Final Environmental Impact Report

The City of Manhattan Beach

General Plan

Final Environmental Impact Report

MANHATTAN BEACH GENERAL PLAN

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Table of Contents

		Page
	Executive Summary	ES-1
	Introduction	IN-1
1.0	Project Description	1
2.0	Environmental Setting	15
3.0	Environmental Impacts and Mitigation Measures	19
	3.1 Transportation/Traffic	21
	3.2 Air Quality	31
	3.3 Noise	43
	3.4 Hydrology, Utilities, and Service Systems	55
	3.5 Population/Housing	63
4.0	Alternatives to the Project	67
5.0	Cumulative and Long-Term Effects	71
6.0	References	75
7.0	Preparers of the EIR	77
8.0	Responses to Comments on Draft EIR	79

Appendices
- A: Notice of Preparation and Initial Study
- B: Traffic Study
- C: Air Quality Worksheets
- D: Summary of General Plan Goals and Policies

List of Tables

		Page
ES-1:	Summary of Environmental Impacts and Mitigation Measures	ES-9
1:	Existing and Future Projected Development	7
2:	Summary of Existing AM/PM Peak Hour Intersection Performance	23
3:	Summary of Future AM/PM Peak Hour Intersection Performance	27
4:	Air Pollution Sources, Effects, and Standards	33
5:	Number of Days State Ambient Air Quality Standards Exceeded, Hawthorne Station	34
6:	PM10 Measurements, Hawthorne Station	34
7:	SCAQMD Thresholds for Significant Contributions to Regional Air Pollution	36
8:	Estimated Air Pollutant Emissions for Existing Land Uses and Buildout	38
9:	CALINE-4 Model Results Summary	40
10:	Noise Impact from Project and Cumulative Traffic on Roadway Segments	45
11:	Estimated Landfill Capacities	57
12:	Estimated Solid Waste Generation	60
13:	SCAG Population, Households, Employment, and Jobs-Housing Balance Projections South Bay Cities Council of Governments Sub-region	64

List of Figures

		Page
1:	Manhattan Beach Planning Area	3
2:	Land Use Policy Map	5
3:	Noise/Land Use Compatibility Matrix	44
4:	Existing Noise Contours	47
5:	Year 2020 Noise Contours	51

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Executive Summary

This Final Program Environmental Impact Report (EIR) for the City of Manhattan Beach General Plan has been prepared pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Section 21000 et seq.) and the *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines) published by the Public Resources Agency of the State of California (California Code of Regulations, Title 14, Section 15000 et seq.), and in accordance with the City of Manhattan Beach's CEQA Guidelines. The City of Manhattan Beach is the lead agency for this Program EIR, as defined in Section 21067 of CEQA.

The Final EIR includes comments and responses to comments received on the Draft EIR, which was circulated for public review beginning on August 8, 2003 and ending on September 22, 2003. The comments and responses to comments are presented in Section 8.0, Responses to Comments on Draft EIR, of this Final EIR. Revisions and clarifications made in response to comments and information received on the Draft EIR are indicated by shading, as illustrated in this sentence. Revisions made for internal consistency, such as typographical errors, are not shaded.

The Project

The project examined in this EIR is the adoption and implementation of the City of Manhattan Beach General Plan. The City has completed a comprehensive update of the current General Plan, adopted in 1988. The project also includes subsequent amendments to the City Local Coastal Program, Title 10 (Planning and Zoning Ordinance) of the Manhattan Beach Municipal Code, and other associated Municipal Code sections that may be necessary to ensure consistency with the General Plan; and to implement the land use plan and policies contained in the General Plan.

Project Location

Manhattan Beach is located in the southwest portion of Los Angeles County along the Pacific Ocean. The City is bordered by the cities of El Segundo to the north, Redondo Beach and Hawthorne to the east, and Hermosa Beach to the south.

The Manhattan Beach General Plan Planning Area consists of properties contained within the City's corporate limits. The entire Planning Area encompasses nearly 4 square miles, or 2,017 acres of land developed with residential, commercial, industrial, open space, and public uses.

Purpose and Objectives of the General Plan

The General Plan establishes a comprehensive, long-term vision for Manhattan Beach to guide planning decisions and physical development over a 20-year period. The principle goals set forth in the General Plan include the following:

- Preserve small town atmosphere
- Protect the unique community character of different residential neighborhoods
- Encourage open space throughout the City
- Support viable commercial areas
- Maintain the unique character of the various commercial areas
- Minimize the intrusion of incompatible land uses
- Develop positive community aesthetics
- Provide a balanced transportation system
- Manage traffic effectively
- Provide for parking needs
- Facilitate the use of non-motorized transportation
- Maintain reliable water, sewage, and storm drainage systems
- Underground utility lines as feasible
- Establish a reliable communications system
- Minimize the risk of hazards
- Provide a high level of emergency and protective services
- Conserve the community's natural resources
- Provide recreational opportunities
- Manage an effective recycling program
- Enhance arts and cultural programs
- Mitigate the various sources of noise pollution

The General Plan is divided into 5 chapters that contain goals and policies focused on achieving the City's objectives. The chapters and the key features of each are as follows:

Land Use Element

In terms of guiding the physical development of Manhattan Beach, the Land Use Element is of primary importance. The Element establishes land uses classifications and intensities of development for both private and public lands throughout the City, providing a rational and ordered approach to future development while preserving and enhancing important community features.

The Element emphasizes maintenance of low-profile development, protection of unique features of individual neighborhoods, and retention and enhancement of landscaped open spaces throughout the City. To encourage pedestrian-oriented development, the land use plan provides for mixed-use residential/commercial development at appropriate locations within Downtown, the North End, and other commercial areas.

The Element addresses the community's desire to maintain the viability of commercial areas by supporting and encouraging the upgrading and growth of businesses. Sepulveda Boulevard will remain as a focal point for regional-serving commercial uses. Downtown will provide businesses and services for local residents and visitors, and the North End will continue its local-serving

character. This Element also focuses on achieving a positive community aesthetic by enhancing and unifying design quality and standards for new development. Specifically, policies address new commercial development, open and public spaces, and public and commercial signage.

The General Plan provides for the construction of 842 new dwelling units and 205,000 square feet of new non-residential development, including commercial, industrial, and public facilities.

Infrastructure Element

The Infrastructure Element addresses the City's street system and other public infrastructure. The Circulation section emphasizes moving commuter traffic through the City on arterial streets to protect residential neighborhoods. Other key goals include providing sufficient parking to protect residential neighborhoods from spillover parking; encouraging pedestrian-oriented development; and supporting pedestrian, bicycle, and other alternative modes of transportation. The Public Facilities section focuses on maintaining safe, reliable, and efficient water, sewer, and storm drainage systems; reliable energy and communications infrastructure; and solid waste and recycling

Community Resources Element

The Community Resources Element focuses on preserving and enhancing the natural resources that make Manhattan Beach unique among urban communities in Southern California. Conservation issues addressed include providing additional parks and open space, recreation programs, and other facilities to meet the needs of all persons in the community. Other issues include encouraging additional landscaping, enhancing cultural arts programs, preserving and protecting mature trees in Manhattan Beach, educational institutions, energy conservation, water resources, and air quality.

Community Safety Element

The Community Safety Element identifies and addresses natural and human-created conditions within or near the City that represent potential dangers to people, structures, or infrastructure. The Element establishes goals and policies to minimize the risk associated with crime, pollution, fires, natural hazards, and hazardous materials. Emergency preparedness planning, including identifying actions needed to manage crisis situations, and maintaining high levels of City police and emergency services are also addressed.

Noise Element

The Noise Element examines ways to minimize the effects and extent of noise impacts from traffic and other sources within and near to Manhattan Beach, including the El Segundo Power facility, Chevron Refinery, and Los Angeles International Airport. Noise standards and land use compatibility guidelines are identified to protect noise-sensitive land uses.

Required Actions

This EIR has been prepared to address the following actions by the City and others to adopt and implement the Manhattan Beach General Plan:

Responsible Agency	Action
Manhattan Beach City Council	Adoption of the General Plan
	Adoption of amendments to Title 20 (Zoning) of the Manhattan Beach Municipal Code to implement the General Plan
	Adoption of any amendments to the Local Coastal Program to ensure consistency with the General Plan
	Adoption of any ordinances, guidelines, programs, or other mechanisms that implement General Plan policy
Manhattan Beach Planning Commission	Recommendation to City Council to adopt the General Plan
	Recommendation to City Council to adopt amendments to Title 20 (Zoning) of the Manhattan Beach Municipal Code to implement the General Plan
	Recommendation to the City Council to adopt any amendments to the Local Coastal Program to ensure consistency with the General Plan
	Recommendation to City Council to adopt any ordinances, guidelines, programs, or other mechanisms that implement General Plan policy
Other City Boards and Commissions	Recommendation to City Council to adopt ordinances, guidelines, programs, or other actions that implement the General Plan policy
City Departments	Implementation of programs or other actions pursuant to General Plan General Plan policy

Responsible Agency	Action
Others as necessary	Adoption and implementation of plans or programs tangential to the Manhattan Beach General Plan

Significant, Unavoidable Environmental Impacts Associated with the Project

Adoption and long-term implementation of the Manhattan Beach General Plan will result in the following significant, unavoidable environmental effects:

Transportation

Future traffic volumes associated with ambient growth outside of Manhattan Beach and modest future development within Manhattan Beach are anticipated to create conditions whereby the existing and planned roadway capacity of numerous roadway segments in the City are exceeded. Such volumes cannot be carried without substantial improvements to these roadways, which cannot be easily accomplished due to right-of-way limitations and the built-out nature of the City.

Analysis shows that the following 27 intersections may be experience a decreased level of service in the future due largely to ambient regional traffic growth (refer to section 3.1-Transportation/Traffic for a discussion of level of service). At some locations, the level of service currently is F, and in the long term, the volume-to-capacity ratio is anticipated to increase by 0.02 or more, triggering a significant impact per the City's threshold of significance criteria cited in this EIR. The boldface type indicates which intersections currently operate at LOS F.

- Highland Ave & 45th St - **LOS F in A.M. and P.M.**
- Highland Ave & Rosecrans Ave - LOS E in A.M. and **LOS F in P.M.**
- Highland Ave & Marine Ave - LOS E in A.M. and LOS F in P.M.
- Highland Ave & 15th St - LOS E in A.M. and LOS F in P.M.
- Valley Dr & 1st St - **LOS F in A.M. and P.M.**
- Blanche Road & Valley Dr - LOS E in P.M.
- Ardmore Ave & 2nd St - **LOS F in A.M.** and LOS E in P.M.
- Pacific Ave & Ardmore Ave - LOS E in P.M.
- Sepulveda Blvd & Rosecrans Ave - **LOS F in A.M.** and P.M.
- Sepulveda Blvd & Valley Dr - **LOS F in A.M. and P.M.**
- Sepulveda Blvd & 33rd St - **LOS F in A.M. and P.M.**
- Sepulveda Blvd & Marine Ave - **LOS F in A.M. and P.M.**
- Sepulveda Blvd & Manhattan Beach Blvd - **LOS F in A.M.** and P.M.
- Sepulveda Blvd & 8th St - **LOS F in A.M.** and P.M.
- Sepulveda Blvd & 2nd St - **LOS F in A.M.** and P.M.
- Sepulveda Blvd & Longfellow Ave - **LOS F in A.M. and P.M.**
- Sepulveda Blvd & Artesia Blvd - **LOS F in A.M. and P.M.**
- Prospect Ave & Artesia Blvd - **LOS F in A.M. and P.M.**
- Meadows Ave & Manhattan Beach Blvd - LOS F in A.M. and LOS E in P.M.

- Peck Ave & Manhattan Beach Blvd – LOS F in A.M. and LOS E in P.M.
- Peck Ave & Artesia Blvd – LOS F in A.M. and LOS D in P.M.
- Redondo Ave & Manhattan Beach Blvd – LOS F in A.M. and P.M.
- Aviation Blvd & Rosecrans Ave – **LOS F in A.M. and P.M.**
- Aviation Blvd & Marine Ave – **LOS F in A.M. and P.M.**
- Aviation Blvd & Manhattan Beach Blvd – LOS F in A.M. and P.M.
- Aviation Blvd & 2nd St – LOS F in A.M. and LOS E in P.M.
- Aviation Blvd & Artesia Blvd – **LOS F in A.M. and P.M.**

Potentially Significant Impacts that Can Be Mitigated

This EIR identifies no areas with potentially significant impacts that can be mitigated to a less than significant level.

Impacts Considered in this EIR but Found to Be Less than Significant

The analysis contained in this EIR indicates that the project will not have a significant impact with respect to the following:

Air Quality

Air pollutant emissions associated with new vehicle trips and stationary sources will not result in emissions levels that exceed the thresholds established by the South Coast Air Quality Management District (SCAQMD) for reactive organic compounds, particulate matter less than 10 microns in size, carbon monoxide, or oxides of nitrogen. In fact, due to enhanced technology related to vehicle emissions and fuel, cleaner air is anticipated for Manhattan Beach over the long term. In addition, no carbon monoxide hotspots currently exist or are projected to occur in the City. Air quality impacts associated with the General Plan will be less than significant.

Noise

Over the long term, increasing traffic volumes will increase the ambient sound environment along various street segments in the City. This increase will not, however, result in sound levels exceeding the established thresholds appropriate for residential land uses and will minimally increase the impact to residences and other noise-sensitive land uses within the City. Noise impact will be less than significant.

Hydrology, Utilities, and Service Systems

Although implementation of the General Plan will result in a modest level of new development, water conservation measures will balance demand. The General Plan action programs call for the City to implement the recommendations of the *Sewer Master Plan*, and in the CIP, ensuring a less than significant impact on the wastewater and drainage system. Waste Management, Inc.

will continue to provide recycling and waste disposal service through 2007 (with the same or a different contractor selected after 2007), and the City will continue to implement solid waste reduction programs in compliance with AB 939. Impact on landfills will be less than significant.

Population and Housing

With implementation of land use policy, the population of Manhattan Beach is projected to increase by approximately 1,934 persons to a total population of 35,786 in 2020. New residential development is anticipated to increase the housing stock by 842 units. The General Plan allows for moderate, balanced, and manageable growth supported by adequate infrastructure.

Impacts Considered in the Initial Study and Found Not to Be Potentially Significant

The Initial Study (see Appendix A) prepared for the project found that the project poses a less than significant impact or no potentially significant impact with regard to:

- Aesthetics
- Agriculture Resources
- Air Quality: conflict with applicable Air Quality Plan or create objectionable odor
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology: drainage patterns, water quality, flood hazards, and inundation
- Land Use
- Mineral Resources
- Noise: groundborne vibration, temporary noise levels, and airport noises
- Public Services
- Recreation
- Transportation and Traffic: conflict with air traffic patterns and adopted regional plans, increase design hazards, and result in inadequate emergency access
- Utilities and Service Systems: violate wastewater treatment and solid waste regulations, and adversely affect wastewater and stormwater treatment facilities

Alternatives to the Project

Through comparison of potential alternatives to the proposed project, the relative advantages of each can be weighed and analyzed. The CEQA Guidelines require that a range of alternatives be "governed by a rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" (Section 15126.6[a]). This EIR does not consider an alternative site because the project involves all properties within Manhattan Beach. The following alternatives are examined:

No Project: Maintain Existing General Plan: If the proposed updated General Plan is not adopted, the existing General Plan would remain effective, and new development would occur in accordance with the existing Plan. This alternative would not adequately accommodate the City's refined planning objectives, particularly with regard to mitigating neighborhood traffic impacts, and could result in increased traffic impacts.

Retain Commercial Designation of Downtown Parcels: This alternative would retain the Downtown Commercial designation of properties along North Highland Avenue and 11th Street, which allows for mixed-use development, rather than change the designation to High-Density Residential. The proposed change reflects development trends. Traffic impacts would be worse due to increased vehicle trips associated with commercial uses.

No Net New Non-Residential Development: This alternative proposes capping nonresidential growth by allowing only new residential development. No net change in future commercial, office, industrial, or public facilities land uses would occur. In this case, the City's goal of providing an enhanced tax base would not be adequately met, although traffic impacts would potentially be reduced. Traffic impacts, however, would likely remain significant due to the high volume of vehicular trips associated with regional growth.

Cumulative Impact

The CEQA Guidelines (Section 15355) define a cumulative impact as "an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

The General Plan addresses growth throughout Manhattan Beach over a 20-year planning period. Thus, there are no "related projects" in the community to be considered. In addition to estimating the number of vehicle trips associated with build-out in accordance with General Plan policy, the traffic analysis conducted for the EIR also accounts for growth that will occur in communities surrounding Manhattan Beach. The project, both by itself and in the cumulative context, will result in significant and unavoidable traffic impacts.

Areas of Controversy and Issues to Be Resolved

Through the Notice of Preparation process for the General Plan and during General Plan Advisory Committee meetings and a community workshop on the General Plan, concerns were raised regarding long-term traffic and circulation issues. These issues are examined in Section 3.1 of the EIR. In particular, the public expressed concern regarding cut-through trips on local residential streets.

Summary of Impacts

Table ES-1, beginning on the following page, summarizes the environmental effects associated with the adoption and long-term implementation of the General Plan, the mitigation measures required to avoid or minimize impact, and the level of impact following mitigation.

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Impact Category	Potential Environmental Impact	Mitigation Measures	Level of Impact after Mitigation
Unavoidable Significant Environmental Impacts (Lead Agency must issue "Statement of Overriding Considerations" under Section 15093 and 15126[b] of the State CEQA Guidelines if the agency determines these effects are significant and approves the project.)			
Transportation: Project specific and Cumulative	Increased traffic volumes associated with ambient growth and potential future development will a decline in service levels at the following intersections, based on the following threshold criteria: The General Plan will have a significant impact on transportation if the project: • Causes an intersection already operating at LOS E or better to operate at LOS F; • Causes an intersection in a residential neighborhood to operate at LOS E or lower; or • Causes an increase in V/C ratio of 0.02 or more at intersections with LOS E or worse; and/or • Causes or worsens an LOS F at CMP monitoring stations or mainline freeway monitoring locations. The intersections indicated in boldface type currently operate at LOS F in either or both the A.M. and P.M. peak periods and will experience a significant impact based on the third criterion cited above. **Highland Ave & 45th St** **Highland Ave & Rosecrans** Ave Highland Ave & Marine Ave Highland Ave & 15th St **Valley Dr & 1st St** Blanche Road & Valley Dr **Ardmore Ave & 2nd St** Pacific Ave & Ardmore Ave **Sepulveda Blvd & Rosecrans Ave** **Sepulveda Blvd & Valley Dr** **Sepulveda Blvd & 33rd St** **Sepulveda Blvd & Marine Ave** **Sepulveda Blvd & Manhattan Beach Blvd** **Sepulveda Blvd & 8th St** **Sepulveda Blvd & 2nd St** **Sepulveda Blvd & Longfellow Ave** **Sepulveda Blvd & Artesia Blvd**	Mitigation measures have been considered by the City and incorporated into the project to the maximum extent possible. No further measures are available.	Significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Impact Category	Potential Environmental Impact	Mitigation Measures	Level of Impact after Mitigation
	Prospect Ave & Artesia Blvd Meadows Ave & Manhattan Beach Blvd Peck Ave & Manhattan Beach Blvd Peck Ave &Artesia Blvd Redondo Ave & Manhattan Beach Blvd **Aviation Blvd & Rosecrans Ave** **Aviation Blvd & Marine Ave** **Aviation Blvd & Manhattan Beach Blvd** Aviation Blvd & 2nd St **Aviation Blvd & Artesia Blvd**		
Impacts Considered but Found to Be Less Than Significant			
Air Quality	Increased traffic volumes resulting from development pursuant to the General Plan and associated with surrounding ambient growth will not create pollutant loads in excess of SCAQMD thresholds. No CO hot spots will result.	No mitigation is required	Less than significant.
Noise	Increased traffic volumes resulting from development pursuant to the General Plan combined with regional ambient growth will not produce any significant increases in noise levels that may adversely affect noise-sensitive land uses.	No mitigation is required.	Less than significant
Hydrology, Utilities and Service Systems	The modest level of growth accommodated by the General Plan will not place demands on utilities and service systems beyond what has been anticipated and planned for. No impact will result.	No mitigation is required.	Less than significant
Population and Housing	Draft General Plan allows for moderate, balanced, and manageable growth supported by adequate infrastructure. No impact will result.	No mitigation is required.	Less than significant

Introduction

Purpose of the EIR

This Final Program Environmental Impact Report (EIR) is a first-tier evaluation of the environmental effects associated with the adoption and implementation of the Manhattan Beach General Plan by the City of Manhattan Beach. The City has completed a comprehensive update of its current General Plan that was adopted in 1988. The adoption and implementation of a General Plan constitutes a project for the purposes of the California Environmental Quality Act, or CEQA (Public Resources Code, Section 21000 et seq.).

According to the *Guidelines for Implementation of the California Environmental Quality Act,* (California Code of Regulations, Title 14, Section 15000 et seq.), an "EIR is an informational document which will inform public agencies, decision makers, and the public generally of the significant environmental effects of a project on the environment, identify possible ways to minimize the significant effects, and describe alternatives to the project."

Accordingly, this Final EIR is an information document to be used by decision makers, public agencies, and the general public. It is not a policy document of the City of Manhattan Beach. The document provides information regarding the potential environmental impacts related to adoption and implementation of the General Plan.

The Final Program EIR will be used by the City of Manhattan Beach in assessing the impacts of the proposed project. During the implementation process, mitigation measure identified in the Final EIR will be applied to the project.

The Final EIR includes comments and responses to comments received on the Draft EIR which was circulated for public review from August 8, 2003 to September 22, 2003. Comments made during the public review period are included in Section 8.0, Responses to Comments on Draft EIR, of this Final EIR. Revisions and clarifications to the EIR made in response to comments and information received on the Draft EIR are shaded, as illustrated in this sentence. Revisions made for internal consistency, such as typographical errors, are not shaded.

Legal Requirements

This Program EIR has been prepared in accordance with the California Environmental Quality Act of 1970 and the CEQA Guidelines published by the Resources Agency of the State of California. The City of Manhattan Beach is the lead agency for this Program EIR, as defined by Section 21067 of CEQA.

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project. The Initial Study concluded that implementation of the General Plan might have a significant effect on the environment. The Initial Study checklist is included in Appendix A of this EIR. A Notice of Preparation (NOP) for this EIR was issued by the City on December 30, 2002 in accordance with the requirements of the California Code of Regulations, Title 14, Sections 15082(a), 15103,

and 15375. The NOP indicated that an EIR was being prepared and invited comments on the project from public agencies and the general public.

This EIR constitutes a Program EIR under the provisions of Section 15168 of the State CEQA Guidelines. A Program EIR allows for review of a series of contemplated actions. The City and other agencies will be able to use information presented in this Program EIR to determine if additional environmental review is required for subsequent actions linked to the project. Under Section 15168, if an agency determines that a program or action will result in impacts within the scope of impact reported in this EIR and that no further mitigation is required, the agency may deem the project within the scope of the EIR, and no further environmental action will be required.

This EIR was prepared by environmental planning consultants under contract to the City of Manhattan Beach and under the direction of City staff. All information, analyses, and conclusions contained in this document reflect the independent review and judgment of the City.

Scope of the Project

The project analyzed in this EIR is the adoption of comprehensive update of the Manhattan Beach General Plan. The General Plan is a comprehensive, long-term guide for the physical development of the incorporated City. The planning area consists of properties contained within the City's corporate limits, which includes approximately 2,017 acres of land. The General Plan addresses planning for the physical growth and enhancement of the community.

Scope of the Environmental Analysis

The analysis in the Initial Study (Appendix A) led to the conclusion that the General Plan might have a significant effect on the environment with respect to the following:

- Transportation/Traffic
- Air Quality
- Noise
- Hydrology
- Utilities/Service Systems
- Population/Housing

For all other environmental issue areas addressed in the checklist, adoption of the General Plan was determined to have no impact or a less than significant impact. The City elected to examine population and housing impacts in this EIR given its scope, although the Initial Study analysis indicated that no potentially significant impact would result.

Appendix A contains the Initial Study and NOP for the project. Appendix B presents comment letters received in response to the NOP, and Appendix C contains the traffic study prepared for the project. All key reference documents on file at the City of Manhattan Beach Planning Division, 1400 Highland Avenue, Manhattan Beach, CA 90266. Other reference documents cited in Section 6.0 (References) may be accessed via the Internet or are on file at the offices of

the City's consultant for this project, Cotton/Bridges/Associates (CBA). To view documents on file at CBA, please contact Laura Stetson at (626) 304-0102 to make an appointment.

Intended Uses of the EIR

This Program EIR will be used by the City and other responsible agencies to provide information necessary for environmental review of discretionary actions related to adoption of the General Plan. The EIR may be used by the following agencies for certain discretionary actions:

Responsible Agency	Action
Manhattan Beach City Council	Adoption of the General Plan
	Adoption of amendments to Title 20 (Zoning) of the Manhattan Beach Municipal Code to implement the General Plan
	Adoption of any amendments to the Local Coastal Program to ensure consistency with the General Plan
	Adoption of any ordinances, guidelines, programs, or other mechanisms that implement General Plan policy
Manhattan Beach Planning Commission	Recommendation to City Council to adopt the General Plan
	Recommendation to City Council to adopt amendments to Title 20 (Zoning) of the Manhattan Beach Municipal Code to implement the General Plan
	Recommendation to the City Council to adopt any amendments to the Local Coastal Program to ensure consistency with the General Plan.
	Recommendation to City Council to adopt any ordinances, guidelines, programs, or other mechanisms that implement General Plan policy
Other City Boards and Commissions	Recommendation to City Council to adopt ordinances, guidelines, programs, or other actions that implement the General Plan policy

Responsible Agency	Action
City Departments	Implementation of programs or other actions pursuant to General Plan General Plan policy
Others as necessary	Adoption and implementation of plans or programs tangential to the Manhattan Beach General Plan

Public Review and Comment

The Draft EIR was circulated for a 45-day public review period. The public was invited to comment in writing on the information contained in the document. Persons and agencies commenting were encouraged to provide information that they believe was missing from the Draft EIR, or to identify where the information could be obtained. All comment letters received were responded to in writing, and comment letters, together with responses to those comments, are included in Section 8.0, Responses to Comments on Draft EIR, of this Final EIR.

The Draft EIR and supporting documentation were available for public inspection at the City of Manhattan Beach Planning Division, 1400 Highland Avenue, Manhattan Beach, CA 90266. The Draft EIR was also available at the Manhattan Beach Public Library, located at 1320 Highland Avenue, Manhattan Beach, CA 90266, and was accessible via the City's website at www.citymb.info.

Contact Person

The primary contact person regarding information presented in this EIR is Laurie B. Jester, Senior Planner. Ms. Jester can be reached at (310) 802-5510, or ljester@citymb.info.

1.0 Project Description

The Project

The proposed project is the adoption and implementation of a comprehensive update of the Manhattan Beach General Plan, herein referred to as the General Plan, and any subsequent amendment to Title 21 (Zoning) of the Manhattan Beach Municipal Code and the Manahattan Beach Local Coastal Program that may be required to ensure consistency. The General Plan consists of five elements that address the State-mandated elements (land use, circulation, safety, open space, conservation and noise), plus additional issues not required by State law.[1] These elements include Land Use, Infrastructure (which address circulation requirements), Community Safety, Community Resources (which addresses open space and conservation requirements), and Noise. The Manhattan Beach General Plan also includes an Implementation Program that provides strategies to implement the adopted policies set forth in each of the General Plan elements.

The Manhattan Beach General Plan will guide the physical development of the City over the 20-year planning period covered in the Plan. The Zoning Code and Local Coastal Program will serve as the primary regulatory tools for implementing the General Plan over the long term.

Regional Setting

Manhattan Beach is located in the southwest portion of Los Angeles County, along the Pacific Ocean, as shown in Figure 1. The community is bordered by the cities of El Segundo to the north, Redondo Beach and Hawthorne to the east, and Hermosa Beach to the south. Sepulveda Boulevard (State Route 1) runs north-south through the center of the City.

Manhattan Beach Planning Area

The Manhattan Beach General Plan addresses all properties contained within the corporate City limits. The City encompasses nearly 4 square miles, or 2,017 acres, of land.

Purpose and Objectives of the General Plan

The General Plan establishes a comprehensive community vision for Manhattan Beach relative to land use, circulation, economic development, community safety, and community resources. In essence, the General Plan serves as the blueprint for future growth and development.

[1] The State-mandated Housing Element has already been completed and is anticipated to be adopted prior to the balance of the General Plan. Thus, it is not part of this General Plan update.

Through text and maps, the Plan expresses the community's long-term goals. The General Plan includes policies and programs designed to achieve these goals. Appendix D of this EIR contains a listing of all General Plan goals and policies, organized by element. The overarching goals set forth in the General Plan are:

- Maintain a small-town community feel that preserves the unique characteristics of individual neighborhoods.
- Provide a balanced transportation system that minimizes cut-through traffic in residential neighborhoods and provides adequate parking in all areas of the City.
- Maintain vibrant commercial areas throughout the City with businesses that meet the desired needs of the community.
- Provide a high level of public safety, ensuring a strong sense of protection for all those who live and visit the City.
- Safeguard picturesque vistas of the ocean, and protect existing trees and landscape resources that add value to the City.
- Create a sense of community that bonds residents together, thus making a stronger, better Manhattan Beach.

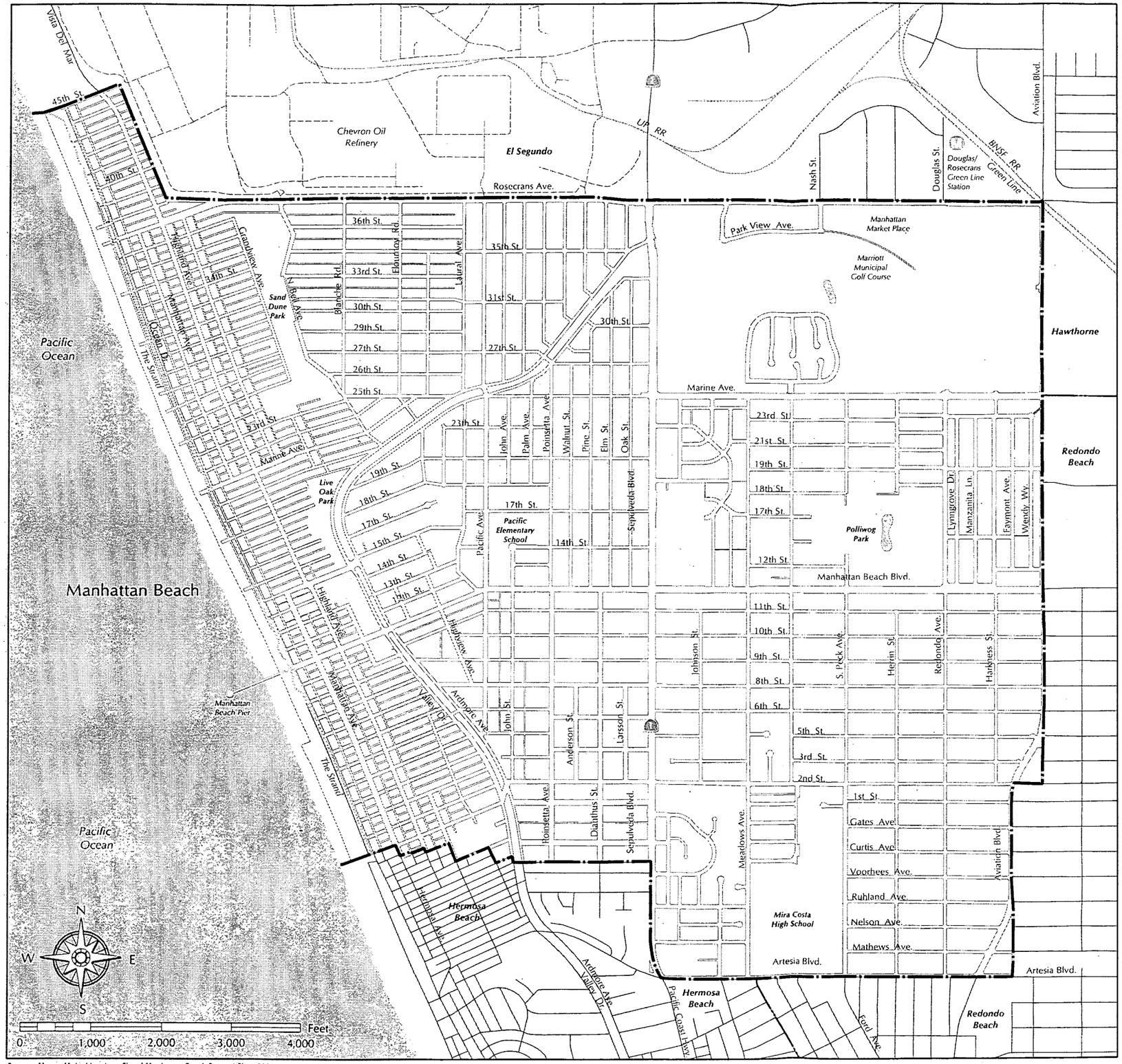
Project Characteristics

Land Use Element

In terms of guiding the physical development of Manhattan Beach, the Land Use Element is of primary importance. The Element establishes land uses classifications and intensities of development for both private and public lands throughout the City, providing a rational and ordered approach to future development while preserving and enhancing important community features. The Land Use Element continues the foundation land use policy of the City expressed in the current General Plan with no substantial changes.

Manhattan Beach is a fully urbanized and predominantly residential community. Nearly all of the land in the City is developed, and few opportunities exist for substantial change in the established land use patterns. Thus, land use policy focuses on the preservation of the basic residential structure of the community; the provision for mixed-use residential/commercial development within Downtown, North End, and other commercial areas; and the enhancement of commercial districts. The Land Use Element defines the land use categories and sets density and intensity limits for each category in a manner that will allow existing development to remain and new development to occur in targeted areas.

The land use categories and associated density and intensity limits are described below, and Figure 2 displays the related Land Use Policy Map, Table 1 identifies the projected number of new dwelling units and non-residential development that General Plan land use policy would permit. A total of 842 new dwelling units and 205,000 square feet of new non-residential development are expected.



Source: Meyer, Mohaddes, Inc., City of Manhattan Beach General Plan; 2002.

City Boundary/Planning Area

Regional Location

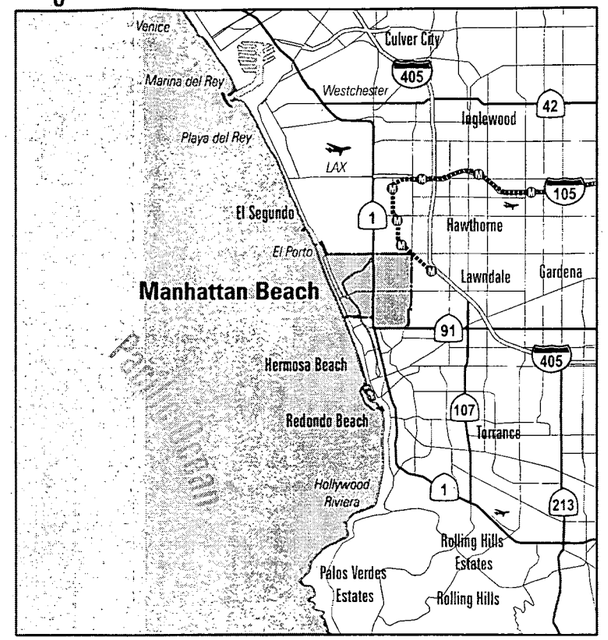
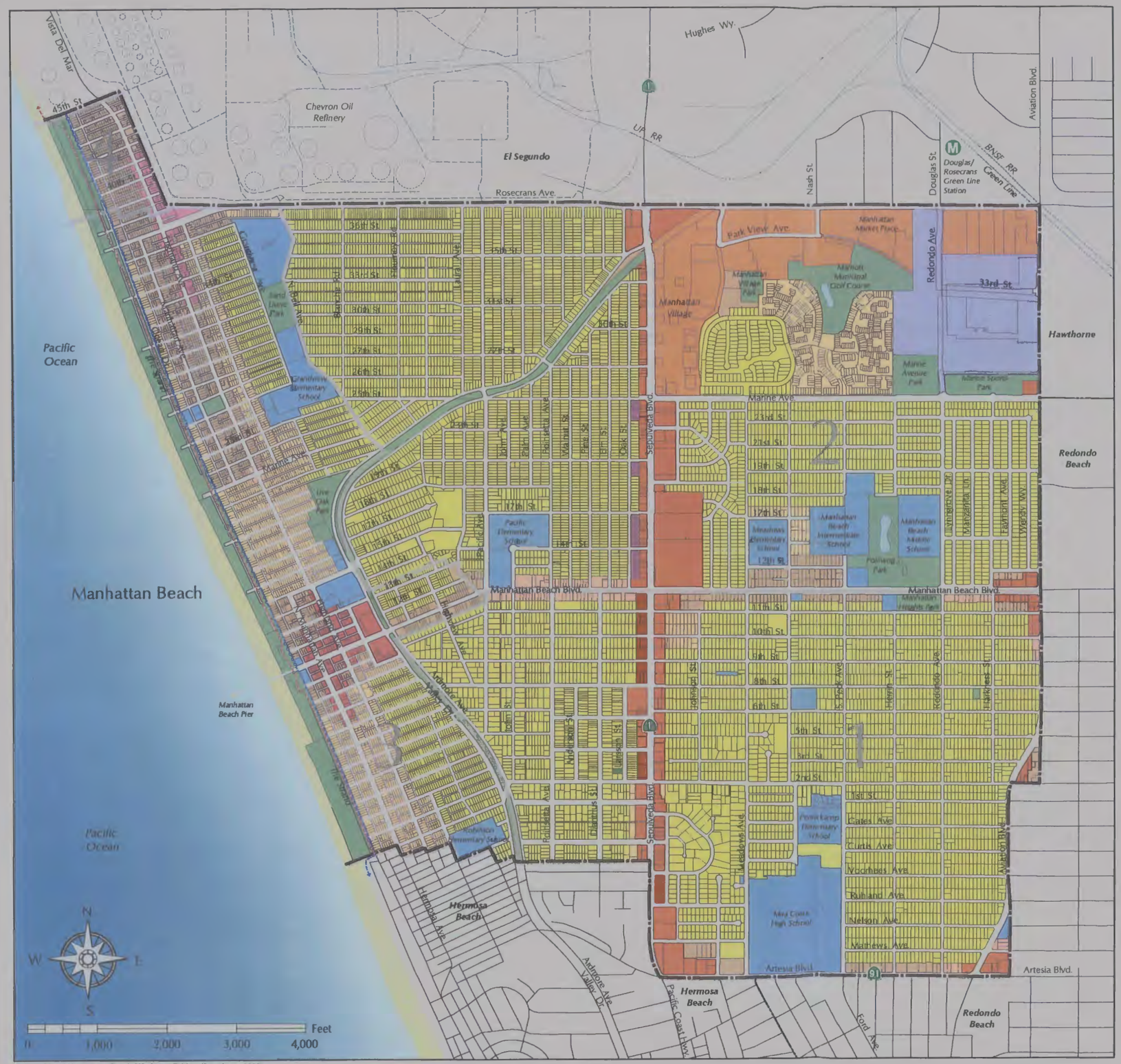


Figure 1

Manhattan Beach Planning Area



Land Use Designations

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Downtown Commercial
- Local Commercial
- General Commercial
- North End Commercial
- Manhattan Village
- Mixed-Use Commercial
- Industrial
- Parks / Open Space
- Public Facilities

- City Boundary
- District Areas

- Walkstreets
- The "Strand" Pedestrian Path
- The "Strand" Bike Path

Source: City of Manhanttan Beach GIS; Cotton/Bridges/Associates, 2002

Figure 2

Land Use Policy Map

Low Density Residential (RS)

The Low Density Residential category provides for the development of single-family residences within a density range of 1.0 to 16.1 units per acre. Development is characterized generally by detached homes on individual lots. Other permitted uses include parks and recreation facilities, public and private schools, public safety facilities, and facilities for religious assembly, consistent with zoning code requirements, which may require discretionary review.

Table 1
Existing and Future Projected Development

Land Use	Estimated Development (DU or KSF)		
	Existing	Future	Net Change
Low Density Residential	6,833	7,353	520
Medium Density Residential	3,354	2,662	-692
High Density Residential	4,853	5,866	1,013
Commercial	3,735	3,420	-315
Industrial	950	1,265	315
Public Facilities	3,239	3,444	205
TOTAL Residential (DU)	**15,039**	**15,881**	**842**
TOTAL Non-Residential (KSF)	**7,924**	**8,129**	**205**

DU = dwelling unit; KSF = thousand square feet

Medium Density Residential (RM)

The Medium Density Residential category allows single-family homes, duplexes, and triplexes, including condominiums. Multi-family housing with four or more units may be permitted subject to discretionary review and provided compatibility with surrounding development can be assured. Development densities may range from 11.6 to 32.3 units per acre. Other permitted uses include parks and recreation facilities, public and private schools, public safety facilities, and facilities for religious assembly, consistent with zoning code requirements, which may require discretionary review.

High Density Residential (RH)

The High Density Residential category accommodates all types of housing, and specifically housing development of a more intensive form, including apartments, condominiums, and senior housing. Residential projects may be constructed at a density of up to 51.3 units per acre. Other permitted uses include parks and recreation facilities, public and private schools, public safety facilities, and facilities for religious assembly, consistent with zoning code requirements, which may require discretionary review.

Downtown Commercial (CD)

The Downtown Commercial category applies only to the Downtown, an area of 40+ blocks that radiate from the intersection of Manhattan Beach Boulevard and Highland Avenue. Downtown

provides locations for a mix of commercial, residential with discretionary review, and public uses, with a focus on pedestrian-oriented commercial businesses that serve Manhattan Beach residents. Visitor-oriented uses are limited to low-intensity businesses providing goods and services primarily to beachgoers. The maximum (Floor Area Factor) FAF for commercial or mixed-used development is 1.5:1, and the maximum residential density is 51.3 units per acre.

Local Commercial (CL)

The Local Commercial category provides areas for neighborhood-oriented, small-scale professional offices, retail businesses, and service activities that serve the local community. Permitted uses are generally characterized by those which generate low traffic volumes, have limited parking needs, and generally do not operate late hours. The maximum FAF is 1.5:1. Residential uses are permitted with discretionary review, at densities consistent with the High Density Residential category.

General Commercial (CG)

The General Commercial category provides opportunities for a broad range of retail and service commercial, and professional office uses intended to meet the needs of local residents and businesses, and to provide goods and services for the regional market. Limited industrial uses are also permitted consistent with zoning regulations. The General Commercial category accommodates uses that typically generate heavy traffic. Therefore, this designation applies primarily along Sepulveda Boulevard and targeted areas along Manhattan Beach Boulevard, Artesia Boulevard, and Aviation Boulevard. The maximum FAF is 1.5:1

North End Commercial (CNE)

Properties designated North End Commercial lie at the north end of the City, along Highland Avenue and Rosecrans Avenue, between 33rd and 42nd Streets. Commercial uses are limited to small-scale, low-intensity neighborhood-serving service businesses, retail stores, and offices. Restaurant and entertainment establishments are permitted only where zoning regulations can adequately ensure compatibility with residential uses. The maximum permitted FAF is 1.5:1. Residential uses are allowed generally with discretionary review and at densities consistent with the High Density Residential category. Additionally permitted uses include parks and recreation improvements and public/quasi-public facilities.

Manhattan Village (CC)

The Manhattan Village Commercial category applies to properties that lie within the Manhattan Village Mall area and subject to discretionary approval requirements. Commercial uses in Manhattan Village are generally regional-serving, including shopping centers, large department and specialty stores, and entertainment and restaurant establishments. The maximum FAF is 1.5:1.

Mixed-Use Commercial

The Mixed-Use Commercial category accommodates the parking needs of commercial businesses on small lots that front Sepulveda Boulevard and abut residential neighborhoods. In recognition of the need to ensure adequate parking for businesses and to protect residential uses from activities that intrude on their privacy and safety, this category limits commercial

activity on commercial lots adjacent to residences and establishes a lower FAF limit of 1.5:1 for commercial uses. Uses permitted are similar to those allowed in the General Commercial category. Residential uses are permitted consistent with the Low Density Residential category.

Industrial (IP)

The Industrial category located between Aviation Boulevard, Rosecrans Avenue, and Marine Avenue applies to the Raleigh Studios and Northrup, and provides areas for establishment of low-intensity warehousing and distribution, research and development, and other specialized industrial uses. Commercial uses similar to those described for the General Commercial category may also be established. The maximum permitted FAF is 1.0:1.

Parks/Open Space (OS)

The Parks and Open Space category applies to all public parks throughout the City, Veterans Parkway, the Beach, and the Strand. While parks and other open space represent the primary permitted uses, limited recreational facilities and commercial uses in support of the principal park use are also permitted. Development intensity standards are established through discretionary review since these areas largely remain unimproved with buildings.

Public Facilities (PS)

The Public Facilities category refers to uses operated for public benefit, including public schools, government offices, and public facilities such as libraries, cultural centers, and neighborhood/community centers. Quasi-public facilities such as hospitals and medical institutions may be established on properties designated Public Facilities. Development standards are established through the discretionary review process.

Infrastructure Element

Since Manhattan Beach is largely built with a fully developed road system, limited opportunities exist to expand road widths or to provide new streets or street connections. Therefore, the Circulation section of the Infrastructure Element focuses on improving the existing street system to enhance traffic flow, minimizing the intrusion of commuter traffic on residential streets, and reducing overall traffic congestion. This Element also includes policies to encourage the use of public transportation and non-motorized modes.

Manhattan Beach has a fully developed infrastructure system providing water, wastewater, storm drainage, and utilities services to local residences and businesses. The Public Facilities section of the Infrastructure Element focuses on maintaining reliable systems and providing adequate services to the community. The Element also includes policies that encourage the establishment of reliable and effective energy communications systems and solid waste and recycling.

Community Resources Element

Preservation and enhancement of the City's resources are addressed in the Community Resources Element. These include preserving and enhancing open spaces and park facilities, providing recreational opportunities for all residents, maintaining educational institutions,

conserving natural energy, water and air resources, and enhancing cultural arts programs in the community. The Element also identifies the City's goal to enhance landscape resources such as street trees and protecting mature trees throughout the community.

Community Safety Element

Minimizing physical hazards, including earthquake, flood, and fire emergencies, through emergency preparedness planning and disaster response programs is the focus of the Community Safety Element. Goals and policies include continuing to support existing federal and State safety regulations and laws, educating the local public to plan and prepare for emergencies, monitoring environmental and physical risks to the community, ensuring appropriate law enforcement services, and reducing crime.

Noise Element

The Noise Element contains policies to minimize noise impacts on noise-sensitive uses citywide through land use planning and design review of individual developments.

Implementation Program

The General Plan includes an Implementation Program that identifies programs the City will undertake to implement General Plan goals and policies. Individual implementation programs serve as a guide to City decision-makers regarding future programming decisions related to the assignment of staff and the expenditure of City funds. The Implementation Program identifies individual program responsibility, funding sources, and time frames for completion.

Relationship to Local and Regional Plans

Manhattan Beach Zoning Ordinance

The City's Zoning Ordinance (Title 21 of the Municipal Code) divides Manhattan Beach into districts and establishes regulations for each district with respect to permitted uses, allowable density or intensity of development, building height, and development character. The Zoning Ordinance consists of a map delineating the district boundaries and text explaining the purposes of areas, specifying permitted and conditional uses, and establishing development and performance standards. The Zoning Ordinance serves as the primary implementation tool for the Land Use Element and the goals and policies contained within it. By law, the zoning map must be consistent with the General Plan Land Use Policy Map.

Following adoption of the General Plan, both the zoning map and Title 21 will be revised to reflect the General Plan. Anticipated changes to Title 21 include:

- Focused amendments to the zoning map to ensure consistency with the adopted Land Use Policy Map.

Other minor amendments to Title 21 may be accomplished to ensure consistency. These future amendments are all considered part of the project examined in this EIR because such subsequent amendments are required to implement policy set forth in the General Plan.

