SR-98 Roadway Widening Project

IMPERIAL COUNTY, CALIFORNIA
DISTRICT 11 – IMP 98, KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6) 080200

Initial Study with Mitigated Negative Declaration/
Environmental Assessment with Finding of No
Significant Impact

Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by The Department under its assumption of responsibility pursuant to 23 U.S.C. 327.

October 2008
General Information About This Document

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State Route 98 Roadway Widening Project, in Calexico in Imperial County, from KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6)

INITIAL STUDY with Proposed Mitigated Negative Declaration/Environmental Assessment
Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA
Department of Transportation

10 September 2003

Susanne Glasgow
Deputy District Director - Environmental
California Department of Transportation
MITIGATED NEGATIVE DECLARATION
Pursuant to: Division 13, Public Resources Code

Project Description
The California Department of Transportation (Caltrans) in cooperation with the City of Calexico (City), proposes to improve traffic operations, enhance bicycle and pedestrian access, and improve drainage performance on State Route 98 (SR-98). SR-98 would be widened from two to four lanes from Dogwood Road through just west of Ollie Avenue, and from four to six lanes from Ollie Avenue through SR-111, tying back to the existing road at Rockwood Avenue. The proposed lane widths are a standard 3.6 meters (12 feet) and a raised median that averages 4.3 meters (14 feet) in width will be incorporated throughout the length of the project. The project is located on SR-98 from 0.5 kilometers (0.3 miles) west of Dogwood Road to 0.3 kilometers (0.2 mile) east of Rockwood Avenue, KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6).

There would also be new intersections constructed or right-turn lanes lengthened to create access to new developments.

Sidewalks are proposed along both sides of SR-98 for the entire length of the project to encourage pedestrian use as well as enhance access to schools and businesses. The sidewalks would be 1.5 meters (5 feet) in width.

This project would also incorporate a new Class II Bike Lane in order to promote bicycle use as well as enhance bicyclist access. The bike lane would be adjacent to the sidewalk for the entire length of the project in both the eastbound and westbound directions. The bicycle lane would be 2.4 meters (8 feet) in width.

Determination
This Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans’ intent to adopt an MND for this project. This does not mean that Caltrans’ decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.
Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the project would not have a significant effect on the environment for the following reasons:

The project would have no effect on Farmland/Timberland, Environmental Justice, Relocations, Hydrology and Floodplain, Geology / Soils / Seismic / Topography, Paleontology, and Threatened and Endangered Species, Wetlands and Other Waters and Plant Species.

In addition, the project would have no significant effect on Land Use, Growth, Community Character and Cohesion, Utilities/ Emergency Services, Cultural, Hazardous Waste, Noise, and Cumulative.

The project would have no significantly adverse effect on Air Quality, Natural Communities, Animal Species, and Invasive Species, Water Quality, Visual/Aesthetics and Traffic because the following mitigation measures would reduce potential effects to insignificance:

TO MITIGATE FOR POTENTIAL AIR QUALITY IMPACTS
In recognition of the nonattainment status of the project area for Particulate Matter 10 (PM 10) and Ozone (O3), the following measures are recommended.

- Caltrans Standard Specifications for Dust Control, Watering, and Dust Palliative would be incorporated into project specifications.
- Idling of diesel-powered vehicles and equipment would not be permitted during periods of nonactive vehicle use. Diesel-powered engines would not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:
  a) When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
  b) When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
  c) To bring the equipment to the manufacturer’s recommended operating temperature;
  d) When the ambient temperature is below 40°F or above 85°F; or
  e) When equipment is being repaired.
TO MITIGATE FOR POTENTIAL BIOLOGY (NATURAL COMMUNITY IMPACTS)

- Preconstruction surveys are required within 30 days prior to initial ground-disturbing activity to avoid impacts to nesting burrowing owls from construction of the project. During focused 2006 surveys, one burrowing owl burrow was detected within the project impact area. If this burrow cannot be avoided, and/or burrowing owls are detected within 500 feet (152 meters) of project construction, mitigation measures recommended in guidelines provided by the California Burrowing Owl Consortium (CBOC) and California Department of Fish and Game (CDFG) should be implemented.

- These measures may include preparing a Burrowing Owl Study for submission to the CDFG, and relocation of burrowing owls prior to the breeding season (i.e., prior to the period from 1 February to 31 August). Final mitigation would be determined through coordination between Caltrans and CDFG.

- In addition, a preconstruction nesting bird survey are required if construction activities are to occur during the avian nesting season (1 February to 31 August).

- Eucalyptus and other ornamental trees found within 500 feet of the project site provide potential nesting sites for raptors and other passerine birds. Any trees or large shrubs to be removed as part of the project would be cleared outside of the breeding season (i.e., avoid the period from 1 February to 31 August). If this time window is not feasible, a staff biologist must be notified prior to construction to locate any possible nesting birds, and direct field crews accordingly.

TO MITIGATE FOR POTENTIAL INVASIVE SPECIES (NATURAL COMMUNITY IMPACTS)

- Revegetation of the cleared areas would require maintenance to keep the weed species from reinvading the cleared areas.

- All heavy equipment would be washed and cleaned of debris prior to entering the project area to minimize spread of invasive weeds.

- No species on the Invasive Plant Council list would be planted onsite.

- The right of way would be landscaped with non-invasive species as part of the project.

TO MITIGATE FOR POTENTIAL WATER QUALITY IMPACTS

Best Management Practices (BMPs) incorporated during design and implemented during construction would minimize the potential for erosion during project construction and post construction. Three categories of BMPs address the potential for erosion during construction
and post construction through the implementation of Temporary Construction Site BMPs, Design Pollution Prevention BMPs and Permanent Treatment BMPs.

**Proposed Temporary Construction Site BMPs to be used on Project**

Construction BMPs should include: implementation of erosion control such as fiber matrices and hydraulic mulch to protect graded slopes, and the usage of sediment control devices such as silt fences and fiber rolls to prevent sediment pollution. These devices should remain in place until construction is complete and there is no potential for erosion and sediment transportation.

- Construction Site BMPs that have been designated include: Hydraulic Mulch; Fiber Rolls; Street Sweeping; Concrete Washout Facilities; Drainage Inlet Protection; and Silt Fences.

**Proposed Design Pollution Prevention BMPs to be used on the Project**

Design Pollution Prevention BMPs are permanent practices that address the design objective to prevent downstream erosion, to stabilize disturbed soil areas and to maximize vegetated surfaces.

The following concentrated flow conveyance systems are proposed:

- 6 basins
- 23 concrete headwalls
- 2,900 meters of underground storm drains (various sizes)

Soil stabilization BMPs would be utilized to prevent soil particles from detaching and becoming suspended in storm water and non-storm water runoff. These BMPs may include the following:

- The preservation of existing vegetation where feasible.
- The implementation of temporary soil stabilization measures at regular intervals throughout the rainy season.
- The stabilization of non-active areas within 14 days of cessation of construction activities.

Implementation of slopes/surface protection systems would be implemented by disturbing slopes only when necessary, minimizing cut and fill areas to reduce slope lengths, providing cut and fill slopes flat enough to allow re-vegetation, and round and shaping slopes.
Proposed Permanent Treatment BMPs to be used on the Project

Since the existing drainage system would be altered, treatment BMPs must be analyzed.

- Basins - A basin allows temporary storage of excess storm water to be held for the short term and then slowly drain when water levels in the receiving channel recede. The proposed drainage improvements include a series of six basins that would collect 66% of the project’s roadway runoff and drain to either the All American Canal Drains #9 and #10 or be pumped to the existing 450mm (18 inch) CMP at the intersection of Kloke Road and SR-98.

Maintenance BMPs (Drain Inlet Stenciling)

- All new inlets should be stenciled with painted messages warning citizens not to dump pollutants into the drains.

