
rancho palos verdes
coastal specific plan

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coastal specific plan
environmental impact report

rancho palos verdes december '78

RESOLUTION NO. 78-81

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO PALOS VERDES MAKING ENVIRONMENTAL FINDINGS AND ADOPTING GENERAL PLAN AMENDMENT NO. 3 AND THE COASTAL SPECIFIC PLAN OF THE CITY OF RANCHO PALOS VERDES.

The City Council of The City of Rancho Palos Verdes Hereby Finds, Resolves and Orders As Follows:

Section 1. The Planning Commission held duly noticed public hearings on the proposed General Plan Amendment No. 3 and Coastal Specific Plan on March 17, 1977, March 29, 1977, and April 21, 1977. All interested parties were given an opportunity to be heard, and evidence was presented to and considered by the Commission. On July 26, 1977, the Planning Commission adopted Resolution No. 77-17 which recommended that the City Council adopt General Plan Amendment No. 3 and the Coastal Specific Plan as set forth in Exhibit B attached to said Resolution.

Section 2. On August 30, 1977 and September 22, 1977, the City Council held duly noticed public hearings on the proposed General Plan Amendment No. 3 and Coastal Specific Plan recommended by the Planning Commission. All interested parties were given an opportunity to be heard, and evidence was presented to and considered by the Council.

Section 3. The final Environmental Impact Report ("EIR") for the proposed General Plan Amendment No. 3 and Coastal Specific Plan was prepared as part of said Coastal Specific Plan and is fully integrated therein. The City Council hereby certifies that the EIR was completed pursuant to the provisions of the California Environmental Quality Act and the guidelines thereto and that the Council has reviewed and considered the contents of the EIR prior to deciding whether to adopt the proposed General Plan Amendment No. 3 and Coastal Specific Plan.

Section 4. With respect to the potential significant environmental effects identified in the EIR, the City Council finds as follows:

1. The EIR identifies as a potential significant environmental effect the impact on views. This potential significant environmental effect will be mitigated or avoided as follows:

View corridors will be created with restrictions on the height of structures. In addition, other mitigation measures more specifically set forth in the Coastal Specific Plan will be implemented.

2. The EIR identifies as a potential significant environmental effect the impact on hazard areas. This potential significant environmental effect will be mitigated or avoided as follows:

Development will be strictly restricted in hazard areas. No new permanent structures will be allowed in geologically constrained areas or areas exceeding 35% slope. In addition, other mitigation measures more specifically set forth in the Coastal Specific Plan will be implemented.

3. The EIR identifies as a potential significant environmental effect the possible increase in noise and pollution created by increased vehicular traffic. This potential significant environmental effect will be mitigated or avoided as follows:

Residential densities will be limited. In addition, other mitigation measures more specifically set forth in the Coastal Specific Plan will be implemented.

4. The EIR identifies as a potential significant environmental effect the impact on the natural environment. This potential significant environmental effect will be mitigated or avoided as follows:

Residential densities will be limited. New residential developments will be required to be constructed as planned unit developments so that buildings can be sited in a manner that will not destroy or damage valuable natural resources. In addition, other mitigation measures more specifically set forth in the Coastal Specific Plan will be implemented.

5. The EIR identifies as a potential significant environmental effect the impact on the marine environment. This potential significant environmental effect will be mitigated or avoided as follows:

Residential densities will be limited. The amount of impervious surfacing will be minimized. State agencies will be requested to more strictly enforce conservation laws. In addition, other mitigation measures more specifically set forth in the Coastal Specific Plan will be implemented.

6. The EIR identifies as a potential significant environmental effect the loss of a valuable coastal resource. This potential significant environmental effect will be mitigated or avoided as follows:

Residential densities will be limited. Bluff roads and public access to coastal resources will be required. In addition, other mitigation measures more specifically set forth in the Coastal Specific Plan will be implemented.

Section 5. The City Council hereby adopts General Plan Amendment No. 3 as set forth in Exhibit A attached hereto.

Section 6. The City Council hereby adopts the Coastal Specific Plan as set forth in Exhibit B attached hereto.

PASSED, APPROVED AND ADOPTED this 19th day of December, 1978.

AYES: RYAN, BUERK, HEIN AND MAYOR DYDA

NOES: NONE

ABSENT: SHAW

Ken Dyda
MAYOR

ATTEST:

LEONARD G. WOOD, CITY CLERK AND
EX OFFICIO CLERK OF THE COUNCIL

Mary Jo Lofthus, Dpty.
CITY CLERK

I HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 78-81 approved and adopted by the City Council of the City of Rancho Palos Verdes at a meeting thereof held on the 19th day of December, 1978.

Mary Jo Lofthus, Dpty.
CITY CLERK

EXHIBIT "A"

GENERAL PLAN AMENDMENTS

1. Sea Cliff erosion hazard depicted in Figure 9 of the General Plan is revised to reflect a more accurate extent of this hazard as depicted in Figure 5 of this Plan.

2. Biotic resources depicted in Figure 9 of the General Plan is revised to reflect a more accurate extent of these resources.

3. Areas with Consideration for Public Health and Safety depicted in Figure 12 of the General Plan are revised to reflect a more accurate extent of these areas.

4. Areas for Preservation of Natural Resources depicted in Figure 13 of the General Plan are revised to reflect a more accurate definition of the resources.

5. Natural Environment Element depicted in Figure 14 of the General Plan is revised to reflect a more accurate definition of these areas.

6. Land Use Activities are as follows:

   A) Subregion 1: Residential Activity - from one (1) dwelling unit per acre to one (1) dwelling unit per acre (Residential Planned Development).

   B) Subregion 2: Commercial Recreation to Agriculture on the Abalone Cove School Site.

   C) Subregion 3: Residential Activity - from 1-2 and 6-12 dwelling units per acre on the bluff to one (1) dwelling unit per acre (Residential Planned Development), and from 4-6 and 6-12 dwelling units per acre inland to 2-4 dwelling units per acre.

   D) Subregion 4: Residential Activity - from 2-4 dwelling units per acre on the bluff to 1-2 dwelling units per acre.

   E) Subregion 6: Residential Activity - from one (1) dwelling unit per acre to 4-6 dwelling units per acre and 1-2 dwelling units per acre in the Coastal Setback Zone.

   F) Subregion 7: Residential Activity - from one (1) dwelling unit per acre to one (1) dwelling unit per acre (Residential Planned Development). Commercial Activity - the addition of a floating Commercial Limited activity in this area.

7. Equestrian Trails depicted in Figure 22 of the General Plan and the following text are eliminated.

8. Fire Hazards depicted in Figure 23 of the General Plan are revised to reflect a more accurate extent of this hazard.

9. Visual Aspects depicted in Figure 41 of the General Plan are revised to reflect the more refined system contained in the Corridor Element of this Plan.

10. Overlay Control Districts are revised to more accurately reflect the areas of concern.

INTRODUCTION

Purpose I-1

Description of the Coastline I-3

Methodology I-3
Natural Environment Element I-5
Socio/Cultural Element I-6
Urban Environment Element I-7
Fiscal Element I-8

NATURAL ENVIRONMENT ELEMENT

Natural Environment N-1
Climate N-2
Air Quality N-9
Water Quality N-10
Geotechnical Factors N-15
Hydrology N-28
Biotic Resources N-28
Fire Hazard N-35

Resource Classification N-36

Areas for Consideration of
Public Health and Safety N-37

Areas for Preservation of
Natural Resources N-39

Natural Environment Element N-40
CRM-1 Extreme Slope N-40
CRM-2 High Slope N-40
CRM-3 Hazard N-41
CRM-4 Marginally Stable N-42
CRM-5 Insufficient Information N-42
CRM-6 Wildland Fire Hazard N-42
CRM-7 Flood/Inundation hazard N-43
CRM-8 Hydrologic Factors N-43
CRM-9 Wildlife Habitat N-44
CRM-10 Natural Vegetation N-44
Policies N-45

SOCIO/CULTURAL ELEMENT

Social Factors S/C-1
Governmental S/C-1
Nongovernmental S/C-4
Policies S/C-6

Cultural Resources S/C-6
Terrestrial S/C-6
Marine S/C-7
Policies S/C-7

URBAN ENVIRONMENT ELEMENT

Activity Areas U-1
Compatibility of the Coastal
Region with Adjacent Activity U-1
Residential Activity U-2
Commercial Activity U-16
Coastal-Dependent Activities U-17
Institutional Activity U-18
Recreational Activity U-22
Agricultural Activity U-28

Infrastructure U-34
Resource Systems U-34
Disposal/Recovery Systems U-37
Transportation Systems U-39
Policies U-66

Planning and Design Guidelines U-68
Site Planning U-69
Structure Design U-71
Landscape/Hardscape U-72
Miscellaneous Design Elements U-73

Policy U-74

Safety U-75
Hazards Inventory U-75
Safety Programs U-76
Policies U-80

CORRIDORS ELEMENT

Introduction C-1

Analysis of Existing Condition C-3

Corridors Concept C-5
Access Corridors C-5
Infrastructure Corridors C-7
Visual Corridors C-9
Natural Corridors C-12
Protection/Preservation Corridors C-14
Composite Corridors C-15
Policy C-16

FISCAL ELEMENT

Introduction F-1

Summary F-3

Policies F-3

SUBREGION 1

Introduction S1-1

Natural Environment S1-1
Climate S1-1
Geotechnical Factors S1-2
Hydrology S1-2
Biotic Resources S1-2
Fire Hazard S1-3

Socio/Cultural S1-3
Cultural Resources S1-3

Urban Environment S1-3
Activity Areas S1-3
Infrastructure S1-6

Policies S1-10

SUBREGION 2

Introduction S2-1

Natural Environment S2-1
Climate S2-1
Geotechnical Factors S2-2
Hydrology S2-2
Biotic Resources S2-2

Socio/Cultural S2-4
Social Factors S2-4
Cultural Resources S2-4

Urban Environment S2-5
Activity Areas S2-5
Infrastructure S2-11

Policies S2-15

SUBREGION 3

Introduction S3-1

NATURAL ENVIRONMENT S3-1
CLIMATE S3-1
GEOTECHNICAL FACTORS S3-2
BIOTIC RESOURCES S3-2
FIRE HAZARD S3-4

SOCIO/CULTURAL S3-4
SOCIAL FACTORS S3-4

URBAN ENVIRONMENT S3-4
ACTIVITY AREAS S3-4
INFRASTRUCTURE S3-12

POLICIES S3-14

SUBREGION 4

INTRODUCTION S4-1

NATURAL ENVIRONMENT S4-1
CLIMATE S4-1
GEOTECHNICAL FACTORS S4-2
HYDROLOGY S4-2
BIOTIC RESOURCES S4-3
FIRE HAZARD S4-4

SOCIO/CULTURAL S4-4
SOCIAL FACTORS S4-4
CULTURAL RESOURCES S4-5

URBAN ENVIRONMENT S4-5
ACTIVITY AREAS S4-5
INFRASTRUCTURE S4-11
SAFETY S4-13

POLICIES S4-14

SUBREGION 5

INTRODUCTION S5-1

NATURAL ENVIRONMENT S5-1
CLIMATE S5-1
GEOTECHNICAL FACTORS S5-2
HYDROLOGY S5-3
BIOTIC RESOURCES S5-3
FIRE HAZARD S5-4

SOCIO/CULTURAL S5-6
SOCIAL FACTORS S5-6
CULTURAL RESOURCES S5-6

URBAN ENVIRONMENT S5-7
ACTIVITY AREAS S5-7
INFRASTRUCTURE S5-10

POLICIES S5-16

SUBREGION 6

INTRODUCTION S6-1

NATURAL ENVIRONMENT S6-1
CLIMATE S6-1
GEOTECHNICAL FACTORS S6-2
HYDROLOGY S6-2
BIOTIC RESOURCES S6-3
FIRE HAZARD S6-3

SOCIO/CULTURAL S6-4
SOCIAL FACTORS S6-4
CULTURAL RESOURCES S6-5

URBAN ENVIRONMENT S6-5
ACTIVITY AREAS S6-5
INFRASTRUCTURE S6-10

Safety S6-11

Policies S6-12

SUBREGION 7

Introduction S7-1

Natural Environment S7-1
Climate S7-1
Geotechnical Factors S7-2
Hydrology S7-2
Biotic Resources S7-2
Fire Hazard S7-4

Socio/Cultural S7-4
Social Factors S7-4
Cultural Resources S7-4

Urban Environment S7-5
Activity Areas S7-5
Infrastructure S7-9

Policies S7-12

SUBREGION 8

Introduction S8-1

Natural Environment S8-1
Climate S8-1
Geotechnical Factors S8-2
Hydrology S8-3
Biotic Resources S8-3
Fire Hazard S8-4

Socio/Cultural S8-4
Social Factors S8-4
Cultural Resources S8-4

Urban Environment S8-4
Activity Areas S8-4
Infrastructure S8-5

Policies S8-9

APPENDIX

EIR Requirements A

EIR Addendum B

Herbicide and Pesticide Regulation C

Glossary D

Bibliography E

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

PURPOSE

Rancho Palos Verdes, being a newly incorporated city as of September 7, 1973, was under legislative law to adopt a General Plan by June 30, 1975. This time schedule would be severe to most established cities; and, being a newly incorporated city required an assemblage of base information. An environmental resource inventory, census profile, and economic base perspective were developed, on which sound land use and fiscal projections could be based. In the course of preparing this Plan, it became evident that the time constraint would not permit a thorough study of the City's highly complex and sensitive coastline. Therefore, a Specific Plan District (a procedure provided for under Section 65450 of California State Law) was designated on the coastal area to permit further study of this environment.

It was quite evident that, in preparing the Coastal Specific Plan, it would be necessary to further assess physical factors. A more accurate definition of bluff stability was needed so that those areas which were geologically unstable could be accurately identified and areas capable of supporting structures would be known. Biological input was crucially needed to better assess both terrestrial and marine habitats and to develop sound land use and resource policies which would not only ensure their continued existence but also increase the quality of these habitats where feasible.

Land use decisions had to respond to environmentally sensitive natural features as well as physical limitations of infrastruc-

TURAL SYSTEMS. THESE SYSTEMS HAVE DEFINED LIMITATIONS DUE TO THE CITY'S LOCATION ON A PENINSULA, WHICH LIMITS THE DIRECTION FROM WHICH THEIR NETWORKS CAN PROVIDE SERVICE. ALL LAND USE DECISIONS AND POLICIES HAD TO BE BASED ON A SOUND FISCAL APPROACH, WHICH IS A PRIMARY CONCERN OF THE CITY.

NOT ONLY WERE PHYSICAL FACTORS IMPORTANT, BUT ALSO SOCIAL CONCERNS. IT WAS INDICATED THROUGH THE PASSAGE OF PROPOSITION 20 IN 1972 THAT THE ENTIRE STATE OF CALIFORNIA IS CONCERNED WITH THE MANAGEMENT OF THE STATE'S COASTLINE, FOR WHICH RANCHO PALOS VERDES IS THE PRIMARY GOVERNING BODY OF 7 1/2 MILES. IT IS IMPORTANT THAT THE COASTAL SPECIFIC PLAN RESPOND NOT ONLY TO LOCAL SOCIAL NEED; A PERSPECTIVE MUST ALSO BE MAINTAINED AS TO ITS VALUE AS A LOCALLY DEFINED PUBLIC RESOURCE.

AT THE ONSET OF THE STUDY, JURISDICTIONAL CONTROL OF LAND USE AND ZONING MATTERS WAS UNDEFINED. IT WAS UNCLEAR WHETHER THE CALIFORNIA LEGISLATURE WOULD MAINTAIN LOCAL CONTROL OF COASTAL AREAS OR WHETHER A STATE COASTAL COMMISSION WOULD EVOLVE AS AN OVERSEEING AGENCY, PRESIDING OVER LOCAL JURISDICTIONS TO ENSURE THEIR COMPLIANCE WITH THE CALIFORNIA COASTAL PLAN (THE PLAN FOUNDED ON THE PASSAGE OF PROPOSITION 20). THEREFORE, A CLOSE WATCH OVER THE PROGRESS OF ASSOCIATED COASTAL LEGISLATION NEEDED TO BE MAINTAINED IN ORDER TO EVALUATE THE RELATIVE COMPATIBILITY/NONCOMPATIBILITY OF THESE ISSUES WITH THE CITY'S COASTAL SPECIFIC PLAN.

THE SUBSEQUENT 1976 COASTAL ACT REDEFINED THE COASTAL COMMISSION'S JURISDICTION WITHIN THE CITY TO COINCIDE WITH THE ESTABLISHED COASTAL SPECIFIC PLAN DISTRICT. THEREFORE, THIS PLAN WILL NOT ONLY SERVE AS A LOCAL SPECIFIC PLAN, BUT WILL REPRESENT THE CITY'S LOCAL LAND USE PLAN COMPONENT OF THE LOCAL COASTAL PROGRAM, AS MANDATED BY THE 1976 ACT. THE CITY HAS REVIEWED THE REQUIRED 1976 ACT POLICIES AND FEELS THAT THIS PLAN ADDRESSES THESE POLICIES AS THEY ARE INTENDED TO APPLY TO THIS SEGMENT OF THE CALIFORNIA COASTLINE.



DESCRIPTION OF COASTLINE

Of California's 1,100 miles of coastline, 7.5 miles are directly within the jurisdiction of Rancho Palos Verdes. The City's similarity with other California coastal areas is dependent upon which features are being compared. Natural features, such as geology, shoreline character, and biota, are somewhat parallel to those of Malibu. However, urban features are quite dissimilar. The City lies in a close proximity to a major sewage outfall (White's Point) and sea port (Los Angeles Harbor), which is not the case in Malibu. Therefore, although general similarities exist with other coastal areas, the City's unique features make it imperative to assess and plan its coastline as a microcosm of the California coastline.

The shoreline is primarily rocky, with two small beaches. The significance and potential of local habitats are enhanced by two geographic features; the northern portion of the City's coastline juts seaward more than surrounding land forms and the deep near shore waters in proximity to Point Vicente. These features are of key importance to migratory patterns of both terrestrial and marine animals.

When specifically assessing the development of the Rancho Palos Verdes coastline, the most impressive point is that no pattern prevails. Although vast opportunity exists to accentuate natural geography with development and landscaping patterns which intermix with the terrain, the overall impression is void of such cohesive pattern.

The northern portion of coastline contains vacant lands which were previously graded for proposed developments. However, since development was halted by court action, these lands have evolved into an unusual display of eroding geometrical land forms with an evolving weed community. South of this area lie spotty developments which can sometimes display distinctively defined communities, but for the most part simply reflect a fragmented character which coincides with the lack of an overall plan or development control mechanism. These development patterns reflect the zoning and development interests that were in effect at a particular time period. Generally, areas developed prior to 1960 are single-family communities; following 1960, the pattern took on a high density, multi-family dominance. At the southernmost end of the City's coastline, two extremes are brought together in a 100-unit condominium complex which is surrounded by vacant or agriculturally productive land.

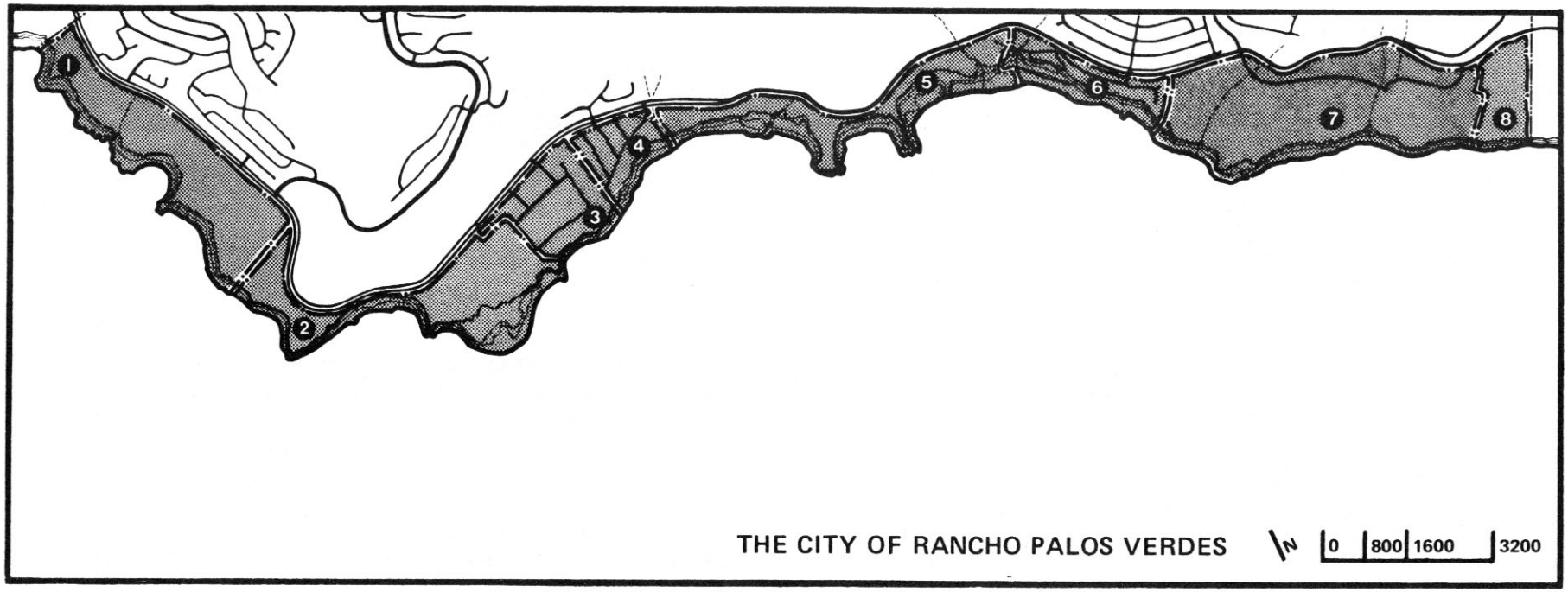
METHODOLOGY

The method utilized in studying the coastal area can be split into two divisions. One is involved with developing area units where common characteristics exist, for which similar decisions would be warranted; the other deals with an information format which presents specific proposals in their appropriate area of concern.

At the onset of the study it was apparent that two levels of study areas exist. The most basic is defined as the Coastal Specific Plan District, which ranges from a minimum concern area of just those lands encompassed by the Coastal Specific Plan District to the broad level of assessing effects generated by the United States Department of Interior's proposed outer continental shelf oil and gas general lease sale offshore of Southern California. The next level of study area focuses on lands internal of the Coastal Specific Plan District which share common characteristics. These areas are referred to as subregions, of which there are eight, and are dealt with on an independent level within the subregion section of this project.

Using criteria established in the General Plan and developed through a questionnaire survey, along with assembled base data, it was possible to analyze the various subregions in order to determine which areas were committed to a specific development pattern/carrying

subregions



CAPACITY. THESE SUBREGIONS (SUBREGIONS 4, 5, 6 AND 8) HAVE BEEN CONSIDERED UNDER THEIR DOMINANT DEVELOPMENT PATTERN AND, FOR THIS REASON, SHOULD NOT BE CONSTRUED AS AN IMPACT OF THIS PLAN BUT MORE A DEVELOPMENT IMPACT RESULTING FROM PAST PERMIT APPROVALS. THE REMAINING SUBREGIONS BECAME THE AREAS FOR WHICH LAND USE DECISIONS NEEDED TO BE MADE. THE FIRST STEP WAS TO NARROW THE OPEN-ENDED RANGE OF CARRYING CAPACITIES TO A FEASIBLE RANGE. THIS WAS ESTABLISHED THROUGH THE VARIOUS CRITERIA AND CONCLUSIONS OF THE CITY'S GENERAL PLAN. THIS FEASIBLE RANGE OF CARRYING CAPACITIES THEN BECAME THE BASIS FOR A WORKBOOK ANALYZING ALTERNATIVE CARRYING CAPACITIES AND DEVELOPMENT TECHNIQUES FOR THE COASTAL SPECIFIC PLAN (APRIL 1976).

THE WORKBOOK ANALYSIS OF ALTERNATIVE CARRYING CAPACITIES TESTED EACH ALTERNATIVE FOR ITS INHERENT ENVIRONMENTAL AND FISCAL IMPACTS. FROM THIS, EACH ALTERNATIVE WAS ASSESSED FOR ITS GENERAL COST AND BENEFITS IN ORDER TO ARRIVE AT AN ACCEPTABLE CARRYING CAPACITY FOR UNCOMMITTED SUBREGIONS (SUBREGIONS 1, 2, 3 AND 7). NUMEROUS WORK SESSIONS WERE CONDUCTED BY BOTH THE CITY COUNCIL AND PLANNING COMMISSION, THROUGH WHICH DIRECTIVE LAND USE DECISIONS AND DEVELOPMENT TECHNIQUE CRITERIA WERE ESTABLISHED. THIS PLAN RESPONDS TO THOSE DECISIONS AND THEY ARE INCORPORATED HEREIN, ALONG WITH THEIR ASSOCIATED ENVIRONMENTAL IMPACTS. HOMEOWNERS ASSOCIATIONS AND OTHER GROUPS CITY-WIDE WERE NOTIFIED OF MEETINGS AND PROGRESS ON COASTAL PLANNING.

HOMEOWNERS ASSOCIATIONS HAVING JURISDICTION WITHIN THE COASTAL REGION WERE CONTACTED TO PROVIDE FURTHER INPUT IN COASTAL PLANNING MATTERS. ONLY ONE ASSOCIATION, PALOS VERDES BAY CLUB HOMEOWNERS ASSOCIATION, DID NOT RESPOND. BOTH WEST PORTUGUESE BEND COMMUNITY ASSOCIATION AND PORTUGUESE BEND HOMEOWNERS ASSOCIATION PLAYED KEY ROLES IN PROVIDING EXTENSIVE DIRECTION AND IN REVIEWING DRAFT WRITINGS PERTAINING TO THEIR RESPECTIVE SUBREGIONS. (THEIR COMMENTS HAVE BEEN RESPONDED TO AND ARE INCORPORATED HEREIN.)

THE FOLLOWING DISCUSSION OUTLINES THE METHODOLOGY UTILIZED FOR EACH OF THE RESPECTIVE COMPONENTS OF THIS PLAN.

NATURAL ENVIRONMENT ELEMENT

THE METHODOLOGY UTILIZED IN THIS COMPONENT OF THE COASTAL SPECIFIC PLAN PARALLELS THAT DEVELOPED FOR THE GENERAL PLAN. FOR THE CONVENIENCE OF THE READER, MAJOR METHODOLOGY SEGMENTS ARE SUMMARIZED BELOW. THOSE INTERESTED IN A MORE IN-DEPTH DISCUSSION SHOULD REFER TO PAGE 5 OF THE GENERAL PLAN.

- THE FIRST SECTION OF THIS ELEMENT (NATURAL ENVIRONMENT) ASSESSES THE PERTINENT CHARACTERISTICS FOR EACH PHYSICAL FEATURE (CLIMATE, GEOLOGY, BIOTA, ETC.) THAT IS ESSENTIAL TO THE PLANNING PROCESS.

- THOSE FEATURES WHICH POSE A HAZARD ARE ACCUMULATED IN THE PUBLIC HEALTH AND SAFETY SECTION AND INDIVIDUALLY CLASSIFIED BY A RESOURCE MANAGEMENT CODE.

- THOSE FEATURES WARRANTING PRESERVATION MEASURES ARE ACCUMULATED IN THE NATURAL RESOURCE SECTION AND INDIVIDUALLY CLASSIFIED BY A RESOURCE MANAGEMENT CODE.

- BOTH HAZARD AND PRESERVATION FEATURES ARE COMBINED IN THE FINAL NATURAL ENVIRONMENT SECTION. EACH PERTINENT FEATURE, IDENTIFIED BY ITS RESOURCE MANAGEMENT CLASSIFICATION CODE, IS DISCUSSED HEREIN IN TERMS OF BOTH THE PHYSICAL CONDITION PRESENT AND THE APPROPRIATE ACTIONS NECESSITATED WHEN CONSIDERING ACTIVITIES IN THESE AREAS.

THE ASSESSMENT OF THE MARINE ENVIRONMENT RECEIVED MAJOR CONSIDERATION AND IN SOME RESPECTS, SUCH AS WATER QUALITY, PLAYS A DOMINANT ROLE OVER ITS TERRESTRIAL COUNTERPART, AIR QUALITY. THIS SITUATION EVOLVES FROM THE GENERAL PLAN'S ABILITY TO PRESENT BROAD TERRESTRIAL CHARACTERISTICS BUT, DUE TO TIME CONSTRAINTS, ITS INABILITY TO PROVIDE THE BASIC CHARACTERISTICS OF THE MARINE ENVIRONMENT. FOR THIS REASON, BASIC OVERRIDING MARINE CONSIDERATIONS ARE INCORPORATED, AS WELL AS THE SPECIFIC TERRESTRIAL AND MARINE DATA.

THE DEGREE OF SPECIFITY BEING SOUGHT IN THIS PLAN REQUIRED INPUT FROM FOUR SPECIALIZED CONSULTANT GROUPS. EDAW PROVIDED ASSISTANCE THROUGHOUT THE COASTAL SPECIFIC PLAN PROCESS TOGETHER WITH BEING RESPONSIBLE FOR THE PLANNING AND DESIGN GUIDELINES AND CORRIDORS ELEMENT. A GEOLOGY FIRM (EARTH SCIENCE ASSOCIATES) REVIEWED NUMEROUS GEOLOGY REPORTS AND ENVIRONMENTAL IMPACT REPORTS DONE IN CONJUNCTION WITH PAST DEVELOPMENT PROPOSALS, AND RELIED ON PAST FIELD WORK SURVEYS TO DERIVE GEOLOGICALLY SENSITIVE AREAS WHICH TAKE INTO ACCOUNT COASTAL BLUFF STABILITY. TERRESTRIAL BIOLOGISTS (ENGLAND AND NELSON) REVIEWED REPORTS AND CONTACTED INDIVIDUALS WITH KNOWLEDGE OF THE PENINSULA'S WILDLIFE AND/OR VEGETATIVE COMMUNITIES. FOLLOWING RESEARCH AND FIELD WORK ACTIVITIES, THE BIOLOGISTS WERE ABLE TO DEFINE THE VARYING DEGREES OF HABITAT SIGNIFICANCE FOUND IN THE COASTAL REGION. A TEAM OF MARINE BIOLOGISTS (DR. SUZANNE LAURENZ-MILLER AND DR. ALAN MILLER) ASSOCIATED WITH THE CABRILLO MARINE MUSEUM VOLUNTEERED THEIR TIME AND EXPERTISE TO CONDUCT A COASTAL FIELD STUDY AIMED AT ASSESSING THE CITY'S INTERTIDAL REGION. AS A RESULT OF THIS EFFORT, SPECIFIC MARINE PRESERVES ARE HEREIN RECOMMENDED.

SOCIO/CULTURAL ELEMENT

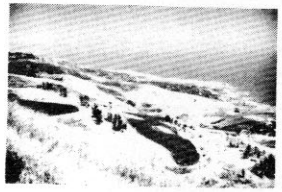
THE SOCIO/CULTURAL ELEMENT LISTS THE VARIOUS GOVERNMENTAL ENTITIES INVOLVED IN COASTAL-RELATED ISSUES, ALONG WITH CURRENT ACTIONS THAT HAVE A LOCAL IMPACT. THIS EFFORT IS INTENDED TO PROVIDE A RESOURCE BASE THROUGH WHICH

THE CITY CAN MONITOR AND EFFECTIVELY DIRECT COMMUNICATION WITH THESE ENTITIES, WHILE VOICING LOCAL CONCERNS OVER BOTH PRESENT AND FUTURE INVOLVEMENTS PERTAINING TO COASTAL MATTERS WHICH POSSESS A LOCAL IMPACT. COASTAL CULTURAL RESOURCES HAVE BEEN MORE ACCURATELY DEPICTED IN THIS PLAN THAN IN THE GENERAL PLAN.

URBAN ENVIRONMENT ELEMENT

ACTIVITY AREAS

TRACT MAPS AND BUILDING PERMITS WERE OBTAINED FOR LAND AREAS WITHIN THE CONFINES OF THIS STUDY. THIS INFORMATION WAS UTILIZED TO REFLECT THE CURRENT EXTENT AND INTENSITY OF DEVELOPMENT IN THE COASTAL REGION. EACH PARCEL'S ASSESSED VALUE, AS LISTED IN THE 1975-76 ASSESSOR'S ROLES, WAS OBTAINED SO THAT AN ACCURATE ECONOMIC PROFILE COULD BE DRAWN. THIS BASE INFORMATION WAS COUPLED WITH BUILDOUT AND PROPOSED LAND USE ACTIVITY TO FORM A WELL-DEFINED IMPACT PERSPECTIVE WHICH WILL BE BROUGHT ABOUT BY THE ADOPTION OF THIS PLAN.



INFRASTRUCTURE

FOR THE PURPOSES OF THIS PLAN, THE INFRASTRUCTURE WAS ANALYZED IN MUCH THE SAME MANNER AS IN THE GENERAL PLAN. THE INFRASTRUCTURE WAS GROUPED INTO FOUR MAJOR CLASSIFICATIONS, EACH HAVING TWO OR MORE SUBDIVISIONS:

- -RESOURCE SYSTEMS (WATER AND ENERGY)
- -DISPOSAL SYSTEMS (SANITATION, FLOOD CONTROL)
- -COMMUNICATIONS SYSTEMS (BROADCAST AND CABLE)
- -TRANSPORTATION SYSTEMS (VEHICULAR AND NON-VEHICULAR)

THE ANALYSIS PROCESS BEGAN WITH A DETAILED REVIEW AND REEVALUATION OF DATA SOURCES DEVELOPED DURING THE PREPARATION OF THE GENERAL PLAN. ANALYSIS FOR ALL BUT THE TRANSPORTATION CLASSIFICATION RELIED PRINCIPALLY UPON EXISTING DATA; HOWEVER, ALL APPROPRIATE INFRASTRUCTURE AGENCIES WERE CONTACTED BY LETTER AND ASKED TO RESPOND TO QUESTIONS REGARDING EXISTING SERVICE, PROBLEM AREAS AND POTENTIAL COASTAL SPECIFIC PLAN IMPACT. ALL RESPONSES ARE ON FILE IN THE ENVIRONMENTAL SERVICES DEPARTMENT.

BECAUSE OF KNOWN AND SUSPECTED PROBLEMS ASSOCIATED WITH CERTAIN ASPECTS OF THE TRANSPORTATION COMPONENT, NAMELY VEHICULAR NETWORKS, THE METHODOLOGY PROPOSED FOR THE RESEARCH AND ANALYSIS PHASES REQUIRED

MUCH MORE DETAIL THAN THAT WHICH WAS CURRENTLY AVAILABLE. FUNDAMENTAL TO AN ACCURATE APPRAISAL OF EXISTING TRAFFIC AND A METHOD OF DETERMINING PROJECTED IMPACT WAS THE NEED FOR UPDATED AND MORE DETAILED TRAFFIC INFORMATION. THEREFORE, IN LATE MARCH OF 1976, TRAFFIC COUNTS WERE SIMULTANEOUSLY CONDUCTED AT EIGHT STRATEGIC LOCATIONS WITHIN THE COASTAL REGION FOR A PERIOD OF FIVE DAYS (MARCH 24-28, 1976). THE COUNTS RESULTED IN NEW DATA WHICH BECAME THE BASIS FOR ANALYZING EXISTING TRAFFIC, AND PROVIDED INFORMATION NEEDED TO DERIVE NEW GENERATING FACTORS. THE NEW GENERATING FACTORS AND EXISTING INFORMATION WERE THEN USED TO DETERMINE THE TRAFFIC IMPACT OF THE PROPOSED ACTIVITIES AT VARIOUS LOCATIONS THROUGHOUT THE PENINSULA. THE PLAN EVALUATES TRAFFIC DURING PEAK PERIODS FOR COASTAL SPECIFIC PLAN AND PENINSULA CORDON LOCATIONS, AS WELL AS KNOWN TROUBLE AREAS. IN ADDITION TO THE ABOVE-MENTIONED DATA GATHERING AND ANALYSIS, ALL ADJACENT AND OUTLYING COMMUNITIES (CITIES AND COUNTY) WERE REQUESTED BY LETTER TO SUPPLY ANY PERTINENT INFORMATION AS TO EXISTING COUNTS, PROBLEM AREAS, AND PROPOSED PROJECTS WHICH COULD AFFECT THE OUTCOME OF THE PLAN. ALL RESPONSES ARE ON FILE WITH THE CITY.

SAFETY

THE SAFETY SECTION OF THIS REPORT FOCUSES ON VARIOUS PROGRAMS AND AGENCIES INVOLVED DURING HAZARDOUS CONDITIONS AND/OR PROVIDING ASSISTANCE AFTER A HAZARDOUS CONDITION HAS OCCURRED.

UNDER THE GENERAL PLAN, FEATURES WHICH POSE A HAZARD WERE IDENTIFIED AND DISCUSSED AS TO THEIR POTENTIAL SAFETY HAZARD. DUE TO THE NATURAL ORIGIN OF CERTAIN HAZARD FEATURES (SEISMIC ACTIVITY, FLOOD HAZARD, ETC.), IT WAS FELT THAT THEIR IDENTIFICATION AND POSSIBLE THREAT WOULD MORE APPROPRIATELY BE HANDLED IN THE NATURAL ENVIRONMENT ELEMENT AND HAVE BEEN INCLUDED THEREIN.

ONLY THOSE SAFETY PROGRAMS AND AGENCIES INVOLVED IN MATTERS PARTICULAR TO THE COASTAL REGION ARE ADDRESSED IN THIS REPORT. TERRESTRIAL SAFETY IS BASED ON MORE INDEPTH DISCUSSIONS WITH THE VARIOUS AGENCIES SERVICING THE COASTAL REGION. BECAUSE OF THE LACK OF INFORMATION PERTAINING TO MARINE SAFETY IN THE GENERAL PLAN, MORE EXTENSIVE RESEARCH, BOTH INDEPTH AND GENERAL, HAD TO BE CONDUCTED FOR THE MARINE ENVIRONMENT.

FISCAL

A PROGRAM FOR THE EVALUATION OF THE COASTAL SPECIFIC PLAN IN TERMS OF FISCAL IMPACTS ON A RECURRING AND NON-RECURRING BASIS FOLLOWS A THREE STEP PROCEDURE. FIRST, A PROFILE UTILIZING GENERAL PLAN PROJECTION FACTORS IS USED TO FORMULATE A FISCAL EVALUATION OF A GIVEN LEVEL OF DEVELOPMENT. SECONDLY, A FISCAL PROFILE IS BUILT USING PROJECTION FACTORS WHICH REPRESENT A MORE UP-TO-DATE ANALYSIS OF GIVEN LEVELS OF DEVELOPMENT. FINALLY, AN ASSESSMENT OF ACQUISITION AND SERVICE COSTS ON A REGIONAL AND SUBREGION BASIS IS EVALUATED FOR IMPACTS WHICH ARE COVERED BY INDIVIDUAL BUDGETARY ELEMENTS.

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

NATURAL ENVIRONMENT

SEVERAL NATURAL FEATURES EXIST IN THE COASTAL REGION WHICH PRESENT A UNIQUE OPPORTUNITY FOR ESTABLISHING A WELL-DEFINED ENVIRONMENT IN WHICH SOCIETAL NEEDS MAY BE BROUGHT INTO HARMONY WITH A WELL-DEFINED NATURAL HABITAT:

- -LARGE AMOUNTS OF UNDEVELOPED LAND IN A CONTIGUOUS RELATIONSHIP RATHER THAN IN SPORADIC UNITS.

- -A UNIQUE INTERTIDAL HABITAT WHICH CAN SUPPORT A VARIED MARINE LIFE AS A RESULT OF GEOLOGIC FEATURES WHICH FORM DIVERSE HABITAT CONDITIONS, SUCH AS TIDE POOLS, BEACHES AND A ROCKY SHORELINE.

- -A CLIMATIC CHARACTER WHICH IS OF HIGH VALUE TO AGRICULTURAL CROP PRODUCTION.

- -NATURAL DRAINAGE FEATURES WHICH NOT ONLY SUPPORT VEGETATION ALONG WITH INHERENT WILDLIFE, BUT ALSO AID IN SAND REPLENISHMENT TO THE OCEAN ENVIRONS.

- -A NATURAL HABITAT WHICH IS NOT ONLY VITAL TO LOCAL ANIMAL LIFE, BUT IS ALSO KEY TO THE MIGRATORY SPECIES.

- -A SUPERIOR AIR QUALITY THAT CANNOT BE FOUND IN INLAND AREAS OF THE LOS ANGELES BASIN.

WHERE APPROPRIATE, TERRESTRIAL AND MARINE FACTORS ARE GROUPED UNDER SIMILAR HEADINGS (CLIMATE, GEOLOGIC FACTORS, BIOTIC RESOURCES, ETC.). THE BALANCING AND SOMETIMES HEAVY WEIGHTING TOWARDS

THE MARINE ENVIRONMENT IS A REFLECTION OF THE INCREASING AWARENESS WITHIN THIS CITY OF HOW IMPROPER MANAGEMENT AND NEGLECTFUL ACTIONS CAN RESULT IN A DEGRADED MARINE BIOTA. TWO ADVERSE ACTIONS, THE OVER-HARVESTING OF SEA OTTERS AND INDUCEMENT OF VAST QUANTITIES OF SEWAGE INTO THE OCEAN, LED TO A SERIES OF MARINE HABITAT ALTERATIONS: THE DISAPPEARANCE OF LOCAL KELP BEDS, OVERABUNDANCE OF SEA URCHINS, AND THE LOSS AND ENDANGERING OF MANY MARINE SPECIES SUCH AS ABALONE (A RECENT LAW PROHIBITS THE TAKING OF ABALONE FOR COMMERCIAL PURPOSES UNTIL MARCH 1, 1982), BROWN PELICANS, ETC. IT APPEARS THAT THE PENINSULA HAS ALREADY EXPERIENCED THE LOWEST EBB IN HABITAT QUALITY. RECENT STUDIES AND PROGRAMS ARE PROVIDING INDICATIONS THAT THIS HABITAT IS RECOVERING; MONITORING BY THE SANITATION DISTRICT SHOWS AN IMPROVEMENT OF COASTAL WATER QUALITY, KELP RESTORATION PROJECTS ARE PROVING FRUITFUL, AND THE NUMBER OF CALIFORNIA BROWN PELICANS IS INCREASING.

IT SHOULD BE RECOGNIZED THAT, WHILE THIS STAGE OF ANALYSIS AND DOCUMENTATION OF THE PLANNING EFFORT EXTENDS CONSIDERABLY BEYOND THE LEVEL OF DETAIL ACCOMPLISHED IN THE INITIAL NATURAL RESOURCE INVENTORY AND GENERAL PLAN EFFORTS, IT CONSTITUTES THAT LEVEL OF DETAIL APPROPRIATE TO THE COASTAL SPECIFIC PLAN PROCESS. AS SUCH, IT IS NOT INTENDED, NOR SHOULD IT BE USED, FOR DETAILED AREA ANALYSIS OR SPECIFIC PROJECT FEASIBILITY, WHICH CAN ONLY BE ESTABLISHED IN MORE DETAILED STUDIES AS AN EXTENSION OF THE COASTAL SPECIFIC PLAN AND ITS IMPLEMENTATION. THE DATA UTILIZED IN THIS ANALYSIS HAS BEEN DERIVED FROM A WIDE VARIETY OF SECONDARY SOURCES COUPLED WITH CONFIRMATION IN SELECTED AREAS. MORE DETAILED INFORMATION ON SPECIFIC SUBJECTS OR LOCATIONS CAN BE FOUND IN DATA SOURCES LISTED IN THIS SECTION OR IN THE BIBLIOGRAPHY SECTION OF THIS REPORT.



CLIMATE

TERRESTRIAL

CLIMATIC CONDITIONS IN AN AREA PRESENT CRITERIA TO WHICH BOTH SITE AND STRUCTURAL DESIGN SHOULD RESPOND. SOCIETY IS BECOMING INCREASINGLY AWARE OF THE FACT THAT MECHANICAL SYSTEMS ASSOCIATED WITH STRUCTURES ARE NEEDED PRIMARILY TO RECTIFY IMPROPER CLIMATIC DESIGN. WITH THIS GROWING AWARENESS, FUTURE DESIGN TECHNIQUES WILL RESPOND TO CLIMATIC SITE CONDITIONS PLACING MORE RELIANCE ON CLIMATIC DATA SUCH AS THAT CONTAINED IN THIS SECTION.

Temperature

The coastal region tends to experience cooler days and warmer nights than inland areas. Table 1 lists mean monthly temperatures which are calculated from average monthly temperatures recorded at various stations within the coastal region.

MEAN TEMPERATURES/°F **TABLE 1**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
HIGH	59	62.4	62.7	63.9	65.3	68.3	72.4	74.7	72.9	69.4	65.7	62.1
LOW	49	51	51.4	51.8	54.6	58	61.3	63.3	60.6	57.3	54.4	51

Fog and/or Clouds

The coastal region is heavily involved in fog banks which account for fewer sunny days than are experienced in other areas of the Peninsula. In general, land areas from Point Vicente north experience the majority of this low cloudiness. This transition is a result of a demarcation where sea breezes lift the moist air (Point Vicente northward) and then start downhill to dissipate the fog (Point Vicente eastward). According to data obtained from Point Vicente Lighthouse, October through December account for the most foggy period with March through May being the least.

Rainfall

The average precipitation along the coastal region ranges from a high of 12.5 inches in the vicinity of Abalone Cove to a low of 10.8 inches at Point Vicente (see Figure 1). The rainfall season runs from November to April with December to February accounting for most of the precipitation.

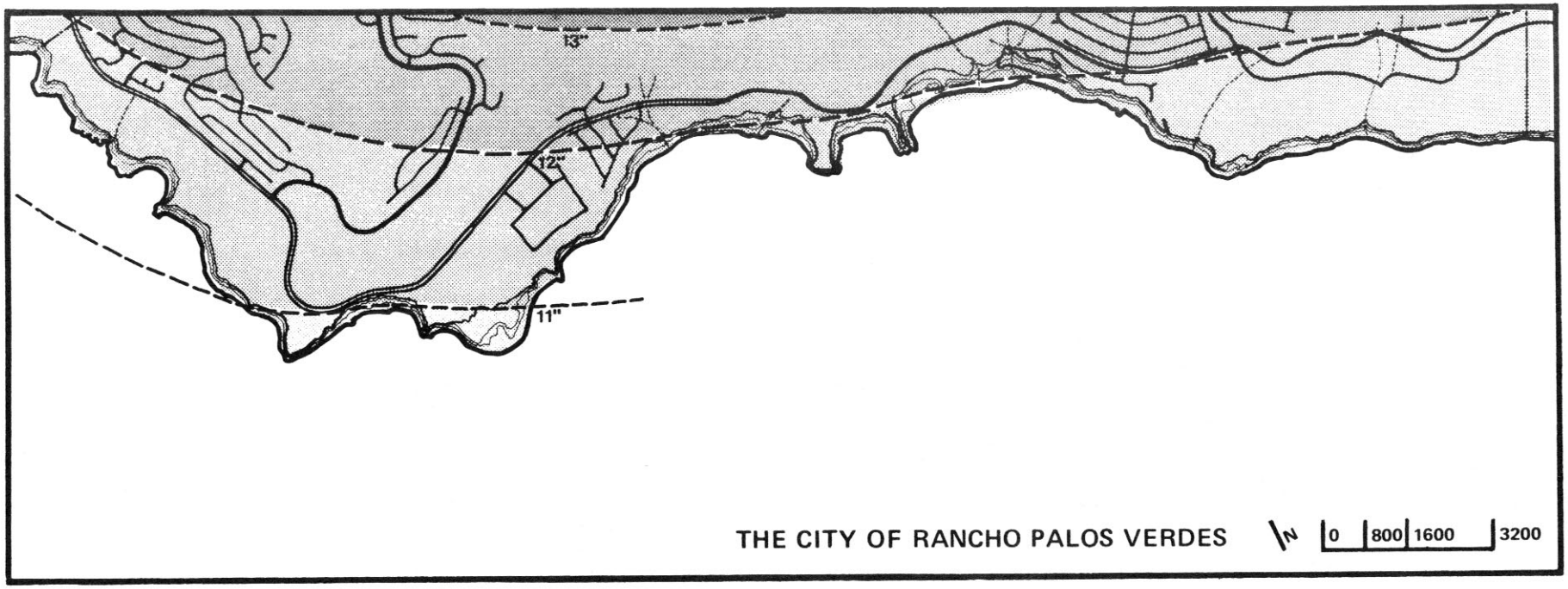
Relative Humidity

Humidity percentages are fairly high in the coastal region, which corresponds with the prevalence of fog in this portion of the Peninsula (fog and low clouds are likely to occur when humidity nears 95%). Humidity is highest in the morning and lowest in the afternoon. Table 2 depicts relative humidity measurements recorded at Lunada Bay, which, although not in Rancho Palos Verdes, serves as a reasonable indication of relative humidity in the Rancho Palos Verdes coastal region.

AVERAGE HIGH AND LOW RELATIVE HUMIDITY IN PERCENT **TABLE 2**

	JAN.	APR.	JULY	OCT.
HIGH	78	88	85	88
LOW	71	69	75	78

figure 1 average rainfall



WIND

THE DOMINANT WIND PATTERN ON THE PENINSULA IS REFERRED TO AS SEA BREEZES. THESE WINDS COME FROM A WEST-SOUTHWEST DIRECTION ON MOST AFTERNOONS AND REACH MAXIMUM SPEED BETWEEN 2 AND 4 P.M. AN AREA AROUND POINT VICENTE RECEIVES THE BRUNT OF THESE WINDS WHICH CREATES A CLIMATIC ZONE VARYING FROM THE REST OF THE COASTAL REGION (REFER TO CLIMATIC ZONE SECTION).

WINTER WINDS COME FROM THE LAND DIRECTION (NORTH TO EAST). DURING WINTER THIS PATTERN DOMINATES SEA BREEZES FOR A LONGER DURATION THAN IN THE SUMMER. SANTA ANA WINDS, WHICH OCCUR DURING THIS PERIOD, ARE A RESULT OF HIGH PRESSURE OVER NEVADA. THE WINDS RESULT IN UNSEASONABLE TEMPERATURES REACHING INTO THE 80'S WITH EXTREMELY DRY AIR (HUMIDITY OFTEN LESS THAN 10%). SANTA ANA WINDS OCCUR PRIMARILY FROM OCTOBER TO MARCH.

SOUTHEASTERN WINDS POSE ANOTHER EXCEPTION TO THE PREDOMINANT SEA BREEZE PATTERN. THESE WINDS OCCUR DURING WINTER AND ARE ASSOCIATED WITH STORM PATTERNS SELDOM LASTING FOR MORE THAN A DAY. THE WINDS ARE PRECEDED BY VIGOROUS RAINSTORMS AND

OFTEN REACH 30 M.P.H. WITH GUSTS THAT CAN EXCEED 50 M.P.H. THE SOUTHERN PORTION OF THE COASTAL REGION IS MOST IMPACTED BY SOUTHEASTERN WINDS DUE TO THE LAND'S SOUTHERN EXPOSURE.

NORTHWESTERN WINDS ARE ANOTHER SPECIFIC WIND PATTERN WHICH OCCURS IN WINTER AND SPRING, FOLLOWING THE PASSING OF A COLD FRONT THROUGH THE AREA CONCURRENT WITH A DEEPENING LOW PRESSURE AREA IN NEVADA. RAIN USUALLY DOES NOT ACCOMPANY THESE WINDS. THEY BRING COLD AIR FROM THE NORTH WITH WIND SPEEDS FROM 25 TO 35 M.P.H. AND GUSTS TO 50 M.P.H.

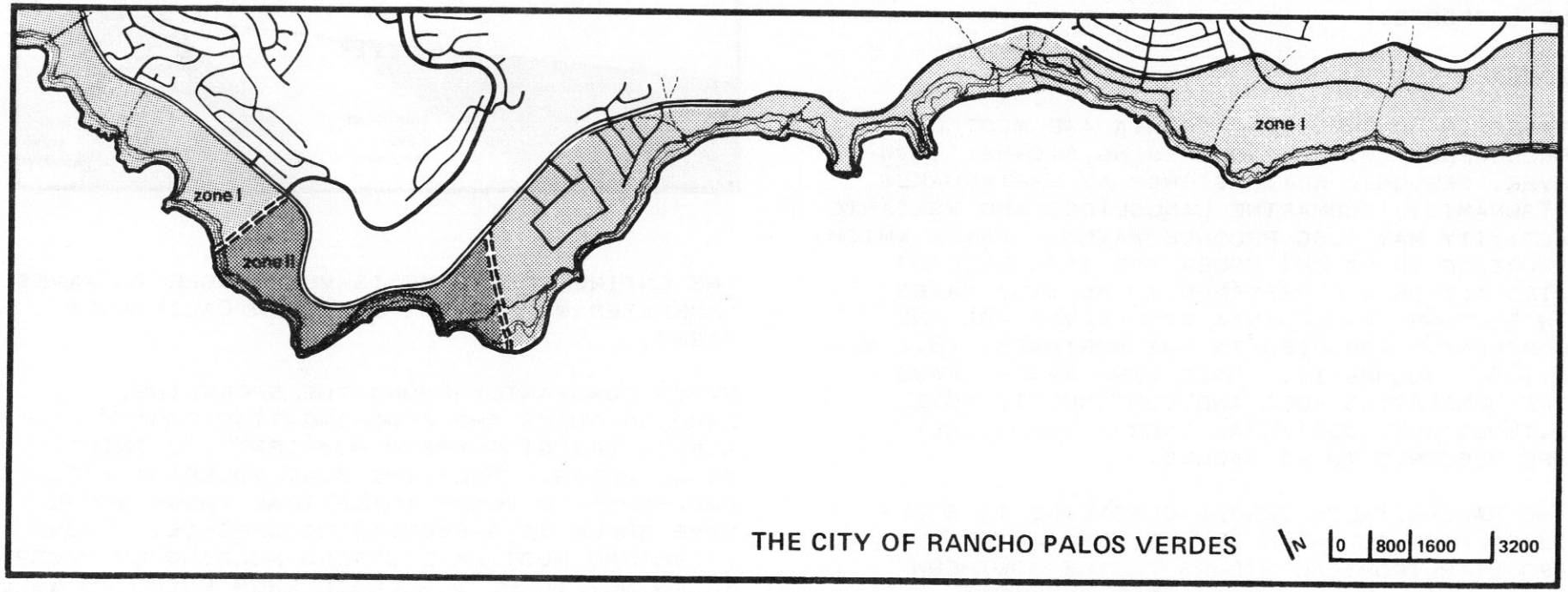
COASTAL CLIMATIC ZONES

THE CLIMATE IN THE COASTAL REGION CAN BE CLASSIFIED INTO THE FOLLOWING TWO MICRO ZONES (GALES).

ZONE 1

A MAJORITY OF THE COASTAL REGION EXPERIENCES CLIMATIC CONDITIONS WHICH DEFINE THIS ZONE (SEE FIGURE 2). THE TEMPERATURE IS PRIMARILY MILD WITH OCCASIONAL WARM DAYS. NIGHTS ARE WARMER AND FOG IS MORE PREVALENT THAN IN MOST INLAND AREAS. THE RELATIVE HUMIDITY IS QUITE HIGH ALL YEAR PROVIDING GOOD GROWING CONDITIONS FOR AGRICULTURE. SMOG IS RARE AND VERY LIGHT WHEN PRESENT. WINDS ARE MILDER IN THIS ZONE THAN IN ZONE 2.

figure 2 climatic zones



ZONE 2

THIS ZONE EXPERIENCES MORE WIND, FOG, AND LOW CLOUDS THAN ZONE 1. AFTERNOON WINDS CAN REACH 12 TO 18 M.P.H., ESPECIALLY ALONG POINTS AND RIDGES. OTHER CLIMATIC FACTORS ARE SIMILAR TO THOSE IN ZONE 1.

MARINE

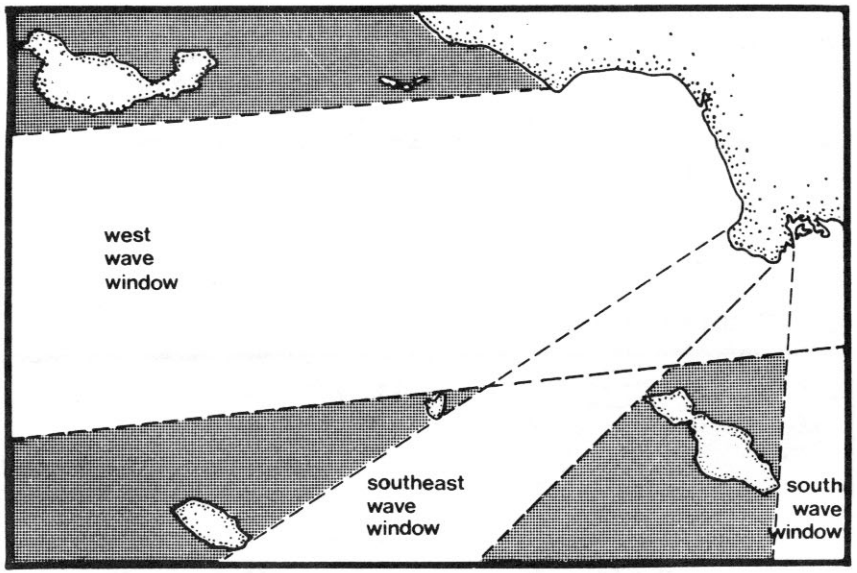
THE MARINE ENVIRONMENT'S ''CLIMATE'' DESCRIBES THE LIVING CONDITIONS FOR DIFFERENT AREAS. CLIMATIC ELEMENTS INCLUDE: WAVES, TIDES, CURRENTS, AND TEMPERATURE. THE COMBINATIONS AND SEVERITY OF EACH ELEMENT FOR A GIVEN AREA PRESCRIBES THE TYPE OF HABITAT AND HENCE THOSE SPECIES OF MARINE LIFE THAT MAY BE SUPPORTED.

WAVES

WAVES IN SOUTHERN CALIFORNIA ARE MOST OFTEN PRODUCED BY WINDS AND PASSING STORMS. HOWEVER, GEOLOGIC ACTIONS SUCH AS EARTHQUAKES (TSUNAMIS), SUBMARINE LANDSLIDES AND VOLCANIC ACTIVITY MAY ALSO PRODUCE WAVES. WAVES WHICH INCREASE IN HEIGHT UNDER THE INFLUENCE OF WIND ACTION ARE REFERRED TO AS WIND WAVES. IN SOUTHERN CALIFORNIA WIND WAVES ARE PREDOMINANTLY PRODUCED IN THE NORTHWEST (B.L.M.-E.I.R., VOLUME 1). ONCE WIND WAVES LEAVE THE GENERATING AREA AND CONTINUE TO MOVE WITHOUT ANY ADDITIONAL ENERGY INPUT THEY ARE REFERRED TO AS SWELLS.

THE RANCHO PALOS VERDES COASTLINE IS SHELTERED FROM SOUTHERN SWELLS, USUALLY ASSOCIATED WITH TROPICAL STORMS IN THE SOUTHERN HEMISPHERE, BY THE ALIGNMENT OF SANTA CATALINA AND SAN CLEMENTE ISLANDS (FIGURE 3). WESTERN AND SOUTHWESTERN SWELLS AND WAVES ARE ABLE TO TRAVEL UNOBSTRUCTED TO THE CITY'S SHORELINE (REFER TO SUBREGIONS FOR DETAILS).

figure 3 wave windows



THE ENTIRE COASTLINE IS VULNERABLE TO WAVES GENERATED WITHIN THE SOUTHERN CALIFORNIA BIGHT.

WAVES CONSTANTLY POUND THE SHORELINE, ERODING ROCKS AND FLUSHING TIDE POOL AREAS, BRINGING FRESH NUTRIENTS TO INTERTIDAL AREAS. ONLY THE MOST TOLERANT SPECIES ARE FOUND IN ROCKY INTERTIDAL AREAS WHERE WAVE SHOCK IS A REGULAR OCCURRENCE. THESE ORGANISMS MUST HAVE STRONG HOLDING ON POWER SO AS NOT TO BE DISLODGED FROM ROCKS AS WELL

AS THICK SKINS OR HARD SHELLS IN ORDER TO WITHSTAND THE SUDDEN IMPACT OF TONS OF WATER AT ONE TIME (RICKETTS AND CALVIN).

PRESENTLY, WAVES ARE PLAYING A MORE SIGNIFICANT ROLE THAN IN THE PAST. THIS IS A RESULT OF THE DISAPPEARANCE OF KELP BEDS THAT ONCE SURROUNDED THE PENINSULA FORMING A RING WHICH BUFFERED THE COASTLINE LESSENING THE WAVE SHOCK. WITHOUT THE STABILIZING EFFECT OF KELP, THE SHORELINE HAS BECOME OPEN TO INCREASED EROSION ACTIVITY AND MANY OF THE LESS TOLERANT ORGANISMS HAVE DIMINISHED.

GIVEN PROPER CONDITIONS (I.E., A STORM OFFSHORE, HIGH TIDES, PROPER SWELL DIRECTION, ETC.) HIGH WAVES COULD BECOME A SAFETY FACTOR TO NOT ONLY BEACH USERS BUT ALSO TO STRUCTURES IN CLOSE PROXIMITY TO THE SHORELINE. SPECIAL HAZARDOUS WAVE CONDITIONS ARE DISCUSSED BELOW AND, WHERE APPLICABLE, SPECIFIC CONDITIONS ARE DISCUSSED UNDER RESPECTIVE SUBREGIONS.

TSUNAMIS

TSUNAMIS ARE SEISMIC SEA WAVES GENERATED PRIMARILY BY VERTICAL OFFSETS OF THE SEA FLOOR ACCOMPANYING SUBMARINE FAULTING. THE DESTRUCTIVE POWER OF TSUNAMIS IS DUE TO THE FACT THAT THEY TRAVEL AT VELOCITIES APPROACHING 400 MILES PER HOUR. WHILE THEY ARE GENERALLY IMPERCEPTABLE ON THE OPEN SEA, TSUNAMIS HAVE BEEN RECORDED THAT CRESTED TO HEIGHTS OF MORE THAN 100 FEET BEFORE SLAMMING INTO SHORE. THESE GREAT HEIGHTS ARE RARE THOUGH, AND DEPEND ON SEVERAL FACTORS, SUCH AS OFFSHORE TOPOGRAPHY, TIDE PHASE, AND COASTLINE ORIENTATION AND CONFIGURATION. HAZARDOUS TSUNAMIS MAY OCCUR ALONG THE COASTLINE OF RANCHO PALOS VERDES AS THE RESULT OF SUBMARINE FAULTING AT GREAT DISTANCE OR DUE TO LOCAL OFFSHORE FAULTING. FAULTING AT GREAT DISTANCE IS THE MOST COMMON SOURCE OF TSUNAMIS ALONG THE CALIFORNIA COAST. TYPICAL SOURCE AREAS ARE THE GREAT SUBMARINE TRENCHES OFF CHILE AND ALASKA.

THE TSUNAMI HAZARD MAP OF THE STATE OF CALIFORNIA IDENTIFIES THE SOUTH-FACING COASTAL STRIP WITHIN THE STUDY AREA ONLY AS AN AREA IN WHICH ''...SPECIAL CAUTION SHOULD BE OBSERVED DURING AN ALERT. THE AREA SHOULD BE CLEARED IF FLOOD TIDE AND TSUNAMI ARE COINCIDENT.'' (STATE OF CALIFORNIA, DIVISION OF MINES AND GEOLOGY)

SEICHES

SEICHES ARE STANDING WAVES PRODUCED IN A BODY OF WATER BY WINDS, ATMOSPHERIC CHANGES, THE PASSAGE OF EARTHQUAKE WAVES, ETC. STUDIES OF TRUE SEISMIC SEICHES ARE LIMITED, BUT THAT BY MCGARR AND VORHIS, 1968, OF SEICHES INDUCED BY THE ALASKA EARTHQUAKE OF 1964 INDICATES THAT THE LARGEST RECORDED WAVE HEIGHTS (DOUBLE AMPLITUDE) DID NOT EXCEED 1.2 FEET. SINCE THIS IS LESS THAN WAVE HEIGHTS THAT WOULD BE EXPECTED FROM WIND-INDUCED WAVES, TRUE SEISMIC SEICHES ARE NOT CONSIDERED A SIGNIFICANT HAZARD IN RANCHO PALOS VERDES,

TIDES

THE PRIMARY FORCES CAUSING TIDES TO FLUCTUATE ARE THE GRAVITATIONAL ATTRACTION OF THE MOON AND THE SUN ON THE EARTH. THE MOON

EXERTS MORE OF A GRAVITATIONAL EFFECT ON TIDES THAN THE SUN; THUS, THE TIDES CORRESPOND TO A ''LUNAR DAY'' WHICH IS APPROXIMATELY 50 MINUTES LONGER THAN A SOLAR DAY. CONSEQUENTLY, THE TIDAL CYCLE OCCURS SLIGHTLY LATER EACH DAY.

IN SOUTHERN CALIFORNIA THE TIDES ARE BOTH DIURNAL AND SEMI-DIURNAL, PRODUCING A MIXED TIDE IN WHICH, GENERALLY, TWO HIGH TIDES AND TWO LOW TIDES OCCUR EACH DAY (B.L.M. - E.I.R., VOLUME 1).

ALTHOUGH A DETAILED DISCUSSION OF TIDES AND THE NATURE OF THEIR CYCLES AND CHANGE IS NOT WARRANTED HERE, A FEW COMMENTS FOR CLARIFICATION ARE NECESSARY. A TIDAL PATTERN, AS WE HAVE SEEN IN THIS AREA, IS ASSOCIATED WITH THE PHASES OF THE MOON AND DURING THE FULL AND NEW MOON STAGES THE RANGE OF TIDES IS GREATER THAN DURING QUARTERS OF THE MOON (RICKETTS AND CALVIN). TIDES DURING FULL AND NEW MOON STAGES, WHERE WE HAVE HIGHER AND LOWER TIDES, ARE REFERRED TO AS SPRING TIDES. TIDES ASSOCIATED WITH QUARTERS OF THE MOON, PRODUCING A LESSER RANGE OF TIDES, ARE REFERRED TO AS NEAP TIDES.

THE SEMI-DAILY OR SEMI-DIURNAL TIDES OF THIS AREA (AS WELL AS THE REST OF THE PACIFIC COAST) PRODUCE A CYCLE WHERE HIGHS AND LOWS OF THE TWO DAILY CYCLES ARE NOT EVEN. THESE ARE REFERRED TO AS MIXED TIDES.

THE DAILY AND SEMI-DAILY COVERING AND UNCOVERING OF THE SHORELINE, TO VARYING DEGREES, HAS PRODUCED AN ENVIRONMENT TO WHICH CERTAIN ORGANISMS HAVE ADAPTED THEMSELVES. CHARACTERISTICS OF LIFE-SUPPORTING ELEMENTS FOR DIFFERENT DEGREES OF EXPOSURE OF THESE INTERTIDAL ORGANISMS ARE DISCUSSED IN MARINE TOPOGRAPHY AND MARINE BIOTIC RESOURCES.

LOW TIDES ALONG THE CITY'S ROCKY COAST OFFER AN EXCELLENT OPPORTUNITY FOR TIDEPOOL OBSERVERS TO EXPERIENCE THE SCIENTIFIC, EDUCATIONAL, RECREATIONAL, AND AESTHETIC VALUE OF THE SHORELINE. UNFORTUNATELY, COLLECTORS ARE ALSO AFFORDED THIS OPPORTUNITY AND IT IS GENERALLY AT LOW TIDES THAT MOST OF THE EXTRACTIVE DAMAGE OCCURS.



Currents

Surface water movement in Southern California occurs at two scales. Large scale movement is principally the result of wind, solar energy, and the earth's rotation. The California current, as it is locally referred to, is really only a part of a larger surface water movement system that originates off the coast of Japan. The current generally travels in a clock-wise direction throughout the north Pacific turning westward in the gulf of Alaska and southward along the Pacific Coast. The southerly movement continues toward Baja California where the current again turns seaward. Small scale, or local currents, are also a result of solar heating and wind, along with forces of the powerful California current.

There are seasonal variations, undercurrents, and countercurrents associated with the major current which produce patterns of their own; however, the intent of this section is not to deal with the pattern, but the effect on the coastline.

Water circulation is primarily responsible for the distribution of the nutrients upon which, ultimately, all sea life depends. Although nutrients are circulated by means of long shore currents, bottom currents and general surface circulation, the most important means of transport is upwelling. Phytoplankton, which is the primary producer or source of food for the marine environment, is reliant upon an adequate supply of three essential nutrients: nitrogen, phosphorous, and silica (B.L.M.-E.I.R., Volume 1). In terms of phytoplankton, areas of upwelling are approximately 3 times as productive as the coastal zone and 6 times as productive as the open ocean, due to the constant and rich supply of nutrients being upwelled from the ocean depths. Rancho Palos Verdes' marine biota depend on the existence of these deep water/shallow water interfaces.

Temperature

Water temperature is a ''climatic'' factor that is extremely important to the health as well as the distribution of marine organisms. From the viewpoint of man, changes in water temperature are very minor and subtle; however, a delicate balance exists between marine organisms and their adaptability to water temperature changes.

A change which exceeds the tolerance level of marine organisms can cause widespread damage or major alterations to the marine environment as a whole. This phenomenon occurred in the late 1960's when the average temperature of the ocean increased over a prolonged period of time and exceeded the tolerance level of local kelp. As a result many kelp beds suffered extensive damage (England and Nelson).

AIR QUALITY

A discussion of air quality, to the extent that information is available, will be found in the General Plan. Since the time of the drafting of that document, no new or more specific information has become available. See the Appendix, Addendum for Coastal Specific Plan E.I.R., for comment/response on Air Quality.

WATER QUALITY

WATER QUALITY IS VITAL TO MARINE ORGANISMS. UNFORTUNATELY, THE PENINSULA WATERS HAVE SUFFERED FROM POLLUTION OF VARIOUS TYPES AND ORIGINS OVER THE PAST FEW DECADES. AS A RESULT OF THIS POLLUTION, SOME MARINE ECOSYSTEMS HAVE BEEN ALTERED BY AN INCREASE IN SOME OF THE MORE TOLERANT SPECIES AND A DECREASE IN SOME OF THE LESS TOLERANT SPECIES.

THE INTRODUCTION OF POLLUTANTS INTO THE MARINE ENVIRONMENT OCCURS PRIMARILY OUTSIDE OF RANCHO PALOS VERDES IN THE FORM OF DISCHARGES FROM MUNICIPAL WASTEWATER TREATMENT PLANTS, INDUSTRIAL OPERATIONS, ELECTRICAL GENERATING STATIONS, OIL AND NATURAL GAS EXTRACTION OPERATIONS, AND WATER BORNE VESSELS. ADDITIONALLY, POLLUTANTS MAY ENTER THE MARINE ENVIRONMENT THROUGH THE PROCESS OF SURFACE RUNOFF AND AERIAL FALLOUT.

MUNICIPAL WASTE WATER

MUNICIPAL WASTE WATER DISCHARGED INTO OCEAN WATERS OF THE SOUTH COAST REGION, WHICH EXTENDS FROM THE LOS ANGELES/VENTURA COUNTY LINE TO THE ORANGE/SAN DIEGO COUNTY LINE, ACCOUNTS FOR 90% OF ALL DISCHARGES INTO THE SOUTHERN CALIFORNIA BIGHT (POINT CONCEPTION TO THE MEXICAN BORDER).

THE THREE LARGEST DISCHARGE POINTS IN THE REGION ARE ALL LOCATED WITHIN FIFTEEN MILES OF THE RANCHO PALOS VERDES COASTLINE. THE LOS ANGELES CITY HYPERION PLANT IS LOCATED 15 MILES TO THE NORTH AND IS RESPONSIBLE FOR DISCHARGING 360 MILLION GALLONS OF WASTE PER DAY (MGD)(1976). THE OTHER TWO DISCHARGE POINTS BELONG TO THE LOS ANGELES COUNTY SANITATION DISTRICT AND ARE LOCATED LESS THAN ONE MILE TO THE SOUTH OF THE RANCHO PALOS VERDES CITY BOUNDARY AT WHITE'S POINT. THEY ARE RESPONSIBLE FOR 340 MGD (1976) (HAWORTH).

WASTEWATER HAS A VERY HIGH CONTENT OF ORGANIC MATERIAL WHICH NEEDS OXYGEN IN ORDER TO DECOMPOSE. WHEN THESE BIODEGRADABLE SUBSTANCES ARE CONCENTRATED IN ONE AREA, THE OXYGEN SUPPLY CAN BE SEVERELY REDUCED HAVING AN ADVERSE EFFECT ON MOST LIVING ORGANISMS.

THE SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT (SCCWRP) STUDY OF CALIFORNIA'S COASTAL WATERS CONCLUDED THAT GENERALLY THE OCEAN IS ABLE TO ASSIMILATE MOST WASTES. HOWEVER, THE PENINSULA IS LOCATED SO CLOSE TO SUCH INTENSE WASTEWATER DISCHARGES THAT THE OCEAN'S ABILITY TO ASSIMILATE WASTE IS EXCEEDED BY THE VAST AMOUNTS OF DISCHARGE. THE HIGH CONCENTRATION OF INDUSTRIAL WASTES, WHICH ARE NOT ALWAYS CAPABLE OF BEING ASSIMILATED, EXACERBATES THE PROBLEM. THUS, THE WASTEWATER NEAR THE PENINSULA PRESENTS BOTH A QUANTITATIVE AND A QUALITATIVE PROBLEM. (MEARNS) CHLORINE IS COMMONLY USED TO ELIMINATE BACTERIA FROM SEWERAGE EFFLUENT. THIS IS DONE IN ORDER TO PREVENT CONTAMINATION FROM WATERBORNE DISEASES. THE EFFECTS OF THE CHLORINE SEEM TO BE MINIMAL AND ARE ONLY OBSERVED IN THE IMMEDIATE AREA OF THE DISCHARGE.

THE WASTEWATER OUTFALL AT WHITE'S POINT, MAINTAINED BY THE LOS ANGELES COUNTY SANITATION DISTRICT, DISCHARGES NEARLY ONE-THIRD OF THE FLOW OF WASTEWATER TO COASTAL WATERS AND MORE THAN HALF THE TOTAL MASS EMISSIONS OF ARSENIC, CHROMIUM, LEAD, ZINC, DDT, AND PCB (SCCWRP, 1975).

SUMMARY COMPARISON OF DIRECT ENVIRONMENTAL EFFECTS

TABLE 3

	ALTERNATIVE #1 "NO PROJECT"	ALTERNATIVE #2 "EMPHASIZE OCEAN DISPOSAL"	ALTERNATIVE #3 "EMPHASIZE UPSTREAM TREATMENT"
PACIFIC OCEAN OFF PALOS VERDES PENINSULA			
MAXIMUM QUANTITY DISCHARGED (MILLION GALLONS PER DAY)	400 mgd	400 mgd	300 mgd
LEVEL OF TREATMENT	PARTIAL SECONDARY (100 mgd)	FULL SECONDARY	FULL SECONDARY
FLOATABLES	ELIMINATED BY ADVANCED PRIMARY TREATMENT.		
MICROORGANISMS	SWIMMING AND SHELLFISH WATER BACTERIOLOGICAL STANDARDS MET BY APPROPRIATE CHLORINATION UNDER EACH ALTERNATIVE.		
CHLORINE DOSAGE (ESTIMATED) (MILLIGRAMS PER LITER)	20 mg/1	10 to 15 mg/1	10 to 15 mg/1
SUSPENDED SOLIDS (MILLIGRAMS/LITER)	80 to 85 mg/1	20 to 25 mg/1	20 to 25 mg/1
SOLIDS DEPOSITION ON BOTTOM WITH METALS AND CHLORINATED HYDROCARBON BUILDUP	AEROBIC BOTTOM; PROBABLE END TO DEPOSITION AND CONSTITUENT BUILDUP AT BOTTOM	SAME EFFECTS AS "NO PROJECT," BUT MORE CERTAIN BASED ON PRESENT INFORMATION.	
CHLORINATED HYDROCARBON REDUCTION SINCE 1970	95%	98-99%	98-99%
CHLORINATED HYDROCARBON TOTAL EMISSIONS (WITHOUT CHANGING INDUSTRIAL STANDARDS)	40 lbs/day	8 to 10 lbs/day	8 to 10 lbs/day
EFFLUENT METALS LEVELS	EACH ALTERNATIVE MEETS ENVIRONMENTAL PROTECTION AGENCY MINIMAL RISK STANDARDS. TO MEET STATE OCEAN PLAN STANDARDS FOR SELECTED METALS, SOURCE CONTROL WILL BE REQUIRED.		
PLANT NUTRIENTS, TOTAL INORGANIC NITROGEN (MILLIGRAMS PER LITER)	37 to 40 mg/1	37 to 40 mg/1	37 to 40 mg/1

SOURCE: DRAFT EIS/EIR SUMMARY JOINT OUTFALL SYSTEM FACILITIES PLAN

Currently, Los Angeles County Sanitation District is cooperating with the U.S. Environmental Protection Agency and the California State Water Resources Control Board in a long range facility planning and construction program for the joint outfall system facilities plan. The immediate goal is to achieve water quality that provides for the protection of fish, shell fish, wildlife, and for recreation in and on the water by July 1, 1983. An environmental document has been prepared which assesses the various impacts associated with the three alternative projects being considered as part of this joint outfall plan. Since the primary aim is to improve water quality, the project will result in improving the quality of discharge associated with the White's Point outfall, and thereby to the Palos Verdes Peninsula coastline. A summary of possible water quality effects is contained in Table 3.

INDUSTRIAL WASTE

In addition to the municipal wastes discharged off the Southern California coast, industrial wastes are also discharged from both onshore and offshore locations. It is approximated that 100 MGD of Industrial wastes are discharged into the region. Much of this discharge occurs in the Los Angeles/Long Beach Harbor area.

Marineland, in its daily operations, discharges a small amount of various types of wastes, but controls placed on this facility by the Regional Water Quality Control Board have helped to maintain the discharges at a relatively insignificant level.

PETROLEUM WASTE

Petroleum wastes are a result of sources which include collisions of water-borne vessels, natural seepage, and offshore oil drilling accidents. It is the offshore drilling accidents that offer the greatest threat to the marine environment. Oil can result in severe degradation and destruction to beaches and rocky intertidal areas and their inhabitants.

Rancho Palos Verdes and the rest of the Peninsula have no oil drilling operations in their vicinity presently, but the effects of accidents elsewhere could impact this area. Residents will long remember the degradation that occurred as a result of the 1969 Santa Barbara oil spill which sent millions of gallons of crude oil into the ocean. Currents, tides, and wave action were responsible for transporting the oil to beaches along the coast for miles, killing birds, fish, kelp, and many other organisms by ''smothering'' or poisoning them.

Oil requires time before it is broken down and absorbed by the ocean. Aesthetic and environmental damage incurred by a major oil spill is present for a period of time following the initial spill.

The potential oil spill problem is heightened by a recent action of the Federal Government involving a series of outer continental shelf oil and gas lease sales off-

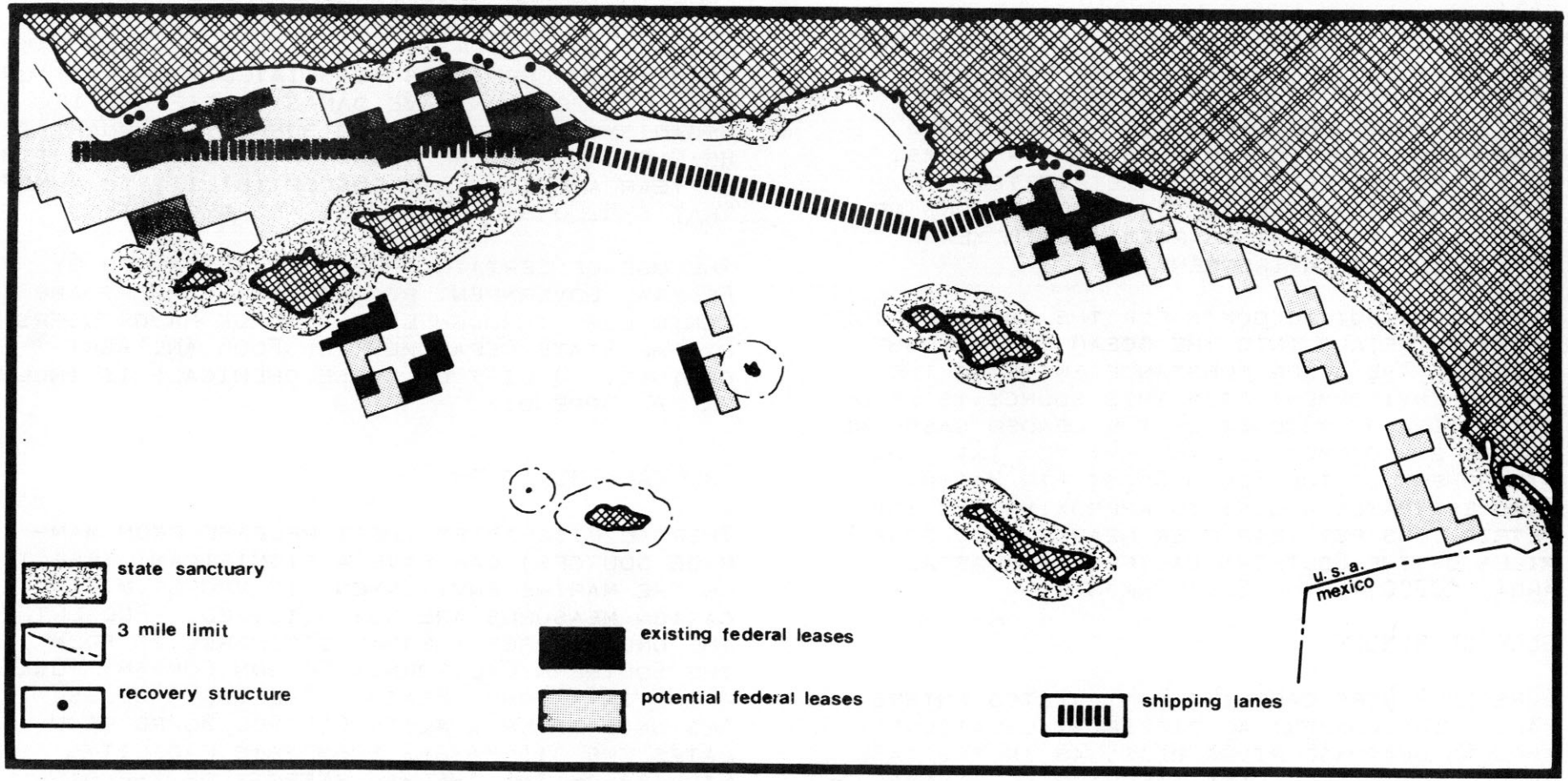
SHORE OF SOUTHERN CALIFORNIA BY THE DEPARTMENT OF THE INTERIOR'S BUREAU OF LAND MANAGEMENT.

FOR PRESENT AND POTENTIAL DRILLING OPERATIONS IN THE SOUTHERN CALIFORNIA BIGHT, SEE FIGURE 4.

TRACE METALS

MUNICIPAL AND INDUSTRIAL WASTE DISCHARGES CONTRIBUTE TO THE INTRODUCTION OF HEAVY METALS INTO THE OCEAN. IN SMALL QUANTITIES THESE METALS, SUCH AS MANGANESE, ZINC, AND COPPER, ARE BASIC TO LIFE; BUT IN LARGE QUANTITIES THESE AND OTHER METALS SUCH AS MERCURY AND CADMIUM, ARE HIGHLY TOXIC.

figure 4 present and potential drilling operations



Some of these metals, as in the case of mercury and copper, are capable of being concentrated in organisms (biological magnification) and, if eaten, are detrimental to human health.

An additional source of these heavy metals has recently been identified as the flaking of anti-fouling paints used to prevent corrosion and retard the growth of marine organisms on the hulls of water-borne vessels. Lead, zinc, and copper appear to be the primary metals used in the paint. Mercury, until recently, was extensively used in these paints, but the use of mercury has been banned due to human health problems. SCCWRP estimates that 720 metric tons of anti-fouling paints and 160 metric tons of zinc anode are ''discharged'' each year (CCZCC-Marine Environment).

Aerial fallout accounts for the introduction of heavy metals into the ocean to a slight degree. The major substance entering the marine environment from this source is lead which is a by-product of the leaded gasoline burned by automobiles and emitted into the atmosphere of the South Coast Air Basin. Lead estimates amount to approximately 100 metric tons per year over nearly 1000 square miles of the Southern California coastal area (CCZCC-Marine Environment).

SURFACE RUNOFF

Surface runoff carrying many wastes enters the marine environment at different locations through drainage river beds, as in the case of the Los Angeles and San Gabriel Rivers, but probably more important to the City are the natural and man-made drainage courses carrying local surface runoff from streets and slopes. Petroleum wastes and by-products associated with street runoff, along with pesticides, fungicides, and herbicides from agricultural and home gardening activities are the most critical sediments and suspended particles of concern. Excessive erosion and runoff laden with pollutants can have detrimental effects on the intertidal and subtidal marine organisms. According to chemical experts and local users, nearly all chemicals associated with pest or weed control can have damaging effects if organisms are exposed to sufficient quantities. However, it is the means of application, time of year applied, and susceptibility to runoff that should be identified and regulated.

The use of certain chemicals is banned by Federal Government regulations; others are controlled through licensing of major users by the State Department of Food and Agriculture. A list of these chemicals is included in the Appendix.

THERMAL POLLUTION

Thermal discharges (heat release from man-made sources) can have a significant effect on the marine environment if proper mitigation measures are not utilized. Presently the only nearby thermal discharge is from the Southern California Edison Company power plant in Redondo Beach. The Los Angeles Regional Water Quality Control Board regulates the discharges from this facility. Studies of the thermal effects of the dis-

CHARGE FROM THE REDONDO BEACH GENERATING STATION HAVE BEEN PERFORMED AND REVIEWED BY THE REGIONAL WATER QUALITY CONTROL BOARD. IT HAS BEEN DETERMINED THAT THE DISCHARGES ARE MADE IN COMPLIANCE WITH THE STATE THERMAL PLAN AND THAT THE BENEFICIAL USES OF THE RECEIVING WATERS ARE BEING PROTECTED. THIS PLANT, THEREFORE, APPEARS TO HAVE NO ADVERSE EFFECT ON THE RANCHO PALOS VERDES MARINE LIFE.

GEOTECHNICAL FACTORS

THE COASTLINE IS IRREGULAR, FEATURING NUMEROUS SECLUDED COVES AND BOLD PROMONTORIES. MUCH OF THE SHORELINE IS MARKED BY A PROMINENT SEA CLIFF THAT RISES NEAR VERTICALLY TO HEIGHTS IN EXCESS OF 100 FEET. SMOOTH SLOPES RISE GENTLY IN A LANDWARD DIRECTION FROM THE CREST OF THE SEA CLIFF. OTHER SLOPES ARE LOCALLY CUT BY CANYONS OR FORMED BY LOW BUT STEEP RISES THAT APPROXIMATELY PARALLEL THE SHORELINE. THE SEA CLIFF IS ABSENT OR NOTICEABLY LOWER ALONG SEVERAL STRETCHES OF SHORELINE IN THE SOUTHERN PART OF THE CITY, AND THE TOPOGRAPHY BORDERING THESE STRETCHES IS HUMMOCKY AND UNDULATORY.

THE COMBINATION OF BEAUTY, SPACIOUSNESS, AND PROXIMITY TO THE OCEAN WOULD APPEAR AT FIRST GLANCE TO QUALIFY THE COASTAL ZONE AS A PRIME AREA FOR DEVELOPMENT. SUCH AN ASSUMPTION, HOWEVER, COULD RESULT IN A FALSE SENSE OF SECURITY REGARDING THE PERMANENCY OF PARTS OF THE COASTAL REGION.

THE PRESENT TOPOGRAPHY OF THE COASTAL REGION IS THE RESULT OF THE INTERACTION BETWEEN GEOMORPHIC PROCESSES AND GEOLOGIC MATERIALS UNDERLYING THE LANDSCAPE. THE SEA CLIFF BEARS TESTIMONY TO CONTINUOUS EROSION OF THE SHORELINE BY WAVE ACTION, AND THE COVES AND PROMONTORIES OF THE SHORELINE ARE INDICATIVE OF THE PRESENCE OF DIFFERENT GEOLOGIC MATERIALS HAVING VARYING DEGREES OF RESISTANCE TO THIS EROSION. THE ABSENCE OF A BOLD SEA CLIFF ALONG SECTIONS OF THE SOUTHERN SHORELINE IS A CONDITION ATTRIBUTABLE TO GEOLOGICALLY RECENT EPISODES OF LANDSLIDING, AND THE HUMMOCKY GROUND SURFACE OF THE ADJACENT LANDWARD AREAS INDICATES THAT SEVERAL OF THESE LANDSLIDES ENCROACHED EITHER WELL INTO, OR ACROSS THE COASTAL REGION. THE DEEP, STEEP WALLED CANYONS CROSSING THE COASTAL REGION HAVE BEEN CUT BY THE INTERMITTENT FLOW OF WATER THAT DRAINS FROM HIGHER PARTS OF THE PALOS VERDES PENINSULA.

THE GEOMORPHIC PROCESSES RESPONSIBLE FOR THE EXISTING TOPOGRAPHY OF THE COASTAL ZONE ARE STILL ACTIVE, AND THEY WILL CONTINUE TO MODIFY THE LANDSCAPE IN THE FUTURE. CLEARLY, LAND-USE PLANNING IN THE COASTAL REGION OF RANCHO PALOS VERDES MUST TAKE INTO ACCOUNT THE LIKELIHOOD OF OCCURRENCE AND THE SEVERITY OF POTENTIAL GEOLOGIC HAZARDS.

TOPOGRAPHY

TERRESTRIAL

WITHIN THE COASTAL REGION OF RANCHO PALOS VERDES A VARIETY OF SLOPING CONDITIONS ARE ENCOUNTERED. THE METHOD BY WHICH THESE SLOPE RANGES ARE CATEGORIZED CORRESPONDS WITH THAT UTILIZED IN THE GENERAL PLAN; 0%- LESS THAN 10%, 10%- LESS THAN 25%,

25%- LESS THAN 35%, AND 35% OR GREATER.

TERRAIN OF LESS THAN 10% SLOPE CONSTITUTES A MAJORITY OF THE COASTAL REGION. THIS TYPE OF TERRAIN IS THE EASIEST TO DEVELOP BARRING ADDITIONAL CONSTRAINTS. HOWEVER, VIEW OBSTRUCTION BECOMES CRITICAL AND DESIGN CONTROLS MAY BECOME NECESSARY TO ENSURE THAT THE IMPACT ON RESIDENTIAL VIEW OBSTRUCTION, AS WELL AS CORRIDOR VIEWS AND VISTAS, IS NOT EXCESSIVE.

SLOPES WITHIN THE 10% TO 25% RANGE ARE CONSIDERED HILLY, BUT IN MOST CASES READILY DEVELOPABLE. VIEW OBSTRUCTION BECOMES LESS OF A PROBLEM AS YOU APPROACH THE UPPER LIMITS OF THIS RANGE. THE TERRAIN WILL LEND ITSELF TO THE CREATION OF VIEW SITES AS WELL AS THE PROTECTION OF VIEWS AND VISTAS PROVIDED ADEQUATE DESIGN MEASURES ARE UTILIZED.

DEVELOPMENT ON 25% TO 35% SLOPES REQUIRES RESPONSIVE SITE PLANNING TO DEAL WITH SENSITIVE TERRAIN WHICH IS OFTEN ASSOCIATED WITH OTHER PHYSICAL CONSTRAINTS.



IT HAS BEEN DETERMINED THROUGH THE GENERAL PLAN PROCESS THAT SLOPES OF 35% OR GREATER POSE A SERIOUS HAZARD TO DEVELOPMENT OR STRUCTURED ACTIVITIES. ONLY LOW INTENSITY TYPES OF ACTIVITIES ARE COMPATIBLE WITH THOSE SLOPES NEAR 35% AND THE TERRAIN'S COMPATIBILITY WITH ANY TYPE OF ACTIVITY DIMINISHES AS THE SLOPES INCREASE.

MARINE

ROCKY SHORES SURROUND THE PENINSULA EXCEPT FOR TWO ''SANDY'' BEACHES WITHIN THE CITY'S JURISDICTION. ONE IS LOCATED IN ABALONE COVE AND IS A PART OF ABALONE COVE PARK. THE OTHER IS LOCATED AT PORTUGUESE BEND AND IS PRESENT ON AN EPHEMERAL BASIS. THIS BEACH REQUIRES MAN-INDUCED SAND REPLENISHMENT AND, FOR THIS REASON, IS NOT BELIEVED TO REPRESENT A TRUE SANDY INTERTIDAL HABITAT (ENGLAND AND NELSON). FOR THE MOST PART, THE CITY'S SHORELINE IS CHARACTERIZED BY ROCKY, GRAVELLY BEACHES, AND ROCKY HEADLANDS.

ZONATION

THE MARINE ENVIRONMENT'S TOPOGRAPHY IS REPRESENTED BY RELIEF (IN FEET). THIS RELIEF, WHEN COUPLED WITH TIDAL ACTION, DEFINES SPECIFIC ZONES THAT CORRESPOND TO THE VARIOUS HEIGHTS OF TIDES. THERE ARE FOUR ZONES WHICH MAKE UP THE OVERALL INTERTIDAL REGION AND TWO ZONES WHICH DESCRIBE THE SUBTIDAL REGION.

THESE ZONES ARE OF VALUE FOR DETERMINING THE GENERAL PLANT AND ANIMAL LIFE WHICH MAY

INHIBIT VARIOUS REGIONS OF THE MARINE TOPOGRAPHY. THE GENERAL BIOLOGIC PROFILE ASSOCIATED WITH EACH ZONE IS DISCUSSED IN THE BIOTIC RESOURCE SECTION. PHYSICAL CHARACTERISTICS ARE PRESENTED BELOW.

INTERTIDAL ZONES

ZONE 1 - UPPERMOST HORIZON OR BEACH: THIS ZONE IS THE HIGHEST OF ALL INTERTIDAL ZONES AND IS FREQUENTLY REFERRED TO AS THE ''SPLASH ZONE''. IT RANGES FROM THE HIGHEST REACH OF OCEAN SPRAY AND STORM WAVES TO ABOVE THE MEAN OF ALL HIGH TIDES. BARE ROCKS ARE MOST OFTEN FOUND IN THIS ZONE. RARELY ONE MAY ENCOUNTER A ''SPRAY POOL'' IN THIS ZONE WHICH IS COMPRISED OF BRACKISH WATER OF HIGH TEMPERATURE DUE TO ITS CONSTANT EXPOSURE TO SOLAR RADIATION IN A CONSTRAINED AREA.

ZONE 2 - HIGH INTERTIDAL OR UPPER HORIZON: THIS ZONE EXTENDS FROM MEAN HIGH WATER TO JUST BELOW MEAN SEA LEVEL. PERMANENT TIDE POOLS ARE ASSOCIATED WITH THIS ZONE IN SOME AREAS OF THE CITY.

ZONE 3 - MIDDLE INTERTIDAL OR MIDDLE HORIZON: EXTENDS FROM MEAN HIGHER LOW WATER TO MEAN LOWER LOW WATER - THE ''ZERO'' OF THE TIDE TABLES. ALONG THE CALIFORNIA COASTLINE THIS ZONE RANGES FROM PLUS 2 1/2 FEET TO 0 FEET, AND IS TYPICALLY COVERED AND UNCOVERED TWICE EACH DAY.

ZONE 4 - LOW INTERTIDAL OR LOWER HORIZON: NORMALLY UNCOVERED BY MINUS TIDES ONLY, THIS ZONE EXTENDS FROM 0 FEET TO USUALLY MINUS 1.6 FEET ALONG THE CITY'S COASTLINE.

SUBTIDAL ZONES

THE FOLLOWING TWO ZONES HAVE BEEN DEVELOPED FOR THE PURPOSE OF THIS REPORT TO DESCRIBE ACTIVITIES AND HABITATS THAT EXIST IN THE SUBTIDAL REGION.

ZONE 5 - HIGH SUBTIDAL: EXTENDS FROM LOW INTERTIDAL, USUALLY MINUS 1.6 FEET, TO THE 60 FOOT DEPTH CONTOUR ALONG THE OCEAN FLOOR.

ZONE 6 - LOW SUBTIDAL: EXTENDS FROM THE 60 FOOT CONTOUR SEAWARD.

GEOLOGIC CONDITIONS

THE REGIONAL GEOLOGY OF THE PALOS VERDES PENINSULA IS NOT PARTICULARLY COMPLEX. HOWEVER, CONDITIONS ARE SUCH THAT SEVERAL SIGNIFICANT GEOLOGIC PROBLEMS DO EXIST. THESE PROBLEMS ARE ESPECIALLY SEVERE IN SEVERAL AREAS OF THE COASTAL ZONE. THIS SECTION, INCLUDING GEOLOGIC CONSTRAINTS CATEGORY SYSTEM, IS TAKEN FROM A REPORT DONE FOR THE CITY IN 1976 BY EARTH SCIENCES ASSOCIATES. THE REPORT WAS BASED ON STUDIES DONE BY THE AUTHORS AND THE REVIEW OF NUMEROUS GEOLOGY REPORTS (LISTED IN THE APPENDIX,) AND INCLUDED MAPS WHICH ARE ON FILE WITH THE CITY.

BEDROCK

THE COASTAL REGION IS UNDERLAIN BY MIOCENE SEDIMENTARY AND VOLCANIC ROCKS TO DEPTHS IN EXCESS OF SEVERAL HUNDRED FEET. STRUCTURAL RELATIONSHIPS INDICATE THAT THE SEDIMENTARY ROCKS ARE OLDER THAN MOST OF THE VOLCANIC

ROCKS AND ARE CONTEMPORANEOUS WITH THE OTHERS. THE SEDIMENTARY ROCKS BELONG TO THE ALTAMIRA SHALE MEMBER OF THE MONTEREY FORMATION. BEDDING IN THIS MEMBER IS THIN BUT PROMINENT, AND A PRONOUNCED ANISOTROPY EXISTS SO THAT THESE UNITS EXHIBIT LITTLE COHESIVE STRENGTH IN DIRECTIONS PARALLEL TO THE BEDDING SURFACES. THE PREVAILING ATTITUDES OF THE SEDIMENTARY ROCKS IN THE COASTAL REGION FEATURE A SEAWARD DIP SO THAT BEDDING SURFACES ARE ORIENTED APPROXIMATELY PARALLEL TO THE GROUND SURFACE. THIS COMBINATION OF ADVERSE DIP AND INHERENT WEAKNESS CONSTITUTES CONDITIONS PARTICULARLY FAVORABLE FOR LANDSLIDING WHERE EXISTING SLOPES ARE UNDERCUT BY EROSION OR BY CONSTRUCTION ACTIVITIES.

TWO TYPES OF VOLCANIC ROCKS, BASALT AND TUFF, HAVE BEEN MAPPED IN THE COASTAL REGION. THE BASALT IS VISUALLY THE MORE PROMINENT OF THE TWO. INTRUSIVE MASSES OF DARK BASALT ARE EXPOSED ALONG MUCH OF THE SHORELINE, AND SEVERAL OF THESE UNITS EXTEND INLAND. THESE UNITS SHOW EXTREME VARIATIONS IN SIZE AND SHAPE; SOME ARE THIN, CONFORMABLE LAYERS WITHIN THE SHALE SEQUENCE, WHILE OTHERS ARE MASSES LARGE ENOUGH TO BE QUARRIED COMMERCIALLY. UNWEATHERED BASALT IS HARDER THAN THE SHALE UNITS, AND IT HAS NO INHERENT ANISOTROPY. MANY OF THE PROMONTORIES THAT PROJECT FROM THE PENINSULA'S SHORELINE ARE ATTRIBUTABLE TO THE PRESENCE OF MORE RESISTANT EXPOSURES OF UNWEATHERED BASALT. HOWEVER, IN SOME AREAS THE BASALT HAS BEEN ALTERED TO A VARIEGATED, CLAY-LIKE MATERIAL HAVING LITTLE STRENGTH.

THE TUFFACEOUS VOLCANIC ROCKS ARE MORE EXTENSIVE THAN THE BASALTIC UNITS. MOST ARE THIN AND ROUGHLY CONFORMABLE WITH THE SEDIMENTARY UNITS. HOWEVER, THE PORTUGUESE TUFF, WHILE ESSENTIALLY CONFORMABLE, IS SEVERAL TENS OF FEET THICK. THESE UNITS WERE DEPOSITED AS ACCUMULATIONS OF VOLCANIC ASH, AND MOST HAVE SUBSEQUENTLY BEEN ALTERED TO ASSEMBLAGES OF CLAY MINERALS THAT EXHIBIT LOW SHEAR STRENGTHS. THE PRESENCE OF THESE SOFT, WEAK UNITS WITHIN THE SHALE SECTION ADDS ADDITIONAL ZONES OF WEAKNESS TO THE BEDROCK UNDERLYING THE REGION.

SURFICIAL UNITS

THE MARINE TERRACES OF THE PALOS VERDES PENINSULA ARE RESPONSIBLE FOR A DISTINCTIVE, STEP-LIKE TOPOGRAPHY OF BROAD, GENTLY SLOPING BENCHES SEPARATED BY LOW, RELATIVELY NARROW, AND STEEPER SLOPES. THE BROAD BENCHES ARE THE SURFACE EXPRESSIONS OF ESSENTIALLY LEVEL PLATFORMS THAT WERE CUT INTO BEDROCK AT DIFFERENT STANDS OF SEA LEVEL. SUBSEQUENT TO THEIR DEVELOPMENT, THESE PLATFORMS HAVE BEEN COVERED BY FAN-LIKE ACCUMULATIONS OF UNCONSOLIDATED MATERIAL THAT HAVE BEEN ERODED FROM HIGHER AREAS OF THE PENINSULA. THE LOOSE TERRACE COVER DEPOSITS RANGE IN THICKNESS FROM A FEW FEET TO A FEW TENS OF FEET, AND INDIVIDUAL DEPOSITS THIN IN A SEAWARD DIRECTION. THESE UNCONSOLIDATED DEPOSITS HAVE ESSENTIALLY NO COHESIVE STRENGTH. THEY ARE MORE RAPIDLY ERODED, AND HAVE A LOWER ANGLE OF REPOSE THAN THE UNDERLYING BEDROCK.

EXTENSIVE LANDSLIDE DEPOSITS UNDERLIE MUCH OF THE UNDULATORY TOPOGRAPHY PRESENT IN THE SOUTHERN PORTION OF THE COASTAL ZONE. THE

MARINE TERRACE SEQUENCE HAS BEEN DISRUPTED BY LANDSLIDING THROUGHOUT THIS AREA, AND SEVERAL OF THE LARGER LANDSLIDES EXTEND TO DEPTHS GREATER THAN 100 FEET BENEATH THE GROUND SURFACE. IN PHYSICAL APPEARANCE, THE LANDSLIDES RANGE FROM LARGE BLOCKS OF RELATIVELY INTACT ROCK TO A LOOSE RUBBLE OF BROKEN ROCK FRAGMENTS INTERMIXED WITH SOIL-LIKE MATERIAL. THE STRENGTHS OF THE INDIVIDUAL SLIDES VARY WIDELY; THE RESISTANCE OF THE LARGE BLOCKSLIDES APPROACHES THAT OF BEDROCK, WHILE THE RUBBLY DEPOSITS ARE ESSENTIALLY COHESIONLESS. ALL OF THE LANDSLIDE DEPOSITS IN THE COASTAL REGION SHOULD BE CONSIDERED SUSCEPTIBLE TO ADDITIONAL EPISODES OF MOVEMENT.

GEOLOGIC HAZARDS

THREE SIGNIFICANT GEOLOGIC HAZARDS HAVE BEEN IDENTIFIED IN THE COASTAL ZONE; 1) COASTAL EROSION, 2) LANDSLIDING, AND 3) EROSION ALONG INTERMITTENT STREAM CHANNELS. COASTAL EROSION AND LANDSLIDING ARE INTERRELATED, AND THEY CLEARLY ARE MAJOR THREATS, BOTH AREALLY AND ECONOMICALLY. STREAM CHANNEL EROSION IS ONLY LOCALLY SIGNIFICANT, AND ITS IMPACTS ARE MORE PREDICTABLE.

COAST EROSION IS A CONTINUAL PROCESS IN WHICH WAVES UNDERCUT AND ERODE GEOLOGIC MATERIALS EXPOSED ALONG THE SHORELINE. AS THIS PROCESS CONTINUES, THE SHORELINE RETREATS, THE VERTICAL INTERVAL EXPOSED TO THE SEA INCREASES, AND A SEA CLIFF FORMS. ALTHOUGH THE NET EFFECT IS A GRADUAL RETREAT OF THE SHORELINE, THE RATE OF RETREAT VARIES WITH THE GEOLOGIC UNITS EXPOSED. HARD, VOLCANIC ROCKS OFFER MORE RESISTANCE TO THE WAVES THAN SOFTER SEDIMENTARY ROCKS AND UNCONSOLIDATED MATERIALS.

THE NUMEROUS PROMONTORIES AND COVES ALONG THE SHORELINE OF THE PALOS VERDES PENINSULA HAVE RESULTED FROM DIFFERING RATES OF EROSION. THESE FEATURES REFLECT THE UNDERLYING GEOLOGY, AND THEY ARE INDICATIVE OF GENERAL FUTURE TRENDS IN COASTAL EROSION. THE PROMONTORIES CHARACTERISTICALLY ARE EXPOSURES OF RESISTANT ROCK, USUALLY UNWEATHERED BASALT, WHILE COVES ARE BORDERED BY EITHER UNCONSOLIDATED MATERIALS, SUCH AS LANDSLIDE DEPOSITS, OR BY INTERVALS OF SHALE HAVING A SEAWARD DIP. EROSION OF SHALE UNITS IS LESS SEVERE WHERE THE LOCAL STRUCTURE FEATURES LANDWARD DIPS OR WHERE THE BEDDING DIPS IN A DIRECTION NEARLY PERPENDICULAR TO THE SHORELINE.



In some areas, the sea cliff is a composite of two or more geologic units. Where this occurs, soft material, such as terrace cover, generally overlies harder bedrock and the sea cliff exhibits a break in slope, with the lower, more resistant part being steeper.

The removal of support by wave erosion has been and will continue to be the major cause of precipitating new coastal landslides and reactivating old slides. Areas most susceptible to this mechanism are either underlain by seaward-dipping sedimentary rock or are occupied by existing inactive landslide deposits. The currently active Portuguese Bend landslide, while not activated by coastal erosion, has clearly been influenced by the removal of support by wave action along its toe.

Future episodes of landsliding also could result from geotechnically unsound construction practices in and around the coastal region.

Numerous stream channels cut across the coastal region. Some of these channels are shallow gullies, while others are deep, steep walled canyons. Stream flow is intermittent, but commonly is severe, and minor erosion will doubtless continue along the sides of these channels.

Categorization of the Coastal Region

The combination of geologic factors described in the preceding sections imposes significant restrictions to future land use in parts of the Rancho Palos Verdes coastal region. Areal distribution of these constraints is variable, so that some regions are virtually free of geologic problems, while other areas are unsafe for practically any human activity. The gross pattern is such that the severity of geologic restrictions generally decreases in a landward direction.

The most practical method of assessing the geologic constraints in the coastal zone is by a classification system based on the suitability for existing and anticipated land uses. The following four-category system is comprehensive and also sufficiently detailed to be used as a basis for land use planning. Criteria used for defining the respective categories of this system include types of structures compatible with the terrain, limits on excavation and grading, and ease and safety of access. The four primary categories selected are described briefly below.

Category 1 - Areas unsuited for any permanent structure.

Category 1A -- potentially hazardous for human passage.

Category 1B - in general, safe for human passage.

Category 2 - Areas suitable for light, non-residential structures not requiring significant excavation or grading.

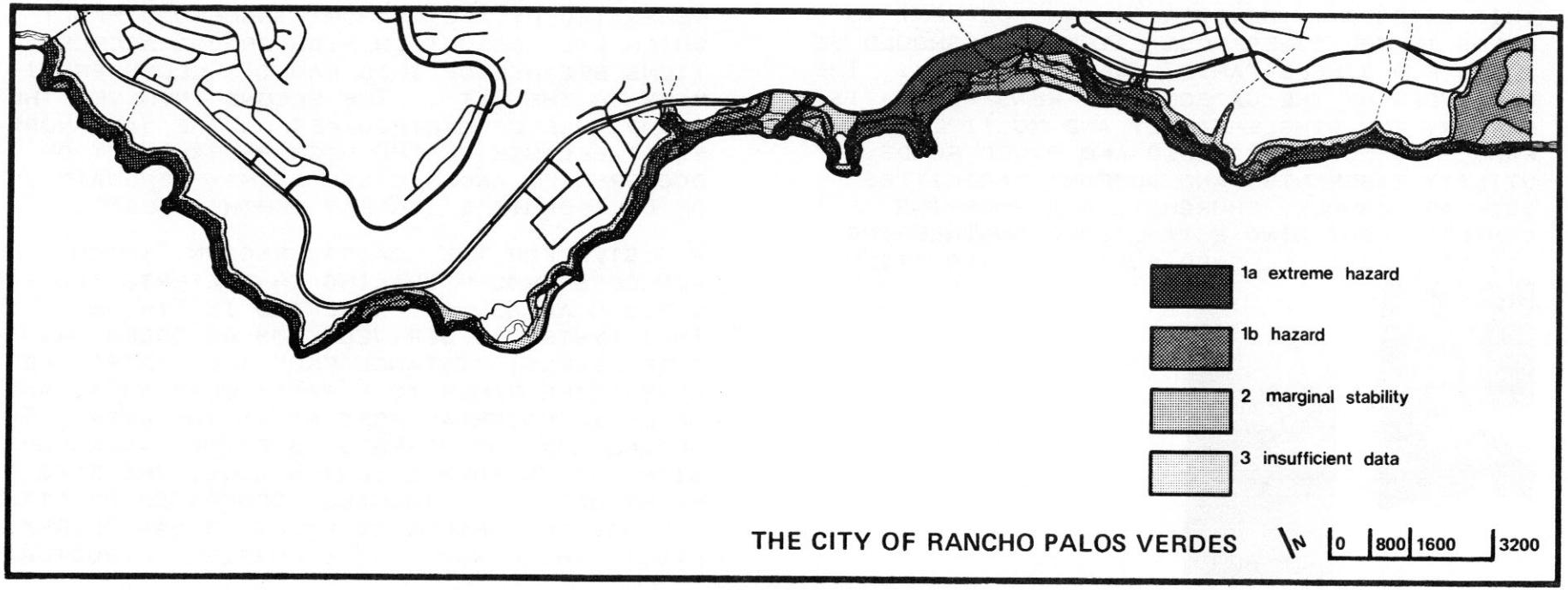
CATEGORY 3 - AREAS IN WHICH EXISTING GEOLOGIC INFORMATION IS NOT SUFFICIENTLY DETAILED TO ESTABLISH SUITABILITY FOR CONSTRUCTION PURPOSES.

CATEGORY 4 - AREAS THAT APPEAR TO BE SUITABLE FOR PERMANENT TRACT-TYPE RESIDENTIAL STRUCTURES AND SUPPORTING FACILITIES IN LIGHT OF EXISTING GEOLOGIC INFORMATION.

THE ABOVE CLASSIFICATION SYSTEM IS BASED ON THE ANALYSIS OF EXISTING GEOLOGIC DATA, BOTH PUBLISHED AND UNPUBLISHED. SIGNIFICANT GAPS STILL EXIST IN THE AMOUNT OF DETAILED GEOLOGIC INFORMATION AVAILABLE ON RANCHO PALOS VERDES TO NECESSITATE THE INCLUSION OF A ''GRAY ZONE'' (CATEGORY 3) BETWEEN AREAS THAT ARE KNOWN TO BE FREE OF GEOLOGIC PROBLEMS AND THOSE KNOWN TO BE RESTRICTED BY GEOLOGIC CONDITIONS.

THE GEOGRAPHICAL DISTRIBUTION OF THE ABOVE CATEGORIES IS SHOWN ON FIGURE 5. SPECIFIC COMMENTS REGARDING THE LOCATION, CONSTRAINTS, AND LIMITATIONS FOR THE USE OF LAND AREAS WITHIN THESE CATEGORIES ARE DISCUSSED IN THE PROVISIONAL COASTAL SETBACK ZONE, NATURAL ENVIRONMENT ELEMENT, AND RESPECTIVE SUBREGION SECTIONS.

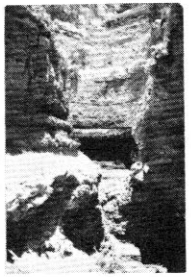
figure 5 geology

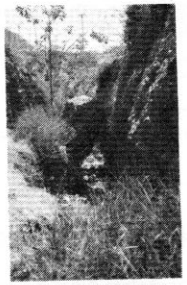


Provisional Coastal Setback Zone

On the basis of the available geologic information, a realistic coastal setback zone would include all lands in Categories 1A, 1B, 2, and 3.

Lands classified as Category 4 make up the major part of the coastal zone. These areas are essentially free of major geologic problems. They are well landward from areas subject to coastal erosion, and their surface expressions are relatively smooth. All of these areas are underlain by in-place bedrock that is sufficiently buttressed by more seaward terrain that will prevent landsliding in the foreseeable future. Restrictions are minimal with respect to areas in this category. However, areas adjacent to lands in the other four categories should be zoned for single-family dwellings only. The remainder of the Category 4 areas are satisfactory for single-family and multiple-family dwellings, graded and paved roads, utility easements, and support facilities such as schools, churches, and shopping centers, providing established engineering practices are followed during construction.





Several residential tracts occupy parts of the areas shown as Category 2 or Category 3 on the accompanying maps. This report is <u>NOT</u> to be construed as a statement that houses currently existing in these areas are unsafe.

SEISMIC HAZARDS

<u>Terrestrial</u>

Seismic hazards inherent in various faults of concern to the City are discussed on pages 148-158 of the General Plan. For the basis of the following discussion it is appropriate to reiterate conclusions drawn in the General Plan on two seismically active faults. The first involves earthquakes generated by the Newport-Inglewood fault which will result in high ground accelerations because of this fault's close proximity to the City. The second involves the importance of earthquakes on the San Andreas fault because of the high probability of occurrence, and because it may generate one of California's ''great earthquakes''.

A system for the coastal region, which reflects ground shaking characteristics for various areas, is presented in Figure 6. This system is derived from recorded magnitude levels, distance from the earthquake generating fault to a particular area, and geologic material present in the area. This ground shaking response spectra, when compared with the Uniform Building Code, presents the magnitude of earthquake (generated by either the Newport-Inglewood fault or San Andreas fault) which would pose possible structural

DAMAGE TO BUILDINGS NOT EXCEEDING THE SEISMIC DESIGN STANDARDS OF THIS CODE.

ONE ADDITIONAL NOTE PERTAINING TO THE RELATIONSHIP OF EARTHQUAKES TO LANDSLIDE AREAS IS WARRANTED BEFORE DISCUSSING GROUND SHAKING RESPONSE SPECTRA. AN EARTHQUAKE, JUST AS HEAVY RAIN, PROVIDES A TRIGGERING FORCE IN INITIATING DOWNSLOPE MOVEMENT OF ALREADY UNSTABLE EARTH MASSES. WHEN LARGE MAGNITUDE EARTHQUAKES ARE GENERATED BY THE NEWPORT-INGLEWOOD FAULT AND SAN ANDREAS FAULT, THEY COULD RESULT IN ACCELERATING EXISTING MOVEMENT OF ACTIVE LANDSLIDE AREAS (SEE FIGURE 7 AND FIGURE 38 OF THE GENERAL PLAN). BECAUSE OF THE CONCENTRATION OF LANDSLIDE AREAS AROUND ABALONE COVE AND PORTUGUESE BEND, NEW OR ACCELERATED MOVEMENT COULD RESULT IN A SEVERING OF INFRASTRUCTURE FACILITIES (SEE INFRASTUCTURE SECTION) ALONG WITH SEVERE STRUCTURAL DAMAGES IN THE PORTUGUESE BEND AREA.

NEWPORT-INGLEWOOD FAULT

THE GROUND AMPLIFICATION SPECTRA FOR EARTHQUAKES GENERATED BY THE NEWPORT-INGLEWOOD FAULT VARY THROUGHOUT THE COASTAL ZONE WITH

figure 6 seismic zones

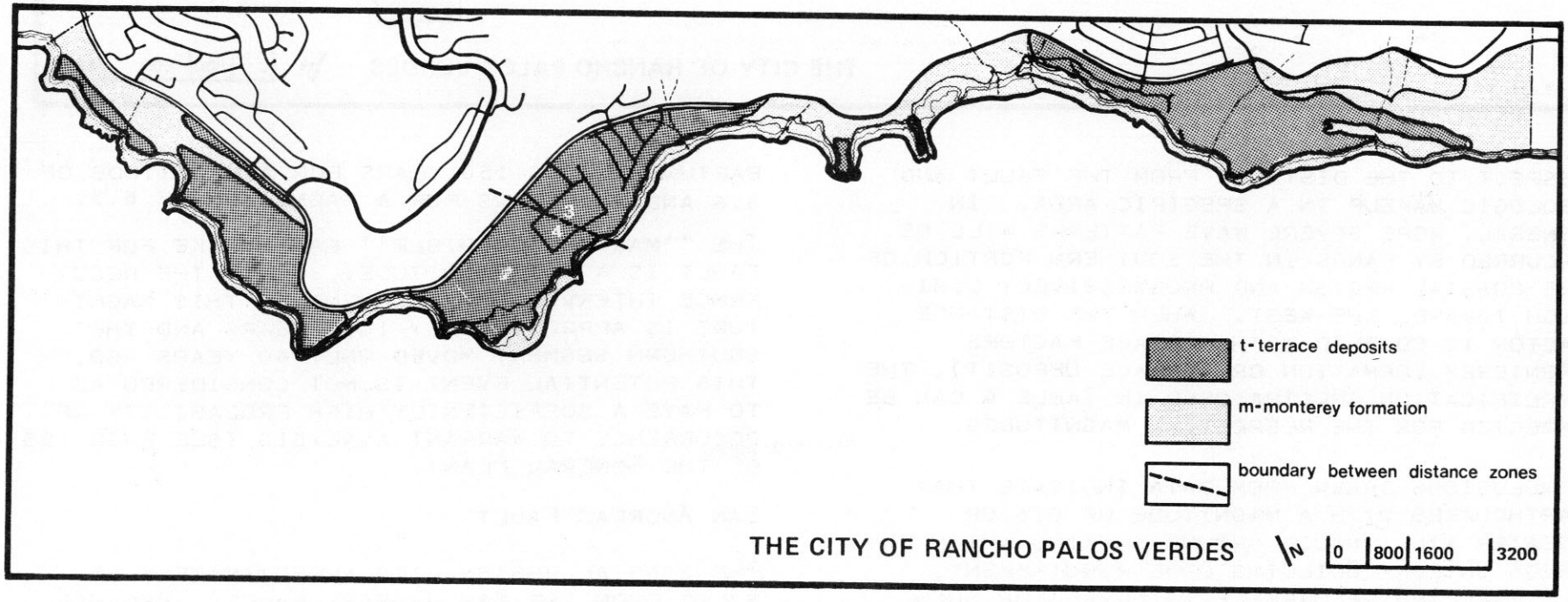
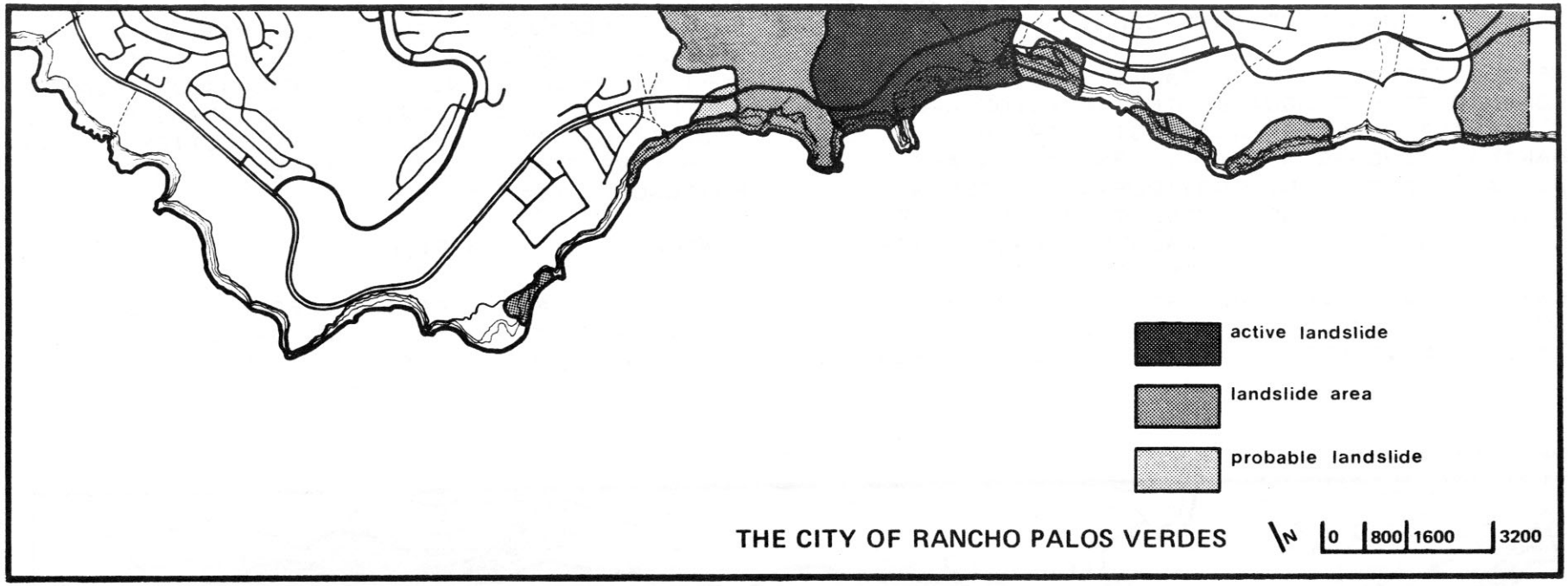


figure 7 landslides



RESPECT TO THE DISTANCE FROM THE FAULT AND GEOLOGIC MAKEUP IN A SPECIFIC AREA. IN GENERAL, MORE SEVERE WAVE PATTERNS WILL BE INCURRED BY LANDS IN THE SOUTHERN PORTION OF THE COASTAL REGION AND PROGRESSIVELY DIMINISH TOWARDS THE WEST. WHEN THE DISTANCE FACTOR IS COUPLED WITH SURFACE FACTORS (MONTEREY FORMATION OR TERRACE DEPOSIT), THE AMPLIFICATION SPECTRA USED IN TABLE 4 CAN BE EXPECTED FOR THE RESPECTIVE MAGNITUDES.

CONCLUSIONS DRAWN FROM DATA INDICATE THAT EARTHQUAKES WITH A MAGNITUDE OF 5.6 OR GREATER WILL INDUCE GROUND SHAKING WHICH EXCEEDS UNIFORM BUILDING CODE REQUIREMENTS. THE EXPECTED RECURRENCE INTERVAL FOR SUCH EARTHQUAKES IS 150 YEARS FOR A MAGNITUDE OF 5.6 AND 300 YEARS FOR A MAGNITUDE OF 6.5.

THE ''MAXIMUM CREDIBLE'' EARTHQUAKE FOR THIS FAULT IS A 7.7 MAGNITUDE. SINCE THE RECURRENCE INTERVAL FOR AN EVENT OF THIS MAGNITUDE IS APPROXIMATELY 1000 YEARS AND THE SOUTHERN SEGMENT MOVED ONLY 40 YEARS AGO, THIS POTENTIAL EVENT IS NOT CONSIDERED AS TO HAVE A SUFFICIENTLY HIGH PROBABILITY OF OCCURRENCE TO WARRANT ANALYSIS (SEE PAGE 155 OF THE GENERAL PLAN).

SAN ANDREAS FAULT

THE COASTAL REGION LIES APPROXIMATELY 55 MILES FROM THE SAN ANDREAS FAULT. BECAUSE

OF THIS GREAT DISTANCE, THERE WILL BE VIRTUALLY NO VARIATION IN GROUND SHAKING INTENSITY ACROSS THE COASTAL REGION. SURFACE FACTORS ARE THE ONLY ELEMENT WHICH WILL VARY THE AMPLIFICATION SPECTRA (SEE TABLE 4). THE RESPONSE SPECTRA REFLECT AN EARTHQUAKE OF 8.5 MAGNITUDE, WHICH IS EXPECTED TO OCCUR IN THE NEAR FUTURE (ENVICOM). ONCE AGAIN THIS RESPONSE SPECTRA EXCEEDS UNIFORM BUILDING CODE REQUIREMENTS.

MARINE

MARINE GEOPHYSICAL STUDIES OF SEA FLOOR STRUCTURE SUGGEST THAT THE NEWPORT-INGLEWOOD AND ROSE CANYON FAULTS MAY BE PART OF A SINGLE ZONE OF FAULTING WHICH LIES NO MORE THAN 6 MILES OFFSHORE BETWEEN NEWPORT BEACH AND LA JOLLA. A STUDY BY MOORE (1972) INDICATES THAT THE ROSE CANYON FAULT EXTENDS OFFSHORE AND NORTHWARD FROM LA JOLLA TO A POINT A FEW MILES WEST OF OCEANSIDE. ALTHOUGH NO HISTORIC SHOCKS ARE KNOWN TO HAVE ORIGINATED ON THE ROSE CANYON FAULT, IT APPARENTLY HAS UNDERGONE VERTICAL MOVEMENT APPROACHING 100 FEET DURING THE PAST 100,000 YEARS. THEREFORE, IT SEEMS REASONABLE TO PRESUME THAT A LARGE EARTHQUAKE IS POSSIBLE ANYWHERE ALONG THE NEWPORT-INGLEWOOD TO ROSE CANYON FAULT (CCZCC GEOLOGY).

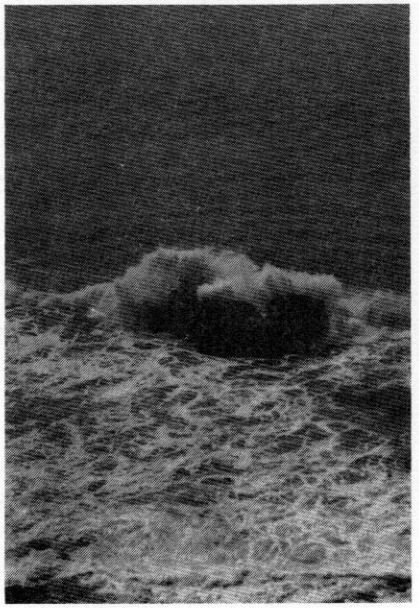
ACCORDING TO MOORE (1969), THE CALIFORNIA CONTINENTAL BORDERLAND IS COMPRISED OF TWO SETS OF FAULTS, A NORTHWEST TRENDING SET AND AN EAST-NORTHEAST SET. THE SAN CLEMENTE ISLAND FAULT IS THE DOMINANT FAULT. IT MAY EXTEND FROM SAN CLEMENTE ISLAND SOUTH TO CABO COLNETT IN BAJA. IN 1951 AN EARTHQUAKE OF MAGNITUDE 5.9 OCCURRED OFF THE TIP OF THIS ISLAND (CCZCC GEOLOGY).

TSUNAMIS AND SEICHES, WHICH MAY BE GENERATED BY OFFSHORE FAULTS, ARE DISCUSSED IN THE WAVES SECTION OF THIS REPORT.

MINERAL RESOURCES

TERRESTRIAL

THERE IS NO CURRENT EVIDENCE OF MINERAL RESOURCES WITHIN THE RANCHO PALOS VERDES COASTAL REGION, AND MORE BROADLY THE CITY, WHICH ARE ECONOMICALLY FEASIBLE FOR EXTRACTION. THIS STATEMENT IS FOUNDED ON THE HIGH ECONOMIC VALUE OF LAND WITHIN RANCHO PALOS VERDES WHICH OUTWEIGHS THE SPARSE AND LOW ECONOMIC VALUE PLACED ON MINERAL RESOURCES FOUND ON THE PENINSULA. A FAIR STATEMENT WOULD BE THAT LAND RESOURCE VALUE FOR DEVELOPMENT EXCEEDS THE VALUE OF MINERAL RESOURCES.



GENERALIZED CHARACTERISTICS OF EXPECTED EARTHQUAKES

TABLE: 4

ZONE	MAGNITUDE OF EARTHQUAKE			
	NEWPORT-INGLEWOOD FAULT ZONE			SAN ANDREAS FAULT ZONE
	5.2	5.6	6.5	8.5
3 MONTEREY	a=0.05 T=0.1-0.2 t=3-5	a=0.16 T=0.15-0.3 t=5-9	a=0.28 T=0.15-0.3 t=14-16	a=0.15 T=0.2-0.4 t=40-50
4 MONTEREY	a=0.04 T=0.1-0.2 t=3-5	a=0.13 T=0.15-0.3 t=5-7	a=0.24 T=0.2-0.3 t=12-14	
3 TERRACE	a=0.05 T=0.1-0.2 t=3-5	a=0.20 T=0.1-0.3 t=5-9	a=0.30 T=0.2-0.3 t=12-14	a=0.15 T=0.2-0.5 t=40-50
4 TERRACE	a=0.05 T=0.1-0.2 t=3-5	a=0.16 T=0.15-0.3 t=5-7	a=0.30 T=0.2-0.4 t=12-14	

a = MAXIMUM GROUND ACCELERATION (GRAVITY)
T = PREDOMINANT PERIOD (SECONDS)
t = DURATION OF STRONG SHAKING (SECONDS)
SOURCE: TECHNICAL DATA BASE FOR SEISMIC SAFETY AND PUBLIC SAFETY GENERAL PLAN ELEMENTS – ENVICOM

THE GENERAL PLAN (PAGES 18-20) DISCUSSES THE LOCATION OF MINERAL RESOURCES AND EXTRACTION OPERATIONS WHICH ONCE TOOK PLACE IN THE CITY.