The Manhattan Beach Local Coastal Program (LCP), which has been certified by the California Coastal Commission, is the basic planning tool used by Manhattan Beach to guide development in the coastal zone in Manhattan Beach. The LCP contains the ground rules for future development and protection of coastal resources. The LCP specifies appropriate location, type, and scale of new or changed uses of land and water. The LCP contains a designation in the Zoning Map and measures to implement the plan. Prepared by the City, this program governs decisions that determine the short- and long-term conservation and use of coastal resources. While the LCP reflects the unique characteristics of Manhattan Beach, the Plan must also be consistent with the Coastal Act goals and policies.

The Coastal Act requires consistency between the LCP and General Plan. The need to amend the LCP should be considered whenever a General Plan Amendment is made.

Regional Plans for Growth and Environmental Management

Throughout the General Plan preparation process, the City carefully considered policies contained in regional growth and management plans. To allow established patterns to continue, guide future development to areas where it can be accommodated, and provide for consistency with regional plans, the General Plan sets density and intensity limits for all land use categories, and includes goals and policies in support of regional objectives. The major applicable regional plans are briefly summarized below.

The Southern California Association of Governments (SCAG) assists cities, counties, and other agencies by reviewing local government plans and individual projects for consistency with the regional plans, including the *Regional Comprehensive Plan and Guide*, the *Regional Mobility Element/Regional Transportation Plan*, the *Growth Management Plan*, and the federally mandated *Air Quality Management Plan* (AQMP). The AQMP is submitted to the federal Environmental Protection Agency as the State's Implementation Plan (SIP) for attaining federal air quality standards. All regional plans are interrelated and work in tandem to manage Southern California's growth and development while meeting federal and State air quality standards. To be in conformance with regional growth and air quality plans, a project should:

- Be consistent with the subregion's jobs/housing balance performance ratio (i.e., the ratio of employment to housing units within a subregion, as defined by SCAG)
- Reduce vehicle trips and vehicle miles traveled to the maximum extent feasible by implementing transportation demand management strategies or other measures
- In the environmental document, include an air quality analysis which demonstrates that the project will not have a significant negative impact on air quality in the long term

Regional Comprehensive Plan and Guide

The *Regional Comprehensive Plan and Guide* (RCPG) was developed with active participation from local agencies, elected officials, the business community, community groups, private institutions, and private citizens to minimize traffic congestion, improve air quality and quality of life, and protect environmental quality throughout the 6-county SCAG region. The RCPG is intended to function as a framework for decision making by local governments, assisting them in working together through their subregional organizations to meet federal and State mandates consistent with regional goals.

Manhattan Beach is one of 16 member governments that form the South Bay Cities Council of Governments (SBCCOG), a SCAG subregion.

Air Quality Management Plan (AQMP)

The AQMP is prepared for any region designated as a non-attainment area. A non-attainment area is a geographic area identified by the federal Environmental Protection Agency and/or California Air Resources Board as not meeting federal or State standards for a given pollutant. The AQMP, updated on a 3-year cycle, contains policies and measures designed to achieve federal and State standards in the South Coast Air Basin and portions of the surrounding area. The AQMP was last updated in 1997.

Congestion Management Program (CMP)

The County of Los Angeles prepares a Congestion Management Plan (CMP) to address the impact of local growth on the regional transportation system and the County's mobility needs. The CMP is required by statute (Section 65089 of the California Government Code) to have the following 6 elements: (1) a system of highways and roadways with minimum level of service performance measurements; (2) a performance element that includes performance measures to evaluate multi-modal system; (3) a travel demand element promoting alternative transportation; (4) a program to analyze the impacts of local land use decisions on the regional transportation system, including an estimate of the cost of mitigating those impacts; (5) a 7-year capital improvement program of projects that benefit the CMP system; and (6) a deficiency plan.

The CMP is incorporated into a 20-year *Regional Transportation Plan*, contained in SCAG's RCPG, to establish the magnitude of congestion problems that face the entire region and the types of solutions that will be necessary to maintain mobility. The CMP relates these long-term regional mobility goals to specific actions at the County and local level, defines implementation strategies, and establishes a system to monitor the effectiveness of transportation improvements. Under the County's CMP, local jurisdictions are required to evaluate impacts of development on the CMP routes and intersections, and mitigate adverse impacts of development within their jurisdictions through other physical and nonphysical improvements, including transportation demand and system management programs and measures.

Los Angeles County Solid Waste Management Plan

The County of Los Angeles prepares and administers solid waste management plans to project the capacity of the County landfills and other facilities to accommodate future demand generated by countywide growth. Local jurisdictions, including the City of Manhattan Beach, need to assess the effect of new development on County facilities and in response, must develop and implement programs to reduce the amount of solid waste within their boundaries to be disposed of at these facilities.

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2.0 Environmental Setting

This section provides an overview of the environmental setting of Manhattan Beach. More detailed discussion of the environmental setting in each category is included in the Environmental Impact analysis of Sections 3.1 to 3.5 of this EIR.

Manhattan Beach is located in the southwest corner of Los Angeles County along the Pacific Ocean, about 19 miles southwest of Downtown Los Angeles. The City encompasses approximately 2,017 acres (4 square miles) of land. Manhattan Beach is bordered by the cities of El Segundo to the north, Hawthorne and Redondo to the east, and Hermosa Beach to the south. Sepulveda Boulevard (State Route 1), runs south through the center of Manhattan Beach.

The City is highly urbanized with limited vacant land available for future new development. Manhattan Beach is predominantly a residential community with single-family homes comprising the majority of the housing stock. Commercial uses represent the second most common use and are concentrated on the City's main arterials – Sepulveda Boulevard, Manhattan Beach Boulevard, Rosecrans Avenue, Aviation Boulevard, and Artesia Boulevard – and in the Downtown and North End areas. Parks and open space are the third most common use, followed by public facilities.

Manhattan Beach has a well-developed circulation network consisting of arterial roadways, collector streets, major local roads, and minor local roads. The east-west arterials are Rosecrans Avenue, Marine Avenue east of Sepulveda Boulevard, Manhattan Beach Boulevard, and Artesia Boulevard. The north-south arterials are Sepulveda Boulevard and Aviation Boulevard. A number of roadway segments and intersections currently operate at a level of service E and F (for a description of level of service, refer to section 3.1 Transportation/Traffic). These include:

- Sepulveda Blvd. and Rosecrans Ave.
- Aviation Blvd. and Rosecrans Ave.
- Aviation Blvd. and Marine Ave.
- Aviation Blvd. and Manhattan Beach Blvd.
- Aviation Blvd. and 2nd Street
- Aviation Blvd. and Artesia Blvd.
- Peck Ave. and Artesia Blvd.
- Prospect Ave. and Artesia Blvd.
- Sepulveda Blvd. and Artesia Blvd.
- Sepulveda Blvd. and Longfellow Drive
- Sepulveda Blvd. and 2nd Street
- Sepulveda Blvd. and 8th Street
- Sepulveda Blvd. and Manhattan Beach Blvd
- Sepulveda Blvd. and Marine Ave.
- Sepulveda Blvd. and 33rd Street
- Sepulveda Blvd. and Valley Drive
- Meadows Ave. and Manhattan Beach Blvd.
- Peck Ave. and Manhattan Beach Blvd.
- Redondo Ave. and Manhattan Beach Blvd.
- Highland Ave. and Rosecrans
- Highland Ave. and Marine Ave.
- Highland Ave. and 15th Street
- Valley Drive/Ardmore Ave. and 15th Street
- Valley Drive and 1st Street
- Ardmore Ave. and 2nd Street
- Highland Ave/Vista Del Mar and 4th Street

Other important transportation modes are represented within and adjacent to Manhattan Beach. The major commercial airport serving the region, Los Angeles International Airport, is located approximately 4 miles to the north. Established public transit service connects the City

by bus to the nearby communities and Downtown Los Angeles. In addition, an established pedestrian network is available primarily consisting of "walkstreets" in the western portion of the City, sidewalks in the residential neighborhoods, and a pedestrian greenway that traverses the western portion of the community.

Topographically, the City consists of a variety of slopes and level surfaces. Elevations within the Manhattan Beach range from sea level at the ocean to 240 feet in the southern neighborhoods. The land adjacent to the beaches slopes up considerably, reflecting the sand dunes that used to encompass this area of the City and creating a shallow ridge, while the remaining properties have subtle slopes.

The climate of the area is characterized by warm, dry summers and mild winters. Most rain falls between the months of November and March, with an average annual rainfall of 12 inches. Cyclic land and sea breezes are the primary factors affecting the region's mild climate. The daytime winds are normally sea breezes, predominantly from the west, that flow at relatively low velocities. Temperatures are mild, averaging 70□F in the summer to 55□F in the winter.

Manhattan Beach is located within the South Coast Air Basin, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Both federal and State governments have set health-based ambient air quality standards for six pollutants: sulfur dioxide, lead, carbon monoxide, fine particulate matter, nitrogen dioxide, and ozone. The Basin fails to meet the air quality standards for 4 of the 6 pollutants: carbon monoxide, fine particulate matter, nitrogen dioxide, and ozone. The South Coast Air Quality Management Plan has been adopted for the Basin to attain these standards by year 2010. Manhattan Beach, like other cities in the basin, is required to implement programs to reduce pollutants originating with in its borders.

Transportation sources, including automobiles, trucks, and motorcycles, represent the predominant noise sources in the community. Other noise sources include recreational areas, commercial areas, and construction sites. Stationary noise sources beyond the City's boundaries that contribute to the noise environment include, but are not limited to, the El Segundo Power Generation Facility, the Chevron Refinery, and Los Angeles International Airport. Refer to Section 3.3 of this EIR for a discussion of noise contours and land use compatibility.

Manhattan Beach has an interesting cultural and community history. The City's most notable and prized historic feature is the Manhattan Beach State Pier. Other prominent historical structures include residential cottages located in neighborhoods mainly in the western portion of the community.

The City participates in the National Flood Insurance Program. The FEMA 100-year and 500-year map shows that no land within the City is located within the 100-year or 500-year flood zones.

The Manhattan Beach park and recreation system consists of recreational beaches, neighborhood parks, sports facilities, a pedestrian greenway, and numerous other community services and facilities.

The City's Public Works Department is responsible for water system facilities. Water sources include imported supplies pumped from the Metropolitan Water District, groundwater pumped

from 2 City-owned and operated wells, and reclaimed water from the West Basin Municipal Water District. The City's water system consists of 4 pump stations, 2 storage reservoirs, 1 elevated storage tank, 2 water supply wells, and approximately 112 miles of water distribution pipelines.

Wastewater collection and treatment systems are maintained primarily by the City's Public Works Department. The wastewater treatment facility that handles sewage from Manhattan Beach, the Joint Water Pollution Control Plant in Carson, is operated by the Los Angeles County Sanitation Districts. This facility has the capacity to process 350 million gallons of wastewater per day.

The City contracts with Waste Management, Inc.[1], a private waste hauler, to collect and dispose of the City's solid waste, recyclables, and green waste. The City's solid waste is transported to the Carson Transfer Station which is then disposed of in one of three Los Angeles County Sanitation Districts' landfills (Calabasas, Scholl Canyon, and Puente Hills Landfills).

[1] Confirmed with City of Manhattan Beach Public Works Department, April 21, 2003.

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3.0 Environmental Impacts and Mitigation Measures

This section of the EIR examines potentially significant effects associated with adoption and implementation of the Manhattan Beach General Plan, and identifies mitigation measures to reduce impacts found to be potentially significant in the EIR analysis. Each environmental issue for which the Initial Study (see Appendix A) identified a potentially significant impact is discussed in the following manner:

Environmental Setting describes the existing environmental conditions in the City in baseline year, 2002, to provide a foundation for comparing "before the project" and "after the project" environmental conditions.

Thresholds Used to Determine Level of Impact defines and lists specific criteria used to determine whether an impact is considered to be potentially significant. Appendix G of the CEQA Guidelines; local, State, federal or other standards applicable to that impact area; and officially established thresholds of significance are the major sources used in crafting criteria appropriate to the specifics of a project, since "... an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting" (CEQA Guidelines Section 15064 [b]). Principally, ". . . a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance" constitutes a significant impact (CEQA Guidelines Section 15382).

Environmental Impact presents evidence, based to the extent possible on scientific and factual data, about the cause and effect relationship between the project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained to the extent possible to provide facts in support of finding the impact to be or not to be significant. In determining whether impacts may be significant, all the potential effects, including direct effects, reasonably foreseeable indirect effects, and considerable contributions to cumulative effects, are considered. If, after thorough investigation, a particular impact is too speculative for evaluation, that conclusion is noted (CEQA Guidelines Section 15145). Such may be the case for a number of issue areas given that the project is a 20-year plan, and inherent uncertainties arise in predicting land use activities so far in the future. The Plan was prepared through a process which considered possible environmental impacts, allowing mitigation to be addressed by Plan policies. When a specific feature of the Draft General Plan, whether it be a policy, standard, or guideline, avoids or reduces an environmental impact, that feature is identified.

Mitigation Measures identify methods that can reduce or avoid the potentially significant impact in cases where the EIR analysis determines impacts to be potentially significant. Standard existing regulations, requirements, and procedures that are applied to all similar projects are taken into account in identifying what additional project-specific mitigation may be needed to reduce significant impacts. Mitigation, in addition to measures that the lead agency

will implement, can also include measures that are within the responsibility and jurisdiction of another public agency (CEQA Guidelines Section 15091[a][2]).

Level of Impact after Mitigation indicates what effects will remain after application of mitigation measures, and whether the remaining effects are considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as "unavoidable significant impacts." In order to approve a project with significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines Section 15093 [a]).

3.1 Transportation/Traffic

This section examines whether implementation of the General Plan will result in increased traffic congestion. The Infrastructure Element of the General Plan contains information about the City's existing and future circulation system, and is summarized in this section. A traffic analysis was conducted for the General Plan in May, 2003 by Meyer, Mohaddes Associates, Inc. A copy of the traffic study is contained in Appendix B of this DEIR. Conclusions of the study are summarized below.

Environmental Setting

Circulation System

The City of Manhattan Beach has a well-developed circulation network consisting of arterial roadways, collector streets, and local roads. Manhattan Beach's arterial and collector streets carry significant regional traffic loads that overflow onto adjoining neighborhood streets, causing noise, traffic, and safety impacts during peak hour periods of the day. Demand for parking adjacent to the beach and commercial districts can also create undesirable traffic and parking impacts on adjoining residential neighborhoods. The primary east-west roadways are Rosecrans Avenue, Marine Avenue east of Sepulveda Boulevard, Manhattan Beach Boulevard, and Artesia Boulevard. The primary north-south travel routes are Sepulveda Boulevard and Aviation Boulevard.

Regional arterials are state-designated facilities that are relatively high-speed, high-capacity routes serving intercity and interregional circulation needs. Sepulveda Boulevard (State Route 1) is the only regional arterial in Manhattan Beach. Major arterials provide for through movement between areas of Manhattan Beach and across the City, and provide access to Minor Arterials and limited access to Collector streets. The major arterials are Artesia Boulevard, Aviation Boulevard, Rosecrans Avenue, and Manhattan Beach Boulevard east of Sepulveda. Minor arterials are similar to major arterials in function, providing some through movements and movements across the City. Minor arterials include Marine Avenue east of Sepulveda Boulevard, and Manhattan Beach Boulevard between Sepulveda Boulevard and Highland Avenue.

Collector streets serve an area or neighborhood and function as distributors of traffic from the local streets to arterials. Some of the adjacent land uses may have direct driveway access to the street, while others have side yards that abut the collector. Collectors in Manhattan Beach include Highland Avenue, Manhattan Avenue north to 15th Street, Manhattan Beach Boulevard west of Highland Avenue, Valley Drive and Ardmore Avenue, and Marine Avenue west of Sepulveda Boulevard.

Major local streets provide for circulation within and between residential neighborhoods. Major local streets are designed to discourage longer distance through trips and higher speeds (posted speed limit of 30 miles per hour or lower). Local streets are the lowest functional classification and are intended solely for access to adjacent residential land uses.

The City's non-motorized transportation facilities include bicycle paths, sidewalks, and the unique "walkstreets." A bicycle path runs parallel to the coast and provides access to the perpendicular walkstreets that provide connectivity from the western neighborhoods to the beaches. Manhattan Beach also has a pedestrian greenway (Veterans Parkway) traversing north-south through the City which was previously a railway right-of-way. Although many existing residential neighborhoods in Manhattan Beach do not have sidewalks, current City policy requires the provision of sidewalks on major arterials, collectors, and some local streets.

Other important transportation modes are represented within and adjacent to Manhattan Beach. The major commercial airport serving the region, Los Angeles International Airport, is located approximately 4 miles to the north. Established regional public transit service connects the City by bus to the nearby communities and Downtown Los Angeles. A Green Line rail transit station is located just north of Manhattan Beach at Douglas Street.

Existing Traffic Conditions

Signalized and stop signal intersections were analyzed using the Intersection Capacity Utilization (ICU) method. This methodology produces an intersection volume-to-capacity (V/C) ratio that is then related to a "Level of Service" (LOS) estimate. LOS describes the ability of an intersection or road segment to meet its intended design capacity. Each LOS rating describes how people perceive the amount of congestion or difficulty in getting where they want to go. LOS is ranked from A, representing no limitation on movement (best), to F, representing very high levels of congestion (worst). A detailed description of the LOS concept and analysis methodologies is provided in Appendix B.

The traffic analysis for the General Plan evaluated existing and future conditions on intersections within the city. Table 2 summarizes baseline (year 2002) conditions for 46 intersections citywide. The data indicate that 25 of the 46 intersections analyzed currently operate at LOS E or worse.

Parking

The demand for on-street and off-street parking within Manhattan Beach often exceeds the supply during summer weekends largely due to beach visitors. Due to narrow roadways in the Downtown, North End, and beach areas, on-street parking is minimal. The City, County, and private companies provide off-street structure and surface parking along the Strand and other beach areas. However, constructing new facilities is typically constrained by high costs and limited available land. These parking deficiencies directly affect traffic congestion, as vehicles tend to re-circulate streets in search of parking while simultaneously increasing traffic volumes and congestion. The City is currently constructing a 460-space public parking structure in the Downtown which will help ease the parking situation.

Table 2
Summary of Existing A.M./P.M. Peak Hour Intersection Performance

Intersection	Signal Operation	AM Peak Hour		PM Peak Hour	
		LOS	V/C or Delay	LOS	V/C or Delay
Manhattan Ave & Manhattan Beach Blvd	Signalized	A	0.593	A	0.412
Highland Ave & 45th St	Signalized	F	1.026	F	1.012
Highland Ave & Rosecrans Ave	Signalized	D	0.881	F	1.052
Highland Ave & Marine Ave	Signalized	D	0.812	E	0.913
Highland Ave & 15th St	Signalized	D	0.863	E	0.953
Highland Ave & Manhattan Beach Blvd	Signalized	C	0.741	A	0.485
Highland Ave & 1st St	Unsignalized	A	0.340	A	0.423
Valley Dr & 15th St	Signalized	A	0.556	A	0.414
Valley Dr & Manhattan Beach Blvd	Signalized	B	0.636	A	0.506
Valley Dr & 1st St	Unsignalized	F	106.5	F	142.5
Blanche Road & Rosecrans Ave	Signalized	A	0.547	A	0.429
Blanche Road & Valley Dr	Unsignalized	C	0.727	D	0.833
Ardmore Ave & 2nd St	Unsignalized	F	1.073	D	0.834
Pacific Ave & Rosecrans Ave	Signalized	B	0.676	B	0.669
Pacific Ave & Valley Dr	Unsignalized	A	0.547	A	0.494
Pacific Ave & Ardmore Ave	Unsignalized	C	22.9	D	33.4
Pacific Ave & Manhattan Beach Blvd	Signalized	A	0.428	A	0.350
Poinsettia Ave & Manhattan Beach Blvd	Signalized	D	0.843	D	0.881
Sepulveda Blvd & Rosecrans Ave	Signalized	F	1.135	E	0.952
Sepulveda Blvd & Valley Dr	Unsignalized	F	OVRFL	F	291.0
Sepulveda Blvd & 33rd St	Signalized	F	1.414	F	1.117
Sepulveda Blvd & Marine Ave	Signalized	F	1.648	F	1.239
Sepulveda Blvd & Manhattan Beach Blvd	Signalized	F	1.060	E	0.931
Sepulveda Blvd & 8th St	Signalized	F	1.054	E	0.977
Sepulveda Blvd & 2nd St	Signalized	F	1.176	E	0.968
Sepulveda Blvd & Longfellow Ave	Signalized	F	1.017	E	0.975
Sepulveda Blvd & Artesia Blvd	Signalized	F	1.143	F	1.107
Prospect Ave & Artesia Blvd	Signalized	F	1.281	F	1.336
Meadows Ave & Marine Ave	Signalized	B	0.673	A	0.576
Meadows Ave & Manhattan Beach Blvd	Signalized	E	0.972	E	0.902
Meadows Ave & 2nd St	Unsignalized	B	13.8	B	10.5
Meadows Ave & Artesia Blvd	Signalized	D	0.860	C	0.722
Park Way & Rosecrans Ave	Signalized	A	0.584	B	0.688
Peck Ave & Marine Ave	Signalized	B	0.652	A	0.524
Peck Ave & Manhattan Beach Blvd	Signalized	F	1.017	D	0.833
Peck Ave & 2nd St	Unsignalized	B	11.7	A	9.5
Peck Ave & Artesia Blvd	Signalized	F	1.152	D	0.829
Market Pl & Rosecrans Ave	Signalized	A	0.556	C	0.772
Redondo Ave & Rosecrans Ave	Signalized	B	0.676	D	0.857
Redondo Ave & Marine Ave	Signalized	B	0.659	D	0.801
Redondo Ave & Manhattan Beach Blvd	Signalized	F	1.044	E	0.954
Aviation Blvd & Rosecrans Ave	Signalized	F	1.949	F	1.976
Aviation Blvd & Marine Ave	Signalized	F	1.192	F	1.160
Aviation Blvd & Manhattan Beach Blvd	Signalized	F	1.145	F	1.312
Aviation Blvd & 2nd St	Signalized	E	0.987	E	0.903
Aviation Blvd & Artesia Blvd	Signalized	F	1.492	F	1.385

Note: Unsignalized intersection LOS is based on average vehicle delay except for the locations where the LOS was taken from the *City of Manhattan Beach Civic Center/Metlox Development Environmental Impact Report*
OVRFL - Overflow conditions, average vehicle delay cannot be estimated.

Related Regional Plans

Congestion Management Plan

The Congestion Management Program (CMP) for Los Angeles County is administered by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP land use analysis program was designed to share information on new development activity and provide a consistent methodology for examining regional impacts on the CMP roadway system. The CMP land use analysis program and traffic impact analysis procedures are primarily intended for development projects. The CMP specifically exempts "phased development projects, or development projects requiring subsequent approvals." (Los Angeles County CMP, June 2002, LACMTA) According to the CMP Traffic Impact Analysis (TIA) Guidelines, a traffic impact analysis is required at the following:

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either the A.M. or P.M. weekday peak hours

- CMP freeway monitoring locations where the proposed project would add 150 or more trips during either the A.M. or P.M. weekday peak hours

The closest CMP arterial monitoring station is Sepulveda Boulevard/Rosecrans Avenue, and the closest freeway monitoring station is I-405 north of Inglewood Avenue.

Thresholds Used to Determine Level of Impact

The Los Angeles County CMP recognizes LOS E as the minimum acceptable standard at signalized intersections. This standard was adopted by the City as part of the CMP in 1992. Build out of Manhattan Beach pursuant to the General Plan will have a significant impact on transportation if the project:

- Causes an intersection already operating at LOS E or better to operate at LOS F;
- Causes an intersection in a residential neighborhood to operate at LOS E or lower; or
- Causes an increase in V/C ratio of 0.02 or more at intersections with LOS E or worse; and/or
- Causes or worsens an LOS F at CMP monitoring stations or mainline freeway monitoring locations.

Environmental Impact

To evaluate potential effects of development pursuant to the General Plan on the local circulation system, impacts to key intersections and primary roadway segments were analyzed. The LOS standard was used to assess impacts to intersections, and average daily traffic (ADT) was used to evaluate impacts to roadway segments.

Circulation System

As discussed in the Project Description of this EIR, Manhattan Beach is largely built out. Thus, the minimal growth anticipated to occur pursuant to implementation of General Plan policy will result from the recycling of land uses within Manhattan Beach, in addition to development of the few remaining vacant parcels. For the purposes of the traffic analysis conducted to study traffic patterns in the build-out year of the General Plan, future traffic includes new trips from higher-intensity land uses within Manhattan Beach plus future regional growth.

To assess future regional growth, the regional travel demand model of the Southern California Association of Governments (SCAG) was reviewed. That model is developed by SCAG and used for regional and sub regional planning. Although it is not accurate at the local street level, it can be used to assess long-term growth on arterial facilities such as Sepulveda, Rosecrans, Aviation, and other major routes. The future SCAG model forecasts were reviewed and compared to exiting model results, and then a growth factor was developed for the following key facilities in Manhattan Beach:

- Sepulveda Boulevard – 17% growth through 2025
- Aviation Boulevard – 3% growth through 2025
- Rosecrans Avenue – 14% growth through 2025
- Artesia Boulevard – 12% growth through 2025
- Valley Drive – 5% growth through 2025
- Ardmore Drive – 5% growth through 2025
- All other roadways – 10% (per Los Angeles County CMP)

For arterials that are not included in the SCAG model, another source was used to estimate future growth. That source is the 2002 Congestion Management Program (CMP) for Los Angeles County, which was developed by the Los Angeles County Metropolitan Transportation Authority (MTA). The CMP documentation includes estimated growth factors to be used for regional transportation planning, including specific factors for the South Bay cities. These growth factors (SCAG and MTA, as applicable) were then applied to the roadway segments and also to the 46 study intersections, and future intersection levels of service were calculated.

The A.M. and P.M. peak hour analysis of anticipated future conditions at the study intersections was performed using the same methodologies that were used to evaluate existing conditions. Results of the analysis of forecast future intersection peak hour conditions are summarized in Table 3. Traffic associated with buildout of the General Plan plus ambient growth will result in significant traffic impacts at the following 27 intersections, based on the minimum acceptable threshold standards described above.

- Highland Ave & 45th St
- Highland Ave & Rosecrans Ave
- Highland Ave & Marine Ave
- Highland Ave & 15th St
- Valley Dr & 1st St
- Blanche Road & Valley Dr
- Ardmore Ave & 2nd St
- Pacific Ave & Ardmore Ave
- Sepulveda Blvd & Rosecrans Ave
- Sepulveda Blvd & Valley Dr
- Sepulveda Blvd & 33rd St
- Sepulveda Blvd & Marine Ave
- Sepulveda Blvd & Manhattan Beach Blvd
- Sepulveda Blvd & 8th St
- Sepulveda Blvd & 2nd St
- Sepulveda Blvd & Longfellow Ave
- Sepulveda Blvd & Artesia Blvd
- Prospect Ave & Artesia Blvd
- Meadows Ave & Manhattan Beach Blvd
- Peck Ave & Manhattan Beach Blvd
- Peck Ave & Artesia Blvd
- Redondo Ave & Manhattan Beach Blvd
- Aviation Blvd & Rosecrans Ave
- Aviation Blvd & Marine Ave
- Aviation Blvd & Manhattan Beach Blvd
- Aviation Blvd & 2nd St
- Aviation Blvd & Artesia Blvd

Improvements

The General Plan Circulation section within the Infrastructure Chapter describes long-term improvements to the City's circulation system that will be implemented to address immediate, anticipated, and long-term needs. These improvements are focused on using technological advancements to enhance traffic flow, discouraging cut-through traffic in residential neighborhoods, and better facilitating walking and biking as substitutes for internal City trips.

Roadway and Intersection Improvements

Limited opportunities exist to widen roadways, except for two roadways: Sepulveda Boulevard and Rosecrans Avenue. On Sepulveda, the bridge between Rosecrans Avenue and Marine Avenue is proposed to be widened; on Rosecrans, the road is proposed to be widened between Douglas Street and Aviation Boulevard. Other projects could include intersection improvements, and traffic safety projects. The following Infrastructure Element goals and policies describe the City's intent to make these improvements.

Goal 1: Provide a balanced transportation system that allows the safe and efficient movement of people, goods and services throughout the City.

Policy 1.1: Review the functioning of the street system on a regular basis to identify problems and develop solutions.

Policy 1.2: Improve street signage citywide, and ensure that street signs are not obscured or obstructed by vegetation or structures.

Policy 1.3: Encourage the development of Transportation Demand Management (TDM) plans for all major developments or facility expansions to encourage ride-sharing and other improvements, thereby reducing vehicle trips.

Table 3
Summary of Future A.M./P.M. Peak Hour Intersection Performance

	AM Peak Hour		PM Peak Hour		Change in V/C		Significant Impact?
	LOS	V/C or Delay	LOS	V/C or Delay	AM	PM	
Manhattan Ave & Manhattan Beach Blvd	B	0.662	A	0.465	0.069	0.053	
Highland Ave & 45th St	F	1.119	F	1.104	0.093	0.092	✓
Highland Ave & Rosecrans Ave	E	0.972	F	1.161	0.091	0.109	✓
Highland Ave & Marine Ave	E	0.904	F	1.025	0.092	0.112	✓
Highland Ave & 15th St	E	0.968	F	1.072	0.105	0.119	✓
Highland Ave & Manhattan Beach Blvd	D	0.825	A	0.557	0.084	0.072	
Highland Ave & 1st St	A	0.379	A	0.479	0.039	0.056	
Valley Dr & 15th St	B	0.644	A	0.557	0.088	0.143	
Valley Dr & Manhattan Beach Blvd	C	0.716	B	0.652	0.080	0.146	
Valley Dr & 1st St	F	143.0	F	179.9	36.5	37.4	✓
Blanche Road & Rosecrans Ave	B	0.600	A	0.471	0.053	0.042	
Blanche Road & Valley Dr	D	0.813	E	0.938	0.086	0.105	✓
Ardmore Ave & 2nd St	F	1.188	E	0.934	0.115	0.100	✓
Pacific Ave & Rosecrans Ave	C	0.748	C	0.744	0.072	0.075	
Pacific Ave & Valley Dr	B	0.613	A	0.573	0.066	0.079	
Pacific Ave & Ardmore Ave	D	30.3	E	45.2	7.4	11.8	✓
Pacific Ave & Manhattan Beach Blvd	A	0.481	A	0.419	0.053	0.069	
Poinsettia Ave & Manhattan Beach Blvd	E	0.917	E	0.959	0.074	0.078	
Sepulveda Blvd & Rosecrans Ave	F	1.272	F	1.067	0.137	0.115	✓
Sepulveda Blvd & Valley Dr	F	OVRFL	F	589.2	—	298.2	✓
Sepulveda Blvd & 33rd St	F	1.566	F	1.230	0.152	0.113	✓
Sepulveda Blvd & Marine Ave	F	1.821	F	1.371	0.173	0.132	✓
Sepulveda Blvd & Manhattan Beach Blvd	F	1.173	F	1.050	0.113	0.119	✓
Sepulveda Blvd & 8th St	F	1.174	F	1.087	0.120	0.110	✓
Sepulveda Blvd & 2nd St	F	1.310	F	1.076	0.134	0.108	✓
Sepulveda Blvd & Longfellow Ave	F	1.133	F	1.085	0.116	0.110	✓
Sepulveda Blvd & Artesia Blvd	F	1.275	F	1.234	0.132	0.127	✓
Prospect Ave & Artesia Blvd	F	1.414	F	1.477	0.133	0.141	✓
Meadows Ave & Marine Ave	C	0.730	B	0.623	0.057	0.047	
Meadows Ave & Manhattan Beach Blvd	F	1.059	E	0.982	0.087	0.080	✓
Meadows Ave & 2nd St	C	16.4	B	11.3	2.6	0.8	
Meadows Ave & Artesia Blvd	E	0.949	C	0.794	0.089	0.072	
Park Way & Rosecrans Ave	B	0.649	C	0.764	0.065	0.076	
Peck Ave & Marine Ave	C	0.707	A	0.566	0.055	0.042	
Peck Ave & Manhattan Beach Blvd	F	1.108	E	0.906	0.091	0.073	✓
Peck Ave & 2nd St	B	13.1	B	10.0	1.4	0.5	
Peck Ave & Artesia Blvd	F	1.233	D	0.890	0.081	0.061	✓
Market Pl & Rosecrans Ave	B	0.617	D	0.858	0.061	0.086	
Redondo Ave & Rosecrans Ave	C	0.753	E	0.951	0.077	0.094	
Redondo Ave & Marine Ave	C	0.715	D	0.872	0.056	0.071	
Redondo Ave & Manhattan Beach Blvd	F	1.139	F	1.005	0.095	0.051	✓
Aviation Blvd & Rosecrans Ave	F	2.122	F	2.144	0.173	0.168	✓
Aviation Blvd & Marine Ave	F	1.257	F	1.220	0.065	0.060	✓
Aviation Blvd & Manhattan Beach Blvd	F	1.208	F	1.377	0.063	0.065	✓
Aviation Blvd & 2nd St	F	1.029	E	0.937	0.042	0.034	✓
Aviation Blvd & Artesia Blvd	F	1.584	F	1.470	0.092	0.085	✓

Policy 1.4: Work with neighboring communities and other South Bay cities, as well as state and other agencies, to develop regional solutions to traffic problems that are regional in nature, and to mitigate impacts of development in neighboring communities that impact the City of Manhattan Beach.

Policy 1.5: Investigate and encourage the use of alternative transportation systems such as intra/inter-city shuttle or trolley systems.

Policy 1.6: Support dial-a-ride or other para-transit systems for the senior and disabled members of the community.

Policy 1.7: Consider emergency vehicle access needs when developing on-street parking and other public right-of-way development standards.

Policy 1.8: Require property owners, at the time new construction is proposed, to either improve abutting public right-of-way to its full required width or to pay in-lieu fees for improvements, as appropriate.

Policy 1.9: Require property owners, at the time of new construction or substantial remodeling, dedicate land for roadway or other public improvements, as appropriate and warranted by the project.

Policy 1.10: Adopt and implement standards for public street right-of-way use for private purposes.

Policy 1.11: Monitor the use of public walkstreets for private purposes consistent with City standards.

Policy 1.12: Monitor and minimize traffic issues associated with construction activities.

Technological Improvements

Creative technological solutions to improve mobility will also be considered. Manhattan Beach, in coordination with local cities and the MTA, will pursue Intelligent Transportation Systems (ITS) approaches to improve traffic flow.

Policy 2.4: Encourage the use of Intelligent Transportation Systems (ITS), such as advanced signalization, motorist information, advanced transit, advanced emergency vehicle access, and intelligent parking systems, as well as other appropriate communication technologies, to direct through traffic.

Transit Improvements, Biking, and Walking

The City will focus on ways to encourage use of alternative transportation means such as transit, walking, and biking. Creating improved local access to the MTA Green Line station is a potential project. Incorporating transportation demand management strategies will also help to improve overall traffic circulation within Manhattan Beach. The General Plan contains the following goals and policies related to improving transit options and facilitating bicycle and pedestrian movement:

Policy 1.3: Encourage the development of Transportation Demand Management (TDM) plans for all major developments or facility expansions to encourage ride-sharing and other improvements, thereby reducing vehicle trips.

Policy 1.5: Investigate and encourage the use of alternative transportation systems such as intra/inter-city shuttle or trolley systems.

Policy 1.6: Support dial-a-ride or other para-transit systems for the senior and disabled members of the community.

Goal 6: Create well-marked pedestrian and bicycle networks that facilitate these modes of circulation.

Policy 6.1: Implement those components of the Downtown Design Guidelines that will enhance the pedestrian-oriented environment.

Policy 6.2: Protect the walkstreets as important pedestrian access to the beach.

Policy 6.3: Consider and protect the character of residential neighborhoods in the design of pedestrian access.

Policy 6.4: Develop standards to encourage pedestrian-oriented design in the North End.

Policy 6.5: Incorporate bikeways and pedestrian ways as part of the City's circulation system where safe and appropriate to do so.

Policy 6.6: Encourage features that accommodate the use of bicycles in the design of new development, as appropriate.

Neighborhood Traffic Management Program

The City has adopted a Neighborhood Traffic Management Program designed to identify specific issues at a very local neighborhood level, and to implement mitigation strategies appropriate to the identified and documented problems. Specific impacts to be addressed include high non-local cut-through traffic, excessive speeds, truck traffic intrusion, demonstrated accident history, and other related issues. The following goals and policies directly address this program and its objectives.

Goal 2: Move commuter traffic through the City on arterial and collector streets to protect other streets from the intrusion of commuter traffic.

Policy 2.1: Upgrade all major intersections and arterial streets to keep traffic moving efficiently.

Policy 2.2: Require additional traffic lanes and/or other traffic improvements for ingress and egress for new development along arterials where necessary for traffic and safety reasons.

Policy 2.5: Encourage the use of the Neighborhood Traffic Management Program, and utilize neighborhood traffic management tools to mitigate neighborhood intrusion by commuter traffic.

Policy 2.6: Establish priorities and determine funding available for implementing the Neighborhood Traffic Management Program.

Policy 2.7: Monitor and minimize traffic issues associated with construction activities.

Implementation of improvements to roadway segments and intersections, technological advancements, transit alternatives, and neighborhood traffic reduction strategies will work to minimize traffic effects. Although the increase in development associated with the General Plan is minimal, this development, coupled with regional growth, will cause significant traffic impacts on local roadways.

Related Regional Plans

The Sepulveda Boulevard/Rosecrans Avenue CMP arterial monitoring station would not be significantly impacted by the project due to the limited amount of development accommodated by General Plan land use policy, the scattered nature of the development throughout the City, and the long-term nature of development that will be phased over time. The I-405 monitoring station at the Inglewood Avenue interchange is also not expected to incur significant impacts because of the limited additional trips that the Plan would produce at this location. The General Plan Infrastructure Element contains the following goals and policies related to regional circulation.

Policy 1.4: Work with neighboring communities and other South Bay cities, as well as state and other agencies, to develop regional solutions to traffic problems which are regional in nature, and to mitigate impacts of development in neighboring communities that impact the City of Manhattan Beach.

Policy 2.3: Work with neighboring cities and regional and sub-regional agencies to widen and upgrade all major intersections and associated street segments within the City and adjacent jurisdictions to optimize traffic flow.

Mitigation Measures

Implementation of the above circulation system improvements, goals, and policies will work to reduce impact from traffic resulting from the modest level of new development accommodated by the General Plan. No further mitigation measures are available to reduce impacts.

Level of Impact after Mitigation

Due to significant right-of-way constraints and the built-out nature of Manhattan Beach, traffic impacts will be significant and unavoidable.

3.2 Air Quality

Environmental Setting

South Coast Air Basin

Manhattan Beach is located within the South Coast Air Basin (Basin). The Basin is a 6,600-square-mile area bounded by the Pacific Ocean on the west and the San Gabriel, San Bernardino, and San Jacinto mountains on the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties.

The topography and climate of Southern California combine to create an area of high air pollution potential in the Basin. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cup over the cool marine layer, which prevents pollution from dispersing upward. This inversion allows pollutants to accumulate within the lower layer. Light winds during the summer further limit ventilation.

Because of the low average wind speeds in the summer and a persistent daytime temperature inversion, emissions of hydrocarbons and oxides of nitrogen have an opportunity to combine with sunlight in a complex series of reactions. These reactions produce a photochemical oxidant commonly known as "smog". Because the Los Angeles region experiences more days of sunlight than any other major urban area in the United States, except Phoenix, the smog potential in the region is higher than in most other major metropolitan areas in the country.

Climate and Meteorology

The climate in and around Manhattan Beach, as well as most coastal areas in Southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. This high-pressure cell produces a typical Mediterranean climate with warm summers, mild winters, and moderate rainfall. Cyclic land and sea breezes are the primary factors affecting the region's mild climate. The daytime winds are normally sea breezes, predominantly from the west, that flow at relatively low velocities. Temperatures are normally mild with rare exceptions. This pattern is infrequently interrupted by periods of hot weather brought in by Santa Ana winds.

The climate of the area is characterized by warm, dry summers and mild winters. Most rain falls between the months of November and March with an average annual rainfall of 12 inches. Cyclic land and sea breezes are the primary factors affecting the region's mild climate. The daytime winds are normally sea breezes, predominantly from the west, that flow at relatively low velocities. Temperatures are mild, averaging 70°F in the summer to 55°F in the winter.

Air Pollution Control Effects

Both the federal and State governments have set health-based ambient air quality standards for the following pollutants:

- Sulfur dioxide (SO2)
- Lead (Pb)
- Carbon monoxide (CO)
- Fine particulate matter (PM10)
- Nitrogen dioxide (NO_2)
- Ozone(O_3)

The standards have been designed to protect the most sensitive persons from illness or discomfort with a margin of safety. The California standards are more stringent than federal standards and in the case of PM10 and sulfur dioxide, far more stringent. Table 4 outlines current federal and State ambient air quality standards.

Despite the existence of many strict controls, the South Coast Air Basin still fails to meet federal air quality standards for 2 of the 6 criteria pollutants: ozone and PM10. Because lead-based gasoline has been phased out of California, airborne lead pollution is no longer a problem in the Basin, nor is sulfur dioxide pollution.

Nearly all pollution control programs developed to date have relied on the development and application of cleaner technology and add-on emissions control devices to clean up vehicular and industrial sources, such as catalytic converters for automobiles. Only recently have efforts been targeted at high-emitting vehicles and industries (e.g., the Vehicle Inspection and Maintenance Program and mandatory maintenance procedures on industrial sources) and at curbing overall vehicle activity (e.g. High Occupancy Vehicle Lanes).

Past air quality programs have been effective in improving the Basin's air quality. Although the magnitude of the problem depends heavily on the weather conditions in a given year, and improvements can only be compared for the same air monitoring station, ozone levels have declined by almost half over the past 30 years. However, they remain at or near the top of all pollution concentrations of urban areas in the United States.

Air Quality Monitoring

The South Coast Air Quality Management District (SCAQMD) monitors air pollution levels throughout the Basin. The monitoring station closest to Manhattan Beach is the Southwest Coastal Los Angeles County Source/Receptor Area station in Hawthorne, just east of Manhattan Beach. Table 5 shows monitored air quality for carbon monoxide (CO), ozone (O_3), and nitrogen dioxide (NO_2) at the Hawthorne station. The data indicate that State standards are never exceeded for CO and NO_2, and O_3 levels near the coast almost always remain below the standard (in contrast to inland areas, where O_3 can be a significant problem). Table 6 shows data for particulate matter (PM10) that was measured at the Hawthorne station. The State standard for PM10 is exceeded occasionally at this location.

Table 4
Air Pollution Sources, Effects, and Standards

Air Pollutant	State Standard	Federal Primary Standard	Sources	Primary Effects
Ozone (O_3)	0.09 ppm, 1-hour average	0.12 ppm, 1-hour average	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	Plant injury Irritation of eyes Aggravation of respiratory and cardiovascular illnesses Impairment of cardiopulmonary function
Carbon Monoxide (CO)	9.0 ppm, 8-hour average 20 ppm, 1-hour average	9.0 ppm, 8-hour average 35 ppm, 1-hour average	Incomplete combustion of fuels and other carbon-containing substances such as motor vehicle exhaust Natural events, such as decomposition of organic matter	Plant injury Reduced visibility Deterioration of metals, textiles, leather, finishes, coatings, etc. Irritation of eyes Aggravation of respiratory illnesses Reduced lung function
Nitrogen Dioxide (NO_2)	0.25 ppm, 1-hour average	0.053 ppm, annual average	Motor vehicle exhaust High-temperature stationary combustion Atmospheric reactions	Aggravation of respiratory illnesses Reduced visibility Reduced plant growth Formation of acid rain
Sulfur Dioxide (SO_2)	0.25 ppm, 1-hour average 0.04 ppm, 24-hour average	0.14 ppm, 24-hour average	Combustion of sulfur-containing fossil fuels Smelting of sulfur-bearing metal ores Industrial processes	Plant injury Reduced visibility Deterioration of metals, textiles, leather, finishes, coatings, etc. Irritation of eyes Reduced lung function Aggravation of respiratory illnesses
Fine Particulate Matter (PM10)	50 $\mu g/m^3$, 24-hour average	150 $\mu g/m^3$, 24-hour average	Stationary combustion of solid fuels Construction activities Industrial processes Atmospheric chemical reactions	Soiling Reduced visibility Aggravation of the effects of gaseous pollutants Reduced lung function Aggravation of respiratory and cardio-respiratory diseases
Lead	1.5 $\mu g/m^3$, 30-day average	1.5 $\mu g/m^3$, calendar quarter	Contaminated soil	Impairment of blood function and nerve construction Behavioral and hearing problems in children
Visibility Reducing Particles	10 miles, 8-hour average with humidity < 70%	None		

Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, Chapter 3, Tables 3-1, 1993and 3-2, November 2001 (Version 3) update.

Table 5
Number of Days State Ambient Air Quality Standards Exceeded
Hawthorne Station

Year	Carbon Monoxide[1]		Ozone[2]		Nitrogen Dioxide[3]	
	Maximum 1-hour concentration (ppm)	*Days standard exceeded	Maximum 1-hour concentration (ppm)	*Days standard exceeded	Maximum 1-hour concentration (ppm)	*Days standard exceeded
1992	12	0	0.15	11	0.19	0
1993	9	0	0.13	9	0.16	0
1994	12	0	0.11	3	0.22	0
1995	11	0	0.12	3	0.18	0
1996	13	0	0.13	8	0.15	0
1997	12	0	0.11	6	0.17	0
1998	11	0	0.09	0	0.15	0
1999	10	0	0.15	1	0.13	0
2000	9	0	0.10	1	0.13	0
2001	7	0	0.98	1	0.11	0

* Number of days state standard was exceeded in calendar year.
ppm= Parts of pollutant per million parts of air, by volume
[1] State standard for carbon monoxide: 20 ppm, 1-Hour
[2] State standard for ozone: 0.09 ppm, 1-Hour
[3] State standard for nitrogen dioxide: 0.25 ppm, 1-Hour
Source: South Coast Air Quality Management District. *Air Quality Data 1992-2001.*

Table 6
PM10 Measurements, Hawthorne Station

Year	Fine Particulate Matter (PM10)	
	Maximum Concentration ($\mu g/m^3$)	Days (% of) Samples Exceeding California standard*
1992	67	5 (9.3)
1993	91	9(14.8)
1994	81	11(18.0)
1995	136	8(13.8)
1996	107	5(8.3)
1997	79	4(7.3)
1998	66	7(11.9)
1999	69	6(10.0)
2000	74	9(16.0)
2001	75	8(14.0)

$\mu g/m3$ = micrograms per cubic meter of air
*State standard for PM10: 50 $\mu g/m^3$, 24-hour. Collected every 6 days.
Source: South Coast Air Quality Management District. *Air Quality Data 1992-2001.*

Sensitive Receptors

The SCAQMD identifies sensitive receptors as populations that are more susceptible to the effects of air pollution than are the general population. Sensitive receptors located in or near the vicinity of known air emission sources, such as freeways and intersections, are of particular concern. Sensitive receptors are located throughout Manhattan Beach, and include the following:

- health care facilities
- residences
- schools
- playgrounds
- child care centers
- athletic facilities

Land use compatibility issues relative to assigning locations of pollution-emitting uses or of sensitive receptors must be considered. In the case of schools, State law requires siting decisions to consider the potential for toxic or harmful air emissions in the surrounding area.

Carbon Monoxide Hot Spots

Carbon monoxide (CO) hot spots, or areas where carbon monoxide is concentrated, typically occur near congested intersections, parking garages, and other spaces where a substantial number of vehicles idle. Petroleum-powered vehicles emit carbon monoxide, an unhealthy gas (see Table 4, Air Pollution Standards, Sources and Effects), the dispersal of which depends on wind speed, temperature, traffic speeds, local topography, and other variables. As vehicles idle in traffic congestion or in enclosed spaces, CO can accumulate to create CO hot spots that can adversely impact sensitive receptors.

