards of grading which would cut into highly fractured blocky volcanic rock and clayey soils. It was concluded that without proper treatment in graded areas, moisture could lubricate the clayey soils along fracture and joint lines and minor landslides or block falls could occur. A combination of engineering designs and proper landscaping could

mitigate impacts that would cause surface water penetration and block slippage. Structural pad locations will be placed along natural ridgelines and not in areas prone to slippage. Average cut heights shown on the approved tentative maps were approximately 15 feet and 25 feet for fill slopes. Maximum cut and fill slope heights were 75 feet and 45 feet respectively in certain areas.

The ERB mitigation measure is as follows:

Prior to approval of any grading plans, the applicant shall obtain specific geotechnical analyses for TM 4225, TM 4226, TM 4227, TM 4229 and the use permits, and submit provisions to carry out the recommended remedial actions to the satisfaction of the Department of Public Works.

Project Revisions and Impacts

As with the original plan, areas of moderate or severe geologic hazard are isolated from the development area and are included within the open space easement. In general, all of the steep slopes remain excluded from development, leaving the development concentrated on ridgelines, peaks and slopes of mild gradient.

The proposed roadway alignments including the realignment of Via Ambiente, for the revised project have been reviewed by the project geologist. Based on the results of their investigation no unusual geologic hazards are present which cannot be mitigated by standard engineering practices (see appendix for report). Cut and fill slopes average 25 and 30 feet, respectively, and are a maximum 105 feet and 45 feet in certain areas. The project engineer and project geologist have determined that the road system, as designed, will result in slopes that are more stable, easier to vegetate and less susceptible to erosion if they are constructed at a gradient of 1 1/2:1 for cut slopes and 2:1 for fill slopes. The original tentative maps were designed at gradients of 1:1 for cut slopes and 1 1/2:1 for fill slopes however, the revised now conform to project engineer and geologist recommendation.

The other project revision which is affected by geological conditions is the location of two open reservoirs for the seasonal storage of reclaimed water. The southernmost reservoir has a capacity of 60-acre feet and the dam face height is approximately 105 feet. The northernmost reservoir has a 20-acre feet capacity and is 90 feet high. Geologic hazards associated with construction of the dams relate to slope stability, seepage and settlement and characteristics of the underlying geographic strata such as faulting, seismicity and adjacent landslides. Site specific geotechnical review will be conducted prior to finalizing the location of the dams. Since the dams are not as yet designed, insufficient information exists to adequately address the anticipated impacts associated with dam construction. Further environmental review will be

required during County grading permit process as well as the dam construction permit process required by the Division of Safety of Dams.

Mitigation

The two project changes which are affected by geologic conditions are the realignment of Via Ambiente and the location of the two 90-day storage reservoirs. Based on the geotechnical study prepared by Leighton and Associates, development of the site as proposed can eliminate, through proper engineering, any geologic hazards existing on the property. Therefore, the condition of approval requiring that the applicant obtain specific geotechnical analyses for tentative maps remains adequate to mitigate this change.

Geotechnical considerations associated with the seasonal storage reservoirs will be analyzed during the dam construction permit process required by the Division of Safety of Dams as well as the County grading, permit process. The dam construction permit should be required as a condition of approval of the tentative map.

No further mitigation measures are believed necessary for approval of the revised Specific Plan or subsequent tentative maps. The review processes for grading permits, building permits, and dam construction are adequate to ensure that future grading and construction conform to acceptable County standards.

MAJOR ISSUES UNAFFECTED BY THE REVISED PROJECT

The following issues were determined to be significant but mitigable by the Environmental Review Board. It is our opinion that the proposed changes to the Rancho Cielo Specific Plan minimally affect these issues, and as such, the mitigation measures recommended by the ERB remain adequate. Please refer to the Rancho Cielo EIR as incorporated by reference herein for a detailed discussion of these issues.

NOISE

Staff Findings and Recommendations

The major source of noise on Rancho Cielo will be traffic. The ERB concluded that the 12,852 vehicular trips (based on the original 892 units) and emergency heliport could result in noise impacts in excess of 60dB(A). Based on the amended 1980 County Noise Element, 60dB(A) is considered acceptable. Areas sited to receive the greatest impacts were areas along Del Dios Highway, Via Ambiente, Mt. Israel Road and SA 680 if constructed. It was also determined that the heliport could create noise levels in excess of 85dB(A), but this would be uncommon.

The following two conditions were recommended by the ERB to mitigate noise impacts created by the project.

1. Prior to approval of any grading plans for road construction on the Large Scale Project or any of the tentative maps, the applicant shall submit copies of the grading plans to the satisfaction of the Environmental Analysis Coordinator with noise attenuating barriers or open space easements which reduce traffic noise to acceptable levels.

2. Prior to approval of TM 4229, the applicant shall obtain a major use permit to regulate noise attentuation in buildings and residences surrounding the heliport to the satisfaction of the Environmental Analysis Coordinator.

Project Revisions and Impacts

Proposed changes that should be considered in the analysis of potential noise impacts are the deletion of connection to Mt. Israel Road and the construction of SA 680. If the construction and widening of Mt. Israel Road is deleted as proposed, noise impacts to residents along Mt. Israel Road would be eliminated, with the exception of noise generated by emergency access trips and trips to two of the lots. While these trips will be redistributed down Via Ambiente, the increased noise should not be significant.

The ERB staff report indicates that if constructed, SA 680 could create significant levels of noise in the southwest portion of the project site. It has been determined since the completion of the EIR that SA 680 will be constructed. However, the right-of-way for the road was shown on the original plans and the potential noise impacts were addressed in the EIR.

Mitigation

While lot configurations and road alignments have changed for the project the recommended noise mitigations remain adequate. A well designed plan for noise attenuation barriers and open space would adequately mitigate noise impacts. The major use permit requirement to regulate noise attenuation in areas surrounding the heliport was a viable mitigation measure. Since the heliport will now be used in conjunction with the fire station, site plan review will be required. Noise impacts could be reviewed at that time.

ARCHAEOLOGY

Staff Findings and Recommendations

Based on the field reconnaissance of the Rancho Cielo property by the project archaeologists, the ERB determined that 16 scientifically significant archaeological sites would be eliminated by the implementation of the project. Four sites are proposed for preservation, two of which are considered to be very significant to the understanding of the San Dieguito Complex. Of special concern is the preservation of examples of the quarries where the earliest people in San Diego County mined/quarried volcanic felsite from which they made knives, paints scrapes and other tools.

To mitigate impacts to archaeology, the following mitigation measures were required as conditions of the Tentative Maps, Major Use Permits and Specific Plan:

A qualified archaeologist shall to the satisfaction of the Environmental Analysis Coordinator:

1. Conduct the sample percentage micro-map surface collection at those sites listed on Table 9, of the Environmental Impact Report dated March 26, 1981 to be destroyed;

2. Conduct test excavations at all sites listed on Table 9 of the Draft-EIR for "Phase I" tests;

3. Submit a report on the micro-mapping and test excavations and meet with the Environmental Analysis Division to obtain direction relative to Phase II salvage;

4. Submit a research design to salvage, excavate and map the remaining scientific values at the sites to be impacted;

5. Conduct a salvage operation and submit a salvage report which can be used by the public in their future appreciation of the lost aspects of their heritage.

Project Revisions and Impacts

Based on review by the project archaeologist, the proposed changes do not impact the identified sites to be preserved. Surface collection as well as test excavations of the sites to be destroyed have commenced.

Mitigation

Since the proposed project changes do not impact the archaeological sites recommended for preservation, the required mitigation remains adequate. The recommended testing, excavation and salvage program should be implemented as recommended.

DARK SKY

Staff Findings and Recommendations

The ERB determined that implementation of the project will result in an incremental increase in night illumination which will reduce to a slight degree the effectiveness of the Mount Palomar Observatory. The major sources of this pollution that will be created by the project will be parking lot lighting at the Village Center and tennis courts. The impacts created by this project are increased because of the elevation of the property. The ERB made the following recommendation in regards to the use of Low Pressure Sodium Lamps:

Mitigation Measures

1. Prior to approval of the grading plans for Via Ambiente on TM4225, TM4226, TM4227, or TM4229, the applicant shall provide plans to utilize Low-Pressure Sodium lamps along streets and parking lot areas to the satisfaction of the Department of Public Works.

Project Revisions and Impacts

None of the proposed project changes will significantly affect night illumination in the area. In fact, the number of recreation areas which would have been the sites of tennis courts and the recreational facilities have been reduced. This is a small but somewhat important improvement since tennis court/recreational lighting is a significant contributor to

night illumination. Furthermore no street lights are proposed on the private roads within the project.

Mitigation

Since the proposed project changes do not adversely affect astronomical dark skies the ERB recommendation relating to the use of low-pressure sodium vapor lamps is an acceptable mitigation measure.

HYDROLOGY

Staff Findings and Recommendations

The ERB report summarized that implementation of the project would create impervious surfaces in the form of streets, driveways, and patios. The maximum results would be a 12% increase of runoff into the Escondido Creek Drainage Basin, 16.4% increase into the San Dieguito River Drainage Basin, and a 15.7% increase into the San Dieguito Reservoir Drainage Basin. Such an increase would only occur during a 100-year storm and after full buildout of the project. Sediments into these drainage basins would ultimately impact the floodplains and lagoons downstream; Elfin Forest Lake and the south Rancho Santa Fe floodplain.

To mitigate erosion and siltation impacts the ERB recommended the following:

1. Prior to approval of the grading plans on TM4225, TM4226, TM4227, TM4229, or the major use permits, the applicant shall provide adequate plans to control erosion and sedimentation reduction measures to the satisfaction of the Department of Public Works.

Project Revisions and Impacts

The proposed project revisions do not create any new impacts to the hydrology of the area. Since the staff findings are based on the original EIR of 892 units the existing project of 770 would probably result in a reduction of the total runoff anticipated by the implementation of the project. The project redesign includes a reduction in the amount of internal streets by 1.25 miles which would decrease somewhat the amount of runoff anticipated.

Mitigation

The proposed project revisions could potentially decrease the amount of erosion and sedimentation expected to occur by implementation of the project. Therefore, the recommended mitigation measure requiring adequate erosion control and

sedimentation reduction plans will mitigate impacts created by the project. No further mitigation is deemed necessary.

ENERGY

Staff Findings and Recommendations

Implementation of this project will result in a substantial levels of energy consumption. The EIR indicates that the construction of streets, dwellings, and utilities will consume approximately 340,357 barrels of oil over a five year period. The project will result in an increase in San Diego Gas and Electric services by 325%, representing a total annual consumption of 12,736,032 Kwh and 610,889 therms. It is estimated that project residents will travel about 154,224 miles a day which will consume 2,462,807 gallons of gasoline a year by 1990.

The ERB determined that mitigation measures incorporated into the project design adequately reduce potential impacts long-term impacts to energy resources. These mitigation measures are described in detail in the EIR.

Project Revisions and Impacts

Since the project is of a lesser scale than originally proposed, a reduction in overall impacts is anticipated. The project redesign incorporated the original mitigation measures as outlined in the EIR.

Mitigation

Impacts to energy resources are mitigated by design. No further mitigation is warranted.

AIR QUALITY

Staff Findings and Recommendations

As indicated by the ERB report, the project would contribute 2.9 parts per million increase in carbon monoxide to the San Diego Air Basin. This figure would use to 3.3 ppm by 1995. According to Hal Brown, Meterologist for APCD, this would not be a significant increase. No mitigation was recommended. The issue of Air Quality was considered not significant.

Project Revisions and Impacts

The project revisions would generate fewer automobile trips lessening the overall air quality impact.

Non-Significant Issues Unchanged by the Revised Project

The following issues were addressed in the original EIR but were not considered significant by the ERB; Climate, Agriculture, Public Services, Recreation and Socio-Economics. The project revisions do not affect the original analysis of these issues. The conclusions as found in the EIR remain unchanged.

IV. GROWTH INDUCEMENT

The major control on growth associated with the construction of a sewage treatment facility described in the EIR remains intact. The principal limitation on uncontrolled growth is tied to the environmental review associated with future annexations into the Rancho Cielo Sanitation District. As described earlier, the configuration of the sewer districts boundaries reinforce the mitigation by including only the Specific Plan area with the exception of four improved lots within the Specific Plan area and two approved projects adjacent to Rancho Cielo. In addition, the current service area encompasses only Phase I of the Rancho Cielo Specific Plan.

In order for projects outside the Rancho Cielo Sanitation District's current service area to obtain sewer service, a formal annexation process through LAFCO and the Board of Supervisors would have to take place, which would include environmental review. Projects outside the Sphere of Influence would have the additional requirement of amending the Sphere boundary. Lastly, it is important to note that the sewer district is under the auspices of a County agency and not a private party. This agency will also have control over annexation requests as well as treatment plant expansion.

V. ALTERNATIVES

The EIR addressed a variety of alternatives for the approved project per the following outline:

1. Project Type
   a. Regional Park
   b. Open Space

2. Project Location
   a. Land Trade
   b. On-site Relocation

3. Project Scope
   a. Higher Density
   b. Lower Density
   c. No Commercial

4. Project Timing
   a. Longer Phasing Period
   b. Delayed Implementation

5. No Project

No new alternatives exist for the revised project. Project alternatives for the original project were thoroughly analyzed in the Environmental Analysis section of the EIR. The "No Project" alternative, however, is now the approved Rancho Cielo project and, as such, is adequately addressed by the original EIR.

VI. CERTIFICATION

This report presents a full disclosure and independent, focused analysis of the identified resources of the subject property as required by the California Environmental Quality Act.

Brian Farrell Mooney
Principal Environmental Consultant

This report was prepared by Mooney-Lettieri and Associates, Inc. of San Diego, California. Staff members contributing to this report are listed below.

Brian Farrell Mooney	Principal Environmental Consultant
Anthony J. Lettieri	Principal Planning Consultant
M. Bruce McIntyre	Director of Planning
Russell E. Hunt	Senior Land Planner
Kimberly K. Elliott	Associate Planner
Rose J. Griscom	Cartographer
Marilyn Bodhaine	Production Specialist

Associates firms contributing to this report are listed below.

Leighton Associates	Geology
Luke-Dudek	Sanitary Engineering
Wier Biological	Biology
Willdan Associates	Traffic

VII. PERSONS AND AGENCIES CONSULTED

Bob Walters	LADERA ASSOCIATES, Project Civil Engineer
Greg Luke Frank Dudek	LUKE-DUDEK, Project Sanitary Engineers
Bob Sergeant	Willdan Associates
Howie Wier Eric Wier	Wier Biological
Avram Ninyo	Leighton Associates, Project Geologist
Bill Chatham	County of San Diego, Department of Planning and Land Use
Tom Garaby Don Hatfield	County of San Diego, Department of Public Works
Lou Quinney	VTN Engineering
Larry Clemens Engineers	Utility Specialists

APPENDICES

A. ERB Staff Report
B. Traffic Report
C. Biology Report
D. Soils and Geology Report

APPENDIX A
ERB STAFF REPORT

received
4-11-81

COUNTY OF SAN DIEGO

DATE March 26, 1981

TO: PLANNING COMMISSION 0173

FROM: ENVIRONMENTAL REVIEW BOARD 0175

SUBJECT: Environmental Impact Report for Rancho Cielo, LSP80-03, TM4225, TM4226, TM4227, TM4229, P79-89, R80-083, EAD Log #80-8-120.

The Environmental Review Board (ERB) has reviewed the enclosed Environmental Impact Report (EIR). Based on the discussion of the issues that follow, the ERB recommends that:

1. The EIR be certified as being comolete and in compliance with the provisions of the California Environmental Quality Act (CEQA).

2. It be found that the project as proposed will have Significant but Mitigable impacts to Traffic/Circulation, Biology, Noise, Fire Protection, Soil and Geology, Archaeology, Dark Sky, Hydrology, Aesthetics, Energy; Unresolved Water Quality/Liquid Waste; Not Significant Air Quality.

3. The mitigation measures that appear in Enclosure "A", the EIR Discusssion, be made conditions of project approval.

ERB DELIBERATIONS

On motion of members Escher/Smith, it is recommended that the EIR be certified as being complete and in compliance with the provisions of CEQA.

Ayes: 4 -- Hurlburt, Escher, Heilman. Smith

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill, Weeks

On motion of members Smith/Escher, it is recommended that the Major Issue of Traffic/ Ciruclation be found Significant but Mitigable.

Ayes: 5 -- Hurlburt, Escher, Heilman, Smith, Weeks

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill

On motion of members Escher/ Smith, it is recommended that the Major Issue of Biology be found Significant but Mitigable.

Ayes: 5 -- Hurlburt, Escher, Heilman, Smith, Weeks

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill

On motion of members Heilman/Smith, it is recommneded that the Major Issues of Noise, Soils/Geology, Archaeology, Dark Sky, Hydrology, Energy be found Significant but Mitigable.

Ayes: 4 -- Hurlburt, Escher, Heilman, Smith

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Weeks, Hill

On motion of members Escher/Heilman, it is recommended that the Major Issue of Water Quality/Liquid Waste be found Unresolved.

Ayes: 4 -- Hurlburt, Escher, Heilman, Smith

Noes: 0 -- None

Abstentions: 0- None

Absent: 3 -- Oberbauer, Weeks, Hill

On motion of members Escher/Smith, it is recommended that the Major Issue of Aesthetics be found Significant but Mitigated by Design.

Ayes: 4-- Hurlburt, Escher, Heilman, Smith

Noes: 0 -- None

Abstentions: 0 -- None

Absent: 3 -- Oberbauer, Weeks, Hill

On motion of members Weeks/Heilman. it is recommended that the Major Issue of Air Quality be found Not Significant.

Ayes: 5-- Hurlburt, Escher, Heilman, Smith, Weeks

Noes: 0-- None

Abstentions: 0 -- None

Absent: 2 -- Oberbauer, Hill

EAD RECOMMENDATIONS TO THE ERB

The Environmental Analysis Division (EAD) has identified the following Major Issues, and our recommendations for findings of significance are as follows:

1. Traffic/Circulation : Significant But Mitigable
2. Biology: Significant But Mitigable
3. Noise: Significant But Mitigable
4. Water Quality/Liquid Waste: Unresolved
5. Soils and Geology Significant But Mitigable
6. Archaeology: Significant But Mitigable
7. Dark Sky: Significant But Mitigable
8. Hydrology: Significant But Mitigable
9. Aesthetics: Significant But Mitigable by Design
10. Energy: Significant But Mitigated by Design
11. Air Quality: Not Significant

Respectfully submitted,

Kathy Lehtola

KATHLEEN A. LEHTOLA, Secretary
Environmental Review Board

KAL:RVM:

Enclosures:
A. Environmental Impact Report Discussion, Pages A-1 to A-7
B. Letters of and Responses to Public and Other Agency Co-ment, Pages B-1 to B-10
C. Draft-EIR, prepared by APEC, 9925-C Businesspark Avenue, San Diego, CA 92131

Copies: Project Planning, Department of Planning and Land Use, #0173
Project Planner, #0173: Harry Trax
Lorena Quintana, A651

ENCLOSURE A-1

ENVIRONMENTAL IMPACT REPORT DISCUSSION

PROJECT: RANCHO CIELO, LSP80-03, TM4225, TM4226, TM4227, TM4229, P79-89, R80-083, EAD Log #80-8-120

PROJECT DESCRIPTION

Rancho Cielo is a three phase Large Scale project to divide 3,525 acres into a series of Tentative Maps. Implementation of this project will necessitate four Tentative Maps in Phase I; TM4225, TM4226, TM4227, and TM4229. Phases II and III will be developed at a future date. Site Plans with specific landscaping detail will be required at the commercial center and an access area. Rezones will be required to cluster residences and create open space areas. Grading Permits will be necessary to grade Via Ambiente and the development of the Tentative Maps. Specific grading and impacts of lot layouts in Phases II and III will have to be evaluated at a future date. The project will create 892 residential units, two commercial centers, a fire station, a wholesale nursery, and street system.

PROJECT LOCATION

The project is located two miles east of Rancho Santa Fe, four miles south of the City of San Marcos, seven miles east of Leucadia and Encinitas and immediately north and west of Lake Hodges and Del Dios Highway. Thomas Bros. Maps page 26:C-3,4;D-2,3, 4,5;F-2,3,4,5. (Supv. Dist. V).

LAND USE FACTORS AND SURROUNDING LAND USES

Most of the property (2,632 acres) is designated as Specific Plan Area with a maximum dessity of .27 du/acres (700 units). Unique resources and a rural environment must be preserved. The Hillside Policy is in effect in the SPA. Outside the SPA in four separate areas is 590 acres of Estate designation. In the northeast area, there is an area designate as public/semi-public.

The zoning on the property is very complicated in thaat 15 different zones exist. The details are listed on page 40 of the draft EIR. The five residential zones (R-R-1, R-V-2, R-S-3, R-R-5, R-R-25) allow from 1 to 3 du/acre. There is a C-36 general commercial (40 du/acre) and a M-54 general industrial (6000 square foot lots). There are four distinct Limited Agriculture Zones (A-70-8, A-70-8 (flood plain), A-70-8AP) which allow 1 du.4-8 acres. Finally, there is S-80 (open space) and S-88 (Specific Plan Area) which allow 1 du/8 acres. The property is currently in a native state with some off-road vehicle trails in the canyons. Development lies to the east in the community of Del Dios, northwest of Elfin Forest, and southwest at Del Dios. Most of the surrounding landscape is in a natural state, but the least impacted vegetational area is the subject property.

BACKGROUND

Rancho Cielo was created as a Specific Planning Area on October 24, 1979 under GPA79-02 to insure development in concert with the preservation of unique environmental resources. The SPA limits developments to a density of .27 dwelling units to the acre (1 du/3.76 acres). The Board of Supervisors was additionally concerned that commercial development be adequately justified. Four additional parcels of land are now being considered under LSP80-03 and the project now encompasses 3,525 acres and 15 ownerships.

ENCLOSURE A-2

MAJOR ISSUES

1. Traffic and Circulation: (See the following Mitigation Measure)

This project will generate approximately 12,852 ADT into the San Dieguito Community, which will create potential circulation problems along the existing Mount Israel Road and the intersections along Del Dios Highway at Via Ambiente, Mount Israel Road, and Via Rancho Parkway. Del Dios Highway is currently operating at Service Level C, but peak traffic hours are anticipated to exceed that level to Service Level D. Impacts to Mount Israel Road currently A could approach Service Level E without mitigation with mitigation to C. However, impacts can not be entirely evaluated due to a disagreement between the applicant who wants Via Ambiente to be private and the Department of Public Works who desire public access. Another problem with evaluating this issue is the status of SA680 which has yet to be approved or denied.

Mitigation Measures

Prior to approval of any Grading Permits on LSP80-03, TM4225, TM4226, TM4227, or TM4229, the applicant shall provide to the satisfaction of the Department of Public Works:

1-A. Signalization for the intersection of Del Dios Highway and Via Rancho Parkway;

1-B. Signalization at the intersection of Mount Israel Road and Del Dios Highway;

1-C. Modify Mount Israel Road to provide for 2 uphill lanes;

1-D. Provide acceleration and deceleration lanes along Del Dios Highway at Via Ambiente and Mount Israel Road;

1-E. Provide signalization at Via Ambiente and Del Dios Highway upon approval of Phase III.

1-F. On site road sections to be reviewed and approved by the Fire Marshall.

ENCLOSURE A-3

2. Biological Resources (Significant but Mitigable)

Project implementation will segment and disrupt one of the largest undisturbed, undeveloped coastal tracts of native chaparral and wildlife habitat remaining in San Diego County.

The entire property is considered significant with respect to the continuity of the undisturbed vegetation and diversity of wildlife habitats onsite: oak woodland, riparian woodland, chaparral, inland sage, large rocky cliffs, a perennial freshwater stream (Escondido Creek) and native grassland. Additionally the rugged topography of the site with its ridges, steep sided canyons and dranages which serve as corridors for wildlife movement as well as sensitive raptor and large mammal foraging areas adds to the significance of the site as a biological resource. Twelve sensitive plant species are located onsite. Most of the species are of low relatively low sensitivity and large percentages of their populations will be preserved in the proposed open space areas which total 58% of the property. Two species which are very rare and of very limited distribution, Baccharis vanessae (Encinitas Baccharis) and Dudleya viscida (Sticky Dudleya), should be preserved wherever they occur. The populations of these plants onsite are proposed for open space easement and should theoretically, therefore, be protected, with the exception of a Dudleya population near the proposed water treatment plant. However, a potential conflict with required clearing for fire protection exists in those areas where open space easements are in close proximity or included within residential lots. A number of sensitive faunal species occur onsite. Of particular concern are the potential impacts to an active Golden Eagle nest located just offsite of the project area. This nest is presently being used by a pair of eagles and is visible from portions of five lots in the extreme northern portion of the plan. It is beleived that these birds will not tolerate human activities within close proximity or in locations elevated above the nest. If development of this project were to cause abandonment of this nest, it would represent a significant impact on San Diego County's ealge population. Additionally, the project will probably eliminate Mountain Lion from the site, and possibly the region north of the San Dieguito River.

A large portion of the project lies within three Resource Conservation Areas, Escondido Creek, Harmony Grove Road, and San Dieguito River- Lake Hodges-Lusardi Canyon. The impact of the project will be to lower the biological quality of these RCA's. The project design, however, allows for wildlife corrodors and breeding areas, preserves a majority of the very rare and less rare plants on the property, and less rare plants on the property, and should prevent major disruption of the resources within the conservation area.

2-A As a condition of the LSP and the future tentative map to be located in the extreme northern portion of the propoerty, 5 lots shall be eliminated which are in line of vision of the active eagle's nest. Either A or a Site Plan to eliminate line of sight.

2-B As a condition of the LSP, tentative maps, and grading plans, all open space lots and open space easements shall be maintained in their native condition with no clearing for firebreaks.

3. Noise (See the Following Mitigation Measures)

Traffic generated by the 12,852 vehicular trips and emergency helicopter port could result in significant noise impacts in excess of 60dB(A). Changes in the County Noise Element of the General Plan in December of 1980 have lowered the acceptable threshold to 60dB(A) and thus the findings in the draft by APEC must be reconsidered to reflect that change. Areas to receive the most impact will be along Del Dios Highway at Via Ambiente, along Via Ambiente, and along Mount Israel Road. If SA680 is constructed, noise levels could be significant in the southwest portion of the project site. Although an uncommon experience, the emergency helicopter could create noise levels in excess of 85dB(A). Traffic around the commercial centers are anticipated to also be high. It must be cautioned, however, that insufficient data exists to adequately assess noise impacts along Del Dios Highway.

Mitigation Measures

3A. Prior to approval of any grading plans for road construction on the Large Scale Project or any of the tentative maps, the applicant shall submit copies of the grading plans to the satisfaction of the Environmental Analysis Coordinator with noise attenuating barriers or open space easements which reduce traffic noise to acceptable levels.

3B. Prior to approval of TM 3229, the applicant shall obtain a major use permit to regulate noise attenuation in buildings and residences surrounding the heliport to the satisfaction of the Environmental Analysis Coordinator.

4. Water Quality/Liquid Waste (See the Following Mitigation Measure)

Implementation of this project would create a sanitation district to manage a water reclamation system to handle 260,000 gallons of waste water a day. The "reclaimed" water would then be discharged into Escondido Creek or the San Dieguito River or used for irrigation. At this time, it remains unclear whether the Regional Water Quality Control Board standards can be met in reducing the total dissolved solids (TDS) and nutrient concentrations. Failures in the system would degrade the local groundwater and could inbalance the ecology of the San Dieguito or San Elijo Lagoons. The Department of Public Works has expressed concerns that the method proposed by the applicant is too costly, will consume too much energy, and may not be feasible.

Mitigation Measure

4A. Prior to approval of the Final Map, the applicant shall obtain approval from both the Health Department, and the Regional Water Quality Control Board, to the satisfaction of the Department of Public Works.

5. Soils and Geology (See the Following Mitigation Measure)

Implementation of this project will result in 3,000,000 cubic yards of grading which will cut into highly fractured blocky volcanic rock and clayey soils. Without proper treatment in graded areas, moisture can lubricate the clayey soils along fracture and joint lines and minor landslides or block fulls can occur. A combination of engineering designs and landscaping can reduce surface water penetration and block slippage. Graded cuts will range from 10' to 30' feet in height along roads and streets. Structural pod locations will be placed along natural ridges and will not be in areas prone to slippage.

Mitigation Measure

5A. Prior to approval of any grading plans, the applicant shall obtain specific geotechnical analyses for TM4225, TM4226, TM4227, TM4229 and the use permits, and submit provisions to carry out the recommended remedial actions to the satisfaction of the Department of Public Works.

6. Archaeology (See the Following Mitigation Measures)

Implementation of this project will result in the destruction of 16 scientifically significant archaeological sites and potential indirect impacts to four sites located in open space areas. Of the four to be preserved, two are considered to be very significant to the understanding of the 12,000 to 7,500 year old San Dieguito Complex which is so poorly understood at this writing.

Most of the sites to be lost are thought to be locations where the earliest people in San Diego County mined/quarried the green colored fine-grained volcanic felsite which was then carried down to camps along the San Dieguito River and made into knives, paints, scrapes, and other tools. Archaeologists are especially concerned about preserving examples of these quarries. A few milling stations of the late Milling Horizon will also be lost.

