

Memorandum

To: Chairman and Commissioners

Date: June 28, 2001

From: Robert I. Remen

File No: K54
BOOK ITEM 2.2a
ACTION

Ref: **Notice of Preparation of an Environmental Impact Report for South Orange County Toll Road Extension**

The Foothill/Eastern Transportation Corridor Agency has issued a Notice of Preparation of a Supplemental Environmental Impact Report (EIR) for a project to extend the Route 241 Foothill toll road corridor southward through San Juan Capistrano and San Clemente to Route 5 in southern Orange County. **The Notice of Preparation gives the Commission and other interested parties the opportunity to comment about alternatives to be examined or types of impacts to be considered.**

The attached notice describes six alternatives to be considered: three alternative corridors for new construction (with localized variations, and with either a toll or free road), improvements to a route using existing arterials near the corridor, improvements to Route 5 parallel to the corridor, plus the no project alternative. The notice then describes the following potential impacts to be examined:

Air Quality:	direct or cumulative change in emissions
Biology:	removal of habitat and wildlife, including 11 rare species
Cultural:	burial or removal of archaeology sites
Farmland:	construction through prime agricultural land
Hazardous Materials:	construction through a landfill
Recreation:	construction through parkland
Relocation:	taking and relocation of housing and businesses
Land Use:	direct or indirect impacts for existing land uses and planned developments
Aesthetics:	obstruction or change of views
Noise:	increases in noise, including at schools and parks
Geology:	cuts and fills in areas with unstable soils
Hydrology:	changes to drainage flows and patterns
Public Services:	changes in emergency access and utilities, including high voltage power lines
Transportation:	improvements in access and circulation
Construction:	erosion, dust, noise, night lighting, disturbance of natural and human activities

The Commission does not usually comment on Notices of Preparation, since its primary interests concern project scope, cost, and schedule, which typically become issues later in the environmental and project development process. The Commission has in some instances asked for another alternative to be put into consideration, usually for reasons of cost and programmability; that may be a moot issue here, because the agency intends to build this project as a self-financed toll road.

Attachment

Foothill/Eastern Transportation Corridor Agency
125 Pacifica, Suite 100
Irvine, California 92618-3304

REC'D BY CTC
JUN 18 2001

Project Title: South Orange County Transportation Infrastructure Improvement Project

NOTICE OF PREPARATION

TO: AGENCIES, ORGANIZATIONS AND INTERESTED PERSONS

SUBJECT: Notice of Preparation of a Draft Subsequent Environmental Impact Report

The Foothill/Eastern Transportation Corridor Agency will be the Lead Agency and will prepare a Subsequent Environmental Impact Report (SEIR) for the project identified above. We are requesting your input about the potential environmental consequences of this project. Your input will help us identify what issues should be addressed in the SEIR. Each Responsible Agency must provide detail about the scope and content of the environmental information to be included in the SEIR related to the agency's statutory responsibility (CEQA Guidelines, Section 15082(b)).

The Federal Highway Administration, in coordination with the California Department of Transportation, is also preparing an Environmental Impact Statement (EIS) to comply with the National Environmental Quality Act. The Federal Highway Administration and the Transportation Corridor Agency will prepare a joint EIS/SEIR for the project.

The project description, location and probable environmental effects are described in the attached materials.

Due to the time limits mandated by State law, your response must be received not later than 30 days following receipt of this notice dated June 7, 2001. Send your response to: Mr. Peter Ciesla at the address shown above. Please indicate a contact person in your response. If you require additional information please call Mr. Ciesla at (949) 754-3497.

Macie Cleary-Milan

Macie Cleary-Milan
Deputy Director, Environmental and Planning

Date: June 7, 2001

PROJECT INFORMATION

INTRODUCTION

The Foothill/Eastern Transportation Corridor Agency (TCA) is a Joint Powers Authority (JPA) comprised of the County of Orange and the local cities within the area of benefit of the Foothill and Eastern Corridors. TCA is the project sponsor for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP), formerly known as the Foothill Transportation Corridor-South (FTC-S) project. The project will be evaluated pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Federal Highway Administration (FHWA), in coordination with the California Department of Transportation (Caltrans), is the federal lead agency for preparation of the NEPA Environmental Impact Statement (EIS). The TCA is the lead agency for the CEQA document.

In accordance with CEQA, the TCA has determined that the SOCTIIP may have a significant effect on the environment and a Subsequent Environmental Impact Report (SEIR) should be prepared (refer to the discussion below regarding the previous EIR). Pursuant to Section 15083 of the State CEQA Guidelines, because it has been determined that the project may have a significant effect on the environment and a SEIR will be prepared, an initial study is not required. However, identification of potential environmental effects and other relevant project information is provided in this NOP for informational purposes.

A joint federal/state document will be prepared in the form of an EIS/SEIR.

TCA BACKGROUND

In the 1980's, Orange County elected officials and transportation planners began to study alternative ways to fund road improvements due to the significant decrease in traditional state and federal transportation funding programs. It was also determined that an agency separate from the county government and other transportation entities should be created to oversee planning, design, financing and construction activities for the new improvements.

In response, the California State Legislature created the TCA in 1986 as a JPA, which would be responsible to plan, finance, design, construct and operate a 68-mile toll highway system in Orange County. The State Legislature's creation of a JPA to construct the new corridors was key to the success of meeting the County's transportation needs. The need for and general location of the roads had already been identified as part of the Master Plan of Arterial Highways (MPAH).

No federal funds were used to develop the corridors, which required TCA to seek innovative financing alternatives. Tax-free bonds to finance the toll roads were successfully sold to investors, which enabled the TCA to get the required financial backing. Up to this point, no local entity in the nation had successfully financed a start-up facility without traffic and revenue history or the backing of state or local tax revenues. Tax-free bonds were issued in March 1993 and September 1997 for the San Joaquin Hills Transportation Corridor (SJHTC) and in July 1993 and July 1999 for the Eastern Transportation Corridor (ETC). These bonds are non-recourse bonds, which means the state taxpayer is not at risk for repayment if the TCA is unable to meet their financial requirements.