Toxic Air Pollutants

Toxic air pollutants, such as asbestos, can be emitted during the demolition of buildings that contain toxic contaminants, and during certain industrial processes that utilize toxic substances. Federal and State governments have implemented a number of programs to control toxic air emissions. For example, the federal Clean Air Act provides a program for the control of hazardous air pollutants. In addition, the California legislature enacted programs including the Tanner Toxics Act (AB1807), the Air Toxics Hot Spot Assessment Program (AB2588), the Toxics Emissions Near Schools Program (AB3205), and the Disposal Site Air Monitoring Program (AB3374).

SCAQMD has developed and implements rules to control emissions of toxic air pollutants from specific sources. These include Rule 1401 (New Source Review of Toxic Air Contaminants) which requires certain businesses to obtain a permit to emit toxic air pollutants, and Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities) which regulates asbestos emissions during construction activities.

Related Plans and Programs

Air Quality Management Plan

Both California and the federal government require non-attainment areas, such as the South Coast Air Basin, to have prepared an Air Quality Management Plan (AQMP) to reduce air pollution to healthful levels.

The California Clean Air Act of 1988 and amendments to the federal Clean Air Act in 1990 required stricter air pollution control efforts than ever before. For example, the California must submit plans to the federal government showing how non-attainment areas in California will meet federal air quality standards by specific deadlines.

The 1994 and 1997 South Coast Air Basin AQMPs incorporate a number of measures to reduce air pollution in the Basin in order to meet federal and State requirements. These measures include strategies to meet federal and state standards for CO, PM10, NO_2, and ozone; control of toxic air contaminants and acutely hazardous emissions; and control of global warming and ozone depleting gases. These measures are updated periodically.

Thresholds Used to Determine Level of Impact

Implementation of the General Plan would result in a significant impact if it: (1) violates any air quality standard or contributes substantially to an existing air quality violation, (2) results in a cumulatively considerable net increase in any criteria pollutant, or (3) exposes sensitive receptors to substantial pollutant concentrations.

The SCAQMD has established air pollutant emission thresholds to assist lead agencies in determining whether or not development pursuant to the General Plan would result in significant impacts. If the lead agency finds that the project has the potential to exceed these thresholds, the project is considered to have a significant impact on air quality. These thresholds are summarized in Table 7.

The thresholds recommended by SCAQMD are used to determine whether or not a specific project has the potential to significantly contribute to regional air pollution. In determining a project's contribution to regional air pollution, all direct and indirect sources related to the proposed project located anywhere within the jurisdiction of the SCAQMD (e.g. emissions from regional power plants to provide the project with electricity) are considered.

Table 7
SCAQMD Thresholds for Significant Contribution to Regional Air Pollution

Pollutant	Threshold of Significant Effect	
	Operation Phase	Construction Phase
Reactive Organic Gases (ROG)	55 lbs/day	75 lbs/day, 2.5 tons/quarter
Oxides of Nitrogen (NO_x)	55 lbs/day	100 lbs/day, 2.5 tons/quarter
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day, 24.75 tons/quarter
Fine Particulate Matter (PM10)	150 lbs/day	150 lbs/day, 6.75 tons/quarter

Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, Chapter 6, 1993.

In addition, the project would result in a significant impact related to CO hot spots if the proposed project will:

- Allow sensitive receptors to locate adjacent to intersections with CO hot spots, and/or
- Result in localized carbon monoxide concentrations near existing sensitive receptors.

The State of California CO concentration standards, shown in Table 4, are 9 parts per million (ppm) during an 8-hour period and 20-ppm during a 1-hour period. If CO hot spots currently exist, then a 1-ppm increase attributable to the project over "no project" conditions for the 1-hour period is considered a significant impact.

Environmental Impact

Air quality impacts from future development pursuant to the General Plan can be divided into short-term impacts and long-term impacts. Short-term impacts are associated with construction activities, and long-term impacts are associated with the operation of developed land uses and associated vehicular trips.

Short-Term Impacts

Short-term impacts result from the following construction-related emissions sources: (1) construction equipment emissions, (2) dust from grading and earthmoving operations, and (3) emissions from workers' vehicles traveling to and from construction sites.

Construction-related air quality impacts will occur continuously over the next 20 years as individual development projects are constructed. Construction activity will primarily generate airborne dust, carbon monoxide, and nitrogen dioxide. In addition, architectural coatings, exterior paints, and asphalt may release volatile organic compounds (VOC). Because the General Plan identifies future land uses and does not contain specific development proposals, construction-related emissions of individual future developments cannot be quantified at this time. Construction-related impacts will be temporary in nature and generally can be reduced to a less than significant level through compliance with existing City, State, and SCAQMD regulations regarding construction-related emissions, and through implementation of air quality policies specified in the Community Resources Element.

Long-Term Impacts

Development pursuant to General Plan policy over the next 20 years will result in the addition of approximately 842 units to the City's housing stock, for a total of 15,881 units, and an additional 207,000 square feet of nonresidential development (see Table 1 in the Project Description of this EIR), for a total of 8.1 million square feet. This development will generate additional emissions from stationary sources and vehicle trips. Stationary sources are defined by SCAQMD to be those sources that emit pollution from equipment, or industrial or commercial processes. Table 8 reports estimated air pollution emissions in pounds per day associated with existing land uses and buildout of the Land Use Plan. The completion analysis and description of assumptions are contained in Appendix C.

Table 8
Estimated Air Pollutant Emissions for Existing Land Uses and Buildout (Pounds per Day)

Pollutant	Existing Land Use	Proposed Land Use	Difference	Percent Change
Reactive Organic Compounds	15,557	7,281	- 8,276	- 53%
Carbon Monoxide	155,634	67,197	- 88,437	- 57%
Nitrogen Dioxide	18,282	6,480	- 11,802	- 65%
Particulate Matter	603	592	- 11	- 2%

Source: URBEMIS 2001 Model Results.

As shown in Table 8, at buildout, average daily pollutant emissions for all monitored pollutants are expected to decrease over time. This decrease is due largely to the minimal increase in new development allowed by the General Plan and expected improvements in engines, cleaner fuels, and other related technologies. Therefore, no significant impact is expected to occur in terms of air pollution.

To improve air quality for future generations of residents in Manhattan Beach and within the Basin as a whole, and to assist with regional efforts to improve air quality over the long term, the City has prepared the Community Resources Element to address air quality issues. This section includes the following goals and policies:

Goal CR-7 Improve air quality.

Policy CR-7.1 Promote energy conservation by public and private sectors

Policy CR-7.2 Encourage the expansion and retention of local-serving retail businesses (e.g., restaurants, family medical offices, drug stores) to reduce the number and length of automobile trips to comparable services located in other jurisdictions.

Policy CR-7.3 Encourage alternative modes of transportation, such as walking, biking, and public transportation to reduce emissions associated with automobile use.

Policy CR-7.4 Cooperate with the South Coast Air Quality Management District and Southern California Association of Governments (SCAG) in their efforts to implement the regional Air Quality Management Plan.

Policy CR-7.5 Cooperate and participate in regional air quality management planning, programs, and enforcement measures.

Given the assumption of increasingly more efficient and effective pollution control technologies, the relatively minor growth that the General Plan provides for, and the above policies, Manhattan Beach can expect to see improvements in air quality conditions by the year 2020. No significant long-term air quality impacts will result.

Carbon Monoxide Hot Spots

To identify CO hot spots, SCAQMD recommends analyzing intersections that meet either of the following level of service (LOS) criteria: 1) the intersection currently operates at LOS C and will deteriorate to LOS D or worse, or 2) the intersection currently operates at LOS D (or worse) and will deteriorate to any degree. As shown in Tables 2 and 3 of Section 3.1 Transportation/Traffic in this EIR, the following intersections meet these criteria:

- Highland Ave. and Rosecrans Ave.
- Sepulveda Blvd. and Rosecrans Ave.
- Market Place and Rosecrans Ave.
- Redondo Ave. and Rosecrans Ave.
- Aviation Blvd. and Rosecrans Ave.
- Aviation Blvd. and Marine Ave.
- Aviation Blvd. and Manhattan Beach Blvd.
- Aviation Blvd. and 2nd St.
- Aviation Blvd. and Artesia Blvd.
- Peck Ave. and Artesia Blvd.
- Prospect Ave. and Artesia Blvd.
- Sepulveda Blvd. and Artesia Blvd.
- Sepulveda Blvd. and Longfellow Dr.
- Sepulveda Blvd. and 2nd St.
- Sepulveda Blvd. and 8th St.
- Sepulveda Blvd. and Manhattan Beach Blvd.
- Sepulveda Blvd. and 33rd St.
- Sepulveda Blvd. and Valley Dr.
- Pacific Ave. and Manhattan Beach Blvd.
- Poinsettia Ave. and Manhattan Beach Blvd.
- Meadows Ave. and Manhattan Beach Blvd.
- Peck Ave. and Manhattan Beach Blvd.
- Redondo Ave. and Manhattan Beach Blvd.
- Highland Ave. and Marine Ave.
- Highland Ave. and 15th St.
- Pacific Ave./Ardmore and Marine Dr.
- Valley Dr. and 1st St.
- Ardmore Ave. and 2nd St.
- Blanche Road and Valley Dr.
- Highland Ave./Vista Del Mar and 45th St.

The General Plan does not provide for the introduction of new sensitive receptors at any of these intersections in the future. Established land use patterns will remain. However, 17 of the 30 intersections have existing sensitive receptors located adjacent to the respective intersection. These intersections are:

- Aviation Blvd. and Marine Ave.
- Aviation Blvd. and 2nd St.
- Peck Ave. and Artesia Blvd.
- Prospect Ave. and Artesia Blvd.
- Sepulveda Blvd. and Valley Dr.
- Meadows Ave. and Manhattan Beach Blvd.
- Peck Ave. and Manhattan Beach Blvd.
- Redondo Ave. and Manhattan Beach Blvd.
- Highland Ave. and Rosecrans Ave.
- Highland Ave. and Marine Ave.
- Highland Ave. and 15th St.
- Pacific Ave. and Manhattan Beach Blvd.
- Pacific Ave./Ardmore and Marine Dr.
- Valley Dr. and 1st St.
- Ardmore Ave. and 2nd St.
- Blanche Road and Valley Dr.
- Highland Ave./Vista Del Mar and 45th St.

Of these 17 intersections, 9 were selected for analysis as representative of the area. The analysis worksheets are contained in Appendix C. As summarized in Table 9, the analysis indicates that based on the above threshold criteria, no sensitive receptors are at risk of experiencing high levels of CO, either currently or in the future.

Table 9
CALINE-4 Model Results Summary

Intersection	Receptor	Concentration of CO in ppm		
		Existing	Future	Change
Peck & Artesia	School	5.1	5.6	0.5
	High Density Residential	5.3	5.7	0.4
Pacific & Manhattan Beach Blvd.	High Density Residential	4.8	4.8	0.0
	High Density Residential	4.7	4.7	0.0
	School	4.3	4.3	0.0
Prospect & Artesia	Church	6.0	6.4	0.4
Redondo & Manhattan Beach Blvd.	Park	7.4	7.4	0.0
	Park	4.6	6.3	1.7
	Low Density Residential	6.3	4.6	-1.7
Blanche & Valley	Low Density Residential	3.9	4	0.1
	Low Density Residential	4.7	4.9	0.2
	Open Space	5.1	5.2	0.1
Pacific & Ardmore	Open Space	2.9	3	0.1
	Open Space	3.2	3.4	0.2
	Low Density Residential	3.9	4	0.1
	Low Density Residential	3.8	3.9	0.1
Highland & 45th	High Density Residential	9.5	9.5	0.0
	High Density Residential	8.4	8.4	0.0
	High Density Residential	8.6	8.6	0.0
	High Density Residential	8.8	8.8	0.0
Highland & 15th	High Density Residential	5.6	5.6	0.0
	High Density Residential	7.4	7.4	0.0
Peck & Manhattan Beach Blvd.	High Density Residential	6	6	0.0
	High Density Residential	5.3	5.3	0.0
	High Density Residential	5.6	5.6	0.0

Source: California Line Source Dispersion Model, June 1989 version.

A CALINE-4 analysis was conducted to identify potential CO concentrations at the 9 intersections. Appendix C includes worksheets documenting the methods used to estimate air pollutant emissions and atmospheric dispersion of pollutants from traffic generated by buildout of the Master Plan, in addition to ambient growth by the year 2020. The downwind concentrations of CO were estimated using a Gaussian Plume Model. Dispersion was estimated for typical worst-case atmospheric conditions which would result in the least dispersion of pollutants. In year 2020, these atmospheric conditions would typically occur during the morning hours from 7 A.M. to 10 P.M., when low wind speeds (less than 1 meter per second), stable air, and constant wind direction result in the minimized dispersal of pollutants. These conditions are expected to occur in combination for 2 hours or more on only a few mornings per year. In more typical morning conditions, less stable air and substantially variable wind direction will disperse pollutants over a much wider area, thus minimizing the area exposed to the highest pollutant levels. During other times of the day, much lower stability and higher wind speeds are typical, therefore the dispersal of air pollutants is expected.

CALINE-4 analysis revealed that none of the 9 intersections examined will experience CO concentrations that will exceed the state 1-hour standard of 20 parts per million (ppm). In fact, the highest level of CO concentration projected to occur at any one sensitive receptor, estimated for the year 2020, is 8.8 ppm. This level is well below the 20 ppm threshold level.

Related Plans and Programs

Air Quality Management Plan

The General Plan includes several policies that demonstrate Manhattan Beach's commitment to work towards the goals in the *Air Quality Management Plan*. These policies are listed above.

Mitigation Measures

Short-Term Impacts

Construction-related impacts will be temporary in nature and can be reduced to a less than significant level through compliance with existing City, State, and SCAQMD regulations for reducing construction-related emissions and through implementation of air quality policies set forth in the Resources Element. No mitigation is required.

Long-Term Impacts

Manhattan Beach will continue to cooperate with the SCAQMD and SCAG to implement the goals of the Community Resources Element and AQMP. The City will be responsible primarily for implementing the transportation control measures within its jurisdiction. AQMP transportation measures focus on reducing the number of trips, improving traffic flow, and utilizing alternative methods of transportation. As discussed above, no significant air quality impacts are expected to result from implementation of the General Plan. No mitigation is required.

Carbon Monoxide Hot Spots

Although sensitive receptors are located adjacent to intersections with significant traffic congestion, the CALINE-4 model results indicate that none of these receptors are at risk of experiencing CO at levels that violate State standards. Because CO concentrations are shown to be minimal both currently and at General Plan buildout, no mitigation is required.

3.3 Noise

Environmental Setting

Noise is generally defined as unwanted sound. Noise can result in speech interference and disrupt activities at home and work, including sleep patterns and recreational pursuits. The long-term effects of excessive noise exposure are physical as well as psychological. Physical effects may include headaches, nausea, irritability, constriction of blood vessels, changes in heart and respiratory rate, and increased muscle tension.

How Sound is Measured

Sound levels are expressed on a logarithmic scale of "decibels" (abbreviated as dB), in which a change of 10 units on the decibel scale reflects a 10-fold increase in sound energy. A tenfold increase in sound energy roughly translates to a doubling of perceived loudness.

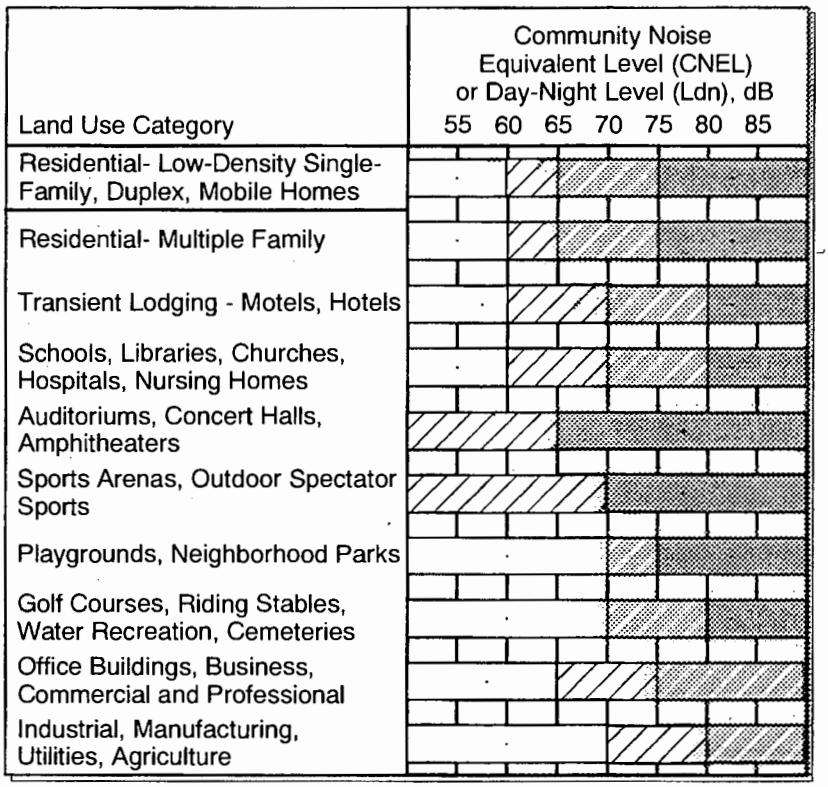
In evaluating human response to noise, acousticians compensate for the response of people to varying frequency or pitch components of sound. The human ear is most sensitive to sounds in the middle frequency range used for human speech and is less sensitive to lower and higher-pitched sounds. The "A" weighting scale is used to account for this sensitivity. Thus, most community noise standards are expressed in decibels on the "A"-weighted scale, abbreviated dB(A). Zero on the decibel scale is set roughly at the threshold of human hearing. Sound levels of common sounds in the environment include office background noise at about 50 dB(A); human speech 10 feet away at about 60 to 70 dB(A); cars driving by 50 feet away at 65 to 70 dB(A); trucks driving by 50 feet away at 75 to 80 dB(A); and aircraft flights directly overhead one mile away at about 95 to 100 dB(A).

Noise Standards

The community noise environment consists of a wide variety of sounds, some near and some far away, which vary over the 24-hour day. People respond to the 24-hour variation in noise but are most sensitive to noise at night. California standards for community noise use the Community Noise Equivalent Level (CNEL), in which a 5-decibel penalty is added to the 7 to 10 P.M. period, and a 10-decibel penalty to the 10 P.M. to 7 A.M. period. The U.S. Environmental Protection Agency uses the Day-Night Noise Level (Ldn) scale, which is identical to the CNEL except that the evening noise penalty is not added on this scale. For all practical purposes, the CNEL and Ldn scales are equivalent.

Figure 3 (Figure N-2 of the Noise Element) illustrates a land use compatibility matrix based on noise generation and noise sensitivity. Residential uses generally are the most sensitive to noise. Other noise-sensitive land uses include schools, libraries, hospitals, churches, offices, hotels, motels, and outdoor recreational areas.

Figure 3
Noise/Land Use Compatibility Matrix



Nature of the noise environment where the CNEL or Ldn level is:

Below 55 dB
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

55-65 dB
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

65-75 dB
Very noisy urban areas near arterials, freeways or airports.

75+ dB
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

Normally Acceptable
Specified land use is satisfactory, based on the assumption that any buildings are of normal conventional construction, without any special noise insulation requirements

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

Clearly Unacceptable
New construction or development should generally not be undertaken.

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

Existing Noise

Manhattan Beach's urban environment is primarily affected by roadway traffic noise and, to a lesser degree, industrial and commercial activities, within and outside the City, recreation activities within public parks and beaches, construction activities, and aircraft overflight noise.

Vehicular Traffic Noise

Existing traffic noise levels were modeled based on the traffic study prepared for the General Plan. Forty-eight streets segments where noise-sensitive uses are located were identified and analyzed. The existing traffic noise levels along those street segments are summarized in Table 10. Figure N-1 of the Noise Element (Figure 4 in this EIR) shows the 60, 65, and 70 dB(A) noise contours along the analyzed street segments. As shown, the noise levels along the following segments exceed the conditionally acceptable levels at the existing noise-sensitive uses, primarily single-family homes, located along these segments. (See Figure 3, which illustrates land use compatibility with different noise environments.)

- Sepulveda Blvd. between Rosecrans Ave. and Artesia Blvd.
- Rosecrans Ave. between Highland Ave. and Sepulveda Blvd.
- Manhattan Beach Blvd. between Valley/Ardmore and Pacific, and between Sepulveda Blvd. and Aviation Blvd.
- Artesia Blvd. between Sepulveda Blvd. and Aviation Blvd.
- Aviation Blvd. between Marine Ave. and Artesia Blvd.
- Marine Ave. between Pacific Ave. and Aviation Blvd.
- Highland Ave. between 45th Street and Manhattan Beach Blvd.
- Manhattan Ave. north of Marine Ave.
- Manhattan Ave. south of 15th
- Valley Drive/Ardmore Ave. between Sepulveda Blvd. and City Limit

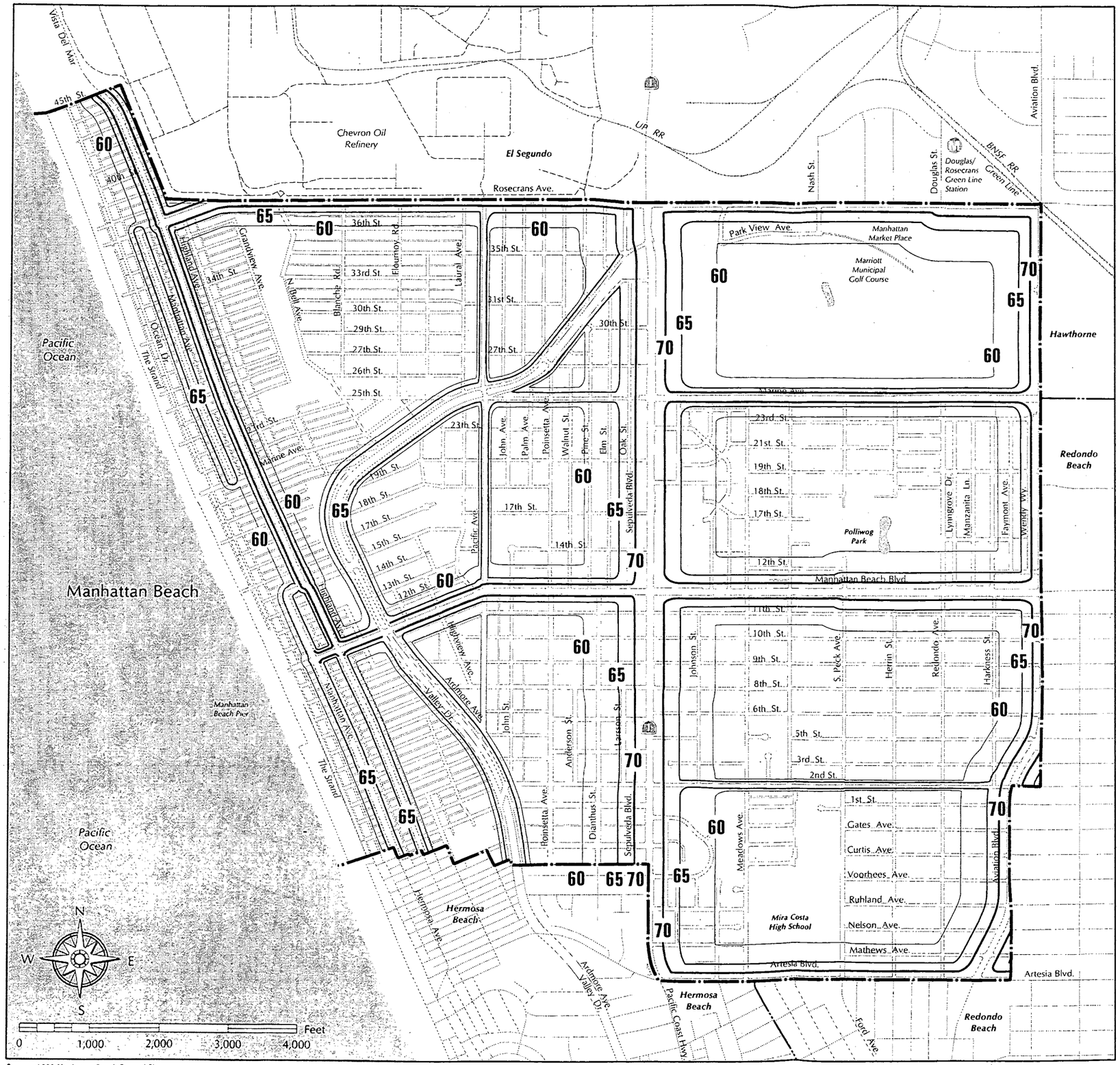
Noise levels within 75 feet of each listed roadway centerline range from 59.9 to 78.1 dB(A), whereas the conditionally acceptable range for single-family residential uses is 60 to 65 dB(A), 60 to 70 dB(A) for schools, and less than 70 dB(A) for parks.

Table 10
Noise Impact from Project and Cumulative Traffic on Roadway Segments

Roadway Segment		Existing	Future w/Proj	Existing			Future With Project			Change From Existing
				75 feet	200 feet	500 feet	75 feet	200 feet	500 feet	
Sepulveda Blvd	n/o Valley Drive	62,419	70,533	78.1	70.0	63.8	78.6	70.5	64.3	+0.5
	n/o Manhattan Beach Blvd	57,604	65,092	77.7	69.6	63.5	78.2	70.2	64.0	+0.5
	n/o 8th Street	57,823	65,339	77.7	69.7	63.5	78.3	70.2	64.0	+0.5
	n/o 2nd Street	54,788	61,910	77.5	69.4	63.2	78.0	69.9	63.8	+0.5
	n/o Artesia Blvd	58,167	65,728	77.8	69.7	63.5	78.3	70.2	64.0	+0.5
	n/o Artesia Blvd	58,167	65,728	77.8	69.7	63.5	78.3	70.2	64.0	+0.5
Rosecrans Ave	e/o Highland Ave	17,117	19,513	72.4	64.4	58.2	73.0	64.9	58.8	+0.6
	e/o Blanch Road	17,608	20,073	72.6	64.5	58.3	73.1	65.1	58.9	+0.6
	e/o Pacific Ave	19,896	22,681	73.1	65.0	58.8	73.7	65.6	59.4	+0.6
	e/o Sepulveda Blvd	35,289	40,229	75.6	67.5	61.3	76.2	68.1	61.9	+0.6

Table 10
Noise Impact from Project and Cumulative Traffic on Roadway Segments

Roadway Segment		Existing	Future w/Proj	Existing			Future With Project			Change From Existing
				75 feet	200 feet	500 feet	75 feet	200 feet	500 feet	
	e/o Redondo	59,702	68,060	77.9	69.8	63.6	78.4	70.4	64.2	+0.6
Manhattan Beach Blvd	e/o Sepulveda Blvd	26,923	29,615	74.4	66.3	60.2	74.8	66.7	60.6	+0.4
	e/o Peck Ave	34,479	37,927	75.5	67.4	61.2	75.9	67.8	61.6	+0.4
Artesia Blvd	e/o Sepulveda Blvd	29,637	33,193	74.8	66.7	60.6	75.3	67.2	61.1	+0.5
	e/o Peck Ave	28,396	31,803	74.6	66.6	60.4	75.1	67.1	60.9	+0.5
	n/o Manhattan Beach Blvd	37,688	38,818	75.9	67.8	61.6	76.0	67.9	61.7	+0.1
	n/o 2nd Street	38,376	39,527	76.0	67.9	61.7	76.1	68.0	61.8	+0.1
	n/o Artesia Blvd	44,849	46,194	76.6	68.5	62.4	76.8	68.7	62.5	+0.1
Marine Ave	e/o Sepulveda Blvd	20,744	22,818	73.3	65.2	59.0	73.7	65.6	59.4	+0.4
	e/o Peck Ave	20,104	22,114	73.1	65.1	58.9	73.6	65.5	59.3	+0.4
Manhattan Beach Blvd	e/o Manhattan Ave	8,237	9,061	69.3	61.2	55.0	69.7	61.6	55.4	+0.4
	e/o Highland Ave	13,218	14,539	71.3	63.2	57.1	71.7	63.7	57.5	+0.4
	e/o Valley/Ardmore	16,613	18,274	72.3	64.2	58.1	72.7	64.6	58.5	+0.4
	e/o Pacific Ave	21,778	23,955	73.5	65.4	59.2	73.9	65.8	59.6	+0.4
Highland Ave	n/o Rosecrans	26,446	29,090	74.3	66.3	60.1	74.8	66.7	60.5	+0.4
	n/o Marine Ave	18,172	19,989	72.7	64.6	58.4	73.1	65.0	58.9	+0.4
	n/o 15th Street	20,238	22,261	73.2	65.1	58.9	73.6	65.5	59.3	+0.4
	n/o Manhattan Beach Blvd	12,540	13,793	71.1	63.0	56.8	71.5	63.4	57.2	+0.4
	n/o Vista Del Mar	7,477	8,224	68.9	60.8	54.6	69.3	61.2	55.0	+0.4
Manhattan Ave	n/o Marine Ave	2,278	2,506	63.7	55.6	49.4	64.1	56.0	49.8	+0.4
	s/o 15th Street	7,639	8,402	68.9	60.9	54.7	69.4	61.3	55.1	+0.4
Valley Drive	n/o Pacific	4,475	4,922	66.6	58.5	52.4	67.0	59.0	52.8	+0.4
	n/o Blanche Rd	7,167	7,883	68.7	60.6	54.4	69.1	61.0	54.8	+0.4
	n/o Manhattan Beach Blvd	7,860	8,645	69.1	61.0	54.8	69.5	61.4	55.2	+0.4
	n/o 6th Street	6,744	7,418	68.4	60.3	54.1	68.8	60.7	54.6	+0.4
	n/o City limit	5,884	6,472	67.8	59.7	53.5	68.2	60.1	54.0	+0.4
Ardmore Ave	n/o Pacific	3,258	3,420	65.2	57.2	51.0	65.5	57.4	51.2	+0.2
	n/o 19th Street	4,649	4,881	66.8	58.7	52.5	67.0	58.9	52.7	+0.2
	n/o Manhattan Beach Blvd	6,379	6,698	68.2	60.1	53.9	68.4	60.3	54.1	+0.2
	n/o 6th Street	6,749	7,086	68.4	60.3	54.1	68.6	60.5	54.4	+0.2
	n/o City limit	6,192	6,502	68.0	59.9	53.8	68.2	60.2	54.0	+0.2
Marine Ave	e/o Pacific Ave	7,305	8,035	68.8	60.7	54.5	69.2	61.1	54.9	+0.4
2nd Street	e/o Poinsetia	3,342	3,676	65.4	57.3	51.1	65.8	57.7	51.5	+0.4
	e/o Sepulveda Blvd	4,267	4,693	66.4	58.3	52.2	66.8	58.7	52.6	+0.4
	e/o Peck Ave	3,185	3,503	65.1	57.1	50.9	65.6	57.5	51.3	+0.4
Pacific Ave	n/o Valley Drive	4,365	4,801	66.5	58.4	52.2	66.9	58.8	52.7	+0.4
	n/o Manhattan Beach Blvd	4,575	5,032	66.7	58.6	52.5	67.1	59.0	52.9	+0.4
	n/o 5th Street	949	1,044	59.9	51.8	45.6	60.3	52.2	46.0	+0.4



Source: 1986 Manhattan Beach General Plan.

Figure 4

Existing Noise Contours (2003)

Stationary and Other Noise Sources

Stationary noise sources that affect noise sensitive land uses in Manhattan Beach include the El Segundo Power Generation Facility and the Chevron Refinery. These uses are located just north of the North End/El Porto neighborhood in the City of El Segundo. Aircraft overflight noise from Los Angeles International Airport creates adverse noise conditions in the City, although Manhattan Beach lies outside of the 60 CNEL contour of the airport.

Residents in the North End/El Porto neighborhood are the most affected by the Refinery and the Power Generation Facility. Although noises from these facilities do on occasion impact residents, these uses generally do not conflict with adjacent land uses.

Air traffic into and out of Los Angeles International Airport, located 4 miles north of Manhattan Beach, generally follow an east-west route directly north of the City. Aircraft takeoff patterns do not pass directly over Manhattan Beach. However, landing approaches regularly pass westward over Manhattan Beach, rotate 180 degrees, and proceed to land on the runway. Given that aircraft passing over Manhattan Beach are at high altitudes, the noise levels resulting from airport operations in the City are not excessive.

Related Plans and Programs

California Noise Insulation Standards (Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or L_{dn}) of 60 dB or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or L_{dn}) to no more than 45 dB.

Manhattan Beach Noise Ordinance

The City adopted the Noise Ordinance (Ordinance No. 1957) that establishes exterior noise standards by land use, and the maximum duration of time that the noise standards may be exceeded without being considered as a nuisance punishable by law. The Noise Ordinance regulates a variety of noise generators, focusing primarily on non-transportation sources.

Thresholds Used to Determine Level of Impact

According to the City's Noise Ordinance, noise impact is considered significant if it causes discomfort or annoyance to any reasonable person of normal sensitivity, or if it exceeds the noise standards allowed in the Manhattan Beach Municipal Code. If the ambient noise level already exceeds the levels allowed in the Municipal Code, then the ordinance has been interpreted that if a project will contribute 2 dB(A) or more to an increase in noise levels in the surrounding area, then the project will have a significant impact. The 2 dB(A) threshold represents an increase in the noise level which is perceivable.

Environmental Impact

Aircraft Overflight Noise

The Federal Aviation Administration has jurisdiction over aircraft and air traffic patterns. The ability for Manhattan Beach to address overflights and minimize aircraft noise impacts on the community is limited. Currently, airport noises do not significantly affect noise-sensitive land uses in the City. Depending on atmospheric conditions, overflight noise is occasionally experienced in the City's Tree Section neighborhood. The General Plan will not result in the exposure of any additional sensitive receptors to aircraft noise nor in any manner increase overflights. Impact will be less than significant.

Vehicular Traffic Noise

General Plan policy permits development of remaining vacant and underutilized land. This development will generate additional traffic that will increase noise levels along the roadways. Figure N-4 of the Noise Element (Figure 5 in this EIR) depicts the CNEL contours associated with future traffic volumes. Table 10 summarizes the future noise levels from roadways and the increase attributable to new development. The analysis includes roadway segments bordered by noise-sensitive uses such as residences, schools, libraries, hospitals, churches, offices, and recreational areas.

Future noise levels at 75 feet from centerline along roadway segments included in the noise model range from 60.3 to 78.6 dB(A). No segment that has a currently acceptable existing noise level will become unacceptable due to a contribution from the proposed project. For the segments with existing noise levels above the conditionally acceptable standard for noise-sensitive uses, no roadway segments have an increase of more than 2 dB(A) in the future. The noise increase represents a less than significant impact.

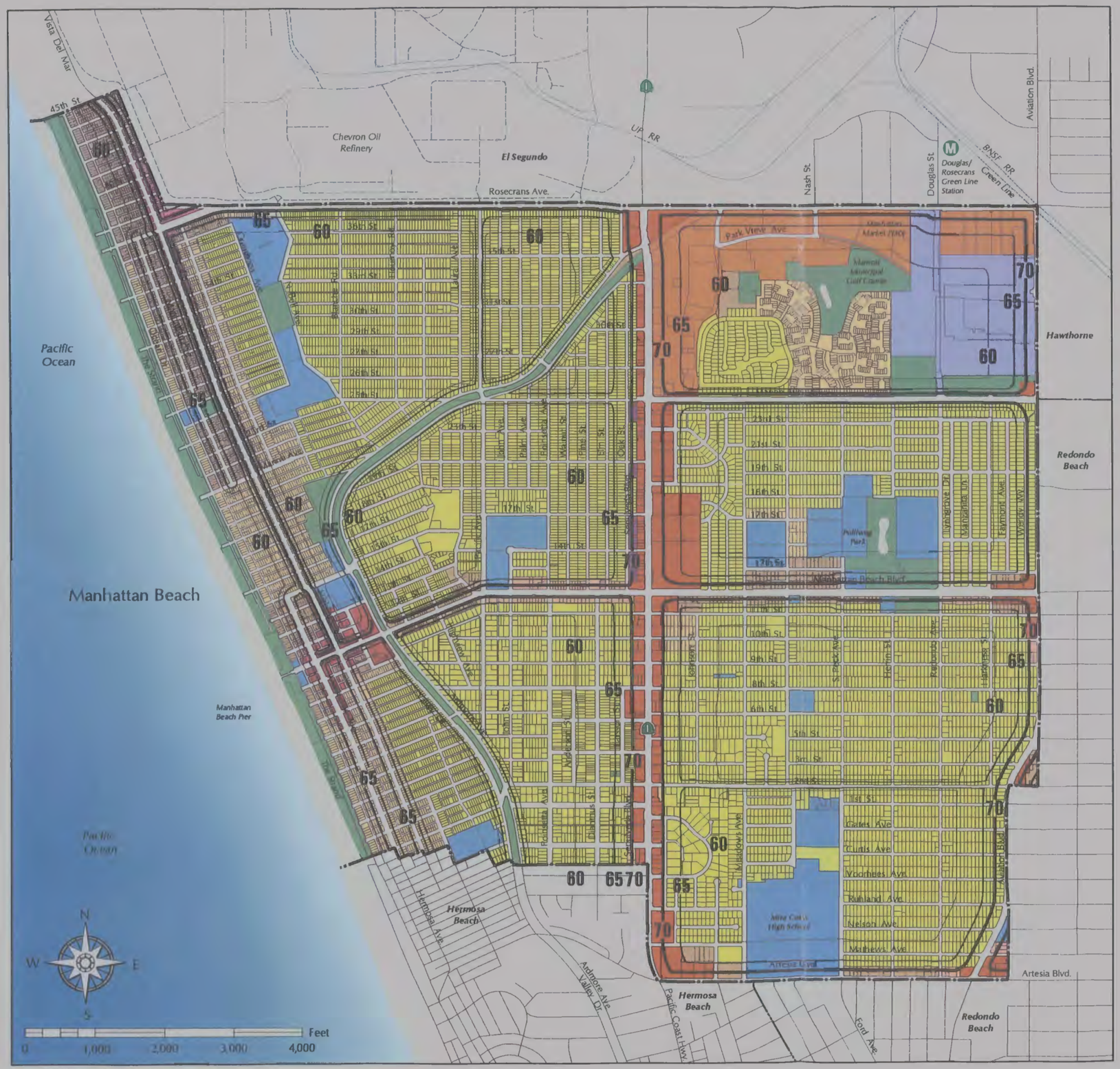
The General Plan contains goals and policies to minimize traffic-related noise impacts on sensitive land uses within the City. Where sensitive land uses are affected by noise levels above the "conditionally acceptable" standard, the Neighborhood Traffic Management Program process outlined in the Circulation Element can be used to reduce traffic noise impacts. The following goals and policies help reduce noise exposure for existing and future land uses in Manhattan Beach:

Goal 1: **Provide for measures to reduce noise impacts from transportation noise sources.**

Policy 1.1: Use proven methods of reducing the transmission of traffic noise onto adjacent noise-sensitive land uses (e.g. residences, schools, medical facilities).

Policy 1.2: Ensure the inclusion of noise mitigation measures in the design of new roadway projects in Manhattan Beach.

Policy 1.3: Reduce transportation noise through proper design and coordination of vehicle routing.



Noise Contours - Community Noise Equivalent Levels (CNEL)

- 70 dB CNEL
- 65 dB CNEL
- 60 dB CNEL

General Plan Land Use Designations

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Downtown Commercial
- Local Commercial
- General Commercial
- North End Commercial
- Manhattan Village
- Mixed-Use Commercial
- Industrial
- Parks / Open Space
- Public Facilities

- City Boundary

Source: 1986 Manhattan Beach General Plan.

Figure 5

Year 2020 Noise Contours

Policy 1.4: Ensure the effective enforcement of City, state, and federal noise levels by all appropriate City divisions.

Policy 1.5: Work with appropriate agencies to mitigate impacts from existing and proposed aviation operations.

Policy 1.6: Work with surrounding jurisdictions and other agencies to mitigate noise impacts.

Stationary Noise

New development resulting from long-term General Plan implementation may result in additional noise generated by nonresidential projects, such as commercial centers, restaurants and bars, religious institutions, and civic centers. These types of uses are allowed throughout the City. Noise generated by new development is controlled through the site design review process and application of the City's Noise Ordinance. Noise generation and potential impacts to surrounding development will continue to be considered as part of the City's review of individual future projects.

New development pursuant to General Plan Policy will not likely be significantly affected by existing stationary noise sources, including the El Segundo Power Generation Facility, the Chevron Refinery, and the Los Angeles International Airport. A noise analysis prepared for the 1999 expansion of the El Segundo Power Plant indicated that noise standards will not be exceeded at nearby residences, the Manhattan Beach Noise Ordinance will be abided by, and no significant noise related impacts will result. The Los Angeles International Airport Master Plan EIR indicates that Manhattan Beach does not lie within the primary aircraft takeoff and arrival approaches. New and existing development is not anticipated to be affected by these existing stationary noise sources.

The General Plan includes these following goals and policies to minimize noise exposure from non-transportation related noise sources, to the extent possible given the City's built-out character:

Goal 3: Minimize the impact of non-transportation noise sources

Policy 3.1: Monitor and update the Noise Ordinance to mitigate noise conflicts.

Policy 3.2: Enforce the Noise Ordinance.

Policy 3.3 Minimize impacts associated with single-event noise activities.

Policy 3.4 Recognize in the Noise Ordinance that nighttime noise levels create a greater sensitivity than do daytime noise levels.

Policy 3.5 Encourage adjacent jurisdictions and other agencies to require compliance with the City of Manhattan Beach noise ordinance where activities affect Manhattan Beach residents and businesses.

Implementation of these goals and policies over time will work to avoid noise impacts from stationary sources on sensitive uses. The General Plan also sets forth goals and policies

oriented towards minimizing noise impacts with regard to general land use issues. These include:

Goal 2: Incorporate noise considerations into land use planning decisions.

Policy 2.1: Establish acceptable limits of noise for various land uses throughout the community.

Policy 2.2: Ensure acceptable noise levels near residences, schools, medical facilities, and other noise-sensitive areas.

Policy 2.3: Establish standards for all types of noise not already governed by local ordinances or preempted by state or federal law.

Policy 2.4: Encourage acoustical design in new construction.

Policy 2.5: Require that the potential for noise be considered when approving new development to reduce the possibility of adverse effects related to noise generated by new development, as well as impacts from surrounding noise generators on the new development.

Policy 2.6: Work with businesses in surrounding jurisdictions to manage noise impacts on City residents and businesses.

Implementation of the above goals and polices will ensure a less than significant impact on noise sensitive land uses from transportation, stationary sources, and incompatible land uses.

Related Plans and Programs

California Noise Insulation Standards (Title 24)

The General Plan will result in new development and intensification of existing development in some areas of the City. As stated in the Plan, new multi-family residential development will comply with Title 24 to ensure that interior ambient noise levels are reduced to 45 CNEL. The City's development review process will include Title 24 regulations regarding the preparation of acoustical studies for residential or other noise-sensitive development near sources that generate high noise. Implementation of existing regulations will avoid impact.

Mitigation Measures

Implementation of the goals and policies outlined in the General Plan will help reduce the noise impact from stationary and vehicular sources on sensitive land uses throughout the City. Due to the minimal additional development that is anticipated to occur in Manhattan Beach, thus few additional vehicular trips, the noise impact on roadway segments throughout the City is less than significant. No mitigation is required.

3.4 Hydrology, Utilities, and Service Systems

This section addresses the impact on groundwater and surface water supplies associated with new development allowed by the General Plan. In addition, this section discusses the capacity of current or planned landfills to accommodate the additional refuse associated with new development. Through the Initial Study process, impacts on water quality, wastewater and storm water drainage facilities, flood hazards, and wastewater treatment facilities were determined to be less than significant. The DEIR therefore does not address these issues. The Metropolitan Water District of Southern California (MWD), in response to the Notice of Preparation, requested that the EIR address water systems.

Environmental Setting

Water Service and Facilities

The City owns and operates the local water system that serves City residents and businesses (approximately 13,100 customers[1]). The City's Public Works Water Division is responsible for the production and distribution of domestic water and maintenance of the overall water system facilities. The water system consists of 4 pump stations, 2 storage reservoirs, 1 elevated storage tank, 2 water supply well, and approximately 112 miles of water distribution pipelines. The City's water supply facilities are efficiently operated and monitored by the City's Supervisory Control and Data Acquisition system (SCADA). This system allows for remote operation and monitoring of all water supply facilities.

The West Basin Feeder, a 45-inch diameter pipeline located within Manhattan Beach Boulevard transports the water supply that Manhattan Beach obtains from MWD into the City. The pipeline extends easterly beyond the City's jurisdictional boundary and terminates within Manhattan Heights Park, east of Herrin Street[2]. This pipeline is sufficiently sized to carry the needed water supply into the City.

The City has three water storage units. The large underground reservoir at Peck Avenue and 18th Street has a storage capacity of 7.5 million gallons and a pumping capacity of 5,000 gallons per minute. The above-ground reservoir at Rowell and 6th Street has a storage capacity of 2 million gallons and a pumping capacity of 6,700 gallons per minute. The elevated tank at Rowell and 6th Streets has a storage capacity of 300,000 gallons.

The Public Works Department provides water conservation tips for households, including techniques for general activities such as garden irrigation, washing of cars and patios, and use of

[1] Sherry Morelan, Revenue Services Manager, City of Manhattan Beach. Personal Communication. February 3, 2003.
[2] Letter from Laura Simonek, Manager, Asset Management, MWD to Laurie Jester, Senior Planner, City of Manhattan Beach. January 27, 2003.

dishwashers and washing machines. The Public Works Department has also established a program to offer rebates to City residents for replacing existing toilets with ultra-low-flow toilets.

Water Sources

Currently, the City obtains most of its water supply from MWD and some water from two City-owned and operated wells in Redondo Beach. In general, the City obtains approximately 80% of its water supply from MWD, 17% from groundwater, and 3% recycled water[3]. Collectively, these sources provide an adequate water supply to existing City residents and businesses.

The West Basin Municipal Water District provides Manhattan Beach with MWD water which originates from the California State Water Project (SWP), one of the largest water and power projects in the world. The SWP is a water delivery system that consists of reservoirs, aqueducts, powerplants, and pumping plants. Water is pumped from the Sacramento-San Joaquin Delta in Northern California and is distributed to 29 urban and agricultural water suppliers in Northern California, the San Francisco Bay Area, the San Joaquin Valley, and Southern California. The City can obtain up to 8.1 million gallons per day or 9,073 acre-feet per year of SWP water from the West Basin Municipal Water District.

The City-owned and operated wells in Redondo Beach extract water from the West Coast Basin, a major groundwater basin underlying the area[4]. The City owns right to extract annually approximately 17 percent of the average annual demand for water. The current pumping capacity for one well is approximately 1,800 gallons per minute. The second well allows the City to pump continuously if the first well is shut down for maintenance or repairs[5].

In addition, Manhattan Beach recently began using recycled water for the irrigation of local athletic fields and parks, and for the seawater intrusion barrier. Recycled water has received, at the minimum, secondary treatment and basic disinfection and is reused after flowing out of a domestic wastewater treatment facility. The City utilizes a separate dedicated pipeline network and storage facilities for reclaimed water. With this backbone infrastructure in place, opportunities exist to expand the use of recycled water for landscape irrigation, school ground irrigation, industrial use, and groundwater recharge[6].

Together, groundwater and surface water supplies provide Manhattan Beach with over 10,200 acre-feet of potable water per year.

Solid Waste

Manhattan Beach contracts for solid waste collection services. Waste Management Inc. collects residential refuse, recyclables (newspaper, cardboard, paper, magazines, glass, aluminum cans, and plastic containers), and yard waste. Manhattan Beach residents and business owners alone disposed of 38,405 tons of waste into local landfills in 1999[7]. The waste is transported to the Carson Transfer Station, where it is then disposed of at one of three Los Angeles County

[3] City of Manhattan Beach, Public Works Department.
http://www.ci.manhattan-beach.ca.us/pubworks/Operations/oper.html
[4] City of Manhattan Beach Water System Master Plan. Kennedy/Jenks Consultants, April, 1994.
[5] City of Manhattan Beach Adopted Budget Fiscal Year 2001-2002.
[6] Manhattan Beach Draft General Plan, Community Resources Element.
[7] California Integrated Waste Management Board. Manhattan Beach Waste Stream Profile.
http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID=284&JUR=Manhattan+Beach

Sanitation District's landfills (Puente Hills, Scholl Canyon, and Calabasas). Table 11 details capacity information about each of these landfills.