TO MITIGATE FOR POTENTIAL VISUAL IMPACTS

To reduce the visual impact, the project would include the following measures along the SR-98 corridor:

Medians:

- The street medians would combine fan palms with flowering accent trees, thematic accent shrubs, rocks and decomposed granite to provide a focal interest for the street.
- Due to traffic safety restrictions where the posted speed limit is less than 35 MPH, tall trees such as palms would be included in the median. Where the posted speed limit is over 35 MPH, “small trees” would be planted. Caltrans defines “small trees” as trees with trunks less than 4 inches (10 centimeters) diameter after 10 years of growth.
- Due to traffic safety restrictions, medians greater than 8 feet (2.4 meters) wide and less than 12 feet (3.6 meters) wide would be planted with “small trees” (Defined above).
- Median less than 6 feet (1.8 meters) wide are to narrow for planting and would be paved with colored stamped concrete.
- Rock cobble material would be cemented in place at the transition from stamped concrete to the decomposed granite.

Parkways:

- Street trees (size of the trees may range from large shade trees or palms to small "accent" trees) would be planted on both sides of SR-98 to provide shade and visual relief.
• Due to the overhead power lines on both sides of the street, the street trees must be small in scale to avoid utility conflicts.
• The ground surface would be covered with decomposed granite to minimize wind erosion and provide an attractive appearance.
• Shrubs and accent plants would be planted only at key locations, including the intersections with SR-111, Cesar Chavez Boulevard, the All American Canal, Kloke Road, and Dogwood Road.
• At accent locations, cobble rock paving would be installed along the sidewalk to add interest. A 5 feet (1.5 meters) wide sidewalk would be constructed adjacent to the street curbs. Rock is to be set in concrete.
• Where City maintained lawn exists, lawn would be installed in the adjacent project area to maintain consistency.

Storm Water Collection Basins:
• The linear basins along the right-of-way would hold storm run-off on a temporary basis. Caltrans requires that these basins should not be accessible to the public, and that a minimum 4 feet (1.2 meters) height perimeter fence surround each basin for safety.
• The sides of the basin are typically 2:1 in steepness, and would be covered with decorative cobble or fractured rock cemented in place.
• The basin fence is to be a durable, commercially produced decorative 48 inches (121.9 cm) high metal fence painted medium blue to evoke an image of water or dark, subtle green to reinforce and extend the color of the plants.
• Occasional random drifts of desert vegetation such as Agave or Yucca would be planted in the upper half of the basins to add interest. These would require a planting pocket in the slope paving, and irrigation.

Irrigation Concept:
• The water source would be the City domestic water, unless recycled or irrigation water becomes available. The system would be designed to conserve water, while providing for plant health and growth.

Inert Groundcover
The following inert groundcovers are proposed for the project:
• Rock Cobble, River Rock (natural tan and Iron oxide colors) for accent areas.
- Gravel for maintenance access roads.
- Decomposed granite.
- Stamped concrete for narrow medians.

TO MITIGATE FOR POTENTIAL TRAFFIC IMPACTS
A Transportation Management Plan (TMP) would be prepared to minimize the impact of construction activities on highway users. Preceding roadway design, a final TMP, would be prepared to reduce potential construction-related traffic conflicts, detours, and delays. The elements to be considered for the highway-widening project include, but are not limited to the following:

The TMP may include the following strategies:
- Development of a Public Awareness Campaign prior to and during construction to inform residents and motorists of construction activities.
- Real-time communications with motorists, including changeable message signs and highway advisory radio announcements.
- Provisions for tow truck service during peak-hours.
- Placement of appropriate signs, cones, and barricades near construction to increase safety and driver certainty.
- Development of plans that ensure emergency access and access to existing residences and businesses within the construction area.
- Inclusion of construction activities on the Caltrans Highway Information Network (CHIN), a public information line. (1-800-427-ROAD).
- Signage for directions to businesses during construction.

Susanne Glasgow  
Deputy District Director Environmental  
District 11  
California Department of Transportation

30 October 2005  
Date
CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT

FOR

State Route 98 Roadway Widening Project, City of Calexico, Imperial County

The California Department of Transportation (Caltrans) the City of Calexico has determined that alternative Build Alternative will have no significant impact on the human environment. This FONSI is based on the attached EA which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

10/30/08
Date

Pedro Orso Delgado
Caltrans District Director
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Chapter 1 Proposed Project

1.1 INTRODUCTION

The California Department of Transportation (Caltrans) and the City of Calexico have worked together to develop a solution to address existing and anticipated traffic congestion on State Route 98 (SR-98). The proposed project is located on SR-98 from 0.5 kilometer (0.3 mile) west of Dogwood Road to 0.3 kilometer (0.2 mile) east of Rockwood Avenue, KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6) in the City of Calexico, in Imperial County. The project length is 4.28 kilometers (2.66 miles). The project location and vicinity map (Figure 1) show the limits of proposed project.

SR-98 is an east – west route that is entirely contained within Imperial County. Traversing a distance of 56.9 miles, SR-98 is mostly a two-lane conventional highway route serving interregional, intra-regional and international travel, as well as providing an alternate route to Interstate 8 (I-8). SR-98 begins at I-8 near Ocotillo (Imp PM 0.3), intersects SR-111 (PM 32.3) and SR-7 (PM 39.6) and terminates at I-8 near Midway Well (PM 56.9).

Through the City of Calexico, SR-98 is a four-lane facility. Within the project limits, SR-98 is a two-lane highway from Dogwood Road to just west of Ollie Avenue and a four-lane highway from Ollie Avenue to SR-111. There are four signalized intersections on SR-98 at Dogwood Road, Kloke Road, Ollie Avenue and SR-111.

SR-98 was originally added to the State Highway System as Route 202 in 1933, at which time it was an 18-20 foot wide (5.5 - 6.1 meter) county road. SR-98 is currently designated as a Terminal Access route for Surface Transportation Assistance Act (STAA) trucks. Terminal Access routes are State or local roads that allow STAA trucks to travel between National Network (NN) routes. NN routes are FHWA designated routes comprised primarily of Interstate Highways that are available to larger trucks. SR-98 from SR-111 to SR-7 is included in the Interregional Road System (IRRS).

Additionally, SR-98 supplies access to many agricultural areas. SR-98 provides the most direct east/west access to SR-111 and the International Port of Entry (POE) in Calexico West and also provides access to State Route 7 and the Calexico East POE.
The estimated total cost of the project is $43 million. The project is being funded through a combination of funds: State Transportation Improvement Program- Interregional Improvement Program (STIP-IIP), SAFETEA - LU High Priority Projects (HPP’s Demo earmark) and potential developer contributions. Potential developer contributions would be through fair share agreements and would fund the widening and/or improvements that tie in directly to those developments.

The proposed project is included in the Southern California Association of Governments 2008 (SCAG 2008) Regional Transportation Plan (RTP ID 8020, Page 1 of Modeled Project Lists), and 2006 Regional Transportation Improvement Plan (RTIP) (Project ID 8020, page 1 of the Imperial County Listing of State Projects) (SCAG 2007a) as amended. The project description of the proposed project matches the project description in the 2008 RTP and 2006 cost-constrained RTIP.

1.2 PURPOSE AND NEED

PURPOSE

The purpose of the project is to improve traffic operations, provide congestion relief in order to improve traffic flow, enhance bicycle and pedestrian access, and improve drainage performance on SR-98.

NEED

Capacity, Transportation Demand and Safety

Currently two of the intersections along this corridor operate at a Level of Service (LOS) F with a peak hour total delay of 22 minutes. In the 2035 No Build condition, every intersection along this corridor, with the exception of SR-98/Ollie Avenue, would operate at a LOS F with a peak hour total delay of 49 minutes.

The current level of service during the three-hours morning (6:30 – 9:30 a.m.) and evening peak hours (2:30 –6:30 p.m. ) in this area is a LOS F. (Table 1)
The intersection capacity analysis and street segment analysis indicated that roadway and intersection improvements were required along SR-98 in addition to widening the corridor to four lanes between Dogwood Road and SR-111.