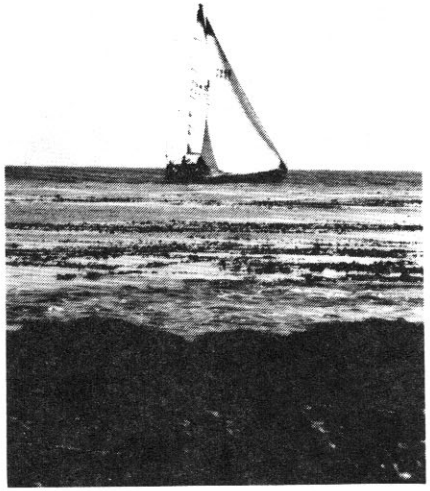
MARINE

PRESENTLY NO MINERAL RESOURCES ARE BEING EXTRACTED FROM THE OCEAN NEAR RANCHO PALOS VERDES. CURRENT INTEREST AND CONTROLS INVOLVING MARINE MINERAL RESOURCES PERTAIN TO THE EXTRACTION OF OIL AND GAS. THE CITY, HAVING NO JURISDICTIONAL CONTROL OVER OCEAN TERRITORY, CAN ONLY ASSESS AND RESPOND TO THE VARIOUS ACTIONS BEING INITIATED BY THE STATE AND FEDERAL GOVERNMENT IN THEIR RESPECTIVE JURISDICTIONS OF CONTROL.

THE STATE HAS ESTABLISHED AN OIL AND GAS SANCTUARY FOR A MAJORITY OF LOS ANGELES COUNTY. THIS SANCTUARY, WHICH PERTAINS TO STATE COASTAL WATERS ADJACENT TO THE CITY, PROHIBITS OIL AND GAS RECOVERY ACTIVITIES.

BEYOND THE 3 MILE STATE JURISDICTION OF INSHORE WATERS, THE FEDERAL GOVERNMENT HAS JURISDICTION OF ''OCEAN ACREAGE'' THAT OFFERS POTENTIAL DRILLING SITES. IN DECEMBER OF 1975 THE DEPARTMENT OF INTERIOR HELD THE FIRST OF A SERIES OF SALES FOR OIL LEASE TRACTS TO INTERESTED OIL COMPANIES (SEE FIGURE 4). RECENTLY (SEPTEMBER 1976) THE DEPARTMENT CALLED FOR LEASE PROPOSALS FROM OIL COMPANIES FOR TRACTS TO BE CONSIDERED AS PART OF THE #48 SALE. POTENTIAL IMPACTS GENERATED BY EACH SERIES OF SALES, AS IT AFFECTS THE CITY, WILL VARY WITH THE TRACTS BEING CONSIDERED. IT IS CRITICAL THAT THE CITY MONITOR THIS ACTIVITY TO VOICE LOCAL CONCERNS WHICH MAY INVOLVE VISUAL AND ENVIRONMENTAL IMPACTS (SEE WATER QUALITY SECTION) ASSOCIATED WITH A PARTICULAR LEASE TRACT SALE.





HYDROLOGY

WATER SYSTEMS ARE AN INTEGRAL PART OF THE TOTAL NATURAL ECOSYSTEM. PRECIPITATION FALLING DIRECTLY ON THE LAND STARTS THE CYCLE WITH STREAMWAYS AND DRAINAGE CHANNELS TRANSPORTING SURFACT RUNOFF DOWNHILL WHERE IT EVENTUALLY ENTERS THE OCEAN. THE OCEAN IS THE MAJOR SOURCE OF PRECIPITATION THROUGH THE PROCESS OF EVAPORATION. BECAUSE OF THE INTRINSIC CYCLICAL PROCESS ASSOCIATED WITH HYDROLOGY, THIS SECTION DOES NOT REFLECT THE TERRESTRIAL/MARINE DIVISION WHICH IS A PART OF MOST SECTIONS IN THE REPORT.

THE DRAINAGE PATTERN ON THE PENINSULA IS DISPERSED. SOME DRAINAGE COURSES TRANSCEND JURISDICTIONAL BOUNDARIES; THUS, RUNOFF FROM JURISDICTION TO JURISDICTION IS AN IMPORTANT FACTOR TO BE CONSIDERED IN THE PLANNING PROCESS.

THROUGHOUT THE COASTAL REGION, DRAINAGE COURSES TRAVERSE THE LAND AT DIFFERENT INTERVALS (SEE FIGURE 8). SOME OF THESE DRAINAGE COURSES LEND THEMSELVES TO FLASH FLOOD POTENTIAL DUE TO THE NATURE AND EXTENT OF THE UPSTREAM DRAINAGE PATTERN. THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HAS IDENTIFIED THESE POTENTIAL HAZARD AREAS AND HAS PROPOSED FLOOD CHANNELS AND/OR STORM DRAINS IN ORDER TO REDUCE THE HAZARD (SEE INFRASTRUCTURE SECTION).

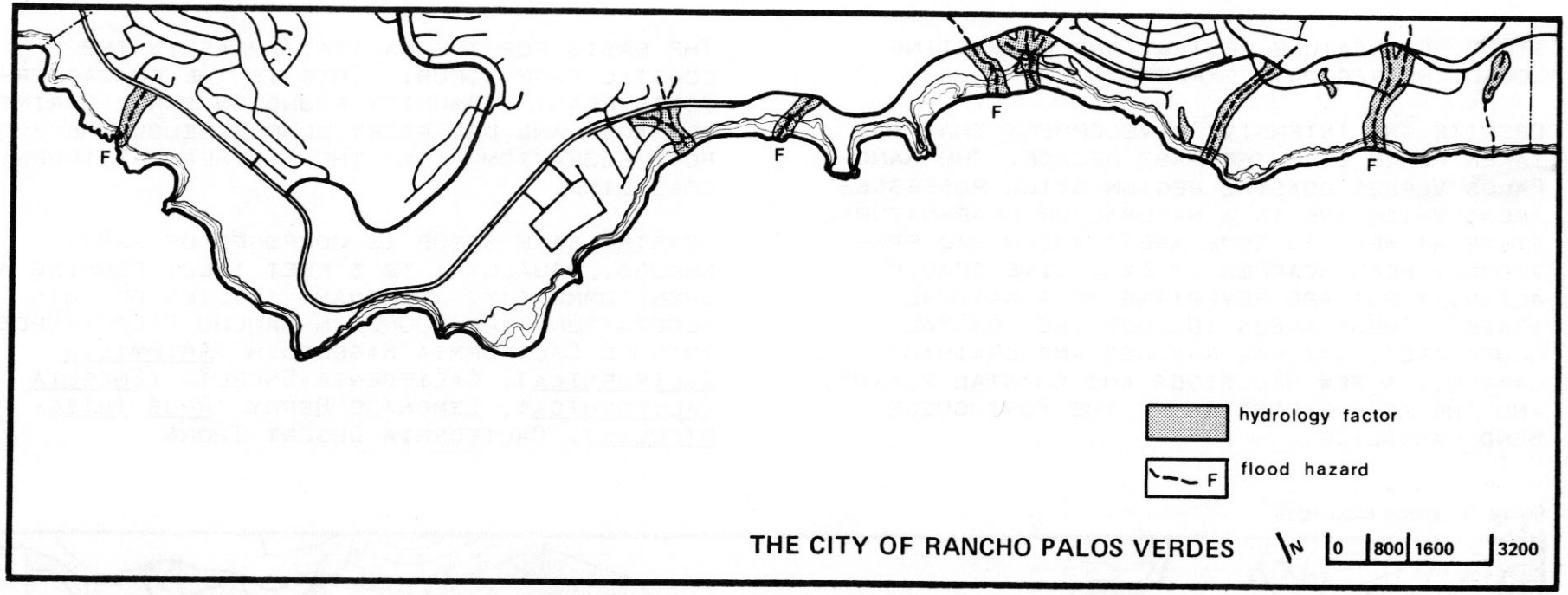
LAND AREAS ADJACENT TO THESE DRAINAGE COURSES THAT ARE SUBJECT TO EROSION HAZARDS ARE DEALT WITH IN THE GEOLOGIC CONDITIONS SECTION.

THE COASTAL REGION'S DRAINAGE COURSES ARE AT THE END OF THE ROUTE BEFORE SURFACE RUNOFF ENTERS THE OCEAN. THEREFORE, THEY WILL BE IMPACTED CONTINUALLY BY INLAND DEVELOPMENTS AND SURFACE DRAINAGE PROJECTS. THE QUALITY OF WATER ENTERING THE OCEAN, QUANTITY AND RATE OF RUNOFF ASSOCIATED WITH THESE CHANNELS, ALONG WITH DEBRIS BEING TRANSPORTED BY THEM WILL, TO A LARGE EXTENT, BE DETERMINED BY UPSTREAM PRACTICES.

BIOTIC RESOURCES

NATURAL HABITAT VALUE IS TWO-FOLD: IT IS OF

figure 8 hydrology



INTRINSIC ECOLOGICAL VALUE BECAUSE IT SUPPORTS MANY SPECIES WHICH OCCUPY AN IMPORTANT PLACE IN THE ORDER OF LIVING THINGS; AND, IT IS IMPORTANT TO MAN OVER A WIDE RANGE OF HIS NEEDS INCLUDING RECREATION, EDUCATION, AESTHETICS, AND SCIENTIFIC RESEARCH.

THE COASTLINE OF RANCHO PALOS VERDES PRESENTS A UNIQUE SITUATION. THE NATURAL AND RURAL ENVIRONMENT ON THE OTHERWISE URBANIZED PALOS VERDES PENINSULA MAKES THESE AREAS BIOLOGICALLY IMPORTANT RELATIVE TO THEIR SURROUNDINGS.

THE CITY WILL CONTINUE TO REVIEW COASTAL BIOLOGICAL RESOURCES SO THAT PLANNING AND CONSERVATION STRATEGIES CAN BE DEVELOPED.

VEGETATION AND WILDLIFE HABITATS

TERRESTRIAL

BIOLOGIC CONSULTANTS WERE UTILIZED TO DETERMINE SUBSTANTIAL STANDS OR AREAS OF NATURAL VEGETATION CAPABLE OF SUPPORTING WILDLIFE HABITATS THROUGHOUT THE COASTAL REGION. THESE AREAS APPEAR ON FIGURE 9. PRELIMINARY DETERMINATION OF NATURAL TERRESTRIAL VEGETATION WAS DONE USING NASA U-2 COLOR INFRARED IMAGERY AVAILABLE AT THE UNIVERSITY OF CALIFORNIA, RIVERSIDE. PHOTOS USED WERE TAKEN FEBRUARY, 1975 AT A SCALE OF 1:32,500. THE BOUNDARIES OF THESE AREAS WERE THEN VERIFIED IN THE FIELD. SIGNIFICANT BIOLOGICAL RESOURCES WERE DETERMINED THROUGH A FIELD

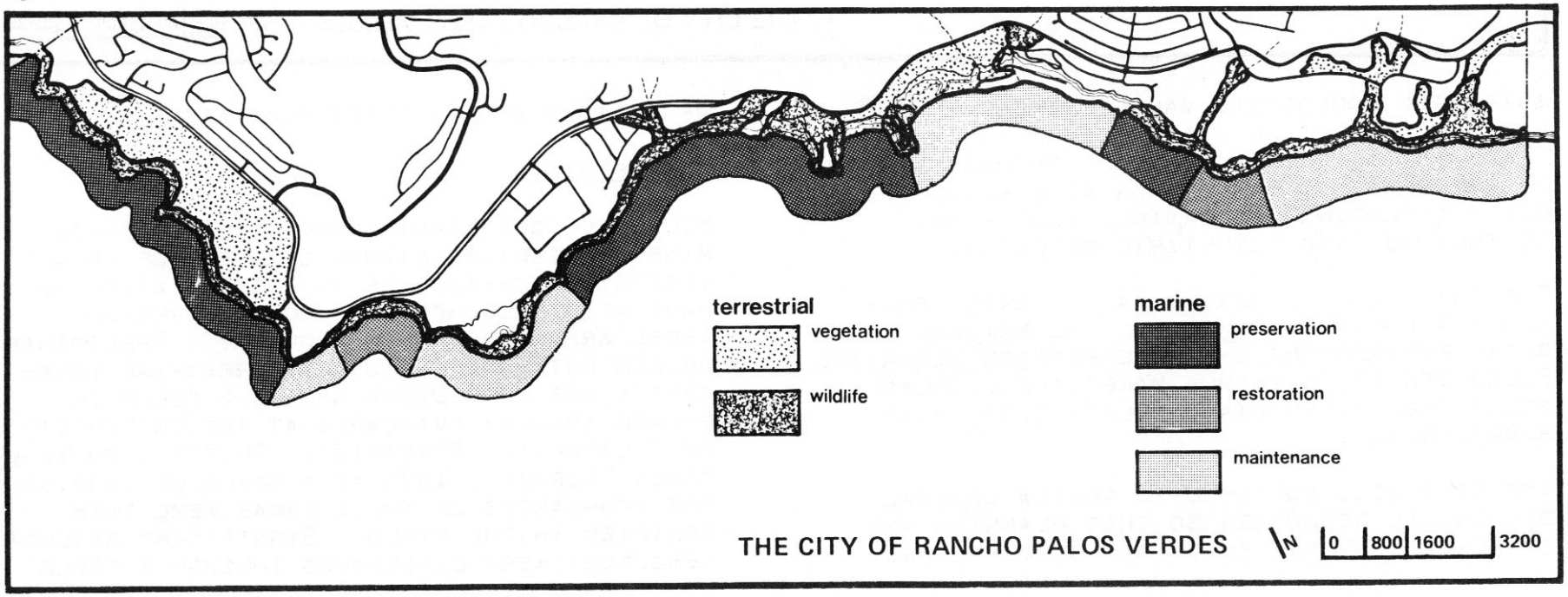
STUDY, LITERATURE REVIEW, AND CONTACTING LOCAL AND REGIONAL EXPERTS.

DESPITE THE INTENSIVE DEVELOPMENT THAT HAS TAKEN PLACE OVER THE PAST DECADE, THE RANCHO PALOS VERDES COASTAL REGION STILL POSSESSES AREAS WHICH ARE IN A NATURAL OR NEAR-NATURAL STATE AS WELL AS SOME AREAS WHICH HAD PREVIOUSLY BEEN SCARRED BY EXTENSIVE GRADING ACTIVITY BUT ARE REVERTING TO A NATURAL STATE. THESE AREAS INCLUDE THE COASTAL BLUFF AREA, NATURAL RAVINES AND DRAINAGE CANYONS, A FEW HILLSIDES AND COASTAL PLAINS, AND THE ACTIVE PORTION OF THE PORTUGUESE BEND LANDSLIDE.

THE BASIS FOR THE HABITAT AREAS IS THE COASTAL SAGE SCRUB. THIS IS THE CHARACTERISTIC PLANT COMMUNITY FOUND ON SANDY MARINE TERRACES AND DRY ROCKY SLOPES BELOW THE 3000 FOOT ELEVATION ALONG THE SOUTHERN CALIFORNIA COASTLINE.

COASTAL SAGE SCRUB IS COMPOSED OF SEMI-SHRUBS, USUALLY 1 TO 5 FEET TALL, FORMING AN OPEN COMMUNITY. DOMINANT SPECIES OF THIS VEGETATION TYPE FOUND IN RANCHO PALOS VERDES INCLUDE CALIFORNIA SAGEBRUSH (ARTEMISIA CALIFORNICA), CALIFORNIA ENCELIA (ENCELIA CALIFORNICA), LEMONADE BERRY (RHUS INTEGRIFOLIA), CALIFORNIA DESERT THORN

figure 9 biotic resources



(*Lycium Californicum*), and Coast Cholla (*Opuntia Prolifera*).

This plant community supports a surprising number and variety of animals. Most species are adaptable to human activity and can survive in disturbed, non-native vegetation. However, a number of species are not adaptable to these altered conditions. As a result their numbers have been eliminated or seriously reduced. Among the larger mammals in this group are the coyote and the gray fox. In addition, there are at least five species of birds that are nearly gone from the area. These include : the Cactus Wren, Road Runner, Blacktailed Gnatcatcher, Rufous Crowned Sparrow, and the Rock Wren (Wells). The coastal sage scrub vegetation provides critical habitats for all of the above species. If these natural areas continue to be impacted, the locally rare animal species will soon be completely lost.

The geography and geologic history of the Palos Verdes Peninsula make the natural vegetation valuable for ecological and scientific reasons. The Peninsula, which was an island in very recent geological time, has some interesting relationships with the Channel Islands. There are at least three geographical races of bird species resident on the Peninsula, that nowhere else except the Channel Islands. These are the insular races of the Orange-Crowned Warbler, Western Flycatcher, and Allens Hummingbird (Wells, Massey, Johnson).

The same phenomena has been documented for plants (Raven, Thorne), including a specie of live-forever (*Dudleya Virens*), which is endemic to the Channel Islands and the Palos Verdes Peninsula (Thorne). This species is known to occur near Point Vicente.

These similarities between the flora and fauna of the Peninsula and the Channel Islands make the natural vegetation of Rancho Palos Verdes a natural biological research laboratory for the study of geographical isolation and evolutionary change in species, island biogeography and ecological relationships, and many other topics of interest to scientists.

The Rancho Palos Verdes coastline is important to the seasonal movements of many bird populations. The natural and semi-natural vegetation here serves as an essential habitat area for many migrating birds moving through the area in the fall and spring to and from their breeding grounds. In addition, many species utilize the Peninsula as prime wintering grounds (Wells, Massey, Gales). These added functions increase the importance and value of natural habitat areas in Rancho Palos Verdes. Without the natural vegetation, successful migration and wintering along the Rancho Palos Verdes coastline could not be possible.

Human activity in the Southern California coastal region has been intensive and very little natural vegetation remains. Due to the scarcity of undisturbed lands in this region, this habitat is considered rare by the CCZCC. An endangered habitat is as important as a rare and endangered specie, and

THE ARGUMENTS FOR ITS PRESERVATION ARE THE SAME AS THOSE PRESENTED ABOVE FOR ENDANGERED SPECIES. RANCHO PALOS VERDES POSSESSES SIGNIFICANT AREAS OF UNDISTURBED COASTAL SAGE SCRUB IN THE PORTUGUESE BEND LANDSLIDE AREA AND IN ISOLATED SCATTERED PATCHES IN INACCESSIBLE AREAS OF THE COASTAL BLUFFS AND CANYONS. MOST OF THE COASTAL SAGE SCRUB HAS BEEN HEAVILY IMPACTED BY OFF-ROAD VEHICLE USE, HEAVY PEDESTRIAN USE, NEARBY RESIDENTIAL DEVELOPMENT, AND AGRICULTURE. THE VEGETATION IN THESE AREAS HAS BEEN INVADED BY INTRODUCED ANNUAL WEEDS. HOWEVER, BECAUSE OF THE REMAINING NATIVE SPECIES, AND THEIR CAPACITY TO REESTABLISH THEMSELVES, THESE AREAS ARE IMPORTANT AS POTENTIALLY EXCELLENT HABITAT AREAS.

MARINE

LIVING MARINE RESOURCES ARE A SIGNIFICANT PART OF MAN'S ENVIRONMENT. THEY PROVIDE HIM WITH MANY OPPORTUNITIES IN FOOD, INCOME, EDUCATION, SCIENTIFIC RESEARCH, RECREATION, AND INSPIRATION. SOUTHERN CALIFORNIA HAS BECOME A WORLD LEADER IN VIRTUALLY ALL FACETS OF MARINE ACTIVITY INCLUDING OCEANOGRAPHIC RESEARCH, FISHERY TECHNOLOGY AND PROCESSING, MARINE RECREATION, MARINE EDUCATION, HABITAT RESTORATION, AND OTHERS. THIS ACTIVITY HAS BEEN MADE POSSIBLE BY THE UNIQUE, DIVERSE, AND HIGHLY PRODUCTIVE MARINE RESOURCE IN THE SOUTHERN CALIFORNIA REGION. RANCHO PALOS VERDES OCCUPIES 7 1/2 MILES OF RICH SOUTHERN CALIFORNIA SHORELINE.

THE CITY OF RANCHO PALOS VERDES HAS DETERMINED THE SIGNIFICANCE OF ITS LIVING MARINE RESOURCES THROUGH STUDIES BY BIOLOGISTS, AND VOLUNTARY EFFORTS OF LOCAL MARINE BIOLOGISTS UNDER THE COORDINATION OF THE PALOS VERDES PENINSULA OCEANOGRAPHIC SOCIETY. TWO MARINE BIOLOGISTS AND A MUSEUM VOLUNTEER FROM THE CABRILLO MARINE MUSEUM CONDUCTED A FIELD STUDY OF THE COASTLINE OF RANCHO PALOS VERDES IN AN EFFORT TO ''IDENTIFY REAL AND POTENTIAL BIOLOGICALLY INTERESTING AND IMPORTANT TIDELANDS ALONG THE COASTLINE'' AND ''TO RECOMMEND PUBLIC USE PLANS FOR THESE TIDELAND AREAS''.

MUCH OF THE PENINSULA'S COASTLINE HAS BEEN ADVERSELY AFFECTED BY MANY FACTORS: OVER-EXTRACTION; POLLUTION; HIGH WATER TEMPERATURES, ETC. DURING ASSESSMENT EFFORTS, BIOLOGISTS IDENTIFIED A NUMBER OF AREAS IN WHICH HUMAN IMPACT HAS BEEN RELATIVELY LOW. THESE HIGH DIVERSITY AREAS ARE IMPORTANT BECAUSE THEY INDICATE THAT COMPLEX INTERRELATIONSHIPS HAVE DEVELOPED THROUGH SUCCESSIVE ECOLOGICAL STAGES. THIS STATUS HAS BEEN ATTAINED OVER LONG PERIODS OF TIME IN THE ABSENCE OF CONTINUED DIRECT HUMAN DISTURBANCE. EFFORTS TO HAVE THE FISH AND GAME COMMISSION ESTABLISH A TOTAL MARINE RESERVE DESIGNATION FOR THESE AREAS ARE CURRENTLY IN PROGRESS. ABALONE COVE WAS PLACED ON A RESERVE STATUS AND EFFORTS ARE NOW DIRECTED TO PORTUGUESE BEND AND A PORTION OF THE COAST NORTH OF POINT VICENTE (SEE FIGURE 9). MORE SPECIFIC INFORMATION IS AVAILABLE AT THE RESPECTIVE SUBREGION LEVEL.

MARINE LIFE IS DIVIDED INTO A NUMBER OF DIFFERENT HABITAT GROUPINGS DEPENDING ON THEIR LIFE SUPPORT REQUIREMENTS. A CLASSIFICATION OF THESE HABITAT AREAS

CORRESPONDS TO THE DIFFERENT ZONES AS DISCUSSED UNDER MARINE TOPOGRAPHY. EACH OF THESE ZONES HAS ITS CHARACTERISTIC LIFE SUSTAINING ELEMENTS WHICH SUPPORT A DIFFERENT REALM OF MARINE ORGANISMS.

THE FOLLOWING IS A BRIEF DISCUSSION OF BASIC LIFE CHARACTERISTICS FOR EACH OF THE ZONES.

INTERTIDAL ZONES

ZONE 1 - UPPERMOST HORIZON OR BEACH: THIS ZONE IS INHABITED BY HARDY, SEMI-TERRESTRIAL ANIMALS WHICH NEED ONLY A VERY SLIGHT AMOUNT OF OCEAN WATER TO SURVIVE AS ONLY THE HIGHEST OF HIGH TIDES AND THE SPRAY OF BREAKING WAVES EVER REACH THIS ZONE. IN THIS INFREQUENTLY WETTED ZONE, ONLY ORGANISMS LIKE THE LAND ASPIRING PERWINKLES AND PILL BUGS OCCUR. SPARCE GROWTHS OF GREEN ALGAE MAY BE FOUND ON BARE ROCKS WHICH ARE CHARACTERISTIC OF THIS ZONE.

ZONE 2 - HIGH INTERTIDAL OR UPPER HORIZON: THIS ZONE SUPPORTS BARNACLES, HERMIT CRABS, SNAILS, CRABS, AND OTHER ANIMALS ACCUSTOMED TO TOLERATING MORE AIR THAN WATER. PLANTS BEGIN TO GROW IN THE UPPER PARTS OF THE ZONE BECOMING MORE LUSH AT THE LOWER EXTREMITIES. THESE PLANTS NOT ONLY PROVIDE A FOOD SOURCE FOR THE ANIMALS BUT ALSO PROVIDE PROTECTION FROM DESICATION FOR THE MORE SUSCEPTIBLE SPECIES.

ZONE 3 - MIDDLE INTERTIDAL OR MIDDLE HORIZON: ANIMALS IN THIS ZONE HAVE ACCUSTOMED THEMSELVES TO, AND MAY REQUIRE, THE RHYTHMIC COVERING AND UNCOVERING OF THE TIDES TWICE DAILY. CHARACTERISTIC OF THIS ZONE IS LUSH PLANT LIFE WHICH NOT ONLY PROVIDES A FOOD SOURCE AND PROTECTION FROM DESICATION, BUT ALSO SHIELDS THE ANIMALS FROM SUNLIGHT.

ZONE 4 - LOW INTERTIDAL OR LOWER HORIZON: SPECIE DIVERSITY IN ZONE 4 FAR EXCEEDS THAT OF ANY OTHER INTERTIDAL ZONE. PLANT AND ANIMAL LIFE CONSISTS OF SOME SPECIES FOUND IN THE HIGHER ZONES PLUS SPECIES WHICH ARE UNABLE TO TOLERATE THE CONSTANT COVERING AND UNCOVERING OF THE TIDES IN THE HIGHER ZONES.

SUBTIDAL ZONES

ZONE 5 - HIGH SUBTIDAL: RESIDENT AS WELL AS MIGRATORY FISH POPULATIONS ARE ABUNDANT. KELP IS ASSOCIATED WITH ZONE 5, EXTENDING UP FROM THE OCEAN FLOOR ATTACHING TO ROCKS THAT ARE LOCATED IN WATER RANGING FROM 5 FEET TO 60 FEET IN DEPTH.



Kelp beds or forests serve as sanctuaries, nurseries, habitats and food sources for many species of marine organisms. The ''biomass'' (the amount of living matter per unit area) of a kelp forest is greater than that of a temperate land forest (CCZCC, The Marine Environment) and in ecological terms may be 100 times more productive than the adjacent sand bottom (SCAG, Coastline Planning). Kelp also exerts a flattening effect on wave surges and thus serves as a stabilizing mechanism for acting against shoreline erosion -- a significant factor for Rancho Palos Verdes as previously noted.

The shoreline of the Peninsula once flourished with huge dense kelp beds (Macrocystis pyrifera) which have now all but disappeared with the result that much of the sea life dependent on the kelp has also disappeared. The ecologic sequence creating the decline of the kelp began with mass harvesting of the brown sea otter in the late nineteenth century. The sea urchin was the favorite food of the otter and for many years the population of sea urchins remained in check as a result of their presence. Due to the demand for sea otter pelts, fur traders practically eliminated the population. This action, combined with water pollution of the coast by sewage discharge, resulted in a situation in which sea urchins thrived and grew. Sea urchins are sea bottom dwellers and feed upon the kelp holdfasts (rootlike, anchoring structures which hold the plants in place). The feeding on the holdfasts severs the anchoring structure and the entire kelp plant washes ashore and dies.

Prior to the increase in urchin population, the kelp was able to replenish itself as rapidly as it was depleted. As the sea urchin population increased, the replenishment process was not able to be maintained. The primary reason that the Palos Verdes Peninsula suffered so extensively in the reduction of kelp is due to the near proximity of two major sewage outfalls (see Water Quality section).

Along with the aesthetic and marine animal loss, the depletion of the kelp forest adversely affects industrial and commercial uses (see Marine Agricultural). Scientific techniques to restore kelp forests have proven successful in reestablishing the Point Loma kelp bed off San Diego and aided in the restoration of kelp beds off the Orange County coast in some locations (CCZCC, The Marine Environment).

Several attempts to restore the kelp around the Peninsula have been initiated. Agencies of Los Angeles County, along with the greater Los Angeles Council of Divers and the California Institute of Technology began restoration efforts in 1970. Restoration was attempted off of White's Point in Royal Palms State Beach, Point Vicente, and Haggartys Cove. This project met with minor success. More recently Dr. Wheeler North of California Institute of Technology has directed a kelp restoration program that is credited with establishment of two successful colonies: one at Abalone Cove (discussed in Subregion 4 - Biotic Resources), and another at Halfway Point. Small colonies of kelp are beginning to come back elsewhere

ALONG THE PENINSULA'S COASTLINE, ALTHOUGH NOT TO THE DEGREE OF THE ABOVE-MENTIONED COLONIES.

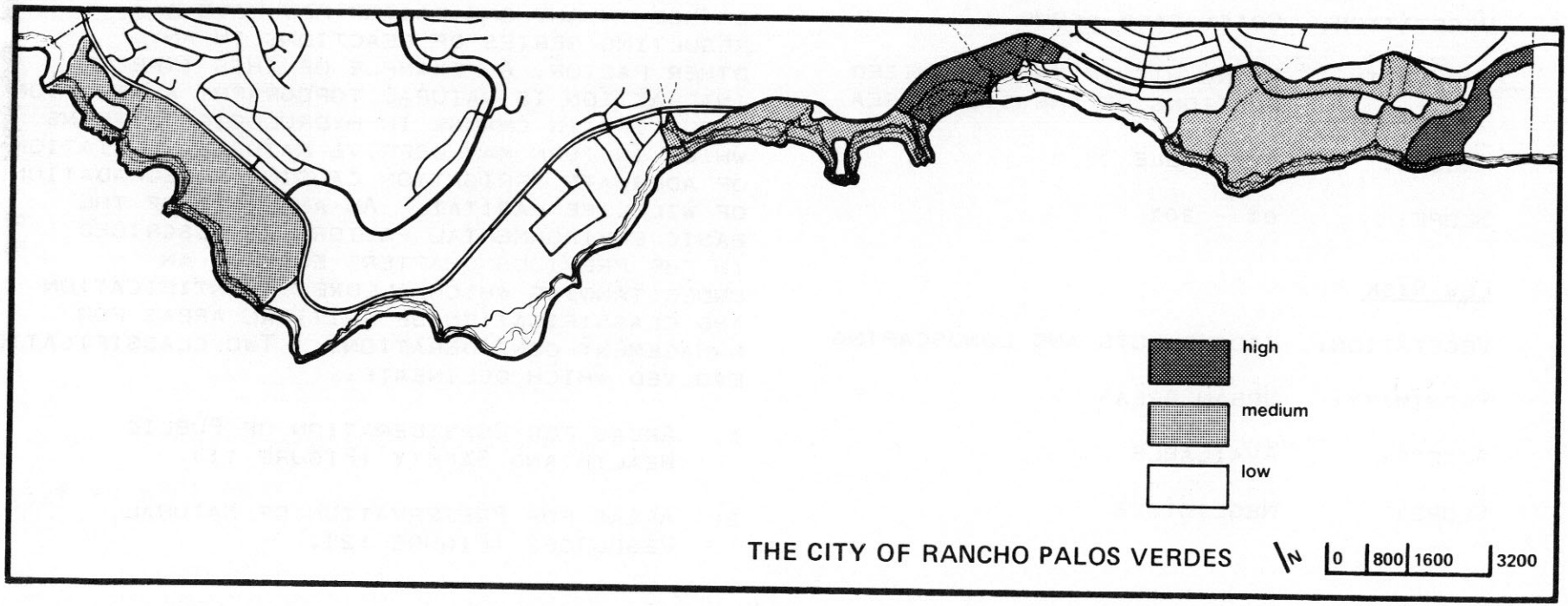
THE CALIFORNIA DEPARTMENT OF FISH AND GAME HAS TAKEN OVER THE EFFORTS OF KELP RESTORATION AT ABALONE COVE AS WELL AS ESTABLISHING COLONIES AT POINT VICENTE, SMUGGLER'S COVE, AND VARIOUS OTHER LOCATIONS ALONG THE PENINSULA.

ZONE 6 - LOW SUBTIDAL: WITHIN THIS ZONE MAY BE FOUND ANIMALS AND MARINE MAMMAL SPECIES WHICH REQUIRE LITTLE OR NO LIGHT, MUCH COLDER TEMPERATURES OR UNOBSTRUCTED SWIMMING GROUNDS (PELAGIC). THIS ZONE IS THE SOURCE OF MANY NUTRIENTS AND COLD WATER CURRENTS THAT UPWELL FROM ITS DEPTHS TO THE OTHER ZONES.

FIRE HAZARD

FIGURE 10 DELINEATES THE VARIOUS DEGREES OF FIRE HAZARD ASSOCIATED WITH THE COASTAL REGION. THIS INFORMATION IS DERIVED FROM STUDIES PERFORMED AS PART OF THE GENERAL PLAN PROCESS (REFER TO PAGES 139-144). THE ANALYSIS IS STILL VALID BASED ON THE MINOR ALTERATIONS TO LAND CONDITIONS IN THE COASTAL REGION SINCE ITS DRAFTING.

figure 10 fire hazard



HOWEVER, SOME MAPPING REFINEMENTS ARE INCORPORATED. AREA PROFILES FOR THE VARIOUS ZONES ARE AS FOLLOWS:

HIGH RISK

VEGETATION:	CHAMISE-COASTAL CHAPARRAL-WOODLAND
PROXIMITY:	NEAR DEVELOPED AREA
ACCESS:	LIMITED
SLOPE:	20% - 40%

MEDIUM RISK

VEGETATION:	COAST SAGE SCRUB
PROXIMITY:	LYING WITHIN THE URBANIZED PORTIONS OF THE STUDY AREA
ACCESS:	AVAILABLE
SLOPE:	0% - 20%

LOW RISK

VEGETATION:	VACANT LOTS AND LANDSCAPING
PROXIMITY:	URBAN AREAS
ACCESS:	AVAILABLE
SLOPE:	NEGLIGIBLE

RESOURCE CLASSIFICATION

THIS ANALYSIS RECOGNIZES THE SIGNIFICANCE AND INTERRELATIONSHIPS OF THE NATURAL ENVIRONMENTAL FACTORS IN ORDER TO DEVELOP A MANAGEMENT PLAN. THIS PLAN IS TO DEFINE AND REGULATE DEVELOPMENT WITHIN AREAS WHICH MAY BE POTENTIALLY HAZARDOUS AND PRESERVE, MAINTAIN, OR IMPROVE THE ESSENTIAL FUNCTIONS OF PHYSICAL AND ECOLOGICAL SYSTEMS, FORMS, OR FORCES WHICH MAY SIGNIFICANTLY AFFECT THE GENERAL HEALTH, SAFETY, AND WELL-BEING OF THE PUBLIC.

ALL FACTORS OF THE NATURAL ENVIRONMENT INHERENTLY INTERACT WITH ONE ANOTHER. A CHANGE IN ANY ONE FACTOR MAY HAVE A RESULTING SERIES OF REACTIONS IN ANY OTHER FACTOR. AN EXAMPLE OF THIS TYPE OF INTERACTION IS NATURAL TOPOGRAPHY ALTERATION RESULTING IN CHANGE IN HYDROLOGIC PATTERNS WHICH IN TURN MAY DEPRIVE NATURAL VEGETATION OF ADEQUATE IRRIGATION CAUSING A DEGRADATION OF WILDLIFE HABITAT. AN ANALYSIS OF THE BASIC ENVIRONMENTAL FACTORS AS DESCRIBED IN THE PREVIOUS CHAPTERS ENABLED AN UNDERSTANDING WHICH ALLOWED IDENTIFICATION AND CLASSIFICATION OF CRITICAL AREAS FOR MANAGEMENT CONSIDERATIONS. TWO CLASSIFICATIONS EVOLVED WHICH DELINEATE:

1. AREAS FOR CONSIDERATION OF PUBLIC HEALTH AND SAFETY (FIGURE 11).

2. AREAS FOR PRESERVATION OF NATURAL RESOURCES (FIGURE 12).

To clearly identify the specific component making up each classification, all components determined to be critical were given a numeric code for reference purposes. Components numbered 1 through 7 are those elements which can be considered in relation to health and safety. Numbers 8, 9 and 10 are those natural resource elements having unique values meriting consideration for preservation. Where several elements overlap, each component code number has been noted in the designation.

Code Designations:

Extreme slope	1
High slope	2
Hazard	3
A extreme	
B high	
Marginally stable	4
Insufficient information	5
Wildland Fire Hazard	6
Flood/Inundation Hazard	7
Hydrologic factors	8
Wildlife Habitats	9
Natural vegetation	10

Areas for Consideration of Public Health and Safety

This classification includes those critical areas of concern in which the natural physical environment poses a significant hazard to the well-being of the public. These normally include natural hazard zones such as, unstable ground conditions, or seismic hazard.

A discussion of the sea cliff erosion and its implications for development was first addressed in the General Plan (Natural Environment). Since the development of the General Plan, more detailed geologic studies have been performed in the coastal region. These studies were directed partially at defining more precisely the hazard areas along the bluffs of the coastline. Consequently, the sea cliff erosion hazard is no longer a major parameter in the classification of the hazard areas. A brief discussion of more refined land stability classifications is presented in the Geologic Conditions section as well as in the Natural Environment Element.

Areas of steep slope were included in two categories: extreme slopes of 35 percent and greater, and high slopes between 25 percent to 35 percent. Generally, these areas require a certain amount of topographic alteration in order to permit development which may result in increasing the probability of landslide and erosional problems. This would especially be the case in areas of known instability.

THE COMPONENT ELEMENTS AND THEIR NUMERIC CODE ARE AS FOLLOWS:

EXTREME SLOPE	1
HIGH SLOPE	2
HAZARD	3
A EXTREME	
B HIGH	
MARGINALLY STABLE	4
INSUFFICIENT INFORMATION	5
WILDLAND FIRE HAZARD	6
FLOOD/INUNDATION	7

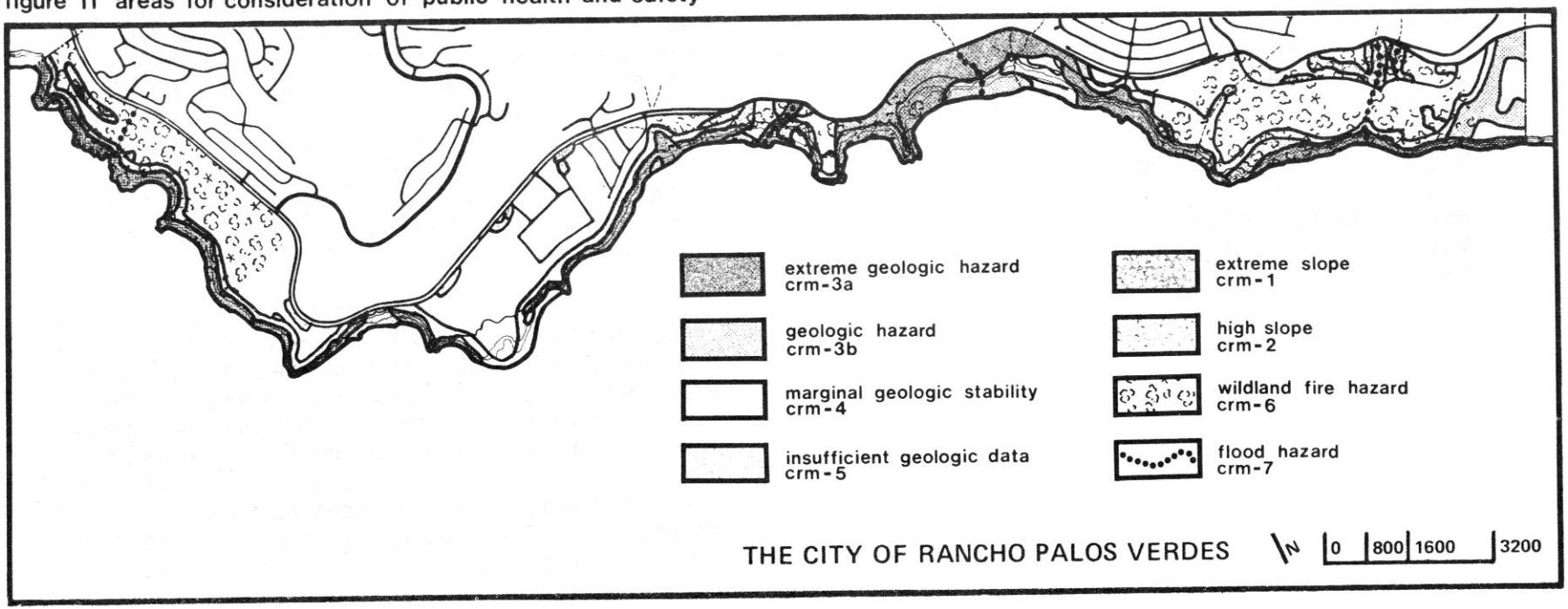
AREAS FOR PRESERVATION OF NATURAL RESOURCES

THESE AREAS ARE FOR CONSERVATION OF PLANT AND ANIMAL LIFE, HABITATS FOR MARINE ORGANISMS AND WILDLIFE SPECIES, AREAS FOR ECOLOGICAL AND OTHER SCIENTIFIC STUDIES, AND ANY OTHER UNIQUE NATURAL RESOURCES WITHIN THE CITY.

THE INTERTIDAL MARINE RESOURCE IS ONE OF THE MOST SIGNIFICANT RESOURCES WITHIN RANCHO PALOS VERDES AND IS DEPENDENT UPON PROPER MANAGEMENT OF THE LAND ENVIRONMENT AS IT INTERACTS WITH THE OCEAN.

THERE ALSO EXIST IN THE COASTAL REGION A NUMBER OF SIGNIFICANT WILDLIFE HABITATS

figure 11 areas for consideration of public health and safety

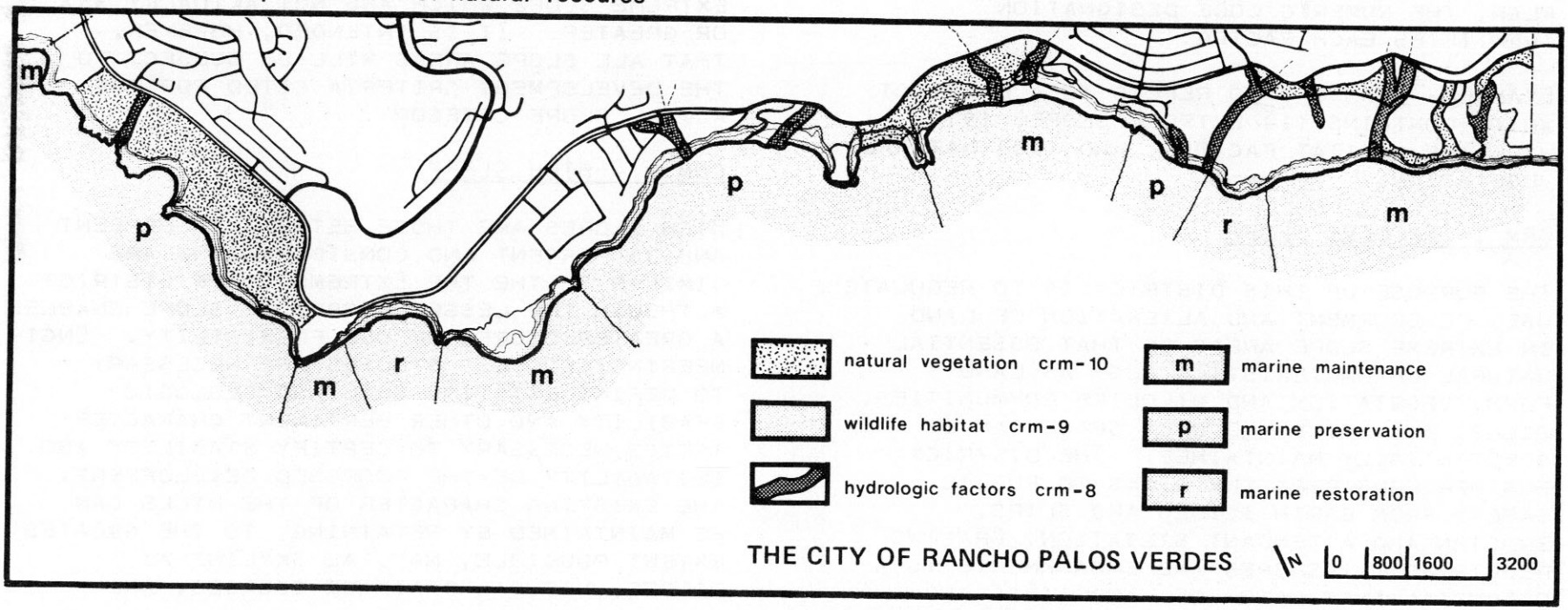


WHICH ARE DIRECTLY ASSOCIATED WITH VEGETATION COMMUNITIES. THESE ARE GENERALLY FOUND ON BLUFF FACES AND NATURAL CANYON AREAS WHERE WILDLIFE THRIVES DUE TO THE PROTECTION AND FOOD FOUND FROM THE NATURAL VEGETATION. THOUGH THERE ARE NO FORMALLY RECOGNIZED ENDANGERED OR RARE SPECIES OF WILDLIFE OR VEGETATION, THESE WILDLIFE HABITATS ARE SIGNIFICANT BECAUSE OF THE WIDE VARIETY AND NUMBERS OF WILDLIFE WHICH ARE ASSOCIATED WITH THEM. ADDITIONALLY, THE NATURAL VEGETATION OF GRASSES AND WILD FLOWERS FOUND ON THE HILLSIDES AND CANYONS GIVES A UNIQUE ENVIRONMENTAL CHARACTER TO THE CITY WHICH, IF TO BE PRESERVED, REQUIRES CONSIDERATION OF THE NATURAL DRAINAGE SYSTEM AND TOPOGRAPHY.

THE AREAS FOR PRESERVATION OF NATURAL RESOURCES MAP (FIGURE 12) IDENTIFIES CRITICAL NATURAL RESOURCES. THESE ARE CALLED OUT ON THE MAP AS FOLLOWS:

HYDROLOGIC FACTORS	8
WILDLIFE HABITATS	9
OTHER NATURAL VEGETATION AREAS	10

figure 12 areas for preservation of natural resoures



NATURAL ENVIRONMENT ELEMENT

THE NATURAL ENVIRONMENT ELEMENT (FIGURE 13) IS A COMPOSITE OF THOSE AREAS REQUIRING CONSIDERATION OF PUBLIC HEALTH AND SAFETY, AND THOSE AREAS REQUIRING PRESERVATION OF NATURAL RESOURCES; AND IS INTENDED TO SHOW THE MANNER OF THEIR RELATIONSHIPS WITH EACH OTHER.

THE VARIOUS TONES INDICATED ON THE PLAN ARE COASTAL RESOURCE MANAGEMENT (CRM) DISTRICTS. THE DARKEST TONE REPRESENTS THOSE AREAS REQUIRING THE HIGHEST DEGREE OF MANAGEMENT AND RETENTION OF OPEN SPACE. LIGHTER TONES ARE LESS RESTRICTIVE. EACH DISTRICT IS MADE UP OF VARIOUS FACTORS WITH ASSOCIATED DEGREES OF CAPABILITY OR SUITABILITY FOR DEVELOPMENT. ON THE PLAN, THE NUMERIC CODE DESIGNATION IDENTIFIES EACH FACTOR.

EXAMPLE: CRM 1 9 10 REFERS TO A DISTRICT WHICH CONTAINS (1) EXTREME SLOPE, (9) WILDLIFE HABITAT FACTORS, AND (10) NATURAL VEGETATION.

CRM 1 EXTREME SLOPE

THE PURPOSE OF THIS DISTRICT IS TO REGULATE USE, DEVELOPMENT AND ALTERATION OF LAND IN EXTREME SLOPE AREAS SO THAT ESSENTIAL NATURAL CHARACTERISTICS SUCH AS LAND FORM, VEGETATION AND WILDLIFE COMMUNITIES, SCENIC QUALITIES AND OPEN SPACE CAN BE SUBSTANTIALLY MAINTAINED. THE DISTRICT FURTHER CONSIDERS THE RISKS TO PUBLIC SAFETY FROM EARTH SLIDES AND SLIPS, EROSION AND ATTENDANT SILTATION. GRADING REQUIRING CUT-SLOPES AND EMBANKMENTS IS A POTENTIAL INSTIGATOR OF LANDSLIDES AND THE PROBABILITY OF THESE OCCURRENCES CAN BE HIGH WITHIN THIS DISTRICT. THE RETENTION OF NATURAL TOPOGRAPHIC CONDITIONS IS IMPORTANT AND NONSTRUCTURED USES SUCH AS PASSIVE PARKS, TRAILS, AGRICULTURE, ETC., ARE APPROPRIATE. DETAILED ENGINEERING/GEOLOGIC STUDIES ARE NECESSARY WITH ANY PROPOSAL FOR DEVELOPMENT OR USE TO DEMONSTRATE TO THE SATISFACTION OF THE CITY THAT THE PROPOSED DEVELOPMENT OR USE REQUIRES NO ALTERATION OF TOPOGRAPHY, SIGNIFICANT RISK TO HUMAN LIFE OR SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACT. DUE TO THE SCALE OF THE ACCOMPANYING MAPS, SOME AREAS OF EXTREME SLOPES MAY NOT HAVE BEEN PLOTTED, JUST AS THERE MAY BE SOME ISOLATED AREAS IDENTIFIED AS EXTREME SLOPE WHICH ARE NOT ACTUALLY 35% OR GREATER. IT IS INTENDED, HOWEVER, THAT ALL SLOPE AREAS WILL BE SUBJECT TO THE DEVELOPMENT CRITERIA CITED FOR THE ACTUAL SLOPE CATEGORY.

CRM 2 - HIGH SLOPE

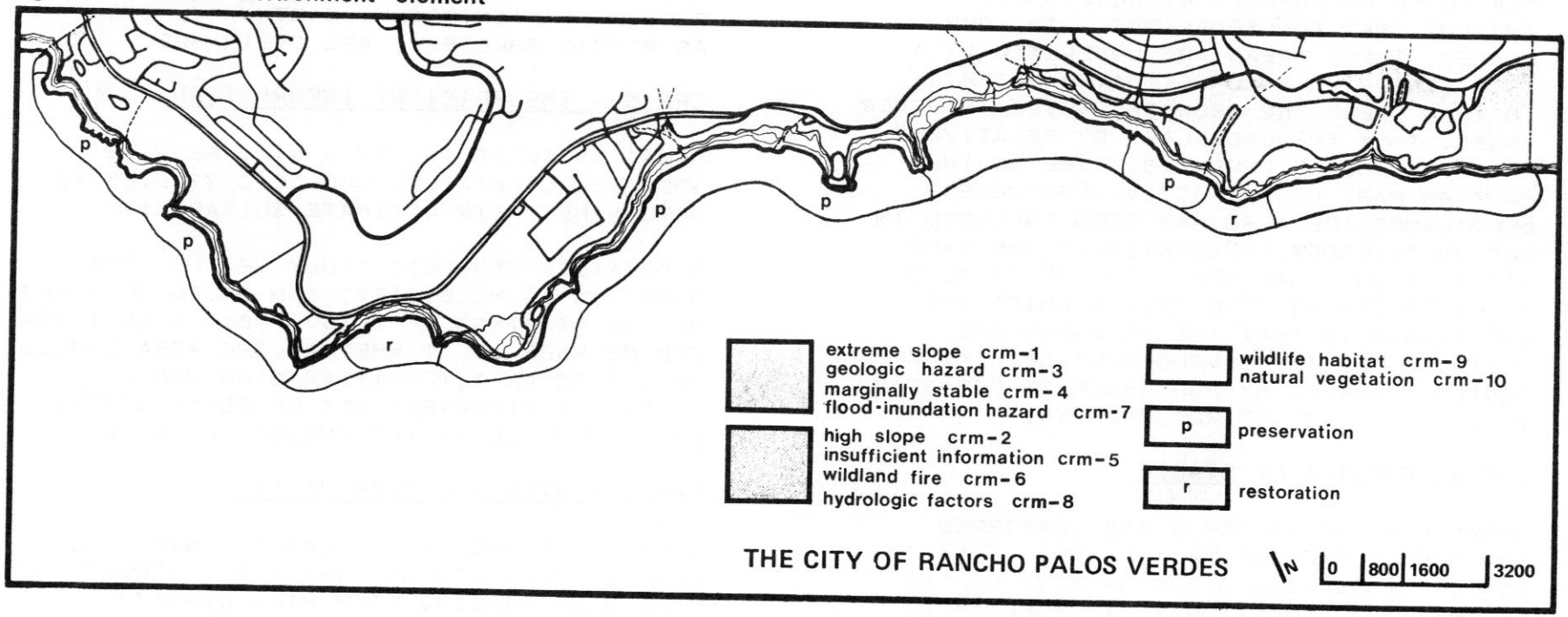
HIGH SLOPES ARE THOSE BETWEEN 25 PERCENT AND 35 PERCENT AND CONSIDERATIONS ARE SIMILAR TO THE THE EXTREME SLOPE DISTRICT ALTHOUGH THE LESSER DEGREE OF SLOPE ENABLES A GREATER DEGREE OF USE FLEXIBILITY. ENGINEERING/GEOLOGIC STUDIES ARE NECESSARY TO DEFINE EXISTING SOIL AND GEOLOGIC STABILITY AND OTHER PERTINENT CHARACTERISTICS NECESSARY TO CERTIFY STABILITY AND SUITABILITY OF THE PROPOSED DEVELOPMENT. THE EXISTING CHARACTER OF THE HILLS CAN BE MAINTAINED BY RETAINING, TO THE GREATEST EXTENT POSSIBLE, NATURAL SKYLINE AT RIDGES, NATURAL DRAINAGE COURSES, AND

NATURAL OUTCROPS. GRADING RESPECTING NATURAL TOPOGRAPHY, ROADS AND DRIVEWAYS FOLLOWING NATURAL TOPOGRAPHY TO THE GREATEST EXTENT POSSIBLE, PROVISION FOR SILTATION AND EROSION CONTROL, REVEGETATION OF ALL CLEARED AND/OR GRADED AREAS, AND DRAINAGE ACCOMPLISHED IN A MANNER CONSISTENT WITH OTHER NATURAL SYSTEMS ARE IMPORTANT.

CRM 3 - HAZARD

CATEGORY 3A - AREAS HAVING THE MOST SEVERE TOPOGRAPHIC AND GEOLOGIC PROBLEMS HAVE BEEN INCLUDED IN CRM 3A. MOST OF THESE AREAS ARE CHARACTERIZED BY STEEP, BROKEN TOPOGRAPHY, AND INCLUDE THE STEEPER SECTIONS OF SEA CLIFF, MOST OF THE ACTIVE PORTUGUESE BEND LANDSLIDE WITHIN THE COASTAL REGION, AND SEVERAL STEEP WALLED CANYONS. THE HIGHER AND STEEPER PORTIONS OF THE SEA CLIFF ARE MAINLY BEDROCK EXPOSURES; HOWEVER, IN SOME SECTIONS IN THE SOUTHERN PART OF THE CITY, A LOWER, BUT EQUALLY STEEP SEA CLIFF HAS BEEN CUT IN ANCIENT LANDSLIDE DEPOSITS. GEOLOGIC HAZARDS ASSOCIATED WITH THE SEA CLIFF INCLUDE COASTAL EROSION AND LANDSLIDING.

figure 13 natural environment element



ALL AREAS IN CRM 3A CURRENTLY ARE SUITABLE ONLY FOR OPEN SPACE. ATTEMPTS TO DEVELOP THESE AREAS WOULD BE UNREALISTIC IN TERMS OF LIABILITY AND PRACTICALITY. FURTHERMORE, THE EXTREME STEEPNESS OF MOST OF THESE AREAS AND THE NUMEROUS CRACKS AND FISSURES IN THE ACTIVE LANDSLIDE RENDER THESE LANDS UNSAFE FOR HUMAN PASSAGE BY FOOT, HORSEBACK, OR OFF-ROAD VEHICLES.

CATEGORY 3B - AREAS CLASSED AS CRM 3B ARE LOCATED BOTH ALONG THE SHORELINE AND INLAND. MOST ARE CHARACTERIZED BY RELATIVELY STEEP TOPOGRAPHY, ALTHOUGH NOT AS SEVERE AS AREAS OF CRM 3A. AREAS BORDERING THE SHORELINE ARE THE LESS STEEP PORTIONS OF SEA CLIFF OR SURFACE EXPRESSIONS OF ANCIENT COASTAL LANDSLIDES. IN SOME PLACES, THESE AREAS ARE UNDERLAIN BY A THIN VENEER OF UNCONSOLIDATED MATERIAL, IN TURN OVERLYING BEDROCK, WHILE IN OTHER AREAS, THEY ARE UNDERLAIN BY RELATIVELY THICK LANDSLIDE DEPOSITS. THE SOUTH-EASTERN PART OF THE ACTIVE PORTUGUESE BEND LANDSLIDE ALSO HAS BEEN INCLUDED IN THE 3B CATEGORY. ESSENTIALLY THE SAME RESTRICTIONS THAT APPLY TO CRM 3A ALSO APPLY TO CRM 3B. THE ONLY SIGNIFICANT DIFFERENCE IS THAT THE 3B AREAS ARE SUITABLE FOR THE DEVELOPMENT OF HIKING TRAILS. TRAVEL BY HORSEBACK OR OFF-ROAD VEHICLES CANNOT BE RECOMMENDED.

CRM 4 MARGINALLY STABLE

AREAS CLASSED IN CRM 4 ARE SCATTERED THROUGHOUT THE COASTAL REGION. THEY EXHIBIT ESSENTIALLY ONE OR BOTH OF TWO RESTRICTIVE CONDITIONS: 1) MARGINALLY STABLE AREAS ADJACENT TO THE CREST OF THE SEA CLIFF OR 2) ANCIENT LANDSLIDE DEPOSITS OF MARGINAL STABILITY. AREAS BORDERING THE SEA CLIFF ARE RELATIVELY NARROW, WHILE ANCIENT LANDSLIDE DEPOSITS ARE MORE EXTENSIVE.

PREFERRED LAND USE WOULD INCLUDE RECREATIONAL FACILITIES SUCH AS PICNIC AREAS, HIKING TRAILS, AND EQUESTRIAN TRAILS. USE OF THE LANDSLIDE AREAS FOR GOLF COURSES IS A DEBATABLE ISSUE, AS SIGNIFICANT AMOUNTS OF IRRIGATION WATER COULD REDUCE THE STABILITY OF THESE AREAS.

MINIMAL, IF ANY, EXCAVATION AND GRADING, AND ONLY SMALL, NONPERMANENT UNITS NOT REQUIRING SIGNIFICANT EARTHWORK, SUCH AS PICNIC SHELTERS, ARE DESIRABLE.

CRM 5 - INSUFFICIENT INFORMATION

AREAS ASSIGNED TO CRM 5 WILL REQUIRE ADDITIONAL DETAILED GEOLOGIC STUDIES TO DETERMINE THEIR ULTIMATE SUITABILITY.

A DETAILED GEOLOGIC STUDY OF THE AREA IN QUESTION IS NECESSARY, AND BASED UPON REVIEW OF THE FINDINGS OF THIS STUDY, A DECISION CAN BE MADE AS TO WHETHER THE AREA SHOULD REVERT TO AN ALTERNATIVE LAND USE OR WARRANT A DIFFERENT SET OF RESTRICTIONS TO BE APPLIED TO THE SUBJECT LAND AREA.

CRM 6 - WILDLAND FIRE HAZARD

LOCATED ON THE PALOS VERDES PENINSULA, RANCHO PALOS VERDES CONTAINS A VARIETY OF LAND USES RANGING FROM HIGH DENSITY

APARTMENT AND CONDOMINIUM DEVELOPMENTS TO VERY LOW DENSITY HILLSIDE UNITS. THIS VARIED LANDSCAPE INVOLVES THE ROLE OF FIRE AS BOTH A NATURAL PROCESS AND A HAZARD.

FIRES IN UNDEVELOPED AREAS RESULT FROM THE IGNITION OF ACCUMULATED BRUSH AND WOODY MATERIALS, AND ARE APPROPRIATELY TERMED ''WILDLAND FIRES''. SUCH FIRES CAN BURN LARGE AREAS AND CAUSE A GREAT DEAL OF DAMAGE TO BOTH STRUCTURES AND VALUABLE WATERSHED.

THERE ARE TWO BASIC METHODS OF APPROACH FOR MINIMIZING THE HAZARD OF WILDLAND FIRES: 1) FIRE PREVENTION - THIS METHOD EMPHASIZES SAFETY IN THE DESIGN, MAINTENANCE, AND USE OF STRUCTURES. PROPER SAFETY MEASURES CAN EFFECTIVELY PREVENT THE POSSIBILITY OF FIRE STARTS. 2) RESPONSE ASPECTS - THIS METHOD STRESSES PROVISION OF THE NECESSARY ACCESS AND ADEQUATE AMOUNTS AND PRESSURES OF WATER IF A FIRE ACTUALLY DOES BECOME A REALITY.

CLOSE ATTENTION TO BOTH OF THE ABOVE FIRE HAZARD MITIGATION TECHNIQUES WILL BE PAID TO ALL LANDS WITHIN A CRM 6 AREA.

CRM 7 - FLOOD/INUNDATION HAZARD

FLOOD INUNDATION HAZARDS ARE THOSE ASSOCIATED WITH MAJOR ATMOSPHERIC EVENTS THAT RESULT IN THE INUNDATION OF DEVELOPED AREAS, DUE TO OVERFLOWS OF NEARBY STREAM COURSES OR INADEQUACIES IN LOCAL STORM DRAIN FACILITIES.

THE LOCATION OF THE PALOS VERDES PENINSULA HELPS INSULATE THE CITY FROM MOST ASPECTS OF FLOOD HAZARD. THE CITY IS NOT LOCATED NEAR ANY MAJOR STREAMWAY, AND LARGE SCALE INUNDATIONS RELATED TO OVERFLOW ARE NOT EXPECTED TO OCCUR. HOWEVER, A DEFINITE FLOODING PROBLEM DOES EXIST IN THE FORM OF TEMPORARY FLASH FLOODS RELATED TO HEAVY WINTER RAINS. MOST OF THIS FLASH FLOOD ACTIVITY IS ISOLATED ALONG THE CANYONS, THE FLOORS OF WHICH PROVIDE THE RUNOFF CHANNELS FOR THE HILLY, STEEP TERRAIN. THE AMOUNT OF RUNOFF DURING A STORM IS INCREASED BY THE HIGH RUNOFF CHARACTERISTIC OF THE LOCAL SOILS. MOST FLASH FLOOD CONDITIONS IN PALOS VERDES ARE SHORT-LIVED IN NATURE, DUE TO THE LIMITED SIZE OF THE AVAILABLE WATERSHED, AND THE DAMAGE RESULTING FROM FLASH FLOODS IS MORE EROSIVE THAN INUNDATIVE IN NATURE. HOWEVER, SUBSTANTIAL DAMAGE CAN OCCUR IF DEVELOPMENTS ENCROACH INTO THE CANYON BOTTOMS.

THE HYDROLOGY MAP (FIGURE 8) IDENTIFIES MAJOR DRAINAGE TRIBUTARIES THAT EXIST IN THE COASTAL REGION. IT IS NECESSARY TO REVIEW ALL DEVELOPMENT PROPOSALS LOCATED NEAR CRM 7 AREAS WITH REGARD TO POSSIBLE PROBLEMS OR IMPACTS IN TERMS OF POTENTIAL FLOOD/INUNDATION HAZARDS.

CRM 8 - HYDROLOGIC FACTORS

IT IS IN THE PUBLIC INTEREST TO MAINTAIN THE OPTIMUM OPERATION OF THE HYDROLOGIC CYCLE SINCE IT CONSTITUTES AN IMPORTANT RESOURCE (WATER) AND INTERACTS WITH OTHER RESOURCES (VEGETATION, OCEAN RESOURCES).

THE FACT THAT ALL WATERSHED SYSTEMS WITHIN RANCHO PALOS VERDES ARE EITHER INFLUENCED BY OR INFLUENCE OTHER JURISDICTIONS REQUIRES THAT FULL REGIONAL COOPERATION BE SOUGHT AND AGREEMENT BE DEVELOPED WITH REGARD TO THE MANAGEMENT OF THESE RESOURCES. WATERSHED MANAGEMENT PROHIBITS ACTIVITIES WHICH CREATE EXCESSIVE SILT OR OTHER POLLUTANT RUNOFF OR INCREASE CANYON-WALL EROSION OR POTENTIAL FOR LANDSLIDE. PRESENT DRAINAGE COURSES ARE GENERALLY STABLE AND IT IS IMPORTANT THAT THE CHARACTERISTICS OF THESE COURSES REMAIN NATURAL. STREAM FLOWS, CHANNEL CONFIGURATIONS, AND OCEAN OUTFALLS ARE IMPORTANT TO PREVENT INCREASED EROSION AND COASTAL DEGRADATION.

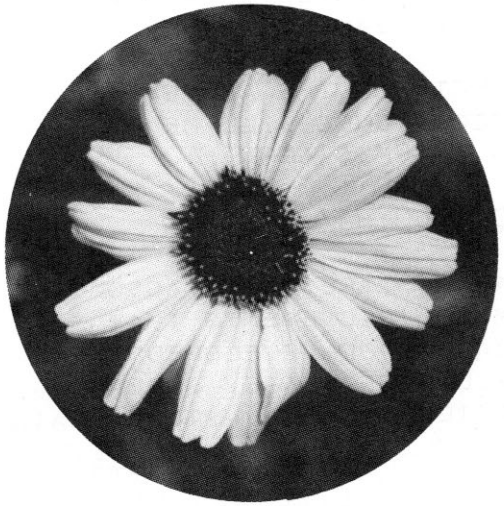
CRM 9 - WILDLIFE HABITAT

EXISTING WILDLIFE HABITATS CAN BE RETAINED WITH VEGETATION AND NATURAL DRAINAGE PATTERNS MAINTAINED TO PROVIDE WATER AND FORAGING MATERIAL IN THE HABITAT. IT IS IMPORTANT TO REVIEW ANY PROPOSED DEVELOPMENT WITHIN OR ADJACENT TO WILDLIFE HABITAT DISTRICTS FOR THE NATURE OF THE IMPACT UPON THE WILDLIFE HABITAT AND POSSIBLE MITIGATION MEASURES TO FULLY OFFSET ANY IMPACTS.

SIGNIFICANT MARINE LIFE HABITATS HAVE ALSO BEEN INCLUDED IN THIS CRM DISTRICT. ALL DEVELOPMENTS WILL BE REVIEWED WITH REGARD TO THE INCREASED DRAINAGE INDUCED AND ITS POSSIBLE IMPACTS ON THE MARINE ENVIRONMENT, THE INTENSIFIED USE OF THE HABITATS BY THE INDUCED POPULATION, AND POSSIBLE DESIGN FACTORS OR MITIGATION MEASURES TO ASSURE THE PROTECTION OF THIS THREATENED RESOURCE.

CRM 10 - NATURAL VEGETATION

THE EXISTING NATURAL VEGETATION OF RANCHO PALOS VERDES IS A MAJOR COMPONENT OF THE ENVIRONMENTAL CHARACTER OF THE CITY. THE OPEN NATURAL HILLSIDES ARE VISIBLY APPARENT AND CREATE AN ATMOSPHERE OF A HILLY RURAL COMMUNITY. THE RETENTION OF WILD FLOWERS, LOW COASTAL SAGE SCRUB, CHAPARRAL, AND GRASSLANDS COMMUNITIES IS DESIRABLE AS IS REVEGETATION WITH NATIVE MATERIAL WHEREVER CLEARING OF VEGETATION IS REQUIRED.



NATURAL ENVIRONMENT ELEMENT (FIGURE 13)

WHEREVER A MULTIPLE SET OF NUMERIC CODE DESIGNATIONS HAS BEEN INDICATED, THE CORRESPONDING DEVELOPMENT CRITERIA WILL NEED TO BE APPLIED AND THOSE CRITERIA OF A MORE STRINGENT NATURE SHALL HAVE PRECEDENCE. THE DARKEST TONE ON THE MAP INDICATES THE AREA OF MOST NATURAL ENVIRONMENTAL SENSITIVITY AND INCLUDES ANY AREA WHERE FACTORS CRM 1, 3, 4, 5, AND 7 ARE COMBINED OR INDIVIDUALLY DESIGNATED.

AREAS WHICH REQUIRE SENSITIVE TREATMENT TOWARD EXISTING PHYSICAL LANDFORMS AND CONDITIONS ARE INDICATED ON FIGURE 13 AS MEDIUM TONES. THESE AREAS ALSO CORRESPOND TO A NUMERIC CODE AND ASSOCIATED CRITERIA WILL BE APPLIED TO ALL DEVELOPMENTS WITHIN THESE AREAS. CRM 2, 6, AND 8 FALL INTO THIS CATEGORY.

THE LIGHTEST TONE REPRESENTS AREAS IN WHICH WILDLIFE (CRM 9) AND NATURAL VEGETATION (CRM 10) ARE OF SUCH SIGNIFICANCE THAT PROTECTION AND MAXIMUM POSSIBLE PRESERVATION IS WARRANTED.

WITHIN ALL BUT THE HAZARD DISTRICTS, SPECIAL SITE CONDITIONS MAY EXIST ENABLING DEVELOPMENT TO OCCUR WITHOUT CREATING SIGNIFICANT ADVERSE IMPACT TO THESE NATURAL FACTORS OR ENDANGERING PUBLIC HEALTH OR SAFETY.

DETAILED STUDY IS NECESSARY TO DEMONSTRATE THAT THESE SPECIAL SITE CONDITIONS EXIST AND DEVELOPMENT IS SUITABLE BEFORE ANY PERMIT MAY BE GRANTED FOR ANY DEVELOPMENT.

ALL COASTAL RESOURCE MANAGEMENT DISTRICTS WILL BE REGULATED BY THE CITY'S DEVELOPMENT CODE WHICH ALREADY CONTAINS AN OPEN SPACE HAZARD DISTRICT AND OVERLAY CONTROL DISTRICTS (NATURAL, SOCIO-CULTURAL, AND URBAN DESIGN).

POLICIES: ADDITIONAL NATURAL ENVIRONMENT POLICIES ARE LISTED ON PAGES 44 AND 45 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1 - ALLOW ONLY LOW INTENSITY ACTIVITIES WITHIN COASTAL RESOURCE MANAGEMENT DISTRICTS OF EXTREME (35% OR GREATER) SLOPES (CRM 1).

2 - REQUIRE ANY DEVELOPMENT WITHIN THE COASTAL RESOURCE MANAGEMENT DISTRICTS OF HIGH SLOPES (CRM 2) AND INSUFFICIENT INFORMATION AREA (CRM 5) TO PERFORM AT LEAST ONE, AND PREFERABLY TWO, INDEPENDENT ENGINEERING STUDIES (PERFORMED BY A LICENSED ENGINEER) CONCERNING THE GEOTECHNICAL, SOILS, AND OTHER STABILITY FACTORS (INCLUDING SEISMIC CONSIDERATIONS) AFFECTING THE SITE.

3 - ALLOW NO NEW PERMANENT STRUCTURES WITHIN COASTAL RESOURCE MANAGEMENT DISTRICTS OF EXTREME HAZARD (CRM 3A) AND BE CAUTIOUS OF ALLOWING HUMAN PASSAGE. THE SAME STRUCTURAL LIMITATION APPLIES TO AREAS OF HIGH HAZARD (CRM 3B) BUT HUMAN PASSAGE MAY BE MORE READILY ALLOWED.

4 - ALLOW NON-RESIDENTIAL STRUCTURES NOT REQUIRING SIGNIFICANT EXCAVATION OR GRADING (I.E., RECREATIONAL FACILITIES) WITHIN COASTAL RESOURCE MANAGEMENT DISTRICTS OF

MARGINAL STABLE AREAS (CRM 4) AND INSUFFICIENT INFORMATION AREAS (CRM 5).

5 - DEVELOP STRINGENT SITE DESIGN AND MAINTENANCE CRITERIA FOR AREAS OF HIGH WILDLAND FIRE HAZARD POTENTIAL (CRM 6).

6 - ALLOW NO GRADING OR STRUCTURAL ENCROACHMENTS INTO AREAS WITHIN A FLOOD/INUNDATION HAZARD COASTAL RESOURCE MANAGEMENT DISTRICT (CRM 7).

7 - PROHIBIT ACTIVITIES WHICH CREATE EXCESSIVE SILT, POLLUTANT RUNOFF, INCREASE CANYON-WALL EROSION, OR POTENTIAL FOR LANDSLIDE, WITHIN OR AFFECTING COASTAL RESOURCE MANAGEMENT DISTRICTS CONTAINING HYDROLOGIC FACTORS (CRM 8).

8 - REQUIRE DEVELOPMENTS WITHIN OR ADJACENT TO WILDLIFE HABITATS (CRM 9) TO DESCRIBE THE NATURE OF THE IMPACT UPON THE WILDLIFE HABITAT AND PROVIDE MITIGATION MEASURES TO FULLY OFFSET THE IMPACT.

9 - ENCOURAGE DEVELOPMENTS WITHIN COASTAL RESOURCE MANAGEMENT DISTRICTS CONTAINING NATURAL VEGETATION (CRM 10) TO REVEGETATE WITH NATIVE MATERIAL WHEREVER CLEARING OF VEGETATION IS REQUIRED.

10 - PROTECT, ENHANCE AND ENCOURAGE RESTORATION OF MARINE RESOURCES OF THE CITY THROUGH MARINE RESOURCE MANAGEMENT AND COOPERATION WITH OTHER PUBLIC AGENCIES AND PRIVATE ORGANIZATIONS.

11 - ENCOURAGE ESTABLISHMENT OF CERTAIN DESIGNATED INTERTIDAL AREAS AS MARINE RESERVES AND APPLY STRICT ENFORCEMENT OF THE REGULATIONS OF THE RESERVE.

12 - CONSIDER THE ACQUISITION OF RIGHTS OVER THE OFFSHORE TIDELANDS AREA ALONG THE CITY'S COASTLINE IF FUTURE CONDITIONS WARRANT.

13 - ENCOURAGE AND SUPPORT PROGRAMS, POLICIES AND ACTIONS OF OTHER AGENCIES DESIGNED TO MAINTAIN, MANAGE, AND RESTORE THE OCEAN WATER QUALITY.

14 - ENCOURAGE AND SUPPORT PROGRAMS, DESIGNS AND POLICIES OF OTHER AGENCIES DESIGNED TO AVOID ADVERSE EFFECTS OF THERMAL DISCHARGE AND MARINE ENTRAINMENT.

15 - PROVIDE MITIGATING MEASURES WHERE POSSIBLE TO CONTROL SURFACE RUNOFF THAT MIGHT BE DEGRADING TO THE NATURAL ENVIRONMENT.

16 - ENCOURAGE INCREASED ACTIVITY BY THE DEPARTMENT OF FISH AND GAME WITH REGARD TO ENFORCEMENT OF FISH AND GAME LAWS AND POSSIBLE REGULATIONS THAT MAY COME TO PASS AS A RESULT OF MARINE LIFE RESERVE DESIGNATIONS.

17 - EXPLORE ALTERNATE MEANS OF ENFORCEMENT TO SUPPLEMENT THE ENFORCEMENT TASK OF PROTECTING THE MARINE ENVIRONMENT.

18 - SUPPORT AND ENCOURAGE SITE AND STRUCTURAL DESIGNS WHICH RESPOND TO CLIMATIC SITE CONDITIONS.

19 - MONITOR STATE AND NATIONAL OIL AND GAS ACTIVITY, TO VOICE LOCAL CONCERNS,

WHICH MAY INVOLVE VISUAL AND ENVIRONMENTAL IMPACTS ASSOCIATED WITH A PARTICULAR ACTION.

20 - ENCOURAGE RESTORATION EFFORTS DEALING WITH ENHANCING THE MARINE ENVIRONMENT FROM A BIOLOGICAL STANDPOINT.

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

SOCIAL FACTORS

PLATFORMS WHICH SERVE TO EXPRESS SOCIAL CONCERNS ARE MOST OFTEN ORGANIZED UNDER SOME FORM OF INSTITUTIONAL ORGANIZATION. FOR THE PURPOSES OF THIS REPORT, INSTITUTIONS ARE GROUPED UNDER GOVERNMENTAL AND NONGOVERNMENTAL ORGANIZATIONS IN AN EFFORT TO CONVEY SOCIAL INFLUENCES RELATING TO THE COASTAL SPECIFIC PLAN.

GOVERNMENTAL

SOCIAL CONCERNS OF A GOVERNMENTAL NATURE CAN BE FORMALLY MONITORED BY POLICIES, PROGRAMS, OR OTHER COMMUNIQUE ISSUED THROUGH THE VARIOUS LEVELS OF GOVERNMENT. THE FOLLOWING PRESENTS THE STATUS OF THESE CONCERNS AS THEY DIRECTLY OR INDIRECTLY AFFECT THE CITY'S COASTAL REGION. POLICIES OR PROGRAMS ORIGINATING FROM THE HIGHER LEVELS OF GOVERNMENT (FEDERAL, STATE, OR COUNTY) ARE OFTEN MORE IMPACTIVE AND LESS RESPONSIVE TO LOCAL CONCERNS. RESPONSIVENESS, OR LACK THEREOF, USUALLY CORRESPONDS WITH THE HIERARCHY OF THE AGENCY INVOLVED. THIS SHOULD NOT GIVE RISE TO A DEFEATIST ATTITUDE TOWARD EFFECTUATING CHANGE AS DETERMINED APPROPRIATE, BUT SHOULD SPUR WELL ORGANIZED, CONSTRUCTIVE INPUT, DIRECTED AT THE APPROPRIATE DEPARTMENT AND LEVEL OF GOVERNMENT.

FEDERAL

FEDERAL INTEREST ON THE PENINSULA, AND MORE SPECIFICALLY WITHIN THE CITY, HAS FOCUSED ON MILITARY DEFENSE. THE PRESENT CITY HALL NOW OCCUPIES A SURPLUSED NIKE MISSILE SITE. NUMEROUS BUNKERS STILL REMAIN ON HILLSIDE AREAS WITH SEVERAL LOCATED IN THE CONFINES OF SUBREGION 7.

HOWEVER, AS MILITARY DEFENSE PRIORITIES HAVE CHANGED, RECENT POLICY DIRECTIVES AND PROGRAMS ARE FOCUSING ON COASTAL AREA

MANAGEMENT (COASTAL ZONE MANAGEMENT ACT OF 1972) AND RESOURCE PROGRAMS. THIS NEW ORIENTATION MAY HAVE A SIGNIFICANT EFFECT ON RANCHO PALOS VERDES WHEN REFERRING TO THE PACIFIC OUTER CONTINENTAL SHELF LEASING PROPOSALS BY THE DEPARTMENT OF THE INTERIOR (DISCUSSIONS DEALING WITH POTENTIAL IMPACTS ASSOCIATED WITH THIS PROPOSAL ARE CONTAINED IN THE NATURAL ENVIRONMENT ELEMENT). CHANGES IN FEDERAL POLICIES AND PROGRAMS MAY AGAIN EFFECT THE CITY.

STATE

IN THE PAST THE STATE HAS POSSESSED NO LAND NOR DIRECTLY INFLUENCED LOCAL POLICIES WITHIN THE BOUNDS OF RANCHO PALOS VERDES. WITH THE PASSAGE OF PROPOSITION 20 IN 1972, THIS STATE OF AFFAIRS WAS ALTERED. PROPOSITION 20 WAS CLEARLY AIMED AT MANAGEMENT OF COASTAL AREAS BOTH IN TERMS OF LAND USE AND MANAGEMENT CONTROLS. THE CALIFORNIA COASTAL PLAN, WHICH EVOLVED AS A RESULT OF THIS PROPOSITION, SPECIFICALLY SPEAKS TO THE ACQUISITION OF COASTAL LANDS WITHIN THE CITY BOUNDARIES. THE FUNDING FOR THESE ACQUISITIONS ALONG WITH WHICH STATE AGENCY OR LOCAL AGENCY WILL MANAGE THESE SITES, IS UNCLEAR TO DATE. IF ACQUIRED, AS PER THE RECOMMENDED COASTAL PROPERTIES FOR PUBLIC ACQUISITION REPORT, THIS COULD RESULT IN AN ADDITIONAL 38% OF CITY COASTAL LAND FALLING IN PUBLIC OWNERSHIP.

ON SEPTEMBER 30, 1975, GOVERNOR BROWN SIGNED A SERIES OF BILLS WHICH ENACTED THE CALIFORNIA COASTAL ACT OF 1976. THIS ACT IS THE RESULT OF STUDIES CONDUCTED UNDER PROPOSITION 20. UNDER THE 1976 ACT A REVISED AREA OF JURISDICTION IS ESTABLISHED WITHIN THE CITY WHICH CORRESPONDS WITH THE ALREADY ADOPTED BOUNDARIES FOR THE CITY'S COASTAL SPECIFIC PLAN DISTRICT.

IT IS IMPORTANT THAT THE CALIFORNIA COASTAL ACT OF 1976 IS NOT INTERPRETED AS STATE INTERVENTION, BUT MORE BROADLY VIEWED AS A MEASURE WHICH ENACTS A PREVIOUSLY PASSED PROPOSITION THROUGH WHICH CALIFORNIA VOTERS EXPRESSED CONCERN OVER PAST COASTAL USE AND DEVELOPMENT PRACTICES, AND SAW THE NEED FOR A SOUND COASTAL MANAGEMENT PROGRAM. ONE KEY FACTOR DISPLAYED THROUGH THE CALIFORNIA COASTAL PLAN CENTERS AROUND THE INTRINSIC VALUE OF RANCHO PALOS VERDES COASTAL AREA AS A MARINE HABITAT AND AGRICULTURAL AREA, AND NOT AN AREA COMPATIBLE WITH SUPPORTING HIGH INTENSITY RECREATIONAL PROGRAMS.

COUNTY

OF ALL THE GOVERNMENTAL AGENCIES, LOS ANGELES COUNTY HAS HAD MOST DIRECT CONTROL OVER CITY COASTAL LANDS BOTH IN PAST LAND USE ACTIONS AND PRESENT LAND OWNERSHIP. UNTIL SEPTEMBER OF 1973, ALL PLANNING AND LAND USE CONTROLS WERE THE DIRECT RESPONSIBILITY OF LOS ANGELES COUNTY. LOCAL CONCERNS WITH COUNTY PLANNING AND ASSOCIATED DEVELOPMENT PRACTICES, SPECIFICALLY IN THE COASTAL AREA, LED TO LEGAL ACTIONS AND EVENTUALLY SPURRED THE INCORPORATION OF RANCHO PALOS VERDES. FOLLOWING 1973, LAND USE AND PLANNING FUNCTIONS BECAME THE RESPONSIBILITY OF RANCHO PALOS VERDES, WITH LOS ANGELES COUNTY MAINTAINING AND EXPANDING THEIR

ACQUISITION OF COASTAL LANDS. THESE LAND AREAS HAVE BEEN DELEGATED TO THE DEPARTMENT OF BEACHES AND DEPARTMENT OF PARKS AND RECREATION. THIS DELEGATION REFLECTS THE COUNTY'S INTEREST IN SUPPLYING RECREATIONAL FACILITIES WITHIN RANCHO PALOS VERDES FOR THE ENJOYMENT OF COUNTY RESIDENTS. A DISCUSSION OF CURRENT PROBLEMS INVOLVING THE RECREATIONAL ORIENTATION AND OPERATION OF THE COUNTY'S PARK LANDS IS CONTAINED WITHIN THE RECREATIONAL SECTION OF THE URBAN ELEMENT.

CITY

THE CONTENT OF THIS PLAN IS THE INITIAL STEP IN RESPONDING TO SOCIAL FACTORS. THE ESSENTIAL REASON FOR DEVELOPING THE COASTAL SPECIFIC PLAN WAS TO EVOLVE DETAILED INFORMATION UPON WHICH SOUND LAND UTILIZATION AND CONTROL MEASURES COULD BE DEVELOPED THAT RESPOND TO SOCIAL AS WELL AS PHYSICAL FACTORS. NOT ONLY ARE THE CONTENTS OF THIS PLAN OF SOCIAL CONCERN, BUT ALSO THE CONSISTENCY BY WHICH THE CITY IMPLEMENTS THE PLAN. THIS TYPE OF CONSISTENCY WAS A MAJOR FACTOR IN SPURRING LEGAL ACTION AGAINST THE COUNTY OF LOS ANGELES BY A CITIZEN'S GROUP KNOWN AS SAVE OUR COASTLINE, BASED ON THE COUNTY'S APPROVAL OF DEVELOPMENTS WHICH WERE CONTRARY TO A PREVIOUSLY ADOPTED COUNTY PRELIMINARY PLAN, THE ENVIRONMENTAL DEVELOPMENT GUIDE.

THE WEIGHING OF VARIOUS SOCIAL CONCERNS THROUGHOUT THIS REPORT SERVES AS A BASE UPON WHICH MANY POLICIES ARE FORMED. TO ACHIEVE ADEQUATE RESPONSE TO LOCAL CONCERN, NATIONAL POLICIES PERTAINING TO RESOURCE MANAGEMENT AND SPECIFICALLY THE PACIFIC OUTER CONTINENTAL SHELF OIL AND GAS LEASING PROPOSAL, HAVE RECEIVED A CRITICAL EVALUATION BECAUSE OF INHERENT VISUAL AND MARINE HABITAT DEGRADATION POTENTIAL.

STATE POLICIES INCORPORATED INTO THE COASTAL ACT OF 1976 SERVED AS BROAD BASE POLICIES WHICH ARE REFINED HEREIN TO REFLECT LOCAL ENVIRONMENTAL FACTORS. IT IS THE CITY'S POSITION THAT TIME IS OF THE ESSENCE WITH RESPECT TO THE ADOPTION AND INITIATION OF SUBSEQUENT IMPLEMENTATION PROCEDURES FOR THIS COASTAL SPECIFIC PLAN SO AS TO PROVIDE PROPERTY OWNERS IN THE AREA WITH A CLEAR INDICATION OF LOCAL LAND USE CONTROLS AND DEVELOPMENT RESTRICTIONS.

THE CITY IS CONTINUALLY WORKING WITH LOS ANGELES COUNTY, AND MOST EXTENSIVELY WITH THE DEPARTMENT OF BEACHES, IN THE IMPLEMENTATION OF COUNTY PLANS AND PROGRAMS WITHIN THE COASTAL AREA. THE PRIMARY AIM IN WORKING WITH THIS AND OTHER DEPARTMENTS, IS TO INSURE THAT THEIR OBJECTIVES ARE IMPLEMENTED IN A MANNER WHICH IS HARMONIOUS WITH THE LOCAL COMMUNITY.



On September of 1975 a questionnaire was sent to each household within the City for the purpose of assessing current local concerns with the planning and management of the City's coastal region. This survey not only asked if a specific factor was of concern (example: access to bluff areas for pedestrians and bicycles), but also requested respondents to rank the particular factors with others listed. The questionnaire divided the City into various geographic areas in order to see if responses varied with respect to the place of residency.

A 13% return was received on the survey with the results shown in Table 5. These results provided an interpretation of social values associated with various resource, recreational, and fiscal factors. From this base, social criteria could be developed and incorporated at the forefront of the planning process, so as to generate a more socially responsive Coastal Specific Plan.

HOMEOWNERS ASSOCIATIONS

Currently four homeowners associations exist within the coastal region, accounting for the control of 70% of all current housing units. These associations are empowered with specific rights in given geographic areas which, in most cases, are recorded in the deeds for those lands/units falling within their jurisdiction. A further discussion of each homeowners association is contained in the subregion portion of this document.

NONGOVERNMENTAL

Various nongovernmental organizations have shown an interest in coastal planning in recent years. These range from locally banded groups (Save Our Coastline) to groups focusing on the California Coastal Plan (people, access, Coastal Environment), to groups with broad environmental interest (Sierra Club). Nongovernmental groups are most often organized around a specific cause and may be disbanded as their goals are attained. The purpose of the Coastal Specific Plan is not to inventory all the various groups concerned either directly or indirectly with the coastal region, but to be cognizant of their concerns, and respond to those warranted by developing recommendations and policies which meet their needs. Based on resource values associated with the coastal region, it can be anticipated that future groups may be formed from time to time around coastal issues.

SURVEY RESULTS

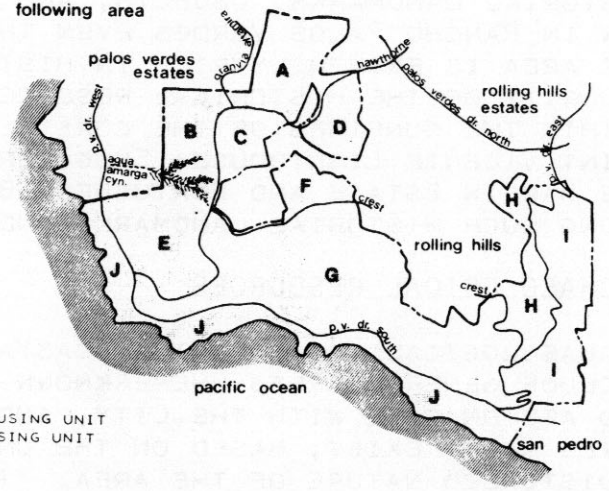
coastal study questionnaire

THIS QUESTIONNAIRE WAS BEEN DEVELOPED TO AID THE ENVIRONMENTAL SERVICE [illegible] DEPARTMENT IN PREPARING A SPECIFIC PLAN STUDY FOR THE COASTAL REGION WHICH WILL REFLECT CONCERNS OF THE CITIZENRY. THE AREA REPRESENTED BY THE LETTER "J" ON THE MAP BELOW DEPICTS THAT REGION WHICH THE COASTAL SPECIFIC PLAN WILL ENCOMPASS. WE WOULD APPRECIATE YOUR COOPERATION IN RETURNING THIS QUESTIONNAIRE BY OCTOBER 1.

1,438 QUESTIONNAIRES WERE RETURNED FOR A 13% RESPONSE.

I **I reside within the following area**

12% A
16% B
8% C
7% D
14% E
4% F
19% G
7% H
7% I
6% J
___ OUTSIDE OF THE CITY



II **occupancy**

4% I RENT MY HOUSING UNIT
96% I OWN MY HOUSING UNIT

QUESTIONS III, IVa, AND V LIST SEVERAL STATEMENTS. THOSE STATEMENTS WHICH YOU AGREE WITH ARE TO BE RANKED IN ORDER OF IMPORTANCE (1,2,3, ETC., WITH 1 BEING CONSIDERED THE MOST IMPORTANT). PLEASE GIVE EACH SELECTED STATEMENT A DIFFERENT RANKING. IF YOU DO NOT RANK A STATEMENT, IT WILL BE ASSUMED THAT YOU DO NOT AGREE WITH IT. RESULTS ARE INDICATED IN THE FOLLOWING MANNER: FIRST, THE PERCENT OF RESPONDENTS SUPPORTING THE STATEMENT, SECOND, THE PRIORITY RANKING FOR THE STATEMENT.

III **new development should :**

89% - 2 NOT OBSTRUCT VIEWS FROM PALOS VERDES DRIVES WEST AND SOUTH
91% - 1 NOT OBSTRUCT VIEWS OF EXISTING DEVELOPED AREAS
65% - 4 PROVIDE PRIVATE RECREATIONAL FACILITIES
87% - 3 BE LIMITED AS TO AMOUNT OF TERRAIN ALTERED

COMMENTS: _____

_____

_____

TABLE 5

IVa **the coastal study should incorporate the following :**

43% - 7 ACCESS TO BLUFFS FOR AUTOMOBILES
82% - 1 ACCESS TO BLUFFS FOR PEDESTRIANS AND BICYCLES
66% - 4 ADDITIONAL RECREATIONAL FACILITIES
73% - 3 BIKE PATH AND TRAIL ALONG THE BLUFFS
48% - 5 EQUESTRIAN TRAIL ALONG THE BLUFF
77% - 2 BIKE PATH ALONG PALOS VERDES DRIVES WEST AND SOUTH
53% - 6 EQUESTRIAN TRAIL ALONG PALOS VERDES DRIVES WEST AND SOUTH

COMMENTS: _____

_____

_____

IVb **I would support, for the aforementioned public improvements, an additional yearly tax of:**

	TAX RATE*		TAX DOLLARS*
1	$.05	=	$10.00
2	$.10	=	$20.00
4	$.20	=	$40.00
3	$.25	=	$50.00
___	OTHER		

*BASED ON AN $80,000 MARKET VALUE HOME

73% OF THE RESPONDENTS INDICATED THEY WOULD SUPPORT AN ADDITIONAL TAX RATE.

V **the following features should be encouraged, protected, or maintained:**

84% - 3 NATURAL DRAINAGE COURSES
89% - 2 TIDE POOL AREAS
84% - 4 SIGNIFICANT PLANT HABITATS
84% - 1 NATURAL TERRAIN
74% - 5 AGRICULTURE

COMMENTS: _____

_____

_____

POLICIES

SOCIAL POLICIES: ADDITIONAL SOCIAL POLICIES ARE LISTED ON PAGES 51 AND 55 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1. EVALUATE POLICIES AND PROGRAMS OF OTHER GOVERNMENTAL AGENCIES WHICH MAY IMPACT THE CITY AND, IF WARRANTED, TAKE A FORMAL POLICY POSITION ON THE ISSUE.

2. WORK WITH OTHER GOVERNMENTAL AGENCIES TO FACILITATE COMMON OBJECTIVES IN A MANNER WHICH IS HARMONIOUS WITH THE LOCAL COMMUNITY.

3. RECOGNIZE BOTH LOCAL AND REGIONAL NON-GOVERNMENTAL GROUPS WITH MEANINGFUL AIMS AND RESPOND TO THOSE PLATFORMS WHICH ARE COMPATIBLE WITH SOCIAL AND/OR ENVIRONMENTAL FACTORS.

CULTURAL RESOURCES

TERRESTRIAL

THE GENERAL PLAN INCLUDES THE ENTIRE COASTAL REGION IN A SOCIO-CULTURAL OVERLAY CONTROL DISTRICT AIMED AT THE PRESERVATION OF ARCHAEOLOGICAL, HISTORICAL, AND PALEONTOLOGICAL SITES. THE COASTAL SPECIFIC PLAN DETERMINED THAT CULTURAL RESOURCES ARE MORE AREA SPECIFIC AND, THEREFORE, A REFINEMENT OF THIS BROAD BRUSH TREATMENT LEADS TO THE DELINEATION OF ONLY THOSE AREAS POSSESSING KNOWN OR POTENTIAL CULTURAL RESOURCES.

A MORE SPECIFIC DISCUSSION OF AREAS WHICH POSSESS KNOWN OR POTENTIAL CULTURAL RESOURCES WILL BE FOUND IN THEIR RESPECTIVE SUBREGIONS.

HISTORIAL RESOURCES

HISTORIAL LANDMARKS, OBJECTS, AND SITES ARE FEW IN RANCHO PALOS VERDES EVEN THOUGH THE AREA IS EXTREMELY RICH IN HISTORY. A MAJORITY OF THE HISTORICAL RESOURCES ARE WITHIN THE CONFINES OF THE COASTAL REGION. POINT VICENTE LIGHTHOUSE, SMUGGLER'S COVE, THE HARDIN ESTATE AND PORTUGUESE BEND ARE AMONG SUCH HISTORIAL LANDMARKS AND SITES.

ARCHAEOLOGICAL RESOURCES

ARCHAEOLOGICAL AREAS IN THE COASTAL REGION INCLUDE GENERAL AREAS WHERE KNOWN SITES EXIST AND ARE ON FILE WITH THE CITY, AND AREAS WHERE SITES MIGHT EXIST, BASED ON THE UNDEVELOPED AND UNDISTURBED NATURE OF THE AREA. THE LATTER AREAS WILL REQUIRE FUTURE ARCHAEOLOGICAL SURVEYS TO VERIFY WHETHER SITES DO OR DO NOT EXIST. THESE SURVEYS SHOULD BE INITIATED EITHER PRIOR TO OR IN CONJUNCTION WITH PROPOSALS FOR THE DEVELOPMENT OF AREAS POSSESSING POTENTIAL ARCHAEOLOGICAL SITES.

PALEONTOLOGICAL RESOURCES

BLUFF AND ACTIVE LANDSLIDE AREAS ARE INCLUDED AS POTENTIALLY HAVING PALEONTOLOGICAL RESOURCE VALUE. PALEONTOLOGICAL VALUE ASSOCIATED WITH THESE AREAS CENTERS AROUND THE HIGH DEGREE OF EROSION AND STRATA EXPOSURE. THIS SITUATION LEADS

TO A HIGHER OCCURRENCE OF FOSSIL EXPOSURE. FOSSIL FINDS MOST OFTEN ARE OF MARINE ANIMALS WITH THE MOST RECENT OCCURRING IN FEBRUARY 1976 (SEE PALEONTOLOGICAL SECTION IN SUBREGION 5). THE DESIGNATION OF THESE AREAS SHOULD NOT BE CONSTRUED AS THE ONLY AREAS WHERE PALEONTOLOGICAL FINDS COULD OCCUR BUT MERELY THAT INHERENT GEOLOGICAL FACTORS GIVE RISE TO EXPOSURE OF SUCH RESOURCES.

MARINE

CULTURAL RESOURCES IN THE MARINE ENVIRONMENT HAVE NOT BEEN EXTENSIVELY STUDIED TO DATE. DESPITE THIS LIMITED RESEARCH, A SIGNIFICANT FIND HAS OCCURRED IN NEAR-SHORE WATERS OF THE PENINSULA. THIS FIND INVOLVES BOULDERS WHICH ARE BELIEVED TO HAVE BEEN USED BY ASIANS FOR ANCHORS. IF PROVEN, THIS MIGHT LEAD TO THE PROOF OF VISITATION BY ASIATICS TO SOUTHERN CALIFORNIA SHORES IN PRE-COLUMBIAN TIMES.

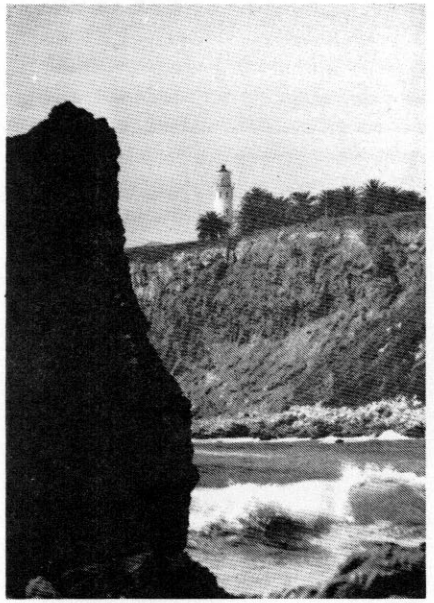
THIS DOCUMENT MERELY NOTES THE POTENTIAL CULTURAL RESOURCE VALUE OF THE MARINE ENVIRONMENT. NO PROTECTIVE MEASURES ARE WARRANTED AT THIS TIME BASED ON THE CURRENT LOW SUSCEPTIBILITY OF THESE RESOURCES TO HUMAN ACTIVITIES, AND NO SIGNIFICANT INCREASE IN ACTIVITY BEING INDUCED AS A RESULT OF THIS PLAN.

POLICIES

CULTURAL POLICIES: ADDITIONAL CULTURAL POLICIES ARE LISTED ON PAGE 50 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1. CONSIDER THE IMPLEMENTATION OF APPROPRIATE MEASURES TO PROTECT THE IDENTIFIED CULTURAL RESOURCES.



INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

ACTIVITY AREAS

URBAN ACTIVITY AREAS CONSIST OF SITES THAT HAVE BEEN SET ASIDE FOR SOME STRUCTURED USE WHICH EITHER DIRECTLY (PRIMARY ACTIVITY AREAS) OR INDIRECTLY (SECONDARY ACTIVITY AREAS) SERVE A FUNCTION ORIENTED TOWARD URBANIZATION. PRIMARY ACTIVITY AREAS ARE THOSE SITES WHERE RESIDENTIAL, COMMERCIAL, INDUSTRIAL, RECREATION, AGRICULTURAL, OR INSTITUTIONAL ACTIVITIES TAKE PLACE. SECONDARY ACTIVITY AREAS ARE THOSE SITES THAT ARE USED IN INFRASTRUCTURE ACTIVITIES WHICH PROVIDE SERVICE TO PRIMARY URBAN ACTIVITY AREAS (STREETS, ELECTRICAL SUBSTATIONS, WATER TANKS, ETC.).

SINCE SECONDARY ACTIVITY AREAS WERE CONSIDERED TO BE A REFLECTION OF INFRASTRUCTURE, THEY ARE INCLUDED IN THE INFRASTRUCTURE SECTION OF THIS DOCUMENT. THE FOLLOWING SECTION DEALS WITH BOTH EXISTING AND PROPOSED PRIMARY URBAN ACTIVITY AREAS.

COMPATIBILITY OF THE COASTAL REGION WITH ADJACENT ACTIVITY

ONE OF THE INITIAL STEPS IN DERIVING A PLAN FOR ANY AREA, WHETHER IT PERTAINS TO A CITY OR A SPECIFIC STRUCTURE ON A LOT, IS THE ASSESSMENT OF SURROUNDING ACTIVITY. MANY FACTORS ARE INVOLVED IN SUCH AN ASSESSMENT, FOR EXAMPLE, VIEW RELATIONSHIP, TRAFFIC PATTERN, NOISE GENERATION, AND LAND USE COMPATIBILITY. WHEN THIS PROCESS WAS ADDRESSED IN THE GENERAL PLAN FOR RANCHO PALOS VERDES, IT WAS FOUND THAT NEIGHBORING JURISDICTIONS EITHER ARE OR POSSESS THE CAPABILITY OF ADVERSELY AFFECTING INTERNAL CITY FUNCTIONS, RATHER THAN THE CITY POSING OR PROPOSING ACTIVITIES WHICH WOULD SIGNIFICANTLY IMPACT OTHER

JURISDICTIONS. HOWEVER, IN THE COASTAL REGION THE OPPOSITE HOLDS TRUE. MANY OF THE PRESENT ACTIVITIES WITHIN THE COASTAL REGION ARE ORIENTED TOWARDS FACILITATING NEEDS EXTERNAL OF THE CITY. FOR EXAMPLE, LOS ANGELES COUNTY EITHER DIRECTLY OWNS OR OPERATES 171 ACRES OF COASTAL RECREATIONAL FACILITIES AIMED AT SERVING COUNTY RESIDENTS. MARINELAND REQUIRES AN EXTENSIVE DRAWING AREA IN ORDER TO PROVIDE ATTENDANCE FIGURES WHICH JUSTIFY ITS FINANCIAL VIABILITY.

REGIONAL USES IN THE COASTAL REGION PUT A BURDEN ON THE AREA AND THE CITY WHICH MUST BE RECOGNIZED AND FOR WHICH MITIGATION MEASURES MUST BE PLANNED. A RECENT EXAMPLE WAS THE OPENING OF ABALONE COVE PARK. BECAUSE THE PARK HAD LIMITED PARKING, PATRONS OVERFLOWED ONTO NEARBY RESIDENTIAL STREETS CAUSING CONFLICT AND INCOMPATIBILITY.

SUCH CONFLICTS PLAYED A KEY ROLE IN POSING CRITERIA TO WHICH THIS PLAN NEEDED TO RESPOND. EVERY EFFORT HAS BEEN MADE TO FACILITATE REGIONAL USES, BUT IN A MANNER WHICH IS COMPATIBLE WITH LOCAL ACTIVITY.

POLICY

IT IS THE POLICY OF THE CITY TO:

1. STRIVE TO ELIMINATE EXISTING CONFLICTS ASSOCIATED WITH REGIONALLY ORIENTED ACTIVITIES.

2. CONTINUE TO FACILITATE REGIONAL AND STATEWIDE PROGRAMS AND ACTIVITIES WITHIN THE COASTAL REGION IN A MANNER WHICH WILL MITIGATE ADVERSE IMPACTS TO THE NEIGHBORING COMMUNITY AND CITY AS A WHOLE.

NATURAL ENVIRONMENT/HAZARD AREAS

NATURAL ENVIRONMENT/HAZARD AREAS HAVE EXTREME PHYSICAL CONSTRAINTS, AS DISCUSSED IN THE NATURAL ENVIRONMENT ELEMENT, AND WILL BE MAINTAINED IN OPEN SPACE AT THIS TIME, WITH VERY LIGHT INTENSITY USES PERMITTED, SUCH AS AGRICULTURE AND RECREATIONAL ACTIVITIES, FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND WELFARE. THOSE AREAS OF EXTREME SLOPE OF 35 PERCENT AND GREATER AND ACTIVE LANDSLIDE WILL BE ZONED OPEN SPACE HAZARD. THOSE AREAS WITH OTHER GEOLOGIC CONSTRAINTS WILL BE INCLUDED IN THE COASTAL SET-BACK ZONE, AS DESCRIBED PREVIOUSLY, AND NO DEVELOPMENT SHALL BE ALLOWED. DENSITY CREDIT WILL BE GIVEN ONLY FOR AREAS PROVEN TO THE CITY'S SATISFACTION TO BE STABLE.

THE NATURAL ENVIRONMENT/HAZARD INCLUDES A SECTION OF EXISTING RESIDENCES, PART OF THE PORTUGUESE BEND CLUB. THIS PLAN RECOGNIZES THESE EXISTING RESIDENCES, IN A DENSITY RANGE OF 1-2 DU/AC, OVERLAYED ON THE NATURAL ENVIRONMENT/HAZARD DESIGNATION. SEE SUBREGION 6. IF THIS AREA IS STABLIIZED BY SOME NATURAL OR MAN-INDUCED FORCE, THE DESIGNATION WOULD BE REVIEWED.

RESIDENTIAL ACTIVITY

A VIEW OF PAST EVENTS WITHIN THE COASTAL REGION

THE COASTAL REGION, BEING LOCATED AT THE EXTREMITY OF THE PENINSULA, CONTAINS ONE OF THE MORE CONTROVERSIAL DEVELOPMENT HISTORIES. EXCLUDING SPARCE SINGLE-FAMILY HOUSING CONSTRUCTION OCCURRING ON NONCONTIGUOUS LOTS BY INDIVIDUAL PARTIES, THE FIRST DEVELOPMENTS IN THIS REGION OCCURRED IN 1948 AND 1949 IN CONJUNCTION WITH TWO PROJECTS, ONE LOCATED IN ABALONE COVE, THE

OTHER IN PORTUGUESE BEND. BOTH DEVELOPMENTS TOOK PLACE AT A TIME WHEN LOS ANGELES COUNTY WAS THE RESPONSIBLE JURISDICTION FOR PLANNING AND PERMIT ISSUING. THIS SITUATION EXISTED UNTIL SEPTEMBER OF 1973 WHEN THE CITY INCORPORATED.

THE APPROVAL OF TENTATIVE TRACT 14649 IN ABALONE COVE OCCURRED IN 1949. THIS TRACT DIVIDED 32 ACRES INTO 81 LOTS OF APPROXIMATELY 10,000 SQUARE FEET. COVENANTS, CONDITIONS, AND RESTRICTIONS ATTACHED TO THESE LOTS ESTABLISHED THE ABALONE COVE COMMUNITY AS A SINGLE-FAMILY RESIDENTIAL AREA. LOTS WERE THEN SOLD TO INDIVIDUALS FOR CONSTRUCTION OF HOMES DEVELOPED TO THE INDIVIDUAL OWNER'S DESIRE. HOUSING DESIGN IS REGULATED THROUGH PARAMETERS ESTABLISHED IN THE C, C, AND R'S.

IN 1948 THE DEVELOPMENT OF PORTUGUESE BEND CLUB BEGAN. THIS CLUB COMPRISED 90 ACRES AND INCLUDED A CLUBHOUSE, PIER, BEACH, AND COTTAGE SITES THAT COULD BE LEASED FOR A PERIOD OF 25 YEARS. THE CLUB DEVELOPED AND LEASED COTTAGE SITES FOR A DURATION OF EIGHT YEARS WHEN, IN 1956, A MASSIVE EARTH SLIDE BEGAN WHICH RESULTED IN THE DESTRUCTION OF THE CLUBHOUSE, PIER, AND APPROXIMATELY TWO-THIRDS OF THE COTTAGE SITES.

THIS LANDSLIDE WAS TRIGGERED BY CONSTRUCTION ACTIVITY ASSOCIATED WITH EXTENDING CRENSHAW BOULEVARD THROUGH GREATER PORTUGUESE BEND. LOS ANGELES COUNTY WAS FOUND LIABLE FOR DAMAGES INCURRED BY BOTH THE OWNERS OF PORTUGUESE BEND CLUB AND INDIVIDUAL PROPERTY OWNERS AFFECTED BY THIS SLIDE.



IN 1957 A 14 ACRE PARCEL DIRECTLY TO THE EAST OF PORTUGUESE BEND CLUB WAS SUBDIVIDED INTO 42 LOTS UNDER TRACT 16540. MOST OF THESE LOTS WERE USED FOR THE PURPOSE OF RELOCATING EXISTING HOUSING FROM THE ACTIVE LANDSLIDE MASS. ROUGHLY 30 UNITS WERE RELOCATED DURING 1958 AND 1959. THE REMAINING LOTS ARE DEVELOPED FROM TIME TO TIME WITH SINGLE-FAMILY UNITS.

THE HALTING OF CRENSHAW BOULEVARD CONSTRUCTION, WHICH WAS TO LINK UP TO PALOS VERDES DRIVE SOUTH, INTERRUPTED THE DEVELOPMENT OF MAJOR LAND AREAS IN THE COASTAL REGION. DAYTON REALTY, ONE OF THE MAJOR LANDOWNERS WITH PROPERTY IN THE WESTERN PORTION OF THE COASTLINE, DEDICATED THE NECESSARY LAND AND PAID FOR ENGINEERING STUDIES IN AN EFFORT TO HAVE LOS ANGELES COUNTY EXTEND HAWTHORNE BOULEVARD TO PALOS VERDES DRIVE WEST. DAYTON REALTY'S SOLE PURPOSE FOR THIS ACTION

WAS TO OBTAIN MAJOR ACCESS TO THEIR PROPERTY (INJUNCTION FILED BY DAYTON REALTY COMPANY ON APRIL 7, 1976 WITH THE U.S. DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA). SUCH ACTION WAS CARRIED OUT BY LOS ANGELES COUNTY WITH THE COMPLETION OF HAWTHORNE BOULEVARD IN 1967.

OBTAINING MAJOR ACCESS ROUTES TO THE COASTAL REGION HAS PLAYED A SIGNIFICANT ROLE IN ITS PLANNING. EVEN AFTER THE TERMINATION OF CRENSHAW BOULEVARD THROUGH GREATER PORTUGUESE BEND, MAJOR PROPERTY OWNERS WERE PROPOSING AN ALTERNATIVE ROUTE FOR ITS EXTENSION. THIS ALTERNATIVE WOULD HAVE LINKED CRENSHAW BOULEVARD WITH FORRESTAL DRIVE AS DEPICTED IN THE MASTER PLAN STUDY FOR A PORTION OF PALOS VERDES PENINSULA (A STUDY CONDUCTED BY JACK BEVASH AND ASSOCIATES FOR MAJOR PROPERTY OWNERS). MANY OF THE TRAFFIC PLANS, FROM WHICH THIS STUDY DREW CONCLUSIONS, WERE NEVER TO COME INTO BEING; FOR EXAMPLE, THE PACIFIC COAST FREEWAY, LINKING OF CRENSHAW BOULEVARD TO FORRESTAL DRIVE, AND THE CONTINUATION OF PASEO DEL MAR. WITHOUT MAJOR ACCESS ROUTES DEVELOPERS COULD NOT EXPECT THE HIGH INTENSITY USES DESIRED ALONG THE COASTLINE (EVEN WITH THEM IT IS QUESTIONABLE WHETHER ADEQUATE TRAFFIC CONDITIONS WOULD HAVE BEEN ACHIEVED).

THE FIRST MULTI-FAMILY STRUCTURES TO BE CONSTRUCTED WITHIN THE COASTAL AREA OCCURRED DURING 1962 AND 1963. THESE 16 MULTI-FAMILY UNITS WERE SUPPLIED THROUGH 4 ADJACENT FOURPLEX APARTMENTS LOCATED AT THE SOUTHWEST CORNER OF PALOS VERDES DRIVE SOUTH AND CLIPPER ROAD.

IN 1964 PALOS VERDES BAY CLUB WAS CONSTRUCTED WHICH BROUGHT ABOUT THE FIRST MAJOR MULTI-FAMILY PROJECT (240 UNITS) IN THE COASTAL REGION. SHORTLY AFTER ITS COMPLETION A SUBDIVISION WAS RECORDED FOR VACANT LAND BETWEEN PALOS VERDES BAY CLUB AND MARINELAND. STREET IMPROVEMENTS AND SERVICE FACILITIES INSTALLED AS PART OF THIS SUBDIVISION COULD SUPPORT THE EXTENSIVE DEVELOPMENT BEING ANTICIPATED THROUGH LOS ANGELES COUNTY ZONING. IN 1969 AND 1970 AN APARTMENT COMPLEX KNOWN AS PORTO VERDE APARTMENTS WAS CONSTRUCTED ON LOTS CREATED THROUGH THIS SUBDIVISION.

1971 TO 1973 IS THE PERIOD WHEN MAJOR EFFORTS WERE MADE FOR DEVELOPING THE COASTAL REGION. FIVE LARGE SCALE PROJECTS WERE BEING PROPOSED RANGING FROM RESIDENTIAL USES AT 9 TO 25 DWELLLING UNITS PER ACRE TO A COMMERCIAL SUBDIVISION. IN TOTAL THE PROJECTS WOULD HAVE RESULTED IN THE DEVELOPMENT OF ROUGHLY 270 ACRES OR 27% OF THE CITY'S COASTLINE. THE THREAT BEING POSED BY THESE PROJECTS SPURRED THE FORMATION OF SAVE OUR COASTLINE, A LOCALLY ORGANIZED GROUP OF CITIZENS. APPROVAL BY LOS ANGELES COUNTY OF A 54 ACRE PROJECT LED TO LEGAL ACTION BY SAVE OUR COASTLINE ON NOVEMBER 1, 1971, CONTESTING THE BASIS OF THIS APPROVAL. RESULTING LITIGATION BROUGHT ABOUT THE FOLLOWING FINDINGS:

1. THAT THE ENVIRONMENTAL DEVELOPMENT GUIDE ADOPTED BY THE LOS ANGELES COUNTY BOARD OF SUPERVISORS ON OCTOBER 1, 1970, IS THE GENERAL PLAN FOR LOS ANGELES COUNTY.

2. THAT THE RECREATION AND OPEN SPACE SECTION OF THE ENVIRONMENTAL DEVELOP-

MENT GUIDE, WHICH PLACED THE SUBJECT SITE ON A FIRST PRIORITY ACQUISITION LIST, SERVED AS THE OPEN SPACE ELEMENT FOR LOS ANGELES COUNTY.

3. THAT THE GRANTING OF A SPECIAL USE PERMIT BY LOS ANGELES COUNTY FOR THIS PROJECT WAS IN CONFLICT WITH THE NECESSARY LOS ANGELES CODE AND STATE LAW REQUIRED FINDINGS.

AS THE VARIOUS COASTAL PROJECTS ALONG WITH OTHERS THROUGHOUT THE ONCE COUNTY REGION WERE BEING PURSUED, CITIZENS IN THE AREA WERE PUSHING FOR INCORPORATION. IN SEPTEMBER OF 1973 THE INCORPORATION MEASURE PASSED, HALTING ALL BUT ONE OF THE INITIAL FIVE PROJECTS. THIS FINAL PROJECT (OCEAN TERRACES) CONSISTS OF 100 UNITS ON 5 1/2 ACRES OF LAND LOCATED WITHIN THE CONFINES OF SUBREGION 7.

FOLLOWING INCORPORATION, THE CITY ESTABLISHED A MORATORIUM AREA WHICH ENCOMPASSED MAJOR UNDEVELOPED REGIONS OF THE COASTLINE AND THE ENTIRE CITY. THIS MORATORIUM REMAINED IN EFFECT UNTIL THE EVENTUAL ADOPTION OF THE GENERAL PLAN. THROUGH THE GENERAL PLAN A COASTAL SPECIFIC PLAN DISTRICT WAS ESTABLISHED FOR THE COASTAL LANDS. TO DATE, ONLY MINOR INFILL OF SINGLE-FAMILY HOUSING ON EXISTING LOTS HAS TAKEN PLACE IN THE COASTAL AREA.

HOUSING TRENDS

THE COASTAL REGION, AS STATED IN THE PREVIOUS SECTION, DID NOT EXPERIENCE A SIGNIFICANT AMOUNT OF DEVELOPMENT UNTIL 1948.

PRIOR TO THIS TIME SINGLE-FAMILY HOMES WERE SPARSELY DISTRIBUTED THROUGHOUT THE COASTAL REGION. A GOOD PERCENTAGE OF THIS HOUSING WAS ASSOCIATED WITH AGRICULTURAL ACTIVITY. AS AGRICULTURAL AREAS WERE CONVERTED TO URBAN USES MOST OF THIS HOUSING WAS REMOVED, LEAVING ONE OR TWO SINGLE-FAMILY DWELLINGS ALONG THE COASTLINE WHICH WERE CONSTRUCTED PRIOR TO 1948.

FROM 1948 ON, SINGLE-FAMILY HOUSING WAS BEING CONSTRUCTED AT AN AVERAGE RATE OF 10 UNITS PER YEAR. CONSTRUCTION ACTIVITY WAS CENTERED AROUND ABALONE COVE AND PORTUGUESE BEND. THE DOMINANCE AND RATE OF SINGLE-FAMILY HOUSING CONSTRUCTION CONTINUED UNTIL 1964. IT SHOULD BE NOTED THAT THE AMOUNT AND RATE OF HOUSING CONSTRUCTION BEING PRESENTED HEREIN DOES NOT REFLECT HOUSING UNITS THAT WERE DESTROYED BY THE PORTUGUESE BEND LANDSLIDE.

IN 1964 THE HOUSING TREND TOOK A DRASTIC TURN TOWARDS THE CONSTRUCTION OF MULTI-FAMILY UNITS. 1964 IS THE YEAR IN WHICH PALOS VERDES BAY CLUB WAS CONSTRUCTED. THIS DEVELOPMENT ACCOUNTS FOR 240 MULTI-FAMILY CONDOMINIUM UNITS, WHICH MORE THAN DOUBLED THE HOUSING SUPPLY IN THE COASTAL REGION AT THAT TIME. IN 1970 ANOTHER MAJOR MULTI-FAMILY COMPLEX WAS COMPLETED JUST TO THE WEST OF PALOS VERDES BAY CLUB. THE COMPLEX INVOLVES 216 APARTMENT UNITS IN THE CONFINES OF THREE INDIVIDUAL BUT ADJACENT LOTS. THE FINAL MULTI-FAMILY COMPLEX WAS BUILT IN 1975 AND INCLUDES 100 CONDOMINIUM UNITS. THESE THREE MULTI-FAMILY PROJECTS, IN ADDITION TO 4 FOURPLEXES LOCATED IN THE ABALONE COVE COMMUNITY, BRING THE TOTAL NUMBER OF MULTI-FAMILY DWELLINGS UNITS SUPPLIED IN THE COASTAL REGION TO 572.

TABLE 6 PRESENTS THE HOUSING INVENTORY TO DATE. AS INDICATED IN THIS TABLE THE TOTAL HOUSING SUPPLY WAS 100% SINGLE-FAMILY UNTIL 1964 WITH THE CURRENT HOUSING MIX CONSISTING OF 76.5% MULTI-FAMILY TO 23.5% SINGLE-FAMILY.

WHEN THE COASTAL HOUSING TREND IS COMPARED WITH THAT OF THE ENTIRE CITY, IT IS APPARENT THAT ALTHOUGH THE TIME PERIOD IN WHICH MULTI-FAMILY UNITS BEGAN TO APPEAR IS SIMILAR IN BOTH AREAS, THE RESULTING HOUSING MIX OF MULTI-FAMILY TO SINGLE-FAMILY BEGAN TO VARY DRASTICALLY. THIS REFLECTS THE FACT THAT SINGLE-FAMILY HOUSING CONSTRUCTION PEAKED OUT IN THE COASTAL REGION IN 1964 AND MULTI-FAMILY UNITS BECAME THE SOLE TYPE OF HOUSING SUPPLIED FROM THAT POINT ON. HOWEVER, THE REMAINDER OF THE CITY CONTINUED TO EXPERIENCE AN INDUCEMENT OF SINGLE-FAMILY UNITS (GENERAL PLAN, PAGE 65).

STRUCTURAL FACTORS

SINGLE-FAMILY

THE MAJORITY OF EXISTING SINGLE-FAMILY HOUSING IN THE COASTAL REGION IS OF A DENSITY OF 4 DWELLING UNITS PER ACRE OR GREATER. THIS IS REFLECTIVE OF THE FACT THAT 84% OF ALL SINGLE-FAMILY DWELLINGS ARE ON LOTS OF 11,000 SQUARE FEET OR LESS. THE BULK OF THIS HOUSING WAS CONSTRUCTED BETWEEN 1949 AND 1964. VIRTUALLY ALL THE HOUSING WAS INDIVIDUALLY DESIGNED AND CONSTRUCTED, AND IS ATYPICAL OF LATER TRACT MODEL HOUSING SUPPLIED IN THE EARLY TO LATE 60'S. BASED ON PRESENT AND THE EXPECTED CONTINUING HIGH REAL ESTATE VALUES WITHIN THE COASTAL REGION, IT IS REASONABLE TO SURMISE THAT THE NEED FOR REHABILITATION PROGRAMS, NOW OR IN THE IMMEDIATE FUTURE, WILL BE LIMITED IN SCOPE TO INDIVIDUAL STRUCTURES IF, IN FACT, WARRANTED AT ALL.

CONDOMINIUM DEVELOPMENT

THE TWO CONDOMINIUM PROJECTS IN THE COASTAL REGION, PALOS VERDES BAY CLUB AND OCEAN TERRACES, ACCOUNT FOR 340 UNITS WITH 304 OF THESE UNITS CONSISTING OF 2 BEDROOM DWELLINGS, AND COMPRISE 59% OF THE TOTAL MULTI-FAMILY UNITS SUPPLY WITHIN THE COASTAL REGION. PALOS VERDES BAY CLUB, LOCATED IN SUBREGION 3, HAS A GROSS DENSITY OF 16 UNITS PER ACRE, WHILE OCEAN TERRACES, LOCATED IN SUBREGION 7, HAS A GROSS DENSITY OF 18 UNITS PER ACRE.

RENTAL APARTMENT DEVELOPMENT

THERE ARE 232 APARTMENT UNITS LOCATED IN THE COASTAL REGION WITH 216 OF THESE UNITS BEING A PART OF THE PORTO VERDE APARTMENT COMPLEX. THE REMAINING 16 UNITS ARE LOCATED ON CLIPPER ROAD IN SUBREGION 4. THESE 16 UNITS ARE CONTAINED IN 4 ADJACENT FOURPLEXES. OVER 70% OF THE TOTAL APARTMENT UNITS SUPPLIED ARE 2-BEDROOM DWELLINGS.

ECONOMIC FACTORS

CURRENT VALUES OF OWNER OCCUPIED HOUSING

ALL DISCUSSION OF HOUSING VALUES PRESENTED HEREIN REFLECT RESALE UNITS ONLY. NO NEW MARKET SUPPLY HAS BEEN INTRODUCED SINCE COMPLETION OF THE OCEAN TERRACES COMPLEX.

SINGLE-FAMILY HOUSING INLAND OF SEACOVE

HOUSING INVENTORY

TABLE 6

	SINGLE-FAMILY	MULTI-FAMILY	TOTAL UNITS
CITY WIDE			
BEGINNING INVENTORY, 1960	3,071		3,071
UNITS ADDED 1960–1969	4,626	981	5,607
UNITS ADDED 1970–1972	1,081	583	1,664
ENDING INVENTORY, 1973	8,778	1,564	10,342
COASTAL REGION			
BEGINNING INVENTORY, 1960	158		158
UNITS ADDED 1960–1969	17	256	273
UNITS ADDED 1970–1972		216	216
ENDING INVENTORY, 1973	175	472	647
UNITS ADDED 1973–1976	1	100	101
ENDING INVENTORY, 1977	176	572	748

DRIVE IN THE ABALONE COVE COMMUNITY AND HOUSING IN THE "FEE" AREA OF PORTUGUESE BEND BEACH CLUB HAVE VALUES OF APPROXIMATELY $150,000/UNIT. HOUSING SEAWARD OF SEACOVE DRIVE HAS A VALUE IN EXCESS OF $200,000/ UNIT, DEPENDING ON THE SPECIFIC HOUSE AND SIZE OF LOT. IT IS IMPORTANT TO NOTE THAT SINGLE-FAMILY HOUSING VALUES CAN VARY GREATLY IN THE COASTAL REGION DUE TO THE CUSTOM NATURE OF THE HOUSING SUPPLY. NO LISTINGS WERE AVAILABLE FOR SINGLE-FAMILY HOUSING IN THE "LEASE" AREA OF PORTUGUESE BEND BEACH CLUB; HOWEVER, IT IS ANTICIPATED THAT SUCH VALUES AVERAGE $50,000 PER UNIT. THE UNIQUE CIRCUMSTANCES ASSOCIATED WITH THE "LEASE" AREA REQUIRE THAT THE PROSPECTIVE PURCHASER SUPPLY THE FULL CASH VALUE OF AGREED PURCHASE PRICE SINCE FINANCIAL INSTITUTIONS ARE UNWILLING TO MAKE LOANS IN THIS AREA, AND THE FACT THAT LOTS ARE ON A LEASE TERM AGREEMENT WITH NO GUARANTEE FOR EVENTUAL PURCHASE OR LEASE TERM RENEWAL, WARRANT ITS CONSIDERATION AS A HIGHLY LIMITED AND UNIQUE HOUSING MARKET.

MULTI-FAMILY CONDOMINIUM UNITS HAVE A BROAD RANGE OF RESALE VALUE CONSIDERING THAT THIS MARKET SUPPLY IS TOTALLY CONFINED WITHIN TWO PROJECTS. UNITS SELL FROM $75,000 TO IN EXCESS OF $150,000. MOST UNITS LIST FOR APPROXIMATELY $125,000.

CURRENT CONTRACT RENTAL RATES

ADEQUATE INFORMATION IS NOT AVAILABLE FOR SINGLE FAMILY AND CONDOMINIUM RENTALS.

INFORMATION PERTAINING TO RENTAL VARIATIONS THAT HAVE TAKEN PLACE IN A FOUR-YEAR SPAN FOR PORTO VERDE APARTMENTS IS SUPPLIED IN TABLE 7. ANY FLUCTUATION IN RENTAL RANGES PERTAINING TO THIS COMPLEX HAS A DRASTIC AFFECT ON APARTMENT RENTAL CONDITIONS FOR THE ENTIRE COASTAL REGION BECAUSE PORTO VERDE APARTMENTS ACCOUNT FOR 93% OF ALL APARTMENT UNITS. ALTHOUGH RENTAL RATES HAVE INCREASED, IT STILL MAINTAINS ROUGHLY A 14% LOWER RATE THAN COMPARABLE MULTI-FAMILY CONDOMINIUM UNITS.

PORTO VERDE APARTMENTS – RENTAL RANGES

TABLE: 7

	JULY 1974	JULY 1976	OCTOBER 1978
1 – BEDROOM	$200 – $225	$248 – $300	$330-380
2 – BEDROOM	$270 – $335	$300 – $475	$400-570
3 – BEDROOM	$335 – $420	$390 – $475	$500-550

HOUSING OBSTACLES

Potential Housing Pressures on the Coastal Region

At the time the General Plan was being prepared, a study assessing housing demands projected a pent-up demand for new housing. This forecast was to acquire validity in the first year following the adoption of the City's Development Code (Zoning Ordinance). As of December 1976 the City had received applications for various subdivision projects involving 465 units. This would amount to an annual growth rate of roughly 450 units. When this rate is compared to an annual growth rate of 169 units required to achieve the projected 1990 buildout date of the General Plan, it is evident that initial construction is exceeding the average rate by a factor of 2.66. Although this growth rate is not expected to continue, it does show the actual impact on City services in the processing of development applications due to pent-up demands.

These same pressures can be predicted for coastal housing development. This forecast is based on the following indicators:

- Large scale developments proposed for the coastal region in the early 70's were terminated either by direct litigation or as a result of the City's incorporation.

- At the time of developing the General Plan the coastal region was designated as a Coastal Specific Plan District. Although land use and zoning were established in this area, it was the intention of the study to reassess land use decisions. Based on the lack of development proposals in this region, it seems reasonable to assume that major landowners are awaiting the conclusion of this Plan.

- The City contains the only major undeveloped coastal lands on the Peninsula capable of supporting new residential projects. Therefore, existing resale units are, for all intents and purposes, the only resource available to facilitate current market demands.

- The 1976 Coastal Act has imposed an additional lag time before the actual implementation of this Plan and subsequent issuance of development permits can proceed. This lag time could account for an additional year or more depending on the Coastal Commission's processing schedule.

Based on these factors, the City can expect to experience an initial project processing load which will tax City staff and decision making bodies. This work load should occur following the eventual certification of this Plan, and subsequent implementing strategies, by the California Coastal Commission.