Table 11
Estimated Landfill Capacities

Landfill	Acres	Max Daily Capacity (tons)	Total Used Capacity (million CY)	Total Remaining Capacity (million CY)	Estimated Closure
Puente Hills	1,365	13,200	86.2	20.2	2020
Scholl Canyon	440	3,400	50.9	18.2	2020
Calabasas	505	3,500	44.3	25.4	2020

Source: California Integrated Waste Management Board Landfill Profiles. (CY = cubic yards)

The California Integrated Waste Management Act (Assembly Bill 939) changed the focus of solid waste management from landfill strategies to diversion strategies such as source reduction, recycling, and composting. Manhattan Beach is responsible for meeting the Assembly Bill 939 (AB 939) mandate of 50% disposal reduction and for preparing AB 939 solid waste planning documents. These documents include the Source Reduction and Recycling Element (SRRE), the Household Hazardous Waste Element (HHWE), and the Non-Disposal Facility Element (NDFE). Additional diversion was achieved through various city programs, some of which are described here.

- *Curbside Recycling* – Semi-automated residential curbside program that provides each residence with a service that collects recyclable waste from uniform crates and/or wheeled containers with lids. The hauler initially educated residents about the program through bill inserts, literature dissemination, and workshops.

- *On-site Recycling* – Free commercial commingled recycling collection service available to all businesses, where recyclable business waste is collected from each business in special containers.

- *Curbside Green Waste Collection* – Semi-automated residential curbside program that collects resident's green waste once a week from special totes. The waste hauler will accept an unlimited amount of green waste.

- *Food Exchanges* – This programs collects food waste donations from hotels, restaurants, city facilities, hospitals, and school cafeterias.

- *Government Recycling* – Expanded mixed paper and beverage container recycling in Parks Department Buildings, City sports facilities, and local parks with increased frequency of collection.

- *School Recycling* – Combined City and Manhattan Beach School District program to increase beverage container recycling in local schools.

- *Construction and Demolition Recycling Guide* – A guide made available to the public by the Manhattan Beach Public Works Department that provides information on

companies and recycle and reuse metal, brick, word, drywall, gypsum, cardboard, glass, and other construction debris materials.

Through source reduction, composting and green waste programs, business recycling practices, grasscycling and xeriscaping at local parks, and the aforementioned other City programs, Manhattan Beach residents successfully achieved a 36% diversion rate in 2002[8].

Thresholds Used to Determine Level of Impact

The project will result in a significant impact if long-term implementation of the General Plan will:

- Result in a demand for water service that exceeds the capacity of the existing distribution system or treatment facilities;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge;
- Require the construction of major new water infrastructure where such facilities presently do not exist; or
- Exceed permitted landfill capacity in order to accommodate the project's solid waste disposal need.

Environmental Impact

Water Service and Facilities

The 1994 *Manhattan Beach Water System Master Plan* includes improvements that will enhance the future water system to be capable of meeting demands. Some of these include replacing sections of distribution lines, replacing pumps to accommodate a higher pressure, installing backup power supplies, installing additional hydrants, and constructing a new storage reservoir.

The 45-inch West Basin Feeder Pipeline in Manhattan Beach Boulevard is not addressed in the list of required or recommended system improvements in the 1994 Plan. In addition, the City Public Works Department indicates that no future improvements are planned for this pipeline, as its capacity is sufficient to serve future populations and land uses[9].

The 1994 Plan also includes a Capital Improvement Program to enable the City to schedule and fund the necessary improvements and studies proposed in the Plan. Incorporation of these improvements into the water system will ensure an adequate water supply system. Water demand from development pursuant to the General Plan is not anticipated to exceed the water

[8] City of Manhattan Beach Public Works Department.
[9] Dana Greenwood, City Engineer, City of Manhattan Beach Public Works Department. Personal Communication. February 3, 2003.

system capacities of the improved system. Therefore, impacts to water facilities, including the West Basin Feeder Pipeline, will be less than significant.

Water Sources

New development built pursuant to Plan land use policy will increase demand on the City's water supply. The General Plan will allow for development of an additional 842 dwelling units and an additional 207,000 square feet of nonresidential development (see Table 1 in the Project Description of this EIR) over the next 20 years.

The 1994 *Manhattan Beach Water System Master Plan* estimates the water demand in the year 2010 to be 6,800 acre-feet per year for a population of 37,000 people. Using the current population projections for the year 2020 and linear extrapolation, the water demand estimate for 2020 is 7,126 acre-feet per year. This is within the water demand projections for the *Water Master Plan* and within the estimated water supply available to Manhattan Beach.

The General Plan supports implementation of measures identified in the *Water System Master Plan,* as well as policies to encourage water conservation and protection. Adherence to the General Plan goals and policies will ensure the adequate provision of water. General Plan goals and policies include:

Goal 7: Maintain and protect a reliable and cost effective water supply system capable of adequately meeting normal demand and emergency demand in the City.

Policy 7.1: Periodically evaluate the entire water supply and distribution system to ensure its continued adequacy, reliability, and safety.

Policy 7.2: Ensure that all new development or expansion of existing facilities bears the cost of providing adequate water service to meet the increased demand which it generates.

Policy 7.3: Educate the public in the importance of water conservation, and require new development to comply with local and State codes for water conservation.

Policy 7.4: Support expanded use of reclaimed water.

Policy 7.5: Support the exploration of the feasibility of desalinated seawater as a reliable potable water source.

Impacts to water supply are accounted for in the *Water System Master Plan.* Existing entitlements, both from groundwater and from MWD, are considered adequate to meet anticipated future demand. The environmental effects of construction and operation of water distribution and treatment facilities will be evaluated at the time individual projects are proposed. The General Plan will not result in a significant impact on water resources.

Solid Waste

The increase in population and development intensity anticipated pursuant to General Plan land use policy will result in increased generation of solid waste. Future solid waste generation estimates are indicated in Table 12.

Table 12
Estimated Solid Waste Generation

Land Use Designation	Estimated Development (DU or KSF)		Generation Factor (Lbs/day/ DU or KSF)	Solid Waste (lbs/day)	
	Existing Land Use*	General Plan**		Existing Land Use	General Plan
Low-Density Res	6,833	7,353	10	68,330	73,530
Medium-Density Res	3,354	2,662	10	33,540	26,620
High-Density Res	4,853	5,866	7	33,971	41,062
Commercial/Office	3,735	3,420	5	18,675	17,100
Industrial	950	1,265	8	7,600	10,120
Public Facility	3,239	3,444	7	22,673	24,108
Total Estimated Solid Waste Generation (lbs/day)				184,789	192,540

Source: Modified by CBA from the City of Los Angeles, Public Works, Bureau of Sanitation, April 1981
DU = dwelling unit, KSF = thousand square feet, lbs = pounds

As Table 13 illustrates, approximately 192,540 pounds per day (35,139 tons per year) will be generated at buildout. This represents a 4.2% increase, or 7,751 pounds per day (1,415 tons per year), in solid waste generation relative to existing conditions.

Solid waste represents a concern not only for Manhattan Beach residents and businesses, but for the entire greater Los Angeles region. The following policies in the Infrastructure Element address ways to reduce the amount of solid waste produced in Manhattan Beach:

Goal 4: Protect the quality of the environment by managing the solid waste generated in the community.

Policy 4.1: Expand recycling programs to commercial establishments in the City.

Policy 4.2: Encourage the maximum diversion of construction and demolition materials.

Policy 4.3: Require trash haulers to track the amount of recycling in accordance with City standards.

Policy 4.4: Encourage maximum recycling in all sectors of the community, including residential, commercial, industrial, institutional, and the construction industry.

Even though implementation of the General Plan will result in an increase of development within the City and a related increase in solid waste generation, impacts relative to solid waste are anticipated to be less than significant. The City has a secure contract with Waste Management Inc. for waste disposal and collection of recyclables. Furthermore, the Puente Hills, Scholl Canyon, and Calabasas landfills are not anticipated to close during the approximate

20-year planning period. The City will continue to implement solid waste reduction programs in compliance with AB 939. Impact will be less than significant.

Mitigation Measures

No significant impact on water services and facilities, water resources, or solid waste disposal will result from buildout pursuant to the Draft General Plan; therefore, no mitigation is required.

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3.5 Population and Housing

This section addresses population, housing, and employment impacts resulting from future development pursuant to General Plan land use and related policies. Although the Initial Study indicates that the General Plan will have a less than significant impact on population and housing, analysis to confirm this conclusion is included here.

Environmental Setting

Population

The U.S. Census reports that in the year 2000, 33,852 people lived in Manhattan Beach. Manhattan Beach has experienced relatively modest growth in the last decade. In 1990, the population was 32,330. Thus, between 1990 and 2000, population increased by 4.7%.

Housing

The U.S. Census reports that 14,474 housing units existed in Manhattan Beach in 2000. In 1990, there were 13,992 housing units. Manhattan Beach thus experienced a relatively modest housing increase of 3.4%.

The types of housing units that compose the housing stock vary throughout the City. The majority of housing units in Manhattan Beach are low-density single-family homes. Medium-, high-, and very high-density units are located in the coastal neighborhoods and along major arterials.

Employment

Manhattan Beach is located within the South Bay Cities subregion, a division defined by the Southern California Association of Governments (SCAG) for the purpose of regional planning and forecasting. SCAG is the regional planning organization for Riverside, Imperial, San Bernardino, Los Angeles, Orange, and Ventura counties. SCAG prepares population, housing, and employment forecasts for the various subregions with its planning area. Table 13 presents SCAG forecasts for the South Bay Cities subregion.

As shown in Table 13, the job/housing ratio within the subregion estimated by SCAG is 1.47 in 2000, indicating that the supply of jobs is greater than housing. Compared to the 6-county regional average of 1.38, this subregion is considered job-rich and housing-poor.

Table 13
SCAG Population, Households, Employment, and Jobs-Housing Balance Projections
South Bay Cities Subregion

	South Bay Cities Subregion			City of Manhattan Beach		
	2000	2010	2020	2000	2010	2020
Population	862,790	910,369	919,173	34,889	35,432	35,490
Households	296,331	305,504	315,456	14,436	14,538	14,590
Employment	435,571	475,716	498,807	13,691	14,486	14,942
Jobs/Housing Ratio	1.47	1.56	1.58	0.95	0.99	1.02

Source: 2001 Regional Transportation Plan Adopted Forecast. SCAG. Adopted April, 2001; Communication from Jeffrey M. Smith, AICP, Senior Regional Planner, Intergovernmental Review, SCAG.

Table 13 also summarizes SCAG projections for Manhattan Beach, revealing that Manhattan Beach is housing-rich. According to SCAG, the City's year 2000 job/housing ratio of 0.95 is much below the average sub-regional and regional ratios. For year 2003, this ratio can be calculated using the estimate of existing non-residential land use (7.9 million square feet), and residential land use (15,039 dwelling units), and a factor of 2 jobs per 1,000 square feet of non-residential development. The job/housing ratio is estimated at 1.05.

Thresholds Used to Determine Level of Impact

Impact on population and housing is considered significant if the project will induce substantial population growth in the area, either directly or indirectly.

Environmental Impact

Population

General Plan land use policy will allow for minimal growth in both the housing and nonresidential sectors of the community. The estimated future population of Manhattan Beach is approximately 35, 786 persons (based on the City's current average size of 2.34 persons per household and a vacancy rate of 3.7%). This represents an increase of 1,897 people, or a 5.5% increase over the next 20 years. This estimate assumes a static average household size of 2.34 persons.

SCAG estimates that the population within the South Bay Cities subregion will increase by 6.5% between 2000 and 2020. While the City's projected population increase is slightly lower than that projected for the region, both the subregional and City growth rates are fairly modest. This rate reflects a continuance of the relatively modest growth pattern of the last decade and the largely built-out character of Manhattan Beach. The General Plan is supportive of regional growth management goals and objectives that call for balanced development that affords both housing and employment opportunities. Impact will be less than significant.

The Manhattan Beach Draft General Plan estimates that General Plan land use policy will provide for an additional 842 housing units. Based on a rate of 2.34[1] persons per household and a vacancy rate of 3.7%, the City could anticipate a population growth of 1,897 people. Thus, the estimated future population of Manhattan Beach is approximately 35,786 persons. This population figure is only 0.8% off the population SCAG's population estimate for Manhattan Beach in the year 2020. The project is consistent with regional growth projections. Impact is less than significant.

Housing

The General Plan will accommodate modest housing growth in Manhattan Beach. Residential buildout pursuant to the Land Use Plan will result in a total of 15,881dwelling units, or an increase of 842 housing units over the next 20 years.

New opportunities for housing will occur primarily as a result of recycling of residential properties to higher densities and mixed-use development in Downtown. This provision of additional housing opportunities is supportive of SCAG's goals for housing throughout the SCAG region. SCAG's Regional Housing Needs Assessment (RHNA) model identifies a need for 250 new units in Manhattan Beach between 1998 and 2005[2]. The Land Use Plan will allow for development of 842 units over the next 20 years, which translates to an average of 42 units per year. The City's RHNA indicates a need for 36 units per year. Impact will be less than significant.

Employment

The General Plan will result in a slight decline in the City's current jobs/housing ratio (1.05) by accommodating very limited development of new employment generating uses. At buildout, the Land Use Plan will result in an additional 205,000 square feet of non-residential development, for a total of 8,129,000 square feet. This new development could provide approximately 410 additional employment opportunities in the City (based on a factor of 2 jobs per 1,000 square feet of non-residential development). This will result in a ratio of 1.02 jobs per housing unit by 2020, which matches SCAG's projected ratio for the City. General Plan policies continue to maintain Manhattan Beach as a housing-rich community. This is supportive of SCAG's objectives for the South Bay Cities subregion as a whole. Since buildout pursuant to the General Plan land use policy will generate employment opportunities and a jobs/housing balance consistent with regional plans, impact will be beneficial. No adverse impact will result.

Related Local and Regional Plans

Regional Comprehensive Plan and Guide

The Manhattan Beach General Plan implements many of the recommendations of SCAG's Regional Comprehensive Plan and Guide. The General Plan supports both jobs and housing growth at a moderate level that will accommodate future community needs. Overall, the General Plan will work toward a jobs/housing balance and encourage development of infill parcels with diverse housing options. The Manhattan Beach General Plan is supportive of the Regional Comprehensive Plan and Guide.

[1] California Department of Finance 2002 Persons per Household estimate for Manhattan Beach.
[2] City of Manhattan Beach, Draft Housing Element. Blodgett Baylosis Associates, January 2003.

Mitigation Measures

With implementation of General Plan goals and polices, impact on population, housing, and employment will be less than significant. No mitigation is required.

4.0 Alternatives to the Project

The following discussion considers alternatives to the Draft General Plan and examines potential environmental impacts resulting from each alternative. Through comparison of these alternatives to the proposed project, the relative advantage of each can be weighed and analyzed. The CEQA Guidelines require that a range of alternatives be addressed, "governed by a rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" (Section 15126[f]).

The Guidelines state that the discussion of alternatives must focus on alternatives capable of either eliminating any significant environmental effects of the project or reducing them to a less than significant level, while achieving most of the major project objectives, which are as follows:

- To preserve and enhance the unique characteristics of Manhattan Beach including various residential neighborhoods, commercial areas, recreational parks, and community open spaces.
- To maintain viable and attractive commercial areas throughout the community.
- To provide a balanced local street network that effectively accommodates current and future traffic volumes without adversely affecting nearby sensitive land uses.
- To ensure adequate parking within the community without adversely affect surrounding land uses.
- To maintain satisfactory infrastructure to accommodate current and future residences and business.

According to the analysis presented in prior sections, build out pursuant to General Plan policies will result in unavoidable significant impacts with regard to traffic due to increased project-related and regional automobile trips. Due to the developed nature of Manahattan Beach, mitigation is infeasible.

Manhattan Beach is densely developed and faces the challenge of balancing local needs with the regional demands characteristic of a highly sought destination area. The General Plan reflects the City's existing characteristics and needs, as it allows for little new overall growth. The significant traffic impacts expected to occur as a result of General Plan implementation are due largely to regional travel patterns that produce pass-through (non-local) traffic. Therefore, the project alternatives discussed here can only address small target areas within the City.

In addition to focusing on alternatives capable of either eliminating any significant environmental effects of the project or reducing them to a less than significant level, the following analysis examines variations of the proposed project that were considered during preparation of the General Plan and that may be considered further during the public hearing process. The following project alternatives are examined:

Alternative 1: No Project
Alternative 2: Retain Mixed-Use Designation on Downtown Parcels
Alternative 3: No Net New Non-Residential Development

None of the above alternatives include an alternate location. The goals and policies of the General Plan are specific to the geographic context of Manhattan Beach. General Plan land use policy applied at an alternate location would not achieve goals specific to Manhattan Beach.

The alternatives analyzed in the EIR are general in nature, as is the proposed project. The degree of specificity used in the alternatives analysis is related to the programmatic approach used in the analysis of the Draft General Plan. Development across the entire Planning Area is addressed in the alternatives analysis, rather than specific development projects.

Alternative 1: No Project

This alternative assumes the existing General Plan remains as the adopted long-range planning policy document for Manhattan Beach. Development would continue to occur within the City in accordance with the existing General Plan and Zoning Code. Buildout pursuant to the existing General Plan would allow current development patterns to remain. Current policy allows for slightly less residential and commercial development than the revised plan. The Downtown Commercial designation at North Highland Avenue and 11th Street would remain and not be redesignated High Density Residential. The latter definition reflects current and planned land use. Regardless, a similar amount of development at buildout is anticipated under the existing Plan as with the proposed General Plan.

The proposed General Plan contains policies specifically directed at:

- Protecting mature trees
- Comprehensively addressing neighborhood traffic impacts
- Developing a balanced approach to commercial use of the walkstreets
- Incorporating environmental considerations more fully into the design, construction, and implementation of development projects

Continued application of the current General Plan would not provide the City with the policy foundations to address the above issues.

Environmental Effects

Continued implementation of the existing General Plan would result in an equivalent level of development and population growth. However, traffic volumes may actually be higher without implementation of the updated Plan because the Downtown area could experience more commercial development within areas designated for such. (The proposed Plan accommodates more housing Downtown.) More trips would be generated by commercial uses. Noise impacts are closely tied to traffic volumes. Both traffic volumes and noise levels would increase. Therefore, the No Project Alternative may have greater transportation, noise, and air quality impacts than the proposed General Plan.

Relation to City Objectives

The benefits of the proposed General Plan would not be fully achieved by this alternative. The General Plan addresses quality of life issues more fully by defining the character of Manhattan Beach to be preserved. The numerous goals and policies in the updated General Plan address such issues as street trees, neighborhood traffic intrusion, environmental quality, and walkstreet usage that are not treated in the current Plan. Thus, the No Project Alternative would not meet City objectives to the extent provided by the proposed Plan.

Alternative 2: Retain Commercial Designation of Downtown Parcels

The current General Plan designates properties along North Highland Avenue and 11th Street as Commercial rather than Residential. Implementing zoning accommodates mixed-use commercial/residential development. However, existing development consists predominantly of residences, permitted via Conditional Use Permits. The General Plan proposes to change the designation to High Density Residential, thereby reflecting local objectives and easing the process of building residential units in the area. This would also prohibit the transformation of existing and potential residential properties to commercial use in the future.

Alternative 2 considers the possibility of retaining the existing Commercial designation of these parcels. This would maintain the current Conditional Use Permit requirement for building a residential unit, and would allow commercial uses now and in the future.

Environmental Effects

Residential uses generate substantially less traffic than commercial uses. Thus, Alternative 2 could increase traffic volumes along North Highland Avenue in particular and within the City as a whole, relative to the proposed project.

The mixed development permitted under current regulations does, however, provide opportunities for integrated, symbiotic land uses and creation of a pedestrian environment. While current market conditions have driven the transition in this area of Downtown to a more residential character, future conditions could create demand/conversion to commercial uses. The current designation provides more opportunity in the future for recycling of land uses.

The current designation also creates potentially greater parking impacts, as commercial uses have a much higher parking demand than residential uses.

Relation to City Objectives

Some of the benefits of the proposed General Plan would not be achieved under this alternative. The proposed General Plan introduces High Density Residential uses on that section of Highland Avenue near 11th Street, whereas the current designation provides for a commercial focus. Alternative 2 could discourage residential development and the benefits associated with meeting housing needs. This alternative does support the goals of the proposed General Plan by allowing more compact development and encouraging a more walkable

community. However, this alternative may not achieve the City's objective of addressing parking impacts in Downtown.

Alternative 3: No Net New Non-Residential Development

Alternative 3 proposes a reduced intensity of development throughout the City. Under this alternative, non-residential development that would add to the existing total square footage of non-residential use citywide would not be permitted. New development would be limited to residential uses and the replacement of existing commercial buildings with a similar-sized development or smaller. As discussed above, residential developments tend to generate fewer automobile trips than non-residential uses. Alternative 3 could therefore result in an overall reduction of possible future sources of increased traffic, depending upon how commercial uses recycle. (For example, a 2,000-square-foot-office building generates an average of 3.56 trips in the morning peak period, compared to 12-82 trips for a 2,000-square-foot specialty retail store.) This alternative does address the significant traffic-related impacts likely to result from the General Plan. However, it would constrain opportunities for future commercial development, including those discussed in the General Plan as answering local needs.

Environmental Effects

Alternative 3 would limit opportunities for commercial growth compared to the proposed General Plan. This alternative would result in fewer new vehicle trips and reduced traffic impacts compared to the proposed General Plan. However, the reduction in total vehicle trips is likely to be minimal because much of future traffic is anticipated to be regional in nature. Ambient growth in the region will still contribute to increased vehicle trips in Manhattan Beach, and traffic impacts are likely to still be significant.

Relation to City Objectives

Alternative 3 would not achieve all of the objectives of the proposed project. Limiting all new development to residential uses would limit opportunities for an enhanced tax base. In addition, the City's goal to maintain viable and attractive commercial areas would be constrained. Alternative 3 would not adequately achieve all project objectives.

Environmentally Preferred Alternative

Given the citywide scope of the proposed General Plan and the long-term nature of implementation, Alternative 3, No Net New Non-Residential Development, has the potential to produce the fewest new vehicle trips and associated impacts. Thus, Alternative 3 is the environmentally preferred alternative.

5.0 Cumulative and Long-Term Effects

5.1 Cumulative Impacts

The CEQA Guidelines (Section 15355) define a cumulative impact as "an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." The Guidelines further state that "an EIR should not discuss impacts which do not result in part from the evaluated project."

Section 15130(a) of the CEQA Guidelines requires a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." Cumulatively considerable, as defined in Section 15065(c), "means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects."

The project is a comprehensive update of the Manhattan Beach General Plan that affects the City as a whole. Thus, cumulative citywide impacts have been addressed in the preceding analysis in this EIR. A more broad-based examination of cumulative impacts involves considering the project together with growth in the region.

Development will occur in accordance with land use designations and development intensities identified in the Land Use Element. These designations promote the recycling of underutilized land to higher uses, compact and infill development, mixed-use development to maintain a pedestrian-friendly environment, and an improved balance between employment and housing.

General Plan land use policy and the associated development yield are in line with SCAG regional growth estimates. SCAG projects growth for the 6-county SCAG region for the purpose of allocating growth to specific areas and identifying regional transportation infrastructure needed to support regional growth. General Plan policy accommodates 35,786 people at buildout, whereas SCAG projects a population of 35,490 for year 2020. Manhattan Beach will be able to accommodate slightly more than its share of regional growth. The General Plan is consistent with regional growth projections; therefore, no significant cumulative land use impact will result.

As development occurs within Manhattan Beach and Los Angeles County, traffic volumes on the regional road network will increase. As discussed in Section 3.1, Transportation/Traffic, cumulative traffic impacts will be significant. The following intersections are expected to experience LOS F conditions in the future.

- Sepulveda Blvd. and Rosecrans Ave.
- Aviation Blvd. and Rosecrans Ave.
- Aviation Blvd. and Marine Ave.
- Aviation Blvd. and Manhattan Beach Blvd.
- Aviation Blvd. and 2nd Street
- Aviation Blvd. and Artesia Blvd.
- Peck Ave. and Artesia Blvd.
- Prospect Ave. and Artesia Blvd.
- Sepulveda Blvd. and Artesia Blvd.

- Sepulveda Blvd. and Longfellow Dr.
- Sepulveda Blvd. and 2nd St.
- Sepulveda Blvd. and 8th St.
- Sepulveda Blvd. and Manhattan Beach Blvd.
- Sepulveda Blvd. and Marine Ave.
- Sepulveda Blvd. and 33rd St.
- Sepulveda Blvd. and Valley Dr.
- Peck Ave. and Manhattan Beach Blvd.
- Redondo Ave. and Manhattan Beach Blvd.
- Highland Ave. and Rosecrans Ave.
- Highland Ave. and Marine Ave.
- Highland Ave. and 15th St.
- Valley Dr./Admore Ave. and 15th St.
- Valley Dr. and 1st St.
- Ardmore Ave. and 2nd St.
- Highland Ave./Vista Del Mar and 45th St.

Cumulative traffic impacts are anticipated to be significant.

Air pollutant levels in the South Coast Air Basin regularly exceed State and federal air quality standards. Development projected for the region will generate increased emission levels from transportation and stationary sources. However, due to the minimal increase in development and hence vehicle trips, air pollutant emissions in Manhattan Beach are anticipated to decline, as discussed in Section 3.2, Air Quality. In addition, potential cumulative air quality impacts will be partially reduced by the implementation of the SCAQMD Air Quality Management Plan and policies and programs contained in local general plans, including those in the Manhattan Beach General Plan Community Resources Element. No significant cumulative impact will result.

New development will incrementally increase demand for water in the City and contribute to increased demand in the region. The General Plan includes policies to reduce water consumption and ensure that the water distribution system will have sufficient capacity to accommodate future development. The Metropolitan Water District has been planning for the region's growth and is currently completing various system improvements to ensure a reliable water supply for the West Basin and other areas over the next several decades. Therefore, impact on water supplies is considered cumulatively less than significant.

Future development in the City will contribute approximately 10,170 tons per year of additional solid waste to the region's solid waste load. The availability of disposal facilities to accommodate the waste is a concern not only for Manhattan Beach residents and businesses, but for the entire greater Los Angeles region. The California Waste Management Act of 1989 (AB 939) requires all cities to reduce waste within their boundaries through source reduction, recycling, and composting. Consistent with the Act's mandate, the General Plan includes policies and programs to reduce generation of waste and minimize the need for disposal facilities. Cumulative solid waste impacts will be less than significant.

5.2 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the growth-inducing impact of the project. Growth inducement includes, "ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

Proposed land use policy is specifically intended to provide for the orderly growth of Manhattan Beach, define ultimate limits to that growth, and act as a mechanism to accommodate and control future growth within this largely built-out community. General Plan policy will result in a better balance between housing and employment, more compact urban development, and recycling of underutilized infill areas to higher land uses within an already urbanized planning area. Overall, the anticipated population growth will continue the City's relatively modest growth pattern, with an anticipated 5.5% increase over two decades. Development permitted by proposed land use policy will provide needed housing and local services, increase economic viability of commercial development, and generate an increased tax base for the City. It will create employment for residents of Manhattan Beach and the surrounding area, contributing to the area's economic and fiscal growth, consistent with goals and objectives of regional plans.

The Infrastructure Element includes circulation improvements for existing arterial and collector streets throughout the City with the goal of enhancing the existing system and creating a more balanced environment between automobile and pedestrian traffic. No extension of urban infrastructure into previously undeveloped areas will occur.

Therefore, the General Plan is not considered to have growth-inducing effects that would conflict with long-range regional growth management objectives.

5.3 Significant Irreversible Environmental Changes

The CEQA Guidelines Section 15127 requires a discussion concerning irreversible changes in EIRs prepared in connection with the adoption of a plan. Adoption and implementation of the General Plan will result in impacts on the local environment that will affect both short-term uses and the maintenance and enhancement of long-term usage of land within the City.

The General Plan will allow for infill development on the few vacant properties within the City, and intensification of residential and non-residential development within existing developed areas. In general, the irreversible land use changes resulting from the adoption and implementation of the General Plan will be beneficial rather than detrimental since the changes will:

- Maintain a small-town community that preserves the unique characteristics of individual neighborhoods.
- Provide a balanced transportation system that minimizes cut-through traffic in residential neighborhoods and provides adequate parking in all areas of the City.
- Maintain vibrant commercial areas throughout the City with businesses that meet the desired needs of the community.
- Provide a high level of public safety, ensuring a strong sense of protection for all those who live and visit the City.
- Safeguard picturesque vistas of the ocean, and protect existing trees and landscape resources that add value to the City.

- Create a sense of community that bonds residents together, thus making a stronger, better Manhattan Beach.

Irreversible commitments of limited resources resulting from General Plan implementation include the use of building materials, minerals, and water consumption.

5.4 Unavoidable Significant Environmental Impacts

Implementation of the updated General Plan will result in significant unavoidable project-level and cumulative traffic impacts. Implementation of General Plan goals and policies identified in Section 3.0 of this EIR will reduce these impacts to the extent feasible. Implementation of the recommended improvements in the Infrastructure Element of the General Plan will help reduce traffic impacts, nonetheless, combined with the regional increases in traffic volumes, the General Plan will result in significant traffic impacts.

5.5 Effects Not Found to be Significant

The CEQA Guidelines Section 15128 require a statement indicating the reasons that various possible significant effects were determined not to be significant and were therefore not discussed in the EIR. Such a statement is contained in the attached copy of the Initial Study in Appendix A for the following issue areas:

- Aesthetics
- Agriculture Resources
- Air Quality: conflict with applicable Air Quality Plan or create objectionable odor
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology: drainage patterns, water quality, flood hazards, and inundation
- Land use
- Mineral Resources
- Noise: groundborne vibration, temporary noise levels, and airport noises
- Public Services
- Recreation
- Transportation and Traffic: conflict with air traffic patterns and adopted regional plans, increase design hazards, and result in inadequate emergency access
- Utilities and Service Systems: violate wastewater treatment and solid waste regulations, and adversely affect wastewater and stormwater treatment facilities

6.0 References

6.1 Reference Documents Used to Prepare the EIR

California Department of Finance web site: http://www.dof.ca.gov/

California Integrated Waste Management Board web site: www.ciwmb.ca.gov

CALINE-4 A Dispersion Model for Predicting Air Pollutant Concentrations Near Roadways. California Air Resources Board. 1988.

CEQA Air Quality Handbook. South Coast Air Quality Management District. May, 1993 with November, 1993 update.

Doelle, Leslie I. *Environmental Acoustics.* 1972.

Final Air Quality Management Plan. South Coast Air Quality Management District. September, 1996.

Draft General Plan. City of Manhattan Beach. April, 2003.

City of Manhattan Beach web site: http://www.ci.manhattan-beach.ca.us/

City of Manhattan Beach, Draft Housing Element. Blodgett Baylosis Associates.

City of Manhattan Beach, Water System Master Plan. Kennedy/Jenks Consultants, April, 1994.

City of Manhattan Beach Adopted Budget Fiscal Year 2001-2002.

Los Angeles International Airport Master Plan, Draft Environmental Impact Report. January, 2001.

Application for Certification 00-AFC-14, El Segundo Power Redevelopment Project Noise Analysis, El Segundo Power II LLC. December, 2001.

Regional Comprehensive Plan and Guide. Southern California Association of Governments. 1997.

Southern California Association of Governments (SCAG): 2001 Regional Transportation Plan Adopted Forecast. April 2001.

Traffic and Transportation Analysis for Manhattan Beach Circulation Element Update. Meyer, Mohaddes Associates. April, 2003.

URBEMIS Air Quality Model. South Coast Air Quality Management District in association with Jones and Stokes. 2001.

U.S. Census STF1, 2000.

6.2 Persons Contacted

Greenwood, Dana. City Engineer. City of Manhattan Beach Public Works Department. Personal Communication. February 3, 2003.

Morelan, Sherry. Revenue Services Manager. City of Manhattan Beach. Personal Communication. February 3, 2003.

Simonek, Laura. Manager Asset Management, Metropolitan Water District. Letter. January 27, 2003.

7.0 Preparers of the EIR

7.1 Lead Agency

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Manhattan Beach, CA 90266

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7.2 Consultants to the Agency

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Responsibility:	Overall preparation and coordination of the General Plan Update and environmental analysis
Principal-in-Charge:	Laura Stetson, AICP
General Plan Manager:	Veronica Tam, AICP
EIR Project Manager:	Irena Finkelstein, AICP
Environmental Planners:	N. Nita Bhave
	Justine Hearn
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Meyer, Mohaddes Associates
Traffic and Transportation Engineers
400 Oceangate, Suite 480
Long Beach, CA 90802

Telephone: (562) 432-8484
Fax: (562) 432-8485

Responsibility:	Preparation of traffic study
Principal-in-charge:	Gary Hamrick
Engineer:	Janet Harvey

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8.0 Responses to Comments on the Draft EIR

This section of the Final EIR contains comments and responses to comments received during the 45-day public review period for the Draft EIR that extended from August 8, 2003 to September 22, 2003. The written comments received are presented in chronological order by date of correspondence. Revisions to the EIR in response to comments are identified by shading, as illustrated in this sentence. Revisions made for internal consistency, such as typographical errors, are not shaded.

The following persons and agencies submitted written comments:

1. Mike Robertson, Senior Utilities Engineer, Consumer Protection and Safety Division, State of California Public Utilities Commission. September 12, 2003.

2. Stephen J. Buswell, ICR/CEQA Branch Chief, Regional Planning, Caltrans District 7. September 17, 2003.

3. James M. Hansen, Director, Department of Community, Economic, and Development Services, City of El Segundo. September 23, 2003.

4. Terry Roberts, Director, State Clearinghouse, Governor's Office of Planning and Research. September 23, 2003.

1. Mike Robertson, Senior Utilities Engineer, Consumer Protection and Safety Division, State of California Public Utilities Commission. September 12, 2003.

Response 1-1

The commentor recommends that any commercial or housing projects planned adjacent to or near rail corridors in the City be planned with the safety of rail corridors in mind. No active rail corridors traverse Manhattan Beach. A Green Line rail transit station is located just north of the City limits at Douglas Street. As with all projects proposed pursuant to adoption and implementation of the General Plan, individual development projects will be subject to detailed traffic analysis as part of the environmental review process. Where applicable, this analysis will take into account traffic volumes at any nearby at-grade highway-rail crossings and safety improvements at rail crossing locations.

STATE OF CALIFORNIA

GRAY DAVIS, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

September 12, 2003

SCH# 2002121140

Laura Jester
Senior Planner
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

Comment Letter #1

RE: Manhattan Beach General Plan

Dear Ms. Jester:

Comment

As the state agency responsible for rail safety within California, we recommend that any commercial or housing projects planned adjacent to or near the rail corridors in the City are planned with the safety of these rail corridors in mind. New developments may contribute to an increase in traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings.

1-1

Safety factors to consider include the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way.

The above-mentioned safety improvements should be considered when approval is sought for new development. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists in the City.

If you have any questions in this matter, please call me at (213) 576-7082.

Very truly yours,

Mike Robertson
Senior Utilities Engineer
Consumer Protection and Safety Division

2. Stephen J. Buswell, ICR/CEQA Branch Chief, Regional Planning, Caltrans District 7. September 17, 2003.

Response 2-1

The commentor recommends use of the Highway Capacity Methodology (HCM) for intersection analysis for signalized and unsignalized intersections to determine the traffic impacts associated with the General Plan. However, the Highway Capacity Analysis methodology, while a national standard, is not as appropriate for longer-term studies such as for general plans. Thus, the City of Manhattan Beach has adopted the Intersection Capacity Utilization (ICU) method for analysis of signalized intersections. This methodology is widely accepted throughout Southern California for short- and long-range intersection capacity analysis and forecasting. In addition, the ICU method is accepted for Congestion Management Program (CMP) analysis per the Los Angeles County Metropolitan Transportation Authority (MTA).

The Los Angeles County Congestion Management Plan (CMP) *Guidelines for CMP Transportation Impact Analysis (TIA)* states that "CMP TIA guidelines, particularly intersection analysis, are largely geared toward analysis of projects where land use types and design details are known. Where likely land uses are not defined (such as where project descriptions are limited to zoning designation and parcel size with no information on access location), the level of detail in the TIA may be adjusted accordingly. This may apply, for example, to some redevelopment area and citywide general plans, or community level specific plans. In such cases, where project definition is insufficient for meaningful intersection level of service analyses, CMP segment analysis may substitute." (*2002 Congestion Management Program* for Los Angeles County, page D-2)

The City of Manhattan Beach went beyond CMP requirements and did conduct some intersection-level analysis using the ICU methodology. However, the actual location, extent, and type of land use development in the long-term horizon cannot be precisely determined at this time. Therefore, the level of detail in the General Plan analysis is considered sufficient, given the amount of information available regarding future development. Details such as the level of service (LOS) for individual traffic movements, signal timing, assigned green time for each signal phase, and signal phasing sequences, are beyond the scope of long-range general plan analyses. It is also important to recognize that individual development projects of sufficient size and scope will be subject to detailed traffic analysis as part of the environmental review process.

Response 2-2

As stated on page 30 of the Draft EIR, "The I-405 monitoring station at the Inglewood Avenue interchange is also not expected to incur significant impacts because of the limited additional trips that the Plan would produce at this location." Even so, the General Plan Infrastructure Element contains the following goals and policies related to regional circulation:

Policy 1.4: Work with neighboring communities and other South Bay cities, as well as state and other agencies, to develop regional solutions to traffic problems which are regional in nature, and to mitigate impacts of development in neighboring communities that impact the City of Manhattan Beach.

Policy 2.3: Work with neighboring cities and regional and sub-regional agencies to widen and upgrade all major intersections and associated street segments within the City and adjacent jurisdictions to optimize traffic flow.

Furthermore, individual development projects of sufficient size and scope will be subject to detailed traffic analysis as part of the environmental review process. Therefore, intersections and freeway ramps, such as the on/off ramps at Inglewood Boulevard and I-405, will be assessed as part of development activity when it occurs. All impacts will be identified and acceptable mitigation measures stated, or a statement of overriding considerations will be developed for significant and unavoidable impacts.

Response 2-3

The Draft Circulation Element EIR Traffic Study, Appendix B of the Draft EIR, includes existing average daily traffic volumes, existing intersection LOS, future forecast average daily traffic volume, and future intersection LOS at build out of the General Plan. This is information necessary to analyze the traffic impacts associated with adoption and implementation of the Manhattan Beach General Plan. As discussed in Response 2-1, HCM was not used because it is not appropriate for longer-term studies such as for general plans. The City has adopted the ICU method for analysis of intersections. This methodology is widely accepted throughout Southern California for short- and long-range intersection capacity analysis and forecasting.

Response 2-4

The level of long-term development activity in Manhattan Beach will be relatively small given the already built-out characteristics of the City. The anticipated level of maximum development is not expected to generate the required number of trips on the closest CMP monitoring locations (I-405 east of Manhattan Beach) to warrant CMP analysis (over 150 trips per direction). As stated on page 30 of the Draft EIR, "The Sepulveda Boulevard/Rosecrans Avenue CMP arterial monitoring station would not be impacted by the project due to the limited amount of development accommodated by the General Plan land use policy, the scattered nature of development throughout the City, and the long-term nature of development that will be phased over time."

The City will continue to work with Caltrans to identify appropriate improvements to Sepulveda Boulevard through the City. As development occurs, the City will ensure that the environmental review process appropriately addresses and analyzes the impacts of that development on all State highways, including Sepulveda Boulevard and at freeway ramps, as appropriate. General Plan Infrastructure Element Policies 1.4 and 2.3 (see Response 2-2 above) support working with regional agencies, including Caltrans, to seek solutions to regional transportation issues, including regional and local traffic using Sepulveda Boulevard.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE: (213) 897-4429
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Flex your power!
Be energy efficient!

IGR/CEQA No. 030838AL, DEIR
City of Manhattan Beach General Plan
Vic. Citywide
SCH #: 2002121140

September 17, 2003

Ms. Laurie Jester, Senior Planner
Planning Department
City of Manhattan Beach
1400 Highland Ave.
Manhanttan Beach, CA 90266

Comment Letter #2

Dear Ms. Jester:

Comment

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project is an update of the City's General Plan

We have reviewed the Draft "**Environmental Impact Report**" for the City of Manhattan Beach General Plan. We recommend the Transportation/Traffic section of the report be revised to include the following items:

- We recommend as per Caltrans requirements (Guide for the preparation of Traffic Impact Studies) to use Highway Capacity Methodology (HCM) for intersection analysis (signalized/un-signalized) to determine the proposed **General Plan** generated traffic impacts. The study report should show the Level of Service (LOS) for each movement as well as the overall LOS of the intersection. Thus, reflecting in the analysis the current signal cycle timing, the assigned green time for each signal phase, and the signal phasing sequences. 2-1

- The study traffic report needs to analyze the freeway on/off ramps at Inglewood Avenue and I-405 using Highway Capacity Methodology (HCM) to determine the proposed future **General Plan** generated traffic impacts. The analysis needs to show the Level of Service (LOS) for each on/off ramp and the potential queuing or vehicle backup onto the freeway mainlines. 2-2

- The study traffic report needs to include the following exhibits to assist our review of the calculations: 2-3

  Exhibits:

  a- Existing updated traffic volumes for year 2003 at intersections, street segments, and freeway ramps during AM/PM peak hours.

  b- Existing lane geometry for intersections, street segments, and freeway ramps.

c- Future Traffic volumes for year 2025 without proposed **General Plan** generated traffic at intersections, street segments, and freeway ramps during AM/PM peak hours.

d- Future lane geometry for year 2025 at intersections, street segments, and freeway ramps to include all approved future improvement projects.

e- Traffic distribution for year 2025 showing proposed General Plan generated traffic percentage onto State highway system.

f- Future Traffic volumes for year 2025 for the proposed **General Plan** generated traffic only at intersections, street segments, and freeway ramps during AM/PM peak hours. 2-3

g- Future Traffic volumes for year 2025 with proposed **General Plan** generated traffic plus ambient growth at intersections, street segments, and freeway ramps during AM/PM peak hours.

h- Future lane geometry for year 2025 at intersections, street segments, and freeway ramps to include proposed mitigation measures.

In conclusion, the traffic study report needs to be revised to use Highway Capacity Methodology (HCM) for analysis of the signalized intersections, un-signalized intersection, street segments, and freeway ramps.

The traffic study report proposed dual left-turn lanes at westbound Marine Avenue and eastbound Manhattan Beach Boulevard to encourage motorists to use Sepulveda Boulevard. However, the report failed to propose any improvements to mitigate the future operating conditions of Sepulveda Boulevard, where the Level of Service in this segment is "F" during AM/PM peak hours. 2-4

If you have any questions, please feel free to contact me at (213) 897-4429 or Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 030838AL.

Sincerely,

STEPHEN J. BUSWELL
IGR/CEQA Branch Chief

Steve Buswell/AL

3. James M. Hansen, Director, Department of Community, Economic, and Development Services, City of El Segundo. September 23, 2003.

Response 3-3

The comment that the City of El Segundo has no comment at this time is acknowledged. No response is required.

City of El Segundo

September 23, 2003

Comment Letter #3

Ms. Laurie B. Jester
Senior Planner
City of Manhattan Beach Planning Division
1400 Highland Avenue
Manhattan Beach, CA 90266

SUBJECT: **Review of the Draft General Plan and Draft Environmental Impact Report for the General Plan**

Dear Laurie:

Comment

The City of El Segundo Community, Economic, and Development Services Department has reviewed the Draft General Plan, dated July 2003 and the Draft Environmental Impact Report for the General Plan, dated August 2003. The City appreciates the opportunity to comment on this project. However, we do not have any comments at this time.

3-1

Again, thank you for the opportunity to comment. We look forward to receiving and reviewing the Final General Plan and Final Environmental Impact Report. If you have any questions, please feel free to contact me or any other Planning Division staff member at (310) 524-2313.

Sincerely,

James M. Hansen, Director
Department of Community, Economic, and Development Services

N:\BJones\Letters\Manhattan Beach DEIR.doc

Community, Economic and Development Services Department
350 Main Street, El Segundo, California 90245-3895
Phone (310) 524-2380 FAX (310) 322-4167

4. Terry Roberts, Director, State Clearinghouse, Governor's Office of Planning and Research. September 23, 2003.

Response 4-1

The comment that the City has complied with the State Clearinghouse review requirements is acknowledged. No response is required.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
Governor

Tal Finney
Interim Director

September 23, 2003

Laurie Jester
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

Comment Letter #4

Subject: Manhattan Beach General Plan
SCH#: 2002121140

Dear Laurie Jester:

Comment

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on September 22, 2003, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

4-1

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2002121140
Project Title Manhattan Beach General Plan
Lead Agency Manhattan Beach, City of

Type EIR Draft EIR

Description The City of Manhattan Beach has completed a comprehensive update of its General Plan. All elements except the Housing Element have been revised. The Plan consist of the following elements. Land Use, Infrastructure. Community Rources, Community Safety, and Noise. The Plan also includes an Implementation Program. As the City is largely built out, General Plan Policy accommodates a limited amount of growth consisting of 842 residential units and 205,000 square feet of net new commercial and industrial development. New issues addressed in the Plan incude establishing a comprehensive Neighborhood Traffic Management Program.

Lead Agency Contact

Name Laurie Jester
Agency City of Manhattan Beach
Phone 310-802-5510 **Fax**
email
Address 1400 Highland Avenue
City Manhattan Beach **State** CA **Zip** 90266

Project Location

County Los Angeles
City Manhattan
Region
Cross Streets
Parcel No. various
Township **Range** **Section** **Base**

Proximity to:

Highways 405
Airports
Railways
Waterways
Schools
Land Use Currently, Manhattan Beach is developed within residential, commercial, industrial, public, and open space uses.

Project Issues Aesthetic/Visual; Air Quality; Drainage/Absorption; Noise; Population/Housing Balance; Public Services; Traffic/Circulation; Growth Inducing; Cumulative Effects

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Game, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Department of Housing and Community Development; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; State Lands Commission

Date Received 08/08/2003 **Start of Review** 08/08/2003 **End of Review** 09/22/2003

Note: Blanks in data fields result from insufficient information provided by lead agency.

Appendix A
Notice of Preparation and Responses

NOTICE OF PREPARATION

To:

Subject: **Notice of Preparation of Environmental Impact Report**

Lead Agency	**Environmental Consultant**
City of Manhattan Beach Planning Division	Cotton/Bridges/Associates, a Division of P&D Consultants
1400 Highland Avenue	800 E. Colorado Blvd. Suite 270
Manhattan Beach, CA 90266	Pasadena, CA 91101
Contact: Laurie B. Jester, Senior Planner	Contact: Laura Stetson, AICP, Principal

The City of Manhattan Beach will be the Lead Agency and will prepare an environmental impact report (EIR) for the project identified below. The City requests the views of your agency as to the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by Manhattan Beach when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to **Laurie B. Jester, Senior Planner** at the Planning Division address shown above. Please provide the name of a contact person in your agency.

Project Title: Manhattan Beach General Plan Update

Project Location: The Manhattan Beach General Plan area consists of properties contained within the City's corporate limits.

Project Description: The proposed project is a comprehensive update of the City of Manhattan Beach General Plan. California law requires each city to adopt a comprehensive, long-term general plan to guide the physical development of the incorporated city. The Manhattan Beach General Plan Update includes the following elements: Land Use, Infrastructure, Community Safety, Community Resources, and Noise. (The Housing Element has been considered by the City Council as a separate, earlier action.)