PROJECT HISTORY

The FTC-S has been subject to planning efforts for approximately 20 years and has been considered by a wide range of local and regional transportation planning agencies including the

Southern California Association of Governments (SCAG), the County of Orange, the Orange County Transportation Authority (OCTA) and the TCA. Prior studies which have been completed for the FTC-S include Final EIR 123 certified by the County of Orange in 1981 which resulted in a conceptual alignment for a transportation corridor facility being placed on the County's MPAH, and the *Foothill Transportation Corridor Alternatives Alignment Analysis* completed in 1986 by the County of Orange and the TCA which identified four alternative alignments to be carried forward for evaluation in an EIR.

Between 1989 and 1991, the TCA prepared an EIR (TCA EIR 3), pursuant to CEQA, for the selection of a locally preferred road alignment for the FTC-S. TCA EIR 3 addressed the C and BX road alignments, selected as part of the Alternatives Analysis phase of the project, as the primary build alternatives. TCA EIR 3 was circulated for a 60-day review period, which included public hearings. Written responses to comments and a Supplemental EIR were circulated for public review prior to the TCA Board of Directors taking action on the project. The Supplemental EIR addressed changes to the C Alignment through San Onofre State Beach. The modified alignment became known as the Modified C Alignment. On October 10, 1991, the TCA Board of Directors selected the Modified C Alignment as the locally preferred alternative and certified the EIR. Subsequently, as a result of coordination with the United States Fish and Wildlife Service (USFWS), the Modified C Alignment was slightly altered to minimize impacts to Pacific pocket mouse, and resident concerns for noise and visual impacts, and was referred to as the "CP Alignment." TCA EIR 3 and Supplemental TCA EIR 3 are available for review at the offices of the TCA.

In December 1993, the TCA initiated the preparation of the EIS/SEIR to evaluate the CP Alignment, the BX Alignment and the No-Build Alternative. A Foothill South Advisory Committee (FSAC) was established at that time to ensure continued coordination with cooperating and local agencies throughout the EIS/SEIR process. The FSAC was comprised of the following agencies:

- FHWA
- TCA
- Caltrans Districts 11 and 12
- Marine Corps Base (MCB) Camp Pendleton
- United States Army Corps of Engineers (ACOE)
- California Coastal Commission (CCC)
- County of Orange
- SCAG
- San Diego Association of Governments
- Rancho Mission Viejo Land Conservancy
- United States Environmental Protection Agency (EPA)
- USFWS
- California Department of Fish and Game
- California Department of Parks and Recreation
- City of San Clemente
- City of San Juan Capistrano
- City of Mission Viejo
- Rancho Mission Viejo Company
- Orange County Transportation Authority

In 1994, the TCA entered into a Settlement Agreement with San Clementeans Against Tollroads, Inc. and Defenders of Wildlife, two non-profit corporations. The Agreement identifies methodologies and approaches to be used for the following sections of the EIS/SEIR: air

quality, traffic, parklands and resource lands, wetlands, general habitat issues, endangered species and water resources (surface and ground water).

Between 1993 and 1996, technical analyses of the CP and BX alignment alternatives and the No Build Alternative were completed for the EIS/SEIR. In 1996, because of the 1994 *National Environmental Policy Act (NEPA) and Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/Section 404 MOU)*, the TCA initiated coordination to implement the policies of this document in developing the EIS and Section 404 permitting. The NEPA/Section 404 MOU implements the FHWA, ACOE and EPA policies of (1) improved interagency coordination, and (2) integration of the NEPA and Section 404 procedures. The NEPA/Section 404 MOU applies to all projects needing both FHWA action under NEPA and an ACOE individual permit under Section 404 of the Clean Water Act. The signatory agencies to the NEPA/Section 404 MOU include FHWA, EPA, ACOE, USFWS, National Marine Fisheries Service (NMFS) and Caltrans. In March 1999, pursuant to the NEPA/Section 404 MOU, a Purpose and Need Statement was approved for the project. Refer to the following page for the approved purpose and need for the project.

Between August 1999 and November 2000, the NEPA/Section 404 MOU signatory agencies and the TCA participated in a facilitated process, utilizing a neutral, objective facilitator to move the process toward a conclusion in developing a list of project alternatives to be evaluated in the EIS/SEIR. It was during this process that the signatory agencies referred to the project as the South Orange County Transportation Infrastructure Improvement Project or SOCTIIP. The NEPA/404 MOU Agencies and the TCA are collectively referred to as the "Collaborative." In November 2000, the SOCTIIP Collaborative concurred on the alternatives to be evaluated in the EIS/SEIR. These alternatives are described later in this NOP.

PUBLIC PARTICIPATION

The public has been involved in the planning process for the FTC-S since the early 1980s when a transportation corridor was considered for inclusion on the County of Orange General Plan. The public involvement directly related to the EIS/SEIR currently being prepared has been through formal procedures such as scoping, requests for cooperating agencies, the NEPA/Section 404 Integration Process and a number of outreach efforts. These efforts include the SOCTIIP Collaborative process, FSAC coordination with environmental interest groups and citizens, newsletters and public workshops.

A pre-scoping meeting for resource agencies, which focused on biological issues, was held on January 12, 1994. An agency scoping meeting was held on February 2, 1994. Public scoping meetings were held in the Cities of San Clemente and Oceanside on August 25 and September 16, 1994, respectively. The FHWA presented a community update in San Clemente on November 14, 2000, to introduce the alternatives developed through the SOCTIIP collaborative process.

Public scoping meetings for the current EIS/SEIR were held on the following dates and locations:

Monday, March 26, 2001
Christian Heritage Church
190 Avenida La Pata
City of San Clemente

Tuesday, March 27, 2001
Trabuco Mesa Elementary School
21301 Avenida De Las Flores
City of Rancho Santa Margarita

Thursday, March 29, 2001
Mission San Luis Rey
4070 Mission Avenue
City of Oceanside

At the scoping meetings, comments were documented in writing as submitted by commentors. In addition, there were two court reporters stenographically recording verbal comments. Transcripts have been prepared from the court reporters' records. All written and verbal comments from the scoping meetings are part of the record for this EIS/SEIR and will be considered in the environmental analysis.