Meeting the Needs of Low and Moderate Income Families

The City of Rancho Palos Verdes is a bedroom community located on a peninsula. In many respects the Palos Verdes Peninsula constitutes a separate geographical region. It is removed from much of the business and commercial activity of Los Angeles County. The only

COMMERCIAL AREAS LOCATED IN THE CITY ARE SUBSTANTIALLY "NEIGHBORHOOD" IN SCOPE AND SIZE, WHICH MEANS THAT COMMERCIAL ACTIVITY GENERATES FEW JOBS FOR CITY RESIDENTS. GOLDEN COVE SHOPPING CENTER AND MARINELAND CONSTITUTE THE PRIMARY COMMERCIAL ACTIVITY FOUND IN RANCHO PALOS VERDES.

DUE TO THE LOCATION OF THE CITY, NEARLY ALL OF ITS RESIDENTS MUST COMMUTE A SUBSTANTIAL DISTANCE TO WORK. UNFORTUNATELY, THE PUBLIC TRANSPORTATION WHICH IS AVAILABLE TO RESIDENTS OF RANCHO PALOS VERDES IS LIMITED IN BOTH SCOPE AND AVAILABILITY.

THE LACK OF COMMERCIAL ACTIVITY, POOR PUBLIC TRANSPORTATION, AND DISTANCE TO EMPLOYMENT CENTERS HAS A DIRECT IMPACT ON THE REASONABLE NEED FOR LOW INCOME HOUSING IN THE CITY. FURTHERMORE, THE COASTAL SETTING AND GEOLOGIC PROBLEMS PRESENT IN THE CITY AS SET FORTH IN THE PLAN ARE SUBSTANTIAL CONSTRAINTS ON HIGH DENSITY USES. IN ADDITION, LAND IN THE CITY IS IN SUCH DEMAND THAT INCREASING DENSITY ON A PARCEL DOES NOT RESULT IN LOWER UNIT PURCHASE PRICES. MULTI-FAMILY UNITS WITH A DENSITY IN EXCESS OF 50 UNITS PER ACRE LOCATED IN THE CITY ARE SELLING IN EXCESS OF $80,000 PER UNIT.

ONE NEED WHICH HAS BEEN IDENTIFIED IS UNITS FOR RETIRED AND ELDERLY PERSONS ON FIXED INCOMES.

GIVEN THE SEVERE LACK OF COASTAL OPEN SPACE AREAS IN LOS ANGELES COUNTY, IT WOULD SEEM THAT THE GREATEST BENEFIT THE CITY CAN SEEK TO OFFER CITIZENS OF THE COUNTY, WHETHER OF LOW, MODERATE, OR HIGH INCOME, IS LARGE OPEN VISTAS OF THE OCEAN AND COASTLINE. THE COUNTY HAS ESTABLISHED A NUMBER OF PARKS IN THE COASTAL AREA WHICH ARE FILLED TO CAPACITY ON SUMMER WEEKENDS. THE CITY, WITH ITS 7-1/2 MILES OF COASTLINE, IS A FAVORITE OF "SUNDAY DRIVERS" SINCE PALOS VERDES DRIVE SOUTH PARALLELS THE COAST.

THE CONSTRUCTION AND MAINTENANCE OF WALKING, JOGGING, AND BIKING TRAILS IN THE COASTAL AREA SHOULD GREATLY INCREASE THE AVAILABILITY OF COASTAL RECREATIONAL OPPORTUNITIES FOR ALL RESIDENTS OF AND VISITORS TO THE COUNTY. THE CITY CAN MOST REALISTICALLY FULFILL ITS OBLIGATIONS TO THE LOW AND MODERATE INCOME FAMILIES OF THE SOUTHERN CALIFORNIA REGION BY PROTECTING VISTAS OF THE COASTLINE AND OCEAN FROM PALOS VERDES DRIVE SOUTH AND OPENING TRAILS ALONG THE BLUFFS FOR PUBLIC USE.

THE CITY WILL CONTINUE TO APPLY THE SAME POLICIES ON HOUSING AS APPLIED IN THE GENERAL PLAN.

FOLLOWING THE GENERAL PLAN AND IN CONJUNCTION WITH THIS PLAN, THE CITY CONTINUED TO MONITOR HOUSING ASSISTANCE PROGRAMS.

HUD PROGRAMS

THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD) ADMINISTERS A VARIETY OF MORTGAGE INSURANCE, RENT SUBSIDY, AND LOAN PROGRAMS TO ASSIST LOW AND MODERATE INCOME FAMILIES. APPLICANTS FOR SUCH PROGRAMS CAN INCLUDE NON-PROFIT AND PROFIT GROUPS AND DEVELOPERS, THE ELDERLY, THE HANDICAPPED, AND INDIVIDUALS OF LOW AND MODERATE INCOME.

THE MAJOR PROBLEM WITH ALL OF THE PROGRAMS, RELATIVE TO USE IN RANCHO PALOS VERDES, IS THAT THE MAXIMUM SUBSIDIES PROVIDED ARE TOO LOW TO BE APPLICABLE TO LAND AND HOUSING COSTS IN THE CITY. AS EXAMPLES, TWO MAJOR PROGRAMS

ARE SECTION 8, LOW-INCOME RENTAL ASSISTANCE AND SECTION 235, HOMEOWNERSHIP ASSISTANCE FOR LOW AND MODERATE INCOME FAMILIES.

SECTION 8 PROVIDES PAYMENTS TO OWNERS, DEVELOPERS, AND PUBLIC HOUSING AGENCIES TO MAKE UP THE DIFFERENCE BETWEEN THE FAIR MARKET RENT AND THE TENANT'S CONTRIBUTION (AT LEAST 15%, BUT NOT MORE THAN 25% OF INCOME). HUD, HOWEVER, HAS MAXIMUM RENTS FOR ASSISTED UNITS AND THESE MAXIMUMS ARE MUCH LOWER THAN THE FAIR MARKET RENTS IN THE COASTAL REGION.

SECTION 235 PROVIDES MORTGAGE INSURANCE TO BUYERS OF NEW OR SUBSTANTIALLY REHABILITATED SINGLE FAMILY RESIDENCES (INCLUDING CONDOMINIUMS AND COOPERATIVES) WHOSE ADJUSTED GROSS INCOME IS LESS THAN 95% OF THE AREA MEDIAN INCOME (L.A. COUNTY, 1978, MEDIAN INCOME FOR FAMILY OF FOUR IS $17,400). BUYERS MUST MAKE THEIR DOWN PAYMENT OF 6% AND SPEND AT LEAST 20% OF THEIR INCOME ON THE MORTGAGE, INSURANCE, AND TAXES. AGAIN, HOWEVER, THE MORTGAGE LIMITS ARE, IN HIGH COST AREAS, $38,000 ($44,000 FOR HOMES FOR FIVE OR MORE PERSONS).

THERE ARE TWO PROGRAMS WHICH CAN BE APPLICABLE TO THE CITY FOR USE BY PRIVATE NON-PROFIT GROUPS. THESE ARE SECTION 202, DIRECT LOANS FOR HOUSING FOR THE ELDERLY OR HANDICAPPED, AND SECTION 106(B), SEED MONEY LOANS. SECTION 202 PROVIDES LONG-TERM DIRECT LOANS TO FINANCE RENTAL OR COOPERATIVE HOUSING AT 100% FINANCING. TENANTS COULD ALSO BE ELIGIBLE FOR THE SECTION 8 PROGRAM. SECTION 106(B) PROVIDES LOANS TO COVER 80% OF PRECONSTRUCTION EXPENSES.

COMMUNITY DEVELOPMENT BLOCK GRANTS

BLOCK GRANTS ARE PROVIDED BY HUD TO BE APPLIED TO A VARIETY OF COMMUNITY DEVELOPMENT ACTIVITIES PRIMARILY TO BENEFIT LOW AND MODERATE INCOME PERSONS. THE CITY PARTICIPATED, THROUGH L.A. COUNTY, IN THE FIRST YEAR OF THE INITIAL THREE-YEAR PROGRAM. BASED ON THAT EXPERIENCE, HOWEVER, THE CITY HAS NOT PARTICIPATED FURTHER SINCE THE AMOUNT OF FUNDING AVAILABLE BARELY OFF-SET ADMINISTRATIVE COSTS. UNLESS FUNDING INCREASES SUBSTANTIALLY IN THE FUTURE, THIS PROGRAM HAS VERY LIMITED PROSPECTS FOR THE CITY CONSIDERING LAND AND CONSTRUCTION COSTS.

STATE OF CALIFORNIA HOUSING PROGRAMS

A REVIEW OF STATE PROGRAMS REVEALS THE SAME DIFFICULTIES AS HUD PROGRAMS, I.E., THE MAXIMUM LIMITS ARE TOO LOW TO BE APPLICABLE IN THE COASTAL REGION. THERE ARE PROGRAMS BENEFITTING INDIVIDUALS.

REGIONAL PROGRAMS

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENT, (SCAG), HAS BEEN DESIGNATED TO DEVELOP A REGIONAL HOUSING ELEMENT AND FAIR SHARE HOUSING ALLOCATION PLAN. SCAG IS, HOWEVER, A PLANNING AGENCY, NOT A FUNDING AGENCY, CONSEQUENTLY ITS PLANS ARE BASED ON APPLICATION OF FUNDS FROM OTHER SOURCES.

THE SCAG 1976 REGIONAL HOUSING ALLOCATION MODEL INDICATES THE FOLLOWING FOR RANCHO PALOS VERDES:

SCAG 1976 NEEDS AND FAIR SHARE

1976 HOUSEHOLDS NEEDING ASSISTANCE	232
1976 FAIR SHARE ADJUSTMENT	1551
ADJUSTED NEED (INCLUDES FAIR SHARE) (1975-1980)	1783
UNITS SUITABLE FOR REHABILITATION	9

CONSIDERING THAT THE CITY PROJECTS ONLY 2500 NEW UNITS AT BUILDOUT (APPROXIMATELY 1990) THE SCAG ADJUSTED NEED FIGURE TO HOUSE PERSONS OF LOWER INCOMES IS CONSIDERED ENTIRELY UNREALISTIC BY ANY STANDARDS.

THE ORIGINAL SCAG ALLOCATIONS WERE BASED ON A LARGER AREA (RSA 19) AND HAD SOME VALIDITY SINCE THE LARGER AREA HAS A BROADER MIX OF TRANSPORTATION, EMPLOYMENT, AND HOUSING. LATER ALLOCATIONS FOR INDIVIDUAL CITIES CREATED MANY INCONSISTENCIES.

POTENTIAL CITY PROGRAMS

ONE AVENUE OPEN TO THE CITY IS THE ESTABLISHMENT OF A LOCAL HOUSING AUTHORITY. SUCH AN AUTHORITY HAS POWERS TO ACQUIRE REAL PROPERTY, USE EMINENT DOMAIN, ASSUME NOTES AND BONDS TO FINANCE LOW-INCOME HOUSING, BORROW ON ITS BONDS, AND MAKE GRANTS AND LOANS AVAILABLE TO NON-PROFIT ORGANIZATIONS FOR DEVELOPING THE HOUSING. HUD PROVIDES LOANS TO AUTHORITIES, REFINANCED THROUGH THE SALE OF BONDS. AUTHORITIES MAY ALSO ENTER INTO CONTRACTS WITH HUD AND THE CALIFORNIA HOUSING FINANCE AGENCY TO ADMINSTER PROGRAMS.

THE CITY HAS DETERMINED THAT THERE IS NOT COMMUNITY SUPPORT FOR THE ESTABLISHMENT AND FINANCING OF A LOCAL HOUSING AUTHORITY NOR FOR THE ISSUANCE OF REVENUE BONDS.

ANOTHER ALTERNATIVE OPEN TO THE CITY IS TO CONTRACT WITH THE HOUSING AUTHORITY OF THE COUNTY OF LOS ANGELES. THE HOUSING AUTHORITY CAN ESTABLISH A LEASED HOUSING AND HOUSING ASSISTANCE PAYMENT PROGRAM FOR THE COMMUNITY.

CITY CODES AND POLICIES HAVE BEEN DEVELOPED CAREFULLY TO BALANCE REGULATION OF DEVELOPMENT IN AN ENVIRONMENTALLY SENSITIVE AREA WITH UNIFORM AND CONSISTENT REQUIREMENTS. THE CITY HAS NO SPECIAL EXCLUSIONARY REGULATIONS.

FUTURE PROGRAMS

SUITABLE AND FEASIBLE SUBSIDY PROGRAMS MAY BE IMPLEMENTED BY STATE AND FEDERAL AGENCIES, AND THE CITY MAY BE ABLE TO TAKE ADVANTAGE OF SUCH PROPOSALS IN THE FUTURE.

LOAD INDUCED

DENSITY RANGES

THE VARIOUS PARAMETERS FOR ESTABLISHING THE DENSITY RANGES DELINEATED INTERNAL OF THE COASTAL REGION ARE PRESENTED ON PAGES 73 AND 74 OF THE GENERAL PLAN. THESE RANGES, 1 DWELLING UNIT PER ACRE, 1-2 DWELLING UNITS PER ACRE, AND 2-4 DWELLING UNITS PER ACRE, REFLECT GROSS CAPACITY LIMITS. A DEVELOPABLE AREA, THROUGH RESPONDING TO VARIOUS DESIGN CONTROL DISTRICTS AND DENSITY TRANSFER PROVISIONS, MAY REACH AS HIGH AS 6 DWELLING UNITS IN A GIVEN AREA. THESE CLUSTERED DENSITIES FOR

VARIOUS AREAS ARE DISCUSSED IN THE RESPECTIVE SUBREGION SECTIONS. THE LOW GROSS DENSITY RANGES DEPICTED IN THE COASTAL REGION REFLECT THE SENSITIVE ENVIRONMENTAL RESOURCES AND INFRASTRUCTURE LIMITATIONS INHERENT IN THIS AREA

APPLYING DENSITY RANGES TO EXISTING RESIDENTIAL AREAS

IN KEEPING WITH THE GENERAL PLAN POLICY TO ENCOURAGE AND ASSIST IN THE MAINTENANCE OF EXISTING RESIDENTIAL NEIGHBORHOODS, ESTABLISHED RESIDENTIAL AREAS ARE DEPICTED AT DENSITY RANGES WHICH REFLECT EXISTING HOUSING PATTERNS. IN ISOLATED HOUSING AREAS, SUCH AS THE 8 SINGLE-FAMILY DWELLINGS AT THE NORTHERN EDGE OF THE COASTAL REGION (SUBREGION 1), PALOS VERDES BAY CLUB AND PORTO VERDE APARTMENTS (SUBREGION 3), AND OCEAN TERRACES (SUBREGION 7), THE DENSITY RANGES REFLECT THE APPROPRIATE HOLDING CAPACITY LIMITS RATHER THAN ISOLATED PROJECT DENSITIES WHICH LACK A COHESIVE FORM.

IN THE COURSE OF THIS STUDY AN AREA REFERRED TO AS LOWER PORTUGUESE BEND WAS FOUND TO BE MISREPRESENTED BY THE GENERAL PLAN. THIS STATUS IS RECTIFIED HEREIN BY ESTABLISHING A 4-6 DWELLING UNIT PER ACRE RANGE RATHER THAN THE PREVIOUS 1 DWELLING UNIT PER ACRE DENSITY. THIS DENSITY RANGE IS MORE IN KEEPING WITH THE ESTABLISHED COMMUNITY.

THE STUDY OF EXISTING NEIGHBORHOODS REVEALED INTERDISPERSED VACANT LANDS WHICH ARE CLEARLY ASSOCIATED WITH THE ESTABLISHED NEIGHBORHOOD. UNDER THE PREMISE THAT THESE AREAS SHOULD DEVELOP AT A SIMILAR DENSITY AS THE EXISTING NEIGHBORHOOD IN ORDER TO MAINTAIN THE PRESENT COMMUNITY PATTERN, A BUILDOUT POTENTIAL IS IDENTIFIABLE WITH EACH NEIGHBORHOOD. THIS BUILDOUT POTENTIAL REPRESENTS THE NUMBER OF NEW UNITS THAT CAN BE SUPPORTED WITHIN THE CONFINES OF THE PRESENT NEIGHBORHOOD. TABLE 8 LISTS THE TOTAL POTENTIAL UNITS ADDED IN THIS FASHION. THESE UNITS SHOULD BE VIEWED AS A GROWTH-INDUCING IMPACT GENERATED THROUGH PAST LAND USE DECISIONS AND/OR PROJECTS, AND FOR THIS REASON NOT A DIRECT IMPACT OF THIS PLAN.

INDUCED RESIDENTIAL ACTIVITY AREAS

TABLE 8 INDICATES A MAXIMUM OF 308 ADDITIONAL ACRES OF RESIDENTIAL ACTIVITY AREAS WILL BE DIRECTLY GENERATED THROUGH THE COASTAL SPECIFIC PLAN.

THREE MAIN AREAS (SEE FIGURE 14) WILL BE UTILIZED TO SUPPORT NEW RESIDENTIAL AREAS ON VACANT LAND (FOR ALL INTENTS AND PURPOSES, THESE ARE THE SAME AREAS CALLED FOR UNDER THE GENERAL PLAN). SUBREGION 1, LOCATED IN THE NORTHERN PORTION OF THE COASTAL REGION, WILL ACCOUNT FOR 132 ACRES AND 132 UNITS AT A GROSS DENSITY OF 1 DWELLING UNIT PER ACRE. SUBREGION 3, LOCATED TO THE EAST OF MARINELAND, WILL SUPPLY 38 ACRES AT VARIOUS DENSITIES WHICH WILL TOTAL 128 NEW UNITS. SUBREGION 7 ENCOMPASSES 134 ACRES ACCOUNTING FOR 134 NEW UNITS AT A DENSITY OF 1 DWELLING UNIT PER ACRE. A DETAILED DISCUSSION OF EACH AREA IS FOUND IN THE RESPECTIVE SUBREGION.

THE COASTAL SPECIFIC PLAN WILL INDUCE 224 LESS DWELLING UNITS THAN THE GENERAL PLAN PROPOSED, BOTH AT CAPACITY WITH ALL UNITS CONFORMING.

INDUCED RESIDENTIAL ACTIVITY

TABLE 8

	EXISTING	GENERAL PLAN	INTERIUM PROFILE	COASTAL PLAN
DENSITY RANGES				
1 D.U./A.C	6.5 AC.	288 AC.	9 AC.	291 AC.
2 D.U./AC.	7 AC.	8 AC.	279 AC.	6 AC.
4 D.U./AC.	14 AC.	24 AC.	46 AC.	64 AC.
6 D.U./AC.	8 AC.	30 AC.	8 AC.	8 AC.
6 D.U./AC.	25.5 AC.	19 AC.	26 AC.	-0-
TOTAL	61 AC.	369 AC.	368 AC.	369 AC.
HOUSING TYPE				
SINGLE-FAMILY	176	421	879	605
MULTI-FAMILY	572	408	572	-0-
TOTAL	748	829	1,451	605

IN ADDITION TO RESIDENTIAL STRUCTURES, TWO ENVIRONMENTAL CONDITIONS ARE ASSOCIATED WITH THE COASTAL BLUFFS WHICH DISCOURAGE ACCESSORY, LIMITED INTENSITY ACTIVITIES. FIRST, EXTREME GEOLOGIC CONDITIONS ARE PRESENT AND HAVE BEEN NOTED BY E.S.A. AS POSING A HAZARD TO EVEN HUMAN PASSAGE (SEE NATURAL ENVIRONMENTAL SECTION). SECOND, BOTH VEGETATIVE AND WILDLIFE COMMUNITIES ARE DEPENDENT ON THE UNALTERED STATE OF THE COASTAL BLUFF FACE (ENGLAND AND NELSON). FOR THIS REASON, THE CITY SHOULD LIMIT THIS ACTIVITY.

POLICIES: ADDITIONAL HOUSING POLICIES ARE LISTED ON PAGE 78 OF THE GENERAL PLAN.

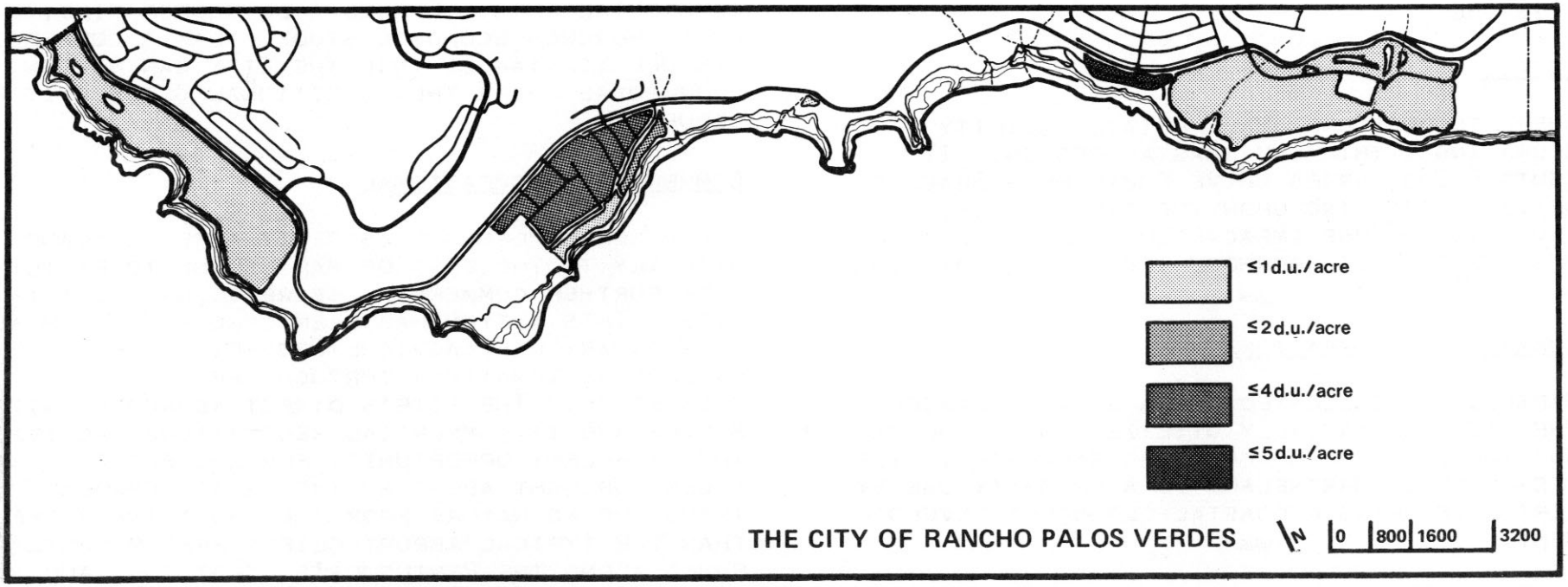
IT IS THE POLICY OF THE CITY TO:

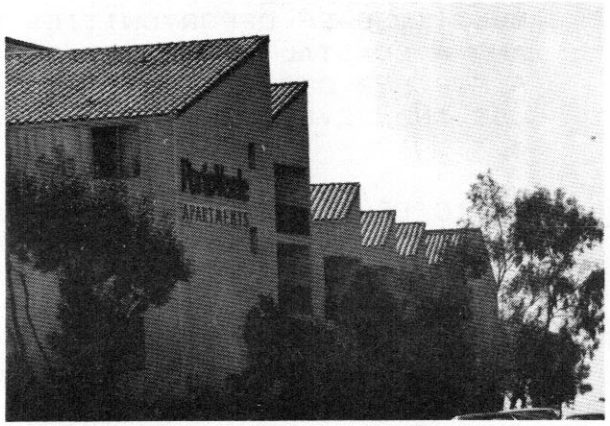
1. EXPLORE ALL SOURCES FOR FUNDING OF LOW AND MODERATE INCOME HOUSING IN THE CITY AND OBTAIN FUNDS WHENEVER FEASIBLE.

2. DISCOURAGE ACCESSORY AND/OR LIMITED INTENSITY RECREATIONAL STRUCTURES FROM LOCATING WITHIN THE COASTAL BLUFF IN SUBREGIONS 1, 3, 4, 6, AND 7.

3. ENCOURAGE THE USE OF A PORTION OF THE ABALONE COVE SCHOOL SITE FOR A RETIREMENT/ SENIOR CITIZEN/FIXED INCOME FACILITY, ALLOWED WITH A CONDITIONAL USE PERMIT.

figure 14 residential activity







COMMERCIAL ACTIVITY

EXISTING

RETAIL

THERE IS ONLY ONE SMALL RETAIL FACILITY OPERATING WITHIN THE COASTAL REGION. IT ABUTS PALOS VERDES DRIVE SOUTH NEAR SEACOVE DRIVE. DEPENDING UPON THE TYPE OF USE, IT CAN HAVE ADVERSE IMPACTS ON THE SURROUNDING RESIDENTIAL NEIGHBORHOOD (REFER TO SUBREGION 4.)

COMMERCIAL RECREATIONAL

MARINELAND IS LOCATED ON AN 85 ACRE PARCEL. THE SITE IS PARTIALLY UTILIZED IN ITS OPERATION BUT THERE ARE PLANS FOR SOME EXPANSION. THE OPERATION OF MARINELAND IS A PRIORITY USE BY VIRTUE OF BEING A COASTAL-DEPENDENT DEVELOPMENT.

LOAD INDUCED

RETAIL

THE LACK OF ANY COMMERCIAL ACTIVITY IN OR AROUND SUBREGION 7 GENERATES A RETAIL SERVICE DEFICIENCY IN THIS AREA. HOWEVER, THE LOCATING OF A NEW RETAIL FACILITY WITHIN THE COASTAL REGION WHICH IS ORIENTED TOWARDS SERVING AREAS EXTERNAL OF THE COASTAL REGION COULD IMPOSE A SERIOUS ADVERSE EFFECT ON THE COASTAL ENVIRONMENT.

ON A PRELIMINARY BASIS THERE SEEMS TO BE A POTENTIAL FOR SUPPORTING A LOCAL RETAIL FACILITY. FOR THIS REASON, IT IS FELT THAT THE CITY SHOULD BE RECEPTIVE TO REVIEWING A COMMERCIAL PROPOSAL IN SUBREGION 7 AND NOT DESIGNATE A SPECIFIC COMMERCIAL AREA. SHOULD A DEVELOPER FIND, BASED ON A THOROUGH ECONOMIC STUDY, THAT A COMMERCIAL VENTURE IS VIABLE, THEN THE CITY CAN REVIEW SUCH A PROPOSAL UNDER THE CONDITIONAL USE PERMIT PROCEDURE.

COMMERCIAL RECREATIONAL

THE GENERAL PLAN SET ASIDE 17 ACRES OF LAND DIRECTLY TO THE EAST OF MARINELAND TO FACILITATE FURTHER COMMERCIAL RECREATIONAL ACTIVITIES. THIS ACTION HAS BEEN CONCURRED WITH AS A SECONDARY USE (AGRICULTURE BEING THE PRIMARY DESIGNATION) THROUGH THE COURSE OF THIS STUDY. THE SITE'S DIRECT ADJACENCY WITH MARINELAND (A COMMERCIAL RECREATIONAL ACTIVITY), THE EXCELLENT OPPORTUNITY FOR SHORELINE ACCESS BROUGHT ABOUT BY THE AREA'S GRADUAL TRANSCENDING NATURE FROM THE SHORELINE RATHER THAN THE TYPICAL ABRUPT CLIFFS PREDOMINANTLY FOUND ALONG THE PENINSULA'S COASTLINE, AND THE RELATIVELY LARGE SITE AREA, PRESENTS A MULTITUDE OF OPPORTUNITIES FOR AGRICULTURE AND A COASTAL DEPENDENT RECREATIONAL ACTIVITY. A FURTHER DISCUSSION OF THE SITE'S POTENTIAL USE AND DEVELOPMENT CAN BE FOUND IN SUBREGION 2.

POLICIES: ADDITIONAL COMMERCIAL POLICIES ARE LISTED ON PAGE 85 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1. ENCOURAGE THE UPGRADING OF COMPATIBLE RETAIL FACILITIES ADJOINING THE ABALONE COVE COMMUNITY OR CONVERSION TO RESIDENTIAL ACTIVITY.

2. ENCOURAGE ACTIONS DEEMED NECESSARY

OR APPROPRIATE IN THE UPGRADING OF MARINELAND SO LONG AS SUCH ACTION(S) IS NOT DETRIMENTAL OR RESULTING IN AN ADVERSE EFFECT ON SURROUNDING AREAS.

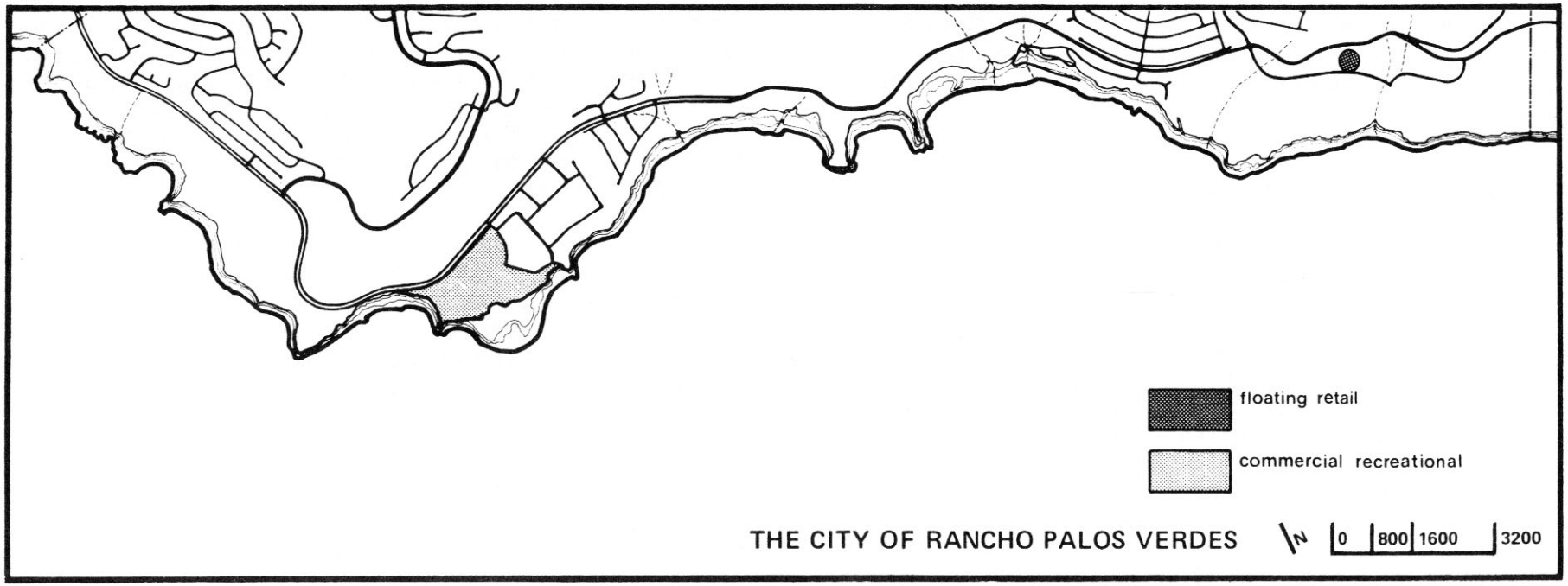
3. THE CITY WILL CONSIDER A RETAIL AREA OF A VILLAGE NATURE IN THE EASTERN PORTION OF THE COASTAL REGION ALONG PASEO DEL MAR OR LA ROTUNDA DRIVE, AS A PART OF A CONDITIONAL USE PERMIT.

COASTAL-DEPENDENT ACTIVITY

IT IS STRESSED THROUGH THE 1976 COASTAL ACT THAT ''COASTAL-DEPENDENT DEVELOPMENT SHALL HAVE PRIORITY OVER OTHER DEVELOPMENTS ON OR NEAR THE SHORELINE''. COASTAL-DEPENDENT DEVELOPMENT PERTAINS TO THOSE USES OR DEVELOPMENTS WHICH REQUIRE A SITE ON, OR ADJACENT TO THE SEA IN ORDER TO FUNCTION. THE SPECIFIC NATURE OF SUCH USES COULD INVOLVE PUBLIC OR PRIVATE MARINE RESEARCH, OCEANOGRAPHIC EDUCATIONAL FACILITIES, COMMERCIALLY ORIENTED MARINE RECREATION, ETC.

THE CITY CONCURS WITH THIS GENERAL POLICY; HOWEVER, THE SPECIFIC SITE REQUIREMENTS FOR THE VARIOUS TYPES OF COASTAL-DEPENDENT DEVELOPMENTS ARE DIVERSE. FOR THIS REASON, IT WOULD BE IMPRACTICAL TO SET ASIDE A GIVEN LAND AREA ON WHICH THIS TYPE OF

figure 15 commercial activity



DEVELOPMENT COULD BE FACILITATED. ALSO, THE REASONABLENESS OF SUCH A DELINEATION IS QUESTIONABLE IN LIGHT OF THE RECENT LACK OF INTEREST TO DEVELOP ANY NEW COASTAL-DEPENDENT DEVELOPMENT WITHIN THE CITY. BASED ON THIS UNCERTAINTY FOR DEMAND AND LACK OF SPECIFIC SITE REQUIREMENTS FOR SUCH ACTIVITIES, AN ALTERNATIVE IS TO ADD COASTAL-DEPENDENT USES TO THE CITY'S ESTABLISHED CONDITIONAL USE PERMIT PROCEDURES. THIS LISTED USE WOULD ONLY BE CONSIDERED WITHIN THE COASTAL REGION. BY UTILIZING THE CONDITIONAL USE PERMIT PROCEDURE MORE FLEXIBILITY IS AFFORDED TO BOTH THE CITY AND PROPOSER OF THE DEVELOPMENT. THROUGH THIS PROCEDURE AN EVALUATION AND MOLDING OF THE PROJECT CAN TAKE PLACE, SO AS TO FACILITATE JUSTIFIABLE COASTAL-DEPENDENT DEVELOPMENT IN A MANNER THAT IS COMPATIBLE TO THE CITY AND SURROUNDINGS, WHILE ALLOWING A POSITIVE UTILIZATION OF COASTAL RESOURCES.

POLICIES

IT IS THE POLICY OF THE CITY TO:

1. ADD COASTAL-DEPENDENT USES TO THE CITY'S ESTABLISHED CONDITIONAL USE PERMIT PROCEDURES. THIS LISTED USE WOULD APPLY TO THE COASTAL REGION.

2. FACILITATE JUSTIFIABLE COASTAL-DEPENDENT DEVELOPMENT IN A MANNER THAT IS COMPATIBLE WITH THE CITY AND SURROUNDINGS, WHILE ALLOWING A POSITIVE UTILIZATION OF COASTAL RESOURCES.

3. ANY COASTAL-DEPENDENT AND COMMERCIAL RECREATIONAL USE SHALL PROVIDE AT LEAST TEN PERCENT OF ITS PARKING FOR THE USE OF THE PUBLIC (A REASONABLE FEE MAY BE CHARGED).

INSTITUTIONAL ACTIVITY

PUBLIC ACTIVITIES

COUNTY FACILITIES

LOS ANGELES COUNTY OWNS AND/OR OPERATES 171 ACRES OF PARK LAND IN THE COASTAL REGION. THIS ACREAGE ENCOMPASSES 4 SEPARATE PARKS. THE DEPARTMENT OF BEACHES IS RESPONSIBLE FOR 3 OF THESE SITES: ABALONE COVE BEACH, POINT VICENTE FISHING ACCESS, AND THE POINT VICENTE BEACH SITE. THE LATTER SITE WAS OWNED BY THE FEDERAL GOVERNMENT, WHICH DECLARED THIS SITE AS SURPLUS LAND, AND THE COUNTY RECENTLY ACQUIRED IT. THE FOURTH SITE, SHORELINE PARK, IS THE RESPONSIBILITY OF THE DEPARTMENT OF PARKS AND RECREATION.

THE COUNTY FIRE DEPARTMENT CURRENTLY OPERATES FIRE STATION #53 LOCATED ON PALOS VERDES DRIVE SOUTH NEAR CLIPPER ROAD. DUE TO SITE CONSTRAINTS (REFER TO DISCUSSION IN SUBREGION 4), THE DEPARTMENT PLANS TO MOVE FROM THE FACILITY ONCE AN ALTERNATIVE SITE IS LOCATED, ACQUIRED, AND IN OPERATION.

FEDERAL FACILITIES

THE FEDERAL GOVERNMENT OWNS 20 ACRES WHICH CONTAIN POINT VICENTE COAST GUARD STATION, WITH A LIGHTHOUSE AND RADIO FACILITY.

EDUCATIONAL ACTIVITIES

Public Schools

Public school service is provided by the Palos Verdes Unified School District. The District operates an organizational plan which groups grade levels as follows:

elementary or K-5 facilitates kindergarten through grade five, intermediate schools facilitate grades six through eight, and high school facilitates grades nine through twelve.

Two high schools service the coastal region, Miraleste High School and Palos Verdes High School, both of which are operating at enrollment levels which exceed the capacity limits for their permanent facilities. In order to rectify this situation, the District has placed relocatable classrooms (trailers) on the sites. Permanent facility expansion plans are proposed for both sites. The future construction of Peninsula High School will provide service to areas currently within the attendance zone boundaries of these two schools. Therefore, this school will play a role in reducing the present overload situation.

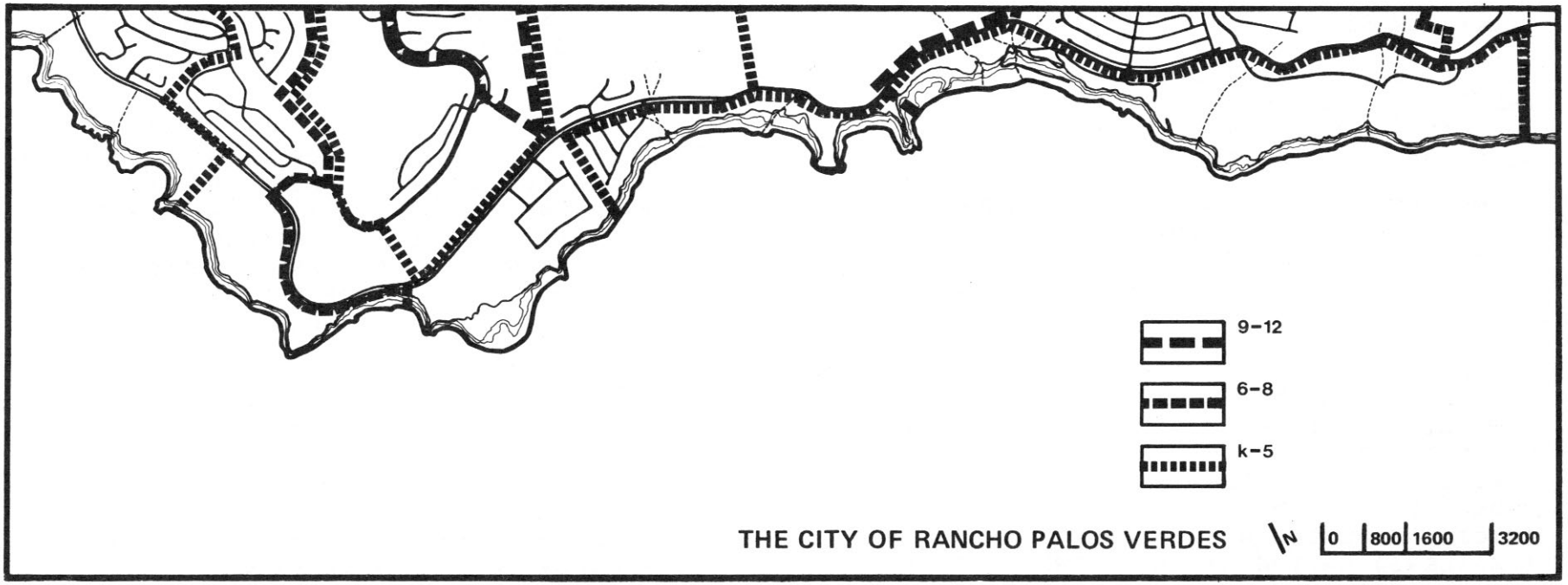
Intermediate school service is currently facilitated in the coastal region by Margate. Again, the School District is having to rely on relocatable units to alleviate the current overloading of permanent facilities. This situation will change with the construction and subsequent occupancy of Portuguese Bend Intermediate School. This school, which is to be located on Forrestal Drive, will directly serve Subregions 3 through 8 (see Figure 16), with Margate maintaining service to Subregion 1.

Three elementary schools, Point Vicente, Ladera Linda, and Mira Catalina, serve the coastal region. As of December 1974, Point Vicente was operating at a 33% overload level, which ranked the highest in the School District. All three schools are slated for expansion of permanent facilities on existing sites in order to increase their enrollment capacities. Loma Del Mar Elementary School was proposed for construction on an existing District site which is located in Subregion 7. This site was recently surplused by the District and may be sold in the future.

In order to assess possible public school enrollment impacts associated with the approximate 440 induced units (includes infill areas), a correlation was drawn with established School District study areas. These 83 study areas, 7 of which are confined to the coastal region, employ both existing and proposed dwelling unit statistics to evolve a projected enrollment perspective for the various grade levels in a 7-year period along with a maturation figure. Statistics on both existing and induced housing units for the 7 School District study areas involved were developed and supplied to the School District for projection.

Based on this analysis and comparison, it can be concluded that the Coastal Specific Plan generates less units than anticipated by the

figure 16 school district attendance boundaries at maturation



SCHOOL DISTRICT. THE CONCENTRATION OF THESE UNITS VARIES IN SOME SPECIFIC STUDY AREAS, THE EFFECTS OF WHICH ARE DEPICTED IN TABLE 9 FOR THE VARIOUS SCHOOL LEVELS AT MATURATION.

ESTABLISHMENT OF A SCHOOL IMPACT FEE

RECENT BOND ISSUES HAVE MET WITH DEFEAT (GENERAL PLAN, PAGE 87) AND THE ECONOMIC RESOURCES AVAILABLE TO THE DISTRICT ARE SEVERELY LIMITED. RECENT STATE LEGISLATION PERMITS A CITY TO REQUIRE A SCHOOL IMPACT FEE WHICH ATTACHES A FEE REQUIREMENT TO EACH BUILDING PERMIT ISSUED ON EACH LOT AS PART OF A FINAL TRACT MAP.



STUDENT GENERATION FACTORS

TABLE 9

SUBREGION		DWELLING UNITS	GRADES			
			K-5	6-8	9-12	K-12
1	EXISTING	8 S.F.	3	2	4	9
	PROPOSED	272 S.F.	109	82	122	313•
	TOTAL	280 D.U.'S	112	84	126	322
3	EXISTING	456 M.F.	160	109	150	419
	PROPOSED	126 S.F.	50	38	57	145•
	TOTAL	582 D.U.'S	210	147	207	564
4	EXISTING	74 S.F.	30	22	33	85
	EXISTING	16 M.F.	6	5	7	18
	PROPOSED	14 S.F.	6	4	6	16•
	TOTAL	104 D.U.'S	42	31	46	119
6	EXISTING	92 S.F.	37	28	41	106
	PROPOSED	26 S.F.	10	8	12	30•
	TOTAL	118 D.U.'S	47	36	53	136
7	EXISTING	100 M.F.	35	24	33	92
	PROPOSED	265 S.F.	106	80	119	305•
	TOTAL	365 D.U.'S	141	104	152	397

• PROPOSED UNIT TOTAL -- 809 STUDENTS

THE CITY COULD PURSUE THIS COURSE BUT WITH THE EXCEPTION THAT THIS FEE BE ATTACHED TO EACH NEW UNIT AS PART OF A SUBDIVISION. SUCH A FEE COULD BE ATTACHED FOLLOWING THE ADOPTION OF THIS PLAN AND APPLY THROUGHOUT THE CITY. THE FEE COULD EITHER BE FORWARDED TO, OR COLLECTED BY, THE SCHOOL DISTRICT.

RELIGIOUS ACTIVITIES

THE ONLY RELIGIOUS INSTITUTION CURRENTLY IN THE COASTAL REGION IS IN SUBREGION 3. THIS CHURCH, ST. PETER'S BY THE SEA, HAS A 3-1/2 ACRE SITE ADJACENT TO PALOS VERDES DRIVE SOUTH.

POLICIES: ADDITIONAL INSTITUTIONAL POLICIES ARE LISTED ON PAGE 93 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1. STUDY THE FEASIBILITY OF REQUIRING SCHOOL IMPACT FEES FOR NEW SUBDIVISIONS BASED ON A SPECIFIED FORMULA.

RECREATIONAL ACTIVITY

TERRESTRIAL

RECREATIONAL AREAS IN THIS SECTION INCLUDE SITES WHICH HAVE BEEN SET ASIDE OR ARE PROPOSED FOR EITHER ACTIVE OR PASSIVE USE. THESE SITES ARE STRUCTURED TO VARIOUS DEGREES TO ALLOW SPECIFIC SITE ACTIVITIES TO TAKE PLACE. PATH AND TRAIL NETWORKS, SYSTEMS WHICH INVOLVE LINEAR RIGHT-OF-WAY FOR THE PURPOSE OF TRANSPORTATION OR RECREATION, ARE ADDRESSED WITHIN THE CORRIDOR SECTION.

PRIVATE RECREATIONAL ACTIVITY AREAS

RECREATIONAL ACTIVITIES ARE SUPPLIED BY BOTH THE PUBLIC AND PRIVATE SECTORS OF THE COMMUNITY. ALTHOUGH THE LATTER IS NOT UNDER DIRECT CONTROL OF THE CITY AS TO QUANTITY AND QUALITY OF THESE FACILITIES, THE PRIVATE SECTOR IS A MAJOR SUPPLIER OF SPECIALIZED RECREATIONAL ACTIVITIES. WITHIN THE COASTAL REGION, VARIOUS TYPES OF PRIVATE FACILITIES (TENNIS COURTS, A BEACH CLUB, SWIMMING POOLS, ETC.) ARE AVAILABLE TO INDIVIDUALS WHO EITHER PAY A FEE FOR THEIR USE OR ARE RESIDENTS OF THE SPECIFIC COMPLEX WHICH OWNS AND MAINTAINS THE FACILITY.



Fee/Membership Recreational Facilities

Presently the only recreational area of this type is located in Portuguese Bend. This beach club facility is operated by the Portuguese Bend Club Homeowners Association, which leases the facility from Palos Verdes Properties. The facility is open to fee paying members and their guests (presently limited to 175 family memberships per season) from May through October. The Club provides on-site parking, a sandy beach, paddle tennis courts and picnic facilities.

Residential Complex Recreational Facilities

Three residential complexes (Porto Verde Apartments, Palos Verdes Bay Club, and Ocean Terraces) currently provide recreational facilities to their residents. The recreational areas are pools, tennis/paddle tennis courts, and recreation buildings. The maintenance and operation of these facilities is the responsibility of the appropriate homeowners association or complex owner.

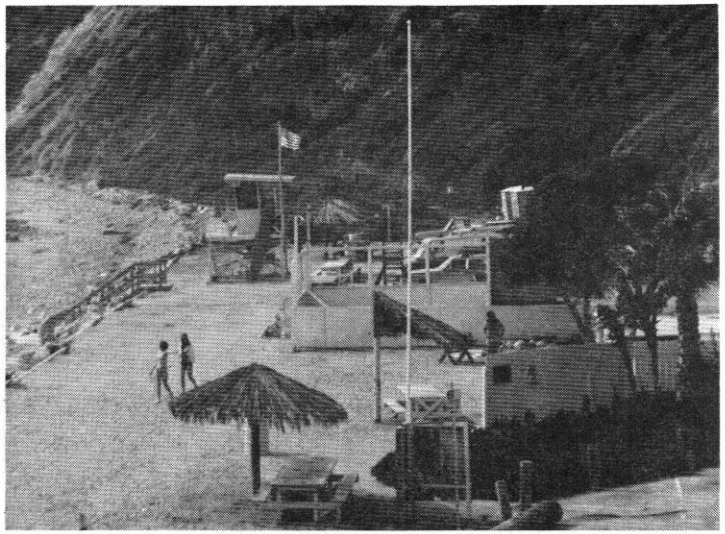
Additional Recreational Facilities

Future residential developments may provide recreational facilities to meet the needs of their residents. These facilities could encompass tennis courts, swimming pools, recreation buildings, and other facilities deemed appropriate. Extensive public trails are proposed throughout the coastal region (refer to Corridor section), and the ability for new developments to create an internal trail network which links with these public



trails should be considered in the site plan design. The advantages and ability to provide both active and passive recreational facilities within specifically controlled land areas (view corridors, etc.) can be considered for its positive benefits.

The advantage to residents brought about by new developments supplying recreational facilities is threefold. First, it places the cost of maintaining such facilities on those residents who most directly benefit from them. Secondly, it facilitates the recreational needs of new residents. Finally, the recreational amenities associated with a development and their financial cost are presented to prospective owners up front.



Public Recreational Activity Areas

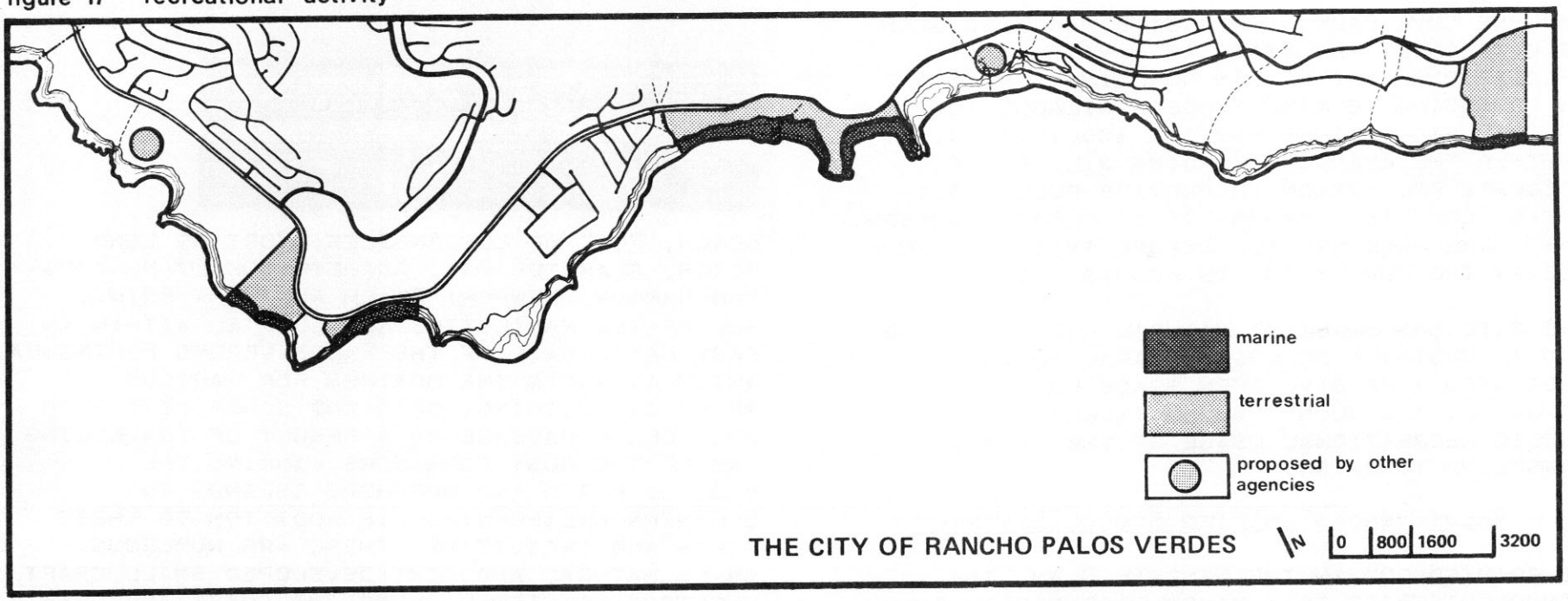
Within the coastal region, public recreational facilities are provided for by Los Angeles County. These facilities are planned, developed, and operated by either the Department of Beaches or the Department of Parks and Recreation. From time to time problems over the coordination and use of recreational facilities arise due to the jurisdictional separation of their control by the County rather than the City. Regardless of these problems, Los Angeles County is currently the sole source of supporting and maintaining open space lands for the public's use.

Los Angeles County currently either operates and/or owns 171 acres of park land within the coastal region (see Figure 17). This acreage includes four separate park sites which account for 17.3% of the entire coastal region. Only one park, Point Vicente Fishing Access, is completely developed with both Abalone Cove Beach and the Point Vicente Beach sites being partially developed but in current operation. Shoreline Park, the fourth site, is undeveloped with no formal plans for its development at this time. When and if Shoreline Park is developed, the utilization of the site will be constrained by the complex geologic problems that encompass most of this site (refer to Subregion 8).

Additional Recreational Facilities

Although this Plan does not directly delineate specific additional recreational areas, it is recognized that facilities may be added if proposals below are carried out. Due to the uncertainty and financial commitment accompanying such proposals, this Plan has designated non-recreational uses for affected sites on the Land Use Plan. These primary land uses (the non-recreational land uses) reflect the City's conclusion as to what are physically and fiscally sound land use decisions at this time for this jurisdiction, which has primary responsibility for their planning.

figure 17 recreational activity



State Proposals

Through the California Coastal Plan, and subsequent acquisition list, two recreational sites have been proposed for acquisition by the State within the coastal region. One site encompasses 184 acres (see Figure 17), all of Subregion 1. The other site contains 54 acres identified as the active portion of the Portuguese Bend landslide adjacent to Abalone Cove Park.

In reality it is questionable whether the site encompassing Subregion 1 will ever be acquired (refer to Subregion 1 discussion). The State has designated this, and the Portuguese Bend site, as of local value, thereby directing local jurisdictions (County or City) to acquire them. However, the large monetary resource needed to acquire the site is far beyond a local jurisdiction's financial capabilities with no State or Federal funding assistance of adequate proportion available. Los Angeles County has expressed an interest in the Portuguese Bend site. The relatively low market value placed on this site makes it a feasible proposal.

County Proposal

As mentioned, the County currently has plans to acquire the active portion of the Portuguese Bend landslide adjacent to

ABALONE COVE PARK. THIS SITE HAS ALSO BEEN RECOGNIZED BY THE STATE AS HAVING COASTAL RECREATIONAL VALUE. IN SO DOING, THE STATE IS PROPOSING TO MAKE FUNDS AVAILABLE TO LOCAL JURISDICTIONS FOR ITS ACQUISITION. WHETHER THE EVENTUAL FUNDING WILL BE OF ADEQUATE PROPORTION TO PROVIDE FULL ACQUISITION COST IS UNKNOWN. IT IS CLEAR, HOWEVER, THAT SOME FUNDING WILL BECOME AVAILABLE TO ASSIST THE COUNTY IN ITS ACQUISITION.

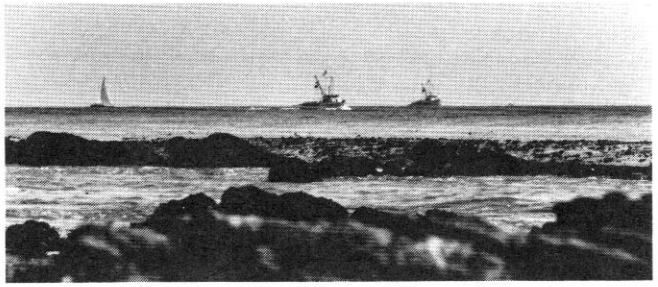
THE SITE HAS INHERENT NATURAL HABITAT VALUE AND AN UNSTABLE GEOLOGIC CHARACTER WHICH INDICATES A PASSIVE OPEN SPACE USE. IF ACQUIRED, THE COUNTY WOULD INCREASE THE PUBLIC RECREATIONAL USAGE OF THE CITY'S COASTLINE TO 22.8%.

PALOS VERDES UNIFIED SCHOOL DISTRICT

AS POINTED OUT IN THE GENERAL PLAN, THE SCHOOL DISTRICT IS A MAJOR RESOURCE IN FULFILLING RECREATIONAL NEEDS BY VIRTUE OF PROVIDING SCHOOL SITES WHICH FACILITATE RECREATIONAL ACTIVITIES. PRESENTLY NO DEVELOPED SCHOOL SITES EXIST IN THE COASTAL REGION. IF THE RECENTLY SURPLUSED LOMA DEL MAR SCHOOL SITE IS DEVELOPED AS A SCHOOL IN THE FUTURE IT WOULD PROVIDE SOME RECREATIONAL FACILITIES.

MARINE

WEATHER, CLIMATE AND POPULATION DISTRIBUTION ACCOUNT FOR ONE OF THE WORLD'S LARGEST RECREATIONAL BOATING FLEETS BEING LOCATED IN SOUTHERN CALIFORNIA. OVER 70,000 REGISTERED PLEASURE CRAFT USE THE HARBOR AND MARINA COMPLEXES LOCATED AT MARINA DEL REY, REDONDO



BEACH, PORT OF LOS ANGELES, PORT OF LONG BEACH, ALAMITOS BAY, ANAHEIM-SUNSET-HUNTINGTON HARBOR, NEWPORT BEACH AND DANA POINT. ALL OF THE FACILITIES ARE LOCATED WITHIN AN EASY DAY'S SAIL OF THE PALOS VERDES PENINSULA, WHICH ATTRACTS THE BOATERS FOR VARIOUS REASONS: FISHING, SKIN AND SCUBA DIVING OR JUST CLOSE PASSAGE AS A RESULT OF TRAVELLING ONE OF THE BUSY CORRIDORS LINKING THE VARIOUS PORTS AND OFFSHORE ISLANDS IN SOUTHERN CALIFORNIA. IN ADDITION TO THESE PORTS AND FACILITIES, THERE ARE NUMEROUS SMALL NATURAL AND SEMI-DEVELOPED SMALL CRAFT SHELTERS SCATTERED ALONG THE COAST AND OFFSHORE ISLANDS. THERE ARE, HOWEVER, NO ADEQUATE SMALL CRAFT REFUGES LOCATED ALONG RANCHO PALOS VERDES.

GIVEN THE SIZE OF THE FLEET IN SOUTHERN CALIFORNIA AND THE PROXIMITY OF CORRIDORS TO RANCHO PALOS VERDES, THE POTENTIAL FOR MARINE DISASTERS IS INCREASED. THESE DISASTERS MAY INCLUDE COLLISION, SINKING, EXPLOSION, RUNNING AGROUND, ETC. (SEE SAFETY SECTION).

ACCORDING TO THE CCZCC (MARINE ENVIRONMENT), THE AVERAGE SALT WATER ANGLER FISHES FROM THE SHORE OR, AT BEST, A FEW MILES OFFSHORE. A FAR GREATER NUMBER OF ''ANGLER DAYS'' PER YEAR ARE SPENT ON SHORE AS COMPARED TO PARTY BOAT AND PRIVATE CRAFT FISHING.

Rancho Palos Verdes possesses a shoreline which is very conducive to shore fishing. The availability of access, rocky beach and an adequate supply of ''on-site'' bait (mussels) make this activity very popular within the City. The type of rocky beach and associated habitats serve as an attractant to numerous species of sport fish which also, in turn, serve as an attractant to sport fishermen.

Party boats and private pleasure craft primarily berthed in Marina Del Rey, Redondo Beach and Los Angeles/Long Beach Harbor frequently venture to the Palos Verdes Peninsula shoreline and offshore area for fishing activity. Party boat fishing activity serves a recreational need of not only the Southern California area but also a much greater segment of the population of the western United States. Given the fact that fishing activity is a consumptive use of the marine resources, monitoring and control of this activity is the responsibility of State agencies.

Skin and scuba (self-contained underwater breathing apparatus) diving activity is also a very popular activity in the area for the same reasons that fishing is popular.

Diving activity can involve spearfishing, underwater photography, collecting, observation of marine life, and exploring. Certain areas on the City's coastline are more desirable for this activity. These include the fishing access and Abalone Cove (see Subregions 2 and 5), because of the ease of access, the submerged rocks, reefs, and beds of kelp.

Beachcombing along the City's coastline is a very popular activity for persons of all ages. The rocky headlands and tide pool areas which dominate the City's coastline are capable of supporting a very rich, but delicate assortment of intertidal marine life attracting people from all over. Opportunities for education, serenity, natural environment appreciation, and sightseeing are available to the shoreline visitor along the entire 7-1/2 miles of shoreline within the City.

Unfortunately, shoreline visitation by the public has taken its toll with regard to the environment. Even knowledgeable tide pool users can unwittingly have a damaging effect on the tide pools and rocky intertidal areas. Numerous marine organisms attach themselves to the underside of rocks for protection. Many of these rocks are indiscriminately turned over by the tide pool visitor. Left in this state, the attached organisms are exposed and soon die. Visitors may also wade through the tide pools crushing shellfish and anything in their path. Many of these persons collect shells, starfish and other sea life, only to eventually discard them as trash.

In order to combat the increasing disturbance to the shoreline, the City has taken steps to establish marine reserves in areas of critical concern and encourage strict enforcement of the regulations associated with them as well as to encourage greater manpower coverage by the Department of Fish and Game to enforce current sport fishing regulations.

POLICIES: Additional recreational policies are listed on page 99 of the General Plan.

IT IS THE POLICY OF THE CITY TO:

1. ENCOURAGE FUTURE RESIDENTIAL DEVELOPMENTS TO PROVIDE RECREATIONAL FACILITIES TO MEET THE NEEDS OF THEIR RESIDENTS.

2. ENCOURAGE NEW DEVELOPMENTS ADJOINING PUBLIC TRAILS TO DESIGN INTERNAL TRAILS TO LINK WITH THE PUBLIC TRAILS.

3. ENCOURAGE NEW DEVELOPMENTS TO PROVIDE BOTH ACTIVE AND PASSIVE RECREATIONAL FACILITIES WITHIN SPECIFICALLY CONTROLLED LAND AREAS (VIEW CORRIDORS, RM DISTRICTS, ETC.).

4. REQUIRE ALL PARKS TO PROVIDE ADEQUATE PARKING WITHIN THEIR BOUNDARIES TO MEET THEIR PROJECTED CARRYING-CAPACITIES.

5. ENCOURAGE PROVISION FOR RECREATIONAL AMENITIES AND FACILITIES (WHERE FEASIBLE) AT EXISTING AND PROPOSED SITES FOR THE USE OF THE HANDICAPPED.

6. STRIVE TO ESTABLISH MARINE RESERVES IN AREAS OF CRITICAL CONCERN AND ENCOURAGE STRICT ENFORCEMENT OF ACCOMPANYING REGULATIONS.

7. INVESTIGATE METHODS AND RECOMMEND SUCH ACTION AS NECESSARY TO ENSURE ENFORCEMENT OF MARINE RESERVES.

8. STRONGLY ENCOURAGE LOS ANGELES COUNTY TO MASTER PLAN ITS PARKS. SUCH PLANS SHOULD BE INTEGRATED WITH PLANS FOR MARINELAND AND THE TRAIL SYSTEM AND SHOULD CONSIDER ALL APPROPRIATE USES.



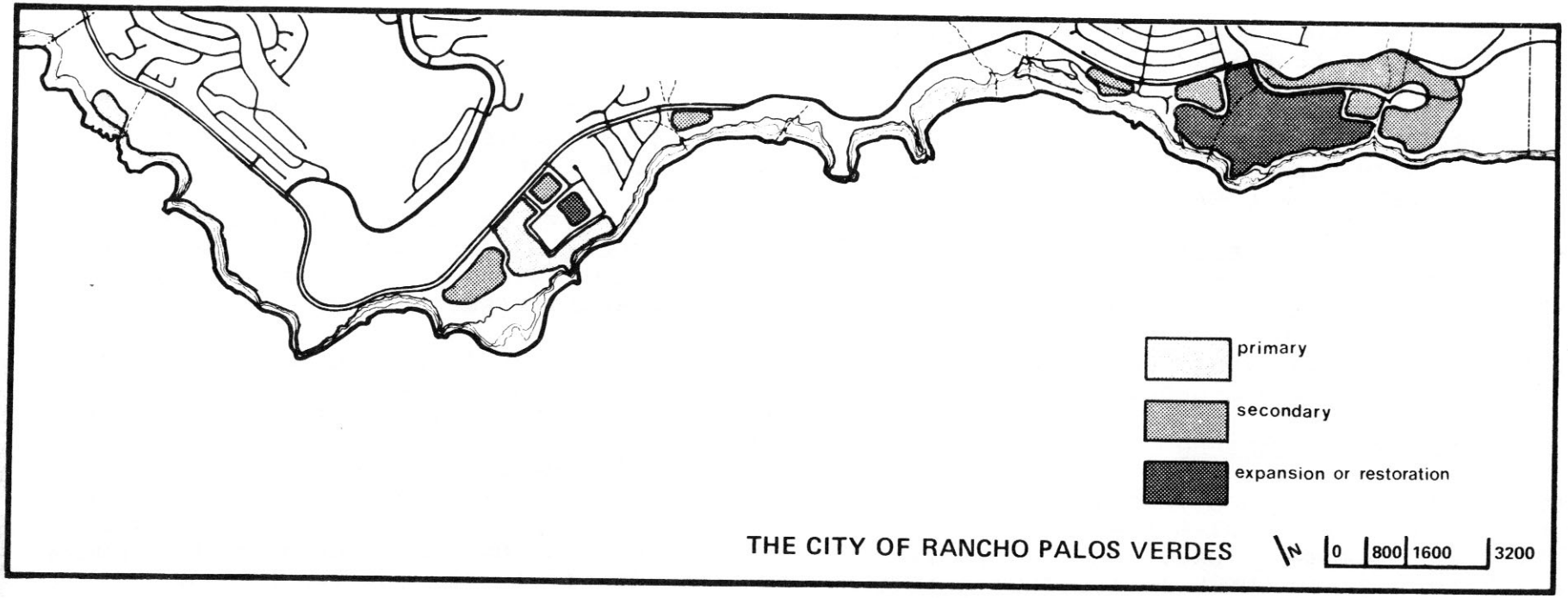
AGRICULTURAL ACTIVITY

TERRESTRIAL

FIGURE 18 DEPICTS AREAS WHICH ARE CURRENTLY CULTIVATED AND OF PRIMARY IMPORTANCE IN PRESERVING AGRICULTURE IN THE COASTAL REGION AND PENINSULA AS A WHOLE, THOSE AREAS OF SECONDARY IMPORTANCE IN RESTORING OR MAINTAINING AGRICULTURE, AND THOSE LANDS OF INTRINSIC VALUE IN EXPANDING OR RESTORING SUCH ACTIVITY. THE LATTER AREAS CONTAIN COMPATIBLE TERRAIN AND SOILS THAT, WHEN COUPLED WITH THE COASTAL CLIMATE, HAVE A HIGH DEGREE OF VALUE IN SUPPORTING AGRICULTURAL ACTIVITY.

AGRICULTURE WAS THE PRIMARY USE OF COASTAL LANDS UNTIL THE EARLY 70'S WHEN, IN ANTICIPATION OF PROPOSED RESIDENTIAL DEVELOPMENT, OVER 200 ACRES WERE PULLED OUT OF PRODUCTION. THE MAINTAINING OF AGRICULTURE AS A LAND USE IS DESIRED BY THE LOCAL COMMUNITY (COASTAL QUESTIONNAIRE) AND IS BENEFICIAL IN ALLOWING THE USE OF COASTAL LAND WITHOUT THE VIEW IMPACTS INHERENT IN MOST LAND USES.

figure 18 agricultural activity and restoration



ONE OF THE MOST INTENSELY FARMED AREAS IN THE COASTAL REGION IS LOCATED TO THE EAST OF MARINELAND. BASED ON HIGHER DENSITIES ESTABLISHED BY THE COUNTY PRIOR TO INCORPORATION, THE SCHOOL DISTRICT HAD THIS SITE ACQUIRED FOR CONSTRUCTION OF AN INTERMEDIATE SCHOOL. HOWEVER, LOWER DENSITIES ESTABLISHED BY THE CITY ALTER THE NEED TO CONSTRUCT THE SCHOOL. SHOULD THE DISTRICT OFFICIALLY RELEASE THE SITE, THEN EITHER THE STATE COULD LEASE THE SITE FOR AGRICULTURE OR FUNDING COULD BE SOUGHT (FOR EXAMPLE, THE COASTAL CONSERVANCY) BY THE CITY TO PURCHASE THE SITE FOR THE PURPOSE OF MAINTAINING AGRICULTURE. IN ORDER TO MAINTAIN AGRICULTURE HERE THE PLAN DESIGNATES AN AGRICULTURAL LAND USE ON THE SITE. THIS WILL NECESSITATE THE ADDITION OF AN AGRICULTURAL ZONE TO THE DEVELOPMENT CODE.

WITH REGARD TO THE CONTINUATION OF AGRICULTURE ON PRIVATELY OWNED LAND THE FOLLOWING CONSTRAINTS ARE ENCOUNTERED:

- CURRENT AGRICULTURAL OPERATORS ARE NOT THE LANDOWNERS OF SUBJECT SITES, BUT HAVE MERELY ENTERED INTO LEASE AGREEMENTS.
- THE DIMINISHING OF VACANT LANDS WILL PLACE AN INCREASING DEMAND FOR AREAS WHICH CAN SUPPORT RESIDENTIAL DEVELOPMENT.
- LANDOWNERS ARE SEEKING FINANCIAL PROFITS ATTAINABLE THROUGH THE CONVERSION OF PRESENT AGRICULTURAL AREAS TO A RESIDENTIAL USE.

- THE CITY COULD NOT AFFORD THE MONETARY COMMITMENT NECESSARY TO PURCHASE AGRICULTURAL AREAS.

- PRESENT FUNDING SOURCES ARE QUESTIONABLE WITH REGARDS TO ALLOWING PUBLIC ACQUISITION OF LOCAL AGRICULTURAL LANDS.

THEREFORE, IT WAS NECESSARY TO INVESTIGATE OR CREATE PROGRAMS WHICH WILL ALLOW FOR THE MAINTENANCE OF AGRICULTURE WHILE SIMULTANEOUSLY PROVIDING PRESENT LANDOWNERS WITH REASONABLE COMPENSATION. THE FOLLOWING PROGRAMS HAVE POSSIBLE APPLICATION:

1. DEVELOPMENT TRANSFER

ONE FEASIBLE PROGRAM IS THAT WHICH ASSOCIATES A DEVELOPMENT CREDIT WITH THE INDIVIDUAL AREA MAINTAINED IN AGRICULTURE. UNDER THIS TYPE OF PROGRAM THE LANDOWNER IS ASSIGNED A DEVELOPMENT ALLOTMENT WHICH IS IN LINE WITH THE RESIDENTIAL HOLDING CAPACITY OF THE SUBJECT SITE. THIS ALLOTMENT CAN THEN BE TRANSFERRED OR SOLD TO PARCELS WITHIN THE CONFINES OF THE PARTICULAR SUBREGION. THE EFFECTS OF THIS ACTION IS MORE SPECIFICALLY DISCUSSED IN THE APPROPRIATE SUBREGIONS.

AN ANALYSIS OF A DEVELOPMENT TRANSFER PROGRAM WITHIN THE CONFINES OF SUBREGIONS 2 AND 3 WAS TESTED IN DEPTH (REFER TO SUBREGION 3 FOR A DETAILED DISCUSSION). A SUMMARY OF FACTS AND FINDINGS ARE AS FOLLOWS:

- ASSESSED MARKET VALUES FOR UNIMPROVED LAND RANGED FROM A LOW OF $42,000 TO A HIGH OF $66,000 PER ACRE. UNIMPROVED LANDS IN SUBREGIONS 1 AND 7 CARRY ASSESSED MARKET VALUES AS LOW AS $22,000 PER ACRE.

- 75% TO 90% OF A PARCEL'S MARKET VALUE IS ACCOUNTED FOR BY THE ASSOCIATED DEVELOPMENT RIGHTS.

- THE CITY COULD EXPECT TO ACQUIRE LANDS, FOLLOWING COMPENSATION FOR DEVELOPMENT RIGHT VALUES, FOR 10% TO 25% OF THE CURRENT MARKET VALUES.

- CURRENT AGRICULTURAL LEASE FEES RANGE FROM A LOW OF $46.00 PER ACRE PER YEAR TO A HIGH OF $93.00 PER ACRE PER YEAR.

- THE NON-RECURRING EXPENDITURE OF ACQUIRING AGRICULTURAL LANDS CAN BE PARTIALLY AND, PERHAPS, WHOLLY FINANCED THROUGH NON-RECURRING REVENUES GENERATED WITHIN THE COASTAL REGION.

- RECURRING REVENUES DROPPED FROM $30,765.00 TO $22,774.50 UNDER THE AGRICULTURAL PROFILE.

- RECURRING EXPENDITURES DROPPED FROM $33,977.00 TO $31,177.00 UNDER THE AGRICULTURAL PROFILE.

- THEREFORE, THE COST OF MAINTAINING AGRICULTURAL LAND THROUGH PUBLIC OWNERSHIP MAY BE WORTHWHILE.

ALTHOUGH THE PHILOSOPHY OF DEVELOPMENT TRANSFER IS SIMPLE, THE ACTUAL MECHANICS ARE OFTEN DIFFICULT. THE IMPLEMENTATION STRATEGIES REQUIRED TO CARRY OUT THIS ACTION WILL NEED TO DETERMINE THE REALITIES OF MAKING DEVELOPMENT

TRANSFER WORK. THE MAIN INTENT AND REQUIREMENTS FOR SUCH A PROGRAM ARE PRESENTED IN THE PREVIOUS PARAGRAPHS AND FORM THE BASIS OF A DEVELOPMENT TRANSFER PROGRAM. IT IS RECOGNIZED THAT THE ACTUAL IMPLEMENTATION OF DEVELOPMENT TRANSFER MAY PROVE UNWORKABLE; IF SO, OUT-RIGHT PURCHASE PROGRAMS OR ALTERNATIVE PROTECTION MEASURES MAY BE THE ONLY RECOURSE.

2. PURCHASE OR PROTECTION

FUNDING OR PROTECTION MEASURES FOR AGRICULTURAL LANDS ARE PROPOSED TO BE INITIATED THROUGH THE COASTAL CONSERVANCY. THE ACQUISITION LIST DEVELOPED FOR THE CALIFORNIA COASTAL PLAN SPECIFICALLY LISTS AGRICULTURAL AREAS, WITHIN THE CONFINES OF THE COASTAL REGION, WHICH ARE INTENDED TO BE ACQUIRED OR PROTECTED BY SUCH ACTION. THE CITY CAN PURSUE THIS AND OTHER SOURCES WHICH PROVIDE FOR THE PURCHASE OR PROTECTION OF AGRICULTURAL LANDS. IF FUNDS ARE OBTAINED, THIS FINANCIAL ASSISTANCE MIGHT ALSO REDUCE, AND POSSIBLY ELIMINATE, THE INITIAL EXPENDITURES REQUIRED IN THE CITY'S ACQUISITION OF AGRICULTURAL LANDS UNDER A DEVELOPMENT TRANSFER PROGRAM.

3. CLUSTER DEVELOPMENT

A THIRD PROGRAM FOR PRESERVING OR RESTORING AGRICULTURAL ACTIVITY IS THE USE OF THE CITY'S RESIDENTIAL PLANNED DEVELOPMENT REGULATIONS, OR CLUSTER DEVELOPMENT. THESE REGULATIONS REQUIRE AT LEAST 30% COMMON OPEN SPACE WHILE ALLOWING DWELLING UNITS TO BE DEVELOPED ON THE REMAINDER OF THE LAND ON SMALLER LOTS THAN REQUIRED UNDER CONVENTIONAL DEVELOPMENT. WHILE MOST SUCH DEVELOPMENTS USE THE COMMON OPEN SPACE FOR PASSIVE OR ACTIVE RECREATION, IT COULD BE USED FOR AGRICULTURE. FOR EXAMPLE, THE HOMEOWNER'S ASSOCIATION COULD LEASE THE LAND TO A FARMER DIRECTLY OR MIGHT REQUEST THE CITY TO ACCEPT THE LAND BY DEDICATION, WITH THE CITY THEN LEASING THE LAND TO A FARMER. IT IS POSSIBLE TO CLUSTER UNITS CLOSER, I.E., SMALLER LOTS AND HAVE MORE THAN 30% OPEN SPACE. THIS TECHNIQUE COULD BE ESPECIALLY VIABLE IN SUBREGIONS 1 AND 7, AND IS DISCUSSED FURTHER IN THOSE SECTIONS.

MARINE

MAN CAN AND DOES DERIVE ECONOMIC BENEFIT FROM MARINE-DEPENDENT ORGANISMS ALONG THE CALIFORNIA COASTLINE. THE METHODS AND QUANTITIES VARY WIDELY BUT ALL ARE REGULATED BY THE STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME.

HISTORICALLY, THE TREND OF TAKING MARINE ORGANISMS FOR COMMERCIAL PURPOSES HAS FOLLOWED ONE COURSE, THE HARVESTING OF THE SPECIFIC SPECIES BEING SOUGHT UNTIL IT BECOMES ECONOMICALLY INEFFICIENT TO CONTINUE, THE SPECIES BECOMES EXTINCT, OR THE SPECIES RECEIVE PROTECTION THROUGH LEGISLATION.

THE CALIFORNIA STATE DEPARTMENT OF FISH AND GAME HAS KEPT RECORDS ON THE HARVEST OF FISH SINCE 1916. ACCORDING TO THESE RECORDS, THE EARLY 1950'S WERE THE LAST YEARS FOR GOOD FISHERIES PRODUCTION IN CALIFORNIA. SINCE 1950, A STEADY DECLINE IN HARVEST CONTINUED UNTIL THE INSHORE PRODUCTION OF FISH NOW AMOUNTS TO ONLY 200,000 TONS ANNUALLY.

THE SHORELINE OF RANCHO PALOS VERDES HAS BEEN A MAJOR ACTIVITY AREA FOR COMMERCIAL FISHING

OF SPECIES SUCH AS LOBSTER, WHITE SEA BASS, ABALONE, AND CRAB, AS WELL AS VARIOUS SPECIES OF ROCK AND KELP FISH. ALL OF THESE SPECIES HAVE BEEN DEPLETED TO THE POINT OF ENDANGERMENT AND REQUIRE AN EXTENDED PERIOD OF TIME FOR RECOVERY. IN ADDITION, THE NET FISHING FOR PELAGIC AND MIGRATORY FIN FISH IS STILL COMMON PRACTICE OFF OUR COAST, AND THESE RESOURCES ARE ALSO ON THE DECLINE.

MANY FACTORS HAVE CONTRIBUTED TO THE DEPLETION OF THESE OCEAN SPECIES. OVER-FISHING AND UNDER-MANAGEMENT ARE TWO PRIMARY FACTORS. THIS IS BEGINNING TO CHANGE SLOWLY AS A RESULT OF THE PLACEMENT OF STRINGENT REGULATIONS ON THE TAKING OF CERTAIN SPECIES BY THE DEPARTMENT OF FISH AND GAME. FOR THIS REASON, THE CITY MAY WANT TO LEND ITS SUPPORT TO FISHERY MANAGEMENT PROGRAMS INITIATED BY PUBLIC AGENCIES OR PRIVATE GROUPS WHICH MAY HAVE A POSITIVE IMPACT ON THE MARINE BIOTIC RESOURCES OF THE PENINSULA.

OTHER COMMERCIAL FISHING ACTIVITIES INCLUDE THE TAKING OF ABALONE, LOBSTER AND CRAB. HOWEVER, EFFECTIVE JANUARY 1, 1977, THE COMMERCIAL TAKE OF ABALONE FROM ROCKY POINT IN PALOS VERDES ESTATES TO DANA POINT IN ORANGE COUNTY WAS TOTALLY BANNED FOR FIVE YEARS (MARCH 1, 1982). THIS ACTION IS TO ALLOW THE ABALONE POPULATIONS TO REGENERATE THEMSELVES WITH THE HELP OF SOME "RESEEDING" EFFORTS BY THE DEPARTMENT OF FISH AND GAME.

COMMERCIAL LOBSTER FISHING IS STILL A COMMON ACTIVITY ALONG THE CITY'S COASTLINE; HOWEVER, THE NUMBER OF LOBSTERS HAVE DWINDLED TO THE POINT WHERE IN MANY CASES THIS ACTIVITY DOES NOT PROVE TO BE ECONOMICALLY FEASIBLE.

THERE HAVE BEEN PROPOSALS TO LIMIT OR SEVERELY RESTRICT THE TAKE OF LOBSTER; HOWEVER, IT DOES NOT APPEAR THAT ANY OF THE PROPOSALS WILL BECOME A REALITY IN THE NEAR FUTURE.

KELP IS AN IMPORTANT RESOURCE FOR THE COMMERCIAL MARKET. ALGIN EXTRACTED FROM THE KELP PLANT IS USED AS THICKENERS AND STABILIZERS IN FOOD AND COSMETICS, ADDITIVES FOR MEDICINES AND COMPONENTS IN TEXTILE PRODUCTS, ADHESIVES, ACOUSTIC TILES, CERAMIC GLAZES, LEATHER FINISHES, AUTOMOBILE POLISH, TOOTHPASTE, BEER, SEASONINGS, AND COUNTLESS OTHER PRODUCTS. THE ENTIRE SOUTHERN CALIFORNIA KELP HARVEST IS VALUED AT APPROXIMATELY $3 MILLION ANNUALLY (BOWDEN).

GIVEN A MANAGED LIVING ENVIRONMENT, KELP IS A RENEWABLE NATURAL RESOURCE. KELP FRONDS HAVE BEEN KNOWN TO GROW AS MUCH AS TWO FEET PER DAY, EVENTUALLY FORMING A THICK BLANKET COVERING THE SURFACE OF THE WATER. LARGE KELP HARVEST BARGES ARE ABLE TO THRASH KELP TWO OR THREE FEET UNDER THE OCEAN SURFACE AND HAUL THE CUT KELP ABOARD FOR TRANSPORT TO PROCESSING FACTORIES. IT IS THOUGHT THAT WITH FURTHER RESEARCH AND MANAGEMENT, KELP CAN BE HARVESTED CONTINUALLY IN AMOUNTS WHERE THE KELP CAN REPLENISH ITSELF AT ABOUT THE SAME RATE AS HARVEST (OPTIMUM SUSTAINABLE YIELD).

MARICULTURE, OR SEA FARMING, CORRESPONDS CLOSELY TO TERRESTRIAL FARMING. PROPONENTS OF MARICULTURE CONTEND THAT INTENSIVE FARMING OF LIMITED AREAS CAN PRODUCE YIELDS THAT ARE NOW OBTAINED FROM EXTENSIVE FISHING GROUNDS. THEY ALSO MAINTAIN THAT CONFLICTS

WILL BE MINIMIZED BETWEEN SPORT AND COMMERCIAL FISHING INTERESTS, AND OTHER RECREATIONAL PURSUITS. OPPONENTS OF MARICULTURE SEE IT AS A THREAT TO THEIR PUBLIC DOMAIN.

IT IS ONLY SPECULATION AS TO WHETHER OR NOT MARICULTURE WILL PROVE TO BE A FEASIBLE SOURCE OF PROTEIN. PRESENTLY THE MARICULTURE INDUSTRY IS DOMINATED BY OYSTER FARMING; HOWEVER, RED ABALONE FARMING IS BEGINNING TO EMERGE AS AN IMPORTANT FACTOR.

AT THIS TIME NO MARICULTURE ACTIVITIES ARE BEING CONDUCTED ALONG THE CITY'S COASTLINE.

POLICIES: ADDITIONAL AGRICULTURAL POLICIES ARE LISTED ON PAGE 100 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1. PURSUE THE ESTABLISHMENT OF AN INTRA-SUBREGION DEVELOPMENT TRANSFER PROGRAM FOR THE MAINTENANCE OF AGRICULTURAL LANDS OF PRIMARY IMPORTANCE AND ANY OTHER AREAS DEEMED APPROPRIATE WITHIN SUBREGION 3.

2. ACTIVELY PURSUE COASTAL CONSERVANCY FUNDS AND OTHER SOURCES WHICH PROVIDE FOR THE PURCHASE OR PROTECTION OF AGRICULTURAL LANDS.

3. SUPPORT FISHERY MANAGEMENT PROGRAMS WHICH MAY HAVE A POSITIVE IMPACT ON THE MARINE RESOURCES OF THE PENINSULA.

4. REQUIRE PROPOSED DEVELOPMENTS IN PORTIONS OF SUBREGION 1 AND IN SUBREGION 7 TO APPLY UNDER A RESIDENTIAL PLANNED DEVELOPMENT IN ORDER TO MAINTAIN OR RESTORE AGRICULTURAL ACTIVITY.

INFRASTRUCTURE

As defined in the General Plan, the infrastructure is that portion of the urban environment which supports and serves various activities (G.P., page 101). The infrastructure consists of four major divisions and respective subdivisions:

Resource Systems
- water
- energy

Disposal Systems
- sanitation
- flood control

Communication Systems
- broadcast
- cable

Transportation Systems
- vehicular
- non-vehicular

(While each of the components identified above is essential to the operation of the coastal region, not all are discussed in this Plan. For those items not discussed refer to the Infrastructure section of the General Plan, beginning on page 101.)

In general, the current state of the infrastructure within the coastal region appears to be satisfactory. The various systems appear to be functioning adequately and most are in satisfactory condition. There are problems and deficiencies, but most can be corrected. The Portuguese Bend landslide continues to be the cause of major problems (G.P., page 102).

Insofar as the results of this Plan are concerned, the infrastructure is expected to remain adequate; although, as could be expected, most components will require change or certain additions in order to meet the increased demand. This Plan will most heavily impact the future traffic situation in the coastal region as well as outside the study area.

Throughout the analysis of the coastal region, geotechnical characteristics have emerged as one of the most important factors controlling land use and the infrastructure. The General Plan (G.P., page 102) identifies the Portuguese Bend landslide as a "major problem area" for infrastructure systems, which are land based. Despite the obvious adversity posed by the landslide, the agencies which operate and maintain the various infrastructure networks within the slide area have continued to adequately serve the City. Most of the agencies have had to incorporate special devices into the slide area networks in order to allow for the ever-present earth movement.

RESOURCE SYSTEMS

WATER

Water is distributed to the coastal region and throughout the Peninsula by the California Water Service Company (G.P., page 103). Currently, water service in the coastal region is limited to developed areas and some segments of Palos Verdes Drive West/South, which are adjacent to developable coastal lands. There are no water resource

FACILITIES (RESERVOIRS OR TANKS) WITHIN THE COASTAL REGION. WATER DISTRIBUTION MAINS RANGE IN SIZE FROM 12 INCHES ALONG THE DRIVE, TO 6 INCHES IN SINGLE-FAMILY RESIDENTIAL AREAS, AND SOME AS SMALL AS 2 INCHES IN THE DEVELOPED AREA JUST EAST OF THE LANDSLIDE (SUBREGION 6).

WATER SERVICE TO THE DEVELOPED AREAS OF THE COASTAL REGION APPEARS TO BE ADEQUATE AND REPRESENTATIVES OF CALIFORNIA WATER SERVICE COMPANY (CWSC) HAVE STATED THAT ALTHOUGH NEW DISTRIBUTION MAINS WILL BE REQUIRED FOR NEW DEVELOPMENT, THE ACTIVITIES PROPOSED BY THIS PLAN CAN BE ADEQUATELY SERVED BY EXISTING RESOURCE FACILITIES (WADE, 12/17/76). CWSC REPRESENTATIVES HAVE ALSO STATED THAT IN ORDER TO PROVIDE BETTER SERVICE AND RELIEVE CERTAIN OPERATIONAL PROBLEMS, THE COMPANY IS PLANNING FOR THE FUTURE CONSTRUCTION OF A ONE MILLION GALLON STORAGE TANK IN THE VICINITY OF FORRESTAL DRIVE AND MAINSAIL DRIVE. FURTHERMORE, IT HAS BEEN INDICATED THAT THERE IS INVESTIGATION INTO THE POSSIBILITY OF EXPANDING RESERVOIRS #20 AND/OR #25 TO BETTER MEET THE NEEDS OF THE CITY.

CURRENTLY THERE ARE NO SIGNIFICANT WATER SERVICE PROBLEMS WITHIN THE COASTAL REGION, NOR ARE ANY EXPECTED TO ARISE WITH THE IMPLEMENTATION OF THIS PLAN. (SEE THE GENERAL PLAN FOR DISCUSSION OF LANDSLIDE RELATED PROBLEMS.)

ENERGY

THE ORGANIZATION OF THIS SECTION DEVIATES SOMEWHAT FROM THAT OF THE GENERAL PLAN FORMAT, IN THAT A NEW SUBSECTION HAS BEEN ADDED. THE IMPORTANCE OF ENERGY CONSERVATION IS BECOMING INCREASINGLY EVIDENT; THEREFORE, CONSERVATION IS DISCUSSED AS A RELATED BUT SEPARATE TOPIC.

NATURAL GAS

NATURAL GAS IS PROVIDED TO THE COASTAL REGION BY THE SOUTHERN CALIFORNIA GAS COMPANY, THROUGH TWO DISTRIBUTION SECTIONS (G.P., PAGE 105). THE WESTERN AREA DISTRIBUTION SECTION SERVICES THE WESTERN PORTION OF THE COASTAL REGION FROM APPROXIMATELY THE CRENSHAW RIGHT-OF-WAY WESTWARD, WHILE THE SOUTHERN AREA DISTRIBUTION SECTION IS RESPONSIBLE FOR THE AREA TO THE EAST OF THE RIGHT-OF-WAY. THE PRIMARY DISTRIBUTION MEDIUM IS THROUGH TWO EIGHT-INCH "HEADER" LINES WHICH RUN APPROXIMATELY PARALLEL TO PALOS VERDES DRIVE WEST/SOUTH AND SERVE RESPECTIVE SERVICE AREAS. GAS MAINS OF TWO TO FOUR INCHES BRANCH OUT FROM HEADERS TO SERVE VARIOUS COASTAL ACTIVITIES.

THE DEVELOPED AREAS OF THE COASTAL REGION ARE ADEQUATELY SERVED AT THIS TIME AND WHILE NO MAJOR PROBLEMS IN TERMS OF SYSTEM REQUIREMENTS ARE SEEN IN THE IMMEDIATE FUTURE, GAS COMPANY REPRESENTATIVES AND LITERATURE ARE QUICK TO POINT OUT THE ABILITY TO PROVIDE ADEQUATE SERVICE IN THE FUTURE IS DEPENDENT UPON SUPPLIES AND USE OF NATURAL GAS.

THE QUESTION OF BEING ABLE TO SUPPLY GAS TO CUSTOMERS IN THE FUTURE IS AN EXTREMELY COMPLEX ISSUE THAT IS FAR BEYOND THE SCOPE OF THIS PLAN, HOWEVER, IT IS CLEAR THAT THE RESULTS OF THIS PLAN CAN HAVE SOME EFFECT ON THIS CONDITION, NO MATTER HOW SMALL. THREE

FACTORS ARE GENERALLY PROPOSED AS MITIGATION METHODS TO HELP ALLEVIATE THE PROBLEM:

1) EXPLORATION AND DEVELOPMENT OF NEW SOURCES;
2) DEVELOPMENT OF ALTERNATIVE SOURCES; AND
3) CONSERVATION OF NATURAL GAS.

OF THE ABOVE PROGRAMS, THE CITY CAN MOST DIRECTLY EFFECTUATE CONSERVATION AS A MITIGATION METHOD. (REFER TO CONSERVATION FOR A DISCUSSION OF THIS TOPIC.)

ELECTRIC

SOUTHERN CALIFORNIA EDISON COMPANY SUPPLIES ELECTRICAL POWER TO THE RANCHO PALOS VERDES COASTAL REGION. REPRESENTATIVES OF SOUTHERN CALIFORNIA EDISON (SCE) INDICATE THAT CURRENTLY THE AREA IS BEING ADEQUATELY SERVED AND THAT THE ACTIVITIES PROPOSED BY THIS PLAN ARE WITHIN THE PARAMETERS OF THE PROJECTED LOAD GROWTH WHICH EDISON IS PLANNING TO MEET. SUCH PLANS MAY INCLUDE THE CONSTRUCTION OF A SUB-STATION (66/16 KV) ON A 1.6 ACRE SITE JUST OUTSIDE THE COASTAL REGION, NEAR THE NORTHWEST CORNER OF FORRESTAL DRIVE AND PALOS VERDES DRIVE SOUTH. ALTHOUGH LOCATED OUTSIDE THE COASTAL REGION, IT WOULD HELP TO BETTER SERVE INDUCED ACTIVITIES WITHIN THE COASTAL REGION.

THERE ARE CURRENTLY NO MAJOR SERVICE PROBLEMS WITHIN THE COASTAL REGION, NOR ARE THERE ANY EXPECTED WITH RESPECT TO SYSTEM REQUIREMENTS; HOWEVER, AS WITH ALL RESOURCE SYSTEMS, ELECTRIC POWER IS DEPENDENT ON NATURAL RESOURCES, WHICH IN THIS CASE ARE NON-RENEWABLE RESOURCES. THE ISSUES OF FUEL SUPPLY FOR ELECTRICAL POWER ARE SIMILAR TO THOSE OF NATURAL GAS, AS ARE THE ANSWERS TO THE PROBLEM (SEE CONSERVATION). AN EXAMPLE OF HOW DELICATE AND/OR TENUOUS THE CONDITION IS, IS ILLUSTRATED IN THE RESPONSE TO A QUESTION POSED TO EDISON ON THE SUBJECT OF FUTURE SERVICE CAPABILITIES:

> "WE NOW BELIEVE THAT OUR LOW SULFUR FUEL OIL INVENTORY, TOGETHER WITH OUR CONTRACTUAL COMMITMENTS FOR DELIVERY AND OUR CUSTOMERS' CONSERVATION EFFORTS, WILL PERMIT US TO MEET THE FORECASTED ELECTRIC DEMAND..." (AVERA, 12/16/76)

THERE ARE NO SUBSTATIONS LOCATED WITHIN THE COASTAL REGION, NOR ARE ANY PROJECTED. WHILE THE DISTRIBUTION NETWORK IS BOTH UNDERGROUND AND OVERHEAD, UNDERGROUNDING PROJECTS WITHIN AND ADJACENT TO THE COASTAL REGION OCCUR FROM TIME TO TIME, WHICH HELP MITIGATE THE ADVERSE IMPACTS OF OVERHEAD UTILITIES. ALL NEW DEVELOPMENTS ARE REQUIRED TO INSTALL ALL ELECTRIC DISTRIBUTION LINES UNDERGROUND IN CONFORMANCE WITH THE ADOPTED GENERAL PLAN, PAGE 138, POLICIES 4-6.

ENERGY CONSERVATION

CONSERVATION OF NATURAL RESOURCES HAS LONG BEEN A CONCERN OF ENVIRONMENTALISTS AND CONSUMERS ALIKE, BUT IT HAS NOT BEEN UNTIL QUITE RECENTLY THAT THE EXTENT OF THE PROBLEM HAS BEEN "FELT" BY MOST. THE ISSUE HAS MANIFESTED ITSELF IN RISING COSTS, RESOURCE SHORTAGES, AND ENVIRONMENTAL/HEALTH PROBLEMS.

THE NEED FOR CONSERVATION IS PARTICULARLY EVIDENT WITH RESPECT TO ENERGY RELATED RE-

SOURCES, SINCE MOST ARE THE NON-RENEWABLE FOSSIL FUELS THAT ARE IN LIMITED SUPPLY. BOTH THE GAS COMPANY AND EDISON HAVE IDENTIFIED THE LACK OF CERTAIN FOSSIL FUELS AS A MAJOR CONCERN AND THEREFORE RECOMMEND CUSTOMER CONSERVATION AS A METHOD OF HELPING ALLEVIATE THE PROBLEM. CUSTOMER CONSERVATION TECHNIQUES GENERALLY INCLUDE LOWERING OF THERMOSTATS, INSTALLATION OF INSULATION, AND TURNING OFF UNUSED APPLIANCES.

WHILE CUSTOMER CONSERVATION IS VITAL TO THE SUCCESS OF CONSERVATION PROGRAMS, SO, TOO, ARE AGENCIES, SUCH AS THE CITY, WHICH GOVERN HOW AND WHERE DEVELOPMENT CAN TAKE PLACE.

THE CLIMATIC CONDITIONS, PHYSIOGRAPHY, AND DEVELOPMENT POTENTIAL OF THE COASTAL REGION ARE OF SUCH A NATURE THAT FUTURE DEVELOPMENT COULD RESPOND TO CONSERVATION RATHER THAN UTILIZATION OF NATURAL RESOURCES. THIS IS PARTICULARLY TRUE OF THE "UNCOMMITTED" SUBREGIONS (1, 2, 3, 7). ENERGY RESPONSIVE DESIGN UTILIZES, BUT IS NOT LIMITED TO, THE FOLLOWING DESIGN FACTORS:

- CLIMATE (WIND, SUN, TEMPERATURE, ETC.)
- CONSTRUCTION TECHNIQUES (INSULATION, USE OF GLAZING, COLOR, ETC.)
- LANDSCAPING
- ORIENTATION (CLIMATE, VIEW, SETBACKS, ETC.)
- SITE CHARACTERISTICS (PHYSIOGRAPHY, EXISTING ENVIRONMENT)

(REFER ALSO TO THE PLANNING AND DESIGN GUIDELINES SECTION.)

DISPOSAL SYSTEMS

SEWERAGE

THE COLLECTION, PROCESSING AND DISPOSAL OF SEWAGE FOR THE COASTAL REGION IS PROVIDED BY LOS ANGELES COUNTY THROUGH TWO AGENCIES: THE COUNTY ENGINEER AND THE COUNTY SANITATION DISTRICT NO. 5. AS DESCRIBED IN THE GENERAL PLAN (G.P., PAGE 108), THE OFFICES OF THE COUNTY ENGINEER AND SANITATION DISTRICT HAVE INDEPENDENT RESPONSIBILITIES; HOWEVER, THEY COORDINATE ALL RELATED ACTIVITIES IN ORDER TO OPERATE AT MAXIMUM EFFICIENCY. THE COUNTY ENGINEER IS RESPONSIBLE ONLY FOR THE INITIAL PHASE OF THE COLLECTION PROCESS. THIS PHASE INVOLVES MAINTENANCE AND OPERATION OF LATERAL SEWERAGE LINES FROM THE POINT OF ORIGIN (HOOK-UP) TO THE CONNECTION WITH SANITATION DISTRICT'S TRUNK LINE. THE SANITATION DISTRICT IS RESPONSIBLE FOR THE TRUNKLINE, PUMP STATIONS, TREATMENT FACILITIES AND DISPOSAL FACILITIES.

THE TRUNK LINE, WHICH APPROXIMATELY PARALLELS PALOS VERDES DRIVE WEST/SOUTH, INTERMITTENTLY LIES WITHIN OR IMMEDIATELY ADJACENT TO THE COASTAL REGION. ALL SEWAGE FROM THE COASTAL REGION IS COLLECTED AND CONVEYED TO THE CARSON TREATMENT FACILITY BY THE TRUNK LINE.

THE SEWERAGE SYSTEM IS PRIMARILY DESIGNED AS A GRAVITY FEED SYSTEM, BUT BECAUSE OF THE VARIED TOPOGRAPHIC CONDITIONS, PUMPING STATIONS ARE EMPLOYED AT VARIOUS POINTS THROUGHOUT ITS LENGTH. THREE SANITATION DISTRICT PUMP STATIONS ARE CURRENTLY LOCATED WITHIN THE COASTAL REGION (SUBREGIONS 2, 3 AND 5).

CURRENTLY, THE SEWAGE SYSTEM APPEARS TO BE FUNCTIONING ADEQUATELY. FURTHERMORE, BOTH THE COUNTY ENGINEER AND SANITATION DISTRICT HAVE INDICATED THAT THE ACTIVITIES GENERATED BY THIS PLAN SHOULD NOT CAUSE SERVICE PROBLEMS (CID, 1/6/77 AND PARKHURST, 12/21/76). THE SEWERAGE SYSTEM WITHIN THE COASTAL REGION IS NOT WITHOUT PROBLEMS, HOWEVER, AND MOST ARE ASSOCIATED WITH THE PORTUGUESE BEND LANDSLIDE. FOR EXAMPLE, PREVIOUSLY UNDETECTED EARTH MOVEMENT AT THE ABALONE COVE PUMP STATION RECENTLY CAUSED A BREAK IN THE INLET LINE, WHICH IN TURN CAUSED ENVIRONMENTAL AND HEALTH PROBLEMS; THEREFORE THE FACILITY WILL BE RELOCATED IMMEDIATELY ADJACENT TO THE COASTAL REGION. IN ADDITION, THROUGHOUT THE ENTIRE WIDTH OF THE PORTUGUESE BEND LANDSLIDE (SUBREGION 5) THE TRUNK LINE IS, OF NECESSITY, ABOVE GRADE, MANIFESTING ITSELF AS ONE OF THE MORE ADVERSE VISUAL CONDITIONS IN THE COASTAL REGION.

WHILE MOST DEVELOPED AREAS ARE SERVED BY PUBLIC SEWERS, THERE ARE CERTAIN AREAS WITHIN THE COASTAL REGION THAT ARE NOT. RANGING FROM RESIDENTIAL TO PUBLIC USES, THE ALTERNATIVE DISPOSAL SYSTEMS INCLUDE SEPTIC TANKS (OR EQUAL), AND A PRIVATE SEWERAGE SYSTEM WHICH CONNECTS WITH THE PUBLIC LINE. THEY ARE FOUND IN SUBREGIONS 1, 2, 5 AND 6, AND, WHILE NONE ARE KNOWN TO BE A PROBLEM, EACH IS IDENTIFIED IN ITS RESPECTIVE SUBREGION SECTION AND DISCUSSED AS APPROPRIATE.

ACCORDING TO AGENCY REPRESENTATIVES, FUTURE DEVELOPMENT PROPOSED BY THIS PLAN WILL NOT HAVE AN ADVERSE IMPACT ON EXISTING FACILITIES; HOWEVER, IT IS FURTHER STATED THAT NEW DEVELOPMENT IN SUBREGIONS 1 AND 7 MAY REQUIRE PUMPING FACILITIES, DUE TO THE GRADE DIFFERENTIALS FROM DEVELOPABLE AREAS TO THE TRUNK LINE. IT SHOULD BE POINTED OUT, HOWEVER, THAT THE USE OF MULTIPLE PUMP STATIONS HAS DISADVANTAGES, SUCH AS:

1. HIGH INSTALLATION, OPERATION, AND MAINTENANCE COSTS.
2. USE OF ENERGY.

FLOOD CONTROL

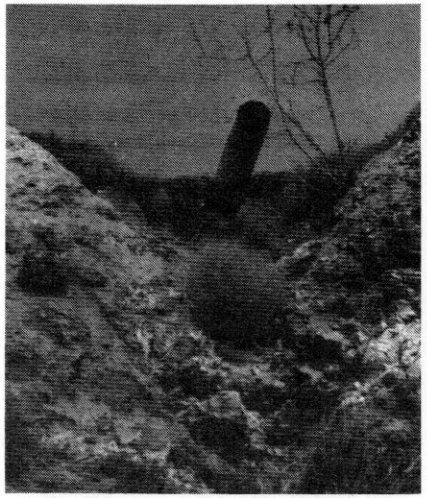
WITHIN THE COASTAL REGION AND THROUGHOUT THE CITY, THE COUNTY FLOOD CONTROL DISTRICT AND THE COUNTY ROAD DEPARTMENT ARE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF FLOOD CONTROL CHANNELS, STORM DRAINS, AND CULVERTS. MOST DRAINS ARE CONSTRUCTED BY DEVELOPERS AS PART OF THE SUBDIVISION PROCESS AND THEN TRANSFERRED TO THE APPROPRIATE AGENCY.

AT THE PRESENT TIME, THE FLOOD CONTROL NETWORK IN THE COASTAL REGION IS LIMITED TO A FEW STORM DRAINS AND SEVERAL CULVERTS. THE STORM DRAINS ARE LIMITED PRIMARILY TO THE DEVELOPED AREAS, WHILE CULVERTS RUN BENEATH PALOS VERDES DRIVE WEST/SOUTH AND OTHER STREETS.

SEVERAL DRAINAGE DEFICIENCIES HAVE BEEN IDENTIFIED WITHIN THE COASTAL REGION, HOWEVER, NONE ARE RECOGNIZED BY THE FLOOD CONTROL DISTRICT AS HAVING A HIGH PRIORITY. THE FLOOD CONTROL DISTRICT HAS STATED THAT DRAINAGE DEFICIENCIES ARE EVALUATED IN COMPETITION WITH OTHERS THROUGHOUT THE DISTRICT; ONLY THOSE WHICH COMPARE FAVORABLY AFTER A COST-BENEFIT ANALYSIS WILL BE CONSIDERED

FOR FUTURE CONSTRUCTION BY THE DISTRICT (WILT, 1/11/77). THE ACTIVITIES INDUCED BY THIS PLAN ARE NOT CONSIDERED TO BE AN ADVERSE IMPACT TO THE EXISTING SYSTEM OR TO EXISTING DEVELOPMENT. THIS IS DUE PRIMARILY TO THE LINEAR NATURE AND TOPOGRAPHIC CHARACTERISTICS OF THE COASTAL REGION. IT SHOULD BE STATED THAT THE COASTAL REGION MAY EXPERIENCE ADVERSE CONDITIONS WHICH RESULT FROM DEVELOPMENT UPSTREAM; HOWEVER, IT IS HOPED THAT SUCH DEVELOPMENTS WILL BE DESIGNED TO MINIMIZE THIS THREAT (G.P., PAGE 112, POLICY 4). NEW DEVELOPMENTS WILL BE REQUIRED, AS A CONDITION OF APPROVAL, TO INSTALL DRAINAGE FACILITIES TO CITY (COUNTY) STANDARDS, WHICH, IN TURN, ARE REVIEWED AND TRANSFERRED TO THE FLOOD CONTROL DISTRICT FOR OPERATION AND MAINTENANCE.

EXCESSIVE EROSION IS IDENTIFIED BY BOTH THE CITY AND FLOOD CONTROL DISTRICT AS A PROBLEM. WHILE SOME EROSION IS NATURAL AND CONSIDERED POSITIVE, THERE ARE LOCATIONS WITHIN THE COASTAL REGION WHERE EROSION HAS POSED A PROBLEM. EXCESSIVE EROSION OFTEN OCCURS AT AN INTERFACE, THAT IS, AN AREA WHERE NATURAL AND URBAN SYSTEMS MEET; HOWEVER, THE PROBLEM HAS BEEN PARTICULARLY EVIDENT ON THE BLUFF FACE. CURRENTLY, MANY FLOOD CONTROL CHANNELS ARE DESIGNED SO THAT RUNOFF (VERY OFTEN MORE THAN WOULD NATURALLY OCCUR) IS ALLOWED TO FLOW AT INCREASED VELOCITY FROM THE CHANNEL ONTO THE BLUFF FACE, THEREBY CAUSING EXCESSIVE EROSION. THE FLOOD CONTROL DISTRICT HAS INDICATED THAT INVESTIGATION IS UNDERWAY WHICH IS INTENDED TO RESULT IN A DESIGN THAT WILL DELIVER RUNOFF TO THE OCEAN WITHOUT CAUSING EXCESSIVE EROSION OR WITHOUT THE NECESSITY FOR AESTHETICALLY UNACCEPTABLE DESIGN.



A PROGRAM WHICH WAS RECENTLY INITIATED BY THE FLOOD CONTROL DISTRICT IS THAT OF LANDSCAPING AND ALLOWING JOINT USE OF DISTRICT RIGHTS-OF-WAY. ALTHOUGH THE PROGRAM HAS LIMITED RESOURCES TO IMPLEMENT IT, THE INTENT IS TO PROVIDE LOW-LEVEL MAINTENANCE LANDSCAPING ON THOSE RIGHTS-OF-WAY WHICH HAVE A HIGH DEGREE OF PUBLIC EXPOSURE AND TO ALLOW FOR PUBLIC USES, SUCH AS TRAILS, PARKS, ETC., WHEN THE AGENCY PROPOSING SUCH A USE AGREES TO REGULATE AND MAINTAIN THE ACTIVITIES. THIS PROGRAM MAY VERY WELL BE IMPORTANT TO THE IMPLEMENTATION OF CERTAIN ASPECTS OF THIS PLAN.

TRANSPORTATION SYSTEMS

VEHICULAR NETWORK

OF THE FOUR OR FIVE DISTINCT PHYSICAL ELEMENTS WHICH CHARACTERIZE THE COASTAL REGION, THE VEHICULAR NETWORK IS AMONG THE MOST VISIBLE AND IS PERHAPS THE SINGLE, MOST IMPORTANT ELEMENT IN TERMS OF HOW THE URBAN ENVIRONMENT FUNCTIONS. IN ADDITION TO MOVING CARS, THE VEHICULAR NETWORK PROVIDES A LOGICAL BOUNDARY FOR THE COASTAL REGION. IT IS AMONG

THE MOST COSTLY ASPECTS OF THE COASTAL SPECIFIC PLAN AREA, AND IT IS ONE OF THE FUNDAMENTAL CRITERIA FOR DETERMINING LAND USE. ALTHOUGH THESE FACTORS ARE ALL INTERRELATED, THIS SECTION PRIMARILY DISCUSSES FUNCTIONAL ASPECTS OF THE NETWORK, WHILE THE VISUAL AND FISCAL CONSIDERATIONS ARE DISCUSSED IN THE CORRIDORS AND FISCAL SECTIONS, RESPECTIVELY.

AS DEFINED IN THE GENERAL PLAN (G.P., PAGE 116), VEHICULAR NETWORKS REFER TO A STREET SYSTEM MADE UP OF A VARIETY OF PUBLIC AND PRIVATE STREETS, EACH HAVING ITS OWN FUNCTIONAL CHARACTERISTICS. WITHIN THE COASTAL REGION THE STREET SYSTEM CONSISTS OF TWO FUNCTIONAL LEVELS: ARTERIAL AND LOCAL. THE ARTERIAL IS THE MAJOR STREET AND IS PRIMARILY INTENDED TO PROVIDE FOR THE MOVEMENT OF TRAFFIC THROUGH A GIVEN AREA. LOCAL STREETS CAN GENERALLY BE EITHER PUBLIC OR PRIVATE, AND PROVIDE DIRECT ACCESS TO RESIDENCES OR OTHER ACTIVITIES.

ARTERIAL STREETS

FORMING THE COASTAL REGION'S INLAND BOUNDARY, PALOS VERDES DRIVE WEST, PALOS VERDES DRIVE SOUTH, AND 25TH STREET ARE ACTUALLY A SINGLE, CONTINUOUS STREET WHICH IS THE ONLY ARTERIAL ALONG THE COASTAL REGION (HEREAFTER REFERRED TO AS THE "COASTAL REGION ARTERIAL"). TWO OTHER ARTERIALS INTERSECT THE COASTAL REGION ARTERIAL; HOWEVER, NEITHER HAWTHORNE BOULEVARD NOR PALOS VERDES DRIVE EAST CONTINUE PAST THE INTERSECTION. THE COASTAL REGION ARTERIAL VARIES IN DESIGN; HOWEVER, THE FUNCTION REMAINS CONSTANT THROUGHOUT ITS LENGTH. ON ITS NORTHERN-MOST SEGMENT (PALOS VERDES DRIVE WEST) IT IS A FOUR-LANE DIVIDED ROAD WHICH WILL SHORTLY UNDERGO SUBSTANTIAL IMPROVEMENTS, WHICH INCLUDE A REDUCED MEDIAN AND INCORPORATION OF AN OFF-ROAD BIKEWAY AND WALKWAY. PALOS VERDES DRIVE SOUTH CHANGES FROM A FOUR-LANE DIVIDED ROAD TO A TWO-LANE UNDIVIDED ROAD. IT IS ALSO THAT PORTION OF THE COASTAL REGION ARTERIAL WHICH TRAVERSES THE INFAMOUS PORTUGUESE BEND LANDSLIDE. 25TH STREET IS A SHORT TWO-LANE SEGMENT WHICH CONTINUES INTO THE CITY OF LOS ANGELES (SAN PEDRO).

CURRENTLY, THE COASTAL REGION ARTERIAL OPERATES ADEQUATELY MOST OF THE TIME AND, WITH THE EXCEPTION OF THE SEGMENT WHICH CROSSES THE ACTIVE LANDSLIDE, IS IN SATISFACTORY CONDITION. FOR THE MOST PART THE COASTAL REGION ARTERIAL IS UNIMPROVED (E.G., CURB, GUTTER, LANDSCAPING, ETC.); HOWEVER, IT IS FELT THAT THIS UNIMPROVED CONDITION DOES NOT IMPACT ITS PRIMARY FUNCTION. THERE ARE AREAS, PARTICULARLY ADJACENT TO GOLDEN COVE SHOPPING CENTER, THAT HAVE CURB AND GUTTER.

THE CURRENT RECOMMENDED CAPACITY FOR THE COASTAL REGION ARTERIAL RANGES FROM 3500 CARS/HOUR (PER BARREL) ON THE FOUR-LANE SEGMENT IN THE NORTH, TO 1000 CARS/HOUR (PER LANE) FOR THE TWO-LANE SEGMENTS IN THE SOUTHEAST. THESE ESTIMATED CAPACITIES WERE BASED ON INFORMATION SUPPLIED BY WILBER SMITH AND ASSOCIATES AS PART OF THE STREET STANDARDS STUDY. (REFER TO TRANSPORTATION AND TRAFFIC ENGINEERING HANDBOOK, INSTITUTE OF TRAFFIC ENGINEERS, FOR FURTHER DETAIL.) ALL CAPACITIES ARE BASED ON A LEVEL OF SERVICE "E", AS ESTABLISHED IN THE HIGHWAY CAPACITY MANUAL. THE HIGHWAY CAPACITY MANUAL (PAGE 7) DESCRIBES LEVEL OF SERVICE AS FOLLOWS:

LEVEL OF SERVICE A

- FREE FLOW CONDITIONS
- LOW VOLUMES
- HIGH OPERATING SPEEDS
- UNINTERRUPTED FLOW
- NO RESTRICTION ON MANEUVERABILITY
- DRIVERS MAINTAIN DESIRED SPEEDS
- LITTLE OR NO DELAYS

LEVEL OF SERVICE B

- STABLE FLOW CONDITION
- OPERATING SPEEDS BEGINNING TO BE RESTRICTED
- DESIGN LEVEL FOR RURAL CONDITIONS

LEVEL OF SERVICE C

- STABLE FLOW BUT SPEED AND MANEUVER ABILITY RESTRICTED BY HIGHER TRAFFIC VOLUMES
- SATISFACTORY OPERATING SPEED FOR URBAN CONDITIONS

LEVEL OF SERVICE D

- APPROACHING UNSTABLE FLOW
- TOLERABLE SPEEDS MAINTAINED
- TEMPORARY RESTRICTIONS
- LITTLE FREEDOM TO MANEUVER

LEVEL OF SERVICE E (CAPACITY)

- LOWER OPERATING SPEED (APPROXIMATELY 30 M.P.H.)
- VOLUMES AT OR NEAR CAPACITY
- UNSTABLE FLOW
- MOMENTARY STOPPAGES

LEVEL OF SERVICE F

- FORCED FLOW CONDITIONS
- LOW SPEEDS
- VOLUMES BELOW CAPACITY, MAY BE ZERO
- STOPPAGES FOR SHORT OR LONG PERIODS BECAUSE OF DOWNSTREAM CONGESTION

RECENT TRAFFIC COUNTS SHOW THAT PEAK HOUR TRAFFIC ON A TYPICAL WEEKDAY MORNING DOES NOT EXCEED RECOMMENDED CAPACITY OF THE COASTAL REGION ARTERIAL; HOWEVER, THESE COUNTS ALSO SHOW THAT WEEKEND TRAFFIC WILL APPROACH RECOMMENDED CAPACITY (LEVEL E) IN SOME AREAS. THE CAPACITY-DEFICIENT SEGMENTS ARE PRIMARILY LOCATED IN THE SOUTHEAST PORTION OF THE COASTAL REGION WHERE CAPACITY IS LOW. TABLE 10 COMPARES CAPACITIES AND ACTUAL VOLUMES FOR A TYPICAL WEEKDAY MORNING AND A WEEKEND (TOURIST) PEAK AT EACH OF THE COUNT LOCATIONS WITHIN THE COASTAL REGION.

ELSEWHERE ON THE PENINSULA, TRAFFIC GENERALLY FUNCTIONS ADEQUATELY, EXCEPT FOR PEAK HOURS ALONG PALOS VERDES DRIVE NORTH FROM HAWTHORNE BOULEVARD TO JUST WEST OF PALOS VERDES DRIVE EAST. THE INTERSECTION OF PALOS VERDES DRIVES NORTH AND WEST ALSO EXPERIENCES TRAFFIC CONGESTION AT PEAK HOURS.

THE ONLY TRAFFIC SIGNAL WHICH REGULATES TRAFFIC FLOW ON THE COASTAL REGION ARTERIAL IS LOCATED AT THE PALOS VERDES DRIVE WEST/ HAWTHORNE INTERSECTION AND IT APPEARS TO FUNCTION ADEQUATELY. ALL OTHER ROADS INTERSECTING THE COASTAL REGION ARTERIAL ARE CONTROLLED BY BOULEVARD STOPS. OTHER CONTROL DEVICES INCLUDE THE TYPICAL REGULATORY, WARNING AND INFORMATIONAL SIGNS AND MARKINGS.

EXISTING TRAFFIC VOLUMES AND CAPACITIES

TABLE 10

	REC. CAP. (LEVEL 'E')	PEAK HR. (AM) WEEKDAY TRAFFIC	% CAP.	PEAK HR. WEEKEND TRAFFIC	% CAP.
PALOS VERDES DRIVE WEST N/O BERRY HILL	3500	563	16	926	26
PALOS VERDES DRIVE WEST N/O HAWTHORNE BLVD.	3500	392	12	779	22
HAWTHORNE BLVD. E/O P.V. DRIVE WEST	3500	375	10	536	15
PALOS VERDES DRIVE WEST S/O HAWTHORNE BLVD.	3500	363	10	822	23
PALOS VERDES DRIVE SOUTH E/O SEAHILL	3500	387	11	911	26
PALOS VERDES DRIVE SOUTH E/O PEPPERTREE	1000	349	35	863	86
PALOS VERDES DRIVE SOUTH W/O P.V. DRIVE EAST	1000	539	54	859	86
25TH STREET E/O P.V. DRIVE EAST	1000	512	49	797	80

SPEEDS ON THE COASTAL REGION ARTERIAL ARE POSTED ON THE RIGHT-OF-WAY AND RANGE FROM 45 M.P.H. IN THE NORTH TO 40 M.P.H. IN THE SOUTHEAST, WITH A SPEED LIMIT WARNING OF 25 M.P.H. THROUGH THE SLIDE AREA WHERE ROAD CONDITIONS WARRANT MORE CAUTION. THE CURRENT SPEED LIMITS APPEAR TO BE APPROPRIATE FOR THE DESIGN AND FUNCTION OF THE ROAD. BASED ON A REQUEST TO THE CITY COUNCIL TO LOWER THE SPEED LIMIT ON PALOS VERDES DRIVE WEST, THE CITY'S TRAFFIC ADVISOR PREPARED A REPORT ON THE ISSUE AND IT WAS DETERMINED THAT THE 45 M.P.H. SPEED ZONING IS APPROPRIATE (BROHARD, 2/20/76). THE SPEED LIMIT FROM THE SLIDE AREA EASTWARD WAS RECENTLY UPGRADED FROM 35 TO 40 M.P.H., BASED ON A STUDY OF THE APPROPRIATE WARRANTS.

CURRENTLY, WITHIN THE COASTAL REGION, SEVERAL ITEMS ARE LOOKED UPON AS PROBLEMS. (SEE THE GENERAL PLAN FOR PROBLEMS OUTSIDE, BUT RELATED TO THE COASTAL REGION.)

- AS PREVIOUSLY IDENTIFIED, THE PORTUGUESE BEND LANDSLIDE IS PROBABLY THE MOST SIGNIFICANT PROBLEM CONFRONTING LAND USE AND CIRCULATION. CONSTANT MOVEMENT NECESSITATES ALMOST CONSTANT ROAD REPAIRS, WHICH ARE ESTIMATED TO COST IN THE RANGE OF $50,000 PER YEAR TO MAINTAIN THIS ONE-MILE SEGMENT OF ROADWAY. IN ADDITION TO THE COST FACTOR, THE ROADWAY POSES A TRAFFIC SAFETY HAZARD IN THAT IT IMPEDES NORMAL TRAFFIC FLOW, AND IT HAS BEEN SHOWN THAT KNOWLEDGABLE DRIVERS WILL AVOID IT, IF POSSIBLE. WHEN RECENT TRAFFIC

COUNTS FOR THE COASTAL REGION AT THE PEAK HOURS ON A WEEKDAY ARE DISPLAYED VISUALLY, IT IS POSSIBLE TO DETECT A "FUNNEL" CONFIGURATION IN THE LANDSLIDE AREA, TENDING TO INDICATE THAT EVERYDAY COMMUTERS WILL AVOID THE CONDITIONS WHEREAS, A SIMILAR DISPLAY FOR A WEEKEND PEAK HOUR ILLUSTRATES LITTLE OR NO "FUNNEL" (SEE SUBREGION 5 FOR FURTHER DISCUSSION).

- ANOTHER AREA IDENTIFIED AS A PROBLEM IS THE INTERSECTION OF PALOS VERDES DRIVE SOUTH AND PALOS VERDES DRIVE EAST. THE INTERSECTION IS A POORLY DESIGNED "Y" CONFIGURATION WITH SOUTHBOUND TRAFFIC FROM PALOS VERDES DRIVE EAST MERGING UNDER A YIELD CONDITION TO THE WEST AND WITH A STOP TO THE EAST. EASTBOUND TRAFFIC ON PALOS VERDES DRIVE SOUTH WISHING TO TURN LEFT IS PROVIDED A SHELTERED LEFT TURN POCKET AND A STOP SIGN WHILE WESTBOUND TRAFFIC HAS NO CONTROLS. AT THE PRESENT TIME, THE INTERSECTION HAS NOT CAUSED MAJOR PROBLEMS BUT IS TERMED MARGINALLY ACCEPTABLE. AS TRAFFIC VOLUMES INCREASE, IT IS EXPECTED THAT THE PROBLEM COULD WORSEN. THE AREA AROUND THE INTERSECTION IS LARGELY UNDEVELOPED AND THE POTENTIAL TO OBTAIN ADDITIONAL RIGHT-OF-WAY AND IMPROVEMENT IS GOOD.

- TRAFFIC COUNTS TAKEN FOR THIS ANALYSIS INDICATE THAT WHILE TYPICAL WEEKDAY PEAK HOUR TRAFFIC IS NOT A PROBLEM, WEEKEND PEAK HOUR TRAFFIC IS, OR AT LEAST CAN BE A SUBSTANTIAL PROBLEM. THE FOUR-LANE SEGMENTS OF THE COASTAL REGION ARTERIAL ARE NOT PRESENTLY IMPACTED, BUT THE TWO-LANE SEGMENTS ARE NEARING AN IMPACTED LEVEL DURING WEEKEND PEAK HOURS. WEEKEND PEAK HOUR TRAFFIC FOR THE DAYS STUDIED SHOWED ALMOST DOUBLE THE TRAFFIC THAN A COMPARABLE WEEKDAY PERIOD. THE FUNDAMENTAL REASON FOR THIS SUBSTANTIAL INCREASE IS THAT THE PALOS VERDES COASTLINE IS AN ATTRACTOR. THE COASTLINE OFFERS A UNIQUE PHYSICAL ENVIRONMENT (BLUFFS, SHORELINE, VIEW, ETC.), PUBLIC FACILITIES (RECREATIONAL AND CULTURAL), AND COMMERCIAL RECREATION (MARINELAND). THE RESULT CAN BE, ON A ''GOOD'' DAY, AN INFLUX OF PEOPLE (CARS) FROM THROUGHOUT SOUTHERN CALIFORNIA WITH THE POTENTIAL OF CAUSING MAJOR CIRCULATION PROBLEMS IN THE EASTERN PORTION OF THE COASTAL REGION.

- TRAFFIC ACCIDENTS ARE NOT CONSIDERED TO BE A SIGNIFICANT PROBLEM, BUT THERE ARE AREAS WITHIN THE COASTAL REGION WHERE MORE ACCIDENTS ARE GENERALLY KNOWN TO OCCUR.

1) THE INTERSECTION OF PALOS VERDES DRIVES SOUTH AND EAST

2) THE INTERSECTION OF PALOS VERDES DRIVE WEST AND HAWTHORNE BOULEVARD

3) PALOS VERDES DRIVE SOUTH AT THE POINT VICENTE CURVE

4) SCHOONER DRIVE AND PALOS VERDES DRIVE SOUTH.

AN ANALYSIS OF ACCIDENT RECORDS INDICATES THAT MOST ACCIDENTS ARE CAUSED BY DRIVER ERROR OR CARELESSNESS AND FEW CAN BE BLAMED ON ROAD DESIGN OR CONDITIONS. NIGHTTIME ACCIDENTS ACCOUNT FOR ABOUT 41% OF THE TOTAL OF WHICH AN EXTREMELY HIGH PERCENTAGE INVOLVE VEHICLES RUNNING OFF THE ROAD (ABOUT 71%).

STATISTICS SHOW THAT DRIVER ERROR AND UNSAFE SPEEDS ARE GENERALLY THE PRIMARY ACCIDENT FACTORS. THE CITY STREET STANDARDS STUDY SHOULD ADDRESS ITSELF TO METHODS OF REDUCING ACCIDENTS.

IMPLEMENTATION OF THIS PLAN WILL MANIFEST ITSELF IN MANY WAYS (PHYSICAL, SOCIAL, ENVIRONMENTAL, AND FISCAL); HOWEVER, ONE OF THE MOST EVIDENT CHANGES WILL BE IN THE AREA OF TRAFFIC AND EXTENT OF VEHICULAR NETWORKS. IN THIS RESPECT, THE FOLLOWING LIST INCLUDES THE MOST APPARENT CHANGES:

- THE PLAN WILL GENERATE APPROXIMATELY 440 NEW DWELLING UNITS IN THE COASTAL REGION, WHICH HAVE THE POTENTIAL TO GENERATE UP TO 343 ADDITIONAL CARS TRAVELLING OUTBOUND ON A WEEKDAY MORNING.

- THE PLAN CALLS FOR THE ESTABLISHMENT OR EXPANSION OF ACTIVITIES THAT ARE REFERRED TO AS ''ATTRACTOR/GENERATORS'' WHICH WILL HAVE A SIGNIFICANT EFFECT ON WEEKEND TRAFFIC. ON A ''GOOD'' SUMMER SUNDAY THESE ACTIVITIES ALONE COULD GENERATE 1,245 INBOUND PEAK HOUR TRIPS.

- IT IS ESTIMATED THAT AT FULL DEVELOPMENT THE COASTAL REGION COULD SHOW AN INCREASE OF UP TO 5 MILES OF NEW STREETS (DEPENDING ON THE TYPE OF DEVELOPMENT).

THE FUTURE DESIGN AND IMPROVEMENT OF THE COASTAL REGION ARTERIAL WILL BE LARGELY RESPONSIBLE FOR THE SUCCESS OF THE COASTAL SPECIFIC PLAN, AS A WHOLE. THROUGHOUT THE GENERAL PLAN STUDIES, ONE OF THE DOMINANT FACTORS OF ROAD DESIGN WAS IDENTIFIED AS PHYSICAL CHARACTER. COASTAL SPECIFIC PLAN STUDIES AGAIN SHOWED THIS TO BE TRUE; HOWEVER, THE SPECTRUM OF PHYSICAL CONSTRAINTS NARROWED DOWN TO TWO VERY SUBSTANTIAL FACTORS: THE ACTIVE LANDSLIDE AT PORTUGUESE BEND; AND AN AREA OF MARGINAL STABILITY, KNOWN AS THE SOUTH SHORES LANDSLIDE SYSTEM. THE CONSTRAINTS CAUSED BY THE ACTIVE SLIDE ARE OBVIOUS. THE DESIGN CONSTRAINTS IMPOSED BY THE SOUTH SHORES SYSTEM WERE IDENTIFIED BY GEOLOGISTS THROUGH VARIOUS COMMUNICATIONS, IN WHICH IT WAS RECOMMENDED THAT MODIFICATION OF THE ''LANDSLIDE TERRAIN BY LARGE SCALE CUTTING OR FILLING'' SHOULD BE AVOIDED (ESA, VERBAL AND LETTER - 12/1/76). THE RESULT OF THE ABOVE FINDINGS IS MANIFEST IN THE RECOMMENDED ROAD DESIGN AND IMPROVEMENT FOR THE COASTAL REGION ARTERIAL, FROM AND INCLUDING THE PORTUGUESE BEND LANDSLIDE TO THE SOUTHEAST CITY BOUNDARY. (IT SHOULD BE NOTED THAT A ''STREET STANDARDS STUDY'' HAS BEEN INITIATED BY THE CITY. THE STUDY WILL INCLUDE AN ANALYSIS OF EXISTING VEHICULAR NETWORKS, TRAFFIC, SIGNING, LANDSCAPE, ETC., AND IS EXPECTED TO RESULT IN A SET OF RECOMMENDED STANDARDS TO BE USED IN THE DEVELOPMENT OF ALL EXISTING AND FUTURE STREETS.) BASED ON A THOROUGH EVALUATION OF PROPOSED LAND USE, PROJECTED TRAFFIC, PHYSICAL CONSTRAINTS, ETC., THE FOLLOWING RECOMMENDATIONS ARE MADE FOR THE FUTURE IMPROVEMENT AND DESIGN OF THE COASTAL REGION ARTERIAL (REFER TO ''CORRIDORS'' AND ''PATHS AND TRAILS'' ALSO):

- FROM THE PALOS VERDES ESTATES/RANCHO PALOS VERDES BOUNDARY TO ABOUT 300 FEET WEST OF THE PORTUGUESE BEND LANDSLIDE, THE ROADWAY SHOULD BE DESIGNED AS A FOUR-LANE DIVIDED ARTERIAL WHICH FEATURES A LANDSCAPED MEDIAN,

PARKING TURNOUTS AT SIGNIFICANT VIEWING AREAS, CURB/GUTTER, BIKEWAY, WALKWAY, AND LANDSCAPED SHOULDERS. A DESIGN HAS BEEN DEVELOPED AND CONSTRUCTION ON PALOS VERDES DRIVE WEST IS SCHEDULED TO BE INITIATED SOON. THIS DESIGN CONCEPT IS RECOMMENDED FOR THE REMAINING FOUR-LANE SEGMENT; HOWEVER, PHYSICAL CHARACTERISTICS IN THE POINT VICENTE AREA MAY REQUIRE DESIGN MODIFICATION.