12/23/02
(Date)

Laurie B. Jester (by) RL
(Signature)

Senior Planner
(Title)

(310) 802-5510
(Telephone)

Notice of Completion

See NOTE below

SCH# _____

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

Project Title: Manhattan Beach General Plan Update
Lead Agency: City of Manhattan Beach Contact Person: Laurie B. Jester, Senior Planner
Street Address: 1400 Highland Avenue Phone: (310) 802-5510
City: Manhattan Beach Zip: 90266 County: Los Angeles

Project Location
County: Los Angeles City/Nearest Community: Manhattan Beach
Cross Streets: _____ Zip Code: _____ Total Acres: 2,017 acres
Assessor's Parcel No. various Section: _____ Twp. _____ Range: _____ Base: _____
Within 2 Miles: State Hwy #: 405 Freeway Waterways: None
Airports: None Railways: None Schools: various

Document Type

CEQA: ☒ NOP ☐ Supplemental/Subsequent
☐ Early Cons ☐ EIR (Prior SCH No.) _____
☐ Neg Dec ☐ Other _____
☐ Draft EIR

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other _____

Local Action Type

☒ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.) ☐ Other _____

Development Type

☐ Residential: *Units* _____ *Acres* _____
☐ Office: *Sq.ft.* _____ *Acres* _____ *Employees* _____
☐ Commercial: *Sq.ft.* _____ *Acres* _____ *Employees* _____
☐ Educational _____
☐ Recreational _____

☐ Water Facilities: *Type* _____ *MGD* _____
☐ Transportation: *Type* _____
☐ Mining: *Mineral* _____
☐ Waste Treatment: *Type* _____
☐ Hazardous Waste: *Type* _____
☒ Other: General Plan Update

Project Issues Discussed in Document

☒ Aesthetic/Visual ☒ Flood Plain/Flooding ☒ Schools/Universities ☒ Water Quality
☒ Agricultural Land ☒ Forest Land/Fire Hazard ☒ Septic Systems ☒ Water Supply/Groundwater
☒ Air Quality ☒ Geologic/Seismic ☒ Sewer Capacity ☒ Wetland/Riparian
☒ Archeological/Historical ☒ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Wildlife
☐ Coastal Zone ☒ Noise ☒ Solid Waste ☒ Growth Inducing
☒ Drainage/Absorption ☒ Population/Housing ☒ Toxic/Hazardous ☒ Land use
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☒ Cumulative Effects
☐ Fiscal ☒ Recreation/Parks ☒ Vegetation ☐ Other _____

Present Land Use/Zoning/General Plan Use: Currently, Manhattan Beach is developed with residential, commercial, industrial, public, and open space uses.

Project Description: The project is the adoption and implementation of an updated General Plan of the City of Manhattan Beach. The updated General Plan continues the City's current land use patterns, and no substantial changes are proposed. The Plan introduces mixed commercial/residential uses at a few selected locations within the city.

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document), please fill it in.

Reviewing Agencies Checklist

KEY
s = Document sent by lead agency
x = Document sent by SCH
✓ = Suggested distribution

_____ Resources Agency
_____ Boating & Waterways
__✓__ Coastal Commission
_____ Coastal Conservancy
_____ Colorado River Board
_____ Conservancy
__✓__ Fish & Game
_____ Forestry
_____ Office of Historic Preservation
_____ Parks & Recreation
_____ Reclamation
_____ S.F. Bay Conservation & Development Commission
_____ Water Resources (DWR)
_____ Business, Transportation & Housing
_____ Aeronautics
__✓__ California Highway Patrol
__✓__ CALTRANS District # 7
_____ Department of Transportation Planning (headquarters)
_____ Housing & Community Development
_____ Food & Agriculture
_____ Health & Welfare
_____ Health Services _____
_____ State & Consumer Services
_____ General Services
_____ OLA (Schools)

_____ Cal-EPA
_____ Air Resources Board
__✓__ APCD/AQMD
__✓__ California Waste Management Board
_____ SWRCB: Clean Water Grants
_____ SWRCB: Delta Unit
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
__✓__ Regional WQCB (Los Angeles)
_____ Youth & Adult Corrections
_____ Corrections
_____ Independent Commissions & Offices
_____ Energy Commission
__✓__ Native American Heritage Commission
_____ Public Utilities Commission
_____ Santa Monica Mountains Conservancy
_____ State Lands Commission
_____ Tahoe Regional Planning Agency

_____ Other _____

Public Review Period (to be filled in by lead agency)

Starting Date: December 30, 2002 Ending Date: January 28, 2003

Signature Laurie Jesterby Date 12/23/02

Lead Agency (Complete if applicable):

Consulting Firm: Cotton/Bridges/Associates

Address: 800 E. Colorado Blvd. Suite 270

City/State/Zip: Pasadena, CA 91101-2103

Contact: Irena Finkelstein, AICP

Phone: (626) 304-0102

Applicant: Same as Lead Agency

Address: _____

City/State/Zip: _____

Phone: (___) _____

For SCH Use Only:

Date Received at SCH _____

Date Review Starts _____

Date to Agencies _____

Date to SCH _____

Clearance Date _____

Notes:

Initial Study

PROPOSED MANHATTAN BEACH GENERAL PLAN UPDATE

December, 2002

Lead Agency:
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

Contact:
Laurie B. Jester, Senior Planner
City of Manhattan Beach
Community Development Department
310-802-5510

Consultant to the City:
Cotton/Bridges/Associates
A Division of P&D Consultants
Urban Planning and Environmental Consulting
800 E. Colorado Boulevard, Suite 270
Pasadena, CA 91101

1339.00

Project Description

The Project

The proposed project is the adoption and implementation of the updated City of Manhattan Beach General Plan, referred to herein as the Draft General Plan. The Draft General Plan addresses the State-mandated elements (land use, circulation, safety, open space, conservation, and noise), as well as additional issues not required by State law, which are nonetheless important to the community[1]. The Implementation Program, developed as a part of the Draft General Plan, provides strategies to implement the adopted policies set forth in the Draft General Plan.

The current General Plan was adopted in 1988. The Draft General Plan, as proposed, will continue the framework land use policy of the current General Plan by focusing on Manhattan Beach's desire to preserve and enhance the community's unique characteristics. These characteristics include the City's low-profile development and small town character, unique features of varied residential neighborhoods, rich cultural arts programs, quality parks, and wide range of commercial businesses. To bring about the community vision, the Draft General Plan contains specific goals and policies to guide long-term decision-making regarding land use, traffic circulation, community identity, public safety, park usage and development, public services and general community resources.

The Draft General Plan has not yet been completed. However, this Initial Study identifies key features of the Plan and provides the public with the opportunity to comment on potential environmental effects that may be associated with Plan adoption and implementation. Through this process, the City may address public concerns in the Draft General Plan. The analysis presented in this Initial Study indicates that the Draft General Plan has the potential to result in significant environmental effects. Thus, the City will prepare an environmental impact report (EIR) to examine the issues identified herein.

Regional Setting

Manhattan Beach is located in the southwest portion of Los Angeles County, along the Pacific Ocean, as shown in the inset map in Figure 1. Sepulveda Boulevard (State Route 1) runs north-south through the center of the City. Manhattan Beach is bordered by the cities of El Segundo to the north, Redondo Beach and Hawthorne to the east, and Hermosa Beach to the south.

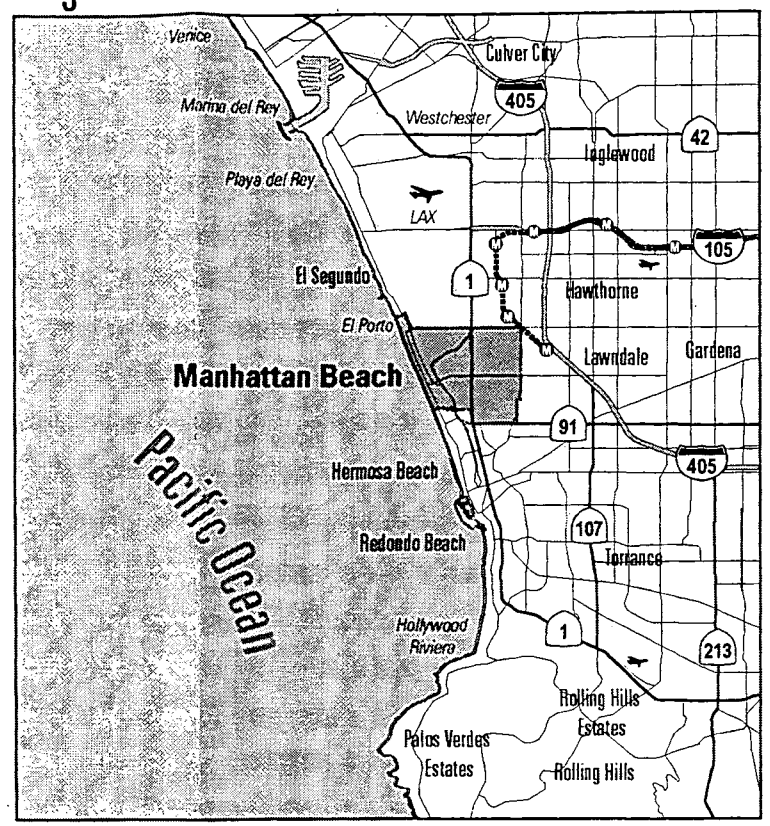
Planning Area

The Draft General Plan addresses all properties within the corporate City boundary (See Figure 1). The City encompasses nearly 4 square miles, or 2,017 acres, of land developed with residential, commercial, industrial, open space, and public uses.

[1] The State-mandated Housing Element has already been completed and is anticipated to be adopted in the near future prior to the balance of the General Plan. Thus, it is not part of this General Plan update.

City Boundary/Planning Area

Regional Location



Source: Meyer, Mohaddes, Inc., City of Manhattan Beach General Plan; 2002.

Figure 1

Manhattan Beach Planning Area

Purpose and Objectives of the General Plan

A general plan serves as the blueprint for future growth and development in a city. Thus, the plan must contain policies and programs designed to provide decision-makers with a solid basis for decisions related to land use and development. The Draft General Plan is founded upon the community's vision and long-term goals for Manhattan Beach, and focuses on the following key issues identified by the community:

- Preserve small town atmosphere
- Protect the unique community character of different residential neighborhoods
- Encourage open space through the City
- Support the viable commercial areas
- Maintain the unique character of the various commercial areas
- Minimize the intrusion of incompatible land uses
- Develop positive community aesthetics
- Provide a balanced transportation system
- Manage traffic effectively
- Provide for parking needs
- Facilitate the use of non-motorized transportation
- Maintain reliable water, sewage, and storm drainage systems
- Underground utility lines as feasible
- Establish a reliable communications system
- Minimize the risk of hazards
- Provide a high level of emergency and protective services
- Conserve the community's natural resources
- Provide recreational opportunities
- Manage an effective recycling program
- Enhance arts and cultural programs
- Mitigate the various sources of noise pollution

Project Characteristics

Plan Elements

The Draft General Plan consists of elements that altogether fulfill State law requirements for major elements related to planning. Each element sets forth goals and related policies for that particular planning issue. Table 1 shows how the structure of the Plan corresponds to the mandated elements defined by the State.

Table 1 - Mandated Elements of the Manhattan Beach Updated General Plan

State Mandated General Plan Elements	Manhattan Beach Updated General Plan Elements				
	Land Use	Infrastructure	Community Safety	Community Resources	Noise
Land Use	✓				
Circulation		✓			
Safety			✓		
Open Space				✓	
Conservation				✓	
Noise					✓

Land Use Element

In terms of guiding the physical development of Manhattan Beach, the Land Use Element is of primary importance. The Element establishes land uses classifications and intensities of development for both private and public lands throughout the City, providing a rational and ordered approach to future development while preserving and enhancing important community features.

The Element emphasizes maintenance of low-profile development, protection of unique features of individual neighborhoods, and retention and enhancement of landscaped open spaces throughout the City. A few minor changes are proposed to some residential designations. To encourage pedestrian-oriented development, the land use plan provides for mixed-use residential/commercial development at appropriate locations within the Downtown and North End.

The Element addresses the community's desire to maintain the viability of commercial areas by supporting and encouraging the upgrading and growth of businesses. Sepulveda Boulevard will remain as a focal point for regional-serving commercial uses. Downtown will provide businesses and services for local residents and visitors, and the North End will continue its local-serving character. This Element also focuses on achieving a positive community aesthetic by enhancing and unifying design quality and standards for new development. Specifically, policies address new commercial development, open and public spaces, and public and commercial signage.

Infrastructure Element

The Infrastructure Element addresses the City's street system and other public infrastructure. The Circulation Section of the Element focuses on improving the existing circulation system to move commuter traffic through the City on arterial streets thus protecting residential streets; providing sufficient parking to protect residential neighborhoods from spillover parking created by nearby commercial, public, and other uses; encouraging pedestrian-oriented development; and supporting pedestrian, bicycle, and other alternative modes of transportation. The Public Facilities Section of the Element focuses on maintaining safe, reliable, and efficient water, sewer, and storm drainage systems, and reliable utilities and communications infrastructure.

Community Safety Element

The Community Safety Element identifies and addresses natural and man-made conditions within or near the City that represent a potential danger to residents, structures, or infrastructure. The Element establishes goals and policies to minimize the risk associated with crime, pollution, fires, natural hazards, and hazardous materials. Emergency preparedness planning, including identifying actions needed to manage crisis situations, and maintaining high levels of City police and emergency services are also addressed.

Community Resources Element

The Community Resources Element focuses on preserving and enhancing the natural resources that make Manhattan Beach unique among urban communities in Southern California. Conservation issues addressed include providing additional open space, recreation programs, and other facilities to meet the needs of all the community. Other important issues include encouraging additional landscaping, enhancing cultural arts programs, and preserving and protecting mature trees in Manhattan Beach.

Noise Element

The Noise Element examines ways to minimize the effects and extent of noise impacts from traffic and other sources within Manhattan Beach and particular sources, including the El Segundo Power facility, Chevron Refinery, and the Los Angeles International Airport just outside of the City. Noise standards and land use compatibility guidelines are identified to protect noise-sensitive land uses.

Implementation Program

The Draft General Plan will include an Implementation Program that provides City staff and decision-makers with choices for translating goals and policies of each General Plan Element into specific actions. The recommended actions will serve as a basis for making future decisions.

Initial Study

1. **Project title:** Manhattan Beach General Plan Update

2. **Lead agency name and address:** City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

3. **Contact person and phone number:** Laurie B. Jester, Senior Planner
City of Manhattan Beach Planning Division
310-802-5504

4. **Project location:** City of Manhattan Beach, Los Angeles County

5. **Project sponsor's name and address:** Same as Lead Agency

6. **General Plan designation:** Not applicable

7. **Zoning:** Not applicable

8. **Description of project:** The project is the adoption and implementation of the updated General Plan. The project description preceding this checklist details each element.

9. **Surrounding land uses and setting:** Manhattan Beach lies along the coast of the Pacific Ocean in the Los Angeles South Bay and is bordered by the cities of El Segundo to the north, Hawthorne and Redondo Beach to the east, and Hermosa Beach to the south. Approximately 33,850 people live within the City.

   The City is highly urbanized with limited vacant land available for future new development. Manhattan Beach is predominantly a residential community with single-family homes comprising the majority of the housing stock. Commercial uses represent the second most common use and are concentrated on two of the main arterials in the City, Sepulveda Boulevard and Manhattan Beach Boulevard, and the Downtown and North End areas. Parks and open space are the third most common use, followed by public facilities and industrial uses.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☒ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☒ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☒ Transportation/Traffic
☒ Utilities/Service Systems	☒ Mandatory Findings of Significance	

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: _____ _____

Laurie B. Jester, Senior Planner
City of Manhattan Beach Planning Division
1400 Highland Avenue
Manhattan Beach, California 90266
310-802-5510

IS SUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
a. The topography in Manhattan Beach consists of rolling hills, some of which afford vistas toward the ocean. Coastal areas along the beaches provide direct scenic vistas of the developed coastline. Although views are not protected by the Manhattan Beach Municipal Code, several goals and policies in the Land Use Element aim to minimize potential effects on scenic vistas by limiting the height of new development to 2 to 3 stories, and restricting the bulk of buildings by utilizing open space, setbacks, landscaping, and architectural detailing. The Draft General Plan will have an overall beneficial effect of minimizing negative impacts to scenic vistas. Impact will be less than significant.				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
b. The portion of Pacific Coast Highway, Stage Highway 1 (Sepulveda Boulevard) that passes through Manhattan Beach is not designated as a state scenic highway. The Draft General Plan identifies specific goals and policies aimed to enhance the visual environment of the community. These include encouraging the protection of existing mature trees, implementing standards for non-intrusive street and building signage, encouraging the landscaping of walkstreets and private properties, and developing a comprehensive streetscape improvement plan. Thus, the Draft General Plan will have no adverse impact with regard to scenic resources.				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
c. The Land Use Element contains several goals and policies related to the urban design of new and existing development to maintain and enhance the visual character and quality of the community. These policies encourage the use of design guidelines to improve the visual identification of unique commercial areas in Downtown, improve the aesthetic quality of businesses within the North End area, support quality design in new construction, and maintain distinctive neighborhood characteristics while making public improvements. Hence, impacts will be beneficial.				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
d. The Land Use Element addresses the issue of light by encouraging the separation of residential areas from businesses which produce light or glare through the use of landscaping, setbacks, and other techniques. New developments will comply with these policies, and impact will be less than significant.				

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to a non-agricultural use?	☐	☐	☐	☒
a through c. No agricultural lands or uses exist in the City. Manhattan Beach is fully urbanized.				
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
a. The Draft General Plan addresses compliance with the current Air Quality Management Plan (AQMP) for the South Coast Air Basin through policies designed to ensure that City land use decisions work to implement and comply with federal, State, and local regulations pertaining to air quality. The Draft General Plan supports the AQMP and thus will neither conflict with nor obstruct implementation of the AQMP.				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
b through d. Development pursuant to Draft General Plan land use policy will generate additional vehicle trips that will subsequently produce exhaust emissions, and may effect some sensitive receptors at some locations throughout the community. Impact may be significant given that the South Coast Air Basin is a non-attainment area with respect to achieving federal and State air quality standards. These issues will be addressed in the EIR.				
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
e. Development anticipated to occur pursuant to the Draft General Plan will predominantly be residential, commercial, and mixed-use. Typically, these uses are not generators of odors. Restaurants and similar uses that may generate odors will comply with the existing South Coast Air Quality Management District regulations regarding odor control. Impact will be less than significant.				
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
a through f. Manhattan Beach is a built-out urban community. There are no riparian habitats, wetlands, or other sensitive habitat conservation areas within the city. Therefore, the Draft General Plan will not affect such biological resources.				
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
a. As stated in the *Manhattan Beach, 80 Year Anniversary Magazine*, the City identifies the Manhattan Beach State Pier as the "City's most notable historic site." The community of Manhattan Beach also reveres the historic beach cottage located in Polliwog Park, which currently houses the Manhattan Beach Historical Society. The Draft General Plan will not affect the uses or any features of the Pier or the historic beach cottage. In addition, residents consider some of the existing coastal residential structures to be of local historic significance. The Plan contains policies to encourage the preservation and enhancement of the unique residential structures within the community, and to develop a historic preservation ordinance to protect buildings, landscape, and other features important to the City's history. Hence, the Draft General Plan will have a beneficial effect on local historic resources; no adverse impact will result.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
b through d. Manhattan Beach is virtually built out and does not contain any known archaeological or paleontological resources. The potential for uncovering significant resources during any construction activity is considered remote, given that no such resources have been discovered during past development and that all new development facilitated by the Plan will occur on previously developed sites. Thus, no adverse impacts will result.				
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
i. The Alquist-Priolo Earthquake Fault Zone Map (Inglewood Quadrangle) indicates no known earthquake faults or any substantial evidence of a known fault within the city. Therefore, no impact will result.				

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☒	☐
ii. Manhattan Beach is subject to ground shaking in the event of a major seismic event, as is most of Southern California. Continued compliance with existing building codes and standards will ensure that impacts from ground shaking will be minimized; impact will be less than significant.				
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iii. Liquefaction can occur in locations where high groundwater levels interact with loose, unconsolidated soils, causing them to lose cohesion when subject to ground motion. According to the Seismic Hazard Zones Map, Venice Quadrangle, an area where liquefaction has occurred or conditions indicate a potential occurrence within Manhattan Beach is limited to a strip of coastal sands along the ocean. Since the Draft General Plan proposes no change to the beach areas, impact will be less than significant.				
iv) Landslides?	☐	☐	☒	☐
iv. Manhattan Beach lies within the Los Angeles Basin geological region. Geologic formations underlying the city consist largely of ancient marine and river deposits characterized by sandy and clay-like soils, which as stated in the current General Plan, present a low level of risk in terms of landslides or slope failure. The Seismic Hazard Zones Map, Venice Quadrangle, identifies a small portion of land in the northwest corner of the city that experienced previous landslide movement or local conditions indicate a potential ground displacement occurrence. This portion of land is already developed. Impact will be less than significant.				
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
b through d. Manhattan Beach is a built-out city with only a few remaining vacant parcels. Future development on these vacant parcels or redevelopment on previously developed parcels pursuant to the Draft General Plan will use specific engineering techniques identified in soils studies required of each individual development project. Continued compliance with existing requirements will ensure that no significant impact will result.				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
e. All development in the City is connected to a sewer system for the disposal of wastewater. Septic tanks are prohibited in all new developments. No impact will result.				

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
a through c. Businesses that use, transport, or dispose of hazardous materials will be required to comply with extensive federal, State, and local hazardous materials regulations. In addition, the Draft General Plan contains specific goals and policies to minimize risks associated with such hazards and hazardous materials, including monitoring underground emissions and hazards in Manhattan Village, promoting routes that minimize public exposure to risk from vehicles carrying hazardous materials, and continuing to identify past and present hazardous waste generators and disposal sites. Therefore, impacts will be less than significant.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
d. The Department of Toxic Substances Control's Hazardous Waste and Substance Site List (Cortese List) lists no hazardous material sites within Manhattan Beach. Therefore, no impact will result.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
e and f. The city is located more than two miles away from the Los Angeles International Airport. No private airstrip is located within or adjacent to Manhattan Beach. No impact will result.				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
g. The Draft General Plan contains specific goals and polices to maintain effective and high-quality emergency response services for the community, including cooperating with other South Bay jurisdictions to maintain an up-to-date regional emergency response system; disseminating information to residents, businesses, and schools on preparing for and responding to natural disasters; and ensuring that all street signs and street numbers are visible and legible to minimize emergency response time. No adverse impact will result.				
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
h. There are no wildlands in Manhattan Beach. No impact will result.				
VIII. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
a. New development that occurs pursuant to Draft General Plan policy will be limited due to the built out nature of the community and will consist of typical residential and commercial urban uses. New development will occur largely through the reuse of already developed sites. Each individual development project will comply with existing water quality standards and waste discharge regulations set forth by the Regional Water Quality Control Board, Los Angeles Region and the Manhattan Beach Municipal Code. Continued compliance with existing regulations will ensure a less than significant impact.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☒	☐	☐	☐
b. As stated in the City's Water System Master Plan, Manhattan Beach receives the majority of its water supply from the Metropolitan Water District of Southern California and the remainder from two underground wells in the City of Redondo Beach. Since future development pursuant to the Draft General Plan could generate demand for additional water, this issue will be examined in the EIR.				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐

c through f. Manhattan Beach is a fully developed city with little vacant land remaining. Thus, development occurring pursuant to the Draft General Plan will involve the recycling of already developed land to new uses that will neither substantially increase nor change the existing runoff volumes or patterns.

The existing storm drain system is primarily owned and operated by the Los Angeles County Department of Public Works, with remaining storm drain facilities owned and operated by the City. Development facilitated by the Draft General Plan will occur on properties which have been previously developed. In compliance with existing requirements, new developments will provide all necessary drainage improvements on site and pay connection fees to the County and City systems. These fees are intended to fund area-wide and regional improvements to drainage infrastructure needed to adequately service new development. In addition, all new development will comply with storm water regulations set forth by the Regional Water Quality Control Board, Los Angeles Region and the standards in the Manhattan Beach Municipal Code. Compliance with these regulations will minimize potential impacts. The Draft General Plan also contains a policy supporting existing regulations that ensure the City is in compliance with federal and State laws regarding storm water pollution prevention. Impact will be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

g and h. According to the National Flood Insurance Rate Maps (FIRMs) prepared by FEMA, no 100-year flood hazard area is mapped within the city. Thus, no impact will result.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

i. No levee or dam is located in close proximity to Manhattan Beach. No adverse impact will result.

j) Inundation of seiche, tsunami, or mudflow?	☐	☐	☒	☐

j. Due to its topography and location, Manhattan Beach is not subject to seiches or mud flows. As the City is located on the Pacific Ocean, in the event of a tsunami, the beach area of the City may be inundated depending on the magnitude of the event. However, considering that tsunamis are extremely rare events, this impact is considered less than significant.

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
a. The Land Use Element of the Draft General Plan does not involve any significant change to established land use patterns and has no potential to physically divide the community. No impact will result.				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
b. The Draft General Plan will facilitate minimal development on the remaining vacant and underutilized parcels within Manhattan Beach and redevelopment of currently developed sites. As no specific plans or other regulatory plans affect the City, the updated General Plan will not cause any conflict.				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
c. No habitat or natural community conservation plan applies to Manhattan Beach. Therefore, no impact will result.				
X. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
a and b. As stated in the current Manhattan Beach General Plan, the City is "adjacent to one of the major oil fields in the Los Angeles area; however, its resources have been largely extracted and there are no remaining active wells in the City. There are no other mineral resources with any commercial potential in the City." Therefore, the Draft General Plan will have no impact on mineral resources.				
XI. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
a and b. Development pursuant to the Draft General Plan has minimal potential to expose residents to noise levels in excess of regulatory standards or groundborne vibration due to land use types and intensities permitted by zoning regulations. In addition, new development will comply with regulations set forth by the Manhattan Beach Municipal Code with regards to noise and, if necessary, will draft site-specific noise impact studies which will address project-specific noise generation. Impact will be less than significant.				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
c. Development pursuant to the Draft General Plan could result in additional vehicular noise along the City's major arterial streets. In addition, the City of Manhattan Beach has identified stationary noise sources outside the city, including but not limited to the El Segundo Power Generation Facility, the Los Angeles International Airport, and the Chevron Refinery. These issues will be addressed in the EIR.				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
e and f. Manhattan Beach is not located within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip. The Los Angeles International Airport, located approximately four miles to the north, is identified as a stationary noise source impacting residents in Manhattan Beach. However, associated noise levels are generally not considered excessive and usually do not impact daily activities in the City. Impact is less than significant.				
XII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
a. The Draft General Plan provides for mixed commercial/residential land uses at a few locations that could result in modest housing development, and thus a limited population growth. Most of the future development pursuant to the Draft General Plan will involve the reuse of previously developed sites. Reuse of sites for new commercial development could indirectly generate limited additional population growth in the region through the provision of additional employment opportunities. Even though the Draft General Plan's potential to induce further population growth in the City is limited, these issues will be discussed in the EIR.				

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

b and c. The Land Use Element includes a mixed-use land use designation, consistent with the current designation, which could result in development of additional housing within the designated areas. In addition, the zoning designation in portions of the Downtown area will change from commercial to residential. Thus, no housing or people will be displaced as a result of the Draft General Plan. No adverse impact will result.

XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

a. The Draft General Plan will not facilitate significant population growth in Manhattan Beach. Existing public facilities adequately service the community, and there is no anticipated need to construct major new fire, police, schools, or other governmental facilities or substantially alter existing facilities in response to new development. The Plan contains goals and policies to maintain quality public services for the community residents, including maintaining a high level of police protection, providing parks and recreational opportunities for all residents, and enhancing cultural arts programs in the City.

The Draft General Plan includes a number of policies aimed at improving existing parks and exploring the potential for additional parkland and open space in Manhattan Beach. These policies could result in conversion of some donated or acquired residential properties into pocket parks or open space. No major construction is anticipated as a result of these policies, and impact will be less than significant.

XIV. RECREATION				

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
a and b. Parks and recreational facilities in Manhattan Beach include sports facilities, community parks, a pedestrian greenway, beaches, and school playgrounds. The Draft General Plan could result in a limited population growth; however, this growth has no potential to accelerate deterioration of existing recreational facilities. In addition, as discussed in item XIII, the Draft General Plan includes policies that promote the donation and acquisition of properties for the purpose of conversion into pocket parks and open space areas. This will have the beneficial effect of increasing the amount of open space. No major construction of new facilities that could result in substantial adverse environmental impacts is associated with these policies. Impact will be less than significant.				
XV. TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☒	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
a and b. The Infrastructure Element emphasizes the maintenance of a balanced, multi-modal transportation system that responds safety and efficiently to demands of existing and planned land uses. Nonetheless, since development pursuant to the Draft General Plan may result in additional vehicle trips, traffic issues will be examined in the EIR.				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
c. The project does not include modifications to any airport or other aircraft facility or operations. No impact will occur.				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
d and e. The Draft General Plan does not propose any physical changes to the roadway system and thus will not create hazardous conditions. No changes to the established land use patterns will result. Draft General Plan goals and policies promote compatible development and a safe environment for Manhattan Beach residents. Each future individual development project will undergo site-specific review in compliance with existing City regulations, including the review of a site-specific design. Compliance with these City regulations will ensure compatible uses and safe design features on a project-by-project basis. Impact will be less than significant.				
f) Result in inadequate parking capacity?	☐	☐	☒	☐
f. All future individual development projects pursuant to the Draft General Plan will be required to comply with the parking standards established in the Manhattan Beach Municipal Code associated for each respective land use. Compliance with the established parking standards will ensure adequate parking capacities on a project-by-project basis. Impact will be less than significant.				
g) Conflict with adopted policies, plans, or program supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒
g. Alternative transportation modes are encouraged through a number of policies in the Infrastructure Element, in support of regional plans. No adverse impact will result.				
XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
a. The existing types, patterns, and intensities of development will remain virtually the same. Thus, the volume and quality of wastewater generated will not markedly change. Impact will be less than significant.				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
b and c. Manhattan Beach currently has a Water System Master Plan, Wastewater System Master Plan, and a Storm Drain Master Plan. These plans will continue to be implemented throughout the life of the General Plan. The Draft General Plan does not propose substantial changes to existing land use patterns or intensities of use. With only limited growth expected, no need for major construction of new or altered water, wastewater, or drainage facilities is anticipated. New development will occur largely through reuse of previously developed sites that are adequately served by the existing utility infrastructure. Impact will be less than significant.				

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
d. As discussed in VIII b, the issue of an adequate water supply to support future development pursuant to the Draft General Plan will be discussed in the EIR.				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
e. As discussed in items XVI a, b, and c above, Draft General Plan policy will not result in any significant change in development intensity or land uses. The volume of wastewater generated will not notably change and will not result in a need for expanded treatment capacity. Impact will be less than significant.				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
f. Landfill space in Los Angeles County is constrained. This issue is addressed on a regional level through State legislation. The Draft General Plan contains specific goals and policies aimed to reduce waste generated, including expanding household, commercial, industrial, and institutional waste programs, and considering the establishment of construction recycling waste requirements. However, since development pursuant to the Draft General Plan will generate additional waste, this issue will be discussed in the EIR.				
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
g. State law requires all jurisdictions to continue waste diversion programs to meet mandated reduction targets. Manhattan Beach has programs in place towards this end. The Draft General Plan includes specific goals and policies aimed to further reduce the amount of waste generated that requires disposal at landfills, including an expanded City-wide recycling program. Compliance will be achieved.				
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒

ISSUES:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporation	Less Than Significant Impact	No Impact
a. As discussed in this checklist, development pursuant to the Draft General Plan will not impact any unique biological resources, habitats, or cultural resources. Thus, the Plan does not have the potential to substantially reduce the habitat of any fish or wildlife species, cause any fish or wildlife population to drop below self-sustaining levels, threaten to eliminate any plant or animal community, reduce the number or restrict the range of any rare or endangered plant or animal, or eliminate important examples of major periods of California prehistory.				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
b. The Draft General Plan is a long-term community plan to guide future development in Manhattan Beach. The cumulative effects of subsequent development projects occurring pursuant to the Plan will be examined in the EIR.				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐
c. The purpose of the Draft General Plan is to guide long-term development and to provide a safe living and working environment for the residents of Manhattan Beach. The Plan is anticipated to result in an overall beneficial impact on human beings. No substantial adverse effects are anticipated.				

REFERENCES

Alquist-Priolo Earthquake Fault Zones Map, Inglewood Quadrangle, 1997.

California Department of Conservation Division of Mines and Geology website: www.consrv.ca.gov/dmg.

California Resources Agency website: http:\\resources.ca.gov.

Cotton/Bridges/Associates. *Manhattan Beach General Plan Update, Final Goals & Policies – As Recommended by the GPAC,* August 2002.

Department of Toxic Substances Control's Hazardous Waste and Substances Site List (Cortese List), September, 2002.

Flood Insurance Rate Map, National Flood Insurance Program.

Kennedy/Jenks Consultants. *Manhattan Beach Water System Master Plan,* April 1994.

Kennedy/Jenks Consultants. *Manhattan Beach Waste Water System Master Plan,* July 1994.

Kennedy/Jenks Consultants. *Manhattan Beach Storm Drain System Master Plan,* June 1997.

Manhattan Beach 80 Year Anniversary Magazine

Manhattan Beach Draft General Plan, 2002.

Manhattan Beach General Plan, February, 1988.

Manhattan Beach Municipal Code.

Seismic Hazard Zones, Venice Quadrangle, Preliminary Map, September, 1998.

PREPARERS OF THE INITIAL STUDY

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January 2, 2002

Ms. Laurie B. Jester
Senior Planner
City of Manhattan Beach Planning Division
1400 Highland Avenue
Manhattan Beach, CA 90266

Dear Ms. Jester:

Notice of Preparation of a Draft Environmental Impact Report for Manhattan Beach General Plan Update

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The AQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR).

Air Quality Analysis

The AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the AQMD's Subscription Services Department by calling (909) 396-3720.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be considered. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the evaluation. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the AQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

AQMD rules and relevant air quality reports and data are available by calling the AQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the AQMD's World Wide Web Homepage (http://www.aqmd.gov).

The AQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Dr. Charles Blankson, Transportation Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:CB:li

LAC021226-01LI
Control Number

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January 8, 2003

IN REPLY PLEASE
REFER TO FILE: W-9

Ms. Laurie B. Jester
Senior Planner
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

Dear Ms. Jester:

REVIEW OF ENVIRONMENTAL DOCUMENTS
NOTICE OF PREPARATION OF ENVIRONMENTAL IMPACT REPORT
CITY OF MANHATTAN BEACH

As requested, we have reviewed the Notice of Preparation of an Environmental Impact Report for the above project and have no comments to offer. The City of Manhattan Beach is not within the Los Angeles County Waterworks or Sewer Maintenance Districts' service area.

If you have any questions, please contact Mr. Kyle Kornelis at (626) 300-3322.

Very truly yours,

JAMES A. NOYES
Director of Public Works

Nicholas A. Aghahn

for BRIAN D. HOOPER
Assistant Deputy Director
Waterworks and Sewer Maintenance Division

KK:tm
SM8709

Copy Laurie - CBA - return

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

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www.scag.ca.gov

January 10, 2003

Ms. Laurie B. Jester
Senior Planner
City of Manhattan Beach
Community Development Department
1400 Highland Avenue
Manhattan Beach, CA 90266

RE: **Comments on the Notice of Preparation for a Draft Environmental Impact Report for the City of Manhattan Beach General Plan Update – SCAG No. I 20020658**

Dear Ms. Jester:

Thank you for submitting the **Notice of Preparation for a Draft Environmental Impact Report for the City of Manhattan Beach General Plan Update** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

We have reviewed the aforementioned **Notice of Preparation** and have determined that **the proposed Project is regionally significant per California Environmental Quality Act (CEQA) Guidelines (Section 15206).** The proposed Project considers a local general plan, element, or amendment for which an environmental impact report is being prepared. CEQA requires that EIRs discuss any inconsistencies between the proposed project and applicable general plans and **regional plans (Section 15125 [d]).** If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Policies of SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan, which may be applicable to your project, are outlined in the attachment. **We expect the Draft EIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your Draft EIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the Proposed Project.**

Please provide a minimum of 45 days for SCAG to review the Draft EIR when this document is available. If you have any questions regarding the attached comments, please contact me at (213) 236-1867. Thank you.

Sincerely,

JEFFREY M. SMITH, AICP
Senior Regional Planner
Intergovernmental Review

COMMENTS ON THE PROPOSAL TO DEVELOP A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF MANHATTAN BEACH GENERAL PLAN UPDATE SCAG NO. I 20020658

PROJECT DESCRIPTION

The proposed Project considers a comprehensive update of the City of Manhattan Beach General Plan.

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The **Growth Management Chapter (GMC)** of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly applicable and should be addressed in the Draft EIR for the City of Manhattan Beach General Plan Update.

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

Regional Growth Forecasts

The Draft EIR should reflect the most current SCAG forecasts which are the 2001 RTP (April 2001) Population, Household and Employment forecasts for the South Bay Cities Council of Governments (SBCCOG) subregion and the City of Manhattan Beach. These forecast follows:

SBCCOG Subregion	2000	2005	2010	2015	2020	2025
Population	862,790	906,543	910,969	914,105	919,172	924,407
Household	296,331	300,702	305,504	310,193	315,456	321,203
Employment	435,571	455,320	475,716	487,776	498,807	510,517

City of Man. Beach	2000	2005	2010	2015	2020	2025
Population	34,889	35,407	35,462	35,456	35,490	35,524
Household	14,436	14,513	14,538	14,562	14,590	14,619
Employment	13,691	14,088	14,486	14,724	14,942	15,176

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL STANDARD OF LIVING

The Growth Management goals to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs, and that enable firms to be more competitive, strengthen the regional strategic goal to stimulate the regional economy. The evaluation of the proposed project in relation to the following policies would be intended to guide efforts toward achievement of such goals and does not infer regional interference with local land use powers.

3.05 Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.

3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL QUALITY OF LIFE

The Growth Management goals to attain mobility and clean air goals and to develop urban forms that enhance quality of life, that accommodate a diversity of life styles, that preserve open space and natural resources, and that are aesthetically pleasing and preserve the character of communities, enhance the regional strategic goal of maintaining the regional quality of life. The evaluation of the proposed project in relation to the following policies would be intended to provide direction for plan implementation, and does not allude to regional mandates.

3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.

3.13 Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.

3.16 Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.

3.18 Encourage planned development in locations least likely to cause environmental impact.

3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.

3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.

3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.

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

GMC POLICIES RELATED TO THE RCPG GOAL TO PROVIDE SOCIAL, POLITICAL, AND CULTURAL EQUITY

The Growth Management Goal to develop urban forms that avoid economic and social polarization promotes the regional strategic goal of minimizing social and geographic disparities and of reaching equity among all segments of society. The evaluation of the proposed project in relation to the policy stated below is intended guide direction for the accomplishment of this goal, and does not infer regional mandates and interference with local land use powers.

3.24 Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.

3.27 Support local jurisdictions and other service providers in their efforts to develop

sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

REGIONAL TRANSPORTATION PLAN

The **Regional Transportation Plan (RTP)** also has goals, objectives, policies and actions pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Among the relevant goals, objectives, policies and actions of the RTP are the following:

Core Regional Transportation Plan Policies

4.01 *Transportation investments shall be based on SCAG's adopted Regional Performance Indicators:*

Mobility - Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient, faster and economical movements of people and goods.

- *Average Work Trip Travel Time in Minutes – 25 minutes (Auto)*
- *PM Peak Freeway Travel Speed – 45 minutes (Transit)*
- *PM Peak Non-Freeway Travel Speed*
- *Percent of PM Peak Travel in Delay (Fwy)*
- *Percent of PM Peak Travel in Delay (Non-Fwy)*

Accessibility - Transportation system should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.

- *Work Opportunities within 45 Minutes door to door travel time (Mode Neutral)*
- *Average transit access time*

Environment - Transportation system should sustain development and preservation of the existing system and the environment. (All Trips)

- *CO, ROG, NOx, PM10, PM2.5 – Meet the applicable SIP Emission Budget and the Transportation Conformity requirements*

Reliability – Transportation system should have reasonable and dependable levels

of service by mode. (All Trips)

- *Transit – 63%*
- *Highway – 76%*

Safety - Transportation systems should provide minimal accident, death and injury. (All Trips)

- *Fatalities Per Million Passenger Miles – 0*
- *Injury Accidents – 0*

Equity/Environmental Justice - The benefits of transportation investments should be equitably distributed among all ethnic, age and income groups. (All trips)

- *By Income Groups Share of Net Benefits – Equitable Distribution of Benefits among all Income Quintiles*

Cost-Effectiveness - Maximize return on transportation investment (All Trips). Air Quality, Mobility, Accessibility and Safety

- *Return on Total Investment – Optimize return on Transportation Investments*

4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.

4.04 Transportation Control Measures shall be a priority.

4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

AIR QUALITY CHAPTER CORE ACTIONS

The **Air Quality Chapter** core actions related to the proposed project includes:

5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.

5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

OPEN SPACE CHAPTER ANCILLARY GOALS

Outdoor Recreation

9.01 Provide adequate land resources to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.

9.02 Increase the accessibility to open space lands for outdoor recreation.

9.03 Promote self-sustaining regional recreation resources and facilities.

Public Health and Safety

9.04 Maintain open space for adequate protection of lives and properties against natural and man-made hazards.

9.05 Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.

9.06 Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.

Resource Production

9.07 Maintain adequate viable resource production lands, particularly lands devoted to commercial agriculture and mining operations.

Resource Protection

9.08 Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The **Water Quality Chapter** core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

11.02 Encourage "watershed management" programs and strategies, recognizing the primary role of local governments in such efforts.

11.05 Support regional efforts to identify and cooperatively plan for wetlands to facilitate both sustaining the amount and quality of wetlands in the region and expediting the process for obtaining wetlands permits.

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

CONCLUSIONS

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) is a ***Joint Powers Agency*** established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's ***Metropolitan Planning Organization*** and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. '134, 49 U.S.C. '5301 et seq., 23 C.F.R. '450, and 49 C.F.R. '613. SCAG is also the designated ***Regional Transportation Planning Agency***, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080 and 65082 respectively.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the ***South Coast Air Quality Management Plan***, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. '7504(a) as a ***Co-Lead Agency*** for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining ***Conformity*** of Projects, Plans and Programs to the State Implementation Plan, pursuant to 42 U.S.C. '7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for ***reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans*** required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for ***Inter-Governmental Review*** of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, Environmental Impacts Reports of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

Pursuant to 33 U.S.C. '1288(a)(2) (Section 208 of the Federal Water Pollution Control Act), SCAG is the authorized ***Areawide Waste Treatment Management Planning Agency***.

SCAG is responsible for preparation of the ***Regional Housing Needs Assessment***, pursuant to California Government Code Section 65584(a).

SCAG is responsible (with the Association of Bay Area Governments, the Sacramento Area Council of Governments, and the Association of Monterey Bay Area Governments) for preparing the ***Southern California Hazardous Waste Management Plan*** pursuant to California Health and Safety Code Section 25135.3.

Revised July 2001

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

January 14, 2003

File No: 05-00.04-00
30-00.04-00

Ms. Laurie B. Jester, Senior Planner
City of Manhattan Beach Planning Division
1400 Highland Avenue
Manhattan Beach, CA 90266

Dear Ms. Jester:

Manhattan Beach General Plan Update

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on December 30, 2002. The City of Manhattan Beach (City) is located within the jurisdictional boundaries of Districts Nos. 5 and 30. We offer the following comments regarding sewerage service:

1. Individual developments within the City should be reviewed by the Districts in order to determine whether or not sufficient trunk sewer capacity exists to serve each project.

2. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or **increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected.** This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to connect to the sewer is issued. A copy of the Connection Fee Information Sheet is enclosed for your convenience. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

3. In order for the Districts to conform with the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into the Air Quality Management Plan, which is prepared by the South Coast Air Quality Management District in order to improve air quality in the South Coast Air Basin as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange,

San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

James F. Stahl

Ruth I. Frazen

Ruth I. Frazen
Engineering Technician
Planning & Property Management Section

RIF:eg

Enclosure

INFORMATION SHEET FOR APPLICANTS
PROPOSING TO CONNECT OR INCREASE THEIR DISCHARGE TO
THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY SEWERAGE SYSTEM

THE PROGRAM

The County Sanitation Districts of Los Angeles County are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting to a Sanitation District's sewerage system. Your connection to a City or County sewer constitutes a connection to a Sanitation District's sewerage system as these sewers flow into a Sanitation District's system. The County Sanitation Districts of Los Angeles County provide for the conveyance, treatment, and disposal of your wastewater. **PAYMENT OF A CONNECTION FEE TO THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY WILL BE REQUIRED BEFORE A CITY OR THE COUNTY WILL ISSUE YOU A PERMIT TO CONNECT TO THE SEWER.**

I. WHO IS REQUIRED TO PAY A CONNECTION FEE?

(1) Anyone connecting to the sewerage system for the first time any structure located on a parcel(s) of land within a County Sanitation District of Los Angeles County.

(2) Anyone increasing the quantity of wastewater discharged due to the construction of additional dwelling units on or a change in land usage of a parcel already connected to the sewerage system.

(3) Anyone increasing the improvement square footage of a commercial or institutional parcel by more than 25 percent.

(4) Anyone increasing the quantity and/or strength of wastewater from an industrial parcel.

(5) If you qualify for an Ad Valorem Tax or Demolition Credit, connection fee will be adjusted accordingly.

II. HOW ARE THE CONNECTION FEES USED?

The connection fees are used to provide additional conveyance, treatment, and disposal facilities (capital facilities) which are made necessary by new users connecting to a Sanitation District's sewerage system or by existing users who significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program insures that all users pay their fair share for any necessary expansion of the system.

III. HOW MUCH IS MY CONNECTION FEE?

Your connection fee can be determined from the Connection Fee Schedule specific to the Sanitation District in which your parcel(s) to be connected is located. A Sanitation District boundary map is attached to each corresponding Sanitation District Connection Fee Schedule. Your City or County sewer permitting office has copies of the Connection Fee Schedule(s) and Sanitation District boundary map(s) for your parcel(s). If you require verification of the Sanitation District in which your parcel is located, please call the Sanitation Districts' information number listed under Item IX below.

IV. WHAT FORMS ARE REQUIRED*?

The Connection Fee application package consists of the following:

(1) Information Sheet for Applicants (this form)
(2) Application for Sewer Connection
(3) Connection Fee Schedule with Sanitation District Map (one schedule for each Sanitation District)

*Additional forms are required for Industrial Dischargers

V. WHAT DO I NEED TO FILE?

(1) Completed Application Form
(2) A complete set of architectural blueprints (not required for connecting one single family home)
(3) Fee Payment (checks payable to: County Sanitation Districts of Los Angeles County)
(4) Industrial applicants must file additional forms and follow the procedures as outlined in the application instructions

VI. WHERE DO I SUBMIT THE FORMS?

Residential, Commercial, and Institutional applicants should submit the above listed materials either by mail or in person to:

County Sanitation Districts of Los Angeles County
Connection Fee Program, Room 130
1955 Workman Mill Road
Whittier, CA 90601

Industrial applicants should submit the appropriate materials directly to the City or County office which will issue the sewer connection permit.

VII. HOW LONG DOES IT TAKE TO PROCESS MY APPLICATION?

Applications submitted by mail are generally processed and mailed within three working days of receipt. Applications brought in person are processed on the same day provided the application, supporting materials, and fee are satisfactory. Processing of large and/or complex projects may take longer.

VIII. HOW DO I OBTAIN MY SEWER PERMIT TO CONNECT?

An approved Application for Sewer Connection will be returned to the applicant after all necessary documents for processing have been submitted. Present this approved-stamped copy to the City or County Office issuing sewer connection permits for your area at the time you apply for actual sewer hookup.

IX. HOW CAN I GET ADDITIONAL INFORMATION?

If you require assistance or need additional information, please call the County Sanitation Districts of Los Angeles County at (562) 699-7411, extension 2727.

X. WHAT ARE THE DISTRICTS' WORKING HOURS?

The Districts' offices are open between the hours of 7:00 a.m. and 4:00 p.m., Monday through Thursday, and between the hours of 7:00 a.m. and 3:00 p.m. on Friday, except holidays. When applying in person, applicants must be at the Connection Fee counter at least 30 minutes before closing time.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE (213) 897-4429
FAX (213) 897-1337

Flex your power!
Be energy efficient!