After segment and intersection recommendations were made for the Year 2035, intersection capacity analyses were conducted at all the intersections with the recommended intersection lane configurations for the following scenarios:

- Year 2015 without Anza Road
- Year 2015 with Anza Road
- Year 2035 with Anza Road
The intersection analysis showed that all the intersections are projected to operate at LOS D or better with the recommended intersection and segment recommendations as described in Section 1.3.

**Roadway Deficiencies**
The project is located in a heavily urbanized area with schools, a community recreation area, and residences next to the highway. There is a lack of sidewalks and/or bike access for those pedestrian/bicyclists traveling through the corridor. Due to the number of schools nearby, this also contributes to an increased number of pedestrians walking or biking immediately adjacent to the highway.

School children from the nearby schools along SR-98 (William Moreno Jr. High School, Vincent Memorial High School, Blanche Charles Elementary, Mains Elementary School and Rockwood Elementary) currently walk or bike alongside of SR-98 mostly on unpaved dirt or grass paths. There currently are no bicycle lanes on SR-98 from David Navarro Avenue to SR-111. The City of Calexico Bicycle Master Plan (September 30, 2003) proposed a Class I bicycle facility on SR-98 from Ollie Avenue to the Canal. The City of Calexico is in the process of updating their General Plan. They are recommending in the Updated General Plan that a Class II bicycle facility be installed on SR-98 instead of a Class I bicycle facility.

There is currently no structured drainage system along this corridor and the highway experiences localized flooding during heavy storms. Roadway runoff sheet flows off of the highway and travels to low points where it eventually infiltrates into the ground. Many of these low points are located in areas outside of state right of way. Due to the flat terrain and lack of existing storm drain facilities, the basins are needed to control roadway runoff.

**Social Demands or Economic Development**
Calexico is characterized by a low-rise sprawling development pattern with a variety of land uses. Calexico is not fully built out and there are both parcels in the planning and development stages. The Imperial County General Plan (2003) has designated land adjacent to SR-98 as Urban Land east of Dogwood Road and as Agricultural west of Dogwood Road. Land uses adjacent to the proposed project have been identified as Low Density Residential, High Density Residential, Commercial Neighborhood, Public Facility and Industrial by the City of Calexico General Plan Update (2007).
Calexico is projected to experience large amounts of growth in the future. This growth would include a population increase from 28,408 in 2000 to 58,348 in 2030 (SCAG). Population growth, increased development, and improvements in nearby border crossings have contributed to traffic, congestion, and delays within Calexico as a whole and along SR-98 specifically.

Three projects adjacent to SR-98 have been approved by the City for development, these are: the Los Lagos which is an approximately 449-acres (181.7 hectare) mixed-use development, the River View Condominium, a 24.5-acre (9.91 hectare) mixed-use development, and the Remington Condominium, a 20-acre (8.09 hectare) development of 272 two-story condominiums. There are additional developments in the City of Calexico that have been approved for development or undergoing environmental review. This type of development is expected to continue in Calexico and further degrade traffic conditions along SR-98.

**Independent Utility and Logical Termini**

The original limits of this project were from SR111 to David Navarro, but with the rapid development that occurred in the recent years, the future traffic needs required that project limits be extended. On the east side of the project the limits were extended up from SR111 to Rockwood Avenue in order to accommodate a larger transition area as well as to increase storage capacity for the SR-111/SR-98 intersection. On the west side of the project the project limits had to be extended from David Navarro to Dogwood Avenue in order to accommodate horizon year traffic due to the city’s proposed development plans.

Over the next 25+ years, traffic growth and congestion are predicted for this section of roadway. It is proposed to deal with the worst of the congestion problems by widening the road from two to four lanes from Dogwood Road through just west of Ollie Avenue, and from four to six lanes from Ollie Avenue through SR-111, tying back to the existing road at Rockwood Avenue.

The project is a stand-alone project with independent utility that does not require any other additional transportation improvements.
1.3 PROJECT DESCRIPTION

Caltrans in cooperation with the City, proposes to improve traffic operations, enhance bicycle and pedestrian access, and improve drainage performance on SR-98. The project is located on SR-98 from .35 kilometers (0.22 miles) west of Dogwood Road to Rockwood Avenue, KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6).

1.4 ALTERNATIVES:

1. Proposed Build Alternative (Preferred)

The Build Alternative proposes to widen SR-98 from two to four lanes from Dogwood Road through just west of Ollie Avenue, and from four to six lanes from Ollie Avenue through SR-111, tying back to the existing road at Rockwood Avenue (see Figures 2A to 2E). The proposed lane widths are a standard 3.6 meters (12 feet) and a raised median that averages 4.3 meters (14 feet) in width would be incorporated throughout the length of the project (see Figure 2F). In addition, this alternative would update the number of turning lanes according to traffic needs at each intersection within the project limits. Table 2 lists the existing and proposed turning lanes for each intersection within the project area.
Table 2. Existing and Proposed Turning Lanes

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</tr>
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<tr>
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<tr>
<td>Rockwood Avenue</td>
<td>0/1</td>
<td>0/1</td>
<td>1/1</td>
<td>0/1</td>
</tr>
</tbody>
</table>

R – Right Turning Lane
L – Left Turning Lane

There would also be new intersections constructed or right-turn lanes lengthened to create access to new developments, these are listed below.

- Full intersection (signalization at all access points) at the proposed Los Lagos development
- Partial intersection (signalization at some access points) at the proposed Riverview development
- Right-in only at the Linda Plaza development
- Extended westbound right-turn lane at Kloke Road to allow for the Linda Plaza access
- Extended eastbound right-turn lane at Cesar Chavez Boulevard to allow access for the proposed gas station
The project would be partially funded by new developments in the area. The new developments through fair share agreements would fund the widening and/or improvements that tie in directly to those developments. Agreements between Caltrans, the City, and/or developers are underway.

Some intersections would be closed with the addition of the raised median. Left turn movements at Harold Avenue and Paulin Avenue onto SR-98 would be restricted by the addition of the raised median. The proposed improvements would allow for better flow of traffic on SR-98 and reduce traffic congestion on the surface streets.

Access to and from SR-98 from Lee Avenue would be closed off in order to create a full intersection at V.V. Williams Avenue. In addition, traffic that would normally exit Lacy Avenue to go east on SR-98 would be diverted to Birch Street, which would then lead to the realigned V.V. Williams Avenue.

Several intersections within the project limits would be signalized. The intersections that are currently unsignalized that would be signalized as a result of this project are as follows:

- SR-98/David Navarro Avenue.
- SR-98/V.V.Williams Avenue/Lee Avenue.
- SR-98/Cesar Chavez Boulevard.

Existing intersections that are currently signalized would remain signalized.

Sidewalks are proposed along both sides of SR-98 for the entire length of the project to, encourage pedestrian use, enhance access and minimize pedestrian/vehicles conflict. The sidewalks would be 1.5 meters (5 feet) in width.

All intersections contain ramps that comply with the American Disabilities Act (ADA) and sidewalks and bike lanes are proposed to aid low mobility and minority groups. Current access to schools and businesses would remain open.

This alternative would also incorporate a new Class II Bike Lane in order to promote bicycle use, enhance access, as well as minimize bicycle/vehicle conflict. The bike lane would be
adjacent to the sidewalk for the entire length of the project in both the eastbound and westbound directions. The bicycle lane would be 2.4 meters (8 feet) in width. A Class II Bike Lane provides a striped lane for one-way bike travel on a street or highway.

The project proposes to upgrade the drainage system within the project limits. Curb and gutter would be placed along the entire length of the project on both sides of the road. Water would drain through inlets to pipes that connect to proposed basins. These basins would be constructed along the project at various locations shown in Figures 2a to 2e. The collected water of the two basins west of the All American Canal and the two basins immediately east of the All American Canal would flow via existing pipes to the All American Canal. The water collected by the two eastern most basins would be pumped to the existing 24-inch (60.7 centimeters) storm drain system at Kloke Road, which then drains south to the New River.

All staging/storage areas would be located within the Caltrans right of way.