- A TRANSITION ZONE IS NEEDED FROM THE ABOVE SEGMENT TO THE LANDSLIDE SEGMENT IN ORDER TO PROVIDE EFFICIENT AND SAFE MERGING TO THE SLIDE AREA SEGMENT (WITH SPECIAL EMPHASIS ON THE WEST BARREL). IT IS RECOMMENDED THAT A 300-FOOT TRANSITION ZONE BE DESIGNED WHICH INCLUDES: REDUCTION OF FOUR LANES TO TWO LANES AND GRADUAL ELIMINATION OF THE MEDIAN AND CURB/GUTTER.

- ACROSS THE SLIDE THE SITUATION IS NOT EXPECTED TO CHANGE; THEREFORE, A STATUS QUO DESIGN AND MAINTENANCE PROGRAM IS RECOMMENDED. IT IS ALSO RECOMMENDED THAT ALTERNATIVE SURFACE MATERIALS BE STUDIED ON A COST/BENEFIT BASIS TO DETERMINE THE BEST TREATMENT.

- FROM THE EDGE OF THE SLIDE TO A POINT ABOUT 300 FEET EAST OF THE SLIDE ANOTHER TRANSITION ZONE IS NECESSARY. THIS ZONE SHOULD BE DESIGNED SIMILAR TO THE TRANSITION ZONE ON THE WEST.

- FROM THE TRANSITION ZONE TO A POINT ABOUT 300 FEET FROM THE SOUTH SHORES LANDSLIDE SYSTEM IT IS RECOMMENDED THAT THE ROADWAY BE A TWO-LANE DIVIDED ARTERIAL WITH LANDSCAPED MEDIAN, PARKING TURNOUTS AT SIGNIFICANT VIEWING AREAS, CURB/GUTTER, BIKEWAY, WALKWAY, AND LANDSCAPED SHOULDERS.

- ANOTHER TRANSITION ZONE IS NECESSARY FROM THE PREVIOUS DIVIDED SEGMENT TO THE EDGE OF THE SOUTH SHORES SYSTEM. DESIGN SHOULD ALLOW FOR SAFE AND EFFICIENT TRAFFIC MERGING, SIMILAR TO OTHER TRANSITION ZONES.

- THE ROADWAY ACROSS THE SOUTH SHORES SYSTEM SHOULD UNDERGO LITTLE IN THE WAY OF CHANGE. IT IS FELT, HOWEVER, THAT IF IT IS DETERMINED TO BE GEOLOGICALLY FEASIBLE, A NARROW MEDIAN AND/OR OFF-ROAD BIKEWAY BE IMPLEMENTED.

- THE PALOS VERDES DRIVE SOUTH AND EAST INTERSECTION WILL REQUIRE REDESIGN TO ALLOW FOR EFFICIENT AND SAFE VEHICULAR FLOW. WHILE IT IS EXPECTED THAT THE STREET STANDARDS STUDY WILL PRESENT REDESIGN CONCEPTS, THE PRIMARY CHANGE SHOULD INVOLVE A LONGER TURNING POCKET ON PALOS VERDES DRIVE SOUTH (LEFT TO PALOS VERDES DRIVE EAST), LONGER MERGING ZONE ONTO PALOS VERDES DRIVE SOUTH, A ''STRAIGHTENING OUT'' OF THE INTERSECTION, AND CREATION OF BETTER SIGHT DISTANCES.

IMPROVEMENTS OF RELATED ITEMS, SUCH AS SIGNING, LANDSCAPING, AND PATHS AND TRAILS, ARE DISCUSSED IN THE PATHS AND TRAILS SECTION, THE CORRIDORS SECTION, AND THE PLANNING AND DESIGN GUIDELINES SECTION OF THIS PLAN.

THE ISSUE OF SIGNALING WAS ALSO EVALUATED. BASED ON THE PROJECTED TRAFFIC CONDITIONS, NO NEW TRAFFIC SIGNALS APPEAR TO BE WARRANTED. THIS ISSUE SHOULD BE PERIODICALLY REEVALUATED, AS TRAFFIC PATTERNS AND GENERATING FACTORS

MAY CHANGE. THE LOCATIONS THAT DESERVE SPECIAL MONITORING INCLUDE: THE MARINELAND ENTRANCE, THE SEAHILL INTERSECTION, AND THE PALOS VERDES DRIVE EAST INTERSECTION.

THE ABOVE-MENTIONED DESIGNS AND IMPROVEMENTS ARE NOT EXPECTED TO SIGNIFICANTLY CHANGE THE RECOMMENDED CAPACITY RATINGS; ALTHOUGH IT IS FELT THAT THE SOUTHEAST PORTION OF THE COASTAL REGION ARTERIAL COULD SHOW AN INCREASED CAPACITY (PROJECTED TRAFFIC ESTIMATES ASSUME NO INCREASE). IT SHOULD BE POINTED OUT, HOWEVER, THAT WHILE INCREASED CAPACITY WOULD GENERALLY RELIEVE CONGESTION INITIALLY, IN THE LONG RUN CONGESTION MAY REAPPEAR AS TRAFFIC FLOW TENDS TO EQUALIZE. IN FACT, IMPROVED ROAD CAPACITY CAN ACTUALLY CAUSE MORE TRAFFIC CONGESTION IF DRIVERS FEEL THAT THE ROUTE WITH THE IMPROVED CAPACITY BECOMES LESS BOTHERSOME THAN A PREVIOUSLY-USED ROUTE.

THE FOLLOWING SCENARIOS AND TRAFFIC ANALYSES WERE DERIVED FOR THIS PLAN (AN EXTENSION OF THE GENERAL PLAN) TO ILLUSTRATE ITS PROBABLE IMPACT AT VARIOUS LOCATIONS. THE RESULTS SHOULD BE CONSIDERED AS ''WORST CASE'' SITUATIONS (E.G., INTERIM PROFILE). THE ANALYSES SHOW THE IMPACT OF THE PLAN AT TWO LEVELS: COASTAL REGION AND PENINSULA. VARIATIONS FROM THE NORMAL METHODOLOGY ARE INCLUDED IF DETERMINED TO BE SIGNIFICANT.

FOR THE MOST PART, TRAFFIC WITHIN THE COASTAL REGION IS EXPECTED TO FUNCTION ADEQUATELY IN THE FUTURE. THE PORTUGUESE BEND LANDSLIDE WILL CONTINUE TO PRESENT ADVERSE CONDITIONS, AND THE TWO-LANE SEGMENTS OF THE COASTAL REGION ARTERIAL WILL APPROACH RECOMMENDED CAPACITY LIMITS ON WEEKDAY MORNINGS. WEEKEND TRAFFIC WILL CONTINUE TO GROW AND WILL VERY LIKELY BECOME ONE OF THE MOST IMPORTANT ISSUES FACING THE CITY. IN THAT RESPECT, IT IS ESTIMATED THAT THE TWO-LANE SEGMENTS WILL BE THE MOST IMPACTED AND COULD REACH A SATURATION POINT. ALTHOUGH MARINELAND HAS THE HIGHEST ''DRAW'' POTENTIAL (AN ESTIMATED 1,132 INBOUND PEAK HOUR CARS), RECREATION FACILITIES AND THE ''VIEW'' WILL ACCOUNT FOR LARGE QUANTITIES OF TRAFFIC. IT IS ESTIMATED THAT THE COASTAL REGION ATTRACTOR/GENERATORS COULD GENERATE 1,358 CARS DURING A PEAK WEEKEND HOUR (EXCLUDES RESIDENT TRIPS AND ''SIGHTSEERS'').

AT THE PENINSULA LEVEL, THE COASTAL SPECIFIC PLAN WILL HAVE ONLY A SLIGHT EFFECT FROM THAT IDENTIFIED IN THE GENERAL PLAN. SPECIFICALLY, THE GENERAL PLAN CALLED FOR A TOTAL OF 14,128 DWELLING UNITS AT BUILDOUT; THE COASTAL SPECIFIC PLAN WILL DECREASE THAT NUMBER BY 224, BRINGING THE TOTAL PROJECTED DWELLING UNITS TO 13,904. THIS AMOUNTS TO A CHANGE OF ABOUT 2%. THE RELATIONSHIP BETWEEN DWELLING UNITS AND TRAFFIC GENERATED IS DIRECT; THEREFORE, A SIMILAR DECREASE CAN BE EXPECTED WITH RESPECT TO TRAFFIC. IT SHOULD BE NOTED, HOWEVER, THAT THE INTERIM PROFILE USED FOR THE ANALYSIS WILL RESULT IN AN INCREASE OF 343 DWELLING UNITS. SINCE THE PREPARATION OF THE GENERAL PLAN, NEW TRAFFIC COUNTS HAVE BEEN MADE AND MORE INFORMATION IS AVAILABLE, WHICH HAS ALLOWED FOR A MORE DETAILED ANALYSIS. THE PREPARATION OF THE TRAFFIC ANALYSIS CHART FOR THE PENINSULA REFLECTS THE GENERAL PLAN METHODOLOGY, BUT WITH UPDATED NUMBERS AND INFORMATION. (SEE TABLE 11).

10/85

WEEKDAY/WEEKEND COASTAL REGION TRAFFIC ANALYSIS

TABLE 11

LOCATION	CURRENT WEEKDAY A.M. PEAK HOUR OUTBOUND	CURRENT OUTBOUND CAPACITY (LEVEL E)	% CAPACITY	PROJECTED WEEKDAY A.M. PEAK HOUR OUTBOUND	PROJECTED OUTBOUND CAPACITY (LEVEL E)	% CAPACITY
P.V. DRIVE WEST @ P.V.E. (BOUNDARY)	563	3500	16	843	3500	24
P.V. DRIVE WEST N/O HAWTHORNE	405	3500	12	608	3500	17
HAWTHORNE E/O P.V. DRIVE WEST	345	3500	10	517	3500	15
P.V. DRIVE WEST S/O HAWTHORNE	363	3500	10	545	3500	16
P.V. DRIVE SOUTH E/O SEAHILL	387	3500	11	581	3500	17
P.V. DRIVE SOUTH E/O PEPPERTREE	349	1000	35	524	1000	52
P.V. DRIVE SOUTH W/O P.V. DRIVE EAST	539	1000	54	809	1000	81
25TH STREET @ L.A. (BOUNDARY)	486	1000	49	728	1000	73
P.V. DRIVE EAST N/O P.V. DRIVE SOUTH	138	1000	14	241	1000	24
	CURRENT WEEKEND PEAK HOUR INBOUND	CURRENT OUTBOUND CAPACITY (LEVEL E)	% CAPACITY	PROJECTED WEEKEND PEAK HOUR INBOUND	PROJECTED INBOUND CAPACITY (LEVEL E)	% CAPACITY
P.V. DRIVE WEST @ P.V.E. (BOUNDARY)	926	3500	26	1200	3500	34
P.V. DRIVE WEST N/O HAWTHORNE	779	3500	22	1038	3500	30
HAWTHORNE E/O P.V. DRIVE WEST	536	3500	15	771	3500	22
P.V. DRIVE WEST S/O HAWTHORNE	822	3500	23	1266	3500	36
P.V. DRIVE SOUTH E/O SEAHILL	911	3500	26	1183	3500	34
P.V. DRIVE SOUTH E/O PEPPERTREE	863	1000	86	1130	1000	113
P.V. DRIVE SOUTH W/O P.V. DRIVE EAST	859	1000	86	1126	1000	113
25TH STREET @ L.A. (BOUNDARY)	797	1000	80	1058	1000	106
P.V. DRIVE EAST N/O P.V. DRIVE SOUTH	N/A					

THE COASTAL SPECIFIC PLAN PENINSULA TRAFFIC ANALYSIS (TABLE 12) SHOWS MUCH THE SAME RESULTS AS THAT OF GENERAL PLAN ANALYSIS. WITHIN RANCHO PALOS VERDES CITY BOUNDARIES (EXCLUDING THE COASTAL REGION), THE MOST IMPACTED LOCATIONS WILL INCLUDE: HAWTHORNE BOULEVARD FROM HIGHRIDGE ROAD TO BEYOND SHOREWOOD; AND PALOS VERDES DRIVE EAST, SOUTH OF MIRALESTE. OUTSIDE THE CITY BOUNDARIES, BUT MORE OR LESS PART OF THE CITY'S INTERNAL STREET SYSTEM (E.G., ROLLING HILLS ESTATES), THE MOST IMPACTED AREA WILL BE ON HAWTHORNE BOULEVARD AT INDIAN PEAK. WITHIN THE PENINSULA CORDON (AN IMAGINARY LINE WHICH ACTS AS A STATISTICAL BOUNDARY), THE NUMBER OF LOCATIONS WITH TRAFFIC PROBLEMS INCREASES, PRIMARILY DUE TO THE GEOGRAPHIC CHARACTERISTICS AND DEVELOPMENT PATTERNS OF THE PENINSULA. LOCATIONS WITH LIKELY TRAFFIC PROBLEMS WILL INCLUDE: PALOS VERDES DRIVE NORTH AT HAWTHORNE TO PALOS VERDES DRIVE EAST (ASSUMES UPGRADING OVER PRESENT CAPACITY), THE PALOS VERDES DRIVE WEST AND PALOS VERDES DRIVE NORTH ''TRIANGLE'', MIRALESTE DRIVE/9TH STREET AT WESTERN.

OUTSIDE THE PENINSULA CORDON, PACIFIC COAST HIGHWAY, HAWTHORNE BOULEVARD, AND WESTERN AVENUE WILL CONTINUE TO PRESENT RUSH HOUR TRAFFIC PROBLEMS, AS WILL THE TWO SOUTH BAY FREEWAYS (THE SAN DIEGO AND HARBOR).

LOCAL STREETS

LOCATED THROUGHOUT THE COASTAL REGION, LOCAL STREETS FORM AN INTERMITTENT WEB OF VEHICULAR NETWORKS WHICH ARE PRIMARILY A RESULT OF PAST DEVELOPMENT ACTIVITIES. PAST DEVELOPMENT STANDARDS, ZONING PRIOR TO INCORPORATION, AND PRIVATE NEEDS DICTATED VARIED DESIGNS WHICH RANGE FROM THE FULLY IMPROVED 64 FOOT WIDE PASEO DEL MAR TO THE 20 FOOT WIDE SPINDRIFT DRIVE (PRIVATE). THE STREETS VARY IN CONDITION, BUT GENERALLY ARE IN SATISFACTORY REPAIR, WITH THE EXCEPTION OF YACHT HARBOR DRIVE AS IT PROJECTS INTO THE EASTERN PERIPHERY OF THE ACTIVE LANDSLIDE. DUE TO THE INDIVIDUAL CHARACTERISTICS OF LOCAL STREETS, THEY ARE DISCUSSED AT THE SUBREGION LEVEL AS APPROPRIATE. TRAFFIC COUNTS ARE NOT AVAILABLE FOR LOCAL STREETS; HOWEVER, THEIR FUNCTION DOES NOT NORMALLY REQUIRE AN ANALYSIS OF THIS SORT.

WHETHER ROAD NETWORKS ARE HELD IN PUBLIC OR PRIVATE OWNERSHIP IS OF CRITICAL CONCERN IN THE COASTAL REGION. THE SHORELINE IS A PUBLIC RESOURCE WHICH COULD BE DENIED THROUGH THE GATING OR RESTRICTING OF COASTAL ROADS. IN ORDER TO ENSURE THE PUBLIC'S RIGHT TO ACCESS VIA ROADS, EXISTING AND PROPOSED ROADS SHOULD BE PUBLIC UNLESS IT IS DEMONSTRATED TO THE CITY'S SATISFACTION THAT A PRIVATE ROAD(S) WOULD NOT IMPEDE PUBLIC ACCESS TO THE SHORELINE. HOWEVER, THIS ACTION DOES NOT APPLY TO SUBREGION 6 SINCE IT WOULD CONFLICT WITH MAINTAINING THE EXISTING NEIGHBORHOOD (GENERAL PLAN POLICY #3 ON PAGE 78) AND LEAD TO THE OVERUSE OF THE FRAGILE MARINE HABITAT BY PROVIDING UNCONTROLLED PUBLIC ACCESS TO THE SHORELINE.

PUBLIC BLUFF ROADS WITH AN ADEQUATE SUPPLY OF PUBLIC PARKING ARE PROPOSED IN SUBREGION 1 AND 7 AND NO DEVELOPMENT SEAWARD OF THIS ROAD WILL OCCUR (SEE SUBREGIONS 1 AND 7 FOR FURTHER DISCUSSIONS).

PENINSULA TRAFFIC ANALYSIS

TABLE 12

LOCATION	CURRENT A.M. PEAK HOUR OUTBOUND	CURRENT OUTBOUND CAPACITY (LEVEL E)	% CAPACITY	PROJECTED A.M. PEAK HOUR OUTBOUND	PROJECTED OUTBOARD CAPACITY (LEVEL E)	% CAPACITY
CRENSHAW @ P.V. DRIVE NORTH*	1580	3500	45	1833	3500	52
CRENSHAW N/O SILVER SPUR	1359	3500	39	1576	3500	45
HAWTHORNE N/O HIGHRIDGE RD	1994	3500	57	2313	3500	66
HAWTHORNE W/O INDIAN PEAK	2085	3500	60	2419	3500	69
HAWTHORNE @ P.V. DRIVE NORTH*	1510	3500	43	1752	3500	50
MIRALESTE DR. @ WESTERN AVE *	630	1000	63	731	1000	73
P.V. DRIVE EAST N/O CREST RD	463	3500	13	537	3500	15
P.V. DRIVE EAST S/O MIRALESTE DR	615	1000	62	713	1000	71
P.V. DRIVE EAST @ P.V. DRIVE NORTH*	773	1000	77	897	1000	90
P.V. DRIVE NORTH W/O CRENSHAW	1095	1000	110	1270	1700	75
P.V. DRIVE NORTH W/O HAWTHORNE	877	1000	88	1017	1700	60
P.V. DRIVE NORTH E/O P.V. DRIVE EAST	1474	3500	42	1710	3500	49
P.V. DRIVE NORTH E/O SILVER SPUR	784	1000	78	909	1700	53
P.V. DRIVE NORTH @ WESTERN AVE *	1700	3500	49	1972	3500	56
P.V. DRIVE WEST @ P.V. DRIVE NORTH*	1500	1500	100	1740	1700	102
SILVER SPUR @ P.V. DRIVE NORTH*	673	1000	67	781	1000	78
WESTERN AVE S/O P.V. DRIVE NORTH	1303	3500	37	1511	3500	43
25TH STREET @ WESTERN AVE *	456	3500	13	529	3500	15

*PENINSULA CORDON LOCATIONS

PUBLIC TRANSPORTATION

Although the Southern California Rapid Transit District has attempted to increase bus transportation on the peninsula in the past few years, rider volume has been low and there are currently only two lines serving the coastline.

- Line 813 - This line originates in Downtown Los Angeles and terminates at Marineland. Relative to the coastal region its benefits include: 1) potential to significantly reduce Marineland traffic; 2) offers an alternative transportation source to employment centers in the South Bay (Del Amo) and Downtown L.A.; and 3) provides a good short distance transportation source within the peninsula.

- Line 869 - This line originates in Inglewood, serves Los Angeles International Airport, passes through the beach cities, and loops through and around the peninsula terminating at Marineland. As an alternative transportation source, this line offers service to Marineland which could help reduce Marineland traffic. Furthermore, this line provides transportation to the airport, employment centers, and the south bay beaches.

These lines have some beneficial impact to the City and more specifically to the coastal region; however, the extent to which they could benefit the area is substantial. Aside from the reduction of weekday traffic, should commuters use the system, the impact to weekend traffic, particularly to Marineland, could be enormously beneficial. For example, on a typical summer Sunday Marineland could generate about 3,285 cars (11,500 people). If a combined usage of the lines could transport only 10% of the people, traffic on the coastal region arterial could also show a 10% reduction. This reduction could also bring the impacted eastern portion of the coastal region arterial to a level of capacity which is more nearly acceptable (83% $\pm$).

PATH AND TRAIL NETWORKS

As an integral part of the locomotion component of the infrastructure, walkways, bikeways, and coastal access make up the classification referred to in this plan as ''Path and Trail Networks''. The importance of path and trail networks and their associated modes in the development of a balanced locomotion system cannot be underestimated. Of particular concern in this regard are bikeways and walkways. In addition to satisfying obvious recreation demands, as do coastal access points, the potential of bikeways and walkways as functioning transportation networks is becoming increasingly evident.

On a localized level, the importance of coastal path and trail networks is obvious in terms of recreational and transportation capabilities. It is important to be cognizant that recreational and environmental amenities found along the coastal area are of regional and state-wide significance. Therefore, the various path and trail networks should be designed to reflect the local and broader demands, while maintaining the unique character of the coastal area.

At the onset of this Plan, efforts to assess community demands pertaining to path and trail networks internal and adjacent to the study area were initiated. This assessment was handled through the Coastal Questionnaire depicted in Table 5. Respondents were asked to express their preference for various types of networks (equestrian, bikeways, walkways) along with general route location (along the bluff, adjacent to Palos Verdes Drive West and South), and shoreline access design (auto, pedestrian). Survey results reflected a low preference for equestrian trails. This lack of demand, along with the absence of present or proposed equestrian facilities along the San Pedro and Palos Verdes Estates common boundaries, placed a low priority on locating such networks within the coastal region.

Questionnaire results, along with the City's 1974 Bikeway Plan and the Path and Trail Network section of the General Plan, established preliminary type and route locations for the various network components. Through further analysis, localized topographic conditions, right-of-way requirements, capabilities of facilitating a proposed route via existing rights-of-way, etc., these preliminary routes have been more accurately located. Proposed path and trail networks were then compared with both County and State proposals and/or requirements to assess potential conflicts. As proposed, these networks were found to be compatible both in terms of route location and meet or exceed minimal design requirements as specified by these two entities.

The following discussion addresses both the individual types of paths and trails and the combined route corridors for the total network. Under their respective headings - bikeway, walkway, and coastal access - each mode is addressed as to its preferred route(s), safety problems, and design requirements. The combined corridor network discusses major route locations and service functionings along with inter-mode conflicts reflective of route adjacency within a common corridor.

Bikeways

Cycling activity can be grouped into two categories: recreational and transportational. Recreational cyclists include racers, tourers, exercisers, and pleasure riders. Transportation cyclists are not concerned with the competition, endurance or pleasure of riding as much as obtaining a specific destination point (i.e., school, home, store).

Design requirements for bike paths vary when considering whether one-way or two-way flows are to be facilitated. These requirements also fluctuate with respect to whether the path shares a route with another mode (i.e., along a roadway), or whether the cyclist will be facilitated on a separate path. Both the State and County have utilized a compatible bikeway classification system when addressing general route designs by type. This Plan incorporates the same system in order to provide a common basis with these entities. A description of these classifications is as follows:

OFF-ROAD: BIKEWAY - CLASS I A BIKEWAY DESIGNATED FOR THE EXCLUSIVE USE OF BICYCLES. CROSSFLOWS BY PEDESTRIANS AND MOTORISTS ARE MINIMIZED. IT IS USUALLY SEPARATED FROM MOTOR VEHICLE FACILITIES BY A SPACE OR PHYSICAL BARRIER. IT MAY BE ON A PORTION OF A STREET RIGHT-OF-WAY OR ON A SPECIAL RIGHT-OF-WAY NOT RELATED TO A MOTOR VEHICLE FACILITY; IT IS USUALLY GRADE SEPARATED BUT IT MAY HAVE STREET CROSSINGS AT DESIGNATED TRAFFIC CONTROLLED LOCATIONS. IT IS IDENTIFIED WITH GUIDE SIGNING AND ALSO MAY HAVE PAVEMENT MARKINGS.

ON-ROAD: BIKEWAY - CLASS II A BIKEWAY ON THE PAVED AREA OF A ROAD FOR PREFERENTIAL USE BY BICYCLES. IT IS USUALLY LOCATED ALONG THE EDGE OF THE PAVED AREA OUTSIDE THE TRAVELLED LANES OR BETWEEN THE PARKING LANE AND THE FIRST MOTOR VEHICLE LANE. IT IS IDENTIFIED BY ''BIKE LANE'' OR ''BIKE ROUTE'' GUIDE SIGNING ON THE PAVEMENT AND OTHER PAVEMENT MARKINGS OR SIGNING DEEMED APPROPRIATE TO GIVE ADEQUATE INSTRUCTIONS TO THE USERS OF THE FACILITY. BICYCLES USUALLY HAVE EXCLUSIVE USE OF A BIKE LANE FOR LONGITUDINAL TRAVEL, BUT MUST ACCOMMODATE CROSSFLOWS BY MOTORISTS AT DRIVEWAYS AND INTERSECTIONS AND ALSO BY PEDESTRIANS AT VARIOUS LOCATIONS.

ON-ROAD: SHARED ROUTE BIKEWAY - CLASS III A SHARED ROUTE IS A ROADWAY IDENTIFIED AS A BICYCLE FACILITY BY ''BIKE ROUTE'' GUIDE SIGNING ONLY. THERE ARE NO SPECIAL LANE MARKINGS AND BICYCLE TRAFFIC SHARES THE ROADWAY WITH MOTOR VEHICLES. SPECIAL REGULATIONS MAY BE ENACTED AND POSTED ALONG SUCH FACILITIES TO CONTROL MOTOR VEHICULAR SPEEDS OR RESTRICT PARKING TO ENHANCE BICYCLING SAFETY.

DESIGN REQUIREMENTS FOR THE VARIOUS CLASSES OF BIKEWAYS, MANDATED BY THE STATE, ADOPTED BY LOS ANGELES COUNTY, AND ADOPTED BY THE CITY THROUGH THIS PLAN, ARE DEPICTED IN TABLE 13. TABLES 14 AND 15 INDICATE MANDATED STATE MINIMUM REQUIREMENTS WHICH ARE TO BE UTILIZED FOR THE VARIOUS CYCLING SPEEDS AND SITUATIONS LISTED. SINCE THESE REQUIREMENTS ARE DIRECTED AT A DEGREE OF SPECIFICITY NOT ATTAINED THROUGH THIS PLAN, THEY HAVE BEEN LISTED HEREIN ONLY TO REFLECT MINIMAL STANDARDS. STANDARDS APPROPRIATE TO A SPECIFIC CASE SHOULD BE UTILIZED AS SUBSEQUENT ROUTE DESIGNS ARE DEVELOPED. HOWEVER, IN NO CASE CAN A BIKEWAY ROUTE DESIGN BE DEVELOPED UNDER STANDARD(S) WHICH DO NOT MEET OR EXCEED STATE MANDATED REQUIREMENTS.

ON-ROAD CYCLING ACTIVITY WILL BE FACILITATED ALONG PALOS VERDES DRIVES WEST AND SOUTH, AND 25TH STREET. A ONE-WAY BIKE LANE TRAVELLING WITH TRAFFIC WILL BE LOCATED ON EACH SIDE OF THE CORRIDOR. EXISTING OR REDESIGNED ROADWAY WOULD BE UTILIZED. A ''NO ON-STREET PARKING'' PROVISION WOULD BE ESTABLISHED THROUGHOUT THE CORRIDOR IN AN EFFORT TO ELIMINATE CONFLICTS WITH PARKED VEHICLES CAUSED BY PARKING MANEUVERS OR THE SUDDEN OPENING OF A VEHICLE DOOR. THE BIKE LANE WOULD BE DESIGNED FOR CYCLISTS REACHING SPEEDS OF 20 M.P.H. OR GREATER. ON-ROAD BIKE LANES SHOULD BE DESIGNED WHEREVER POSSIBLE AS CLASS II BIKEWAYS.

DESIGN REQUIREMENTS FOR BIKEWAYS

TABLE 13

	STATE	COUNTY	CITY
CLASS I			
ONE-WAY	5′	6′	••
TWO-WAY	8′	10′	••
CLASS II			
ON-STREET PARKING STRIPED STALL	13½′	13′	••
ON-STREET PARKING NO STRIPED STALL	11′	8′ •	••
NO ON-STREET PARKING	4′	5′	••

• EMERGENCY PARKING ONLY

•• THE CITY'S STREET STANDARDS ARE PRESENTLY UNDER REVIEW

DESIGN SPEED REQUIREMENTS FOR BIKEWAYS

TABLE 14

	MINIMUM DESIRABLE DESIGN SPEED (MPH)
URBAN	15
OPEN COUNTRY	20
LONG DOWNGRADES	30

THE NATURE OF ON-ROAD BIKEWAYS IS SUCH THAT CERTAIN AUTO-BICYCLE CONFLICTS ARE INEVITABLE, PARTICULARLY AT INTERSECTIONS. VARIOUS INTERSECTION CONFLICTS ARE DELINEATED IN FIGURE 19. MOST AUTO-BICYCLE ACCIDENTS WILL OCCUR AT THESE LOCATIONS WITH THE MOST PREVALENT TYPE OF ACCIDENT INVOLVING STRAIGHT-THROUGH CYCLISTS AND RIGHT-TURNING MOTORISTS. LEFT-TURNING CYCLISTS WILL ALSO INCUR SIGNIFICANT SAFETY PROBLEMS, AS THE BIKE LANE IS ON THE RIGHT SIDE OF THE STREET AND THE CYCLIST HAS TO CROSS THE PATH OF CARS TRAVELLING IN BOTH DIRECTIONS. THIS SITUATION WILL BE MORE CRITICAL AT THE INTERSECTION OF PALOS VERDES DRIVES SOUTH AND EAST, AND 25TH STREET, DUE TO THE POOR INTERSECTION CONDITIONS AT THIS LOCATION.

DESIGN SPEED REQUIREMENTS FOR BIKEWAYS **TABLE 15**

	10 (MPH)	15 (MPH)	20 (MPH)	25 (MPH)	30 (MPH)
SIGHT DISTANCE (STOPPING)	50′	80′	120′	160′	200′
HORIZONTAL ALIGNMENT •	15′	35′	65′	100′	140′

• MINIMUM RADIUS

INTERSECTION CONFLICTS CAN BE MITIGATED THROUGH THE USE OF SIGNS, PAVEMENT MARKINGS, AND TRAFFIC SIGNALS. SIGNS AND PAVEMENT MARKINGS CAN ALERT MOTORISTS TO THE PRESENCE OF BIKE LANES AND TO POTENTIAL INTERSECTION CONFLICTS. PAVEMENT MARKINGS COULD ALSO DELINEATE THE LOCATION OF THE BIKE LANE. WHERE WARRANTED, TRAFFIC SIGNALS COULD BE UTILIZED TO ASSIGN RIGHT-OF-WAY.

OFF-ROAD CYCLING ACTIVITIES WILL BE LOCATED ADJACENT TO PORTIONS OF PALOS VERDES DRIVE SOUTH/WEST AND 25TH STREET AS WELL AS THREE LOOP CORRIDORS LOCATED THROUGHOUT THE COASTAL REGION. OFF-ROAD BIKEWAYS SHOULD BE DESIGNED AS CLASS I FACILITIES, WITH AS FEW CONFLICTS AS POSSIBLE.

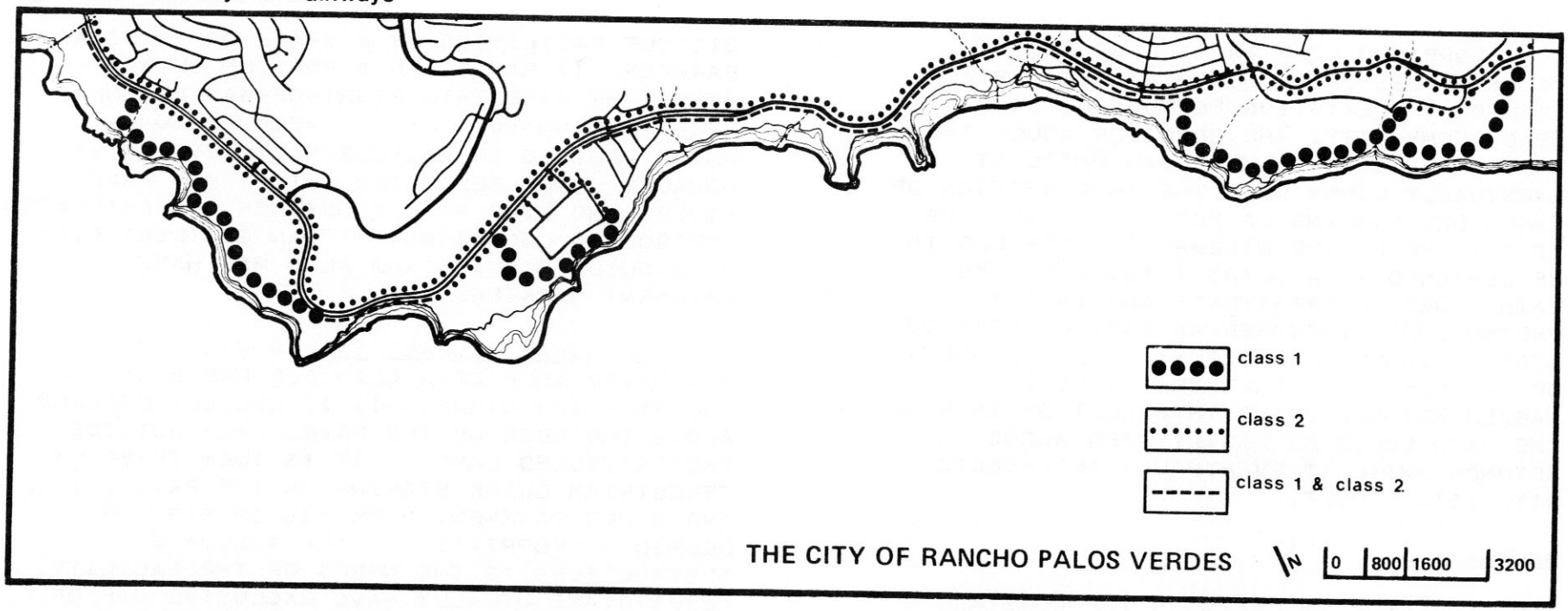
PRIMARY CORRIDOR BIKEWAY

- AN OFF-ROAD CLASS I BIKEWAY ASSOCIATED WITH THE PRIMARY CORRIDOR WILL BE LOCATED ALONG PORTIONS OF THE SEAWARD SIDE OF PALOS VERDES DRIVES WEST AND SOUTH, AND 25TH STREET IN ORDER TO MAKE A CONTINUOUS CLASS I BIKEWAY LINKING THE SECONDARY CORRIDOR LOOPS. FIGURE 21 DEPICTS THE CROSS SECTION FOR THIS SECTION OF BIKE PATH. THERE WILL BE CLASS II BIKEWAYS ON BOTH BARRELS OF PALOS VERDES DRIVES WEST AND SOUTH AND 25TH STREET, AS THE PRIMARY CORRIDOR. ON SECONDARY CORRIDORS, THERE WILL BE CLASS I BIKEWAYS; WHERE THAT BIKEWAY MEETS THE PRIMARY CORRIDOR, IT WILL BE CONTINUED AS A CLASS I BIKEWAY PARALLELING THE CLASS II BIKEWAY. THERE SHALL BE NO DUPLICATION OF CLASS I BIKEWAYS IN THE COASTAL ZONE.

TOPOGRAPHIC CONSTRAINTS PRESENT AT POINT VICENTE, PORTUGUESE BEND AND 25TH STREET MAY HINDER THE ABILITY TO MAINTAIN A SEPARATED TWO-WAY PATH IN THESE SECTIONS. AT THESE LOCATIONS THE TYPICAL CLASS I SECTION MAY WARRANT MODIFICATION IN ORDER TO FACILITATE THE BIKE PATH. MODIFICATION COULD INVOLVE A NARROWING OR ELIMINATION OF THE 4-FOOT AREA BETWEEN THE BIKEWAY AND ROADWAY, AND/OR THE REDUCTION OF THE BIKE PATH WIDTH TO 8 FEET. IN ALL CASES, THE PHYSICAL SEPARATION OF THE BIKEWAY AND ROADWAY SHOULD BE MAINTAINED.

AS DISCUSSED ABOVE, PORTIONS OF THE

figure 19 bikeways & walkways



PRIMARY CORRIDOR WILL BE CLASS II BIKEWAYS IN THE SECTIONS WHERE THERE WILL BE SECONDARY CORRIDOR LOOPS.

SECONDARY CORRIDOR BIKEWAYS

- CORRIDOR LOOP #1 WILL FOLLOW THE BLUFF TOP ALONG THE BLUFF ROAD IN SUBREGION 1 AND THROUGH POINT VICENTE PARK IN THE NORTHERN PORTION OF SUBREGION 2. THE BIKEWAY WOULD BE A CLASS I, TWO-WAY, PATH. A TYPICAL CROSS SECTION IS SHOWN IN FIGURE 22. SAFETY RAILING MAY BE NECESSARY ON THE SEAWARD SIDE OF THIS PATH ALONG THOSE PORTIONS OF THE CORRIDOR WHICH LIE IN CLOSE PROXIMITY TO THE BLUFF TOP. CONFLICT POINTS WOULD BE MINIMIZED DUE TO THE PATH'S LOCATION ALONG THE SEAWARD EXTREMITY OF THE COASTLINE. THEREFORE, STREET AND DRIVEWAY ACCESS POINTS SHOULD NOT POSE A PROBLEM.

- CORRIDOR LOOP #2 WOULD RUN FROM PALOS VERDES DRIVE SOUTH, ALONG THE SCHOOL SITE AND PARALLEL TO THE BLUFF, TO A POINT WHERE IT CAN MERGE WITH COASTSITE DRIVE AND ULTIMATELY BACK TO PALOS VERDES DRIVE SOUTH VIA SEAHILL DRIVE. THE BIKEWAY SHOULD BE DEVELOPED AS A CLASS I DESIGN THROUGH THE CURRENTLY UNDEVELOPED AREAS WHILE A CLASS II DESIGN SHOULD BE UTILIZED ON THE COASTSITE/SEAHILL DRIVE SEGMENT OF THE LOOP.

- Corridor Loop #3 will go from Palos Verdes Drive South at the eastern edge of the existing Portuguese Bend Beach Community. The corridor would then travel along the bluff road until it eventually links with the intersection of Paseo Del Mar and La Rotonda Drive. Up to this point the bikeway is intended to be designed as a Class I two-way bike path. Design treatments and safety precautions discussed as part of Corridor Loop #1 would also apply to this segment of the bikeway. Once the Paseo Del Mar/La Rotonda Drive intersection is reached the path would be facilitated along La Rotonda until it eventually intersects with 25th Street.

Walkways

The system of walkways in the coastal area is designed to meet the recreational and transportation needs of Peninsula residents and visitors alike. Recreation and transportation activities take similar forms (walking, jogging, hiking) but the manner in which each is approached is different. Therefore, a distinction is made and both should be accommodated. The following classification system is designed to accommodate diverse pedestrian needs as well as physical and right-of-way constraints.

Off-Road: - Class I - A walkway designated for the exclusive use of pedestrians. Crossflows by bicyclists and motorists are minimized. It is usually separated from motor vehicle or bicycle facilities by a space or physical barrier. It may be on a portion of a street or bike path right-of-way or on a special right-of-way not related to a motor vehicle or bicycle facility; it is usually grade separated but it may have street and bike path crossings at designated controlled locations. It can be identified with guide signing and also may have pavement markings.

On-Road: - Class II - A walkway on the paved area of a road for preferential use by pedestrians. It is usually located along the edge of the paved area outside the travelled lanes. It is identified by pedestrian guide signing on the pavement and other pavement markings or signing deemed appropriate to give adequate instructions to the users of the facility. Pedestrians usually have exclusive use of a walkway for longitudinal travel, but must accommodate crossflows by motorists at driveways and intersections and also by bicyclists at various locations.

On-Road: - Class III - A shared route is a roadway and/or bikeway identified as a walkway facility by pedestrian guide signing only. There are no special markings and pedestrians share the roadway and/or bikeway with motor vehicles and/or cyclists. Special regulations may be enacted and posted along such facilities to control vehicular speeds or restrict parking to enhance pedestrian safety.

It should be noted that Class III walkways contain numerous mode conflicts. Although

THE WALKWAY CONTAINS PRECAUTIONARY MEASURES, THESE ARE OF AN IDENTIFICATION NATURE WITH VIRTUALLY NO PHYSICAL SEPARATION OF MODES. IT IS, THEREFORE, THE INTENTION OF THIS PLAN TO ONLY UTILIZE CLASS III WALKWAYS WHERE ROUTE DEMAND IS LOW OR WHERE ADDITIONAL RIGHT-OF-WAY OR ALTERNATIVE ROUTE LOCATIONS ARE UNOBTAINABLE.

DESIGN REQUIREMENTS FOR THE VARIOUS CLASSES OF WALKWAYS ADOPTED BY THE CITY THROUGH THIS PLAN ARE DEPICTED IN TABLE 16. SINCE THESE REQUIREMENTS ARE DIRECTED AT A DEGREE OF SPECIFICITY NOT ATTAINED THROUGH THIS PLAN, THEY HAVE BEEN LISTED HEREIN ONLY TO REFLECT MINIMAL STANDARDS. STANDARDS APPROPRIATE TO A SPECIFIC CASE SHOULD BE UTILIZED AS SUBSEQUENT ROUTE DESIGNS ARE DEVELOPED. HOWEVER, IN NO CASE SHOULD A WALKWAY ROUTE DESIGN BE DEVELOPED BELOW STANDARDS LISTED IN TABLE 16.

WALKING, JOGGING, AND OTHER PEDESTRIAN ACTIVITIES IN THE COASTAL AREA WILL BE ACCOMMODATED WITHIN TWO MAJOR WALKWAY CORRIDOR NETWORKS. THESE CORRIDORS ARE DESIGNED TO LINK WITH OTHER PENINSULA PEDESTRIAN SYSTEMS, AS WELL AS BIKEWAYS AND ROADWAYS IN ORDER TO PROVIDE FOR UTILIZATION AND ACCESSIBILITY. A GENERAL DESCRIPTION OF THE CORRIDOR ALIGNMENTS CAN BE FOUND IN FIGURE 20 WITH A MORE SPECIFIC DESCRIPTION IN RESPECTIVE SUBREGION SECTIONS.

PRIMARY CORRIDOR WALKWAY

THE WALKWAYS ASSOCIATED WITH PALOS VERDES DRIVE WEST/SOUTH AND 25TH STREET WILL BE A CONTINUOUS SYSTEM OF CLASS I, II, AND III

DESIGN SPEED REQUIREMENTS FOR WALKWAYS **TABLE 16**

	WIDTH IN FEET
MINIMUM	4'–0"
OPTIMUM	6'–0"

WALKWAYS. OFF-ROAD, CLASS I WALKWAYS WILL CONSIST OF SIDEWALKS ON BOTH SIDES OF THE ROAD THROUGHOUT MOST OF THE COASTAL AREA. TOPOGRAPHIC, GEOLOGIC, AND RIGHT-OF-WAY CONSIDERATIONS MAY, HOWEVER, PRECLUDE THIS IN THE EASTERN-MOST SEGMENT OF PALOS VERDES DRIVE SOUTH AND 25TH STREET, WHERE THE CLASS I WALKWAY WILL HAVE TO MERGE WITH CLASS II AND CLASS III WALKWAYS. THE CLASS II AND III WALKWAYS WILL RUN THE LENGTH OF THE SEAWARD SIDE OF PALOS VERDES DRIVE WEST/SOUTH AND 25TH STREET. THESE ON-ROAD WALKWAYS SHOULD BE DEVELOPED AS CLASS II SYSTEMS WHEREVER POSSIBLE; HOWEVER, IT IS EXPECTED THAT THIS MAY BE UNFEASIBLE AT THE EASTERN END OF THE CORRIDOR OR ACROSS THE LANDSLIDE AREA WHERE PHYSICAL OR RIGHT-OF-WAY CONSIDERATIONS DO NOT ALLOW.

IT IS ANTICIPATED THAT THE OFF-ROAD CLASS I WALKWAYS WILL FULFILL ALL NORMAL PEDESTRIAN ACTIVITIES, WHEREAS THE ON-ROAD, CLASS II/III SYSTEM WILL BE UTILIZED PRIMARILY BY JOGGERS. THE ON-ROAD SEGMENTS WILL HAVE A DUAL FUNCTION, IN THAT BICYCLISTS WILL BE PERMITTED ALSO. IN ORDER TO MINIMIZE CONFLICTS BETWEEN PEDESTRIANS AND

BICYCLISTS, A SYSTEM OF SIGNS COULD BE ESTABLISHED TO ALERT USERS TO POTENTIAL CONFLICTS.

SECONDARY CORRIDOR WALKWAYS

THE SECONDARY CORRIDOR NETWORK INCLUDES THREE SEGMENTS. THESE SEGMENTS ARE REFERRED TO AS ''LOOPS'' AND WILL BE DESIGNED AS CLASS I AND II WALKWAYS. THE INTENT OF THE LOOPS IS TWO-FOLD. FIRST, TO PROVIDE ADEQUATE PEDESTRIAN FACILITIES TO EXISTING AND FUTURE RESIDENTS OF THE COASTAL REGION. SECOND, TO ENSURE PUBLIC ACCESS TO THE COASTAL BLUFF. ACCESS TO THE BLUFF WILL ALLOW FOR MAXIMUM VISUAL ENJOYMENT OF THE COASTLINE AS WELL AS SEVERAL LINKAGES TO THE WATER'S EDGE VIA COASTAL ACCESS TRAILS (DISCUSSED IN A SUBSEQUENT SECTION). FOR SPECIFIC ALIGNMENTS REFER TO WALKWAYS DISCUSSION IN THE SUBREGION SECTIONS.

CORRIDOR LOOP #1 WILL CONTAIN A CLASS I WALKWAY TO BE SITUATED ON THE SEAWARD SIDE OF THE ''BLUFF ROAD'' IN SUBREGION 1 WITH A CONTINUATION THROUGH POINT VICENTE PARK. THIS WALKWAY SHOULD HAVE AN ADEQUATE SETBACK FROM THE BLUFF'S EDGE TO ENSURE SAFETY (SEE FIGURE 22). IT IS EXPECTED TO BE UTILIZED PRIMARILY BY NEARBY RESIDENTS; HOWEVER, ITS LOCATION WITH RESPECT TO POTENTIAL VIEWS AND COASTAL ACCESS POINTS WILL ALLOW FOR REGIONAL UTILIZATION. BASED ON PRELIMINARY DESIGN CONCEPTS, THERE WILL BE FEW, IF ANY, CONFLICT POINTS WITH AUTOMOBILES OR BICYCLES.

CORRIDOR LOOP #2 IS PROPOSED TO RUN FROM THE SCHOOL SITE, EAST OF MARINELAND, ALONG THE BLUFF TO A POINT WHERE IT CAN MERGE WITH THE COASTSITE/SEAHILL DRIVE ALIGNMENT. A CLASS I DESIGN SHOULD BE USED THROUGHOUT THIS WALKWAY LOOP. THE COASTSITE/SEAHILL DRIVE WALKWAY ALIGNMENT ALREADY EXISTS WHEREAS THE REMAINING SEGMENTS OF THIS LOOP WILL REQUIRE CONSTRUCTION.

CORRIDOR LOOP #3 IS A WALKWAY LOOP DESIGNED TO PROVIDE PEDESTRIAN ACCESS WITHIN SUBREGIONS 7 AND 8. THE WESTERN SEGMENT OF THIS LOOP IS DESIGNED AS A CLASS I WALKWAY TO PARALLEL THE PROPOSED BLUFF ROAD. AT THE POINT WHERE THE BLUFF ROAD TURNS TOWARD PASEO DEL MAR THE WALKWAY CAN CONTINUE ALONG THE BLUFF TO SHORELINE PARK.

COASTAL ACCESS

PRIOR TO 1970 THE PUBLIC GAINED ACCESS TO THE COASTLINE BY CROSSING VACANT PRIVATE PROPERTY BOTH ON FOOT AND IN VEHICLES. MANY TRAILS WERE CREATED FROM PALOS VERDES DRIVE TO THE BLUFFS AND DOWN THE BLUFFS TO THE WATER. IN 1970 THE CALIFORNIA SUPREME COURT MADE A JUDGMENT IN THE GION AND DEITZ CASES THAT THE PUBLIC HAD PRESCRIPTIVE RIGHTS TO ACCESS WHICH HAD BEEN USED AT LEAST FIVE YEARS. ALMOST IMMEDIATELY THEREAFTER THE LARGE LANDOWNERS ALONG THE COAST FENCED THEIR PROPERTIES ALONG PALOS VERDES DRIVE TO KEEP THE PUBLIC OUT.

IN 1970 LOS ANGELES COUNTY PHOTOGRAPHED THE ENTIRE COASTLINE TO RECORD THE PREVIOUSLY USED TRAILS. THE COUNTY BEGAN A PRELIMINARY INVESTIGATION OF THE PRESCRIPTIVE RIGHTS MATTER BUT NEVER PROCEEDED TO ANY RESOLUTION.

WHEN THE CITY INCORPORATED IN 1973 THE COUNTY

TRANSFERRED ITS INFORMATION AND THE CITY BEGAN A FURTHER INVESTIGATION OF THE MATTER. THERE WERE NUMEROUS DISCUSSIONS AMONG THE CITY ATTORNEY, COUNTY COUNSEL, AND ATTORNEY GENERAL. THE FINAL DETERMINATION WAS THAT IN ORDER TO PROCEED THE CITY WOULD HAVE TO PURSUE RATHER COSTLY LITIGATION AND, SINCE LAND USE PLANNING WAS NOT COMPLETED FOR THE NEW CITY, THE DETERMINATION OF PRECISE ACCESS TRAILS FOR WHICH TO SUE COULD NOT BE MADE. INSTEAD, THE CITY DECIDED TO COMPLETE ITS GENERAL PLAN AND COASTAL PLAN, WHICH WOULD INCLUDE PUBLIC ACCESS TO THE COAST, AND AS DEVELOPMENT OCCURRED THE CITY WOULD REQUIRE DEDICATIONS AND/OR EASEMENTS TO IMPLEMENT THE PLANS.

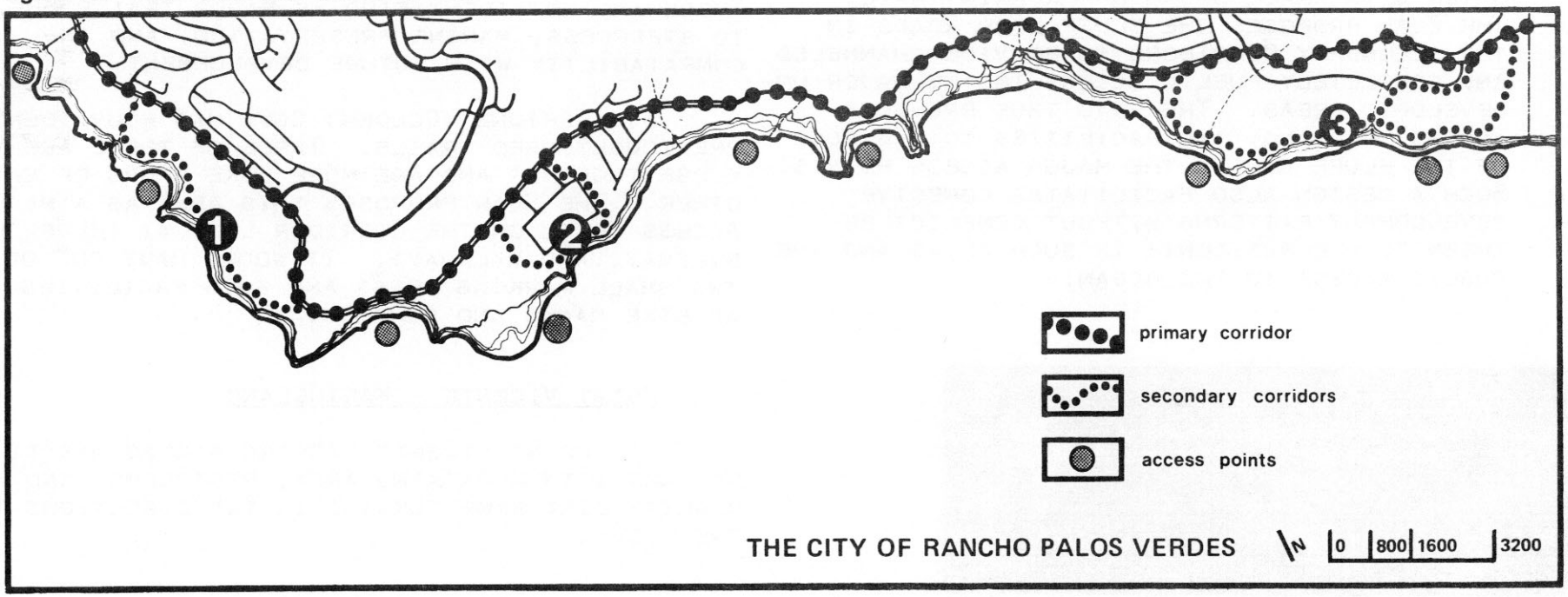
ANALYSIS FACTORS

THE APPROACH IN THIS COASTAL SPECIFIC PLAN WAS TO ANALYZE ALL OF THE PREVIOUSLY USED PUBLIC ACCESSES BASED ON THREE FACTORS: (1) SAFETY, (2) POTENTIAL DEGRADATION OF THE MARINE ENVIRONMENT, AND (3) COMPATABILITY WITH FUTURE DEVELOPMENT.

(1) SAFETY

MANY OF THE PREVIOUSLY USED TRAILS DOWN THE BLUFF ARE EXTREMELY STEEP AND/OR ERODED. THE PLAN PROPOSES THAT THESE TRAILS BE RESTRICTED, IF NECESSARY, WITH A SAFETY RAILING ALONG THE BLUFF. OTHERS ARE IN AREAS WHICH MIGHT NEED TO BE TEMPORARILY RESTRICTED DUE TO POTENTIAL TSUNAMIS OR TIMES OF SIMULTANEOUS HIGH TIDE AND WAVE ACTION.

figure 20 corridors and access points

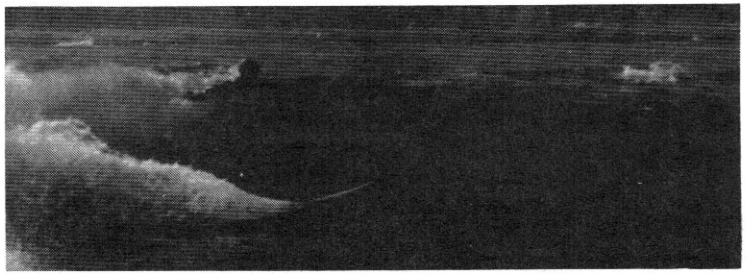


(2) Potential degradation of the marine environment

Trails down the bluff leading to areas previously identified as sensitive marine environments must be considered in conjunction with adequate protection measures, such as marine reserves with appropriate policing. In such areas, where there are several trails close together, the intention also is to provide parking and facilities only for the major trails.

(3) Compatibility with future development

The trails leading from Palos Verdes Drive to the bluff wandered in many directions often with small spurs off a main trail. The Plan proposes the bluff loop roads in the secondary Corridors to provide channeled and completely public access in the major undeveloped areas. The road thus provides access, parking, and facilities to the edge of the bluff and to the major access points. Such a design also facilitates cohesive development patterns without conflict between future residents in such areas and the public access to the ocean.



Description of Access Points

The existing access points are discussed in order starting at the Northern City boundary. These are in defined segments or groupings due to geological formations which completely barred human access in some areas.

Point Vicente North

1) Christmas Tree Cove is an existing public access point of good quality in the City of Palos Verdes Estates immediately north of the boundary between the two cities.

2) Sandy Point has three identified previously used trails very close together. These are not identified as major trails due to steepness, marine preservation, and incompatability with future development.

3) Neptune (Golden) Cove has four identified previously used trails. Three of these are very close together and are more like spurs of each other. The Plan proposes this area as a major Access Trail on the Corridor Loop #1 (bluff road, bikeway, and walkway). It would have one or two small parking areas and such facilities as bike racks and benches.

Point Vicente - Marineland

1) Point Vicente Fishing Access has 11 acres of land with a parking area, restrooms, and a high quality dirt ramp forking in two directions to the ocean.

2) Marineland has a paved road which forks in two directions leading from the parking area to the pier and ocean. It is currently not open to customers but may be in the future. There is also a path leading down to the area inhabited by wild sea lions which is a customer attraction.

Marineland - Inspiration Point

1) There is one identified trail leading from Seacove Drive to the ocean. This trail is quite steep but is probably being used by the public since it is not fenced. While not proposed as a major access point it can be preserved through easement and would have street parking and direction connection to Corridor Loop #2 (bikeway and walkway).

2) Palos Verdes Bay Club has a good quality private trail.

3) Lower Abalone Cove Neighborhood has several private paths including one set of steps down the bluff.

4) Abalone Club Beach Park has five identified access trails to the ocean. These include: the main road into the park which extends to the water's edge and beach area, a road on Portuguese Point which leads from Palos Verdes Drive to the ocean, not currently open to the public, a trail with two spurs down the south side of Portuguese Point, and two trails on either side of Inspiration Point. The Plan proposes two major accesses in the park.

Inspiration Point - Halfway Point

1) Portuguese Bend Club has a private paved road leading to the water's edge and private beach with facilities.

2) There is one identified previously used trail, with two spurs immediately to the south of the Portuguese Bend Club. This is not proposed as a major trail due to its nearness to Halfway Point (see below).

3) Halfway Point is proposed as a Major Access Trail point which directly connects with Corridor Loop #3 (bluff road, bikeway, and walkway). It would have one or two small parking areas and such facilities as bike racks and benches. There are three identified previously used trails leading down the point and along the beach.

Halfway Point - Shoreline Park

1) Four other identified previously used trails exist between Halfway Point and Shoreline Park. These would be accessible from Corridor Loop #3 by easement or dedication.

2) Shoreline Park has two identified trails down the bluff and is proposed as a Major Access Trail. It is anticipated that the Park will provide public access when it is developed and will have parking and facilities.

Parking

Parking will be provided in various ways through the Coastal Region which will serve the path and trail networks.

Major Access Trails

Neptune (Golden) Cove

It is proposed to have one or two small parking areas or bays. In addition, the public bluff road will provide for parking on the inland side which can be used by the users of the bikeways, walkways, and trails. Parking on the Ocean side should be restricted in order to protect public views.

Point Vicente Fishing Access

This County facility currently has a parking area for 46 vehicles.

Abalone Cove Beach Park

The Park currently has 147 parking spaces and is considering adding 125 temporary overflow spaces. In the future, when master planning is completed, more spaces should be added.

Halfway Point

It is proposed to have the same type of parking facilities as Neptune Cove.

Shoreline Park

Preliminary plans for the Park indicate that there will be 40-60 parking spaces.

Other Parking Facilities

Point Vicente Park

The Park, when developed, will have parking for 64 vehicles.

Marineland

Current parking areas provide for more than 2000 vehicles. Parking is free and could be used by people wanting to bicycle or walk on the pathways along the coast.

Lomo Del Mar School Site

If this surplused elementary school is developed it will provide both recreational facilities and parking (available on weekends) for approximately 25 vehicles. The School Site is adjacent to Corridor Loop #3 (bluff road, bikeway, and walkway).

The foregoing will provide approximately 3500 parking spaces in the Coastal Region, fairly evenly distributed throughout the area.



Combined Corridor Network

In the preceeding sections each mode alignment - automobile, bicycle, pedestrian - is described separately. The actual placement of each within common corridors will dictate certain design requirements along with safety conflicts. This section presents the combined corridor perspective with the intention of pointing out these requirements along with potential problems.

Design Requirements

The design requirements for the two corridor classifications, primary and secondary, are, for the most part, consistent throughout their lengths. The physical problems encountered vary according to the geographical characteristics encountered in the corridor's alignment along with right-of-way constraints present. For this reason, the primary regional corridor is divided into segments that correspond to the common characteristics encountered.

Primary Corridor

Segment #1: From the northern City boundary to a point midway on the Point Vicente Beach site frontage along Palos Verdes Drive West, a segment of the primary regional corridor is slated for redesign. This project is approved by the City Council and design plans have been drawn. Figure 20 delineates the cross section design.

As designed, the project will provide a two-lane roadway in each direction along with a Class I two-way bike path on the seaward side, except in areas where a loop provides Class I bikeway travel. There will be no duplication of Class I bikeways in the coastal region.

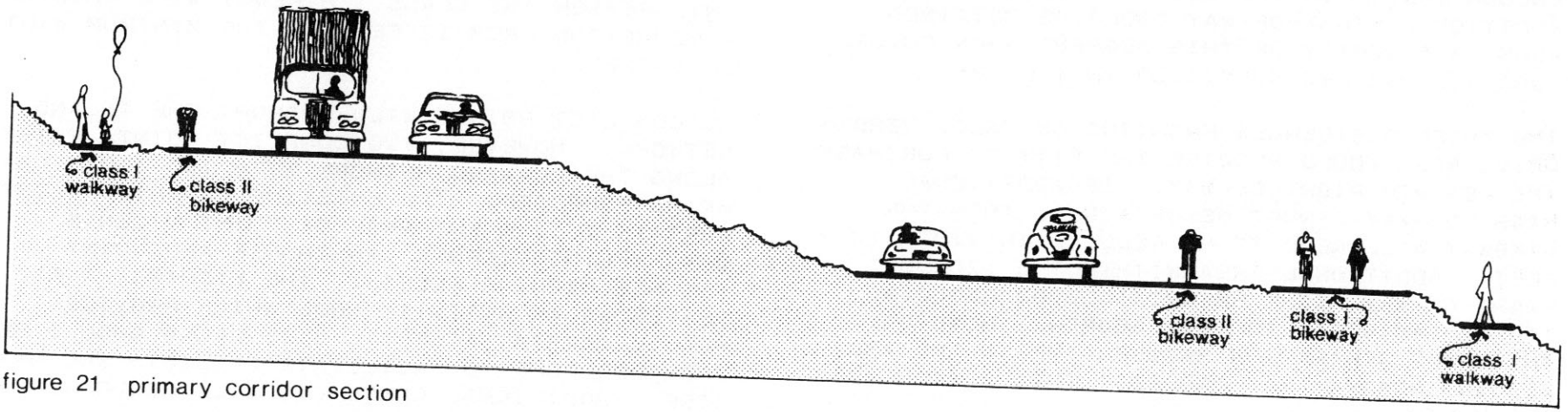


figure 21 primary corridor section

UNDER THE MODE NETWORK PROPOSED FOR THIS CORRIDOR THAT IS PART OF THIS PLAN, CERTAIN MINOR MODIFICATIONS WILL BE NECESSARY WITHIN THE PROJECT'S 120 FOOT RIGHT-OF-WAY. LANE STRIPING SHOULD BE PROVIDED ON THE RIGHT SIDE OF THE ROADWAY WHICH WILL DEMARCATE ON-ROAD BIKEWAY AND WALKWAY. DUE TO THE TRANSPORTATIONAL NATURE OF THESE ONE-WAY BIKEWAYS AND WALKWAYS IT IS FELT THAT BOTH ACTIVITIES CAN BE FACILITATED WITHIN A 4 TO 6 FOOT AREA WITH ONLY MINOR SAFETY CONFLICTS.

OFF-ROAD PEDESTRIAN ACTIVITY IS ALSO PROPOSED TO BE LOCATED WITHIN THIS CORRIDOR. THE INLAND SIDE CONTAINS ROUGHLY 11 FEET OF RIGHT-OF-WAY WHICH CAN FACILITATE A CLASS I 4-FOOT WIDE WALKWAY, LEAVING SOME 7 FEET OF RIGHT-OF-WAY TO SUPPORT LANDSCAPING. HOWEVER, THE SEAWARD WALKWAY WILL REQUIRE ADDITIONAL RIGHT-OF-WAY OR A MODIFICATION OF THE CLASS I BIKEWAY. THE IDEAL SOLUTION WOULD BE TO OBTAIN 10 TO 20 FEET OF ADDITIONAL RIGHT-OF-WAY, DEPENDING ON THE NATURE OF TERRAIN ENCOUNTERED, FOR THE LOCATION OF THIS WALKWAY. ADDITIONAL RIGHT-OF-WAY COULD BE OBTAINED ALONG A MAJORITY OF THIS SEGMENT WHEN FUTURE SUBDIVISIONS ARE SUBMITTED IN THE AREA.

THE THREE RESIDENCES FRONTING ON PALOS VERDES DRIVE WEST WOULD REQUIRE THE CITY TO PURCHASE THE DESIRED RIGHT-OF-WAY. IF ADDITIONAL RIGHT-OF-WAY CANNOT BE OBTAINED, THEN THE BIKEWAY WILL NEED TO BE REDUCED IN WIDTH TO 8 FEET. ADDITIONAL AREA WITHIN THE 120-FOOT RIGHT-OF-WAY MIGHT BE OBTAINED BY REDUCING THE MEDIAN WIDTH IN THIS SEGMENT; HOWEVER, THE GRADE SEPARATION BETWEEN THE INLAND AND SEAWARD ROADWAY MAY PROHIBIT THIS ACTION TO THE NORTH.

ONE MAJOR INTERSECTION IS LOCATED AT PALOS VERDES DRIVE WEST AND HAWTHORNE BOULEVARD. NETWORKS ON THE INLAND SIDE OF THIS CORRIDOR ARE AFFECTED; HOWEVER, THE INTERSECTION IS SIGNALED, HENCE, REDUCING THE DEGREE OF SAFETY CONFLICT. VARIOUS RESIDENTIAL STREETS ALSO AFFECT THE INLAND NETWORK TO A MINOR DEGREE. ADDITIONAL CONFLICT POINTS WILL AFFECT THE SEAWARD NETWORK ONCE ROAD ACCESS IS DEVELOPED TO SERVE PROPOSED RESIDENTIAL AREAS THEREIN.

SEGMENT #2: FROM SEGMENT #1 TO A POINT AT THE WESTERN EDGE OF MARINELAND, MAJOR DIFFERENTIALS IN TOPOGRAPHY ARE ENCOUNTERED. THE COUNTY, UTILIZING THE 120-FOOT CROSS SECTION DESIGNED FOR SEGMENT #1, WAS ABLE TO FACILITATE THE DESIRED ROADWAY REDESIGN THROUGH THIS AREA. THEREFORE, THIS CROSS SECTION, WITH PREVIOUSLY DESCRIBED MODIFICATIONS, IS EXPECTED TO POSE NO MAJOR PROBLEMS. ADDITIONAL RIGHT-OF-WAY FOR THE SEAWARD WALKWAY WILL MOST LIKELY BE UNOBTAINABLE DUE TO THE SEVERE TOPOGRAPHIC AND GEOLOGIC CONSTRAINTS. FOR THIS REASON THE CLASS I BIKEWAY WILL REQUIRE A REDUCTION FROM 12 FEET TO THE MINIMUM WIDTH OF 8 FEET.

NO CONFLICT POINTS WILL DISRUPT THE INLAND NETWORK. HOWEVER, TWO CONFLICT POINTS EXIST ALONG THE SEAWARD NETWORK WITH TWO ADDITIONAL BEING PROPOSED. THE EXISTING CONFLICT POINTS PERTAIN TO THE ENTRANCE OF POINT VICENTE BEACH/POINT VICENTE LIGHTHOUSE AND POINT VICENTE FISHING ACCESS. THE FISHING ACCESS SERVES AS AN ACTIVITY NODE WHICH PROVIDES PUBLIC COASTAL ACCESS. BIKE RACKS SHOULD BE PROVIDED HERE TO FACILITATE CYCLISTS WHO MAY STOP. ADDITIONAL CONFLICTS WILL OCCUR WHERE

CORRIDOR LOOP #1 AND LOOP #2 MERGE WITH THIS ROUTE.

SEGMENT #3: FROM THE WESTERN EXTREMITY OF MARINELAND TO A POINT WESTWARD OF THE ABALONE COVE PARK ENTRANCE, ROUGHLY 135 FEET OF RIGHT-OF-WAY EXISTS. FOR THIS REASON NO PROBLEMS SHOULD BE ENCOUNTERED IN DEVELOPING THE PLAN'S PROPOSED CROSS SECTION THROUGH THIS SEGMENT. VARIOUS EXISTING CONFLICT INTERSECTIONS AND FRONTAGE ACCESS POINTS WARRANT SIGNING AND STRIPING SAFETY PRECAUTIONS.

SEGMENT #4: THIS SEGMENT IS ALMOST TOTALLY CONSTRAINED BY GEOLOGIC PROBLEMS. THE CONSTANT MOVEMENT OF THE LANDSLIDE WILL REQUIRE THE USE OF PLIABLE SURFACE MATERIALS WHICH CAN CONFORM TO THE CONSTANT ALTERATION OF LANDFORM. ADDITIONAL RIGHT-OF-WAY MAY NEED TO BE ACQUIRED. EVEN WITH THE ADDITIONAL RIGHT-OF-WAY, MAJOR MODIFICATIONS TO THE TYPICAL CROSS SECTION WILL BE REQUIRED.

SEGMENT #5: THIS SEGMENT RUNS FROM THE EASTERN EDGE OF THE PORTUGUESE BEND LANDSLIDE TO THE INTERSECTION OF PALOS VERDES DRIVE SOUTH WITH PASEO DEL MAR/FORRESTAL DRIVE. THIS SEGMENT WILL POSE TWO MAJOR PROBLEMS: A LIMITED RIGHT-OF-WAY WHICH, DUE TO BORDERING DEVELOPMENTS, DOES NOT APPEAR TO BE EXPANDABLE; AND AN AREA OF SEVERE TOPOGRAPHIC DROP-OFF. MEDIANS LYING BETWEEN FRONTAGE ROADS AND PALOS VERDES DRIVE SOUTH COULD BE REDUCED IN WIDTH SO THAT DESIRED ROADWAY, BIKEWAY AND WALKWAYS CAN BE FACILITATED. UNDEVELOPED LANDS ON THE SEAWARD SIDE WILL PRESENT OPPORTUNITY FOR OBTAINING ADDITIONAL RIGHT-OF-WAY IN CONJUNCTION WITH SUBDIVISION APPROVAL.

TWO MINOR AND ONE MAJOR INTERSECTION CONFLICT POINTS EXIST ALONG THIS SEGMENT. THE MAJOR CONFLICT POINT PERTAINS TO THE INTERSECTION OF PALOS VERDES DRIVE SOUTH WITH PASEO DEL MAR/FORRESTAL DRIVE. CURRENT TRAFFIC LEVELS DO NOT WARRANT SIGNALIZATION; HOWEVER, AS COASTAL LANDS DEVELOP IN THE AREA, SIGNALIZATION MAY BE WARRANTED NOT ONLY FOR MOTORIST SAFETY BUT ALSO FOR CYCLISTS AND PEDESTRIANS.

SEGMENT #6: FROM PASEO DEL MAR TO LA ROTUNDA ANY ADDITIONAL RIGHT-OF-WAY REQUIREMENTS ALONG THIS SEGMENT WILL BE OBTAINABLE AS SUBDIVISIONS ARE PRESENTED FOR APPROVAL.

SEGMENT 7: RUNS FROM THE INTERSECTION OF 25TH STREET AND LA ROTONDA DRIVE TO THE CITY'S COMMON BOUNDARY WITH SAN PEDRO. SEVERE GEOLOGIC CONSTRAINTS IN THIS AREA PROHIBIT THE WIDENING OF THE EXISTING ROADWAY (SEE INFRASTRUCTURE SECTION).

SECONDARY CORRIDORS

WHEREAS THE PRIMARY CORRIDOR NETWORK IS PART OF AN ESTABLISHED ARTERIAL, SECONDARY CORRIDOR ALIGNMENTS, FOR THE MOST PART, WILL TRAVERSE UMIMPROVED AREAS. SECONDARY CORRIDORS WILL BE ESTABLISHING PUBLIC CORRIDORS THROUGH THESE AREAS FOR THE FIRST TIME. MUCH OF THE LAND REQUIRED TO MEET DESIRED RIGHT-OF-WAY WIDTHS ALONG WITH TRAIL IMPROVEMENTS CAN BE OBTAINED AT THE TIME OF THE AFFECTED PARCEL'S SUBDIVISION. DUE TO THE ALIGNMENTS SKIRTING ALONG BLUFF TOPS, MANY OF THE INTERSECTION CONFLICTS EXHIBITED ALONG THE PRIMARY CORRIDOR WILL BE AVOIDED.

TYPICALLY TWO INDIVIDUAL TRAILS - BIKEWAY AND

WALKWAY - LYING ADJACENT TO EACH OTHER WILL BE PART OF THE SECONDARY CORRIDORS. BECAUSE OF THIS TYPICAL NATURE, A STANDARD CROSS SECTION CAN BE DRAWN. FIGURE 22 DEPICTS THE OPTIMUM AND MINIMUM CROSS SECTION STANDARDS. WHERE POSSIBLE, THE OPTIMUM CROSS SECTION SHOULD BE UTILIZED. THE ARRANGEMENT OF THESE TRAILS WITHIN THEIR COMMON CORRIDOR IS AS FOLLOWS: THE WALKWAY WILL BE LOCATED ALONG THE SEAWARD EDGE OF THE CORRIDOR, AND THE BIKEWAY WILL RUN ALONG THE INLAND SIDE OF THE CORRIDOR. ALL WILL BE DESIGNED AS CLASS I TWO-WAY TRAILS.

A GOOD PORTION OF THE SECONDARY CORRIDOR NETWORK MAY LIE WITHIN THE COASTAL SET-BACK ZONE WHICH REQUIRES THAT ONLY MINIMAL LAND-FORM ALTERATION BE PERMITTED.

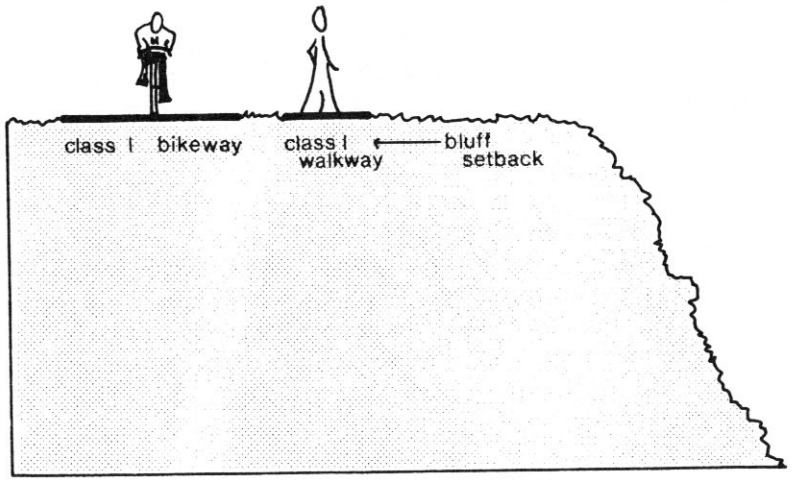


figure 22 secondary corridor section

COASTAL ACCESS POINTS ALONG THE ROUTES WILL CAUSE CROSS-OVER TRAFFIC AT THESE POINTS. ALTHOUGH THIS SITUATION WILL DISRUPT TRAIL FUNCTIONING, NO SIGNIFICANT CONFLICTS ARE ANTICIPATED DUE TO GOOD SIGHT DISTANCES AND INFREQUENCY OF CONFLICT POINTS. BIKE RACKS SHOULD BE SUPPLIED ON THE INLAND SIDE OF THE BIKE PATH SO AS TO AVOID UNNECESSARY BICYCLE CROSS-OVER ONTO SEAWARD TRAILS. AREA REQUIREMENTS AT COASTAL ACCESS POINTS WILL INCREASE BEYOND THAT REQUIRED FOR A CORRIDOR DUE TO THE SUPPLYING OF COMFORT AND SUPPORT FACILITIES (BENCHES, PARKING AREAS, AND BIKE RACKS). THE AREA REQUIREMENTS WILL NEED TO BE DECIDED ON AN INDIVIDUAL BASIS ACCORDING TO TOPOGRAPHY AND AMOUNT OF USE ANTICIPATED FOR AN INDIVIDUAL ACCESS POINT. THIS SHOULD BE DETERMINED EITHER PRIOR TO OR IN CONJUNCTION WITH SUBDIVISION APPROVAL, IF PERTINENT.

THE PROXIMITY OF A PATH OR TRAIL TO THE BLUFF'S EDGE IS AN IMPORTANT SAFETY CONSIDER-ATION. THE SEAWARD EDGE OF A CORRIDOR SHOULD MAINTAIN A MINIMUM OF 15 FEET FROM THE BLUFF'S EDGE WITH CONSIDERATION GIVEN TO LOW PROFILE WOOD RAILING.

THE THREE SECONDARY CORRIDOR LOOPS ARE IDENTIFIED IN FIGURE 20. UNLIKE THE PRIMARY CORRIDOR, SECONDARY CORRIDORS TRAVERSE THROUGH SUBREGIONS. AN IN-DEPTH DISCUSSION OF A LOOP'S NEGOTIATION THROUGH AN AFFECTED SUBREGION IS FOUND IN THE RESPECTIVE SUBREGIONS.

POLICIES: ADDITIONAL INFRASTRUCTURE POLICIES ARE LISTED ON PAGES 107, 112, 115 AND 137 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

1. ENCOURAGE CONSERVATION OF ENERGY RESOURCES AND NATURAL RESOURCES. ENERGY RESPONSIVE DESIGN SHOULD UTILIZE, BUT NOT BE LIMITED TO, CLIMATE, CONSTRUCTION TECHNIQUES, LANDSCAPING, STRUCTURE ORIENTATION, AND SITE CHARACTERISTICS.

2. STUDY, WITH THE FLOOD CONTROL DISTRICT, THE FEASIBILITY OF IMPLEMENTING A LANDSCAPING PROGRAM WITHIN THE DISTRICT'S RIGHTS-OF-WAY.

3. ENCOURAGE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT AND ANY OTHER MASS TRANSIT TO CONTINUE TO IMPROVE THEIR PROGRAMS.

4. ENCOURAGE RESIDENTS TO TAKE FULL ADVANTAGE OF THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT AND ANY OTHER MASS TRANSIT SERVICE.

5. DEVELOP A PLAN IN CONJUNCTION WITH MARINELAND THAT ENCOURAGES PATRONS TO UTILIZE BUS SERVICE.

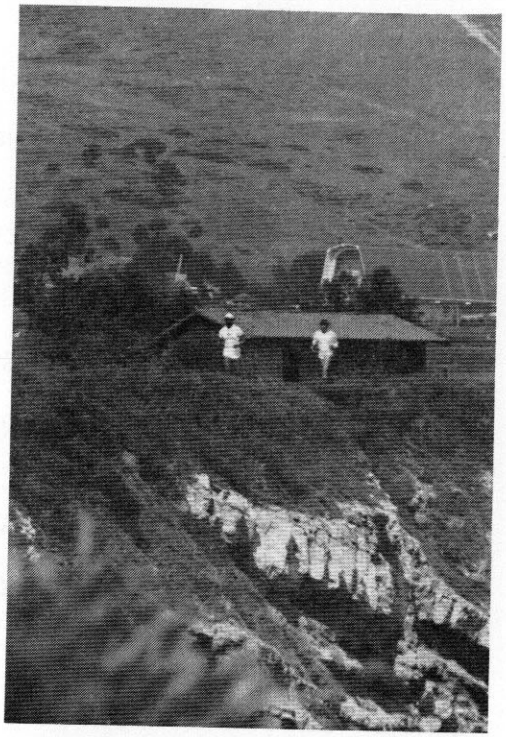
6. IDENTIFY AND PRESERVE EXISTING TRAILS TO BE LEFT IN THEIR NATURAL STATE AND POST APPROPRIATE WARNING SIGNS.

7. RESTRICT COASTAL ACCESS POINTS WHICH POSE A SAFETY HAZARD.

8. ENCOURAGE DEVELOPMENT IN A MANNER WHICH WILL MINIMIZE THE NEED FOR SEWER PUMP STATIONS.

9. INVESTIGATE THE FEASIBILITY OF ASSESSING NEW DEVELOPMENT FOR IMPROVEMENTS OF MAJOR ARTERIALS IN THE CONTEXT OF A CITYWIDE POLICY.

10. REQUIRE PROPOSED ROADS TO BE PUBLIC UNLESS IT IS DEMONSTRATED TO THE CITY'S SATISFACTION THAT A PRIVATE ROAD(S) WOULD NOT IMPEDE PUBLIC ACCESS TO THE SHORELINE.



PLANNING AND DESIGN GUIDELINES

SEVERAL DOCUMENTS ALREADY SHAPE THE PLANNING AND DESIGN OF PROJECTS AND USES IN THE COASTAL REGION, AND WILL CONTINUE TO SERVE AS THE PRIMARY BASIS FOR FUTURE DEVELOPMENT. THESE DOCUMENTS ARE:

- THE RANCHO PALOS VERDES GENERAL PLAN
- THE RANCHO PALOS VERDES DEVELOPMENT CODE
- THE UNIFORM BUILDING CODE
- A VARIETY OF OTHER ORDINANCES AND STANDARDS

ADDITIONALLY, STUDIES UNDERWAY WILL SERVE TO FURTHER DEFINE STANDARDS FOR PLANNING AND DESIGN:

- THE RPV STREET STANDARDS STUDY
- MORE DETAILED INVESTIGATIONS OF THE NATURAL ENVIRONMENTAL CONSTRAINTS OF THE AREA, INCLUDING GEOLOGY, ETC.

GENERALLY, STANDARD ENGINEERING DESIGNS AND CONSTRUCTION PROCESSES UTILIZED BY VARIOUS UTILITIES AND OTHER PUBLIC SERVICES FOR INFRASTRUCTURE FUNCTIONS FURTHER DEFINE STANDARDS AFFECTING PLANNING AND DESIGN.

ESSENTIALLY, THE PURPOSE OF THESE GUIDELINES IS TO INSURE THAT VARIED DEVELOPMENT INTERESTS AND DESIGNERS WITHIN THE COASTAL REGION CONTRIBUTE TO THE AESTHETIC AND FUNCTIONAL IMPROVEMENT OF THE COMMUNITY WHILE MEETING BOTH PLANNING OBJECTIVES AND LIMITS (NUMBERS OF UNITS, DENSITIES). ADDITIONALLY, THE PURPOSE OF THESE GUIDELINES IS TO INSURE THAT AREAS BETWEEN DEVELOPMENTS AND AT THE INTERFACE BETWEEN PRIVATE AND PUBLIC AREAS ARE PLANNED, DESIGNED, AND APPROPRIATELY DEVELOPED WITH COMPATIBLE USES AND LANDSCAPE TREATMENTS.

RANCHO PALOS VERDES HAS HAD A RELATIVELY "UNSTRUCTURED" DEVELOPMENT HISTORY; THEREFORE, IT IS NOT FEASIBLE TO DEVELOP A UNIFORM "DESIGN CONCEPT" FOR RANCHO PALOS VERDES.

ALTHOUGH LARGELY UNDEVELOPED, THE COASTAL REGION HAS HAD SUFFICIENT DEVELOPMENT IN SOME AREAS TO CREATE VISUAL IMAGES WHICH CANNOT BE IGNORED, AND WHICH ARE PRONE TO A WIDE RANGE OF SUBJECTIVE INTERPRETATIONS AS TO THEIR AESTHETIC QUALITY. FORTUNATELY, MOST OF THIS DEVELOPMENT IS CONCENTRATED WITHIN RELATIVELY CONSISTENT ENCLAVES WHICH HAVE BEEN IDENTIFIED AS SUBREGIONS, AND CAN THUS BE TREATED AS A SERIES OF INDIVIDUAL, GENERALLY COHESIVE, DESIGN/PLANNING UNITS.

SUBREGION 3, WITH ITS REMAINING INFILL DEVELOPMENT POTENTIALS, IS A SIGNIFICANT EXCEPTION TO THIS CASE, WITH A WIDE VARIETY OF DEVELOPMENT SCALES, PATTERNS AND IMAGES IN DIRECT ADJACENCY (THE SMALL SCALE SINGLE FAMILY RESIDENTIAL AREA OF ABALONE COVE NEXT TO THE LARGE SCALE MULTISTORY BLOCKS OF THE PALOS VERDES BAY CLUB). THIS AREA REQUIRES "BRIDGING" CONTROLS AND DESIGN EFFORTS IN ORDER TO "SOFTEN" THESE VARIED CHARACTERISTICS THROUGH THE WAYS IN WHICH FUTURE DEVELOPMENT OCCURS AND APPEARS WITHIN IT.

OTHER DEVELOPED AREAS REQUIRE SOME MEANS OF DEFINITION AND REINFORCEMENT OF THEIR IDENTITY AND ITS PRESENTATION IN THE FACE OF POTENTIAL ADJACENT NEW DEVELOPMENT, AS WELL AS THE INTRODUCTION OF CONSISTENT PUBLIC ELEMENT DESIGN DETAILING IN STREETS, LANDSCAPE, LIGHTING, SIGNS, ETC. PRIVATE AREA DESIGN CONTROLS WOULD APPLY PRIMARILY TO ISSUES OF SAFETY (FIRE PROTECTION-BRUSH CLEARANCE, ETC.), MAINTENANCE OF LANDSCAPE, AND OTHER FACTORS.

LARGE UNDEVELOPED (BUT POTENTIALLY DEVELOPABLE) COASTAL LAND AREAS, WITH THEIR EXTRA ORDINARY IMPACT ON THE EXISTING AND POTENTIAL APPEARANCE AND CHARACTER OF THE CITY AND ITS REGIONALLY SIGNIFICANT VIEWSHED, REQUIRE THE APPLICATION OF PLANNING AND DESIGN GUIDELINES WHICH WILL SHAPE DEVELOPMENT TO REINFORCE THIS VIEWSHED.

THESE GUIDELINES HAVE BEEN DEVELOPED IN SEVERAL CATEGORIES:

- SITE PLANNING
- STRUCTURE DESIGN
- LANDSCAPE
- MISCELLANEOUS DESIGN ELEMENTS

EACH OF THESE ELEMENTS IS TREATED IN THE FOLLOWING INDIVIDUAL SECTIONS. (DESIGN AND PLANNING RECOMMENDATIONS FOR ROAD AND STREET SYSTEMS ARE COVERED IN THE RPV STREET STANDARDS STUDY).

THESE GUIDELINES ARE INTENDED TO:

- PROVIDE A RANGE OF PARAMETERS WITHIN WHICH DESIGNERS OF FUTURE DEVELOPMENTS MAY WORK.
- PROVIDE THESE PARAMETERS IN THE FORM OF <u>GUIDELINES</u> RATHER THAN ABSOLUTE CONTROL REQUIREMENTS, SO AS TO ENCOURAGE CREATIVE RESPONSE TO THE SPIRIT OF THEIR INTENT.

SITE PLANNING

TWO BASIC APPROACHES TO SITE PLANNING OF MAJOR RESIDENTIAL DEVELOPMENTS ARE CURRENTLY OFFERED TO DESIGNERS WORKING WITHIN THE CITY: THE CONVENTIONAL SUBDIVISION APPROACH AND THE RESIDENTIAL PLANNED DEVELOPMENT (RPD) APPROACH (SEE DEVELOPMENT CODE).

IN THE FORMER, THE TRADITIONAL ''ROWS OF HOUSES-IN-THE-MIDDLE OF THE LOTS'' RESPONSE, WITH THE MAXIMUM POSSIBLE NUMBER OF LOTS/HOUSES DEVELOPED ON THE AVAILABLE SITE AREA CONTINUES TO BE THE APPROACH TAKEN FOR DETACHED SINGLE-FAMILY RESIDENTIAL USE BY THE MAJORITY OF DEVELOPERS GIVEN CURRENT HIGH COSTS, PRESUMED CONSUMER PREFERENCES, AND EXPERIENCE. THE MAJORITY OF RANCHO PALOS VERDES, EXCEPT WHERE TOPOGRAPHY HAS CONSTRAINED IT (AND SOMETIMES IN SPITE OF IT) HAS BEEN DEVELOPED IN THIS MANNER, WITHOUT THE PRESENCE OF COUNTERVAILING CONTROLS OR INCENTIVES.

IN RPD, THE OPEN SPACE REQUIREMENTS, AS WELL

AS OTHER FACTORS, CAN SHAPE THE DEVELOPMENT INTO VARIANTS OF A CLUSTER CONCEPT, OR THEY MAY MERELY ENABLE THE CREATION OF VARIANTS OF THE CONVENTIONAL PATTERN WITH THE INCLUSION OF OPEN SPACE REQUIREMENTS.

SITE PLANNING GUIDELINES SEEK TO ESTABLISH SPECIFIC RELATIONSHIP REQUIREMENTS BETWEEN AND AMONG INDIVIDUAL RESIDENTIAL UNITS, ADJACENT CORRIDORS, VIEWS, OPEN SPACES, ETC.

THE FOLLOWING ARE GUIDELINES AND SHOULD BE CONSIDERED:

- SITE PLANNING ANALYSES FOR INDIVIDUAL PROJECTS SHOULD BE DEVELOPED BY THE PROJECT'S PROPONENTS/DESIGNERS TO ACCOMPANY ALL OTHER REQUIRED SUBMISSIONS INCLUDING EIR'S WHICH GRAPHICALLY ILLUSTRATE THE FOLLOWING INFORMATION:
  - RELATIONSHIP OF PROPOSED DEVELOPMENT TO ALL DESIGNATED ''CORRIDOR'' AREAS AND PROPOSED LINKAGES, BUFFERS, ETC.
  - RELATIONSHIP OF PROPOSED DEVELOPMENT TO THE GRADING ORDINANCE.
  - RELATIONSHIP OF DEVELOPMENT TO VIEWSHEDS, IDENTIFIED IN PLAN AND SECTION, IN VISUAL CORRIDORS.
- OVERALL PROJECT SITE PLANNING SHOULD BE CONSIDERED IN TERMS OF TOTAL VISUAL IMPACT OF UNITS AS SEEN FROM HIGHER ELEVATIONS.
- OVERALL SITE PLANNING SHOULD SEEK TO MINIMIZE STRAIGHT LENGTHS OF STREET AND SHOULD SEEK TO MINIMIZE THE USE OF CONTINUOUS LARGE IMPERMEABLE SURFACES WHERE STREET DRAINAGE FLOW WOULD OCCUR DIRECTLY ONTO BARE GROUND OR IMPACT THE MARINE ENVIRONMENT.
- ALL GRADING SHOULD APPEAR AS NATURAL AS POSSIBLE.
- EACH UNIT SHOULD BE PROVIDED WITH DIRECT ACCESS AND DIRECT VISUAL RELATIONSHIP TO A COMMON OPEN SPACE AND PEDESTRIAN NETWORK (ONE OR MORE CORRIDOR TYPES) SEPARATE FROM THAT PROVIDED BY THE VEHICULAR ACCESS TO THE UNIT.
- WHERE MAJOR VIEWS OR VISTAS EXIST, ALL UNITS SHOULD BE ORIENTED TO THAT VIEW OR VISTA, PROVIDED TOPOGRAPHY AND NECESSARY UNIT RELATIONSHIPS PERMIT. THIS ORIENTATION SHOULD BE REFLECTED IN THE DESIGN OF INTERIOR UNIT SPACES AND SHOULD VARY TO SUIT DIFFERING ORIENTATIONS.
- ALL UNITS SHOULD BE SITED SO THAT THEIR REQUIRED GRADING ACCOMPLISHES A UNIFORM RELATIONSHIP BETWEEN UNITS AND OUTDOOR AREAS. SUCH AREAS SHOULD BE DEVELOPED SO AS TO RESPOND TO THE UNIQUE NEEDS OF SITING GROUPS OR CLUSTERS OF HOMES ON VARYING TOPOGRAPHY.

STRUCTURE DESIGN

THE FOLLOWING ARE GUIDELINES AND SHOULD BE CONSIDERED IN STRUCTURE DESIGN:

- STRUCTURES SHOULD CONFORM, IN HEIGHT AND SITE PLACEMENT, TO THE REQUIREMENTS OF THE VISUAL CORRIDORS DESIGN GUIDELINES, IN ADDITION TO THOSE SET BY THE CITY'S DEVELOPMENT CODE.

- NO ''POLE'' HOUSES, OR OTHER HOUSES REQUIRING EXTENSIVE AND VISUALLY DOMINANT EXPOSED STRUCTURAL ELEMENTS SHOULD BE PERMITTED.

- NO EXTERNAL MASTED ANTENNAS OF ANY TYPE SHOULD BE PERMITTED ON ANY STRUCTURE.

- ALL EXTERIOR FACADES OF FREE-STANDING UNITS SHOULD BE ASSUMED TO BE EQUALLY VISIBLE, AND SHOULD BE DESIGNED TO REFLECT UNIFORM ARCHITECTURAL TREATMENT.

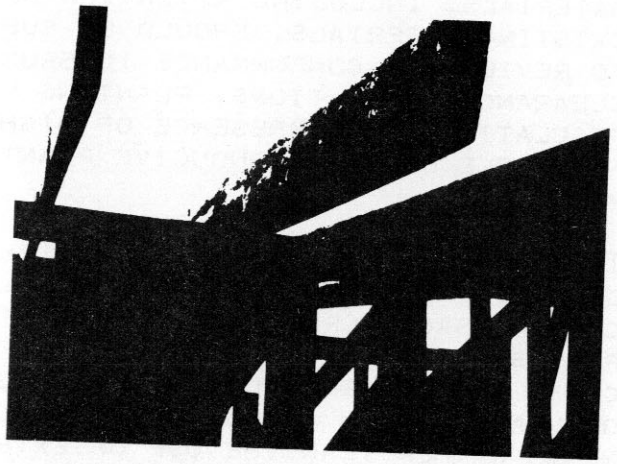
- ALL STRUCTURES ADJOINING WILDLAND FIRE HAZARD AREAS (CRM-6) SHOULD BE DESIGNED SO AS TO AVOID OPEN EAVE OR OTHER CONDITIONS WHICH PROVIDE MEANS FOR FIRE TO SPREAD FROM ADJACENT UNITS OR LANDSCAPE AREAS.

- ALL STRUCTURES SHALL BE DESIGNED/SITED TO PROMOTE ENERGY CONSERVATION.

- WHERE THE USE OF ENERGY CONSERVATION OR GENERATION DEVICES IS PROPOSED IN THE DESIGN OF A STRUCTURE OR GROUP OF STRUCTURES, THESE DEVICES SHOULD BE INTEGRATED INTO THE OVERALL STRUCTURAL DESIGN OF THE UNITS RATHER THAN AFFIXED OR APPLIED TO THEIR EXTERIOR, EXCEPT IN THE CASE OF EXISTING STRUCTURES, TAKEN ON AN INDIVIDUAL REVIEW BASIS.

- VARIANTS IN UNIT DESIGN AND MASSING, AND CONSISTENT, AESTHETIC DESIGN OF UNITS WITHIN NEIGHBORHOOD ARE ENCOURAGED.

- DRAWINGS SHOWING THE CUMULATIVE EFFECT OF ALL VISIBLE ELEVATIONS AND ROOFSCAPES PROPOSED WITHIN ANY PORTION OF A MAJOR VIEW CORRIDOR SHOULD BE PROVIDED FOR REVIEW AND COMMENT BY THE CITY. FACADE AND ROOFSCAPE DESIGNS SHOULD THUS BE CONSIDERED IN RELATION TO THEIR TOTAL AGGREGATE VISUAL IMPACT ON MAJOR VIEWSHEDS AS WELL AS THEIR INDIVIDUAL UNIT IMPACT.



LANDSCAPE/HARDSCAPE

GUIDELINES FOR THE USE OF LANDSCAPE/HARDSCAPE MATERIALS IN PUBLIC STREET RIGHTS-OF-WAY ARE CONTAINED IN THE RPV STREET STANDARDS STUDY.

THE FOLLOWING ARE GUIDELINES AND SHOULD BE CONSIDERED IN THE USE OF LANDSCAPE/HARDSCAPE MATERIALS IN PRIVATE DEVELOPMENTS WITHIN THE COASTAL AREA:

- MASTER LANDSCAPE PLANS FOR ALL PROPOSED DEVELOPMENTS SHOWING PLANTING PLANS, IRRIGATION PLANS, PLANT MATERIALS, HARDSCAPE MATERIALS/PLANS, AND ALL PATH OR OTHER ACCESS CORRIDOR TREATMENTS SHOULD BE DEVELOPED FOR REVIEW BY THE CITY, IN CONJUNCTION WITH ALL OTHER DEVELOPMENT PLANS.

- BECAUSE OF THE SEVERE FIRE HAZARD POTENTIAL WITHIN THE CITY DURING CERTAIN SEASONS, ALL USE OF LANDSCAPE MATERIALS, INCLUDING RETENTION OF EXISTING MATERIALS, SHOULD BE SUBJECT TO REVIEW FOR CONFORMANCE TO BRUSH CLEARANCE REGULATIONS, PLANTING LIMIT REGULATIONS, AND PRESENCE OF HIGHLY INFLAMMABLE OR FIRE-CONDUCIVE PLANT MATERIALS.

- THE USE OF PLANT MATERIALS AND PLANTING DESIGNS WHICH REFLECT THE NATURAL COASTAL SAGE SCRUB CHARACTER OF THE PENINSULA, AND THE SOUTHERN CALIFORNIA COASTLINE IN GENERAL, IS ENCOURAGED FOR OPEN AND COMMON AREAS WITHIN DEVELOPMENTS RATHER THAN THE USE OF EXTENSIVE DECORATIVE MATERIALS AND PLANS REQUIRING EXTENSIVE MAINTENANCE/WATERING, AND WHICH ARE IN CONTRAST WITH SPECIES/MATERIALS IN REMAINING NATURAL VEGETATION AREAS OF THE CITY.

- THE USE OF PLANT MATERIALS AND PLANTING PLANS AS WIND BREAKS, VISUAL SCREENS, SOUND ATTENTUATION BARRIERS, SOLAR SCREENS, AND FOR OTHER CLIMATE MODIFICATION PURPOSES IS ENCOURAGED, SUBJECT TO THE SELECTION OF MATERIALS CONSISTENT WITH THOSE IN THE RECOMMENDED PLANT LIST IN THE APPENDIX, AND THEIR CONSISTENT USE IN DESIGN ELEMENTS THROUGHOUT INDIVIDUAL PROJECTS.

- THE USE OF PLANT MATERIALS WITHIN INDIVIDUAL PROPERTIES IS SUBJECT TO THE GUIDELINES FOR PLANT MATERIALS IN COMMON AREAS (USE OF NATURAL/NATIVE MATERIALS) AND THE RECOMMENDED PLANT LIST IN THE APPENDIX, AND SHOULD STRESS THE USE OF LOW MAINTENANCE, LOW WATER-REQUIREMENTS MATERIALS. APPROPRIATE FUNCTIONAL USE (WINDBREAKS, SCREENS), AS WELL AS DECORATIVE USE, RECOMMENDATIONS ARE ALSO INCLUDED.

- FIRE RETARDANT PLANT MATERIALS SHOULD BE UTILIZED ON THE PERIPHERIES OF DEVELOPED AREAS ADJACENT TO LARGE AREAS OF NATURAL VEGETATION SUBJECT TO BRUSH FIRES (CRM 6) IN COMBINATION WITH CLEARED FIREBREAKS.

- PLANT MATERIALS SHOULD BE CHOSEN WHICH WILL NOT OBSTRUCT PUBLIC OR PRIVATE VIEWS.

MISCELLANEOUS DESIGN ELEMENTS

THE FOLLOWING ARE GUIDELINES FOR MISCELLANEOUS DESIGN ELEMENTS AND SHOULD BE CONSIDERED:

SIGNING

THE LANDSCAPE FORMS, SMALL SETTLEMENT AREAS AND ONE MAIN ROADWAY OF THE COASTAL REGION COMBINE TO CREATE A COMPREHENSIBLE REGION. THE NECESSITY TO LOCATE MANY DIRECTIONAL, REGULATORY AND INFORMATIONAL SIGNS IS THEREFORE UNNECESSARY. HOWEVER, SOME SIGNS ARE NEEDED AND THEY SHOULD CONFORM TO THE FOLLOWING CRITERIA:

- MESSAGES SHOULD BE AS CONCISE AS POSSIBLE. WHEN ONE MESSAGE AUTOMATICALLY IMPLIES ANOTHER, THEN THE IMPLIED MESSAGE SHOULD BE ELIMINATED.
- USE A UNIFORM TYPE FACE SUCH AS ''HELVETIES MEDIUM'' IN LOWER CASE LETTERS ON BOTH LOCATIONAL AND DIRECTIONAL SIGNS. THE ALPHABET RECOMMENDED FOR THE STREET NAME SIGNS SHOULD ALSO BE USED FOR THE PUBLIC SIGNS. EXCEPTIONS MIGHT BE LOCATIONAL AND DIRECTIONAL SIGNS TO SPECIAL USE AREAS.
- ALL GRAPHIC SYMBOLS (ARROWS, ET AL.) SHOULD BE CONSISTENT ON ALL SIGNS.
- THE COMPONENTS SHOULD BE DESIGNED IN MODULAR SYSTEMS TO ACCOMMODATE CHANGE AND GROWTH. HOWEVER, NO MORE THAN SEVEN MESSAGES SHOULD BE MOUNTED AT ONE PLACE.
- ESTABLISH A MODULE FOR THE SIZE OF THE STREET SIGNING, 16 INCHES X 4 INCHES IS RECOMMENDED AS THE BASIC MODULE WITH THE 16-INCH SIDE ALWAYS REMAINING AS THE WIDTH (STANDARD COMMERCIAL SYSTEM MODULE).
- THE COMPONENT SYSTEM SHOULD HAVE A SELF-CONTAINED LIGHTING SYSTEM, IF NECESSARY.
- ALL SIGNS WHICH MUST BE READ BY A DRIVER SHOULD BE MOUNTED AT A HEIGHT WHICH WILL ALWAYS BE VISIBLE TO THE MOTORIST WHILE DRIVING.
- ALL SIGNS WHICH ARE GEARED TO THE PEDESTRIAN SHOULD BE MOUNTED AT A HEIGHT WHICH IS AS CLOSE TO THE EYE LEVEL AS POSSIBLE.
- THERE SHOULD BE AN ATTEMPT TO GROUP TOGETHER AT KEY LOCATIONS ALL THE REGULATORY, PROHIBITORY, GUIDANCE AND ORIENTATION SIGNS ALONG WITH STREET FURNITURE AND LIGHTING SYSTEMS, RATHER THAN ALLOW THE RIBBON TYPE DEVELOPMENT OF SIGNS.

LIGHTING

- WHERE IT IS NECESSARY TO PROVIDE LIGHTING FOR SECURITY, ILLUMINATION SHOULD NOT BE DESIGNED TO CREATE A DAYTIME EFFECT AT USE AREAS. LIGHTS CAN BE PLACED TO DEFINE AN AREA SO THAT SURVEILLANCE IS EASY AND DOES NOT OVERPOWER THE USERS WITH HIGH CANDLE POWER OUTPUT.

- IN ORDER TO RETAIN THE RURAL ATMOSPHERE, LIGHTING SHOULD BE KEPT TO A MINIMUM IN DEVELOPED AREAS. STREET LIGHTING COULD BE ATTACHED TO THE SIGNING SYSTEM.

- ALL MAJOR DIRECTIONAL AND LOCATIONAL SIGNS ALONG PALOS VERDES DRIVE SHOULD HAVE VERY INDIRECT LOW INTENSITY ILLUMINATION SO THAT ONLY THE SIGN IS LIT.

- WHENEVER POSSIBLE, LIGHT SOURCES SHOULD BE INCORPORATED WITH OTHER ESSENTIAL FIXTURES. SIGNING STRUCTURES CAN HAVE WIRING AND FIXTURES.

- ALL LIGHTING SHOULD BE SOFT AND LOW KEY. TALL CITY-TYPE LUMINAIRES ARE NOT APPROPRIATE.

- STREET SIGNS AND DIRECTIONAL SIGNS SHOULD BE DESIGNED WITH A LIGHTING FIXTURE ON THE SUPPORT STRUCTURE.

- NO SOURCE REVEALED SPOT LIGHTS SHOULD BE ALLOWED.

- STREET LIGHTS IN DEVELOPED AREAS SHOULD NOT BE HIGHER THAN REQUIRED TO OBTAIN NECESSARY ILLUMINATION.

POLICY

IT IS THE POLICY OF THE CITY TO:

1. PROVIDE DESIGNERS WITH THE ABOVE GUIDELINES WHICH ARE TO BE USED TO ACHIEVE CREATIVE RESPONSES CONSISTENT WITH THE SPIRIT OF THE PLAN.

SAFETY

THE SAFETY SECTION OF THIS REPORT FOCUSES ON VARIOUS HAZARDS, PROGRAMS, AND AGENCIES INVOLVED DURING HAZARDOUS CONDITIONS AND/OR PROVIDING ASSISTANCE AFTER A HAZARDOUS CONDITION HAS OCCURRED. UNDER THE GENERAL PLAN, FEATURES WHICH POSE A HAZARD WERE IDENTIFIED AND DISCUSSED AS TO THEIR POTENTIAL SAFETY HAZARD. DUE TO THE NATURAL TERRESTRIAL RELATIONSHIP OF CERTAIN HAZARD FEATURES (SEISMIC ACTIVITY, FLOOD HAZARD, ETC.), IT WAS FELT THAT THEIR IDENTIFICATION AND POSSIBLE THREAT WOULD MORE APPROPRIATELY BE HANDLED IN THE NATURAL ENVIRONMENT ELEMENT. MARINE HAZARDS ARE DISCUSSED HEREIN SINCE THEY ARE A RESULT OF MAN'S INTERACTION WITH A HOSTILE ENVIRONMENT WHOSE THREAT IS CONSTANT.

HAZARDS INVENTORY

SWIMMING ACTIVITY

THE OCEAN OFFERS A CONSTANT THREAT OF WATER RELATED ACCIDENTS TO SHORELINE USERS. SWIMMERS, SURFERS, DIVERS, BOATERS, (OR POSSIBLY EVEN THE PERSON ON DRY LAND SWEPT IN BY A WAVE) ARE OFTEN UNABLE TO COPE WITH SURVIVAL IN A WATER ENVIRONMENT. FATIGUE, INJURY, LACK OF SWIMMING SKILLS, PANIC, OR OTHER FACTORS ARE THE REASONS PEOPLE GET INTO TROUBLE.

RANCHO PALOS VERDES' SHORELINE OFFERS A MORE HAZARDOUS CONDITION THAN THE TYPICAL SANDY SWIMMING BEACHES FOUND ELSEWHERE IN SOUTHERN CALIFORNIA. ROCKY TIDEPOOLS AND SUBMERGED REEFS MAY EASILY INFLICT INJURY TO THE USER. HIGH WAVES ASSOCIATED WITH STORMS IN THE PACIFIC ARE ALSO RESPONSIBLE FOR MANY ACCIDENTS. OFTEN, WHEN A WAVE APPROACHES A ROCKY SHORELINE IT DOES NOT APPEAR TO BE OF MAJOR CONSEQUENCE TO THE PERSON ON SHORE; HOWEVER, AS THE WAVES CRASH INTO THE ROCKS, WATER MAY PUSH FURTHER LANDWARD THAN EXPECTED, THUS CAUSING SOME ACCIDENTS. THE LOS ANGELES COUNTY LIFEGUARD SERVICE MADE 30 RESCUES AT ABALONE COVE IN 1976.

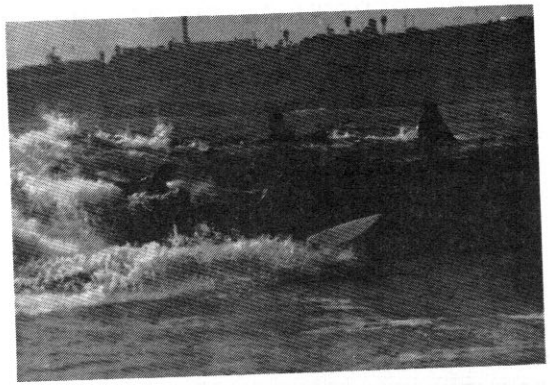
DIVING ACTIVITY

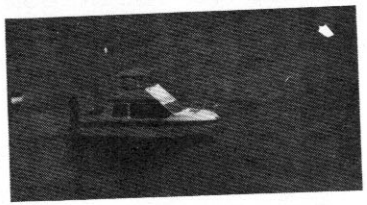
DIVERS ARE EXPOSED TO THE SAME HAZARDS AS SWIMMERS; HOWEVER, THEY HAVE THE ADDITIONAL HANDICAP OF HAVING AS MUCH AS 70 LBS. OF EQUIPMENT ATTACHED TO THEIR BODIES. IN ADDITION, THE DIVER IS FACED WITH A WHOLE DIFFERENT SPECTRUM OF HAZARDS ONCE SUBMERGED (MOSTLY SELF-INDUCED).

SCUBA DIVING ACTIVITY INVOLVES SEVERAL PHYSIOLOGICAL CHANGES AND ADAPTATIONS THROUGH WHICH THE BODY MUST PASS. A PANICKED DIVER, OR ONE WHO IS NOT FAMILIAR WITH DIVING PHYSICS, CAN SUFFER VERY SERIOUS OR POSSIBLY FATAL EFFECTS FROM IMPROPER SURFACING TECHNIQUES.

AIR EMBOLISM, OF WHICH THERE ARE VARIOUS TYPES, IS AN EFFECT WHICH IS CAUSED BY SURFACING WHILE HOLDING ONE'S BREATH. AN EXPANSION OF THE AIR HELD IN THE LUNGS AS THE EXTERNAL PRESSURES ARE ELIMINATED FROM SURFACING GENERALLY CAUSES THE LUNGS TO "EXPLODE".

ANOTHER POSSIBLE PHYSIOLOGICAL EFFECT IS REFERRED TO AS THE "BENDS". THIS DISEASE, CAUSED BY SURFACING TOO RAPIDLY OR BY NOT "DECOMPRESSING", CAUSES NITROGEN GAS BUBBLES TO LODGE IN THE JOINTS CAUSING EXCRUCIATING PAIN AND POSSIBLE DEATH.





DIVING ACCIDENT OCCURRENCE LEVELS ARE DIFFICULT TO DEFINE AS THEY ARE NOT NECESSARILY GEOGRAPHICALLY ORIENTED. IN THE PALOS VERDES PENINSULA AREA ROUGHLY 7 SERIOUS ACCIDENTS CAN BE EXPECTED TO OCCUR EACH YEAR.

BOATING AND SHIPPING ACTIVITY

BOATING AND SHIPPING ACTIVITIES ARE EXTREMELY INTENSE IN THE SOUTHERN CALIFORNIA BIGHT AREA. WITH THIS INTENSITY OF ACTIVITY, MARINE RELATED DISASTERS COULD AND SHOULD BE EXPECTED TO OCCUR OFTEN ENOUGH TO WARRANT DISCUSSION WITHIN THIS PLAN. MARINE DISASTERS INCLUDE, BUT ARE NOT LIMITED TO, BOATS OR SHIPS WHICH BY ACCIDENT ARE EXPOSED TO SINKING, EXPLOSION, RUNNING AGROUND, OR COLLISION WITH ANOTHER WATER BORNE VESSEL.

THE CITY HAS NO AUTHORITY OR JURISDICTION IN THESE MATTERS (EXCEPT POSSIBLE MITIGATION ACTIVITIES FOR RUNNING AGROUND); HOWEVER, A DISCUSSION OF AGENCY COORDINATION FOR INFORMATIONAL PURPOSES WILL BE FOUND IN THE MARINE SAFETY PROGRAM SECTION OF THIS REPORT.

SAFETY PROGRAMS

THIS SECTION DEALS WITH VARIOUS PROGRAMS DESIGNED TO AVOID HAZARDS, HELP DURING HAZARDOUS CONDITIONS, AND/OR PROVIDE ASSISTANCE AFTER A HAZARDOUS CONDITION HAS OCCURRED. EACH PROGRAM IS DISCUSSED AND EVALUATED IN TERMS OF EXISTING AND PROPOSED ACTIVITIES.

A DISCUSSION OF CITY-WIDE SAFETY PROGRAMS CAN BE FOUND ON PAGE 166 OF THE GENERAL PLAN. ONLY THOSE PROGRAMS WHICH HAVE BEEN FOUND TO VARY FROM THE CITY-WIDE PROFILE DEPICTED IN THE GENERAL PLAN, OR WHICH ARE UNIQUE TO THE COASTAL REGION, OR, AS IN THE CASE OF MARINE SAFETY, PROGRAMS WHICH HAD NOT PREVIOUSLY BEEN MENTIONED, ARE A PART OF THIS DISCUSSION. BECAUSE OF THE DIFFERENT AGENCIES INVOLVED, EQUIPMENT USED, AND VARYING DISPATCH POINTS, TERRESTRIAL AND MARINE SAFETY PROGRAMS ARE PRESENTED UNDER THEIR RESPECTIVE HEADINGS.

TERRESTRIAL

FIRE PROTECTION

CURRENT PROPOSALS BY THE LOS ANGELES COUNTY FIRE DEPARTMENT WILL ALTER FIRE SERVICE

DISPATCH POINTS WHICH, IN TURN, WILL ALTER RESPONSE TIMES WITHIN THE COASTAL REGION. THESE PROPOSALS PERTAIN TO THE CONSTRUCTION OF A NEW STATION IN THE VICINITY OF HAWTHORNE BOULEVARD AND PALOS VERDES DRIVE WEST AND THE RELOCATION OF FIRE STATION #53 TO THE VICINITY OF FORRESTAL DRIVE AND PALOS VERDES DRIVE SOUTH.

FIRE STATION #53 IS A ONE-ENGINE COMPANY LOCATED WITHIN THE COASTAL REGION ON PALOS VERDES DRIVE SOUTH. THE LIMITED SIZE AND INABILITY TO EXPAND THIS STATION PROHIBITS THE FACILITATION OF ADDITIONAL EQUIPMENT WHICH WILL BE REQUIRED TO ADEQUATELY SERVE NEW DEVELOPMENT. FOR THIS REASON THE FIRE DEPARTMENT IS PROPOSING TO RELOCATE THE STATION TO A LARGER SITE NEAR THE INTERSECTION OF FORRESTAL DRIVE AND PALOS VERDES DRIVE SOUTH. THE SPECIFICS OF WHAT THE NEW STATION WILL ENTAIL ARE NOT AVAILABLE AT THIS TIME; HOWEVER, THIS RELOCATION ACTION IS PROJECTED TO OCCUR IN APPROXIMATELY FIVE YEARS.

CIVIL DEFENSE AND DISASTER

FIGURE 39 OF THE GENERAL PLAN DEPICTS PALOS VERDES DRIVE WEST, PALOS VERDES DRIVE SOUTH AND 25TH STREET AS A CONCEPTUAL DISASTER ROUTE. TWO ATYPICAL OCCURRENCES, AN UNUSUALLY HEAVY OR LONG DURATION RAIN STORM OR MAJOR SEISMIC ACTIVITY, COULD POSE CIRCUMSTANCES WHICH, UNDER A WORSE CASE, MIGHT RESULT IN A GEOLOGICAL PHENOMENON THAT WOULD SEVER THIS ROUTE. BOTH WATER INDUCEMENT AND SEISMIC ACTIVITY ARE SUSPECTED TO TRIGGER OR INCREASE MOVEMENT IN LANDSLIDE AREAS. THIS DISASTER ROUTE TRAVERSES TWO IDENTIFIED LANDSLIDE MASSES (SEE GEOTECHNICAL FACTORS SECTION). ONE, PORTUGUESE BEND LANDSLIDE, CONTAINS TWO ACTIVE MASSES, ONE SMALL AREA NEAR THE ENTRANCE TO ABALONE COVE PARK AND THE SECOND, KNOWN AS THE ACTIVE PORTUGUESE BEND LANDSLIDE, AFFECTS A ROUTE SEGMENT NORTHWARD OF INSPIRATION POINT TO AN AREA WESTWARD OF PORTUGUESE BEND CLUB LEASE AREA. THE SECOND LANDSLIDE MASS IS REFERRED TO AS THE SOUTH SHORES LANDSLIDE AND IS CURRENTLY INACTIVE. SOUTH SHORES LANDSLIDE AFFECTS 25TH STREET AND A PORTION OF PALOS VERDES DRIVE EAST.

IF THESE LANDSLIDES WERE TRIGGERED SIMULTANEOUSLY AND MASSIVE MOVEMENT OCCURRED, DEVELOPED AREAS LYING BETWEEN THE TWO WOULD BECOME ISOLATED IN TERMS OF DISASTER ROUTE SERVICE. NOT ONLY WOULD 25TH STREET BE SEVERED BUT ALSO THE PALOS VERDES DRIVE EAST SWITCHBACK AREA COULD BECOME UNPASSIBLE, SINCE IT ALSO TRAVERSES THE SOUTH SHORES LANDSLIDE. BARRING ACCESS FROM PALOS VERDES DRIVE SOUTH, PALOS VERDES DRIVE EAST AND 25TH STREET, ONE LOCAL STREET NETWORK (THIS NETWORK TRAVERSES STABLE LANDS) COULD BE EXPECTED TO REMAIN WHICH SERVES THIS DEVELOPED AREA. THE NETWORK CONNECTS PALOS VERDES DRIVE SOUTH TO UPPER PORTIONS OF PALOS VERDES DRIVE EAST. FOR THIS REASON, THE ROUTE IS IDENTIFIED HEREIN AS AN ALTERNATIVE DISASTER ROUTE WHICH, HOPEFULLY, WILL NEVER NEED TO BE UTILIZED.

CODES AND ORDINANCES

AN ANALYSIS OF THE COASTAL REGION'S GEOLOGIC RESPONSE SPECTRUM TO SEISMIC ACTIVITY IS PRESENTED IN THE GEOTECHNICAL FACTORS SECTION OF THIS REPORT. THIS ANALYSIS (PER-

FORMED BY ENVICOM) CONCLUDED THAT SEISMIC ACTIVITY ASSOCIATED WITH THE NEWPORT-INGLEWOOD FAULT EQUAL TO, OR IN EXCESS OF, A 5.6 MAGNITUDE, OR SEISMIC ACTIVITY ASSOCIATED WITH THE SAN ANDREAS FAULT EQUAL TO, OR IN EXCESS OF, A 8.5 MAGNITUDE, COULD POSE STRUCTURAL DAMAGE TO BUILDINGS. THIS CONCLUSION IS BASED ON THE FACT THAT THE RESPONSE SPECTRUM FOR COASTAL LANDS AT THESE MAGNITUDES EXCEEDS THE SEISMIC CONSTRUCTION STANDARDS OF THE UNIFORM BUILDING LAWS WHICH THIS CITY ENFORCES. THEREFORE, THOSE STRUCTURES WHICH DO NOT EXCEED EARTHQUAKE REGULATIONS COULD EXPECT TO INCUR STRUCTURAL DAMAGE. IF AN EARTHQUAKE OF THESE SPECIFIED MAGNITUDES OCCURS, THE STRUCTURES SHOULD BE INSPECTED FOR POSSIBLE STRUCTURAL DAMAGE.

BLUFF RELATED RESCUES AND ACCIDENTS

AS COASTAL TRAILS ARE DEVELOPED AND NEW RESIDENTIAL UNITS OCCUPIED, MORE PEOPLE WILL BE EXPOSED TO COASTAL BLUFFS. WITH THIS INCREASED EXPOSURE, AN INCREASE IN BLUFF RELATED RESCUES, ACCIDENTS AND PURPOSEFUL JUMPINGS CAN BE EXPECTED. THE CURRENT LEVEL OF RESCUE AND EMERGENCY MEDICAL AID OPERATIONS RESPONDING TO BLUFF ACCIDENTS CAN BE VIEWED AS QUITE LOW IN LIGHT OF A MAJORITY OF VACANT BLUFF LANDS BEING FENCED OFF BY PRIVATE PROPERTY OWNERS.

SIGNING OF UNSTABLE AND SHEAR BLUFFS, ALONG WITH LOW PROFILE RAILING WHERE WARRANTED, SHOULD BE IMPLEMENTED AS BLUFF TRAILS ARE FACILITATED TO WARN AND PROTECT THE UNAWARE. EVEN WITH THESE PRECAUTIONS, THE CITY CAN EXPECT AN INCREASE OF RESCUE AND EMERGENCY MEDICAL AID OPERATIONS ALONG BLUFF AREAS WHICH WILL AFFECT POLICE AND FIRE DEPARTMENT SERVICES.

BLUFF TRAILS ARE TO BE DESIGNED AND LOCATED IN SUCH A MANNER THAT THEY WILL ALSO AID IN PROVIDING ACCESS FOR EMERGENCY VEHICLES. IN ORDER TO BLOCK THEIR USAGE BY NON-EMERGENCY VEHICLES, A BREAK-AWAY BARRIER MAY BE NECESSITATED AT TRAIL ENTRANCES.

MARINE

SWIMMER RESCUE

CURRENTLY THE LOS ANGELES COUNTY DEPARTMENT OF BEACHES IS RESPONSIBLE FOR LIFEGUARD SERVICES IN THE CITY OF RANCHO PALOS VERDES; HOWEVER, THE ONLY MANNED LIFEGUARD STATION IS LOCATED AT ABALONE COVE. THE REST OF THE COASTLINE LACKS INTENSE SWIMMING ACTIVITY (SAVE FOR DIVING AND SURFING ACTIVITY), EXCEPT AT THE PRIVATE PORTUGUESE BEND CLUB.

THE LIFEGUARD SERVICE DOES HAVE EMERGENCY RESPONSE CAPABILITIES WITH BOTH LAND UNITS AND THE ''BAYWATCH'' CREWS WITH BOATS LOCATED IN KING HARBOR AND CABRILLO BEACH. RESPONSE TIME FOR ALL PORTIONS OF THE COASTLINE, EXCEPT FOR THE MANNED ABALONE COVE BEACH, IS 14 MINUTES.

ABALONE COVE BEACH ALWAYS HAS AT LEAST ONE PERMANENT LIFEGUARD ON DUTY (DURING OPERATIONAL HOURS). THE ON-DUTY PERSONNEL DURING THE WINTER MONTHS IS ONE, AND THE ON-DUTY PERSONNEL DURING THE SUMMER MONTHS IS USUALLY THREE. AN ADDITIONAL LIFEGUARD WILL PROBABLY BE USED IN THE SMUGGLER'S COVE AREA OF THE PARK WHEN THE COUNTY ASSUMES PROTECTIVE RESPONSIBILITY FOR THAT AREA.

ALL PERMANENT LIFEGUARD PERSONNEL ARE EMT 1 TRAINED (EMERGENCY MEDICAL TRAINING), WHICH IS ONE STEP BELOW A FULL PARAMEDIC. THE DEPARTMENT OF BEACHES IS CURRENTLY SENDING SOME OF THEIR PERSONNEL THROUGH THE PARAMEDIC TRAINING COURSE.

DIVER RESCUE

IN THE EVENT ANY DIVING ACCIDENT SHOULD OCCUR WITHIN THE CITY, A HIGHLY SOPHISTICATED SYSTEM OF RESCUE IS SET INTO ACTION BY A PHONE CALL. IN RESPONSE TO THE DESIRES OF INCREASING THE SAFETY OF DIVING ACTIVITY AND PROVIDING BETTER EMERGENCY SERVICES, THE LOS ANGELES COUNTY INTERAGENCY SCUBA DIVING COMMITTEE HAS SET UP A SYSTEM WHICH INVOLVES THE COORDINATION OF THE SHERIFF'S DEPARTMENT, FIRE DEPARTMENT, BEACH DEPARTMENT, PARKS AND RECREATION DEPARTMENT, THE CORONER'S OFFICE AND THE COAST GUARD, AS WELL AS THE SERVICES OF THE COUNTY/U.S.C. GENERAL HOSPITAL'S MEDICAL ALERT CENTER AND THE U.S.C. MARINE LABORATORY NEAR THE ISTHMUS COVE ON CATALINA ISLAND.

WHENEVER AN ACCIDENT OCCURS, THIS COMMITTEE COORDINATES AND DISPATCHES THE SERVICES OF THE AGENCIES WITH THE QUICKEST RESPONSE TIMES AT THAT MOMENT, COORDINATES THE USE OF EITHER THE COAST GUARD OR SHERIFF'S HELICOPTER FOR TRANSPORT TO THE DECOMPRESSION CHAMBER AT CATALINA, IF NECESSARY, AND IMMEDIATELY ASSUMES RADIO CONTACT WITH PROFESSIONAL MEDICAL PERSONNEL FOR TRANSMISSION OF IMPORTANT INFORMATION.

AT THE DECOMPRESSION CHAMBER ON CATALINA, A HYPERBERIC DOCTOR AWAITS THE VICTIM TO ACCOMPANY HIM INTO THE CHAMBER FOR DIAGNOSIS AND TREATMENT.

IN ADDITION, THIS COMMITTEE HAS CONSULTANT SERVICES FOR LESS SEVERE ACCIDENTS AVAILABLE TO THEM THROUGH THE COUNTY/U.S.C. MEDICAL ALERT CENTER.

TSUNAMI HAZARD WARNING SYSTEM

THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION HAS TWO OBSERVATORIES, ONE LOCATED IN HONOLULU, HAWAII, AND ONE LOCATED IN PALMER, ALASKA, WHICH MONITOR TSUNAMI ACTIVITY. ONCE AN EARTH MOVEMENT HAS OCCURRED AND AN ALERT HAS BEEN ISSUED BY NOAA, THESE TWO OBSERVATORIES ISSUE HOURLY REPORTS ON MONITORING ACTIVITIES. THE WARNING, WHEN ISSUED, IS DISPATCHED THROUGH THE NATIONAL WARNING SYSEM (NAWAS) WHICH, IN TURN, ALERTS





THE NATIONAL WIRE SERVICE FOR BROADCAST. NOAA ALSO NOTIFIES THE STATE OFFICE OF EMERGENCY SERVICES. HERE, THE WARNING CONTROLLER ALERTS THEIR BROADCAST NETWORK AND CONTACTS THE LOCAL SHERIFFS AND OTHER AFFECTED AGENCIES (SEE SUBREGION 6 FOR DISCUSSION OF A TSUNAMI HAZARD AREA).

MARINE DISASTER RESPONSE

WHENEVER A SHIP OR BOAT DISASTER OCCURS OFF THE COAST OF RANCHO PALOS VERDES, SEVERAL AGENCIES ARE INVOLVED. WITHIN THE THREE-MILE LIMIT LINE OF STATE JURISDICTION THE COUNTY SHERIFF HAS JURISDICTIONAL CONTROL; HOWEVER, THE COAST GUARD, FIRE DEPARTMENT PARAMEDICS, AND LIFEGUARD SERVICE ARE FREQUENTLY INVOLVED, DEPENDING ON AVAILABILITY OF SERVICES AND RESPONSE TIMES.

NAVIGATIONAL AIDS

ALONG THE RANCHO PALOS VERDES COASTLINE, AND JUST OFFSHORE, NAVIGATIONAL AIDS FOR SAFETY AND GUIDANCE HAVE BEEN LOCATED FOR VARIOUS PURPOSES. AIDS TO AVOID RUNNING AGROUND, MARKERS TO IDENTIFY SUBMERGED ROCKS, AND EVEN MARKERS WHICH IDENTIFY A MEASURED NAUTICAL MILE FOR MARINERS' USE IN CHECKING THEIR INSTRUMENTS EXIST WHICH APPEAR ON NAVIGATIONAL CHARTS DEVELOPED AND DISTRIBUTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). THESE CHARTS ARE WIDELY USED BY SMALL CRAFT MARINERS AND SHIPPERS FOR SAFETY REASONS. ADEQUATE MAINTENANCE OF ANY NAVIGATIONAL AID CORRIDORS WHICH MAY BECOME OBSTRUCTED BY DEVELOPMENT MUST BE MAINTAINED SINCE SOME OF THESE AIDS ARE LOCATED ON LAND.

FOR ANY EMERGENCY OR DISASTER, THE CITY'S ENVIRONMENTAL SERVICES DEPARTMENT HAS EMERGENCY PHONE NUMBERS FOR THE VARIOUS AGENCIES AND SYSTEMS AVAILABLE FOR RESPONSE.

POLICIES: ADDITIONAL SAFETY POLICIES ARE LISTED ON PAGE 175 OF THE GENERAL PLAN.