PROPOSED ACTION

PROJECT LOCATION

The study area for the SOCTIIP, which is the subject of this evaluation, is in southern Orange County and the northern part of San Diego County. It extends from the current terminus of the existing FTC-North (State Route 241) at Oso Parkway and from the Interstate 5 (I-5) at approximately the I-5/I-405 confluence and extends south to the northwestern part of Marine Corps Base Camp Pendleton. The study area covers parts of the cities of Lake Forest, Laguna Hills, Laguna Niguel, Mission Viejo, San Juan Capistrano, Dana Point, San Clemente, and unincorporated parts of south Orange County.

PURPOSE AND NEED FOR THE PROJECT

The transportation infrastructure improvements are necessary to address needs for mobility, access, goods movement and projected freeway capacity deficiencies and arterial congestion in southern Orange County. Freeway capacity deficiencies and arterial congestion are anticipated as a result of projected traffic demand, which will be generated by projected increases in population, employment, housing and intra-regional and inter-regional travel estimated by the SCAG and the San Diego Association of Governments (SANDAG).

The purpose of the SOCTIIP is to provide improvements to the transportation infrastructure system that would help alleviate regional and local traffic congestion and accommodate the need for mobility, access, goods movement for present and future traffic demands on the I-5 and the arterial road network in the study area. The following are the objectives in implementing the project purpose:

"Improve the projected future level of service (LOS) and reduce the amount of congestion and delay on the freeway system and, as a secondary objective, the arterial network in southern Orange County. The overall goal is to improve projected levels of congestion and delay as much as is feasible and cost effective. This may include strategies which lead to a reduction in the length of time LOS F will occur, even if the facility will still operate at LOS F for a short period of time, if the strategy will result in substantial benefits to the traveling public and more efficient movement of goods because it reduces total delay."

PROJECT DESCRIPTION

The proposed project involves locating and constructing transportation improvements in southern Orange County. Six main alternatives are under consideration, consisting of five transportation improvement alternatives and a No Project alternative. The transportation improvement alternatives include three new toll road corridors, which would be the southerly extension of the existing FTC-North, arterial road improvements and widening of I-5.

The FTC is one of three Orange County toll road corridors operated by the TCA. The northern segment of the FTC (SR 241) begins at the Riverside Freeway (State Route 91), extends for approximately 25 miles in a southerly direction and ends at Oso Parkway. The proposed corridor alternatives described in the following pages would extend the FTC further south.

Specifically, the EIS/SEIR will evaluate six main alternatives, the Far East Corridor, the Central Corridor, the Alignment 7 Corridor, Arterial Improvements, I-5 Widening and the No Project Alternative. The Corridor alternatives also contain additional variations. These alternatives and variations are described below and the build alternatives are depicted in Exhibits 1 through 5:

Far East Corridor

- Far East Corridor - Complete (former CP Alignment)
- Far East Corridor - Talega Variation
- Far East Corridor - Cristianitos Variation
- Far East Corridor - Agricultural Fields Variation
- Far East Corridor - Ortega Highway Variation
- Far East Corridor - Avenida Pico Variation

Central Corridor

- Central Corridor - Complete (former BX Alignment)
- Central Corridor - Avenida La Pata Variation
- Central Corridor - Ortega Highway Variation

Alignment 7 Corridor

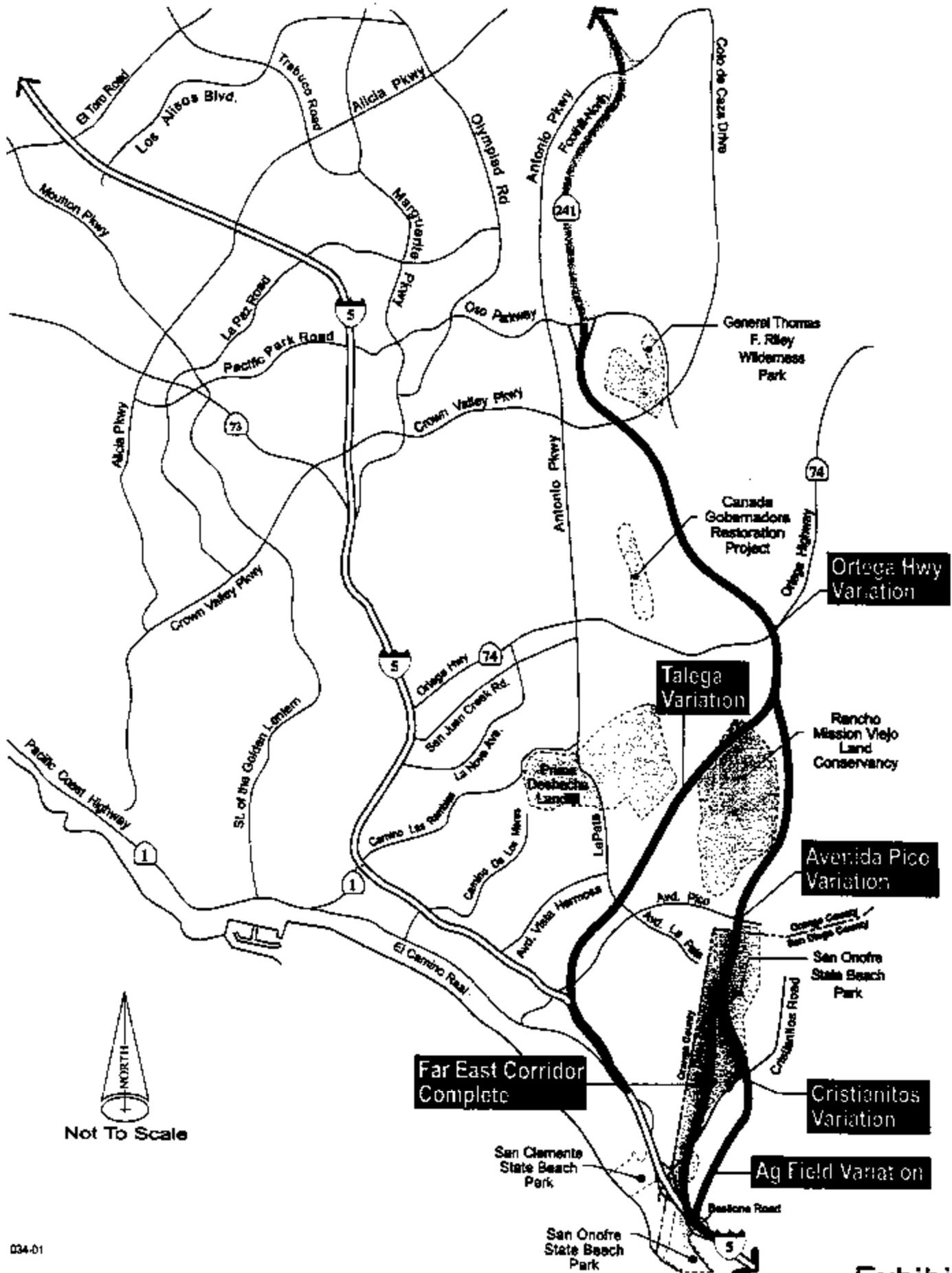
- Alignment 7 Corridor - Complete
- Alignment 7 Corridor - 7 Swing Variation
- Alignment 7 Corridor - Far East Crossover Variation
- Alignment 7 Corridor - Ortega Highway Variation
- Alignment 7 Corridor - Avenida La Pata Variation