January 15, 2003

Ms. Laurie Jester
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, CA 90266

Manhattan Beach General Plan Update
IGR/CEQA 030108/EK
SCH No. 2002121140

Dear Ms. Jester:

We have received the Notice of Preparation for the application referenced above, right. We have the following comments on it.

New development within the City might result in more user traffic affecting such State facilities as freeway I-405 and Route 1. Therefore we ask for consideration of contribution toward mitigation of traffic impacts. We request that such consideration be presented in a traffic study.

We wish to refer you to our Caltrans Traffic Impact Study Guide WEBsite:
http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf
and we state here some elements of what we generally expect in a traffic study.

Assumptions and methods used to develop estimates of trip generation, trip origin-destination pairing, and choice of travel mode and route should be given. Any differences from other regional forecasts or other standard assumptions should be stated and explained. Any effects on non-adjacent but regional-access State transportation services or facilities should be estimated.

Peak-hours and ADT volumes and Level of Service for both existing and future conditions on affected State transportation facilities should be estimated. Highway/freeway mainline segments should be considered as well as intersections/ interchanges. For intersections we request the HCM2000 method where appropriate. Future conditions would include build-out of all developments (see next item) and any plan-horizon years.

Analysis should include traffic from projects specified in the Plan, cumulative traffic generated from all expected new developments in surrounding areas, and traffic growth other than from the project and developments. That is, include: existing + projects + other new developments + other growth. Scenarios involving different assumptions on development and growth might be considered.

If mitigation is indicated according to the criteria in the Caltrans Guide, mitigation discussions should include, but need not be limited to, the following:

- description of transportation infrastructure improvements
- financial costs, funding sources and financing
- sequence and scheduling considerations
- implementation responsibilities, controls and monitoring

Any mitigation involving transit, HOV, or TDM should be rigorously justified and its effects conservatively estimated. With an area-wide plan by a general government, we request assurances of administrative mechanisms in place, such as to collect and hold any mitigation assessments from developers.

Because standards can be different among agencies, we briefly state what Caltrans considers deserves mitigation for traffic impacts. In the Guide is further description. We quote from the Guide page 6 that (when appropriate) "mitigation measures must be included" in a traffic study analysis. Mitigation would be indicated in order to maintain on State facilities either a level of service C or at least (if LOS is less than C) allow no further deterioration (page 1) from the current level of service. One LOS for consideration would be LOS for the most-congested time-period (page 4).

Where improvements would be needed to accommodate traffic increases due only in part to a development, we ask for calculation of the equitable share due for that development (Guide Appendix B).

Finally, we take this opportunity to invite the City of Manhattan Beach to take possession of the portion of State Route 1 within its geographical jurisdiction through the Caltrans relinquishment process. We appreciate that the local agency might wish to make entirely its own plans for mitigation, for surface streets in urban areas. For a State Highway of such a character, we usually recommend that the local agency initiate relinquishment proceedings if it has not already done so.

If you have any questions for us regarding this matter, please refer to IGR/CEQA No. 030108/EK, and contact me at (213) 897 – 4429 .

Sincerely,

STEPHEN BUSWELL
IGR/CEQA Branch Chief
Office of Regional Transportation Planning

cc: Ms. Becky Frank, State Clearinghouse

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

January 27, 2003

FEDERAL EXPRESS

Ms. Laurie B. Jester
City of Manhattan Beach, Planning Division
1400 Highland Avenue
Manhattan Beach, CA 90266

Dear Ms. Jester:

Notice of Preparation of
an Environmental Impact Report for the Manhattan Beach General Plan Update

The Metropolitan Water District of Southern California (Metropolitan) has received a copy of the Initial Study and Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Manhattan Beach General Plan Update (General Plan). The city of Manhattan Beach (City) is the lead agency for this project. The proposed project is a comprehensive updated of the City of Manhattan Beach General Plan. California law requires each city to adopt a comprehensive, long-term general plan to guide the physical development of the incorporated city. The Manhattan Beach General Plan Update includes the following elements: Land Use, Infrastructure, Community Safety, Community Resources, and Noise. (The Housing Element has been considered by the City Council as a separate, earlier action). This letter contains Metropolitan's response to the Notice of Preparation as a potentially affected agency.

Metropolitan owns and operates a facility within the City's General Plan Update boundaries. Metropolitan's West Basin Feeder is a 45-inch diameter pipeline, located within Manhattan Beach Boulevard, terminating westerly within Manhattan Heights Park just east of Herrin Street and extending easterly beyond the City's jurisdictional boundary.

Metropolitan is concerned with potential impacts to the West Basin Feeder pipeline that may occur as a result of implementation of the proposed General Plan. Metropolitan requests that the City consider the West Basin Feeder pipeline in its planning and analyze in the EIR potential impacts to these facilities that may occur as a result of the proposed project. While the Initial Study addresses water supply and mentions Metropolitan as the City's major source of water supply and the potential for future development to generate demand for additional water, we recommend that this issue be fully analyzed in the EIR.

The Public Services and Recreation sections of the Initial Study state that the General Plan will explore the potential for additional parkland and open space in Manhattan Beach and will include policies that will promote the donation and acquisition of properties for the purpose of

conservation into pocket parks and open space areas. However, the Initial Study does not clearly identify the location of any proposed properties for donation and/or acquisition. It would be unacceptable to designate any of Metropolitan's fee-owned property or easements as conservation or open space.

In order to avoid potential conflicts with Metropolitan's rights-of-way, we request that any design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. Metropolitan must also be allowed to maintain its rights-of-way and access to all of its facilities at all times in order to repair and maintain the current condition of those facilities.

Metropolitan must also be allowed to maintain its rights-of-way and access to its facilities at all times in order to repair and maintain the current condition of those facilities. The applicant may obtain detailed prints of drawings of Metropolitan's pipelines and rights-of-way by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist the applicant in preparing plans that are compatible with Metropolitan's facilities and easements, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

Metropolitan requests that the City analyze the consistency of the proposed project with the growth management plan adopted by the Southern California Association of Governments (SCAG). Metropolitan uses SCAG's population, housing and employment projections to determine future water demand. Development above these forecast provisions may increase demand on Metropolitan's resources and facilities beyond that anticipated.

Additionally, Metropolitan encourages projects within its service area to include water conservation measures. Water conservation, reclaimed water use, and groundwater recharge programs are integral components to regional water supply planning. Metropolitan supports mitigation measures such as using water efficient fixtures, drought-tolerant landscaping, and reclaimed water to offset any increase in water use associated with the proposed project.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation on this project. If we can be of further assistance, please contact Mr. William Fong of the Environmental Planning Team at (213) 217-6899.

Very truly yours,

Delaine W. Shane

(for) Laura J. Simonek
Manager, Asset Management
and Facilities Planning Unit

JAH/rdl
(Public Folders/EPU/Letters/27-JAN-03B.doc – Laurie B. Jester)

Enclosure: Planning Guidelines

Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California

1. Introduction

a. The following general guidelines should be followed for the design of proposed facilities and developments in the area of Metropolitan's facilities, fee properties, and/or easements.

b. We require that 3 copies of your tentative and final record maps, grading, paving, street improvement, landscape, storm drain, and utility plans be submitted for our review and written approval as they pertain to Metropolitan's facilities, fee properties and/or easements, prior to the commencement of any construction work.

2. Plans, Parcel and Tract Maps

The following are Metropolitan's requirements for the identification of its facilities, fee properties, and/or easements on your plans, parcel maps and tract maps:

a. Metropolitan's fee properties and/or easements and its pipelines and other facilities must be fully shown and identified as Metropolitan's on all applicable plans.

b. Metropolitan's fee properties and/or easements must be shown and identified as Metropolitan's with the official recording data on all applicable parcel and tract maps.

c. Metropolitan's fee properties and/or easements and existing survey monuments must be dimensionally tied to the parcel or tract boundaries.

d. Metropolitan's records of surveys must be referenced on the parcel and tract maps.

e. Metropolitan's pipelines and other facilities, e.g. structures, manholes, equipment, survey monuments, etc. within its fee properties and/or easements must be protected from damage by the easement holder on Metropolitan's property or the property owner where Metropolitan has an easement, at no expense to Metropolitan. If the facility is a cathodic protection station it shall be located prior to any grading or excavation. The exact location, description and way of protection shall be shown on the related plans for the easement area.

4. Easements on Metropolitan's Property

a. We encourage the use of Metropolitan's fee rights-of-way by governmental agencies for public street and utility purposes, provided that such use does not interfere with Metropolitan's use of the property, the entire width of the property is accepted into the agency's public street system and fair market value is paid for such use of the right-of-way.

b. Please contact the Director of Metropolitan's Right of Way and Land Division, telephone (213) 250-6302, concerning easements for landscaping, street, storm drain, sewer, water or other public facilities proposed within Metropolitan's fee properties. A map and legal description of the requested easements must be submitted. Also, written evidence must be submitted that shows the city or county will accept the easement for the specific purposes into its public system. The grant of the easement will be subject to Metropolitan's rights to use its land for water pipelines and related purposes to the same extent as if such grant had not been made. There will be a charge for the easement. Please note that, if entry is required on the property prior to issuance of the easement, an entry permit must be obtained. There will also be a charge for the entry permit.

5. Landscaping

Metropolitan's landscape guidelines for its fee properties and/or easements are as follows:

a. A green belt may be allowed within Metropolitan's fee property or easement.

b. All landscape plans shall show the location and size of Metropolitan's fee property and/or easement and the location and size of Metropolitan's pipeline or other facilities therein.

a. Permanent structures, including catch basins, manholes, power poles, telephone riser boxes, etc., shall not be located within its fee properties and/or easements.

b. We request that permanent utility structures within public streets, in which Metropolitan's facilities are constructed under the Metropolitan Water District Act, be placed as far from our pipeline as possible, but not closer than 5 feet from the outside of our pipeline.

c. The installation of utilities over or under Metropolitan's pipeline(s) must be in accordance with the requirements shown on the enclosed prints of Drawings Nos. C-11632 and C-9547. Whenever possible we request a minimum of one foot clearance between Metropolitan's pipe and your facility. Temporary support of Metropolitan's pipe may also be required at undercrossings of its pipe in an open trench. The temporary support plans must be reviewed and approved by Metropolitan.

d. Lateral utility crossings of Metropolitan's pipelines must be as perpendicular to its pipeline alinement as practical. Prior to any excavation our pipeline shall be located manually and any excavation within two feet of our pipeline must be done by hand. This shall be noted on the appropriate drawings.

e. Utilities constructed longitudinally within Metropolitan's rights-of-way must be located outside the theoretical trench prism for uncovering its pipeline and must be located parallel to and as close to its rights-of-way lines as practical.

f. When piping is jacked or installed in jacked casing or tunnel under Metropolitan's pipe, there must be at least two feet of vertical clearance between the bottom of Metropolitan's pipe and the top of the jacked pipe, jacked casing or tunnel. We also require that detail drawings of the shoring for the jacking or tunneling pits be submitted for our review and approval. Provisions must be made to grout any voids around the exterior of the jacked pipe, jacked casing or tunnel. If the piping is installed in a jacked casing or tunnel the annular space between the piping and the jacked casing or tunnel must be filled with grout.

j. Potholing of Metropolitan's pipeline is required if the vertical clearance between a utility and Metropolitan's pipeline is indicated on the plan to be one foot or less. If the indicated clearance is between one and two feet, potholing is suggested. Metropolitan will provide a representative to assists others in locating and identifying its pipeline. Two-working days notice is requested.

k. Adequate shoring and bracing is required for the full depth of the trench when the excavation encroaches within the zone shown on Figure 4.

l. The location of utilities within Metropolitan's fee property and/or easement shall be plainly marked to help prevent damage during maintenance or other work done in the area. Detectable tape over buried utilities should be placed a minimum of 12 inches above the utility and shall conform to the following requirements:

1) Water pipeline: A two-inch blue warning tape shall be imprinted with:

"CAUTION BURIED WATER PIPELINE"

2) Gas, oil, or chemical pipeline: A two-inch yellow warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

3) Sewer or storm drain pipeline: A two-inch green warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

4) Electric, street lighting, or traffic signals conduit: A two-inch red warning tape shall be imprinted with:

"CAUTION BURIED _____ CONDUIT"

5) Telephone, or television conduit: A two-inch orange warning tape shall be imprinted with:

"CAUTION BURIED _____ CONDUIT"

o. Control cables connected with the operation of Metropolitan's system are buried within streets, its fee properties and/or easements. The locations and elevations of these cables shall be shown on the drawings. The drawings shall note that prior to any excavation in the area, the control cables shall be located and measures shall be taken by the contractor to protect the cables in place.

p. Metropolitan is a member of Underground Service Alert (USA). The contractor (excavator) shall contact USA at 1-800-422-4133 (Southern California) at least 48 hours prior to starting any excavation work. The contractor will be liable for any damage to Metropolitan's facilities as a result of the construction.

8. Paramount Right

Facilities constructed within Metropolitan's fee properties and/or easements shall be subject to the paramount right of Metropolitan to use its fee properties and/or easements for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove any of the facilities from the fee properties and/or easements, such removal and replacement shall be at the expense of the owner of the facility.

9. Modification of Metropolitan's Facilities

When a manhole or other of Metropolitan's facilities must be modified to accommodate your construction or reconstruction, Metropolitan will modify the facilities with its forces. This should be noted on the construction plans. The estimated cost to perform this modification will be given to you and we will require a deposit for this amount before the work is performed. Once the deposit is received, we will schedule the work. Our forces will coordinate the work with your contractor. Our final billing will be based on actual cost incurred, and will include materials, construction, engineering plan review, inspection, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount.

imposes loads no greater than AASHTO H-10. If the cover is between two and three feet, equipment must be restricted to that of a Caterpillar D-4 tract-type tractor. If the cover is less than two feet, only hand equipment may be used. Also, if the contractor plans to use any equipment over Metropolitan's pipeline which will impose loads greater than AASHTO H-20, it will be necessary to submit the specifications of such equipment for our review and approval at least one week prior to its use. More restrictive requirements may apply to the loading guideline over the San Diego Pipelines 1 and 2, portions of the Orange County Feeder, and the Colorado River Aqueduct. Please contact us for loading restrictions on all of Metropolitan's pipelines and conduits.

b. The existing cover over the pipeline shall be maintained unless Metropolitan determines that proposed changes do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance.

13. Blasting

a. At least 20 days prior to the start of any drilling for rock excavation blasting, or any blasting, in the vicinity of Metropolitan's facilities, a two-part preliminary conceptual plan shall be submitted to Metropolitan as follows:

b. Part 1 of the conceptual plan shall include a complete summary of proposed transportation, handling, storage, and use of explosions.

c. Part 2 shall include the proposed general concept for blasting, including controlled blasting techniques and controls of noise, fly rock, airblast, and ground vibration.

14. CEQA Requirements

a. When Environmental Documents Have Not Been Prepared

1) Regulations implementing the California Environmental Quality Act (CEQA) require that Metropolitan have an opportunity to consult with the agency or consultants preparing any environmental documentation. We are required to review and consider the environmental effects of the project as shown in the Negative Declaration or Environmental Impact Report (EIR) prepared for your project before committing Metropolitan to approve your request.

giving Metropolitan's comments, requirements and/or approval that will require 8 man-hours or less of effort is typically performed at no cost to the developer, unless a facility must be modified where Metropolitan has superior rights. If an engineering review and letter response requires more than 8 man-hours of effort by Metropolitan to determine if the proposed facility or development is compatible with its facilities, or if modifications to Metropolitan's manhole(s) or other facilities will be required, then all of Metropolitan's costs associated with the project must be paid by the developer, unless the developer has superior rights.

b. A deposit of funds will be required from the developer before Metropolitan can begin its detailed engineering plan review that will exceed 8 hours. The amount of the required deposit will be determined after a cursory review of the plans for the proposed development.

c. Metropolitan's final billing will be based on actual cost incurred, and will include engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount. Additional deposits may be required if the cost of Metropolitan's review exceeds the amount of the initial deposit.

16. Caution

We advise you that Metropolitan's plan reviews and responses are based upon information available to Metropolitan which was prepared by or on behalf of Metropolitan for general record purposes only. Such information may not be sufficiently detailed or accurate for your purposes. No warranty of any kind, either express or implied, is attached to the information therein conveyed as to its accuracy, and no inference should be drawn from Metropolitan's failure to comment on any aspect of your project. You are therefore cautioned to make such surveys and other field investigations as you may deem prudent to assure yourself that any plans for your project are correct.

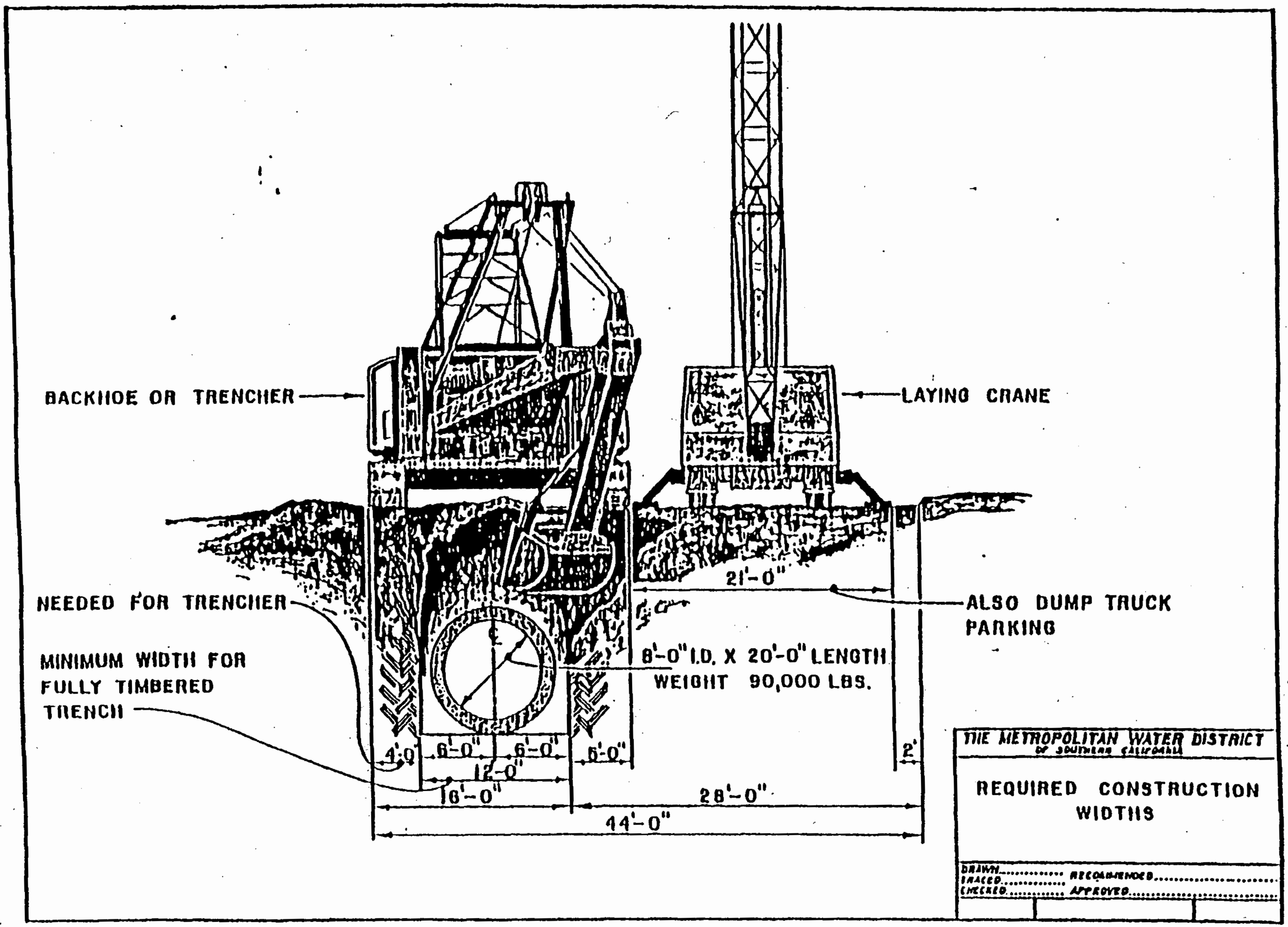
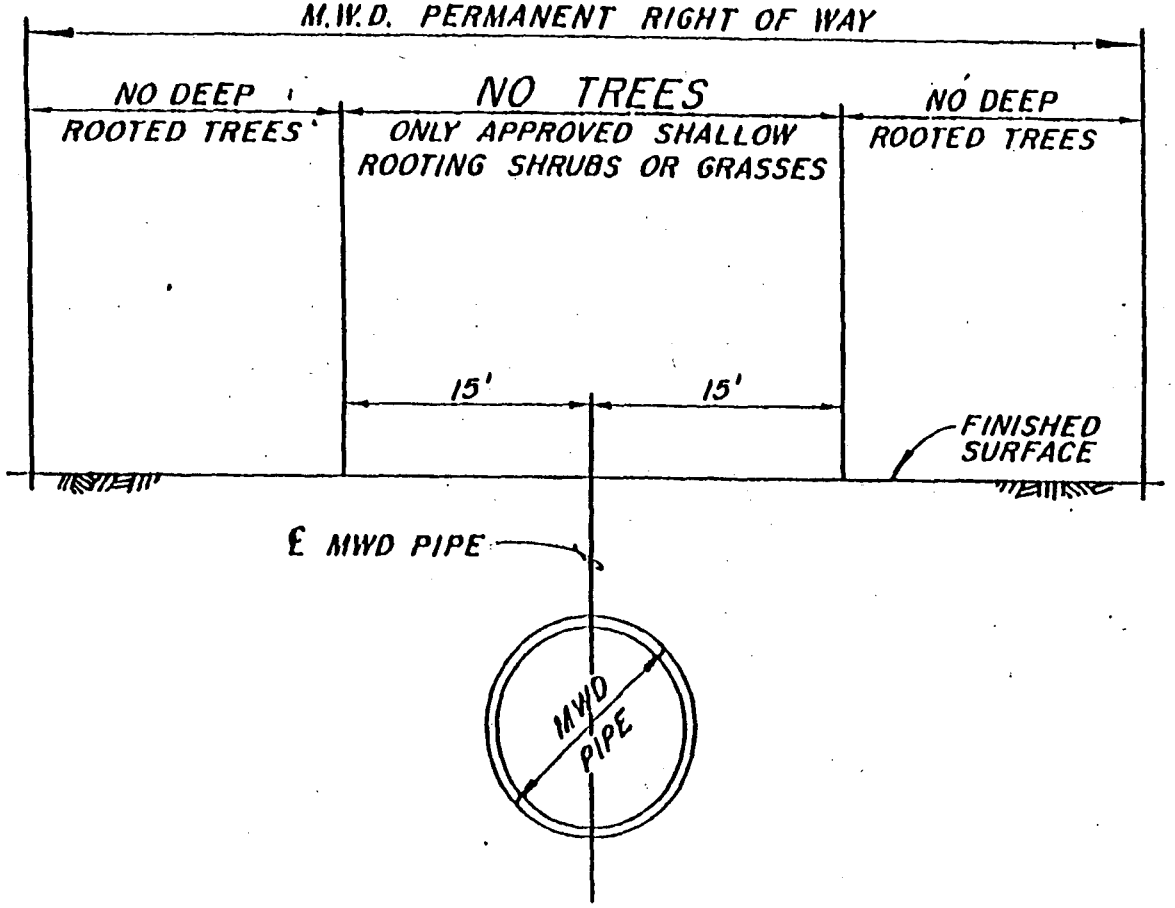

BACKHOE OR TRENCHER
LAYING CRANE
NEEDED FOR TRENCHER
MINIMUM WIDTH FOR FULLY TIMBERED TRENCH
8'-0" I.D. X 20'-0" LENGTH
WEIGHT 90,000 LBS.
21'-0"
ALSO DUMP TRUCK PARKING
4'-0"
6'-0"
6'-0"
6'-0"
12'-0"
16'-0"
28'-0"
44'-0"
2'
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
REQUIRED CONSTRUCTION WIDTHS
DRAWN
TRACED
CHECKED
RECOMMENDED
APPROVED

FIGURE 1



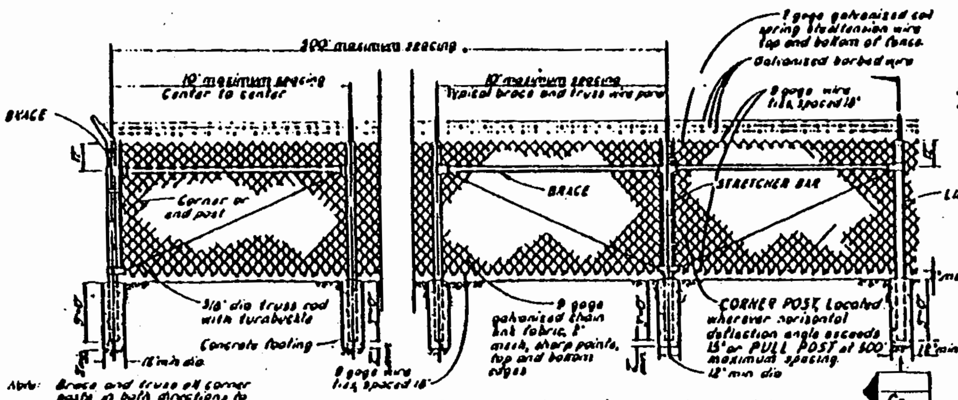
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

LANDSCAPE GUIDELINES FOR M.W.D. RIGHT OF WAY

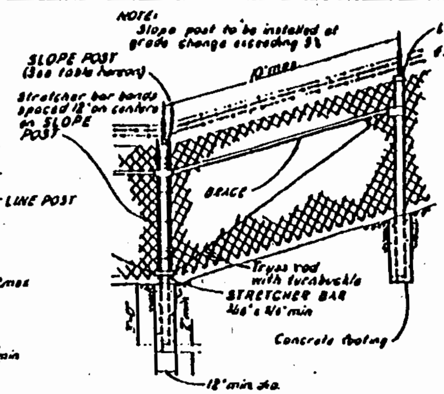
DRAWN..... RECOMMENDED.....
TRACED..... .....
CHECKED..... APPROVED.....

FIGURE 3

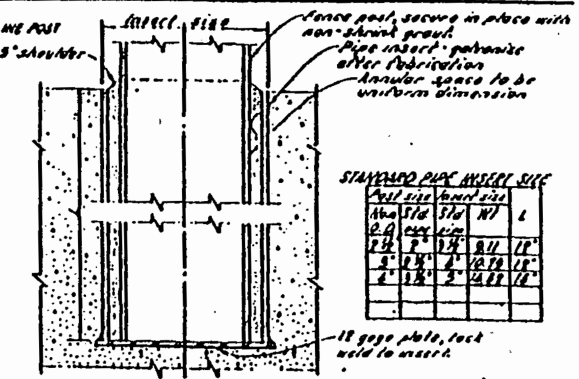
SPECIFICATIONS NO. SHEET NO.



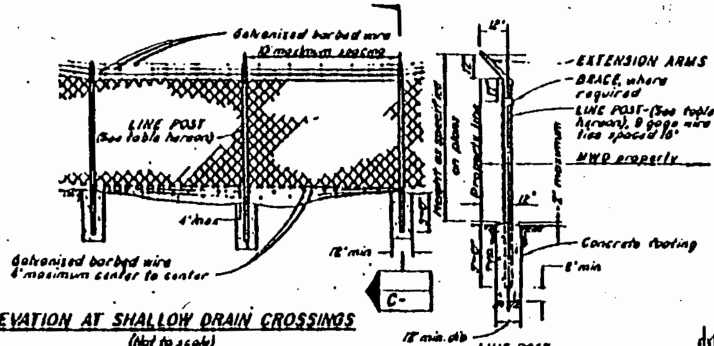
END, CORNER, AND PULL POST BRACING
(Not to scale)



TYPICAL FENCE ON SLOPE
(Not to scale)

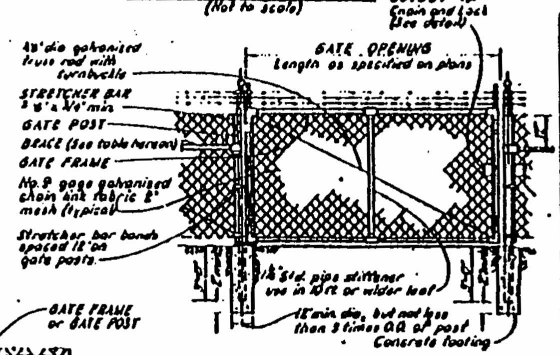


FENCE POST INSERT FOR CONCRETE WALL AND CONCRETE CURB
(Not to scale)

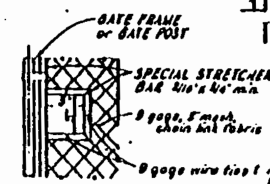


ELEVATION AT SHALLOW DRAIN CROSSINGS
(Not to scale)

LINE POST SECTION
(Not to scale)



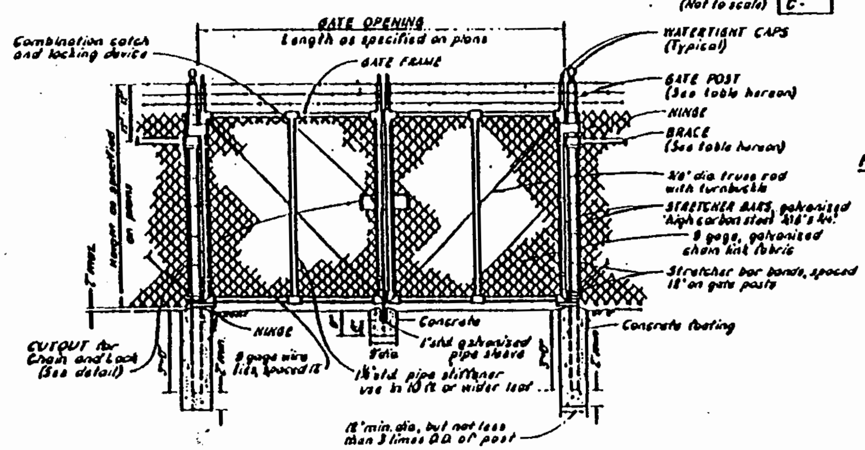
SINGLE SWING GATE DETAIL
(Not to scale)



DETAIL OF CUTOUT FOR CHAIN AND LOCK
(Not to scale)

GENERAL NOTES

1. All ferrous parts and materials shall be galvanized after fabrication
2. Adjustable tighteners shall be turnbuckle or equivalent, having minimum 6" take-up
3. Extension arms for barbed wire shall be steel, malleable iron or wrought iron and shall be attached to the top of the post with a 1/4 inch round head rivet. The extension arms shall carry three wires each at approximately 5 inch centers in a plane approximately 45° from the vertical.
4. All gate hinges shall be heavy duty malleable iron or steel, industrial service type, 270 degree swing, of approved quality and design.
5. Secure cap to post with 1/4 inch round head rivet



DOUBLE SWING GATE DETAIL
(Not to scale)

Use	Type	Nominal Size (Inches)	Actual O.D. (Inches)	Weight per Foot (Pounds)
End, corner, slope, pull and gate posts (for single gates 6 feet or less in width and double gates 12 feet or less in width) for chain link fabric 72 inches or higher	Pipe	2 1/2	2.875	5.79
End, corner, slope, pull and gate posts (for single gates 6 feet or less in width and double gates 12 feet or less in width) for chain link fabric less than 72 inches height	Pipe	2	2.375	3.65
Gate posts for single swing gates over 6 feet but not over 13 feet in width and double swing gates over 12 feet but not over 26 feet in width	Pipe	3 1/2	4.000	9.11
Gate posts for single swing gates over 13 feet but not over 18 feet in width and double swing gates over 26 feet but not over 36 feet in width	Pipe	6	6.625	18.97
Gate posts for single swing gates over 18 feet in width and double swing gates over 36 feet in width	Pipe	8	8.625	24.70
Line posts for chain link fabric 72 inches or higher	Pipe / H-Section	2 / [illegible]	2.375	3.65 / 4.10
Line posts for chain link fabric less than 72 inches in height	Pipe / H-Section	1 1/2 / [illegible]	1.900	2.72 / 2.00
Braces	Pipe / H-Section	1 1/4 / [illegible]	1.660	2.27 / 2.10
Frame for gates	Pipe	1 1/2	1.900	2.72
Stiffeners for gates	Pipe	1 1/4	1.660	2.27

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
DISTRIBUTION SYSTEM

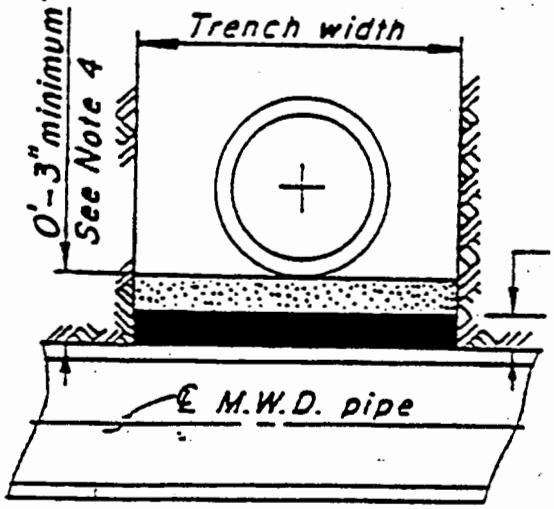
CHAIN LINK FENCE DETAILS

NO.	DATE	DWN	CKD	REVISION	ENG	APP

DESIGNED / DRAWN / CHECKED / WORK ORDER NO. — RECOMMENDED / APPROVED — LOS ANGELES

ORIGINAL RELEASE	MECH.	STRUCT.	ELEC.	CIVIL	SPECL	DATE
INTERSECTIONAL COORDINATION CHECK						

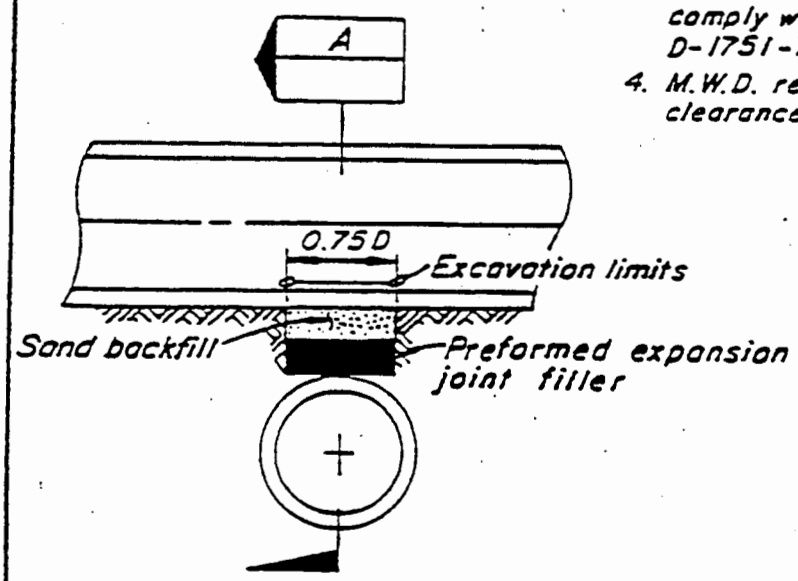
FIGURE 5



SECTION A

NOTES

1. This method to be used where the utility line is 24" or greater in diameter and the clearance between the utility line and M.W.D. pipe is 12" or less.
2. Special protection may be required if the utility line diameter is greater than M.W.D. pipe or if the cover over the utility line to the street surface is minimal and there is 12" or less clearance between M.W.D. pipe and the utility line.
3. Preformed expansion joint filler to comply with ASTM designation D-1751-73.
4. M.W.D. requests 12" minimum clearance whenever possible.



CROSS SECTION

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

TYPICAL EXPANSION JOINT FILLER PROTECTION FOR OVERCROSSING OF M.W.D. PIPELINE

DRAWN
TRACED
CHECKED
RECOMMENDED
APPROVED

C-11632

Appendix B
Traffic Study

DRAFT CIRCULATION ELEMENT EIR TRAFFIC STUDY

Submitted to:

Cotton Bridges Associates

and

City of Manhattan Beach

Submitted by:

Meyer, Mohaddes Associates, Inc.

400 Oceangate, Suite 480
Long Beach, CA 90802

J01-0075
May, 2003

TABLE OF CONTENTS

INTRODUCTION 1

TRAFFIC VOLUMES AND LEVEL OF SERVICE 3

EXISTING INTERSECTION OPERATING CONDITIONS 6

FUTURE CIRCULATION SYSTEM OPERATING CONDITIONS 9

NEIGHBORHOOD TRAFFIC MANAGEMENT 14

CONCLUSIONS AND RECOMMENDATIONS 24

LIST OF TABLES

Table 1 Existing Average Daily Traffic Volume 4

Table 2 Intersection Level of Service Definitions 7

Table 3 Existing Intersection Level of Service 8

Table 4 Future Forecast Average Daily Traffic Volume 10

Table 5 Future Intersection Level of Service Summary 12

Table 6 Residential Streets with Traffic Issues 17

Table 7 List of Transportation System Improvements 25

INTRODUCTION

This document describes the transportation analysis that was conducted for the City of Manhattan Beach General Plan Circulation Element, as part of the General Plan Update Environmental Impact Report. The purpose of the Circulation Element is to regulate and develop Manhattan Beach transportation systems. The Circulation Element is correlated with the Land Use Element. As required by Government Code Section 65302(b), the Element contains information on the general location and extent of existing and proposed major thoroughfares, transportation routes and terminals.

The EIR transportation study assesses the existing and future circulation system operating conditions, with and without buildout of the land use element of the General Plan. In Manhattan Beach, relatively little growth in residential or commercial and business land uses is expected over the life of the General Plan due to the already built-out character of the City. The anticipated growth in residential dwelling units DU's is 842 units over the buildout period, or an average of about 40 DU's per year. There is no anticipated change in the total amount of land dedicated to commercial and business land uses, although types of commercial land uses may vary over time. Therefore, most of the future traffic volume growth on the circulation system will occur as a result of changes in regional land uses outside of the City of Manhattan Beach.

Key issues in the City related to circulation and transportation include arterial street congestion and spillover of arterial street traffic to local residential streets. Excessive speeding and traffic volumes on residential streets is a critical issue, and was a focus of the General Plan analysis. The EIR transportation analysis therefore focuses on key arterial facilities, as well as the local residential street issues. Exhibit 1 illustrates the proposed roadway classification system. The proposed classification system defines roadways into six categories, as follows:

- Local Street
- Major Local Street
- Collector Street
- Minor Arterial
- Major Arterial
- Regional Arterial

Freeway - Freeways are state-designated facilities, characterized by limited access at major streets only, full grade separation of all crossings, physical separation of opposing traffic lanes, and no direct access to land uses. They are intended to serve regional and interregional trips, as well as provide access to major roadways which feed traffic to and from the local arterial systems. Freeways are high-speed, high-capacity facilities which are designed to standards established by the California Department of Transportation. There are no freeways in Manhattan Beach, however, the I-405, I-105 and SR-91 Freeways provide important regional access for the City's residents and businesses.

Regional Arterial – Sepulveda Boulevard (Route 1) is the only Regional Arterial in Manhattan Beach. Regional Arterials are state-designated facilities that are relatively higher speed, higher capacity routes which serve inter-city and inter-regional circulation needs. Regional Arterials also connect major city streets with other regional routes. Local access is intended to be limited to major streets via signal-controlled intersections, although historically some access has been granted to retail business and shopping centers along Sepulveda Boulevard. Left turns should be prohibited or restricted to signalized intersections where feasible. Curbside parking is either prohibited all day or during the peak hours to facilitate the movement of traffic. In Manhattan Beach, Sepulveda Boulevard is a six-lane facility.

Major Arterial - Major Arterials are intended to provide for through movement between areas of the City and across the City, and also to provide access to Minor Arterials and limited access to collector streets. Access to abutting land uses should be limited where possible, or consolidated to minimize curb cuts to avoid interference with the through-traffic function of these routes. Major Arterials will provide four to six lanes for through travel, single or double left turn lanes at intersections, left turn signal phases where necessary, and other enhancements to help the efficient movement of larger volumes of traffic. Curbside parking may be prohibited all day or during the peak hours to facilitate the most efficient movement of through traffic.

Minor Arterial – Minor Arterials are similar to Major Arterials in function, and are intended to serve some through movements and movements across the City. Compared to Major Arterials, additional access to abutting land uses is allowed. They function in a manner similar to Major Arterials; however, they generally have lower capacities and may have lower speeds. Parking is generally allowed, although it may be prohibited in selected locations to facilitate traffic movement. Overall traffic volumes are lower on Minor Arterials as compared to Major Arterials and they will carry four lanes for through traffic. Intersections will generally have left turn lanes (or dual left turn lanes in selected locations).

Collector Street – Collector Streets serve an area or neighborhood and they function as collectors or distributors of traffic from the local and major local streets to the Minor or Major Arterial or Regional Arterial streets. Collector Streets are lower speed streets with lower capacity than arterials, but carry more traffic than either local or major local streets. Collector streets have a mixture of single-family residential, multi family residential and some commercial land uses. Some of the adjacent land uses may have direct driveway access, while some may have side yards on the collector street. Collector streets often have curbside parking, and have one or two through lanes in each direction.

Major Local – Major Local Streets are designed to serve a residential area, are local in character and provide for circulation within neighborhoods and between neighborhoods. Major Local streets are typically designed to discourage longer distance through trips and discourage higher speeds (posted speed limit of 25 miles per hour or lower). Major Local streets have a maximum of one lane in each direction and curbside parking is generally allowed where there the street width is sufficient to support both moving traffic and parking lanes.

Local – Local Streets are the lowest functional classification and are intended solely for access to adjacent residential land uses. They provide for circulation within a neighborhood and principally provide vehicular, bicycle and pedestrian access to abutting properties. Any through traffic, including through traffic from one residential neighborhood to another, is discouraged. Local Streets have one lane in each direction and have posted speed limits of 25 miles per hour or lower. Parking is generally allowed where the street width is sufficient to support both moving traffic and parking lanes.

The classifications of Regional Arterial, Major Arterial and Minor Arterial are new classifications that are proposed as part of the Circulation Element update. Previously, all arterial roadways were designated as "arterials" and were not separated into the Minor, Major and Regional in the currently adopted circulation element. This modification helps to better define the system, however, it does not affect roadway operating conditions.

TRAFFIC VOLUMES AND LEVEL OF SERVICE

Traffic flow is measured and analyzed both on a daily basis and during peak hours (commute peak hours). On a daily basis, traffic flow is measured on roadways at mid-block locations to determine the overall level of travel demand and level of service. Average Daily Traffic (ADT) values have been developed that represent the typical daily traffic flow on key roadways in the City. During peak hours, intersection level of service is assessed based on peak hour turning movement traffic counts and level of service analysis methodologies. A total of 46 key intersections were analyzed. The locations were chosen based on the most critical locations in the City along arterial roadways. Exhibit 2 illustrates the Average Daily Traffic volumes, and Table 1 lists the ADT values by location. Exhibit 3 shows the 46 key intersections that were analyzed.

Table 1
Existing Average Daily Traffic Volume

Street and Segment Location	Average Daily Traffic Volume
Ardmore Ave	
Sepulveda Blvd to Pacific Ave	3,258
Pacific Ave to 19th Street	4,649
19th Street to Manhattan Beach Blvd	6,379
Manhattan Beach Blvd to 6th Street	6,749
6th Street to South City Limit	6,192
Artesia Blvd	
Sepulveda Blvd to Peck Ave	29,637
Peck Ave to Aviation Blvd	28,396
Aviation Blvd	
Rosecrans Ave to Marine Ave	42,866
Marine Ave to Manhattan Beach Blvd	37,688
Manhattan Beach Blvd to 2nd Street	38,376
2nd Street to Artesia Blvd	44,849
Blanche Rd	
Rosecrans Ave to 25th Street	3,164
25th Street to Marine Ave	3,559
Marine Ave to Valley Dr	6,103
Eighth Street	
Poinsettia Ave to Sepulveda Blvd	1,733
Sepulveda Blvd to Peck Ave	2,035
Peck Ave to Aviation Blvd	855
First Street	
Valley Dr to Highland Ave	2,193
Highland Ave to Manhattan Ave	1,229
Highland Ave	
45th Street to Rosecrans Ave	26,446
Rosecrans Ave to Marine Ave	18,172
Marine Ave to 15th Street	20,238
15th Street to Manhattan Beach Blvd	12,540
Manhattan Beach Blvd to South City Limit	7,477
Manhattan Ave	
Rosecrans Ave to Marine Ave	2,278
15th Street to Manhattan. Beach Blvd	7,639
Manhattan Beach Blvd to South City Limit	9,769
Manhattan Beach Blvd	
Manhattan Ave to Highland Ave	8,237
Highland Ave to Valley Dr	13,218
Ardmore Ave to Pacific Ave	16,613
Pacific Ave to Sepulveda Blvd	21,778
Sepulveda Blvd to Peck Ave	26,923
Peck Ave to Aviation Blvd	34,479
Marine Ave	
Highland Ave to Blanche Rd	3,166
Pacific Ave to Sepulveda Blvd	7,305
Sepulveda Blvd to Peck Ave	20,744
Peck Ave to Aviation Blvd	20,104

Table 1
Existing Average Daily Traffic Volume (continued)

Street and Segment Location	Average Daily Traffic Volume
Meadows Ave	
Marine Ave to Manhattan Beach Blvd	3,951
Manhattan Beach Blvd to 2nd Street	3,079
2nd Street to Artesia Blvd	3,804
Pacific Ave	
Rosecrans Ave to Valley Dr	4,365
Ardmore Ave to Manhattan Beach Blvd.	4,575
Manhattan Beach Blvd. to 5th St.	949
Peck Ave	
Marine Ave to 18th Street	835
Manhattan Beach Blvd to 2nd Street	2,056
2nd Street to Artesia Blvd	4,191
Poinsettia Ave	
Rosecrans Ave to Valley Dr	413
Ardmore Ave to Manhattan Beach Blvd	1,550
Manhattan Beach Blvd to 2nd Street	1,597
Redondo Ave	
Marine Ave to Manhattan Beach Blvd	4,324
Manhattan Beach Blvd to 2nd Street	3,266
2nd Street to Artesia Blvd	2,272
Rosecrans Ave	
Highland Ave to Blanche Rd	17,117
Blanche Rd to Pacific Ave	17,608
Pacific Ave to Sepulveda Blvd	19,896
Sepulveda Blvd to Village Dr	35,289
Village Dr to Redondo Ave	47,500
Redondo Ave to Aviation Blvd	59,702
Rowell Ave	
Manhattan Beach Blvd to Marine Ave	1,632
Second Street	
Poinsettia Ave to Sepulveda Blvd	3,342
Sepulveda Blvd to Peck Ave	4,267
Peck Ave to Aviation Blvd	3,185
Sepulveda Blvd	
Rosecrans Ave to Valley Dr	62,419
Valley Dr to Marine Ave	60,010
Marine Ave to Manhattan Beach Blvd	57,604
Manhattan Beach Blvd to 8th Street	57,823
8th Street to 2nd Street	54,788
2nd Street to Artesia Blvd	58,167
25th Street	
Blanche Rd to Valley Dr	958
Valley Dr	
Sepulveda Blvd to Pacific Ave	4,475
Pacific Ave to Blanche Rd	7,167
Blanche Rd to Manhattan Beach Blvd	7,860
Manhattan Beach Blvd to 6th Street	6,744
6th Street to South City Limit	5,884

EXISTING INTERSECTION OPERATING CONDITIONS

During peak hours, intersection traffic volume is counted to determine the operating conditions during the peak hours of travel demand. Typically, intersection traffic demand is measured for the peak morning and afternoon/evening commute peak periods (7 to 9 AM and 4 to 6 PM). Then, the single highest hour in the morning and in the afternoon is determined and used to develop intersection level of service estimates.

Level-of-service is a qualitative measure describing the efficiency of traffic flow. It also describes the way such conditions are perceived by persons traveling in a traffic stream. Levels-of-service (LOS) measurements may also describe variables such as speed and travel time, freedom to maneuver, traffic interruptions, traveler comfort and convenience, and safety. Measurements are graduated ranging from LOS A (representing free flow and excellent comfort for the motorist, passenger or pedestrian) to LOS F (reflecting highly congested or stop and go traffic conditions where traffic volumes approach or exceed the capacities of streets, sidewalks, etc.).