IT IS THE POLICY OF THE CITY TO:

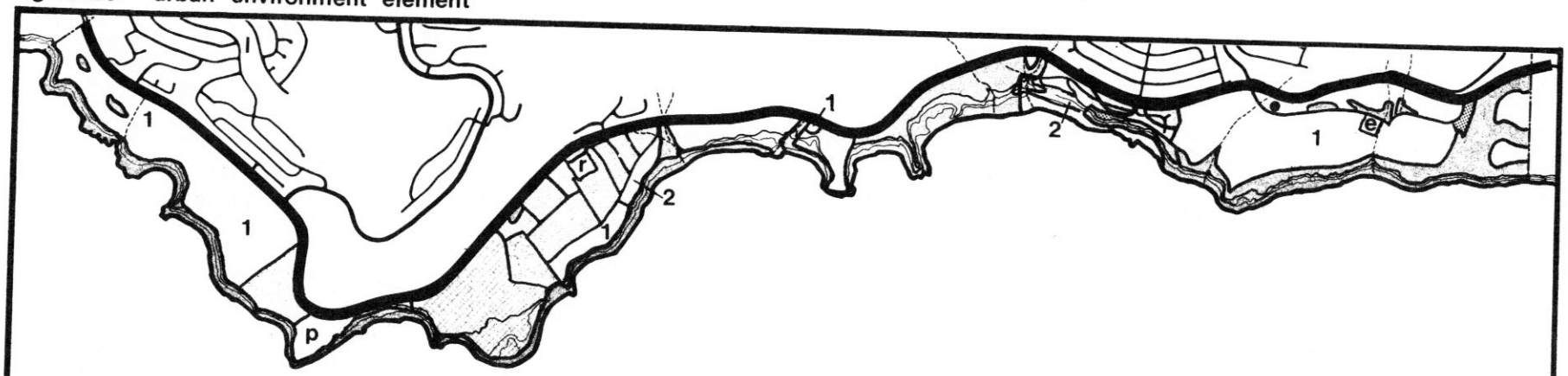
1. SIGN AND PROVIDE LOW RAILINGS WHERE APPROPRIATE ALONG UNSTABLE AND SHEAR BLUFF AREAS ADJOINING BLUFF TRAILS.

2. PROHIBIT VEHICULAR ACCESS TO TRAILS EXCEPT FOR EMERGENCY VEHICLES.

3. ENSURE THAT THE DISASTER PREPAREDNESS PLAN CONSIDERS HAZARDS OF THE CITY'S COASTLINE.



figure 23 urban environment element



natural environment
- hazard areas

residential activity
- 1 ≤ 1 d.u./ac.
- 2 ≤ 2 d.u./ac.
- ≤ 4 d.u./ac.
- ≤ 6 d.u./ac.

commercial activity
- retail
- recreation

institutional activity
- (p) public
- (e) education
- (r) religious

recreational activity
- terrestrial
- marine

agricultural activity
- agriculture

infrastructure
- arterial
- facility

note: overlay districts are not shown due to small scale of map

THE CITY OF RANCHO PALOS VERDES

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INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

CORRIDORS ELEMENT

THE CONTENT AND FORMAT OF THE COASTAL SPECIFIC PLAN TO THIS POINT HAS ESSENTIALLY BEEN A REFLECTION OF THE GENERAL PLAN. THE INCLUSION OF A CORRIDORS ELEMENT, HOWEVER, INTRODUCES A NEW AND VERY NECESSARY ELEMENT INTO THE CITY'S PLANNING PROCESS. THE CORRIDORS ELEMENT REPRESENTS A LOGICAL EXTENSION IN THAT, LIKE THE LAND USE ELEMENT OF THE GENERAL PLAN, IT JOINS TOGETHER COMPONENTS OF THE VARIOUS PHYSICAL ELEMENTS PROPOSED BY THE PLAN THROUGH THE USE, PRESERVATION, AND ENHANCEMENT OF ACCESS, EDGES, AND VISUAL AND NATURAL CHARACTERISTICS.

THE CORRIDORS ELEMENT IS MADE UP OF SEVERAL INDIVIDUAL COMPONENTS, WHICH WHEN COMBINED, FORM A WEB-LIKE NETWORK OVER THE ENTIRE COASTAL REGION. CORRIDORS ARE GENERALLY OF A LINEAR NATURE ALTHOUGH INDIVIDUAL CORRIDOR COMPONENTS MAY NOT BE; THEY CAN BE PUBLIC OR PRIVATE; THEY MAY BE OF A REGIONAL OR NEIGHBORHOOD IMPORTANCE; AND THEY MAY BE MAN-MADE OR NATURAL.

THE TERM ''CORRIDOR'' AS UTILIZED IN THE GENERAL PLAN PRIMARILY REFERS TO THE VISUAL CHARACTERISTICS OF CERTAIN LINEAR ELEMENTS, SUCH AS STREET NETWORKS, PATH AND TRAIL NETWORKS, AND ADJACENT AREAS WHICH PROVIDE A DIRECT OR INDIRECT VISUAL RELATIONSHIP (GENERAL PLAN 191-192). AS UTILIZED WITHIN THE CONTEXT OF THIS, THE COASTAL SPECIFIC PLAN, ''CORRIDORS'' REFERS TO A BROADER RANGE OF THE COMMUNITY AND REGION. THIS EXPANDED CONCEPT INCLUDES A FULL RANGE OF INTER-RELATED LINEAR AND NON-LINEAR ELEMENTS WHICH PROVIDE FUNCTIONAL, PROTECTION/ PRESERVATION, DEFINITION, AND LINKING CAPABILITIES.

FOR THE PURPOSES OF THIS PLAN, THE VARIOUS CORRIDOR ELEMENTS HAVE BEEN GROUPED INTO FIVE BASIC CATEGORIES. THE FOLLOWING LIST IDENTIFIES AND DEFINES EACH CATEGORY:

- ACCESS CORRIDORS - PROVIDE ACCESS TO AND FROM ACTIVITY AREAS BY VEHICLES, PEDESTRIANS, AND BICYCLISTS (GENERAL PLAN 117-137). VERY OFTEN AN ACCESS CORRIDOR WILL ACT AS A MULTIFUNCTIONAL CORRIDOR (MORE THAN ONE MODE); HOWEVER, SINGLE FUNCTION ACCESS CORRIDORS CAN BE FOUND IN THE COASTAL REGION. ACCESS CORRIDORS MAY ALSO PERFORM RECREATIONAL AND OPEN SPACE FUNCTIONS.

- INFRASTRUCTURE CORRIDORS - THESE CORRIDORS FACILITATE UTILITIES, MAN-MADE DRAINAGE AND WASTE COLLECTION NETWORKS, COMMUNICATION SYSTEMS, AND THEIR RELATED SERVICE/ACCESS ROUTES. WITH THE EXCEPTION OF CERTAIN MAN-MADE DRAINAGE SYSTEMS, THE MAJORITY OF THESE EXISTING INFRASTRUCTURE CORRIDORS ARE PARALLEL TO, OR WITHIN, EXISTING ACCESS CORRIDORS. IN THE CASE OF POTENTIAL (FUTURE) INFRASTRUCTURE CORRIDORS, TYPICAL PLANNING AND DESIGN PRACTICE WILL VERY OFTEN INTEGRATE BOTH ACCESS AND INFRASTRUCTURE ELEMENTS WITHIN THE SAME PHYSICAL CORRIDOR. INFRASTRUCTURE CORRIDORS CAN PROVIDE RECREATIONAL AND OPEN SPACE FUNCTIONS, AND EFFORTS ARE BEING MADE TO COORDINATE CERTAIN INFRASTRUCTURE AND NATURAL SYSTEMS IN A MORE HARMONIOUS RELATIONSHIP (E.G. DRAINAGE).

- VISUAL CORRIDORS - THIS CATEGORY IS NOT AFFIXED TO THE PHYSICAL ENVIRONMENT (MAN-MADE OR NATURAL) BUT RATHER, DIRECTED BY OR ORIENTED TO THE PHYSICAL ENVIRONMENT. A VISUAL CORRIDOR MAY BE OF A ''LINEAR'' TYPE WHICH IS SPECIFICALLY DIRECTED TO A FOCAL POINT OR IT CAN BE A BROADER, LESS SPECIFIC VIEW WHICH IS REFERRED TO AS AN ARC. VISUAL CORRIDORS MAY BE TAKEN FROM ANY NUMBER OF LOCATIONS OR ORIENTATIONS, BUT THE EMPHASIS OF THIS PLAN IS FROM TERRESTRIAL AND MARINE ACCESS CORRIDORS.

- NATURAL CORRIDORS - THIS ELEMENT CONSISTS OF NATURAL WATER COURSES, SIGNIFICANT NATURAL VEGETATION, AND TOPOGRAPHY OR OTHER NATURAL FEATURES. A NATURAL CORRIDOR CAN ACT AS A MULTIFUNCTIONAL CORRIDOR; HOWEVER VERY OFTEN ITS SENSITIVITY AND/OR ACCESSIBILITY MAY LIMIT THE TYPE OR EXTENT OF FUNCTIONS IT CAN PROVIDE (SEE PROTECTION/PRESERVATION CORRIDORS).

- PROTECTION/PRESERVATION CORRIDORS - THE PRIMARY FUNCTION OF THIS CORRIDOR ELEMENT IS FOR THE PROTECTION/PRESERVATION OF SIGNIFICANT NATURAL FEATURES WHICH REQUIRE PROTECTION FROM PEOPLE AS WELL AS PROTECTION OF PEOPLE FROM UNSAFE AREAS OR FEATURES. MANY OF THESE PROTECTION/PRESERVATION CORRIDORS HAVE A DIRECT RELATIONSHIP TO VISUAL AND NATURAL CORRIDORS AND MAY BE DIRECTLY ADJACENT TO ACCESS CORRIDORS. UNLIKE OTHER CORRIDORS, THE PROTECTION CORRIDORS REQUIRE A SPECIFIC CITY DETERMINATION.

THESE CORRIDORS (EXCEPT FOR THE PROTECTION/ PRESERVATION CORRIDORS) ARE INTENDED TO PROVIDE A WIDE VARIETY OF USERS (RESIDENTS, NON-RESIDENTS, SERVICE PERSONNEL, PUBLIC SAFETY PERSONNEL, ETC.) WITH A CLEARLY DEFINED, RELATIVELY CONTINUOUS, SET OF ''LINKAGES'', OR UNIFYING ELEMENTS, THROUGHOUT THE COASTAL REGION. THUS, USE OF ONE PART OF THIS SYSTEM SHOULD, THROUGH CONSISTENT DESIGN PRINCIPLES, PROPER SIGNING/MAP INFORMATION, AND OTHER FACTORS, ENABLE EASE OF PERCEPTION AND USE OF OTHER ELEMENTS OF THE SYSTEM. THEIR FUNCTIONS OF LINKING AND DEFINING OTHER ACTIVITY AREAS ARE SIGNIFICANT, IN THAT THEY CAN ACCOMPLISH A LARGE NUMBER OF THE STATED POLICIES OF THE GENERAL PLAN THROUGH RELATIVELY SIMPLE, BUT HIGHLY ''VISIBLE'' MEANS, SUCH AS A NATURAL DRAINAGE AREA BEING ENHANCED TO DEFINE AN ''EDGE'' BETWEEN TWO ADJACENT DEVELOPMENTS THROUGH LANDSCAPE, WHILE ALSO PROVIDING PUBLIC ACCESS FROM AN OPEN SPACE AREA OR ANOTHER CORRIDOR TO A PARK, THE SEA BLUFF EDGE, ETC. ADDITIONALLY, ALL OF THE CORRIDORS MAY PROVIDE OPEN SPACE AND RECREATION FUNCTIONS WITHIN THEIR LIMITS.



AT THE PRESENT TIME, MANY OF THE COMPONENTS WHICH MAKE UP THE FIVE CORRIDOR ELEMENTS EXIST WITHIN THE COASTAL REGION. IN FACT, SOME HAVE ESTABLISHED DEFINITE CHARACTER AND RATHER PRECISE BOUNDARIES; SOME POSSESS MULTIFUNCTIONAL CAPABILITIES; AND SOME CURRENTLY PROVIDE LINKS TO OTHER CORRIDOR ELEMENTS. HOWEVER, FEW POSSESS A COMBINATION OF THE ABOVE-MENTIONED TRAITS WHICH ARE NECESSARY TO ESTABLISH A NEEDED COHESIVENESS AND CHARACTER TO THE COASTAL REGION. THE FOLLOWING PARAGRAPHS DISCUSS THE MAJOR COMPONENTS OF EACH ELEMENT AS THEY CURRENTLY EXIST, AS WELL AS LIKELY POTENTIALS THAT WERE OBSERVED DURING THE RECONNAISSANCE AND RESEARCH PHASES OF THIS PLAN.

- THE PRIMARY ACCESS CORRIDOR WITHIN THE COASTAL REGION IS PALOS VERDES DRIVE WEST/SOUTH/25TH STREET, WHICH AT PRESENT OPERATES (ALTHOUGH IS NOT DESIGNED) AS A MULTIFUNCTION ACCESS CORRIDOR, PROVIDING AUTOMOBILE, BICYCLE, AND PEDESTRIAN ACCESS. CURRENT ENGINEERING AND DESIGN STUDIES, AS WELL AS APPROVED PROJECTS, CAN PROVIDE A ''DESIGNED'' MULTIFUNCTION ACCESS CORRIDOR CONFIGURATION FOR PORTIONS OF P.V. DRIVE (BETWEEN HAWTHORNE AND PALOS VERDES ESTATES), BY SEPARATING VEHICULAR, BICYCLE AND PEDESTRAIN TRAFFIC INTO INDIVIDUAL ''SUB-CORRIDORS'' DESIGNED SPECIFICALLY TO THEIR NEEDS.

- GENERALLY, INFRASTRUCTURE NETWORKS, SUCH AS UTILITY, SEWERAGE, AND WATER, ARE INCORPORATED INTO THE EXISTING ACCESS CORRIDOR. THEREFORE, NO SEPARATE PATTERN HAS BEEN ESTABLISHED. THIS IS PARTICULARLY TRUE IN THE COASTAL

REGION, WHERE A CONSISTENT DEVELOPMENT PATTERN HAS NOT EMERGED. WHILE NO OVERALL PATTERN FOR CONTINUITY OF AN INFRASTRUCTURE CORRIDOR BASED SYSTEM IS PRESENT, PARTIAL CONTINUITY IS ACHIEVABLE IN SOME AREAS WHICH CAN YIELD AN IMPORTANT LINKING CAPABILITY.

° THE GENERAL PLAN IDENTIFIES SEVERAL VISTAS AND VIEWS (GENERAL PLAN, 189) WHICH ARE CURRENTLY AVAILABLE FROM, OR IMMEDIATELY ADJACENT TO, THE PRIMARY ACCESS CORRIDOR (PALOS VERDES DRIVE). ALTHOUGH THE RESULTS OF THESE VISUAL RESOURCES ARE CURRENTLY EXCELLENT, THE ANTICIPATED DEVELOPMENT WITHIN THE COASTAL REGION HAS THE POTENTIAL TO DISRUPT OR DESTROY THIS VALUABLE RESOURCE UNLESS THEY ARE DEFINED, PRESERVED, AND ENHANCED. ALSO INCLUDED IN THIS INVENTORY ARE THOSE MARINE ORIENTED VIEW CORRIDORS WHICH ARE ESSENTIAL TO MARINE NAVIGATION. THERE ARE SEVERAL NAVIGATIONAL AID MARKERS LOCATED WITHIN OR CLOSE ENOUGH TO THE COASTAL REGION TO BE IMPACTED BY FUTURE COASTAL DEVELOPMENT. GENERALLY, THESE AIDS ARE ''RANGE MARKERS'' OR LANDMARKS PLACED IN A SEQUENTIAL ORDER ON THE LAND (AND IDENTIFIED ON NAUTICAL CHARTS) WHICH, WHEN VIEWED FROM THE OCEAN, WILL ASSIST MARINERS IN NAVIGATING THE SOMETIMES ''TRICKY'' PALOS VERDES COASTLINE.

° LIKE VISUAL CORRIDORS, MOST NATURAL CORRIDORS TO BE INCORPORATED INTO THIS PLAN ALREADY EXIST AND FUNCTION AS CORRIDORS. CURRENTLY, SEVERAL DRAINAGE COURSES, MOST LINED WITH VEGETATION, DIVIDE THE COASTAL REGION INTO SEVERAL SEGMENTS. THE BLUFF AND ASSOCIATED SHORELINE IS THE MOST EVIDENT NATURAL CORRIDOR WITHIN THE COASTAL REGION. WHILE GENERAL PLAN POLICIES AND NATURAL CONSTRAINTS HAVE AND WILL PROTECT MOST NATURAL CORRIDORS, MANY PROVIDE MULTI-FUNCTIONAL PURPOSES (VIEW AND ACCESS) AND SOME ACT AS NATURAL BOUNDARIES AND ENHANCEMENT TO EXISTING DEVELOPMENT.

° THE GENERAL PLAN IDENTIFIES AREAS WHICH COULD BE CONSIDERED THE EQUIVALENT OF PROTECTION/PRESERVATION CORRIDORS (GENERAL PLAN 31-33 AND 35-37). WHILE THE AREAS WHICH REQUIRE PROTECTION FROM MAN ARE INCLUDED IN THE GENERAL PLAN DISCUSSION OF AREAS FOR PRESERVATION OF NATURAL RESOURCES, NONE ARE CURRENTLY TOTALLY PROTECTED, NOR ARE THEY FUNCTIONAL IN AN ''AVOIDANCE'' ROLE. SOME POTENTIALLY HAZARDOUS AREAS AND FEATURES WHICH NECESSITATE PROTECTION FOR MAN ARE MORE OBVIOUS, SUCH AS BLUFF EDGE, AND THUS CAN BE CLASSIFIED AS PROTECTION/PRESERVATION CORRIDORS; HOWEVER, OTHER AREAS ARE LESS OBVIOUS AND REQUIRE IN-DEPTH STUDY AND THEREFORE CANNOT BE CLASSIFIED. CURRENTLY, THERE ARE NO PRACTICAL METHODS BY WHICH THESE CORRIDORS CAN BE ''AVOIDED'' BY MAN.

CORRIDORS CONCEPT

ACCESS CORRIDORS

PALOS VERDES DRIVE WEST/SOUTH/25TH STREET IS THE PRIMARY CORRIDOR WITHIN THE COASTAL REGION. IT FORMS THE SPINE OF AN ACCESS CORRIDORS CONCEPT WHICH INVOLVES A SERIES OF LATERALS AND LOOPS WITHIN THE COASTAL REGION WHICH WILL PROVIDE ACCESS TO, FROM, AND THROUGH DEVELOPED AND UNDEVELOPED AREAS.

SUGGESTING A MORE DEFINITIVE LOCATION FOR PROPOSED ACCESS CORRIDORS WITHIN UNDEVELOPED OR UNCOMMITTED PORTIONS (SUBREGIONS) OF THE COASTAL REGION IS A FUNCTION OF SEVERAL FACTORS:

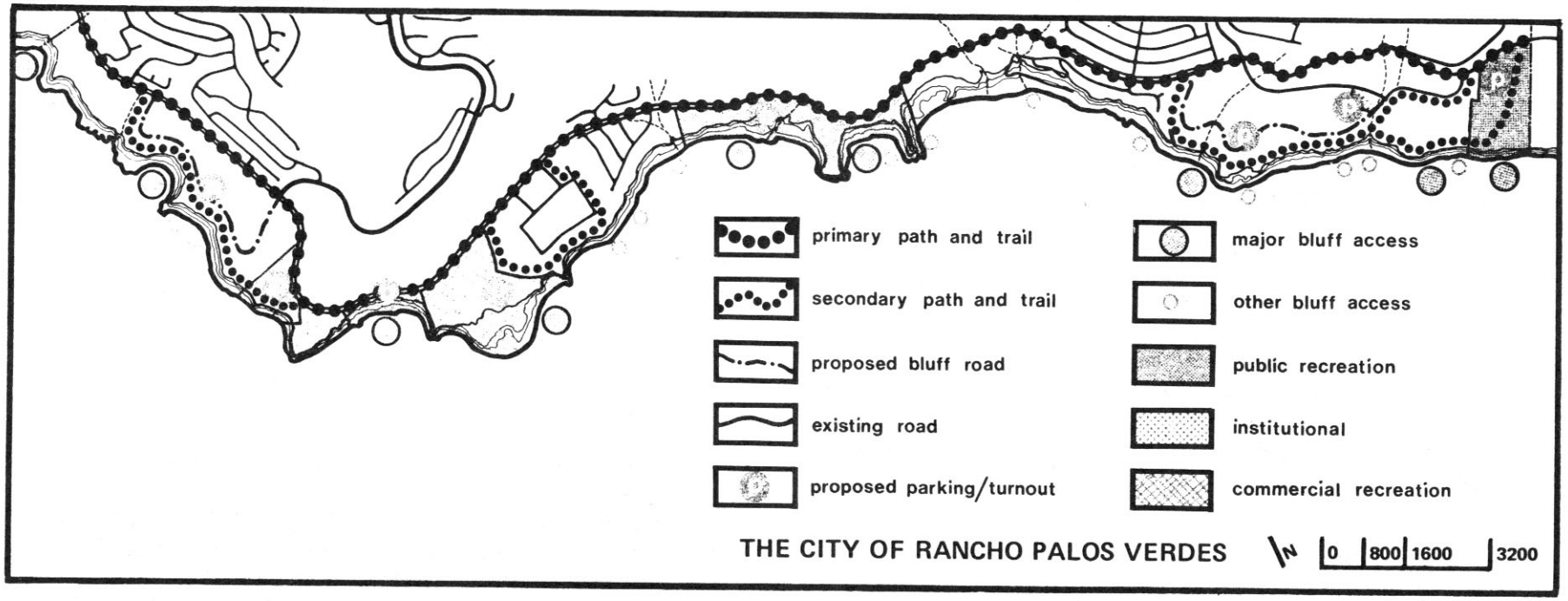
- LOCATION OF EXISTING OR ''APPROVED'' ACCESS ROUTES (STREETS) WITHIN UNDEVELOPED AREAS WHICH COULD CONCEIVABLY FORM A PORTION OF THE SYSTEM.
- THE CURRENTLY UNKNOWN LOCATIONS OF POSSIBLE STREETS AND OTHER ACCESS LINKAGES WHICH MAY BE PROPOSED BY FUTURE DEVELOPERS/DESIGNERS, BUT WHICH CAN BE SHAPED CONCEPTUALLY BY THIS CORRIDORS STUDY, AND PHYSICALLY (IN TERMS OF DESIGN STANDARDS) BY THE CITY'S FUTURE STREET STANDARDS STUDY.
- THE EXISTING OR POTENTIAL LOCATIONS OF OTHER TYPES OF CORRIDORS WHICH MAY COMBINE WITH ACCESS CORRIDORS INTO MULTIFUNCTION CORRIDORS (INFRASTRUCTURE, NATURAL CORRIDORS, ETC.).
- THE PHYSICAL REQUIREMENTS FOR THE VARIOUS ACCESS CORRIDOR ELEMENTS, INCLUDING MINIMUM WIDTHS, GRADIENTS, SEPARATION/ DEFINITION CONSIDERATIONS, ETC.
- THE LOCATION OF PROTECTION CORRIDORS WHICH MAY PRECLUDE THE PRESENCE OF ACCESS CORRIDORS.
- THE WILLINGNESS OF MAJOR EXISTING USE AREAS AND OTHER JURISDICTIONS TO PERMIT PASSAGE OF NON-STREET ACCESS CORRIDORS (OR LINKAGE TO THEM AT CITY BOUNDARIES) SUCH AS PEDESTRIAN AND BICYCLE CORRIDORS.

THE ACCOMPANYING ACCESS CORRIDORS DRAWING (FIGURE 24) ILLUSTRATES THE TYPES OF ACCESS CORRIDORS WHICH MIGHT BE DEVELOPED WITHIN THE COASTAL REGION, BASED UPON THE ABOVE CONSIDERATIONS. THIS DRAWING AND THE ELEMENTS OF THIS ACCESS CORRIDOR DISCUSSION SHOULD BE REVIEWED IN CONJUNCTION WITH THE DETAILED DISCUSSION OF THE PATHS AND TRAILS NETWORK CONTAINED WITHIN THE INFRASTRUCTURE PORTION OF THIS PLAN, AND THE ILLUSTRATIONS ACCOMPANYING THAT DISCUSSION.

THE FOLLOWING PLANNING AND DESIGN CONSIDERATIONS ARE STATED IN THE FORM OF GENERAL GUIDELINES RATHER THAN SPECIFIC DESIGN STANDARDS, SINCE THE ''RPV STREET STANDARDS'' AS WELL AS SPECIFIC RECOMMENDATIONS ELSEWHERE IN THIS DOCUMENT PROVIDE MORE DETAILED STANDARDS AND CRITERIA.

THE PRIMARY VALUE OF THESE ACCESS CORRIDOR GUIDELINES IS THUS THEIR INTENDED ROLE IN SHAPING THE PLANNING AND DESIGN PROCESS FOR BOTH PUBLIC WORKS PROJECTS AND PRIVATE

figure 24 access corridors



DEVELOPMENT PROJECTS:

- WHEREVER POSSIBLE, PROPOSED ACCESS CORRIDORS SHOULD BE LOCATED SO AS TO MAXIMIZE COMPATIBLE OPPORTUNITIES FOR MULTI-USE RELATIONSHIPS WITH OTHER CORRIDOR TYPES (OVERLAID OR PARALLEL).

- PHYSICAL SEPARATION OF PEDESTRIANS, BICYCLISTS, AND AUTOMOBILES WITHIN MULTI-USE ACCESS CORRIDORS SHOULD BE ACCOMPLISHED THROUGH PHYSICAL BARRIERS (FENCES, CURBS/GRADE DIFFERENCES) AND LANDSCAPING WHERE POSSIBLE.

- CONTINUITY OF PATHWAYS BETWEEN MAJOR ACCESS CORRIDORS, OPEN SPACES, ETC., SHOULD BE PROVIDED WITHIN PRIVATE DEVELOPMENTS, BUT DESIGNED SO AS TO RETAIN PRIVACY FOR ADJACENT RESIDENCES WITHIN THESE DEVELOPMENTS.

- DEFINITION OF CORRIDORS SHOULD BE ACCOMPLISHED BY USE OF DISTINCTIVE SURFACE MATERIALS, LANDSCAPING, CONSISTENT SIGNING, AND LIGHTING.

- WHERE ACCESS CORRIDORS ARE INTENDED FOR NON-VEHICULAR USE (PEDESTRIANS,

BICYCLISTS) YET PROVIDE THE ONLY ACCESS TO AREAS OF CRITICAL SAFETY/SURVEILLANCE (BLUFF EDGE) THEY SHOULD BE PROVIDED WITH DESIGN ELEMENTS WHICH WILL, WHILE PREVENTING PUBLIC VEHICULAR TRAFFIC, SELECTIVELY ADMIT SPECIFIC TYPES OF EMERGENCY/SAFETY VEHICLES.

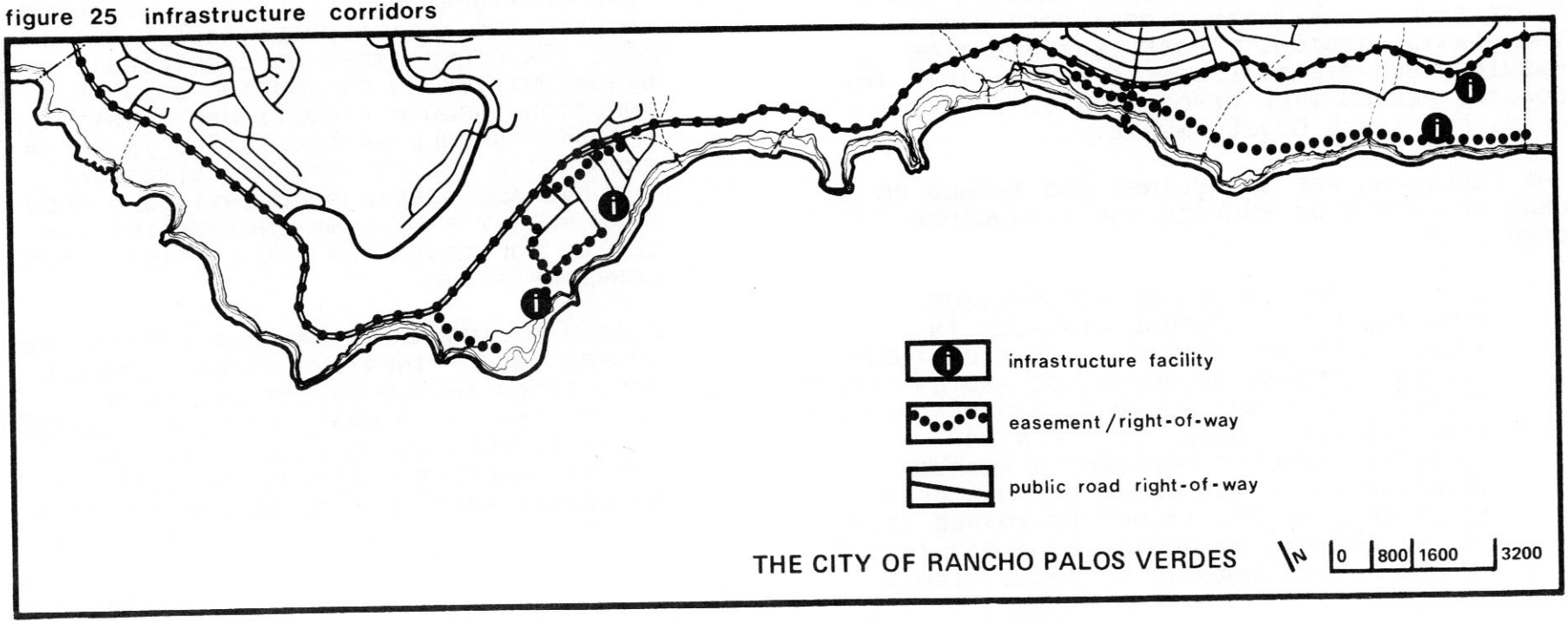
- ACCESS CORRIDOR GRADIENTS SHOULD BE DESIGNED SO THAT THEY DO NOT EXCEED ''DESIRABLE'' GRADIENT STANDARDS FOR THEIR RESPECTIVE USERS (PEDESTRIANS, BICYCLES, AUTOS), AND WHERE TOPOGRAPHY OR OTHER FACTORS PROHIBIT THIS APPROACH, THEY SHOULD BE CLEARLY MARKED AS BEING OF GREATER DIFFICULTY, AND REQUIRING MORE CAUTION.

- WHERE DESIRABLE AND POSSIBLE, ACCESS CORRIDORS SHOULD INCLUDE OVERLOOKS, VIEWPOINTS, REST STOPS, AND OTHER OPEN SPACE ELEMENTS WITHIN THEIR DESIGNS TO BOTH PROVIDE A BROADER RANGE OF USE BEYOND THE UTILITARIAN ACCESS FUNCTION OF THE CORRIDOR AS WELL AS TO VARY ITS PHYSICAL CONFIGURATION, PROVIDING VISUAL AND SPATIAL INTEREST.

INFRASTRUCTURE CORRIDORS

THE MAJOR POTENTIAL FOR THIS CATEGORY OF CORRIDOR TO SERVE AS THE BASIS FOR OTHER ''OVERLAID'' CORRIDOR FUNCTIONS (IN ACCOMPLISHING THE MULTI-FUNCTION CORRIDOR OBJECTIVE) LIES IN THE APPROACH TAKEN BY FUTURE DEVELOPMENT

figure 25 infrastructure corridors



PLANNING/PATTERNS IN UNCOMMITTED OR PARTIALLY COMMITTED SUBREGIONS OF THE COASTAL REGION.

IF THE EASEMENTS AND RIGHTS-OF-WAY FOR UTILITIES AND OTHER INFRASTRUCTURE ELEMENTS, WHICH ARE AN INTEGRAL PART OF THE SITE PLANNING CONSIDERATIONS OF THESE DEVELOPMENTS, CAN BE STRUCTURED SO AS TO PROVIDE PORTIONS OF, AND LINKAGES TO, OTHER CORRIDOR SYSTEMS (ACCESS, VISUAL, NATURAL, PROTECTIVE) THROUGH THEIR DESIGN, THEN AN INFRASTRUCTURE BASED CORRIDOR SYSTEM OF SOME CONTINUITY CAN BE CREATED WITHIN THE UNCOMMITTED SUBREGIONS IN THE FUTURE.

THE ACCOMPANYING ILLUSTRATION (FIGURE 25) PROVIDES AN INDICATION OF THE MAJOR EXISTING INFRASTRUCTURE ONLY CORRIDORS (NOT INCLUDING OTHER TYPES OF EXISTING CORRIDORS) WITHIN THE COASTAL REGION. THOSE THAT MIGHT BE PROVIDED BY POTENTIAL DEVELOPMENT WITHIN THE COASTAL REGION WILL BE DELINEATED IN THE PLANS FOR THESE DEVELOPMENTS.

THE FOLLOWING ARE GUIDELINES AND SHOULD BE USED TO CREATE OR ENHANCE INFRASTRUCTURE CORRIDORS:

- COORDINATION SHOULD BE ACCOMPLISHED WITH THE FLOOD CONTROL DISTRICT IN RELATION TO THE POTENTIAL USES OF THEIR CURRENT PROGRAM OF JOINT USE AND LANDSCAPIN OF DISTRICT RIGHTS-OF-WAY, WHERE APPROPRIATE, FOR PEDESTRIAN AND OTHER NON-VEHICULAR (EXCEPT EMERGENCY) ACCESS CORRIDOR USES, AND WHERE HUMAN ACCESS IS TO BE LIMITED, IS NOT DESIRABLE (DUE TO THE EFFECTS OF HUMANS ON HABITATS, OR FOR HAZARD REASONS). THESE RIGHTS-OF-WAY/EASEMENTS/CORRIDORS COULD BE UTILIZED AS NATURAL OR PROTECTION CORRIDORS.

- ALL FUTURE INFRASTRUCTURE CORRIDORS INVOLVING UTILITIES OR COMMUNICATIONS, AS WELL AS SEWERAGE, SHOULD BE UNDERGROUNDED WHERE NECESSARY TO MITIGATE ANY ADVERSE IMPACTS ON COASTAL RESOURCES, INCLUDING SCENIC RESOURCES. ALL MAN-MADE DRAINAGE COURSES SHOULD BE EITHER UNDERGROUNDED OR, IF RETAINED ON THE SURFACE, DEVELOPED WITH A NATURALIZED TREATMENT AND LANDSCAPE TO CONFORM TO EXISTING NATURAL DRAINAGE APPEARANCES.

- WHERE EXISTING AND PROPOSED INFRASTRUCTURE CORRIDORS MAY BE LOCATED ADJACENT TO EXISTING AND PROPOSED ACCESS CORRIDORS (OR OTHER TYPES OF CORRIDORS) OPPORTUNITIES TO EXPAND THE SIZE AND FUNCTION THROUGH A MULTI-USE CORRIDOR APPROACH SHOULD BE CONSIDERED IN A COMPREHENSIVE DESIGN APPROACH STRESSING THE OVERALL CORRIDOR POTENTIALS RATHER THAN MERELY PROVIDING ENGINEERING AND DESIGN SOLUTIONS FOR THE INFRASTRUCTURE CORRIDOR ALONE.

- ACCESS ROUTES NECESSARY FOR SERVICE AND INSPECTION OF INFRASTRUCTURE CORRIDOR FACILITIES SHOULD BE INTEGRATED INTO THE DESIGN AND OVERALL CORRIDORS CONCEPT SO AS TO PROVIDE AT LEAST A PARTIAL ACCESS CORRIDOR FUNCTION (PEDESTRIANS AT LEAST) WHERE DESIRABLE AND POSSIBLE.

VISUAL CORRIDORS

THIS SECTION DEALS WITH THE ESTABLISHMENT OF VISUAL CORRIDORS WHICH HAVE DIMENSIONS FOR BOTH VISTAS AND VIEWS AS A FURTHER EXTENSION OF THEIR DEFINITION IN THE GENERAL PLAN. VISTAS, AS DEFINED, HAVE A VIEWING STATION, OBJECT OR OBJECTS TO BE SEEN AND AN INTERMEDIATE GROUND. VIEWS HAVE A VIEWING STATION BUT DO NOT HAVE A SPECIFIC FOCUS OR OBJECT TO BE SEEN. VIEWS HAVE BROAD FOCAL POINTS WHICH HAVE AN UNLIMITED ARC AND DEPTH.

THE VISUAL CORRIDORS WHICH HAVE BEEN IDENTIFIED IN THE GENERAL PLAN AND ARE DISCUSSED HERE ARE THOSE WHICH ARE CONSIDERED TO HAVE THE GREATEST DEGREE OF VISUAL VALUE AND INTEREST TO THE GREATEST NUMBER OF VIEWERS; AND ARE THUS A FUNCTION OF PALOS VERDES DRIVE AS THE PRIMARY VISUAL CORRIDOR ACCESSIBLE TO THE GREATEST NUMBER OF VIEWERS, WITH VIEWS OF IRREPLACEABLE NATURAL CHARACTER AND RECOGNIZED REGIONAL SIGNIFICANCE.

PUBLIC VIEWING STATIONS WITHIN THE COASTAL SPECIFIC PLAN AREA FROM WHICH A MAJORITY OF RPV RESIDENTS AND VISITORS VIEW THE COMMUNITY ARE EITHER THE VEHICULAR CORRIDOR OF PALOS VERDES DRIVE OR TURNOUTS ALONG VEHICULAR CORRIDORS FOR THE PURPOSE OF VIEWING. THUS, VIEWING STATIONS ARE:

1. CONTINUOUS - VIEWED ALONG THE PUBLIC CORRIDOR OF PALOS VERDES DRIVE.

2. LOCALIZED - AS VIEWED FROM A SPECIFIC SITE OR TURNOUT.

THE VIEWING FOCAL POINTS HAVE BEEN CLARIFIED AS EITHER SPECIFIC OR NON-SPECIFIC, WHICH IS THE PRIMARY DIFFERENCE BETWEEN THE TWO TYPES OF VISUAL ASPECTS (VISTAS AND VIEWS) DEFINED IN THE GENERAL PLAN.

SPECIFIC VISUAL CORRIDORS HAVING BOTH A HORIZONTAL AND VERTICAL DIMENSION HAVE BEEN IDENTIFIED FOR VISTAS. THE VISTA CORRIDORS HAVE BEEN PUT INTO THREE CATEGORIES BASED UPON THE FOCAL POINT'S ANGLE FROM THE DIRECTION OF MOVEMENT ALONG PALOS VERDES DRIVE AND VISIBILITY OF THE FOCAL POINT. THE VISTA CORRIDORS ARE DIVIDED INTO THE FOLLOWING CATEGORIES:

1. DIRECT/FULL VISIBILITY - THE FOCAL POINT IS ENTIRELY VISIBLE WITHIN A 0-32.5 DEGREE ANGLE* FROM THE DIRECTION OF MOVEMENT.

2. DIRECT/PARTIAL VISIBILITY - THE FOCAL POINT IS PARTIALLY OBSTRUCTED OR OBSCURED (I.E. CHAIN LINK FENCE OR VEGETATION) WITHIN A 0-32.5 DEGREE ANGLE* FROM THE DIRECTION OF MOVEMENT.

3. INDIRECT VISIBILITY - THE FOCAL POINT IS WITHIN A 32.5-90 DEGREE ANGLE* FROM THE DIRECTION OF MOVEMENT, OR A SECONDARY AREA OF VISION (I.E., ''CORNER OF THE EYE'', PERIPHERAL).

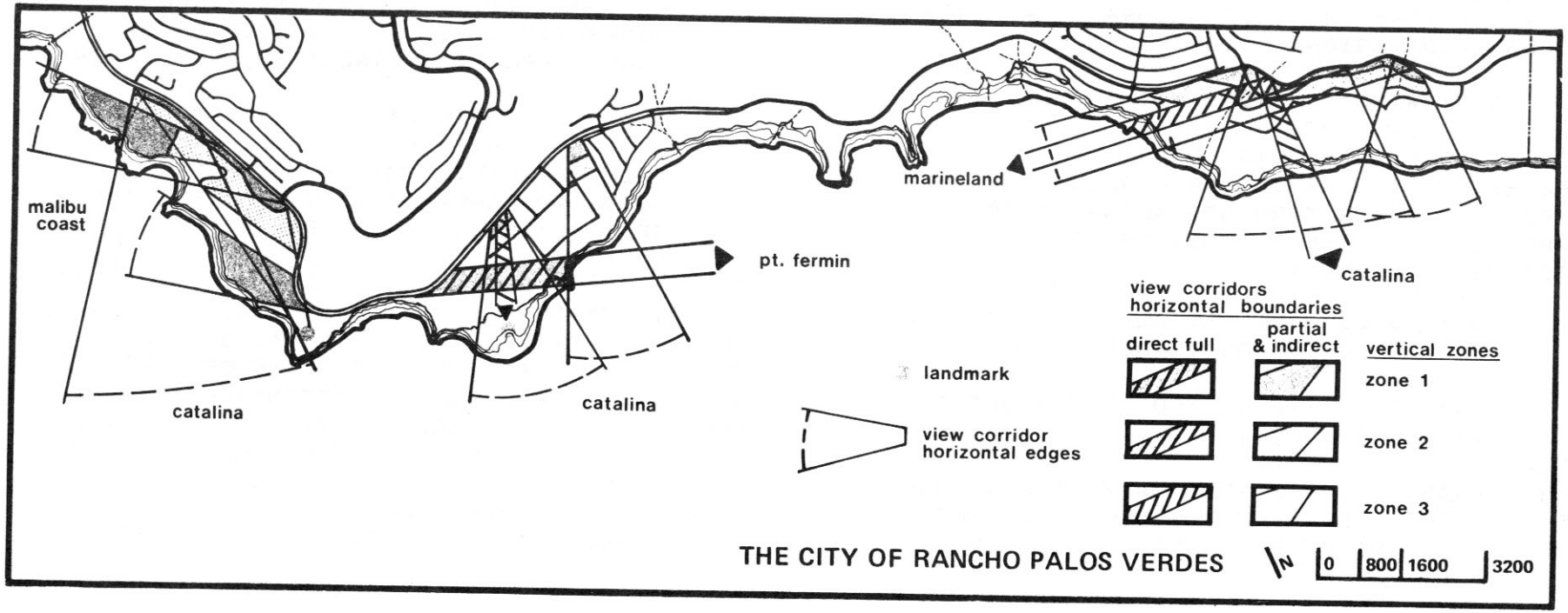
*THE ANGLE USED TO DEFINE DIRECT VS. INDIRECT VISIBILITY IS BASED UPON AN ASSUMED AVERAGE SPEED FOR TRAVEL ALONG THE PALOS VERDES DRIVE VEHICULAR CORRIDOR. THE DRIVER'S AS WELL AS THE PASSENGER'S ATTENTION IS DIRECTED FORWARD AND THE ANGLE OF VISION IS A DIRECT RELATIONSHIP OF SPEED. THE CONE OF VISION AT A SPEED OF 45 MPH IS 65 DEGREES OR 32.5 DEGREES TO EITHER SIDE. THIS ANGLE WAS USED TO DIFFERENTIATE BETWEEN DIRECT (0-32.5

DEGREES) AND INDIRECT (32.5-90 DEGREES). A 90-DEGREE ANGLE TO THE SIDE WAS DETERMINED TO BE OUT OF THE NORMAL RANGE OF VISION OF DRIVER AND PASSENGER.

THE BOUNDARIES OF THE VISTAS IDENTIFIED ALONG PALOS VERDES DRIVE ARE DEFINED BOTH VERTICALLY AND HORIZONTALLY ON THE ACCOMPANYING PLANS AND SECTIONS OF THE COASTAL AREA (FIGURES 26, 27, AND 28). THESE BOUNDARIES WERE ESTABLISHED BY THE FOLLOWING METHOD:

- HORIZONTAL BOUNDARIES
  - RIGHT EDGE FROM THE BEGINNING POINT OF A CONTINUOUS VIEWING STATION TO THE RIGHT EDGE OF THE VIEWING FOCUS.
  - LEFT EDGE - FROM THE ENDING POINT OF A CONTINUOUS VIEWING STATION TO THE LEFT EDGE OF THE VIEWING FOCUS.
- VERTICAL BOUNDARIES
  - BOTTOM EDGE - A VERTICAL ARC WAS ESTABLISHED FOR THE BOTTOM EDGE FROM THE VIEWING STATION ELEVATION TO THE FOCAL POINT ELEVATION. FOR DISTANT FOCAL POINTS (I.E. CATALINA AND MALIBU COASTLINE) A MINIMUM 2-DEGREE DOWN-ARC FROM HORIZONTAL WAS USED.

figure 26 visual corridors



- TOP EDGE - ASSUMED TO BE THE UPPER LIMIT, OR ZENITH OF A PERSON WITH NORMAL VISION VIEWING ON AN ESSENTIALLY HORIZONTAL PLANE.

THE HORIZONTAL DIMENSION OF THE THREE CATEGORIES OF VISTA CORRIDORS IS DEFINED ON THE SUBREGION PLANS. THE VERTICAL DIMENSION (BOTTOM) IS DEFINED BY THE ACCOMPANYING SECTIONS. THIS VERTICAL DIMENSION IS TRANSFERRED TO THE PLANS IN TERMS OF ''HEIGHT ZONES''. THESE HEIGHT ZONES ARE DEFINED BY THE DISTANCE BETWEEN THE BOTTOM OF THE VERTICAL ARC AND GROUND LEVEL AND ARE AS FOLLOWS:

ZONE 1 LESS THAN 16'
ZONE 2 - 16' TO 30'
ZONE 3 - ABOVE 30'

PLANS AND SECTIONS WERE ESTABLISHED BASED ON THE CITY'S ESTABLISHED HEIGHT REGULATIONS FOR RESIDENTIAL ZONING CATEGORIES (I.E. SF LESS THAN 16', MF LESS THAN 30').

PLANS AND SECTIONS DESCRIBING THE PLANS WERE NOT PREPARED FOR SUBREGIONS 4 AND 8 SINCE 4 IS FULLY DEVELOPED WITH RESIDENTIAL AND 8 WILL REMAIN AS A NATURAL LAND AREA.

HEIGHT ZONES WERE NOT APPLIED TO SUBREGION 5'S VISTA CORRIDOR SINCE THIS REGION WILL REMAIN AS A NATURAL LAND AREA AND IS NOT AVAILABLE FOR DEVELOPMENT.

THE PRECEDING VISTA CORRIDOR ANALYSIS IS INTENDED TO PROVIDE THE CITY WITH A RANGE OF CHOICES AS TO THE COURSE OF ACTIONS FOR: (1) THE DEVELOPMENT OF THE PV DRIVE VISUAL (AND ACCESS/INFRASTRUCTURE) CORRIDOR (LANDSCAPING, UNDERGROUNDING, VISTA POINTS); (2) THE DEVELOPMENT OF NATURAL LAND AREAS (LANDSCAPING, ETC.); AND (3) THE PROPOSED DEVELOPMENT INTENSITY (ZONING) AND DEVELOPMENT CONTROLS NEEDED TO PROTECT AND ENHANCE (OVERLAY DISTRICTS, DESIGN STANDARDS, DESIGN REVIEW) THE IDENTIFIED CORRIDORS. THE ''DIRECT/FULL VISIBILITY'' VISTA, BEING THE MOST VALUABLE, SHOULD RECEIVE THE HIGHEST PRIORITY FOR PRESERVATION PROTECTION AND ENHANCEMENT; WITH THE HEIGHT ZONES ESTABLISHING ZONES OF DEVELOPMENT RESTRICTION BASED UPON ZONING.

A LARGE PORTION OF THE PALOS VERDES DRIVE WEST/SOUTH/25TH STREET CORRIDOR HAS VISUAL ASPECTS WHICH QUALIFY AS VIEWS. THOSE SECTIONS OF THE DRIVE WHICH HAVE OCEAN VIEWS QUALIFY HERE AND A MAJORITY OF THE LAND ON THE OFFSHORE SIDE FALLS WITHIN THE FOREGROUND OF SOME PORTION OF THE DRIVE WHICH IS A VIEWING STATION.

figure 27 distant views

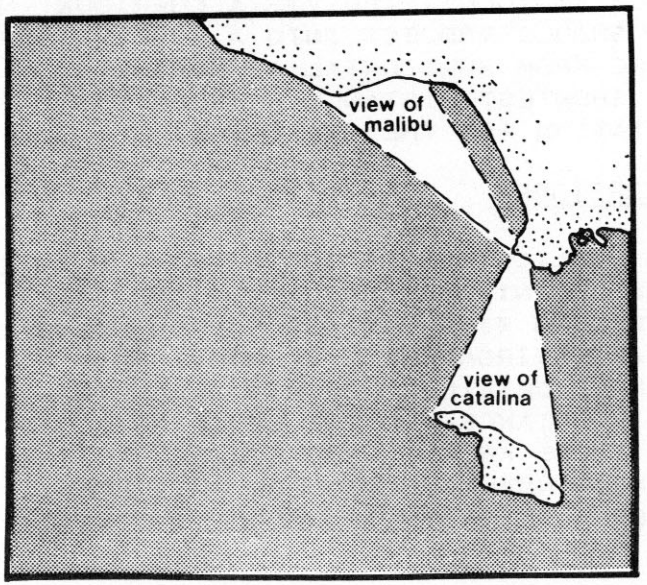
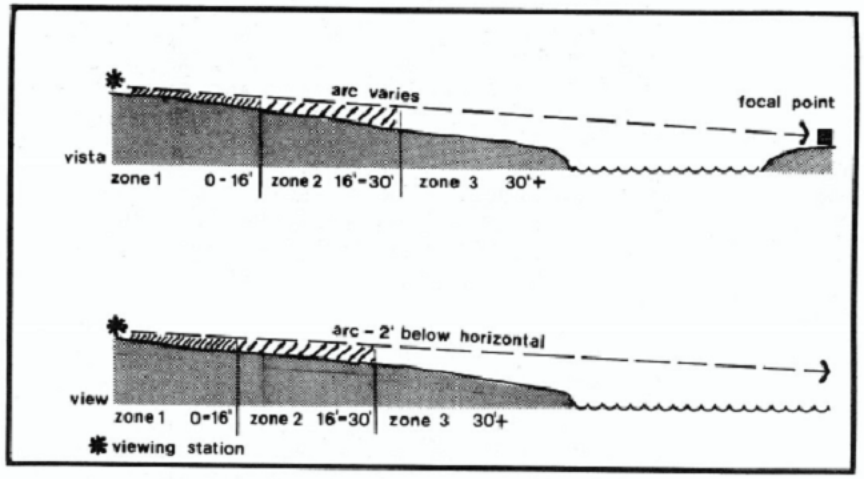


figure 28 typical sections



TO PROTECT THIS VISUAL RELATIONSHIP BETWEEN THE DRIVE AND OCEAN IN THOSE AREAS WHICH ARE NOT PART OF AN IDENTIFIED VISTA CORRIDOR, NO BUILDINGS SHOULD PROJECT INTO A ZONE MEASURED 2° DOWN-ARC FROM HORIZONTAL AS MEASURED ALONG THE SHORTEST DISTANCE BETWEEN THE VIEWING STATION AND THE COASTLINE.

NATURAL CORRIDORS

SINCE THE PUBLICATION OF THE GENERAL PLAN IN 1975, MORE DEFINITIVE CONSULTANT AND STAFF STUDIES DEALING WITH VARIOUS COMPONENTS OF THE NATURAL ENVIRONMENT HAVE PROVIDED A SOMEWHAT MORE DETAILED DEFINITION OF THE RELATIVE IMPORTANCE AND THE GEOGRAPHIC LIMITS OF THESE AREAS, AS DESCRIBED IN THE NATURAL ENVIRONMENT SECTION OF THIS PLAN. HOWEVER, BECAUSE OF THEIR UNIQUELY DYNAMIC (CHANGING) CHARACTER, ANY ATTEMPT TO PROVIDE PRECISE MEASURED BOUNDARIES MUST YIELD TO THE MORE GENERALIZED, BUT EASILY VALIDATED METHODS OF FIELD INSPECTION COUPLED WITH HISTORICAL AND CURRENT AERIAL PHOTOGRAPHY AND OTHER DOCUMENTING SOURCES.

NATURAL CORRIDORS THUS CAN PERFORM SEVERAL SIGNIFICANT FUNCTIONS IN BOTH SHAPING AND SUPPORTING EXISTING AND POTENTIAL LAND USES OF ALL TYPES, INCLUDING:

- PROVIDING LANDSCAPE/TOPOGRAPHIC RELIEF/DEFINITION WITHIN DEVELOPED AREAS WHICH CAN SERVE AS A PROTOTYPICAL SYSTEM FOR DEVELOPMENT LANDSCAPING SYSTEMS/THEMES WHICH ARE INTENDED TO BE "NATURALIZED" RATHER THAN HIGH-MAINTENANCE IN THE FUTURE.

FLAG POLES

FLAG POLES IN THE COASTAL ZONE ARE PERMITTED UP TO 12-FEET IN HEIGHT, AS MEASURED FROM ADJACENT GRADE, WITH NO DISCRETIONARY REVIEW, OR UP TO 16-FEET IN HEIGHT, AS MEASURED FROM ADJACENT GRADE, WITH A SITE PLAN REVIEW APPLICATION TO ENSURE THERE IS NO SIGNIFICANT VIEW IMPAIRMENT CAUSED BY THE FLAG POLE ABOVE 12-FEET IN HEIGHT. FLAG POLES IN THE COASTAL ZONE MAY EXCEED 16-FEET IN HEIGHT, UP TO A MAXIMUM HEIGHT OF 70-FEET, AS MEASURED FROM ADJACENT GRADE PROVIDED THE FOLLOWING PARAMETERS ARE MET:

- ONE FLAG POLE EXCEEDING 16-FEET IS PERMITTED FOR ANY PARCEL OF 120 ACRES OR MORE, PROVIDED THAT, WITHIN THE 120-PLUS-ACRE LEGAL PARCEL, THE LAND ON WHICH THE FLAG POLE IS ERECTED IS OWNED BY OR DEDICATED TO THE CITY SO AS TO ALLOW FOR PUBLIC ACCESS AND TO ALLOW ONLY THE AMERICAN FLAG TO BE FLOWN ON SAID FLAG POLE;
- THE FLAG POLE SHALL BE CONSISTENT WITH THE HEIGHT RESTRICTIONS IDENTIFIED IN THE VISUAL CORRIDORS SECTION OF THE LCP;
- AN APPROVED VARIANCE PERMIT TO EXCEED THE CITY'S 16-FOOT HEIGHT LIMIT MUST BE OBTAINED FROM THE CITY; AND,
- THE PROPERTY ACCOMMODATING THE FLAGPOLE MUST PROVIDE A MINIMUM OF 20 FREE PUBLIC PARKING SPACES, PUBLIC RESTROOMS, DRINKING FOUNTAIN, AND PUBLIC BENCH SEATING.

- PROVIDING OPPORTUNITIES FOR ADDITIONAL CORRIDOR FUNCTIONS TO BE ACCOMPLISHED IN OVERLAY OR PARALLEL FASHION SUCH AS PEDESTRIAN ACCESS CORRIDORS, VISUAL CORRIDORS, INFRASTRUCTURE CORRIDORS, AND AS A BUFFER BETWEEN PROTECTION CORRIDORS AND HIGH ACTIVITY CORRIDORS (ACCESS) OR USE AREAS.

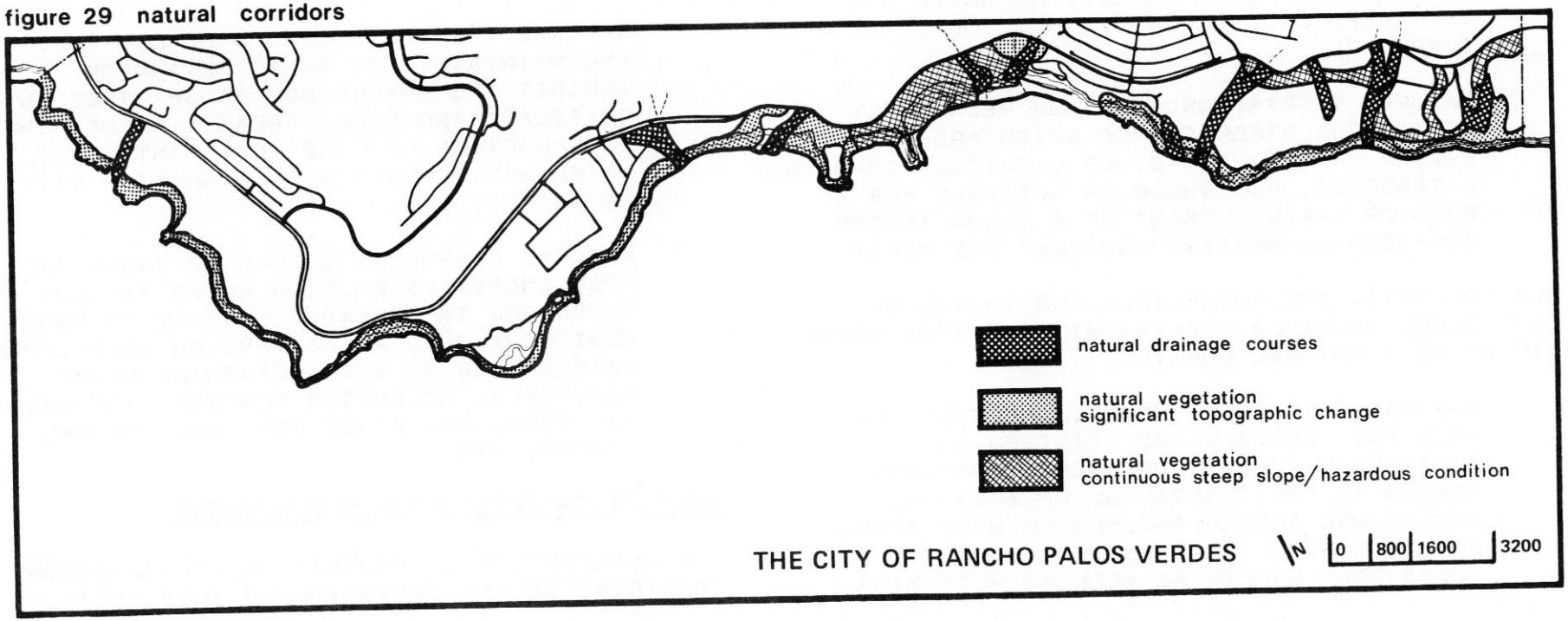
- PROVIDING IMPORTANT UTILITARIAN FUNCTIONS SUCH AS DRAINAGE, ETC., WITHIN AN EXISTING ENVIRONMENT WHICH DOES NOT HAVE TO BE ALTERED, AT COST OR EFFORT, TO ACCOMMODATE THIS FUNCTION; THUS RESULTING IN ECONOMIES FOR BOTH PUBLIC AND PRIVATE SECTOR AND RETENTION OF CHARACTERISTIC LAND FORMS WHICH HAVE DEVELOPED NATURALLY IN RESPONSE TO THESE NATURAL ACTIONS FORMING AN IMPORTANT PORTION OF THE VISUAL APPEARANCE OF THE COASTAL REGION.

THE NATURAL CORRIDORS DEFINED FOR THE COASTAL REGION ARE ILLUSTRATED ON THE ACCOMPANYING FIGURE 29.

THREE DISTINCT NATURAL CORRIDOR TYPES ARE EVIDENT:

- NATURAL DRAINAGE AREAS AND DRAINAGE COURSES GENERALLY LEADING DOWN TO THE COASTAL BLUFF AREA AND TRAVERSING

figure 29 natural corridors



ACROSS THE COASTAL PLAIN/TERRACES GENERALLY ''SUBDIVIDING'' THESE AREAS INTO SMALLER LAND AREAS DEFINED BY THE RAVINES AND VEGETATION CHARACTERISTIC OF THE DRAINAGE FUNCTION. MANY OF THESE CORRIDORS PROVIDE AN IMPORTANT SMALL ANIMAL HABITAT AS WELL.

- NATURAL VEGETATION AND DRASTIC TOPOGRAPHIC CHANGE CHARACTERISTIC OF THE SEA BLUFF EDGE AND FACE, AND RELATED DRAINAGE COURSE ''MOUTHS'' AT THE BLUFF EDGE CREATING CORRIDORS CONTAINING EXTENSIVE VEGETATION. THIS IS BOTH A HORIZONTAL AND VERTICAL CORRIDOR, WITH EXISTING AND PROPOSED ACCESS ROUTES TO AND DOWN THE BLUFF FACE REPRESENTING THE PRIMARY HUMAN INTRUSIONS WHICH MUST BE CAREFULLY INTEGRATED INTO THESE CORRIDORS.

- NATURAL VEGETATION AREAS ON RELATIVELY CONTINUOUS STEEP SLOPES WHICH ARE EITHER IN THE HAZARD, OR DIFFICULT-TO-BUILD CATEGORIES, BUT WOULD BE SUITABLE FOR A PATH OR TRAIL ELEMENT OF A MINOR ACCESS CORRIDOR CONNECTING ADJACENT USE AREAS.

THE FOLLOWING ARE GUIDELINES AND SHOULD BE CONSIDERED WHENEVER DEALING WITH AN AREA IDENTIFIED AS A NATURAL CORRIDOR:

- NATURAL CORRIDORS SHOULD, WHERE DESIRABLE AND FEASIBLE, BE UTILIZED AS PEDESTRIAN ACCESS CORRIDORS PROVIDING ACCESS TO THE COASTAL BLUFF AREA AND PUBLIC USE AREAS, AND SHOULD HAVE APPROPRIATE DESIGN TREATMENT TO INSURE PEDESTRIAN SAFETY AS WELL AS RETENTION AND ENHANCEMENT OF THE NATURAL FEATURES.

- NATURAL CORRIDORS SHOULD BE UTILIZED AS LANDSCAPE AND OPEN SPACE BUFFERS SEPARATING AND DEFINING DEVELOPED AREAS AND WHERE PEDESTRIAN ACCESS IS PRESENT, LINKING TO PEDESTRIAN ACCESS CORRIDORS WITHIN THESE DEVELOPMENTS.

- WHERE NATURAL CORRIDORS CAN BE UTILIZED TO EXPAND, OR OTHERWISE ENHANCE, PROTECTION CORRIDORS AS OPEN SPACE WITHIN VISUAL CORRIDORS, THE OPPORTUNITY SHOULD ALSO CONSIDER THE POSSIBILITY OF PROVIDING CONTROLLED ACCESS CORRIDORS FOR VIEWING SELECTED HABITAT AREAS FOR EDUCATIONAL OR SCIENTIFIC PURPOSES.

- NATURAL CORRIDORS SHOULD BE DESIGNED AND MAINTAINED SO AS TO RETARD OR INHIBIT THE CHANCE FOR BRUSH FIRES IN GRASSLAND AND BRUSH AREAS, THROUGH THE INTRODUCTION OF FIRE RESISTANT PLANT MATERIALS, CLEANING OF HIGH FIRE RISK MATERIALS, ETC.

- NATURAL CORRIDORS SHOULD BE PROTECTED FROM INCREASED EROSION POTENTIAL DUE TO INCREASED IMPERMEABLE SURFACE IN ADJACENT DEVELOPED AREAS THROUGH DEVELOPMENT/MAINTENANCE OF SOIL-RETAINING PLANT MATERIALS, SELECTIVE PLACEMENT OF NATURAL ROCK, AND OTHER DRAINAGE CHANNEL LINERS, ETC.

PROTECTION/PRESERVATION CORRIDORS

THE DESCRIPTION OF PROTECTION/PRESERVATION CORRIDORS AT THE BEGINNING OF THIS SECTION

INDICATED THAT THEY ARE BASICALLY ''AVOIDANCE'' CORRIDORS OR AREAS BASED UPON THE REQUIREMENT THAT HUMAN ACTIVITIES/PRESENCE BE EXCLUDED OR STRINGENTLY CONTROLLED DUE TO THE NEED TO PRESERVE VALUABLE/SENSITIVE NATURAL HABITATS AND/OR TO AVOID GEOLOGIC OR OTHER LAND RELATED CONDITIONS INVOLVING HAZARD OR DANGER, SUCH AS THE SEA CLIFF EDGE.

BECAUSE OF THESE CRITERIA, A NUMBER OF OTHERWISE RELATIVELY CONTINUOUS OR APPARENTLY USABLE CORRIDORS WITHIN THE COASTAL REGION ARE ACTUALLY SUBJECT TO AVOIDANCE CRITERIA INVOLVING ANY ACTIVE HUMAN USE AND MUST BE CONSIDERED FOR PASSIVE USE (VISUAL).

THE ACTUAL CORRIDOR FUNCTION OF THESE PROTECTION/PRESERVATION AREAS IS, EXCEPT IN LIMITED, CONTROLLED ACCESS SITUATIONS, THEIR CONTRIBUTION TO THE FUNCTION OF NATURAL AND VISUAL CORRIDORS, TO WHICH THEY, BY THEIR LOCATION AND EXTENT, ARE UNIQUELY SUITED. FOR EXAMPLE, AREAS IDENTIFIED AS EITHER SIGNIFICANT NATURAL SYSTEMS OR UNSAFE AREAS, IN BOTH THE GENERAL PLAN AND THIS PLAN, HAVE A NUMBER OF LINEAR CHARACTERISTICS WHICH, WHILE THEY ARE HAZARDOUS TO HUMANS OR SHOULD BE PROTECTED FROM HUMANS, PROVIDE EXCELLENT ELEMENTS OF A TOTAL MULTIFUNCTIONAL CORRIDORS SYSTEM.

AREAS WHICH ARE DELINEATED AS PROTECTION/ PRESERVATION CORRIDORS INCLUDE:

- SLOPES ABOVE 35% WHICH ARE RELATIVELY CONTINUOUS IN NATURE (AND WHOSE GEOLOGY MIGHT PERMIT LIMITED PEDESTRIAN ACCESS CORRIDORS IF APPROPRIATE).
- CATEGORY 1A OF THE GEOLOGIC FACTORS CLASSIFICATION SYSTEM (NATURAL ENVIRONMENT SECTION) WHICH IS DEFINED AS POTENTIALLY HAZARDOUS FOR HUMAN PASSAGE.
- ALL AREAS DESIGNATED AS HAVING HABITATS SENSITIVE TO HUMAN INTRUSION (TERRESTRIAL AND MARINE).

THE ACCOMPANYING ILLUSTRATION (FIGURE 30) INDICATES THE LOCATION OF PROTECTION/PRESERVATION CORRIDORS.

BECAUSE OF THEIR NATURE AS AVOIDANCE CORRIDORS, NO PLANNING OR DESIGN CRITERIA APPLY TO THESE AREAS EXCEPT THOSE WHICH WOULD IMPACT THEM DUE TO ACTIONS IN ADJACENT AREAS, THUS:

- WHERE A PROTECTION/PRESERVATION CORRIDOR IS LOCATED ADJACENT TO AN AREA INVOLVING HUMAN USE (ACCESS, HABITATION), SOME BUFFER AREA SHOULD BE DESIGNED/PLANNED/ MAINTAINED SO AS TO AVOID ADVERSE IMPACTS.

COMPOSITE CORRIDORS

COMPOSITE CORRIDORS REPRESENT COMBINATIONS OF TWO OR MORE INDIVIDUAL CORRIDOR TYPES INTO MULTIFUNCTIONAL OR COMPOSITE FUNCTION CORRIDORS. THESE COMBINATIONS CAN BE OF TWO TYPES:

- ''OVERLAY'' - IN WHICH THE FUNCTIONS EXIST WITHIN THE SAME RIGHT-OF-WAY, OR GENERALLY DEFINED EASEMENT, OR ''OVERLAID'' ON A BASE OR PRIMARY CORRIDOR FUNCTION. AN EXAMPLE WOULD BE A COMBINED INFRASTRUCTURE/ACCESS CORRIDOR IN WHICH THE ACCESS FUNCTION (STREET, PEDESTRIAN

PATH) IS LITERALLY ''OVERLAID'' ON THE UNDERGROUNDED UTILITIES, WHILE ANOTHER MIGHT BE A VISUAL CORRIDOR ''OVERLAID'' ON ANY ONE OF THE OTHER TYPES.

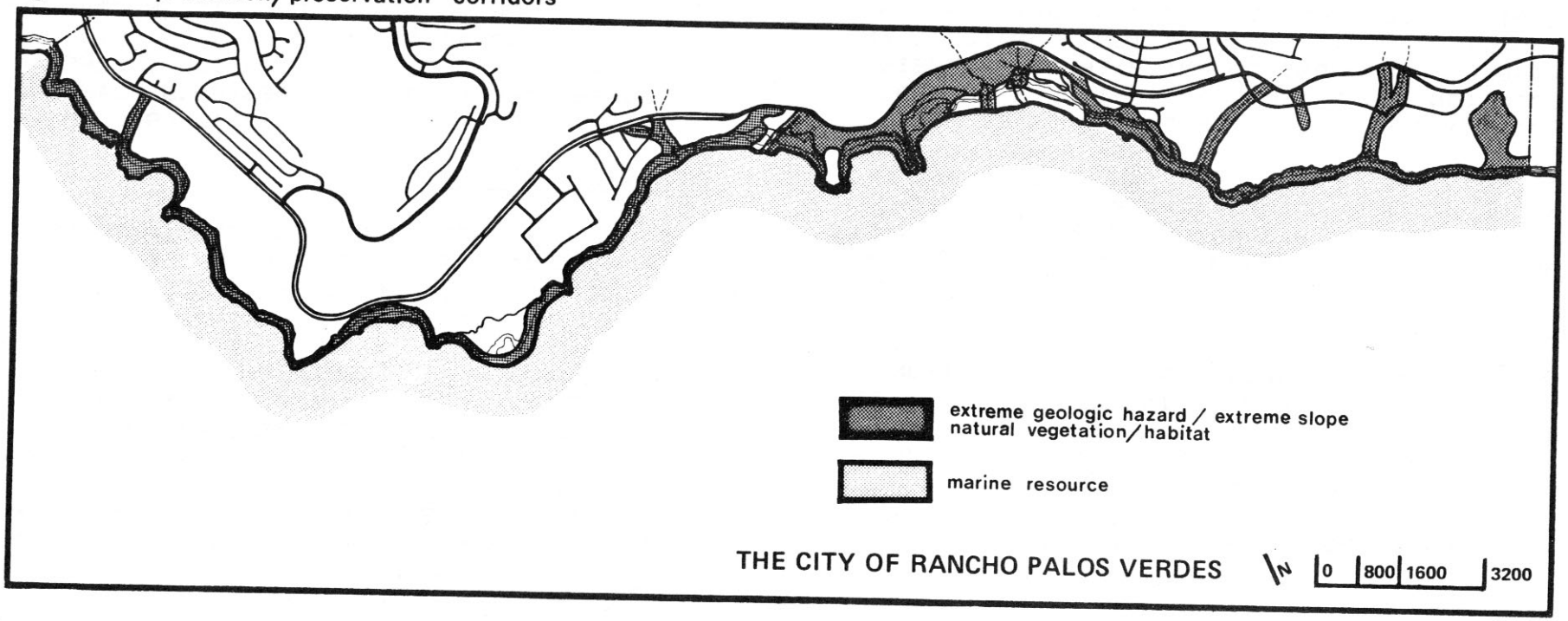
- ''PARALLEL'' - IN WHICH THE FUNCTIONS EXIST IN PARALLEL, OR RELATIVELY ADJACENT, RIGHTS-OF-WAY OR EASEMENTS/LINEAR AREAS EITHER BECAUSE OF INHERENT INCOMPATIBILITY (A PROTECTION/PRESERVATION CORRIDOR ADJACENT TO AN ACCESS CORRIDOR FOR EXAMPLE) OR BECAUSE OF JURISDICTIONAL, OWNERSHIP, FUNCTIONAL, OR NATURAL ENVIRONMENT FACTORS WHICH HAVE RESULTED IN SEPARATED, ''PARELLEL'' CORRIDORS.

ADDITIONALLY, COMPOSITE CORRIDORS CAN BE CLASSIFIED IN TERMS OF THE DEGREE OF INTENDED CONTROL OVER HUMAN USE OF THE CORRIDOR, RANGING FROM THE UNRESTRICTED HUMAN USE WITHIN ACCESS CORRIDORS, THROUGH THE CONTROL OF HUMAN USE BY LIMITATIONS ON HEIGHT AND PLACEMENT OF STRUCTURES IN VISUAL CORRIDORS, TO THE TOTAL EXCLUSION OF HUMANS FROM PROTECTION/PRESERVATION CORRIDORS.

POLICY:

IT IS THE POLICY OF THE CITY TO: REQUIRE DEVELOPMENT PROPOSALS WITHIN AREAS WHICH MIGHT IMPACT CORRIDORS TO ANALYZE THE SITE CONDITIONS IN ORDER TO MITIGATE IMPACTS AND OBTAIN FEASIBLE IMPLEMENTATION OF ALL CORRIDOR GUIDELINES.

figure 30 protection/preservation corridors



INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

FISCAL

A FISCAL SUMMARY OF THE COASTAL SPECIFIC PLAN AND AN EXAMINATION OF ITS IMPACT UPON THE GENERAL PLAN BUILDOUT REVENUES AND EXPENDITURES CANNOT BE ACCOMPLISHED WITHOUT A FISCAL ANALYSIS OF THOSE SUBREGIONS IN THE COASTAL AREA WHICH HAVE BEEN DESIGNATED DEVELOPMENT DENSITIES DIFFERENT FROM THOSE SPECIFIED IN THE GENERAL PLAN OR THOSE AREAS WHICH HAVE THE POTENTIAL FOR SIGNIFICANT DEVELOPMENT IN THE COASTAL REGION.

SUBREGIONS ONE AND SEVEN BOTH HAVE DENSITIES CONSISTENT WITH THE GENERAL PLAN. HOWEVER, BECAUSE THERE IS SO MUCH DEVELOPABLE LAND IN THESE TWO AREAS, FISCAL EXAMINATION FOR POTENTIAL IMPACTS IS NECESSARY. SUBREGION 3, HOWEVER, HAS UNDERGONE A SIGNIFICANT CHANGE IN DENSITIES. A REVISION FROM SIX AND TWELVE MULTIPLE FAMILY AND TWO SINGLE FAMILY UNITS PER ACRE TO FOUR AND ONE SINGLE FAMILY UNITS PER ACRE HAS THE POTENTIAL TO SIGNIFICANTLY ALTER THE GENERAL PLAN REVENUES AND EXPENDITURES FOR THAT AREA, AND FOR THAT REASON IT HAS ALSO BEEN ANALYZED. SUBREGION 6 HAS ALSO UNDERGONE A DENSITY CHANGE, HOWEVER, THE DEVELOPMENT IN THIS PARTICULAR AREA IS OF A MINOR NATURE AND IS NOT EXPECTED TO ALTER OR IMPACT THE SAME GENERAL PLAN BASE REVENUES AND EXPENDITURES.



PROJECTION FACTORS WHICH WERE USED FOR THE FISCAL ANALYSIS OF THESE AREAS WERE THOSE USED IN THE GENERAL PLAN FISCAL ELEMENT. POTENTIAL REVENUES AND EXPENDITURE FACTORS WERE BASED UPON: ASSESSED VALUATION PER ACRE, PER CAPITA FIGURES OBTAINED BY USING THE GENERAL PLAN PERSONS PER DWELLING UNIT PROJECTION FACTORS, AND PER CAPITA COSTS BASED UPON AN OVERALL POPULATION FIGURE OF

42,000 FOR THE ENTIRE CITY. IT SHOULD BE NOTED AT THIS POINT THAT THE GENERAL PLAN HAS IN SOME CASES BEEN INCREASED OR DECREASED BECAUSE OF MORE DEFINITIVE INFORMATION PERTAINING TO GEOLOGICAL AND SLOPE HAZARD AREAS.

ACQUISITION OF ACREAGE FOR CLASS I AND II TRAILS IN THE COASTAL REGION WILL BE A PART OF THE DEVELOPMENT OF THOSE AREAS. AT THE TIME THE PROPERTIES ARE SUBDIVIDED, IT WILL BE THE RESPONSIBILITY OF THE LANDOWNER/DEVELOPER TO DEDICATE ADEQUATE EASEMENT FOR SUCH USES. MAINTENANCE COSTS FOR THESE FACILITIES CAN BE FUNDED BY VARIOUS SOURCES SUCH AS GAS TAX MONIES RECEIVED FROM THE STATE ONLY IF THOSE FACILITIES ARE CONSIDERED IN THE PUBLIC RIGHT-OF-WAY.

GENERAL PLAN BUILDABLE ACREAGE FIGURES FOR SUBREGION ONE INDICATE THAT THERE ARE 131 BUILDABLE ACRES ON THE SITE. COASTAL PLAN BUILDABLE ACREAGE FIGURES FOR THE SAME AREA REPRESENT 140 ACRES. THE FOLLOWING REVENUE AND EXPENDITURE ANALYSIS FOR THIS SUBREGION UTILIZES BOTH THE GENERAL PLAN AND COASTAL PLAN ACREAGE FIGURES WITH THE SAME ZONING DESIGNATION (1 DU/ACRE). SEE TABLE 17.

IN SUBREGION THREE, THERE NOW EXISTS 240 CONDOMINIUMS IN THE PALOS VERDES BAY CLUB AND 216 APARTMENT UNITS IN THE PORTO VERDE COMPLEX. THE GENERAL PLAN ZONING FOR THIS SUBREGION DESIGNATES 12 DU/ACRE ON THE CONDOMINIUM AND APARTMENT SITES, 2 DU/ACRE ON THE BLUFF AREA AND 6 DU/ACRE ON THE REMAINING ACREAGE. THE COASTAL SPECIFIC PLAN CHANGES THIS TO 1 DU/ACRE ON THE BLUFF AREA AND AN OVERALL DENSITY DESIGNATION OF 4 DU/ACRE ON THE REMAINING ACREAGE. THE

GENERAL PLAN / COASTAL PLAN FISCAL COMPARISON•

TABLE 17

		GENERAL PLAN	COASTAL PLAN	BALANCE
SUBREGION 1	REVENUE	46,750	49,973	+3,223
	EXPENDITURES	17,103	18,298	+1,195
	NET IMPACT	29,647	31,675	+2,028
SUBREGION 3	REVENUE	165,136	63,263	-101,873
	EXPENDITURES	51,910	25,468	-26,442
	NET IMPACT	113,226	37,795	-75,431
SUBREGION 7	REVENUE	68,163	49,258	-18,905
	EXPENDITURES	24,460	18,065	-6,395
	NET IMPACT	43,703	31,193	-12,510

• GENERATING FACTORS IDENTICAL TO 1975 GENERAL PLAN FACTORS

LOWER PORTION OF THE PALOS VERDES BAY CLUB CONDOMINIUMS WOULD BE CHANGED TO REFLECT THIS 1 DU/ACRE DENSITY DESIGNATION.

GENERAL PLAN BUILDABLE ACREAGE FIGURES FOR SUBREGION THREE INDICATE THAT THERE ARE 66 BUILDABLE ACRES ON THE SITE. COASTAL PLAN ACREAGE FIGURES FOR THE SAME AREA REPRESENT 57 ACRES. THE FOLLOWING REVENUE AND EXPENDITURE ANALYSIS FOR THE SUBREGION UTILIZES BOTH THE GENERAL PLAN AND COASTAL PLAN DENSITIES AND ACREAGE FIGURES. SEE TABLE 17.

SUBREGION 7 PRESENTLY HAS ONE MULTIPLE FAMILY USE ESTABLISHED WHICH CONTAINS 100 CONDOMINIUM UNITS. GENERAL PLAN ZONING FOR THE SUBREGION IS PRESENTLY 1 DU/ACRE WHILE THE PROPOSED GENERAL PLAN ZONING WILL REPRESENT THE SAME DENSITY. APPROXIMATELY 153 ACRES ARE POTENTIALLY BUILDABLE THROUGH THE GENERAL PLAN AND 139 ACRES HAVE BEEN ESTABLISHED AS POTENTIALLY BUILDABLE IN THE COASTAL PLAN. THE FOLLOWING REVENUE AND EXPENDITURE ANALYSIS FOR THE SUBREGION UTILIZES BOTH THE GENERAL PLAN AND COASTAL PLAN DENSITIES AND ACREAGE FIGURES. SEE TABLE 17.

AT THE COMPLETION OF THE ANALYSIS OF EACH SUBREGION, A COMPILATION WAS DONE OF THE REVENUES AND EXPENDITURES INCURRED THROUGH DEVELOPMENT OF THESE SUBREGIONS. THOSE FIGURES WERE TOTALED AND COMPARED TO REFLECT A NET LOSS WHEN COMPARED TO THE EXPECTED RESULT OF BUILDOUT AT THE PROPOSED GENERAL PLAN DENSITIES FOR THE SAME AREA. SEE TABLE 18.

THE GENERAL PLAN FISCAL ANALYSIS DETAILED A $199,400 DEFICIT FOR THE ENTIRE CITY AT BUILDOUT FOR THE GENERAL PLAN DENSITIES. AS INDICATED IN THE SUMMARY CHART, THE NET IMPACT BALANCE SHOWS A NET LOSS OF $85,431 FOR THOSE SUBREGIONS WITH COASTAL PLAN DENSITIES DIFFERENT THAN THOSE OF THE GENERAL PLAN OR SUBSTANTIAL DEVELOPMENT POTENTIAL. THIS LOSS ADDED TO THE GENERAL PLAN DEFICIT WILL RESULT IN A TOTAL BUILDOUT DEFICIT OF $284,831.

POLICIES

FISCAL POLICIES: NO ADDITIONAL FISCAL POLICIES ARE PROPOSED. EXISTING FISCAL POLICIES ARE LISTED ON PAGES 241-242 OF THE GENERAL PLAN.

GENERAL PLAN / COASTAL PLAN FISCAL SUMMARY • **TABLE 18**

	GENERAL PLAN	COASTAL PLAN	BALANCE
REVENUE	280,049	162,494	-117,555
EXPENDITURES	93,473	61,831	-31,642
NET IMPACT	186,576	100,663	-85,913

•GENERATING FACTORS IDENTICAL TO 1975 GENERAL PLAN FACTORS

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 1 IS LOCATED IN THE NORTHERN-MOST PORTION OF THE COASTAL REGION AND IS BORDERED ON THE NORTH BY THE CITY OF PALOS VERDES ESTATES AND ON THE SOUTH BY POINT VICENTE BEACH PARK. THE 187 ACRE AREA IS PREDOMINANTLY UNDEVELOPED, ALTHOUGH A FEW RESIDENCES AND SOME AGRICULTURE EXISTS IN THE NORTH. IT IS THIS AREA'S RELATIVELY UNDEFINED CHARACTER, PRIVATE OWNERSHIP, AND ULTIMATE POTENTIAL THAT ESTABLISH IT AS AN UNCOMMITTED SUBREGION.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

THE CLIMATIC PROFILE OF ZONE 1 PRESENTED IN THE CLIMATIC SECTION OF THE COASTAL REGION IS REPRESENTATIVE OF THE GENERAL WEATHER PATTERN IN THIS SUBREGION. FOG/CLOUDS ARE MORE PREVALENT HERE THAN IN OTHER ZONE 1 AREAS AND BURN OFF LATER IN THE DAY DUE TO INLAND LAND MASSES BLOCKING THE SUN'S EXPOSURE TO THIS AREA. THE DIRECT WESTWARD EXPOSURE OF THIS SUBREGION SHOULD BE RECOGNIZED IN THE SITING OF STRUCTURES SINCE IT PROVIDES EXCELLENT SUNSETS.

MARINE

SUBREGION 1 IS A WEST FACING SHORELINE WHICH ALLOWS WESTERN AND SOUTHWESTERN GENERATED WAVES AND SWELLS TO BREAK UNHINDERED ON THIS SEGMENT OF THE COAST.

DURING LOW TIDE CONDITIONS, TWO SENSITIVE TIDE POOL AREAS CAN BE SUBSTANTIALLY AFFECTED: CHRISTMAS TREE (PARTIALLY IN PALOS VERDES ESTATES) AND NEPTUNE (GOLDEN) COVE.

GEOTECHNICAL FACTORS

Topography

Terrestrial

In 1972 a major portion of the subregion was modified by grading operations in preparation for a development which was later stopped by court order. Grading activity resulted in a highly scarred and unnatural topography over the southern 2/3 of the area. For this reason the eventual development of this area should not be constrained to the altered geometric land form but should recontour the topography to create a more natural appearance.

The topography in the northern 1/3 remains relatively natural, except for the alterations necessitated by sparse residential housing and agriculture.

Marine

Christmas Tree Cove is located at the northern extremity of the subregion with the Rancho Palos Verdes/Palos Verdes Estates boundary "splitting" the cove. The shoreline of the cove is primarily rocky headland, while the southern point possesses some large flat rock ledges forming tidepools. South of this area a rocky headland is again predominant until the large flat rock ledges at Neptune Cove appear. These also form large tidepools with their seaward edges dropping vertically into fairly deep water. South of Neptune Cove the rocky headland beach is present throughout the remainder of the subregion coastline.

Geologic Conditions

The only geologic hazards within Subregion 1 are those associated with the bluff, which has been found to be quite stable.

Hydrology

The northern portion of Subregion 1 has a major natural drainage course which exhibits the potential for flash flood hazard. This drainage course also has significant hydrologic value and the maintenance and preservation of its natural qualities are important.

No other major natural drainage courses exist in the area; however, it is noteworthy to mention that since the massive grading project occurred in 1972 (and the lack of subsequent development impacts) not only has the natural vegetation begun to regenerate but new drainage courses are also appearing which reflect the "revised" topographic pattern of the area.

BIOTIC RESOURCES

Terrestrial

Subsequent to the grading activity which destroyed valuable agricultural lands various forms of natural vegetation have begun to establish to the point of having habitat potential. In addition, wildlife appears to have adapted to this area (due to the protection offered by a fence limiting access). The southern portion of this area offers high potential to complement and supplement the recommended proposals for

Point Vicente Beach Park. This habitat potential could provide the necessary elements for maintenance and enhancement of the roosting and feeding activities of resident and migratory bird species (see Subregion 2 biotic resources and coastal region biotic resources section).



MARINE

Local biologists have determined the living marine resources of this area to be of such high quality that ecological reserve status is warranted to protect them. The high quality of this area is primarily a result of the limited access conditions.

With the advent of development and/or opening of this area, it is anticipated that the increased exposure could very likely produce a condition of degradation to a truly unique marine environment unless protected.

FIRE HAZARD

The area exhibits a medium fire hazard; however, this state will alter with the eventual development of this area. It is anticipated that the area will exhibit a lower fire hazard once buildout occurs.

SOCIO/CULTURAL

CULTURAL RESOURCES

Archaeological Resources

No sites have been documented to date; however, archaeological potential is noted for undisturbed lands located in the northern portion of this subregion.

URBAN ENVIRONMENT

ACTIVITY AREAS

Compatibility of Adjacent Activity Areas

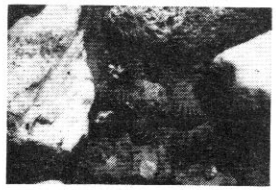
Compatibility is not a serious problem along this subregion's common boundary with Palos Verdes Estates since adjoining land areas within that City are public and will remain undeveloped. However, along the southern common boundary with Point Vicente Beach Park compatibility could become a concern if proper measures are not taken. These measures involve both the location of site activities within the Park (refer to Subregion 2) and the proposed residential activity adjoining the Park. If residential structures are sited away from the common property line with the Park to allow a buffering land area future residents will not be exposed to excessive noise impacts by Park patrons.

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

TABLE: S1-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED		5.5 AC.	14 AC.				174 AC.		5.5 AC.	43 AC.	MAINTENANCE FROM SANDY POINT NORTH	174 AC.
RESTRICTED	48 AC.			40 AC.	.5 AC.	8 AC.		1 DRAINAGE COURSE			PRESERVE FROM SANDY POINT SOUTH	
LEVEL OF SIGNIFICANCE	●	◒	○	●	●	◒	◒	●	●	●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.
NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.



CULTURAL RESOURCES

TABLE: S1-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED		PROBABILITY ON UNDISTURBED LAND IN NORTHERN PORTION OF SUBREGION	COASTAL BLUFFS
LEVEL OF SIGNIFICANCE		◒	◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

Existing Activities

Residential

Only 8 residential single family units sited on 1 acre lots exist within the area. Each unit is custom built and located in the northern portion of this subregion. Two of the units share a common lot but are not structurally connected. No sales transaction information was available to indicate housing values but it is anticipated that since the housing is located on large lots and of a custom nature that its market value is comparable to bluff dwellings in Subregion 4.

Recreation

Recreation in this subregion is fairly restricted due to limited access. Christmas Tree Cove is the only access point which is not fenced off. However, when development occurs and the City establishes the path and trail network through this subregion, recreational opportunities will increase substantially.

The existing primary recreational activities involve fishing and beachcombing.

Agriculture

Flower farming is currently conducted on a 6 acre area adjacent to the bluff in the northern portion of this subregion. The availability of water here allows high crop yields which warrant the preservation of this agricultural activity.

Potential Activities

Of the 187 acres comprising this subregion, 140 acres are conducive to supporting structures. This high percentage of buildable land is reflective of both the limited amount of existing development and the stable geologic profile of the area. Terrestrial biotic resources are evolving and, if given enough time, could provide a significant habitat resource; however, this city cannot provide the fiscal expenditure required for public acquisition and maintenance of such a natural habitat without major funding assistance. To date, no assistance programs are available of required proportions to allow this action. A significant natural drainage habitat is present requiring future development to be sited in a manner which maintains this feature.

Residential

Residential activity is considered the most compatible land use designation for the area from both a physical and fiscal perspective. It is more compatible with the area than commercial or institutional uses, and fiscally it is more sound than recreational or large scale agricultural uses.

Recreational

At one time the entire confines of this subregion were slated by the California Coastal Commission for acqusition with the intention of providing a state park oriented towards the enjoyment of marine resources. However, this action failed to materialize when the Department of Parks and Recreation eliminated it from the 1976 state park bond measure.

Los Angeles County identified lands adjoining

NEPTUNE COVE (GOLDEN COVE) IN THE ENVIRONMENTAL DEVELOPMENT GUIDE AS PART OF ITS OPEN SPACE AND RECREATION ACQUISITION LIST. THIS ACQUISITION HAS NEVER BEEN PURSUED OR OFFICIALLY DROPPED FROM THE LIST. IT IS NOT KNOWN WHETHER THE COUNTY'S CURRENT GENERAL PLAN PROGRAM WILL PROPOSE MAINTAINING THIS SITE ON AN ACQUISITION LIST OR HAVE IT REMOVED.

ALTHOUGH THE CITY CONCURS WITH THE HABITAT VALUE OF THE AREA, IT IS FISCALLY BEYOND ITS SCOPE TO ACQUIRE AND MAINTAIN THESE LANDS. EVEN IF NECESSARY MONIES WERE AVAILABLE, THE CITY HAS MORE RECREATIONALLY DEFICIENT AREAS INLAND WHICH MAY WARRANT A HIGHER PRIORITY FOR EXPENDITURE.

AGRICULTURE

UNTIL THE EARLY 1970'S THIS AREA WAS EXTENSIVELY FARMED. FROM 1971 TO 1973 THREE PROJECTS WERE PROPOSED WHICH RESULTED IN THE TERMINATION OF AGRICULTURAL ACTIVITY ON ALL BUT 6 ACRES. ALTHOUGH THE PROJECTS WERE NEVER CONSTRUCTED, GRADING OPERATIONS WERE PERFORMED WHICH DESTROYED THE TOPSOIL, THEREBY MAKING THE RENEWAL OF AGRICULTURE IMPRACTICAL.

THIS AREA, LIKE ALL COASTAL LANDS, POSSESSES INHERENT CLIMATIC CHARACTERISICS OF VALUE TO AGRICULTURAL ACTIVITY. HOWEVER, THE RENEWAL OF AGRICULTURE HEREIN IS IMPRACTICAL AND WOULD REQUIRE AGGRESSIVE ACTION BY THE CITY WHICH WOULD MOST LIKELY RESULT IN LITIGATION, WITH THE CITY PERHAPS UNABLE TO OBTAIN JUDICIAL SUPPORT.

PRESENT FLOWER FARMING IN THE NORTHERN PORTION OF THIS SUBREGION CAN BE MAINTAINED. THIS COULD BE ACCOMPLISHED BY REQUIRING NEW DEVELOPMENT IN THIS AREA TO APPLY UNDER THE RESIDENTIAL PLANNED DEVELOPMENT PROVISIONS OF THE CITY'S DEVELOPMENT CODE. IN THIS MANNER FARMING COULD BE FACILITATED WITHIN THE REQUIRED COMMON OPEN SPACE (30% OF THE TOTAL SITE).

INDUCED ACTIVITY

RESIDENTIAL

A DENSITY OF 1 DWELLING UNIT PER ACRE IS DESIGNATED FOR THIS SUBREGION. THIS COINCIDES WITH THE 1 DWELLING UNIT PER ACRE DENSITY ESTABLISHED ON AN INTERIM BASIS BY THE GENERAL PLAN. THE UNIT AND POPULATION THAT RESULT FROM THIS DENSITY ARE DEPICTED IN TABLE S1-C.

INFRASTRUCTURE

THE UNDEVELOPED CHARACTER OF THE SUBREGION IS SUCH THAT MAJOR ADDITIONS TO, AND EXTENSIONS OF, THE VARIOUS INFRASTRUCTURE NETWORKS WILL BE REQUIRED AS A RESULT OF FUTURE DEVELOPMENT.

RESOURCE SYSTEMS

WATER

CURRENTLY, THE ONLY WATER SERVICE AVAILABLE IS TO EXISTING RESIDENCES AND LIMITED AGRICULTURE IN THE EXTREME NORTHERN PORTION, VIA A WATER MAIN OF VARIABLE DIAMETER (6 INCHES TO 8 INCHES). THERE ARE NO KNOWN SERVICE PROBLEMS. THE EXTENT AND DESIGN OF THE FUTURE WATER SYSTEM WILL BE DEPENDENT ON THE LAND USE PATTERN OF PROSPECTIVE DEVELOPMENT;

ACTIVITY AREAS

TABLE: S1-C

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	⩽1	⩽2	⩽4	⩽6	>6	RETAIL	REC.			
EXISTING	47 AC.	140 AC.•	5.5 AC.	1 AC.								6 AC.
EXISTING UNITS			6 S.F.	2 S.F.								
EXISTING POPULATION			21	7								
GENERAL PLAN	47 AC.	140 AC.	140 AC.									
GENERAL PLAN UNITS			140 S.F.									
GENERAL PLAN POPULATION			490									
COASTAL PLAN	47 AC.	140 AC.	140AC.									
COASTAL PLAN UNITS			140 S.F.									
COASTAL PLAN POPULATION			490									
INTERIM PROFILE			140 AC.									
INTERIM PROFILE UNITS			141 S.F.									
INTERIM PROFILE POPULATION			494									

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

• ASSUMING INSUFFUCIENT INFORMATION AREA STABLE

HOWEVER, THE DESIGN WILL VERY LIKELY REQUIRE NEW LINES ALONG PALOS VERDES DRIVE WEST AS WELL AS EXTENSION OF EXISTING LINES. THE CALIFORNIA WATER SERVICE COMPANY FORESEES NO PROBLEMS IN SERVING SUBREGION 1.

ENERGY

AS WITH WATER SYSTEMS, THE ONLY GAS OR ELECTRIC CUSTOMERS WITHIN THE SUBREGION ARE THOSE EXISTING RESIDENCES ADJACENT TO THE CITY BOUNDARY. REPRESENTATIVES OF BOTH THE GAS COMPANY (SPECK 12/16/76) AND EDISON (AVERA 12/20/76) INDICATE THAT PROVIDING FUTURE SERVICE SYSTEMS TO THE AREAS SHOULD POSE NO PARTICULAR PROBLEMS; HOWEVER, THE ABILITY TO SUPPLY THE ACTUAL RESOURCES (GAS AND ELECTRIC) IS DEPENDENT ON FUEL SUPPLIES (SEE COASTAL REGION). GAS SERVICE WILL BE TAKEN THROUGH THE 8 INCH HEADER LINE IN PALOS VERDES DRIVE WEST, WHILE ELECTRIC HOOK-UP CAN BE MADE FROM VARIOUS LOCATIONS ON PALOS VERDES DRIVE WEST OR JUST OUTSIDE THE COASTAL REGION.

AS DESCRIBED AT THE COASTAL REGION LEVEL, THE NEED FOR PRACTICAL ENERGY CONSERVATION PROGRAMS IS BECOMING INCREASINGLY IMPORTANT. THE EXTENT OF POTENIAL DEVELOPMENT THAT SUBREGION 1 IS EXPECTED TO GENERATE IS OF A LARGE ENOUGH SCALE THAT, IF STRUCTURE AND SITE DESIGNS UTILIZE KNOWN CONSERVATION TECHNIQUES, SIGNIFICANT ENERGY SAVINGS COULD BE MADE.

DISPOSAL SYSTEMS

SEWERAGE

CURRENTLY, THE SEWERAGE NETWORK WITHIN THE SUBREGION CONSISTS SOLELY OF THE SANITATION DISTRICT TRUNK LINE WHICH IS IN THE PALOS VERDES DRIVE WEST RIGHT-OF-WAY. THE EIGHT EXISTING RESIDENCES ARE SERVED BY PRIVATE DISPOSAL UNITS (SEPTIC TANKS) WHICH APPEAR TO BE FUNCTIONING ADEQUATELY AND WITHOUT ANY KNOWN HEALTH OR ENVIRONMENTAL PROBLEMS.

FUTURE DEVELOPMENT IN SUBREGION 1 SHOULD POSE NO PROBLEMS WITH RESPECT TO THE CAPABILITIES OF THE EXISTING TRUNK OR PROCESSING FACILITIES. TOPOGRAPHIC CHARACTERISTICS AND THE LOCATION OF THE TRUNK WILL VERY LIKELY REQUIRE THAT ONE OR MORE SEWERAGE PUMP STATION BE IMPLEMENTED INTO THE ULTIMATE SEWERAGE SYSTEM. THE QUANTITY AND LOCATION OF THE PUMP STATION(S) WILL DEPEND LARGELY ON THE LAND USE PATTERNS GENERATED. IN THIS REGARD, LAND DEVELOPERS ARE ENCOURAGED TO DESIGN ACTIVITIES SO THAT THE NEED FOR SEWERAGE PUMPS IS MINIMIZED; FURTHERMORE, SEWERAGE SYSTEMS SHOULD BE DESIGNED IN A MANNER THAT WOULD ALLOW FOR LINKAGE TO AND FROM ADJACENT DEVELOPMENT (EXISTING AND FUTURE).

FLOOD CONTROL

FLOOD CONTROL FACILITIES WITHIN SUBREGION 1 ARE LIMITED TO VARIOUS DRAINS AND CULVERTS WHICH RUN UNDER PALOS VERDES DRIVE WEST. THE FLOOD CONTROL DISTRICT HAS IDENTIFIED FIVE WATER COURSES AS BEING DEFICIENT. PAST GRADING ACTIVITIES HAVE SOMEWHAT ALTERED THE LOCATION OF SOME OF THE DRAINAGE COURSES; HOWEVER, THE NEED FOR FLOOD CONTROL FACILITIES

APPARENTLY STILL EXISTS. THE NORTHERN-MOST DRAINAGE COURSES (ABOVE NEPTUNE COVE) HAVE BEEN DETERMINED TO BE OF ENVIRONMENTAL SIGNIFICANCE; THEREFORE, FLOOD CONTROL IMPROVEMENTS SHOULD BE SENSITIVE TO EXISTING AND POTENTIAL ENVIRONMENTAL CONDITIONS. SOUTH OF THE COVE, THE DRAINAGE COURSES DO NOT NOW EXHIBIT STRONG NATURAL CHARACTERISTICS; THEREFORE, DO NOT NECESSARILY MANDATE RETENTION AS NATURAL WATER COURSES. THE SENSITIVITY OF FUTURE ACTIVITIES TO THE POTENTIAL OF CREATING A NATURAL DRAINAGE CORRIDOR HABITAT IS IMPORTANT. (SEE NATURAL ENVIRONMENT).

TRANSPORTATION SYSTEMS

VEHICULAR NETWORKS

ASIDE FROM PALOS VERDES DRIVE WEST, THE VEHICULAR NETWORK WITHIN SUBREGION 1 CONSISTS OF A PRIVATE ACCESS ROAD (DRIVEWAY) WHICH SERVES THE EXISTING RESIDENCES. PALOS VERDES DRIVE WEST IS A FOUR-LANE DIVIDED ARTERIAL WHICH FUNCTIONS ADEQUATELY AND IS IN GOOD REPAIR. THE PRIVATE ROAD IS 20 FEET WIDE, PAVED, AND IS IN FAIR CONDITION.

AT THE PRESENT TIME, THE SUBREGION GENERATES INSIGNIFICANT PEAK HOUR TRAFFIC (AN ESTIMATED 7 OUTBOUND TRIPS) FROM THE EXISTING RESIDENCES. THE COASTAL SPECIFIC PLAN WILL ULTIMATELY ALLOW 132 NEW DWELLING UNITS WHICH TRANSLATES INTO AN ESTIMATED 103 PEAK HOUR OUTBOUND TRIPS.

WITH REGARD TO THE FUTURE VEHICULAR NETWORK, MAJOR CHANGES WILL OCCUR AS A RESULT OF FUTURE DEVELOPMENT ACTIVITY AND A REDESIGN OF PALOS VERDES DRIVE WEST. THE ENGINEERING AND DESIGN WORK FOR PALOS VERDES DRIVE WEST WAS RECENTLY COMPLETED AND CONSTRUCTION IS EXPECTED TO BE COMPLETED DURING 1979 (SEE COASTAL REGION). THE INTERNAL VEHICULAR NETWORK WITHIN SUBREGION 1 WILL BE A FUNCTION OF THE TYPE OF DEVELOPMENT ACTIVITY WHICH OCCURS; HOWEVER, IT IS RECOMMENDED THAT THE FOLLOWING GUIDELINES BE CONSIDERED IN THE DESIGN OF ANY DEVELOPMENT:

1) INGRESS/EGRESS POINTS SHOULD BE MINIMIZED ON PALOS VERDES DRIVE WEST;

2) IF FOUND DESIRABLE, INGRESS/EGRESS SHOULD CORRESPOND WITH EXISTING INTERSECTIONS;

3) INTERIOR STREETS SHOULD BE DESIGNED IN SUCH A WAY THAT LAND COVERAGE IS MINIMIZED;

4) THE USE OF CUL-DE-SACS AND LOOPS IS ENCOURAGED, RATHER THAN SINGLE LOADED GRID STREETS (AS A WORST CASE);

5) PROPOSED STREETS SHOULD MINIMIZE INTERFERENCE WITH PATH AND TRAIL NETWORKS;

6) INTERIOR STREETS SHOULD BE NO LESS THAN 30 FEET WIDE (20 FEET FOR ONE-WAY STREETS).

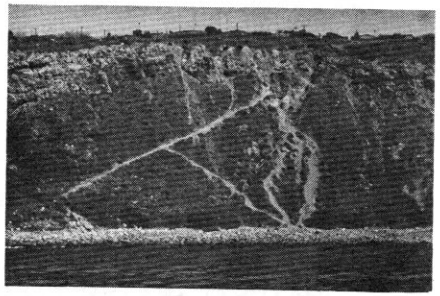
7) A BLUFF ROAD SHOULD BE LOCATED WHERE FEASIBLE IN THE AREA BETWEEN POINT VICENTE AND THE NATURAL DRAINAGE COURSE.

PATH AND TRAIL NETWORK

AS PER THE GENERAL PLAN, A LOOP BYPASS TRAIL (SECONDARY CORRIDOR LOOP #1) IS PROPOSED TO

RUN THROUGH SUBREGIONS 1 AND 2. THIS WALKWAY/BIKEWAY IS PROPOSED TO RUN PARALLEL TO THE PROPOSED BLUFF ROAD AND, IN CONCEPT, SHOULD MEET THE VARIED DEMANDS OF PEDESTRIANS AND CYCLISTS. WITHIN THE SUBREGION THE LOOP TRAILS SHOULD BE DESIGNED TO CLASS I STANDARDS. NO LAND MARKINGS OR SIGNING IS PROPOSED EXCEPT AT PRIMARY CORRIDOR INTERFACES. THE WALKWAY/BIKEWAY IS PROPOSED TO UTILIZE THE FOLLOWING ALIGNMENT AND CHARACTERISTICS:

THE NORTHERN-MOST PORTION OF THE TWO-WAY LOOP TRAIL BEGINS JUST SOUTH (ABOUT 300') OF THE INTERSECTION OF PALOS VERDES DRIVE WEST AND BERRYHILL DRIVE. AT THIS POINT THE TWO-WAY CLASS I LOOP TRAILS RUN IN AN EAST-WEST DIRECTION ALONG THE SOUTHERN SIDE OF THE WATERCOURSE. THE TRAILS SHOULD MAINTAIN ADEQUATE DISTANCE FROM THE WATERCOURSE TO ENSURE SAFE TRAVEL AND TO PROTECT BIOTIC RESOURCES. THE CORRIDOR TURNS SOUTHWARD AT THE BLUFF AND WILL RUN PARALLEL TO, BUT ADEQUATELY SET BACK FROM, THE BLUFF EDGE. A COASTAL ACCESS POINT IS PROPOSED AT NEPTUNE COVE TO ALLOW PUBLIC ACCESS TO THE WATER. A REST AREA (AND PARKING LOT) IN THE AREA OF THIS COASTAL ACCESS SHOULD BE PROVIDED WITH BENCHES AND BIKE RACKS. THE CORRIDOR WILL MAINTAIN ITS BLUFF ALIGNMENT FROM THE NEPTUNE COVE AREA TO THE SUBREGION BOUNDARY, WHERE THE LOOP TRAILS WILL CONTINUE THROUGH POINT VICENTE PARK. THE DESIGN OF THE LOOP TRAILS IN RELATION TO THE PROPOSED BLUFF ROAD IS ILLUSTRATED IN FIGURE 22.



POLICIES

IT IS THE POLICY OF THE CITY TO:

1. MAINTAIN AND PROTECT THE MAJOR DRAINAGE COURSE WITHIN THE CONFINES OF SUBREGION 1.

2. ENCOURAGE NEW DEVELOPMENTS TO INCORPORATE INTO THEIR LANDSCAPING PLAN NATIVE PLANT MATERIALS, WHERE SUCH MATERIALS ARE FIRE RETARDENT, BENEFICIAL TO MIGRATORY AND RESIDENT BIRD SPECIES.

3. INITIATE ESTABLISHMENT OF INTERTIDAL AREAS AS MARINE RESERVES AND ENCOURAGE STRICT ENFORCEMENT OF THE REGULATIONS OF THE RESERVES.

4. REQUIRE AN ARCHAEOLOGICAL SURVEY TO BE CONDUCTED PRIOR TO OR IN CONJUNCTION WITH, PROPOSED PROJECTS FOR UNDISTURBED LANDS LOCATED IN THE NORTHERN PORTION OF THIS SUBREGION.

5. REQUIRE PROPOSED DEVELOPMENT ON THE SITE WHICH CURRENTLY SUPPORTS AGRICULTURAL ACTIVITY TO APPLY UNDER A RESIDENTIAL PLANNED DEVELOPMENT SCHEME WHICH IS COMPATIBLE WITH ADJOINING EXISTING DEVELOPMENT IN ORDER TO MAINTAIN AS MUCH OF THIS ACTIVITY AS POSSIBLE WITHIN THE REQUIRED

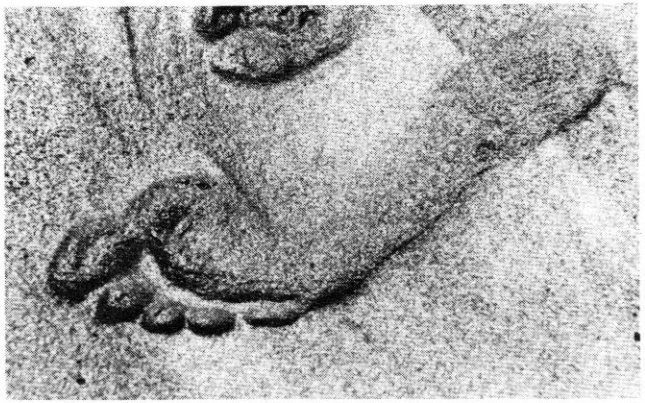
COMMON OPEN SPACE AREA.

6. ENSURE THAT FLOOD CONTROL IMPROVEMENTS ARE CARRIED OUT IN A MANNER THAT IS CONSISTENT WITH APPLICABLE GENERAL PLAN AND COASTAL SPECIFIC PLAN POLICIES REGARDING PRESERVATION OF NATURAL HABITAT, VISUAL CHARACTER, AND FLOOD CONTROL.

7. REQUIRE NEW DEVELOPMENTS TO PROVIDE PATH AND TRAIL LINKS FROM THE BLUFF CORRIDOR TO PATHS AND TRAILS ALONG PALOS VERDES DRIVE WEST.

8. REQUIRE PROPOSED DEVELOPMENTS ON LANDS AFFECTED BY VIEW CORRIDORS TO MAINTAIN THE RESOURCE.

9. REQUIRE A BLUFF ROAD, WHERE FEASIBLE, IN THE AREA BETWEEN POINT VICENTE AND THE NATURAL DRAINAGE COURSE. NO DWELLING UNITS SHALL BE ALLOWED OCEANWARD OF THE ROAD.



INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 2 IS A PREDOMINANTLY DEVELOPED, 161-ACRE SITE WHICH IS BORDERED ON THE NORTH BY VACANT LAND AND ON THE EAST BY BOTH VACANT LAND AND NANTASKET DRIVE. IT IS MADE UP OF THREE PUBLIC USES, A LARGE COMMERCIAL RECREATION CENTER (MARINELAND), AND A POTENTIALLY SURPLUSED SCHOOL SITE SUPPORTING FARMING ACTIVITIES. ALTHOUGH THE USES WITHIN THE SUBREGION ARE DIFFERENT IN TERMS OF PRIMARY FUNCTION, MOST HAVE THE SECONDARY HOMOGENEOUS CHARACTERISTIC OF BEING ACCESSIBLE, OR AT LEAST PARTIALLY ACCESSIBLE, TO THE GENERAL PUBLIC. THEREFORE, SUBREGION 2 CAN BE REFERRED TO AS AN ATTRACTOR/GENERATOR. THIS HOMOGENEITY AND PREDOMINANTLY DEVELOPED CHARACTER ARE THE MAJOR FACTORS WHICH ESTABLISHED THE AREA AS A SUBREGION.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

CLIMATIC CONDITIONS EXPERIENCED WITHIN THE CONFINES OF THIS SUBREGION ARE REFLECTIVE OF THOSE CHARACTERIZED UNDER THE ZONE II DISCUSSION PRESENTED IN THE CLIMATIC SECTION OF THE COASTAL REGION. POINT VICENTE ITSELF IS SLIGHTLY WINDIER AND COOLER THAN OTHER AREAS OF THIS SUBREGION. THIS IS DUE LARGELY TO THE UNSHELTERED ASPECTS OF THE POINT. BECAUSE OF ITS EXPOSURE, THE SITE WILL EXPERIENCE STRONG WINTER STORM WINDS, FREQUENTLY IN EXCESS OF 25 MILES PER HOUR.

MARINE

THE NORTHERN PORTION OF THIS SUBREGION IS

A ROCKY HEADLAND FACING WEST-SOUTHWEST AND, THEREFORE, THE PREVAILING WIND WAVES AND SWELLS CAN TRAVEL UNOBSTRUCTED TO BREAK ON THE SHORELINE. THIS CONDITION EXISTS FROM THE NORTHERN BOUNDARY OF THE COUNTY'S POINT VICENTE BEACH PARK, SOUTH TO LONG POINT AT MARINELAND.

WINDWAVES GENERATED FROM WITHIN THE SOUTHERN CALIFORNIA BIGHT AND TRAVELLING FROM A SOUTHERN DIRECTION IMPACT THE SOUTH-FACING SHORELINE OF SUBREGION 2.

GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

THE SLOPE CONDITIONS OF THIS SUBREGION ARE SOMEWHAT DIVERSE, WITH THE NORTHERN AREA HAVING A RATHER FLAT ($\leq$10%) BLUFFTOP AREA EXTENDING FROM PALOS VERDES DRIVE WEST TO THE BLUFF EDGE. RATHER STEEP AND HIGH BLUFFS ARE PRESENT IN THIS AREA. SOUTHWARD LANDS ADJACENT TO PALOS VERDES DRIVE SOUTH ARE STEEPER AND MORE RUGGED. AT THE FISHING ACCESS, THE BLUFFTOP NEARLY MEETS THE ROAD'S EDGE. TO THE EAST THE ROAD SWEEPS AWAY FROM THE CLIFFS AS LONG POINT DESCENDS TO THE OCEAN. IN THIS AREA THE BLUFFS ARE LOWER AND LESS SEVERE.

MARINE

THE SHORELINE IS MADE UP PRIMARILY OF ROCKY HEADLAND WITH THE EXCEPTION OF POINT VICENTE COVE WHERE THERE ARE A NUMBER OF LARGE ROCK OUTCROPPINGS. NEAR THE CENTER OF THE COVE A ROCK STRATA OF ANGULAR SHELVES IS VISIBLE AT LOW TIDE.

GEOLOGIC CONDITIONS

THE ONLY GEOLOGIC HAZARDS WITHIN SUBREGION 2 ARE THOSE ASSOCIATED WITH BLUFF INSTABILITY AND STEEP TOPOGRAPHY. INSUFFICIENT INFORMATION WARRANTS FURTHER INVESTIGATION INTO GEOLOGIC STABILITY ALONG THE BLUFFTOP FROM POINT VICENTE BEACH PARK TO THE FISHING ACCESS SHOULD ANY DEVELOPMENT PROPOSALS ARISE.

HYDROLOGY

WITHIN SUBREGION 2, THERE ARE NO MAJOR NATURAL DRAINAGE CHANNELS. IN THE MARINELAND AREA THERE ARE A FEW SMALL DRAINAGE COURSES, NONE OF WHICH WARRANTS EXTENSIVE EFFORTS FOR PRESERVATION.

BIOTIC RESOURCES

TERRESTRIAL

SIGNIFICANT VEGETATIVE AND RESIDENT WILDLIFE HABITATS ARE ASSOCIATED WITH BLUFF LANDS. ALTHOUGH RESIDENT BIOTIC RESOURCES ARE WEAK IN THE REMAINDER OF THIS SUBREGION, MIGRATORY FLIGHT PATTERNS ARE DOCUMENTED (SEE COASTAL REGION BIOTIC RESOURCE SECTION), WHICH STRONGLY RELATE TO POINT VICENTE. THIS IS DUE TO ITS SEAWARD JUTTING NATURE.

THE UNDEVELOPED POINT VICENTE BEACH PARK IS IN THE DEVELOPMENT PLANNING STAGE. THIS PARK OFFERS GREAT POTENTIAL FOR INTENSIFYING AND ESTABLISHING NATURAL VEGETATION SPECIES WHICH SERVE AS A FOOD SOURCE FOR MIGRATORY

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

TABLE: S2-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE		CRM-10 VEGET.
										TER.	MARINE	
CONTROLLED		4 AC.	30 AC.							30 AC.	RESTORATION & MAINTENANCE FROM POINT VICENTE EAST	57 AC.
RESTRICTED	41 AC.			29 AC.	15 AC.	6 AC.					PRESERVE FROM POINT VICENTE NORTH	
LEVEL OF SIGNIFICANCE	●	◒	○	●	●	◒				●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

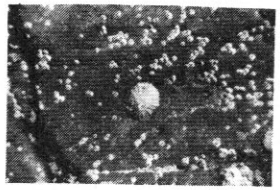
BIRDS THAT PASS THROUGH THE AREA.

MARINE

THE MARINE BIOTIC RESOURCES FROM THE NORTHERN SUBREGION BOUNDARY TO POINT VICENTE HAVE BEEN DETERMINED TO BE SIGNIFICANT ENOUGH TO WARRANT RESERVE STATUS. THE CITY SHOULD STRIVE TO CONVINCE THE STATE LANDS COMMISSION AND THE STATE FISH AND GAME COMMISSION THAT RESERVE STATUS IS NEEDED TO PRESERVE ONE OF THE RICHEST STRETCHES OF SHORELINE, IN TERMS OF INTERTIDAL BIOTIC RESOURCES, IN SOUTHERN CALIFORNIA.

A KELP RESTORATION EFFORT IS CURRENTLY UNDERWAY IN THE POINT VICENTE AREA. THIS SMALL BUT GROWING KELP BED IS BEING MAINTAINED BY THE CALIFORNIA STATE DEPARTMENT OF FISH AND GAME. ENCOURAGEMENT OF THE EXISTENCE OF THIS BED AND OTHERS THAT MAY BE PROPOSED FOR RESTORATIVE EFFORTS WOULD PROVIDE THE ''RING OF KELP'' THAT ONCE SURROUNDED THE PENINSULA.

THE SHORELINE BELOW MARINELAND SERVES AS HOME TO A NUMBER OF WILD CALIFORNIA SEA LIONS (ZALOPHUS CALIFORNIANUS).





IT IS THOUGHT THAT THEY MAY FREQUENT THE AREA AS A RESULT OF HEARING OTHER MARINE MAMMAL NOISES FROM WITHIN MARINELAND. THIS IS THE ONLY PLACE ALONG THE PENINSULA WHERE THESE MAMMALS CAN BE FOUND IN SIGNIFICANT NUMBERS.

SOCIO/CULTURAL

SOCIAL FACTORS

NATIONAL

THE FEDERAL GOVERNMENT OWNED 49.7 ACRES OF LAND WITHIN SUBREGION 2, 18.9 OF WHICH BELONGS TO THE U.S. COAST GUARD. THE REMAINING 30.8 ACRES WERE RECENTLY SURPLUSED BY THE U.S. DEPARTMENT OF DEFENSE AND TITLE TRANSFERRED TO L.A. COUNTY FOR USE FOR PARK PURPOSES.

COUNTY

LOS ANGELES COUNTY OWNS 41.3 ACRES OF LAND. THE COUNTY HAS DELEGATED RESPONSIBILITY FOR THESE AREAS TO THE DEPARTMENT OF BEACHES FOR USE AS PARK SITES.

CULTURAL RESOURCES

HISTORICAL RESOURCES

ON A PROMINTORY, NAMED BY THE ENGLISH SEA CAPTAIN GEORGE VANCOUVER, STANDS POINT VICENTE LIGHTHOUSE. ERECTED IN 1926 IN RESPONSE TO A PETITION FROM SHIP'S MASTERS, WHO DEPLORED THIS DANGEROUS STRETCH OF COASTAL WATERS, IT FLASHES A TWO-MILLION CANDLEPOWER LIGHT MORE THAN 20 MILES TO SEA. THE BEACON IS DEVELOPED FROM A 15 WATT BULB FOCUSED THROUGH A 5 FOOT LENS. MADE IN PARIS IN 1886, THE LENS SAW 40 YEARS OF SERVICE IN ALASKA BEFORE BEING BROUGHT TO THE PENINSULA (AUGUSTA FINK).

CULTURAL RESOURCES

TABLE: S2-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED	POINT VICENTE LIGHTHOUSE		COASTAL BLUFFS
LEVEL OF SIGNIFICANCE	●		◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

THE GENERAL PLAN ESTABLISHED A CITY POLICY, WHICH IS CONCURRED WITH BY THIS COASTAL SPECIFIC PLAN, TO HAVE POINT VICENTE LIGHTHOUSE INCLUDED IN THE NATIONAL REGISTER OF HISTORICAL PLACES.

URBAN ENVIRONMENT

ACTIVITY AREAS

Compatibility of Adjacent Activities

THIS SUBREGION'S CHARACTER IS THAT OF AN ATTRACTOR/GENERATOR TO THE VAST MAJORITY OF THE POPULACE WHICH RESIDES OUTSIDE THE PENINSULA. WHEN THIS CHARACTERISTIC IS COUPLED WITH THE HIGH INTENSITY OF USE, THE RESULTS ARE THAT OF IMPOSING CONFLICTS ON SURROUNDING AREAS. THE CLOSER THE PROXIMITY OF THE NONCOMPATIBLE USE (SUCH AS RESIDENTIAL AREAS), THE GREATER THE INTENSITY OF CONFLICT.

THE MOST EFFECTIVE MEANS BY WHICH TO MITIGATE IMPACTS IS TO FOCUS ON THE SOURCE. THEREFORE, REDUCTION OF IMPACTS SUCH AS NOISE, TRAFFIC, OUTDOOR LIGHTING, ETC., SHOULD BE ATTACKED AT THE GENERATING SOURCE.

FRINGE AREAS ABUTTING RESIDENTIAL AREAS CAN BE BUFFERED BY LOCATING ACTIVITIES AWAY FROM COMMON BOUNDARIES. LANDSCAPING, EARTH BERMS AND OTHER APPROPRIATE MEASURES CAN BE EMPLOYED WITHIN BUFFER LAND STRIPS TO FURTHER REDUCE GENERATING IMPACTS. MASS TRANSIT SYSTEMS CAN BE ENCOURAGED TO SERVICE THIS AREA, ESPECIALLY DURING PEAK USE PERIODS, IN ORDER TO REDUCE THE AMOUNT OF AUTO INTRUSION ONTO THE PENINSULA. MECHANICAL EQUIPMENT CAN BE OF A LOW NOISE LEVEL NATURE AND LOCATED WITHIN ENCLOSED STRUCTURES TO CONSTRAIN EMANATING NOISE. LOUDSPEAKER SYSTEMS CAN BE DESIGNED AND DIRECTED IN A MANNER WHICH ALLOWS THEM TO SERVE THEIR PURPOSE WITHOUT ALLOWING OFF-SITE NOISE SPILLOVER. LIGHTING CAN BE INDIRECT WHERE POSSIBLE AND, WHERE DIRECT LIGHTING IS NECESSITATED, SCREENING MEASURES CAN BE CONCURRENTLY EMPLOYED TO IMPEDE POSSIBLE LIGHT SOURCE SPILLOVER. VIEW IMPACTING AREAS CAN BE SCREENED FROM PUBLIC CORRIDORS AND VIEW SHEDS.

Existing Activities

Commercial

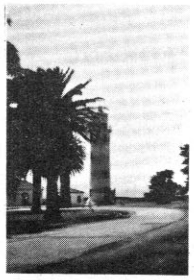
MARINELAND, THE LARGEST COMMERCIAL ACTIVITY IN THE CITY, IS LOCATED ON AN 84.7 ACRE SITE. THE FACILITY PROVIDES A SPECIALIZED FORM OF ENTERTAINMENT CENTERED AROUND MARINE ANIMAL SHOWS AND DISPLAYS. MARINELAND ALSO HAS A PIER WHICH IS USED FOR ANIMAL TRANSPORT AND, UNTIL RECENTLY, FOR ENTERTAINMENT IN THE FORM OF BOAT EXCURSIONS. THERE IS PARKING FOR MORE THAN 2,000 AUTOMOBILES.

MARINELAND WAS RECENTLY PURCHASED BY TAFT BROADCASTING CORPORATION. FOR THE LAST SEVERAL YEARS, THE FACILITY WAS EXPERIENCING DECLINING ATTENDANCE WHICH HAS BEEN BLAMED ON POOR MANAGEMENT. ATTENDANCE FIGURES WERE STILL DECLINING (950,000 IN 1975 TO 900,000 IN 1976), WITH AN ADDITIONAL DRAWBACK BEING POSED BY THE AGE OF THE FACILITIES. BOTH STRUCTURES AND MARINE TANKS REQUIRE EXTENSIVE EXPENDITURES TO BRING THEM IN LINE WITH CURRENT CODES OR TO RECTIFY EXISTING LIMITATIONS. GALLEY WEST (MARINELAND'S RESTAURANT) IS CURRENTLY CLOSED AND CANNOT

BE REOPENED UNTIL THE STRUCTURE MEETS BUILDING AND HEALTH CODE REQUIREMENTS (MICHAEL DOWNS).

INSTITUTIONAL

POINT VICENTE LIGHTHOUSE IS SITUATED ON A PLATEAU ATOP POINT VICENTE AND ENCOMPASSES AN 18.9 ACRE SITE. ERECTED IN 1926, IT FLASHES A TWO-MILLION CANDLEPOWER LIGHT MORE THAN 20 MILES TO SEA. ADDITION OF A RADIO STATION, LIVING QUARTERS, AND HELICOPTER LANDING PAD HAVE MADE POINT VICENTE LIGHTHOUSE THE COAST GUARD'S PRINCIPAL COMMUNICATION CENTER IN SOUTHERN CALIFORNIA, AS WELL AS A BASE FOR RESCUE OPERATIONS. SHOULD THIS FACILITY BE DECLARED SURPLUS, AND BARRING HISTORICAL PRESERVATION, THE STATE DEPARTMENT OF PARKS AND RECREATION RECOMMENDED IN ITS 1971 CALIFORNIA COASTLINE PRESERVATION AND RECREATION PLAN THAT THE FACILITY BE MADE AVAILABLE FOR PARK AND RECREATION PURPOSES.



RECREATION

TERRESTRIAL

LOS ANGELES COUNTY DEPARTMENT OF BEACHES OPERATES TWO PARK SITES WITHIN SUBREGION 2 TOTALLING 41.3 ACRES.

POINT VICENTE FISHING ACCESS IS A FULLY DEVELOPED 10.5 ACRE SITE. APPROXIMATELY 46 PARKING SPACES AND A RESTROOM STRUCTURE ARE ON TOP OF THE BLUFF DIRECTLY ADJOINING PALOS VERDES DRIVE SOUTH. FROM THERE, A WELL DEFINED DIRT RAMP AFFORDS PUBLIC PEDESTRIAN ACCESS DOWN TO THE NEARBY SHORELINE.

POINT VICENTE BEACH SITE WAS PARTIALLY OPENED IN THE SUMMER OF 1976. THE SITE'S CURRENT OPERATION IS CONFINED TO THE ACCOMODATION OF A 24 SPACE PARKING LOT. THE REMAINDER OF THE SITE IS FENCED OFF AND CONTAINS A RIFLE RANGE WHICH WAS UTILIZED WHEN THE NIKE SITE WAS OPERATIONAL. NO SHORELINE ACCESS FROM THIS SITE IS PRESENTLY AFFORDED; HOWEVER, THE DEPARTMENT OF BEACHES' DEVELOPMENT PLANS FOR THIS SITE CONTAIN SUCH A PROPOSAL.



MARINE

THE ONLY REAL ACCESS, WITHIN THIS SUBREGION, TO THE SHORELINE IS LOCATED AT THE FISHING ACCESS. THE TRAIL DOWN THE BLUFFS (REFERRED TO BY LOCAL USERS AS ''CARDIAC HILL'' SERVES DIVERS, FISHERMEN, PICNICKERS, BEACHCOMBERS AND SIGHTSEERS. DUE TO THE DIFFICULTY OF

NEGOTIATING THE ROCKY HEADLAND, WHICH IS TYPICAL OF THIS AREA, THIS ACCESS POINT HAS ONLY LOCALIZED IMPACT ON THE SHORELINE.

AGRICULTURE

THE MOST EXTENSIVE AGRICULTURAL OPERATION IN THE AREA TAKES PLACE ON A 17 ACRE SITE LOCATED AT THE EASTERN EXTREMITY OF THIS SUBREGION. THIS SITE IS CURRENTLY LEASED FOR $800 PER YEAR FROM PALOS VERDES PENINSULA UNIFIED SCHOOL DISTRICT, WHICH HAS DECLARED THE SITE SURPLUS AND INTENDS TO SELL IT IN THE NEAR FUTURE. ADDITIONAL AGRICULTURAL ACTIVITY TAKES PLACE ON AN UNDEVELOPED PORTION OF MARINELAND'S SITE. THE GRAIN AND TREE FARMING ACTIVITIES ARE BOUNDED ON THE SOUTH BY MARINELAND'S ACCESS ROAD AND ON THE NORTH BY PALOS VERDES DRIVE SOUTH.

THE COASTAL SPECIFIC PLAN MAKES A PRIMARY EFFORT TO MAINTAIN AGRICULTURAL ACTIVITY ON THE 17 ACRE SCHOOL SITE. THIS ACTION IS WARRANTED BECAUSE OF THE SITE'S HIGH CROP YIELD, IRRIGATION AND SUBSTANTIAL SITE SIZE. IN ORDER TO MAINTAIN THE ACTIVITY, THE CITY NEEDS TO ADD AN AGRICULTURAL DISTRICT TO ITS DEVELOPMENT CODE AND APPLY IT TO THIS SITE. MAINTAINING AGRICULTURE ON THIS SITE IS CONTINGENT ON THE SITE NOT BEING NEEDED FOR A SCHOOL, AND SUFFICIENT FUNDING FROM OTHER AGENCIES BEING AVAILABLE FOR PURCHASE OF THE SITE. SHOULD THESE CONDITIONS NOT BE MET, THEN THE PLAN RECOMMENDS A SECONDARY USE OF COMMERCIAL RECREATION AS PROPOSED BY THE GENERAL PLAN.

POTENTIAL ACTIVITIES

THE ONLY TOTALLY UNDEVELOPED SITE CAPABLE OF SUPPORTING NEW ACTIVITY IS THE 17 ACRE SITE OWNED BY THE SCHOOL DISTRICT. THE DISTRICT HAD INTENDED TO USE THIS SITE FOR DEVELOPMENT OF AN INTERMEDIATE SCHOOL; HOWEVER, ENROLLMENT STUDIES DONE BY THE DISTRICT DID NOT SUBSTANTIATE THE NEED FOR AN ADDITIONAL SCHOOL IN THIS VICINITY. THEREFORE, THE SITE HAS BEEN FOUND POTENTIALLY SURPLUS AND MAY BE SOLD IN THE NEXT FEW YEARS. THE SITE'S GENTLE TOPOGRAPHY AND ITS LACK OF BIOTIC RESOURCES AND GEOLOGIC CONSTRAINTS MAKE IT A DESIRABLE AREA FOR SUPPORTING STRUCTURED ACTIVITIES.

ADDITIONAL POTENTIAL ACTIVITY IS PRESENTED ON THOSE AREAS WHICH PRESENTLY HAVE LIMITED SITE DEVELOPMENT. THIS POTENTIAL IS REFLECTIVE OF SITE BUILDOUT AND IS DISCUSSED BELOW UNDER EACH SITE'S RESPECTIVE LAND USE DESIGNATION.