Arterial Improvements Alternative

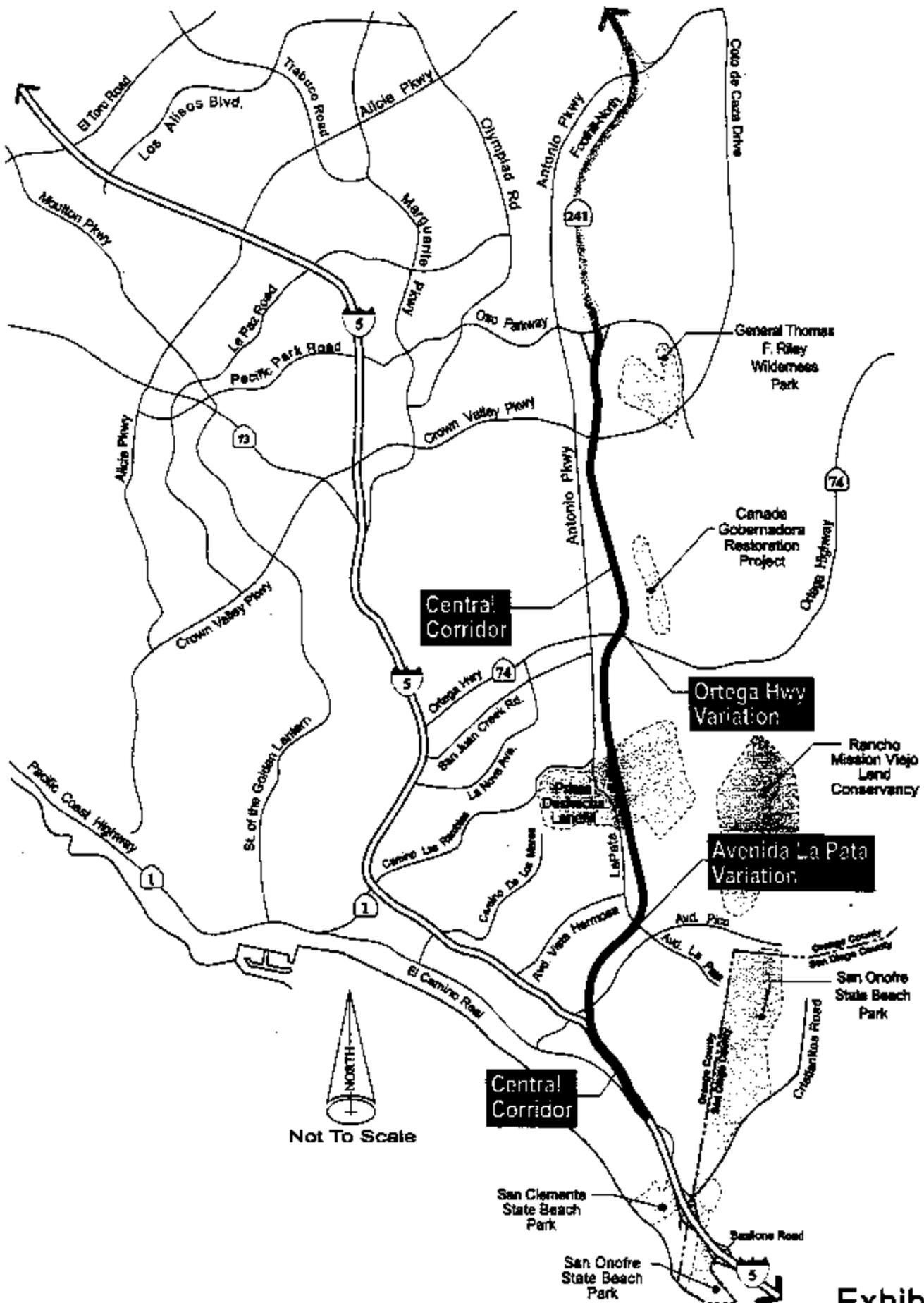
I-5 Widening Alternative

No Project Alternative

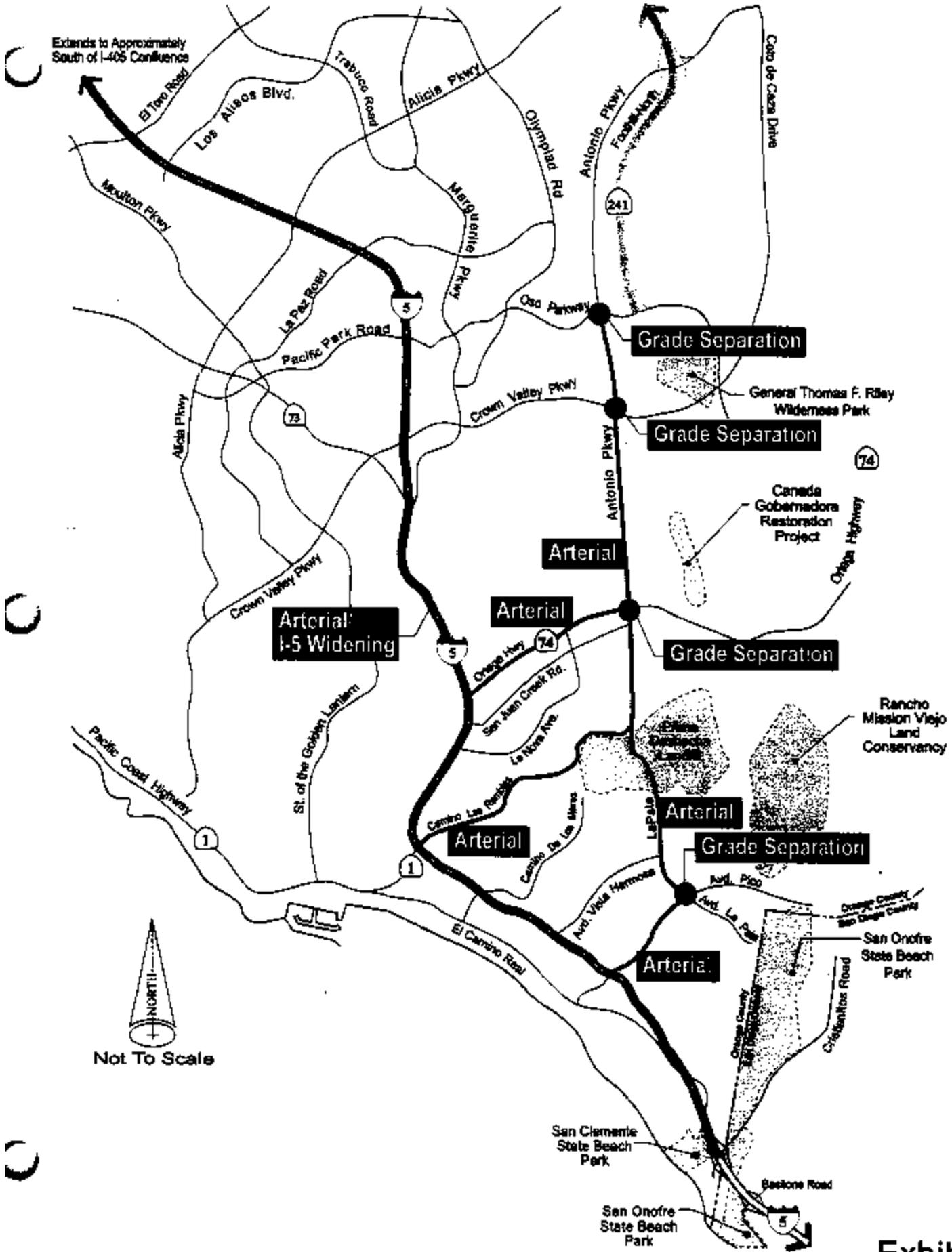
FAR EAST CORRIDOR ALTERNATIVE



Central Corridor Alignment



Arterial Improvements Alternative

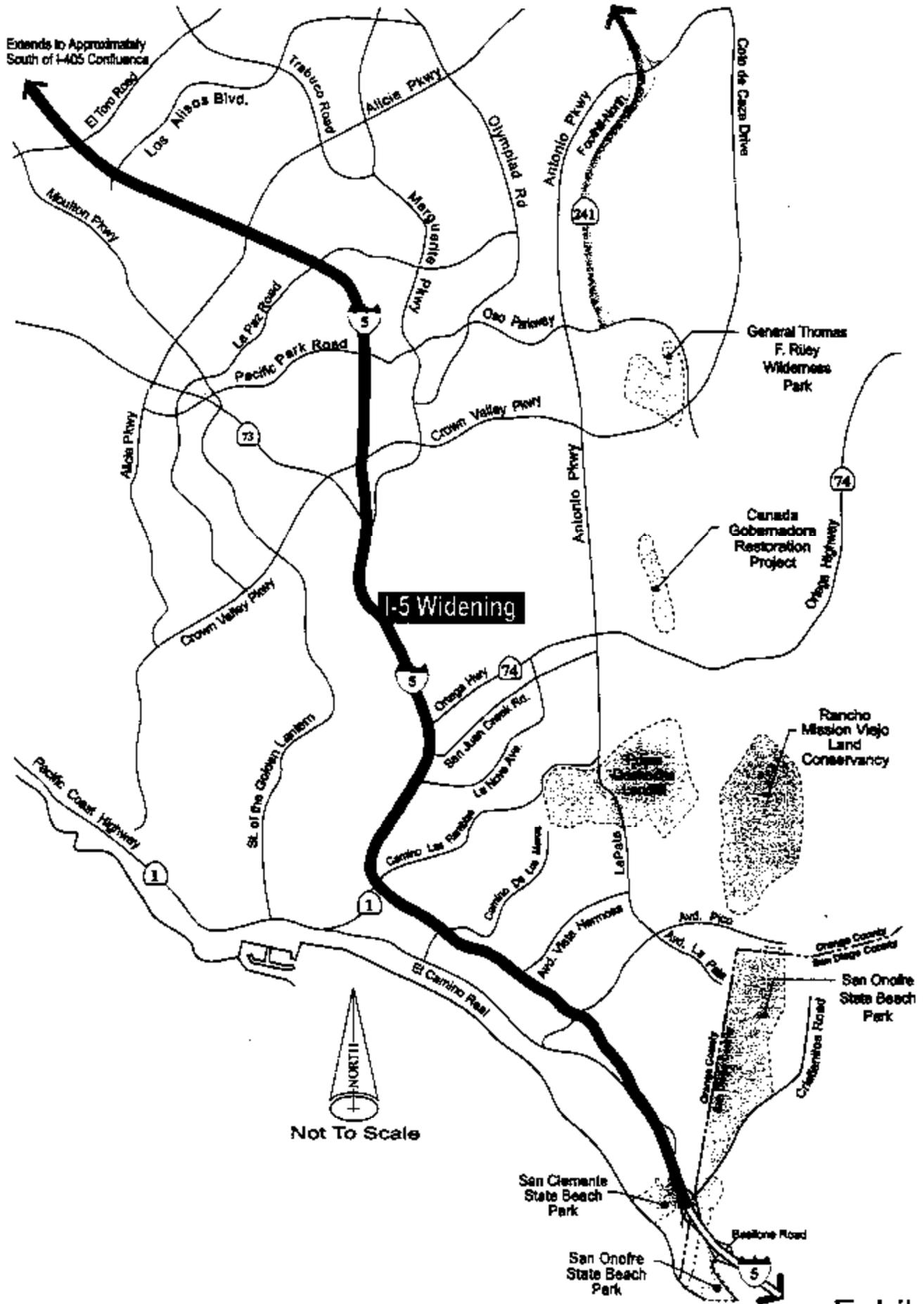




 NORTH

 Not To Scale

Interstate 5 (I-5) Widening Alternative



ENVIRONMENTAL CHECKLIST *

1. Project title: South Orange County Transportation Infrastructure Improvement Project
2. Lead agency name and address:
Foothill/Eastern Transportation Corridor Agency
125 Pacifica, Suite 100
Irvine, CA 92618
3. Contact person and phone number: Mr. Peter Ciesla (949) 754-3497
4. Project location:
Southern Orange County, California
5. Project sponsor's name and address:
Foothill/Eastern Transportation Corridor Agency
125 Pacifica, Suite 100
Irvine, CA 92618
6. General plan designation: Various
7. Zoning: Various
8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)
Locating and constructing transportation improvements. The alternatives consist of five transportation improvement alternatives in addition to the No Project Alternative. The transportation improvements include the widening of the I-5, arterial road improvements, and toll roads which would be southerly extensions of the existing Foothill Transportation Corridor (FTC).
9. Surrounding land uses and setting: Briefly describe the project's surroundings:
The alternatives would traverse land under jurisdiction of the County of Orange, MCB Camp Pendleton, City of San Clemente, and City of San Juan Capistrano. Additionally, the I-5 widening alternative would travel through the cities of San Clemente, San Juan Capistrano, Dana Point, Mission Viejo, Laguna Niguel, Laguna Hills, and Lake Forest.
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Marine Corps Base Camp Pendleton, California Coastal Commission, County of Orange, California Department of Parks and Recreation, Orange County Transportation Authority, California Department of Transportation, California Department of Fish and Game, San Diego Regional Water Quality Control Board, City of San Juan Capistrano and City of San Clemente.

* Adapted from CEQA Guidelines, Appendix G

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology /Soils |