Mitigation Measures

Prior to approval of the Tentative Maps, Major Use Permits, or issuance of any grading permits, a qualified archaeologist shall to the satisfaction of the Environmental Analysis Coordinator:

6A. Conduct the sample percentage micro-max surface collection at those sites listed on table 9, to be destroyed;

6B. Conduct test excavations at all sites listed on Table 9 of the Draft-EIR for "Phase I" tests;

6C. Submit a report on the micro-mapping and test excavations and meet with the Environmental Analysis Division to obtain direction relative to Phase II salvage;

6D. Submit a research design to salvage, excavate and map the remaining scientific values at the sites to be impacted;

6E. Conduct a salvage operation and submit a salvage report which can be used by the public in their future appreciation of the lost aspects of their heritage.

7. Dark Sky (See the Following Mitigation Measure)

Implementation of this project will result in an incremental increase in night illumination which will reduce to a slight degree the effectiveness of the Mount Palomar Observatory. The major sources of this pollution is street and parking lot lighting at the commercial center and tennis courts. The topographic elevation of the property increases this impact. The draft EIR indicates that High Pressure Sodium Lamps are required by the Department of Public Works; Low Pressure Sodium Lamps are more desirable.

Mitigation Measure

7A. Prior to approval of the grading plans for Via Ambiante on LSP or TM4225, TM4226, TM4227, or TM4229, the applicant shall provide plans to utilize Low-Pressure Sodium lamps along streeets and parking lot areas to the satisfaction of the Department of Public Works.

8. Hydrology (See the Following Mitigation Measure)

Implementation of this project will create impervious surfaces in the form of streets, driveways, and patios, resulting in a 12% increase of runoff into the Escondido Creek, 16.4% increase into the San Dieguito River, and 15.7% increase into the San Dieguito Resevoir. This increase would only occur during a 100 year storm and after full build out of all three phases. Sediments in these drainage basins will ultimately impact the floodplains and lagoons downstream; Elfin Forest Lake and the south Rancho Santa Fe floodplain.

Mitigation Measure

8A. Prior to approval of any grading plans on TM4225, TM4226, TM4227, TM4229, or the major use permits, the applicant shall provide adequate plans to control erosion and sedimentation reduction measured to the satisfaction of the Department of Public Works.

9. Aesthetics (Mitigated by Project Design)

Implementation of this project will result in a modification of the aesthetic environments of the neighboring communities of Del Dios/Mt. Israel, Elfin Forest, and Rancho Santa Fe. A major problem in the analysis of aesthetic impacts is a lack of information on individual lot development; the impact must therefore be assumed for all non-open space areas on the lots. Del Dios Highway is a Second Priority Scenic Route on the General Plan and SA680 (if ever built) will be a Third Priority Scenic Highway.

Staff assesses the aesthetic issue to be a trade off between a breakup of skyline/viewshed areas and retaining the native slopes in 1695 acres of open space. The entire Escondido Creek will be retained in open space. The majority of the viewsheds along Lake Hodges and Del Dio Highway will involve native vegetated slopes. Between the open space areas, open space easements on residential lots, and site plan landscaping for the commercial center, the project design has mitigated aesthetic impacts.

10. Energy (Mitigated by Project Design)

Implementation of this project will result in future energy consumption beyond the levels projected from previous land use plans. The Draft-EIR indicates that the construction of streets, dwellings, and utilities will consume approximately 340,357 barrels of oil over a five year period. The project will result in an increase of San Diego Gas and Electric services by .325%; 12,736,032 KwH, Gas and Electric services 610,889 therms. Project residents will travel about 154,224 miles a day which will consume about 2,462,807 gallons of gasoline a year by 1990. Topographic orientation and slope will probably limit solar access to insufficiant levels to meet the Solar Ordinance. Mitigation of these impacts, according to the Draft-EIR, has been incorporated into the project design.

11. Air Quality (No Mitigation Proposed)

Implementation of this project will contribute a 2.9 parts per million increase in carbon monoxide to the San Diego Air Basin. This figue will rise to 3.3 ppm million by 1995. According to Hal Brown, Meteorologist for APCE, this would not be a significant increase. The Federal Standard is 35 ppm.

12. Fire Protection (No Mitigation Proposed)

This project would place 892 residential units in an area of high fire potential. However, the plan is designed to include an onsite fire station fully equipped to meet emergency needs. Homesites will have fire breaks between 50' feet and 150' feet, depending upon the discretion of the Fire Marshall.

APPENDIX B

TRAFFIC REPORT

WILLDAN ASSOCIATES ☐ ENGINEERS & PLANNERS
Anaheim, Norwalk, Ventura, Lancaster, San Bernardino and San Diego, California
Phoenix, Flagstaff, and Tucson, Arizona

January 9, 1984

Tony Lettieri
Mooney-Lettieri & Associates
9925-C Businesspark Avenue
San Diego, CA 92131

Dear Tony:

Willdan Associates is pleased to transmit this report summarizing our analysis of the circulation aspects of the proposed Revised Specific Plan for Rancho Cielo.

This report supplements the previous reports prepared for this project by American Pacific Environmental Consultants as part of the original EIR for the project. The original specific plan for Rancho Cielo, adopted in December 1981, is proposed to be modified in several ways which may impact projected traffic flows. These include:

1. Reducing the size of the Village Center commercial area.

2. Defining the size of the neighborhood center at the intersection of Del Dios Highway with SA 680.

3. Deleting the wholesale nursery.

4. Rerouting Via Ambiente through the center of the site.

5. Eliminating the street connection to Mt. Israel Road.

In addition to these changes we have also reviewed the projected trip distribution pattern in light of more recent population forecast information (SANDAG Series 6 population forecasts).

TRAFFIC GENERATION

As approved, the Rancho Cielo project was expected to generate 12,240 trips from 774 dwelling units and 9 acres of commercial.

The proposed land use changes have eliminated the majority of the commercial at the Village Center. What will remain will be used for the homeowners association offices and minor related uses, as a result it will generate a negligible amount of traffic external to the project. The neighborhood commercial center located at Del Dios Highway and SA 680, however, has now been defined in size to be approximately 50,000 square feet of floor area located on 10 to 15 developable acres. Using a trip generation rate of 40 trips per 1,000 square feet (from Traffic Generators representing commercial shops or strip commercial) this center will now generate 2,000 daily trips. In addition, the total number of units within the Specific Plan boundaries has been reduced to 770 units.

The total number of trips generated by the project is therefore expected to decrease from the previously forecast 12,240 to 9,700. This decrease of over 2500 trips will further reduce the already negligible impacts from the project. Because of the change in access and potential redistribution of trips we have continued our analysis to look at the site access and internal circulation.

INTERNAL CIRCULATION

Looking first at the internal circulation and particularly at the impacts associated with the relocation of Via Ambiente and the deletion of the connection to Mt. Israel Road, we have identified no significant adverse impacts.

To evaluate the internal circulation we divided the site into four sub-areas: 1) those homes in the Paint Mountain area served primarily by Harmony Grove Road, 2) those homes in the central area of the project served by Via Ambiente. 3) the Planned Development area served directly by Del Dios Highway. 4) the homes and commercial center served by SA 680.

Of these four areas only Area 2, the core area, will be directly affected by the relocation of Via Ambiente and the deletion of the Mt. Israel connection. This area contains approximately 400 units which will generate 4,000 daily trips. Of these trips, 20 percent were projected to remain within the project and another 20 percent to be oriented to and from the neighborhood commercial. The 20 percent remaining within the neighborhood is higher than generally expected for a residential project. It, however, could be justified for this type of high income development, where a number of residents would be retired or would conduct their business from either their homes or by telex available from the Village Center. A significant number of their trips would therefore be social trips within the project.

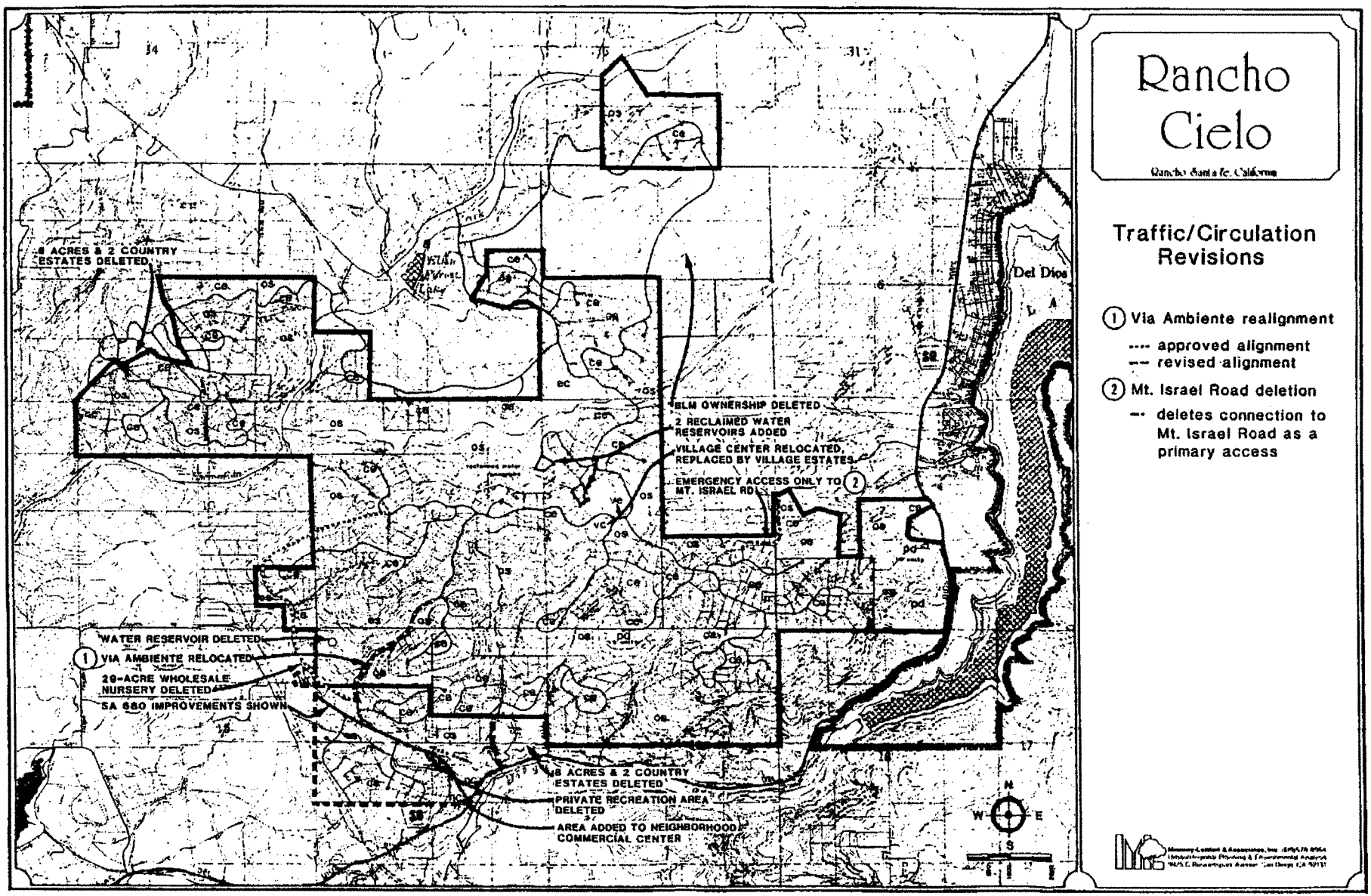
Using this 20 percent internal distribution the anticipated volume of traffic on Via Ambiente is, not expected to exceed 3,200 vehicles per day at the project entrance. This volume will actually be approximately 2,400 vehicles per day at the point it enters the Air Logistics property (TM 4229) with the remaining 800 trips coming from side streets near the project entrance. These volumes are fairly typical for residential areas and can be easily accommodated on the roadway system as proposed.

The relocation of Via Ambiente as shown on Exhibit 1 reduces the travel distances within the Rancho Cielo project significantly. The distance from the Village Center to SA 680 is reduced by approximately 0.9 miles. Since no major internal roads are being deleted from the plan the revised location of Via Ambiente will only have positive circulation impacts on the project.

The deletion of the Mt. Israel Road connection will increase the travel distance to Del Dios Highway from some areas. (an emergency access will be provided so there will be no impact on emergency services). This roadway modification will cause an increased travel distance to Del Dios Highway of two miles for residents at the easterly edge of Rancho Cielo. This, however, does not truly reflect the driving patterns of most people because it considers the travel distance to Del Dios Highway at two different points. Since most people (90 percent of external trips) will travel through the Del Dios Highway/SA 680 intersection, it is more appropriate to compare the travel distance to that point. The distance from the east edge of Rancho Cielo using the relocated Via Ambiente is 2.7 miles compared to 3.8 miles using Mt. Israel Road. We, therefore, conclude the deletion of this street connection will not create adverse impacts.

EXTERNAL TRIPS

The final area we have evaluated is the potential impacts resulting from a revised trip distribution pattern. The original report was prepared in March 1980 using Series 5 Regional Population forecasts. This was then revised in 1981 when SA 680 was included in the San Diego County Circulation Element. In mid 1983 SANDAG released its Series 6 population and transportation forecasts, which provides an additional source of information to forecast the trip distribution from this project. The three distributions are shown in the following table and the Series 6 distribution on Exhibit 2:


Rancho Cielo
Rancho Santa Fe, California
Traffic/Circulation Revisions
(1) Via Ambiente realignment
---- approved alignment
-- revised alignment
(2) Mt. Israel Road deletion
-- deletes connection to Mt. Israel Road as a primary access
8 ACRES & 2 COUNTRY ESTATES DELETED
BLM OWNERSHIP DELETED
2 RECLAIMED WATER RESERVOIRS ADDED
VILLAGE CENTER RELOCATED, REPLACED BY VILLAGE ESTATES
EMERGENCY ACCESS ONLY TO MT. ISRAEL RD (2)
WATER RESERVOIR DELETED
(1) VIA AMBIENTE RELOCATED
29-ACRE WHOLESALE NURSERY DELETED
SA 680 IMPROVEMENTS SHOWN
8 ACRES & 2 COUNTRY ESTATES DELETED
PRIVATE RECREATION AREA DELETED
AREA ADDED TO NEIGHBORHOOD COMMERCIAL CENTER
Del Dios
N
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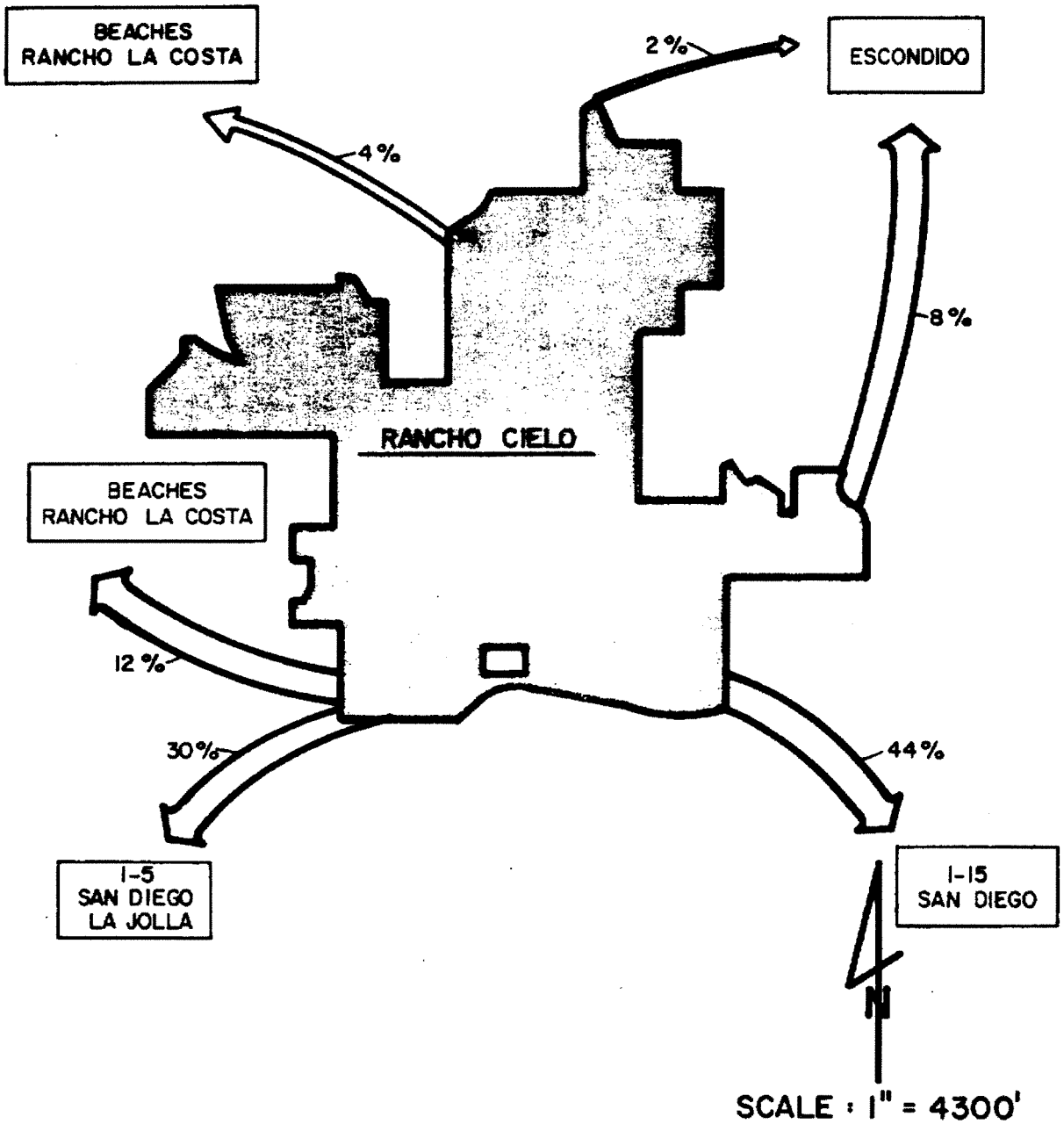


RANCHO CIELO TRIP DISTRIBUTION

EXHIBIT 2

WILLDAN ASSOCIATES

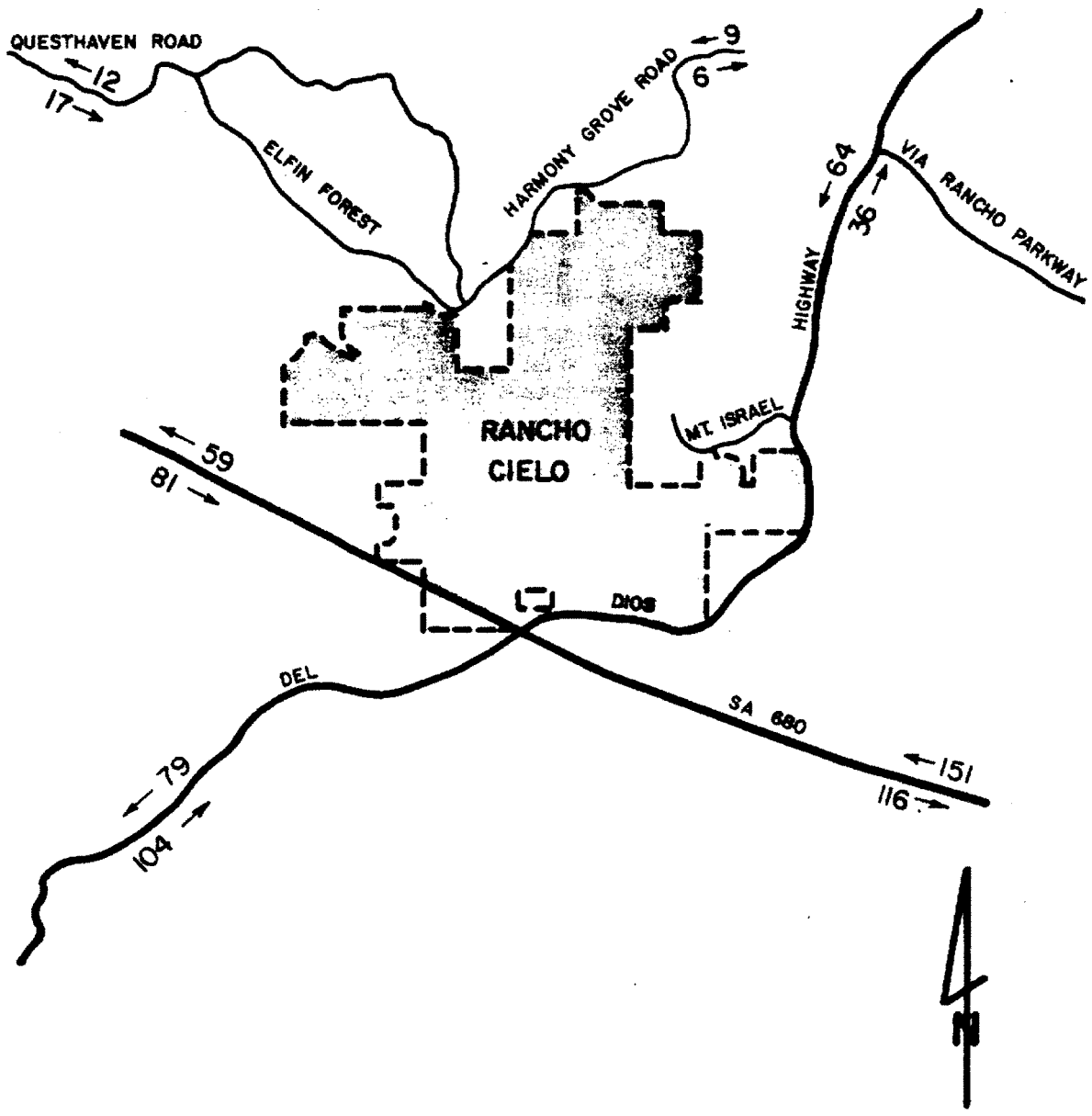
EXTERNAL TRIP DISTRIBUTION

Destination	Original	Update	Series 6
Escondido			
via Del Dios (north)	25%	25%	8%
via Harmony Grove	2%	2%	2%
N. County Coastal			
via Elfin Forest	8%	0	4%
via SA 680 (west)	0	8%	12%
San Diego			
via Del Dios (south)	25%	17%	30%
via SA 680 (east)	0	48%	44%
via Via Rancho Pkwy	40%	0	0

The main difference between the Series 6 information and the updated report is the shift in trips from Escondido to Del Dios Highway south and SA 680 west. This shift is understandable if we look at the land use changes, which have occured over the past two years. Most significant is the development of the Fairbanks Ranch - North City West area which are both upper income areas like the Rancho Cielo project, thus creating more interaction between them. The increase to the North County Coastal area can be accounted for by the increased office-industrial development in the vicinity of Palomar Airport.

In terms of actual roadway volumes the Series 6 redistribution reduces the volume on Del Dios Highway north of the site by 1,200 vehicles per day, but increases it to the south by 1,000 vehicles. The change on Del Dios to the south would increase the post development traffic volume from approximately 12,000 to 13,000 ADT, and the year 2,000 volumes from 20,000 to 21,000. These volumes, however, can be accommodated on a four lane Del Dios Highway at level of service C to D.

Using the Series 6 trip distribution the peak hour traffic was assigned to the street system as shown on Exhibit 3. For purposes of this analysis we have assumed each dwelling unit will generate 0.7 inbound and 0.3 outbound evening peak hour trips. These values are somewhat conservative since the expected residents of Rancho Cielo will not have a tendency to work from



SCALE : 1" = 4800'

P.M. PEAK HOUR TRIP ASSIGNMENT PROJECT ONLY

EXHIBIT 3

WILLDAN ASSOCIATES

8 AM to 5 PM which is the typical cause for the marked evening peak period. The future residents are expected to be either retired or in executive positions with less rigid hours. For the commercial center, we have assumed a ten percent evening peak hour evenly split between incoming and outgoing trips.

The level of service at the intersection of SA 680 with Del Dios Highway was then calculated using the methodology described in TRB circular No. 212 "Interim Materials on Highway Capacity" assuming a signalized intersection. Adding traffic from the completed Rancho Cielo specific plan to the existing traffic and conducting an ICU analysis as shown on Exhibit 4, yields a projected level of service A at this intersection. When the Rancho Cielo traffic is added to the year 2000 traffic volumes forecast as part of the EIR for the San Dieguito Circulation Element (San Diego County, 1981) the level of service drops to level C, which is the same or just above level of service forecast without Rancho Cielo. (forecast to be leve C to D).

CONCLUSIONS

The proposed modification to the land uses for the Rancho Cielo Specific Plan will not cause any adverse traffic related impacts. The elimination of the roadway connection to Mt. Israel Road will not present any internal congestion or capacity problems. It will add additional traffic to the SA 680/Del Dios Highway intersection, but will not significantly reduce its operating efficiency. It is, therefore, our professional opinion no additional mitigation measures will be necessary to adequately relieve the impacts from the development of this specific plan.

Sincerely,

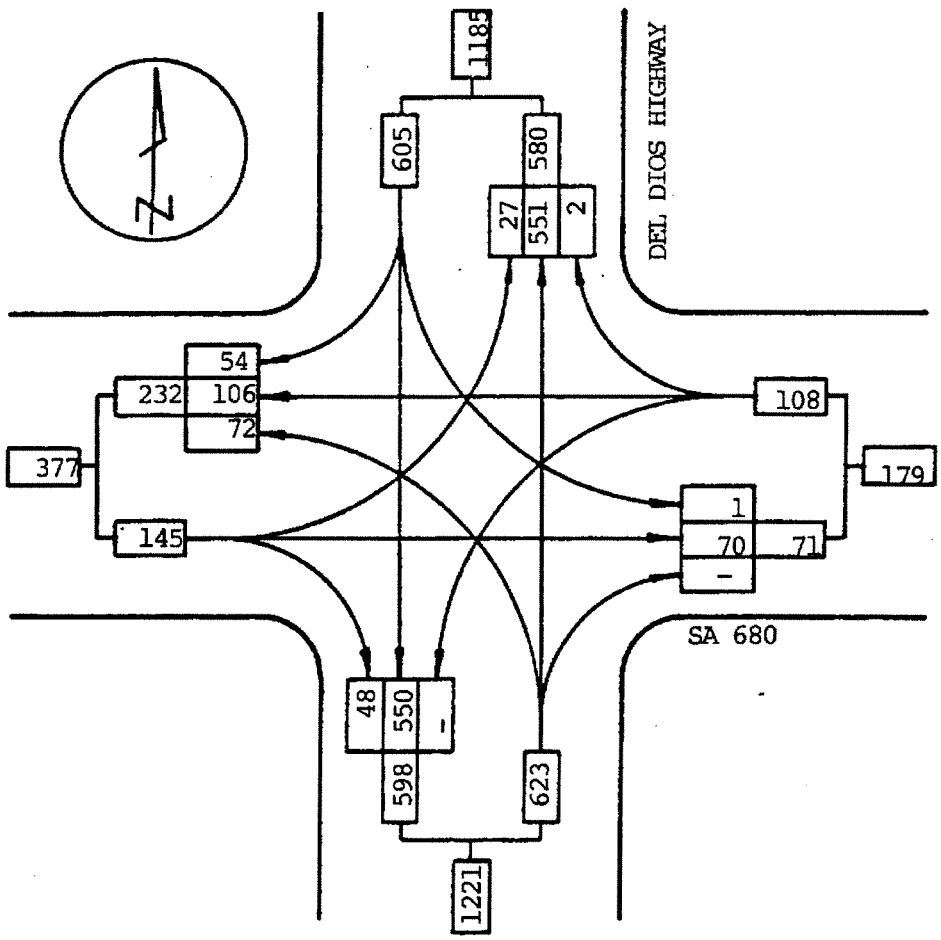
WILLDAN ASSOCIATES

Robert M. Sergeant

Robert M. Sergeant
Sr. Project Engineer
RCE 29685
TR 1115

RMS:mcd

JN 6486



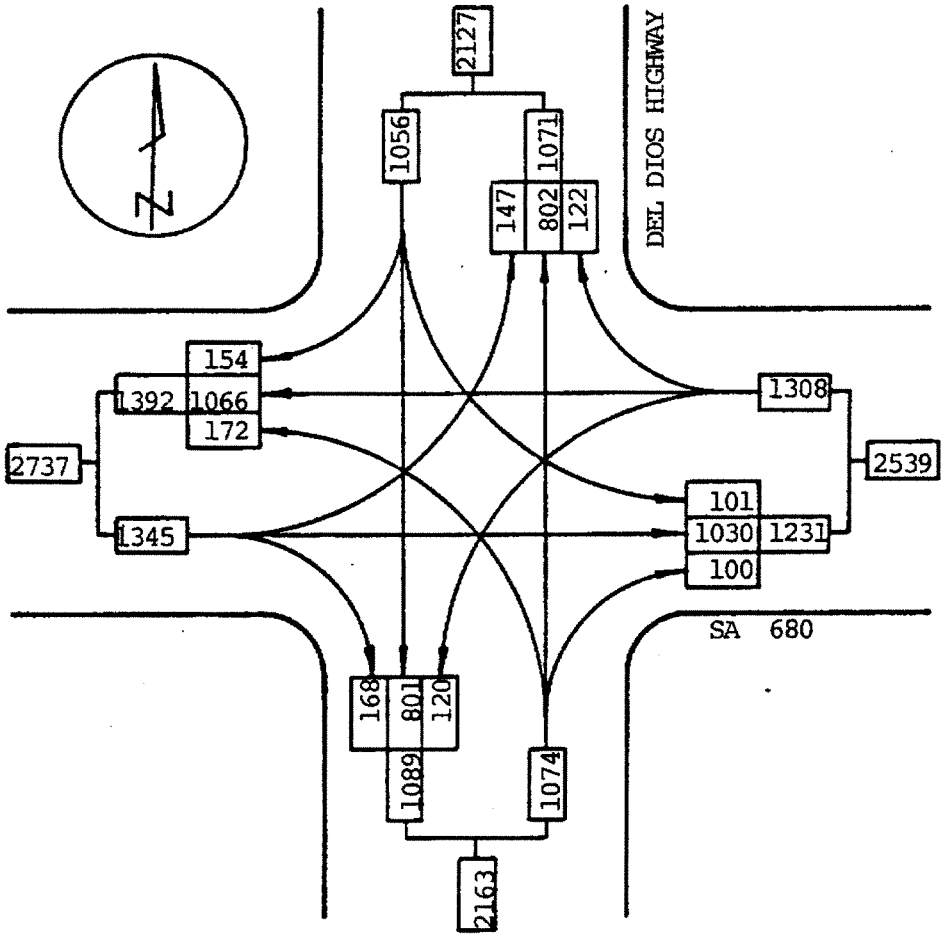
ICU ANALYSIS

$$\frac{72}{1} + \frac{106}{1} + \frac{550}{2} + \frac{72}{1} = 480 \quad \text{---} \quad \text{LOS A}$$

PM PEAK HOUR
EXISTING + PROJECT TRAFFIC

EXHIBIT 4

WILLDAN ASSOCIATES



ICU ANALYSIS

Assume 10% Left and Right Turns

$$\frac{147}{2} + \frac{1066}{2} + \frac{172}{2} + \frac{801}{2} = 1093 \quad \text{---} \quad \text{LOS C}$$

Source: Supplemental Draft EIR, San Dieguito Circulation Element GPA 81-01, County of San Diego 1981

PM PEAK HOUR
YEAR 2,000 + PROJECT

EXHIBIT 5

WILLDAN ASSOCIATES

APPENDIX C

BIOLOGY REPORT

BIOLOGICAL SURVEY REPORT OF THE STATUS OF THE CALIFORNIA BLACK-TAILED GNATCATCHER ON THE RANCHO CIELO DEVELOPMENT

Prepared for:

Mooney-Lettieri and Associates
9925-C Businesspark Avenue
San Diego, California 92131

Prepared by:

Wier Biological
4855 Ruffner St., Suite B
San Diego, California 92111

March 4, 1984

I. INTRODUCTION

This report addresses the potential biological impacts of the proposed revisions to the Rancho Cielo Specific Plan, including (1) the realignment of Via Ambiente, (2) the proposed construction of SA 680 and (3) two reclaimed water reservoirs. In addition to the proposed changes in the Specific Plan, concern for the impacts of development on a bird species, the Black-tailed Gnatcatcher (Polioptila melanura ssp. californica) is much greater now than at the time the original biological survey was conducted. Since the original survey did not fully address the status and significance of this sensitive bird species on the site, potential effects of the Rancho Cielo project is considered warranted and has been included here.