Construction would occur in two phases:

- Phase 1 - Location: From east of All American Canal to Rockwood Avenue.  
  Estimated Cost: $31.6 million
- Phase 2 - Location: From just west of Dogwood Road to east of All American Canal.  
  Estimated Cost: $12 million

Phase 2 of construction is expected to be largely funded by private developers through fair share agreements. Construction of Phase 2 would not be needed if the developments are not built.

**Utility Involvement**

There are numerous utilities along SR-98 and several utility conflicts have been identified. Most of the existing utility lines are located along the roadside or within the street system. The project would directly impact the overhead power lines, and as a result, the power poles along with the lines would have to be relocated. In areas where new structural section is proposed, water, communication, and gas lines crossing beneath the existing roadway may need to be relocated or protected-in-place. The TV Cable line along the south side of SR-98 may also need to be relocated. Any required relocations or protection measures would be coordinated with the utility owners during the design process. Imperial Irrigation District, Pacific Bell, Southern California
Gas Company (SC Gas) and The City of Calexico Water and Sewer District, have utility facilities located within the project limits.

**Railroad Involvement**
Union Pacific Rail Road (UPRR) crosses SR-98 just east of Cesar Chavez Boulevard. Meetings with UPRR representatives were held throughout the project development process. Upgrades to the railroad crossings would include upgraded gates and signalization and would be coordinated with the UPRR.

**2. No-Build Alternative:**
The No-Build Alternative proposes no improvements to the project area. Under the No-Build alternative, SR-98 would remain at its current Level of Service of F. The No-Build would not alleviate the current or anticipated increased traffic congestion on SR-98 or reduce the level of service. Additionally, Class II bike lanes, sidewalks, and a standard drainage system would not be built; and additional signalization along SR-98 would not occur. Because this alternative does not improve present and future traffic conditions, enhance pedestrian and bike access, it would be inconsistent with the purpose and need of this project.

After the public circulation period, all comments will be considered, and Caltrans will make the final determination of the project’s effect on the environment. In accordance with CEQA, if no unmitigable significant adverse impacts are identified, Caltrans will prepare a Mitigated Negative Declaration (MND). Similarly, if Caltrans determines the action does not significantly impact the environment, Caltrans, as assigned by FHWA, will issue a Finding of No Significant Impact (FONSI) in accordance with NEPA.

**1.5 Permits and Approvals Needed**

Due to the limited scope of the proposed project’s impacts on resources or right of way, no jurisdictional or municipal permits would be required for project construction.

However, reviews or approvals from Imperial Irrigation District, the Public Utilities Commission and/or the UPPR may be required during further development of the project.
Figure 2A
Project Features

LEGEND

- Existing Right of Way
- Proposed New Right of Way
- Construction Easements
- Drainage Features
- Proposed Drainage Basin
- Proposed Retaining Walls
- Landscape
- Noise Receptor Site

Caltrans

Scale: 1:2000
Figure 2F
State Route 98 Typical Cross-section
CHAPTER 2 - AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION &/OR MITIGATION MEASURES

This chapter explains the impacts that the project would have on the human, physical and biological environments in the project area. It describes the existing environment that could be effected by the project and potential impacts. As part of the scoping and environmental analysis conducted for the project, the following environmental resources were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

Farmlands/Timberlands
The land adjacent to the proposed project has been designated as Residential Specific Plan (RSP) and RSP with Business Park (BP) north of SR-98 and as High Density Residential (HDR), and Commercial Neighborhood, south of SR-98 by the City of Calexico General Plan Update 2007. Additionally, none of these agricultural lands are preserved under Williamson Act contracts, which are rolling term ten-year contract agreements between landowners and jurisdictions to voluntarily restrict land to agricultural and open-space uses.

Relocations
The proposed project would not require relocations. Most of the work would occur within Caltrans' right of way or dedicated easements. Some new right of way would be required for the widening, temporary construction easements, and drainage easements, there would be no relocations of businesses or homes.

Environmental Justice
The proposed project would not result in disproportionately high and adverse effects on the health or environment of minority or low-income populations.

Hydrology/Floodplain
The proposed project’s widening will have no impacts to hydrology or any floodplain. Federal Emergency Management Agency (FEMA) mapping was reviewed and the project is not located within a known floodplain.
Geology/Soils/Seismic/Topography
Impacts from geologic hazards are not expected since deep cut features or structural works are not required for the proposed project. No faults have been mapped within the limits of the planned improvements. Based on literature review, the site is not subject to surface rupture or soil cracking. The potential for surface rupture and soil cracking from active sources is considered negligible. The fill and lake deposits underlying the alignment are not considered liquefiable due to their relatively high density and substantial clay content.

Paleontology
Grading and excavation activities associated with this project are minimal and would not impact paleontological resources.

Wetlands and Other Waters
The project would not cause any impacts to wetlands or other waters of the U.S. because the drainages and the canal are not considered jurisdictional “waters of the U.S.” by the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) pursuant to the Clean Water Act (CWA) and Porter-Cologne. Additionally, the agricultural ditches and the canal are not typically considered state-regulated by the California Department of Fish and Game (CDFG) under Sections 1600-1616 of the Fish and Game Code, unless they are vegetated and support sensitive species.

Plant Species
No plant species of concern were observed within the project limits. Therefore, there would be no impact to any state sensitive plant species, and no direct/indirect or adverse modification of designated critical habitat with the proposed project.

Threatened And Endangered Species
Based on the information on the July 2007 Natural Environment Study (NES), the proposed project would not impact proposed, listed threatened or endangered species because there are no impacts to federally or state-listed endangered species.

Cumulative Impacts
The planned and built developments are consistent with Calexico General Plan Update 2007. No substantial cumulative impacts are anticipated to result from this project.
HUMAN ENVIRONMENT

2.1 LAND USE

AFFECTED ENVIRONMENT
The proposed project is largely located within the rapidly growing and expanding City of Calexico located along the United States/Mexico border. Part of the project extends into an unincorporated area of Imperial County immediately adjacent to the city. The City will likely soon have jurisdiction over this land as well as it is located within the City’s Sphere of Influence and is expected to be annexed into Calexico in the near future. Calexico is unique due to its location adjacent to the international border with Baja California, Mexico.

Calexico’s port of entry is a major entrance point for thousands of persons as well as large amounts of goods traveling between the two countries. Its economy reflects its proximity to the Mexican border and its location in an agriculturally-oriented California county.

More than 33 million vehicles and pedestrians cross into U.S. through Calexico's two Ports-of-Entry. The East Calexico port of entry provides an improved link to major trucking routes, and has increased the ease with which people and goods move between the two countries. At the West Calexico port of entry, the Secure Electronic Network for Travelers Rapid Inspection (SENTRI) Lane is now open to the public (City of Calexico).

A Notice of Intent to Prepare an Environmental Impact Statement for the Calexico West Port of Entry Expansion/Renovation, Calexico, California was filed February 27, 2007 by the General Services Administration. The purpose of the expansion/renovation is to reduce traffic congestion in Calexico and Mexicali city centers caused by vehicles crossing the border, to improve border security; and to provide safe, secure, and efficient operational areas for the public and Federal employees.

2.1.1 Existing and Future Land Use
Calexico is characterized by a low-rise sprawling development pattern with a variety of land uses. Calexico is not fully built out and there are parcels both in the planning and development stages. The Imperial County General Plan (2003) has designated land adjacent to SR-98 as “Urban Land” east of Dogwood Road and as “Agricultural” west of Dogwood Road. Land uses
adjacent to the proposed project have been identified as Residential Specific Plan (RSP) Low Density Residential, High Density Residential, Commercial Neighborhood, Public Facility and Industrial by the City of Calexico General Plan Update (2007) (Figure 3).

The Calexico General Plan Update states that there are approximately 2,060 acres (833 hectares) of land that is zoned residential, 290 acres (117 hectares) that is zoned commercial, 255 acres (103 hectares) that is zoned industrial, with the remaining acreage (hectare) within the City consisting of vacant lots, parks, schools, and agricultural/open space uses.