SHOULD THE PRIMARY AIM OF MAINTAINING AGRICULTURE ON THIS SITE PROVE UNWORKABLE, THEN A SECONDARY PROPOSAL OF COMMERCIAL RECREATION SHOULD BE IMPLEMENTED. DEVELOPMENT UNDER A COMMERCIAL RECREATIONAL USE WOULD RAISE TWO CONCERNS. ONE, THE POINT OF PRIMARY ACCESS WHICH IS DISCUSSED UNDER VEHICULAR NETWORKS AND SHOULD BE REFERRED TO THEREIN; AND TWO, POSSIBLE ADVERSE IMPACTS ONTO ADJOINING RESIDENTIAL AREAS LOCATED IN SUBREGION 3. SITE PLANNING EFFORTS NEED TO BE COGNIZANT OF ADJOINING RESIDENTIAL AREAS. BUFFER AREAS SHOULD BE SUPPLIED ALONG THE SITE'S COMMON PROPERTY LINES ALONG WITH THE SHIELDING OF ANY OUTDOOR LIGHTING. NOISE SHOULD BE RETARDED AT THE GENERATING SOURCES. A CRITICAL VIEW CORRIDOR TRAVERSES THE SITE (SEE CORRIDOR SECTION) REQUIRING STRUCTURAL IMPROVEMENTS TO BE CAREFULLY REVIEWED IN THE

AFFECTED AREA. ALSO, CONSIDERATION SHOULD BE GIVEN TO A DEVELOPMENT'S APPEARANCE FROM RESIDENTIAL AREAS.

COMMERCIAL

MARINELAND'S PRESENT SITE DEVELOPMENT UTILIZES ROUGHLY 50% OF THE TOTAL 85 ACRES. DURING THE SPRING OF 1978 RENOVATIONS WERE MADE TO THE FACILITY, INCLUDING LANDSCAPING AND BUILDING EXTERIORS, SOME ATTRACTIONS WERE RELOCATED, AND NEW ADDITIONS INCLUDED A STRANDED ANIMAL FACILITY, TIDEPOOL, PICNIC AREA, FOOD STANDS, THEATRE, AND MAINTENANCE BUILDING WITH PARKING. THE SITE PRESENTLY HAS 2244 PARKING SPACES PLUS TEMPORARY OVERFLOW SPACES.

A MASTER PLAN FOR FUTURE ADDITIONS IS UNDERWAY BY MARINELAND AND TENTATIVELY MAY INCLUDE RETAIL SHOPS, MOTEL, RESTAURANTS, AND A "COVE OF TALL SHIPS" ANCHORED OFF-SHORE. THE MANAGEMENT HOPES TO INCREASE ANNUAL ATTENDANCE TO 1.2 MILLION, THE NUMBER THAT VISITED THE FACILITY IN THE MID-1960'S. ALL IMPACTS, SUCH AS TRAFFIC, DESCRIBED IN THIS PLAN WERE BASED ON THIS POTENTIAL MAXIMUM ATTENDANCE.

ANY FUTURE DEVELOPMENT ON THE SITE WILL REQUIRE CITY APPROVAL IN THE FORM OF A CONDITIONAL USE PERMIT. COMPATIBLE USES COULD INCLUDE THOSE OF A COMMERCIAL RECREATIONAL NATURE, VISITOR-ORIENTED, SUCH AS ADDITIONAL OCEANARIUM ATTRACTIONS, RETAIL FACILITIES, RECREATION USES, MOTEL, CONVENTION FACILITY, RESTAURANTS, MUSEUM, ETC. THOSE CONSIDERED NOT COMPATIBLE ARE USES OF A "CARNIVAL" NATURE.

THE MAJOR CRITERIA WHICH WILL BE OF CONCERN WITH ANY FUTURE DEVELOPMENT PROPOSALS ARE:

PROTECTION OF VISUAL CORRIDORS.
ENHANCEMENT OF VISUAL QUALITY.
BUFFERING FROM ADJACENT RESIDENTIAL USES.
ATTENUATION OF NOISE AND LIGHT.
PROTECTION OF THE NATURAL ENVIRONMENT.

THE CITY SHOULD BE COGNIZANT OF BOTH FINANCIAL AND OPERATIONAL PROBLEMS ASSOCIATED WITH THIS FACILITY AND WORK IN A POSITIVE DIRECTION TO ASSIST IN MARINELAND'S DESIRED VIABILITY. THIS SUPPORT MAY REQUIRE THE CITY, AS WELL AS NEARBY RESIDENTS, TO ENDURE SHORT TERM IMPACTS ASSOCIATED WITH SPECIAL EVENTS CONDUCTED IN AN EFFORT TO INCREASE ATTENDANCE. ONCE MANAGEMENT IS CAPABLE OF IMPLEMENTING ITS MASTER PLAN, THEN THE CITY SHOULD ENSURE THAT CONCERNS PERTAINING TO NOISE, VISUAL, TRAFFIC AND OTHER PERTINENT IMPACTS ARE PROPERLY MITIGATED IN ORDER TO ACHIEVE A HARMONIOUS FUNCTIONING WITHIN THE COMMUNITY.

RECREATION

POINT VICENTE BEACH SITE'S DEVELOPMENT IS CURRENTLY LIMITED TO A PARKING LOT FOR 24 CARS. THE LOS ANGELES COUNTY DEPARTMENT OF BEACHES' MASTER PLAN FOR THIS SITE PROJECTS TWO DEVELOPMENT PHASES. THE INITIAL PHASE WILL INCLUDE THE FOLLOWING IMPROVEMENTS:

- LEVELLING OF THE TARGET MOUND, REMOVAL OF EXISTING STRUCTURES, AND GRADING OF THE PARK AREA.

- INSTALLATION OF UTILITIES, LANDSCAPING, AND SPRINKLER SYSTEM.

- Preparation of a parking area for 25 cars to supplement existing parking for 24 cars.

- Provisions of pedestrian access by means of a sidewalk to be built along Palos Verdes Drive.

- Installation of safety fencing (split rail or other wood material of pleasing appearance) on the bluff above the steep cliff.

- Installation of park facilities that will initially include 12 picnic tables, 12 braziers, 2 drinking fountains, and 2 temporary portable toilets.

The Department of Beaches envisions the second phase involving the following improvements:

- Construction of stairs for access to the beach and tide pools.

- A low-profile structure to provide shade and weather protection. This building will house marine exhibits and other educational materials, and will serve as an interpretive center for marine sciences. A circular, open-sided viewing structure also is being considered.

- A permanent restroom building replacing the temporary toilets.

- Expansion of parking, picnic, and recreational facilities to meet a gradually increasing patronage. It is recognized, however, that the natural character of the area must be retained by limiting the number of visitors. This will be done by limiting the amount of parking, the size of the park, and the number of picnic tables and other facilities. Additional picnic facilities and parking spaces will be limited to double those provided in the initial phase.

The area would thus contain parking, picnic areas, and access to the shoreline. The ultimate goal is a relatively low level of development, maintaining as far as possible the natural and aesthetic setting, providing primarily picnic areas and parking to accommodate demand.

The location and appearance of previously mentioned improvements will be of concern to the City. The proposed stairway should be stricken from the Master Plan since such an action in this area would require major structural measures, thereby significantly altering the cliff face. The site's adjacency to Palos Verdes Drive West and its visual exposure from this corridor causes concern about appearance and ability to integrate with the corridor's theme.

As part of this study, the City contacted the Department of Beaches to obtain a time frame for the park's development. In discussions with the staff it was indicated that the site's development hinged on obtaining funding and that no specific time is known as to when this funding will be made available.

ACTIVITY AREAS

TABLE: S2-C

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	≤ 1	≤ 2	≤ 4	≤ 6	> 6	RETAIL	REC.			
EXISTING	48 AC.	113 AC.•							40 AC.	12 AC.	24 AC.	37 AC.
EXISTING UNITS												
EXISTING POPULATION												
GENERAL PLAN	48 AC.	113 AC.							77 AC.	12 AC.	24 AC.	
GENERAL PLAN UNITS												
GENERAL PLAN POPULATION												
COASTAL PLAN	48 AC.	113 AC.							60 AC.	12 AC.	24 AC.	17 AC.
COASTAL PLAN UNITS												
COASTAL PLAN POPULATION												
INTERIM PROFILE												
INTERIM PROFILE UNITS												
INTERIM PROFILE POPULATION												

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

•ASSUMING INSUFFICIENT INFORMATION AREA STABLE

Induced Activity

The General Plan designates a commercial recreational use for the 17 acre surplused school site. The Coastal Specific Plan changes this proposal. It designates a primary use of agriculture on the site, a secondary use of commercial recreation, and encouragement of a retirement/senior citizen/fixed income facility on a portion of the site. Aside from this, the Coastal Specific Plan concurs with land uses established in the General Plan.

INFRASTRUCTURE

As a separate and distinct area within the Rancho Palos Verdes coastline, Subregion 2 has developed somewhat differently than other coastal areas. The results are most obvious in the physical characteristics; however, study of the infrastructure reveals a system which is somewhat atypical in form and function. Furthermore, the type of activities found in the subregion require a traffic analysis which deviates from that predominantly used throughout this Plan.

Sewerage

The sewerage network within the subregion consists of the Sanitation District's Long Point pumping station and a private sewerage system owned and operated by Marineland. The Long Point pump station is designed to receive sewage from a major portion of Subregion 3, Marineland, and the school site and transmit it to the Sea Cove pump station, located east of the Palos Verdes Bay Club. Marineland's system consists of an internal sewerage collection system, a pump station and a force main; all of which is designed to collect and transmit sewage to the Long Point pump station.

At this time, both public and private sewerage systems appear to be functioning adequately. Furthermore, service agencies have indicated that the facilities should remain adequate into the foreseeable future. While the ultimate use of the school site is not known and therefore difficult to make accurate demand projections, it is felt that the system could facilitate a rather intense use. This is a function of the overall system having been designed to allow for a more intense usage (residential) than that proposed by this Plan. Marineland has explained that the capacity of its system is contingent upon future expansion plans and resultant increased attendance. At the time of this writing, Marineland had not yet developed expansion plans, however, it is felt that those alternatives within the scope of possibility could be facilitated.

Within the northern portion of the subregion, the fishing access and Lighthouse/Coast Guard facility employ septic tanks (or similar) to dispose of sewage. The intensity and nature of these uses are such that present systems appear to be functioning adequately. Furthermore, there are no known health hazards.

The Draft Environmental Impact Report for Point Vicente beach park indicates that the proposed recreation facility will be served by the Sanitation District's trunk line,

WHICH IS LOCATED NORTH OF PALOS VERDES DRIVE SOUTH. WHILE THE CITY WOULD SUPPORT THIS DISPOSAL TECHNIQUE OVER THE USE OF SEPTIC TANKS, IT SHOULD BE STATED THAT A PUMP WOULD PROBABLY BE NECESSARY IN ORDER TO TRANSMIT SEWAGE TO THE TRUNK LINE, WHICH IS AT A SUBSTANTIALLY HIGHER ELEVATION THAN THE LIKELY LOCATION OF THE COMFORT STATION. SHOULD A PUMP BE REQUIRED, IT IS RECOMMENDED THAT THE PROPONENTS INVESTIGATE THE FEASIBILITY OF INCLUDING THE FISHING ACCESS AND/OR LIGHTHOUSE IN SUCH A SYSTEM.

IN ADDITION TO THE SEWERAGE FACILITIES NORMALLY FOUND, MARINELAND HAS A SEAWATER DISPOSAL SYSTEM WHICH DISCHARGES AS MUCH AS 3,060,000 GALLONS OF WASTE WATER PER DAY. THE DISPOSAL SYSTEM CONSISTS OF A NETWORK OF LINES AND PUMPS WHICH DISCHARGE WASTE WATER FROM TWO SEPARATE OUTFALLS. THE OUTFALLS ARE BOTH LOCATED ABOVE SEA LEVEL AND ARE ABOUT 600 FEET APART. OUTFALL #1 HAS A POTENTIAL OUTPUT OF ABOUT 2,100,000 GALLONS PER DAY AND IS SITUATED ABOUT 40 FEET ABOVE SEA LEVEL. OUTFALL #2 IS LOCATED ABOUT 10 FEET ABOVE SEA LEVEL AND CAN DISCHARGE ABOUT 960,000 GALLONS PER DAY. BOTH OUTFALLS DISCHARGE DIRECTLY ONTO THE BLUFF FACE AND THE WASTE WATER FLOWS OVER BLUFF ROCKS TO THE SURF LINE. THE QUALITY OF WASTE WATER IS REGULATED AND MONITORED BY THE CALIFORNIA REGIONAL WATER QUALITY BOARD (LOS ANGELES REGION). THE TWO MOST SIGNIFICANT MAN-INDUCED WASTES INCLUDE CHLORINE AND COPPER SULFATE. THE CHLORINE IS USED IN THE TANKS WHICH DISPLAY THE MARINE MAMMALS AND MUST BE CONTROLLED BECAUSE IT ACTS AS AN IRRITANT TO THE MAMMALS. COPPER SULFATE IS AN ALGACIDE WHICH IS USED IN THE FISH DISPLAY TANKS.

TRANSPORTATION SYSTEMS

VEHICULAR NETWORKS

THE VEHICULAR NETWORK WITHIN SUBREGION 2 CONSISTS OF PALOS VERDES DRIVES SOUTH AND WEST, MINOR ACCESS ROADS TO PUBLIC FACILITIES, AND A PRIVATE ROAD WHICH SERVES MARINELAND. ALL ROADS CURRENTLY FUNCTION ADEQUATELY AND ALL ARE IN SATISFACTORY CONDITION. (AS DISCUSSED IN THE INTRODUCTION, THE CHARACTER OF THE SUBREGION IS SUCH THAT THE METHOD OF ANALYSIS USED IN OTHER SUBREGIONS DOES NOT ALLOW THE READER TO SEE THE TRUE IMPACT OF EXISTING AND PROPOSED USES. THEREFORE, THE FOLLOWING ANALYSIS CONCENTRATES NOT ON WEEKDAY A.M. PEAK HOUR TRAFFIC, BUT RATHER ON THE WEEKEND PEAK HOURS, WHEN THE TRAFFIC IS GREATEST.)

AN EVALUATION OF THE EXISTING CONDITIONS WHICH GENERATE AND/OR ATTRACT TRAFFIC INDICATE THAT ON A WEEKDAY MORNING, OUTBOUND TRAFFIC IS INSIGNIFICANT AND THAT INBOUND TRAFFIC IS LIMITED TO THOSE PERSONS EMPLOYED WITHIN THE SUBREGION. INBOUND TRAFFIC (TO THE SUBREGION ITSELF) IS ESTIMATED TO BE ABOUT 75 TRIPS AT PEAK HOUR. ASSUMING THE SUBREGION MAINTAINS A SIMILAR CHARACTER, THE PROPOSED ACTIVITIES ARE NOT EXPECTED TO SIGNIFICANTLY CHANGE THE EXISTING TRAFFIC CONDITIONS.

AT THE PRESENT TIME, IT IS ESTIMATED THAT THE ACTIVITIES WITHIN SUBREGION 2 HAVE THE POTENTIAL (WORST CASE) TO ATTRACT 1185 CARS, DURING A PEAK TRAFFIC HOUR ON A SUMMER SATURDAY OR SUNDAY. FURTHERMORE, IT IS ESTIMATED THAT THE EXISTING ACTIVITIES COULD GENERATE AS MANY AS 3,664 TRIPS IN A 24-HOUR PERIOD. MARINELAND, WITH OVER 1,000,000 VISITORS ANNUALLY (1978), ACCOUNTS FOR A

MAJOR PORTION OF THE PEAK HOUR TOTAL.

BASED ON THE ACTIVITIES PROPOSED IN THIS PLAN AND PRELIMINARY ESTIMATES ON MARINELAND'S SHORT-RUN FUTURE IMPROVEMENTS, IT IS ESTIMATED THAT THE TRAFFIC GENERATED BY SUBREGION 2 COULD BE SUBSTANTIALLY THE SAME DURING A PEAK WEEKEND/HOLIDAY HOUR AS IS NOW EXPERIENCED. THE LACK OF ANY REAL CHANGE TO SUBREGION TRAFFIC PATTERNS IS DUE PRIMARILY TO THE INSIGNIFICANT CHANGES IN SUBREGION ACTIVITES. MARINELAND HAS MADE AND WILL CONTINUE MAKING PHYSICAL IMPROVEMENTS TO THE PARK, BUT A CURRENT PEAK DAILY ATTENDANCE OF 11,900 (7/4/78) IS CONSIDERED BY PARK OFFICIALS TO BE JUST ABOUT AS MANY VISITORS AS CAN BE ACCOMMODATED ON ONE DAY. FURTHER, THE REMAINING SUBREGION ACTIVITIES WILL UNDERGO SOME PHYSICAL CHANGES, BUT NOT IN A WAY THAT IS EXPECTED TO SIGNIFICANTLY CHANGE TRAFFIC GENERATION. THIS IS NOT TO SAY THAT THE VARIOUS ACTIVITIES WILL NOT ATTRACT MORE VISITORS ON A YEARLY OR MONTHLY BASIS, BUT MERELY THAT THE ACTIVITIES SEEM TO HAVE REACHED A MAXIMUM VISITOR POTENTIAL ON A 24-HOUR OR PEAK-HOUR BASIS.

IN THE LONG RUN, TRAFFIC MAY BE SIGNIFICANTLY CHANGED UPON IMPLEMENTATION OF FUTURE CHANGES TO MARINELAND'S ACTIVITIES AND WITH POTENTIAL DEVELOPMENT OF THE SCHOOL SITE. HOWEVER, LONG RANGE TRAFFIC PROJECTIONS HAVE NOT BEEN MADE DUE TO THE OBVIOUS DIFFICULTIES ANTICIPATING WHAT THESE CHANGES/ ADDITIONS MIGHT INVOLVE. AN ANALYSIS OF POTENTIAL TRAFFIC IMPACT WILL BE REQUIRED FOR BOTH ENVIRONMENTAL AND PROJECT REVIEW AT SUCH TIMES THAT PROPOSALS ARE MADE BEYOND THE SHORTRUN ANALYSIS DESCRIBED ABOVE.

A PROBLEM WHICH HAS BEEN EXPERIENCED AND IS EXPECTED TO OCCASIONALLY RE-OCCUR ON PEAK VISITOR DAYS AT MARINELAND IS CONGESTION AT THE PARK ENTRANCE. THE MARINELAND ACCESS ROAD IS DESIGNED SO THAT INGRESS/EGRESS MAY BE TAKEN AT TWO POINTS; HOWEVER, THE WESTERNMOST ENTRANCE IS ONLY USED FOR EGRESS FROM THE PARK. A RECENTLY APPROVED CONDITIONAL USE PERMIT FOR VARIOUS IMPROVEMENTS REQUIRES THAT IMPROVEMENTS BE MADE TO PALOS VERDES DRIVE SOUTH INCLUDING THE LEFT-HAND TURN POCKET. THE IMPROVEMENTS, WHICH ARE INTENDED TO REDUCE CONGESTION, INCLUDE WIDENED AND LENGTHENED LEFT-HAND TURN POCKET, ACCELERATION/ DECELERATION LANES, AND REDESIGNED ENTRANCE UTILIZING THE ABANDONED TEXACO SITE. IT IS ANTICIPATED THAT THESE IMPROVEMENTS WILL BE MADE PRIOR TO THE SUMMER OF 1979.

THE IMPACTS OF SUBREGION GENERATED TRAFFIC (EXISTING AND POTENTIAL) TO THE CARRYING CAPACITY OF PALOS VERDES DRIVE SOUTH/WEST WITHIN THE SUBREGION ITSELF IS NOT CONSIDERED SIGNIFICANTLY ADVERSE, SINCE PALOS VERDES DRIVE SOUTH IS NOT PROJECTED TO EXPERIENCE IMPACTIVE TRAFFIC CONDITIONS. THE IMPACTS OF THE TRAFFIC GENERATED BY SUBREGION 2, HOWEVER, DOES IMPACT AREAS OUTSIDE THE SUBREGION BOUNDARIES. FOR A DISCUSSION OF THE IMPACTS, SEE COASTAL REGION - INFRASTRUCTURE.

THE NATURE OF THE ACTIVITIES WITHIN THE SUBREGION ARE SUCH THAT A SUBSTANTIAL AMOUNT OF LAND IS ALLOTTED TO PARKING. THIS IS PARTICULARLY TRUE OF MARINELAND. OF THE 85 ACRES WHICH MARINELAND OCCUPIES, APPROXIMATELY 14 ACRES (16%) ARE CURRENTLY UTILIZED FOR PARKING. THIS TRANSLATES INTO 2,020 ON-SITE PARKING

SPACES. THE AFOREMENTIONED CONDITIONAL USE PERMIT ALSO REQUIRED THAT NEW PARKING SPACES BE DEVELOPED WHEN ATTENDANCE REACHED A CERTAIN LEVEL. SINCE ATTENDANCE SURPASSED THE LEVEL DURING THE SUMMER OF 1978, PLANS HAVE BEEN SUBMITTED TO THE CITY THAT WOULD ALLOW FOR APPROXIMATELY 900 NEW PARKING SPACES ON THE SITE. THIS IS ANTICIPATED TO RELIEVE PARKING PROBLEMS ON PALOS VERDES DRIVE SOUTH AND IN NEARBY RESIDENTIAL NEIGHBORHOODS. THE OTHER FACILITIES WITHIN THE SUBREGION APPEAR TO PROVIDE ADEQUATE PARKING; HOWEVER, THERE ARE INTERMITTENT TIMES WHEN THE FISHING ACCESS PARKING LOT IS FULL.

WITH RESPECT TO THE FUTURE POTENTIAL DEVELOPMENT OF THE SCHOOL SITE AS A COMMERCIAL RECREATION FACILITY (SECONDARY USE), THIS PLAN DOES NOT IDENTIFY SPECIFIC RECOMMENDED USES; HOWEVER, THE FOLLOWING ARE GUIDELINES WHICH SHOULD BE CONSIDERED IN ANY SUCH DEVELOPMENT PLANS:

1) ACCESS SHOULD NOT BE TAKEN FROM NANTASKET DRIVE (IN SUBREGION 3) SINCE IT IS DESIGNED AS A RESIDENTIAL STREET AND COMMERCIAL TRAFFIC WOULD IN ALL LIKELIHOOD CAUSE SIGNIFICANT PROBLEMS.

2) THE PROJECT PROPONENTS SHOULD INVESTIGATE THE POSSIBILITY OF SHARING ACCESS WITH MARINELAND THROUGH THE USE OF APPROPRIATE LEGAL METHODS.

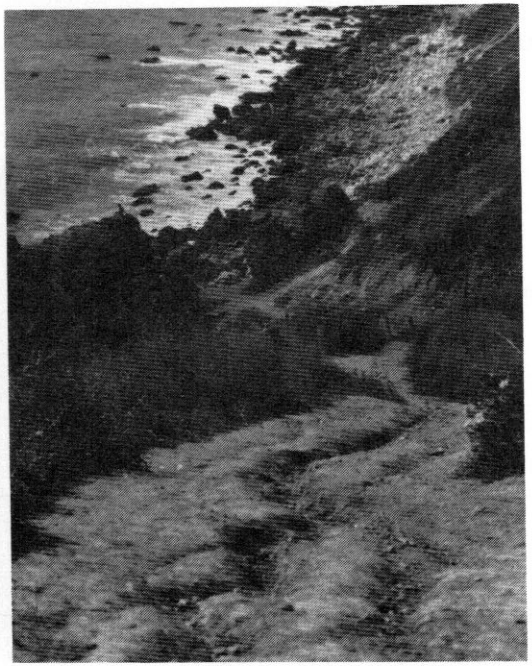
3) PARKING AND ACCESS SHOULD BE DESIGNED SO THAT IT IS SUFFICIENTLY BUFFERED FROM EXISTING AND FUTURE RESIDENTIAL DEVELOPMENT.

PATH AND TRAIL NETWORK

TWO CORRIDOR LOOPS ORIGINATE/TERMINATE WITHIN THE CONFINES OF SUBREGION 2 AND BOTH SHOULD BE DESIGNED TO A CLASS I STANDARD WHICH WILL MEET THE VARIED DEMANDS OF ITS USERS. WITHIN SUBREGION 2 BOTH CORRIDOR LOOP TRAILS ARE SLIGHTLY MODIFIED VERSIONS OF THAT PROPOSED IN THE GENERAL PLAN. THE FOLLOWING DISCUSSION TALKS TO THE TWO LOOPS PER THEIR ALIGNMENT AND DESIGN CHARACTERISTICS.

- CORRIDOR LOOP #1 WILL INTERSECT THE NORTHERN PROPERTY LINE OF POINT VICENTE BEACH PARK AT THE BLUFF TOP. FROM HERE THE BIKEWAY/WALKWAY TURNS TO AN EAST-WEST ALIGNMENT THROUGH THE PARK TO A POINT WHERE IT INTERSECTS WITH PALOS VERDES DRIVE WEST ALONG THE EASTERN EXTREMITY OF THIS SITE. DUE TO THE PARK'S PROPOSED CHARACTERISTICS, BIKE STANDS COULD BE A PART OF SITE IMPROVEMENTS SO THAT CYCLISTS MAY STOP TO REST AND ENJOY THE PARK. SINCE AUTO ACCESS IS PROVIDED ON-SITE, THE PATH AND TRAIL NETWORK IN THIS VICINITY SHOULD BE DESIGNED TO MINIMIZE POSSIBLE MODE CONFLICTS. AN ADDITIONAL MINOR TRAIL IS PROPOSED TO LEAD THROUGH THE SITE IN A NORTHEASTERLY DIRECTION TOWARD THE PALOS VERDES DRIVE WEST/HAWTHORNE BOULEVARD INTERSECTION. THE PARK WILL PROVIDE PARKING FOR TRAIL USERS AS WELL AS PARK USERS.
- CORRIDOR LOOP #2 ORIGINATES/TERMINATES WITHIN SUBREGION 2 AT THE SURPLUS SCHOOL SITE. ALTHOUGH THE PRECISE ALIGNMENT OF THE LOOP TRAILS THROUGH THE SCHOOL SITE WILL DEPEND LARGELY ON THE TYPE OF DEVELOPMENT THAT OCCURS, IT IS PROPOSED THAT THE

TRAIL ALIGN WITH, AND RUN PARALLEL TO, THE COMMON PROPERTY LINE BETWEEN THE SCHOOL SITE AND MARINELAND. IF THIS ALIGNMENT IS USED IT WILL MAXIMIZE THE TRAIL LENGTH WHILE PROVIDING A BUFFER BETWEEN MARINELAND AND FUTURE DEVELOPMENT ON THE SCHOOL SITE. AT THE BLUFF, THE LOOP TRAILS TURN TO AN EAST-WEST ALIGNMENT AND RUN PARALLEL TO THE BLUFF TO A POINT JUST WEST OF THE P.V. BAY CLUB CONDOMINIUMS. AT THIS LOCATION THE TRAIL WILL MERGE WITH COASTSITE DRIVE AND FOLLOW BEACHVIEW AND SEAHILL DRIVES TO THE PRIMARY CORRIDOR ON PALOS VERDES DRIVE SOUTH. DUE TO POTENTIAL DEVELOPMENT TECHNIQUES ON THE BLUFF, THE BLUFF TRAIL SEGMENT MAY BE IMPRACTICAL; THEREFORE, AN ALIGNMENT ON SEACOVE DRIVE IS PROPOSED AS AN ALTERNATE TO INSURE IMPLEMENTATION OF THIS LOOP.



IN ADDITION TO THE TRAIL NETWORK, THERE ARE TWO EXISTING COASTAL ACCESS POINTS IN THIS SUBREGION.

POINT VICENTE FISHING ACCESS IS FULLY DEVELOPED AND PROVIDES PUBLIC ACCESS TO THE SHORELINE VIA A DIRT RAMP. AUTO PARKING AND RESTROOM FACILITIES ARE AFFORDED AT THE BLUFF TOP.

THE SECOND ACCESS POINT IS A PART OF MARINELAND'S SITE AND IS OF A PRIVATE NATURE. ACCESS IS FACILITATED ON GENTLE SLOPING TERRAIN AND LEADS TO THE MARINELAND PIER. AT PRESENT THIS ACCESS IS CLOSED TO PATRONS. THERE IS ALSO A PATH TO THE AREA INHABITED BY THE WILD SEA LIONS, OPEN TO PATRONS.

POLICIES

IT IS THE POLICY OF THE CITY TO:

1. ENCOURAGE THE COUNTY TO INCORPORATE NATIVE PLANT MATERIALS BENEFICIAL TO MIGRATORY AND RESIDENT BIRD SPECIES INTO THE LANDSCAPING PLAN FOR POINT VICENTE BEACH PARK.

2. ENCOURAGE ESTABLISHMENT OF DESIGNATED INTERTIDAL AREAS AS MARINE RESERVES AND APPLY STRICT ENFORCEMENT OF THE REGULATIONS OF THE RESERVES.

3. ENCOURAGE RESTORATION OF KELP BEDS OFF POINT VICENTE.

4. ENCOURAGE THE INCLUSION OF POINT VICENTE LIGHTHOUSE IN THE NATIONAL REGISTER OF HISTORIC PLACES.

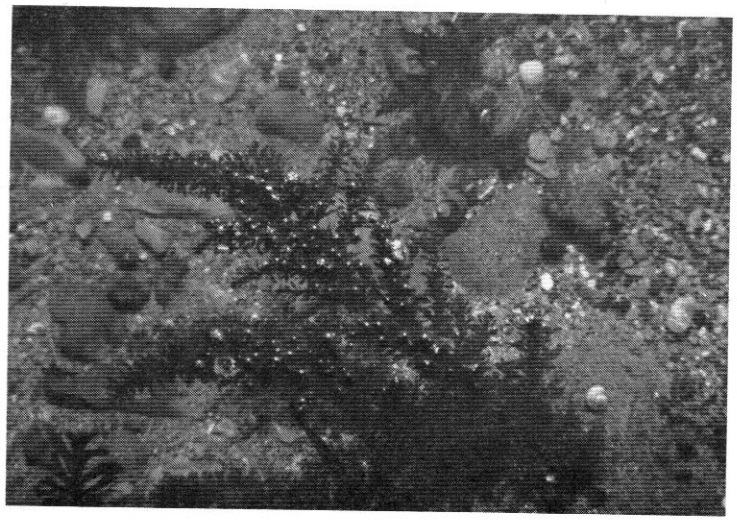
5. Ensure that impacts such as noise, outdoor lighting, etc., are mitigated at the point of origin.

6. Encourage mass transit systems to service Subregion 2, especially during peak use periods, in order to reduce the amount of auto intrusion onto the Peninsula.

7. Encourage actions deemed necessary or appropriate in the upgrading of Marineland and its activities so long as such action(s) is not detrimental and does not result in an adverse effect on surrounding areas.

8. Designate as agricultural use on Abalone Cove School Site in the event that the property is not required for construction of a school and if sufficient non-City funds are made available to the City through the Coastal Conservancy (or other funding) for purchase of the site. A secondary use designation shall be commercial recreation and encouragement of a retirement/senior citizen/fixed income facility on a portion of the site.

9. Require the Point Vicente Beach Park site plan to reflect City concerns with regard to shoreline access and prohibit any stairway.



INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 3 IS A PARTIALLY DEVELOPED 73-ACRE AREA WITH A DIVERSITY OF EXISTING AND POTENTIAL USES. THE SUBREGION IS BOUNDED ON THE WEST BY MARINELAND AND A VACANT SCHOOL SITE, ON THE EAST BY ABALONE COVE COMMUNITY, AND ON THE NORTH BY A VACANT AREA WHICH IS CURRENTLY ZONED FOR A LOW DENSITY RESIDENTIAL USE. THIS SUBREGION HAS LITTLE IN THE WAY OF IDENTIFIABLE CHARACTER. HOWEVER, IT IS THE AREA'S UNDEFINED CHARACTER, HETEROGENEOUS LAND USES, AND THE STRONG CHARACTERS OF ADJACENT SUBREGIONS (2 AND 4) THAT ESTABLISHES IT AS A DISTINCT YET WEAK COASTAL SUBREGION.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

THE CLIMATIC PROFILE OF ZONE 1, PRESENTED IN THE CLIMATIC SECTION OF THE COASTAL REGION, IS REPRESENTATIVE OF THE GENERAL WEATHER PATTERN IN THIS SUBREGION. THE CLIMATIC ELEMENT WHICH VARIES FROM THIS PROFILE PERTAINS TO THE PREDOMINANT WIND PATTERN EXPERIENCED IN THE AREA. BECAUSE OF THE COASTLINE'S CURVATURE HERE, THE SUBREGION EXPERIENCES AN OFFSHORE PATTERN, EVEN MORE SO THAN SUBREGION 4, AS COMPARED TO THE ONSHORE PATTERN TYPICAL OF MOST LANDS SHARING A ZONE 1 CLIMATIC PROFILE.

MARINE

THE SHORELINE IN THIS AREA IS SHELTERED BY LONG POINT SO WAVE ACTION FROM THE WEST IS NOT SEVERE; HOWEVER, WAVES AND SWELLS TRAVELLING

IN FROM THE SOUTHWEST CAN PRODUCE HIGH SURF WHICH POUNDS THE SHORELINE.

THE SHORELINE OF THIS AREA IS VERY RICH AND DIVERSE IN MARINE LIFE, MAKING IT ATTRACTIVE TO THE COLLECTOR AND THUS VULNERABLE DURING LOW TIDES.

GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

SUBREGION 3 IS BASICALLY A GENTLE SLOPING LANDMASS WHICH DIPS TOWARD THE OCEAN. THE SLOPE IN THIS SUBREGION DOES NOT OFFER RESISTANCE TO DEVELOPMENT UNTIL THE BLUFF'S EDGE IS REACHED WHERE THE TERRAIN DROPS SEVERELY, ALMOST VERTICALLY, TO THE BEACH BELOW.

MARINE

THE SHORELINE IS BASICALLY ROCKY HEADLAND BY NATURE WITH OUTCROPPINGS OF ROCKS AT BOTH THE WESTERN SUBREGION DIVISION AND THE EASTERN DIVISION. THE OUTCROPPING OF ROCKS AT THE WESTERN EXTREMITY EXTENDS WELL INTO THE OCEAN. THE ROCKS SLOPE GENTLY INTO THE WATER ON THE EASTERN SIDE OF THIS OUTCROPPING, FORMING REEFS WHICH SHELTER MANY FORMS OF MARINE LIFE. THE WESTERN GROUPING OF ROCKS ARE COMPOSED OF LARGE BOULDERS. THIS ROCK STRUCTURE EVENTUALLY GIVES WAY TO A BASICALLY SANDY BOTTOM WITH SCATTERED SUBMARINE REEFS IN THE EASTERN PORTION OF THE SUBREGION.

GEOLOGIC CONDITIONS

SUBREGION 3 POSSESSES NO SIGNIFICANT GEOLOGIC HAZARDS ASIDE FROM THE SEA CLIFF EROSION HAZARD AREA AND EXTREME DROPOFF AT THE BLUFF'S EDGE.

BIOTIC RESOURCES

TERRESTRIAL

THERE ARE VERY FEW AREAS IN THIS SUBREGION THAT POSSESS ANY SIGNIFICANT NATURAL VEGETATION. THE STEEPNESS OF THE BLUFF AND OTHER HARSH CONDITIONS DO NOT ALLOW ESTABLISHMENT OF SIGNIFICANT VEGETATION ON THE BLUFF. FURTHERMORE, NEARLY ALL OF THE UNDEVELOPED LAND IS OR HAS RECENTLY BEEN IN AN AGRICULTURAL USE. THE NATURAL VEGETATION THAT DOES EXIST IS LOCATED IN SMALL PATCHES AT THE BASE OF THE BLUFF. DUE TO THIS LACK OF VEGETATION, WILDLAND FIRES ARE OF VERY LITTLE CONCERN.

MARINE

MOST OF SUBREGION 3'S SHORELINE IS NOT AS CONDUCIVE TO A RICH AND DIVERSE INTERTIDAL ENVIRONMENT AS ARE TIDE POOL AND REEF ORIENTED SHORELINES. HOWEVER, AN OUTCROPPING OF ROCKS ON THE EASTERN EXTREMITY DOES FORM A MINOR REEF SYSTEM WHICH SHELTERS MANY ORGANISMS. OFFSHORE, PATCHES OF KELP ARE EVIDENCE THAT THE LARGE KELP BED IN THE WESTERN PORTION OF ABALONE COVE IS NATURALLY EXPANDING. A MORE THOROUGH DISCUSSION OF TYPICAL KELP ASSOCIATED HABITATS CAN BE FOUND IN THE BIOTIC RESOURCE SECTION AT THE REGIONAL LEVEL.

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

TABLE: S3-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED		3 AC.	26 AC.							6 AC.		
RESTRICTED	11 AC.			6 AC.	4 AC.						PRESERVE	
LEVEL OF SIGNIFICANCE	●	◒	○	●	●					◒	●	

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

CULTURAL RESOURCES

TABLE: S3-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED			COASTAL BLUFFS
LEVEL OF SIGNIFICANCE			◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW,
BLANK MEANS NOT APPLICABLE.

FIRE HAZARD

FIGURE 23 OF THE GENERAL PLAN DELINEATES AN AREA OF HIGH FIRE HAZARD ABUTTING PALOS VERDES DRIVE SOUTH. THIS IS IN ERROR SINCE THREE OF THE FOUR FACTORS WHICH WARRANT THIS CLASSIFICATION ARE ABSENT; SLOPES OF 20-40%, LIMITED ACCESS, AND EXTENSIVE NATURAL VEGETATION. THEREFORE, ACTIVITY IN THIS AREA DOES NOT NEED TO BE CONCERNED WITH THIS FEATURE.

SOCIO/CULTURAL

SOCIAL FACTORS

PALOS VERDES BAY CLUB CONTAINS 240 CONDOMINIUM UNITS LOCATED ON 17.6 ACRES WHICH ARE REGULATED BY AUTHORITY DELEGATED TO THE HOMEOWNERS ASSOCIATION. SPECIFIED LIMITATIONS ALONG WITH MAINTENANCE FEE ASSESSMENTS ARE ENFORCED BY THE ASSOCIATION WHICH IS EMPOWERED VIA CC&R'S ATTACHED TO EACH UNIT.

URBAN ENVIRONMENT

ACTIVITY AREAS

COMPATIBILITY OF ADJACENT ACTIVITY AREAS

AN ACTIVITY CONFLICT LIES EXTERNAL OF THIS SUBREGION AND IS ASSOCIATED WITH MARINELAND. VISUAL APPEARANCE, THE LOUD SPEAKER SYSTEM, INTENSITY OF ACTIVITY, AND TRAFFIC ARE ALL SEGMENTS OF THIS FACILITY WHICH POSE ADVERSE IMPACTS TO RESIDENTIAL AREAS. NOISE IS THE MOST PREVALENT IMPACT INCURRED.

CURRENT VACANT/AGRICULTURAL AREAS WHICH LIE BETWEEN MARINELAND AND EXISTING RESIDENTIAL AREAS ARE VOID OF ANY LARGE VEGETATION OR STRUCTURES; THUS ALLOWING NOISE TO IMPACT RESIDENTIAL AREAS WITH LITTLE ATTENUATION.

AS DEVELOPMENT TAKES PLACE IN THIS SUBREGION, NOISE CHARACTERISTICS WILL BE ALTERED. THE POTENTIAL FOR NEW DEVELOPMENT TAKING PLACE ON LANDS WHICH LIE BETWEEN EXISTING RESIDENTIAL AREAS AND MARINELAND WOULD SERVE AS ATTENUATING DEVICES; THUS REDUCING OR ELIMINATING NOISE IMPACTS ON EXISTING AREAS. HOWEVER, IN DOING SO, NEW DEVELOPMENT WOULD BE SUBJECT TO GREATER NOISE IMPACT DUE TO ITS PROXIMITY TO MARINELAND. IT IS APPARENT THAT THE MOST EFFECTIVE MANNER IN WHICH TO MITIGATE THIS NOISE IMPACT IS TO IMPLEMENT MEASURES INTERNAL OF MARINELAND'S SITE (SEE SUBREGION 2, ACTIVITY AREAS).

VISUAL IMPACTS ASSOCIATED WITH MARINELAND ARE ALSO OF CONCERN. LANDSCAPING AND OTHER COMPATIBLE VISUAL SCREENS COULD BE UTILIZED ALONG THE EASTERN PORTIONS OF THE SITE SO AS TO SCREEN PARKING AND SERVICE AREAS, WHILE MAINTAINING SCENIC VIEWS FROM RESIDENTIAL AREAS.

EXISTING ACTIVITIES

RESIDENTIAL

ALL HOUSING UNITS ARE OF A MULTI-FAMILY NATURE AND CONTAINED WITHIN TWO PROJECTS. THE FIRST, PALOS VERDES BAY CLUB, IS A CONDOMINIUM DEVELOPMENT ACCOUNTING FOR 240 UNITS ON 17.6 ACRES WITH AN AVERAGE DENSITY OF 13.6 D.U./AC.

The second, Porto Verde, is an apartment complex containing 216 units on 5.6 acres for an average net density of 38.6 d.u./ac.

All dwellings were constructed between 1964 and 1970. Palos Verdes Bay Club began construction in 1964 with completion taking place in the following year. Porto Verde Apartments were completed in 1970.

Units in the Palos Verdes Bay Club contain a gross floor area of roughly 1,750 square feet and sell from $75,000 to $100,000 with the average sale price around $85,000. Unit rental prices for Porto Verde Apartments have changed drastically in a four-year period from those noted in a survey (July 1974) conducted in conjunction with the General Plan. These changes are noted in table 7.

Commercial

A service station and one produce/flower stand are the only type of commercial activity located in this subregion. The service station is operated by Union Oil Company at the corner of Palos Verdes Drive South and Seawolf Drive. The produce/flower stand is located adjacent to Palos Verdes Drive South and serves as a retail outlet for local agricultural activities.

Institutional

Institutional activity consists solely of a church, St. Peter's by the Sea, abutting Palos Verdes Drive South in the northeastern corner of the subregion. This activity's existing adverse impacts are centered around site access and parking overflow.

Recreation

Shoreline usage in this area is comparatively lighter than that of adjacent subregions. Access is limited as the bluff trails are difficult to negotiate. Primary access is presently gained by walking the shoreline from either Marineland or Abalone Cove. The bluffs are used, however, for viewing and walking.

The kelp bed offers good skin diving and fishing activity; but due to the rocky headland nature of the beach, beachcombing is of minor intensity.

Agriculture

Subregion 3 was, until very recently, the agricultural mainstay of the coastal region. 26 acres of the 73 total acres in the area were devoted to agricultural uses with crops ranging from flowers to vegetables and grain. Recently the landowner terminated the farmer's lease. There is one produce/flower



STAND FOR THE RETAIL SALE OF LOCALLY-GROWN CROPS AS WELL AS A ''FARM'', HOUSING SUPPLIES AND RELATED AGRICULTURAL EQUIPMENT.

THE PRIMARY AGRICULTURE OPERATOR ON THE PENINSULA, MAS ISHIBASHI, INDICATED THAT THIS AREA HAD SERVED AS THE ''HEART'' OF HIS OPERATION. BOTH ISHIBASHI AND HIS COUSIN OWN AND OPERATE THE RETAIL STANDS (ONE IN SUBREGION 5). THESE STANDS SERVE AS THE SOLE OUTLETS FOR ALL CROPS GROWN BY ISHIBASHI EXCEPT GRAIN. THIS IS IN CONTRAST TO OTHER FARMERS WHO RELY ON WHOLESALE OUTLETS TO DISPENSE THEIR CROPS.

POTENTIAL ACTIVITY

37 ACRES OF VACANT BUILDABLE LAND LIE WITHIN THE CONFINES OF THIS SUBREGION. ALTHOUGH NATURAL FEATURES WITHIN THE AREA ARE OF MINIMAL CONSTRAINT, WITH REGARD TO THE MOLDING OF DEVELOPMENT PATTERNS, A PREVIOUSLY RECORDED TRACT (TRACT 30339) HAS PARCELED THIS VACANT LAND; THUS, CONSTRAINING NEW DEVELOPMENT TO INDIVIDUAL SITE SEGMENTS. UNDER CONVENTIONAL DEVELOPMENT PRACTICES, THIS COULD RESULT IN A MULTITUDE OF INDIVIDUAL PROJECTS BEING DEVELOPED WITH LITTLE OR NO RELATIONSHIP TO ADJOINING PROJECTS. THESE CONSTRAINTS ARE FURTHER HEIGHTENED BY THE EXISTING PUBLIC STREET PATTERN DEVELOPED IN CONJUNCTION WITH THE TRACT.

THE CURRENT COMMON OWNERSHIP OF ADJOINING PARCELS IN THE SUBREGION ASSISTS IN PROVIDING FLEXIBILITY TO THE SUBSEQUENT DEVELOPMENT PATTERN, IN THAT ADJACENT LOTS UNDER THE SAME OWNERSHIP CAN BE DEVELOPED UNDER ONE DEVELOPMENT PROPOSAL WITH GREATER EASE THAN IF UNDER SEPARATE OWNERSHIPS. HOWEVER, IT IS NOT KNOWN HOW LONG THIS CONDITION WILL LAST.

RESIDENTIAL

RESIDENTIAL ACTIVITY IS CONSIDERED THE MORE COMPATIBLE LAND USE DESIGNATION FOR THE AREA FROM BOTH A PHYSICAL AND FISCAL PERSPECTIVE. PHYSICALLY AND DEMAND-WISE, IT IS MORE COMPATIBLE WITH THE AREA THAN COMMERCIAL OR INSTITUTIONAL USES; FISCALLY IT IS MORE SOUND THAN A RECREATIONAL USE.

RECREATION

BLUFF LANDS LOCATED SEAWARD OF SEACOVE DRIVE ARE RECOGNIZED AS BEING OF PRIMARY VALUE FOR MAINTAINING AS OPEN SPACE. IF ACCOMPLISHED, TWO POSITIVE LOW INTENSITY ACTIVITIES COULD TAKE PLACE WHICH ARE COMPATIBLE WITH THIS AIM. THE FIRST, AGRICULTURE, IS DISCUSSED WITHIN THE FOLLOWING AGRICULTURAL SECTION. THE SECOND, RECREATION, COULD BE OF POSITIVE BENEFIT IN FACILITATING LOCAL RECREATIONAL NEEDS. BOTH ACTIVITIES INVOLVE THE TRANSFER OF DEVELOPMENT RIGHTS, THE MECHANICS OF WHICH ARE DESCRIBED IN THE AGRICULTURAL SECTION. EIGHT DWELLING UNIT CREDITS WOULD NEED TO BE TRANSFERRED FROM THIS SITE BEFORE PUBLIC ACQUISITION COULD BE CONSIDERED. THE ACTUAL COST/BENEFIT OF THIS ACTION WILL BE THE SUBJECT OF A FUTURE STUDY WHICH WILL ALSO ADDRESS THE MAINTAINING OF AGRICULTURE IN THIS AREA.

AGRICULTURAL

BASED ON DIMINISHING AGRICULTURAL ACTIVITY IN THE CITY AND PENINSULA AS A WHOLE, THE CITY'S DESIRE TO MAINTAIN IT, AND THE PARALLEL INTENTIONS OF THE CALIFORNIA COASTAL COMMISSION, EFFORTS WERE DIRECTED TOWARDS SEARCHING

OUT POTENTIAL AGRICULTURAL PRESERVATION MEASURES WHICH COULD AIDE IN MAINTAINING THE HIGH PRIORITY AGRICULTURAL ACTIVITY IN THIS SUBREGION. IN ORDER TO ASSESS THE SUITABILITY OF VARIOUS PRESERVATION MEASURES IN MAINTAINING LOCAL AGRICULTURE, IT WAS NECESSARY TO DRAW A CURRENT OPERATION PROFILE. THIS EFFORT PRODUCED THE FOLLOWING FACTORS:

- CURRENT AGRICULTURAL OPERATORS ARE NOT LANDOWNERS BUT MERELY LEASE THE LAND.

- RESPECTIVE LANDOWNERS DO NOT VIEW CURRENT AGRICULTURAL ACTIVITY AS THE SITE'S PRIMARY USE, BUT MERELY AS AN INTERIM USE UNTIL THE SITE IS SOLD OR DEVELOPED.

- CURRENT ACTIVITIES TAKE PLACE ON SMALL LOTS, USUALLY LESS THAN 10 ACRES IN SIZE, WHEN VIEWED ON AN ACCEPTED AGRICULTURAL LOT SIZE.

- THE LOTS ON WHICH AGRICULTURAL OPERATIONS TAKE PLACE ARE ZONED FOR RESIDENTIAL OR COMMERCIAL RECREATIONAL USES.

- THE HIGH CROP YIELD IN THIS AREA RESULTS FROM WATER SUPPLY LINES BEING LOCATED ON SITE.

- AN INTERVIEW WITH LOCAL OPERATORS REVEALED THAT IN THEIR OPINION THIS SUBREGION COMPRISES THE LAST STRONGHOLD OF AGRICULTURAL OPERATIONS AND THAT, ONCE CONVERTED, WILL MEAN A NON-REVERTING DOWNWARD TREND OF THIS ACTIVITY ON THE PENINSULA.

THESE FACTORS, ALONG WITH A REVIEW OF AN AGRICULTURAL STUDY PERFORMED FOR THE CITY OF SAN JUAN CAPISTRANO IN JUNE AND AUGUST OF 1975 BY LEVANDER, PARTRIDGE AND ANDERSON, INC., RESULTED IN THREE FEASIBLE MEASURES WHICH THE CITY COULD ADOPT IN ORDER TO MAINTAIN AGRICULTURE. THE FIRST, OUTRIGHT PURCHASE, IS DISCUSSED IN THE AGRICULTURE SECTION FOR THE COASTAL REGION AND SHOULD BE REFERRED TO THEREIN. THE SECOND INVOLVES THE DIRECT ZONING OF LAND FOR AGRICULTURAL USE AND IS DISCUSSED IN SUBREGION 2. THE THIRD, THROUGH THE TRANSFER OF DEVELOPMENT RIGHTS, IS DISCUSSED BELOW.

THE GENERAL CONCEPT OF DEVELOPMENT TRANSFER IS DISCUSSED IN THE AGRICULTURAL SECTION OF THE COASTAL REGION. THE FOLLOWING DISCUSSION IS REPRESENTATIVE OF ACTUALLY APPLYING THIS CONCEPT TO A SPECIFIC AGRICULTURAL AREA. THE ACTUAL MECHANICS OF THIS CONCEPT WILL BE THE SUBJECT OF SUBSEQUENT STUDY.

THIS TEST CASE FOCUSES ON EXISTING AGRICULTURAL AREAS WHICH POSSESS EITHER HIGH CROP YIELDS, OR CONTAIN STRUCTURES USED IN THE OPERATION OF AGRICULTURAL ACTIVITIES, OR AREAS WHICH, DUE TO VIEW IMPACTS INCURRED THROUGH THEIR STRUCTURAL DEVELOPMENT, ARE OF VALUE IN FACILITATING AGRICULTURAL ACTIVITIES. THE LAND AREA SELECTED IS DEPICTED IN FIGURE S3-1. NOTE THAT THIS AREA ENCOMPASSES THE SURPLUSED SCHOOL SITE WHICH IS ACTUALLY A PART OF SUBREGION 2.

THE SITE ACCOUNTS FOR A MAJORITY OF THE AGRICULTURAL PRODUCTION IN THIS AREA AND IS THEREFORE INCLUDED IN THIS TEST CASE. RESIDENTIAL DENSITIES IN KEEPING WITH THOSE ASSIGNED TO THIS SUBREGION (SEE INDUCED ACTIVITIES)

HAVE BEEN APPLIED TO THIS SITE SO THAT A DEVELOPMENT CREDIT COULD BE ESTABLISHED.

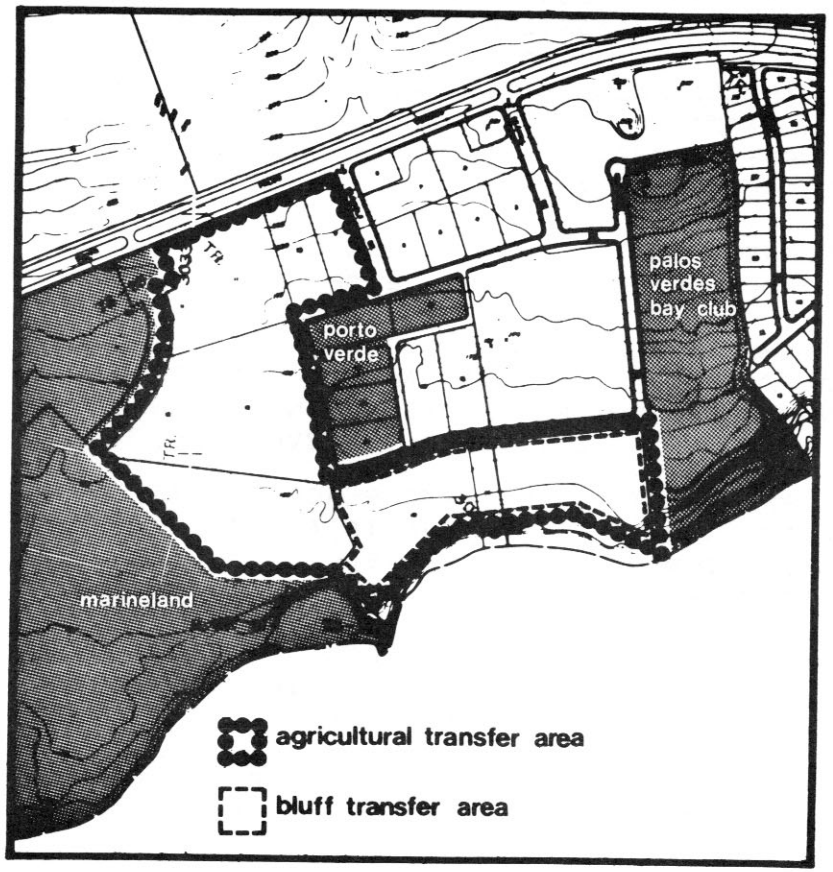
RESEARCH OF THE AREA'S OWNERSHIP PATTERN REVEALED THAT ALL AFFECTED LANDOWNERS, WITH THE EXCEPTION OF THE SCHOOL SITE, OWN ADDITIONAL VACANT LANDS WITHIN SUBREGION 3. THIS COULD PROVE TO BE ADVANTAGEOUS IN MAKING THE ACTUAL TRANSFER WORK, SINCE AN AFFECTED LANDOWNER COULD SIMPLY TRANSFER HIS ALLOTTED UNITS TO HIS OTHER SITE. HOWEVER, FOR THE PURPOSE OF THIS TEST CASE, DEVELOPMENT CREDITS ARE EQUALLY DISTRIBUTED AMONG THE REMAINING VACANT LANDS CONFINED TO SUBREGION 3.

WHEN THE 1 DWELLING UNIT PER ACRE DENSITY IS APPLIED TO BLUFF LANDS AND 4 DWELLING UNITS PER ACRE DENSITY IS APPLIED TO INLAND AREAS, THE NET RESULTS ARE 80 UNITS ASSOCIATED WITH THE STUDY AREA. THESE 80 DEVELOPMENT CREDITS COULD THEN BE TRANSFERRED TO THE 23 ACRES OF VACANT LAND LOCATED IN THIS SUBREGION RESULTING IN PUSHING THEIR OVERALL DENSITY FROM 4 DWELLING UNITS PER ACRE TO 8 DWELLING UNITS PER ACRE.

ONCE THESE DEVELOPMENT CREDITS ARE SOLD, IT IS ESTIMATED THAT THE CITY COULD PURCHASE THE AREA FOR $308,000. THIS FIGURE IS DERIVED BY TAKING 17.5 % OF THE AREA'S ASSESSED MARKET VALUE (THE AVERAGE PERCENT OF A SITE MARKET VALUE WHICH REMAINS ONCE DEVELOPMENT CREDITS ARE COMPENSATED FOR: LEVANDER, PARTRIDGE AND ANDERSON, INC., 1975).

A FISCAL PROFILE FOR SUBREGION 3, INCLUDING THE SCHOOL SITE, IS DEPICTED IN TABLE S3-C. THE SECOND COLUMN SHOWS THE FISCAL PROFILE ACHIEVED THROUGH A STANDARD RESIDENTIAL

figure S3-1



DEVELOPMENT OF THE STUDY AREA. THE FIRST COLUMN SHOWS THE FISCAL PROFILE RESULTING FROM A TRANSFER OF AFFECTED UNITS ALONG WITH THE CITY'S ACQUISITION COSTS AND RECURRING REVENUES GENERATED BY THE LEASING OF THIS LAND TO AGRICULTURAL OPERATORS (RECURRING REVENUES ARE BASED ON CURRENT AVERAGE LEASE CONTRACTS).

AGRICULTURAL FISCAL PROFILE

TABLE S3-C

	PROJECTION FACTORS	AGRICULTURE	RESIDENTIAL	
RECURRING REVENUE				
PROPERTY TAX	A/V(4) -1,750(3) x 1.5 x D.U.S	8,142.00	11,892.00	
REAL PROP. TRANS. TAX	POP.(1) ÷ 42,000(9) x 71,020(2)	933.00	1,028.00	
SALES TAX - RES.	POP.(1) ÷ 42,000(9) x 140,640(2)	1,848.00	2,036.00	
SALES TAX - COMM.	1% OF SALES TAX RECEIPTS			
FRANCHISE TAX	POP.(1) ÷ 42,000(9) x 132,640(2)	1,743.00	1,920.00	
M.V. IN LIEU	POP.(1) x 10.78	5,950.00	6,552.00	
HIGHWAY CARRIER AND UNIFORM BUS. LIC TAX	POP.(1) x 0.10	55.00	55.00	
CIG. TAX	POP.(1) ÷ 42,000(9) x 131,360(2)	1,726.00	1,902.00	
HIGHWAY AND TRANS. 2107 2106	POP.(1) x 4.35 POP.(1) x 4.90	4,885.00	5,380.00	
BUSINESS LIC.	(8)			
TOTAL		*22,774.50	30,765.00	
NON-RECURRING REVENUE				
ENVIRON. EXCISE TAX	$1,000/NEW D.U.	184,000.00	184,000.00	
REAL PROPERTY TRANS TAX	@.55 /$1,000(4)	18,150.00	18,150.00	
TOTAL		202,150.00	202,150.00	
RECURRING COSTS				
SERVICE COSTS		3,577.00	3,577.00	
GENERAL GOVERNMENT	POP.(1) x 35	19,320.00	21,280.00	
HIGHWAY AND TRANS. COSTS	POP.(1) x 15	8,280.00	9,120.00	
TOTAL		31,177.00	33,977.00	
NON-RECURRING COSTS				
ACQUISITION	NON-RECURRING REV.(5)	347,204.00	39,204.00	
IMPROVEMENT	÷ 11 x POP.(1) = YEARS	93,250.00	93,250.00	
TOTAL		440,454.00	132,454.00	
SCHOOL DISTRICT				
REVENUE (PROP. TAX)	A/V(4) -1750(3) x 5.45 x NEW D.U.'S	295,688.00	431,802.00	
COSTS	1.15(8) STUDENTS/D.U. x $1300/YEAR/STUDENT	76,700.00	282,360.00	

1. POPULATION – NEW D.V.'S x PERSONS/UNIT. (GEN PLAN, PG. 201)
2. FIGURES REPRESENT 1976 – 1977 BUDGET TOTALS.
3. HOMEOWNERS EXEMPTION.
4. BASED ON CURRENT ESTIMATED SELLING PRICE.
5. TOTAL NON-RECURRING REVENUE.
6. ALL FIGURES IN THOUSANDS OF DOLLARS.
7. BASED ON PALOS VERDES PENNINSULA SCHOOL DISTRICT'S PUPIL GENERATION FIGURES.
8. SUBREGION 2, 3, AND 4 ONLY AND 7. RETAIL, WHOLESALE, PROFESSIONAL AND COMMERCIAL RENTAL BUSINESS: $20.00 FOR FIRST $50,000 IN GROSS RECEIPTS AND $30/$1000 THEREAFTER.
9. EXISTING POPULATION.

*TOTAL INCLUDES $2,432.50 IN AGRICULTURAL LEASE REVENUE PER YEAR.

FROM THIS ANALYSIS THE FOLLOWING COST BENEFIT PROFILE CAN BE DRAWN:

Costs

-THE NON-RECURRING REVENUES PRODUCED BY A TOTAL RESIDENTIAL DEVELOPMENT OF THE AREA WOULD RESULT IN $202,150. UNDER THE AGRICULTURAL PROFILE, THE CITY WOULD BE FACED WITH A NON-RECURRING ACQUISITION COST OF $308,000.

-WHEN RECURRING REVENUES AND EXPENDITURES ARE COMBINED, IT WAS FOUND THAT A TOTAL RESIDENTIAL DEVELOPMENT OF THE AREA WOULD PRODUCE A DEFICIT OF $3,212. UNDER THE AGRICULTURAL PROFILE, THE DEFICIT WOULD BE $8,402.40 OR $5,490.50 OVER THAT OF THE RESIDENTIAL PROFILE.

Benefits

-35 ACRES OF AGRICULTURAL LAND WOULD BE MAINTAINED UNDER PUBLIC OWNERSHIP.

-LANDOWNERS WOULD RECEIVE DUE COMPENSATION.

-PUBLIC ACQUISITION COSTS ARE LOW SINCE THE LANDOWNER RECEIVES COMPENSATION FOR DEVELOPMENT RIGHTS THROUGH THE PRIVATE SECTOR.

-ALTHOUGH RECURRING DEFICITS ARE GREATER UNDER THE AGRICULTURAL PROFILE, THE AGRICULTURAL AREA WILL REQUIRE LESS OF AN EXPENDITURE THAN THAT ASSOCIATED WITH THE TYPICAL EXPENDITURE PROFILE ASSOCIATED WITH MOST PUBLIC LANDS.



THE RESULTS OF THIS TEST CASE WARRANT THE FURTHER CONSIDERATION OF THIS PRESERVATION MEASURE THROUGH A MORE DETAILED ANALYSIS. THIS FURTHER STUDY SHOULD FOCUS IN ON THE SAME AGRICULTURAL AREA WITH THE GOAL OF PUBLIC ACQUISITION, IF FOUND WORKABLE. REVENUE SOURCES SUCH AS THE COASTAL CONSERVANCY SHOULD BE INVESTIGATED SO AS TO REDUCE OR ELIMINATE THE CITY'S EXPENDITURE INCURRED IN THE ACQUISITION OF THE LAND. CONSIDERATION SHOULD BE GIVEN TO ESTABLISHING A MORATORIUM ON THIS AREA UNTIL SUCH TIME AS THIS STUDY PROVES THE PROGRAM'S WORKABILITY.

Induced Activity

Residential

A DENSITY OF 1 UNIT PER ACRE ON LAND AREAS SEAWARD OF SEACOVE DRIVE AND 4 UNITS PER ACRE INLAND OF SEACOVE DRIVE HAVE BEEN DESIGNATED FOR THE SUBREGION BASED ON THE CITY COUNCIL AND PLANNING COMMISSION REVIEW OF ASSOCIATED IMPACTS PRESENTED IN THE WORKBOOK. THIS VARIES FROM THE 2 AND 6 COMBINATION OF THE GENERAL PLAN. ONE OTHER POINT OF VARIATION PERTAINS TO THE GENERAL PLAN'S PLACEMENT OF A 12 DWELLING UNIT PER ACRE DENSITY ON BOTH PORTO VERDE APARTMENTS AND PALOS VERDES BAY

ACTIVITY AREAS

TABLE:S3-D

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	≤ 1	≤ 2	≤ 4	≤ 6	> 6	RETAIL	REC.			
EXISTING	13 AC.	60 AC.					19 AC.	5 AC.		3 AC.		26 AC.
EXISTING UNITS							456 M.F.					
EXISTING POPULATION							1186					
GENERAL PLAN	13 AC.	60 AC.		8 AC.		30 AC.	19 AC.			3 AC.		
GENERAL PLAN UNITS				16 S.F.		180 M.F.	228 M.F.					
GENERAL PLAN POPULATION				56		540	638					
COASTAL PLAN	13 AC.	60 AC.	11 AC.		46 AC.					3 AC.		
COASTAL PLAN UNITS			11 S.F.		184 S.F.							
COASTAL PLAN POPULATION			38		644							
INTERIM PROFILE	13 AC.	60 AC.	8 AC.		30 AC.		19 AC.	5 AC.		3 AC.		
INTERIM PROFILE UNITS			8 S.F.		120 S.F.		456 M.F.					
INTERIM PROFILE POPULATION			28		420		1186					

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

CLUB. THE COASTAL SPECIFIC PLAN NOW DESIGNATES A 1 AND 4 COMBINATION ON THE PALOS VERDES BAY CLUB AND A 4 UNIT PER ACRE DENSITY ON THE PORTO VERDE APARTMENT SITE.

THE UNIT AND POPULATION CHANGES THAT RESULT FROM THIS ALTERATION IN DENSITY ARE DEPICTED IN TABLE S3-D. IT IS WORTH NOTING THAT ALTHOUGH THE COASTAL SPECIFIC PLAN PROFILE PROJECTS FEWER UNITS THAN PROPOSED UNDER THE GENERAL PLAN, AND EVEN FEWER THAN ARE IN EXISTENCE, THE MOST REALISTIC PROFILE IS EXPRESSED IN THE INTERIM PROFILE COLUMN. THIS PROFILE WILL EXIST ONCE VACANT LANDS ARE DEVELOPED TO CONFORMANCE WITH THE COASTAL SPECIFIC PLAN AND FOR AS LONG AS NON-CONFORMING USES, SUCH AS PORTO VERDE APARTMENTS AND PALOS VERDES BAY CLUB, CONTINUE TO EXIST. THE LIKELIHOOD OF THEIR CONVERSION IN THE FORESEEABLE FUTURE APPEARS SLIM.

INFRASTRUCTURE

ALTHOUGH SUBREGION 3 IS RELATIVELY UNDEVELOPED, ITS INFRASTRUCTURE IS ALMOST TOTALLY COMPLETE. THE EXTENT TO WHICH THE ROADS, SEWERS, WATER LINE, ETC., HAVE BEEN DEVELOPED IS PRIMARILY A RESULT OF PAST DEVELOPMENT. THE SUBREGION APPEARS TO BE ADEQUATELY SERVED BY THE INFRASTRUCTURE; HOWEVER, THERE ARE INDIVIDUAL CHARACTERISTICS AND ISSUES WHICH WARRANT INDIVIDUAL DISCUSSION.

SEWERAGE

THE SEWERAGE NETWORK WITHIN SUBREGION 3 CONSISTS OF SANITATION DISTRICT #5'S SEACOVE PUMPING STATION AND TRUNK LINES AND THE COUNTY ENGINEER'S SEWERAGE LINES. THE SEACOVE PUMPING STATION IS LOCATED AT THE WEST END OF SEACOVE DRIVE (IN SUBREGION 4) AND IS ACCESSIBLE FROM BOTH THE PALOS VERDES BAY CLUB AND THE ABALONE COVE COMMUNITY. THE PUMPING STATION SITE IS ABOUT .04 OF AN ACRE IN SIZE. THE SANITATION DISTRICT ALSO MAINTAINS THE TRUNK LINE WHICH RUNS APPROXIMATELY PARALLEL TO PALOS VERDES DRIVE SOUTH AND A FORCE MAIN WHICH RUNS FROM THE LONG POINT PUMP STATION (SUBREGION 2) ALONG SEACOVE DRIVE TO THE PALOS VERDES BAY CLUB, WHERE IT LINKS WITH THE COUNTY ENGINEER'S SEWER LINE. PAST POPULATION PROJECTIONS FOR THE PENINSULA (PRE-INCORPORATION) WERE SUCH THAT THE SEWERAGE SYSTEM WAS DEVELOPED FOR MAXIMUM CAPACITIES; THEREFORE FUTURE DEVELOPMENT WOULD NOT BE PRECLUDED BY SANITATION FACILITIES.

FLOOD CONTROL FACILITIES

SUBREGION 3 CURRENTLY EXPERIENCES NO SIGNIFICANT FLOODING PROBLEMS NOR ARE ANY EXPECTED IN THE FORESEEABLE FUTURE. FLOOD CONTROL FACILITIES CONSIST OF AN UNDERGROUND STORM DRAIN AND A SHORT OPEN ''V'' CHANNEL. THE UNDERGROUND SYSTEM DRAINS A SMALL UNNAMED ARROYO SYSTEM IN THE VACANT AREA TO THE NORTH. IT RUNS BENEATH STREETS WHICH SERVE THE PORTO VERDE APARTMENTS AND EMPTIES INTO AN OPEN FLOOD CONTROL CHANNEL WHICH, IN TURN, CROSSES INTO SUBREGION 2, WHERE IT REVERTS TO A NATURAL DRAINAGE COURSE DOWN THE BLUFF.

THE FLOOD CONTROL DISTRICT PROPOSES NO NEW FLOOD CONTROL FACILITIES, WITH THE POSSIBLE EXCEPTION OF AN IMPROVEMENT IN SUBREGION 2, WHICH MAY ENTER SUBREGION 3 FOR A SHORT DISTANCE JUST WEST OF THE EXISTING CHANNEL.

Transportation Systems

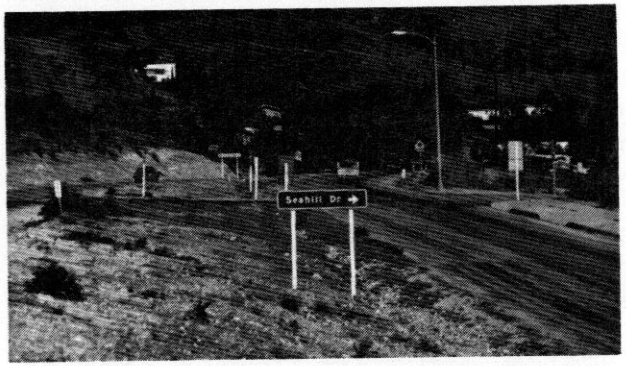
Vehicular Networks

The vehicular network within Subregion 3 consists of about 2 miles of public and private roads. Palos Verdes Drive South is the arterial street which provides primary access to the area, while six local streets form a rectilinear network of roads which serve most of the interior of Subregion 3.

A private road, Sea Gate Drive, is located immediately parallel to the eastern subregion boundary and provides access to the eastern half of the Palos Verdes Bay Club. All streets are presently in good condition and seem to be operating satisfactorily.

The area's residential activities currently generate about 356 trips at peak hour and a 24-hour total of almost 5,472 vehicle trips. Land use activities, as proposed by this Plan, will ultimately result in a projected increased peak hour traffic of about 28%, or about 100 vehicle trips over that which is currently generated. This added traffic is not expected to adversely affect the flow of traffic in or adjacent to the area; however, further evaluation of traffic projections may indicate the need for a traffic signal or other traffic regulating device at Seahill Drive and Palos Verdes Drive South.

Although the present street configuration provides adequate and safe traffic flow, future development may require that additional streets be constructed. The eventual street arrangement will depend largely on the type of development that occurs, because this Plan does not identify or propose new streets. An analysis of the subregion, in terms of existing street characteristics, traffic safety issues, projected traffic, and potential development techniques, suggests that no new streets be allowed to directly intersect Palos Verdes Drive South.



Path and Trail Network

The path and trail network within Subregion 3 is a modified version of the conceptual networks in the General Plan (General Plan figures 20 and 21), with the exclusion of the equestrian trail on Palos Verdes Drive South, which has been deleted for reasons explained in the Coastal Region Paths and Trails discussion.

As per the General Plan, a loop by-pass trail is proposed to run through Subregions 2 and 3. This walkway/bikeway is proposed to run approximately parallel to the bluff and, in concept, will meet the varied needs of pedestrians and cyclists. Within Subregion 3 the character of the trail will take two forms: on-road class II and off-road class I. In the

CLASS I SEGMENT, THE TRAIL WILL REMAIN UNSTRUCTURED IN THAT NO LANE MARKINGS OR SIGNING WILL BE USED. THE CLASS II SEGMENT WILL NECESSITATE BOTH SIGNING AND LANE MARKINGS AS SAFETY MEASURES. THE WALKWAY/ BIKEWAY IS PROPOSED TO LOOP THROUGH THE AREA AND UTILIZE THE FOLLOWING ALIGNMENT AND CHARACTERISTICS:

- FROM THE WESTERN TIP OF THE SUBREGION (WHERE IT LINKS WITH SUBREGION 2 TRAIL) ALONG THE SUBREGION BORDER TO THE BLUFF WHERE IT WILL PARALLEL THE BLUFF'S EDGE, TO A POINT IMMEDIATELY WEST OF PALOS VERDES BAY CLUB WHERE IT WILL MEET WITH THE SOUTHERN EXTREMITY OF COAST SITE DRIVE. THIS SEGMENT WILL BE OFF-ROAD AND WILL BE DESIGNED TO CLASS I SPECIFICATIONS DETAILED IN THE COASTAL REGION PATHS AND TRAILS SECTION.

- FROM THIS POINT THE NETWORK WOULD BE ON-ROAD CLASS II AND OFF-ROAD CLASS I AND WOULD BE FACILITATED ON THE EASTERN SIDE OF COAST SITE DRIVE, NORTH SIDE OF BEACHVIEW DRIVE AND EASTERN SIDE OF SEAHILL DRIVE, WHERE IT WOULD INTERSECT WITH PALOS VERDES DRIVE SOUTH. VEHICULAR DRIVEWAY ACCESS TO SITES ADJOINING THIS SEGMENT WILL POSE CONFLICT POINTS WHICH CANNOT BE AVOIDED.

COASTAL ACCESS IN THE AREA IS CONFINED TO A PRIVATE ACCESS POINT LOCATED ON THE PALOS VERDES BAY CLUB SITE. NO PROVISIONS ARE INCORPORATED INTO THIS PLAN TO PROVIDE ADDITIONAL ACCESS POINTS IN THE AREA DUE TO THE SEVERE NATURE OF THE LOCAL SEA CLIFFS.

POLICIES

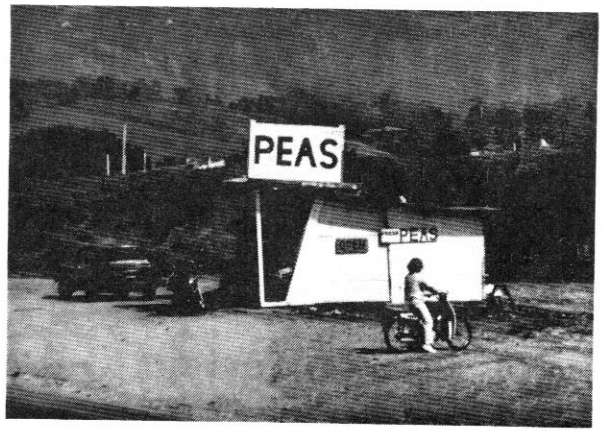
IT IS THE POLICY OF THE CITY TO:

1. ENCOURAGE THE USE OF TRANSFER OF DEVELOPMENT RIGHTS WITHIN SUBREGION 3 TO PROVIDE LOCAL RECREATIONAL ACTIVITIES ON BLUFF LANDS.

2. FURTHER STUDY THE CONCEPT OF DEVELOPMENT TRANSFER WITHIN THIS SUBREGION ONLY AS A MEANS WHICH THE CITY CAN ENFORCE FOR THE PURPOSE OF PRESERVING AGRICULTURAL LAND.

3. IN THE EVENT THAT DEVELOPMENT TRANSFER PROVES TO BE UNFEASIBLE, REQUIRE ANY DEVELOPMENT ON LANDS SEAWARD OF SEACOVE DRIVE TO APPLY UNDER A RESIDENTIAL PLANNED DEVELOPMENT SCHEME IN ORDER TO MAINTAIN COASTAL VIEWS.

4. ENCOURAGE A PRODUCE/FLOWER STAND(S) IN ORDER TO PROVIDE AN OUTLET(S) FOR LOCALLY-GROWN PRODUCTS EITHER INDEPENDENTLY OR AS A PART OF A RESIDENTIAL PLANNED DEVELOPMENT (WITH DENSITY CREDIT ALLOWED).



INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 4 IS AN EXISTING RESIDENTIAL AREA WHICH IS PREDOMINANTLY DEVELOPED WITH SINGLE FAMILY DWELLING UNITS. THE AREA IS BORDERED ON THE WEST BY AN EXISTING MULTIPLE FAMILY RESIDENTIAL COMPLEX (PALOS VERDES BAY CLUB), AND ON THE EAST BY AN UNDEVELOPED PORTION OF THE COUNTY ABALONE COVE PARK. SUBREGION 4'S STRONG AND UNIFIED CHARACTER, ADJACENT LAND USES OF DIFFERENT TYPES, AND ACTIVE HOMEOWNERS ASSOCIATION, CREATES A HOMOGENEITY WHICH ESTABLISHES IT AS A DISTINCT NEIGHBORHOOD. SUBREGION 4, OR ABALONE COVE AS IT IS SOMETIMES REFERRED TO, IS APPROXIMATELY 40 ACRES IN SIZE.

NATURAL ENVIRONMENT

CLIMATE

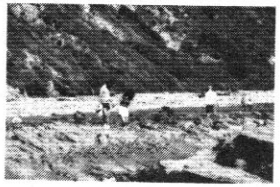
TERRESTRIAL

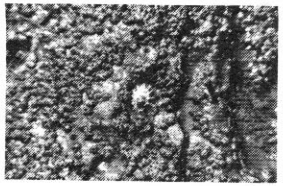
THE CLIMATIC PROFILE OF ZONE 1, PRESENTED IN THE CLIMATIC SECTION OF THE COASTAL REGION, IS REPRESENTATIVE OF THE GENERAL WEATHER PATTERN IN THIS SUBREGION. THE CLIMATIC ELEMENT WHICH VARIES FROM THIS PROFILE PERTAINS TO THE PREDOMINANT WIND PATTERN EXPERIENCED IN THE AREA. BECAUSE OF THE COASTLINE'S CURVATURE HERE, THE SUBREGION EXPERIENCES AN OFFSHORE PATTERN AS COMPARED TO THE ONSHORE PATTERN ON OTHER LANDS SHARING A ZONE 1 CLIMATIC PROFILE.

MARINE

DUE TO THE SHELTERING EFFECT OF LONG POINT, SUBREGION 4 DOES NOT SUFFER MAJOR WAVE ACTION FROM THE WESTERLY SWELL AND WIND WAVES.

ABALONE COVE'S MARINE ENVIRONMENT IS VERY ATTRACTIVE TO THE COLLECTOR AND OBSERVER DUE TO ITS RICHNESS AND DIVERSITY. THE TYPE OF INTERTIDAL ROCK FORMATIONS THAT EXIST HERE ALLOW FOR MUCH SURFACE AREA TO BE EXPOSED BY LOW TIDES THUS MAKING THIS RICH MARINE LIFE VULNERABLE TO COLLECTORS.





GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

SUBREGION 4 POSSESSES AN AVERAGE SLOPE OF LESS THAN 10% OVER MOST OF THE PRESENTLY DEVELOPED AREA. THIS MILD SLOPE CONDITION NEITHER POSED NOR POSES A PROBLEM FOR DEVELOPMENT IN THE MAJORITY OF THE SUBREGION. AT THE BLUFF THE SLOPE BEGINS TO INCREASE SEVERELY AND DESCENDS TO THE OCEAN. PORTIONS OF RECORDED LOTS ARE WITHIN THIS SEVERE SLOPE AREA AND HENCE DEVELOPMENT BECOMES A CONCERN.

MARINE

IN THE UPPERMOST LIMITS OF THE SHORELINE, ROCKY BEACHES PREVAIL, BUT SEAWARD TO LOWER INTERTIDAL ZONES, ANGULAR ROCK STRATA AND LARGER BOULDERS BEGIN TO FORM TIDE POOLS.

OFFSHORE REEFS CROPPING UP FROM A SANDY AND ROCKY BOTTOM ARE EXPOSED AT LOWER TIDES. BEYOND THE REEFS A GENERALLY SANDY BOTTOM IS ENCOUNTERED WITH SCATTERED OUTCROPPINGS OF ROCKS.

GEOLOGIC CONDITIONS

GEOLOGICALLY SENSITIVE AREAS, IN ALMOST EVERY RESPECT, ARE ASSOCIATED WITH THE BLUFF AND NATURAL DRAINAGE COURSES IN THE AREA. ACTIONS ON PROPERTIES SEAWARD OF SEA COVE DRIVE NEED TO BE COGNIZANT OF THIS CONDITION.

HYDROLOGY

A MAJOR NATURAL DRAINAGE COURSE EXISTS IN THE EAST AND SERVES AS A NATURAL DIVISION BETWEEN SUBREGIONS 4 AND 5. EVEN THOUGH THERE IS SOME UPSLOPE DRAINAGE WHICH FEEDS THIS NATURAL RAVINE, LITTLE OR NO FLOOD POTENTIAL EXISTS.

THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HAS PROPOSED A STORM DRAIN FOR THIS AREA BUT PRESENTLY IT IS UNFUNDED AND ITS CONSTRUCTION NOT IMMEDIATELY FORESEEN.

WITH THIS WATER COURSE LEFT IN AN UNDISTURBED STATE, EROSION AND RUNOFF BECOME CONCERNS. WITH THE PRESENT AMOUNT OF DRAINAGE FLOW, NO REAL PROBLEM EXISTS RELATED TO EROSION; HOWEVER, IF UPSLOPE DEVELOPMENT OCCURS, DRAINAGE FLOW MAY INCREASE CREATING A GREATER EROSION FACTOR. RUNOFF IS NOW A CONCERN AS THIS DRAINAGE COURSE LEADS DIRECTLY TO THE SHORELINE. SURFACE RUNOFF AND DRAINAGE FLOW MAY CONTAIN SUBSTANCES THAT ARE TOXIC TO THE MARINE LIFE. A LIST OF TOXIC PESTICIDES SHOULD BE DEVELOPED AND THEIR USE DISCOURAGED

OR PROHIBITED (REFER TO WATER QUALITY SECTION FOR THE COASTAL REGION).

BIOTIC RESOURCE

TERRESTRIAL

THE COASTAL BLUFF OF ABALONE COVE POSSESSES A NATURAL VEGETATIVE BASE CAPABLE OF SUPPORTING WILDLIFE. JUMPING OR COAST CHOLLA (OPUNTIA PROLIFERA), CALIFORNIA SAGEBRUSH (ARTEMISIA CALIFORNICA), AND OTHER NATURAL VEGETATION, COMBINE TO PROVIDE SHELTER AND FOOD FOR A WIDE VARIETY OF ANIMALS. THE BLUFF AREA AND THE DRAINAGE COURSE AT THE EASTERN BOUNDARY HAS BEEN IDENTIFIED BY LOCAL EXPERTS AND BIOLOGISTS AS A HABITAT AREA IN EXCELLENT CONDITION AND WORTHY OF PRESERVING (SEE SCHEMATIC DIAGRAM). THIS AREA IS OF PRIME IMPORTANCE BECAUSE OF ITS PROXIMITY TO THE LARGE UNDEVELOPED PORTION OF ABALONE COVE PARK, WHICH ALSO POSSESSES HABITAT SUPPORT CAPABILITIES. THEORETICALLY, WITH THESE HABITAT AREAS BEING ADJACENT TO EACH OTHER, A LARGER WILDLIFE HABITAT AREA EXISTS, CAPABLE OF SUPPORTING LARGER MEMBERS OF POPULATIONS OF SPECIES THAT ARE UNABLE TO EXIST UNDER THE MORE LIMITED CONDITIONS OF A SMALLER AREA.

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

TABLE: S4-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED			6 AC.				15 AC.		3 AC.	15 AC.		15 AC.
RESTRICTED	12 AC.			12 AC.	3 AC.			1 DRAINAGE COURSE			PRESERVATION	
LEVEL OF SIGNIFICANCE	●		○	●	●		◒	○	●	●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

MARINE

THE MARINE BIOTIC RESOURCE IS EXTREMELY RICH DUE TO A NUMBER OF FACTORS: MANY SMALL OFF-SHORE REEFS, AN EXTENSIVE KELP BED, ANGULAR STRATAS OF ROCKS RUNNING EAST-WEST FORMING MANY PROTECTED TIDE POOLS AND CREVACES FOR MARINE ORGANISMS TO LIVE AND A LARGE MUSSEL BED GROWING ON THE ANGULAR STRATA.

ACCORDING TO MARINE BIOLOGISTS AT THE CABRILLO BEACH MARINE MUSEUM, THE REEFS EXERT A FLATTENING EFFECT, BREAKING THE FORCE OF THE WAVES THAT WOULD ORDINARILY POUND THE SHORELINE. THIS BEING THE CASE, MANY ORGANISMS EXIST IN THE TIDE POOL AREAS WHICH WOULD NOT BE ABLE TO TOLERATE THE ROUGHER SURF CONDITIONS THAT WOULD ORDINARILY EXIST (DR. SUZANNE MILLER - PERSONAL COMMUNICATION). SOME OF THE MORE PROMINANT AND UNIQUE MARINE ORGANISMS FOUND IN THIS AREA WOULD BE: THE LARGE PURPLE SEASTAR (PISASTER), OCHRE SEASTAR, KEYHOLD LIMPETS (FISSURELLACEA), BLACK TURBIN SNAIL (TEGULA), MUSSELS (FILLIBRANCHIA) AND A NUMBER OF DIFFERENT TYPES OF NUDIBRANCHS (NUDIBRANCHIA).

SINCE 1967 EFFORTS HAVE BEEN MADE TO ESTABLISH A KELP BED JUST WEST OF THE ABALONE COVE PARK BOUNDARY. DR. WHEELER NORTH OF CAL. TECH. MADE SEVERAL ATTEMPTS AT ESTABLISHING A KELP BED WITH MINIMAL SUCCESS. IN 1971 THE CALIFORNIA STATE DEPARTMENT OF FISH AND GAME (DFG) JOINED DR. NORTH IN HIS EFFORTS. IN 1973 THE DFG INTRODUCED APPROXIMATELY 50,000 LBS. OF KELP TRANSPLANTS WHICH, BY 1974 HAD NEARLY DOUBLED IN SIZE THROUGH NATURAL FORCES (KEN WILSON, DEPARTMENT OF FISH AND GAME, PERSONAL COMMUNICATION, 6/76).

TODAY THE KELP BED AT ABALONE COVE IS SO SUCCESSFUL THAT TRANSPLANTS FOR OTHER PENINSULA KELP PROJECTS ARE TAKEN FROM THE ABALONE COVE BED INSTEAD OF FROM THE CHANNEL ISLANDS AS WAS DONE FORMERLY.

AS A RESULT OF THE SUCCESS OF THIS BED, GAME FISH POPULATIONS SUCH AS KELP BASS, SAND BASS, WHITE SEA BASS, OPELEYE, BLACK PERCH AND SHEEPSHEAD HAVE INCREASED IN NUMBER WHERE PREVIOUSLY SOME OF THESE WERE VERY RARELY SPOTTED. INVERTEBRATE POPULATIONS SUCH AS LOBSTER AND ABALONE HAVE ALSO INCREASED IN NUMBER IN AND AROUND THE KELP BED.

FIRE HAZARD

AN ANALYSIS OF FIRE POTENTIAL IN SUBREGION 4 INDICATES NO SIGNIFICANT PROBLEMS; ALTHOUGH THERE ARE CURRENTLY UNDEVELOPED PORTIONS WHICH HAVE A MEDIUM PROPENSITY FOR FIRE. THE AREAS OF CONCERN ARE THE ARROYOS ON THE EAST AND NORTHEAST AND THE BLUFF/SLOPE AREAS ON THE SOUTHEAST. THE AMOUNT OF VEGETATION AND THE STEEP SLOPE CONDITIONS IN THESE AREAS MAKE THEM VULNERABLE.

FUTURE DEVELOPMENT WILL NO DOUBT DIMINISH WILDLAND FIRE HAZARD IN SOME AREAS; HOWEVER, WHEREVER NATURAL TERRAIN AND VEGETATION ARE MAINTAINED IN THE STEEP SLOPE AREAS, A CERTAIN AMOUNT OF RISK WILL ALWAYS BE PRESENT.

SOCIO/CULTURAL

SOCIAL FACTORS

THE WEST PORTUGUESE BEND COMMUNITY ASSOCIATION WAS ESTABLISHED IN 1949 IN CONJUNCTION WITH THE FINAL RECORDING OF TRACT MAP 14649.

COVENANTS, CONDITIONS, AND RESTRICTIONS (CC&R'S) ATTACHED TO THE 81 LOTS CREATED THROUGH THIS TRACT SPECIFIED POWERS DELEGATED TO THIS ASSOCIATION. THE RESULTING JURISDICTIONAL CONTROL AMOUNTS TO ROUGHLY 71% OF THE DEFINED SUBREGION. IN ORDER TO ENSURE THE HARMONIOUS INTEGRATION OF FUTURE RESIDENTIAL DEVELOPMENTS WITH THE EXISTING COMMUNITY, NEW LAND DIVISIONS COULD CONSIDER THE ANNEXATION OF INDUCED LOTS TO THE WEST PORTUGUESE BEND COMMUNITY ASSOCIATION.

CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

IT HAS BEEN DETERMINED THAT SUBREGION 4 MAY POSSESS SIGNIFICANT ARCHAEOLOGICAL RESOURCES. FOR THIS REASON, THE ENTIRE AREA HAS BEEN DESIGNATED WITH AN OVERLAY CONTROL DISTRICT TO PROTECT THESE ''ARCHAEOLOGICALLY SENSITIVE'' SITES. MORE SPECIFIC INFORMATION IS ON FILE WITH THE ENVIRONMENTAL SERVICES DEPARTMENT OF THE CITY.

URBAN ENVIRONMENT

ACTIVITY AREAS

COMPATIBILITY OF ADJACENT ACTIVITY AREAS

TWO TYPES OF CONFLICTS ARE PRESENTLY OCCURRING IN RELATIONSHIP TO ADJACENT USE IMPACTS ON THE ABALONE COVE COMMUNITY. THE FIRST INVOLVES TRAFFIC AND PARKING WHILE THE SECOND RELATES TO VIEW/PRIVACY CONFLICTS. A DISCUSSION OF TRAFFIC AND PARKING CONFLICTS IS PRESENTED IN THE INFRASTRUCTURE SECTION OF THIS SUBREGION.

THE VIEW/PRIVACY CONFLICT IS ASSOCIATED WITH LANDSCAPING ALONG THE WESTERN BOUNDARY OF THE ABALONE COVE COMMUNITY. EXISTING HOUSING FRONTING ON PACKET ROAD AND BACKING UP TO PALOS VERDES BAY CLUB IS EXTENSIVELY LANDSCAPED. THIS LANDSCAPING SERVES THE PURPOSE OF PROVIDING PRIVACY TO THESE LOTS FROM VIEWING BY THE THREE-STORY PALOS VERDES BAY CLUB STRUCTURES. AS TREES IN THE AREA MATURE THEY ENCROACH ON VIEWS FROM THE BAY CLUB. IF THE CITY DEVELOPS A LACING ORDINANCE AND ENFORCES IT WITHIN

CULTURAL RESOURCES **TABLE: S4-B**

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED		PROBABILITY IN UNDEVELOPED AREAS	COASTAL BLUFFS
LEVEL OF SIGNIFICANCE		◒	◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

THIS AREA, EFFORTS MUST BE MADE TO MAINTAIN A BALANCE BETWEEN LOT PRIVACY AND VIEW PRESERVATION. BASED ON A SITE INSPECTION OF THIS AREA IT SEEMS THAT BOTH SITE PRIVACY AND VIEW PRESERVATION CAN BE BALANCED TO AN ACCEPTABLE DEGREE FOR BOTH CONCERNS.

EXISTING ACTIVITIES

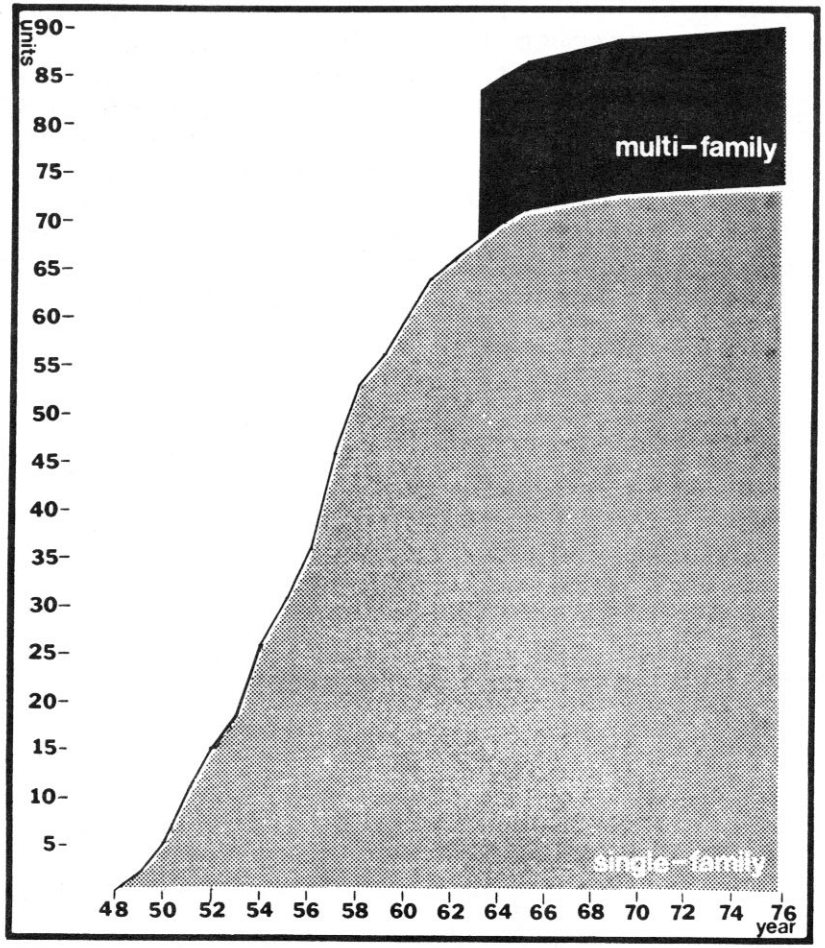
RESIDENTIAL

THIS SUBREGION IS PREDOMINANTLY SINGLE-FAMILY WITH 17.5% OF THE HOUSING UNITS BEING OF A MULTI-FAMILY NATURE. THE FIRST AND PRINCIPAL PROJECT IN GENERATING SINGLE-FAMILY LOTS ORIGINATED WITH THE SUBDIVISION OF 32 ACRES INTO 81 LOTS. THIS SUBDIVISION COMPRISES 71% OF THE SUBREGION AND THROUGH ITS DEVELOPMENT HAS ESTABLISHED THE CHARACTER IN THIS AREA. THESE SUBDIVIDED LOTS WERE THEN OFFERED FOR SALE WITH COVENANTS, CONDITIONS, AND RESTRICTIONS (C,C, AND R'S) ATTACHED. THESE C,C, AND R'S ESTABLISHED AND EMPOWERED WEST PORTUGUESE BEND COMMUNITY ASSOCIATION AS A GOVERNING ENTITY OVER THE PROJECT AREA.

OTHER RESIDENTIAL USES IN THE AREA CONSIST OF TWO SINGLE-FAMILY LOTS ABUTTING WEST PORTUGUESE BEND COMMUNITY ASSOCIATION ALONG SEA COVE DRIVE AND FOUR FOURPLEXES AT THE WESTERN CORNER OF PALOS VERDES DRIVE SOUTH AND CLIPPER ROAD. THE FOURPLEXES ARE GROUPED AT THE OUTER BOUNDARIES OF THIS SUBREGION WHICH AIDES IN REDUCING THEIR POTENTIALLY DISRUPTIVE IMPACT ON THE SINGLE-FAMILY AREA.

THE MAJOR PORTION OF HOUSING CONSTRUCTION TOOK PLACE BETWEEN 1949 AND 1966 WITH THE HIGH POINT OF SINGLE-FAMILY DEVELOPMENT OCCURRING IN

figure S4-C **housing trends**



1957. MULTI-FAMILY DEVELOPMENT OCCURRED TOTALLY IN 1963 (SEE TABLE S4-C). SINGLE-FAMILY HOUSING VARIES GREATLY IN FLOOR SPACE AREA DUE TO THEIR INDIVIDUAL DESIGN. FLOOR SPACE AREAS BEGIN AT A LOW OF 1,300 SQ. FT. WITH THE AVERAGE FOR THIS SUBREGION BEING 2,000 SQ. FT.

HOUSING COST AND LOT SIZE DIVERGE VASTLY AT SEA COVE DRIVE. HOMES TO THE NORTH OF SEA COVE DRIVE ARE LOCATED ON LOTS OF APPROXIMATELY 10,000 SQ. FT. AND SELL FOR AROUND $140,000 WITH RENTAL RATES AT ABOUT $600. HOMES TO THE SOUTH ARE CONSTRUCTED ON BLUFF TOP LOTS, NEARLY ONE ACRE IN SIZE, AND SELL FOR MORE THAN $200,000.

THE FOURPLEX APARTMENTS ARE LOCATED ON 9,500 SQ. FT. LOTS WITH EACH UNIT CONTAINING AN AVERAGE OF 1,200 SQ. FT. OF FLOOR SPACE. RENTAL RATES FOR THESE UNITS EXCEED $200 PER MONTH.

ACCESSORY/LIMITED INTENSITY RECREATIONAL STRUCTURES

RECENTLY AN ACCESSORY STRUCTURE WAS CONSTRUCTED AT THE REAR OF THE RESIDENTIAL AREA DIRECTLY ABUTTING THE COASTAL BLUFF. CONCERNED RESIDENTS IN THE AREA HAVE APPROACHED THE CITY IN AN EFFORT TO HAVE THIS STRUCTURE REMOVED. RESIDENTS ARE FEARFUL THAT, IF ALLOWED, THE STRUCTURE WOULD FORM A PRECEDENT, HENCE, PERMITTING THE LOCAL BLUFF FACE TO BE DOTTED WITH VARIOUS LIMITED SCALE STRUCTURES IN THE FUTURE.

THIS ACTION RAISES THE QUESTION AS TO WHETHER THE CITY SHOULD ALLOW ACCESSORY AND/OR LOW INTENSITY RECREATIONAL STRUCTURES WITHIN THE COASTAL BLUFF FACE. TWO ENVIRONMENTAL CONDITIONS ARE ASSOCIATED WITH COASTAL BLUFFS WHICH DISCOURAGE THIS TYPE OF ACTIVITY. FIRST, EXTREME GEOLOGIC CONDITIONS ARE PRESENT AND HAVE BEEN NOTED BY ESA AS POSING A HAZARD EVEN TO HUMAN PASSAGE (SEE REGIONAL NATURAL ENVIRONMENT SECTION). SECOND, BOTH VEGETATIVE AND WILDLIFE COMMUNITIES ARE DEPENDENT ON THE UNALTERED STATE OF THE COASTAL BLUFF FACE (ENGLAND AND NELSON).

COMMERCIAL

COMMERCIAL ACTIVITIES IN THE SUBREGION CONSIST OF A SMALL RETAIL FACILITY AND SERVICE STATION. BOTH FACILITIES FRONT AND OBTAIN PRIMARY ACCESS FROM PALOS VERDES DRIVE SOUTH. THE SERVICE STATION HAS EXPERIENCED OPERATION INSTABILITY BASED ON NEEDS DEMAND (SEE GENERAL PLAN, PAGE 84). THE ORIENTATION OF THESE ACTIVITIES HAS CREATED CONFLICTS WITH THE RESIDENTIAL NEIGHBORHOOD IN THE MANNER OF EXPOSING THE NEIGHBORHOOD TO ADDITIONAL TRAFFIC.

INSTITUTIONAL

THE PRESENT ABALONE COVE FIRE STATION MAY BE PHASED OUT UNDER THE FIRE DISTRICT'S MASTER PLAN (SEE SAFETY SECTION FOR RESPONSE TIME EFFECTS). THE REASONS FOR ABANDONING THIS FACILITY ARE BASED ON ITS SIZE AND THE INABILITY TO EXPAND THE PRESENT SITE.

RECREATION

MARINE

SPORT FISHING IN AND AROUND THE SUBREGION SHORELINE IS A POPULAR ACTIVITY AS THE NOW EXTANT KELP BED AND OFFSHORE REEFS ARE GAME FISH ATTRACTORS. CARE SHOULD BE TAKEN TO ENSURE THAT SPORT FISHING REGULATIONS ARE ENFORCED SO AS TO PREVENT ANY UNNECESSARY DEPLETION OF THE MARINE RESOURCES.

SPORT DIVING IS ANOTHER ACTIVITY THAT IS BECOMING INCREASINGLY POPULAR IN THIS AREA. INCREASED EASE OF ACCESS AS A RESULT OF THE OPENING OF ABALONE COVE PARK TO THE PUBLIC AS WELL AS THE ATTRACTION OF THE KELP BED, REEFS, AND THE RELATIVELY RICH MARINE LIFE SEEM TO BE RESPONSIBLE FOR THIS POPULARITY. FISH AND GAME REGULATIONS SHOULD BE STRICTLY ENFORCED WITH REGARD TO DIVERS TAKING ILLEGAL GAME FROM THIS AREA.

EASE OF ACCESS (FROM ABALONE COVE PARK) TO THE BEACHCOMBER AND ''TIDEPOOLER'' HAVE CAUSED THIS TO ALSO BECOME VERY POPULAR. ABALONE COVE'S SHORELINE POSSESSES SOME OF THE RICHEST MARINE LIFE IN THE CITY, AS DISCUSSED IN THE BIOTIC RESOURCES SECTION, MAKING THIS AN EXTREMELY ATTRACTIVE AREA FOR THIS KIND OF ACTIVITY. THIS AREA DOES NOT POSSESS ANY PUBLIC ACCESS POINTS; THEREFORE ACCESS IS MOST OFTEN GAINED THROUGH ABALONE COVE PARK.

AGRICULTURE

TERRESTRIAL

NO MAJOR AGRICULTURAL ACTIVITY IS CURRENTLY BEING CONDUCTED, NOR IS THERE ANY REALISTIC POTENTIAL FOR FUTURE AGRICULTURAL USES. IT IS INTERESTING TO NOTE, HOWEVER, THAT SIGNIFICANT PORTIONS OF TWO VACANT BLUFF LOTS ARE BEING USED FOR VEGETABLE GARDENING AND THERE ALSO APPEARS TO BE THE BEGINNINGS OF A SMALL ORCHARD.

MARINE

HISTORICALLY, ABALONE COVE, OF WHICH SUBREGION 4 IS A PART, OFFERED EXCELLENT OPPORTUNITIES FOR COMMERCIAL ABALONE DIVERS; BUT THE DRASTIC DECREASE OF THE ABALONE POPULATION OVER THE YEARS HAS PRODUCED A STATE IN WHICH COMMERCIAL EXTRACTION OF THIS POPULAR SHELL FISH IS NO LONGER ECONOMICALLY FEASIBLE.

THERE ARE NUMEROUS LOBSTER TRAPS LOCATED OFFSHORE, BUT THIS IS NOT UNIQUE TO THE AREA. COMMERCIAL LOBSTER FISHERMEN HAVE TRAPS ALL ALONG THE PENINSULA COASTLINE. AS A RESULT OF THE INTENSE FISHING ACTIVITY FOR LOBSTER BY BOTH SPORT AND COMMERCIAL FISHERMEN, THE CALIFORNIA SPINEY DELICACY IS A RARE OCCURRENCE AROUND THE PENINSULA.

POTENTIAL ACTIVITY

RESIDENTIAL

ALTHOUGH THIS SUBREGION IS 62% DEVELOPED, THERE REMAIN SCATTERED BUILDABLE VACANT PARCELS. RESIDENTIAL ACTIVITY IS THE PRIMARY USE OF THESE AREAS AS FURTHER DEVELOPMENT TAKES PLACE. ALTERNATE USES ARE INFEASIBLE DUE TO THE STRONG RESIDENTIAL ACTIVITY BASE THAT IS ESTABLISHED AND THE INABILITY OF THIS AREA TO WARRANT OR SUPPORT ADDITIONAL COMMERCIAL ACTIVITY. INTRUSION OF NONRESIDENTIAL USES INTO THE ESTABLISHED RESIDENTIAL AREA WOULD SERVE TO DISRUPT THE EXISTING COMMUNITY.

THE RESIDENTIAL USE DESIGNATED WITHIN THE GENERAL PLAN IS COMPATIBLE WITH CONCLUSIONS REACHED IN THE COASTAL SPECIFIC PLAN; HOWEVER, THE DENSITY PATTERNS ARE NOT. THE GENERAL PLAN ESTABLISHED A 2-4 DWELLING UNIT PER ACRE PATTERN OVER ALL BUILDABLE AREA. THIS IS COMPATIBLE FOR AREAS INLAND OF SEA COVE DRIVE (EXCLUSIVE OF FOURPLEXES LOCATED ON CLIPPER ROAD), BUT DOES NOT ACCURATELY REPRESENT DENSITIES SEAWARD OF SEA COVE DRIVE.

A CLOSER LOOK AT THIS AREA SHOWS MOST LOTS AT .7 TO .8 OF AN ACRE WITH OPEN SPACE HAZARD ON THE REAR OF THESE LOTS, LEAVING BUILDABLE AREA AT LESS THAN ACTUAL LOT SIZE. FOR THIS REASON THE COASTAL SPECIFIC PLAN ESTABLISHES A 2 DWELLING UNIT PER ACRE DENSITY ON PARCELS SEAWARD OF SEA COVE DRIVE.

THE EXISTING FOURPLEXES HAVE BEEN MAINTAINED AS NONCONFORMING BASED ON USE CONFLICTS WITH THE SINGLE-FAMILY NEIGHBORHOOD. IT IS THE DESIRE OF THE CITY TO NOT ONLY ENSURE MAINTENANCE OF EXISTING NEIGHBORHOODS BUT TO ALLEVIATE DISRUPTIVE FORCES. IT IS, THEREFORE, THE INTENTION OF THIS COASTAL SPECIFIC PLAN TO ENCOURAGE THE REVERSION OF THESE APARTMENTS INTO A SINGLE-FAMILY AREA. BOTH LOT SIZE AND ORIENTATION OF THE FOUR FOURPLEX PARCELS LEND THEMSELVES TO THIS CONVERSION.

ALTERNATE USES FOR EXISTING COMMERCIAL AND INSTITUTIONAL SITES

THE COASTAL SPECIFIC PLAN EXAMINED ALTERNATIVE USES FOR EXISTING COMMERCIAL AND INSTITUTIONAL ACTIVITIES LOCATED WEST OF THE INTERSECTION OF SEA COVE DRIVE AND PALOS VERDES DRIVE SOUTH. THE BASIS FOR THIS ANALYSIS ORIGINATED FOR THE FOLLOWING FACTORS: THE GENERAL PLAN DESIGNATING THIS AREA AS RESIDENTIAL; CONFLICTS BETWEEN COMMERCIAL ACTIVITIES AND ABALONE COVE COMMUNITY; AND PROPOSED ABANDONMENT OF FIRE STATION 53.

THE FEASIBILITY OF CONVERTING THIS AREA TO ALTERNATE USES REQUIRED AN EXAMINATION OF PLANS WHICH WOULD LOCATE A DEVELOPMENT PATTERN ON THE SITES IN SUCH A MANNER AS TO ENSURE A VIABLE RESIDENTIAL AREA. ADVERSE CONDITIONS WHICH COULD BE EXPERIENCED BY RESIDENTIAL USE ON THESE SITES ARE ASSOCIATED WITH PALOS VERDES DRIVE SOUTH. THESE CONFLICTS INVOLVE THE ARTERIAL PRESENTLY SERVING AS THE PRIMARY AND ONLY ACCESS TO BOTH THE COMMERCIAL AND FIRE STATION SITES, AND NOISE GENERATED BY TRAFFIC. BASED ON THESE AND OTHER CONDITIONS, IT BECAME APPARENT THAT IN DEVELOPING A SCHEMATIC PLAN FOR THIS AREA, THE FOLLOWING CRITERIA NEEDED TO BE MET:

1) PRIMARY ACCESS SHOULD NOT BE OBTAINED FROM PALOS VERDES DRIVE SOUTH (POLICY 3, PAGE 137, G.P.)

2) MEASURES SHOULD BE INCORPORATED WHICH BUFFER POTENTIAL RESIDENTIAL SITES FROM ADVERSE TRAFFIC NOISE (POLICY 1, PAGE 187, G.P.)

3) ACCESS TO SITES SHOULD NOT INTERFERE WITH THE EXISTING DRAINAGE COURSE

4) RESIDENTIAL DENSITY SHOULD NOT EXCEED 4 D.U./AC.

5) HOUSING SHOULD BE OF A SINGLE-FAMILY NATURE

6) SITES SHOULD RELATE TO THE DRAINAGE COURSE WITHOUT ADVERSELY IMPACTING IT.

SCHEMATIC PLAN #1

THIS PLAN PROPOSES RESIDENTIAL ON ALL LOTS WITH A FRONTAGE ROAD/EASEMENT AS THE PRIMARY ACCESS. UNDER A 2-4 D.U./AC. DESIGNATION, THE AREA COULD ONLY GENERATE THREE RESIDENTIAL LOTS; THEREFORE, WHETHER EXISTING LOT LINES ARE ADHERED TO OR NEW LOT ALIGNMENTS

PROPOSED, THE OUTCOME WILL BE THE SAME, WITH THE EXCEPTION THAT THE LATTER COULD BALANCE LOT SIZES BETWEEN EACH INDIVIDUAL LOT. BELOW IS A DISCUSSION OF POSSIBLE DEVELOPMENT PHASING FOR THIS PLAN IN ORDER OF PREFERENCE.

SINGLE PHASE DEVELOPMENT

THIS PHASING WOULD REQUIRE THAT A DEVELOPER/ DEVELOPERS ACQUIRE ALL SITES IN CONJUNCTION WITH CONVERSION OF THE AREA. ADVANTAGES BEING THE ABILITY FOR THE CONVERSION TO TAKE PLACE AT ONE TIME WITH MORE FLEXIBILITY IN SITE PLAN ARRANGEMENT (THE CITY SHOULD BE RECEPTIVE TO A RESIDENTIAL PLANNED DEVELOPMENT UNDER A SINGLE PHASE PROPOSAL). ALTHOUGH THIS IS THE MOST DESIRABLE WAY TO DEVELOP THE AREA, IT IS ALSO THE LEAST LIKELY TO OCCUR.

STAGED DEVELOPMENT

THIS COULD REQUIRE TEMPORARY ACCESS TO BE GAINED FROM PALOS VERDES DRIVE SOUTH IN THE CIRCUMSTANCE THAT EITHER THE FIRE STATION OR RETAIL SITE WERE TO CONVERT PRIOR TO THE GAS STATION SITE. PLACING A FRONTAGE ROAD OR EASE-MENT RESTRICTION ON THE FRONT OF THESE PARCELS WOULD ALLOW FOR THE EVENTUAL ACCESS TO BE GAINED FROM SEA COVE DRIVE AT A TIME WHEN THE ENTIRE ACCESS SYSTEM COULD BE DEVELOPED.

SCHEMATIC PLAN #2

ABANDONMENT OF THE FIRE STATION WILL OPEN THIS SITE FOR ALTERNATE USES. THE CITY COULD STUDY THE FEASIBILITY OF THIS SITE FULFILLING A RECREATIONAL OR CIVIC NEED. THIS SHOULD BE DONE ALONG WITH THE OVERALL RECREATIONAL STUDY FOR THE CITY.

SCHEMATIC PLAN #2 IS RECOGNIZED BY THE COASTAL SPECIFIC PLAN AS THE MOST DESIRABLE USAGE OF THIS AREA. HOWEVER, IF CIVIC OR RECREATIONAL ACTIVITIES ARE FOUND TO BE AN INFEASIBLE USAGE OF THE EXISTING FIRE STATION IN FURTHER STUDIES, THEN PLAN 1 SHOULD BE IMPLEMENTED.

AGRICULTURAL ACTIVITY

WITH THE SUCCESS OF THE KELP BED AT ABALONE COVE AND POTENTIAL SUCCESS AT OTHER LOCATIONS, IT IS NOT UNREASONABLE TO ANTICIPATE COMMERCIAL KELP HARVEST OPERATIONS IN THE ''STRONGER'' KELP BEDS AROUND THE PENINSULA, AS KELP IS A RENEWABLE RESOURCE IF MANAGED PROPERLY. ABALONE COVE'S KELP BED IS DEFINITELY THE MOST EXTENSIVE KELP BED PRESENTLY FOUND OFF THE PENINSULA, ACCORDING TO THE DEPARTMENT OF FISH AND GAME.

INDUCED ACTIVITY

ALL NEW DEVELOPMENT WILL BE RESIDENTIAL SINGLE-FAMILY DWELLINGS. SUBDIVISION OF LARGE PARCELS SHOULD BE DESIGNED IN A MANNER WHICH WILL BLEND WITH THE EXISTING COMMUNITY PATTERN. LOTS DEVELOPED OUTSIDE OF THE EXISTING WEST PORTUGUESE BEND COMMUNITY ASSOCIATION JURISDICTION COULD CONTAIN CC&R'S WHICH WILL PARALLEL THOSE



PRESENTLY ENFORCED BY THE ASSOCIATION. ALSO, CONSIDERATION COULD BE GIVEN TO ANNEXATION OF THESE LOTS BY THE WEST PORTUGUESE BEND COMMUNITY ASSOCIATION IN ORDER TO ENSURE HOMOGENEITY OF FUTURE HOUSING WITH THE ESTABLISHED COMMUNITY.

TOTAL UNITS ADDED TO THIS SUBREGION ARE LISTED IN TABLE S4-D. THE COASTAL SPECIFIC PLAN DESIGNATES A REDUCTION IN RESIDENTIAL ACTIVITY BY ROUGHLY 20 UNITS UNDER THAT CALLED FOR BY THE GENERAL PLAN. THIS IS PRIMARILY A REFLECTION OF LOWERING THE DENSITY ALONG THE BLUFF.

INFRASTRUCTURE

THE ESTABLISHED CHARACTER OF SUBREGION 4 OFFERS ITS RESIDENTS RELATIVELY ADEQUATE AND STABLE SERVICE FROM MOST INFRASTRUCTURE FACILITIES AND RELATED AGENCIES. TWO AREAS, HOWEVER, WARRANT FURTHER DISCUSSION. THEY ARE: FLOOD CONTROL FACILITIES AND TRANSPORTATION SYSTEMS.

FLOOD CONTROL FACILITIES

THE FLOOD CONTROL SYSTEM IN SUBREGION 4 CONSISTS OF A STORM DRAIN AND CHANNEL. THE UNDERGROUND DRAIN RUNS IN A NORTH-SOUTH DIRECTION, MIDWAY BETWEEN PACKET AND BARKENTINE ROADS AND FROM NORTH OF PALOS VERDES DRIVE SOUTH TO THE SOUTH OF SEA COVE DRIVE. AT THIS POINT IT BECOMES AN OPEN CONCRETE CHANNEL WHICH CONTINUES TO THE BLUFF'S EDGE, WHERE IT ENTERS THE NATURAL SYSTEM.

CURRENTLY, SUBREGION 4 EXPERIENCES NO MAJOR FLOOD CONTROL PROBLEMS. MINOR PROBLEMS OCCASIONALLY ARISE WITH A SCREEN AT THE JUNCTION OF THE DRAIN AND CHANNEL, SOUTH OF SEA COVE DRIVE. THE SCREEN IS PERIODICALLY CLOGGED WITH DEBRIS; AT SUCH TIME, HOWEVER, IT IS CLEANED (USUALLY UPON REQUEST) BY THE COUNTY ROAD DEPARTMENT. ANOTHER PROBLEM INVOLVES THE END OF THE DRAINAGE CHANNEL AT THE BLUFF'S EDGE. THIS INTERFACE, AN AREA WHERE NATURAL AND URBAN SYSTEMS MEET, IS DESIGNED SO THAT EXCESSIVE EROSION IS RESULTING. THE CHANNEL DOES NOT PROVIDE ANY METHOD OF REDUCING THE UNNATURAL VELOCITY ATTAINED BY WATER FLOWING DOWN THE CHANNEL AND THEREBY CAUSES EXCESSIVE EROSION ON THE FACE OF THE BLUFF. THIS TYPE OF ABNORMAL BLUFF EROSION IS OF PARTICULAR CONCERN BECAUSE OF THE IMPACT ADDED TO NATURAL EROSION CONDITIONS ON THE BLUFF. AS BRIEFLY DESCRIBED IN THE GENERAL PLAN (G.P. 111), WATER VELOCITY REDUCERS AT DRAINAGE INTERFACES ARE AN IMPORTANT MITIGATING MEASURE THAT CAN BE INSTALLED RELATIVELY INEXPENSIVELEY AND WITHOUT NECESSARILY IMPACTING VISUAL QUALITY. THE CORRIDORS SECTION OF THIS SUBREGION DISCUSSES THE VISUAL AND DESIGN FACTORS THAT SHOULD BE CONSIDERED.

FUTURE DEVELOPMENT IN THE ABALONE COVE COMMUNITY IS NOT ANTICIPATED TO CREATE FLOOD CONTROL PROBLEMS; HOWEVER, TWO ISSUES REQUIRE FURTHER DISCUSSION. FIRST, ANY FUTURE DEVELOPMENT ADJACENT TO THE ARROYOS WILL BE REQUIRED TO MEET FLOOD CONTROL REQUIREMENTS, AS SPECIFIED BY THE CITY OR OTHER APPROPRIATE AGENCY, WHILE MAINTAINING THE STANDARDS PROVIDED IN THE CORRIDORS SECTION. THE SECOND ISSUE IS THAT OF FUTURE FLOOD CONTROL IMPACTS BY DEVELOPMENT ''UPSTREAM''. TWO MAJOR CANYONS, EACH WITH FLASH FLOOD POTENTIAL (G.P. 147), DRAIN INTO SUBREGION 4. FUTURE DEVELOPMENT ADJACENT TO THESE CANYONS WILL NO DOUBT CREATE INCREASED RUNOFF, WHICH COULD IMPACT WATER COURSES IN SUBREGION 4. ANY FUTURE

ACTIVITY AREAS

TABLE: S4-D

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	≤ 1	≤ 2	≤ 4	≤ 6	> 6	RETAIL	REC.			
EXISTING	15 AC.	24 AC.		6 AC.	14 AC.		1 AC.	.5 AC.		.5 AC.		
EXISTING UNITS				13 S.F.	61 S.F.		16 M.F.					
EXISTING POPULATION				46	214		42					
GENERAL PLAN	15 AC.	24 AC.			24 AC.							
GENERAL PLAN UNITS					117 S.F.							
GENERAL PLAN POPULATION					410							
COASTAL PLAN	15 AC.	24 AC.		6 AC.	18 AC.							
COASTAL PLAN UNITS				18 S.F.	72 S.F.							
COASTAL PLAN POPULATION				63	252							
INTERIM PROFILE	15 AC.	24 AC.		6 AC.	16 AC.		1 AC.	.5 AC.		.5 AC.		
INTERIM PROFILE UNITS				18 S.F.	70 S.F.		16 M.F.					
INTERIM PROFILE POPULATION				63	245		42					

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

DEVELOPMENT WHICH COULD AFFECT ABALONE COVE MUST BE REQUIRED TO MITIGATE ANY FLOODING CAUSED BY THE DEVELOPMENT.

TRANSPORTATION SYSTEMS

VEHICULAR NETWORKS

SUBREGION 4 HAS APPROXIMATELY 1 1/3 MILES OF PUBLIC STREETS. PALOS VERDES DRIVE SOUTH, AN ARTERIAL (G.P. 117, 121), IS ABOUT 1/3 MILE, WHILE THE REMAINING 1 MILE IS MADE UP OF FIVE LOCAL STREETS. THE STREETS ARE CURRENTLY IN GOOD REPAIR AND APPEAR TO FUNCTION WELL. THE INTERIOR STREETS FORM A LOOP-LIKE NETWORK AND THEREFORE SERVE ONLY ABALONE COVE, WITH THE EXCEPTION OF INGRESS/EGRESS TO ST. PETER'S CHURCH.

THIS AREA CURRENTLY GENERATES APPROXIMATELY 70 PEAK HOUR RESIDENTIAL TRIPS ONTO THE PRIMARY STREET OF ACCESS, PALOS VERDES DRIVE SOUTH. THE LAND USES PROPOSED BY THIS PLAN ARE ULTIMATELY PROJECTED TO GENERATE ONLY ABOUT 81 TRIPS AT PEAK HOUR. THERE APPEAR TO BE NO EXISTING TRAFFIC PROBLEMS NOR ARE ANY PROJECTED, IN THE FORESEEABLE FUTURE.

THE CONVERSION OF THE COMMERCIALLY USED PROPERTIES ON PALOS VERDES DRIVE SOUTH TO A RESIDENTIAL USE WILL REQUIRE THAT ACCESS NO LONGER BE TAKEN DIRECTLY FROM PALOS VERDES DRIVE SOUTH BUT RATHER FROM SEA COVE DRIVE.

WHILE THERE ARE NO MAJOR TRAFFIC PROBLEMS, THERE ARE PROBLEMS OCCURRING IN RESPECT TO AN AUXILIARY FUNCTION OF THE TRANSPORTATION SYSTEM: THAT IS PARKING. SINCE THE OPENING OF THE COUNTY'S ABALONE COVE PARK, SOME PARK PATRONS HAVE USED RESIDENTIAL STREETS FOR AUTO PARKING, PARTICULARLY ON WEEKENDS AND HOLIDAYS. A RECENT ACTION BY THE COUNTY, WHICH INITIATED A FEE FOR PARKING, HAS ADDED TO THE PROBLEM, ACCORDING TO RESIDENTS. ASSOCIATED WITH THE PARKING PROBLEMS HAVE COME OTHER RELATED ISSUES, SUCH AS EXCESSIVE LITTER, LOITERING AND TRESPASSING. THE CITY RECOGNIZES THE PROBLEM AND HAS INITIATED CORRECTIVE ACTION BY THE PARTIAL BARRICADING OF SEA COVE DRIVE. THE CITY HAS ALSO INITIATED DISCUSSIONS OF THE ISSUES WITH RESIDENTS AND THE COUNTY, IN THE HOPE OF FINDING A SOLUTION. TWO ALTERNATIVES ARE MAKING THE STREETS PRIVATE OR REGULATING PARKING.

PATH AND TRAIL NETWORKS

THE PATH AND TRAIL NETWORKS, AS THEY SPECIFICALLY RELATE TO SUBREGION 4, ARE DISSIMILAR TO THOSE CONCEPTUALLY PROPOSED IN THE GENERAL PLAN (G.P. 124). THE ELIMINATION OF PATH AND TRAILS THROUGH THE AREA WAS BROUGHT ABOUT BY LOCAL COMMUNITY OBJECTION TO THE ROUTE.

BEACH ACCESS IS LIMITED TO TWO STRUCTURED PATHS, BOTH OF WHICH ARE PRIVATE. ONE OF THE PATHS IS A FENCED ACCESS OWNED BY THE HOMEOWNERS ASSOCIATION FOR MEMBERS AND GUESTS ONLY. THE OTHER IS PRIVATELY OWNED. NO NEW BEACH ACCESS PATHS ARE PROPOSED; FURTHERMORE, NO NEW PRIVATE PATHS ARE APPROPRIATE DUE TO THE NATURE OF THE BLUFF.

SAFETY

FIRE SAFETY PROGRAM

AS DESCRIBED IN A PREVIOUS SECTION, PROTEC-

TION FOR THE COASTAL REGION IS THE PRIMARY RESPONSIBILITY OF FIRE STATION #53. WHILE THE ENTIRE COASTAL REGION IS ADEQUATELY SERVED BY STATION #53, SUBREGION 4 IS PARTICULARLY WELL SERVED SINCE THE STATION IS LOCATED WITHIN THE SUBREGION. AN ANALYSIS OF RESPONSE TIMES, PREPARED BY THE FIRE DEPARTMENT FOR THIS STUDY, SHOWS A RESPONSE TIME OF ABOUT 30 SECONDS TO A POINT IN THE MIDDLE OF THE SUBREGION.

IT HAS BEEN NOTED BY THE FIRE DEPARTMENT (SCHNEIDER) THAT THE LOCATION AND THE SIZE OF FIRE STATION #53 WILL BECOME SOMEWHAT INADEQUATE IN THE FUTURE; THEREFORE, A NEW SITE WOULD BE REQUIRED. THE AREA AROUND PALOS VERDES DRIVE SOUTH AND FORRESTAL DRIVE HAS BEEN SUGGESTED AS THE IDEAL LOCATION (SEE SUBREGION 7). THE PROPOSED RELOCATION OF THE FIRE STATION IS OF GREAT CONCERN TO THE RESIDENTS OF THE ABALONE COVE COMMUNITY, BOTH IN TERMS OF FIRE PROTECTION AND THE FUTURE OF THE EXISTING FACILITY SITE.

THE FUTURE OF THE FACILITY SITE IS RATHER TENUOUS; HOWEVER, SOME SUGGESTIONS HAVE BEEN MADE AND ARE DISCUSSED IN THE ACTIVITY AREAS SECTION OF THIS SUBREGION. THE QUESTION OF FIRE PROTECTION CAN BE ANSWERED WITH MORE CERTAINTY. WHILE IT IS TRUE THAT RESPONSE TIME WILL BE LENGTHENED, TOTAL SERVICE IS EXPECTED TO INCREASE FOR THE FOLLOWING REASONS: FIRST, THE RELOCATION IS NEEDED TO PROVIDE A LARGE, MORE MODERN FACILITY, WHICH, IN TURN, MEANS THE AVAILABILITY OF MORE AND BETTER EQUIPMENT. SECONDLY, AN ADDITIONAL FACILITY IS CURRENTLY PROPOSED IN THE PALOS VERDES DRIVE WEST/HAWTHORNE AREA. THE RELOCATION OF FIRE STATION #53 AND THE ADDITIONAL FACILITY WILL PROVIDE A PROJECTED AVERAGE RESPONSE TIME OF ABOUT 3-4 MINUTES. THE EVENTUAL RELOCATION IS PROJECTED TO OCCUR IN ABOUT FIVE YEARS.

POLICIES

IT IS THE POLICY OF THE CITY TO:

1. REQUIRE ALL NEW HOUSING WITHIN THE CONFINES OF SUBREGION 4 TO BE OF A SINGLE-FAMILY NATURE.

2. REQUIRE DEVELOPMENT ABUTTING THE NATURAL DRAINAGE COURSE TO MAINTAIN THE NATURAL CHARACTER OF THE COURSE.

3. REQUIRE THAT THE SUBDIVISION OF LARGE PARCELS WITHIN THE CONFINES OF SUBREGION 4 BE DESIGNED IN A MANNER WHICH WILL BLEND WITH THE EXISTING COMMUNITY PATTERN.

4. ENCOURAGE LOTS DEVELOPED IN THE CONFINES OF SUBREGION 4, YET OUTSIDE THE JURISDICTION OF WEST PORTUGUESE BEND COMMUNITY ASSOCIATION, TO DEVELOP ATTACHED CC&R'S WHICH PARALLEL THOSE PRESENTLY ENFORCED BY THE ASSOCIATION. ALSO, CONSIDERATION SHOULD BE GIVEN TO ANNEXATION OF THESE LOTS BY THE WEST PORTUGUESE BEND COMMUNITY ASSOCIATION.

5. STUDY THE EXISTING DRAINAGE INTERFACE AND ITS ASSOCIATED ADVERSE IMPACTS, AND IF FOUND NECESSARY, IMPLEMENT CORRECTIVE MEASURES.

6. CONTINUE TO WORK WITH THE RESIDENTS AND THE COUNTY TO SOLVE THE PARKING PROBLEMS CAUSED BY ABALONE COVE BEACH PARK.

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 5 IS A 132 ACRE AREA WHICH IS ALMOST ENTIRELY UNDEVELOPED. IT IS BOUNDED ON THE WEST BY THE ABALONE COVE COMMUNITY; ON THE NORTH BY THE UPPER PORTUGUESE BEND COMMUNITY AND OPEN SPACE; AND ON THE EAST BY THE PORTUGUESE BEND CLUB COMMUNITY. ITS GEOPHYSICAL CHARACTERISTICS INCLUDE SUCH DIVERSITIES AS TWO OF THE MOST SPECTACULAR PROMONTORIES ON THE SOUTHERN CALIFORNIA COAST, A BEACH ON A BROAD COVE, AN INTIMATE COVE WITH DIFFICULT ACCESS, AN ACTIVE LANDSLIDE MASS, AND MARINE AND TERRESTRIAL HABITATS RICH IN LIFE. OTHER FACTORS SUCH AS OWNERSHIP PATTERNS, EXISTING AND POTENTIAL USES, GOVERNMENTAL CONTROLS, AND INFRASTRUCTURE DIFFICULTIES CREATE A SUBREGION ENVIRONMENT LIKE NO OTHER IN THE ENTIRE COASTAL REGION.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

THE CLIMATIC PROFILE OF ZONE 1, PRESENTED IN THE CLIMATE SECTION OF THE COASTAL REGION, IS REPRESENTATIVE OF THE GENERAL WEATHER PATTERN IN THIS SUBREGION. ONE POINT OF VARIANCE INVOLVES THE HIGHER DEGREE OF ANNUAL RAINFALL (AVERAGING 12 INCHES PER YEAR). THIS HIGHER ANNUAL RAINFALL IS REFLECTIVE OF THE COASTAL GEOGRAPHY RECEDING FURTHER IN THIS LOCATION AS COMPARED TO OTHER COASTAL LANDS ALONG THE CITY'S AND PENINSULA'S SHORELINE AS A WHOLE.