II. BIOLOGICAL RESOURCE EVALUATION

A. Vegetation Impacts

The vegetation impacts of the proposed changes are not considered significant. The additional loss of Chaparral and Inland Sage Scrub which would result from the construction of the proposed SA 680 and new segment of Via Ambiente, and the reclaimed water reservoirs would be minor. The additional open space included in the project serves to further reduce the potential vegetation impacts.

The new Specific Plan realigns Via Ambiente, with the major result being the deletion of a segment which ran east/west through the west central portion of the Specific Plan and the addition of a new segment in the southwestern portion. In terms of overall disturbance, the new alignment is similar to the old alignment because the two segments are essentially the same length and both pass through Chaparral. The location of the new segment along the bottom of a relatively large drainage would result in the loss of Chaparral which is more well developed than along the original alignment; however, this is not considered a significant increase in vegetation impact. Both the old and the new segments could impact a sensitive plant (Warty-stemmed Ceanothus). Potential impacts to this species are not considered significant because it is adequately preserved in open space within the Specific Plan.

The two reclaimed water reservoirs are located in drainages but would not impact any riparian vegetation. Approximately 3.6 acres of Chaparral would be eliminated by the two ponds. The only sensitive plant which could be impacted is Warty-stemmed Ceanothus and, as stated earlier, this species is adequately protected by the Specific Plan.

The construction of SA 680 will remove approximately 5.5 acres of Inland Sage Scrub and possibly impact a stand of Pygmy-club Moss; this plant species is common throughout San Diego County and any plants lost due to SA 680 would not be

significant. It should also be noted that the original Specific Plan proposed a road which closely paralleled the current alignment of SA 680 and would have resulted in vegetation impacts similar to SA 680.

B. Wildlife Corridor Impacts

The proposed realignment of Via Ambiente and the construction of SA 680 would substantially reduce the future use of a wildlife corridor which currently exists in the area of the proposed roads. The original biology report in 1980 concluded that four major wildlife movement corridors transect the Specific Plan area for Escondido Creek to the San Dieguito River.

The loss of the wildlife corridor from Via Ambiente and SA 680 is not considered a significant impact by virtue of the fact that other corridors through the property will remain in open space. Also, the original Specific Plan proposed a road parallel to SA 680 and a residential street which would have crossed the canyon through which the new alignment of Via Ambiente passes. Consequently, the original Specific Plan circulation system would have substantially diminished the value of this area as a wildlife corridor. Therefore, the proposed realignment of Via Ambiente and the construction of SA 680 would not create a significant impact.

C. Black-tailed Gnatcatcher Impacts

The following field survey was intended primarily to census the population and describe the distribution of habitat of Black-tailed Gnatcatcher on the property. The reconnaissance was conducted by Harold A. Wier and Eric N. Wier, biologists, according to the following schedule:

DATE	HOURS	PERSONNEL	CONDITIONS
12/6/83	0930-1130	HAW	Fair
12/8/83	0930-1530	HAW	Fair
12/22/83	0935-1600	HAW & ENW	Mostly cloudy, ca. 60-65°F, wind 10-15 mph.
12/23/83	0830-1600	HAW & ENW	Partly cloudy, ca. 60-70°F, wind 5-10 mph.
12/28/83	0830-1600	ENW	Mostly clear, ca. 55-70°F, no wind.
12/30/83	0840-1600	ENW	Clear, ca. 60-78°F, no wind.

The surveys were conducted primarily on-foot, with some travel to and from sites by vehicle. Coastal Sage Scrub habitat was identified from an aerial photograph of the site. Potentially suitable gnatcacher habitat was identified by visual inspection in the field. Most of these areas were directly surveyed for the gnatcatcher using tape recordings of the sub-species' vocalizations to elicit response. Many areas were only visited once. Observed birds were noted, and their locations plotted in the field on 1" = 200' or 1" = 2000' (USGS 7.5') scale topographic sheets. These locations were later transferred to 1" = 800' scale maps.

Black-tailed Gnatcatcher habitat was identified mostly on the basis of vegetation type (Coastal Sage Scrub) and whether birds were present in a given area. Some areas where birds were not detected are shown as "suitable habitat" on the map. These areas appeared to be suitable (using vegetation and slope criteria) but may not support Gnatcatchers.

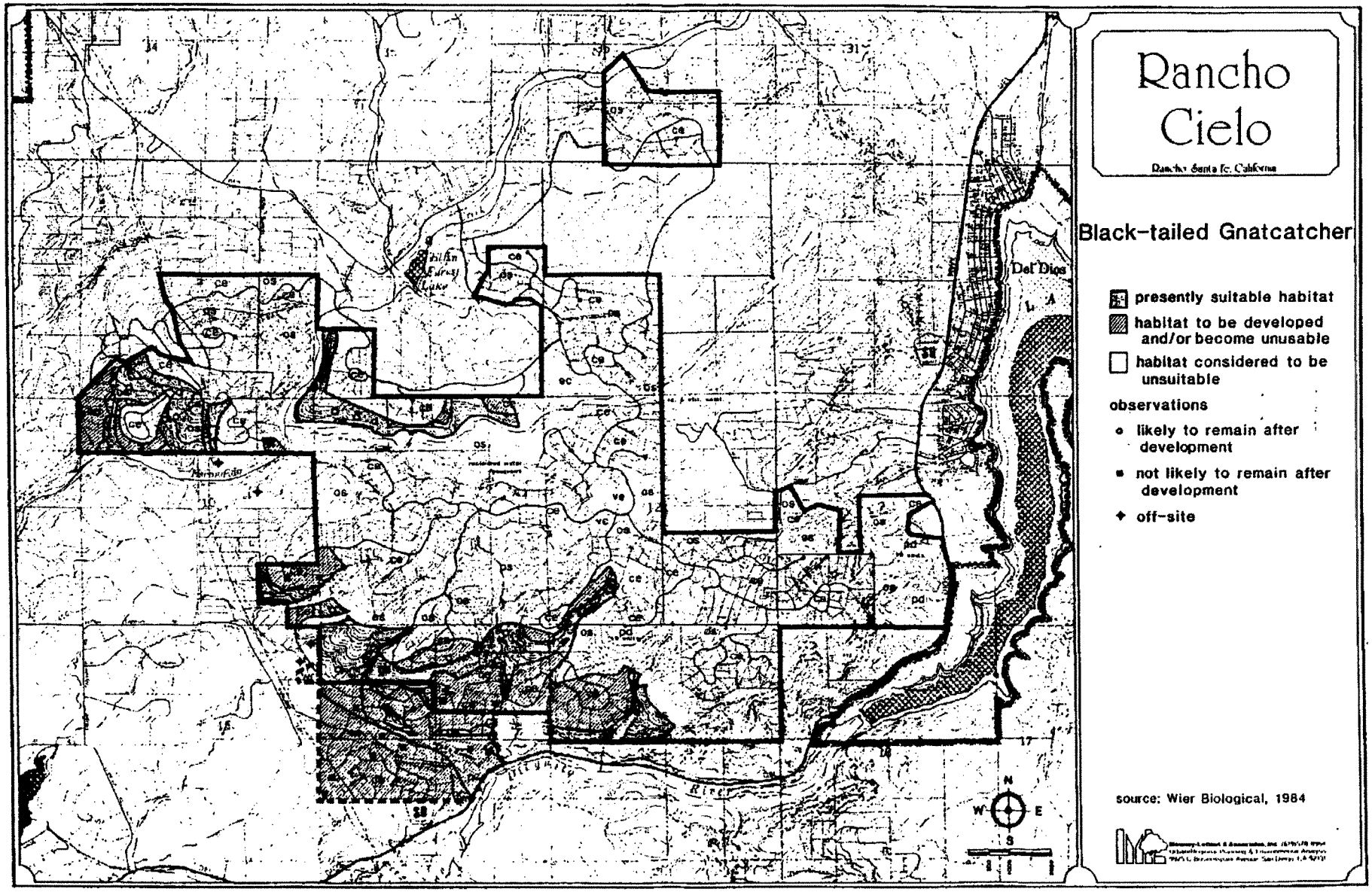
The "suitable habitat area" was overlain by the proposed development areas with a 100'-wide band adjacent to all development. It was assumed that this band would probably not be used by the birds due to its proximity to human activity. It may function as an effective buffer, however. The amounts of presently useful habitat, and habitat to be developed or made unusable by Black-tailed Gnatcatcher were then measured from the 1" = 800' scale map using a polar compensating planimeter.

1. Existing Conditions

The site contains approximately 1060 acres of Coastal Sage Scrub habitat (APEC 1980), of which 704.4 acres are considered suitable Black-tailed Gnatcatcher habitat. Within this amount of potential habitat, observed birds were distributed unevenly. Concentrations of birds appeared in the very southwest portion, in a primary north-south trending canyon, about the quarry area along the western boundary, and north of Escondido Creek in two locations (Figure 1). The observed distribution of birds is partly natural and partly a result of a brief survey.

In total, 36 separate observations of Black-tailed Gnatcatcher were made. This number probably represents about 36 breeding pair. Many of the observations were in fact of a pair of birds, male and female. It should be noted that many Gnatcatchers present were probably not detected during the survey, both in open space areas and areas to be developed. This is a result of the intensity and repetitiveness of the survey.

Portions of the site seem to be excellent habitat for Black-tailed Gnatcatcher. The site supports about 36 pair of birds on about 704 acres of "suitable habitat".


Rancho Cielo
Rancho Santa Fe, California
Black-tailed Gnatcatcher
presently suitable habitat
habitat to be developed and/or become unusable
habitat considered to be unsuitable
observations
likely to remain after development
not likely to remain after development
off-site
source: Wier Biological, 1984
Del Dios
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2. Impacts

Approximately 393.5 acres of presently suitable Black-tailed Gnatcatcher habitat is planned for development, and will probably become unusable due to proximity of human activity, or will be of such a small size as to become unuseable to the species, except as a buffer. This represents a 55.9% loss of habitat (393.5/704.4 x 100 = 55.9%).

Of the 36 observations, 18 occur in areas slated for development, or areas of such a size that a pair will probably not be supported on-site over the long term. This represents a 50% loss of birds observed. Some of these birds, however, may relocate into areas of suitable habitat off-site. This is a loss of about 1-2% of the California population of this animal (Atwood 1980).

The loss of 393.5 acres of Black-tailed Gnatcatcher habitat, and approximately 18 pair of birds is considered a significant adverse biological impact. By virtue of the project design, however, 310.9 acres of usable habitat will be preserved in open space. Had the area of the project been developed as separate ownerships, it is possible that less usable habitat would be preserved. Preservation of 44.1% of Black-tailed Gnatcatcher habitat on a development is probably high when taken in a historical perspective. Lower percentages are usually set aside in open space, and the open spaces are generally smaller.

Potential project impacts to Black-tailed Gnatcatcher are ameliorated by the project design.

3. Recommendations

In order to preserve as much habitat as possible, and to help insure the long term survival of the Black-tailed Gnatcatcher on-site, the following recommendations should be followed:

1. Discourage pets, especially cats, from entering the open space areas. Cats are efficient predators which can destroy a family of birds, or drive them from the site. Other pets, horses and children contribute to habitat deterioration as well.

2. Do not allow off-road vehicles to use the open space areas, especially the areas identified as Gnatcatcher habitat.

3. Limit brushing of native vegetation to areas outside of the open space easements. Allow brushing of native vegetation where necessary only during the months of September through December. This timing will mean lowest interference with Gnatcatcher breeding activity.

III. LITERATURE CITED

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APPENDIX D

SOILS AND GEOLOGY REPORT

LEIGHTON and ASSOCIATES
INCORPORATED
SOIL ENGINEERING TESTING GEOLOGY GROUNDWATER STUDIES

October 27, 1983

Project No. 4820308-02

TO: Mooney-Lettieri and Associates, Inc.
9925-C Businesspark Avenue
San Diego, California 92131

ATTENTION: Mr. Tony Lettieri

SUBJECT: Preliminary Investigation of Geotechnical Constraints Along Proposed Road Alignments, Proposed Rancho Cielo, San Diego County, California

In accordance with your request, we have completed our preliminary evaluation of the geotechnical constraints along the proposed roadway alignments of the subject development. The accompanying report presents the results of our geologic mapping, subsurface exploration, geotechnical analysis and pertinent recommendations.

We appreciate your continued confidence in Leighton and Associates. Should you have any questions regarding the enclosed report, we will be happy to discuss them with you at your convenience.

Respectfully submitted,

Gene Custenborder
Project Geologist

Avram Ninyo, RCE 29538
Manager/Chief Geotechnical Engineer

Ernest R. Artim, CEG 1084
Chief Engineering Geologist

GC/AN/EA/vs

Distribution: (4) Addressee
(1) Ladera Associates
Attention: Mr. Bob Walters

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ACCOMPANYING ILLUSTRATIONS AND APPENDICES

Figure 1 - Site Location Map — Rear of Text

Appendices

Appendix A - References
Appendix B - Seismic Survey and Rippability Characteristics
Appendix C - General Earthwork and Grading Specifications

1.0 INTRODUCTION AND SCOPE OF INVESTIGATION

The purpose of this report is to present the results of our geotechnical evaluations and to provide preliminary design recommendations for the proposed road alignments in Rancho Cielo. The road alignments in Rancho Cielo were designed by Ladera Associates, and indicated on the 100-scale plans. Our review of the plans indicate that cut slopes to a maximum height of approximately 90 feet, and fill slopes to a maximum height of approximately 125 feet are proposed.

In order to provide preliminary design information, geologists from our firm performed field mapping and a subsurface investigation utilizing seismic refraction techniques. In addition, existing cut slopes in the immediate vicinity of the proposed development were inspected, and the references listed in Appendix A were reviewed.

2.0 SITE GEOLOGY

Our field mapping and a review of existing literature indicates that the site is underlain by two major bedrock types. The bedrock units are described below:

- Santiago Peak Volcanics - The Jurassic Santiago Peak Volcanics are mildly metamorphosed volcanic and volcaniclastic rocks of variable composition and color. The rocks are very dense and resistant to weathering and erosion. As exposed in on-site outcrops, the Sanitago Peak Volcanics are highly jointed and fractured. In general, joint spacing ranges from several inches to several feet.

  The rock is mantled with a relatively thin veneer of topsoil derived in-situ from the weathering of the bedrock. The topsoil consists of sandy to clayey silt with angular gravels and rock fragments, and appears to range from zero to several feet thick.

- Granodiorite - The granodiorite unit is part of the plutonic complex of the Cretaceous southern California batholith. Surficial exposures of the granodiorite bedrock are characterized by large, massive, smooth-faced boulders. Exposures along existing road cuts indicate that the granodiorite weathers deeply to a thick uniformly decomposed rock or D.G. Occasional boulders of disintegration (core stones) are scattered within the decomposed rock. The granodiorite is less severely jointed than the metavolcanic rocks.

  In addition to the two bedrock units, surficial units consisting of alluvial and colluvial deposits occupy the stream and drainage course channels and lower flatter slopes. These deposits are derived from weathering of the bedrock units, and appear to be relatively thin and limited in lateral extent.

3.0 SUBSURFACE EXPLORATION

Our subsurface exploration to date consists of a total of 18 seismic refraction traverses (9 normal and 9 reverse) performed in selected areas of proposed cut grading utilizing a "Bison Model 1570C Signal Enchancement Seismograph". A summary of the reduced data obtained from our seismic refraction survey, and a more detailed explanation of the seismic refraction technique are presented in Appendix B.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The results of our investigation indicate that the subsurface conditions are generally favorable. The proposed construction is feasible from a geotechnical standpoint provided the following recommendations are incorporated into the design and construction.

4.1 Earthwork

Grading and Earthwork should be performed in accordance with the following recommendations and the General Grading and Earthwork Specifications included in Appendix C.

4.1.1 Site Preparation

Prior to grading, the site should be cleared of surface and subsurface obstructions, including any existing debris, and stripped of vegetation. Removed vegetation and debris should be disposed of off-site or used in landscape areas. Holes resulting from removal of buried obstructions which extend below the finished site grades should be replaced with suitable fill material.

4.1.2 Rippability

In general, seismic traverse data obtained indicate that 2 to 10 feet of weathered bedrock and soil with velocities of approximately 500 to 1600 fps overlie irregular granitic and metavolcanic bedrock with velocities of 2175 to 6500 fps. However, based on the scatter of points obtained and actual bedrock outcrops, the weathered bedrock/bedrock surface appears to be irregular with many weathered zones between occasional resistant unweathered bedrock.

Based on tables of seismic velocity versus rippability (Caterpillar, 1980 and Church, 1981) and our geologic field examination of actual bedrock outcrops, the weathered bedrock is considered easily rippable, but bedrock will probably be moderate to very difficult to rip, and locally may require blasting.

Numerous boulders of resistant bedrock cover the site ranging in size from under 1 foot to 10 feet in diameter. Based on previous experience, numerous boulders of equal or greater dimensions could be exposed during excavation nested within the weathered bedrock. In addition, oversize material will be generated within the bedrock during grading.

4.1.3 Oversize Material

The previously mentioned oversize material, especially the granitic materials, may require blasting to reduce them to a size for use in compacted fills. Oversize materials may be used in roadway fills. However, the oversize materials should be placed in windrows to avoid nesting of the rocks, and granular material should be flooded around the oversize material to fill any voids. No oversize materials should be placed within the upper 2 feet below finished grade or in areas which will require excavation for utilities.

4.1.4 Fills

The on-site soils are generally suitable for use as compacted fill provided they are free of organic material and debris. All areas to receive fill should be scarified to a minimum depth of 6 inches, brought to near-optimum moisture conditions and recompacted to at least 90 percent relative compaction (based on ASTM D1557-82). Import soils should be predominantly granular, nonexpansive and approved by the geotechnical engineer.

All fill soils should be brought to near-optimum moisture conditions and compacted in uniform lifts to at least 90 percent relative compaction based upon laboratory standard ASTM D1557-82. The optimum lift thickness required to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in loose lift thickness not exceeding 8 inches.

Fills placed on natural slopes steeper than 5 to 1 (horizontal to vertical) should be keyed and benched into firm natural ground (see Appendix C for detail). Placement and compaction of fill should be performed in general accordance with local grading ordinances, sound construction practice, and the General Earthwork and Grading Specifications presented in Appendix C.

4.2 Slope Stability

4.2.1 Cut Slope Stability

In general, it appears that cut slopes will have an adequate factor of safety against deep-seated failure to the anticipated heights when constructed at a gradient of 1½:1 (horizontal to vertical) or flatter. All cut slopes should be mapped by an engineering geologist during grading for adverse geologic conditions. If adverse geologic conditions are encountered, mitigation measures can be recommended at that time.

4.2.2 Fill Slope Stability

It is our opinion that the fill slopes will have an adequate factor of safety against deep-seated failure to the proposed heights when constructed at a gradient of 2:1 (horizontal to vertical) or flatter when constructed in accordance with the recommendations contained in this report.

4.2.3 Slope Drainage

In order to minimize rilling, sheetwash and sloughing on slope faces, we recommend the use of brow ditches at the top of cut slopes and berms at the top of fill slopes. Surface water should be controlled and drainage facilities maintained so that no water is permitted to flow over the tops of the slopes.

4.3 Drainage Course Crossings

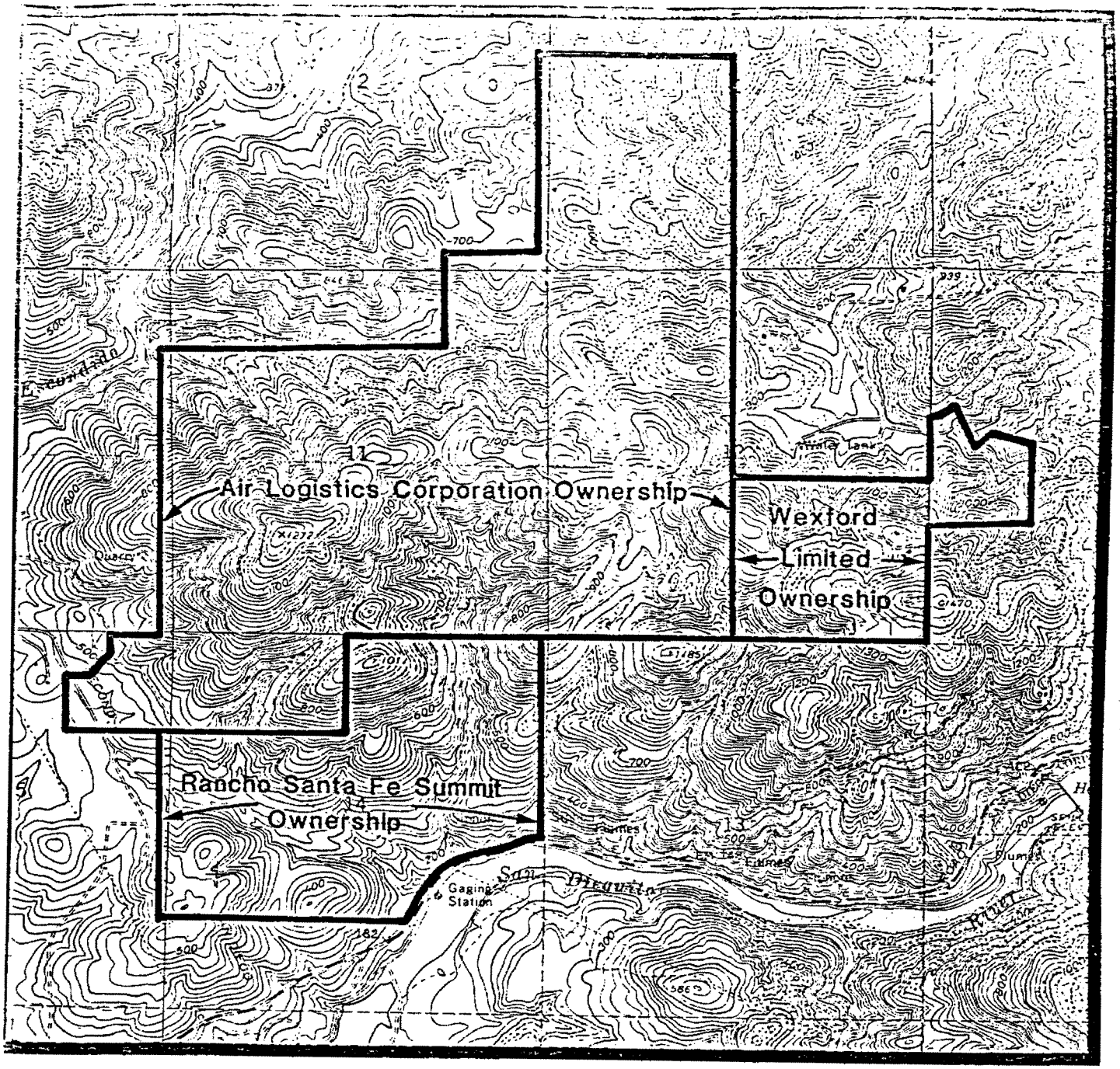
We recommend that site-specific geotechnical studies be performed in areas where the proposed roads will cross major drainage courses. The investigations will provide data including depth of alluvium, depth to bedrock, and parameters for design of bridges and/or culverts.

4.4 Additional Seismic Investigations

We recommend additional subsurface investigations utilizing seismic refraction techniques prior to grading to more fully evaluate rippability and so that more competitive earthwork bids may be obtained.

4.5 Construction Inspection

The recommendations provided in this report are based on preliminary design information for the proposed facilities, and subsurface conditions disclosed by seismic refraction techniques. The interpolated subsurface conditions should be checked in the field during construction. All foundation excavations and grading operations should be observed by a representative of this firm so that construction is performed in accordance with the recommendations of this report. In addition, final project drawings should be reviewed by this office prior to construction.



BASE MAP: USGS RANCHO SANTA FE
7.5 MIN. QUADRANGLE

N

2000 4000
scale feet

PROPOSED RANCHO CIELO

San Diego County, California

FIGURE 1

SITE LOCATION MAP

Project No. 4820308-02

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APPENDIX A

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APPENDIX A

REFERENCES

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2. Bison Instruments, Inc., 1976, Signal Enhancement Seismograph - Model 1570C - Instruction Manual.

3. ———, 1971, Signal Enhancement Seismograph - Model 1570B - Instruction Manual.

4. Caterpillar Tractor Company, 1980, Caterpillar Performance Handbook.

5. Church, Horace K., 1981, "Excavation handbook", McGraw-Hill Book Company.

6. Cummings, David, 1979, "Determination of depths to an irregular interface in shallow seismic refraction surveys using a pocket calculator", Geophysics, v. 44, p. 1987.

7. Leighton and Associates, Inc., 1978, "Geotechnical feasibility study, 160-acre parcel, Mt. Israel Road, Southwest of Escondido, California", dated November 20, 1978.

APPENDIX B

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APPENDIX B

SEISMIC SURVEY AND RIPPABILITY CHARACTERISTICS

The intent of the seismic refraction survey was specifically to facilitate the project planning by evaluating the variation in seismic velocity of the underlying materials and to evaluate a reasonable approximation of the depth from the surface to the boundaries between rippable, marginally rippable, and nonrippable rock.

The refraction seismograph traverses were extended using a Bison Instruments Signal Enhancement Seismograph Model 1570C. The traverses were located in areas where deep cuts might be anticipated. The results of each seismic traverse are included in this Appendix.

The seismograph's depth of investigation is closely related to the length of the seismic traverse. For a particular length of traverse, e.g., 100 feet, using a ratio of 3:1 between length and depth, the length of survey line will detect the boundaries between materials of varying density and compressional wave velocity to a depth of approximately 33 feet. The maximum length of traverse in our survey was 100 feet.

Rippability Charts

Due to the presence of granitic and metavolcanic soil-rock units, we are including three rippability charts which apply to the site conditions. Two of the charts have been developed by the Caterpillar Tractor Company for use with the D-9 and D-8 Caterpillar Tractor with No. 9 Series D Ripper and No. 8 Series Ripper, respectively ("Handbook of Ripping", Caterpillar Tractor Company, Fourth Edition, April, 1972). The third chart is a modification of charts by the Caterpillar Company and an article in "Roads and Streets", September, 1967, which we feel approximately defines rippability with the D-9 using a conventional #9 Single Shank Ripper. These charts are as follows:

1) D9G Cat - No. 9 Series D Ripper	Compressional Wave Velocity
Rippable	0 - 7000 fps
Marginally Rippable	7000 - 8000 fps
Nonrippable	8100+ fps

2) D8H Cat - No. 8 Series D Ripper	Compressional Wave Velocity
Rippable	0 - 5800 fps
Marginally Rippable	5800 - 6800 fps
Nonrippable	6800+ fps

3) *D9 Cat - No. 9 Single Shank Ripper	Compressional Wave Velocity
Rippable	0 - 4500 fps
Marginally Rippable	4500 - 5500 fps
Nonrippable	5500+ fps

*This chart has been utilized in this report for defining rippability characteristics of the subject site.

Seismic Traverse Limitations

The results of the seismic survey for this investigation reflect rippability conditions only for the areas of the traverses. However, the conditions of the various soil-rock units appear to be similar for the remainder of the site and may be assumed to possess similar characteristics.