The City also shares a connection to Mexicali, just across the border, as a boon to commercial activity between the cities, from commuters, trucking and the potential for commercial trade due to the enactment of the North American Free Trade Agreement (NAFTA). Calexico and other cities in the Imperial Valley are now experiencing unprecedented growth due to the higher cost of housing in San Diego and other counties along coastal California.

Future Land Use plans in the Calexico General Plan Update call for capitalizing upon its proximity to Mexico, by continuing to provide opportunities for maquiladora uses or "sister"-plants to locate in the City. Additionally, the City should make use of the business park overlay that would allow the City and future developers the flexibility to regulate the uses allowed that would most benefit the City and alternative land design opportunities that may not be available under typical land use designations. The Calexico General Plan Update also calls for the City to encourage commercial development to support Calexico’s growing residential areas, in the downtown area for pedestrians from Mexicali and local residents, and highway commercial uses that capitalize on the substantial number of border crossings each year. Land uses need to respond to the eastern border crossing and revisions to the main border crossing that would redirect automobile, truck and pedestrian traffic.

The following are the planned and existing developments in the general project vicinity.
<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
<th>Proposed Uses</th>
<th>Status</th>
</tr>
</thead>
</table>
| Los Lagos         | City of Calexico   | A proposed mixed-use development of 1,885 primarily single-family residences, as well as townhomes and four-plex and six-plex models, and neighborhood commercial.  
Also proposed are two joint-use schools and community park sites totaling 29.9 acres, a 38.3-acre park/lake feature, and a 1.9-acre park.  
Additionally, a 31-acre detention basin system and a 1.65-acre fire station. An IID substation is also proposed. Approximate project site 499-acres (202 hectares).  
Project is located at the northeast intersection of Highway 98/Birch Street and Dogwood. | Approved Final Environmental Impact Report (EIR). No construction. |
| Riverview Condos  | City of Calexico   | River View Condominiums is a proposed 24.5-acre mixed-use development of approximately 352 condominium units; four (4) commercial lots; and large open space with swimming pool and tennis courts.  
Project is located at the southeast corner of Highway 98/Birch Street and the All American Canal. | Approved Final Mitigated Negative Declaration (MND). No construction. |
| Crossroads Plaza  | City of Calexico   | A 23-acre commercial development subdivided into 12 parcels, now home to Food 4 Less, Carl’s Jr., Starbucks, Subway, GameStop and All State Insurance to name several. Other parcels of various sizes surround the perimeter of the property including a few large enough to accommodate big box retailers.  
The property is located at the south of Highway 98/Birch Street and approx. 1,000 feet east of Kloke Avenue. | Built                                        |
| Remington Condos  | City of Calexico   | Remington Condominiums is a proposed 20-acre development of 272 two-story condominiums with private gardens, assigned covered parking, a landscape retention basin park, swimming pool with cabana, tennis court, and a children’s play area.  
Project is located at the northeast intersection of Highway 98/Birch Street and Dogwood. | Final MND                                    |
| Linda Plaza       | City of Calexico   | A 2.81-acre commercial development, 3 office buildings totaling 27,240 square feet, 10,416 square feet of retail space, and one 3,000 square foot fast food restaurant | Built                                        |
| Las Ventanas      | City of Calexico   | A proposed 304-acre mixed use development of approximately 1,040 single family homes on 204.4-acres, 28.6-acres of commercial, 18-acres of community and neighborhood parks, 2 acres for a school site and joint use park; and 14 acres for retention basins.  
Project is located at the northeast intersection of Highway111/Imperial Avenue and Jasper Road. | Traffic Impact Study (TIS)                   |
<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
<th>Proposed Uses</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rancho Diamante</td>
<td>City of Calexico</td>
<td>A proposed 1,035 acres mixed use development of 2,257 single family homes on 555.7 acres; 1,944 townhomes on 136.2 acres; 32.3 acres of commercial; 43.9 acres of community park; 64.9 acres of schools; 37.9 acres of retention basins and 164.1 acres of roadways and easements</td>
<td>TIS</td>
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<tr>
<td></td>
<td></td>
<td>Project is located along Jasper Road and Bowker Road corridors.</td>
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<tr>
<td>Estrella Subdivision</td>
<td>City of Calexico</td>
<td>A proposed 149.7 acre mixed use development of approx. 371 single family homes on 96.5 acres; 500 multi-family attached home on 20 acres; a 12.94 acre school site; and 6 acres of park.</td>
<td>Final EIR</td>
</tr>
<tr>
<td></td>
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<td>Project is located at the northwest corner of the Central Main Canal and the future extension of Meadows.</td>
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<tr>
<td>Venezia</td>
<td>City of Calexico</td>
<td>A proposed 78.3 acre mixed use development of 249 single family homes on 6,000 square feet lots on 40 acres; 12.6 acres of commercial/retail; and 1.2 acres of commercial retention basins.</td>
<td>MND, Revising TIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project is located east of Highway 98/Birch Street and south of the All American Canal.</td>
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</tr>
<tr>
<td>La Jolla Palms</td>
<td>City of Calexico</td>
<td>A proposed 160-acre mixed use development of approx. 500 single family homes; and 22 acres of commercial.</td>
<td>MND</td>
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<tr>
<td></td>
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<td>Project is located at the northwest corner of Cole Blvd and Meadows Avenue.</td>
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</tr>
<tr>
<td>El Portal</td>
<td>City of Calexico</td>
<td>A proposed 153-acres residential development of approx. 535 units of single family homes on 6,000 square feet lots and a 13-acre school.</td>
<td>MND</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project is located at the northeast corner of Cole Blvd and Meadows Avenue.</td>
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</tr>
<tr>
<td>Santa Fe</td>
<td>City of Calexico</td>
<td>A proposed 251-acre mixed use development of approx. 571 single family homes; 13 commercial lots; 127 PUD – Planned unit development lots; and 4 condominium units.</td>
<td>Final EIR</td>
</tr>
<tr>
<td></td>
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<td>Project is located at the southwest corner of Jasper Road and Bowker Road.</td>
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<tr>
<td>Calexico International Center</td>
<td>City of Calexico</td>
<td>A proposed 232-acre mixed use development of approx. 22 units of residential apartments on 5.8 acres; seven units of mobile home park on 55 acres, 256 residential condominiums; 65.6 acres of commercial; and 58.7 acres of industrial.</td>
<td>Revised TIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project is located at the southwest corner of Highway 111/Imperial Avenue and Jasper Road.</td>
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</tbody>
</table>
ENVIRONMENTAL CONSEQUENCES

Build Alternative
Improvements to SR-98 would not impact existing or planned development within the project area.

No-Build Alternative
The No-Build Alternative proposes no improvements to SR-98 and would not impact any existing or future land use.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES
Because the Build Alternative does not have any impact to existing or planned development, no mitigation is required.

2.1.2 Consistency with State, Regional and Local Plans

AFFECTED ENVIRONMENT
Information for following section was obtained from the January 2008 Community Impact Assessment (CIA), and supplemented from the Calexico General Plan Update 2007 and the Imperial County General Plan (2003).

- Regional Transportation Plan & Regional Transportation Improvement Program

The proposed project is included in the Southern California Association of Governments 2008 (SCAG 2008) Regional Transportation Plan (RTP ID 8020, Page 1 of Modeled Project Lists), and the 2006 Regional Transportation Improvement Plan (RTIP) (Project ID 8020, page 1 of the Imperial County Listing of State Projects) (SCAG 2007a) as amended. The project description of the proposed project matches the project description in the 2008 RTP and 2006 cost-contrained RTIP.

- General & Community Plans
CALEXICO GENERAL PLAN UPDATE 2007

The City of Calexico General Plan Update provides a planning framework for future development of Calexico. The Calexico General Plan Update states that the City is expected to experience large amounts of growth in the future and identifies several factors driving this growth. Calexico is located directly across the border from Mexicali, Mexico, which has a population of approximately 1 million people and a high number of manufacturing jobs. However, Mexicali has limited housing opportunities and retail centers, which encourages some people employed in Mexicali to live in Calexico and take advantage of the housing and retail opportunities provided in the city.