MARINE

WAVE ACTION IN THIS AREA VARIES WITH RESPECT TO LOCATION. THE WESTERN BOUNDARY OF THE SUBREGION IS ABSENT OF WAVE ACTION MOST OF THE TIME DUE TO THE LONG POINT SHELTERING EFFECT AND WAVE DAMPENING ACTION IMPOSED BY A NEWLY ESTABLISHED KELP BED. THE BEACH AREA, LOCATED IN ABALONE COVE, RECEIVES SURF MOST OF THE TIME PRIMARILY FROM THE SOUTHWEST. BOTH PORTUGUESE POINT AND INSPIRATION POINT ALSO INCUR WAVE ACTION PRIMARILY FROM THE SOUTHWEST. SMUGGLER'S COVE IS LARGELY SHELTERED FROM SURF AND, WHEN PRESENT, IS USUALLY SMALL. THE EASTERN PORTION OF THIS SUBREGION IS SHELTERED FROM WESTERLY SWELLS AND WAVES BY INSPIRATION POINT. HOWEVER, THIS AREA IS EXPOSED TO SURF FROM THE SOUTHWEST.

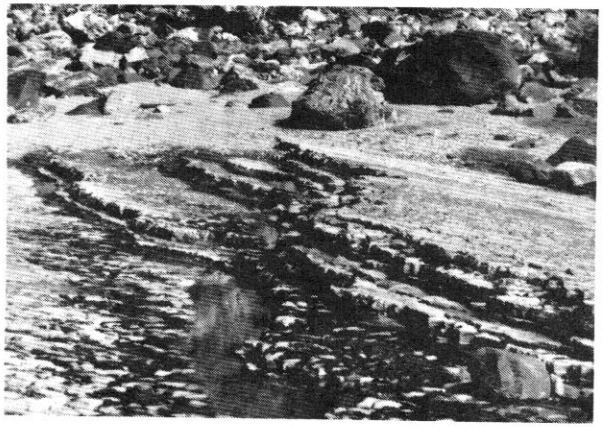
THE EASY ACCESS PROVIDED TO ABALONE COVE INDUCES A GREATER AMOUNT OF COLLECTORS AND BEACHCOMBERS INTO THIS AREA. WHEN LOW-TIDAL PERIODS OCCUR, THE SUSCEPTIBILITY OF ESTABLISHED MARINE ORGANISMS IS OF CRITICAL CONCERN. PRESENTLY, A VOLUNTEER GROUP OF YOUTHS, WORKING WITH THE PENINSULA OCEANOGRAPHIC SOCIETY, ARE PATROLLING THE ABALONE COVE PARK SHORELINE DURING LOW-TIDES. THESE YOUTHS INFORM VISITORS OF CURRENT FISH AND GAME LAWS BEING ENFORCED IN THE AREA AND THROUGH THEIR PRESENCE DETER POACHERS TO SOME EXTENT.

GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

TOPOGRAPHICALLY, THIS AREA IS VERY DIVERSE, RANGING FROM VERTICAL CLIFFS AT PORTUGUESE



POINT AND INSPIRATION POINT TO RELATIVELY FLAT LAND ATOP PORTUGUESE POINT AND ALONG PALOS VERDES DRIVE SOUTH IN THE NORTHWEST PORTION OF THE SUBREGION.

MARINE

THE WESTERN EXTREMITY OF THE SHORELINE EXHIBITS A ROCKY BEACH WITH SOME BOULDERS EXTENDING INTO THE OCEAN AND INTERSPERSING WITH THE SANDY OCEAN FLOOR. INTERMITTENT REEFS EXIST OFFSHORE PROVIDING AN ADHERENCE MEDIUM FOR LOCAL KELP BEDS. FURTHER SEAWARD, THE SANDY OCEAN FLOOR IS DOMINANT.

A GENTLY SLOPING BEACH IS PRESENT AT THE ACCESS POINT OF ABALONE COVE BEACH. AT THE WESTERN AND EASTERN EXTREMITY OF THIS BEACH THE SURFACE FEATURES TRANSCEND FROM PEBBLES TO A ROCKY SURFACE. SEAWARD OF THE BEACH SCATTERED ROCK REEFS ARE PRESENT.

THE ACTUAL TERRAIN OF THE ACTIVE LANDSLIDE CONSISTS OF ROUGH BROKEN LAND WITH MANY CREVACES, STEEP SCARPS, AND CONFIRMED INSTABILITY. ACCESS



TO THE SHORELINE ACROSS THIS AREA AS WELL AS ACCESS TO ANY PORTION OF THE SITE, IS UNSAFE.

HYDROLOGY

THERE ARE 3 MAJOR NATURAL DRAINAGE COURSES WITHIN THIS SUBREGION. THE WESTERN-MOST COURSE SHARES A COMMON BOUNDARY WITH SUBREGION 4 AND IS DISCUSSED THEREIN.

THE SECOND DRAINAGE COURSE IS ASSOCIATED WITH A MAJOR CANYON LOCATED JUST TO THE EAST OF THE ABALONE COVE BEACH ACCESS ROAD. THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HAS PROPOSED A STORM DRAIN FOR THIS CANYON, THE CONSTRUCTION OF WHICH IS NOT IMMEDIATELY FORESEEN AND IS CURRENTLY UNFUNDED. IT IS IMPORTANT THAT THE PRESENT NATURAL STATUS OF THE CANYON BE MAINTAINED IN ORDER TO PRESERVE THE EXISTING VEGETATIVE COMMUNITY SUPPORTED BY THIS DRAINAGE COURSE. PRESENT RUNOFF AND EROSION IN THE IMMEDIATE CANYON AREA IS NOT OF MAJOR CONCERN. HOWEVER, INCREASED RUNOFF AND SUBSEQUENT EROSION POTENTIAL GENERATED THROUGH THE ALTERATION OF ALTAMIRA CANYON AND FUTURE DEVELOPMENT IN ITS VICINITY, COULD ALTER THIS STATE.

THE THIRD DRAINAGE COURSE IS LOCATED IN THE ACTIVE LANDSLIDE AREA JUST TO THE WEST OF THE EASTERN SUBREGION BOUNDARY. THE COUNTY FLOOD CONTROL DISTRICT HAS ALSO PROPOSED A STORM DRAIN FOR THIS AREA. STRONG CONSIDERATION SHOULD BE GIVEN TO THE ABANDONMENT OF THIS PROJECT BASED ON INHERENT MAINTENANCE PROBLEMS ASSOCIATED WITH LAND MOVEMENT IN THE AREA.

BIOTIC RESOURCES

TERRESTRIAL

SUBREGION 5 POSSESSES A WIDE RANGE OF BIOTIC RESOURCES ALONG WITH AN EXCELLENT OPPORTUNITY TO ENHANCE CERTAIN AREAS.

NATURAL VEGETATION IN SUFFICIENT QUANTITY TO SUPPORT A WILDLIFE HABITAT IS PRESENT OVER MUCH OF THE AREA (SEE FIGURE 12). THE COASTAL BLUFF AREA IN THE WESTERN PORTION OF THE PARK CONTAINS A COASTAL SAGE SCRUB COMMUNITY WHICH EXTENDS INTO THE CENTER OF THE PARK WHERE IT TERMINATES AT THE ACCESS ROAD FOR ABALONE COVE PARK. THE STEEP BLUFFS AND HILLSIDES ASSOCIATED WITH PORTUGUESE AND INSPIRATION POINTS ARE OF VALUE TO NESTING AND ROOSTING ACTIVITIES OF COASTAL RESIDENT AND MIGRATORY SHOREBIRDS. PORTUGUESE POINT HAS BEEN DESIGNATED AS AN IMPORTANT NON-BREEDING ROOSTING SITE IN A SEABIRD BREEDING GROUND SURVEY (OSBORNE, REYNOLDS, 1971).

THE ACTIVE PORTION OF THE PORTUGUESE BEND LANDSLIDE SUPPORTS STANDS OF NATURAL VEGETATION (COASTAL SAGE SCRUB). DUE TO THE SEVERE NATURE OF THE TERRAIN AND THE UNSTABLE GEOLOGIC PROFILE OF THE AREA, OPPORTUNITIES FOR SITE DEVELOPMENT ARE LIMITED.

THE ACTIVE LANDSLIDE AREA PROVIDES A GOOD HABITAT FOR A NUMBER OF RESIDENT, MIGRANT, AND WINTERING BIRD SPECIES. THE HIGH RODENT POPULATIONS AND CONSTANT AIR CURRENTS MAKE THIS AREA AN EXCELLENT FEEDING GROUND FOR BIRDS OF PREY, INCLUDING THREE RARE AND ENDANGERED SPECIES (CALIFORNIA DEPARTMENT OF FISH AND GAME, 1972): THE PEREGIRNE FALCON, THE PRAIRIE FALCON AND WHITE-TAILED KITE. THESE

SPECIES ARE KNOWN TO WINTER ALONG RANCHO PALOS VERDES COASTAL AREA; THEREFORE THIS AREA IS OF PRIME SIGNIFICANCE. JACK RABBITS AND CALIFORNIA GROUND SQUIRRELS ARE ALSO PRESENT.

MARINE

SUBREGION 5 POSSESSES SOME OF THE RICHEST MARINE RESOURCES IN THE ENTIRE CITY IF NOT THE WHOLE PENINSULA. THIS RICHNESS AND DIVERSITY IS DUE TO THE AREA ONCE BEING RESTRICTED TO PRIVATE CLUB MEMBERS, HENCE, LIMITING THE AMOUNT OF HUMAN INTERFACE. DIFFICULT ACCESS IN OTHER PARTS OF THE SUBREGION ALSO CONTRIBUTE IN RESTRICTING ITS USE.

STARTING AT THE WESTERN SUBREGION BOUNDARY (SEE FIGURE 9), THE INTERTIDAL MARINE LIFE SPECTRUM IS TYPICAL OF THOSE ASSOCIATED WITH A ROCKY BEACH SHORELINE. AT THE CENTER OF ABALONE COVE THERE EXISTS A SANDY BEACH AT THE BASE OF A SMALL ROCKY SCARP. THE INTERTIDAL SPECTRUM HERE IS RATHER BARREN AS COMPARED TO THE REST OF THE SUBREGION. TOWARD PORTUGUESE POINT A ''COBBLESTONE'' BEACH EXISTS WHICH POSSESSES A RICH CLAM BED AS WELL AS INTERTIDAL SPECIES. A LARGE WAVECUT BENCH SURROUNDS PORTUGUESE POINT AND IS THE BASIS FOR TIDE POOLS THAT ARE INACCESSIBLE BECAUSE OF TWO GORGES CONTAINING SEAWATER. THESE TIDE POOLS ARE OF EXCELLENT QUALITY AND DIVERSITY. THE COVE BETWEEN PORTUGUESE POINT AND INSPIRATION POINT (REFERRED TO AS ''SMUGGLER'S COVE'') CONTAINS A ROCKY BEACH WITH INTERTIDAL SPECIES SIMILAR TO THOSE IN THE WESTERN PORTION OF THE SUBREGION. A PEBBLE BEACH IS LOCATED IN THE EASTERN PART OF THE COVE. INSPIRATION POINT EXHIBITS A MARINE LIFE SIMILAR TO THAT ASSOCIATED WITH PORTUGUESE POINT. EAST OF INSPIRATION POINT THE MARINE LIFE BECOMES MORE BARREN DUE TO THE CONSTANT MOVING AND COVERING OF BOULDERS BY LANDSLIDING ACTIVITY.

THE SUBTIDAL MARINE LIFE IS VERY RICH IN THREE MAJOR LOCATIONS. FIRST, THE WESTERN PORTION OF THE SUBREGION HAS SOME SPARCE GROWTHS OF KELP EXTENDING EASTWARD FROM SUBREGION 4'S LARGE KELP BED. THIS KELP IS AN ATTRACTOR OF GAME FISH AND INVERTEBRATES. THE OTHER TWO LOCATIONS ARE AT THE TIPS OF PORTUGUESE AND INSPIRATION POINTS. SUBMERGED REEFS AND SPARCE KELP GROWTH HERE ALSO SERVE AS ATTRACTORS OF MARINE LIFE.

ABALONE COVE HAS BEEN DESIGNATED A MARINE RESERVE STATUS BY THE STATE FISH AND GAME COMMISSION. THIS WAS BASED ON THE GOOD QUALITY OF THE MARINE HABITAT ALONG WITH HABITAT DEGRADATION EXPERIENCED THROUGH THE UNCONTROLLED EXPOSURE OF THE PUBLIC TO SENSITIVE MARINE ENVIRONMENTS.

FIRE HAZARD

ABALONE COVE PARK AND THE ACTIVE PORTION OF PORTUGUESE BEND LANDSLIDE EXHIBIT FEATURES THAT WARRANT A CLASSIFICATION OF MEDIUM AND HIGH FIRE HAZARD RESPECTIVELY. THE NATURAL ORIENTATION OF THE COUNTY'S CURRENT MASTER PLANNING ACTIVITY FOR ABALONE COVE PARK IS NOT EXPECTED TO ALTER THE SITE'S FIRE STATUS TO ANY GREAT DEGREE IN THE FUTURE. THE ACTIVE PORTION OF PORTUGUESE BEND LANDSLIDE WILL EXHIBIT HIGH FIRE HAZARD POTENTIAL IN THE FUTURE FOR THE FOLLOWING REASONS:

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

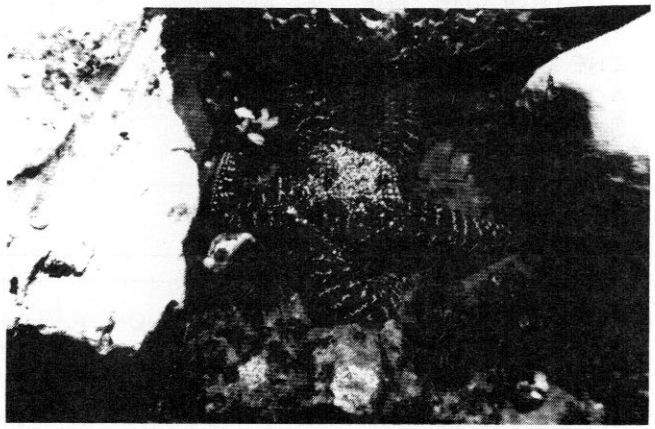
TABLE: S5-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED		9 AC.	27 AC.				102 AC.		12 AC.	102 AC.	RESTORATION FROM INSPIRATION POINT EAST	102 AC.
RESTRICTED	69 AC.			96 AC.	24 AC.	1 AC.		1 DRAINAGE COURSE			PRESERVE FROM INSPIRATION POINT WEST	
LEVEL OF SIGNIFICANCE	●	◒	○	●	●	◒	●	●	●	●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.
NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

1. DIFFICULT ACCESS
2. INCREASED FUEL (VEGETATION)
3. LACK OF SITE DEVELOPMENT DUE TO INHERENT GEOLOGIC CONSTRAINTS.

IT IS IMPORTANT THAT PRECAUTIONARY MEASURES BE IMPLEMENTED WITHIN SUBREGION 5 SINCE THE FIRE HAZARD STATUS IN THIS AREA IS TO REMAIN VIRTUALLY STATUS QUO. ONE MEASURE WHICH IS COMPATIBLE WITH THE NATURAL CHARACTER OF THE AREA INVOLVES THE PLANTING OF FIRE RETARDANT VEGETATION ALONG BORDERING TERRAIN. PREVAILING EASTWARD WINDS IN THE AREA MAY WARRANT MORE EXTENSIVE FIRE PRECAUTIONARY MEASURES ALONG THE EASTERN EDGE OF THE ACTIVE PORTUGUESE BEND LANDSLIDE.



CULTURAL RESOURCES **TABLE:** S5-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED	HARDEN ESTATE	2 DOCUMENTED SITES PLUS PROBABILITY ON STABLE LANDS	COASTAL BLUFFS PLUS ACTIVE LANDSLIDE
LEVEL OF SIGNIFICANCE	●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

SOCIO/CULTURAL

SOCIAL FACTORS

THE PLANNING, OPERATION AND OTHER RESPONSIBILITIES ASSOCIATED WITH ABALONE COVE BEACH PARK FALL UNDER THE JURISDICTION OF LOS ANGELES COUNTY DEPARTMENT OF BEACHES. THE COUNTY HAS ALSO DESIGNATED THE ACQUISITION OF THE ACTIVE PORTUGUESE BEND LANDSLIDE WHERE IT ADJOINS THE PARK'S EASTERN PROPERTY LINE. IF ACQUIRED AND PLACED UNDER THE CONTROL OF THE DEPARTMENT OF BEACHES, WHICH THIS PLAN SUPPORTS, THIS WOULD RESULT IN THE DEPARTMENT'S RESPONSIBILITY FOR 130 ACRES OR 98.5% OF THE LAND AREA WITHIN SUBREGION 5.

CULTURAL RESOURCES

HISTORICAL RESOURCES

THE HARDEN ESTATE EXISTS ON A 1.9 ACRE SITE ADJOINING PALOS VERDES DRIVE SOUTH JUST TO THE WEST OF PORTUGUESE POINT. INFORMATION PERTAINING TO THE STRUCTURE'S HISTORY WAS ONLY OBTAINABLE THROUGH AN ARTICLE APPEARING IN THE PALOS VERDES REVIEW. THE ESTATE WAS APPARENTLY UNDER CONSTRUCTION IN LATE 1929 AND SERVED AS A PERMANENT RESIDENCE FOR THE HARDENS FOLLOWING THE SELLING OF THEIR 380 ACRE RESIDENCE IN SCARBOROUGH-ON-HUDSON, NEW YORK IN 1949. CURRENTLY THE MAIN STRUCTURE IS DIVIDED INTO TWO RESIDENCES WITH NO APPARENT ALTERATION TO ITS ORIGINAL CHARACTER. THIS ESTATE SERVES AS AN IMPORTANT COMPONENT IN THE PENINSULA'S FEW REMAINING HISTORICAL SITES.

ARCHAEOLOGICAL RESOURCES

ARCHAEOLOGICAL RESOURCE VALUE HAS BEEN IDENTIFIED FOR THE ENTIRE LAND AREA WITHIN SUBREGION 5. TWO SITES ARE DOCUMENTED WITH ONE INCURRING DAMAGE AS A RESULT OF LAND MASS MOVEMENTS ASSOCIATED WITH THE PORTUGUESE BEND LANDSLIDE. ANY ADDITIONAL ARCHAEOLOGICAL FIND(S) LOCATED ON THE ACTIVE PORTUGUESE BEND LANDSLIDE PROBABLY HAS INCURRED DAMAGE AS A RESULT OF EITHER PAST DEVELOPMENT IN THE AREA OR THROUGH THE CONTINUAL TERRAIN ALTERATIONS BROUGHT ABOUT BY THE LANDSLIDE ITSELF. THE REMAINING STABLE PORTIONS OF THE SUBREGION

HAVE BEEN NOTED AS PROBABLE ARCHAEOLOGICAL AREAS. FOR THIS REASON CONSTRUCTION PROJECTS SHOULD BE COGNIZANT OF THE LIKELIHOOD OF UNCOVERING ARCHAEOLOGICAL RESOURCES.

PALEONTOLOGICAL RESOURCES

AS DISCUSSED AT THE REGIONAL LEVEL, PALEONTOLOGICAL FINDS ARE HIGHLY PROBABLE ALONG COASTAL BLUFFS AND ACTIVE LANDSLIDE AREAS (PG. S/C-6). SINCE A HIGHER EROSION RATE IS ASSOCIATED WITH THE ACTIVE LANDSLIDE THAN THAT OF ADJOINING COASTAL BLUFFS, IT IS APPROPRIATE TO NOTE THE HIGHER PROBABILITY FOR PALEONTOLOGICAL FINDS IN THIS AREA.

URBAN ENVIRONMENT

ACTIVITY AREAS

COMPATIBILITY OF ADJACENT ACTIVITY AREAS

THE COMPATIBILITY OF ADJACENT ACTIVITIES ASSOCIATED WITH SUBREGION 5 POINTS CONCERN TO ACTIVITY INTERNAL OF THE SUBREGION. ABALONE COVE PARK, A FACILITY OWNED AND OPERATED BY LOS ANGELES COUNTY, IS GENERATING PARKING IMPACTS ON LOCAL STREETS SURROUNDING THE PARK (SEE VEHICULAR NETWORKS). THE ISSUE OF A PARK FACILITY ABUTTING A RESIDENTIAL NEIGHBORHOOD IS NOT THE CONCERN; HOWEVER, THE NATURE, INTENSITY OF USE, AND ITS ORIENTATION IS. THEREFORE, ISSUES REGARDING THE FUTURE PLANNING OF THIS PARK ARE ADDRESSED HEREIN.



EXISTING ACTIVITIES

RESIDENTIAL

THE HARDEN ESTATE IS THE SOLE RESIDENTIAL STRUCTURE LOCATED WITHIN THIS SUBREGION. THIS ESTATE IS AN IMPORTANT COMPONENT OF THE CITY'S HISTORICAL RESOURCES AND A DISCUSSION OF ITS SIGNIFICANCE CAN BE FOUND IN THE HISTORICAL SECTION.

RECREATIONAL

TERRESTRIAL

MANY ADVERSE IMPACTS ARE BEING EXPERIENCED BY BOTH THE MARINE ENVIRONMENT AND SURROUNDING RESIDENTIAL AREAS (ABALONE COVE COMMUNITY BEING THE MOST IMPACTED AREA) SINCE THE OPENING OF ABALONE COVE PARK IN 1975. THE INTENDED USE AND ORIENTATION OF THIS PARK BY LOS ANGELES COUNTY IS STATED WITHIN THE EIR, PREPARED IN CONJUNCTION WITH THE ACQUISITION PROPOSAL, AS FOLLOWS:

> ''THE PROPOSED BEACH WILL BE A NATURE STUDY AREA RATHER THAN A HIGH DENSITY BATHING BEACH. THE AREA WILL PROVIDE THE GENERAL PUBLIC WITH THE OPPORTUNITY OF EXPERIENCING THE WILD BEAUTY AND ENVIRONMENT OF THE TIDE AND SUBMERGED LAND IN THE AREA''.

HOWEVER, THE ACTUAL USE OF THIS FACILITY HAS VEERED FROM THIS INTENT. SINCE THE OPENING OF THIS FACILITY, EXTENSIVE OVERFLOW PARKING PROBLEMS ARE BEING EXPERIENCED (SEE INFRASTRUCTURE SECTION) ALONG WITH A SEVERE DEGRADATION OF THE TIDE POOL ENVIRONMENT (SEE BIOTIC RESOURCE SECTION).

THE FUNDING FOR MASTER PLANNING AND FUTURE DEVELOPMENT OF THE PARK HAS BEEN CUT.

Marine

Subregion 5 offers the widest range of marine recreational opportunities of all the subregions. This is a result of both public access being afforded by the Park and the rich and diverse marine life in the area. Shoreline users are attracted for activities such as fishing, tide pool observation, clamming, collecting, spearfishing, skin and scuba diving, education, beach-combing, swimming and sun bathing. Offshore sport diving and fishing is a frequent occurrence in the area.

Agriculture

Current grain farming in this subregion is located on a small plateau in the northwestern confines of Abalone Cove Park. The maintaining of this activity here is considered to be of low priority due to the land's ability to broaden established wildlife and vegetation habitats in the area and/or support recreational activity in conjunction with the Park's operation.

Potential Activities

Recreational

Existence of both terrestrial/marine environments and beach orientated recreational facilities dictate the need for this Park to respond to two factors. Terrestrial and marine environments are of a high quality in many areas and highly susceptible to human degradation, especially in terms of the marine environment. The beach is unique to the Peninsula as a whole, with only one other beach located at Portuguese Bend.



Beach activities and natural habitats are appropriate to the site. However, the manner in which future planning facilitates these activities will determine their impact both internal and external of the site.

Presently, the entire site is not committed to either supporting beach activities or terrestrial habitats. The designed use for these areas should consider their role in adding support to existing uses on the site and not intrusion of activities that are contrary to the site's and Peninsula's capacity limits.

Los Angeles County was involved in the first stage of developing a park master plan. This initial stage involved the circulation of a questionnaire booklet published by the Department of Beaches in an effort to obtain community response to aid in developing an overall park master plan. The planning program has not established capacity limits for Abalone Cove Park. However, a study

CONDUCTED IN 1973 ENTITLED FACTORS AFFECTING THE PUBLIC DEVELOPMENT OF ABALONE COVE MADE SUCH AN ATTEMPT. THIS STUDY IS REFERRED TO HEREIN ONLY AS AN INDICATION OF CAPACITY LIMITS AND SHOULD NOT BE CONSTRUED AS CONCRETE FACTUAL INFORMATION. IN FACT, INFORMATION CONTAINED IN THIS REPORT WAS HIGHLY DISPUTED IN AN INTER-OFFICE MEMO PREPARED BY THE DEPARTMENT OF BEACHES. THEIR CONTENTIONS ARE NOT ON A FACTUAL BASIS AND THEREFORE THIS PLAN MUST RELY ON THE STUDY FOR AN INDICATION OF THE PARK'S CARRYING CAPACITY. HOPEFULLY, THE DEPARTMENT OF BEACHES WILL SET A CAPACITY LIMIT ON THE PARK VIA THEIR MASTER PLAN PROGRAM WHICH CAN SERVE AS AN ACCURATE USE LIMIT.

THE BEACH AREA HAS A DEFINED LIMIT AND CANNOT BE EXPANDED. BASED ON THIS LIMITATION, IT WAS POSSIBLE FOR THE ABALONE COVE STUDY TO ESTABLISH A SPECIFIC CARRYING CAPACITY IN TERMS OF USERS. THE CONCLUSION IN THE REPORT INDICATES A 1,512 PERSON PEAK DAY CAPACITY (THIS INCORPORATES A USER TURNOVER OF 2 PLUS A 40% OVERLOAD DURING PEAK USER PERIODS). IF THIS FIGURE IS ACCURATE, THEN PARKING SPACES SUPPLIED SHOULD RESPOND TO THIS BEACH CAPACITY. UTILIZING THE 1,512 FIGURE AND 3.5 PERSONS PER CAR, A PARKING SUPPLY FOR 216 CARS IS WARRANTED. PRESENTLY, ABALONE COVE PARK CONTAINS 147 SPACES WHICH INDICATES A NEED FOR 69 ADDITIONAL SPACES.

THE STUDY ALSO ESTABLISHES A BACKLAND CARRYING CAPACITY. BACKLAND AREAS, REFERRED TO BY THIS REPORT, PERTAIN TO THE SAND PICNIC AREA ADJOINING THE ABALONE COVE CLUB BUILDING, VOLLEYBALL COURTS, AND PADDLE TENNIS COURTS, WHICH ACCOUNT FOR A USEABLE BACKLAND AREA OF 40,000 SQUARE FEET. THE CAPACITY LIMIT ARRIVED AT FOR THIS AREA IS 2,240 PERSONS PER PEAK DAY (INCORPORATING A USER TURNOVER OF 2, PLUS A 40% OVERLOAD DURING PEAK USE PERIODS). THIS WOULD WARRANT 320 PARKING SPACES.

ADDING THE BEACH AREA AND BACKLAND AREA PARKING REQUIREMENTS TOGETHER, THE RESULTING SUM IS 536 SPACES. HOWEVER, A PARKING ANALYSIS CONTAINED IN THE REPORT ESTABLISHES A 280 SPACE CAPACITY LIMIT FOR LANDS IN A REASONABLE PROXIMITY TO THESE ACTIVITIES. THIS WOULD RESULT IN A COMBINED USE LIMIT OF 1,960 PERSONS PER DAY. ANY ADDITIONAL SPACES BEYOND THE 280 LIMIT WOULD REQUIRE EXTENSIVE GRADING OR NECESSITATE THEIR LOCATION OUTSIDE OF AN EFFICIENT SERVICE DISTANCE.

ALTHOUGH THE EXACT NUMBER OF PERSONS FACILITATED AND PARKING SPACES PROVIDED FOR MAY ALTER, BASED ON FURTHER STUDY CONDUCTED IN CONJUNCTION WITH THE ABALONE COVE PARK MASTER PLAN, THESE FIGURES SERVE AS THE ONLY REASONABLE SOURCE FROM WHICH THIS PLAN CAN ASSESS POTENTIAL IMPACTS GENERATED BY THIS FACILITY AT COMPLETION. IT IS ALSO PERTINENT TO POINT OUT THAT THE STUDY DID NOT ASSOCIATE A PATRONAGE USE WITH HABITAT AREAS. THIS MAY OR MAY NOT BE VALID. IT IS CLEAR THAT ITS VALIDITY CAN ONLY BE DETERMINED THROUGH THE EVENTUAL MASTER PLAN, FOR WHICH FUNDING IS CURRENTLY DISCONTINUED.

Induced Activities

Recreational

The remaining portion of the active Portuguese Bend landslide, which currently lies in private ownership, has been designated for acquisition by both the State and County. The State establishes this site as part of the California Coastal Zone Acquisition List. Although the site is not a part of Proposition 2's Acquisition List (the subsequent measure through which monies for acquisition became available), it is intended that grant monies distributed to local jurisdictions through this measure, could be applied to the site's acquisition. The County is also proposing that the site be part of the Acquisition List developed in conjunction with their current General Plan program.

If acquired, the site's present status would most likely incur only minor alterations. The primary value associated with the landslide lies in its capacity to support natural habitat communities. Under the present private ownership, existing geologic constraints inhibit development on the land. Under possible public ownership these constraints would remain the same, but positive efforts could be initiated towards the enhancement of established habitats. Therefore, continued private ownership maintains a status quo situation while public ownership could be interpreted to generate positive actions towards enhancement of the present state.

It is felt that the public responsibility for this site would most appropriately fall to the County. The site's adjacency and habitat commonalities with Abalone Cove Park create strong functional relationships. With one agency's control over both areas, possible planning and operational conflicts would be avoided.

Infrastructure

The existing and probable future character of Subregion 5 does not require an extensive infrastructure system for internal activities; however, within this subregion are portions of two networks which are vital to an efficient city. The two essential networks (sewerage trunkline and road) which traverse the area are common to most of the coastal region, but the conditions through which they pass are not common; specifically an active landslide. The Portuguese Bend landslide was identified in the General Plan as "a major problem" with respect to land use, safety, and infrastructure service. Insofar as the infrastructure is concerned, both the roadway and sewerage trunkline are substantially impacted and, to a point, dominated by the landslide.

Although the discussion of the infrastructure within Subregion 5 centers primarily around this adverse condition, the County's role as landowner, planner, and developer for about 80 acres is also significant. This is particularly true with respect to traffic, parking, and paths and trails.

ACTIVITY AREAS

TABLE: S5-C

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	≤ 1	≤ 2	≤ 4	≤ 6	> 6	RETAIL	REC.			
EXISTING	121 AC.	11 AC.	1 AC.								11 AC.	
EXISTING UNITS			2 S.F.									
EXISTING POPULATION			7									
GENERAL PLAN	121 AC.	11 AC.	1 AC.								11 AC.	
GENERAL PLAN UNITS			1 S.F.									
GENERAL PLAN POPULATION			4									
COASTAL PLAN	121 AC.	11 AC.	1 AC.								11 AC.	
COASTAL PLAN UNITS			1 S.F.									
COASTAL PLAN POPULATION			4									
INTERIM PROFILE	121 AC.	11 AC.	1 AC.								11 AC.	
INTERIM PROFILE UNITS			2 S.F.									
INTERIM PROFILE POPULATION			7									

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

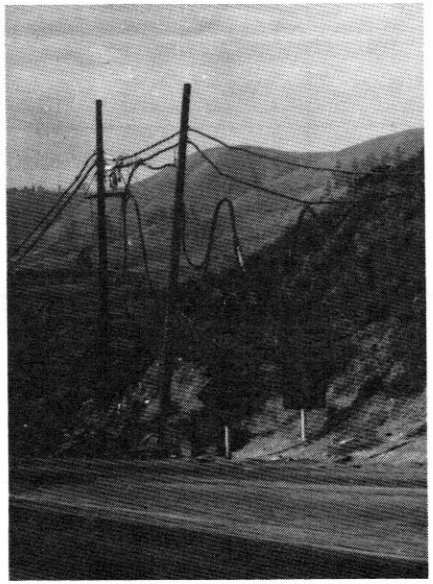
Disposal Systems

Current sewerage facilities within Subregion 5 consist of the Sanitation District's trunk sewerage line and a pumping station. While normally associated with sanitation facilities, both the trunkline and pumping station take on characteristics not normally found in such a system, but which are necessary because of the landslide.

Consisting of as many as three individual lines, the trunk first enters the subregion in the area of Wayfarer's Chapel and then runs parallel to Palos Verdes Drive South throughout the remaining eastern portion of the subregion. The trunk enters the area below grade and continues to about Portuguese Point, where, because of constant earth movement, it is necessary for the line to be exposed (above grade) to the subregion boundary. This is essential so that continual inspection and maintenance can be provided. The exposed trunklines are located immediately adjacent to the roadway and are therefore highly visible and subject to damage from vehicles or vandalism.

The pumping plant is located at a small site immediately east of the Abalone Cove Beach Park entrance. While its main function is obvious, it can also provide a method of temporarily shutting off the sewage flow in case of a break in the line or for routine maintenance procedures. Discussions with representatives of the Sanitation District indicate that the pump station was actually intended as a temporary facility; however, it has resulted in a rather permanent installation. It is made up of two temporary pumps which are functioning "over capacity" and are considered "inadequate" by the Sanitation District (Fuller, Epic, Hansen, interviews).

Aside from the adverse visual character and an occassional minor crack, the trunk and pumps functioned adequately until December, 1976, when previously undocumented earth movement caused a break in the trunkline at its connection with the pump station. The result was a major spill of raw sewage for a period of almost 24 hours. The spill created significant environmental damage and health hazard to the Abalone Cove area (terrestrial and marine). The damage to the system has



BEEN REPAIRED, BUT THE SITUATION IS STILL CONSIDERED TENUOUS. SUBSEQUENT TO THE BREAK, THE SANITATION DISTRICT INITIATED THE NECESSARY PROCEDURES WITH THE CITY TO MOVE THE PUMP STATION TO A NEW SITE WHICH IS CONSIDERED STABLE (GEOLOGY REPORT OF SANITATION DISTRICT'S PUMP STATION AT PALOS VERDES DRIVE SOUTH AND SEA COVE, PALOS VERDES, CALIFORNIA, MARCH 17, 1976, DEPARTMENT OF COUNTY ENGINEER, DESIGN DIVISION). THE PROPOSED SITE IS NOT LOCATED WITHIN THE COASTAL REGION BUT IMMEDIATELY ADJACENT TO IT, ON THE NORTH SIDE OF PALOS VERDES DRIVE SOUTH AT THE SEA COVE DRIVE INTERSECTION. THE NEW PUMP STATION WILL PROVIDE ADEQUATE SERVICE TO THE CITY FOR THE FORESEEABLE FUTURE.

AN ISSUE WHICH IS NOT KNOWN TO BE SIGNIFICANT AT THIS TIME, BUT ONE THAT COULD BECOME SIGNIFICANT, RELATES TO THE DEVELOPMENT OF THE COUNTY'S ABALONE COVE BEACH PARK. A REVIEW OF RECORDS INDICATES THAT THE PARK DOES NOT UTILIZE PUBLIC SEWERAGE FACILITIES (CURTIS, INTERVIEW). WHILE THIS IS NOT UNUSUAL FOR THE PENINSULA, NOR IS IT NECESSARILY ADVERSE OR UNHEALTHY, IT IS A SITUATION THAT REQUIRES INVESTIGATION, PARTICULARLY WITH RESPECT TO DEVELOPMENT PLANS AT THE PARK.

IN THE PAST, THE ONCE PRIVATELY OWNED BEACH CLUB PROBABLY DID NOT WARRANT A SEWERAGE HOOK-UP (DUE TO ITS LIMITED PATRONAGE); HOWEVER, WITH ITS ACQUISITION BY THE COUNTY AND SUBSEQUENT INCREASED PATRONAGE, THE DISPOSAL FACILITIES MAY REQUIRE UPGRADING. IT IS NOT THE INTENT OF THIS PLAN TO DIRECT ACTION TO BE TAKEN BY THE COUNTY, BUT BECAUSE OF THE POTENTIAL FOR ENVIRONMENTAL DEGRADATION AND/OR HEALTH HAZARDS DUE TO IMPROPER SEWAGE TREATMENT, IT IS SUGGESTED THAT THE ISSUE BE FULLY ANALYZED AND THAT DATA BE PROVIDED IN THE ENVIRONMENTAL IMPACT REPORT WHICH IS EXPECTED TO PRECEDE A DEVELOPMENT PLAN FOR THE PARK.

TRANSPORTATION SYSTEMS

VEHICULAR NETWORK

THE VEHICULAR NETWORK ASSOCIATED WITH SUBREGION 5 INCLUDES PALOS VERDES DRIVE SOUTH AND AN UNNAMED PUBLIC ROAD WHICH PROVIDES ACCESS TO THE COUNTY'S ABALONE COVE BEACH PARK. ISSUES OF A MAJOR CONCERN TO THIS COMPONENT INCLUDE ROAD CONDITION, TRAFFIC, AND PARKING.

IN THE 1 1/2 MILE LENGTH OF PALOS VERDES DRIVE SOUTH THROUGH SUBREGION 5, THIS ARTERIAL RANGES FROM A FOUR-LANE DIVIDED ROAD IN RELATIVELY GOOD CONDITION TO A TWO-LANE UNDIVIDED ROAD IN EXTREMELY POOR CONDITION. THE FOUR-LANE DIVIDED SEGMENT IS SITUATED IN THE WESTERN HALF WHILE THE TWO-LANE SEGMENT MAKES UP THE EASTERN HALF (AND CONTINUES EASTWARD THROUGHOUT THE REMAINDER OF THE COASTAL REGION). AS EXPECTED, THE DIVIDED SEGMENT APPEARS TO FUNCTION NORMALLY, WHEREAS THE CONDITION OF THE NARROW SEGMENT DOES NOT ALLOW FOR NORMAL FUNCTION (E.G., SPEED, FLOW, SAFETY, COMFORT, ETC.).

THE SOLE FACTOR IN THE DIFFERENCE IN ROAD FUNCTION AND CONDITIONS WITHIN THE SUB-

REGION IS THE EXISTENCE OF AN ACTIVE LANDSLIDE. TRIGGERED IN 1956, THE PORTUGUESE BEND LANDSLIDE HAS DESTROYED NOT ONLY ROADS BUT DWELLINGS. CONTINUOUS MAINTENANCE OPERATIONS ARE REQUIRED AT AN ESTIMATED COST OF $50,000 PER YEAR; HOWEVER, EVEN WITH THE MONEY AND EFFORT EXPENDED, THE ROADWAY IS CONSTANTLY IN A STATE OF DETERIORATION: DISTORTED, BUCKLED, AND BROKEN.

ASIDE FROM THE OBVIOUS MAINTENANCE PROBLEMS, THE RESULT OF THE LANDSLIDE CONDITION IS MANIFESTED IN TRAFFIC SAFETY HAZARDS, ABNORMAL TRAFFIC FLOW, AND DISCOMFORT. IN AN EFFORT TO MITIGATE THESE INTERRELATED FACTORS, THE CITY HAS IMPOSED A SUGGESTED SPEED LIMIT OF 25 MILES PER HOUR THROUGH THE LANDSLIDE AREA, WHICH, IF USED, MAKES FOR A SMOOTHER AND SAFER RIDE. IT HAS BEEN SUGGESTED (AND SOMEWHAT SUBSTANTIATED) THAT THE LANDSLIDE ALSO ACTS AS A MAJOR OBSTACLE WHICH DRIVERS WILL AVOID IF POSSIBLE (SEE COASTAL REGION).

DISCUSSIONS WITH THE PUBLIC WORKS DEPARTMENT AND THE COUNTY ROAD DEPARTMENT INDICATE THAT THE CONDITION WILL CONTINUE FOR AT LEAST THE FORESEEABLE FUTURE; THEREFORE, IS CONSIDERED A LONG RANGE PLANNING CONSTRAINT. IN ADDITION TO THE OBVIOUS, BUT IMPRACTICAL SOLUTION OF ''STOPPING THE SLIDE'', MANY PROPOSALS HAVE BEEN FORWARDED AS TO HOW TO MITIGATE THE PROBLEM. THE PROPOSALS RANGE FROM TUNNELING UNDER OR BRIDGING OVER THE SLIDE MASS, TO THE CONSTRUCTION OF AN OFFSHORE CAUSEWAY.

DUE TO ITS NON-RESIDENTIAL CHARACTER, SUBREGION 5 DOES NOT GENERATE SIGNIFICANT MORNING PEAK HOUR TRAFFIC; HOWEVER, THE EXISTING ACTIVITIES WITHIN THE AREA HAVE THE POTENTIAL TO GENERATE SUBSTANTIAL QUANTITIES OF TRAFFIC AT VARIOUS OTHER TIMES, PARTICULARLY SUMMER WEEKEND AFTERNOONS. CURRENTLY, THE COUNTY'S ABALONE COVE BEACH PARK IS THE ONLY ACTIVITY WITHIN THE SUBREGION CAPABLE OF GENERATING ANY NOTICEABLE TRAFFIC. IN ORDER TO ESTIMATE THE TRAFFIC CURRENTLY GENERATED BY THE PARK, A SIMULATED ''TYPICAL WORST CASE'' CONDITION (NO OFF-SITE PARKING) WAS ESTABLISHED WHICH RESULTS IN ABOUT 74 PEAK HOUR OUTBOUND TRIPS. ASSUMING AN EQUAL EAST-WEST SPLIT AT PEAK HOUR, THE IMPACT OF THE SUBREGION TRAFFIC AT THE COASTAL SPECIFIC PLAN CORDON IS NOT CONSIDERED TO BE PARTICULARLY GREAT. FOR EXAMPLE, AT THE 25TH STREET COASTAL SPECIFIC PLAN CORDON, THE TOTAL PEAK HOUR TRAFFIC GENERATED BY SUBREGION 5 RESULTS IN LESS THAN 5% OF ITS 1,000 CAR CAPACITY AND OTHER CORDON LOCATIONS SHOW LESS THAN 1% CAPACITY (SEE COASTAL REGION TRAFFIC FOR CUMULATIVE IMPACT).

WHILE THE TRAFFIC WHICH IS CURRENTLY GENERATED BY THE PARK IS NOT CONSIDERED TO BE A PROBLEM, PARKING IS A PROBLEM THAT HAS DRAWN CONSIDERABLE ATTENTION. WITH THE OPENING OF ABALONE COVE TO THE PUBLIC CAME THE NEED TO FACILITATE THE CARS WHICH TRANSPORT PATRONS TO THE BEACH. ORIGINALLY, IT WAS THOUGHT THAT THE LIMITED ON-SITE PARKING WOULD MORE OR LESS LIMIT THE NUMBER OF PATRONS, BUT SOON AFTER THE UNIQUE COASTLINE FACILITY OPENED IT WAS CLEAR THAT THIS SELF-LIMITING HYPOTHESIS WAS NOT GOING TO BE THE CASE. RATHER, BECAUSE OF ITS POPULARITY AND BECAUSE NO MAXIMUM USER CAPACITY WAS PLACED ON THE FACILITY, CARS OVERFLOWED TO ANY AND ALL

AVAILABLE PARKING SPOTS - LEGAL AND ILLEGAL. THE PARKING OVERFLOW DISRUPTED TRAFFIC ON PALOS VERDES DRIVE SOUTH, UTILIZED PRIVATE PARKING AT WAYFARER'S CHAPEL, AND ADVERSELY IMPACTED ADJACENT RESIDENTIAL AREAS (SEE INFRASTRUCTURE SUBREGION 4). EFFORTS SUCH AS POSTING NO PARKING AND BLOCKING NON-RESIDENT ACCESS TO RESIDENTIAL AREAS HAVE SINCE RELIEVED MOST OF THE PARKING PROBLEMS. HOWEVER, THE BASIC ISSUE STILL REMAINS: SPECIFICALLY, THERE APPEARS TO BE TOO LITTLE ON-SITE PARKING FOR THE NUMBERS OF PATRONS ALLOWED TO ENTER THE FACILITY AT A GIVEN TIME, THE RESULT BEING AN ADVERSE IMPACT TO THE ADJACENT COMMUNITY.

THE FUTURE OF TRAFFIC AND PARKING WITHIN THE SUBREGION WILL LARGELY BE DETERMINED BY THE PLANNING EFFORTS OF THE COUNTY. SINCE THERE IS NO INDICATION AS TO THE RESULT OF SUCH ACTIVITIES, THIS PLAN AGAIN UTILIZES A ''WORST CASE'' SCENARIO TO PROJECT TRAFFIC IMPACTS. IT IS ESTIMATED THAT, GIVEN A LOGICAL AREA CARRYING CAPACITY (NO OFF-SITE PARKING), SUBREGION 5 WILL GENERATE APPROXIMATELY 140 OUTBOUND TRIPS (13% INCREASE) AT ITS PEAK AFTERNOON TRAFFIC HOUR. USING A SIMILAR DISTRIBUTION METHODOLOGY AS THAT USED EARLIER, IT IS PROJECTED THAT THE TRAFFIC GENERATED BY THIS SUBREGION WOULD BE ABOUT 7% OF THE DIRECTIONAL CAPACITY FOR THE COASTAL SPECIFIC PLAN CORDON LOCATION AT 25TH STREET.

ANOTHER ISSUE WHICH HAS CAUSED SOME CONCERN RELATES TO THE PARK ENTRANCE. THE MEDIAN DIVIDER ON PALOS VERDES DRIVE SOUTH HAS NOW BEEN OPENED TO ALLOW FOR LEFT HAND TURNING MOVEMENTS INTO OR OUT OF THE PARK; HOWEVER, THE PARK ENTRANCE IS INADEQUATE AND THERE IS LITTLE STACKING SPACE AND LIMITED SIGHT DISTANCE.

PATH AND TRAIL NETWORKS

THE ABILITY TO FACILITATE A DIRECT PATH AND TRAIL ROUTE THROUGH SUBREGION 5 IS HAMPERED BY THE MULTITUDE OF TERRAIN CONDITIONS PRESENT IN THIS AREA. HOWEVER, VARIOUS SIDE LOOPS STEMMING FROM THE PALOS VERDES DRIVE SOUTH CORRIDOR COULD BE FACILITATED TO KEY INTEREST POINTS. THE FIRST LOOP, MOVING IN A WEST TO EAST DIRECTION, WOULD ENCOMPASS A BIKEWAY AND WALKWAY OF A CLASS I DESIGN AND WOULD PARALLEL THE BLUFF IN THE WESTERN PORTION OF ABALONE COVE PARK. THIS LOOP SHOULD BE DESIGNED TO FACILITATE THE RECREATIONAL PARTICIPANT. THE SECOND LOOP IS TRANS-PORTATIONAL IN NATURE AND SIMPLY INVOLVES THE PROVIDING OF ACCESS TO THE BEACH FOR BOTH PEDESTRIAN AND CYCLIST. IN REALITY, THIS ROUTE CURRENTLY EXISTS AND MAY ONLY REQUIRE SIGNING, IF THAT. THE NEXT PATH AND TRAIL LOOP WOULD VEER FROM PALOS VERDES DRIVE SOUTH JUST TO THE EAST OF PORTUGUESE POINT. THE ROUTE COULD UTILIZE AN ABANDONED ROADWAY WHICH LEADS DIRECTLY TO THE POINT. FROM PORTUGUESE POINT THE VISITOR WOULD BE AFFORDED EXCELLENT VIEWS ALONG WITH ACCESS TO SMUGGLER'S COVE.

THE PREVIOUSLY MENTIONED ROUTES COULD SERVE AS THE PARK'S PRIMARY LOOP SYSTEM. IN ADDITION TO THESE ROUTES VARIOUS HIKING PATHS COULD BE FACILITATED THROUGHOUT THE PARK AND LANDSLIDE AREA. IF THE PORTUGUESE BEND LANDSLIDE AREA IS ACQUIRED BY THE COUNTY, A MINOR PATHWAY COULD TRAVERSE THE AREA AS AN

EXTENSION OF THE PARK SYSTEM. IF THE EXTENSION IS IMPLEMENTED, PRECAUTIONARY MEASURES SHOULD BE INCORPORATED TO GUARD AGAINST POSSIBLE INJURY SUSTAINED BY THE USER DUE TO THE TERRAIN'S CREVICED NATURE.

A MAJOR CONCERN FACTOR ASSOCIATED WITH THE PATH AND TRAIL SYSTEM INVOLVES UNCONTROLLED HUMAN ACCESS TO THE SHORELINE. PAST EXPERIENCE HAS SHOWN THAT UNCONTROLLED HUMAN ACCESS TO THE VALUABLE AND VULNERABLE MARINE INTERTIDAL REGION CAUSES SEVERE DEGRADATION OF INTERTIDAL AND NEAR SHORE HABITATS. ALTHOUGH A RESERVE STATUS HAS BEEN DESIGNATED FOR NEAR SHORE HABITATS BY THE DEPARTMENT OF FISH AND GAME, THESE MEASURES WILL ONLY SERVE THEIR PURPOSE IF PROPERLY ENFORCED. THEREFORE, IF ADEQUATE MANPOWER IS NOT AVAILABLE TO POLICE THE ENTIRE SHORELINE IN THIS AREA, THEN KEY ACCESS POINTS AND SUPPORTIVE PATH AND TRAIL NETWORKS SHOULD NOT BE IMPLEMENTED. IT IS IMPORTANT THAT THE ENTIRE PATH AND TRAIL SYSTEM IN THIS SUBREGION IS IMPLEMENTED WITH FORESIGHT GIVEN TO THE EVENTUAL HUMAN EXPOSURE TO MARINE AS WELL AS TERRESTRIAL HABITATS. THE PATH AND TRAIL NETWORK SHOULD RELATE STRONGLY TO THE PARK'S EVENTUAL CHARACTER AS DEVELOPED THROUGH THE SITE'S MASTER PLAN.

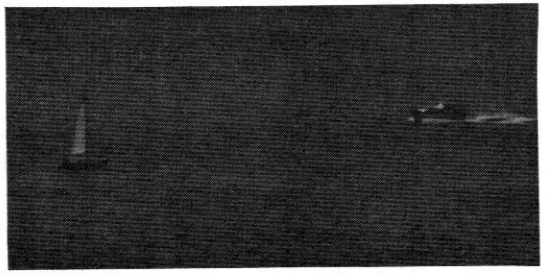
POLICIES

IT IS THE POLICY OF THE CITY TO:

1. ENSURE THAT FLOOD CONTROL IMPROVEMENTS WITHIN SUBREGION 5 ARE CARRIED OUT IN A MANNER THAT IS CONSISTENT WITH APPLICABLE GENERAL PLAN AND COASTAL SPECIFIC PLAN POLICIES REGARDING PRESERVATION OF NATURAL HABITATS, VISUAL CHARACTER, AND FLOOD CONTROL.

2. ENCOURAGE THE DEPARTMENT OF BEACHES TO WORK WITH FIRE OFFICIALS IN ORDER TO ENSURE THAT ADEQUATE FIRE PRECAUTIONARY MEASURES ARE INCORPORATED INTO THE ABALONE COVE PARK MASTER PLAN.

3. ENCOURAGE THE DEPARTMENT OF BEACHES TO ESTABLISH APPROPRIATE CARRYING CAPACITY LIMITS FOR ABALONE COVE PARK AS PART OF ITS MASTER PLAN EFFORT AND REQUIRE PATHS AND TRAILS LINKING WITH THE COASTAL CORRIDORS.



INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 6 IS AN EXISTING RESIDENTIAL AREA WHICH IS SOLELY DEVELOPED AS A SINGLE-FAMILY COMMUNITY WITH BEACH FACILITIES. IN TOTAL THE AREA IS ABOUT 58 ACRES AND LIES WITHIN THE CONFINES OF THE PORTUGUESE BEND CLUB WHICH IS A PRIVATE, GATED COMMUNITY. THE AREA IS BORDERED ON THE WEST BY THE ACTIVE PORTUGUESE BEND LANDSLIDE AND ON THE EAST BY VACANT LAND IDENTIFIED AS SUBREGION 7. THE FUNDAMENTAL CRITERIA WHICH DEFINE THIS AREA AS AN INDIVIDUAL SUBREGION ARE ITS STRONG UNIFIED CHARACTER AND ACTIVE HOMEOWNERS ASSOCIATION NETWORK, CREATING A HOMOGENEITY WHICH ESTABLISHES IT AS A DISTINCT NEIGHBORHOOD.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

THE CLIMATIC PROFILE OF ZONE 1, PRESENTED IN THE CLIMATE SECTION OF THE COASTAL REGION, IS REPRESENTATIVE OF THE GENERAL WEATHER PATTERN IN THIS SUBREGION. ONE POINT OF VARIANCE INVOLVES THE HIGHER DEGREE OF ANNUAL RAINFALL (AVERAGING 12+ INCHES PER YEAR). THIS HIGH ANNUAL RAIN FALL IS REFLECTIVE OF THE COASTLINE RE-CEDING FURTHER INLAND IN THIS LOCATION AS COMPARED TO OTHER COASTAL LANDS.

MARINE

OF ALL THE SUBREGIONS, THIS AREA POTENTIALLY STANDS TO SUFFER THE MOST DAMAGE FROM WAVE ACTION. DUE TO THE SHORELINE OF THIS AREA BEING ORIENTED IN A MANNER WHICH HAS NO

SHELTERING LAND MASSES PROTECTING IT FROM SOUTHERLY OR PREVAILING WESTERLY SWELL AND WINDWAVES, CERTAIN CONDITIONS, IF OCCURRING AT OR ABOUT THE SAME TIME, COULD POSE A SERIOUS THREAT TO RESIDENTIAL STRUCTURES LOCATED JUST ABOVE THE WATER'S EDGE IN PORTUGUESE BEND. THE CONDITIONS THAT MUST OCCUR ARE A TSUNAMI OR A LARGE STORM WHICH GENERATES HIGH WAVES ORIGINATING FROM AN UNOBSTRUCTED DIRECTION (SEE SAFETY). THE THREAT POSED BY THESE CONDITIONS WOULD BE HEIGHTENED DURING HIGH TIDE PERIODS.

THE TIDES PLAY AN IMPORTANT ROLE IN THIS SUBREGION NOT ONLY FOR SAFETY REASONS AS MENTIONED ABOVE, BUT ALSO BECAUSE OF THE EXCELLENT QUALITY TIDEPOOLS AND INTERTIDAL HABITATS LOCATED AT THE SUBREGION'S SOUTHERN-MOST EXTREMITY. LOW TIDES UNCOVER ''SHELVES'' OF ROCK STRATA THAT ARE VERY ATTRACTIVE TO THE COLLECTOR.

GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

SUBREGION 6 POSSESSES VERY DIVERSE SLOPE CONDITIONS WITH FLAT LAND ALONG PALOS VERDES DRIVE SOUTH, CLIFFS EXTENDING THROUGH THE MIDDLE OF THE SUBREGION AND FLATTENING OUT AGAIN AT THE BASE OF THE STEEP SLOPES NEAR THE WATER'S EDGE.

STEEP SLOPES AND ADVERSE GEOLOGIC CONDITIONS HAVE RESULTED IN A DESIGNATION OF EXTREME HAZARD (SEE NATURAL ENVIRONMENT ELEMENT FOR DESCRIPTION), HAZARD OR MARGINAL STABILITY BY THE CITY OVER THE MAJORITY OF THE SUBREGION.

MARINE

THE NORTHERN PORTION OF THE SUBREGION HAS A ROCKY BEACH WITH AREAS OF SAND AND OTHER LANDSLIDE MATERIAL. SOUTHWARD THE ROCKY BEACH GIVES WAY TO A MAN-MADE SANDY BEACH WHICH IS USED FOR PRIVATE RECREATIONAL PURPOSES BY BEACH CLUB MEMBERS. IN THE SOUTHERN-MOST PORTION OF SUBREGION 6, THE SANDY BEACH GIVES WAY TO ROCK STRATA AND TIDE POOLS FORMED BY LARGE ROCK OUTCROPPINGS. SEAWARD OF SUBREGION 6 A SANDY BOTTOM IS PREVALENT WITH A FEW INTERSPERSED ROCK REEFS.

GEOLOGIC CONDITIONS

IT HAS BEEN DETERMINED THAT MUCH OF THE ''PORTUGUESE BEND'' SUBREGION POSSESSES GEOLOGIC PROBLEMS WHICH WOULD PRECLUDE ANY NEW DEVELOPMENT. THE AMOUNT AND VARYING DEGREE OF HAZARDS ASSOCIATED WITH SUBREGION 6 MAKE THE NORTHWESTERN PORTION (LEASE AREA) IDEALLY SUITED FOR UNSTRUCTURED USES, BUT NOT FOR NEW RESIDENTIAL DEVELOPMENT. THE REMAINING DEVELOPED AREA (FEE AREA) IS PARTIALLY CONSTRAINED BY MAJOR GEOLOGIC PROBLEMS AND CAUTION SHOULD BE EXERCISED IN THE ADJOINING AREAS WHICH ARE FREE OF GEOLOGIC HAZARD BY CONDUCTING GEOLOGIC STUDIES IN CONJUNCTION WITH FURTHER DEVELOPMENT.

HYDROLOGY

TWO MAJOR NATURAL DRAINAGE COURSES EXIST IN THIS SUBREGION. THE DEPARTMENT OF

HOUSING AND URBAN DEVELOPMENT'S FEDERAL INSURANCE ADMINISTRATION HAS IDENTIFIED ONE OF THEM, KLONDIKE CANYON, AS HAVING POTENTIAL FLOOD HAZARD IMPACTS.

IT IS IMPORTANT THAT THE CANYONS SHOULD REMAIN IN A NATURAL STATE TO PROTECT THE VERY RICH NATURAL VEGETATIVE BASE THAT HAS DEVELOPED OVER THE YEARS. THIS SHOULD HOLD TRUE UNTIL SUCH TIME THAT UPSLOPE DRAINAGE ACTIVITY INCREASES TO A POINT WHERE REASSESSMENT IS WARRANTED.

MAINTENANCE OF THIS STRONG VEGETATIVE BASE WOULD BE IN LINE WITH DEVELOPING (ENHANCING) THE VEGETATIVE BASE OF THE NATURAL LANDSLIDE AREA FOR THE SUPPORT OF A MAJOR WILDLIFE HABITAT AS PROPOSED IN THE SUBREGION 5, INDUCED ACTIVITIES DISCUSSION.

BIOTIC RESOURCES

TERRESTRIAL

THE ACTIVE LANDSLIDE AREA AND THE ADJACENT LANDS TO THE SOUTHEAST HAVE MUCH NATURAL VEGETATION. THE PRICKLEY PEAR CACTUS COMMUNITY (OPUNTIA LITTORALIS) IS PREVALENT ON MOST OF THE STEEPER SLOPES PROVIDING NOT ONLY A VEGETATIVE BASE FOR WILDLIFE BUT ALSO SERVING AS A NATURAL FIRE RETARDANT AND EROSION PREVENTATIVE.

THE BLUFF AREAS ALONG ALL PORTIONS OF THE SUBREGION, EXCEPT IN THE ''MAN CREATED'' BEACH AREA, ARE IDENTIFIED BY BIOLOGISTS AND LOCAL EXPERTS AS POSSESSING EXCELLENT QUALITY WILDLIFE HABITATS WORTHY OF PRESERVATION (SEE FIGURE 9). THESE AREAS CAN BE OF EXTREME VALUE WHEN VIEWED AS BEING ADJACENT TO OTHER AREAS OFFERING WILDLIFE HABITAT SUPPORT CAPABILITIES.



MARINE

OVER MOST OF THE SUBREGION, THE MARINE BIOTIC RESOURCE IS, OR HAS BEEN, HEAVILY IMPACTED BY THE LANDSLIDE. SILT AND CONSTANTLY-MOVING LANDSLIDE MATERIALS HAVE CAUSED MARINE LIFE QUALITY TO DECLINE OVER THE PAST TWO DECADES. AT THE SOUTHERN-MOST PORTION OF SUBREGION 6 TIDE POOL FORMATIONS POSSESS AN EXCELLENT QUALITY OF MARINE LIFE, WHICH IS SO DIVERSE AND RICH THAT THE CITY HAS DESIGNATED THIS AREA AS ONE IN WHICH A MARINE PRESERVE IS NEEDED. THE CITY SHOULD ENCOURAGE THE CALIFORNIA STATE FISH AND GAME COMMISSION TO PLACE A MARINE RESERVE STATUS ON THIS AREA. A FURTHER DISCUSSION OF THIS AREA WILL BE FOUND IN SUBREGION 7 AS THE MAJORITY OF THIS HIGH QUALITY RESOURCE LIES WITHIN ITS BOUNDS.

FIRE HAZARD

THE GENERAL PLAN IDENTIFIES A HIGH PROPENSITY TO BURN FOR AREAS ON THE INLAND SLOPE OF THE

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

TABLE S6-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED		7 AC.	11 AC.				8 AC.		4 AC.	18 AC.	RESTORATION FROM TIDE POOLS WESTWARD	18 AC.
RESTRICTED	26 AC.			31 AC.	19 AC.			1 DRAINAGE COURSE			PRESERVE ON TIDE POOL AREA	
LEVEL OF SIGNIFICANCE	●	◒	○	●	●		●	●	●	●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.
NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

''LEASE AREA''. BOTH VEGETATIVE STANDS AND STEEP SLOPES PROVIDE FEATURES WHICH WARRANT THIS CLASSIFICATION. TO DATE NO MAJOR FIRES HAVE OCCURRED.

POTENTIAL DEVELOPMENT ON A SITE NORTHWEST OF THE GATEHOUSE WOULD BE EXPOSED TO A FIRE THREAT, SHOULD ONE OCCUR. THIS CONDITION IS A RESULT OF THE SITE'S PROXIMITY TO A HIGH FIRE RISK AREA, PREVAILING EASTWARD WINDS, AND STEEP SLOPES ADJOINING THE WESTWARD EXTREMITY OF THE SITE. SITE PLANNING ACTIVITIES SHOULD BE COGNIZANT OF THIS SITUATION AND CONSULT WITH FIRE DEPARTMENT OFFICIALS TO ENSURE THAT APPROPRIATE FIRE PREVENTION MEASURES ARE INCORPORATED.

SOCIO/CULTURAL

SOCIAL FACTORS

PORTUGUESE BEND CLUB HOMEOWNERS ASSOCIATION SERVES AS THE LOCAL BODY REPRESENTING ALL HOMEOWNERS WITHIN THE SUBREGION. TWO OTHER ASSOCIATIONS, LEASEHOLDERS ASSOCIATION OF PORTUGUESE BEND CLUB AND PORTUGUESE BEND EAST HOMEOWNERS ASSOCIATION, DIRECTLY REPRESENT THEIR RESPECTIVE AREAS AND ARE LINKED THROUGH THE PORTUGUESE BEND CLUB HOMEOWNERS ASSOCIATION. FOUR MEMBERS FROM EACH OF THESE TWO ASSOCIATIONS COMPRISE THE BOARD OF DIRECTORS FOR THE PORTUGUESE BEND CLUB HOMEOWNERS ASSOCIATION.

CULTURAL RESOURCES **TABLE:** S6-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED		1 DOCUMENTED SITE PLUS PROBABILITY ON UNDISTURBED LANDS	COASTAL BLUFFS
LEVEL OF SIGNIFICANCE		●	◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

ADDITIONAL DEVELOPMENT IN THE AREA COULD VIA CC&R'S, INTEGRATE INTO THE LOCAL ASSOCIATION NETWORK IN ORDER TO MAINTAIN THE COHESIVE COMMUNITY OPERATION.

CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

ACCORDING TO THE OFFICIAL ARCHAEOLOGICAL MAP ON FILE AT THE CITY, AN ARCHAEOLOGICAL SITE IS LOCATED IN THE DEVELOPED RESIDENTIAL AREA NEAR THE GATEHOUSE IN THIS SUBREGION. THIS SITE IS NOT NOTED AS BEING ADVERSELY IMPACTED OR DESTROYED EVEN THOUGH DEVELOPMENT HAS TAKEN PLACE ON THE SITE. SINCE THIS SEEMED HIGHLY UNLIKELY, BASE DATA FILES WERE SEARCHED WHICH INDICATED THAT THE SITE IS LOCATED ON OR NEAR THE 5 ACRE SITE TO THE NORTHWEST OF THE GATEHOUSE. SINCE THIS PLAN PROPOSES DEVELOPMENT ON THE SITE, IT IS CRITICAL THAT AN ARCHAEOLOGICAL SURVEY IS CONDUCTED PRIOR TO, OR IN CONJUNCTION WITH, A PROPOSED PROJECT. IF VERIFIED, MEASURES SHOULD BE TAKEN TO EITHER PRESERVE OR EXTRACT THIS SITE PRIOR TO DEVELOPMENT.

URBAN ENVIRONMENT

ACTIVITY AREAS

EXISTING ACTIVITIES

RESIDENTIAL

ALL EXISTING AND FUTURE RESIDENTIAL ACTIVITY IN THIS SUBREGION IS, AND WILL BE, PART OF A PRIVATE GATED COMMUNITY KNOWN AS PORTUGUESE BEND CLUB (PBC). THE COMMUNITY, PRESENTLY ACCOUNTING FOR 91 RESIDENTIAL UNITS, IS COMPOSED OF TWO DEVELOPED AREAS SEPARATED BY A STRIP OF VACANT LAND. THESE AREAS ARE REFERRED TO BY LOCAL RESIDENTS AS THE ''LEASE AREA'' AND ''FEE AREA''. AS THE TERMINOLOGY CONNOTES, ONE OF THE PRIMARY DIFFERENCES BETWEEN THE TWO AREAS LIES IN THE LAND HOLDING ASSOCIATED WITH STRUCTURES AND/OR LOTS. ALTHOUGH THE AREAS POSSESS COMMONALITIES, THEIR DIVERGENCE IN OWNERSHIP WARRANTS SEPARATION WHEN CONSIDERING CIRCUMSTANCES WHICH AFFECT PLANNING PARAMETERS. THIS CIRCUMSTANCE IS ESPECIALLY EVIDENT IN THE LEASE AREA.

Lease Area

The 60 ''cottage sites'' comprising the lease area are located in the northwest area of this subregion and envelop land areas adjoining the beach club. These cottage sites represent the first large scale residential development in the coastal region and are part of the original Portuguese Bend Club (PBC) that began in the summer of 1948. Of the 60 sites, 51 have been developed as single-family residences.

The initial club area comprised 90 acres and included a clubhouse, pier, beach, and cottage sites that could be leased for a period of 25 years. The developer was Palos Verdes Corporation, which also owned the land. A master lease was entered into between Palos Verdes Corporation and PBC. The principals of these two entities were basically the same individuals. PBC in turn subleased the cottage sites to individuals, who then constructed their homes according to extensive lease restrictions. The PBC developed and leased cottage sites for a period of approximately 8 years until 1956. Disaster struck in 1956 in the form of a massive earth slide (Portuguese Bend landslide) which resulted in the eventual destruction of the clubhouse, pier, and approximately two-thirds of the cottage sites. The slide affected nearly 50 acres of the original 90 acre development. The remaining 40 acres are what is presently referred to as the PBC lease area.

From 1956 to 1971 both development and land transactions were virtually in a status quo state. In 1972, as original lease agreement expiration dates neared, a group of residents met with Palos Verdes Properties (the successor to Palos Verdes Corporation) in regards to the Company's intentions pertaining to cottage site leases and the continued maintenance of the PBC. Palos Verdes Properties formed a policy to extend the leases on a month-to-month basis.

In August 1976, Palos Verdes Properties significantly increased the lease rate on all cottage site leases that had expired and offered a new one year lease.

Although the sale of the lease area has not been resolved, it is anticipated that a cooperative agreement to sell will evolve in the future. An additional problem pertains to compliance with the Subdivision Map Act in the selling of these individual cottage sites. When PBC was developed in 1948, the developer decided to lease the cottage sites rather than sell them and transfer title. All requirements of the California Subdivision laws administered by the State at that time were complied with, and a public report was issued by the California Department of Real Estate. Because the developer desired to lease the cottage sites, the provisions of the Subdivision Map Act, administered then by the County of Los Angeles, did not have to be complied with since leased property was not covered by the Act at that time. The significance of the developer's decision to lease rather than sell created one of the most difficult legal problems. Simply stated, subdivided land cannot be sold in California without complying with the Map Act. This Act requires, among other things, the recording

OF A TRACT MAP AND PHYSICAL IMPROVEMENTS IN ACCORDANCE WITH LOCAL SUBDIVISION CODES. PUTTING THIS PROBLEM ANOTHER WAY, IT IS NOT POSSIBLE FOR LEASEHOLDERS TO PURCHASE THEIR COTTAGE SITES UNTIL THE MAP ACT IS COMPLIED WITH.

THE COMPLIANCE/NONCOMPLIANCE ISSUE IS FURTHER HEIGHTENED WHEN ADDRESSING THE EVENTUAL TRACT MAP COMPLIANCE WITH CITY CODES. BASED ON THE INHERENT GEOLOGICAL HAZARD PROFILE OF THE AREA ENCOMPASSING THESE 60 SITES, THE SUBSEQUENT ZONING DISTRICT WOULD BE OPEN SPACE HAZARD AND COASTAL SET-BACK ZONE. THESE DISTRICTS DO NOT ALLOW FOR NEW RESIDENTIAL ACTIVITY. THE CITY HAS DETERMINED THAT THE EXISTING RESIDENCES MAY REMAIN AND THE LAND BE SUBDIVIDED IF PROPER SAFEGUARDS ARE EFFECTED.

ONE ADDITIONAL DESCRIPTIVE NOTE IS IN ORDER BEFORE DISCUSSING THE FEE AREA. THE 60 COTTAGE SITES (NOT RECORDED LOTS) RANGE IN SIZE FROM 2,400 SQUARE FEET TO 9,000 SQUARE FEET. OF THESE 60 COTTAGE SITES, 9 ARE UNDEVELOPED AND OWNED BY PALOS VERDES PROPERTIES. IN ADDITION TO THE 60 COTTAGE SITES, ONE RECORDED TRACT OF 5 LOTS, EACH APPROXIMATELY 5,300 SQUARE FEET, ABUTTING YACHT HARBOR DRIVE AND ADJOINING THE EASTERN-MOST COTTAGE SITES, WAS RECORDED IN 1956. ALL FIVE LOTS ARE UNDEVELOPED AND ARE OWNED BY PALOS VERDES PROPERTIES. THESE 9 SITES AND 5 LOTS ARE WITHIN THE OPEN SPACE HAZARD OR COASTAL SET-BACK ZONE AREAS AND, FOR THIS REASON, CANNOT BE DEVELOPED.

FEE AREA

THE FEE AREA IS A PRODUCT OF TRACT 16540, RECORDED IN 1957. OF THE 42 LOTS CREATED THROUGH THIS SUBDIVISION, 31 HAVE HOUSING UNITS THAT WERE INITIALLY CONSTRUCTED ON THE LAND AREA AFFECTED BY THE PORTUGUESE BEND LANDSLIDE. THIS RELOCATION ACTIVITY TOOK PLACE DURING 1958 AND 1959. TEN OF THE REMAINING LOTS HAVE HAD CUSTOM HOMES CONSTRUCTED ON THEM, LEAVING ONLY ONE LOT FRONTING ON SEA HORSE LANE AVAILABLE FOR AN ADDITIONAL DWELLING UNIT. LOT SIZES IN THE AREA RANGE FROM 5,000 SQUARE FEET TO 10,000 SQUARE FEET.

ONLY ONE SALES LISTING, FOR $98,500, IN APRIL OF 1976, WAS AVAILABLE TO GIVE SOME INDICATION OF HOUSING COST IN THE AREA (MULTIPLE LISTING BOOK FOR THE MONTH OF APRIL 1976).

RECREATIONAL

TERRESTRIAL

THE PRIVATE BEACH AREA IN PBC CONTAINS PADDLE TENNIS COURTS, A RECREATION/RESTROOM BUILDING, PICNIC AREA, OFF-STREET PARKING, AND A MAN-MADE SANDY BEACH. THE PARKING LOT HAS A CAPACITY FOR 75 VEHICLES WITH 40 ADDITIONAL SPACES BEING SUPPLIED THROUGH DIRT AREAS ADJOINING YACHT HARBOR DRIVE/SEAWALL ROAD. RECENTLY, BEACH USE DURING PEAK PERIODS (EXAMPLE, JULY 4TH) HAS BEEN TAXING PARKING FACILITIES, RESULTING IN ON-STREET PARKING ALONG THE NARROW PRIVATE ROAD NETWORK.

THIS PRIVATE BEACH IS OPEN TO RESIDENTS OF PBC, AND TO FEE MEMBERS RESIDING ON THE PENINSULA FROM MAY 1 TO OCTOBER 31. AT

PRESENT, PBC LIMITS MEMBERSHIP TO 175 FAMILIES AT AN ANNUAL FEE OF $300 PER YEAR. THIS CONTRIBUTES $52,500 TO THE OPERATION AND MAINTENANCE OF THE MAN-MADE BEACH AREA, WHICH IS ESTIMATED TO COST APPROXIMATELY $85,000 PER YEAR, NOT INCLUDING ROAD MAINTENANCE OR STABILIZATION IN THE SLIDE AREA. PBC IN TURN LEASES THE AREA FROM PALOS VERDES PROPERTIES, WHICH SUPPORTS THE COSTS OF ROAD MAINTENANCE, STABILIZATION, AND GATE-KEEPERS.

MARINE

AUTOMOBILE ACCESS FOR CLUB MEMBERS IS PROVIDED ALMOST TO THE WATER'S EDGE, SO ACTIVITIES SUCH AS SCUBA DIVING, SURFING AND ANY OTHER WATER SPORTS, THAT MIGHT BE OTHERWISE LIMITED BY ACCESS PROBLEMS IS POSSIBLE. SAILING ACTIVITY IS ALSO COMMON.

THIS AREA, ALTHOUGH RECREATION ORIENTED, IS NOT AVAILABLE TO THE GENERAL PUBLIC DUE TO THE PRIVATE CLUB ORIENTATION.

AGRICULTURE

GRAIN FARMING ON APPROXIMATELY 5 ACRES OF LAND NORTHWEST OF THE GATEHOUSE REPRESENTS THE MAJOR ACTIVITY OF THIS NATURE. A COMMUNITY ROW CROP FARM AT THE EASTERN EDGE OF THIS SUBREGION ALONG WITH VARIOUS INDIVIDUAL GARDENS ACCOUNT FOR THE REMAINING AGRICULTURAL ACTIVITY.

POTENTIAL ACTIVITY

EVEN THOUGH SUBREGION 6 CONTAINS SIGNIFICANT AMOUNTS OF VACANT LAND, INHERENT GEOLOGIC HAZARDS CONSTRAIN MOST OF THIS AREA FROM BEING DEVELOPED; THEREBY LIMITING DEVELOPABLE VACANT LAND TO 5 ACRES NORTHWEST OF THE GATEHOUSE ON A SMALL PLATEAU AND A VACANT 7,800 SQUARE FOOT LOT WHICH FRONTS ON SEA HORSE LANE.

IN LIGHT OF THE GENERAL PLAN'S POLICY TO MAINTAIN EXISTING NEIGHBORHOODS, IT WAS CONCLUDED THAT RESIDENTIAL ACTIVITY WAS THE MOST COMPATIBLE USE FOR THE BUILDABLE VACANT LANDS. ALTHOUGH IT COULD BE ARGUED THAT THE MAINTAINING OF AGRICULTURAL FARMING ON THE 5 ACRE SITE IS MORE IN LINE WITH THE GENERAL PLAN POLICY, IT WAS INTERPRETED THAT THIS IS NOT THE PRIMARY INTENTION OF THE LANDOWNER (PALOS VERDES PROPERTIES, WHICH IS LEASING SIMILAR VACANT LANDS FOR INTERIM AGRICULTURAL USE UNTIL SUCH LANDS ARE DEVELOPED OR SOLD TO PROSPECTIVE DEVELOPERS), AND THAT THE LOW PRIORITY OF MAINTAINING AGRICULTURE IN THIS AREA (SEE REGIONAL AGRICULTURE SECTION) DOES NOT WARRANT PROTECTIVE MEASURES.

INDUCED ACTIVITY

VACANT AREAS CAPABLE OF SUPPORTING ADDITIONAL RESIDENTIAL USES HAVE BEEN DESIGNATED A DENSITY OF 5 DWELLING UNITS PER ACRE. THE SELECTION OF THIS DENSITY IS BASED ON ITS SIMILARITY WITH EXISTING RESIDENTIAL UNITS IN BOTH THE LEASE AND FEE AREAS. APPLYING THIS DENSITY TO THE 5 ACRE SITE NORTHWEST OF THE GATEHOUSE AND ONE IN-FILL LOT IN THE FEE AREA COULD RESULT IN AN INCREASE OF 26 DWELLING UNITS. EXISTING FEE RESIDENTIAL AREAS OUTSIDE OF THE OPEN SPACE HAZARD AREA ALSO ARE DESIGNATED A 5 DWELLING UNIT PER ACRE DENSITY.

ACTIVITY AREAS

TABLE S6-C

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	⩽ 1	⩽ 2	⩽ 4	⩽ 6	> 6	RETAIL	REC.			
EXISTING	50 AC.	8 AC.				3 AC.						5 AC.
EXISTING UNITS						92 S.F.●						
EXISTING POPULATION						276						
GENERAL PLAN	50 AC.	8 AC.	8 AC.									
GENERAL PLAN UNITS			8 S.F.									
GENERAL PLAN POPULATION			28									
COASTAL PLAN	50 AC.	8 AC.				8 AC.						
COASTAL PLAN UNITS						40 S.F.						
COASTAL PLAN POPULATION						140						
INTERIM PROFILE	50 AC.	8 AC.				8 AC.						
INTERIM PROFILE UNITS						118 S.F.						
INTERIM PROFILE POPULATION						351						

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY
● 69 UNITS LOCATED ON HAZARD LAND

ALTHOUGH THE PLAN ALLOWS FOR 26 NEW LOTS, IT ALSO PLACES 68 EXISTING RESIDENTIAL UNITS IN A NONCONFORMING STATUS. THEIR NONCONFORMITY, UNDER A STRICT INTERPRETATION, IS DUE TO THE UNITS BEING LOCATED IN A HAZARD AREA, WHICH IS BASED ON THE CONSULTING GEOLOGIST'S DETERMINATION OF WHICH LANDS POSSESS A GEOLOGIC PROFILE INDICATIVE OF INSTABILITY. IT IS STRESSED BY THE GEOLOGIST THAT EXISTING STRUCTURES LOCATED WITHIN THESE AREAS SHOULD NOT BE CONSTRUED AS UNSAFE. THEREFORE, NO ACTION BY THE CITY IS WARRANTED TO HAVE THEM REMOVED. THE PRIMARY CONCERN IS OVER THE ADDITION OR ALTERATION OF EXISTING UNITS WHICH REQUIRE ALTERATION OF THE LAND FORM. THE CITY WILL NEED TO DENY ANY SUCH ACTIONS IN ORDER TO PRECLUDE ACTIONS WHICH COULD RESULT IN ENDANGERING LIVES AND/OR PROPERTY. A DENSITY RANGE OF 1-2 DU/AC WILL BE OVERLAYED ON THE NATURAL ENVIRONMENT/HAZARD DESIGNATION TO ALLOW THESE UNITS TO REMAIN AND SUBDIVIDE. AS WITH ANY OTHER GEOLOGICALLY CONSTRAINED AREA IN THE CITY, IF A PLAN IS PROPOSED WHICH COULD PROVE TO THE SATISFACTION OF THE CITY THAT THE AREA COULD BE STABILIZED THE CITY WOULD REVIEW LAND USE DESIGNATIONS FOR THE AREA.

THE 5 UNIT PER ACRE DENSITY ESTABLISHED THROUGH THIS PLAN VARIES FROM THE 1 UNIT PER ACRE DENSITY ESTABLISHED BY THE GENERAL PLAN. ALTHOUGH IT CAN BE CONSTRUED THAT THIS PLAN IS MORE IMPACTIVE THAN THE GENERAL PLAN, THE GENERAL PLAN, BY PLACING A LOWER DENSITY ON THE EXISTING AREA, IS NOT IN LINE WITH MAINTAINING THE EXISTING NEIGHBORHOOD AS CALLED FOR BY POLICY NUMBER 3 ON PAGE 78 OF THAT REPORT. THEREFORE, THE 5 UNIT PER ACRE DENSITY IS IN CONFORMANCE WITH THE EXISTING PATTERN AND INDUCES NEW UNITS UNDER A PATTERN WHICH IS COMPATIBLE WITH THE INTIMATE CHARACTER ESTABLISHED BY PAST DEVELOPMENT.

INFRASTRUCTURE

THIS PREDOMINANTLY DEVELOPED SUBREGION IS MADE UP OF A MIXTURE OF PUBLIC AND PRIVATE INFRASTRUCTURE FACILITIES WHICH APPEAR TO FUNCTION ADEQUATELY. THE INDUCEMENT OF NEW DEVELOPMENT AS PROPOSED BY THIS PLAN SHOULD NOT SIGNIFICANTLY CHANGE THIS STATUS; HOWEVER, THREE ITEMS REQUIRE FURTHER DISCUSSION: SEWAGE DISPOSAL, FLOOD CONTROL, AND TRAFFIC.

SEWAGE DISPOSAL

SEWERAGE FACILITIES WITHIN THE SUBREGION ARE BOTH OF A PUBLIC AND PRIVATE NATURE. GENERALLY SPEAKING, THE WESTERN HALF OF THE DEVELOPED PORTION (LEASE) IS UNSEWERED AND RELIES ON PRIVATE DISPOSAL FACILITIES; WHILE THE EASTERN HALF IS HOOKED UP TO SEWERAGE LINES MAINTAINED BY THE SANITATION DIVISION OF THE COUNTY ENGINEER. INSOFAR AS ADEQUACY OF SERVICE IS CONCERNED, BOTH PUBLIC AND PRIVATE SEWERAGE FACILITIES APPEAR TO MEET DEMANDS. THE PUBLIC LINES SHOULD NOT BE ADVERSELY IMPACTED BY FUTURE DEVELOPMENT. THERE ARE NO KNOWN HEALTH OR ENVIRONMENTAL PROBLEMS WITH PRIVATE FACILITIES; HOWEVER, THE POSSIBILITY OF SUCH PROBLEMS OCCURING DUE TO GEOLOGIC INSTABILITY (FOUND IN ADJACENT LANDS) AND/OR IMPROPER MAINTENANCE IS SUCH THAT PERIODIC REVIEW IS RECOMMENDED.

Flood Control

Although the General Plan does not identify Subregion 6 as having any flash flood problems, a natural drainage course exists in the western portion which is identified in a study prepared by the Department of Housing and Urban Development (Federal Insurance Administration) as having flash flood potential. The Flood Control District has proposed that the drainage course be channelized; however, no estimated date of completion has been made since the project is not considered a high priority. It is important that the improvement be consistent with applicable General Plan and Coastal Specific Plan policies regarding preservation of natural habitat, visual character and flood control.

Transportation Systems

Vehicular Networks

The vehicular network consists of approximately 1.9 miles of streets, of which 1.3 miles are privately owned and maintained. Within the subregion, Palos Verdes Drive South is a 2 lane arterial which appears to function adequately (see Traffic -- Coastal Region). The private roads appear to be in satisfactory condition, with the exception of the lower portion of Yacht Harbor Drive, in the lease area. The unsatisfactory road condition in that area is a result of the Portuguese Bend landslide which traverses the western-most corner of the subregion. As with Palos Verdes Drive South through the landslide, the roadway is in almost constant disrepair. The private road provides vehicular access to the private beach club, as well as residences.

It is currently estimated that the subregion generates about 72 outbound trips at the peak hour (A.M.). The projected traffic generated by the area is expected to be about 92 outbound trips at peak hours. Current and projected traffic is not considered to be adverse to the functional capabilities of the network; however, as with all areas, increased traffic will impact streets now in or at a capacity deficient state.

Path and Trail Network

No public trails or coastal access points are provided now within the subregion, nor are they proposed for the future. The area affords private coastal access of excellent quality to both residents and club members. This private access is a positive measure in controlling human exposure to the sensitive intertidal habitat in the area.

Safety

The Tsunami Hazard Map, compiled by the State, identifies the south-facing shoreline as an area of specific caution during an alert. The Portuguese Bend Beach area, being south-facing and lacking any bluff demarcation, is the most susceptible segment of the City's shoreline to a tsunami threat. Of particular concern are the 9 residential dwellings fronting on Seawall Road which are located at or below the 50 foot elevation. Should an alert be issued

BY THE NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION THESE DWELLINGS COULD BE ENDANGERED.

POLICIES

IT IS THE POLICY OF THE CITY TO:

1. MAINTAIN AND PROTECT THE TWO MAJOR CANYONS, WILDLIFE HABITATS, AND NATURAL VEGETATIVE BASE WITHIN THE CONFINES OF SUBREGION 6.

2. ENCOURAGE ESTABLISHMENT OF DESIGNATED INTERTIDAL AREAS AS MARINE RESERVES AND ENCOURAGE STRICT ENFORCEMENT OF THE REGULATIONS OF THE RESERVE.

3. ENCOURAGE LOTS DEVELOPED IN THE CONFINES OF SUBREGION 6 TO ATTACH C, C, AND R'S WHICH PARALLEL THOSE PRESENTLY ENFORCED BY THE PORTUGUESE BEND EAST HOMEOWNERS ASSOCIATION. ALSO, CONSIDERATION SHOULD BE GIVEN TO ANNEXATION OF THESE LOTS BY THE PORTUGUESE BEND EAST HOMEOWNERS ASSOCIATION.

4. ENSURE THAT FLOOD CONTROL IMPROVEMENTS WITHIN SUBREGION 6 ARE CARRIED OUT IN A MANNER THAT IS CONSISTENT WITH APPLICABLE GENERAL PLAN AND COASTAL SPECIFIC PLAN POLICIES REGARDING PRESERVATION OF NATURAL HABITAT, VISUAL CHARACTER AND FLOOD CONTROL.

5. ALLOW THE EXISTING UNITS IN HAZARD AREAS TO REMAIN AND THE LAND UNDER THEM BE SUBDIVIDED BUT NO NEW STRUCTURES OR ADDITIONS TO STRUCTURES SHALL BE PERMITTED, EXCEPT THAT AN EXISTING STRUCTURE WHICH IS DAMAGED MAY BE RESTORED ON THE SAME FOUNDATION, PROVIDED THE OWNER FILES A NON-SUIT COVENANT WITH THE CITY RELIEVING THE CITY OF RESPONSIBILITY RELATED TO WHATEVER HAZARD MAY EXIST, AND SAID RESTORATION WILL NOT AGGRAVATE THE CURRENT CONDITION.

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 7 IS THE LARGEST SUBREGION IN THE COASTAL REGION (252 ACRES). THE AREA IS BORDERED ON THE NORTHWEST BY PORTUGUESE BEND CLUB AND ON THE SOUTHEAST BY PACIFIC TELEPHONE'S COMMUNICATION TOWERS AND SHORELINE PARK. THE AREA IS CURRENTLY UNDEVELOPED, WITH THE EXCEPTION OF A 5.53 ACRE MULTI-FAMILY RESIDENTIAL SITE AT THE EASTERN END. THIS SUBREGION'S VACANT STATUS AND ENVIRONMENTAL CHARACTER ESTABLISH IT AS AN UNCOMMITTED AREA FOR WHICH LAND USE DECISIONS ARE DESIGNATED HEREIN.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

THE CLIMATIC PROFILE OF ZONE 1 PRESENTED IN THE CLIMATIC SECTION OF THE COASTAL REGION, IS REPRESENTATIVE OF THE GENERAL WEATHER PATTERN IN THIS SUBREGION. THE SOLAR EXPOSURE OF THIS AREA IS EXCELLENT DUE TO ITS YEAR AROUND, DIRECT RADIATION PATTERN. THIS CHARACTERISTIC AFFORDS OPPORTUNITY TO COUNTERACT THE CHILL FACTOR ASSOCIATED WITH THE DOMINANT SEA BREEZE PATTERN THROUGH PROPER SOLAR ORIENTATION AND DESIGN RESPONSE TO THIS NATURAL HEATING SOURCE.

MARINE

WAVES AND SWELLS GENERATED TO THE WEST ARE FREE TO BREAK UNHINDERED ON THE SHORELINE. THE SOUTHERN GENERATED WAVES THAT OCCUR ARE THOSE WHICH ORIGINATE FROM WITHIN THE SOUTHERN CALIFORNIA BIGHT. THESE CONDITIONS

EXIST OVER THE ENTIRE SHORELINE SINCE THE FULL LENGTH RECEIVES NO SHELTERING EFFECT FROM ANY LAND MASS (EXCEPT FOR SANTA CATALINA AND SAN CLEMENTE ISLANDS). OF ALL SUBREGIONS, THIS SHORELINE PROBABLY EXPERIENCES THE GREATEST WAVE ACTIVITY. NUMEROUS REEFS ARE EXPOSED BY THE LOWEST OF TIDES, WHICH ARE OTHERWISE TOTALLY COVERED. PRESENTLY, THE LOW TIDE CONDITION POSES LITTLE OR NO THREAT TO THE MARINE BIOTIC RESOURCES FROM THE COLLECTOR AS ACCESS TO THIS SUBREGION'S COASTLINE IS VERY LIMITED.

GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

THE GREAT MAJORITY OF SUBREGION 7 FALLS INTO THE SLOPE CATEGORIES OF LESS THAN 25%. THE ONLY AREAS OF STEEPER SLOPES ARE THOSE ASSOCIATED WITH THE BLUFF AREA AND NUMEROUS NATURAL DRAINAGE CANYONS TRAVERSING THE LAND. THE HIGHEST CONCENTRATION OF ''STEEP'' SLOPES IS IN THE AREA NORTH OF PASEO DEL MAR, WEST OF LA ROTONDA, AND SOUTH OF PALOS VERDES DRIVE SOUTH.

MARINE

THE SHORELINE IN THIS AREA IS TOPOGRAPHICALLY COMPLEX WITH THE NORTHERN PORTION HAVING SOME EXTENSIVE BOULDER AREAS. SOUTHERLY, THE SHORE BECOMES ROCKY HEADLAND WITH OCCASIONAL SMALL NATURAL JETTIES EXTENDING SEAWARD. SUBTIDALLY AND IN THE LOWER INTERTIDAL ZONES ROCK LEDGES, SMALL REEFS, AND TIDE POOLS ARE INTERSPERSED. SEAWARD THE ROCKY TOPOGRAPHIC FEATURES GIVE WAY TO A SANDY OCEAN BOTTOM.

GEOLOGIC CONDITIONS

THE GEOLOGICALLY SENSITIVE AREAS THAT FALL INTO THE EXTREME HAZARD CATEGORY ARE PRIMARILY A REFLECTION OF THE COASTAL SETBACK ZONE. GEOLOGIC HAZARDS ARE PRESENT IN TWO MAJOR LOCATIONS. ONE RELATES TO AN OLD LANDSLIDE AREA (SEE FIGURE 7) AND THE OTHER IS A REFLECTION OF THE SOUTH SHORES LANDSLIDE SYSTEM DISCUSSED IN SUBREGION 8.

HYDROLOGY

THIS AREA POSSESSES NUMEROUS NATURAL DRAINAGE CANYONS WHICH ARE OF SIGNIFICANT HYDROLOGIC VALUE. AT THE NORTHERN SUBREGION BOUNDARY, A SMALL DRAINAGE COURSE EXISTS WHICH EXTENDS SEAWARD, DOWN THE BLUFFS FROM THE END OF MARITIME DRIVE IN SUBREGION 6. TWO OTHER SIGNIFICANT COURSES EXIST (SEE FIGURE 8) WHICH HAVE VEGETATIVE/WILDLIFE HABITAT DEPENDENCE UPON MAINTENANCE OF THE ASSOCIATED HYDROLOGIC FACTORS. ONE OTHER MINOR DRAINAGE COURSE EXISTS BETWEEN THESE TWO COURSES.

BIOTIC RESOURCES

TERRESTRIAL

THE TYPICAL COASTAL SAGE SCRUB PLANT COMMUNITY IS EXTANT IN THE BLUFF AREAS AND IN THE NATURAL DRAINAGE CANYONS. THE MAJORITY OF THESE AREAS ARE SIGNIFICANT ENOUGH TO SUPPORT A WILDLIFE HABITAT. THE

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES

TABLE: S7-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED		18 AC.	68 AC.				213 AC.		35 AC.	48 AC.	RESTORATION & MAINTENANCE FROM HALFWAY POINT EAST	80 AC.
RESTRICTED	80 AC.			51 AC.	26 AC.			1 DRAINAGE COURSE			RESERVE FROM HALFWAY POINT WEST	
LEVEL OF SIGNIFICANCE	●	◒	○	●	●		●	●	●	●	●	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

MAJORITY OF THE REMAINING PORTIONS OF THE SUBREGION HAVE BEEN FARMED. NOT ENOUGH TIME HAS ELAPSED TO AFFORD ANY REGENERATION OF A NATURAL VEGETATIVE BASE THAT WOULD BE NECESSARY TO WARRANT PRESERVATION MEASURES. DEVELOPMENT SHOULD BE SENSITIVE TO THOSE AREAS WHICH DO HAVE BIOTIC RESOURCE VALUE, ESPECIALLY TO RESIDENT AND MIGRATORY BIRD SPECIES WHICH DEPEND ON THESE AREAS FOR ROOSTING AND FEEDING ACTIVITIES.

MARINE

THE SHORELINE IN THE NORTHERN PORTION OF THE SUBREGION HAS BEEN DETERMINED BY THE CITY TO BE OF HIGH ENOUGH QUALITY TO WARRANT DESIGNATION OF A MARINE LIFE PRESERVE. THIS DESIGNATION RELATES VERY HEAVILY TO AN AREA COMPOSED OF ROCK LEDGES, BOULDERS, TIDE POOLS AND REEFS WITH VERY RICH AND DIVERSE MARINE LIFE.

TO THE SOUTH OF THIS PROPOSED RESERVE AREA LIES HALFWAY POINT WHERE SEVERAL EFFORTS HAVE BEEN MADE TO RE-ESTABLISH A PORTION OF THE ONCE EXTANT KELP BED. CURRENT EFFORTS AND RESULTS ARE NOT KNOWN; HOWEVER, THE CITY SHOULD LEND SUPPORT WHEREVER POSSIBLE TO ORGANIZATIONS WISHING TO INITIATE OR CONTINUE RESTORATIVE EFFORTS.

SOUTH OF HALFWAY POINT AND CONTINUING

THROUGH SUBREGION 8 THE WATER QUALITY BECOMES IMPACTED TO A SIGNIFICANT DEGREE AS A RESULT OF THE PROXIMITY TO THE LOS ANGELES COUNTY SEWAGE OUTFALL AT WHITE'S POINT.

FIRE HAZARD

FIGURE 23 OF THE GENERAL PLAN, FOR THE MOST PART, CLASSIFIES SUBGREGION 7 AS A MEDIUM FIRE HAZARD AREA. UPON CLOSER EXAMINATION, MODIFICATIONS WERE WARRANTED TO MORE ACCURATELY REFLECT THE LOCAL FIRE HAZARD STATUS. LAND AREAS CURRENTLY CULTIVATED OR DEVELOPED EXHIBIT A LOWER FIRE HAZARD, WHILE AREAS SEAWARD OF PASEO DEL MAR, WHICH IN RECENT YEARS WERE CULTIVATED, CONTAIN AN EVOLVING NATURAL VEGETATIVE BASE WARRANTING THEIR CLASSIFICATION AS A MEDIUM FIRE HAZARD. AN AREA LOCATED AT THE SOUTHEASTERN TIP OF THE SUBREGION SUPPORTS A WELL-DEFINED VEGETATIVE BASE CONFINED TO SLOPES IN EXCESS OF 35%, HENCE, PRESENTING A HIGH FIRE HAZARD. THIS AREA IS ALSO IDENTIFIED AS CONTAINING GEOLOGIC CONSTRAINTS, AND, FOR THIS REASON, IS DESIGNATED AS AN OPEN SPACE HAZARD DISTRICT. THEREFORE, IT CAN BE EXPECTED THAT THE AREA WILL CONTINUE TO EXHIBIT HIGH FIRE HAZARD CONDITIONS WHICH WILL REQUIRE ADJOINING DEVELOPMENT TO BE COGNIZANT OF THIS THREAT AND INCORPORATE MITIGATION MEASURES, SUCH AS FIRE RETARDANT VEGETATION BUFFERS, INTO SITE DESIGNS.

SOCIO/CULTURAL

SOCIAL FACTORS

OCEAN TERRACES CONTAINS 100 CONDOMINIUM UNITS LOCATED ON 5.53 ACRES WHICH ARE REGULATED BY AUTHORITY DELEGATED TO THE HOMEOWNERS ASSOCIATION. SPECIFIED LIMITATIONS AND MAINTENANCE FEE ASSESSMENTS ARE ENFORCED BY THE ASSOCIATION, WHICH IS EMPOWERED VIA CC&RS ATTACHED TO EACH UNIT.

CULTURAL RESOURCES

HISTORICAL RESOURCES

THE U.S. ARMY ESTABLISHED THE PENINSULA AS A STRATEGIC AREA DURING WORLD WAR II.

CULTURAL RESOURCES **TABLE:** S7-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED		2 DOCUMENTED SITES PLUS PROBABILITY ON UNDEVELOPED LAND	COASTAL BLUFFS
LEVEL OF SIGNIFICANCE		●	◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

NUMEROUS BUNKERS SERVING AS GUNNERY HOUSING WERE CONSTRUCTED ON KEY SEAWARD FACING SLOPES. VACATED GUNNERY BUNKERS CAN BE FOUND NEAR THE BLUFF'S EDGE IN THE SOUTH-EASTERN PORTION OF SUBREGION 7. ALTHOUGH THESE STRUCTURES REFLECT A SEGMENT OF THE PENINSULA'S HISTORY, THEY LACK STRUCTURAL CHARACTER AND PRESENT NO SPECIAL HISTORICAL SIGNIFICANCE. IN FACT, THEY SHOULD BE REMOVED OR SEALED OFF TO ELIMINATE POTENTIAL INJURY TO CHILDREN PLAYING IN THEM.

ARCHAEOLOGICAL RESOURCES

ARCHAEOLOGICAL RESOURCE VALUE HAS BEEN IDENTIFIED FOR THE ENTIRE LAND AREA WITHIN SUBREGION 7. TWO SITES ARE DOCUMENTED, WITH THE REMAINING UNDEVELOPED LANDS HAVING BEEN NOTED AS PROBABLE ARCHAEOLOGICAL AREAS.

URBAN ENVIRONMENT

ACTIVITY AREAS

COMPATIBILITY OF ADJACENT ACTIVITY AREAS

EXTERNAL ACTIVITY COMPATIBILITY IS OF POTENTIAL CONCERN WITH REGARDS TO A PLATEAU OF LAND ADJOINING THE SEAWARD SIDE OF LA ROTONDA DRIVE. A PRIMARY CONCERN IS NOISE INTRUSION BROUGHT ABOUT BY THE EVENTUAL DEVELOPMENT AND OPERATION OF SHORELINE PARK. THIS POTENTIAL NOISE IMPACT IS DUE TO THE GEOGRAPHICAL PROXIMITY OF PROPOSED RESIDENTIAL ACTIVITY ON THE PLATEAU LYING AT A HIGHER ELEVATION THAN FUTURE PARK ACTIVITIES. BY ITS PHYSICAL NATURE, SOUND WILL AFFECT AN AREA LOCATED ABOVE THE SOURCE TO A GREATER EXTENT THAN AREAS LOCATED BELOW THE SOURCE.

NOISE INTRUSION FROM DEVELOPMENT AND OPERATION OF SHORELINE PARK AND FUTURE RESIDENTIAL DEVELOPMENT CAN BE MITIGATED BY PROVIDING BUFFERING. ACCESS TO THE PARK WOULD BE ACCOMPLISHED BY FOOTPATHS AND TRAILS RATHER THAN BY VEHICLE.

EXISTING ACTIVITIES

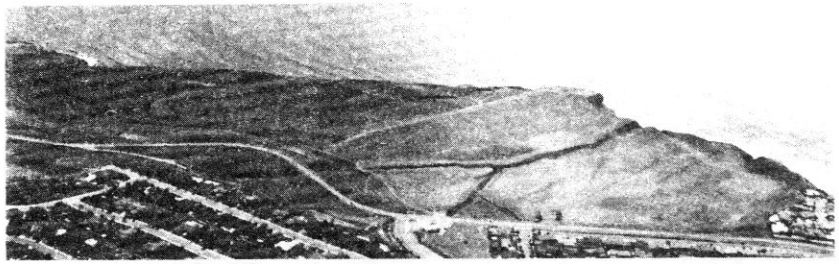
RESIDENTIAL

RESIDENTIAL ACTIVITY IS CONFINED TO 5.53 ACRES LOCATED AT THE NORTHEAST CORNER OF PASEO DEL MAR AND LA ROTONDA DRIVE. A 100 UNIT MULTI-FAMILY CONDOMINIUM COMPLEX IS LOCATED IN THIS AREA WHICH WAS COMPLETED IN 1975.

THIS COMPLEX, KNOWN AS OCEAN TERRACES, CONTAINS 10 ONE-BEDROOM UNITS AVERAGING 1,063 SQUARE FEET IN AREA; 64 TWO-BEDROOM UNITS AVERAGING 1,435 SQUARE FEET IN AREA; AND 26 THREE-BEDROOM UNITS AVERAGING 1,608 SQUARE FEET IN AREA. THE OCEAN TERRACE UNITS LIST FOR $90,000 TO $160,000.

AGRICULTURE

PRESENT AGRICULTURAL ACTIVITY TAKES THE FORM OF GRAIN FARMING AND IS FACILITATED ON ROUGHLY 75 ACRES. THIS FARMING SERVES AS AN INTERIM USE FOR LANDS WHICH OWNERS ARE LEASING UNTIL SUCH TIME AS PARCELS ARE SOLD AND/OR DEVELOPED. THE LACK OF AN IRRIGATION NETWORK ON THESE LANDS DICTATES GRAIN FARMING PRACTICES WHICH REQUIRE ONLY SEASONAL RAINS.



Potential Activities

143 acres of vacant land within this subregion can support structured activities. Natural features affecting buildable lands vary with respect to their inland or seaward relationship to Paseo del Mar. Inland areas exhibit varying slopes along with natural drainage courses. These constraints segment buildable lands, dictating the needs for a clustered/concentrated form of development rather than grid/sprawling form of development. However, seaward of Paseo del Mar buildable lands are more contiguous and terrain along with other natural features are less constraining, providing more versatility in their development.

Man-imposed constraints, such as small lots or a tightly knit street pattern, pose little problem. Recorded parcels are large and only two streets traverse the subregion.

Residential

A large scale low intensity residential activity is considered the more compatible land use designation for the area from both a physical and fiscal perspective. Physically and demand wise, it is more compatible with the area than large scale commercial or institutional uses, while fiscally it is more sound than a recreational use.

Commercial

As this area develops, an increased shopping demand will be generated by new residents. Major retail facilities at the Peninsula Center and in surrounding areas such as the Del Amo area of Torrance are expected to serve the major retail needs of these residents. Neighborhood retail demands are expected to be served by the San Pedro shopping center located at the intersection of 25th Street and Western Avenue or Golden Cove Shopping Center. Convenience retail facilities, however, are not now nor are they proposed to be located elsewhere in the vicinity and therefore, these demands will be unmet unless provisions are made for such activities.

Page 82 of the General Plan discusses the recognition of a potential commercial need warranting further study as part of this Plan. Through the course of this study discussions with the City Council and Planning Commission were held regarding concerns over such an activity and a projection of local retail demand.

On a preliminary basis there seems to be a potential for supporting one acre of retail facilities (obtained through projecting demand based on an estimated population achieved at buildout). However, it has been expressed in the course of reviewing this Plan that such a commercial area could be conducive to incorporating a restaurant and integrated specialty shops. This might necessitate a larger site area. For this reason, it is felt that the City should be receptive to reviewing a commercial proposal in the area north of Paseo Del

MAR AND NOT AT THIS POINT IN TIME DESIGNATE A SPECIFIC COMMERCIAL AREA. SHOULD A DEVELOPER FIND, BASED ON A THOROUGH ECONOMIC STUDY, THAT A COMMERCIAL VENTURE IS VIABLE, THEN THE CITY WILL REVIEW SUCH A PROPOSAL AS PART OF A CONDITIONAL USE PERMIT APPLICATION. HOWEVER, SUCH A PROPOSAL WILL BE CAREFULLY SCRUTINIZED TO ENSURE THAT IT IS VIABLE AND WILL NOT ADVERSELY AFFECT SCENIC, NATURAL, OR ADJOINING RESIDENTIAL NEIGHBORHOODS. THE PROJECT SHOULD BE DESIGNED WITH FORESIGHT GIVEN TO THE PROJECT'S ULTIMATE APPEARANCE, RELATIONSHIP TO COASTAL RESOURCES AND DESIGN CONCEPT.

RECREATIONAL

ALTHOUGH PUBLIC RECREATION, FROM A CURSORY SOCIAL VIEWPOINT, IS ALWAYS A POSITIVE LAND USE, WITHIN THIS SUBREGION IT IS OF A LOW PRIORITY. NATURAL HABITATS ARE LIMITED AND CAN BE MAINTAINED THROUGH DEVELOPMENT CONTROLS; ACTIVE RECREATIONAL DEMANDS CAN BE MET IF THE SURPLUSED LOMA DEL MAR SCHOOL SITE IS DEVELOPED AS A SCHOOL, AND A HIGHER PRIORITY EXISTS FOR PUBLIC EXPENDITURE OF MONIES FOR THE ACQUISITION OF RECREATIONAL LANDS ELSEWHERE IN THE CITY. SPECIALIZED FORMS OF RECREATION (POOLS, TENNIS COURTS, ETC.) SHOULD BE CONSIDERED AS PART OF NEW RESIDENTIAL DEVELOPMENTS FOR THE ENJOYMENT OF THEIR RESIDENTS.

AGRICULTURE

UNDER THE CALIFORNIA COASTAL ACT OF 1972 A COASTAL PLAN WAS DEVELOPED WHICH CALLED FOR THE PROTECTION OF AGRICULTURAL LAND IN THIS SUBREGION. THESE AREAS WERE ALSO EVALUATED AS TO THEIR LOCAL SIGNIFICANCE AS PART OF THIS PLAN AND WERE DETERMINED TO BE OF SECONDARY PRIORITY (SEE AGRICULTURAL ACTIVITY SECTION FOR COASTAL REGION). ALTHOUGH THE CITY DESIRES TO PRESERVE THESE AREAS, HIGH LAND COST AND THE QUESTIONABLE LEGAL GROUNDS FOR AGRICULTURAL PRESERVATION THROUGH LOCAL POLICE POWERS PLACED THEM OUT OF A FEASIBLE RANGE OF PRIMARY LAND USE CONSIDERATIONS. HOWEVER, BY REQUIRING NEW DEVELOPMENT IN THE AREA TO APPLY UNDER RESIDENTIAL PLANNED DEVELOPMENT PROVISIONS OF THE CITY'S DEVELOPMENT CODE, AREA COULD BE SET ASIDE FOR AGRICULTURE. ASSUMING THAT THE TOTAL REQUIRED COMMON OPEN SPACE (30% OF THE BUILDABLE AREA) WERE FARMED, THIS WOULD AMOUNT TO 40 ACRES.

IT IS FURTHER ENCOURAGED THAT DEVELOPMENT SEAWARD OF PASEO DEL MAR CLUSTER DEVELOPMENT TO LANDS INLAND OF PASEO DEL MAR SO AS TO PROVIDE ADDITIONAL AREAS FOR AGRICULTURE. THIS WOULD ALSO REDUCE NEW ENCROACHMENT OVER LANDS SEAWARD OF PASEO DEL MAR WHICH ARE RELATIVELY FLAT.

INDUCED ACTIVITY

RESIDENTIAL

A DENSITY OF 1 DWELLING UNIT PER ACRE IS DESIGNATED FOR THIS SUBREGION. THIS COINCIDES WITH THE 1 DWELLING UNIT PER ACRE DENSITY ESTABLISHED BY THE GENERAL PLAN. THE UNITS AND POPULATION THAT RESULT FROM THIS DENSITY ARE DEPICTED IN TABLE S7-C. IT IS WORTH NOTING THAT ALTHOUGH THE COASTAL SPECIFIC

ACTIVITY AREAS

TABLE: S7-C

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	≤ 1	≤ 2	≤ 4	≤ 6	> 6	RETAIL	REC.			
EXISTING	104 AC.	148 AC.					5.5 AC.					75 AC.
EXISTING UNITS							100 M.F.					
EXISTING POPULATION							260					
GENERAL PLAN	104 AC.	148 AC.	139 AC.							9 AC.		
GENERAL PLAN UNITS			139 S.F.									
GENERAL PLAN POPULATION			486									
COASTAL PLAN	104 AC.	148 AC.	139 AC.					1 AC.		9 AC.		
COASTAL PLAN UNITS			139 S.F.									
COASTAL PLAN POPULATION			592									
INTERIM PROFILE	104 AC.	148 AC.	133.5 AC.				5.5 AC.	1 AC.		9 AC.		
INTERIM PROFILE UNITS			134 S.F.				100 M.F.					
INTERIM PROFILE POPULATION			571				260					

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

PLAN PROFILE PROJECTS 139 UNITS, THE MORE REALISTIC PROFILE IS EXPRESSED IN THE INTERIM PROFILE COLUMN. THIS PROFILE WILL EXIST ONCE VACANT LANDS ARE DEVELOPED TO CONFORMANCE WITH THE COASTAL SPECIFIC PLAN AND FOR AS LONG AS THE NON-CONFORMING OCEAN TERRACES COMPLEX CONTINUES TO EXIST.

INSTITUTIONAL

PALOS VERDES PENINSULA UNIFIED SCHOOL DISTRICT OWNS A 8.56 ACRE SITE FRONTING ON THE SEAWARD SIDE OF PASEO DEL MAR. THIS SITE WAS PROPOSED TO BE DEVELOPED AS AN ELEMENTARY SCHOOL BUT HAS RECENTLY BEEN SURPLUSED BY THE DISTRICT AND MAY BE SOLD IN THE FUTURE.

RECREATION

PRESENTLY, ONLY LIMITED ACCESS TO THE SHORELINE OF THIS AREA IS AVAILABLE. ACCESS CAN BE GAINED THROUGH THE PORTUGUESE BEND CLUB (OPEN TO CLUB MEMBERS ONLY), THROUGH SHORELINE PARK'S UNDEVELOPED BLUFF TRAIL, OR THROUGH SEVERAL UNDEVELOPED AND VERY STEEP TRAILS DOWN THE BLUFFS ALONG SUBREGION 7. RECREATION, GIVEN THE ACCESS PROBLEM IS NOT AN INTENSE ACTIVITY; HOWEVER, WITH THE ADVENT OF THE PROPOSED DEVELOPED ACCESS BY THE COUNTY AT SHORELINE PARK, AND THE EVENTUAL DEMAND FOR MARINE-ORIENTED RECREATION FROM THE 134 INDUCED DWELLING UNITS LANDWARD OF THE BLUFFTOP, ACTIVITIES SUCH AS FISHING, DIVING, BEACHCOMBING, AND EVEN SURFING WILL INTENSIFY.

INFRASTRUCTURE

THE ACTIVITIES PROPOSED FOR THIS PREDOMINANTLY UNDEVELOPED SUBREGION WILL NECESSITATE RATHER SUBSTANTIAL ADDITIONS TO THE EXISTING INFRASTRUCTURE. SINCE THE VARIOUS INFRASTRUCTURE AGENCIES HAVE INDICATED NO PARTICULAR PROBLEMS WITH RESPECT TO SERVICE CAPABILITIES, THE BASIC ISSUE BECOMES HOW TO MOST EFFICIENTLY SERVE THE FUTURE NEEDS OF THE SUBREGION. THE PRIMARY CHANGES WILL BE THROUGH THE EXTENSION OF THE VARIOUS NETWORKS, ALTHOUGH EXPANSION OF SOME FACILITIES HAS BEEN IDENTIFIED, SO THAT MORE EFFICIENT SERVICE MAY BE PROVIDED.

WATER

THE ONLY WATER SERVICE CURRENTLY WITHIN THE SUBREGION IS TO THE OCEAN TERRACE DEVELOPMENT. THE MAIN LINES SERVING THE DEVELOPMENT ARE OF ADEQUATE SIZE, RELATIVELY NEW, AND COULD BE EXPECTED TO SERVE THE SOUTHEAST PORTION OF THE SUBREGION AS WELL AS SHORELINE PARK IN SUBREGION 8 (DEPENDING ON PARK DESIGN). DUE TO GRADE DIFFERENTIALS WITHIN THE SUBREGION, THE HIGHER, NORTHWEST HALF WILL PROBABLY REQUIRE EXTENSION OF THE EXISTING WATER NETWORK ACROSS PALOS VERDES DRIVE SOUTH (FROM NEAR FORRESTAL DRIVE). WHILE THE CALIFORNIA WATER SERVICE COMPANY ANTICIPATES NO SERVICE PROBLEMS, THE COMPANY IS STUDYING THE NEED FOR A WATER STORAGE FACILITY IN THE AREA NORTH OF THE SUBREGION SO THAT MORE EFFICIENT SERVICE CAN BE PROVIDED TO CUSTOMERS IN THE SOUTHEAST PORTION OF THE CITY.

ENERGY

WHILE THE CURRENT ENERGY REQUIREMENTS OF

SUBREGION 7 ARE SOMEWHAT SMALL, THE ADDITION OF SOME 134 NEW HOMES, A SMALL COMMERCIAL ACTIVITY, AND A SCHOOL WILL REQUIRE A SIGNIFICANT INCREASE IN GAS AND ELECTRIC SERVICE. THE ENERGY RELATED AGENCIES ANTICIPATE NO SERVICE PROBLEMS IN SUBREGION 7. GAS WILL MOST LIKELY BE SUPPLIED BY A HEADER LINE WHICH RUNS ALONG PALOS VERDES DRIVE SOUTH/25 STREET. ELECTRIC SERVICE WILL NECESSITATE AN EXTENSION OF EXISTING LINES (OCEAN TERRACE) AS WELL AS LINES OUTSIDE THE SUBREGION. (SEE COASTAL REGION FOR DISCUSSION OF NEW EDISON SUBSTATION, AS DESCRIBED AT THE COASTAL REGION LEVEL, CONSERVATION OF ENERGY AND ENERGY SOURCES ARE BECOMING INCREASINGLY IMPORTANT. THE DEVELOPMENT POTENTIAL IN SUBREGION 7 IS SUCH THAT A GREAT OPPORTUNITY EXISTS TO IMPLEMENT ENERGY CONSERVATION.

SEWERAGE

SEWERAGE FACILITIES WITHIN SUBREGION 7 CONSIST OF THE SANITATION DISTRICT'S TRUNK SEWER LINE AND A MAIN LINE SEWER MAINTAINED BY THE COUNTY ENGINEER. THE TRUNK LINE RUNS APPROXIMATELY PARALLEL TO THE BLUFF AND IS DESIGNED TO SERVE A POPULATION WELL IN EXCESS OF THAT PROPOSED. THE MAIN LINE SEWER SERVES THE OCEAN TERRACE DEVELOPMENT.

A LETTER FROM THE SANITATION DISTRICT (PARKHURST, 12/21/76) STATES THAT ALTHOUGH NO CAPACITY PROBLEMS ARE EXPECTED, SMALL SEWERAGE PUMPING PLANTS MAY BE NECESSARY TO FACILITATE FUTURE DEVELOPMENT BETWEEN THE TRUNK LINE AND THE BLUFF. AN ANALYSIS OF VARIOUS FACTORS SUCH AS NATURAL/ENVIRONMENTAL CONSTRAINTS, LOCATION OF THE TRUNK LINE, AND PROBABLE DEVELOPMENT PATTERNS SHOW THAT PUMPS MAY NOT BE NECESSARY. THE NEED FOR PUMPS, OR THE LACK THEREOF, WILL BE A FUNCTION OF THE DESIGN AND LOCATION OF ACTIVITIES SEAWARD OF THE TRUNK LINE. THE TRUNK LINE IS, FOR THE MOST PART, LOCATED NEAR ENOUGH TO THE BLUFF OR TO AREAS OF GEOLOGIC INSTABILITY THAT DEVELOPMENT WILL BE SITUATED INLAND OF THE TRUNK. THE ONLY MAJOR AREA WITHIN SUBREGION 7 IN WHICH THIS IS NOT THE CASE IS ADJACENT TO HALFWAY POINT. IN THIS AREA THE TRUNK LINE CURVES SLIGHTLY INLAND, THEREBY PROVIDING MORE DEVELOPABLE LAND BETWEEN THE TRUNK AND BLUFF.



FLOOD CONTROL

ONLY MINOR FLOOD CONTROL IMPROVEMENTS CURRENTLY EXIST WITHIN SUBREGION 7. EXISTING FACILITIES INCLUDE THOSE DRAINS ASSOCIATED WITH OCEAN TERRACE AND CULVERTS WHICH ALLOW DRAINAGE BENEATH ROADWAYS. THE FLOOD CONTROL DISTRICT HAS IDENTIFIED THE LARGER WATER COURSES AS DEFICIENCIES, HOWEVER NONE ARE CONSIDERED HIGH PRIORITY ITEMS.

Transportation Systems

Vehicular Network

Subregion 7 is served by Palos Verdes Drive South/25th Street, Paseo Del Mar, and La Rotonda. The 1.2 mile segment of the coastal region arterial (Palos Verdes Drive South/25th Street) is a two-lane undivided street with no curb or gutter and provides primary access to the sub-region. Paseo Del Mar and La Rotonda are fully improved local streets which serve the Ocean Terrace development. All streets are in good repair and function adequately, with the exception of the Palos Verdes Drive South and East intersection (see Coastal Region). Currently, the subregion generates about 78 peak hour outbound trips and about 1200 24-hour trips, all from Ocean Terrace.

The new activities proposed by this plan are projected to generate a total of about 105 peak hour outbound trips. The proposed school if constructed, is projected to generate about 216 peak hours trips; however the nature of such schools is such that the peak hour does not coincide with the heaviest worker peak hour, and most traffic is of a short haul character and therefore will not affect the typical worst case outbound traffic. The projected increase is not expected to create traffic problems within the subregion, however, as described at the coastal regional level, the cumulative effect of this and all other traffic is expected to create problems at various locations (see Coastal Region).

Although not included in the overall subregion or peninsula traffic analysis, the potential traffic generated by a small commercial facility is worth noting. Based on generating factors developed by the City of Los Angeles it has been calculated that a one acre retail facility (16,000 sq. ft. of useable floor area) could generate about 688 trips in a 24-hour period and about 69 peak hour trips. If such a facility is proposed in the future, a detailed traffic analysis should be required in order to determine the precise impact to the coastal region.

Future development in Subregion 7 will require that significant increases be made to the vehicular network including the bluff road. The pattern and extent of the future network is dependent upon the design concepts utilized in the development of the area. Therefore, no detailed plan is proposed.

Path and Trail Network

This subregion will comprise secondary corridor loop #3, along with various minor trail linkages, making it one of the more complex networks within the coastal region.

Secondary Corridor Loop #3

This loop will facilitate a Class I two-way low speed bike path and pedestrian walkway. At the western common boundary with Subregion 6 the loop will veer from Palos Verdes Drive South and lead towards the bluff. Once at the bluff it will parallel the bluff road in a southeast direction until it intersects with a natural drainage course. From here

THE LOOP WILL FOLLOW THE TOP OF THE DRAINAGE COURSE UNTIL IT MEETS WITH AN ACCESS ROAD WHICH CURRENTLY BRIDGES THE DRAINAGE COURSE. THE ROAD IS OF ADEQUATE WIDTH FOR THE LOOP AND SHOULD REQUIRE NO GRADE ALTERATIONS. FROM THE ACCESS ROAD THE LOOP WILL LEAD TO HALFWAY POINT, WHERE TWO GOOD QUALITY DIRT ACCESS TRAILS EXIST. A REST AREA ATOP HALFWAY POINT SHOULD BE PROVIDED WHICH WOULD CONTAIN BENCHES, A PARKING TURNOUT, AND BIKE RACK FACILITIES. FROM THIS POINT THE LOOP WILL PARALLEL THE BLUFF ROAD UNTIL A SECOND NATURAL DRAINAGE COURSE IS ENCOUNTERED. THIS COURSE WILL REQUIRE BRIDGING TO REACH THE EASTERN SIDE. ONCE BRIDGED, THE LOOP WILL DIVIDE TO ACCOMMODATE EACH TYPE TRAIL. THE BIKEWAY LOOP WILL TURN IN A NORTH/SOUTH ALIGNMENT TO PASEO DEL MAR. AT PASEO DEL MAR THE LOOP WILL CROSS THE STREET AT THE EASTERN SIDE OF ITS INTERSECTION WITH LA ROTONDA DRIVE. A MINOR TRAFFIC CONFLICT WILL BE ENCOUNTERED AT THIS INTERSECTION. ONCE ON ROAD, THE LOOP WILL BE OF A CLASS II STANDARD. THIS SEGMENT OF THE BIKEWAY LOOP WILL FOLLOW THE SEAWARD SIDE OF LA ROTONDA DRIVE UNTIL IT INTERSECTS WITH 25TH STREET. THE WALKWAY LOOP WILL CONTINUE ALONG THE BLUFF TO THE SUBREGION BOUNDARY. IF FURTHER REVIEW OF PHYSICAL CONDITIONS IN SUBREGION 8 DOES NOT ALLOW FOR CONSTRUCTION OF A CLASS I WALKWAY, THE BIKEWAY ALIGNMENT SHOULD BE USED AS AN ALTERNATE ROUTE TO PASEO DEL MAR AND THEN TO SHORELINE PARK.

POLICIES

IT IS THE POLICY OF THE CITY TO:

1. MAINTAIN AND PROTECT MAJOR DRAINAGE COURSES AND ASSOCIATED NATURAL VEGETATION WITHIN THE CONFINES OF SUBREGION 7.

2. INITIATE ESTABLISHMENT OF DESIGNATED INTERTIDAL AREAS AS MARINE RESERVES AND ENCOURAGE STRICT ENFORCEMENT OF THE REGULATIONS OF THE RESERVE.

3. LEND SUPPORT WHEREVER POSSIBLE TO ORGANIZATIONS WISHING TO INITIATE OR CONTINUE MARINE RESTORATIVE EFFORTS.

4. ENSURE THAT APPROPRIATE FIRE PREVENTION MEASURES ARE INCORPORATED IN DEVELOPMENTS ADJOINING THE HIGH FIRE HAZARD AREA IN THE SOUTHEASTERN TIP OF THIS SUBREGION.

5. REQUIRE AN ARCHAEOLOGICAL SURVEY TO BE CONDUCTED PRIOR TO, OR IN CONJUNCTION WITH, PROPOSED PROJECTS ON UNDEVELOPED LAND AREAS.

6. CONSIDER A COMMERCIAL AREA OF A VILLAGE NATURE ALONG PASEO DEL MAR AS PART OF A CONDITIONAL USE PERMIT.

7. ENSURE THAT ANY PROPOSED COMMERCIAL ACTIVITY RESPONDS TO THE NEEDS OF COASTAL RESIDENTS AND SHALL NOT BE OF AN INTENSITY WHICH WOULD PURPOSEFULLY GENERATE A SERVICE AREA EXTERNAL OF THE COASTAL REGION.

8. Ensure that any proposed commerical activity integrates into residential areas and not be located on Palos Verdes Drive South or 25th Street.

9. Encourage development in a manner which will minimize the need for a sewerage pump station(s).

10. Ensure that natural drainage courses are preserved and, where flood control devices are necessary, that they are sensitive to the natural environment and consistent with applicable corridor policies.

11. Encourage the use of cul-de-sacs or short loop streets.

12. Prohibit dirt fill for traversing identified natural drainage courses.

13. Minimize additional ingress/egress to Palos Verdes Drive/25th Street.

14. Require proposed developments on a site which currently supports, or has recently supported, agricultural activity to apply under a residential planned development scheme in order to maintain as much of this activity as possible within the required common open space area and to encourage the development of dwelling units inland of Paseo Deo Mar.

15. Access to Shoreline Park shall not be provided on Paseo Del Mar for vehicular traffic.

16. Paseo Del Mar shall be improved to provide access to residential development and consideration shall be given to relocating Paseo Del Mar southward or exchanging it for another access route closer to the bluff edge.

17. Access routes to future residential development seaward of the existing condominiums shall be provided in such a fashion as to discourage use by non-residents and shall include a buffer so as to mitigate noise impacts.

18. Encourage a produce/flower stand(s) in order to provide an outlet(s) for locally-grown products either independently or as part of a residential planned development (with density credit allowed).

19. Require a bluff road, where feasible, in the area between the Portuguese Bend Club and La Rotonda Drive. No dwelling units shall be allowed oceanward of the road.

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INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

INTRODUCTION

SUBREGION 8 IS A 58 ACRE SITE LOCATED AT THE SOUTHEASTERN-MOST TIP OF THE COASTAL REGION. IT IS BOUNDED ON THE WEST AND NORTH BY UNDEVELOPED LAND AND ON THE EAST BY A MOBILE HOME PARK (IN THE CITY OF LOS ANGELES). PACIFIC TELEPHONE COMPANY OWNS A SMALL AREA IN THE NORTHWEST CORNER, WHICH IS OCCUPIED BY LOW INTENSITY, BUT HIGHLY VISIBLE, RADIO TOWERS AND A SMALL BUILDING. LOS ANGELES COUNTY OWNS THE REMAINING LAND, WHICH IS THE UNDEVELOPED SHORELINE PARK SITE. ITS PREDOMINANTLY UNDEVELOPED NATURE, OWNERSHIP CHARACTERISTICS, AND PROBABLE USES, ESTABLISH SUBREGION 8 AS AN INDIVIDUAL AND COMMITTED AREA UNLIKE ANY IN THE COASTAL REGION.

NATURAL ENVIRONMENT

CLIMATE

TERRESTRIAL

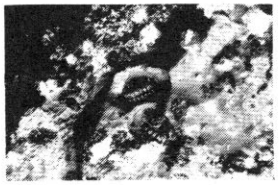
CLIMATIC CONDITIONS EXPERIENCED WITHIN THE CONFINES OF THIS SUBREGION ARE REFLECTIVE OF THOSE CHARACTERIZED UNDER THE ZONE 1 DISCUSSION PRESENTED IN THE CLIMATIC SECTION OF THE COASTAL REGION. RAINFALL AVERAGES 11 INCHES ANNUALLY WITH THE PREDOMINANT WIND PATTERN TRAVERSING THE AREA FROM A SOUTHWEST TO NORTHEAST DIRECTION.

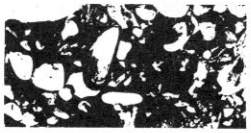
MARINE

THE SHORELINE IS PROTECTED FROM SOUTHERLY SWELLS THAT ARE COMMONLY ORIGINATED BY STORMS IN THE SOUTHERN HEMISPHERE. HOWEVER, THE PREVALENT WESTERLY SWELL AND WIND WAVES ARE ABLE TO TRAVEL UNOBSTRUCTED AND

BREAK ON THE SHORE. HIGH WAVES POSE A PROBLEM TO FISHERMEN AND TIDE POOL VISITORS, ALTHOUGH, DUE TO THE LIMITED ACCESS OF THE AREA, SUCH ACTIVITY IS LIGHT.

SUBREGION 8'S SHORELINE IS SUCH THAT WHEN THE TIDE RECEDES, MANY REEFS ARE EXPOSED THAT OTHERWISE ARE TOTALLY COVERED. THESE REEFS, ALONG WITH LARGE BOULDERS, FORM TIDE POOLS RICH IN CERTAIN FORMS OF MARINE LIFE.





THE WATER QUALITY OF THIS AREA IS THE MOST IMPACTED AND DETERIORATED OF ALL THE SUBREGIONS. THIS IS DUE TO THE PROXIMITY TO LOS ANGELES COUNTY'S SEWAGE OUTFALL AT WHITE'S POINT (REFER TO WATER QUALITY SECTION).

GEOTECHNICAL FACTORS

TOPOGRAPHY

TERRESTRIAL

THE TOPOGRAPHY IS VERY RUGGED DUE TO STEEP SLOPES OVER MUCH OF THE SUBREGION. THE UPPER PORTIONS OF THE SUBREGION AND THE SIDES OF THE MAJOR DRAINAGE COURSE CONTAIN THE STEEPEST SLOPES. THESE RANGE FROM 25% TO 35% AND THEREFORE HAVE RECEIVED AN OVERLAY CONTROL DISTRICT DISTINCTION. THE LOWER PORTIONS, WHERE AT ONE TIME MOTORCYCLE RIDING ACTIVITY TOOK PLACE, POSSESS LESS SEVERE SLOPES.

MARINE

IN THE UPPERMOST LIMITS OF THE SHORELINE THERE EXISTS A ROCKY BEACH OF PREDOMINANTLY LARGE ROCKS WITH INTERMITTENT PEBBLE BEACHES. CLOSER TO THE WATER, LARGER BOULDERS AND OUTCROPPINGS OF ROCKS FORM TIDE POOLS AND CREVICES. SEAWARD OF THE INTERTIDAL AREA, REEFS EXIST THAT ARE PERIODICALLY UNCOVERED BY LOW TIDES. FURTHER SEAWARD, THE ROCKS AND REEFS GIVE WAY TO A SAND BOTTOM.

GEOLOGIC CONDITIONS

SUBREGION 8 POSSESSES A NUMBER OF GEOLOGIC HAZARDS. SEA CLIFF EROSION HAZARDS; EXTREME SLOPES (> 35%); AND LANDSLIDE CONDITIONS EXIST OVER PORTIONS OF THE SUBREGION. DEVELOPMENT IN THIS SUBREGION WILL BE VERY DIFFICULT AND ENVIRONMENTALLY UNSOUND OVER A MAJORITY OF THE AREA.