The seismic refraction method requires that materials become increasingly dense with depth. In areas where denser, higher velocity materials are underlain by lower velocity materials, the low velocity materials would not be indicated by our survey.

All of the velocities used as upper limits from Rippability Chart No. 3 are subject to fluctuation depending upon such local variations in rock conditions as:

- Fractures, faults and planes of weakness of any kind.
- Weathering and degree of decomposition.
- Brittleness and crystalline nature.
- Grain size.

Further, the range of rippability using Caterpillar equipment may be increased using the equipment listed in Charts I and 2. However, it should be noted that ripping of higher velocity materials may become totally dependent on the time available and the economics of the project. Ripping of higher velocity materials can be achieved but it may not be economically feasible.

SEISMIC REFRACTION SUMMARY

Seismic Traverse No.	Compressional Wave Velocity in Feet Per Second	Depth of Velocity Horizon in Feet
S-1 forward	V_1=700 V_2=2500	0-2' 2'+
S-1 reverse	V_1=1090 V_2=5660	0-20' 20'+
S-2 forward	V_1=620 V_2=2175	0-2' 2'+
S-2 reverse	V_1=525 V_2=3600	0-2' 2'+
S-3 forward	V_1=600 V_2=2750	0-2' 2'+
S-3 reverse	V_1=450 V_2=4250	0-2' 2'+
S-4 forward	V_1=650 V_2=3600	0-4' 4'+
S-4 reverse	V_1=750 V_2=3800	0-4' 4'+
S-5 forward	V_1=1400 V_2=6500	0-8' 8'+
S-5 reverse	V_1=1600 V_2=6500	0-8' 8'+
S-6 forward	V_1=700 V_2=2750	0-4' 4'+
S-6 reverse	V_1=880 V_2=3000	0-4' 4'+
S-7 forward	V_1=1000 V_2=4000	0-2' 2'+
S-7 reverse	V_1=1000 V_2=4200	0-2' 2'+
S-8 forward	V_1=850 V_2=5200	0-9' 9'+
S-8 reverse	V_1=500 V_2=4300	0-4' 4'+
S-9 forward	V_1=800 V_2=1960	0-10' 10'+
S-9 reverse	V_1=660 V_2=1710	0-3' 3'+

APPENDIX C

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APPENDIX C

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

1.0 General Intent

These specifications present general procedures and requirements for grading and earthwork as shown on the approved grading plans, including preparation of areas to be filled, placement of fill, installation of subdrains, and excavations. The recommendations contained in the geotechnical report are a part of the earthwork and grading specifications and shall supersede the provisions contained hereinafter in the case of conflict. Evaluations performed by the consultant during the course of grading may result in new recommendations which could supersede these specifications or the recommendations of the geotechnical report.

2.0 Earthwork Observation and Testing

Prior to the commencement of grading, a qualified geotechnical consultant (soils engineer and engineering geologist, and their representatives) shall be employed for the purpose of observing earthwork procedures and testing the fills for conformance with the recommendations of the geotechnical report and these specifications. It will be necessary that the consultant provide adequate testing and observation so that he may determine that the work was accomplished as specified. It shall be the responsibility of the contractor to assist the consultant and keep him apprised of work schedules and changes so that he may schedule his personnel accordingly.

It shall be the sole responsibility of the contractor to provide adequate equipment and methods to accomplish the work in accordance with applicable grading codes or agency ordinances, these specifications and the approved grading plans. If, in the opinion of the consultant, unsatisfactory conditions, such as questionable soil, poor moisture condition, inadequate compaction, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the consultant will be empowered to reject the work and recommend that construction be stopped until the conditions are rectified.

Maximum dry density tests used to determine the degree of compaction will be performed in accordance with the American Society for Testing and Materials test method ASTM D1557-78.

3.0 Preparation of Areas to be Filled

3.1 Clearing and Grubbing: All brush, vegetation and debris shall be removed or piled and otherwise disposed of.

3.2 Processing: The existing ground which is determined to be satisfactory for support of fill shall be scarified to a minimum depth of 6 inches. Existing ground which is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until the soils are broken down and free of large clay lumps or clods and until the working surface is reasonably uniform and free of uneven features which would inhibit uniform compaction.

3.3 Overexcavation: Soft, dry, spongy, highly fractured or otherwise unsuitable ground, extending to such a depth that surface processing cannot be adequately improve the condition, shall be overexcavated down to firm ground, approved by the consultant.

3.4 Moisture Conditioning: Overexcavated and processed soils shall be watered, dried-back, blended, and/or mixed, as required to attain a uniform moisture content near optimum.

3.5 Recompaction: Overexcavated and processed soils which have been properly mixed and moisture-conditioned shall be recompacted to a minimum relative compaction of 90 percent.

3.6 Benching: Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. The lowest bench shall be a minimum of 15 feet wide, shall be at least 2 feet deep, shall expose firm material, and shall be approved by the consultant. Other benches shall be excavated in firm material for a minimum width of 4 feet. Ground sloping flatter than 5:1 shall be benched or otherwise overexcavated when considered necessary by the consultant.

3.7 Approval: All areas to receive fill, including processed areas, removal areas and toe-of-fill benches shall be approved by the consultant prior to fill placement.

4.0 Fill Material

4.1 General: Material to be placed as fill shall be free of organic matter and other deleterious substances, and shall be approved by the consultant. Soils of poor gradation, expansion, or strength characteristics shall be placed in areas designated by the consultant or shall be mixed with other soils to serve as satisfactory fill material.

4.2 Oversize: Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches, shall not be buried or placed in fills, unless the location, materials, and disposal methods are specifically approved by the consultant. Oversize disposal operations shall be such that nesting of oversize material does not occur, and such that the oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 feet vertically of finish grade or within the range of future utilities or underground construction, unless specifically approved by the consultant.

4.3 Import: If importing of fill material is required for grading, the import material shall meet the requirements of Section 4.1.

5.0 Fill Placement and Compaction

5.1 Fill Lifts: Approved fill material shall be placed in areas prepared to receive fill in near-horizontal layers not exceeding 6 inches in compacted thickness. The consultant may approve thicker lifts if testing indicates the grading procedures are such that adequate compaction is being achieved with lifts of greater thickness. Each layer shall be spread evenly and shall be thoroughly mixed during spreading to attain uniformity of material and moisture in each layer.

5.2 Fill Moisture: Fill layers at a moisture content less than optimum shall be watered and mixed, and wet fill layers shall be aerated by scarification or shall be blended with drier material. Moisture-conditioning and mixing of fill layers shall continue until the fill material is at a uniform moisture content at or near optimum.

5.3 Compaction of Fill: After each layer has been evenly spread, moisture-conditioned, and mixed, it shall be uniformly compacted to not less than 90 percent of maximum dry density. Compaction equipment shall be adequately sized and shall be either specifically designed for soil compaction or of proven reliability, to efficiently achieve the specified degree of compaction.

5.4 Fill Slopes: Compacting of slopes shall be accomplished, in addition to normal compacting procedures, by backrolling of slopes with sheepsfoot rollers at frequent increments of 2 to 3 feet in fill elevation gain, or by other methods producing satisfactory results. At the completion of grading, the relative compaction of the slope out to the slope face shall be at least 90 percent.

5.5 Compaction Testing: Field tests to check the fill moisture and degree of compaction will be performed by the consultant. The location and frequency of tests shall be at the consultant's discretion. In general, the tests will be taken at an interval not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of embankment.

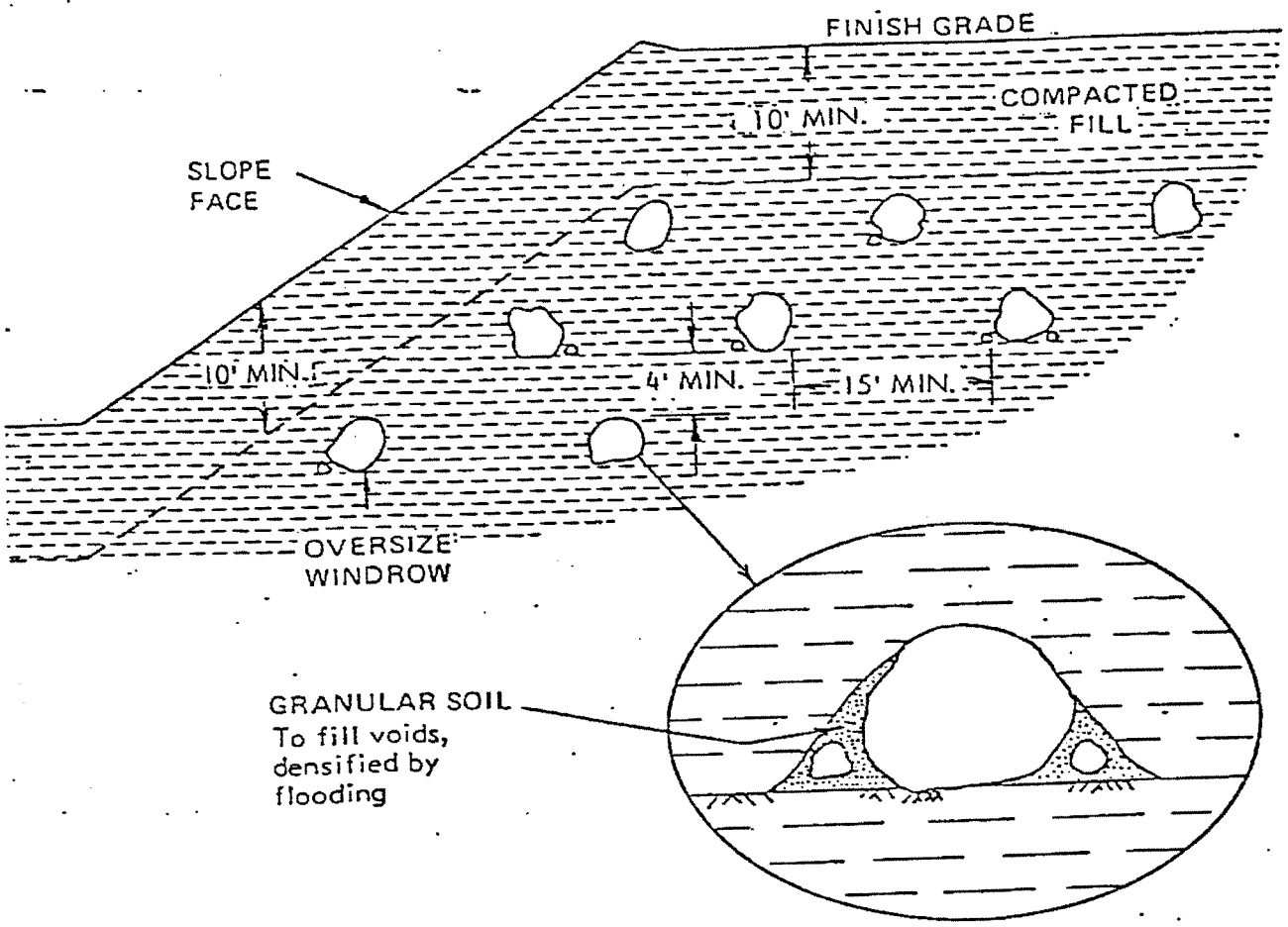
6.0 Subdrain Installation

Subdrain systems, if required, shall be installed in approved ground to conform to the approximate alignment and details shown on the plans or herein. The subdrain location or materials shall not be changed or modified without the approval of the consultant. The consultant, however, may recommend and upon approval, direct changes in subdrain line, grade or material. All subdrains should be surveyed for line and grade after installation and sufficient time shall be allowed for the surveys, prior to commencement of filling over the subdrains.

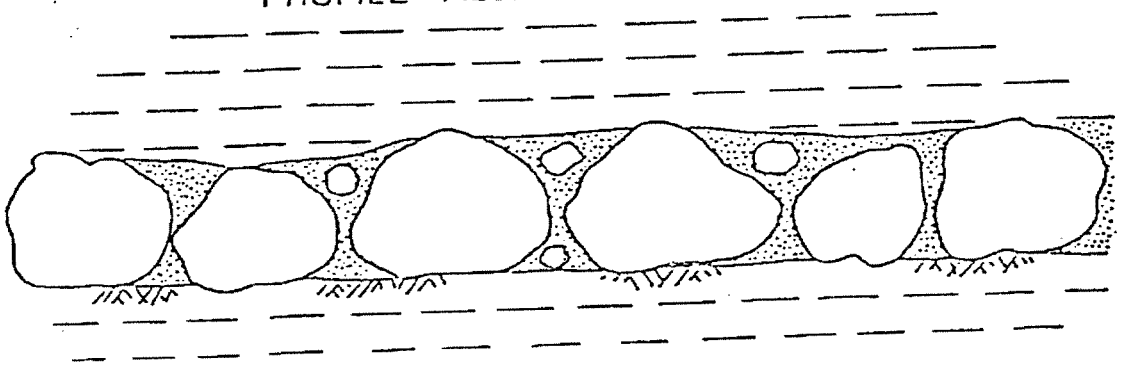
7.0 Excavation

Excavations and cut slopes will be examined during grading. If directed by the consultant, further excavation or overexcavation and refilling of cut areas shall be performed, and/or remedial grading of cut slopes shall be performed. Where fill-over-cut slopes are to be graded, unless otherwise approved, the cut portion of the slope shall be made and approved by the consultant prior to placement of materials for construction of the fill portion of the slope.

ROCK DISPOSAL DETAIL

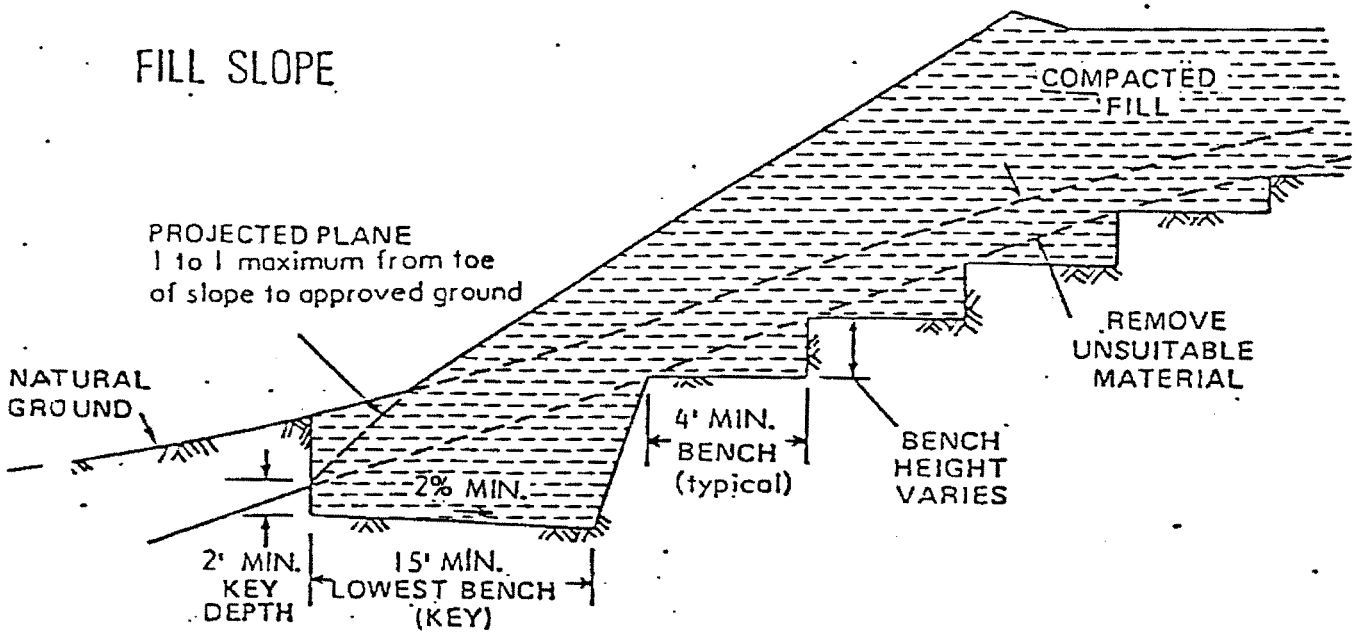


PROFILE ALONG WINDROW

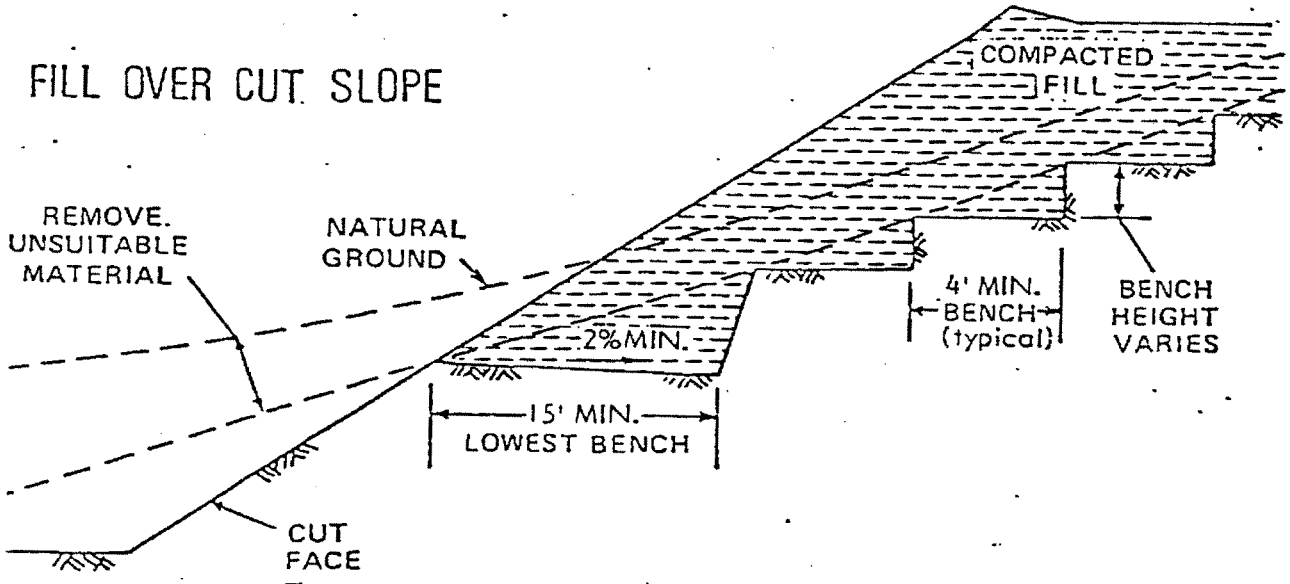


BENCHING DETAILS

FILL SLOPE



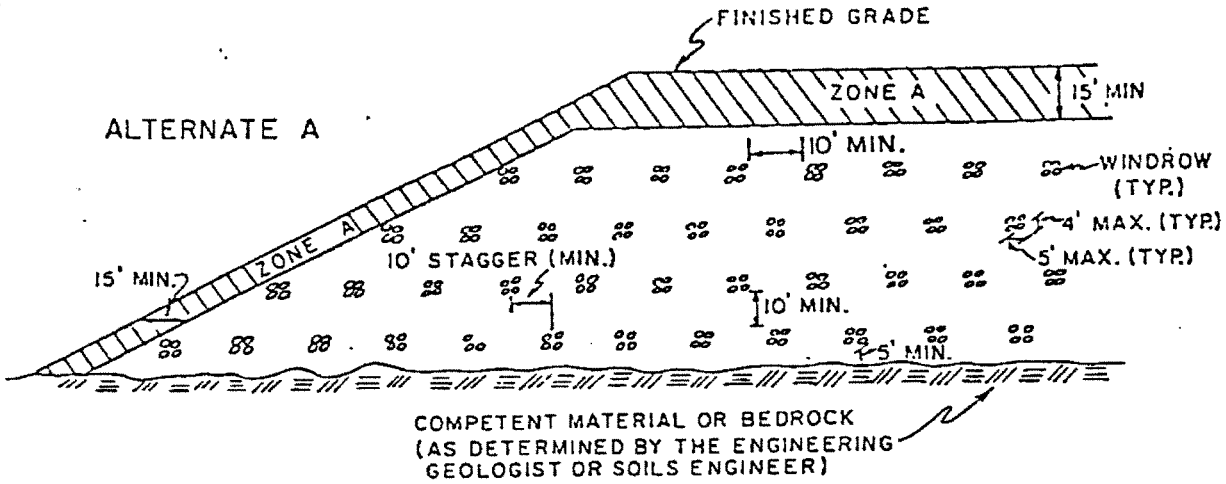
FILL OVER CUT SLOPE

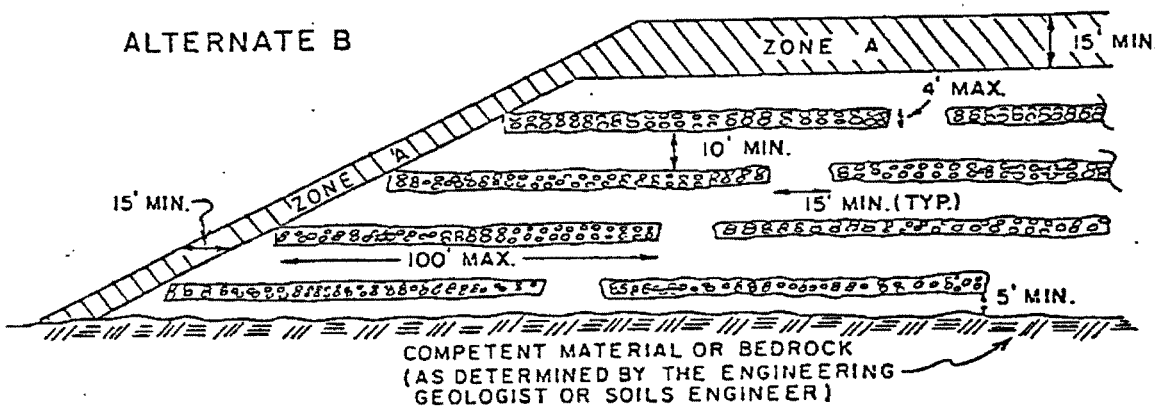


NOTES:

LOWEST BENCH: Depth and width subject to field change based on consultant's inspection.

SUBDRAINAGE:. Back drains may be required at the discretion of the geotechnical consultant.

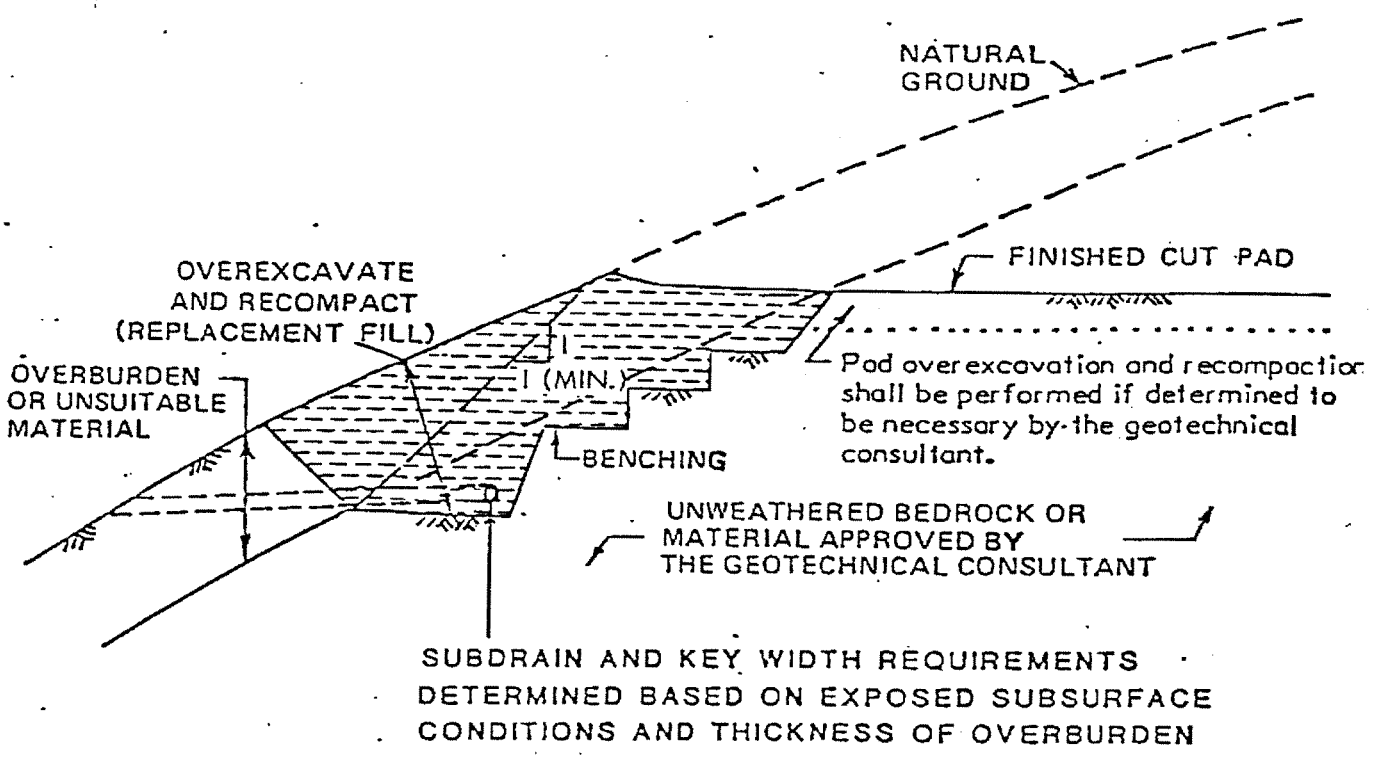




NOTES

1. ALL FILL MUST BE APPROVED BY THE SOILS ENGINEER AND SHOULD BE COMPACTED TO AT LEAST 90% RELATIVE COMPACTION (ASTM D 1557-70).
2. ZONE A SHOULD CONSIST OF COMPACTED SOIL FILL ONLY (NO ROCK FRAGMENTS OVER 6 INCHES IN MAXIMUM DIMENSION).
3. ZONE A SHOULD HAVE A MINIMUM THICKNESS OF 15 FEET (AS SHOWN), BUT MUST EXTEND 3 FEET BELOW THE DEEPEST UTILITY.
4. EXCESSIVE OVERSIZE ROCK CAN BE WINDROWED IN AREAS AS SHOWN IN ALTERNATES A OR B. SELECTION OF ALTERNATES A OR B CAN BE MADE BY THE EARTHWORK CONTRACTOR, DEPENDING ON THE SITE GEOMETRY.
5. MAXIMUM SIZE AND SPACING OF WINDROWS SHOULD BE IN ACCORDANCE WITH THE ABOVE FIGURES (ALTERNATES A AND B).
6. WINDROWS SHOULD BE PLACED IN EXCAVATED TRENCHES. APPROVED GRANULAR SOIL (SE>30) SHOULD BE FLOODED IN THE WINDROW TO FILL VOIDS AROUND AND BENEATH ROCKS. NO ROCK FRAGMENTS OVER 3 FEET IN MAXIMUM DIMENSION SHOULD BE USED IN WINDROWS.
7. ROCK PLACEMENT, FLOODING OF APPROVED GRANULAR FILL, AND FILL PLACEMENT SHOULD BE CONTINUOUSLY INSPECTED BY THE GEOTECHNICAL ENGINEER.

SIDE HILL
CUT PAD DETAIL



Attachment M
Rancho Cielo Design Guideline
Consistency Confirmation

5256 Mission Road, Suite 306
Bonsall, CA 92003
760.724.1198

February 15, 2013

County of San Diego
Planning Department

Re: Cielo Parcel H and Village Center

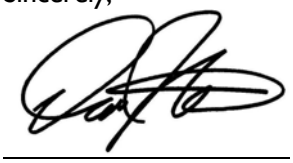
Dear County Planners,

SummA Architecture has been retained to assist in the internal design review process for Rancho Cielo Estates (RCE) as it relates to the proposed project of Taylor Morrison designed by Robert Hidey Architects.

The scope of our service is to review the floor plans and elevations for architectural integrity and consistency with the Cielo, Rancho Santa Fe Design Guidelines dated June 27, 2001 and the Site Improvements Design guidelines dated November 2001. The review process has included client presentations, conference calls and 3D digital imagery reviews of the submittals. We have received several versions of the design through the process and have made comments with recommendations for appropriate revisions where necessary.

Our recommendation to RCE is that the current proposed project design conforms to the community design guidelines. The proposed design is complimentary to the existing development of the master planned community of Rancho Cielo and shall continue to enhance the neighborhood aesthetics.

Sincerely,



Damian Taitano, Architect
SummA Architecture DE, Inc.
CA License # C30358

Focused
Visual Impact Analysis
Rancho Cielo Project

3813-05-004 (SPA), 3100-5440 (TM), 3600-05-010 (R), 3500-05-043 (STP),
3100-5441 (TM), 3600-05-011 (R), 3500-05-044 (STP), 3910-86-06-026B (ER)

Prepared for:
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Department of Planning and Land Use
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Project Proponent:
Rancho Cielo Estates
P.O. Box 203
Rancho Santa Fe, California 92067

February 2013

FOCUSED
RANCHO CIELO PROJECT
VISUAL IMPACT ANALYSIS

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LIST OF ABBREVIATIONS AND ACRONYMS

Board	San Diego County Board of Supervisors
CEQA	California Environmental Quality Act
DU	Dwelling unit(s)
EIR	Environmental Impact Report
PDS	San Diego County Department of Planning and Development Services
Project	Approved Rancho Cielo project, currently in development
Proposed Project	The SPA, the current action
Reserve	Elfin Forest Recreational Reserve
RPL	Replacement Map
RPO	San Diego County Resource Protection Ordinance
SP	Specific Plan, generally the approved Rancho Cielo project
SPA	Specific Plan Amendment, the current action
TM	Tentative Map
VIA	Visual Impact Analysis

EXECUTIVE SUMMARY

This focused Visual Impact Analysis (VIA) has been prepared to provide visual review of proposed changes based on Amendment 7 to the Rancho Cielo Specific Plan, consistent with the 2007 County of San Diego Visual Guidelines and Significance Thresholds. It has been prepared by two technical specialists listed on the County-accepted list of California Environmental Quality Act (CEQA) consultants for Visual Analysis; one of whom is a California registered landscape architect and one of whom is also on the County-approved list for EIR Preparer.