| <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality | <input checked="" type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Population / Housing |
| <input checked="" type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION:

On the basis of this initial evaluation:

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

Macie Cleary-Milan
Signature

June 7, 2001
Date

Macie Cleary-Milan
Printed Name

Deputy Director, Environmental and Planning
Title

Following is a discussion of the environmental issues to be assessed in the EIS/SEIR as noted in the environmental checklist. In addition to these topical issues, cumulative impacts associated with the SOCTIIP will be addressed. The EIS/SEIR will provide an equal level of analysis for all the alternatives under consideration.

AESTHETICS / VISUAL IMPACTS

The alternatives have the potential to significantly obstruct existing scenic views and may result in adverse negative aesthetic effects in some areas. A Visual Impact Assessment (VIA) will be prepared for the project pursuant to FHWA guidelines. The VIA will include a visual resource inventory and evaluation. Primary viewers and key view areas will be identified. A quantified rating system will be used to initially assess visual impacts and will take into consideration visual character units, visual quality, landform quality, visual sensitivity, view distance and major viewer groups. Visual simulations will be prepared from selected locations. The impacts will be assessed from four perspectives: visual quality, landform quality, view quality and community character/design goals. Mitigation will be recommended, as appropriate, to reduce or eliminate visual impacts.

FARMLAND/AGRICULTURAL RESOURCES

The build alternatives have the potential to significantly impact prime and unique farmland and farmland of statewide importance, and pass through areas currently within Williamson Act Reserve Areas within Rancho Mission Viejo. Farmland impacts will be quantified in the EIS/SEIR. Agricultural operations conducted on MCB Camp Pendleton and Rancho Mission Viejo could also be affected. The potential impacts to farmlands associated with the alternatives will be evaluated in the EIS/SEIR and feasible mitigation will be identified.

AIR QUALITY