WITHIN SUBREGION 8, THERE EXISTS AN ''OLD'' LANDSLIDE AND A PROBABLE LANDSLIDE AREA COMPLETELY DISECTING THE LAND MASS FROM NORTHEAST TO SOUTHWEST. THIS LANDSLIDE SYSTEM IS REFERRED TO AS THE SOUTH SHORES SYSTEM AND, ALTHOUGH NO HISTORIC MOVEMENT HAS BEEN RECORDED, MANY FRESH SCARPS AND CLOSED DEPRESSIONS EVIDENT WITHIN THE MASS INDICATE THAT RELATIVELY RECENT MOVEMENT HAS OCCURRED. THIS SYSTEM IS APPARENTLY AT EQUILIBRIUM FOR THE PRESENT, BUT RENEWED ACTIVITY MAY OCCUR IF EXISTING CONDITIONS ARE MODIFIED (ENVICOM, P. 87, ESA).

HYDROLOGY

A MAJOR NATURAL DRAINAGE COURSE TRAVERSES SUBREGION 8. THIS COURSE IS LOCATED IN THE CENTER OF THE PARK AND RUNS FROM NORTHEAST TO SOUTHWEST. LITTLE OR NO POTENTIAL FLOOD HAZARD EXISTS AND THERE ARE NO PROPOSED STORM DRAINS FOR THE AREA.

BIOTIC RESOURCES

TERRESTRIAL

FOR QUITE A NUMBER OF YEARS, THE SHORELINE PARK AREA WAS A POPULAR PLACE FOR OFF-ROAD MOTORCYCLE RIDING. THIS ACTIVITY WAS SO INTENSE THAT LONG-TERM DAMAGE WAS INCURRED TO THE NATURAL VEGETATION.

SINCE THE AREA HAS BEEN CLOSED TO MOTORCYCLE ACTIVITY, VEGETATION HAS BEEN REGENERATING TOWARDS A BASE THAT MAY EVENTUALLY BE CAPABLE OF SUPPORTING A MAJOR WILDLIFE HABITAT. WHEN THIS REGENERATION IS COMBINED WITH THE EXISTING GEOLOGIC CONSTRAINTS AND TENUOUS DEVELOPMENT PLANS FOR SHORELINE PARK, IT APPEARS FEASIBLE THAT FINAL DEVELOPMENT PLANS COULD REFLECT A LOW INTENSITY USE CONFINED TO UNCONSTRAINED PORTIONS OF THE SITE. THIS WOULD ALSO BE COMPATIBLE WITH THE GENERAL PLAN DESIGNATION OF A PASSIVE RECREATIONAL ACTIVITY.

TYPICAL COASTAL PLANT COMMUNITIES EXIST WITHIN THIS SUBREGION WITH THE CACTUS

NATURAL ENVIRONMENT: SIGNIFICANT FEATURES **TABLE:** S8-A

	TOPOGRAPHY-SLOPE			GEOLOGY			FIRE	HYDROLOGY		BIOTA		
	CRM-1 ⩾ 35%	CRM-2 25-35%	GRAD. ORD. 10-25%	CRM-3 HAZARD	CRM-4 MARG. STABLE	CRM-5 INSUF. INFO.	CRM-6 HAZARD	CRM-7 FLOOD HAZARD	CRM-8 FACTORS	CRM-9 WILDLIFE TER.	CRM-9 WILDLIFE MARINE	CRM-10 VEGET.
CONTROLLED		5 AC.	18 AC.						9 AC.	28 AC.	MAINTENANCE	38 AC.
RESTRICTED	26 AC.			32 AC.	24 AC.							
LEVEL OF SIGNIFICANCE	●	◒	○	●	●		○		●	●	◒	●

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.
NOTE: FACTORS COMPRISING AND THE APPROPRIATE ACTION NECESSITATED FOR EACH CRM CAN BE FOUND IN THE COASTAL REGION NATURAL ENVIRONMENT ELEMENT SECTION.

COMMUNITY BEING VERY PREVALENT ON THE STEEPER SLOPES.

MARINE

THE MARINE BIOTIC RESOURCES OF THIS AREA ARE NOT AS DIVERSE AS ELSEWHERE BUT IT DOES TEND TO BE RICH IN THE HARDIER INTERTIDAL SPECIES SUCH AS BLACK ABALONE AND PURPLE SEA URCHIN. THIS IS DUE TO THE SURF THAT CONTINUOUSLY POUNDS THE SHORELINE AS WELL AS THE PROXIMITY TO THE SEWAGE OUTFALL.

FIRE HAZARD

THE PRESENT LACK OF A STRONG VEGETATIVE BASE AND THE MANY DISTINCT AND WIDE TRAILS AND ''SCARS'' FROM MOTORCYCLE ACTIVITY HAVE REDUCED THE FIRE HAZARD POTENTIAL TO A ''LOW'' RATING. HOWEVER, IF THE PRESENT TREND OF REVERSION TO NATURAL VEGETATION CONTINUES, THE VEGETATIVE BASE COULD CONCEIVABLY INCREASE TO THE POINT WHERE FIRE HAZARD BECOMES OF MEDIUM OR HIGH RISK, DEPENDING ON THE ULTIMATE DEVELOPMENT PLANS BY THE COUNTY.

SOCIO/CULTURAL

CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

THE ENTIRE LAND MASS OF SUBREGION 8 HAS BEEN IDENTIFIED AS POSSESSING POSSIBLE AND PROBABLY EXTANT ARCHAEOLOGICAL RESOURCES; THUS WARRANTING AN OVERLAY CONTROL DISTRICT DESIGNATION.

URBAN ENVIRONMENT

ACTIVITY AREAS

INSTITUTIONAL

ONE LAND USE IN THIS SUBREGION CONSISTS OF A 5-ACRE RADIO TOWER FACILITY OPERATED BY PACIFIC TELEPHONE. NO REVISIONS TO THIS FACILITY ARE ANTICIPATED AT THIS TIME (SEE INFRASTRUCTURE DISCUSSION OF COMMUNICATION SYSTEMS).

CULTURAL RESOURCES

TABLE: S8-B

	HISTORICAL	ARCHAEOLOGICAL	PALEONTOLOGICAL
AREA INVOLVED		58 AC.	COASTAL BLUFFS
LEVEL OF SIGNIFICANCE		●	◒

LEVEL OF SIGNIFICANCE CODE: ● – HIGH, ◒ – MODERATE, O – LOW, BLANK MEANS NOT APPLICABLE.

Recreation

Terrestrial

In January of 1958, the County of Los Angeles acquired a 53 acre site now known as Palos Verdes Shoreline County Park. This undeveloped park falls under the jurisdiction of Los Angeles County Parks and Recreation Department. Preliminary development proposals (which include a vista area, picnic area, parking, play apparatus area, service yard and building, and a comfort station) have been postponed because of a lack of funds and extensive geologic problems. Based on these sensitive geologic conditions (see geologic discussion), the future development and orientation of this park is unclear. However, it is important to note that from the City's view point any development on this site should be low-keyed and respond to existing environmental conditions.

Marine

Skin diving, sportfishing, and beachcombing in the Shoreline Park subregion are not major activities. Access is difficult and few people use the shoreline in this area due to its distance from Paseo Del Mar and 25th Street. Access down the bluff is moderately difficult.

Infrastructure

The ultimate infrastructure requirements for Subregion 8 will largely be a result of County action, in respect to the development of Shoreline Park. Assuming the park is developed as a low intensity, passive recreation area, with only minor improvements, the infrastructure network could remain relatively minor.

Sewerage

As in other coastal subregions, the Sanitation District's trunk sewerage line transects the lower half of Subregion 8. While there are currently no known problems concerning the trunk line itself, the geologic stability of the area through which it passes is questionable (Envicom, 1975, ESA, 1976). The history of landslide activity on the Peninsula and the associated impacts to sewerage system are well known. The classic example is the Portuguese Bend landslide which disrupted a one mile section of the trunk line during the 50's, and which still exists today. More recently, the trunk line entering the Abalone Cove pumping station was severed by new earth movement and will result in the relocation of the station (see Subregion 5). It is this type of situation that could occur in Subregion 8 if proper steps are not taken, in respect to ultimate development on, and adjacent to, the South Shores landslide system. It is interesting to note that at one time a sewage treatment plant was proposed for this general area; however, the idea was abandoned after it was determined that the geologic stability in the area would not support such an activity.

Flood Control

The low intensity uses proposed for the area probably will not require flood control improvements; however, preliminary development

ACTIVITY AREAS

TABLE: S8-C

	OPEN SPACE		RESIDENTIAL – D.U./AC.					COMMERCIAL		INST.	REC.	AGRI.
	HAZARD	BUILD-ABLE	≤ 1	≤ 2	≤ 4	≤ 6	> 6	RETAIL	REC.			
EXISTING	31 AC.	27 AC.								2.5 AC.		
EXISTING UNITS												
EXISTING POPULATION												
GENERAL PLAN	31 AC.	27 AC.								2.5 AC.	24.5 AC.	
GENERAL PLAN UNITS												
GENERAL PLAN POPULATION												
COASTAL PLAN	31 AC.	27 AC.								2.5 AC.	24.5 AC.	
COASTAL PLAN UNITS												
COASTAL PLAN POPULATION												
INTERIM PROFILE												
INTERIM PROFILE UNITS												
INTERIM PROFILE POPULATION												

ABBREVIATIONS: AC. – MEANS ACRES, S.F. – MEANS SINGLE-FAMILY, M.F. – MEANS MULTI-FAMILY

PLANS FOR SHORELINE PARK PROPOSE MINOR EROSION CONTROL IMPROVEMENTS (EXACT SPECIFICATIONS ARE UNKNOWN AT THIS TIME).

COMMUNICATION SYSTEMS

PACIFIC TELEPHONE COMPANY OWNS FIVE ACRES OF LAND IN THE NORTHWEST CORNER OF THIS SUBREGION. THE SITE CONTAINS A SMALL BUILDING AND THREE RADIO TOWERS WHICH EXCEED 100 FEET IN HEIGHT. THE SMALL BUILDING HOUSES AN UNMANNED RADIO CONTROL SYSTEM AND AN EMERGENCY GENERATOR WHICH ACTUATES IF COMMERCIAL POWER SHOULD FAIL. OF THE THREE RADIO TOWERS, TWO ARE PART OF A MARINE RADIO (SHIP TO SHORE) SYSTEM, WHILE THE THIRD IS A TRANSMITTING/RECEIVING LINK ON THE INTERNATIONAL CALLING, SAFETY AND DISTRESS CHANNEL (G. SMITH, PACIFIC TELEPHONE COMPANY, 7/13/76).

TRANSPORTATION SYSTEMS

VEHICULAR NETWORKS

THE VEHICULAR NETWORK WITHIN SUBREGION 8 INCLUDES ONLY 25TH STREET, WHICH RUNS IN AN EAST-WEST DIRECTION. THERE IS NO VEHICULAR ACCESS TO SHORELINE PARK, AND THE TELEPHONE COMPANY FACILITY ACCESS IS TAKEN FROM THE WIDENED SHOULDER. NO TRAFFIC IS CURRENTLY GENERATED BY THE SUBREGION, WITH THE EXCEPTION OF AN OCCASIONAL TELEPHONE COMPANY VEHICLE; HOWEVER, SUBREGION 8 IS NOT WITHOUT TRAFFIC PROBLEMS. RECENT TRAFFIC COUNTS (4/76) ON 25TH STREET, JUST EAST OF THE PALOS VERDES DRIVE EAST INTERSECTION, REVEALED WEEKEND TRAFFIC THAT APPROACHES THE MAXIMUM RECOMMENDED CAPACITY (1,000 VEHICLES PER HOUR, EACH DIRECTION).

ASSUMING SHORELINE PARK IS EVENTUALLY DEVELOPED AS A LOW INTENSITY, PASSIVE RECREATION FACILITY AND THE STATUS OF THE TELEPHONE COMPANY FACILITY REMAINS THE SAME, SUBREGION 8 COULD GENERATE ABOUT 164 TRIPS IN A 24 HOUR PERIOD AND, MORE IMPORTANTLY, ABOUT 33 TRIPS DURING A PEAK HOUR. THE SMALL AMOUNT OF TRAFFIC THAT IS PROJECTED TO BE GENERATED BY SUBREGION 8 WOULD NORMALLY BE UNNOTICED; HOWEVER, THE TRAFFIC PROBLEMS FOUND IN THIS AREA ON WEEKENDS ARE SUCH THAT ANY INCREASE WILL FURTHER ADD TO AN ALREADY IMPACTED SITUATION. THE DEGREE TO WHICH THIS ADDED TRAFFIC WILL IMPACT PALOS VERDES DRIVE SOUTH/25TH STREET MAY DEPEND LARGELY ON THE PLACEMENT AND METHOD OF ACCESS TO THE COUNTY'S SHORELINE PARK. THE PRELIMINARY DEVELOPMENT PLAN (DEPARTMENT OF PARKS AND RECREATION, 12/16/75) PROPOSES THAT ACCESS BE TAKEN FROM 25TH STREET, AT A POINT APPROXIMATELY 600 FEET WEST OF THE RANCHO PALOS VERDES/LOS ANGELES CITY BOUNDARY. WHILE THIS PROPOSAL MAY BE A LOGICAL ''PRELIMINARY CHOICE'', FURTHER ANALYSIS OF THE FOLLOWING ISSUES SUGGEST RE-EVALUATION BY COUNTY PLANNERS:

- IMPACTED WEEKEND TRAFFIC AND DOUBTFUL ROAD WIDENING (25TH STREET)
- AREAS OF KNOWN AND PROBABLE GEOLOGIC INSTABILITY
- TOPOGRAPHY VARIATIONS
- A NATURAL DRAINAGE SYSTEM WHICH ACTS AS A WILDLIFE HABITAT.

Directly associated with vehicular access is the issue of parking for Shoreline Park. The success of the facility and its acceptance by the City and particularly adjacent residents may lie in how the parking is handled. Too little or too much parking are conditions that have obvious impacts which require careful assessment. Park planners are urged to thoroughly monitor and evaluate conditions and standards at similar facilities (e.g., Abalone Cove Park, Point Vicente Beach Park) for mistakes and opportunities.

Path and Trail Networks

At present, Subregion 8 contains no officially recognized paths or trails. There is, however, a web-like system of trails which covers a substantial portion of the southern half of the area. These trails were originally established by cars, motorcycles, and hikers. Vehicular access has since been blocked, and although an occasional motorcyclist finds a way in, most of the trails are ''maintained'' (kept open) by foot traffic. Beach access is relatively easy, due to the lack of major bluffs. Currently there are several officially unrecognized beach access points.

An evaluation of Subregion 8, in terms of path and trail potential and necessity, reveals excellent opportunities. The preliminary concept of Shoreline Park, as a low intensity, passive facility with an emphasis on hiking, vistas, and picnicing, when coupled with location, could establish it as a significant destination point for bicyclists and walker/hikers. The precise alignment of paths and trails will, of course, be subject to the County's final development plans for the park; however, it is hoped that the suggestions made in the following paragraphs will be studied and implemented if found to be consistent.

From the common subregion boundary on the west, the walkway loop will continue the bluff alignment to a point where topographic and other physical conditions allow the trail to take a north/south alignment. The Class I trail would then traverse the Park to 25th Street where it would merge with the primary walkway. Should this alignment not be feasible, the alternate route described in Subregion 7 should be implemented.

The bikeway which runs the length of the coastal region on Palos Verdes Drive West and South and on 25th Street will function as the primary bike route to and from Subregion 8. The actual point of access to the park, however, should coincide with vehicular access, for the simple reasons of excessive slopes and rights-of-way considerations.

POLICIES

IT IS THE POLICY OF THE CITY TO:

1. REQUIRE THAT FINAL DEVELOPMENT PLANS FOR SHORELINE PARK BE PLANNED IN COOPERATION WITH THE CITY AND REFLECT A LOW INTENSITY ACTIVITY AND TAKE ENVIRONMENTAL CONSTRAINTS INTO CONSIDERATION.

2. DISCOURAGE VEHICULAR ACCESS TO SHORELINE PARK FROM SUBREGION 7.

3. ENCOURAGE THE COUNTY TO FACILITATE A BIKEWAY ACCESS TO SHORELINE PARK WHICH COINCIDES WITH VEHICULAR ACCESS.

4. ENCOURAGE THE COUNTY TO PROVIDE AT LEAST TWO WALKWAYS: ONE FROM 25TH STREET ALONG THE EASTERN PORTION OF THE SITE; THE OTHER ACCESS POINT SHOULD ALIGN WITH THE CITY'S TRAIL IN SUBREGION 7.

INTRODUCTION
NATURAL ENVIRONMENT ELEMENT
SOCIO/CULTURAL ELEMENT
URBAN ENVIRONMENT ELEMENT
CORRIDOR ELEMENT
FISCAL ELEMENT
SUBREGION 1
SUBREGION 2
SUBREGION 3
SUBREGION 4
SUBREGION 5
SUBREGION 6
SUBREGION 7
SUBREGION 8
APPENDIX

ENVIRONMENTAL IMPACT REPORT REQUIREMENTS

EIR REQUIREMENTS

Due to the long-range and policy nature of the Coastal Specific Plan, direct specific application of the requirements of an environmental impact report is not always practical. But because it is a purpose of the environmental impact report process to expose alternatives and impacts, and it is a function of the Coastal Specific Plan to analyze options and select best alternatives, it is appropriate to address the environmental impact report requirements within the Plan. The following summarizes the requirements and indicates the location, by element and section, of the items required to be addressed. More detailed analysis and supporting data for the Coastal Specific Plan and this EIR are found in the documents listed in the Bibliography, which are incorporated herein by reference.

DESCRIPTION OF THE PROJECT

The project serves two functions: first, it serves as a Coastal Specific Plan for the City of Rancho Palos Verdes and second, it will serve as this City's Land Use Plan component of a local coastal program as required under the 1976 California Coastal Act. The Plan encompasses 1.5 square miles within the City boundaries, indicated on maps in the beginning of this document.

The objective of the project is the adoption of a long-range comprehensive plan for the physical development of the City's coastal region, including goals, objectives, policies, and proposals, which meets both the requirements of the California Government Code pertaining to Specific Plans and the requirements of the 1976 California Coastal Act pertaining to the land use component of a local coastal program.

A general description of the project's technical, economic, and environmental characteristics are:

1. Technical characteristic - the project will serve as a guide to be used by decision-making bodies concerning the future development of the City's coastal region.

2. Economic characteristic - the project will provide land use activities that promote a stable economic base and serve as a tool for analyzing fiscal impacts of future decisions.

3. Environmental characteristic - the project analyzes and balances environmental considerations with land use planning and reflects the unique environmental character of the coastal region.

ENVIRONMENTAL SETTING

The coastal region is part of the City of Rancho Palos Verdes. While much of the area is vacant, what land use does exist is primarily oriented towards facilitating recreational needs and residential activity due to location and geological constraints.

THE COASTAL REGION ENCOMPASSES APPROXIMATELY 960 ACRES, WITH APPROXIMATELY 632 ACRES VACANT. THE LAND IS EXTREMELY SENSITIVE ENVIRONMENTALLY, INCLUDING STEEP SLOPES, LANDSLIDES (BOTH ACTIVE AND INACTIVE), ANIMAL HABITATS, MARINE HABITATS, NATURAL VEGETATION AREAS, KELP BEDS, MANY DRAINAGE COURSES, AND OCEAN RESOURCES. THE CLIMATE IS MEDITERRANEAN IN CHARACTER, AND THE AIR QUALITY GOOD. MARINE WATER QUALITY PROGRESSIVELY DIMINISHES TOWARD WHITE'S POINT BUT IS IMPROVING OVER THAT EXPERIENCED IN THE 1960'S.

MORE SPECIFIC DESCRIPTION OF THE ENVIRONMENTAL SETTING IS FOUND IN THE FOLLOWING SECTIONS OF THE PLAN:

INTRODUCTION

Description of Coastline

NATURAL ENVIRONMENT ELEMENT

Natural Environment

Climate
Air Quality
Water Quality
Geotechnical Factors
Hydrology
Biotic Resources
Fire Hazard

SOCIO/CULTURAL ELEMENT

Social Factors

Governmental
Non-governmental

Cultural Resources

Terrestrial
Marine

URBAN ENVIRONMENT ELEMENT

Activity Areas

Compatibility of the Coastal Region
with Adjacent Activity
Residential Activity
Commercial Activity
Institutional Activity
Recreational Activity
Agricultural Activity

Infrastructure

Resource Systems
Disposal Systems
Transportation Systems

Safety

Hazard Inventory
Safety Programs

CORRIDOR ELEMENT

Analysis of Existing Condition

FISCAL ELEMENT

General Plan/Coastal Plan Comparison

Coastal Plan Profile

SUBREGIONS

Subregion 1

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 2

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 3

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 4

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 5

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 6

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 7

Introduction
Natural Environment
Socio/Cultural
Urban Environment

Subregion 8

Introduction
Natural Environment
Socio/Cultural
Urban Environment

ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

THE PROJECT IS A POSITIVE APPROACH TO REDUCING ADVERSE ENVIRONMENTAL IMPACTS. THE INTENT IS TOWARDS PRESERVING ENVIRONMENTAL CHARACTERISTICS AND RESPONDING TO THOSE PHYSICAL FEATURES RESTRICTING DEVELOPMENT FOR THE HEALTH, SAFETY, AND WELFARE OF THE PUBLIC. WITHOUT THE PLAN, POTENTIAL EXISTS FOR DEGRADATION OF RESOURCES. ADVERSE ENVIRONMENTAL IMPACT COULD BE INCURRED IF POLICIES AND GUIDELINES ARE NOT DEVELOPED TO PROTECT AND MANAGE RESOURCES, ENVIRONMENTAL CHARACTER, AND PHYSICAL HAZARDS.

LONG-RANGE IMPACTS INCLUDE THE COMMITTMENT OF PORTIONS OF THE VACANT LAND TO MORE INTENSE URBAN USE, WHILE PRESERVING OTHER LAND AND MARINE RESOURCES IN THEIR NATURAL STATE. THE PLAN PROPOSES USES AND INTENSITIES WHICH ARE INTENDED TO RESPOND TO THE COASTAL REGION'S HOLDING CAPACITY, WHILE STILL ALLOWING SOME DEVELOPMENT.

BY ITS NATURE, THE PROJECT IS AN INDIRECT IMPACT, SINCE IT IS ONLY A PLAN AND DOES NOT PROPOSE SPECIFIC DEVELOPMENT. IT IS DEPENDENT UPON NUMEROUS MECHANISMS AND PROCEDURES FOR IMPLEMENTATION. A MAJOR ASPECT OF PREDEVELOPMENT PROCEDURES IS THE ENVIRONMENTAL IMPACT REVIEW PROCESS THAT PERMITS SPECIFIC ANALYSIS OF THE IMPACTS OF SUBSEQUENT SPECIFIC DEVELOPMENT PROPOSALS.

MORE SPECIFIC DISCUSSION OF ENVIRONMENTAL IMPACTS IS FOUND IN THE FOLLOWING SECTIONS OF THE PLAN:

NATURAL ENVIRONMENT ELEMENT

- NATURAL ENVIRONMENT
  - WATER QUALITY

URBAN ENVIRONMENT ELEMENT

- ACTIVITY AREAS
  - ° COMPATIBILITY OF THE COASTAL REGION WITH ADJACENT ACTIVITY
  - ° RESIDENTIAL ACTIVITY - LOAD INDUCED
  - ° COMMERCIAL ACTIVITY - LOAD INDUCED
  - ° COASTAL-DEPENDENT ACTIVITY
  - ° INSTITUTIONAL ACTIVITY - EDUCATIONAL ACTIVITY
  - ° RECREATIONAL ACTIVITY - ADDITIONAL RECREATIONAL FACILITIES - MARINE
- INFRASTRUCTURE
  - RESOURCE SYSTEMS
  - DISPOSAL SYSTEMS
  - TRANSPORTATION SYSTEMS

CORRIDOR ELEMENT

- ANALYSIS OF EXISTING CONDITION
- CORRIDORS CONCEPT

FISCAL ELEMENT

- COASTAL PLAN PROFILE

SUBREGIONS

Subregion 1

Urban Environment - Induced Activity - Infrastructure

Subregion 6

Urban Environment - Induced Activity - Infrastructure

Subregion 7

Urban Environment - Induced Activity - Infrastructure

ANY ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

No significant adverse effects have been identified resulting from the Plan.

The intensifying of land use along certain segments of the coastal region will create potential adverse environmental effects. The Plan is intended to reduce these as much as possible. Other adverse impacts which cannot be avoided are those associated with natural forces such as earthquake, landslide, sea cliff erosion, or those regional problems such as air and water pollution.

More specific discussion of adverse environmental effects is found in the following sections of the Plan:

NATURAL ENVIRONMENT ELEMENT

Natural Environment

Water Quality
Geotechnical Factors
Hydrology

Areas for Consideration of Public Health and Safety

Areas for Preservation of Natural Resources

SOCIO/CULTURAL RESOURCES

Cultural Resources

Terrestrial
Marine

URBAN ENVIRONMENT ELEMENT

Activity Areas

Residential Activity
Commercial Activity
Coastal-Dependent Activity
Institutional Activity - Educational Activity
Recreational Activity

Infrastructure

Resource Systems
Disposal Systems
Transportation Systems

Safety

Hazard Inventory

CORRIDOR ELEMENT

Corridors Concept

FISCAL ELEMENT

Coastal Plan Profile

SUBREGIONS

Subregion 1

Urban Environment - Induced Activity - Infrastructure

Subregion 6

Urban Environment - Induced Activity - Infrastructure

Subregion 7

Urban Environment - Induced Activity - Infrastructure

MITIGATION MEASURES PROPOSED TO MINIMIZE THE IMPACT

In general terms, the project is a mitigation measure in itself. It proposes to protect and manage the natural environment of the coastal region of the City and, through environmental analysis of specific development proposals, it is intended that specific mitigating measures would be required.

More specific discussion of mitigating measures (often contained in policy statements) is found in the following sections of the Plan:

NATURAL ENVIRONMENT ELEMENT

Natural Environment

Water Quality
Geotechnical Factors
Biotic Resources

Resource Classification

Areas for Consideration of Public Health and Safety Areas for Preservation of Natural Resources

Natural Environment Element

Policies

SOCIO/CULTURAL ELEMENT

Social Factors

Governmental
Non-governmental
Policies

Cultural Resources

Terrestrial
Marine

URBAN ENVIRONMENT ELEMENT

Activity Areas

- Compatibility of the Coastal Region with Adjacent Activity - Policies
- Residential Activity - Housing Obstacles - Policies
- Commercial Activity - Policies
- Institutional Activity - Establishment of a School Impact Fee - Policies
- Recreational Activity - Additional Recreational Facilities - Policies
- Agricultural Activity - Policies

Infrastructure

Resource Systems
Disposal Systems
Transportation Systems
Policies

Planning and Design Guidelines

Site Planning
Structure Design
Materials
Landscape/Hardscape
Miscellaneous Design Elements
Policy

Safety

Safety Programs
Policies

CORRIDOR ELEMENT

Corridors Concept

SUBREGIONS

Subregion 1

Natural Environment
Socio/Cultural
Urban Environment
Policies

Subregion 2

Natural Environment
Socio/Cultural
Urban Environment
Policies

Subregion 3

Natural Environment
Urban Environment
Policies

Subregion 4

Natural Environment
Socio/Cultural
Urban Environment
Policies

Subregion 5

Natural Environment
Socio/Cultural
Urban Environment

SUBREGION 6

NATURAL ENVIRONMENT
SOCIO/CULTURAL
URBAN ENVIRONMENT
POLICIES

SUBREGION 7

NATURAL ENVIRONMENT
SOCIO/CULTURAL
URBAN ENVIRONMENT
POLICIES

SUBREGION 8

NATURAL ENVIRONMENT
SOCIO/CULTURAL
URBAN ENVIRONMENT
POLICIES

ALTERNATIVES TO THE PROPOSED ACTION

IN GENERAL TERMS, EXTREME ALTERNATIVES TO THE PROJECT ARE: NO PLAN, A PLAN ACCOMMODATING MAXIMUM DEVELOPMENT, AND A MORE RESTRICTIVE PLAN. NO PLAN WOULD MAINTAIN THE CURRENT GENERAL PLAN LAND USE DESIGNATIONS AND CONTROLS WITHIN THE COASTAL REGION. A LESS RESTRICTIVE PLAN, ACCOMMODATING MAXIMUM GROWTH AND DEVELOPMENT, COULD RESULT IN OVER-DEVELOPMENT AND OVER-UTILIZATION OF COASTAL RESOURCES, PRODUCING NUMEROUS ADVERSE IMPACTS. A MORE RESTRICTIVE PLAN COULD PROVIDE LESSENED ADVERSE ENVIRONMENTAL IMPACTS, BUT COULD INCREASE SOCIAL, LEGAL, AND ECONOMIC IMPACTS. THESE THREE ALTERNATIVES ARE INCONSISTENT WITH THE GOALS AND POLICIES OF THE CITY.

PART OF THE PROCESS OF DEVELOPING THE PLAN WAS TO ANALYZE SEVERAL REASONABLE ALTERNATIVES IN A STUDY ENTITLED A WORKBOOK ANALYZING ALTERNATIVE CARRYING CAPACITIES AND DEVELOPMENT TECHNIQUES FOR THE COASTAL SPECIFIC PLAN (APRIL 1976). VARIOUS WORK SESSIONS WERE HELD BY BOTH THE PLANNING COMMISSION AND CITY COUNCIL CONCERNING THE RANGE OF IMPACTS ACCOMPANYING EACH ALTERNATIVE. COPIES OF THIS DOCUMENT ARE ON FILE AT THE CITY. SUBSEQUENT PLANNING COMMISSION AND CITY COUNCIL DIRECTIVES, ALONG WITH REFINEMENTS, LED TO THIS PLAN.

ADDITIONAL SPECIFIC DISCUSSION OF ALTERNATIVES IS FOUND IN THE FOLLOWING SECTIONS OF THE PLAN:

URBAN ENVIRONMENT ELEMENT

ACTIVITY AREAS

AGRICULTURAL ACTIVITY

INFRASTRUCTURE

TRANSPORTATION SYSTEMS

SUBREGIONS

SUBREGION 1

URBAN ENVIRONMENT - POTENTIAL ACTIVITY

SUBREGION 2

URBAN ENVIRONMENT - POTENTIAL ACTIVITY

Subregion 3

Urban Environment - Potential Activity

Subregion 4

Urban Environment - Potential Activity

Subregion 5

Urban Environment - Potential Activity

Subregion 6

Urban Environment - Potential Activity

Subregion 7

Urban Environment - Potential Activity

The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

The cumulative and long-term effects of the project are to maintain the natural environmental characteristics of the coastal region, while providing for controlled development of land capable of supporting it. The methodology used provided for an analysis necessary to propose policies promoting a sound balance between economic development and environmental protection. The Plan promotes a stewardship role for the City to maintain and enhance the long-term productivity of coastal resources as a regional and State-wide asset which should not be lost to short-term pressures.

Additional discussion is found in the following sections of the Plan:

Natural Environment Element

Resource Classification

Areas for Consideration of Public Health and Safety

Areas for Preservation of Natural Resources

Natural Environment Element

Policies

Socio/Cultural Element

Cultural Resources

Terrestrial
Marine

Urban Environment Element

Activity Areas

- Recreational Activity - Public Recreational Activity Areas - Additional Recreational Facilities - Marine - Policies
- Agricultural Activity

CORRIDOR ELEMENT

Corridors Concept

FISCAL ELEMENT

General Plan/Coastal Plan Comparison

Coastal Plan Profile

SUBREGIONS

Subregion 1

Natural Environment
Socio/Cultural
Urban Environment

Subregion 2

Natural Environment
Socio/Cultural
Urban Environment - Activity Areas

Subregion 3

Natural Environment
Urban Environment

Subregion 4

Natural Environment
Socio/Cultural
Urban Environment

Subregion 5

Natural Environment
Socio/Cultural
Urban Environment

Subregion 6

Natural Environment
Socio/Cultural
Urban Environment

Subregion 7

Natural Environment
Socio/Cultural

Subregion 8

Natural Environment
Socio/Cultural

ANY IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

The irreversible environmental changes involved with the project would be the intensification of land use within certain segments of the coastal region. Although the Plan proposes the preservation of land with severe physical constraints and proposes mitigating measures to be taken with any development of other land, intensifying urban uses would be an irreversible environmental change within the time frame of this Plan.

ADDITIONAL DISCUSSION IS IN THOSE SECTIONS WHICH DESCRIBE PROPOSED INTENSIFICATION OF URBAN USES:

URBAN ENVIRONMENT ELEMENT

- ACTIVITY AREAS
  - RESIDENTIAL ACTIVITY
  - COMMERCIAL ACTIVITY
  - INSTITUTIONAL ACTIVITY - EDUCATIONAL ACTIVITY
- INFRASTRUCTURE
  - RESOURCE SYSTEMS
  - DISPOSAL SYSTEMS
  - TRANSPORTATION SYSTEMS

CORRIDOR ELEMENT

- CORRIDORS CONCEPT

SUBREGIONS

- SUBREGION 1
  - URBAN ENVIRONMENT
- SUBREGION 6
  - URBAN ENVIRONMENT ELEMENT
- SUBREGION 7
  - URBAN ENVIRONMENT ELEMENT
  - URBAN ENVIRONMENT

THE GROWTH-INDUCING IMPACT OF THE PROPOSED ACTION

THE GROWTH-INDUCING IMPACT OF THE PROJECT IS THE AMOUNT OF NEW DWELLING UNITS, COMMERCIAL ACTIVITY, AND POPULATION PROJECTED BEYOND THAT ALLOWED BY THE GENERAL PLAN. THE PLAN DIRECTS GROWTH TO AREAS WHERE ENVIRONMENTAL CAPABILITIES FOR ACCOMMODATING DEVELOPMENT ARE MOST FEASIBLE.

FURTHER DISCUSSION OF THE GROWTH-INDUCING IMPACT IS FOUND IN THE FOLLOWING SECTIONS OF THE PLAN:

URBAN ENVIRONMENT ELEMENT

- ACTIVITY AREAS
  - RESIDENTIAL ACTIVITY
  - COMMERCIAL ACTIVITY
  - INSTITUTIONAL ACTIVITY - EDUCATIONAL ACTIVITY
- INFRASTRUCTURE
  - RESOURCE SYSTEMS
  - DISPOSAL SYSTEMS
  - TRANSPORTATION SYSTEMS

FISCAL ELEMENT

- COASTAL PLAN PROFILE

SUBREGIONS

- SUBREGION 1
  - URBAN ENVIRONMENT

SUBREGION 6

URBAN ENVIRONMENT

SUBREGION 7

URBAN ENVIRONMENT

ADDENDUM FOR COASTAL PLAN ENVIRONMENTAL IMPACT REPORT

NOTE - SOME OF THE REVISIONS MADE UP TO APRIL 27, 1977, WERE LATER CHANGED IN THE FINAL DOCUMENT.

PERSONS AND PUBLIC AGENCIES COMMENTING
ON THE DRAFT EIR

Individuals:

1. Tim Burrell
2. Joseph Clifford

Agencies:

1. Palos Verdes Peninsula Unified School District
2. Southern California Edison Company
3. Department of Fish and Game
4. Air Resources Board

Palos Verdes Peninsula Unified School District
Administration Center
30 Crest Road West • Rolling Hills, California 90274
(213) 377-1811

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BUSINESS MANAGER
ROBERT J. FERRERA
ASSISTANT SUPERINTENDENT
FOR EDUCATION

RECEIVED
MAR 21 1977

March 17, 1977

Mrs. Sharon Hightower
Director of Planning
City of Rancho Palos Verdes
30950 Hawthorne Boulevard
Rancho Palos Verdes, California 90274

Dear Mrs. Hightower:

The school district's Housing Office reviewed your March 1977 Draft Coastal Plan and would like to draw your attention to a few changes which should be incorporated in a future draft.

On page U-16, under Educational Activities, the statements concerning the occupancy of Peninsula High School, Portuguese Bend Intermediate School, and the Loma Del Mar Elementary School should be altered to reflect that no future date has been established for the construction and occupancy of these three schools. Any future new construction of schools will be wholly dependent upon the growth of dwelling units within each school's attendance area and the entire Peninsula residents' willingness to approve a school bond election for the construction of new schools. Unless the law requiring a two-thirds majority vote to pass a school bond election is repealed, it is doubtful whether the school district will ever have the funds for construction of new schools.

The financial constraints imposed upon the school district over the past few years has, and will continue to curtail any expansion of school facilities.

The School District's Master Plan of 1974, used for your figures in the draft of March 1977, will be updated in the coming year to reflect the District's plight.

Sincerely,

Frank W. Ferguson
Assistant to the Business Manager

FWF:pn

RESPONSE TO PALOS VERDES PENINSULA
SCHOOL DISTRICT'S COMMENTS

The following changes are incorporated into the Final EIR in response to this comment:

Page U-16, right column, first paragraph, third sentence
...Peninsula High School, ~~scheduled for occupancy in the 1979-80 school year~~, will provide...

Page U-16, right column, second paragraph, third sentence
...Intermediate School ~~in the 1980-81 school year~~. This school,...

Page U-16, right column, third paragraph, fourth sentence
...enrollment capabilities. ~~The school year of 1980-81 is scheduled for the occupancy of~~ Loma Del Mar Elementary School is proposed for construction on an existing District site which is ~~to be~~ located in Subregion 7...

Southern California Edison Company

SCE

[illegible]

April 5, 1977

Mrs. Sharon W. Hightower
Director of Planning
City of Rancho Palos Verdes
30490 Hawthorne Boulevard
Rancho Palos Verdes, CA 90274

Dear Mrs. Hightower:

Review of the Draft Coastal Plan of the City of Rancho Palos Verdes has revealed Element areas in which Southern California Edison Company recommends language changes which will more accurately or specifically speak to the Element subject matter.

These areas, which involve Southern California Edison Company operations, are as follows:

1. Natural Environment Element
   Page N-12
   Thermal Pollution

Language recommended in lieu of that used in the Draft Coast Plan is:

> Thermal discharges (heat release from man-made sources) can have a significant effect on the marine environment if proper mitigation measures are not utilized. Presently the only nearby thermal discharge is the Southern California Edison Company power plant in Redondo Beach. The Los Angeles Regional Water Quality Control Board regulates the discharges from this facility. Studies of the thermal effects of the discharge from the Redondo Beach Generating Station have been performed and reviewed by the Regional Water Quality Control Board. It has been determined that the discharges are made in compliance with the State Thermal Plan and that the beneficial uses of the receiving waters are being protected. This plant, therefore, appears to have no adverse effect on the Rancho Palos Verdes marine life.

2. Corridor Element
   Page C-6
   Infrastructure Corridors

In the second paragraph relating to guidelines to be used to create or enhance infrastructure corridors, the language reads as follows:

> All future infrastructure corridors involving utilities or communications as well as sewerage, should be undergrounded.

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APR 12 1977
[illegible] SERVICES

It is suggested that this language be changed to reflect the language used in Section 30610 (e) of the California Coastal Act of 1976 as follows:

> All future infrastructure corridors involving utilities or communications, as well as sewerage, should be undergrounded, WHERE NECESSARY TO MITIGATE ANY ADVERSE IMPACTS ON COASTAL RESOURCES, INCLUDING SCENIC RESOURCES.

3. Urban Environment Element Infrastructure
   Page U-31
   Electric

The final sentence in the last paragraph of this section reads as follows:

> All new development shall be required to install all electric distribution lines underground IN CONFORMANCE WITH THE ADOPTED GENERAL PLAN, PAGE 138, POLICIES 4-6.

4. Miscellaneous Design Elements
   Page U-70
   Lighting

The final paragraph stipulates that "Street lights in developed areas should not be higher than 12 feet."

> Recommendation: Change from 12 feet to 18 feet. The 18 foot heighth is the minimum standard heighth available under Edison Optional Light Standards. It is also the heighth selected by the City since incorporation. Intensity and lighting pattern are dramatically decreased by use of low level standards. The number of lights required for lighting is increased and vandalism opportunity is greater with low-heighth standards.

I believe that the proposed modifications supplement or qualify the Coastal Plan language without changing its intent. Favorable consideration of these modifications is requested.

Sincerely,

K. S. Avera
Area Manager

eg

RESPONSE TO SOUTHERN CALIFORNIA EDISON COMPANY COMMENTS

1. The suggested substitute paragraph is incorporated in the Final EIR.

2. The suggested addition is incorporated in the Final EIR.

3. The suggested addition is incorporated into the Final EIR.

4. The suggested change from 12 to 18 feet would not be appropriate since the City is not committed to an 18 foot minimum height. However, it is questionable whether a 12 foot standard will always prove adequate. For this reason the following change is a part of the Final EIR:

   ...higher than ~~12 feet~~ required to obtain necessary illumination.

State of California
GOVERNOR'S OFFICE
OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

EDMUND G. BROWN JR.
GOVERNOR

May 24, 1977

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MAY 27 1977
ENVIRONMENTAL SERVICES

Ms. Sharon Hightower
City of Rancho Palos Verdes
30904 Hawthorne Blvd.
Rancho Palos Verdes, CA

SUBJECT: SCH# 77040579 COASTAL SPECIFIC PLAN AND GENERAL PLAN AMENDMENT

Dear Ms. Hightower,

This is to certify that State review of your environmental document is complete.

The results of the State review are attached. You should respond to the comments as required by the California Environmental Quality Act. You should address your responses to the commenting agency with a copy to the Clearinghouse.

Sincerely,

William G. Kirkham
Division Chief
State Clearinghouse
(916) 445-0613

WGK/pca
Attachment(s)
cc: Ken Fellows, DWR
Mary Schell, Library
E. C. Fullerton, Fish and Game
William C. Lockett, ARB

State of California — The Resources Agency

Memorandum

To : 1. L. Frank Goodson, Projects Coordinator
Resources Agency

2. City of Rancho Palos Verdes
30904 Hawthorne Blvd.
Rancho Palos Verdes, California

Attn: Sharon Hightower

Date: May 4, 1977

From : Department of Fish and Game

Subject: SCH 77040579 - Draft Coastal Plan - Rancho Palos Verdes

The intent of the coastal plan is to describe and evaluate future developments and their impact on the coastal resources of the City's area of the Palos Verdes Peninsula. It is apparent in this draft that the City recognized the uniqueness of its coastline. Through the use of outside biological consultants and a survey of the City's residents, a top priority on preservation and conservation of tide pool animals and conservation of fish and wildlife resources in general has been established. The development of marine reserves and the education of public users of the coastal resources is seen as a means of both preserving and conserving the biotic communities in their existing healthy state.

This draft coastal plan is a well written document showing the concerns of a community with valuable natural resources.

Jack R. Beer
FOR Director

State of California

Memorandum

To : 1. L. Frank Goodson
Projects Coordinator
Resources Agency

2. City of Rancho Palos Verdes
30904 Hawthorne Blvd.
Rancho Palos Verdes, CA

Date : May 6, 1977

Subject: Coastal Specific Plan and General Plan Amendment - Rancho Palos Verdes Los Angeles County SCH. No. 77040579

From : Air Resources Board

We have reviewed the draft environmental impact report (DEIR) for the draft coastal plan of the City of Rancho Palos Verdes. This plan will serve as a local specific plan and will represent the city's Local Land Use Plan Component of the Local Coastal Program as mandated by the 1976 State Coastal Act. The coastal plan appears to decrease the density of future development permitting only the construction of single family dwelling units.

This DEIR seems confusing and inadequate. The description of the project and of the environmental impacts caused by the project has not been presented clearly. The descriptions would be clarified if the DEIR contained a summary as required by Section 15140(b) of the State EIR Guidelines. This would permit the public and the decision makers to review the scope of the project and its impacts. The description of the project needs to state specifically what the plan proposes, such as the maximum number of people who could reside in the area and the total number and type of dwelling units which would be permitted, and which would actually exist when the plan area is fully implemented.

The DEIR does not contain enough information to determine the impact of the plan on air pollutant emission levels or to determine if the plan is the best of the alternatives available. Specifically, we recommend the final EIR include the following information:

- (1) A list of the state and national ambient air quality standards, (2) the air pollutant level readings of the Los Angeles County Air Pollution Control District Station 72 (now incorporated into the South Coast Air Quality Management District), and (3) the number of days and hours the state or national standards have been exceeded at Station 72;

- Additional discussion of the relationship of local and regional air quality. The severity of air pollution in the South Coast Air Basin is not adequately discussed. The city general plan, which contains the air quality analysis for the coastal plan, does indicate on page II, "... further development creating additional sources of air pollution on the peninsula would further degrade inland air quality". However, the discussion does not indicate the seriousness of air pollution in the South Coast Air Basin. The plan needs to present inland air pollutant levels, the number of days and hours the standards have been exceeded, and, generally, more discussion of air pollution in the basin;

- A presentation of the impact the plan will have on air quality. An estimate needs to be made of the air pollutant emissions in tons per day for maximum development or for 1990. The estimate needs to be generally related to projected air pollutant concentrations in the area;

- A discussion of air pollution mitigation measures. The draft coastal plan does have an extensive discussion of alternate modes of transportation such as public transit, walkways, and bikeways. However, these alternate modes need to be analyzed as mitigation measures and be related to the estimated air pollutant emissions of the project;

- A notation that the project is in the South Coast Air Quality Maintenance Area where air quality maintenance planning teams are presently developing a plan which will include formulation of techniques to integrate air quality considerations into planning decisions to enable the attainment and maintenance of the national ambient air quality standards. The plan is scheduled for completion in the fall of 1978. Information about the Air Quality Maintenance Plan (AQMP) program can be obtained by calling Stephanie Trenck, Regional Manager, South Coast AQMP Team, at (213)575-6962; and

- An estimate and brief discussion of the air quality impacts of the alternatives to the project and the relationship of these impacts to the impacts of the project.

We believe this information will help decision makers weigh carefully the air quality impacts and consider the tradeoffs involved in the alternatives.

We would like to review the final EIR for this project.

for William C. Lockett, Chief
Planning Division

cc: California Coastal Zone Conservation Commission
South Coast Regional Commission
M. Nichols
W. H. Lewis, Jr.
S. Trenck
M. Shallenberger

RESPONSE TO AIR RESOURCES
BOARD COMMENTS

RESPONSE: PROJECT SUMMARY

A project summary is contained in the Draft Coastal Plans Appendix starting on Page A-5.

RESPONSE: INLAND AIR POLLUTANT LEVEL

The following statement presents a summary of Air Quality within Los Angeles County for 1975. This statement is from the Southern California Air Pollution Control District's Metropolitan Zone Air Quality and Meteorology 1975 Annual Report. To date the Department has not compiled their 1976 Annual Report.

Meteorology

The 1975 yearly average temperature was 63.7°F, slightly below the long-term average of 64.8°F. The mean noon relative humidity of 49% was exactly normal for the second consecutive year. The 1975 wind speeds were lighter than average: the hourly wind speed averaged 5.0 mph; normal is 5.7 mph. The Downtown Los Angeles morning wind speed was 4.4 mph; normal is 5.0 mph. The percentage of possible sunshine, 80%, was much above the normal 73%. There were 189 clear days during the year, slightly above the average of 187 days. The highest temperature was 104°F on September 24; the lowest temperature of the year was 37°F on January 29.

Rainfall was much less than average, 10.72 inches of rain being measured on 33 rainy days during 1975. The average year has 14.05 inches on 34 rainy days. It should be noted that the average rainfall for Downtown Los Angeles is now 14.05 inches rather than 14.68 inches reported in prior years. In compiling rainfall statistics, the National Weather Service recomputes the average every ten years, using the latest 30-year period of record during the ensuring decade. The current averaging period is 1941-1970.

The Rule 57 combination of low inversions, shallow mixing heights and light morning wind speeds occurred on 103 days, significantly higher than the long-term average of 89 such days. As a result, 1975 was considered a poorer than normal year in terms of ventilation in the Basin, in contrast with 1973 when the fewest number of Rule 57 days (46) occurred since records were begun in 1950, and also in contrast with 1974, a normal year. Consequently, contaminant values would be expected to be much higher in general than values measured during 1973, a year of extraordinarily good ventilation or 1974, an average year. Actually, 1975 values were either lower or only slightly higher in 1975 than during the preceding two years.

Air Pollution Effects

During 1975, at least a reportable degree of eye irritation was experienced on 137 of 285 observation days in the Los Angeles Basin, compared with 147 of 289 observation days in 1974, and 124 of 250 observation days in 1973. Before 1974, the total number of observation days was dependent upon the number of days heavy smog was forecast or occurred during the year on weekends and holidays. Air monitoring stations were specially staffed on those days when heavy smog was forecast or when high readings on those days resulted in special call-outs of personnel to man stations. Since April 1, 1974, comparable staffing is based on the forecast or attainment of the First-Stage Episode criterion for ozone. These factors govern the number of daily reports available during each of the three years mentioned above. Moderate to heavy eye irritation was experienced on 35 days in 1975, 54 days in 1974, and 39 days in 1973.

The number of days with greatly reduced visibility (less than three miles at low relative humidity) during 1975 was much below average at each of the four reporting stations in the Los Angeles Basin. The highest number of such low-visibility days at any station was 58 (Burbank), compared with an average of 92 days. The number of low visibility days in Downtown Los Angeles, where observations are not taken on weekends or holidays, was 27, far below the average of 95 days. The Los Angeles International Airport Station reported 26 low visibility days, also much below the long-term average of 58 days. Long Beach reported 54 days vs. an average of 81 days.

Air Pollution Episodes

The Air Resources Board mandated criteria for various contaminant Episode stages on April 1, 1974. Since that date, during 1974 and 1975, no Second-Stage or Third-Stage Episodes were attained in Los Angeles County. During 1975, in the Los Angeles Basin, First-Stage ozone Episodes (Health Advisories) occurred on seventy-five days, on twenty-nine days in the Upper Santa Clara River Valley, and on no days in the Antelope Valley. First-Stage carbon monoxide Episodes occurred on nineteen days in the Los Angeles Basin but did not occur in the Upper Santa Clara River Valley or the Antelope Valley during the year.

Contaminant Maxima (Instantaneous Values)

Generally, each 1975 contaminant maximum showed seasonal fluctuations similar to the patterns of the previous two years. No new record-high air pollutant concentrations were recorded except an unusual Km value at the Pasadena air monitoring station (42.0) on January 23, a value attributed to a temporary local source. The annual averages of monthly instantaneous contaminant maxima listed below are averages of the highest values attained at any station in the Los Angeles Basin during each month of the year. The ozone, carbon monoxide, sulfur dioxide and oxides of nitrogen data show a general downward trend over three years, while the hydrocarbons data show a slight increase in peak concentrations over 1973 values.

The annual averages of monthly ozone maxima for the three-year period 1973-1975 were 0.29, 0.30 and 0.28 parts per million, respectively.

The 1975 annual average of the monthly carbon monoxide maxima was 34 parts per million, reflecting a gradual decrease from the previous two year - 37 and 36 parts per million for 1973 and 1974, respectively.

In the three-year period, the annual average of the monthly oxides of nitrogen maxima was lowest in 1974. The averages were 1.21, 1.15 and 1.19 parts per million for 1973, 1974, and 1975, respectively, showing a slight increase this year.

The 1975 annual average of monthly sulfur dioxide maxima showed a decrease from the last two-year period, with 0.36, 0.28, and 0.27 parts per million being the values for 1973, 1974, and 1975, respectively.

The annual average of monthly hydrocarbons maxima increased slightly during the last two years; the averages were 15, 16, and 16 parts per million for 1973, 1974, and 1975, respectively.

Contaminant Maxima (One-Hour Values)

The annual averages of monthly one-hour maxima are averages of the highest values attained during each month of the year. In making a three-year comparison, the hydrocarbons data reflected a mild increase, while the ozone, carbon monoxide, nitrogen oxides and sulfur dioxide showed a decreasing trend.

The annual averages of monthly ozone one-hour maxima for the two-year period 1973-1974 were 0.26 parts per million, but fell to 0.24 parts per million in 1975.

The annual averages of monthly carbon monoxide one-hour maxima were 27, 28, and 26 parts per million during 1973, 1974, and 1975, respectively.

The annual averages of the monthly nitrogen oxides one-hour maxima reflected little change in each of the succeeding three years. The values were 1.02, 0.96, and 0.99 parts per million for 1973, 1974, and 1975, respectively.

The annual averages of the monthly sulfur dioxide one-hour maxima continued on a downward trend with averages of 0.22, 0.18, and 0.17 parts per million over the three-year period.

The annual averages of the monthly hydrocarbons one-hour maxima reflected a mild fluctuation over the three-year period with recorded values of 12, 13, and 14 parts per million for 1973, 1974, and 1975, respectively.

California Air Quality Standards

The State of California air quality standards listing minimum acceptable visibilities were not met on a majority of the days during 1975, but the data showed a declining trend in the number

of extremely low visibility days. The number of days that nitrogen dioxide concentration standards were not met rose somewhat over immediately preceding years; the increase is attributed mainly to less favorable meteorological conditions in 1975. Because of vehicular emission controls, the number of days the ozone and carbon monoxide standards were not met during 1975 were fewer than the number of days during 1974. The number of days the revised State sulfur dioxide standard was not met increased in 1975 compared to 1974, but was lower than the 1973 total. The number of occurrences in the Los Angeles Basin for each type were as follows:

The number of days on which the State visibility air quality standard was not met in 1975 was 294, compared to 310 in 1974 and 298 in 1973. The twenty-year (1956-1975) average is 329 days.

The number of days on which the State nitrogen dioxide air quality standard was not met in 1974 rose to 78 compared to 69 in 1974 and 59 in 1973. The nineteen-year average is 97 days (1957-1975).

The number of days on which the State ozone air quality standard was not met in 1975 decreased to 201, compared to 215 in 1974 and 185 in 1973. The twenty-year average is 257 days.

The number of days on which the State one-hour carbon monoxide standard was not met in 1975 was three days, a decrease from four days in 1973 and five days in 1974. The twenty-year average is fourteen days.

The number of days on which the State twelve-hour carbon monoxide air quality standard was not met in 1975 was 123, compared to 128 in 1974 and 116 in 1973. The twenty-year average is 267 days.

The number of days on which the State sulfur dioxide air quality standard was not met was 84 days in 1973, 51 days in 1974 and 62 days in 1975. The twenty-year average is 111 days.

In the foregoing paragraph, the specific air contaminant data presented have been calculated on the basis that the State standards were either equalled or exceeded, since the California Air Resources Board counts an episode equalling the standard as not meeting the standard.

National Air Quality Standards

During 1971, through the Environmental Protection Agency (EPA), the Federal Government established air quality standards to apply to the entire nation. The national standards are different from the California standards. In practice it will be necessary eventually to meet the

stricter of the two standards as far as areas in California are concerned

With the national standards, equalling the standard is not counted as exceeding the standard in any event. Tabulations in this report concerning national standards are presented only in terms of "exceeding" those standards.

As with the decrease in the number of days when the State ozone and carbon monoxide standards were not met in 1975, a similar decrease was found in the number of days when the national air quality standards for those contaminants were not met. The number of days during 1975 that the national air quality short-period standards were not met in the Los Angeles Basin with regard to the gaseous pollutants follows:

The number of days on which national ozone air quality standards (primary and secondary identical) were not met in 1975 decreased appreciably over the previous year. The number of days for each year in the 1973-1975 period was 196, 237, and 211 days, respectively. The twenty-year (1956-1975) average is 269 days.

The number of days on which national carbon monoxide air quality standards (primary and secondary identical) were not met exhibited a large decrease from 1974 and also showed a three-year downward trend; the number of days was 160, 167, and 149 for 1973, 1974, and 1975, respectively. The twenty-year (1956-1975) averages is 292 days.

The national sulfur dioxide primary and secondary air quality standards were both met in 1975 as well as in the previous two years. The twenty-year (1956-1975) average for both standards is less than one day.

The national non-methane hydrocarbon air quality standards (primary and secondary identical) were not met on 362, 355, and 353 days during 1973, 1974, and 1975, respectively. The nine year average (1967-1975) is 355 days.

RESPONSE: IMPACT OF PLAN ON AIR QUALITY FOR TOTAL BUILDOUT IN 1990

Project Energy Use	Pollutants in Pounds Per Day 1990				
	CO_2	NO_2	SO_2	Parts.	HC
4,985 Kwh/day	1.00	11.47	26.42	2.00	.90
29,868 cubic feet/day	negl.	3.46	negl.	.54	negl.
8,092 vehicle miles/day	80.28	12.49	1.78	5.35	8.92
Total/Day 1990	81.28	27.42	28.20	7.89	9.82

*Based on "Energy-Use Emission Factors," South Coast Air Quality Management District, July, 1976.

RESPONSE: ALTERNATE MODE EFFECTS ON AIR POLLUTANT EMISSIONS

As mentioned, the Plan directly proposes improvements for a wide variety of non-vehicular modes. The use of mass transit service is also encouraged, especially where it provides service to visitor activities of more than local significance. These modes provide an alternative to the use of private automobiles. Although the Project accepts the worst case scenario by identifying only automobile trips with both residential and non-residential uses, it is conceivable that a portion of the trips will utilize alternative modes. This being the case, for each trip using an alternative mode, an incremental decrease in air pollutant emission of up to 4.5 grams per mile of Carbon Monoxide, .7 grams per mile of Nitrogen Oxides, .1 grams per mile of Sulfur Oxides, .3 grams per mile of Particulate, and .5 grams per mile of Hydrocarbon Organic gases could occur at buildout in 1990.

RESPONSE: AIR QUALITY IMPACTS OF ALTERNATIVES TO THE PROJECT

Impacts of the two extreme projects on Air Quality that were reviewed in the course of the Coastal Plan are indicated below. All other alternatives would fall within these two extremes depending on the intensity of development proposed.

	Pollutants in Pounds per day 1990				
	CO_2	NO_2	SO_2	Parts.	HC
No Project	N.C.	N.C.	N.C.	N.C.	N.C.
Project	81.28	27.42	28.20	7.89	9.82
Most Impactive Alternative	622.19	166.85	135.75	53.16	71.53

*Based on "Energy-Use Emission Factors," South Coast Air Quality Management District, July, 1976.

Table LII

NATIONAL PRIMARY AND SECONDARY AIR QUALITY STANDARDS

Air Pollutant	National[a] Standard	Maximum Allowable Annual Mean Concentrations			Maximum Allowable Short-Period Concentrations and Averaging Times[b]			
		AAM[c] ug/m3	AAM[c] ppm	AGM[d] ug/m3	ug/m3	mg/m3	ppm	Averaging Times
Oxidant[e] (Ozone) (O_3)	Primary				160		0.08	1 hour
	Secondary				160		0.08	1 hour
Carbon Monoxide (CO)	Primary[f]					10	9	8 hours
						40	35	1 hour
	Secondary[f]					10	9	8 hours
						40	35	1 hour
Nitrogen Dioxide (NO_2)	Primary	100	0.05					
	Secondary	100	0.05					
Sulfur Dioxide (SO_2)	Primary	80	0.03		365		0.14	24 hours
	Secondary				1300		0.50	3 hours
Non-Methane[g] Hydrocarbons	Primary				160		0.24	3 hours (6-9 a.m.)
	Secondary				160		0.24	3 hours (6-9 a.m.)
Particulate Matter	Primary			75	260			24 hours
	Secondary			60	150			24 hours

a) National Air Quality Standards as presented in the Code of Federal Regulations, 40, Protection of Environment, Part 50, Sec 50.4 to 50.11, July 1, 1974, U.S. Government Printing Office, Wash., D. C. 1974.
Primary Standard - Necessary to protect the public health. (Sec 50.2)
Secondary Standard - Necessary to protect the public welfare and the environment from known or anticipated adverse effects of a pollutant. (Sec 50.2)

b) Not to be exceeded more than once per year.

c) AAM - Annual Arithmetic Mean.

d) AGM - Annual Geometric Mean.

e) Photochemical oxidants - measured concentrations must be corrected for interferences due to nitrogen oxides and sulfur dioxide before comparing to standards.

f) Standard has two short-period requirements, both of which must be met.

g) Total hydrocarbons corrected for methane - i.e., total hydrocarbons minus methane.

Table LI

CALIFORNIA STATE AMBIENT AIR QUALITY STANDARDS

Substance	Concentration	Duration of Averaging Period	Measurement[a] Methods	Most Relevant Effects
Oxidant (as Ozone)	0.10 ppm	1 hour	Ultraviolet Photometry	Aggravation of respiratory diseases
Carbon Monoxide	10 ppm 40 ppm	12 hours 1 hour	NDIR[b] NDIR	2 - 2½% COHb[c] 2 - 2½% COHb
Sulfur Dioxide	0.5 ppm	1 hour	Conductimetric Method	a) Approximate odor threshold b) Possible alteration in liver function
	0.04 ppm	24 hours	Conductimetric Method	With particulate matter, 0.05 ppm long term average may be associated with respiratory irritation.
Visibility Reducing Particles	In sufficient amount to reduce visibility[d] to less than ten miles when relative humidity is less than 70%	1 observation	——	Visibility impairment on days when relative humidity is less than 70%
Suspended Particulate Matter	60 ug/m3	24-hour samples, annual geometric mean	High volume sampling	Long continued exposure may be associated with increases in chronic respiratory disease.
	100 ug/m3	24-hour samples	High volume sampling	Exposure with SO_2 may produce acute illness.
Lead (particulate)	1.5 ug/m3	30-day average	High volume sampling, dithizone Method	Possible inhibition of d-ALA[e] dehydrase which is used in heme synthesis.
Hydrogen Sulfide	0.03 ppm	1 hour	Cadmium hydroxide, Stractan Method	Exceeds the odor threshold.
Nitrogen Dioxide	0.25 ppm	1 hour	Saltzman	a) At slightly higher dosage, effects are observed in experimental animals which imply a risk to public health. b) Produces atmospheric discoloration.

a) Any equivalent procedure which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

b) NDIR - non-dispersive infra red.

c) COHb - carboxyhemoglobin

d) Prevailing visibility is defined as the greatest visibility which is attained or surpassed around at least half of the horizon circle, but not necessarily in continuous sectors.

e) Delta-aminolevulinic acid.

TABLE C-VI SUMMARY OF AIR QUALITY STANDARDS AND DATA FOR 1975

SOUTH COASTAL
(LONG BEACH)

CALIFORNIA STATE AMBIENT AIR QUALITY STANDARDS

Air Pollutant	Current Standards: Concentrations and Averaging Times[a]	No. Days Above Standard	Maximum Concentration For Indicated Time Intervals	Annual Average Concentration
	Effective June 1976			
Photochemical Oxidants	0.10 ppm - 1 hour[b]	4	0.14 ppm	0.016 ppm
Carbon Monoxide	10 ppm - 12 hours 40 ppm - 1 hour	34 0	15.7 ppm 21 ppm	4.14 ppm
Nitrogen Dioxide	0.25 ppm - 1 hour	26	0.45 ppm	0.062 ppm
Sulfur Dioxide	0.04 ppm - 24 hours 0.50 ppm - 1 hour	22 0	0.064 ppm 0.23 ppm	0.021 ppm
Suspended Particulate Matter	60 µg/m³ - AGM[c] 100 µg/m³ - 24 hours	NA ND	NA ND µg/m³	ND µg/m³
Lead[d]	1.5 µg/m³ - 30-day Average	NA	ND µg/m³	ND µg/m³
Sulfate[d]	25 µg/m³ - 24 hours	ND	ND µg/m³	ND µg/m³
Hydrogen Sulfide	0.03 ppm - 1 hour	0	0.0021 ppm	0.028 ppm
Visibility Reducing Particles	In sufficient concentration to reduce visibility to less than 10 miles at relative humidity of less than 70 percent.	234	NA	NA

a) The standard is not met when it is either equalled or exceeded.
b) Photochemical Oxidants, corrected for NO_2 interference.
c) Annual Geometric Mean.
d) In particulate matter.

NATIONAL PRIMARY AND SECONDARY AIR QUALITY STANDARDS

Air Pollutant	National[a] Standard	Maximum Allowable Annual Mean Concentration			Maximum Allowable Short-Period Concentrations and Averaging Times[b]			No. Days Above Standard (Primary)	Maximum Concentration For Indicated Time Intervals	Annual Average Concentration
		AAM[c] µg/m³	AAM[c] ppm	AGM[d] µg/m³	µg/m³	ppm	Averaging Time			
Oxidant[e] (Ozone)	Primary				160	0.08		9	0.14 ppm	0.016 ppm
	Secondary				160	0.08		NR	NR	NR
Carbon Monoxide	Primary[f]				10000 40000	9 35	8 hours 1 hour	57 0	17.1 ppm 21 ppm	4.14 ppm
	Secondary[f]				10000 40000	9 35	8 hours 1 hour	NR NR	NR NR	NR NR
Nitrogen Dioxide	Primary	100	0.05					NA	NA	0.062 ppm
	Secondary	100	0.05					NR	NR	NR
Sulfur Dioxide	Primary	80	0.03		365	0.14	24 hours	0	0.064 ppm	0.021 ppm
	Secondary				1300	0.50	3 hours	NR	NR	NR
Non-Methane[g] Hydrocarbons	Primary				160	0.24	3 hours (6-9 a.m.)	ND	ND ppm	ND ppm
	Secondary				160	0.24	3 hours (6-9 a.m.)	NR	NR	NR
Particulate Matter	Primary			75	260		24 hours	ND	ND µg/m³	ND µg/m³
	Secondary			60	150		24 hours	NR	NR	NR

a) National Air Quality Standards as presented in the Code of Federal Regulations, 40, Protection of Environment, Part 50, Sec. 50.4 to 50.11, July 1, 197-, U. S. Government Printing Office, Wash., D.C. 197-.
Primary Standard - Necessary to protect the public health. (Sec. 50.2)
Secondary Standard - Necessary to protect the public welfare and the environment from known or anticipated adverse effects of a pollutant. (Sec. 50.2)
b) Not to be exceeded more than once per year.
c) AAM - Annual Arithmetic Mean.
d) AGM - Annual Geometric Mean.
e) Photochemical oxidants, corrected for NO_2 and SO_2 interference.
f) Standard has two short-period requirements, both of which must be met.
g) Total hydrocarbons corrected for methane - i.e., total hydrocarbons minus methane.
NR - Not Required for EIR ND - No Data NA - Not Applicable
(See attached information sheet)

[illegible] METROPOLITAN ZONE

ADDITIONAL CHANGES INCORPORATED INTO THE FINAL EIR

INTRODUCTION

Page I-5, left column, second paragraph - should read as follows:
...Plan required input from ~~three~~ four specialized consultant groups. EDAW provided assistance throughout the Coastal Plan process together with being responsible for the Planning and Design Guidelines and Corridors Element. A geology...

Page I-6 to I-8
All reference to Specific Plan should read Coastal Plan.

NATURAL ENVIRONMENT

Page N-12
The following replaces the entire Surface Runoff discussion:

SURFACE RUNOFF

Surface Runoff carrying many wastes enter the marine environment at different locations through drainage river beds as in the case of the Los Angeles and San Gabriel Rivers, but probably more important to the City are the natural and man-made drainage courses carrying local surface runoff from streets and slopes. Petroleum wastes and by-products associated with street runoff, along with pesticides, fungicides, and herbicides from agricultural and home gardening activities are the most critical sediments and suspended particles of concern. Excessive erosion and runoff laden with pollutants can have detrimental effects on the intertidal and subtidal marine organisms. According to chemical experts and local users, nearly all chemicals associated with pest or weed control can have damaging effects if organisms are exposed to sufficient quantities. However, it is the means of application, time of year applied, and susceptibility to runoff that should be identified and regulated.

The use of certain chemicals are banned by Federal Government regulations; others are controlled through licensing of major users by the State Department of Food and Agriculture. These chemicals appear in Table 5.

Page N-40

the following replaces Policy #14:

14. Discourage the use of chemicals believed to be harmful to marine organisms, application techniques which may cause the chemical to be exposed to runoff, and regulate the time of year during which these chemicals and application techniques can be used (i.e., avoidance of the rainy season.).

SOCIO/CULTURAL ELEMENT

Page S/C-2, right column, second paragraph, fourth sentence
...as Save Our Coastline, based on the...

Page S/C-3, left column, second paragraph, fourth sentence
...prior to July ~~1~~ 1,1978. It is...

Page S/C-5, left column, first paragraph, second sentence
...groups (Save Our Coastline) to groups focusing...

URBAN ENVIRONMENT ELEMENT

Page U-12, left column, second paragraph, second sentence
...will account for ~~135~~ 134 acres and ~~274~~ 272 units...

Page U-12, left column, second paragraph, third sentence
... will supply ~~39~~ 38 acres...will total ~~127~~ 126 new units...

Page U-12, left column, second paragraph, fourth sentence
...encompasses ~~144~~ 133 acres accounting for ~~280~~ 265 new...

Page U-15, right column, last paragraph, third sentence
...Access, and the ~~Rifle Range~~ Point Vicente Beach Site. The latter site...

Page U-20, right column, second paragraph, first sentence
...(see Figure ~~22~~ 23). This...

Page U-20, right column, second paragraph, third sentence
...and the ~~Rifle Range~~ Point Vicente Beach sites being...

Page U-26, right column, second paragraph
...dropped from ~~$25,332.00~~ $30.765.00 to $22,774.50...

Page U-26, right column, third paragraph
Recurring expenditures ~~remained the same~~ dropped from $33,977.00 to $31,177.00 under the agricultural profile.

Page U-39, left column, first paragraph
...a total of ~~716~~ 713 new dwelling...

Page U-41, right column, first paragraph, first sentence
...number by ~~100~~ 66, bringing the...units to ~~14,300~~ 14,194. This amounts to a change of about ~~1.3%~~ .5%. The relationship...

Page U-45, right column, third paragraph, second sentence
...as to its preferred route(s)...

Page U-52, right column, third paragraph, last sentence
...developed under the standards listed in...

Page U-66, left column, fifth paragraph, second sentence
...City to be ~~in~~ an inherent design...

Page U-70, right column, fourth paragraph, first sentence
...Subregions 1, 2, 3, and 7...

Page U-80, left column, fourth paragraph, last sentence
...would total some ~~297~~ 204 units.

CORRIDOR ELEMENT

Page C-8, right column, second paragraph, first sentence
...no significant vistas are or are committed (4 are fully developed with residential and 8 will remain, for the most part, as a natural...

FISCAL ELEMENT

Page F-3, left column, first paragraph, last sentence
...acquisition figure of ~~$467,033~~ 390,936 for ~~11.6~~ 9.8 acres.

SUBREGION 1

Page S-I-8, right column, third paragraph, last sentence
...ultimately allow ~~276~~ 272 new dwelling...and estimated ~~215~~ 213 peak hour...

Page S1-10, left column, third paragraph, first sentence
...each year (~~$40,254~~ 41,563) will offset...costs incurred (~~$35,545~~ 34,300) by a ...difference of (~~$5,709~~ 7,263).

Page S1-10, left column, third paragraph, last sentence
...collected yearly (~~$8,734~~ 8,673) will not...construction costs (~~$14,805~~ 14,700) for this...yearly deficit of (~~$6,071~~ 6,027)

Page S1-10, right column, second paragraph
...transfer tax (~~$304,140~~ 301,920), which would...

Page S1-10, right column, third paragraph, first sentence
...total buildout (~~$669,491~~ 722,682)

Page S1-10, right column, third paragraph, last sentence
...would be ~~324~~ 322 pupils resulting...margin of (~~$240,291~~ 304,082) for school...

Page S1-12, left column, first paragraph, third sentence
...amount to ~~$198,633~~ 165,984, and this...

SUBREGION 2

Page S2-16, left column, second paragraph, first sentence
...total approximately ~~$73,100~~ 61,152 for the trail...

SUBREGION 3

Page S3-5, left column, third paragraph, second sentence
...of the ~~76~~ 73 total acres

Page S3-8, left column, third paragraph, second sentence
...the ~~first table~~ second column shows the...

Page S3-8, left column, third paragraph, third sentence
...the ~~second table~~ first column shows the...

Page S3-8, left column, third paragraph, third sentence
...The ~~second table~~ first column shows the...

Page S3-8, left column, fifth paragraph, last sentence
...cost of ~~$111,350~~ 308,000.

Page S3-8, left column, sixth paragraph
...produce ~~a revenue~~ deficit of ~~$4,052~~ 3,212. Under the...

Page S3-8, right column, first paragraph
...profile, the ~~revenues~~ deficit would be ~~$3,454.50~~ 8,402.50 or ~~$597.50~~ 5,190.50 ~~under~~ over that of...

Page S3-8, right column, fifth paragraph
Although recurring ~~revenues~~ deficits are ~~lower~~ greater under the... agricultural area ~~is revenue producing-rather~~ will require less of an expenditure than ~~possessing~~ that associated with the typical...

Page S3-10, Table S3-D
Existing retail should be .5 acres rather than 5 acres.

Page S3-15, left column, first paragraph
...each year (~~27,926~~ $27,928) will offset...difference of ~~$4,056~~ 4,058. The recurring...

Page S3-15, left column, last paragraph
...The approximate ~~additional~~ pupil population

Page S3-15, right column, first paragraph
...would be ~~16~~ 224 pupils resulting...margin of ~~$14,521~~ 175,551 for school...

Page S3-17, left column, first paragraph, third sentence
...amount to ~~$39,204~~ 32,760 and this is...

SUBREGION 4

Page S4-14, right column, second paragraph
...each year (~~$2,730~~ 10,330) will not offset the...Government costs (~~$2,415~~ 11,515)~~-by-a-positive-margin~~ resulting in a ~~difference~~ deficit of ~~$315~~ 1,185. The recurring...collected yearly (~~$610~~ 2,911) will not...construction costs (~~$1,035~~ 8,935) for this...deficit of ~~$315~~ 2,024.

Page S4-14, right column, third paragraph, first sentence
...transfer tax (~~$15,404~~ 17,993), which would...

Page S4-15, first paragraph, first sentence
...for approximately ~~23~~ 5 years.

Page S4-15, second paragraph
...total buildout (~~$43,806~~ 110,979) would more...The approximate ~~additional~~ pupil population...would be ~~23~~ 108 pupils resulting in ~~a positive margin~~ deficit of ~~$13,986~~ 29,441 for school...

SUBREGION 5

Page S5-7, left column, second paragraph, first sentence
...areas (pag. S/C-~~3~~ 6). Since...

SUBREGION 6

Page S6-5, left column, first paragraph, second sentence
...accounting for ~~91~~ 92 residential units;...

Page S6-12, right column, first paragraph
...each year (~~$3,038~~ 5,110) will not offset the...Government costs (~~$2,730~~ 5,145) ~~by-a-positive-margin~~, resulting in a ~~difference~~ deficit of ~~$308~~ 35. The recurring...each year (~~$609~~ 1,300) will not...and construction (~~$1,170~~ 2,205), according to...deficit of ~~$486~~ 905 per year...

Page S6-14, left column, first paragraph
...for approximately ~~33~~ 17 years...Property taxes (~~$50,657~~ 67,602), will ~~more than~~ not offset the...the approximate ~~additional~~ pupil... would be ~~29~~ 108 students, thereby resulting in ~~a positive difference~~ deficit of ~~$12,957~~ 5,198 for the...

SUBREGION 7

Page S7-11, right column, second paragraph, second sentence
...will be located ~~on the seaward side of~~ along Paseo Del Mar...

Page S7-12, right column, first paragraph
...each year (~~$42,160~~ 40,644) will offset...costs incurred (~~$36,260~~ 32,480) by a ...difference of (~~$5,900~~ 8,164). The recurring...collected yearly (~~$9,159~~ 8,213) will not...construction costs (~~$15,540~~ 13,920) for this...deficit of (~~$6,381~~ 5,707).

Page S7-12, right column, second paragraph
...transfer tax (~~$320,560~~ 306,360), which would...for approximately ~~28~~ 30 years.

Page S7-13, left column, first paragraph
...total buildout (~~$711,267~~ 731,250) would more than...The approximate ~~additional~~ pupil population...would be ~~340~~ 317 pupils resulting... margin of (~~$269,267~~ 319,150) for school...

Page S7-13, right column, first paragraph, third sentence
...will amount to ~~$156,816~~ 131,040. This acquisition cost...

APPENDIX

Page A-1, right column, twelfth listing
Converse, Davis and Associates. Geologic Report Project No. 68-423 for Kimberly-Pacific Corp. November 25, 1968.

Page A-5, left column, fourth paragraph, last sentence
...to be addressed. More detailed analysis and supporting data for the Coastal Plan and this EIR are found in the documents listed in the Bibliography, which are incorporated herein by reference.

EXISTING TRAFFIC VOLUMES AND CAPACITIES

REVISED TABLE 13

	REC. CAP.	PEAK HR. (AM) WEEKDAY TRAFFIC	% CAP.	PEAK HR. WEEKEND TRAFFIC	% CAP.
PALOS VERDES DRIVE WEST N/O BERRY HILL	2,100	563	27%	926	44%
PALOS VERDES DRIVE WEST N/O HAWTHORNE BLVD.	2,100	405	19%	779	37%
HAWTHORNE BLVD. E/O P.V. DRIVE WEST	2,100	345	16%	536	26%
PALOS VERDES DRIVE WEST S/O HAWTHORNE BLVD.	2,100	363	17%	822	39%
PALOS VERDES DRIVE SOUTH E/O SEAHILL	2,100	387	18%	911	43%
PALOS VERDES DRIVE SOUTH E/O PEPPERTREE	2,100	349	44%	863	108%
PALOS VERDES DRIVE SOUTH W/O P.V. DRIVE EAST	2,100	539	67%	859	107%
25TH STREET E/O P.V. DRIVE EAST	2,100	486	61%	797	100%

Table 12

		D.U.'s	STUDENT GENERATION FACTORS K-5	6-8	9-12	K-12
Sub. 1	Existing	8 S.F.	3	2	4	9
	Proposed	272 S.F.	109	82	122	313*
	Total	280 D.U.'s	112	84	126	322
Sub. 2	Existing	0	0	0	0	0
	Proposed					
	Total					
Sub. 3	Existing	456 M.F.	160	109	150	419
	Proposed	126 S.F.	50	38	57	145*
	Total	582 D.U.'s	210	147	207	564
Sub. 4	Existing	74 S.F.	30	22	33	85
		16 M.F.	6	5	7	18
	Proposed	14 S.F.	6	4	6	16*
	Total	104 D.U.'s	42	31	46	119
Sub. 6	Existing	92 S.F.	37	28	41	106
	Proposed	26 S.F.	10	8	12	30*
	Total	118 D.U.'s	47	36	53	136
Sub. 7	Existing	100 M.F.	35	24	33	92
	Proposed	265 S.F.	106	80	119	305*
	Total	365 D.U.'s	141	104	152	397

*Proposed Unit Total - 809 Students

COASTAL PLAN FISCAL PROFILE GENERAL FUND

REVISED

TABLE 20

	PROJECTION FACTORS	EXISTING	INTERIM	COASTAL PLAN
RECURRING REVENUE				
PROPERTY TAX	A.V.[4] 1750 [3] x .5 x D.U.S			
REAL PROP TRANS TAX	POP [1] 42,300 [6] x 11.20 [2]			
SALES TAX - RES	POP [1] 42,300 [6] x 140.840 [2]			
SALES TAX - COMM	1% OF SALES TAX RECEIPTS			
FRANCHISE TAX	POP [1] 42,000 [6] x 132.840 [2]			
M.V. IN LIEU	POP [1] x 10.78			
HIGHWAY CARRIER AND UNIFORM BUS. LIC TAX	POP [1] x 3.10			
CIG. TAX	POP [1] 42,000 [7] x 131.380 [2]			
HIGHWAY AND TRANS 2107 2106	POP [1] x 4.35 POP [1] x 4.80			
BUSINESS LIC	[8]			
TOTAL				186,620
NON RECURRING REVENUE				
ENVIRON. EXCISE TAX	$1,000/NEW D.U.			
REAL PROPERTY TRANS TAX	@ 1% $1.00 [4]			
TOTAL				868,489
RECURRING COSTS				
SERVICE COSTS				
GENERAL GOVERNMENT	POP [1] x 36			
HIGHWAY AND TRANS COSTS	POP [1] x 15			
TOTAL				175,690
NON RECURRING COSTS				
ACQUISITION	NON-RECURRING REV [5]			
IMPROVEMENT	6.11 x POP [1] - YEARS			
TOTAL				990,465
SCHOOL DISTRICT				
REVENUE (PROP TAX)	A/V [4] 1750 [3] x 5.46 x NEW D.U.'S			2,176,487
COSTS	[illegible]			1,412,323

1. POPULATION - NEW D.U.'S x PERSONS/UNIT (GEN PLAN PG 2011)
2. FIGURES REPRESENT 1976 - 1977 BUDGET TOTALS
3. HOMEOWNERS EXEMPTION
4. BASED ON CURRENT ESTIMATED SELLING PRICE
5. TOTAL NON-RECURRING REVENUE
6. ALL FIGURES IN THOUSANDS OF DOLLARS.
7. BASED ON PALOS VERDES PENINSULA SCHOOL DISTRICT'S PUPIL GENERATION FIGURES
8. SUBREGION 2, 3 AND 4 ONLY AND 7 RETAIL, WHOLESALE, PROFESSIONAL AND COMMERCIAL RENTAL BUSINESS $21.00 FOR FIRST 250,000 IN GROSS RECEIPTS AND $.30/$1000 THEREAFTER
9. EXISTING POPULATION

COASTAL PLAN FISCAL PROFILE GENERAL FUND

REVISED

TABLE S1-E

	PROJECTION FACTORS	EXISTING	INTERIM	COASTAL PLAN
RECURRING REVENUE				
PROPERTY TAX	A.V. [illegible]	1,609.00		19,890.00
REAL PROP TRANS TAX	[illegible]	45.00		1,657.00
SALES TAX - RES	[illegible]	94.00		1,282.00
SALES TAX - COMM	[illegible]	0		0
FRANCHISE TAX	[illegible]	88.00		3,095.00
M.V. IN LIEU	[illegible]	102.00		10,364.00
HIGHWAY CARRIER AND UNIFORM BUS. LIC TAX	[illegible]	0		10.00
CIG. TAX	[illegible]	88.00		3,065.00
HIGHWAY AND TRANS 2107 2106	[illegible]	248.00		8,671.00
BUSINESS LIC	[illegible]	[illegible]		0
TOTAL		[illegible]		[illegible]
NON RECURRING REVENUE				
ENVIRON. EXCISE TAX	[illegible]	0		[illegible]
REAL PROPERTY TRANS TAX	[illegible]	[illegible]		[illegible]
TOTAL		[illegible]		[illegible]
RECURRING COSTS				
SERVICE COSTS		0		5,214.00
GENERAL GOVERNMENT	[illegible]	980.00		[illegible]
HIGHWAY AND TRANS COSTS	[illegible]	[illegible]		[illegible]
TOTAL		[illegible]		[illegible]
NON RECURRING COSTS				
ACQUISITION	[illegible]			165,984.00
IMPROVEMENT	[illegible]			[illegible]
TOTAL				[illegible]
SCHOOL DISTRICT				
REVENUE (PROP TAX)	[illegible]	[illegible]		727,683.00
COSTS	[illegible]	[illegible]		418,690.00

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]

COASTAL PLAN FISCAL PROFILE GENERAL FUND — **REVISED** — TABLES 3-F

	PROJECTION FACTORS	EXISTING	INTERIM	COASTAL PLAN
RECURRING REVENUE				
PROPERTY TAX	A/V[4] ÷ 1,760[3] × 1.5 × D U S	6,535.00	13,734.00	12,846.00
REAL PROP TRANS TAX	POP[1] ÷ 42,000[9] × 11,020[7]	2,005.00	2,791.00	1,153.00
SALES TAX - RES	POP[1] ÷ 42,000[9] × 140,840[7]	3,971.00	5,448.00	2,283.00
SALES TAX - COMM	1% OF SALES TAX RECEIPTS	90.00	90.00	0
FRANCHISE TAX	POP[1] ÷ 42,000[9] × 132,840[7]	3,745.00	5,138.00	2,154.00
M V IN LIEU	POP[1] × 10.78	12,785.00	17,539.00	7,352.00
HIGHWAY CARRIER AND UNIFORM BUS LIC TAX	POP[1] × 0.10	12.00	16.00	7.00
CIG TAX	POP[1] ÷ 42,000[9] × 131,360[7]	3,709.00	5,089.00	2,133.00
HIGHWAY AND TRANS 2107 2108	POP[1] × 4.35 POP[1] × 4.90	10,496.00	14,398.00	6,035.00
BUSINESS LIC	[8]	80.00	80.00	0
TOTAL		43,428.00	64,283.00	33,961.00
NON RECURRING REVENUE				
ENVIRON EXCISE TAX	$1 000 NEW D		126,000.00	195,000.00
REAL PROPERTY TRANS TAX	@ 55 $1 000[4]		12,347.00	19,071.00
TOTAL		0	138,347.00	214,071.00
RECURRING COSTS				
SERVICE COSTS				
GENERAL GOVERNMENT	POP[1] × 36	2,542.00	3,577.00	3,577.00
HIGHWAY AND TRANS COSTS	POP[1] × 15	41,510.00	56,925.00	23,870.00
TOTAL		17,790.00	24,405.00	10,230.00
		61,842.00	84,907.00	37,677.00
NON RECURRING COSTS				
ACQUISITION	NON-RECURRING REV[9]		32,760.00	32,760.00
IMPROVEMENT	2.11 × POP[11] × YEARS	57,250.00	93,250.00	93,250.00
TOTAL		57,250.00	126,010.00	126,010.00
SCHOOL DISTRICT				
REVENUE (PROP TAX)	A/V[4] ÷ 1,760[3] × 9.46 × NEW D U S	237,423.00	499,021.00	466,751.00
COSTS	[illegible]	681,200.00	869,700.00	291,200.00

1. POPULATION - NEW D V S x PERSONS/UNIT (SEE PLAN, PG 20-1)
2. FIGURES REPRESENT 1976 - 1977 BUDGET TOTALS
3. HOMEOWNERS EXEMPTION
4. BASED ON CURRENT ESTIMATED SELLING PRICE
5. TOTAL NON-RECURRING REVENUE
6. ALL FIGURES IN THOUSANDS OF DOLLARS.
7. BASED ON PALOS VERDES PENINSULA SCHOOL DISTRICT'S PUPIL GENERATION FIGURES
8. SUBREGION 2, 3, AND 4 ONLY AND 7 RETAIL, WHOLESALE, PROFESSIONAL AND COMMERCIAL RENTAL BUSINESS $20.00 FOR FIRST $50,000 IN GROSS RECEIPTS AND $30/$1000 THEREAFTER
9. EXISTING POPULATION

COASTAL PLAN FISCAL PROFILE GENERAL FUND — **REVISED** — TABLE 52-D

	PROJECTION FACTORS	EXISTING	INTERIM	COASTAL PLAN
RECURRING REVENUE				
PROPERTY TAX	A/V[4] ÷ 1,760[3] × 1.5 × D U S	1,762.00		2,125.00
REAL PROP TRANS TAX	POP[1] ÷ 42,000[9] × 11,020[7]			
SALES TAX - RES	POP[1] ÷ 42,000[9] × 140,840[7]			
SALES TAX - COMM	1% OF SALES TAX RECEIPTS	14,111.00		11,929.00
FRANCHISE TAX	POP[1] ÷ 42,000[9] × 132,840[7]			
M V IN LIEU	POP[1] × 10.78			
HIGHWAY CARRIER AND UNIFORM BUS LIC TAX	POP[1] × 0.10			
CIG TAX	POP[1] ÷ 42,000[9] × 131,360[7]			
HIGHWAY AND TRANS 2107 2108	POP[1] × 4.35 POP[1] × 4.90			
BUSINESS LIC	[8]	1,228.00		2,949.00
TOTAL		17,101.00		17,003.00
NON RECURRING REVENUE				
ENVIRON EXCISE TAX	$1 000 NEW D U			
REAL PROPERTY TRANS TAX	@ 55 $1 000[4]			
TOTAL				
RECURRING COSTS				
SERVICE COSTS				1,932.00
GENERAL GOVERNMENT	POP[1] × 36			
HIGHWAY AND TRANS COSTS	POP[1] × 15			
TOTAL				1,932.00
NON RECURRING COSTS				
ACQUISITION	NON RECURRING REV[9]			61,152.00
IMPROVEMENT	2.11 × POP[11] × YEARS			67,200.00
TOTAL				128,352.00
SCHOOL DISTRICT				
REVENUE (PROP TAX)	A/V[4] ÷ 1,760[3] × 9.46 × NEW D U S	64,018.00		77,223.00
COSTS	[illegible]			

1. POPULATION - NEW D V S x PERSONS/UNIT (SEE PLAN, PG 20-1)
2. FIGURES REPRESENT 1976 - 1977 BUDGET TOTALS
3. HOMEOWNERS EXEMPTION
4. BASED ON CURRENT ESTIMATED SELLING PRICE
5. TOTAL NON-RECURRING REVENUE
6. ALL FIGURES IN THOUSANDS OF DOLLARS.
7. BASED ON PALOS VERDES PENINSULA SCHOOL DISTRICT'S PUPIL GENERATION FIGURES
8. SUBREGION 2, 3, AND 4 ONLY AND 7 RETAIL, WHOLESALE, PROFESSIONAL AND COMMERCIAL RENTAL BUSINESS $20.00 FOR FIRST $50,000 IN GROSS RECEIPTS AND $30/$1000 THEREAFTER
9. EXISTING POPULATION

COASTAL PLAN FISCAL PROFILE GENERAL FUND REVISED TABLE S4-F

	PROJECTION FACTORS	EXISTING	INTERIM	COASTAL PLAN
RECURRING REVENUE				
PROPERTY TAX	A/V[4] × .750[3] × .5 × D.U.'S	1,889.00	2,672.00	3,054.00
REAL PROP TRANS TAX	POP[11] ÷ 42 300[8] × 11 020[7]	511.00	592.00	556.00
SALES TAX - RES	POP[11] ÷ 42 300[8] × 140 840[7]	1,011.00	1,172.00	1,102.00
SALES TAX - COMM	1% OF SALES TAX RECEIPTS	240.00	240.00	0
FRANCHISE TAX	POP[11] ÷ 42 300[8] × 132 840[7]	951.00	1,105.00	1,039.00
M.V. IN LIEU	POP[11] × 10.78	3,255.00	3,773.00	3,547.00
HIGHWAY CARRIER AND UNIFORM BUS. LIC TAX	POP[11] × 0.10	3.00	3.00	3.00
CIG. TAX	POP[11] ÷ 42 300[8] × 131 380[7]	944.00	1,095.00	1,029.00
HIGHWAY AND TRANS 2107 2106	POP[11] × 4.76 POP[11] × 4.90	2,673.00	3,097.00	2,911.00
BUSINESS LIC	IP	190.00	190.00	0
TOTAL		11,669.00	13,439.00	13,241.00
NON RECURRING REVENUE				
ENVIRON EXCISE TAX	$1 000/NEW D.U.		14,000.00	16,000.00
REAL PROPERTY TRANS TAX	@ .55 $1 000[4]		1,484.00	1,993.00
TOTAL		0	15,484.00	17,993.00
RECURRING COSTS				
SERVICE COSTS		4,809.00	4,809.00	4,809.00
GENERAL GOVERNMENT	POP[11] × 36	10,570.00	12,250.00	11,515.00
HIGHWAY AND TRANS COSTS	POP[11] × 15	4,530.00	5,250.00	4,935.00
TOTAL		19,909.00	22,309.00	21,259.00
NON RECURRING COSTS				
ACQUISITION	NON-RECURRING REV[5]		0	0
IMPROVEMENT	8.11 × POP[11] - YEARS	47,338.00	47,338.00	47,338.00
TOTAL		47,338.00	47,338.00	47,338.00
SCHOOL DISTRICT				
REVENUE (PROP TAX)	A/V[10] × .750[3] × 6.46 × NEW D.U.'S	68,660.00	102,409.00	110,979.00
COSTS	[illegible]	133,900.00	154,700.00	140,400.00

1. POPULATION - NEW D.U.'S x PERSONS/UNIT IGEN PLAN, PG. 201
2. FIGURES REPRESENT 1976 - 1977 BUDGET TOTALS
3. HOMEOWNERS EXEMPTION
4. BASED ON CURRENT ESTIMATED SELLING PRICE
5. TOTAL NON-RECURRING REVENUE
6. ALL FIGURES IN THOUSANDS OF DOLLARS
7. BASED ON PALOS VERDES PENINSULA SCHOOL DISTRICT'S PUPIL GENERATION FIGURES
8. SUBREGION 2, 3 AND 4 ONLY AND 7
RETAIL WHOLESALE PROFESSIONAL AND COMMERCIAL RENTAL BUSINESS $30.00 FOR FIRST $50,000 IN GROSS RECEIPTS AND $30/$1,000 THEREAFTER
9. EXISTING POPULATION

COASTAL PLAN FISCAL PROFILE GENERAL FUND REVISED TABLE S6-E

	PROJECTION FACTORS	EXISTING	INTERIM	COASTAL PLAN
RECURRING REVENUE				
PROPERTY TAX	A/V[4] × .750[3] × .5 × D.U.'S	1,799.00	1,111.00	1,860.00
REAL PROP TRANS TAX	POP[11] ÷ 42 300[8] × 11 020[7]	467.00	588.00	249.00
SALES TAX - RES	POP[11] ÷ 42 300[8] × 140 840[7]	924.00	1,185.00	492.00
SALES TAX - COMM	1% OF SALES TAX RECEIPTS			
FRANCHISE TAX	POP[11] ÷ 42 300[8] × 132 840[7]	872.00	1,118.00	464.00
M.V. IN LIEU	POP[11] × 10.78	2,975.00	3,816.00	1,584.00
HIGHWAY CARRIER AND UNIFORM BUS. LIC TAX	POP[11] × 0.10	3.00	3.00	1.00
CIG. TAX	POP[11] ÷ 42 300[8] × 131 380[7]	863.00	1,107.00	460.00
HIGHWAY AND TRANS 2107 2106	POP[11] × 4.76 POP[11] × 4.90	2,443.00	3,133.00	1,301.00
BUSINESS LIC	IP			
TOTAL		[illegible]	[illegible]	[illegible]
NON RECURRING REVENUE				
ENVIRON EXCISE TAX	$1 000/NEW D.U.		26,000.00	26,000.00
REAL PROPERTY TRANS TAX	@ .55 $1 000[4]		2,749.00	2,749.00
TOTAL		0	28,749.00	28,749.00
RECURRING COSTS				
SERVICE COSTS		249.00	249.00	249.00
GENERAL GOVERNMENT	POP[11] × 36	9,660.00	12,250.00	5,249.00
HIGHWAY AND TRANS COSTS	POP[11] × 15	4,140.00	5,250.00	2,249.00
TOTAL		14,049.00	17,749.00	7,747.00
NON RECURRING COSTS				
ACQUISITION	NON-RECURRING REV[5]	1,614.00	1,614.00	1,614.00
IMPROVEMENT	8.11 × POP[11] - YEARS	1,614.00	1,614.00	1,614.00
TOTAL				
SCHOOL DISTRICT				
REVENUE (PROP TAX)	A/V[4] × .750[3] × 6.46 × NEW D.U.'S	65,168.00	111,334.00	47,632.00
COSTS	[illegible]	127,400.00	170,400.00	60,000.00

1. POPULATION - NEW D.U.'S x PERSONS/UNIT IGEN PLAN, PG.
2. FIGURES REPRESENT 1976 - 1977 BUDGET TOTALS
3. HOMEOWNERS EXEMPTION
4. BASED ON CURRENT ESTIMATED SELLING PRICE
5. TOTAL NON-RECURRING REVENUE
6. ALL FIGURES IN THOUSANDS OF DOLLARS
7. BASED ON PALOS VERDES PENINSULA SCHOOL DISTRICT'S PUPIL GENERATION FIGURES
8. SUBREGION 2, 3 AND 4 ONLY AND 7
RETAIL WHOLESALE PROFESSIONAL AND COMMERCIAL RENTAL BUSINESS $30.00 FOR FIRST $50,000 IN GROSS RECEIPTS AND $30/$1,000 THEREAFTER
9. EXISTING POPULATION

COASTAL PLAN FISCAL PROFILE GENERAL FUND — REVISED — TABLE S7-E

M I N U T E S

City of Rancho Palos Verdes
Environmental Committee

Regular Adjourned Meeting
April 13, 1977

DRAFT EIR NO. 11
Coastal Specific Plan
General Plan Amendment
(and subsequent zone change)

Mr. Davis said changes recommended by the Palos Verdes Peninsula Unified School District were included in the staff report. He reviewed the letter from the Southern California Edison Company, saying that he agreed with the recommended changes #1, #2 (change of verbiage), #3 (change of verbiage), but re #4, he and the Director of Public Works suggested the following: "Street lights in developed areas should not be higher than (cross out "12 feet") required to provide necessary illumination." Staff recommends finalizing the EIR subject to the following condition: contingent upon no significant comments being received from the State Clearinghouse. He said they would not be finished with the document until May 19.

The public hearing was declared open.

Joseph Clifford, 30907 Rue de la Pierre, asked if there has been public notice of this meeting and felt that many people did not know about it. He suggested that the hearing be continued and that public notice be sent. He further felt the document should note by paragraph what is part of the EIR.

Mr. Hinchliffe closed the public hearing, reserving the right to reopen.

Mr. Schuegraff pointed out that some of the figures and tables were missing from the document, and Mr. Davis said these are proposed to be added in the final printing.

There was some discussion about impacts to the City by other cities, the County, etc., and Mr. Davis explained that the City has no jurisdiction in some areas even though it affects the coastline. He also pointed out that if the City adopts a plan, the State may still override it.

In response to Committee questions, Mr. Davis said all homeowners associations and other agencies received copies of the report and that notice was in the newspaper; that although the Planning Commission had a larger turnout of citizens, most of their concerns were about City policy rather than environmental issues; and that this document was done in the same way as the General Plan and that it is a technical difficulty which forces Staff to key the pages at a later date.

Jacki Bacharach reiterated that most people were not aware of this meeting.

Mr. Davis said staff followed the legal procedures re notification, and explained that the major issues discussed at the Planning Commission meetings were agriculture, density, coastal trails, and clustering homes, all of which have been addressed in the document.

After further discussion, during which the Committee felt because of the importance of the document, they should obtain as much public input as possible, Mr. Schuegraff proposed a motion, seconded by Mrs. Watt, and unanimously carried, to continue the public hearing to the meeting of April 27, and that the following conditions be met: 1) letter sent to all homeowners associations notifying them of the hearing; 2) public notice in the newspaper; and 3) request that the Planning Commission comment at the beginning of its April 21 meeting to direct people with comments of an environmental nature to the Environmental Committee meeting.

M I N U T E S

City of Rancho Palos Verdes
Environmental Committee

Regular Adjourned Meeting
April 27, 1977

DRAFT EIR NO. 11
Coastal Specific Plan
General Plan Amendment
(and subsequent zone change)

As staff had no additional information to present at this time, Mr. Hinchliffe noted that there were two people in the audience and, therefore, re-opened the public hearing.

Tim Burrell, 4038 Exultant, suggested the addition of another geology report to the bibliography, and said he has submitted the information to staff. He further recommended a one-line incorporation into the document on page A-5 under "Environmental Impact Report Requirements" referring to the bibliography and suggested wording be similar to "More detailed analysis and supporting data for the Coastal Plan and this EIR are found in the documents listed in the bibliography, which are incorporated herein by reference."

Mr. Hinchliffe asked if staff agreed with this addition, and Mr. Davis said yes.

The public hearing was closed.

Mr. Schuegraff felt the document addresses all issues, and asked staff if anything of environmental concern was brought up at the last Planning Commission public hearing.

Mr. Davis said the only thing he remembered was an attorney who stated that agriculture on the coastline is not very productive because the soil is exhausted.

The Committee briefly discussed this point, and Mr. Schuegraff pointed out that any land which has been farmed for a number of years is exhausted.

A gentleman in the audience expressed concern about litter on the proposed bikeways and trailways and the existing and potential traffic on Palos Verdes Drive South and West.

Mr. Davis reminded the Committee to include in its motion to finalize that it is contingent upon no significant comments being received from the State Clearinghouse.

On motion by Mr. Schuegraff, seconded by Mrs. Watt, and unanimously carried, Draft Environmental Impact Report No. 11 was finalized with the following provisions: that the finalization is contingent upon no major comments being made by the State Clearinghouse which would require changes to the environmental impact report; and that the bibliography include the geology report mentioned this evening, and that Staff prepare and incorporate into the EIR a sentence referring people to the documents listed in the bibliography, as were suggested by Mr. Burrell.

EXCERPT FROM MINUTES OF ENVIRONMENTAL COMMITTEE JULY 2, 1977

DRAFT EIR # 11 ADDENDUM
Coastal Specific Plan
General Plan Amendment No. 3
(and subsequent zone change)

Mr. Davis said this item was back before the Committee so that the comments from the State Clearinghouse and Air Resource Board, along with staff responses, could become part of the final environmental impact report.

The Committee did not open the public hearing since no substantial issue was raised, and they authorized the additional information to become part of Final Environmental Imapct Report No. 11.

HERBICIDE AND PESTICIDE REGULATION

HERBICIDE AND PESTICIDE REGULATION

THE FOLLOWING HAVE BEEN DESIGNATED BY THE DIRECTOR OF FOOD AND AGRICULTURE AS RESTRICTED MATERIALS AND A PERMIT FOR THEIR USE OR POSSESSION IS REQUIRED EXCEPT AS NOTED OR USED ONLY ON LIVESTOCK OR POULTRY IN ACCORDANCE WITH REGISTERED LABELS.

*ALDRIN
ALUMINUM PHOSPHIDE (PHOSTOXIN)
*ARSENICALS, INORGANIC
AVITROL
AZODRIN
*BHC
BIDRIN
*CADMIUM, PESTICIDES CONTAINING
CALCIUM CYANIDE
CARBON BISULFIDE
*CHLORDANE
*CHLOROPICRIN (EXCEPT 1 1/2 LB. OR LESS CANS)
COMPOUND 1080
DASANIT
DDD
DDT
*DIELDRIN
*DI SYSTON (DISULFOTAN)
ENDRIN
ENDRIN TREATED CONIFER SEEDS
EPN
ETHION
FURADAN (EXCEPT 5% OR LESS GRANULES)
GUTHION (AZINPHOSMETHYL)
*HEPTACHLOR
LANNATE (METHOMYL) (NUDRIN)
*LINDANE
*METHYL BROMIDE (EXCEPT 1 1/2 LB. OR LESS CANS)
METHYL PARATHION
MERCURY, CERTAIN TREATED SEED
*MERCURY, PESTICIDES CONTAINING
MONITOR
MOCAP (TURF USE ONLY)
NEMACUR
OMPA (SCHRADAN)
PARATHION
PHOSDRIN (MEVINPHOS)
PHOSPHAMIDON
*SEVIN (CARBARYL)
SODIUM ARSENITE (EXCEPT SYRUPS & DRY BAITS)
SODIUM CYANIDE
STARLICIDE
*STRYCHNINE FOR RODENT CONTROL
STRYCHNINE FOR BIRD CONTROL
SULFOTEPP
SUPRACIDE
SYSTOX (DEMETON)
TEMIK (ALDICARB)
TEPP
THIMET (PHORATE)
*THIODAN (ENDOSULFAN)
TORAK (DIALIFOR)
*TOXAPHENE
TRITHION (CARBOPHENOTHION)
*ZINC PHOSPHIDE

HERBICIDES

**DICAMBA (BANVEL)
**MCPA
**PICLORAM
**PROPANIL
**SILVEX
**2,4-D
**2,4-DB
**2,4-DP
**2,4,5-T
PARAQUAT (EXCEPT DILUTED FOAM AEROSOL)

* ALL PESTICIDES IN DUST FORM FOR USE OVER CROPS EXCEPT EXEMPT MATERIALS AND CERTAIN ENCLOSED AREAS SUCH AS GREENHOUSES.

EXEMPT MATERIALS

ADJUVANTS
BACILLUS THURINGIENSIS
BORDEAUX MIXTURE
COPPER ACETATE
COPPER CARBONATE
COPPER HYDROXIDE
COPPER-LIME MIXTURE

COPPER LINEOLATE
COPPER OLEATE
COPPER OXIDE
COPPER OXYCHLORIDE
COPPER SULFATE
COPPER CALCIUM OXYCHLORIDE
LIME
LIME-SULFUR
OILS, PETROLEUM
SODIUM POLYSULFIDE
SULFUR

* PERMITS NOT NEEDED FOR CERTAIN USES SUCH AS HOME USE, STRUCTURAL PEST CONTROL, INDUSTRIAL USE, OR INSTITUTIONAL USE.

** SMALL QUANTITIES AND CERTAIN DILUTE FORMULATIONS DO NOT REQUIRE A PERMIT.

PREPARED BY LOS ANGELES COUNTY AGRICULTURAL COMMISSIONER'S OFFICE.

2-28-77

PERMIT EXEMPTIONS

RESTRICTED MATERIALS

NO PERMIT REQUIRED FOR:

--RESTRICTED MATERIALS LABELED FOR USE ON LIVESTOCK OR POULTRY.

--READY-TO-USE SYRUPS OR DRY BAITS CONTAINING SODIUM ARSENITE.

* HOME USE, STRUCTURAL PEST CONTROL, INDUSTRIAL AND INSTITUTIONAL USES, AND USES BY CERTAIN PUBLIC AGENCIES.

--NO PERMIT REQUIRED FOR GRANULAR FORMULATIONS OF FURDAN CONTAINING NOT MORE THAN 5%.

--CHLOROPICRIN OR METHYL BROMIDE PACKAGED IN CONTAINERS HOLDING 1 1/2 LB. OR LESS.

--NO PERMIT REQUIRED FOR PARAQUAT FOR HOME USE ONLY POSSESSED AND USED IN ACCORDANCE WITH REGISTERED LABELING.

--MOCAP EXCEPT FOR TURF USES.

--OTHER DUSTS (THOSE NOT CONTAINING A RESTRICTED MATERIAL) IN CONTAINERS HOLDING 25 POUNDS OR LESS OR FOR USE IN ENCLOSED AREAS SUCH AS GREENHOUSES.

RESTRICTED HERBICIDES

NO PERMIT REQUIRED FOR:

--UP TO 1 GALLON LIQUID PER 24-HOUR PERIOD IF LESS THAN 1 1/4% ACTIVE INGREDIENT.

--UP TO 1 PINT LIQUID OR 1 POUND DRY PER 24-HOUR PERIOD REGARDLESS OF PERCENT ACTIVE INGREDIENT.

--UP TO 50 POUNDS DRY COMMERCIAL FERTILIZER, AGRICULTURAL MINERAL, OR GRANULAR MATERIAL PER 24-HOUR PERIOD IF LESS THAN 10% ACTIVE INGREDIENT.

--A WAX BLOCK IMPREGNATED WITH A RESTRICTED HERBICIDE.

--UP TO 1 QUART OF READY-TO-USE SOLUTION.

--UP TO 1 QUART OF DICAMBA PER 24-HOUR PERIOD REGARDLESS OF PERCENT ACTIVE INGREDIENT.

GENERAL

(1) THE PERSON IN CHARGE OF THE PROPERTY TO BE TREATED OR THE PEST CONTROL OPERATOR OR BOTH MAY APPLY FOR A PERMIT, BUT NO PERMIT SHALL BE VALID FOR POSSESSION OR USE BY ANY OPERATOR OR PERSON NOT NAMED IN THE PERMIT.

(2) THE PERSON NAMED IN A RESTRICTED MATERIALS PERMIT IS AUTHORIZED TO POSSESS MATERIALS FOR WHICH THE PERMIT WAS VALID AFTER SUCH PERMIT EXPIRES, PROVIDED IT IS STORED IN ACCORDANCE WITH SECTION 3136.

REFER TO REGULATIONS FOR SPECIFIC PERMIT REQUIREMENTS.

MAJOR PESTICIDE SUSPENSION/CANCELLATION ACTIONS

A. SODIUM FLUOROACETATE, STRYCHNINE, AND SODIUM CYANIDE (CANCELLED AND SUSPENDED AGAINST MAMMALIAN PREDATORS).

NON-CANCELLED USE:

SODIUM CYANIDE MAY BE USED IN THE M-44 DEVICE ONLY TO TAKE WILD CANIDS SUSPECTED OF PREYING UPON LIVESTOCK AND POULTRY.

B. DDT

NON-CANCELLED USES:

1. FOR USE AND DISTRIBUTION BY U.S. PUBLIC HEALTH SERVICE OFFICIALS, OR FOR DISTRIBUTION BY, OR ON THE APPROVAL OF, THE U.S. PUBLIC HEALTH SERVICE TO OTHER HEALTH SERVICE ORGANIZATIONS FOR CONTROL OF VECTOR DISEASES.

2. USDA OR MILITARY FOR HEALTH QUARANTINE USE.

3. FOR FORMULATION OF PRESCRIPTION DRUGS FOR CONTROLLING BODY LICE.

4. DRUGS FOR CONTROLLING BODY LICE DISPENSED BY PHYSICIANS.

C. CHLORDANE AND HEPTACHLOR

NON-SUSPENDED USES:

1. CHLORDANE:

   A. FEDERAL/STATE QUARANTINE PROGRAM FOR JAPANESE BEETLE AND IMPORTED FIRE ANT.

   B. NON-QUARANTINE IMPORTED FIRE ANT PROGRAMS.

C. MICHIGAN QUARANTINE PROGRAM FOR BLACK VINE WEEVIL.

D. HARVESTER ANT IN OKLAHOMA.

E. WHITE FRINGED BEETLE EXCEPT ON TOBACCO.

F. FULLER ROSE BEETLE AND OTHER ROOT WEEVILS ON FLORIDA CITRUS CROP.

G. ROOT-DESTROYING GRUBS ON STRAWBERRIES.

H. WHITE GRUBS IN MICHIGAN.

2. HEPTACHLOR:

A. CONTROL OF THE NARCISSUS BULB FLY.

B. SEED TREATMENT.

C. PINAPPLE MEALYBUG.

NON-CANCELLED USES - CHLORDANE AND HEPTACHLOR:

1. SUBSURFACE GROUND INSERTION FOR TERMITE CONTROL.

2. DIPPING OF ROOTS AND TOPS OF NON-FOOD PLANTS.

NOTE: STOCKS FORMULATED PRIOR TO JULY 29, 1975, AND REGISTERED WITH THE ENVIRONMENTAL PROTECTION AGENCY, MAY BE USED ACCORDING TO LABEL DIRECTIONS.

ALDRIN AND DIELDRIN

NON-CANCELLED USES:

1. SUBSURFACE GROUND INSERTION FOR TERMITE CONTROL.

2. DIPPING OF ROOTS AND TOPS OF NON-FOOD PLANTS.

3. USE IN TOTAL EFFLUENT-FREE MOTH-PROOFING SYSTEMS.

NOTE: STOCKS FORMULATED PRIOR TO AUGUST 2, 1974, AND REGISTERED WITH EPA, MAY BE USED ACCORDING TO LABEL DIRECTIONS.

D. MERCURY

NON-CANCELLED USES:

1. AS A FUNGICIDE IN THE TREATMENT OF TEXTILES AND FABRICS FOR CONTINUOUS OUTDOOR USE, SUCH AS AWNINGS, BOAT COVERS, AND TARPAULINS.

2. CONTROL OF GROUND MOLD ON SAWN LUMBER.

3. CONTROL OF DUTCH ELM DISEASE.

ADDITIONAL NON-CANCELLED USES:

1. AS AN IN-CAN PRESERVATIVE IN WATER BASE PAINTS AND COATINGS.

2. AS A FUNGICIDE IN WATER BASE PAINTS AND COATINGS FOR EXTERIOR APPLICATION.

STAYED THROUGH AUGUST 31, 1978:

1. AS A SEED TREATMENT.

2. AS A FUNGICIDE FOR USE AGAINST SUMMER TURF DISEASES.

READING FILE:

BOESCH/GREANYA

10/5/76

426 787, 426 798, 417 967

GLOSSARY

COASTAL SPECIFIC PLAN GLOSSARY TERMS

ACCESSORY STRUCTURE: A STRUCTURE, BUILDING, OR PART OF A BUILDING, THE USE OF WHICH IS INCIDENTAL TO THAT OF THE MAIN BUILDING, STRUCTURE, OR USE ON THE SAME LOT.

AGRICULTURE: THE CULTIVATION OF THE SOIL FOR THE PURPOSE OF GROWING MARKETABLE CROPS, SUCH AS FLOWERS, TREES, GRAINS, AND PRODUCE.

ARCHAEOLOGICAL SURVEY: SURVEY PERFORMED BY A QUALIFIED ARCHAEOLOGIST TO DETERMINE WHETHER SITES POSSESS CULTURAL RESOURCES. THE SURVEY TYPICALLY INCLUDES A ''WALKOVER'' AND RECORDS SEARCH, BUT MAY BE EXPANDED TO INCLUDE EXCAVATION OF TEST PITS.

ATTACHED SINGLE FAMILY HOUSING: TWO OR MORE UNITS OF INDIVIDUAL FAMILY HOUSING LOCATED ON SEPARATE LOTS YET HAVING ONE OR MORE COMMON WALLS.

BIOTIC RESOURCES: ALL PLANT AND ANIMAL ORGANISMS, BOTH MARINE AND TERRESTRIAL.

BLUFF STABILITY: THE INTEGRITY OF THE SURFACE AND SUBSURFACE GEOLOGIC STRUCTURE RELATIVE TO SETTLING, SLIPPING, MOVING, EXPANSION, EROSION, ETC. OF THE BLUFF AREA.

BLUFF'S EDGE: THE ACTUAL PHYSICAL DROP-OFF POINT WHERE THE LAND SLOPES AWAY TOWARD THE OCEAN AT GREATER THAN 35% IN STEEPNESS.

BUILDABLE ACREAGE: ACTUAL PHYSICAL LAND AREA DETERMINED SUITABLE FOR DEVELOPMENT AFTER EXCLUSION OF SUCH FACTORS AS PUBLIC HEALTH, SAFETY, AND RESOURCE PRESERVATION.

BUILDOUT POTENTIAL: MAXIMUM DEVELOPMENT POTENTIAL

CCZCC: CALIFORNIA COASTAL ZONE CONSERVATION COMMISSION

CARRYING CAPACITY: LEVEL OR INTENSITY OF DEVELOPMENT FOR ANY PARTICULAR PARCEL OF LAND.

CLUSTERING: A RESIDENTIAL DEVELOPMENT TECHNIQUE WHEREBY THE DEVELOPER IS ALLOWED TO CREATE LOTS SMALLER THAN THOSE PROVIDED FOR IN THE ZONING DISTRICT STANDARDS FOR A STANDARD SUBDIVISION WITH AREAS OF OPEN SPACES. THE CLUSTER CONCEPT IS PROVIDED FOR IN THE RESIDENTIAL PLANNED DEVELOPMENT (RPD) SECTION OF THE DEVELOPMENT CODE.

COASTAL DEPENDENT USE OR DEVELOPMENT: USE OR DEVELOPMENT THAT MUST HAVE AN OCEANFRONT AREA SITE TO BE ABLE TO FUNCTION.

COASTAL REGION ATTRACTOR/GENERATORS: REGIONAL ACTIVITIES WHICH HAVE THE POTENTIAL TO SIGNIFICANTLY INCREASE THE AMOUNTS OF TRAFFIC TO THE COASTAL REGION.

COASTAL SETBACK ZONE: A ZONE ADJACENT TO THE BLUFFS, WHICH, FOR ADVERSE GEOLOGIC, TOPOGRAPHIC, OR EROSION REASONS, SHOULD BE AVOIDED IN LOCATING DEVELOPMENT OF ANY TYPE OR SCALE.

CONTINUOUS VIEWING STATION: A VIEWING STATION WHICH AFFORDS A CONTINUOUS UNINTERRUPTED VIEW, SUCH AS PALOS VERDES DRIVE SOUTH.

CORRIDOR VIEW: A VIEW OF ANY NON-SPECIFIC OBJECT OR FOCUS WITH A STATIONARY VIEWING STATION AND AN UNLIMITED HORIZONTAL OR VERTICAL ARC.

DENSITY TRANSFER: A PROCESS WHEREBY RESIDENTIAL DEVELOPMENT AT A GIVEN DENSITY IS TRANSFERRED TO ANOTHER AREA WHERE DEVELOPMENT IS FEASIBLE.

DESIGN GUIDELINES: PARAMETERS, WHICH ARE NOT ABSOLUTE CONTROLS, FOR THE DESIGNING OF FUTURE DEVELOPMENTS.

DETAILED GEOLOGIC STUDY: STUDY OF ALL FACETS OF THE SURFACE AND SUBSTRUCTURAL SOILS AND GEOLOGIC CONDITIONS OF A SPECIFIC PROJECT AREA IN ORDER TO DETERMINE THE AREA'S ABILITY TO SUPPORT THE PROPOSED PROJECT.

DIRECTIONAL SIGNS: SIGNS USED TO INDICATE GUIDANCE OR DIRECTION TO AN ACTIVITY.

DRAINAGE COURSE (NATURAL): THE ULTIMATE PHYSICAL PATH TAKEN BY NATURAL WATERSHED RUNOFF DUE TO THE EFFECTS OF GRAVITY.

E.S.A.: EARTH SCIENCE ASSOCIATES

EXCAVATION: ANY ACT BY WHICH EARTH, SAND, GRAVEL, ROCK, OR ANY OTHER SIMILAR MATERIAL IS CUT INTO, DUG, QUARRIED, UNCOVERED, REMOVED, DISPLACED, RELOCATED, OR BULLDOZED; AND SHALL INCLUDE THE CONDITIONS RESULTING THEREFROM.

FISCAL PROFILE: A REPRESENTATION OF FINANCIAL MATTERS RELATING TO DEVELOPMENTAL ELEMENTS OF THE COASTAL ZONE.

GEOLOGICALLY UNSTABLE: REFERS TO A LANDMASS WHICH IS UNSTABLE FOR DEVELOPMENT BECAUSE THE SUBSURFACE GEOLOGICAL STRUCTURE HAS THE POTENTIAL TO DETERIORATE TO HAZARDOUS LEVELS RELATIVE TO MOVEMENT.

GEOMETRIC GRADING: GRADING ACTIVITY WHICH PRODUCES SHARP VISUAL EDGES AT THE TOP OR TOE OF A SLOPE AND A UNIFORM ANGLE OF SLOPE SO AS TO CREATE AN UNNATURAL APPEARING LAND MASS.

GRADING: ANY EXCAVATION OR FILL OR ANY COMBINATION THEREOF; AND SHALL INCLUDE THE CONDITIONS RESULTING FROM ANY EXCAVATION OR FILL.

GROSS DENSITY: THE NUMBER OF DWELLING UNITS PER ACRE OF RESIDENTIAL LAND INCLUDING STREETS, PARKING, PLAYGROUNDS, AND NON-RESIDENTIAL BUILDINGS.

GUIDANCE SIGNS: SIGNS USED TO INDICATE DIRECTION TO PUBLIC OR PRIVATE FACILITIES.

GUIDELINE: A RANGE OF PARAMETERS WHICH DESIGNERS MAY USE TO ACHIEVE CREATIVE RESPONSES CONSISTENT WITH THE SPIRIT OF THE COASTAL SPECIFIC PLAN.

INDIVIDUAL FACTOR CORRIDOR: AN AREA DELINEATED AS A CORRIDOR WHICH ALLOWS ONLY ONE ACTIVITY.

INFILL LOT: VACANT LOT WITHIN A PREDOMINANTLY DEVELOPED AREA.

INFORMATION SIGNS: TRAFFIC SIGNALS, MILEAGE INDICATORS AND SIGNS USED TO INDICATE DIRECTIONS.

INTERTIDAL REGION (ZONE): THE REGION OR ZONE OF TIDELANDS BETWEEN THE SPLASH ZONE AND APPROXIMATELY 1.6 FEET BELOW MEAN LOWER LOW WATER. THIS IS THE AREA AFFECTED BY THE RISE AND FALL OF THE DAILY TIDES. (SEE INTERTIDAL ZONE DISCUSSION P. N-14)

INTRA-SUBREGION DENSITY TRANSFER: THE TRANSFER OF DEVELOPMENT RIGHTS WITHIN A SUBREGION IN ORDER TO FACILITATE THE PRESERVATION OF AGRICULTURAL OR RECREATIONAL LAND. (SEE ALSO DENSITY TRANSFER)

LAND STABILITY/INSTABILITY: CAPABILITY OF THE LAND TO RESIST FORCES OF MOVEMENT FROM EROSION, SUBSURFACE GEOLOGIC STRUCTURE, SOIL EXPANSION, CONTRACTION, SETTLING, OR ANY OTHER NATURAL OR INDUCED FORCES CAUSING LAND MOVEMENT.

LIGHT, NON-RESIDENTIAL STRUCTURE: STRUCTURES NOT USED FOR HUMAN HABITATION SUCH AS COMFORT STATIONS, MAINTENANCE BUILDINGS, RECREATION SHELTERS, AND MINIMUM RECREATION FACILITIES, VIEWING STATIONS, AND ANY SIMILAR USES, PROVIDING THE STRUCTURE WILL NOT ADVERSELY AFFECT THE LAND STABILITY OF THE AREA.

LOCAL CONVENIENCE RETAIL: A COMMERCIALLY ZONED USE FOR THE SELLING OF GOODS AND/OR SERVICES FOR PERSONAL OR HOUSEHOLD CONSUMPTION IN A LIMITED SERVICE AREA.

LOCAL RETAIL FACILITY: A COMMERCIALLY ZONED USE FOR THE SELLING OF GOODS AND/OR SERVICES FOR PERSONAL OR HOUSEHOLD CONSUMPTION.

MAJOR GRADING: ANY GRADING WHICH REQUIRES A MANDATORY PLANNING COMMISSION REVIEW.

MARINE BIOTA: THE FLORA AND FAUNA OF THE MARINE ENVIRONMENT.

MULTI-USE CORRIDOR: CORRIDOR WHICH CAN SUPPORT VARIED USES, SUCH AS AN ACCESS CORRIDOR WHICH CAN ACCOMMODATE AUTO, BICYCLE, AND PEDESTRIAN TRAFFIC AND UNOBSTRUCTED VIEWS.

NATIVE PLANT MATERIALS: PLANT MATERIALS INDIGENOUS TO THE CALIFORNIA COASTAL SAGE SCRUB COMMUNITY AND, MORE SPECIFICALLY, THE PALOS VERDES PENINSULA AREA.

NATURAL CONTOURS: EXISTING TOPOGRAPHIC CONTOUR LINES (PRIOR TO DEVELOPMENT OR GRADING - I.E., NATURAL LAND FORMATION)

NATURAL DRAINAGE FEATURES: ALL NATURAL FEATURES AFFECTING THE FLOW OF WATER FROM WATERSHED DISTRICTS TO THE OCEAN. INCLUDES VEGETATION, SLOPES, DRAINAGE, NATURAL ENERGY, AND DISSIPATORS SUCH AS ROCK OUTCROPPINGS, ETC.

NATURAL HABITAT: THE DOMAIN OR RESIDENCE OF ANY PLANT OR ANIMAL UNDER UNDISTURBED OR NEARLY UNDISTURBED NATURAL CONDITIONS.

NATURAL STATE: UNIMPACTED OR SUBSTANTIALLY UNIMPACTED BY HUMAN ACTIVITY OR INFLUENCE.

NET DENSITY: THE NUMBER OF DWELLING UNITS PER ACRE OF NET RESIDENTIAL LAND DEVOTED TO RESIDENTIAL BUILDINGS AND ACCESSORY USES ON THE SAME LOTS, SUCH AS INFORMAL

PRIVATE OPEN SPACE, DRIVES AND SERVICE AREAS. THIS ACREAGE WOULD BE EXCLUSIVE OF PUBLIC STREETS, PUBLIC PARKING, OPEN SPACE AND NON-RESIDENTIAL STRUCTURES (CLUSTERING).

OPEN EAVE CONDITION: ROOFING CONDITION WITH RAFTERS EXPOSED AND FASCIA PLATE AFFIXED TO VERTICAL EDGE OF RAFTERS.

ORIENTATION SIGNS: SIGNS WHICH INDICATE THE ARRANGEMENT OR ALIGNMENT OF OBJECTS OR LOCATIONS.

OVERLAY: AREAS WITHIN THE COASTAL ZONE WHICH POSSESS NATURAL OR SOCIO-CULTURAL FEATURES WHICH WARRANT SPECIAL CONTROL OVER DEVELOPMENT.

PASSIVE RECREATION: OUTDOOR RECREATION ACTIVITIES THAT ARE NON-STRUCTURED IN NATURE (PICNICKING, SIGHTSEEING, NATURE STUDY AREAS, ETC.)

PERMANENT STRUCTURE: A STRUCTURE WHICH IS AFFIXED TO THE GROUND SURFACE BY FOOTINGS AND FOUNDATIONS.

POLE HOUSE: A RESIDENTIAL STRUCTURE WHICH UTILIZES ''TELEPHONE POLES'' OR OTHER SIMILAR STRUCTURAL ELEMENTS AS A PIER SYSTEM FOR THE FOUNDATION OF A HOUSE. THIS APPROACH CAN ASSIST IN THE MINIMIZATION OF GRADING IN HILLSIDE SITUATIONS.

POLICY: A DEFINITE COURSE OF ACTION EMBRACING THE GOALS AND ACCEPTABLE PROCEDURES OF THE CITY.

PROJECTION FACTORS: A STATISTICAL ESTIMATE BASED ON PAST EXPERIENCE OR TESTING WHICH IS USED IN A FORMULA TO CALCULATE THE IMPACT OF ONE OR MORE COMPONENTS OF A COURSE OF ACTION. ALSO REFERRED TO AS A GENERATING FACTOR, IT IS USED PRIMARILY IN FISCAL AND TRAFFIC ANALYSIS.

PUBLIC ACCESS: THE PROVIDING OF ACCESS BY THE PUBLIC TO AREAS OF THE COASTAL ZONE.

RETENTION STRUCTURES: RETAINING WALLS BEING EITHER A PART OF A STRUCTURE OR CONSTRUCTED EXCLUSIVELY FOR THE PURPOSE OF SUPPORTING CUT AND/OR FILLED EARTH SITUATIONS.

SEAWARD EDGE OF A CORRIDOR: A SETBACK FROM THE BLUFF EDGE OF ANY CORRIDOR IN THE COASTAL REGION.

SECONDARY CORRIDOR: A SINGLE OR SPECIAL USE CORRIDOR WHICH IS OF A LIMITED DIMENSION. A SINGLE USE TRANSPORTATION CORRIDOR, SUCH AS THE CLASS II BIKEWAY ADJACENT TO PALOS VERDES DRIVE SOUTH AND WEST.

SERVICE COSTS: MONETARY COSTS ASSIGNED TO LABOR AND MATERIALS FOR MAINTENANCE SERVICES RENDERED IN THE PUBLIC RIGHT-OF-WAY.

SITE PLANNING GUIDELINES: PARAMETERS WHICH WILL BE USED TO ESTABLISH SPECIFIC RELATIONSHIP REQUIREMENTS FOR ANY TYPE OF DEVELOPMENT.

SLOPE: A NATURAL OR ARTIFICIALLY CREATED INCLINE ON THE GROUND SURFACE.

SOURCE REVEALED SPOT LIGHT: LIGHTING IN WHICH THE LIGHT SOURCE IS VISIBLE RATHER THAN INDIRECT.

SPECIFIC PLAN DISTRICT: AREAS OF SPECIAL INTEREST THAT REQUIRE A MORE DETAILED LEVEL OF STUDY THAN THE GENERAL PLAN PROCESS WOULD ENABLE. SPECIFICALLY, THE STUDY AREA IN QUESTION IS BOUNDED BY THE CITY OF LOS ANGELES, CITY OF PALOS VERDES ESTATES, MEAN HIGH TIDE LINE, AND PALOS VERDES DRIVES SOUTH AND WEST.

SUBREGION: AREAS INTERNAL OF THE DEFINED COASTAL AREA SHOWING COMMON GEOGRAPHICAL USE OR OTHER COMMON CHARACTERISTICS. ALLOWS FOR A LOGICAL AND DETAILED LEVEL OF STUDY.

SUBTIDAL REGION: A ZONE RANGING FROM THE LOWEST INTERTIDAL ZONE TO THE OCEAN DEPTHS FOR THE PURPOSES OF CLASSIFYING PLANT AND ANIMAL HABITATS.

SUPPORTING FACILITIES FOR PERMANENT RESIDENTIAL STRUCTURES: STREETS, SIDEWALKS, STREET LIGHTING AND SIGNING, LANDSCAPING IN THE PARKWAY AND STREETS, FLOOD CONTROL EQUIPMENT AND UTILITY INFRASTRUCTURE.

TRAFFIC CAPACITY: THE MAXIMUM NUMBER OF VEHICLES WHICH CAN HAVE A REASONABLE EXPECTATION OF PASSING OVER A GIVEN SECTION OF ROADWAY DURING A GIVEN TIME PERIOD UNDER PREVAILING TRAFFIC CONDITIONS.

VIEW SHED: UNOBSTRUCTED VIEW AREAS.

VISTA: INCLUDES A VIEWING STATION, OBJECTS TO BE SEEN, AND AN INTERMEDIATE VIEWING GROUND.

VISTA HEIGHT ZONE: THE DISTANCE BETWEEN THE BOTTOM OF THE VERTICAL ARC AND THE GROUND LEVEL OF THE FOCAL POINT WHICH IS INTENDED TO CONTROL THE HEIGHT OF STRUCTURES AND VEGETATION.

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BIBLIOGRAPHY

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