Additionally, San Diego’s constrained housing market has caused many people working in adjacent San Diego County to look for more affordable housing opportunities in Imperial County.

Circulation Element

The Circulation Element of the Calexico General Plan Update provides more specific Goals and Objectives relevant to the proposed project. The Circulation Element has the following stated goal: The circulation system should promote the safe, efficient movement of people, goods and vehicles, and protect and enhance the environmental quality of Calexico.

Relevant Objectives and Policies provided by the Circulation Element include:

- Access to highways, primary arterials, and major arterials shall be limited to maintain capacity, efficiency, and the safety of the traffic flow on the City’s streets.
- Pedestrian facilities shall be developed throughout the city to encourage walking as an alternative to the automobile.
- All urban standard streets should have improved sidewalks on both sides of the road.
- Develop a well-designed bicycle network throughout the City that provides for safe and efficient means of transportation.

Parks & Recreation Element

As of 2004, the City had 22 parks totaling more than 60 acres (20.4 hectares). In the Calexico General Plan Update, parks are characterized by their size and service area. The City has numerous smaller parks that, according to the City park classification, would not qualify as
either Neighborhood or Community Parks (See Table 4). The City has voiced its need for a central community park to serve as a focal point of the City and provide various recreational facilities such as a swimming pool, soccer fields, and recreation center.

The Park & Recreation Element has the following stated goal: To provide continued investment in existing parks while creating high quality new facilities that satisfy the underserved and future needs of the community. Park planning will be flexible in nature and therefore be responsive to demographic or other social changes, thus ensuring a high quality, long-term viable park system.

Relevant Objectives and Policies include:

- All Parks. All parks should be landscaped with drought tolerant plant materials in an effort to conserve water. In addition, automatic irrigation systems should be used and provisions made for adequate drainage. All sidewalks shall be constructed of concrete or rubberized materials. Biking or multi-purpose trails are encouraged and may be constructed with materials such as decomposed granite or other soil stabilized material. As much as possible, parks should be barrier-free to the physically disabled.

- Pocket Park. Due to the wide variation in size and the propensity for pocket parks to be located in irregular and difficult parcels, design standards for pocket parks are limited to those listed for “All Parks.”

<table>
<thead>
<tr>
<th>Table 4 City Park Classification</th>
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</thead>
<tbody>
<tr>
<td><strong>Pocket Park.</strong></td>
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<tr>
<td><strong>Neighborhood Park</strong></td>
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<tr>
<td><strong>Community Park</strong></td>
</tr>
</tbody>
</table>

Source: Calexico General Plan Update 2007
The Calexico General Plan Update lists two parks along the SR-98 corridor: These parks, based on size, would be considered pocket parks.

Landscaping and City Identity Element
The Landscaping and City Identity Element goal is to create streets, highways, and trails that add to the positive experience of Calexico by drivers, pedestrians and cyclists.

Relevant Objectives and Goals are:
- The City shall ensure that streetscape design along roadways creates a strong landscaped edge, provides a coherent high-quality appearance along each route, and enhances the image of adjacent development. Coherent design elements can include such things as designated street trees, trails installed pursuant to the Bicycle Master Plan, enhanced paving, lighting, and consistent setbacks.
- To enhance impressions of Calexico at places that serve as entry points, or “gateways”, to the City (e.g., international border, Hwy. 111 and Jasper Road, SR-98 at Dogwood Road), landscaping and City identification monument signs should be developed at key locations.

CITY OF CALEXICO BICYCLE MASTER PLAN (2003)
The City of Calexico Bicycle Master Plan (September 30, 2003) proposed a Class I bicycle facility on SR-98 from Ollie Avenue to the Canal. The City of Calexico is in the process of updating their General Plan. They are recommending in the Updated General Plan that a Class II bicycle facility be installed on SR-98 instead of a Class I bicycle facility.

IMPERIAL COUNTY GENERAL PLAN (2003)
The Imperial County General Plan was developed to guide future development within Imperial County and to direct growth within the county in a way that meets the needs of Imperial County while protecting valuable natural resources and ensuring public safety.

Circulation and Scenic Highways Element
The Circulation and Scenic Highways Element was developed to meet the transportation needs of Imperial County and provide regional coordination for transportation facilities.
Relevant Goals and Objectives provided include:

- The County will provide an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.
- Maintain and improve the existing road and highway network, while providing for future expansion and improvements based on travel demand and the development of alternative travel modes.
- Consider all modes of transportation including motor vehicle, rail, transit, air transportation, and non-motorized transportation.
- Develop alternative transportation strategies designed to reduce traffic volumes and improve traffic flow. This includes providing alternatives to residents such as pedestrian, bicycle, and public transit options.

ENVIRONMENTAL CONSEQUENCES

Build Alternative
The City of Calexico’s General Plan Update indicates the need to upgrade SR-98 through the urban area of the city. It also include Caltrans plan to upgrade Birch between Highway 111 and David Navarro Avenue to a four-lane highway.

The proposed project is consistent with both the Calexico General Plan Update and the Imperial County General Plan in that it calls for improving access, efficiency and highway capacity, development of pedestrian facilities to encourage alternatives to the automobile, developing a bicycle network, and the addition of landscaping.

No-Build Alternative
The No-Build Alternative proposes no improvements to SR-98 and would not be consistent with the City of Calexico General Plan Update nor the Imperial County General Plan.

AVOIDANCE MINIMIZATION AND/OR MITIGATION MEASURES
The proposed project is in compliance with local planned economic and residential development and would be a beneficial improvement to meet the surrounding communities transportation needs. No mitigation required.
2.1.3 Parks and Recreational Facilities

AFFECTED ENVIRONMENT
Within the proposed project is 1.75 -acre (0.70 hectare) park identified as the Williams Greenbelt Park. The park is listed in the Calexico General Plan Update in the Parks and Recreation Element. The park is located immediately between a city front road West Canal Street and SR-98.

The park is a long and narrow strip of land with some trees, overhead electrical lines, and no recreational amenities (i.e. no picnic tables, benches or playground equipment). City staff, during the course of meetings with the project development team, has indicated that the park is not used.

Rather than a recreational facility, the park acts as a land use buffer separating SR-98 from a frontage road and residential housing. There are no organized actives recognized in the Calexico General Plan or identified by the City, and per the characteristics listed in Table 4, the park is considered a pocket park. Pocket parks may be used for, but not limited to, land use buffers, picnic and sitting areas, and playgrounds.
ENVIRONMENTAL CONSEQUENCES

Build Alternative
Approximately 0.81 acre (0.32 hectare) of the existing 1.75-acre (0.70 hectare) park would impacted by the roadway widening. The remaining area of the park 0.94 acre (0.38 hectare) would be stay as "buffer greenbelt park" area.

The City has stated in a letter dated August 22, 2008 (see Chapter 3 Comment & Coordination) that Williams Greenbelt Park does not serve any recreational activities. The location and surrounding constraints only allows the city to utilize the area as a buffer “greenbelt - park.” The City concurs that the use of the greenbelt area would not result in any temporary or permanent adverse change to the activities, features, or attributes which are important to the purpose or functions that qualify a resource for protections under Section 4(f) of the Department of Transportation Act of 1966.

No- Build Alternative
The No-Build Alternative proposes no improvements to SR-98 and would not impact any known park or park area.

AVOIDANCE MINIMIZATION AND/OR MITIGATION MEASURES
No adverse effects associated with Park and Recreational Facilities would be anticipated with the widening of the highway. There are no park impacts requiring the need for mitigating measures.