The SOCTIIP may result in potentially significant direct, indirect and cumulative local and regional air quality impacts in the South Coast and San Diego air basins. The project may contribute to existing or projected air quality violations, and may violate state and federal ambient air quality standards. A technical report will be prepared for the EIS/SEIR, which will assess these potential air quality impacts. The assessment will include an analysis of regional operational and local air quality impacts, and will provide a comparison of the build alternatives and the No Project Alternative. The analysis will also consider air quality impacts with and without tolls. The project is a roadway and thus is not anticipated to create odors that may affect a substantial number of people. The conformity of the alternatives with federal Clean Air Act requirements will be determined. Mitigation measures will be recommended, as appropriate.

BIOLOGICAL RESOURCES

The SOCTIIP alignment alternatives would travel through undeveloped and developed areas and would result in potentially significant direct impacts to biological resources including plant communities, wildlife resources, and sensitive species of plants and animals. There would also be the potential for indirect impacts related to increased dust, road pollutants entering native habitats, wildlife corridor interruption, noise impacts, night lighting and glare.

Sensitive species which may be directly impacted by the SOCTIIP alternatives include, but are not limited to the thread-leaved brodiaea (federally threatened and state endangered); vernal

pool fairy shrimp (federally threatened); San Diego fairy shrimp (federally endangered), and Riverside fairy shrimp (federally endangered); tidewater goby (federally endangered and state species of special concern); arroyo southwestern toad (federally endangered); southwestern willow flycatcher (federally); coastal California gnatcatcher (federally threatened and state species of special concern); least Bell's vireo (federally and state endangered); peregrine falcon (state endangered); and the Pacific pocket mouse (federally endangered and state species of special concern) (Table 1A). Impacts to other sensitive species will be ascertained after the field reconnaissance has been concluded.