PROJECT HISTORY

The Rancho Cielo Specific Plan was first adopted by the Board on December 9, 1981 (24) and has been subject to six Specific Plan Amendments (SPAs). The 1981-certified EIR (ER 80-08-120) and addenda on the project are available in County files.

Currently, the approved Specific Plan allows for the development of commercial and civic uses on 28 acres of Neighborhood Commercial and five acres of Village Center, as well as 719 dwelling units comprised of 639 Country Estates, 38 Planned Development and 42 Village Estates units, with an overall density maximum of 0.27 du/ac.

Since 1984, the Rancho Cielo Specific Plan has allowed for an anticipated 42 Village Estate units on one parcel north of Via Ambiente (TM 5441). Current zoning allows those units to be developed upon approval of a Major Use Permit pursuant to the "P" Special Area Regulation for a Planned Development at a height of 60 feet, and at a maximum coverage of 60 percent. A parcel south of Via Ambiente, west of El Brazo (TM 5440), is designated Village Commercial in the approved Rancho Cielo Specific Plan. The current zone allows the site to be developed with commercial and residential structures reaching 35 feet in height, provides for a density of 29 dwelling units per acre, as well as a heliport, and does not include any provisions that would restrict the maximum site coverage or require a subsequent discretionary action subject to review by the Department of Planning & Development Services (PDS), San Dieguito Community Planning Group, and general public.

Location of these uses on the subject parcels was specifically mandated during the Board of Supervisors (Board) consideration of the project in 1984. In certifying the 1984 Supplemental EIR, the Board found that Project implementation would modify the aesthetic environment of surrounding communities (including Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe), and balanced the aesthetic issue of visible skylined development (the outline of buildings against a backdrop of the sky) with retention of 1,635 acres of native slopes (County 1984: discussion on p. 39.) Spreading the development density out among the specific plan acres with a larger overall development footprint was found to create an unacceptable worse aesthetic impact than clustering the development on this particular ridgeline. Therefore, the County required preservation of the 1,710 acres of open space in exchange for permission to develop hundreds of residential units, including the 42 units identified for Parcel H (TM 5441) (County 1984: discussion on p. 7). The Board also found that redesign by moving the Village Center to the southwest parcel (to its current location) would have "a positive effect on aesthetic impacts" (County 1984:40), as it is less visible from the Mt. Israel community. Additionally, it was

specifically found that "[a]esthetic impacts created by the Proposed Project revisions are considered mitigated by the Project design. The dedication of 1,710 acres of open space preservation of steep slopes, major drainages, woodland areas, revegetation and landscaping of disturbed areas and clustering of units are aspects of the Project which serve to mitigate aesthetic impacts"(County 1984:4).

PROPOSED ACTION

This focused VIA addresses two changes to the approved Specific Plan area proposed as part of the current SPA.

The SPA proposes the subdivision (TM 5441RPL^3) of one parcel north of Via Ambiente into 31 detached single-family, Village Estate residential units. This would change the number of previously approved units on this parcel from 42 to 31 residential units, thereby lowering the allowed density on the parcel. The associated rezone also would lower the previously approved structure height to a maximum of 35 feet (a reduction in allowable height of over 40 percent), establish variable setbacks, and apply a "D" Special Area Regulation for Design Review, which requires approval of a Site Plan (provided in the Project submittal).

The SPA also proposes subdivision (TM 5440RPL^3) of the commercial parcel south of Via Ambiente into 11 detached single-family, Village Estate residential units. The SPA would change the designation of the site from Village Center to Village Estates and transfer 11 units from the northerly Village Estates parcel to the southern parcel. The rezone would change the use regulations on this parcel from C36 (General Commercial) to RV (Variable Family Residential) and remove the density allowance of 29 du/ac; thereby permitting residential development at an overall lower density consistent with the rest of the Rancho Cielo Specific Plan. The rezone would retain applicable development regulations allowing structures to a maximum height of 35 feet and three stories with variable setbacks, and would add a maximum coverage of 60 percent and a "D" Special Area Regulation for Design Review which requires a Site Plan (provided in the Project submittal) subject to review by PDS, San Dieguito Community Planning Group, and general public.

In sum, the revisions to planned uses on these two parcels would result in the maximum number of detached, single-family homes (42) on the two parcels, as was originally approved for the northern parcel alone. An alternative would implement most of the Rancho Cielo elements noted above, but would restrict total residential unit number to 39. On the southern parcel, approved commercial and residential uses would be developed as only residential, consistent with the approved 35-foot structure height. The homes would range in size from 2,300 to 3,600 square feet and have architectural styles and colors consistent with the Rancho Cielo community, in which they are located. Both parcels would be landscaped in a manner consistent with approved landscaping for the previously approved Rancho Cielo Specific Plan.

The current amendment has been reviewed for conformance with the Rancho Cielo Specific Plan and the "D" Special Area Designator, through the Tentative Maps and Site Plan review process. The current amendment would preserve the existing Specific Plan density maximum of 0.27 du/ac and maximum unit count of 719.

CONFORMITY FINDINGS

Pursuant to guidance in the 2007 County of San Diego Visual Resources Report Format and Content Requirements, public views form the primary focus of this analysis.[1] Although visibility of the SPA area to viewers from both private and public viewpoints are discussed throughout the report, because the SPA would result in less dense development than anticipated under the approved Specific Plan (and would therefore be visually less intrusive), impact assessments focus on public viewers. The overall less impactful nature of the proposed SPA is summarized below.

The subject parcels and their uses were identified during approval of the 1984 Supplemental EIR for Rancho Cielo as mitigation for aesthetic impacts that would otherwise have occurred with greater incursions into steep slopes, major drainages and wooden areas located throughout the approved project. Hilltop development and visibility of this clustered development was therefore assumed as part of the approved project design. This included anticipated skylining, as lot configuration was intentionally clustered along ridgelines.

With regard to current visible changes to the approved Rancho Cielo development plan, implementation of the Proposed SPA on TM 5440 would retain building heights at 35 feet, would eliminate an approved helipad and commercial uses, and implement residential uses only (consisting of 10 to 11 units, depending on development scenario). Implementation of the proposed SPA on TM 5441 would reduce the number of planned units for this lot from 42 to 31, and lower potential building heights from 60 feet to a uniform 35 feet. An alternative development scenario would reduce residential units on TM 5441 to 29. Pursuant to the County Title 8, Zoning and Land Use Regulations, Chapter 6 Resource Protection Ordinance (RPO), natural slopes in the County that exceed 25 percent slope and have a gradient of more than 50 feet are protected from excessive encroachment. Steep slope encroachment for both parcels is within allowable limits; defined in Section 86.604(e)(2) as development encroaching into less than 10 percent of the steep slopes on each parcel. SPA implementation would result in grading patterns, retaining walls, architectural features and landscaping generally consistent with other portions of the Rancho Cielo Project development and which have been implemented as part of the ongoing phased development.

Review of site changes from five representative viewpoints within a three-mile radius indicates that SPA elements would range from notable to barely visible. Rancho Cielo development would be both incrementally less visible and less dense from off-site locales than it would be if the currently allowed Specific Plan were built. This minimization of potential effects anticipated under the previously approved Specific Plan results in findings of less than significant impacts under CEQA relative to the SPA. These findings are supported by three photosimulations prepared in accordance with the County Visual Guidelines and Significance Thresholds, and provided in Section 5.5 of this VIA.

[1] Under the County Visual Resources Report Format and Content Guidelines, private views are considered when an action would result in a "substantially different" visual result than would occur without the action (County 2007:9). In this case, implementation of the proposed amendment would reduce the visual magnitude of allowable uses, but would not result in something "substantially different."

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1.0 INTRODUCTION

1.1 Study Purpose

The following Visual Impact Analysis was prepared for the Rancho Cielo Specific Plan Amendment 7 (SPA; Proposed Project). The purpose of this study is to:

1. assess the visual impacts of the Proposed Project,
2. determine consistency with visual effects that would occur relative to the previously approved Project, draw conclusions regarding significance of the impacts under CEQA, and
3. propose measures to avoid, minimize or mitigate adverse visual impacts associated with the construction of Proposed Project on the surrounding visual environment, as appropriate.

This analysis has been prepared per the County of San Diego (County) 2007 Visual Guidelines and Significance Thresholds using the California Environmental Quality Act (CEQA) guidelines of significance.

1.2 Key Issues

This report evaluates potential impacts to the visual character and quality of the Rancho Cielo site and surrounding area as viewed from public view points within the Project viewshed. It focuses on variation in visual effects of the Rancho Cielo development as proposed under the SPA versus the previously approved Project.

1.3 Principal Viewpoints to be Covered

This report describes the subject parcels and evaluates principal views of the Proposed Project from public roads, recreational trails and designated scenic corridors in the Project vicinity.

The subject parcels are located approximately two miles north of the Rancho Cielo Project entrance, at the Del Dios Highway intersection with Calle Ambiente (Figure 1, Regional Location Map, and Figure 2, Project Location Map). Figure 3, Viewshed Map, depicts surrounding land uses on an aerial photographic base, and identifies locations of the photographs and viewpoints discussed below.

Figures 4 through 6, Existing Conditions, provide orientation information and existing visual character for the parcels. Figure 4, Photograph A, depicts the parcel addressed in TM 5440 looking north to TM 5441. Photograph B is the high point of TM 5440. Figure 5, Photograph C, was taken from parcel TM 5441 looking north and depicts typical hilltop structure development within the approved Rancho Cielo Specific Plan. Photograph D was taken from Rancho Cielo Lot 95 and looks northeasterly down slope to TM 5440 and shows planned development at higher elevations than the current SPA.

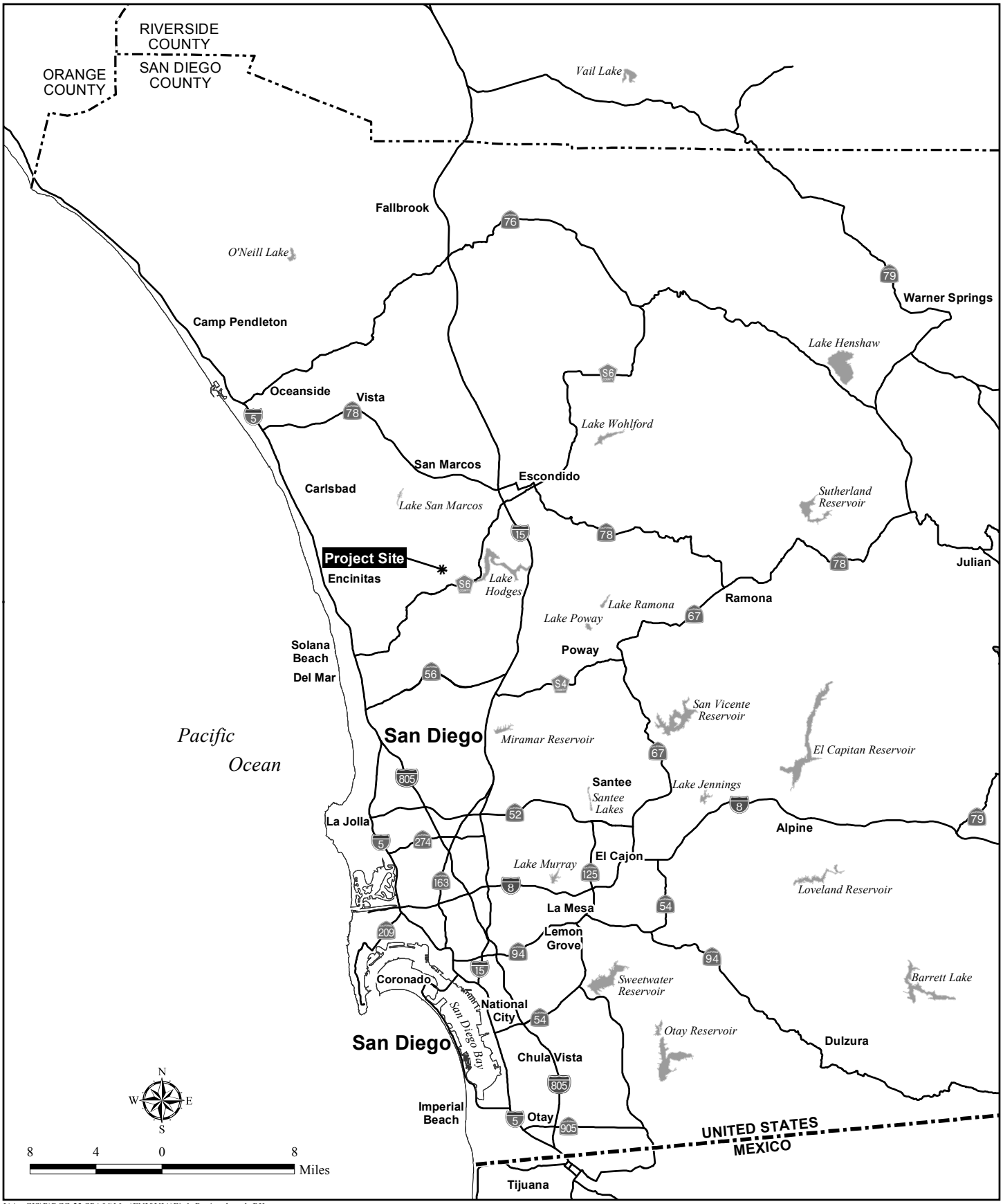
Figure 6, Photograph E, was taken at the end of the County-maintained portion of Mt. Israel Road, and indicates that no public access is available to pedestrian/equestrian/bicycle trails from this locale. Public views must be accessed from points north.

Figures 7 through 9, Key Views, depict visibility within the viewshed described in Section 3.2 below. Figure 7, Key View 1, is a view from Mt. Israel Road looking west toward parcel TM 5440, and was sited approximately 0.5 mile from the parcel. This depicts the closest public view to the subject parcel. Key View 2 is a view from the vicinity of the intersection of Camino del Sur and Casey Glen south of Crosby National Golf Club. The site is in the distance (approximately three miles away), beyond open space and the San Dieguito River Valley. Intervening uses with visibility to the SPA parcels are private and gated.

Figure 8, Key View 3, was taken from 7100 Artesian Road, looking northeast to the SPA area, approximately three miles from the Project. Residential lots are in the foreground, and the view looks across to the Rancho Cielo hilltops. Key View 4 was taken from Elfin Forest Road looking southeast toward the Project. Both parcels are visible from this location, which is approximately 1.75 miles distant.

Figure 9, Key View 5, was taken from the Elfin Forest Recreational Reserve (Reserve) Ray Brooks Overlook. Among other views, it provides views down the Rancho Cielo Trail toward the subject parcels.

Views also may be obtained from private residences, private roads, and a private golf course. Under the County Visual Resources Report Format and Content Guidelines, private views are considered when an action would result in a "substantially different" visual result than would occur without the action (County 2007:9). In this case, implementation of the proposed amendment would reduce the visual magnitude of allowable uses, but would not result in something "substantially different."These private viewpoints are considered, but they do not provide a focus of this analysis, as the proposed SPA does not propose increasing density, height or a change in use that could change neighborhood perception (e.g., changing from a residential zone to an industrial zone) over uses already approved.



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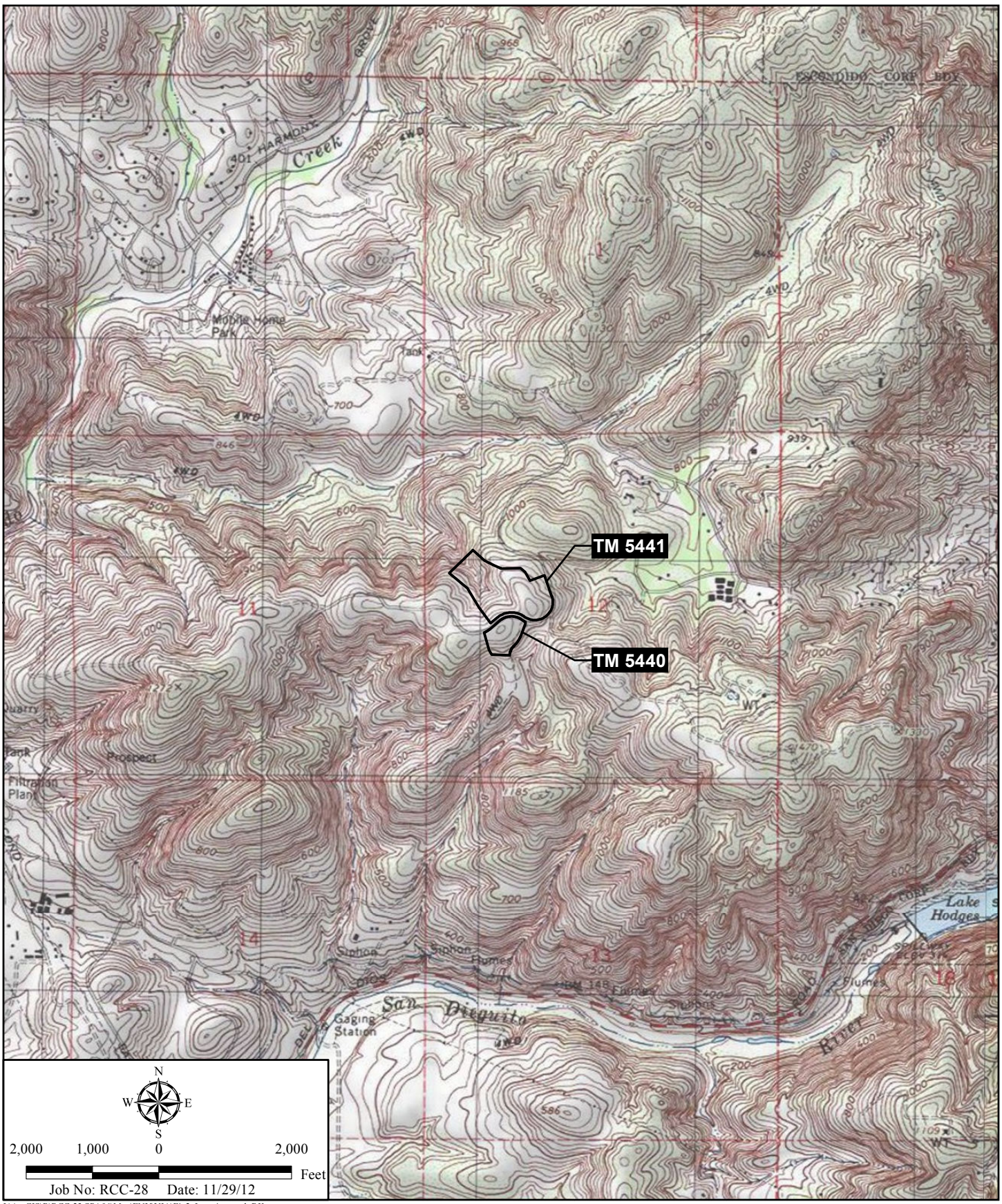
Regional Location Map

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 1



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Project Location Map

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 2

3-mile Buffer
Viewpoint (35 ft)
Visible
Photo Location

San Elijo Road
Avenida Del Diablo
Elfin Forest Road
Questhaven Road
Wild Willow Hollow
Harmony Grove Road
Via Rancho Parkway
Elfin Forest Recreation Reserve
Olivenhain Reservoir
Del Dios Highway
Del Dios Community Park
Lake Hodges
Mt Israel Road
Via Ambiente
The Bridges at Rancho Santa Fe
Avenida Del Duque
El Brazo
Alisos Canyon Road
Calle Ambiente
Coast to Crest Trail
San Dieguito Reservoir
El Montevideo
Via Cuatro Caminos
Crosby National Golf Club
Old Course Road
La Valle Plateada
El Mirador
El Vuelo
Bing Crosby Boulevard
Top O The Morning Way
Camino Del Sur
Rancho Bernardo Road
Las Colinas
Artesian Road
San Dieguito Road

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Viewshed Map

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

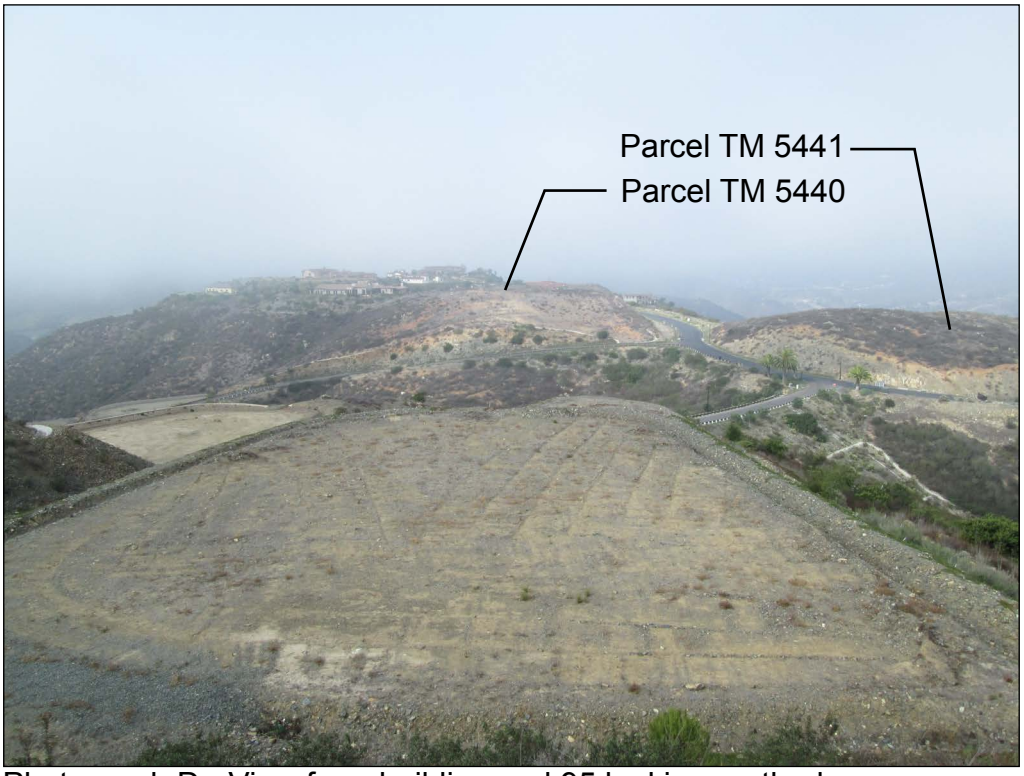
HELIX Environmental Planning

Figure 3

Photograph A - Looking west from parcel TM 5441 towards TM 5440

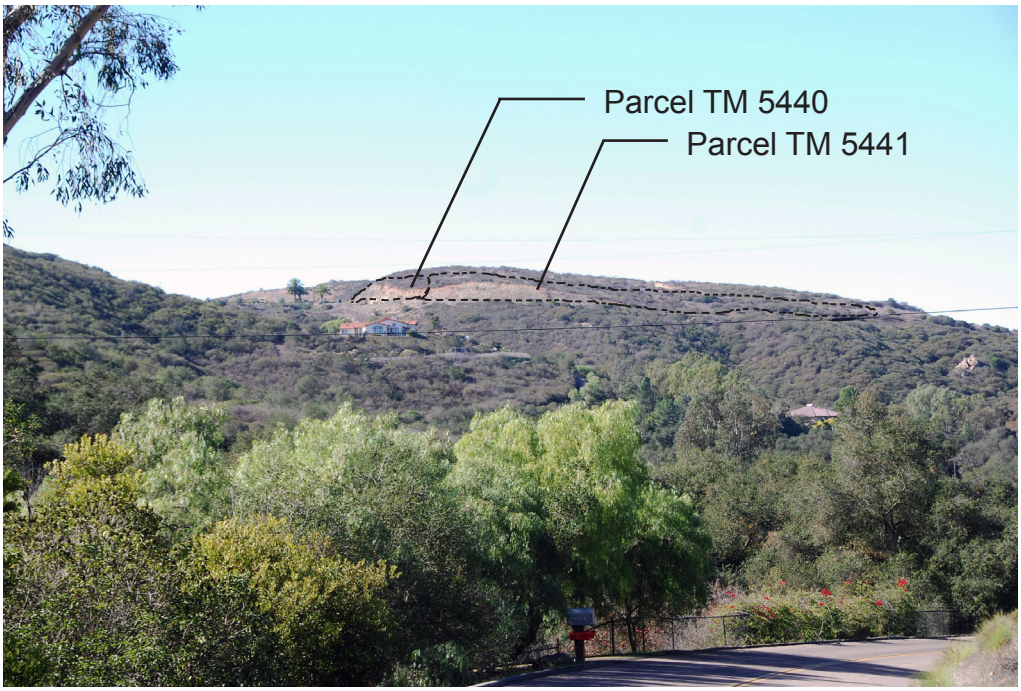
Photograph B - High point of TM 5441

Photograph C - View of ridgetop development from TM 5440

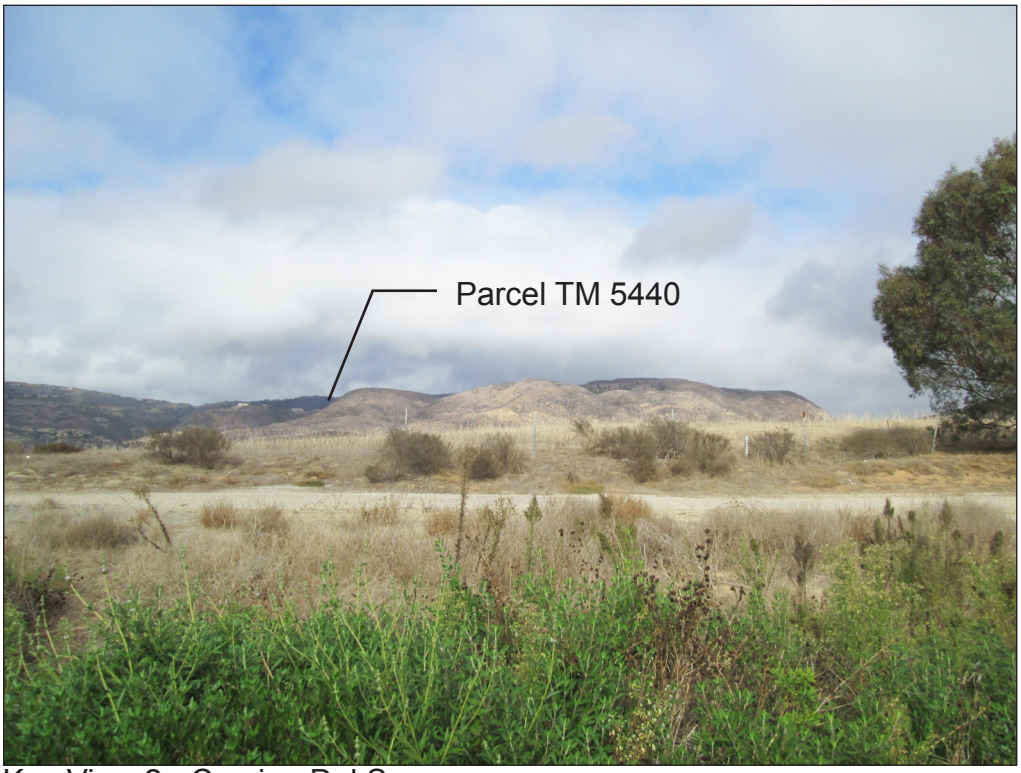


Photograph D - View from building pad 95 looking northerly

Photograph E - End of County-maintained portion of Mt. Israel Road: no public access



Key View 1 - Mt. Israel Road



Key View 2 - Camino Del Sur

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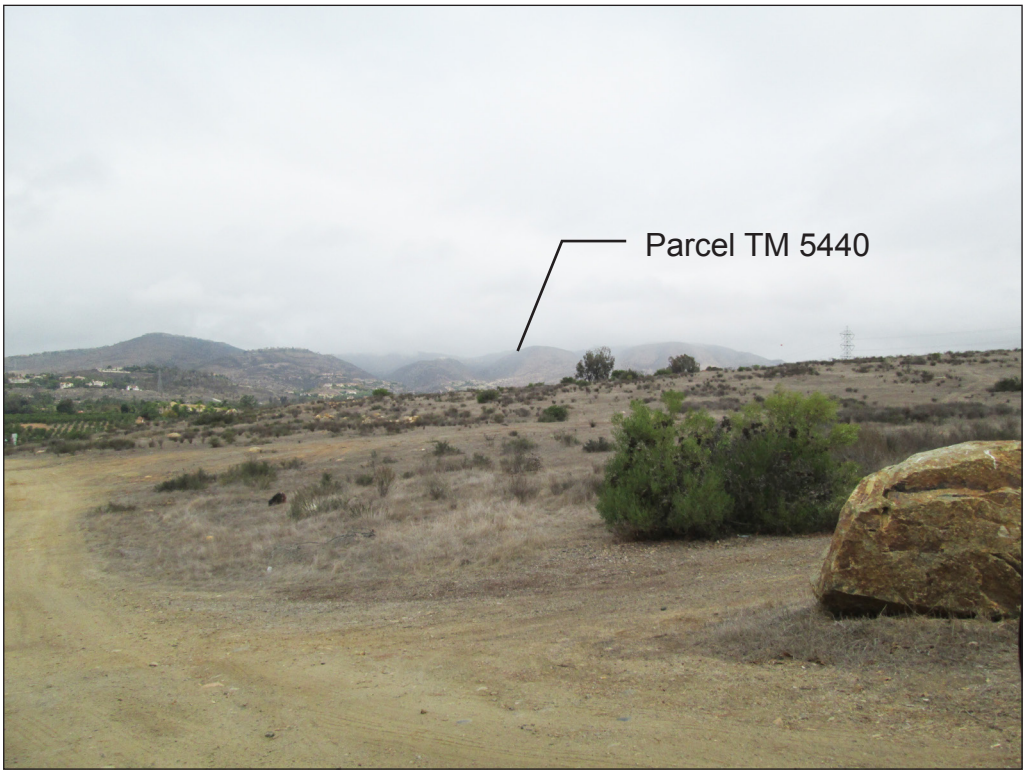
Key Views

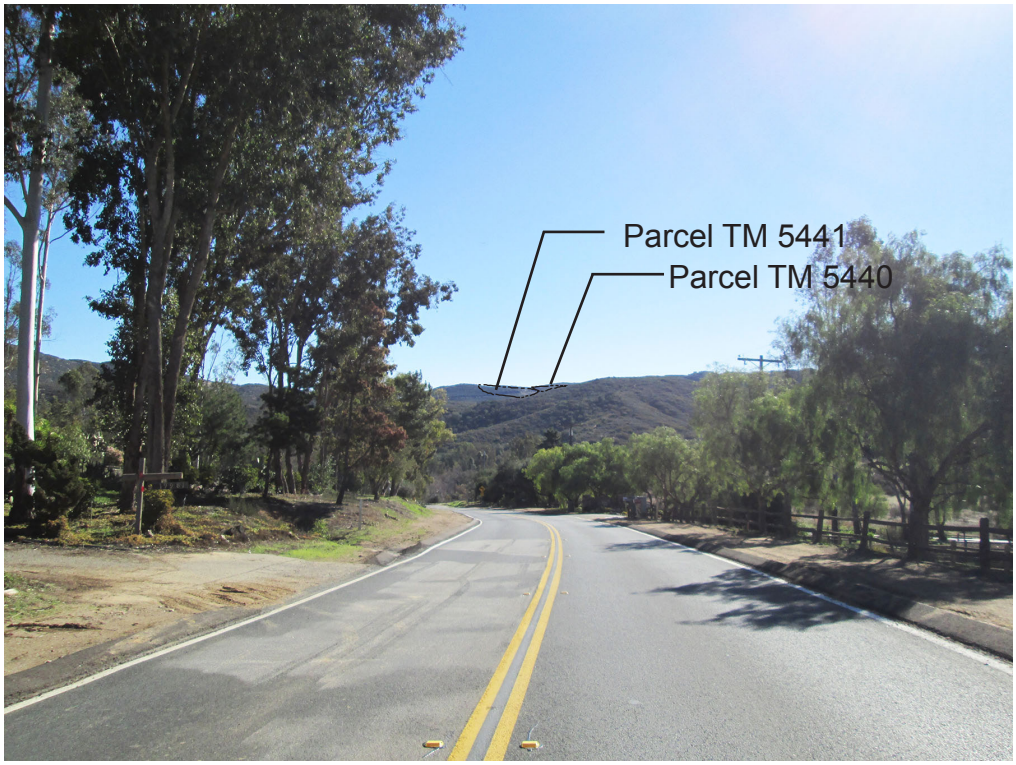
RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 7



Key View 3 - Artesian Road



Key View 4 - Elfin Forest Road

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Key Views

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 8

Key View 5 - Elfin Forest Recreational Reserve, vicinity of Ray Brooks Overlook

2.0 PROJECT DESCRIPTION

2.1 Land Use Designations and Zoning

The Rancho Cielo Specific Plan was first adopted by the Board on December 9, 1981 (24) and has been subject to six Specific Plan Amendments. The 1981-certified EIR (ER 80-08-120) and addenda are available in County files.