Levels-of-service can be determined for a number of transportation facilities including freeways, multi-lane highways, arterials, two-lane highways, signalized intersections, intersections that are not signalized, transit and pedestrian facilities. For the Circulation Element update, intersection level of service is measured to determine the peak period operating characteristics at key intersections in the City. Intersections typically represent the most critical locations of bottlenecks and congestion since the right-of-way must be shared by opposing traffic. For this study, the Intersection Capacity Utilization (ICU) methodology has been used to determine intersection level of service. ICU is a standard methodology in Southern California. Currently, the City considers a Level of Service D to be the upper limit of acceptable service at intersections in Manhattan Beach. The maximum level of service D objective for the roadway system reflects the City's intent at this time to maintain stable traffic flow throughout the City, recognizing that peak hour congestion may occur at locations near freeways or other locations with unusual traffic characteristics due to regional traffic flow. Table 2 outlines the level of service concept for signalized intersections.

Traffic counts were obtained from several sources including the new counts conducted by Stevens-Garland Associates and counts from previous traffic studies. Both AM and PM peak hour counts were utilized. Table 3 illustrates the results of the existing intersection operations analysis. As indicated, there are 5 intersections currently operating at LOS D, 2 at LOS E and 20 at LOS F during the AM peak hour, and 8 intersections currently operating at LOS D, 10 at LOS E and 12 at LOS F during the PM peak hour. The remaining locations are currently operating at LOS C or better.

Table 2
Intersection Level of Service Definitions

LOS	*Interpretation*	*Signalized Intersection Volume to Capacity Ratio*	*Stop-Controlled Intersection Average Stop Delay (seconds)*
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 – 0.600	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 – 0.700	>10 and ≤ 15
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 – 0.800	>15 and ≤ 25
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 – 0.900	>25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches.	0.901 – 1.000	>35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go-type traffic flow.	Over 1.000	>50

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 1985 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982

Table 3
Existing Intersection Level of Service

Intersection	Signal Operation	AM Peak Hour		PM Peak Hour	
		LOS	V/C or Delay	LOS	V/C or Delay
Manhattan Ave & Manhattan Beach Blvd	Signalized	A	0.593	A	0.412
Highland Ave & 45th St	Signalized	F	1.026	F	1.012
Highland Ave & Rosecrans Ave	Signalized	D	0.881	F	1.052
Highland Ave & Marine Ave	Signalized	D	0.812	E	0.913
Highland Ave & 15th St	Signalized	D	0.863	E	0.953
Highland Ave & Manhattan Beach Blvd	Signalized	C	0.741	A	0.485
Highland Ave & 1st St (1)	Unsignalized	A	0.340	A	0.423
Valley Dr & 15th St	Signalized	A	0.556	A	0.414
Valley Dr & Manhattan Beach Blvd	Signalized	B	0.636	A	0.506
Valley Dr & 1st St (1)	Unsignalized	F	106.5	F	142.5
Blanche Road & Rosecrans Ave	Signalized	A	0.547	A	0.429
Blanche Road & Valley Dr (1)	Unsignalized	C	0.727	D	0.833
Ardmore Ave & 2nd St (1)	Unsignalized	F	1.073	D	0.834
Pacific Ave & Rosecrans Ave	Signalized	B	0.676	B	0.669
Pacific Ave & Valley Dr (1)	Unsignalized	A	0.547	A	0.494
Pacific Ave & Ardmore Ave (1)	Unsignalized	C	22.9	D	33.4
Pacific Ave & Manhattan Beach Blvd	Signalized	A	0.428	A	0.350
Poinsettia Ave & Manhattan Beach Blvd	Signalized	D	0.843	D	0.881
Sepulveda Blvd & Rosecrans Ave	Signalized	F	1.135	E	0.952
Sepulveda Blvd & Valley Dr (1)	Unsignalized	F	OVRFL	F	291.0
Sepulveda Blvd & 33rd St	Signalized	F	1.414	F	1.117
Sepulveda Blvd & Marine Ave	Signalized	F	1.648	F	1.239
Sepulveda Blvd & Manhattan Beach Blvd	Signalized	F	1.060	E	0.931
Sepulveda Blvd & 8th St	Signalized	F	1.054	E	0.977
Sepulveda Blvd & 2nd St	Signalized	F	1.176	E	0.968
Sepulveda Blvd & Longfellow Ave	Signalized	F	1.017	E	0.975
Sepulveda Blvd & Artesia Blvd	Signalized	F	1.143	F	1.107
Prospect Ave & Artesia Blvd	Signalized	F	1.281	F	1.336
Meadows Ave & Marine Ave	Signalized	B	0.673	A	0.576
Meadows Ave & Manhattan Beach Blvd	Signalized	E	0.972	E	0.902
Meadows Ave & 2nd St (1)	Unsignalized	B	13.8	B	10.5
Meadows Ave & Artesia Blvd	Signalized	D	0.860	C	0.722
Park Way & Rosecrans Ave	Signalized	A	0.584	B	0.688
Peck Ave & Marine Ave	Signalized	B	0.652	A	0.524
Peck Ave & Manhattan Beach Blvd	Signalized	F	1.017	D	0.833
Peck Ave & 2nd St (1)	Unsignalized	B	11.7	A	9.5
Peck Ave & Artesia Blvd	Signalized	F	1.152	D	0.829
Market Pl & Rosecrans Ave	Signalized	A	0.556	C	0.772
Redondo Ave & Rosecrans Ave	Signalized	B	0.676	D	0.857
Redondo Ave & Marine Ave	Signalized	B	0.659	D	0.801
Redondo Ave & Manhattan Beach Blvd	Signalized	F	1.044	E	0.954
Aviation Blvd & Rosecrans Ave	Signalized	F	1.949	F	1.976
Aviation Blvd & Marine Ave	Signalized	F	1.192	F	1.160
Aviation Blvd & Manhattan Beach Blvd	Signalized	F	1.145	F	1.312
Aviation Blvd & 2nd St	Signalized	E	0.987	E	0.903
Aviation Blvd & Artesia Blvd	Signalized	F	1.492	F	1.385

Note: (1) Unsignalized intersection level of service is based on average vehicle delay except for the locations where the LOS was taken from the "City of Manhattan Beach Civic Center/Metlox Development Environmental Impact Report"

OVRFL – Overflow conditions, average vehicle delay cannot be estimated.

FUTURE CIRCULATION SYSTEM OPERATING CONDITIONS

A computer traffic analysis and assignment model was developed for the City using the TRAFFIX software system. The TRAFFIX model includes all 46 study intersections plus all connecting roadway segments. All 46 intersections were reviewed to verify lane geometry, signal type, and phasing and other pertinent characteristics. The model was then developed with a network that includes all classified streets in the City (per the General Plan) as well as some additional local streets. The model has been used primarily to forecast the impacts of future regional growth on intersections within the City. This is due to the fact that the internal growth is expected to be negligible, and it cannot be accurately determined where the growth in residential dwelling units will occur in the City.

To assess future regional growth, the regional travel demand model of the Southern California Association of Governments (SCAG) was reviewed. That model is developed by SCAG and used for regional and sub regional planning. Although it is not accurate at the local street level, it can be used to assess long-term growth on arterial facilities such as Sepulveda, Rosecrans, Aviation and other major routes. The future SCAG model forecasts were reviewed and compared to exiting model results, and then a growth factor was developed for the following key facilities in Manhattan Beach:

- Sepulveda Boulevard - 17 percent growth through 2025
- Aviation Boulevard - 3 percent growth through 2025
- Rosecrans Avenue - 14 percent growth through 2025
- Artesia Boulevard - 12 percent growth through 2025
- Valley Drive - 5 percent growth through 2025
- Ardmore Drive - 5 percent growth through 2025
- All other roadways – 10 percent (per Los Angeles County CMP)

For arterials that are not included in the SCAG model, another source was used to estimate future growth. That source is the 2002 Congestion Management Program (CMP) for Los Angeles County, which was developed by the Los Angeles County Metropolitan Transportation Authority (MTA). The CMP documentation includes estimated growth factors to be used for regional transportation planning, including specific factors for the South Bay cities. These growth factors (SCAG and MTA, as applicable) were then applied to the roadway segments and also to the 46 study intersections, and future intersection levels of service were calculated. Table 4 presents future forecast arterial street traffic volumes with the SCAG and MTA growth rates applied.

The most significant development project that will occur inside the City is the Metlox Development in Downtown Manhattan Beach. A detailed traffic study was conducted as part of the EIR for that project. The intersection traffic analysis from that project EIR has been reviewed and is summarized in this report. Future intersection forecasts from the Metlox EIR are included in the future conditions analysis since they are considered to be more detailed and representative of future conditions at the locations that were assessed in the EIR.

Table 5 summarizes future intersection levels of service with regional growth and with the Metlox Development. As indicated in the table, there are expected to be 3 intersections in the future operating at LOS D, 5 at LOS E and 22 at LOS F during the AM peak hour, and 3 intersections operating at LOS D, 8 at LOS E and 20 at LOS F during the PM peak hour. This represents an increase in two locations at LOS F during the AM peak hour and 8 intersections at LOS F during the PM peak hour.

Table 4
Future Forecast Average Daily Traffic Volume

Street and Segment Location	Existing Average Daily Volumes	Growth	Future Average Daily Traffic Volume
Ardmore Ave			
· Sepulveda Blvd to Pacific Ave *	3,258	5%	3,420
· Pacific Ave to 19th Street *	4,649	5%	4,881
· 19th Street to Manhattan Beach Blvd *	6,379	5%	6,698
· Manhattan Beach Blvd to 6th Street *	6,749	5%	7,086
· 6th Street to South City Limit *	6,192	5%	6,502
Artesia Blvd			
· Sepulveda Blvd to Peck Ave *	29,637	12%	33,193
· Peck Ave to Aviation Blvd *	28,396	12%	31,803
Aviation Blvd			
· Rosecrans Ave to Marine Ave *	42,866	3%	44,151
· Marine Ave to Manhattan Beach Blvd *	37,688	3%	38,818
· Manhattan Beach Blvd to 2nd Street *	38,376	3%	39,527
· 2nd Street to Artesia Blvd	44,849	3%	46,194
Blanche Rd (1)			
· Rosecrans Ave to 25th Street *	3,164	10%	3,480
· 25th Street to Marine Ave **	3,559	10%	3,915
· Marine Ave to Valley Dr **	6,103	10%	6,713
Eighth Street (1)			
· Poinsettia Ave to Sepulveda Blvd *	1,733	10%	1,906
· Sepulveda Blvd to Peck Ave *	2,035	10%	2,239
· Peck Ave to Aviation Blvd *	855	10%	941
First Street (1)			
· Valley Dr to Highland Ave **	2,193	10%	2,412
· Highland Ave to Manhattan Ave **	1,229	10%	1,352
Highland Ave (1)			
· 45th Street to Rosecran Ave *	26,446	10%	29,090
· Rosecrans Ave to Marine Ave *	18,172	10%	19,989
· Marine Ave to 15th Street *	20,238	10%	22,261
· 15th Street to Manhattan Beach Blvd *	12,540	10%	13,793
· Manhattan Beach Blvd to South City Limit *	7,477	10%	8,224
Manhattan Ave (1)			
· Rosecrans Ave to Marine Ave *	2,278	10%	2,506
· 15th Street to Manhattan Beach Blvd *	7,639	10%	8,402
· Manhattan Beach Blvd to South City Limit *	9,769	10%	10,745
Manhattan Beach Blvd (1)			
· Manhattan Ave to Highland Ave *	8,237	10%	9,061
· Highland Ave to Valley Dr *	13,218	10%	14,539
· Ardmore Ave to Pacific Ave *	16,613	10%	18,274
· Pacific Ave to Sepulveda Blvd *	21,778	10%	23,955
· Sepulveda Blvd to Peck Ave *	26,923	10%	29,615
· Peck Ave to Aviation Blvd *	34,479	10%	37,927
Marine Ave (1)			
· Highland Ave to Blanche Rd *	3,166	10%	3,483
· Pacific Ave to Sepulveda Blvd **	7,305	10%	8,035
· Sepulveda Blvd to Peck Ave *	20,744	10%	22,818
· Peck Ave to Aviation Blvd *	20,104	10%	22,114

Table 4
Future Forecast Average Daily Traffic Volume (continued)

Street and Segment Location	Existing Average Daily Volumes	Growth	Future Average Daily Traffic Volume
Meadows Ave (1)			
· Marine Ave to Manhattan Beach Blvd *	3,951	10%	4,346
· Manhattan Beach Blvd To 2nd Street *	3,079	10%	3,387
· 2nd Street to Artesia Blvd *	3,804	10%	4,184
Pacific Ave (1)			
· Rosecrans Ave to Valley Dr *	4,365	10%	4,801
· Ardmore Ave to Manhattan Beach Blvd *	4,575	10%	5,032
· Manhattan Beach Blvd to 5th Street *	949	10%	1,044
Peck Ave (1)			
· Marine Ave to 18th Street *	835	10%	918
· Manhattan Beach Blvd to 2nd Street *	2,056	10%	2,261
· 2nd Street to Artesia Blvd *	4,191	10%	4,610
Poinsettia Ave (1)			
· Rosecrans Ave to Valley Dr *	413	10%	454
· Ardmore Ave to Manhattan Beach Blvd *	1,550	10%	1,704
· Manhattan Beach Blvd to 2nd Street *	1,597	10%	1,756
Redondo Ave (1)			
· Marine Ave to Manhattan Beach Blvd *	4,324	10%	4,756
· Manhattan Beach Blvd to 2nd Street *	3,266	10%	3,593
· 2nd Street to Artesia Blvd *	2,272	10%	2,499
Rosecrans Ave			
· Highland Ave to Blanche Rd *	17,117	14%	19,513
· Blanche Rd to Pacific Ave *	17,608	14%	20,073
· Pacific Ave to Sepulveda Blvd *	19,896	14%	22,681
· Sepulveda Blvd to Village Dr *	35,289	14%	40,229
· Village Dr to Redondo Ave *	47,500	14%	54,150
· Redondo Ave to Aviation Blvd *	59,702	14%	68,060
Rowell Ave (1)			
· Manhattan Beach Blvd to Marine Ave **	1,632	10%	1,795
Second Street (1)			
· Poinsettia Ave to Sepulveda Blvd *	3,342	10%	3,676
· Sepulveda Blvd to Peck Ave *	4,267	10%	4,693
· Peck Ave to Aviation Blvd *	3,185	10%	3,503
Sepulveda Blvd			
· Rosecrans Ave to Valley Dr *	62,419	13%	70,533
· Valley Dr to Marine Ave *	60,010	13%	67,811
· Marine Ave to Manhattan Beach Blvd *	57,604	13%	65,092
· Manhattan Beach Blvd to 8th Street *	57,823	13%	65,339
· 8th Street to 2nd Street *	54,788	13%	61,910
· 2nd Street to Artesia Blvd *	58,167	13%	65,728
25th Street (1)			
· Blanche Rd to Valley Dr **	958	10%	1,054
Valley Ave (1)			
· Sepulveda Blvd to Pacific Ave *	4,475	10%	4,922
· Pacific Ave to Blanche Rd *	7,167	10%	7,883
· Blanche Rd to Manhattan Beach Blvd *	7,860	10%	8,645
· Manhattan Beach Blvd to 6th Street *	6,744	10%	7,418
· 6th Street to South City Limit *	5,884	10%	6,472

* Two-day mid-week non-holiday counts taken mid-October to mid-December 2001
** Two-day mid-week non-holiday counts taken the weeks of April 8, 2002 and April 15, 2002
(1) SCAG model either does not include this roadway or indicates no growth but will assume 10% growth based on 2002 Congestion Management Program for Los Angeles County, Metropolitan Transportation Authority, South bay cities growth factor.

Table 5
Existing and Future Intersection Level of Service Summary

Intersection	Signal Operation	Existing				Future with Regional Growth				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	AM	PM
Manhattan Ave & Manhattan Beach Blvd (2)	Signalized	A	0.593	A	0.412	B	0.662	A	0.465	0.069	0.053
Highland Ave & 45th St	Signalized	F	1.026	F	1.012	F	1.119	F	1.104	0.093	0.092
Highland Ave & Rosecrans Ave (1)	Signalized	D	0.881	F	1.052	E	0.972	F	1.161	0.091	0.109
Highland Ave & Marine Ave (2)	Signalized	D	0.812	E	0.913	E	0.904	F	1.025	0.092	0.112
Highland Ave & 15th St (2)	Signalized	D	0.863	E	0.953	E	0.968	F	1.072	0.105	0.119
Highland Ave & Manhattan Beach Blvd (2)	Signalized	C	0.741	A	0.485	D	0.825	A	0.557	0.084	0.072
Highland Ave & 1st St (2) (3)	Unsignalized	A	0.340	A	0.423	A	0.379	A	0.479	0.039	0.056
Valley Dr & 15th St (2)	Signalized	A	0.556	A	0.414	B	0.644	A	0.557	0.088	0.143
Valley Dr & Manhattan Beach Blvd (2)	Signalized	B	0.636	A	0.506	C	0.716	B	0.652	0.080	0.146
Valley Dr & 1st St (1) (3)	Unsignalized	F	106.5	F	142.5	F	143.0	F	179.9	36.5	37.4
Blanche Road & Rosecrans Ave (1)	Signalized	A	0.547	A	0.429	B	0.600	A	0.471	0.053	0.042
Blanche Road & Valley Dr (2) (3)	Unsignalized	C	0.727	D	0.833	D	0.813	E	0.938	0.086	0.105
Ardmore Ave & 2nd St (2) (3)	Unsignalized	F	1.073	D	0.834	F	1.188	E	0.934	0.115	0.100
Pacific Ave & Rosecrans Ave (1)	Signalized	B	0.676	B	0.669	C	0.748	C	0.744	0.072	0.075
Pacific Ave & Valley Dr (2) (3)	Unsignalized	A	0.547	A	0.494	B	0.613	A	0.573	0.066	0.079
Pacific Ave & Ardmore Ave (1) (3)	Unsignalized	C	22.9	D	33.4	D	30.3	E	45.2	7.4	11.8
Pacific Ave & Manhattan Beach Blvd (2)	Signalized	A	0.428	A	0.350	A	0.481	A	0.419	0.053	0.069
Poinsettia Ave & Manhattan Beach Blvd	Signalized	D	0.843	D	0.881	E	0.917	E	0.959	0.074	0.078
Sepulveda Blvd & Rosecrans Ave (1)	Signalized	F	1.135	E	0.952	F	1.272	F	1.067	0.137	0.115
Sepulveda Blvd & Valley Dr (1) (3)	Unsignalized	F	OVRFL	F	291.0	F	OVRFL	F	589.2	-----	298.2
Sepulveda Blvd & 33rd St (1)	Signalized	F	1.414	F	1.117	F	1.566	F	1.230	0.152	0.113
Sepulveda Blvd & Marine Ave (2)	Signalized	F	1.648	F	1.239	F	1.821	F	1.371	0.173	0.132
Sepulveda Blvd & Manhattan Beach Blvd (2)	Signalized	F	1.060	E	0.931	F	1.173	F	1.050	0.113	0.119
Sepulveda Blvd & 8th St (1)	Signalized	F	1.054	E	0.977	F	1.174	F	1.087	0.120	0.110
Sepulveda Blvd & 2nd St (1)	Signalized	F	1.176	E	0.968	F	1.310	F	1.076	0.134	0.108
Sepulveda Blvd & Longfellow Ave (1)	Signalized	F	1.017	E	0.975	F	1.133	F	1.085	0.116	0.110
Sepulveda Blvd & Artesia Blvd (1)	Signalized	F	1.143	F	1.107	F	1.275	F	1.234	0.132	0.127
Prospect Ave & Artesia Blvd (1)	Signalized	F	1.281	F	1.336	F	1.414	F	1.477	0.133	0.141

Table 5
Existing and Future Intersection Level of Service Summary

Intersection	Signal Operation	Existing				Future with Regional Growth				Change in V/C	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	AM	PM
Meadows Ave & Marine Ave	Signalized	B	0.673	A	0.576	C	0.730	B	0.623	0.057	0.047
Meadows Ave & Manhattan Beach Blvd	Signalized	E	0.972	E	0.902	F	1.059	E	0.982	0.087	0.080
Meadows Ave & 2nd St (3)	Unsignalized	B	13.8	B	10.5	C	16.4	B	11.3	2.6	0.8
Meadows Ave & Artesia Blvd (1)	Signalized	D	0.860	C	0.722	E	0.949	C	0.794	0.089	0.072
Park Way & Rosecrans Ave (1)	Signalized	A	0.584	B	0.688	B	0.649	C	0.764	0.065	0.076
Peck Ave & Marine Ave	Signalized	B	0.652	A	0.524	C	0.707	A	0.566	0.055	0.042
Peck Ave & Manhattan Beach Blvd	Signalized	F	1.017	D	0.833	F	1.108	E	0.906	0.091	0.073
Peck Ave & 2nd St (3)	Unsignalized	B	11.7	A	9.5	B	13.1	B	10.0	1.4	0.5
Peck Ave & Artesia Blvd (1)	Signalized	F	1.152	D	0.829	F	1.233	D	0.890	0.081	0.061
Market Pl & Rosecrans Ave (1)	Signalized	A	0.556	C	0.772	B	0.617	D	0.858	0.061	0.086
Redondo Ave & Rosecrans Ave (1)	Signalized	B	0.676	D	0.857	C	0.753	E	0.951	0.077	0.094
Redondo Ave & Marine Ave	Signalized	B	0.659	D	0.801	C	0.715	D	0.872	0.056	0.071
Redondo Ave & Manhattan Beach Blvd	Signalized	F	1.044	E	0.954	F	1.139	F	1.005	0.095	0.051
Aviation Blvd & Rosecrans Ave (1)	Signalized	F	1.949	F	1.976	F	2.122	F	2.144	0.173	0.168
Aviation Blvd & Marine Ave (1)	Signalized	F	1.192	F	1.160	F	1.257	F	1.220	0.065	0.060
Aviation Blvd & Manhattan Beach Blvd (1)	Signalized	F	1.145	F	1.312	F	1.208	F	1.377	0.063	0.065
Aviation Blvd & 2nd St (1)	Signalized	E	0.987	E	0.903	F	1.029	E	0.937	0.042	0.034
Aviation Blvd & Artesia Blvd (1)	Signalized	F	1.492	F	1.385	F	1.584	F	1.470	0.092	0.085

Note: (1) Includes estimated regional growth on Sepulveda, Rosecrans, Aviation, Artesia and Valley/Ardmore based on model results from the Southern California Association of Governments (SCAG) Regional model.
(2) Level-of-Service and V/C values from "City of Manhattan Beach Civic Center/Metlox Development Environmental Impact Report"
(3) Unsignalized intersection level of service is based on average vehicle delay except for the locations where the LOS was taken from the "City of Manhattan Beach Civic Center/Metlox Development Environmental Impact Report"
OVRFL – Overflow conditions, average vehicle delay cannot be estimated.

NEIGHBORHOOD TRAFFIC MANAGEMENT

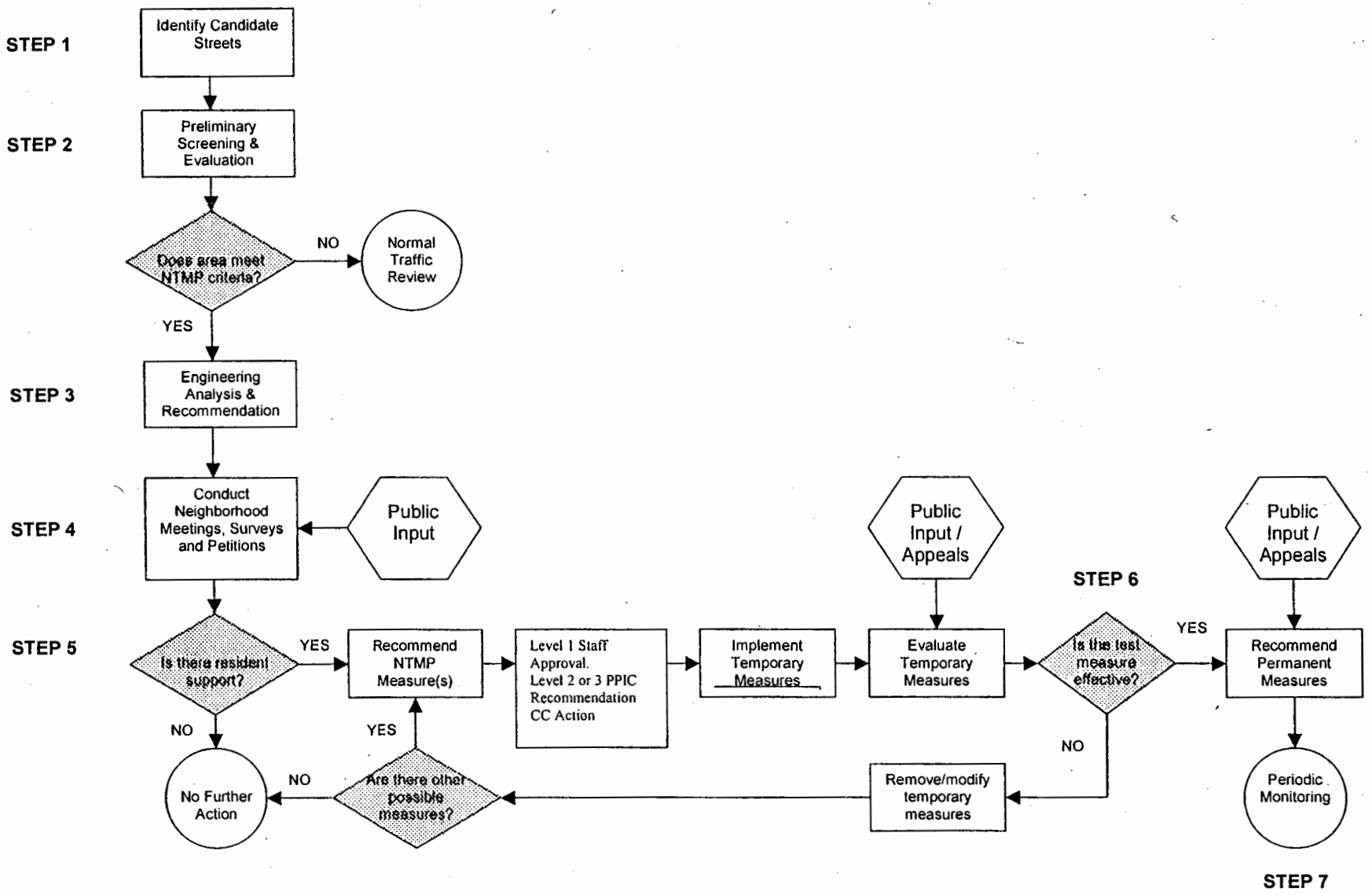
One of the most critical circulation issues in the City of Manhattan Beach is excessive speeding and traffic volume on residential streets. To address this problem, a Neighborhood Traffic Committee was established as part of the General Plan process. The Committee reviewed neighborhood traffic issues, and developed a program to address those problems. The Neighborhood Traffic Management Program described below will be used to address these general issues as they arise throughout the City:

- Non-local traffic on selected residential streets
- Excessive speeds on some residential streets
- Problems related to school area congestion
- Cut-through traffic from congested arterial streets
- Beach related cut-through traffic during peak seasons
- All other related problems on local and residential streets.

The City of Manhattan Beach experiences traffic intrusion into residential neighborhoods as a result of many factors including arterial congestion (creating traffic by-passes), schools, recreation and park facilities, adjacent commercial and industrial activities and other reasons. As these problems occur, they cause adverse impacts on local residential streets and collector streets such as speeding and excessive traffic volumes. In many cases, the impact is an "environmental impact" on the residential street as opposed to the traffic volume exceeding the physical capacity of the lanes. While the street may have the total capacity for more traffic, the "environmental capacity" is exceeded based on the residential character of the adjoining land uses. Speeds and volume are perceived to be too high and disrupt the character of the street.

When such impacts occur, it is necessary to address problems on a case-by-case basis, and it is critical to include the affected residents and affected businesses in the process. To accomplish this, a "Neighborhood Traffic Management Program" or NTMP was developed and adopted by the City. Details of the NTMP procedures are outlined below. These procedures were approved by the City Council separate from the General Plan. As part of the NTMP development process, a list of impacted streets was developed. Table 6 summarizes the list of residential streets with neighborhood traffic issues.

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM PROCESS



Overall Objective

The overall objective of the Neighborhood Traffic Management Program is to improve the livability of neighborhood streets by mitigating the impacts of vehicular traffic on residential neighborhoods. Specific impacts to be addressed by the Program include high non-local cut-through traffic volumes, high speeds, truck traffic intrusion, demonstrated accident history and other related problems.

Process Overview

The Neighborhood Traffic Management Program process will ensure that neighborhoods with demonstrated problems and community support for traffic improvements have equal access to neighborhood traffic management measures. The program depends upon citizen involvement and may vary from year to year based upon funding available for neighborhood traffic management. The process includes the following eight steps:

Step 1 - Identify Candidate Streets/Neighborhoods
Step 2 - Preliminary Screening and Evaluation
Step 3 - Engineering Analysis/Preliminary Recommendations
Step 4 - Neighborhood Meetings and Survey/Petitions
Step 5 - Develop, Install, and Evaluate Test projects
Step 6 - Determination of Permanent Project
Step 7 - Monitoring

Table 6
Residential Streets with Traffic Issues

Street/ Area	Location	Limit/Boundary	Issues/Concerns	History
A	Ardmore/33rd	Eastbound at Sepulveda intersection	• Morning northbound queues • 33rd from Oak to Sepulveda limited to one-way east-bound only	Counts conducted over past 20+ years. Evaluated in 1999 Marine Avenue Study.
B	Blanche	Rosecrans to Valley	• Volumes and speeds since Bell is closed at Sand Dune Park, traffic uses Blanche Avenue	No prior studies
D	Eleventh	Sepulveda to Poinsettia	• Cut through traffic (NB Sepulveda to WB Manhattan Beach Boulevard) from Sepulveda to avoid the intersection of Sepulveda and MBB	11-02 Engineering Study in process to extent left-turn lane from NB Sepulveda to WB MBB which would physically block NB access to 11th from NB Sepulveda and increase the stacking for NB Sepulveda to WB MBB. Future MTA call-for-projects.
C	El Porto Area	Ocean Drive and other streets	• Use of Ocean as cut-through route to avoid Highland, excessive volumes	Studies conducted in 1998 and 1999. Various measures implemented.
D	Highland Avenue	Longfellow to 45th Street	• Volume and speed of traffic impacts residential neighborhoods • Pedestrian conflicts with high volumes and speed	No prior studies
E	Liberty Village	West of Aviation, east of Sepulveda between MBB and Marine	• Access to Aviation thru neighborhood	No prior studies
F	Marine Avenue	Sepulveda to Meadows	• Westbound backs up past Cedar • Exit/Entrance to Mall at Cedar adds to Marine traffic problems	No prior studies except Mall EIR in 1980's. To be evaluated as part of current design project of Sepulveda/Marine intersection.
G	Marine Avenue	Sepulveda to Valley/Ardmore	• Cut-through traffic, excessive volume on Marine • Speeding on Marine • Other street blockages (30th) – are they still warranted? • Too many stop signs	Several studies and traffic counts conducted over past 20 years. Comprehensive study conducted in 1999. Series of recommendations made. Some changes were implemented; some are still in implementation phase. Existing 30th Street barricade installed in early to mid-1980's to address concerns with Mall cut-thru traffic throughout the residential neighborhood

Table 6
Residential Streets with Traffic Issues (continued)

Street/ Area	Location	Limit/Boundary	Issues/Concerns	History
H	Meadows	Marine to Artesia	• Speed and Volume since used as an alternative to Sepulveda and cut-through traffic from Village	Studies conducted in 2001 at Marine. Right or left turns only onto Marine at Meadow/Portsmouth from both North and Southbound, no through traffic.
I	Oak Street	Marine to Manhattan Beach Boulevard	• Cut-through traffic	No prior studies
J	Pacific	At Rosecrans intersection	• Refinery exiting traffic-south-bound cut-through	No prior studies
K	Peck Ave. and corner of Voorhees and Rowell	South of Manhattan Beach Boulevard	• Potential impacts of proposed school district office	No prior studies
L	Peck Avenue	Marine to Manhattan Beach Boulevard	• Extend Peck through school to connect north and south portions • One-way couplet with Meadows to ease Meadows traffic	No prior studies.
M	Rowell	Marine to Manhattan Beach Boulevard	• Used as alternative (school access) to Meadows due to turning restrictions at Portsmouth/Meadows and Marine • Volume and speed issue	No prior studies
N	Sand Dune Park	Rosecrans to Valley, Bell/Blanche to Pacific	• Traffic volumes and speed • Lack of Park parking impacts residents on-street parking	City Council directed staff to conduct a traffic study 7-11-02. PPIC 7-02 preliminary review-future neighborhood workshop
O	School areas	All schools throughout City	• Congestion during drop/off pick-up at the school site, some adjacent speeding and cut-through traffic on residential streets • Future of school bus services to MBMS	Some sites have been studied based on individual complaints to City and PPIC

Table 6
Residential Streets with Traffic Issues (continued)

Street/ Area	Location	Limit/Boundary	Issues/Concerns	History
P	Second Street and surrounding local streets	Ardmore to Aviation plus surrounding street system. Investigation of this area should extend from Ardmore to Aviation, Manhattan Beach Blvd. to Artesia (in Hermosa Beach). May be broken up into two or more smaller areas for study	• Cut-through traffic, used as short cut to Aviation • Speeding • School traffic issues on portion east of Sepulveda • School bus and cut- through traffic on Nelson from Aviation	Studies conducted in 2001 regarding various traffic management measures to reduce volumes. East of Sepulveda-Pilot project traffic chokers removed. West of Sepulveda- proposal to eliminate centerline denied 2001. Turn restrictions installed Aviation at 2nd 11-01. 6-02 petition received from Nelson residents, Redondo cut-through due to 2nd Street turn restrictions. Reviewing- counts to be conducted when school begins
Q	Tennyson, Keats, Shelley, Prospect, Chabela, Meadows	Adjacent to MC High School	• School related impacts of speeding and cut-through traffic • Parking intrusion • Sepulveda/Aviation cut-through traffic	Studies conducted in 2001 regarding cut through and speeding issues. Various measures implemented.
R	Valley	At Sepulveda	• Limited westbound truck access • Increase capacity- east-bound left turn difficult • Narrow width, low height (13') due to overhead "bridge" portion of Barnabys restaurant	No Prior studies
S	15th Street	American Martyrs school (Laurel) to Ardmore	• Cut-through traffic • Speeding due to grade	No prior studies
U	Sepulveda Corridor	Entire length	• Conflicts between residential and commercial uses near Sepulveda	Selected studies of neighborhoods along Sepulveda, no comprehensive study
V	Peck Avenue	Throughout City	• Cut-through traffic, high school traffic	

The process and individual steps are explained in more detail below.

Goals/Policies of Neighborhood Traffic Management Program

Goals/Policies of the Program include the following:

- Reduce demonstrated accident patterns on local streets where feasible.
- Eliminate or discourage non-local cut-through traffic on local residential streets and collectors streets. Focus such traffic on the arterial roadway system.
- Reduce traffic speeds on residential streets with demonstrated problems to levels consistent with the ranges of speeds on other non-impacted residential streets in the City.
- Minimize the shifting of traffic intrusion or speeding problems from one residential street to another.
- Ensure citizen participation throughout the Neighborhood Traffic Management Program process, obtaining the input of affected residents, affected business owners and non-resident property owners.
- Minimize impacts on emergency vehicle response times due to implementation of neighborhood traffic management measures. Include police and fire departments in all plan preparation and avoid creating excessive vehicle delay on critical emergency vehicle routes. (See attached Emergency Response Routes Map).
- Review surrounding land uses and functionality/connectivity of street to the rest of the system.

Program steps are detailed below.

Step 1 - Identify Candidate Streets/Neighborhoods

Residential neighborhood traffic management improvements (for either one street or a larger neighborhood area) shall be considered for Local, Major Local, or Collector streets, as classified in the City's General Plan Circulation Element, based on one of the following actions:

- After receipt of written request(s),
- After direction of the City Council.
- Traffic problems identified by City staff.

A chart of residential streets/neighborhoods with traffic concerns, developed by the Neighborhood Traffic Committee and the parking and Public Improvements Commission, is attached

Step 2 - Preliminary Screening and Evaluation

The Community Development Director (CDD) and the City Traffic Engineer will review requests to determine whether or not they should be handled as part of the normal traffic engineering or police enforcement functions of the City, or if they qualify for consideration under the Neighborhood Traffic Management Program. The following initial criteria will be used to assess requests:

- The street in question must be classified as a Local, Major Local, or Collector street. If not, the adjacent neighborhood must be predominantly residential in character.

- The requests must be related to speeding, high traffic volumes, accidents, cut-through traffic, truck traffic or other related impacts on a residential or collector street or district.

If it is determined that the request falls under the Neighborhood Traffic Management Program, then Step 3 is initiated. If not, the request shall be followed up as appropriate by the CDD and City Traffic Engineer as part of the Department's normal function, including coordination with Police, Fire, and Public Works Departments, and Parking and Public Improvements Commission (PPIC) as needed.

Step 3 - Engineering Analysis by Community Development Department / Preliminary Recommendations

The CDD and City Traffic Engineer will undertake an engineering study of streets or neighborhoods with outstanding requests. The study will include the following actions:

- Public meeting in the neighborhood to understand issues. Affected parties must be notified of the meeting.

- Review by Police and Fire Departments. This review will determine if the specific streets in question are critical police or fire response routes. If so, CDD will work with Police and Fire to ensure that measures are not installed which significantly impact response times.

- Traffic data collection to include (as appropriate based on identified problem) one or more of the following:

  - determine the area affected and then conduct field investigation to note traffic operating conditions, geometric conditions (roadway width, pavement condition, parking availability, type and location of existing traffic management devices, etc);

  - traffic volume counts (24 hour broken down into 15-minute increments and aggregated hour-by-hour);

  - radar or machine-based speed surveys;

  - truck volume counts;

  - cut-through traffic estimates via license plate surveys;

  - pedestrian counts;

  - accident investigation (review of accidents over a minimum of the prior two year period);

  - other investigations deemed appropriate by the CDD.

Based on this investigation, the CDD will make a preliminary determination of the need for specific traffic management measures. The traffic management measures may include one or more of the measures in the City's Neighborhood Traffic Management Toolbox.

Using the City's criteria and applying recognized traffic engineering standards, the CDD will recommend the use of one or more neighborhood traffic management measures to the affected neighborhood where they are appropriate. If most but not of the Toolbox criteria are met and the CDD and Traffic Engineer feel that a particular request is warranted, the CDD has the flexibility to recommend the use of a neighborhood traffic management measure. In determining the types and location of measures, estimates of potential secondary impacts (e.g., diversion to other streets) will be made where it is feasible to do so. Efforts to apply Level 1 toolbox measures will be made first where feasible, then proceeding to Level 2 and Level 3 only when it is demonstrated that applicable Level 1 tools will not solve the problems.

Step 4 - Neighborhood Meeting(s) to present plan and Surveys/Petitions

One or more neighborhood meetings will be conducted as required for purposes of notifying local residents, business owners and non-resident property owners of the results of the technical analysis, findings and preliminary recommendations. Meeting will be noticed as follows:

- Mailing of the notices to:
    - Applicant and all who have identified themselves as interested parties.
    - All property owners, residents and business owners that have frontage on the project street segment(s).
    - All other affected property owners, residents, and business owners in the neighborhoods. "Affected" parties are those who could potentially be impacted by the improvement(s), including those who reside or have businesses on parallel or adjacent streets which may also be affected by secondary spillover traffic. The extent of the notification for affected parties shall be determined by City staff.
    - City Police, Fire and Public Works Departments
- Other notification, as determined necessary by City staff, including:
    - Newspaper notice, display ad, announcement, or article
    - Posting of notice or signage on street(s) in affected areas
    - Posting of notice at City Hall
    - Posting of notice on City website

Following the evaluation and recommendation of potential toolbox measures, a survey/petition will be circulated to the affected persons to ascertain whether or not others agree that such measures should be installed. The persons receiving the survey/petition who are defined as "affected persons" will include all households, businesses and non-resident property owners that have frontage on the project street segment(s) or in the neighborhood, and could potentially be impacted by the improvement(s) including those with reside or have businesses on parallel or adjacent streets which may also be affected by secondary spillover traffic. The purpose of the survey is to establish the level of support among affected persons to proceed with implementation.

Step 5 - Develop, Install, and Evaluate Test Projects

Once funding becomes available, Level 1 measures and/or temporary test projects will be designed by the CDD. In some cases, the test project(s) may be implemented with temporary materials and will remain in place for approximately three to six months depending on the types of improvements (if significant citizen complaints warrant, the time period could be reduced). The project will be evaluated during the test period to determine if it addresses the identified problems and is consistent with Neighborhood Traffic Management Program goals. During this temporary test period, affected residents, business

owners, commuters who use the routes and other interested persons may provide comments to the CDD, City staff and City council regarding the measures. The CDD shall conduct follow-up studies as necessary to evaluate effectiveness of individual measures. Such analysis may include, but not necessarily be limited to, ADT traffic counts and radar speed surveys on affected streets and parallel streets. At anytime during this Test Project time frame anyone may appeal the decision of the installation of the Test Project to the PPIC and their recommendation will then be forwarded to the City Council.

Step 6 - Determination of Permanent Project

If the temporary test project shows that the Level 1 tools or other temporary measures have sufficiently addressed the targeted traffic problem(s) and there have not been citizen complaints or/and an appeal, nor excessive diversion (as determined per the attached diversion chart or as determined on a case-by-case basis by the City Traffic Engineer) of the problem to another residential street, the traffic management measures shall be made permanent as funding becomes available. If it is determined that the measures will be installed on a permanent basis, the list of affected residents, business owners and non-resident property owners and other interested parties will be notified.

If it is found that the measures do not achieve the intended goals of reducing speeds, cut through traffic or other identified problems, the CDD will review other potential measures (Level 2 and 3 measures) and recommend either elimination of all measures at the location or test installation of different neighborhood management measures. All installations may be appealed.

Step 7 - Monitoring

The City will conduct periodic monitoring as necessary to determine if the project continues to meet the goals of the Neighborhood Traffic Management Program. This monitoring will be conducted at the discretion of the CDD based on available funding, staffing levels, City staff input, and resident comments. If monitoring shows that the measures fail to achieve the intended goals of reducing speeds, cut through traffic or other identified problems, the measures may be removed. Affected residents and businesses may also petition to have measures removed using the same process as outlined herein for approval.

Administration/Miscellaneous

Appeals -
In addition to providing comments during the temporary test installation period, appeals may be made as indicated in the above steps. Decisions of staff are appealable to the PPIC, and PPIC decisions are appealable to the City Council. Generally staff will make the decision on Level 1 measures and the PPIC and/or City Council will make the decision on Level 2 and 3 measures. The appeals process will follow established City procedures.

Amendments-
This Program and the associated Toolbox may be amended at any time by the City Council. The City Council or Staff may make a request for an amendment to the Program. If deemed appropriate, amendments may first be reviewed by the Parking and Public Improvements Commission who will make a recommendation on the amendment to the City Council.

Removal-
Existing projects and/or projects installed under this Program may be requested to be removed. The request for removal of a project will be processed generally using the same procedures as outlined in this Program.

CONCLUSIONS AND RECOMMENDATIONS

Land use growth within the City itself as define in the land use element is small and is not expected to result in any significant traffic impacts, therefore, no mitigation measures are required. There are, however, a number of locations that are currently operating below the City's desirable level of service of LOS D. Also, regional growth is expected to result in impacts along major corridors in the City. Finally, residential street traffic impacts are expected to increase as a result of increased arterial street congestion and other factors. Although no project related improvements are required, the City does have a number of transportation system improvements planned. Table 7 lists the currently planned or programmed improvements. In addition, there may be improvements to some of the arterial streets as a result of Caltrans plans, programs of the Metropolitan Transportation Authority or the South Bay Council of Governments. Also, residential street traffic management measures will be applied as a result of the newly adopted Neighborhood Traffic Management Program. Significant changes in land use, if they occur, should include appropriate traffic impact analyses and mitigation measures.

Table 7
List of Transportation System Improvements

Project Title	**South Side Rosecrans Avenue Widening and Utility Undergrounding**
Description	Widen Rosecrans Avenue on the south side and underground the existing utilities.
Justification	This Project will provide an additional through lane for eastbound traffic east of Redondo Avenue and will remove the last segment of power poles on the south side of Rosecrans Avenue between Sepulveda Blvd. And Aviation Blvd. This City has received a MTA Grant to make improvements on Rosecrans Avenue. One improvement will be the addition of a fourth eastbound lane east of Redondo Ave. To widen the street at this location, the existing utilities have to be moved back and undergrounded. The City has already received $1.3 million in contributions and commitments. This proposed funding will complete the funding for SCE's portion of the work.
Project Title	**Manhattan Beach Blvd/Redondo Avenue Left Turn Signal**
Description	Installation of a permissive protected left turn signal on eastbound Manhattan Beach Blvd at Redondo Avenue.
Justification	At the Council Meeting of January 15, 2002. staff was directed to include this project in the next Capital Improvement Program.
Project Title	**Dual Left-Turn Lanes Westbound Marine Avenue at Sepulveda Blvd**
Description	Construct dual left turn lanes on westbound Marine Avenue to southbound Sepulveda Blvd
Justification	Identified by the Marine Avenue Traffic Study. This project will encourage motorists to turn left at Sepulveda Blvd. Rather than proceed west across Sepulveda into residential neighborhood.
Project Title	**Dual Left-Turn Lanes on Northbound Sepulveda Blvd at Manhattan Beach Blvd**
Description	Construct dual left turn lanes on northbound Sepulveda Blvd to westbound Manhattan Beach Blvd Project; will require Caltrans' approval permit.
Justification	Construct of the dual left turn pocket will increase the volume of left turn movement, improving the efficiency of the intersection. During peak times, excess vehicles back up into the number 1 northbound lane, impeding through traffic. This project will also reduce the amount of cut through traffic on 11th Street.
Project Title	**Dual Left-Turn Lanes on Eastbound Manhattan Beach Blvd at Sepulveda Blvd**
Description	Construct dual left turn lanes on eastbound Manhattan Beach Blvd to northbound Sepulveda Blvd Project will require Caltrans' approval and permit.
Justification	Identified by the Marine Avenue Traffic Study. This project will encourage motorist to use Manhattan Beach Blvd. Rather than Marine Avenue to access northbound Sepulveda Blvd. During peak times, excess vehicles wishing to turn left back up into the number 1 through lane reducing the efficiency of the intersection.
Project Title	**Metlox/13th Street Extension**
Description	Extend 13th Street easterly from Morningside Drive to Valley Drive construct curb, gutter and concrete street section.
Justification	New street extension will facilitate access to the proposed Police/Fire Facility as well as the Metlox development. It will also improve traffic circulation in the area.
Project Title	**Sepulveda Corridor Improvements Phase II**
Description	Construct the remaining improvements recommended by the Sepulveda Corridor Study. This project will include the installations of stamped concrete cross walks, street light pole bases, and key intersection enhancements.
Justification	This project will complete the improvement program envisioned by the study. It will further enhance the boulevard appearance and encourage further economic development.