2.2 GROWTH

REGULATORY SETTING
The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, requires evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as secondary impacts. Secondary impacts may
include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project’s potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents “…discuss the 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…”

**AFFECTED ENVIRONMENT**

Calexico is expected to experience rapid growth in the future due to its location directly across the border from Mexicali, Mexico, and near San Diego, California, both of which have limited housing opportunities. As indicated in Table 5, this growth would include a population increase from 28,408 in 2000 to 58,348 in 2030, and an increase in housing units from 6,867 in 2000 to 16,130 in 2030, and an increase in employed people from 8,483 in 2000 to 16,645 in 2030.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>28,408</td>
<td>38,233</td>
<td>48,720</td>
<td>51,227</td>
<td>53,702</td>
<td>56,072</td>
<td>58,348</td>
<td>105.4%</td>
</tr>
<tr>
<td>Housing</td>
<td>6,867</td>
<td>9,293</td>
<td>12,865</td>
<td>13,700</td>
<td>14,525</td>
<td>15,315</td>
<td>16,130</td>
<td>134.9%</td>
</tr>
<tr>
<td>Employment</td>
<td>8,483</td>
<td>10,622</td>
<td>16,521</td>
<td>16,551</td>
<td>16,582</td>
<td>16,613</td>
<td>16,645</td>
<td>96.2%</td>
</tr>
</tbody>
</table>

Source: City of Calexico General Plan Update 2007

Consequently, the City of Calexico General Plan Update has been developed with goals and objectives designed to capture and facilitate this projected growth.

**ENVIRONMENTAL CONSEQUENCES**

**Build Alternative**
The proposed project is in response to traffic congestion that has resulted from growth that has occurred or is planned to occur. It is in response to the surrounding communities transportation needs. Section 2.1.1. Existing and Future Land Use, Table 3 lists developments located along the project and the project vicinity. Three of the larger planned developments located along the SR - 98 Roadway Widening Project Final IS/EA with MND and FONSI
proposed project limits would add more than 2,500 primarily single-family residences, as well as townhomes and condos.

The proposed project would alleviate existing traffic congestion and accommodate future traffic generated as a result of projected growth. The proposed project is not expected to provide traffic capacity above and beyond the needs of the future planned population and is not mitigation for any approved or planned development.

No adverse effects associated with growth would be anticipated with the widening of the highway.

**No Build Alternative**

The No Build Alternative would not address the needs of future planned development in the City of Calexico. The no-build project would do nothing to address the needs of future planned development in the City of Calexico.

**AVOIDANCE MINIMIZATION AND/OR MITIGATION MEASURES**

The proposed project is in compliance with local planned economic and residential development and would act, as a beneficial improvement to meet the surrounding communities transportation needs. There are no growth-related impacts requiring the need for mitigating measures.

**2.3 COMMUNITY CHARACTER AND COHESION**

**REGULATORY SETTING**

NEPA establishes that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as, destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.
Under CEQA, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project’s effects.

**AFFECTED ENVIRONMENT**

A January 2008 Community Impact Assessment was prepared for the project and is incorporated by reference.

Existing developments within the project limits, consists of high-density multi-family residences, lower density single-family residences, commercial, public facilities (schools, parks, post office) industrial, business parks, and agricultural land. Calexico is currently not fully built out and contains both parcels in the planning and development stages.

Development stretching from the western terminus short of Dogwood Road to the All-American Canal at Calexico’s western border and immediately adjacent to the proposed project is relatively sparse and only includes four developed properties, all of which are located on the south side of SR-98. Other land north of the proposed project, bounded by Jasper, Dogwood to the west, SR-98 to the south is predominately agricultural land with small amounts of residential development dispersed throughout.

Just east of the All-American Canal to Cesar Chavez Boulevard, include single and multi-family residential development on both sides of SR-98 with some commercial development dispersed throughout. The largest commercial development is the Santo Tomas Swap Meet, an outdoor commercial shopping area with a large number of vendors selling a variety of products such as home furnishings, clothing, and other assorted items.

Several community resources are located along SR-98 within this area. The properties of two schools are located adjacent to SR-98, while two other schools are located near SR-98. Portions of the open playing field and recess area for Blanche Charles Elementary School are located adjacent to SR-98 at the northwest corner of SR-98 and Kloke Road. Similarly, portions of the open playing field and recess area for Mains Elementary School are located adjacent to SR-98.
SR-98 at the southeast corner of SR-98 and Eady Avenue. The Calexico Family Resource Center is located on the south side of SR-98 at the southwest corner of SR-98 and Lacy Avenue, with the parking lot of properties occupying the entire corner of the intersection.

Development along SR-98 between the railroad tracks and Rockwood Avenue is primarily commercial with a small amount of residential development. Several community resources are located within area. Portions of the open playing field and recess area for Rockwood Elementary School are located adjacent to SR-98 at the southeast corner of and Rockwood Avenue. Additionally, the Calexico Chamber of Commerce is located at the northwest corner of SR-98 and SR-111, and a United States Post Office is located at the northwest corner of SR-98 and Ollie Avenue.

ENVIRONMENTAL CONSEQUENCES

Build Alternative
The Build Alternative would not result in the relocation nor result in the full acquisition of any existing business, residence, or community-serving resource within the project limits. The proposed project involves only minor right-of-way impacts that would not cause any permanent impacts to existing business, residence, or community-serving resource. Temporary construction easements, lasting approximately six months, would have the potential to impact some business and residences within the project limits. Mitigation measures outlined in Section 2.15 Construction Impacts would be implemented that would maintain access to the business property and maintain visibility of the business from the road.

The proposed project would enhance the community by the addition of sidewalks and a bicycle path. Sidewalks and a new Class II Bike Lane are proposed along both sides of SR-98 for the entire length of the project to encourage pedestrian and bicycle use as well as enhance access. The bike lane would be adjacent to the sidewalk for the entire length of the project in both the eastbound and westbound directions.

Aesthetic improvements are also proposed for the project that would add to the character of the corridor by the addition of trees and enhanced paving in the median creating attractive new features. (See Section 2.6 Visual/Aesthetics). Through these proposed measures, the project can help to visually unify the corridor.
No Build Alternative
The No-Build Alternative proposes no improvements to SR-98 and would not impact Community Character or Cohesion.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES
No adverse effects associated with Community Character or Cohesion would be anticipated with the widening of the highway. The proposed aesthetic features would act, as a beneficial improvement to the surrounding communities, thus no additional mitigation is required.

2.4 UTILITIES / EMERGENCY SERVICES

AFFECTED ENVIRONMENT
Existing utilities within the proposed project limits include a high-pressure gas line, owned by Southern California Gas Company (SC Gas), cable and phone lines owned by AT&T SBC/Pacific Bell, City of Calexico Water and Sewer District, and Time Warner Cable, and irrigation throughout length of project owned and operated by Imperial Irrigation District (IID).

ENVIRONMENTAL CONSEQUENCES

Build Alternative
Most of the power poles owned by IID would have to be relocated due to the widening of the road. In order to remain within the proposed right-of-way, the guy cables (used for bracing) that support the power poles would need to shift in certain areas, creating the need for steel utility poles or guy cable poles. The following have the potential to be either protected in place or lowered in place: gas lines owned by SC Gas; water pipelines owned by IID; water pipelines owned by the City; and cables owned by SBC Pacific Bell. IID does not own any canal drains that would be affected by the project. The other drains on the project site are no longer in use.

There are numerous utilities along SR-98. Most of the existing utility lines are located along the roadside or within the street system. The widening to the north of SR-98 would directly impact the poles supporting overhead power lines. As a result, the power poles would have to be relocated. Power poles and transmission lines would be relocated to inside of the planned sidewalks along SR-98. Within the project limits there is a 92 kilovolt (KV) transmission line that
would need to be relocated on the north side of SR-98, starting at the All American Canal and heading west. About 1,100 meters (3,609 feet) of this line need to be relocated. The lines would be placed in areas with dedicated easements near the proposed Los Lagos Development. The proposed Los Lagos Development has been required to widen the highway and related work associated with the widening, including utility relocation through fair share agreements.

There is a large steel pole that is located just west of SR-111 that carries two 48 KV lines that also would also need to be relocated. In areas where new structural section is proposed, water, communication, and gas lines crossing beneath the existing roadway may need to be relocated or protected-in-place. The TV Cable line along the south side of SR-98 may also need to be relocated. Any required relocations or protection measures would be coordinated with the utility owners during the design process.