Currently, the Specific Plan allows for the development of commercial and civic uses on 28 acres of Neighborhood Commercial and five acres of Village Center, as well as 719 dwelling units comprised of 639 Country Estates, 38 Planned Development and 42 Village Estates units, with an overall density maximum of 0.27 du/ac. The overall layout of the approved Rancho Cielo Project is shown on Figure 10, Rancho Cielo Approved Specific Plan Lots.

Location of these uses on the subject parcels was specifically mandated in during Board of Supervisors (Board) consideration of the project in 1984. In certifying the 1984 Supplemental EIR, the Board found that Project implementation would modify the aesthetic environment of surrounding communities (including Del Dios, Mt. Israel, Elfin Forest, and Rancho Santa Fe), and balanced the aesthetic issue of visible skylined[2] development with retention of 1,635 acres of native slopes (County 1984: 39.) Spreading the allowable development density out among the Specific Plan acres was found to result in an unacceptable level of impact to slopes with native vegetation. Therefore, the County required preservation of 1,710 acres of open space as part of the Specific Plan approval.

That approval included 42 units identified for Parcel H (TM 5441) (County 1984: 7). The Board also found that redesign of the area to move the Village Center to the southwest parcel (current location) would make it less visible from the Mt. Israel community, and would have "a positive effect on aesthetic impacts" (County 1984:40). Additionally, It was specifically found that "[a]esthetic impacts created by the Proposed Project revisions are considered mitigated by the Project design. The dedication of 1,710 acres of open space preservation of steep slopes, major drainages, woodland areas, revegetation and landscaping of disturbed areas and clustering of units are aspects of the Project which serve to mitigate aesthetic impacts"(County 1984:4).

As a result, since 1984, the approved Specific Plan has allowed for an anticipated 42 Village Estate units on one parcel north of Via Ambiente (TM 5441). Current zoning allows those units to be developed upon approval of a Major Use Permit pursuant to the "P" Special Area Regulation for a Planned Development at a maximum height of 60 feet, and at a maximum coverage of 60 percent. A parcel south of Via Ambiente, west of El Brazo (TM 5440), is designated Village Commercial in the approved Rancho Cielo Specific Plan. The current zone allows the site to be developed with commercial and residential structures reaching 35 feet in height, provides for a density of 29 dwelling units per acre, as well as a heliport, and does not include any provisions that would restrict the maximum site coverage or require a subsequent discretionary action subject to review by the Department of Planning & Development Services (PDS), San Dieguito Community Planning Group, and general public. Rancho Cielo and SPA

[2] A skylined feature is one that is seen against a backdrop of sky and may be natural, as in ridgelines, or man-made, as when development is sited along hilltops or ridgelines.

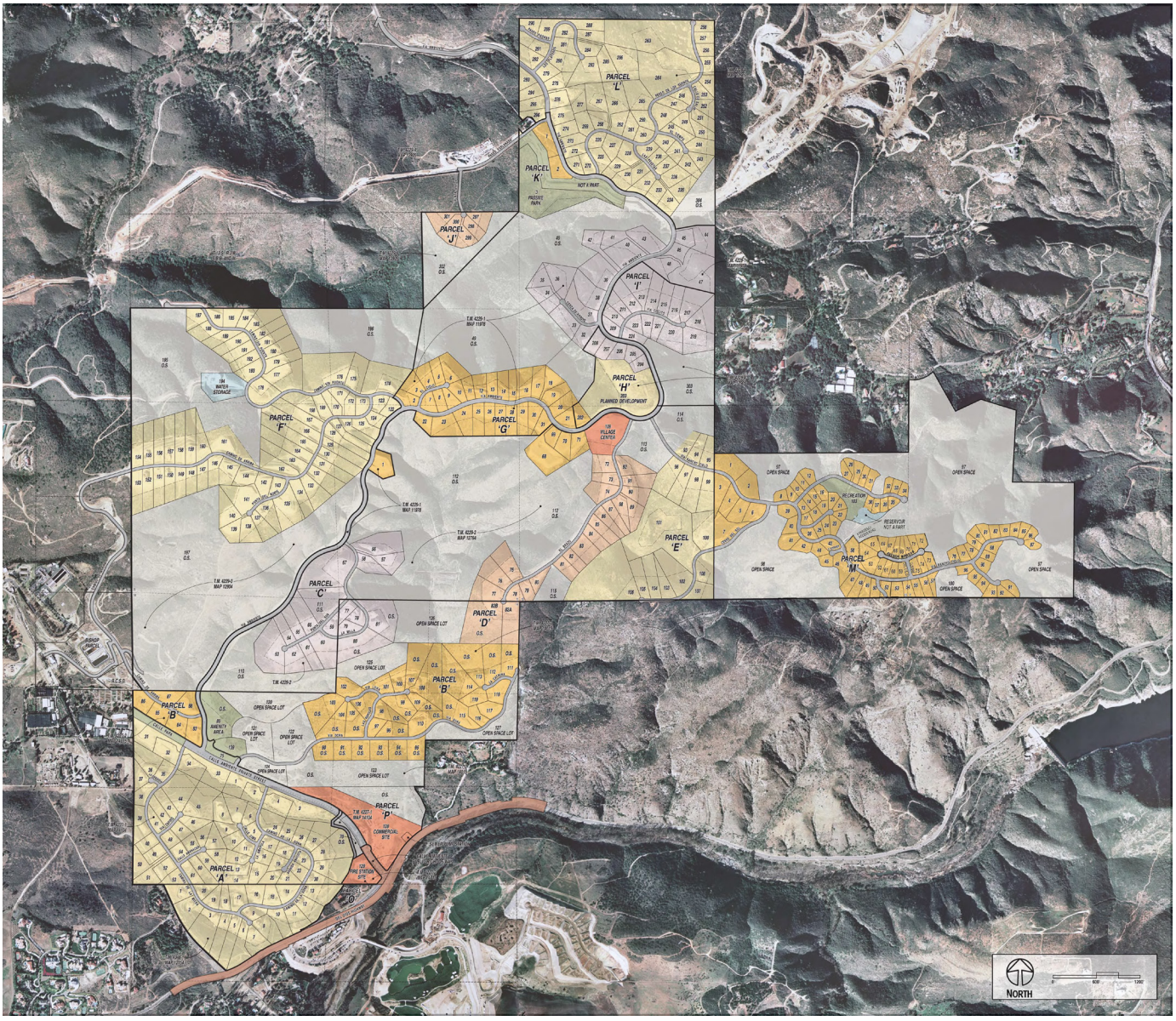
elements applicable to aesthetics review (e.g., grading, site design, architectural features, and landscaping/fire management) are summarized below.

TM 5441 consists of approximately 14.5 acres. As part of Amendment 7, the 31 residential units would be placed in three lines of dwellings, with pads graded at elevations ranging from 1,125 to 1,149 feet AMSL. Structures would step slightly down the slope from the hilltop on the northern side. Since last reviewed, several modifications have been recommended that would affect visible elements. The associated rezone also would lower the previously approved structure height to a maximum of 35 feet (a reduction in allowable height of over 40 percent), and establish variable setbacks. In addition, approximately one-third of the residential units have been replaced with single-story residences; thereby, removing approximately 10,000 square feet of building mass.

TM 5440 is located on approximately 5.6 acres. An existing knoll would be cut down to accommodate the structures on a relatively flat pad. The 11 residences would be oriented in a horse-shoe pattern (cul-de-sac) at elevations ranging from 1,166 to 1,171 feet AMSL, or with a variance between pads of approximately 5 feet. The rezone would change the use regulations on this parcel from C36 (General Commercial) to RV (Variable Family Residential) and remove the density allowance of 29 du/ac; thereby, permitting residential development at an overall lower density consistent with the rest of the Rancho Cielo Specific Plan. The rezone would retain restriction of structures to a maximum height of 35 feet and would add a maximum coverage of 60 percent.

Architectural detailing would be consistent with Mediterranean style and finishes, including tile roofs, stucco and stone exteriors in earth tones, and use of wrought iron and deck/balcony features. The homes would range in size from 2,300 to 3,600 square feet and have architectural styles and colors consistent with the 42 Village Estate units allowed at Parcel H, within the approved Rancho Cielo Specific Plan, as amended. Second floor setbacks would be incorporated to provide elevation variation. Landscaping would be provided between the structures and Via Ambiente and El Brazo, on slopes, and between dwellings. All landscaping would be consistent with Rancho Cielo design guidelines, which also conform to Fire Marshal requirements, as presented in the plant list contained in the Firewise 2000 Conceptual Fire Protection Study for Rancho Cielo Estates TMs 5440 and 5441 (2011, as amended in 2012). Anticipated lot landscaping for the two TMs is shown on Figure 11a, TM 5441 Proposed Landscaping, and Figure 11b, TM 5440 Proposed Landscaping.

In sum, the revisions to planned uses on these two parcels would result in the maximum number of detached, single-family homes (42) on the two parcels as was originally approved for the northern parcel alone. An alternative would implement most of the approved Rancho Cielo Specific Plan elements noted above, but would restrict total residential unit number to 39. On the northern parcel, structure height would be reduced by 25 feet. On the southern parcel, approved commercial and residential uses would be developed as residential only. Both parcels would be landscaped consistent with approved landscaping for the existing approved Rancho Cielo Specific Plan.



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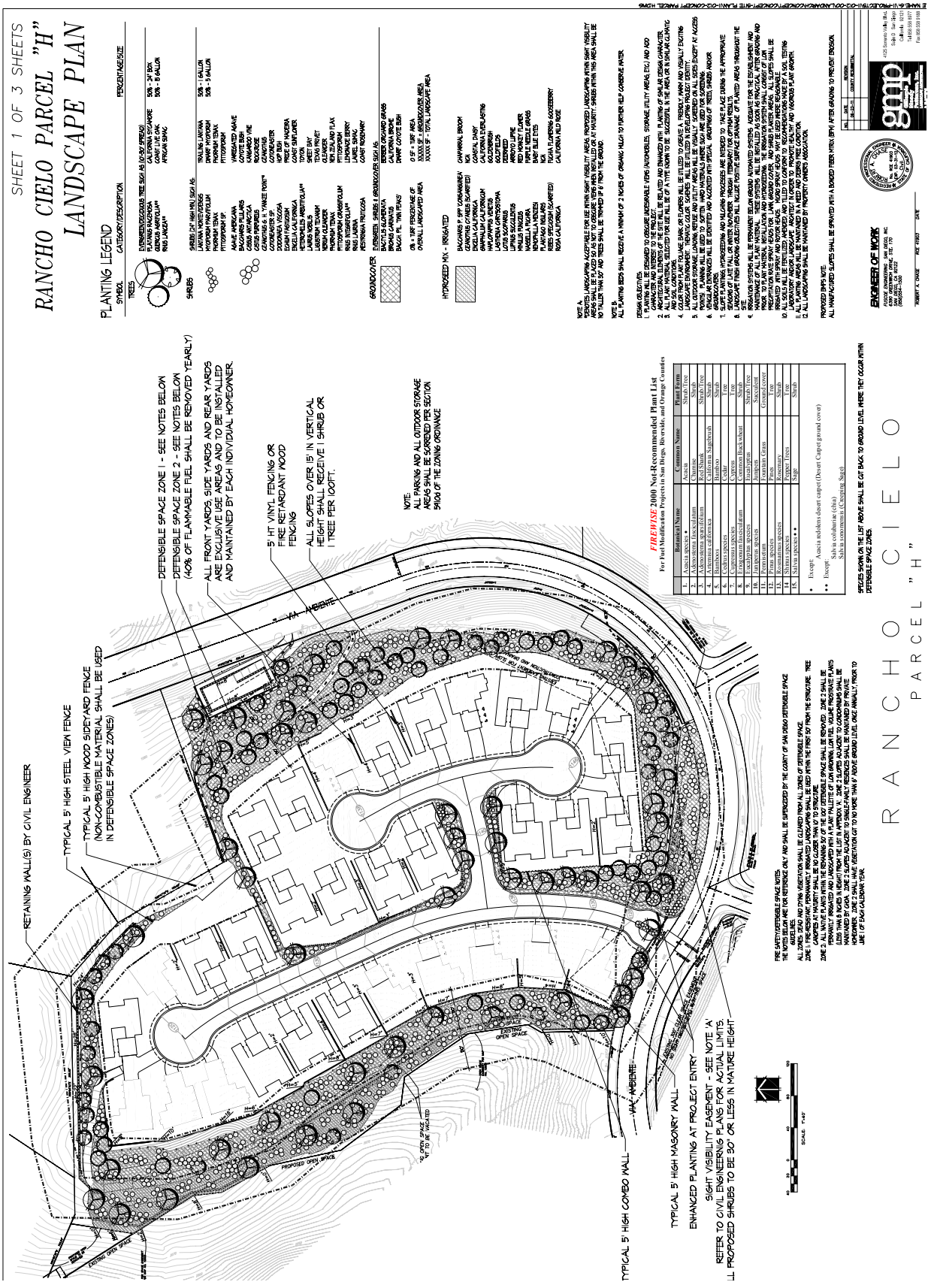
Rancho Cielo Approved Specific Plan Lots

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 10



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TM 5441 Proposed Landscaping

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 11a

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TM 5440 Proposed Landscaping

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 11b

The Project contains a "D" Special Area Designator, requiring design review during review and approval of the parcel Tentative Maps and Site Plan.

2.2 Regulatory Framework

The Rancho Cielo site is within a geographic area addressed by the San Diego County General Plan (2011) and San Dieguito Community Plan (2011), as well as the Zoning Ordinance. Overall design elements of the existing Specific Plan were previously evaluated and approved. The current SPA addresses approximately 20 acres, within the larger 2,846-acre Project (*less than one percent of the previously approved Project acreage*). The regulatory framework relevant to the proposed SPA includes CEQA review (the entirety of this report, with specific visual thresholds addressed in Sections 2 through 5), as well as consistency with the adopted General Plan and San Dieguito Community Plan, San Diego County Zoning Ordinance and Resource Protection Ordinance relative to steep slopes, as addressed below. The SPA is consistent with the approved Specific Plan as amended, Semi Rural 2, Open Space – Conservation, and Public/Semi-Public Facility designations of the General Plan because it proposes residential and open space uses in compliance with the Rancho Cielo Specific Plan, which permits an overall density of 0.27 dwelling unit per acre and identified development of these parcels with similar (although more intense) uses. This reduction in intensity of the proposed development provides a primary basis for the analysis in the remaining sections of this VIA.

The SPA is consistent with the San Dieguito Community Plan because it proposes residential and open space uses that conform to the RC Specific Plan use classifications and maximum unit count as outlined in that Community Plan. Visual design policies are additionally addressed in Section 2.3, below.

The proposed SPA is consistent with encroachment into steep slopes, as described herein. Pursuant to the County Title 8, Zoning and Land Use Regulations, Chapter 6 Resource Protection Ordinance (RPO), natural slopes in the County that exceed 25 percent slope and have a gradient of more than 50 feet are protected from excessive encroachment. Steep slopes are shown on Figure 14, TM 5441 Steep Slopes Analysis, and Figure 15, TM 5440 Steep Slopes Analysis in the Section 5.3.1, Construction Period Effects discussion of Grading, below. Specifically, TM 5440 has a gross acreage of approximately 5.6 acres, with approximately 2.2 acres (or 38.6 percent of the lot) in steep slopes. The allowable percent encroachment is 10 percent (or approximately 0.6 acre). The proposed encroachment is approximately 0.2 acre, or 3.6 percent. TM 5441 has a gross acreage of approximately 4.4 acres, with approximately 6.6 acres (or 46.1 percent of the lot) in steep slopes. The allowable percent encroachment is 10 percent (or approximately 1.5 acre). The proposed encroachment is approximately 1.4 acre, or 9.8 percent. Steep slope encroachment for both parcels is within allowable limits defined in RPO Section 86.604(e)(2) as development would encroach into less than 10 percent of the steep slopes on each parcel.

2.3 Design Policies and Guidance

The San Dieguito Community Plan has a number of design policies relative to development in within the community that could have visual effects. The Community Plan asks that during review of proposed development the following criteria are considered:

- Site topography and protection of steep slopes
- View orientation and view protection of adjacent properties
- Natural site amenities such as trees, bluff, rocks and natural drainage channels
- Access to the proposed residence
- Protection of ridgelines
- Preservation of dark skies

Also, the design of a building must be reasonably appropriate to its site, and harmonize with its surroundings.

Initial review of conformity with applicable design guidelines was completed for Rancho Cielo development overall as part of previous approvals. Those approvals anticipated development of the subject parcels with 42 residential units of up to 60 feet in height on small lots north of Via Ambiente and commercial/residential uses up to 35 feet in height south of Via Ambiente. Specific plans demonstrating compliance with approved elements would have been required prior to implementation, but the types and extent of uses were approved.

Therefore, this analysis does not evaluate current plans for these parcels addressed in TMs 5440 and 5441 in a vacuum. The prior approvals provide the existing condition, as demonstrated in the Community Plan. This document: (1) addresses the level to which the currently proposed uses on those two specific parcels would visually vary from previously approved uses (including ridgeline development), on those parcels; and (2) analyzes the level to which any change might be more visually impactive under CEQA.

3.0 VISUAL ENVIRONMENT OF THE PROJECT

This section addresses the existing setting and visual conditions in the area. It also includes a discussion of the Proposed Project viewshed; the types and magnitude numbers of viewers in the area; and the location, type and frequency of views. The existing visual and landform setting is based on topographic mapping, aerial photographs, reference document reviews, analysis of photographs, and documented on- and off-site land uses, as well as site reconnaissance.

3.1 Project Setting

The Rancho Cielo SPA site is located in the unincorporated portion of the County of San Diego in the community of Rancho Santa Fe, approximately 2.5 miles easterly of the City of Encinitas (Figure 1). The area within the Specific Plan that is subject to change is sited approximately 2 miles northeast of the intersection of Calle Ambiente and Del Dios Highway and consists of two parcels north and south of Via Ambiente near that road's junction with El Brazo. The parcels are at elevations of approximately 1,100 to 2,000 feet in elevation. Large amounts of open space are located on area hillsides, with ridgelines and hill tops in the area being dedicated to large-scale rural residential/estate uses.

Olivenhain dam is visible approximately one mile to the northeast, within the Elfin Forest Recreational Reserve. The southern boundary of the Elfin Forest Recreational Reserve (down in the bottom of a canyon and as the crow flies), is located approximately 0.5 mile to the northeast (Figure 3). Rounded hills abut Del Dios Highway and extend to the west and north. The San Dieguito River and a narrow valley are located to the south and west, with lower hills (in the range of 450 to 550 feet AMSL) to the south. Lake Hodges is located approximately 1.75 miles to the east.

3.2 Project Viewshed

A viewshed is an analytical tool used to aid in the identification of views that could be affected by a potential project. The viewshed is defined as the surrounding geographic area from which the on-site elements of a project are likely to be seen, and mostly is delineated based on topography. The viewshed boundary for the Proposed Project was determined through the computer analysis of local topography, and was field verified. The viewshed boundary represents the geographic limits for this visual assessment.

Figure 3 illustrates viewshed limits on an aerial photographic base. The viewshed assumes a 3-mile distance from the site in any direction, and incorporates over 28 square miles. The areas highlighted in green shading on the map indicate areas that—based on topography and elevation relative to the site—have the potential to see the SPA parcels.

As indicated, this figure is based on topography only, without consideration for structures or vegetation which often restrict views in local areas. Other controlling features include distance (from some locations within the viewshed the SPA site would be seen as one small aspect of a much larger view) and atmospheric conditions (haze/humidity can often diminish details of views).

The delineated viewshed is conservative (i.e., shows the greatest possible visibility) as a 35-foot elevation to reflect potential building height was entered on top of the highest elevation of finished grading proposed; and neither intervening vegetation or structures, nor distance, were assumed. As noted above, it also extends three miles out, to encompass a larger pool of potential viewers, although climatic conditions in San Diego County can often result in much lower visibility of detail at distances over one mile.

As shown on Figure 3, the potential viewshed generally is confined to higher elevations, as intervening topography would block views from areas with intervening topography. Of the 28.26 miles encompassed within the viewshed, views would be available from an anticipated maximum of only 3.48 square miles, or approximately 12 percent of the surrounding area within the viewshed limits. Approximately 88 percent of the locations within three miles of the Proposed Project would not have views to the subject parcels, based on topography alone. A lower percentage would experience actual views to the SPA parcels based on intervening structures and existing vegetation.

The viewshed analysis also reveals other scattered areas beyond three miles from which the SPA parcels potentially could be seen. From these distances, the location uniformly would be seen as one small aspect of a much larger view, and atmospheric conditions generally would be expected to diminish details.

3.3 Landscape Unit

The site is situated within a single landscape unit. This unit is defined by the Rancho Cielo ridgeline development pattern currently being implemented. It consists of winding roads and flat pads on an undulating ridgeline that generally follows the topography of the underlying hills. Development to date consists of large low-density estate residential uses. Open space between homes and on hillsides consists of native low-lying scrub habitats. Within developed lots, landscaping can be lush, and consist of irrigated trees as well as shrubs and groundcovers.

4.0 EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

4.1 Existing Visual Resources

4.1.1 Visual Character

Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither good nor bad in themselves. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape and a resistance to or a preference for a project that would change or contrast with that character, then changes in the visual character can be evaluated.

The visual character of the Rancho Cielo locale encompasses visually diverse forms, including numerous hills, expansive open areas (generally on slopes that can be extremely steep), and notable ridgeline development, with geometric and rectilinear structures skylined from off-site views. Roadways generally wind along the valleys between hillsides, although often steep roads provide access to the hilltop structures. Views in this area provide dramatically different visual experiences. Along the public roadways (generally located at lower elevations) and from areas in the valley bottoms, views are fairly restricted. This is because roads are generally winding in nature, and often edged by vegetation, resulting in views being fairly focused and localized. From private roadways, public trails and private residential lots at higher elevations, views are panoramic in nature—with a viewshed often extending miles. On clear days, the ocean can be clearly seen from the higher hilltops in this area, as are Olivenhain reservoir, extensive open space, and surrounding (primarily residential) development.

The overall Rancho Cielo development is building out, with numerous graded pads and some homes currently located in the vicinity of the Proposed SPA. Slightly more than one-half of the approved Project has been graded, and homes have been built on approximately 40 percent of the 639 Country Estate lots.

As shown on Figure 12, Existing Ridgeline Development, residential uses in this portion of the County have been allowed on hilltops. Ridgeline homes are also situated atop Mt. Israel and above the Reserve in the vicinity of Harmony Grove. In general, area grading has respected the natural topography; in that it steps up and down the original gradient, following increases and decreases in elevation. The ultimate result, however, is that the ridgelines (which draw the eye from lower elevations) are developed with large-scale structures that are skylined to viewers from below or at similar elevations.

4.1.2 Visual Quality

Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed. This approach to evaluating visual quality can help identify specific methods for mitigating specific adverse impacts that may occur as a result of a project. The three criteria for evaluating visual quality can be defined as follows:

- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape
- **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings
- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns

The visual unity of the landscape unit is high. The setting locates estate residential on stepped lots following ridgetop topography, with large expanses of retained open space on hillsides. These homes have consistent architectural unity as well. Existing structures are generally one to two stories in height, and incorporate setbacks within the structures. Mediterranean influences are clear, based on tile roofs and materials and finishes, while still varying in specific color. The residential elements show visible compositional harmony, even among the variety of features.

The intactness of the area currently is moderately low. As noted above, although approximately 50 percent of the Project has been graded, only 40 percent is currently built out. There are voids in the development pattern that will disappear as the overall development matures and is completed. At that point, intactness would be expected to be similarly high for the same reasons noted above under "unity."

The site setting is vivid because of its access to expansive views. Rancho Cielo, however, is not particularly vivid as it is consistent with other ridgetop development in this portion of the County.

4.2 Viewer Response

Viewer response, or awareness, is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project's implementation.

4.2.1 Viewer Sensitivity

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. For the Proposed Project, viewer sensitivity has been identified based on the analysts' experience in similar settings, input provided by the San Dieguito Planning Group and at County hearings on the Project, as well as County planning documents (i.e., General Plan and San Dieguito Community Plan).

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, the speed at which the viewer moves, and position of the viewer.

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Existing Ridgeline Development

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 12

Viewer Awareness: A viewer's response is also affected by the degree to which he/she is receptive to the visual details, character, and quality of the surround landscape. A viewer's ability to perceive the landscape is affected by his/her activity. A viewer on vacation in San Diego County would probably take pleasure in looking at the landscape, and an individual may be strongly attached to the view from his home, but a local County resident commuting to work may not "register" those same visual resources on a daily basis.

4.2.2 Viewer Groups

The following viewer groups' discussion addresses both public and private views. With regard to private view, the majority of these are from residences and from private, gated communities with streets that are not accessible to the general public but have views to the SPA.

Motorists

The SPA parcels are located off the beaten track. The primary roadway in the vicinity is Del Dios Highway, located approximately two miles from the subject site. Motorists on this roadway would constitute the largest viewer group in the area, but although other sections of Rancho Cielo are visible from Del Dios, the subject parcels addressed in the SPA are not. Other roadways in the area with some clear views to the Project include Mt. Israel Road (which accesses a total of approximately 40 homes) and Elfin Forest Road. Other smaller and publically accessible roads are located at greater distances within the viewshed. No County Scenic Corridor roadway is located within the viewshed.