Appendix C
Air Quality Worksheets

URBEMIS 2001 Model Results - Summary
Manhattan Beach General Plan

Model Run #1		ROG	Nox	CO	PM10
Year = 2001	Summer	7,003	8,868	77,255	258
Existing Land Use	Winter	8,554	9,414	78,379	345

Model Run #2		ROG	Nox	CO	PM10
Year = 2020	Summer	3,172	3,154	32,952	251
Proposed Land Use	Winter	4,109	3,326	34,245	341

Difference in Pollutants		ROG	Nox	CO	PM10
	Summer	(3,831)	(5,714)	(44,303)	(7)
	Winter	(4,445)	(6,088)	(44,134)	(4)

Percentage Change		ROG	Nox	CO	PM10
	Summer	-55%	-64%	-57%	-3%
	Winter	-52%	-65%	-56%	-1%

Thresholds	ROG	Nox	CO	PM10
	75	100	550	150

URBEMIS 2001 For Windows 6.2.1

File Name: L:\planning\1300s\1339.00\Ceqa\Air Quality\MB General Plan Exist
Project Name: Manhattan Beach General Plan Existing
Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	633.23	211.88	213.24	0.69	3.18
TOTALS (lbs/day, mitigated)	633.17	211.07	212.92	0.69	3.18

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (ppd, unmitigated)	6,431.24	8,744.29	77,818.92	259.30	53.02
TOTALS (ppd, mitigated)	6,431.24	8,744.29	77,818.92	259.30	53.02

URBEMIS 2001 For Windows 6.2.1

File Name: L:\planning\1300s\1339.00\Ceqa\Air Quality\MB General Plan Exist
Project Name: Manhattan Beach General Plan Existing
Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	1,186.83	217.00	715.72	86.38	0.99
TOTALS (lbs/day, mitigated)	1,186.77	216.20	715.40	86.38	0.99

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (ppd, unmitigated)	7,367.38	9,196.51	77,662.89	259.30	48.64
TOTALS (ppd, mitigated)	7,367.38	9,196.51	77,662.89	259.30	48.64

URBEMIS 2001 For Windows 6.2.1

File Name: L:\planning\1300s\1339.00\Ceqa\Air Quality\MB General Plan Futur
Project Name: Manhattan Beach General Plan Future
Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	657.03	221.91	142.10	0.46	1.47
TOTALS (lbs/day, mitigated)	656.98	221.10	141.77	0.46	1.47

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (ppd, unmitigated)	2,514.88	2,931.94	32,810.21	249.99	24.83
TOTALS (ppd, mitigated)	2,514.88	2,931.94	32,810.21	249.99	24.83

URBEMIS 2001 For Windows 6.2.1

File Name: L:\planning\1300s\1339.00\Ceqa\Air Quality\MB General Plan Futur
Project Name: Manhattan Beach General Plan Future
Project Location: South Coast Air Basin (Los Angeles area)

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS(lbs/day,unmitigated)	1,253.16	227.56	755.17	91.21	1.05
TOTALS (lbs/day, mitigated)	1,253.11	226.76	754.85	91.21	1.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	PM10	SO2
TOTALS (ppd, unmitigated)	2,856.37	3,097.78	33,489.88	249.99	24.61
TOTALS (ppd, mitigated)	2,856.37	3,097.78	33,489.88	249.99	24.61

CALINE-4 Model Results Summary
CO Hotspots

Intersection	Receptor	Concentration		
		Existing	Future	Change
Peck & Artesia	School	5.1	5.6	0.5
	High Density Res	5.3	5.7	0.4
Pacific & Manhattan	High Density Res	4.8	4.8	0.0
	High Density Res	4.7	4.7	0.0
	School	4.3	4.3	0.0
Prospect & Artesia	Church	6.0	6.4	0.4
Redondo & Manhattan	Park	7.4	7.4	0.0
	Park	4.6	6.3	1.7
	Low Density Res	6.3	4.6	-1.7
Blanche & Valley	Low Density Res	3.9	4	0.1
	Low Density Res	4.7	4.9	0.2
	Open Space	5.1	5.2	0.1
Pacific & Ardmore	Open Space	2.9	3	0.1
	Open Space	3.2	3.4	0.2
	Low Density Res	3.9	4	0.1
	Low Density Res	3.8	3.9	0.1
Highland & Vista Del Mar	High Density Res	9.5	9.5	0.0
	High Density Res	8.4	8.4	0.0
	High Density Res	8.6	8.6	0.0
	High Density Res	8.8	8.8	0.0
Highland & 15th	High Density Res	5.6	5.6	0.0
	High Density Res	7.4	7.4	0.0
Peck & Manhattan	High Density Res	6	6	0.0
	High Density Res	5.3	5.3	0.0
	High Density Res	5.6	5.6	0.0

Source: California Line Source Dispersion Model, June 1989 Version

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Blanche & Valley
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley [EB]	-60	0	0	0	AG	456	50.0	.0	10.0
B. Blanche [SB]	0	0	0	-60	AG	0	50.0	.0	10.0
C. Blanche [NB]	0	-60	0	0	AG	0	50.0	.0	10.0
D. Valley [EB]	0	0	60	0	AG	346	50.0	.0	10.0
E. Valley [WB]	60	0	0	0	AG	481	50.0	.0	10.0
F. Blanche [NB]	0	0	0	60	AG	354	50.0	.0	10.0
G. Blanche [SB]	0	60	0	0	AG	395	50.0	.0	10.0
H. Valley [WB]	0	0	-60	0	AG	632	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. LDR	-11	10	1.8
2. LDR	10	10	1.8
3. Open Spc	0	-8	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. LDR	104.	3.9	.0	.0	.0	1.2	1.6	.6	.6	.0
2. LDR	255.	4.7	1.5	.0	.0	.0	.0	.6	.7	2.0
3. Open Spc	358.	5.1	.5	.0	.0	.0	.0	1.8	2.0	.7

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Blanche & Valley
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley [EB]	-60	0	0	0	AG	478	50.0	.0	10.0
B. Blanche [SB]	0	0	0	-60	AG	0	50.0	.0	10.0
C. Blanche [NB]	0	-60	0	0	AG	0	50.0	.0	10.0
D. Valley [EB]	0	0	60	0	AG	357	50.0	.0	10.0
E. Valley [WB]	60	0	0	0	AG	506	50.0	.0	10.0
F. Blanche [NB]	0	0	0	60	AG	371	50.0	.0	10.0
G. Blanche [SB]	0	60	0	0	AG	395	50.0	.0	10.0
H. Valley [WB]	0	0	-60	0	AG	651	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. LDR	-11	10	1.8
2. LDR	10	10	1.8
3. Open Spc	0	-8	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. LDR	104.	4.0	.0	.0	.0	1.2	1.6	.6	.6	.0
2. LDR	255.	4.9	1.5	.0	.0	.0	.0	.6	.7	2.0
3. Open Spc	357.	5.2	.6	.0	.0	.0	.0	1.8	1.9	.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Highland Ave. & 15th Street
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 15th [EB]	-60	0	0	0	AG	345	50.0	.0	10.0
B. Highland [SB	0	0	0	-60	AG	899	50.0	.0	10.0
C. Highland [NB	0	-60	0	0	AG	578	50.0	.0	16.0
D. 15th [EB]	0	0	60	0	AG	334	50.0	.0	10.0
E. 15th [WB]	60	0	0	0	AG	415	50.0	.0	10.0
F. Highland [NB	0	0	0	60	AG	859	50.0	.0	16.0
G. Highland [SB	0	60	0	0	AG	1093	50.0	.0	10.0
H. 15th [WB]	0	0	-60	0	AG	339	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-12	9	1.8
2. HDR	8	10	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	104.	5.6	.0	.0	.0	1.2	1.4	1.5	1.6	.0
2. HDR	192.	7.4	.0	3.2	2.0	.5	.7	1.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Highland Ave. & 15th Street
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 15th [EB]	-60	0	0	0	AG	345	50.0	.0	10.0
B. Highland [SB	0	0	0	-60	AG	899	50.0	.0	10.0
C. Highland [NB	0	-60	0	0	AG	578	50.0	.0	16.0
D. 15th [EB]	0	0	60	0	AG	334	50.0	.0	10.0
E. 15th [WB]	60	0	0	0	AG	415	50.0	.0	10.0
F. Highland [NB	0	0	0	60	AG	859	50.0	.0	16.0
G. Highland [SB	0	60	0	0	AG	1093	50.0	.0	10.0
H. 15th [WB]	0	0	-60	0	AG	339	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-12	9	1.8
2. HDR	8	10	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	104.	5.6	.0	.0	.0	1.2	1.4	1.5	1.6	.0
2. HDR	192.	7.4	.0	3.2	2.0	.5	.7	1.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Highland & Vista Del Mar/4th Avenue
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 4th [EB]	-60	0	0	0	AG	97	50.0	.0	10.0
B. Highland [SB	0	0	0	-60	AG	1833	50.0	.0	10.0
C. Highland [NB	0	-60	0	0	AG	807	50.0	.0	10.0
D. 4th [EB]	0	0	60	0	AG	0	50.0	.0	10.0
E. 4th [WB]	60	0	0	0	AG	22	50.0	.0	10.0
F. Highland [NB	0	0	0	60	AG	855	50.0	.0	10.0
G. Highland [SB	0	60	0	0	AG	1833	50.0	.0	10.0
H. 4th [WB]	0	0	-60	0	AG	121	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-8	2	1.8
2. HDR	9	8	1.8
3. HDR	-9	-8	1.8
4. HDR	8	-8	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Highland & Vista Del Mar/4th Avenue
Page 1

RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	164.	9.5	.1	6.2	3.0	.0	.0	.0	.0	.2
2. HDR	194.	8.4	.0	5.6	2.7	.0	.0	.0	.0	.0
3. HDR	14.	8.6	.2	.0	.0	.0	.0	2.8	5.4	.2
4. HDR	346.	8.8	.0	.0	.0	.0	.0	3.0	5.8	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Highland & Vista Del Mar/4th Avenue Futu
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 4th [EB]	*	-60	0	0	0	* AG	97	50.0	.0	10.0
B. Highland [SB	*	0	0	0	-60	* AG	1833	50.0	.0	10.0
C. Highland [NB	*	0	-60	0	0	* AG	807	50.0	.0	10.0
D. 4th [EB]	*	0	0	60	0	* AG	0	50.0	.0	10.0
E. 4th [WB]	*	60	0	0	0	* AG	22	50.0	.0	10.0
F. Highland [NB	*	0	0	0	60	* AG	855	50.0	.0	10.0
G. Highland [SB	*	0	60	0	0	* AG	1833	50.0	.0	10.0
H. 4th [WB]	*	0	0	-60	0	* AG	121	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. HDR	*	-8	2	1.8
2. HDR	*	9	8	1.8
3. HDR	*	-9	-8	1.8
4. HDR	*	8	-8	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Highland & Vista Del Mar/4th Avenue Futu
Page 1

RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	164.	9.5	.1	6.2	3.0	.0	.0	.0	.0	.2
2. HDR	194.	8.4	.0	5.6	2.7	.0	.0	.0	.0	.0
3. HDR	14.	8.6	.2	.0	.0	.0	.0	2.8	5.4	.2
4. HDR	346.	8.8	.0	.0	.0	.0	.0	3.0	5.8	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Pacific & Ardmore
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Marine [EB]	*	-60	0	0	0	* AG	560	50.0	.0	10.0
B. Pacific [SB]	*	0	0	0	-60	* AG	198	50.0	.0	10.0
C. Pacific [NB]	*	0	-60	0	0	* AG	253	50.0	.0	10.0
D. Marine[EB]	*	0	0	60	0	* AG	734	50.0	.0	10.0
E. Marine [WB]	*	60	0	0	0	* AG	250	50.0	.0	10.0
F. Pacific [NB]	*	0	0	0	60	* AG	417	50.0	.0	10.0
G. Pacific [SB]	*	0	60	0	0	* AG	337	50.0	.0	10.0
H. Marine [WB]	*	0	0	-60	0	* AG	51	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Open Spc	*	-19	18	1.8
2. Open Spc	*	10	10	1.8
3. LDR	*	10	-12	1.8
4. LDR	*	-11	-10	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Pacific & Ardmore

RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Open Spc	111.	2.9	.0	.0	.0	1.4	.5	.5	.4	.0
2. Open Spc	212.	3.2	.0	.4	.5	1.3	.5	.2	.2	.0
3. LDR	345.	3.9	.0	.0	.0	1.1	.4	1.3	1.1	.0
4. LDR	75.	3.8	.0	.3	.4	2.2	.8	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Pacific & Ardmore
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Marine [EB]	*	-60	0	0	0	*	AG	589	50.0	.0	10.0
B. Pacific [SB]	*	0	0	0	-60	*	AG	201	50.0	.0	10.0
C. Pacific [NB]	*	0	-60	0	0	*	AG	253	50.0	.0	10.0
D. Marine[EB]	*	0	0	60	0	*	AG	758	50.0	.0	10.0
E. Marine [WB]	*	60	0	0	0	*	AG	264	50.0	.0	10.0
F. Pacific [NB]	*	0	0	0	60	*	AG	431	50.0	.0	10.0
G. Pacific [SB]	*	0	60	0	0	*	AG	337	50.0	.0	10.0
H. Marine [WB]	*	0	0	-60	0	*	AG	53	50.0	.0	10.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Open Spc	*	-19	18	1.8
2. Open Spc	*	10	10	1.8
3. LDR	*	10	-12	1.8
4. LDR	*	-11	-10	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Pacific & Ardmore

RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Open Spc	111.	3.0	.0	.0	.0	1.4	.6	.5	.4	.0
2. Open Spc	255.	3.4	1.8	.0	.0	.0	.0	.7	.6	.2
3. LDR	345.	4.0	.0	.0	.0	1.1	.4	1.4	1.1	.0
4. LDR	75.	3.9	.0	.3	.4	2.3	.9	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Pacific & Manhattan
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mnhttn [EB]	-60	0	0	0	AG	565	50.0	.0	10.0
B. Pacific [SB]	0	0	0	-60	AG	98	50.0	.0	10.0
C. Mnhttn [NB]	0	-60	0	0	AG	100	50.0	.0	10.0
D. Mnhttn [EB]	0	0	60	0	AG	721	50.0	.0	10.0
E. Mnhttn [WB]	60	0	0	0	AG	657	50.0	.0	12.2
F. Pacific [NB]	0	0	0	60	AG	180	50.0	.0	10.0
G. Pacific [SB]	0	60	0	0	AG	242	50.0	.0	10.0
H. Mnhttn [WB]	0	0	-60	0	AG	565	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-10	10	1.8
2. School	13	10	1.8
3. HDR	-10	-10	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	106.	4.8	.0	.0	.0	2.1	2.0	.3	.4	.0
2. School	255.	4.3	1.8	.0	.0	.0	.0	.3	.4	1.8
3. HDR	75.	4.7	.0	.2	.2	2.2	2.1	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Pacific & Manhattan
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mnhttn [EB]	-60	0	0	0	AG	565	50.0	.0	10.0
B. Pacific [SB]	0	0	0	-60	AG	98	50.0	.0	10.0
C. Mnhttn [NB]	0	-60	0	0	AG	100	50.0	.0	10.0
D. Mnhttn [EB]	0	0	60	0	AG	721	50.0	.0	10.0
E. Mnhttn [WB]	60	0	0	0	AG	657	50.0	.0	12.2
F. Pacific [NB]	0	0	0	60	AG	180	50.0	.0	10.0
G. Pacific [SB]	0	60	0	0	AG	242	50.0	.0	10.0
H. Mnhttn [WB]	0	0	-60	0	AG	565	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-10	10	1.8
2. School	13	10	1.8
3. HDR	-10	-10	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	106.	4.8	.0	.0	.0	2.1	2.0	.3	.4	.0
2. School	255.	4.3	1.8	.0	.0	.0	.0	.3	.4	1.8
3. HDR	75.	4.7	.0	.2	.2	2.2	2.1	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Peck & Artesia
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Artesia [EB]	-126	0	0	0	AG	1388	50.0	.0	12.2
B. Peck [SB]	0	0	0	-60	AG	244	50.0	.0	10.0
C. Peck [NB]	0	-60	0	0	AG	89	50.0	.0	10.0
D. Artesia [EB]	0	0	60	0	AG	1255	50.0	.0	12.2
E. Artesia [WB]	60	0	0	0	AG	1311	50.0	.0	12.2
F. Peck [NB]	0	0	0	60	AG	222	50.0	.0	10.0
G. Peck [SB]	0	60	0	0	AG	333	50.0	.0	10.0
H. Artesia [WB]	0	0	-60	0	AG	1400	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. School	-126	21	1.8
2. HDR	8	23	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. School	102.	5.1	2.1	.1	.0	.5	.5	.0	.0	1.8
2. HDR	243.	5.3	2.1	.0	.0	.0	.0	.4	.7	2.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Peck & Artesia
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Artesia [EB]	-126	0	0	0	AG	1555	50.0	.0	12.2
B. Peck [SB]	0	0	0	-60	AG	270	50.0	.0	10.0
C. Peck [NB]	0	-60	0	0	AG	89	50.0	.0	10.0
D. Artesia [EB]	0	0	60	0	AG	1391	50.0	.0	12.2
E. Artesia [WB]	60	0	0	0	AG	1469	50.0	.0	12.2
F. Peck [NB]	0	0	0	60	AG	247	50.0	.0	10.0
G. Peck [SB]	0	60	0	0	AG	333	50.0	.0	10.0
H. Artesia [WB]	0	0	-60	0	AG	1538	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. School	-126	21	1.8
2. HDR	8	23	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. School	102.	5.6	2.3	.1	.0	.6	.6	.0	.0	1.9
2. HDR	243.	5.7	2.3	.0	.0	.0	.0	.5	.7	2.2

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Peck & Manhattan Beach Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mnhttn [EB]	-60	0	0	0	AG	1345	50.0	.0	12.2
B. Peck [SB]	0	0	0	-60	AG	245	50.0	.0	10.0
C. Peck [NB]	0	-60	0	0	AG	244	50.0	.0	10.0
D. Mnhttn [EB]	0	0	60	0	AG	1422	50.0	.0	12.2
E. Mnhttn [WB]	60	0	0	0	AG	1289	50.0	.0	12.2
F. Peck [NB]	0	0	0	60	AG	99	50.0	.0	10.0
G. Peck [SB]	0	60	0	0	AG	88	50.0	.0	10.0
H. Manhattan [W	0	0	-60	0	AG	1200	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-5	15	1.8
2. HDR	-4	-21	1.8
3. HDR	7	-18	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	112.	6.0	.0	.0	.0	2.9	2.7	.2	.2	.0
2. HDR	59.	5.3	.0	.5	.5	2.2	2.0	.0	.0	.0
3. HDR	293.	5.6	2.4	.5	.5	.0	.0	.0	.0	2.2

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Peck & Manhattan Beach Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mnhttn [EB]	-60	0	0	0	AG	1345	50.0	.0	12.2
B. Peck [SB]	0	0	0	-60	AG	245	50.0	.0	10.0
C. Peck [NB]	0	-60	0	0	AG	244	50.0	.0	10.0
D. Mnhttn [EB]	0	0	60	0	AG	1422	50.0	.0	12.2
E. Mnhttn [WB]	60	0	0	0	AG	1289	50.0	.0	12.2
F. Peck [NB]	0	0	0	60	AG	99	50.0	.0	10.0
G. Peck [SB]	0	60	0	0	AG	88	50.0	.0	10.0
H. Manhattan [W	0	0	-60	0	AG	1200	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. HDR	-5	15	1.8
2. HDR	-4	-21	1.8
3. HDR	7	-18	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. HDR	112.	6.0	.0	.0	.0	2.9	2.7	.2	.2	.0
2. HDR	59.	5.3	.0	.5	.5	2.2	2.0	.0	.0	.0
3. HDR	293.	5.6	2.4	.5	.5	.0	.0	.0	.0	2.2

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Prospect & Artesia
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	37. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Artesia [EB]	-60	0	0	0	AG	1389	50.0	.0	12.2
B. Prospect[SB]	0	0	0	-60	AG	511	50.0	.0	10.0
C. Prospect[NB]	0	-60	0	0	AG	377	50.0	.0	10.0
D. Artesia [EB]	0	0	60	0	AG	1367	50.0	.0	12.2
E. Artesia [WB]	60	0	0	0	AG	1344	50.0	.0	12.2
F. Prospect [NB	0	0	0	60	AG	88	50.0	.0	10.0
G. Prospect [SB	0	60	0	0	AG	311	50.0	.0	10.0
H. Artesia [WB]	0	0	-60	0	AG	1455	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Church	10	19	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Church	194.	6.0	.0	1.5	1.1	1.7	1.6	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Prospect & Artesia
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	37. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Artesia [EB]	-60	0	0	0	AG	1555	50.0	.0	12.2
B. Prospect[SB]	0	0	0	-60	AG	556	50.0	.0	10.0
C. Prospect[NB]	0	-60	0	0	AG	377	50.0	.0	10.0
D. Artesia [EB]	0	0	60	0	AG	1512	50.0	.0	12.2
E. Artesia [WB]	60	0	0	0	AG	1505	50.0	.0	12.2
F. Prospect [NB	0	0	0	60	AG	93	50.0	.0	10.0
G. Prospect [SB	0	60	0	0	AG	311	50.0	.0	10.0
H. Artesia [WB]	0	0	-60	0	AG	1587	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Church	10	19	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Church	194.	6.4	.0	1.6	1.1	1.8	1.8	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Redondo & Manhattan Beach Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mnhttn [EB]	-60	0	0	0	AG	1444	50.0	.0	12.2
B. Redondo [SB]	0	0	0	-60	AG	444	50.0	.0	10.0
C. Redondo [NB]	0	-60	0	0	AG	211	50.0	.0	10.0
D. Mnhttn [EB]	0	0	60	0	AG	1388	50.0	.0	12.2
E. Mnhttn [WB]	60	0	0	0	AG	1378	50.0	.0	12.2
F. Redondo [NB]	0	0	0	60	AG	234	50.0	.0	10.0
G. Redondo [SB]	0	60	0	0	AG	366	50.0	.0	10.0
H. Manhattan [W	0	0	-60	0	AG	1333	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Park	-10	13	1.8
2. LDR	18	27	1.8
3. Park	-16	-17	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Park	110.	7.4	.0	.0	.0	3.2	3.2	.4	.6	.0
2. LDR	241.	4.6	1.9	.0	.0	.0	.0	.3	.5	1.8
3. Park	69.	6.3	.0	.6	.3	2.7	2.7	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Redondo & Manhattan Beach Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	36. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	5. DEGREES	TEMP=	25.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mnhttn [EB]	*	-60	0	0	0	* AG	1444	50.0	.0	12.2
B. Redondo [SB]	*	0	0	0	-60	* AG	444	50.0	.0	10.0
C. Redondo [NB]	*	0	-60	0	0	* AG	211	50.0	.0	10.0
D. Mnhttn [EB]	*	0	0	60	0	* AG	1388	50.0	.0	12.2
E. Mnhttn [WB]	*	60	0	0	0	* AG	1378	50.0	.0	12.2
F. Redondo [NB]	*	0	0	0	60	* AG	234	50.0	.0	10.0
G. Redondo [SB]	*	0	60	0	0	* AG	366	50.0	.0	10.0
H. Manhattan [W	*	0	0	-60	0	* AG	1333	50.0	.0	12.2

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Park	*	-10	13	1.8
2. LDR	*	18	27	1.8
3. Park	*	-16	-17	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	*	PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Park	*	110.	*	7.4	*	.0	.0	.0	3.2	3.2	.4	.6	.0
2. LDR	*	241.	*	4.6	*	1.9	.0	.0	.0	.0	.3	.5	1.8
3. Park	*	69.	*	6.3	*	.0	.6	.3	2.7	2.7	.0	.0	.0

Appendix D
Summary of General Plan Goals and Policies

Manhattan Beach General Plan Update Program

Final Goals and Policies – October 2002

Land Use Element

Goal 1: **Maintain the low-profile development and small town atmosphere of Manhattan Beach.**

Policy 1.1: Limit the height of new development to three stories where the height limit is thirty feet, or to two stories where the height limit is twenty-six feet, to protect the privacy of adjacent properties, reduce shading, protect views of the ocean, and preserve the low-profile image of the community.

Policy 1.2: Require the design of all new construction to utilize notches, balconies, rooflines, open space, setbacks, landscaping, or other architectural details to reduce the bulk of buildings and to add visual interest to the streetscape.

Goal 2: **Preserve the features of each community neighborhood, and develop solutions tailored to each neighborhood's unique characteristics.**

Policy 2.1: Protect public access to and enjoyment of the beach while respecting the privacy of beach residents.

Policy 2.2: Encourage the preservation and enhancement of unique residential homes and buildings throughout Manhattan Beach to preserve the culture and history of the City.

Policy 2.3: Preserve and maintain distinctive neighborhood characteristics when public improvements are made.

Policy 2.4 Continue to allow use of the public landscaped area of the Strand for limited private landscaping purposes consistent with adopted City policy.

Policy 2.5 Develop and implement standards for the use of walkstreets and other public right-of-way areas .

Policy 2.6 Discourage the commercial use of walkstreets.

Policy 2.7 Encourage the beautification of the walkstreets, particularly through the use of landscaping.

Policy 2.8 Develop a historic preservation ordinance that recognizes and works to protect buildings, landscaping, and other features important to the City's history.

Goal 3: **Encourage the provision and retention of private landscaped open space.**

Policy 3.1: Develop landscaping standards for commercial areas that unify and humanize each district.

Policy 3.2: Preserve and encourage private open space on residential lots citywide.

Policy 3.3: Protect existing mature trees throughout the City, and encourage their replacement with specimen trees whenever they are lost or removed.

Goal 4: **Maintain the viability of the commercial areas of Manhattan Beach.**

Policy 4.1: Support the viability of small businesses throughout the City.

Policy 4.2: Encourage a diverse mix of businesses that support the local tax base, are beneficial to residents, and support the economic needs of the community.

Policy 4.3: Recognize the need for a variety of commercial development types and designate areas appropriate for each. Encourage development proposals that meet the intent of these designations.

Goal 5: **Continue to support and encourage the viability of the Downtown area of Manhattan Beach.**

Policy 5.1: Encourage the upgrading and expansion of businesses in the Downtown area to serve as a center for the community and to meet the needs of local residents and visitors.

Policy 5.2: Encourage the use of the Downtown Design Guidelines Downtown to improve the Downtown's visual identification as a unique commercial area.

Policy 5.3: Support pedestrian-oriented improvements to increase accessibility in and around Downtown.

Policy 5.4: Encourage first-floor street front businesses with retail, restaurants, service-commercial, and similar uses to promote lively pedestrian activity on Downtown streets.

Policy 5.5: Support the efforts of business improvement districts (BIDs) to enhance and improve Downtown.

Policy 5.6: Recognize the unique qualities of mixed-use development, and balance the needs of both commercial and residential uses.

Goal 6: **Maintain Sepulveda Boulevard, Rosecrans Avenue, and the commercial areas of Manhattan Village as regional-serving commercial districts.**

Policy 6.1: Ensure that applicable zoning regulations allow for commercial uses that serve a broad market area, including visitor-serving uses.

Policy 6.2 Support the remodeling and upgrading needs of businesses as appropriate within these regional-serving commercial districts.

Policy 6.3 Recognize that shallow-depth commercial lots along Sepulveda Boulevard may be difficult to develop and that in limited circumstances, allowing parking facilities to be established on adjacent residential properties may be appropriate, provided such use does not result in any adverse impact on abutting residential neighborhoods and further provided that access to residential streets from the back entrance of commercial uses is discouraged.

Goal 7: **Preserve the low-intensity, pedestrian-oriented character of commercial areas in the North End and El Porto.**

Policy 7.1 Provide zoning regulations that encourage neighborhood-oriented businesses within these areas.

Policy 7.2 Encourage and support ground floor retail and service uses on properties designated for commercial use.

Policy 7.3 Continue to improve the aesthetic quality of businesses within the North End and El Porto.

Policy 7.4 Provide traffic enhancements that accommodate safe pedestrian movement.

Policy 7.5 Work to improve parking conditions within the North End and El Porto.

Policy 7.6 Support the development of a comprehensive streetscape improvement plan.

Policy 7.7: Recognize the unique qualities of mixed-use development, and balance the needs of both commercial and residential uses.

Goal 8: **Protect residential neighborhoods from the intrusion of inappropriate and incompatible uses.**

Policy 8.1: Require the separation or buffering of residential areas from businesses which produce noise, odors, high traffic volumes, light or glare, and parking through the use of landscaping, setbacks, or other techniques.

Policy 8.2: Work with all commercial property owners bordering residential areas to mitigate impacts and use appropriate landscaping and buffering of residential neighborhoods.

Policy 8.3: Consider using discretionary review for any public gathering place or institutional use proposed within or adjacent to a residential neighborhood.

Policy 8.4: Discourage the outdoor commercial and industrial use of property adjacent to residential use.

Policy 8.5 Regulate the use of and special activities conducted within public parks to minimize any adverse impact on adjacent residential neighborhoods.

Policy 8.6 Encourage developers to incorporate CPTED (Crime Prevention Through Environmental Design) concepts into project design.

Goal 9: Achieve a strong, positive community aesthetic.

Policy 9.1 Continue to encourage quality design in all new construction.

Policy 9.2 Promote the use of adopted design guidelines for new construction in Downtown, along Sepulveda Boulevard, and other areas to which guidelines apply.

Policy 9.3 Encourage use of "stealth" design for telecommunications antenna and related facilities.

Policy 9.4 Establish and implement consistent standards and aesthetics for public signage, including City street signs.

Policy 9.5: Ensure that the sign ordinance provides for commercial signage that is attractive, non-intrusive, safe, and consistent with overall City aesthetic goals.

Infrastructure Element: Circulation

Goal 1: Provide a balanced transportation system that allows the safe and efficient movement of people, goods and services throughout the City.

Policy 1.1: Review the functioning of the street system on a regular basis to identify problems and develop solutions.

Policy 1.2: Improve street signage citywide, and ensure that street signs are not obscured or obstructed by vegetation or structures.

Policy 1.3: Encourage the development of Transportation Demand Management (TDM) plans for all major developments or facility expansions to encourage ride-sharing and other improvements, thereby reducing vehicle trips.

Policy 1.4: Work with neighboring communities and other South Bay cities, as well as state and other agencies, to develop regional solutions to traffic problems which are regional in nature, and to mitigate impacts of development in neighboring communities that impact the City of Manhattan Beach.

Policy 1.5: Investigate and encourage the use of alternative transportation systems such as intra/inter-city shuttle or trolley systems.

Policy 1.6: Support dial-a-ride or other para-transit systems for the senior and disabled members of the community.

Policy 1.7: Consider emergency vehicle access needs when developing on-street parking and other public right-of-way development standards.

Policy 1.8: Require property owners, at the time new construction is proposed, to either improve abutting public right-of-way to its full required width or to pay in-lieu fees for improvements, as appropriate.

Policy 1.9: Require property owners, at the time of new construction or substantial remodeling, dedicate land for roadway or other public improvements, as appropriate and warranted by the project.

Policy 1.10: Adopt and implement standards for public street right-of-way use for private purposes.

Policy 1.11: Monitor City standards regarding the use of public walkstreets for private purposes.

Policy 1.12: Explore opportunities for creating peripheral parking lots to serve the Downtown and North End.

Goal 2: Move commuter traffic through the City on arterial and collector streets to protect other streets from the intrusion of commuter traffic.

Policy 2.1: Upgrade all major intersections and arterial streets to keep traffic moving efficiently.

Policy 2.2: Require additional traffic lanes and/or other traffic improvements for ingress and egress for new development along arterials where necessary for traffic and safety reasons.

Policy 2.3: Work with neighboring cities and regional and sub-regional agencies to widen and upgrade all major intersections and associated street segments within the City and adjacent jurisdictions to optimize traffic flow.

Policy 2.4: Encourage the use of Intelligent Transportation Systems (ITS), such as advanced signalization, motorist information, advanced transit, advanced emergency vehicle access, and intelligent parking systems, as well as other appropriate communication technologies, to direct through traffic.

Policy 2.5: Encourage the use of the Neighborhood Traffic Management Program and utilize neighborhood traffic management tools to mitigate neighborhood intrusion by commuter traffic.

Policy 2.6: Establish priorities and determine funding available for implementing the Neighborhood Traffic Management Program.

Policy 2.7: Monitor and minimize traffic issues associated with construction activities.

Goal 3: Ensure that adequate parking and loading facilities are available to support both residential and commercial needs.

Policy 3.1: Review the existing Downtown Parking Management Program recommendations, re-evaluate parking and loading demands, and develop and implement a comprehensive program, including revised regulations as appropriate, to address parking issues.

Policy 3.2: Periodically evaluate the adequacy of parking standards in light of vehicle ownership patterns and vehicle sizes in the City.

Policy 3.3: Review development proposals to ensure potential adverse parking impacts are minimized or avoided.

Policy 3.4: Encourage joint use and off-site parking where appropriate.

Policy 3.5: Evaluate parking and loading demands in the North End, and develop and implement a comprehensive program to address these needs.

Policy 3.6: Require private development to provide public on-street parking in the public right-of-way according to City Public Works standards.

Policy 3.7: Monitor and minimize parking issues associated with construction activities.

Policy 3.8: Work to retain on-street parking in the Beach Area, particularly on Highland Avenue.

Policy 3.9 Continue to work with businesses and public agencies to coordinate parking strategies.

Goal 4: Protect residential neighborhoods from the adverse impacts of traffic and parking of adjacent non-residential uses.

Policy 4.1: Review on-street parking in neighborhoods adjacent to commercial areas where neighbors have requested such review, and develop parking and traffic control plans for those neighborhoods which are or which could potentially be adversely impacted by spillover parking and traffic.

Policy 4.2: Carefully review commercial development proposals with regard to planned ingress/egress, and enforce restrictions as approved.

Policy 4.3: Encourage provision of on-site parking for employees.

Policy 4.4: Ensure that required parking and loading spaces are available and maintained for parking.

Goal 5: Reduce the adverse parking and traffic impacts that schools create on surrounding residential neighborhoods.

Policy 5.1: Encourage the school district to provide busing or other alternative transportation modes to the schools as a means of reducing peak-hour traffic.

Policy 5.2: Work with the school district and private schools to improve pedestrian and bicycle safety around schools.

Policy 5.3: Coordinate after-school, weekend, and community activities on school grounds with consideration of potential traffic impacts on neighborhoods.

Policy 5.4: Discourage parking associated with schools, particularly at Mira Costa High School, within surrounding neighborhoods.

Policy 5.5: Work with the school district and private schools to address high traffic volumes during the morning and afternoon peak school hours, and improve drop-off and pick-up circulation.

Goal 6: Create well-marked pedestrian and bicycle networks that facilitate these modes of circulation.

Policy 6.1: Implement those components of the Downtown Design Guidelines that will enhance the pedestrian-oriented environment.

Policy 6.2: Protect the walkstreets as important pedestrian access to the beach.

Policy 6.3: Consider and protect the character of residential neighborhoods in the design of pedestrian access.

Policy 6.4: Develop standards to encourage pedestrian-oriented design in the North End.

Policy 6.5: Incorporate bikeways and pedestrian ways as part of the City's circulation system where safe and appropriate to do so.

Policy 6.6: Encourage features that accommodate the use of bicycles in the design of new development, as appropriate.

Infrastructure Element: Public Facilities – Water

Goal 7: **Maintain and protect a reliable and cost effective water supply system capable of adequately meeting normal demand and emergency demand in the City.**

Policy 7.1: Periodically evaluate the entire water supply and distribution system to ensure its continued adequacy, reliability, and safety.

Policy 7.2: Ensure that all new development or expansion of existing facilities bears the cost of providing adequate water service to meet the increased demand which it generates.

Policy 7.3: Educate the public in the importance of water conservation, and require new development to comply with local and State codes for water conservation.

Policy 7.4 Support expanded use of reclaimed water.

Policy 7.5 Support the exploration of the feasibility of desalinated seawater as a reliable potable water source.

Infrastructure Element: Public Facilities – Sewer

Goal 8: **Maintain a sewage system adequate to protect the health and safety of all Manhattan Beach residents and businesses.**

Policy 8.1: Evaluate the sewage disposal system periodically to ensure its adequacy to meet changes in demand and changes in types of waste.

Policy 8.2: Ensure that all new development or expansion of existing facilities bears the cost of expanding the sewage disposal system to handle the increased load, which they are expected to handle.

Infrastructure Element: Public Facilities – Storm Drainage

Goal 9: **Maintain a storm drainage system that adequately protects the health and safety and property of Manhattan Beach residents.**

Policy 9.1: Evaluate the size and condition of the storm drainage system periodically to ensure its ability to handle expected storm runoff.

Policy 9.2: Evaluate the impact of all new development and expansion of existing facilities on storm runoff, and ensure that the cost of upgrading existing drainage facilities to handle the additional runoff is paid for by the development which generates it.

Policy 9.3: Support the use of storm water runoff control measures that are effective and economically feasible.

Policy 9.4: Encourage the use of site and landscape designs that minimize surface runoff by minimizing the use of concrete and maximizing the use of permeable surface materials.

Policy 9.5 Support policies and regulations which will ensure the City is in compliance with Federal and State laws regarding stormwater pollution prevention.

Infrastructure Element: Public Facilities – Utilities

Goal 10: Underground utility lines throughout the community to the extent that it is economically and practically feasible.

Policy 10.1: Continue to underground utilities in commercial streets using Rule 20A and other available funds.

Policy 10.2: Require new commercial and industrial developments to underground utility lines or pay an in-lieu fee, as appropriate.

Policy 10.3: Encourage the undergrounding of utilities in residential neighborhoods, including through the formation of residential utility undergrounding districts.

Policy 10.4: In neighborhoods where an underground utilities system assessment district formation has been approved but not yet implemented, ensure that new utilities are undergrounded or that the responsible parties fund the cost of the system.

Policy 10.5: Identify the needs for street lighting, and establish lighting districts to provide street lighting as needed and appropriate.

Goal 11: Establish a reliable communications system.

Policy 11.1: Accommodate the expansion of communications networks to address the needs of City residents, businesses, and other operations.

Policy 11.2: Encourage new housing, commercial/industrial development, and public facilities to accommodate all forms of telecommunications.

Community Safety

Goal 1: Minimize the risks to public health, safety, and welfare resulting from natural and human-caused hazards.

Policy 1.1: Continue to encourage and support the enforcement of State and Federal environmental and pollution control laws.

Policy 1.2: Cooperate with other jurisdictions in the South Bay area to maintain an up-to-date emergency response system for the region.

Policy 1.3: Prepare and disseminate information to residents and businesses on preparing for and responding to natural disasters and threats to public safety.

Policy 1.4: Encourage and assist the school district in teaching children annually to respond appropriately in an emergency and to threats to personal safety.

Policy 1.5: Ensure that public and private water distribution and supply facilities have adequate capacity and reliability to supply both everyday and emergency fire-fighting needs.

Goal 2: Protect residents from hazardous materials and the hazards associated with the transport of such materials.

Policy 2.1: Continue to support and encourage State and Federal efforts to identify existing or previously existing hazardous waste generators or disposal sites and monitor disposal of all wastes and contamination of their sites.

Policy 2.2: Continue to monitor underground emissions and associated hazards in Manhattan Village and in other areas adjacent to industrial uses.

Policy 2.3: Promote the routing of vehicles carrying potentially hazardous materials along transportation corridors that reduce public exposure to risk. Cooperate with regional agencies in developing such routing systems.

Policy 2.4: Require all businesses located in the City to maintain required Fire Department permits and file a list of the chemicals which they use with the Fire Department, and identify the areas where they are used or stored so that, should an emergency arise, emergency personnel will be able to respond appropriately.

Policy 2.5: Develop and support an educational program to assist small users (individuals and households) to dispose of small quantities of hazardous materials.

Policy 2.6 Continue to monitor the potential environmental risks posed by industrial users in the City and adjacent jurisdictions, and actively work with State, Federal, and other agencies to prevent and mitigate any accidents.

Goal 3: Maintain a high level of City emergency response services.

Policy 3.1: Support the continued active enforcement of building and fire codes.

Policy 3.2: Recognize the importance of calculating the daytime population in determining emergency service needs.

Policy 3.3: Support the development and continued updating of public education programs on safety.

Policy 3.4: Inform all residents of the requirements for visible and clearly legible street numbers to minimize the response time of emergency personnel.

Policy 3.5: Review the City's emergency service equipment and shelters periodically to ensure that they are adequate to meet the needs of changing land uses and development types and types of disasters.

Policy 3.6: Review the location, size, and equipment at each designated emergency shelter periodically to ensure that the City will be able to accommodate all people likely to need shelter in the event of a disaster.

Policy 3.7: Support the use of the best available equipment and facilities to ensure safety that meets the changing needs of the community.

Policy 3.8 Ensure that street signs are legible and easy to find by both emergency response personnel and the general public.

Policy 3.9 Maintain an Insurance Services Organization (ISO) rating of 3 or higher.

Policy 3.10 Continue to upgrade the quality of emergency response personnel through continued education and training.

Policy 3.11: Strive to reduce emergency response time.

Goal 4: Maintain a high level of police protection services.

Policy 4.1: Recognize the importance of calculating the daytime population in determining emergency service needs.

Policy 4.2: Support the development and continued updating of public education programs on safety.

Policy 4.3: Encourage the formation and continued education of Neighborhood Watch groups to assist the police in crime prevention and detection.

Policy 4.4: Work with Los Angeles County Department of Beaches to ensure adequate police protection and emergency services to visitors and residents using the City's beaches.

Policy 4.5: Continue to upgrade the quality of police personnel through continued education and training.

Policy 4.6: Strive to reduce police response time.

Policy 4.7 Support proactive measures to enhance public safety, such as use of increased foot or bicycle police patrols.

Community Resources Element

Goal 1: Conserve and protect the remaining open spaces and natural resources in Manhattan Beach.

Policy 1.1: Employ principles of a sustainable environment in the development, operation, and maintenance of the community, emphasizing the importance of respecting and conserving the natural resources.

Policy 1.2: Education the community regarding resource conservation by providing information on current techniques and technologies.

Policy 1.3: Encourage water conservation, including landscaping with drought-tolerant plants, use of reclaimed water, and recycling of cooling system water, in all development.

Policy 1.4: Encourage the use of energy-saving designs and devices in all new construction and reconstruction.

Policy 1.5: Continue to encourage all new residential and commercial construction and substantial rehabilitation to be plumbed for solar heating.

Policy 1.6 Encourage utilization of "green" approaches to building design and construction, including use of environmentally friendly interior improvements.

Policy 1.7: Encourage the use of public/private partnership to upgrade existing buildings for energy efficiency and water conservation.

Policy 1.8 Encourage and support the use of alternative fuel vehicles, including support of charging or "fueling" facilities.

Policy 1.9 Support policies and regulations which will ensure the City is in compliance with Federal and State laws regarding stormwater pollution prevention.

Policy 1.10: Support sustainable building practices.

Policy 1.11: Support other agencies in their Livable Communities programs.

Goal 2: Preserve the existing plant resources in the City, and encourage the provision of additional landscaping.

Policy 2.1: Protect existing mature trees throughout the City, and encourage their replacement with specimen trees whenever they are lost or removed.

Policy 2.2: Prepare lists of appropriate landscaping materials for the climate, and encourage residents and businesses to use them.

Policy 2.3: Discourage the reduction of landscaped open space and especially the removal of trees from public and private land.

Policy 2.4: Investigate methods to improve the quality and maintenance of street trees and public landscape improvements.

Policy 2.5: Recognize that trees provide valuable protection against air pollution, noise, soil erosion, excessive heat, and water runoff, and that trees promote a healthy environment.

Policy 2.6: Review the tree ordinance to consider its application citywide and to determine the need to strengthen tree preservation criteria.

Goal 3: Maintain a parks and recreation system that provides a variety of recreational opportunities accessible to all residents.

Policy 3.1: Promote the acquisition of properties for the purpose of conversion to parks and open space areas to meet the needs of City residents.

Policy 3.2: Encourage the development of quality commercial recreation facilities on both privately held and City-owned land under long-term lease or concession agreements.

Policy 3.3: Promote public awareness and education about the marine environment through development of appropriate facilities in the beach area.

Policy 3.4: Continue joint-use agreements with the school district.

Policy 3.5: Continue to upgrade the parks and recreation system in Manhattan Beach.

Policy 3.6: Provide a range of educational and recreational activities for the youth of Manhattan Beach at the teen center.

Policy 3.7: Acquire properties that are subject to flooding during heavy storms for the purpose of converting them to open space and park facilities, when feasible to do so.

Policy 3.8: Convert a portion of the water tower property into a passive open space area.

Policy 3.9 Accept and actively seek out the donation of private residential properties for the development of strategically located pocket parks and similar open space.

Policy 3.10: Design recreation programs to respond to the special needs of all of the various segments of the community.

Goal 4: Protect the quality of the environment by managing the solid waste generated in the community.

Policy 4.1: Expand recycling programs to commercial establishments in the City.

Policy 4.2: Encourage the maximum diversion of construction and demolition materials.

Policy 4.3: Require trash haulers to track the amount of recycling in accordance with City standards.

Policy 4.4: Encourage maximum recycling in all sectors of the community, including residential, commercial, industrial, institutional, and the construction industry.

Goal 5: Enhance cultural arts programs in the community.

Policy 5.1: Develop a master plan to coordinate the establishment and maintenance of art in public places.

Policy 5.2: Continue to encourage and support cultural arts events.

Policy 5.3: Prepare and implement a Public and Cultural Arts Master Plan, as feasible.

Policy 5.4: Include art work in City capital improvement projects.

Policy 5.5: Encourage the establishment of a non-profit charitable organization which could accept and disburse donations, funds, and gifts from the community for the support of cultural arts.

Policy 5.6: Provide cultural arts programs that offer a variety of opportunities to all age groups.

Goal 6: Maintain relationships with educational institutions, as they represent a cornerstone of the community's foundation.

Policy 6.1: Work with the Manhattan Beach Unified School District to continue joint-use agreements of City and school district facilities for arts and recreation programs.

Policy 6.2: Emphasize crime prevention education in local public and private schools.

Goal 7: Improve air quality.

Policy 7.1: Promote energy conservation by public and private sectors.

Policy 7.2: Encourage the expansion and retention of local-serving retail businesses (e.g., restaurants, family medical offices, drug stores) to reduce the number and length of automobile trips to comparable services located in other jurisdictions.

Policy 7.3: Encourage alternative modes of transportation, such as walking, biking, and public transportation to reduce emissions associated with automobile use.

Policy 7.4: Cooperate with the South Coast Air Quality Management District and Southern California Association of Governments (SCAG) in their efforts to implement the regional Air Quality Management Plan.

Policy 7.5: Cooperate and participate in regional air quality management planning, programs, and enforcement measures.

Noise Element

Goal 1: Provide for measures to reduce noise impacts from transportation noise sources.

Policy 1.1: Use proven methods of reducing the transmission of traffic noise onto adjacent noise-sensitive land uses (e.g. residences, schools, medical facilities).

Policy 1.2: Ensure the inclusion of noise mitigation measures in the design of new roadway projects in Manhattan Beach.

Policy 1.3: Reduce transportation noise through proper design and coordination of vehicle routing.

Policy 1.4: Ensure the effective enforcement of City, state, and federal noise levels by all appropriate City divisions.

Policy 1.5: Work with appropriate agencies to mitigate impacts from existing and proposed aviation operations.

Policy 1.6: Work with surrounding jurisdictions and other agencies to mitigate noise impacts.

Goal 2: Incorporate noise considerations into land use planning decisions.

Policy 2.1: Establish acceptable limits of noise for various land uses throughout the community.

Policy 2.2: Ensure acceptable noise levels near residences, schools, medical facilities, and other noise-sensitive areas.

Policy 2.3: Establish standards for all types of noise not already governed by local ordinances or preempted by state or federal law.

Policy 2.4: Encourage acoustical design in new construction.

Policy 2.5: Require that the potential for noise be considered when approving new development to reduce the possibility of adverse effects related to noise generated by new development, as well as impacts from surrounding noise generators on the new development.

Policy 2.6: Work with businesses in surrounding jurisdictions to manage noise impacts on City residents and businesses.

Goal 3: Minimize the impact of non-transportation noise sources

Policy 3.1: Monitor and update the Noise Ordinance to mitigate noise conflicts.

Policy 3.2: Enforce the Noise Ordinance.

Policy 3.3 Minimize impacts associated with single-event noise activities.

Policy 3.4 Recognize in the Noise Ordinance that nighttime noise levels create a greater sensitivity than do daytime noise levels.

Policy 3.5 Encourage adjacent jurisdictions and other agencies to require compliance with the City of Manhattan Beach noise ordinance where activities affect Manhattan Beach residents and businesses.

Policy 3.6: Monitor and minimize noise impacts associated with construction activities on residential neighborhoods.