TABLE 1A POTENTIALLY IMPACTED SENSITIVE SPECIES

Species	Federally Listed	State Listed	State Species of Special Concern
Thread-leaved brodiaea	✓	✓	
Vernal pool fair shrimp	✓		
San Diego fairy shrimp	✓		
Riverside fairy shrimp	✓		✓
Tidewater goby	✓		✓
Arroyo southwestern toad	✓		
Southwestern willow flycatcher	✓		
Coastal California gnatcatcher	✓		✓
Least bell's vireo	✓	✓	
Peregrine falcon		✓	
Pacific pocket mouse	✓		✓

The Biological Resources Technical Report for the SOCTIIP will include documentation of the biological resources in the study area, an assessment of the impacts of the project alternatives on those resources, and recommended mitigation measures. Impacts to wildlife movement corridors will also be assessed.

The project alternatives will also impact wetland habitat under the jurisdiction of the Army Corps of Engineers, California Department of Fish and Game and/or the California Coastal Commission. The analysis of impacts to biological resources will be conducted in accordance with the requirements of the NEPA/Section 404 Integrated Process and Caltrans' *Guidance to Consultants for the Preparation of a Natural Environmental Study (NES)*. The EIS/SEIR will assess the amount of impacted habitat under the jurisdiction of each of these agencies and mitigation will be recommended.

The relationship of the SOCTIIP alternatives to the ongoing Orange County Southern Subregion Natural Community Conservation Program (NCCP) process will also be addressed in the EIS/SEIR.

CULTURAL RESOURCES

There are known historic resources and archaeological sites in proximity to the build alternatives, which could be impacted directly or indirectly during construction of the SOCTIIP build alternatives. The effect of the alignments on cultural resources will be assessed in accordance with Section 106 of the National Historic Preservation Act. In coordination with Caltrans and FHWA, an area of effects for direct and indirect impacts will be developed to define the area to be evaluated. General and focused investigations will be conducted, as appropriate. Based on the results of these investigations, recommendations will be made for mitigation, as required. Pursuant to Section 106, consultation with the State Historic

Preservation Officer will be conducted for concurrence regarding the determination of project effects, and eligibility of identified sites for the National Register of Historic Places.

GEOLOGY AND SOILS

Southern California is seismically active and the project area is subject to geologic hazards such as earthquakes, landslides and ground failure. Slope stability will represent the largest overall adverse geologic condition for the build alternatives. Each of the alignments would pass through areas with existing major landslides. There are also existing fill areas that would be encountered during construction. Typically, this material would need to be excavated for implementation of the project. There would be a substantial amount of cut and fill required for each of the build alternatives. The cut and fill would result in topographical changes. Due to the proximity of active faults in the project area, there is a potential for ground shaking to occur. However, seismicity is not considered to be a constraint as existing construction practices and standards to reduce these potential seismic impacts are available and would be implemented. The probability of a ground rupture is considered very remote and would not be considered an adverse affect. The use of septic tanks is not proposed for the project. A geotechnical report will be prepared for the EIS/SEIR and will address the geologic conditions in the study area and adverse conditions that may be encountered during construction of the project. Mitigation will be recommended to reduce or eliminate significant impacts.

HAZARDOUS MATERIALS

Within the SOCTIP study area there are a number of sites of environmental concern, which may be encountered during construction, exposing construction workers to potential health hazards. The Prima Deshecha Landfill would be traversed by the Central Corridor, Alignment 7 and variations of these alignment alternatives. In addition, it is possible that unidentified contamination has occurred within the study area from the use and/or storage of hazardous materials. In the event that contamination has occurred within the grading limits (or within close enough proximity to affect soil composition) the excavation of soils and the demolition of developed properties during construction of the project could result in the exposure of construction workers and the public to hazardous materials. For each of the build alternatives there is also a potential for spills of toxic and hazardous materials during construction as well as during transportation of such materials on the project roads. Although not likely, there is a remote possibility for an accident involving transport vehicles containing hazardous materials, which could cause a spill or release of hazardous materials. Tesoro High School and San Clemente High School are adjacent to the proposed project roads and could be exposed to emissions during an accidental spill. The project area is not within an area that is currently designated for an airport land use plan or in the vicinity of a private airstrip. The project alternatives would improve surface transportation access and mobility, which would improve emergency response times and evacuation plans. Potential project impacts related to hazardous materials will be addressed in the Hazardous Materials Technical Report and mitigation will be recommended, as necessary.

HYDROLOGY AND WATER QUALITY

The SOCTIP alternatives can have a potentially significant impact on existing hydrologic conditions by the addition of impervious surfaces and by modifications of the existing drainage patterns and channels. The addition of impervious surfaces to existing drainage areas increases the amount of storm water runoff and reduces ground infiltration. The addition of impervious surfaces and effects on hydrologic conditions as a result of the SOCTIP alternatives will be addressed in the EIS/SEIR. Highway runoff can contain concentrations of pollutants,

which would have an adverse affect on downstream water quality. There would also be an increase in sedimentation and erosion as a result of the project, which could also affect water quality. Potential water quality impacts from the introduction of pollutants and increased erosion and sedimentation will be assessed in a Runoff Management Plan. The EIS/SEIR will also address potential impacts from accidental spills of toxic chemicals.

The project will not involve the development of housing or structures and there would be no impacts due to flooding. Potential residential development in the project area would be the subject of separate environmental analysis and documentation.

The SOCTIIP alternatives would cross existing watercourses and would enter the associated floodplains. Proposed bridge structures for each alternative have been identified. Location Hydraulic Studies, which will identify potential impacts to water surface elevations and stream flow velocities, will be prepared for the EIS/SEIR pursuant to Caltrans requirements to assess the impacts to floodplains. Mitigation will be recommended to eliminate floodplain impacts.

Segments of the alignment alternatives would cross groundwater recharge areas within the San Juan Creek and San Mateo basins. The placement of impervious road surfaces in recharge areas may affect the amount of precipitation and runoff that infiltrates into the aquifer. This will be addressed in the EIS/SEIR. Mitigation will be recommended for water quality impacts.