Motorists on smaller, residential roads in the area are presumed to generally have moderately high sensitivity. A high percentage of the viewers along these roads are presumed to be residents. Residents' sensitivity (discussed below) generally would be high; however, the winding nature of the roads in the residential areas of the viewshed would require that motorists in these areas be more sensitive to the immediate roadway rather than wider views. This may not be the case with passengers, who would be able to pay more attention to the surrounding scenery.

Recreationalists

The Del Dios Community Park (at the north end of Lake Hodges) is in the vicinity, but has no views to the site. The Del Dios Highlands County Preserve (accessed from Del Dios Highway and Date Lane) includes a trail that accesses Elfin Forest Recreational Reserve. Views to the Project are not available until the viewer is in the Reserve.

Elfin Forest Recreational Reserve offers approximately 11 miles of hiking, mountain biking, equestrian trails, as well as picnic areas and scenic mountain viewing points (Figure 13, Reserve Trail Map). Based on car counts made by Reserve staff, an average of 2,800 to 3,500 cars accesses the Reserve per month. Reserve staff assume 2.5 individuals per car, so that an estimated 60,000 visitors a year come to the Reserve. Trail use can therefore be heavy, with the most heavily used trail being the "Way Up Trail," which is used to access others in the system. The farther away from the Reserve entrance a trail is located, the fewer hikers use the trail. In other words, the majority of Reserve visitors focus their visit on areas closer to the visitor center,

with fewer visitors visiting locales miles in from the entrance and away from the trail head (Anderson 2012: pers. comm.).

A number of these trails are on the northeastern slopes of the Reserve, with views oriented toward the Harmony Grove community. The Equine Incline Loop, Manzanita, and Cielo trails, however, are located on the southwesterly side of the Reserve, and would have intermittent to open views toward the Proposed Project. The Ray Brooks Overlook (Figure 13) is also located in this area, with direct views to the site.

Trail users in the Reserve can see the subject parcels on the ridgeline. The existing view encompasses diverse elements—including buildings and developed areas, as well as natural open space. A transmission line with tower footings trends along the Ridgeline Maintenance Road, which provides primary access to the Ray Brooks Overlook. Although there is some effect based on distance, the hills on which the SPA area is located provides a major element for the viewer as it can be the defining feature (both highest, and most distant) forming a horizon in the view.

The Coast to Crest Trail in this vicinity is aligned along the San Dieguito River. As shown on the VIA viewshed map (Figure 3), the Proposed Project is not visible from this location with the exception of a small area very near the limits of the viewshed to the southwest.

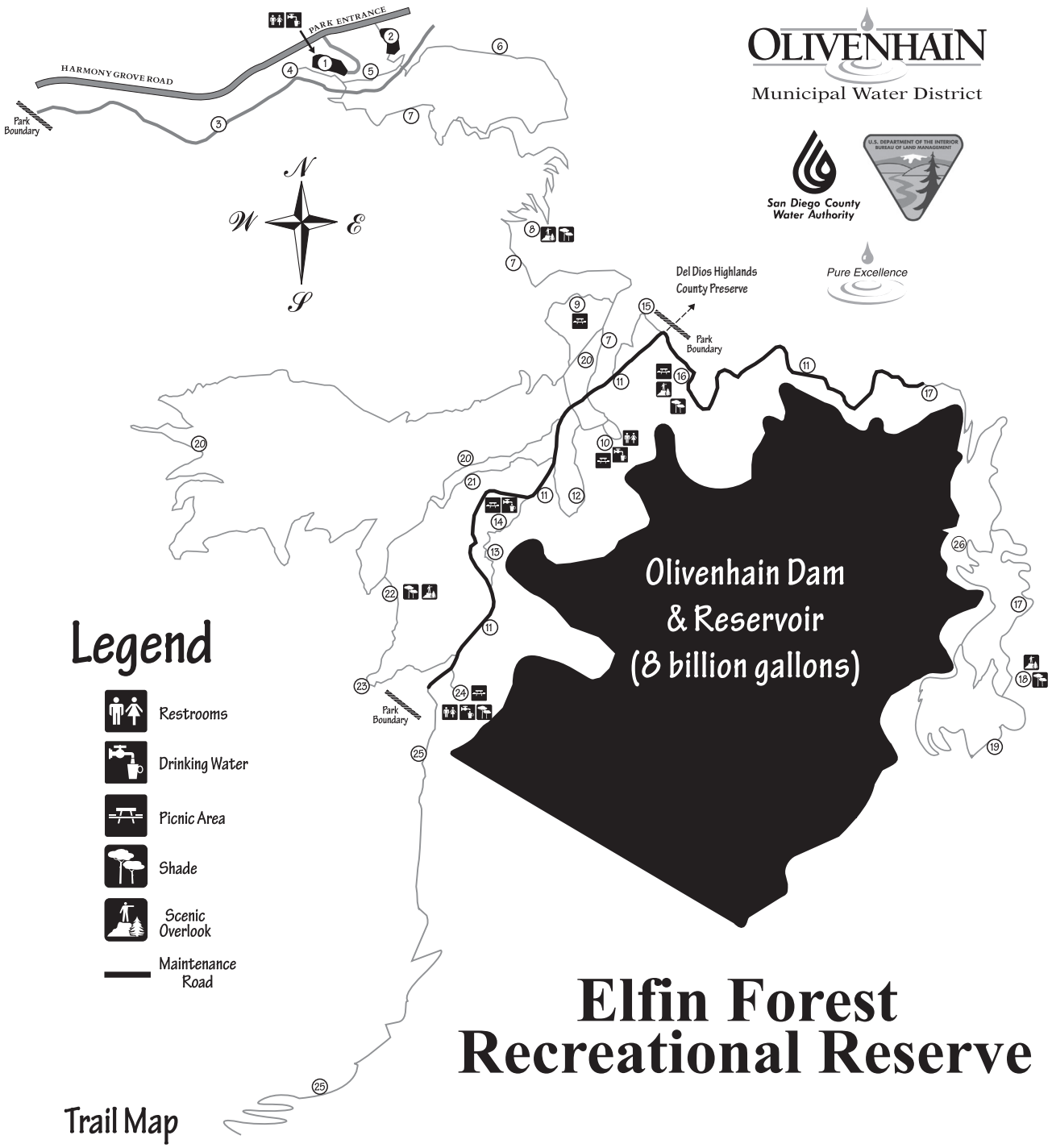
Two private golf courses exist within three miles of the Project site, and open views may be available from the Crosby National Golf Club.

Individuals using the cited trail system would be expected to be highly sensitive to changes in the immediate viewscape. Viewers using these trails would be moving at pedestrian rates of travel, or even stationary at overlooks. As a result, they are expected to be sensitive to Proposed Project modifications to the existing setting, as well as, potentially, any change from a more to less "natural" experience. Viewers from the Crosby National Golf Club are anticipated to have a low level of sensitivity. This is due to both the distance from the Project and their focus on the game.

Residents

A number of homes are located within the Project viewshed. Large, estate-style single-family residences and smaller rural residential uses are located in the Project vicinity. Smaller lot homes south of Del Dios Highway (at two to three miles distant) also potentially would have views of the Project parcels. Along Elfin Forest Road to the northwest, homes are at elevations from which views could be accessible, but vegetation is also mature in many areas, and may restrict views.

Residential viewers are expected to be highly sensitive to changes in the immediate viewscape. For these viewers, the Rancho Cielo area can provide an often-seen and intimately known view that contributes to the sense of home or the broader community.



OLIVENHAIN
Municipal Water District

San Diego County Water Authority

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Pure Excellence

Elfin Forest Recreational Reserve

Trail Map

1. Staging Area/Main Parking/ Elfin Forest Interpretive Center (Elevation 492 ft.)
2. Overflow Parking Lot
3. Escondido Creek (Flows year round from Lake Wohlford to Pacific Ocean)
4. Creek Trail (.22 mile)
5. Creek Viewing Area
6. Botanical Trail (.64 mile)
7. Way Up Trail (1.41 miles)
8. Harmony Grove Overlook (Elevation 1,010 ft.)
9. Me-xal Trail (.21 mile)
10. Ridgetop Picnic Area (Elevation 1,140 ft.)
11. Ridgeline Maintenance Road (1.39 miles)
12. Tykes Hike Trail (.23 mile)
13. Mariposa Trail (.18 mile)
14. Mariposa Picnic Area (Elevation 1,155 ft.)
15. Quail Trail (.16 mile)
16. Escondido Overlook (Elevation 1,200 ft.)
17. Lake Hodges Overlook Trail (.93 mile)
18. Lake Hodges Overlook (Elevation 1,200 ft.)
19. Lake Hodges Overlook Loop Trail (.81 mile)
20. Equine Incline Loop Trail (2.60 miles)
21. Chaparral Trail (.28 mile)
22. Elfin Forest Overlook (Elevation 1,346 ft.)
23. Manzanita Trail (.30 mile)
24. Ray Brooks Overlook (Elevation 1,185 ft.)
25. Cielo Trail (.88 mile)
26. Witch Trail (.37 mile)

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Reserve Trail Map

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

HELIX Environmental Planning

Figure 13

4.2.3 Existing Viewer Exposure

Motorists' Exposure

Primary exposure from public roads would occur on Mt. Israel (the closest road with a direct view) and Elfin Forest Road (further away, but also with open views toward Rancho Cielo). Elfin Forest Road is posted at 45 miles per hour in sections. In other areas, speeds would be expected to be slower as the road is narrow and winding. Similar conditions (slow, narrow and winding) pertain for Mt. Israel Road. This could result in longer exposure to any one view than would occur at higher speed roads. Along both of these roads, screening vegetation obscures views to the SPA parcels in many areas. Along other roads, views are additionally attenuated by distance, the curving nature of the roadways and/or vegetation. Where roads are long and straight, higher speeds may also result in lower periods of exposure.

Overall, the brief duration of views and relatively low number of viewers indicates that motorists on roads in the residential areas have moderate exposure.

Recreationalists' Exposure

Despite the opportunity for expansive views of the SPA site and surrounding area, recreationalists in the nearby Reserve lands and hiking on nearby trails are anticipated to have moderate exposure. Open views to the subject parcels are available from some trails, and at least one scenic overlook, as noted above. However, the number of individuals who make it to these interior trails, combined with the turning and twisting nature of the trails, results in a much lower number of viewers being expected than actually enter the Reserve on the north side.

Hikers along the Coast to Crest Trail would only have potential for a view from approximately 2.5 miles distant. As the Trail in this area parallels the river, riparian vegetation may also intervene. Exposure would be considered low from this location.

Residents' Exposure

Residents in the viewshed have high exposure, due to their long-term, stationary views. The views currently are of a generally rural area with a hilly backdrop. A substantial amount of local topographic variation (small hills, bumps and gullies located on the larger hill forms) is present throughout the viewshed, and residential landscaping also provides frequent shielding of view elements, both from the home where the landscaping is installed as well as for adjacent structures. In other cases, residential (or related) structures themselves block views. Therefore, not every structure encompassed in the viewshed limits has uninterrupted views from the entire property. Regardless, where views exist, they can be expansive, and many homes are sited specifically to take advantage of these open views. In these instances, open views encompass adjacent developed uses, and ridge features with residential development.

4.2.4 Existing Viewer Awareness

Motorists' Awareness

Although drivers on local roads are expected to note SPA-related changes, their primary focus generally would be on speed of travel, interaction with other drivers on the road, as well as attention to local children, domesticated animals, and the occasional wildlife sighting in this rural area. This, combined with both the relatively short duration of exposure time and the number of competing visual elements in the expansive viewshed, is expected to lessen the importance of specific view elements for this group of viewers. Speed and traffic conditions would comprise an element of distraction from passenger views as well, but it generally would be less than for the driver. In these cases, passengers within the vehicle could be more focused on the passing viewscape. Although lessened in level of effect, any distraction at all, when combined with the relatively short duration for visibility, would result in the visual impact of specific view elements being less important for this group of viewers (e.g., less important relative to viewers such as residents, discussed below).

Recreationalists' Awareness

Hikers in the nearby Reserve may have a high awareness of the surrounding area and the available views, including those that encompass the SPA parcels. Regular visitors would wish to retain the current, expansive views of mostly natural and rural areas, while occasional or first time visitors may not expect the same conditions.

Residents' Awareness

Residents are expected to be extremely aware of changes associated with SPA implementation. Based on past experience, it is assumed that residents will strongly desire retention of existing conditions.

5.0 VISUAL IMPACT ASSESSMENT

This discussion focuses on visible project-direct changes, which could occur resulting from SPA implementation and would be based on variance from the approved Rancho Cielo Specific Plan and the uses permitted within Rancho Cielo's current zoning district.

5.1 Guidelines of Significance

The following CEQA significance guidelines are from the County Guidelines for Determining Significance – Visual Resources (July 30, 2007), and were derived from the CEQA Guidelines, Appendix G, Environmental Checklist Form.

They guide the evaluation of whether a significant impact to visual resources will occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect on visual resources, absent specific evidence of such an effect.

1. The project would introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.

2. The project would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.

3. The project would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:

    - a public road,
    - a trail within an adopted County or State trail system,
    - a scenic vista or highway, or
    - a recreational area.

5.2 Key Views

Analyzing all of the views from which a proposed project potentially can be seen is not feasible. Several of these potential views are in gated communities not accessible to the general public. Five publically accessible key viewpoints (Photographs 1 through 5, as depicted on Figures 7 through 9) have been selected that most clearly display the visual effects of the project from various locations. The key view points with arrows depicting the direction of the view are shown on Figure 3.

Each of the five Key Views is described below. The Key Vew descriptions include viewer location and orientation, existing visual character and quality, SPA features visible from this location, change to visual character and quality, anticipated viewer response, and resulting visual impact.

5.2.1 Key View 1 – Mt. Israel Road

Key View 1 (Figure7) is located on Mt. Israel Road approximately 0.5 mile directly east of the Proposed Project. The view orientation is westerly, looking up at TM 5441 on the ridgeline. The TM 5440 lot ground level is not visible from this location as that parcel is behind TM 5441 and blocked by the existing topography. Less rural settings are also present along this road (e.g., farther west, there is development and a rip-rap swale leading down the slope from Rancho Cielo to Mt. Israel Road, with Via Ambiente also visible from the location). Key View 1 was chosen to depict the rural setting also available along this road.

The existing visual character seen from this location is rural, with existing vegetation and a steep rocky embankment along the road framing the view to the SPA lots. Mt. Israel Road accesses approximately 40 homes and private drives in the valley and hillsides east of Rancho Cielo. There is no access to public trails or recreation facilities. The existing visual quality is fairly high, with several mature trees along the road and valley floor and lower scrub and/or chaparral vegetation and rock outcrops on the hillsides.

The eastern elevation and manufactured slopes of TM 5441 on the ridgeline would be visible from this location. Although the amount of detail discernible is somewhat dependent on the time of day and sun angle, at distances of less than one mile architectural features such as windows, railings, rooflines, building materials, and project landscaping generally are easily seen. Visible elements of Project design would be most prominent in the morning, with the late afternoon view to the west becoming more of a silhouetted ridgeline view as the sun sets.

With implementation of the SPA, the visual character of this focused portion of the ridgeline would be the most prominent change to this view. Project landscaping would soften the view somewhat, but the view from the valley floor up to the ridge cannot be completely screened.

The viewer response is anticipated to be adverse. At this Key View location, the great majority of people on Mt. Israel Road are homeowners arriving or leaving their neighborhood. Viewer sensitivity to change is expected to be high. However, the number of viewers is low. As noted above and provided in the Community Plan, only approximately 40 homes are located in the Mt. Israel Road residential enclave, and much of the Road is highly vegetated, obscuring off-road views.

The resulting visual impact is expected to be important to these local viewers, but less than significant under CEQA, due to the limited number of viewers. Reduction in visual effect from the approved Project that would occur with implementation of the SPA due to decreases in intensity of allowable development is addressed in Section 5.5 of this chapter.

5.2.2 Key View 2 – Camino Del Sur

Key View 2 (Figure7) was taken from Camino Del Sur (northern sidewalk) at the intersection of Casey Glen approximately 2.6 miles south of the Proposed Project and lower in elevation. The view orientation is due north, looking toward a portion of TM 5440 on the ridgeline across the San Dieguito River Valley. The TM 5441 location is not visible from this site as it is blocked by existing topography.

The existing visual character at this view location is suburban, with recent streetscape improvements and landscaping. Camino Del Sur is a four lane major roadway at this location with a posted speed limit of 45 mph. The foreground of this view consists of open space and an unpaved section of Artesian Road (see Key View 3 in Figure 8). The existing visual quality is relatively high with new and planned development replacing open space and formerly rural lands.

A small portion of proposed development on TM 5440, primarily the rooftops and parts of second floors of units on the southwest side, would be visible. At this distance individual project features such as windows, railings, and building materials would not be discernible. The majority of the proposed ridgeline development is blocked by the existing topography.

The SPA-related change to existing visual character, as seen from this Key View, with the proposed development would be negligible. The resulting visual impact is less than significant.

5.2.3 Key View 3 – Artesian Road

Key View 3 (Figure 8) was taken from the western portion of Artesian Road approximately 3.0 miles southwest of the Proposed Project and lower in elevation. The view orientation is northeast, looking toward at a portion of TM 5440 on the ridgeline across the San Dieguito River Valley. The TM 5441 location is not visible from this site as it is blocked by the existing topography.

The existing visual character at this view location is rural/estate.

A small portion of proposed development on parcel TM 5440, primarily the rooftops and parts of second floors of units on the southwest side would be visible. At this distance, individual project features such as windows, railings and building materials would not be discernible. The majority of the proposed ridgeline development is blocked by the existing topography.

The SPA-related change to existing visual character as seen from this key view with the proposed development would be negligible. The resulting visual impact is less than significant.

5.2.4 Key View 4 – Elfin Forest Road

Key View 4 (Figure 8) is located on the eastern portion of Elfin Forest Road approximately 1.5 miles northwest of the propose project. The view orientation is southeast, looking toward

and up at portions of both TMs 5440 and TM 5441 on the ridgeline, although the two parcels are indistinguishable at this distance.

The existing visual character at this view location is rural.

The visual character of the ridgeline would be the most prominent change to this view with implementation of SPA, as the hilltops currently read as relatively flat distant features and implementation of structures would be visible against the skyline. Color variation from the current scrub-covered hills also would be apparent; as structures would be anticipated to introduce both lighter and darker colors and irrigated landscaping would also result in darker vegetation that would be visible from this vantage point. However, as shown on Figure 8, the SPA is at a distance, and only comprises less than 20 percent of the horizontal view seen in this picture. This is a larger percentage of the view than would be perceived by southerly bound travelers along this Road, and for whom the viewshed would stretch both left and right from that shown in the photograph. The SPA would be noticeable, but not substantial from this view point. It also would meld with similar changes currently being built out as part of the approved Project along abutting ridgelines.

The resulting visual impact is expected to be noticeable, but would not vary from visual impacts approved under the overall Rancho Cielo Project from this vantage point. Less than significant visual impacts are identified for SPA implementation.

5.2.5 Key View 5 – Elfin Forest Recreational Reserve

Key View 5 (Figure 9) was taken from the Ray Brooks Overlook (elevation 1,185 ft) on the Manzanita Trail just off the Ridgeline Maintenance Road within the Elfin Forest Recreation Reserve. The site is approximately 1.0 mile north of the subject parcels and proposed SPA. The view orientation is southerly, looking across the valley to both TM 5440 and 5441, which would be located on the ridgeline, at a similar elevation as the photograph. The viewpoint is somewhat difficult to depict, as views toward the SPAs are generally oriented toward the sun during hours when visitors are most likely to be present. Nonetheless, the expansiveness of the view is demonstrated, as well as direct line of site to the Project.

The existing visual character at this view location is generally rural. Some intervening development is visible, and if the viewer looks southerly, the Olivenhain dam is immediately adjacent. Transmission lines and poles, and the primary maintenance road in this part of the Reserve, are also visible. For viewers looking directly toward Rancho Cielo, existing homes toward the valley and along the ridgelines are visible, with the majority of view elements on the north-facing slopes consisting of slopes and vegetation. It should be noted that on-site slopes generally were protected as part of the 1984 Supplemental EIR approval, as part of the first Rancho Cielo Specific Plan Amendment.

This view point is toward the far southern extent of the Reserve, and requires substantial hiking from the entry point, at the north end. The number of viewers would be less than the total number of viewers to the Reserve interpretive center, at the north end.

The visual character of the ridgeline and the implementation of retaining walls to support the clustered development (rather than impact additional native vegetation) would be the most prominent changes to this view with SPA implementation. These modifications are discussed in detail in Section 5.5 of this report.

To some extent, the resulting visual impact is expected to be attenuated by the SPAs' distance from the Key Views discussed. Potential visual effects also would be reduced by the expected diversion of viewer attention to other viewpoints visible from some Key View locations. The modifications would constitute important and adverse changes from the existing condition, but are considered less than significant under CEQA for the reasons enumerated above, including overall visual consistency with the approved and developing Rancho Cielo Specific Plan. Reduction in effect from the approved Rancho Cielo Specific Plan that would occur with implementation of the SPA is addressed in Section 5.5 of this chapter.

5.3 Assessment of Visual Character and Quality/Analysis of Project Effects During SPA Construction

Because the SPA is so limited in extent (proposing revisions to less than one percent of the overall approved Rancho Cielo Project), and because those proposed modifications would result in less visibility than the approved Specific Plan, additional detailed discussion of this topic is not necessary. The reader is referred to Sections 5.2, above, and 5.5, below, for important information related to visual character and quality relative to effects associated with SPA implementation. This section specifically addresses the proposed changes that SPA implementation may cause to the visual character and quality within the Project viewshed, during Project phasing (i.e., SPA construction through SPA maturity), and the potential response of viewers to those changes.

5.3.1 Construction Period Effects

Construction-period visual effects are described in four phases:

- Existing Conditions
- During Grading and Cut/Fill Operations
- End of Construction
- At Maturity

Existing Conditions

The existing visual conditions do not consist of pristine open land, but rather two parcels identified and partially modified as part of the construction of roads and mass grading over the last 20 years. Each of the two parcels contains cut slopes and concrete brow ditches left over from the initial roadway construction largely covered by sparse low-growing scrub vegetation. The ridgelines, although previously altered, now appear fairly natural and visually cohesive with nearby undisturbed sections of ridgelines.

During Grading and Cut/Fill Operations

During grading and cut/fill operations, both parcels would have approximately 58 percent of the existing vegetation cleared. Cut and fill operations would create flatter stepped pads on site surrounded by 1.5:1 manufactured slopes, as approved by the Project geotechnical engineer and landscape architect, consistent with the County grading ordinance.

Pursuant to the County Title 8, Zoning and Land Use Regulations, Chapter 6 Resource Protection Ordinance (RPO), natural slopes in the County that exceed 25 percent slope and have a gradient of more than 50 feet are protected from excessive encroachment. Steep slopes are shown on Figures 14 and 15. As shown on those figures, substantial areas of steep slope abut and slightly encroach into the proposed pads. Pad boundaries have been designed to restrict encroachment to allowable limits, as detailed on these figures. Steep slope encroachment for both parcels is within allowable limits defined in RPO Section 86.604(e)(2) as development would encroach into less than 10 percent of the steep slopes on each parcel.

Parcel TM 5440 would not require any retaining walls. Parcel TM 5441 would have three retaining walls. A 22 to 28-foot- high retaining wall approximately 380 feet in length would be constructed wrapping around the northern end of the parcel. A 4 to 16-foot-high retaining wall would be constructed on the west side of the lot to support residential pads. This wall would be approximately 610 feet long, or the whole length of the western pad limit. A 6 to 8-foot high retaining wall would be constructed surrounding a pad on the eastern side of the lot. This wall would be approximately 140 feet long. Similar to other walls completed for residential pads and roads in Rancho Cielo, walls greater than six feet in height would be modular segmental concrete systems (or precast segmented walls), and can be selectively colored and textured to harmonize with surroundings. On TM 5441, although consistent with other walls required for pads in Rancho Cielo these walls are unique in their number, extent and height within a single lot. As noted elsewhere, the implementation of the clustered development on TM 5441 is a Project design feature required as mitigation, to minimize steep slope and vegetation impacts.

During grading and cut/fill operations, both parcels would have approximately 60 percent of the site exposed as raw, unvegetated soil. The bare soil would visually contrast with adjacent vegetated areas and during this 8 to 12-month period the site would be expected to stand out from its immediate surroundings. As soon as the manufactured slopes are complete, hydroseeding operations could commence which would minimize the temporary visual impact. Approximately 40 percent of both parcels consist of steep slopes that would not be disturbed.

End of Construction

At the end of the construction period all the homes would be constructed, including all final color and finishes. All SPA-related landscaping and erosion control measures would be installed and a three to six-month plant establishment period would begin for trees and shrubs. Architectural features such as wall color and finishes, roof materials, etc., would constitute the dominant visual elements associated with the SPA parcels during this period. The manufactured slopes would have had approximately a year to establish cover, but sections of bare soil would likely remain.

RPO STEEP SLOPE LANDS HAVING A SLOPE WITH A NATURAL GRADIENT OF 25% OR GREATER AND A MINIMUM RISE OF 50 FEET.

Source: Fuscoe Engineering 2012

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TM 5441 Steep Slopes Analysis

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Figure 14

RPO STEEP SLOPE LANDS HAVING A SLOPE WITH A NATURAL GRADIENT OF 25% OR GREATER AND A MINIMUM RISE OF 50 FEET.

Source: Fuscoe Engineering 2012

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TM 5440 Steep Slopes Analysis

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Figure 15

At Maturity

Approximately five years following the end of construction, landscaping would mature to the point where all the shrub/vine planting would be at its full mature size and all groundcover would achieve 100 percent of planned coverage. Trees mature more slowly and vary amongst species. On average, it is anticipated that the trees in the landscape would be 30 to 50 percent taller and fuller than at initial planting. Overall, the landscape elements would by then effectively visually soften the architectural features and create a much more cohesive aesthetic. This would continue into the future as the trees reach full maturity.

These construction-period effects are consistent with those occurring for other developing areas within the overall Rancho Cielo development. No new significant impact is identified.

5.4 Viewer Response

As noted in Section 4.2, viewer response, or awareness, is composed of two elements: viewer sensitivity and viewer exposure. Viewer exposure is the degree (number of viewers, length of time and /or frequency) to which viewers are exposed to a view or visual resource. Viewer sensitivity and expectations are based on the preferences, standards, ideas, opinions, and bias of different viewers. For example, recreational and residential viewers' sensitivity and expectations or their visual surroundings are traditionally higher than viewers in industrial or commercial settings. The general sensitivity and exposure of viewers was defined in Section 4.2 of this VIA. In this section, an assessment is provided of viewer response for the same four project phases addressed in Section 5.3.

Existing Conditions

The existing condition is generally anticipated to be the preferred condition for viewers in this area. Because the majority of viewers (particularly those with close-in views to the SPA lots such as from Mt. Israel Road) are anticipated to live in the area and/or be recreating there, they are anticipated to know the area and be emotionally invested in the existing condition. One contrary point is that the existing condition does reflect ongoing construction of the overall Rancho Cielo Specific Plan. That means that areas of cut and new construction are currently visible that have not been fully remediated (e.g., the existing road cut visible from Mt. Israel Road), or reached maturity in terms of landscaping. Because of their detailed knowledge of the Project area, adjacent local viewer response to the existing condition is expected to range from neutral to adverse depending on their view orientation.

Other viewers passing through the area on Del Dios Highway or more distant points are not expected to be as sensitive as area residents. To the extent that they are also residents of the general vicinity, they would still be expected to be less sensitive to SPA-related changes due to less routine visibility to the site (either because of distance or intervening topography). Their response is expected to generally be neutral to the existing condition.

During Grading and Cut and Fill Operations

For those with views to the site, the grading period is expected to be the most visually obtrusive. The cut and fill areas would be generally "raw," without shielding vegetation and can be perceived as scars across the landscape. Additional disturbance could be perceived as less visually severe due to the existing disturbed condition, or could be perceived as exacerbating the existing visual effect over the original impact. Viewer sensitivity is expected to be highest at this time and response is generally expected to be adverse.

More distant viewers are not expected to respond as adversely as the local and "close-in" viewers. For the more distant viewers, the disturbed area would comprise a very small part of the overall view, and it could also be fleeting depending on the nature of the road (straight or with many turns). Response of the more distant viewer is expected to be neutral due to the distance from disturbance.

End of Construction

This is second only to the grading phase in terms of level of visual change. At this point, some of the graded areas would already be recovering from a visually "raw" state as a result of hydroseeding for erosion control; and, in some instances, expansion of native vegetation into previously graded areas due to "volunteer" behavior on the part of nearby plants. Retaining walls would have been installed with some coloring intended to blend with abutting soil colors seen in areas of native habitat. The walls themselves, however, would not yet be shielded by landscaping. Homes also would be new elements in the viewscape to existing viewers, and would not be shielded by SPA landscaping. Viewer response is expected to be adverse.

Response of the more distant viewer is expected to be neutral due to the distance from new building, and the inability to distinguish structural elements.

At Maturity

This phase reflects a post-construction time period. Landscaping would be installed and would have reached full maturity, which would provide substantially more cover than depicted in the simulations in Section 5.5.1 of this VIA (per County guidelines, the SPA vegetation has been depicted five years after installation). All ground cover would be in place, no "raw" soil associated with construction would visible. Walls and structures with planting in place would be obscured or softened.

Viewer response at this point is expected to become more varied. It is expected that some viewers would be deeply connected to past land use patterns and would find any change to those patterns to be visually adverse. Some viewers would accommodate the changed condition and find it less impactful than originally anticipated. Other viewers would be new to the area, and the SPA lots would simply be part of the existing condition. For those viewers, their response would be expected to be generally neutral, and may be positive. The latter category of viewers would be expected to grow in numbers with the passage of time, while the first and second categories of

viewers (those with current views to the property) would be expected to shrink in numbers as the years go by.