LAND USE AND PLANNING

The SOCTIIP alternatives have the potential to result in significant direct and indirect impacts to existing and planned land uses. The alternatives would traverse property under the jurisdiction of the County of Orange, MCB Camp Pendleton, and the cities of San Clemente, San Juan Capistrano, Dana Point, Mission Viejo, Laguna Niguel, Laguna Hills and Lake Forest.

The EIS/SEIR will address the potentially significant impacts to existing and planned land uses resulting from implementation of each alternative. A relocation and economic study will be prepared which focuses on existing and planned land uses that will be displaced, the availability of replacement sites, and economic impacts to the various jurisdictions. The analysis will be based on field surveys, review of aerial photographs, and review of existing literature including relevant planning documents and environmental documentation. Meetings will be held with affected jurisdictions and property owners to obtain input on the extent and significance of potential land use impacts. The consistency of the project with existing General Plan land use designations, as well as consistency with relevant planning documents, will be addressed in the EIS/SEIR. Mitigation measures will be recommended, as appropriate.

MINERAL RESOURCES

No mineral resource recovery sites are located within the project alignments and no impacts to known mineral resource sites are expected.

NOISE

The SOCTIIP alternatives have the potential to cause potentially significant increases in existing noise levels and exposure of people to noise levels in excess of adopted standards. Sensitive noise receptors in the study area include, but are not limited to, the San Onofre State Beach, General Thomas F. Riley Wilderness Park, the Tesoro High School currently being constructed south of Oso Parkway, residences and schools in the areas surrounding the build alternatives and various noise sensitive uses along I-5. The project area is not close to any public use

airport or private airstrip and would not be exposed to excessive airport noise levels.

A technical report will be prepared for the EIS/SEIR which will evaluate noise generated by the SOCTIIP alternatives in comparison to existing noise levels, and increases in noise on arterial roads in the project vicinity. The noise analysis will be prepared pursuant to Caltrans procedures. Recommendations for noise mitigation, including soundwalls, will be provided in the EIS/SEIR, as appropriate.

ENERGY

It is not anticipated that the SOCTIIP alternatives would result in a substantial use of fuel or energy, or substantially increase demand on existing non-renewable resources of energy or require the development of new sources of energy. Energy impacts will be addressed in the EIS/SEIR and mitigation will be recommended, as necessary.

POPULATION AND HOUSING

The SOCTIIP alternatives have the potential to result in the acquisition of existing housing units and the displacement of existing residents. The Socioeconomics and Relocation Technical Reports will assess the anticipated right-of-way impacts of the SOCTIIP alternatives, including the acquisition of housing and the displacement of residents. The Socioeconomics Technical Report will also assess the potential for the SOCTIIP alternatives to result in growth inducing impacts. Mitigation measures will be identified to address potentially significant adverse impacts of the SOCTIIP alternatives related to population and housing.

PUBLIC SERVICES

The SOCTIIP alternatives may have a potentially significant impact on public services. The services that may be affected include fire protection, law enforcement, schools and solid waste. Improvements associated with the I-5 may result in increased emergency service response times in some areas. Emergency response times and access will be addressed in the EIS/SEIR. The alignments which traverse the existing Prima Deshecha Landfill property have the potential to impact ongoing and future operations at this Landfill. Additionally the Central Corridor, and variations which include the same connection to I-5, would directly impact San Clemente High School and Ole Hanson Elementary School. Impacts to these public services and facilities will be addressed in the EIS/SEIR, and mitigation will be recommended, as necessary. The I-5 widening alternative would require some relocation of existing development and residences along segments of the freeway.

RECREATION RESOURCES

The SOCTIIP alternatives have the potential to result in direct impacts on existing recreation resources including the taking of land currently used for recreation. In addition, the SOCTIIP alternatives have the potential to result in significant adverse indirect impacts on recreation uses, including noise, air quality, traffic and other impacts. These potential impacts of the SOCTIIP alternatives will be addressed and mitigation will be identified to substantially reduce or avoid significant adverse impacts on recreation resources.

TRANSPORTATION/CIRCULATION

A traffic study will be conducted for the EIS/SEIR, which will assess the potential transportation/circulation impacts on local and regional road facilities associated with the

SOCTIP alternatives, including beneficial impacts to the circulation system. The traffic study will consider the potential traffic impacts under the "with-toll" and "toll-free" conditions. The extent of congestion on I-5 under various scenarios will be assessed. Analysis of several No Project alternative scenarios as well as special scenarios will be provided. These special scenarios will depict varying development levels and will include a reduced MPAH that utilizes only arterial roadways that are currently built and committed, as well as full MPAH buildout. Mitigation measures will be recommended, as necessary.

The project is expected to improve mobility options for travelers in the south Orange County area and result in improved travel times and reduce traffic congestion. The road design will utilize the latest construction improvements and features to provide safe and efficient transportation. The alignments would increase road capacity to help to reduce the existing and anticipated increase in traffic congestion.

UTILITIES AND SERVICE SYSTEMS

Construction of any of the build alternatives would have a potentially significant impact on existing utility lines and facilities, requiring reconstruction, relocation and/or removal of utilities in or along the proposed right-of-way. Utility lines in the study area include water, sewer, electric, natural gas and communication. Notable utilities include high power electrical transmission lines extending north from the San Onofre Nuclear Generating Station (SONGS), electrical substations and the South County Pipeline. The majority of the utilities in the study area do not pose substantial constraints to the design or alignment of the alternatives. Impacts to utilities would be coordinated with the affected agencies and utility companies during final design. Other utilities in the Far East Corridor study area include water wells and percolation ponds at MCB Camp Pendleton. The Santa Margarita Water District Chiquita Water Reclamation Plant is located along the Central Corridor. The EIS/SEIR will include analysis of potential impacts to utility lines and associated facilities, and mitigation will be recommended, as necessary.

CONSTRUCTION IMPACTS

The build alternatives would be under construction for approximately three years, during which time there would be short term potential impacts associated with construction activities. The EIS/SEIR will address these impacts including transportation congestion and rerouting; erosion and sedimentation; water quality impacts; impacts to biological resources; visual impacts; interference with commercial, residential and public activities; dust, noise and night lighting. Mitigation will be recommended, as necessary.