Response of the more distant viewer is expected to be neutral due to an inability to distinguish Project detail.

5.5 Determination of Significance

The discussions below address long-term potential impacts, to off-site viewers. Three simulations are provided for illustrative purposes, and are referred to in the following determination discussions. These simulations depict with-SPA views from viewpoints close to and/or frequently seen off-site vantage points. These include locations from Mt. Israel Road, Elfin Forest Road, and the Ray Brooks Overlook area in the Reserve. All owners of properties within Rancho Cielo have purchased their properties assuming full build-out of the development, and disclosure of potential modifications to Project design specifics has been made.

5.5.1 Guideline 1: Contrast with Existing Visual Character and/or Quality by Conflicting With Important Visual Elements or the Quality of the Area, or by Being Inconsistent With Applicable Design Guidelines

Two sets of design guidelines are relevant to SPA evaluation. One set comes from the 2011 San Dieguito Community Plan, and one set consists of the criteria guiding the build-out of the Rancho Cielo Development. The San Dieguito Community Plan identifies several criteria to be considered during planning. Particularly relevant to the SPA are consideration of site topography and protection of steep slopes, view orientation and view protection of adjacent properties, protection of ridgelines, preservation of dark skies, and design of buildings reasonably appropriate to the site in order to harmonize with its surroundings.

The parcel locations are currently open in aspect. Vegetation generally consists of scrub habitats and open soil; no trees are present. As a hilltop location, no natural drainage channels are present. Small rock outcrops are occasionally present in the vicinity, but none were noted on the subject parcels, and (if present) would be likely to be visible from off-site vantage points due to parcel elevation, which is generally higher than surrounding areas.

SPA structures would be built on ridgeline/knoll top topography. Steep slopes are on the site and would be affected by SPA implementation (see discussion under Section 5.3, above). Although consistent with other walls required for pads in Rancho Cielo, TM 5441 walls would be unique in their number, extent and height within a single lot. As noted elsewhere, implementation of the clustered development on TM 5441 is a Rancho Cielo design element required as mitigation to minimize steep slope and vegetation impacts. Grading would be the minimum required for parcel implementation. Slopes not affected during pad creation would not be affected by SPA implementation. Undeveloped areas would be left in existing native habitat.

With regard to view protection and the related issue of protection of ridgelines, the parcels are located on hills and knolls that are representative of this part of the County, and which form ridgeline views for off-site viewers. The implementation of the 31-unit residential development

(TM 5441) would be notable on a ridgeline that, from points north in particular, currently appears undisturbed. Likely viewers would include private residential viewers, travelers along Mt. Israel, and users of southerly trails in the Elfin Forest Recreational Reserve. One overlook (Ray Brooks), in particular, has views directly to the site (see discussion above for Key View 5). These views are illustrated in Figure 16, Key View/Photosimulation – Mt. Israel Road, and Figure 17, Key View/Photosimulation – Elfin Forest Recreational Reserve/Ray Brooks Overlook.

The view to this specific part of the Rancho Cielo ridgeline would change for these viewers. The ridgeline is a substantial topographic feature, and is both close enough to be visible and far enough away to provide the horizon line. Structures built on the TM 5441 pad would be skylined and would change the current more natural aspect of the ridgeline.

The potential significance of this effect, however, must be weighed in conjunction with the setting in this part of the County. Ridgeline development in this part of the County is both common and a hallmark of the estate residential uses in the area. As described earlier in this report and depicted on Figure 12, such development is wholly consistent with the rest of the Rancho Cielo development build-out surrounding these parcels. Both the General Plan and San Dieguito Community Plan assume full Rancho Cielo implementation. Based on proposed elimination of a number of residential structures, the current SPA proposes visually similar, but less dense uses, than have already been approved. Project landscaping, assumed as part of SPA design, would be included to soften structural lines. As a result, ridgeline effects that would result from SPA implementation would not result in a significant visual impact, under Guideline 1 related to contrast with valued visual elements or quality or inconsistency with applicable design guidelines.

The San Dieguito Community Plan requests that design of a building be reasonably appropriate to its site, and in harmony with its surroundings. The SPA proposes 31 detached single-family residential units. These homes would match the theme and style of the rest of the Rancho Cielo development, which is already visible, to off-site viewers. As noted in Section 2.0 of this VIA, the color, architecture, building materials, etc., all would be consistent with the structures already existing and under construction within the development, as would the height of the structures (up to 35 feet, or two stories).

Outlines of individual structures (and architectural detailing and variation between the structures) would be visible to closer viewers, such as along Mt. Israel Road, as shown in Figure 16. As noted, spaces between the homes would be visible, and the proximity of the structures to each other would be apparent. The large retaining wall along the road cut below the structures is visible, although it fades into the slope due to Rancho Cielo-design earth-tone coloring of the cement. These viewers would see the rooftops and some structures associated with TM 5440, beyond the TM 5441 structures from some vantage points.

Retaining walls closer to the homes have been incorporated into the model, but they are less visible from the Mt. Israel vantage point due to distance and the SPA landscape plan. Slope revegetation of the cut slope in direct view of the traveler on Mt. Israel Road has occurred in the simulation, and the visual scarring associated with grading is substantially diminished. As

Existing Conditions

Proposed Configuration

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Key View/Photosimulation - Mt. Israel Road

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Figure 16

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Existing Conditions

Proposed Configuration

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Key View/Photosimulation - Elfin Forest Reserve/Ray Brooks Overlook

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Figure 17

shown, the natural tones of the native vegetation located below SPA development would continue upslope, and expand the visual perception of natural slopes. The Reserve location shown in Figure 17 would be too distant to discern much detail.

Although Figure 16 depicts the reduction in massing that would occur under the currently approved Rancho Cielo Specific Plan, the residential structures would be closer to each other than the large-lot estate homes located adjacent to these SPA lots along the ridgeline, and would have less open space between them. Figure 18, Perceived Structure Massing, depicts existing large lot estate homes in the area. As shown, a viewer's distance from specific parcels can result in structures being seen at the same time without perceiving intervening space. This results in the structure mass "combining" as the lots seem to merge together. This is an existing visual condition in the area. The proposed SPA structures would not appear too different.

Overall, identified architectural features, such as gabled roofs, split level design and varied window treatments, common landscaping elements and similar heights would result in a level of unity that results in "harmony" with the surroundings; consistent with the San Dieguito Community Plan goal stated in Section 2.3 of this VIA.

From the Reserve, as shown in Figure 17, both lines of residential structures on TM 5441 would be visible as they trend along, and slightly down slope from, the ridgeline. To some extent, it would draw the eye, as it would be located on the ridgeline that could be directly in front of the viewer. Its visual impact would be somewhat diminished, however, by other visible elements such as homes down slope and other residences along the ridgeline. It is also clear from the simulation that the lot provides only a portion of a much larger view experienced from this location. Equally dominant to the visible (on- and off-Rancho Cielo developed elements) are the undeveloped slopes with native vegetation. Both of these terrestrial elements are additionally visually balanced by the expanse of sky seen from this elevated viewpoint.

As depicted in Figure 19, Key View/Photosimulation – Elfin Forest Road, although potentially centered in the view for travelers along this roadway, the distance to the site renders changes to the view somewhat minimal. The ridgeline development would be seen, but would be substantially visually outweighed by the intervening slopes and immediately adjacent vegetation.

Relative to the currently approved Rancho Cielo Project, the subject SPA-proposed reduction in units within the parcel would result in uses over 20 percent less dense than those allowed under the approved Rancho Cielo Project for TM 5441. Restriction of structure height to 35 feet rather than the anticipated 60 feet also would result in rooftops being 40 percent less visible than originally anticipated. Any view of development at TM 5440 would result in less impactive views than those originally planned as part of the existing zoning district, as the commercial development allowed by the existing zoning would have been more intense than the residential development proposed as TM 5440. The reduction in units combined with the lower structure height result in a less than significant impact. Based on the above discussion, SPA implementation would not result in a significant visual impact under Guideline 1 related to contrast with existing visual elements or quality of the area. The SPA is also found consistent with applicable design guidelines. Although the San Dieguito Community Plan contains current prohibitions against ridgeline development, it also expressly contains the approved Specific Plan

as a specific element. As an already approved project, the SPA is not evaluated in a vacuum as a new proposal, but is evaluated relative to the approved Rancho Cielo development. As noted above, the current amendment reduces footprint, number of dwellings, and heights of dwellings proposed for TM 5441. The SPA is identified as consistent.

Visual effects described above also occur, but to a lesser level, for more westerly viewers. These viewers would see more of TM 5440 than 5441. In general, the size of the immediate adjacency of the structures is expected to be less visible as these viewers generally would be at farther distances. The separate structures would visually read as built features, but they may visually meld into one larger structure given landscaping and viewer distance, (as illustrated in Figure 18, which shows existing separated structures on large lots appearing to be immediately adjacent to one another when viewed from a distance). Other Rancho Cielo (and off-site) structures also would be part of the view, detracting from a focus on the subject parcels. Regardless, the view would be consistent with, and less impactive than, the one originally approved. Since the development is residential, the units are more consistent with adjacent residential development than the zoned commercial center.

With regard to concern for dark skies, although Rancho Cielo is not located within the Dark Skies boundaries (it is in Zone B), the development of the Specific Plan includes safety lighting, street lights; pedestrian pathway illumination; and parking lot lighting. SPA (and Rancho Cielo development overall) would not adversely affect night views or astronomical observations. The proposed lighting would conform to the lamp type and shielding requirements, as well as the hours of operation detailed in the Light Pollution Code (Section 59.101-59.115).

5.5.2 Guideline 2: Result in the Removal of/or Change to Valued Visual Elements

No designated landmarks (e.g., landmark trees) or visible rock outcrops or historic resources (structures or landscaping) are present on the two parcels. They do not form part of the seen environment, and no impact is identified.

The largest change to valued visual elements would relate to modifications to ridgeline views for off-site viewers as discussed under Guideline 1. As noted, ridgeline effects are specifically identified as a matter to consider in the San Dieguito Community Plan, and would be notable from the Elfin Forest Recreation Reserve overlook, which has views directly to the site.

As noted above, the view to this specific part of the Rancho Cielo ridgeline would change for these viewers. The ridgeline is a substantial topographic feature, and is both close enough to be visible and far enough away to provide the horizon line. Structures built on this pad would be skylined and would change the current more natural aspect of the ridgeline. Also as discussed above, ridgeline development is wholly consistent with the entire ongoing Rancho Cielo Specific Plan. The review of this type of construction and its visual effects was included within the previous Rancho Cielo approvals. The current SPA proposes visually similar, but less intense, uses than have already been approved, through the existing zoning districts. Landscaping, assumed as part of design and shown in Figure 11, would be included to soften structural lines. As a result, ridgeline effects that would result from SPA implementation are not visually significant, as it relates to Guideline 2.

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Perceived Structure Massing

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Figure 18

Existing Conditions

Proposed Configuration

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Key View/Photosimulation - Elfin Forest Road

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Figure 19

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5.5.3 Guideline 3: Substantially Obstruct, Interrupt, or Detract From a Valued Focal and/or Panoramic Vista

The subject parcels are not visible from scenic roadways, and visibility to the site from the Coast to Crest Trail could occur from one limited location that is over 2.5 miles distant. No impact is identified for these resources.

The SPA development would be visible from public roads, and trails within Elfin Forest Recreational Reserve. However, based on this analysis, no substantial obstruction or interruption of views would occur.

As discussed, many views towards the SPA area are eliminated due to existing road orientation or vegetation that screens views. The presence of surrounding hills however, results in views that remain often being panoramic in nature.

This means that potential public views are likely to incorporate all or a portion of the subject parcels, but also means that the subject parcels only form one element within a larger and expansive view, incorporating other hills, structures, roads, etc. Although it is expected that some viewers will find that the SPA would detract from a valued focal point or panoramic vista, the scope of the views result in the effect being less than *substantial*, with associated impacts being less than significant under Guideline 3.

5.5.4 Rancho Cielo Interior Views

Although not directly relevant to the CEQA analysis provided in this VIA, the SPA Applicant has also prepared visual simulations of interior Rancho Cielo views in response to requests from area residents and the Planning Commission.

These simulations do not follow County guidelines for CEQA simulation preparation in that they neither focus on public views nor restrict vegetation represented in the simulations to five years' growth. They have been reviewed for accuracy of modeling, however, and they accurately illustrate the post-development topography, and architectural detailing. They depict proposed lot development at landscape maturity (e.g., trees are shown at mature height and canopy) as well as showing substantially greater detail of the development due to the closer location of the represented viewer. For these reasons, although these simulations did not provide the basis for the CEQA analysis in this VIA, they are provided here for the readers' information and interest.

Figure 20, Key Map for On-Site Simulations, provides an orientation graphic showing the locations from which the base photographs were taken. Figures 21 through 26, On-Site Key View/Photosimulations 1 through 6, depict views within Rancho Cielo, from west to east.

5.6 Cumulative Effects

Visual cumulative effects address those incremental changes that may contribute to significant adverse changes in a regional setting or character, even if those changes are not identified as

significant adverse impacts on a project level. The analysis is a two-step process. First, an assessment is made regarding whether a cumulative impact occurs, and second, as assessment is made regarding the level to which the proposed action would contribute to it. The project contribution is identified as either cumulatively considerable or less than cumulatively considerable.

In this instance, project visual effects relate to two SPA elements: (1) location on a ridgeline, and (2) clustering of residential features in an area generally more estate residential in nature. The cumulative study area is the viewshed identified for the project, as this covers the area from which project elements are most likely to be visible.

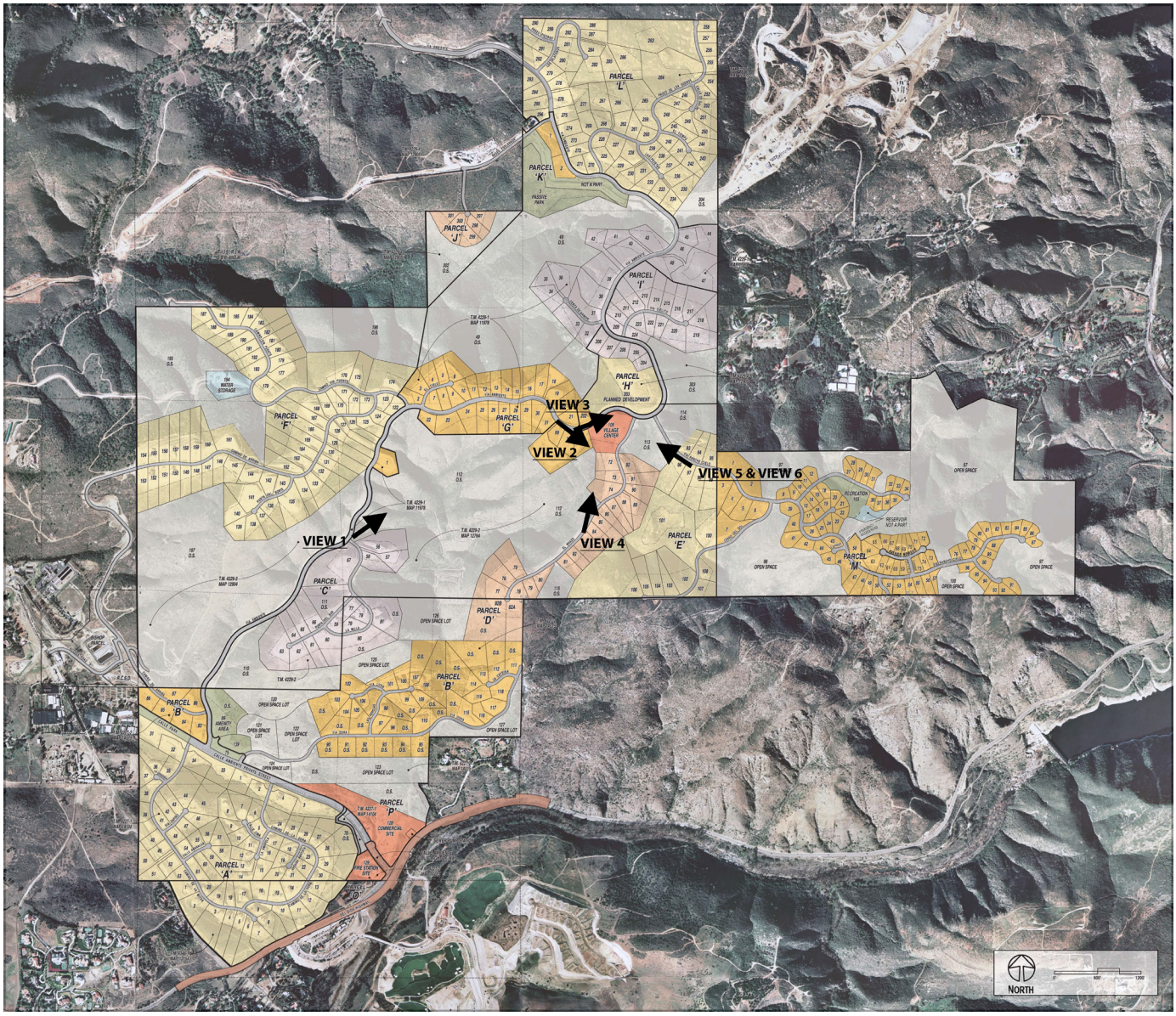
In this instance, as seen in Figure 3 of this VIA, the cumulative study area breaks into two general categories—the large estate or rural lots and open space located in the northern two-thirds of the study viewshed, and the more densely developed residential areas around golf course facilities in the southern third of the viewshed. The proposed project would place the allowed clustered structures in the northernmost portion of the viewshed, where they are relatively atypical. Most of the development here is based on large lots—in fact, the two parcels in question are part of an otherwise large-lot development. As such, there is not a cumulative trend toward such clustered development in this part of the viewshed, and the proposed SPA does not contribute to an existing cumulative effect. With regard to ridgeline development, SPA implementation would continue this trend that occurs in the more exclusive portions of the County. The Proposed Project would also implement the past approvals in the Rancho Cielo Specific Plan. While representative of this area and seen as highly desirable by some, others find ridgeline development and structural skylining to be visually intrusive. The proposed SPA, however, addresses less than one percent of the overall Rancho Cielo project, and a substantially smaller percentage of the overall viewshed. As shown on Figure 3 and described above, views to the proposed development generally would be fleeting and/or at distance, as well as observed by relatively low numbers of viewers overall.

Cumulative effects resulting from these very focused (and minimizing) changes would not vary based on SPA implementation. The contribution to this effect resulting from SPA implementation would constitute a less than considerable contribution to any adverse cumulative condition that may exist.

5.7 Summary of Project Impacts and Significance and Conclusions

Consistent with guidance in the 2007 County of San Diego Visual Guidelines and Significance Thresholds, public views form the primary focus of this analysis. Although visibility of the SPA area to viewers from both private and public viewpoints are discussed throughout the report, since, the SPA would result in less intense and dense development it is visually less intrusive and the impact assessment focus on public viewers.

The subject parcels and their uses were identified during approval of the first amendment to the Rancho Cielo Specific Plan, in the 1984 Supplemental EIR. The visual impacts identified in 1984 and during the subsequent Specific Plan Amendments were the same or similar to those discussed in this analysis for the proposed TMs 5440 and 5441. The stated visual impact



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Key Map for On-Site Simulations

RANCHO CIELO ESTATES VISUAL IMPACT ASSESSMENT

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Figure 20

Existing Conditions

Proposed Configuration

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On-Site Key View/Photosimulation 1

RANCHO CIELO

Figure 21

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Existing Conditions

PROPOSED PROJECT

Proposed Configuration

EXISTING HOME LOT 21

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On-Site Key View/Photosimulation 2

RANCHO CIELO

Figure 22

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Existing Conditions

PROPOSED PROJECT

PROPOSED PROJECT

Proposed Configuration

EXISTING PAD FUTURE
HOMESITE LOT 202

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On-Site Key View/Photosimulation 3

RANCHO CIELO

HELIX Environmental Planning

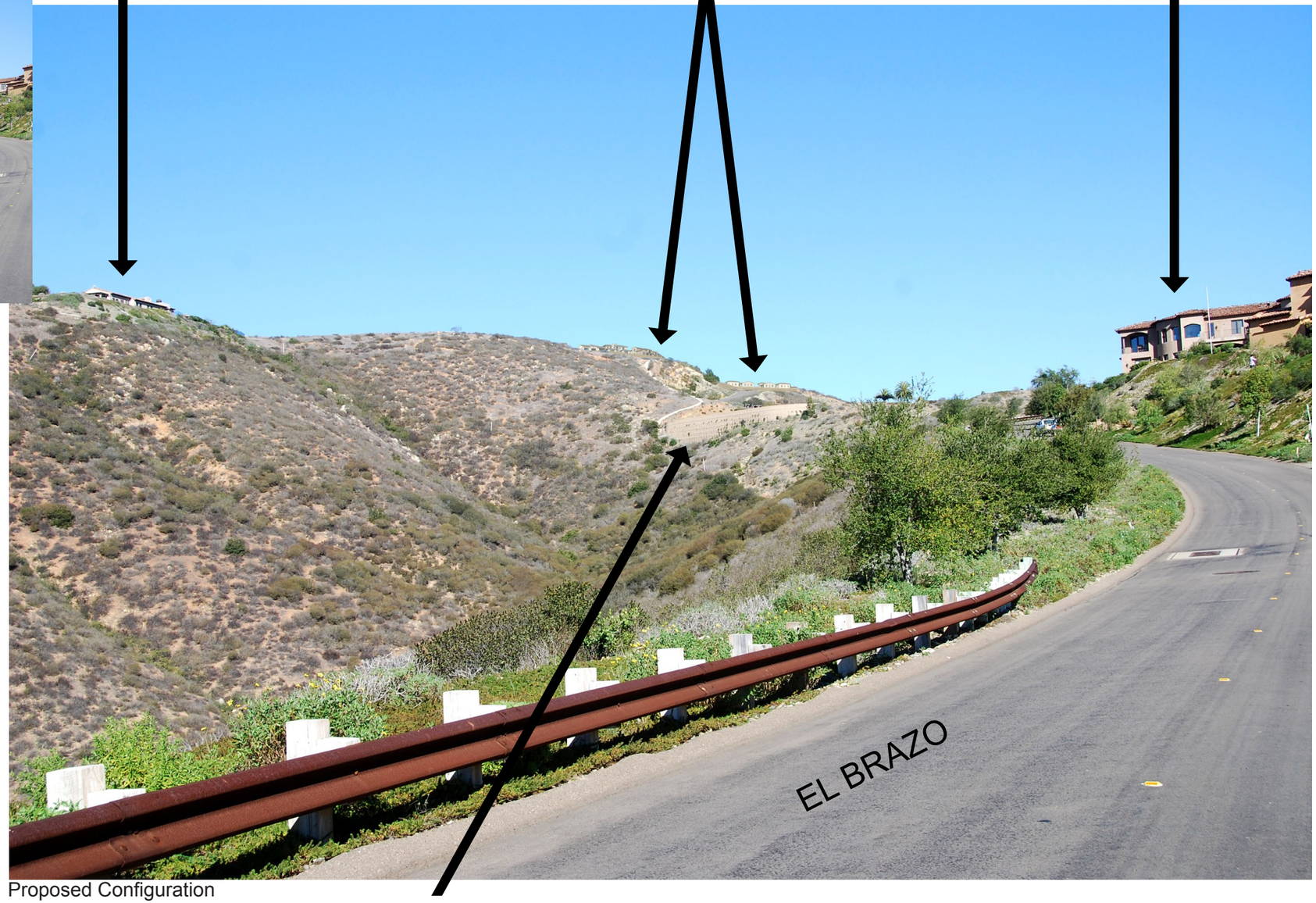
Figure 23

Existing Conditions

EXISTING HOME
LOT 71

PROPOSED PROJECT

EXISTING HOME
LOT 85 & 86



Proposed Configuration

EXISTING PAD FUTURE
HOMESITE LOT 74

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On-Site Key View/Photosimulation 4

RANCHO CIELO

Figure 24

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Existing Conditions

EXISTING HOMES
LOTS 30, 69, & 71

PROPOSED PROJECT

Proposed Configuration

VIA RANCHO CIELO

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On-Site Key View/Photosimulation 5

RANCHO CIELO

Figure 25

HELIX Environmental Planning

Existing Conditions

PROPOSED PROJECT

VIA RANCHO CIELO

EXISTING SLOPE LOT 94

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On-Site Key View/Photosimulation 6

RANCHO CIELO

Figure 26

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mitigation measures proposed for the Specific Plan would not change based on the current project design. The current TMs would not create more severe visual impacts than were originally analyzed. In fact, it is anticipated that the subject TMs would result in slightly less impact, due to the lower intensity of development and reduced building heights currently proposed. Ridgeline development and visibility of the subject clustered development were assumed as part of the originally approved Specific Plan design and implementation of the current SPA TMs would not create a more severe impact than the original design of the Rancho Cielo Specific Plan.

With regard to visible SPA-related changes, implementation of the proposed SPA at TM 5440 would retain building heights at 35 feet, eliminate an approved helipad and commercial uses, and implement residential uses only (consisting of 10 to 11 units, depending on development scenario) and result in building massing that is more consistent with residential development than the zoned commercial uses. Implementation of the proposed SPA at TM 5441 would reduce the number of planned units for this lot from 42 to 31 and substantially reduce structure height from a maximum allowed 60 feet to 35. Steep slope encroachment for both parcels complies with the RPO. The SPA implementation would result in grading patterns, retaining walls, architectural features and landscaping consistent with the existing development, on the other portions of the Rancho Cielo Specific Plan.

Review of site changes from five representative viewpoints within a three-mile radius indicates that the SPA elements would range from notable to barely visible. This is supported by the three photosimulations prepared for the SPA and presented in Section 5.5.1. The Project would be incrementally less visible from off-site locales than if the currently allowed Project were to be built. Consideration of each of the above points related to minimization of potential Project effects previously approved, results in findings of less than significant impacts under CEQA relative to the SPA.

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6.0 ALTERNATIVE DEVELOPMENT SCENARIO

6.1 39-Unit Development Scenario

One alternative development scenario has been reviewed for the SPA, which would reduce the units developed on the two subject parcels by a total of three. This would reduce the number of homes on TM 5441 by 2, so that only 29 residences would be built. On TM 5440, only 10 residential units would be constructed. This would allow a slightly less dense organization of the units on the lots, but would result in only an incremental change in massing. Structure height would be the same. Given the distance from which most viewers see the site (at least 0.5 mile distant), this decrease may not be noticeable.

Although grading on Lot 5440 would remain the same, one potentially important change between the plans would occur on Lot 5441. With deletion of two residential structures, grading would be simplified, and retaining walls at the north end of the lot that are proposed for the 31-residential unit alternative on this lot would be substantially minimized. Under this alternative, the northern wall would be only approximately 80 feet long and would vary from 1 to 10 feet in height, as opposed to 380 feet in length and 22-to-28 feet in height.

Similar to the 42-unit design scenario analyzed above, this alternative also would result in less than significant impacts under CEQA.

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7.0 VISUAL MITIGATION AND DESIGN CONSIDERATIONS

Several design features such as landscaping, building setbacks, and architectural details would help to reduce the contrast between the Proposed Project and the surrounding area. These elements largely are part of the approved Rancho Cielo Specific Plan. For the current SPA proposal, the reduction in residential units on TM 5441 (either the 31 or 29 unit development scenarios), combined with reduction in structure height to 35 feet and elimination of approximately 30 percent of two-story dwellings, would result in further diminution of visual effects over those anticipated as part of the currently approved Specific Plan.

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8.0 REFERENCES

County of San Diego

2011 General Plan
San Dieguito Community Plan

2007 County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources. July 30.

1986 San Diego County Code of Regulatory Ordinances. Light Pollution Code. Section 59.101 et seq. Chapter 9.

1984 Supplemental Environmental Impact Report for the Rancho Cielo Specific Plan Project

Elfin Forest Recreational Reserve

2012 Anderson, Jeff, to Lisa Capper of HELIX, pers. comm. regarding user numbers at the Reserve and primary use of more northern areas.

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VII. RECOMMENDATIONS

Two commercial centers may be included in the Rancho Cielo Specific Plan.

A. Rancho Cielo Village Center

The first commercial center should be located at a central point within the project, and could be comprised of the following uses:

1. Clubhouse, restaurant and recreational center, including a swimming pool, and tennis courts.
2. Post office contract station.
3. Leasable area for specialty shops, 5000-plus square feet for tenants and residents.
4. 20-40 townhouses to provide the opportunity for residents to purchase less expensive housing, and will contribute to the activity in the community center and to the security of the center 24 hours a day.
5. Rancho Cielo Association offices.

The size of the Village Center site should be 10 to 15 acres; this should include 3 to 4 acres for the clubhouse, commercial and civic use.

B. Rancho Cielo Neighborhood Commercial Center

The commercial center comprising 10 to 15 usable acres should be located on Del Dios Highway at the intersection with the westerly entrance to the project (also near the intersection with the alignment of SA 680). The following tenants should be solicited:

1. Market
2. Pharmacy
3. Plant nursery
4. Convenience/fast food store
5. Laundry and dry cleaners
6. Gasoline station
7. Leasable office space

The size of the neighborhood center site should accommodate 30,000 to 50,000 square feet GLA in buildings. Such a site would leave about one acre for future expansion. Office space should comprise 10 to 30 percent of the GLA. Offices should be designed for conversion to commercial use, for built-in flexibility. Office tenants should be concentrated in medical and professional services, but office space availability should also be presented to potential buyers of Rancho Cielo lots.