No Build Alternative
No utility conflicts would result from the No Build Alternative.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES
Any required relocations or protection measures would be coordinated with the utility owners during the design process. Imperial Irrigation District, AT&T SBC/Pacific Bell, SC Gas and The City of Calexico Water and Sewer District, have utility facilities located within the project limits. Most utility companies affected by the project would design and construct their own relocation of utilities. In addition ongoing and continuing, per Public Utilities Commission (PUC) General Order 131-D, coordination with PUC would occur on all transmission lines exceeding 50 KV.

2.5 TRAFFIC & TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

REGULATORY SETTING
Caltrans, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor
vehicle traffic, every effort must be made to minimize the detrimental effects on all highway
users who share the facility.

Caltrans is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building
transportation facilities that provide equal access for all persons. The same degree of
convenience, accessibility, and safety available to the general public would be provided to
persons with disabilities.

AFFECTED ENVIRONMENT
Three major highways, including SR-98, serve the project area. Birch Street/SR-98 is classified
as a State Highway and serves as a primary east/west arterial in Calexico. SR-98 currently
provides two travel lanes in each direction east of the SR-98/Ollie Avenue intersection. SR-98
becomes Birch Street west of Ollie Avenue, which provides one travel lane in each direction.
The project area is also served by Imperial Avenue, SR 111, which is the primary north/south
arterial in Calexico, and I-8, which is located approximately five miles (eight kilometers) north of
the planning area.

The circulation system of the city of Calexico is primarily composed of a system of signalized
and unsignalized arterial and collector facilities. The majority of vehicle delay occurs at the
signalized intersections because vehicles are stopped to allow cross traffic to clear.

The traffic study (April 2007) encompasses the SR-98 corridor from west of Dogwood Road to
east of SR-111, Cesar Chavez Boulevard from SR-98 to 2nd Street, and 2nd Street from Cesar
Chavez Boulevard to SR-111. The project includes nine intersections along SR-98, plus three
intersections to the south of SR-98. The roadway facilities within the study area fall under both
City of Calexico and Caltrans jurisdiction. The project vicinity is shown in (Figure 1).

A modification of Imperial County Transportation Model 2025 Regional Model was used to
forecast Year 2025 traffic volumes along SR-98. Modifications were made to both the land use
and network impacts so that the data is consistent with the City of Calexico General Plan
Update. Once the land use and network data were modified, Year 2025 Average Daily Traffic
(ADT) volumes were forecasted for two scenarios (with and without the Anza Road extension to
Dogwood Road).
Although several scenarios were analyzed, the Year 2035 with the Anza Road extension scenario volumes were used to determine recommended improvements because it is the most likely long-term build-out scenario. The Anza Road Extension is the City of Calexico’s proposal to connect Anza Road (2nd Street) from west of Cesar Chavez Boulevard to Dogwood Road. Though the City does not yet have a final alignment, discussions with city representatives have confirmed the City’s intentions to build the extension.

As such, the forecasted traffic numbers that include the Anza Road extension is the preferred alternative for the project. (See Table 6)

<table>
<thead>
<tr>
<th>Study Segment</th>
<th>Existing</th>
<th>Year 2015</th>
<th>Year 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West of Dogwood Rd</td>
<td>5600</td>
<td>6800</td>
<td>9300</td>
</tr>
<tr>
<td>Dogwood Rd to All American Canal</td>
<td>8800</td>
<td>19,600</td>
<td>27,100</td>
</tr>
<tr>
<td>All American Canal to David Navarro Ave</td>
<td>9200</td>
<td>21,000</td>
<td>29,000</td>
</tr>
<tr>
<td>David Navarro to Kloke Rd</td>
<td>11,200</td>
<td>23,700</td>
<td>32,800</td>
</tr>
<tr>
<td>Kloke Rd to Eady Ave</td>
<td>17,100</td>
<td>26,300</td>
<td>36,300</td>
</tr>
<tr>
<td>Eady Ave to V.V. Williams/Lee Ave</td>
<td>17,000</td>
<td>26,300</td>
<td>36,300</td>
</tr>
<tr>
<td>V.V. Williams/Lee to Cesar Chavez Blvd</td>
<td>22,100</td>
<td>27,400</td>
<td>37,900</td>
</tr>
<tr>
<td>Cesar Chavez Blvd to Ollie Ave</td>
<td>22,400</td>
<td>28,900</td>
<td>39,800</td>
</tr>
<tr>
<td>Ollie Ave to SR-111</td>
<td>25,300</td>
<td>28,900</td>
<td>39,800</td>
</tr>
<tr>
<td>SR-111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North of SR-98</td>
<td>33,100</td>
<td>57,000</td>
<td>78,700</td>
</tr>
<tr>
<td>South of SR-98</td>
<td>36,200</td>
<td>47,800</td>
<td>65,900</td>
</tr>
</tbody>
</table>

The intersection capacity analysis and street segment analysis in the study indicated that roadway and intersection improvements were required along SR-98 in addition to widening the corridor to four lanes between Dogwood Road and SR-111.

Table 7 compares the results of the intersection analyses for the existing year and years 2015 and 2035 with the two alternatives build and no-build.
## Table 7 Intersection Analyses 2015 and 2035 with the two alternatives, build and no-build

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Existing Control Type</th>
<th>Future Control Type</th>
<th>Peak Hour</th>
<th>Existing LOS</th>
<th>Year 2015</th>
<th>Year 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No Build LOS</td>
<td>Build LOS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No Build LOS</td>
<td>Build LOS</td>
</tr>
<tr>
<td>SR-98/ Dogwood Rd</td>
<td>Signal</td>
<td>Signal</td>
<td>AM PM</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/David Navarro Ave</td>
<td>All-Way Stop</td>
<td>Signal</td>
<td>AM PM</td>
<td>B</td>
<td>F</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/Kloke Rd</td>
<td>Signal</td>
<td>Signal</td>
<td>AM PM</td>
<td>E</td>
<td>D</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/Eady Ave</td>
<td>Signal</td>
<td>Signal</td>
<td>AM PM</td>
<td>C</td>
<td>F</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/ V.V. Williams Ave/ Lee Ave</td>
<td>Two-Way Stop</td>
<td>Signal</td>
<td>AM PM</td>
<td>F</td>
<td>B</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/Cesar Chavez Blvd</td>
<td>Two-Way Stop</td>
<td>Signal</td>
<td>AM PM</td>
<td>F</td>
<td>C</td>
<td>B</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/Estrada Blvd</td>
<td>Two-Way Stop</td>
<td>Two-Way Stop</td>
<td>AM PM</td>
<td>C</td>
<td>B</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/Ollie Ave</td>
<td>Signal</td>
<td>Signal</td>
<td>AM PM</td>
<td>D</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-98/SR-111/Imperial Ave</td>
<td>Signal</td>
<td>Signal</td>
<td>AM PM</td>
<td>D</td>
<td>D</td>
<td>F</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grant Ave./Cesar Chavez Blvd</td>
<td>Two-Way Stop</td>
<td>Signal</td>
<td>AM PM</td>
<td>C</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Street/Cesar Chavez Blvd</td>
<td>All-Way Stop</td>
<td>Signal</td>
<td>AM PM</td>
<td>-*</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Street/SR-111</td>
<td>Signal</td>
<td>Signal</td>
<td>AM PM</td>
<td>C</td>
<td>C</td>
<td>F</td>
</tr>
</tbody>
</table>

Footnote:
*The intersection cannot be calculated because the Traffic Synchro software does not accept existing lane geometrics for unsignalized intersections.

### SIGNALIZED

<table>
<thead>
<tr>
<th>Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 &lt; 10.0</td>
<td>A</td>
</tr>
<tr>
<td>10.1 to 20.0</td>
<td>B</td>
</tr>
<tr>
<td>20.1 to 35.0</td>
<td>C</td>
</tr>
<tr>
<td>35.1 to 55.0</td>
<td>D</td>
</tr>
<tr>
<td>55.1 to 80.0</td>
<td>E</td>
</tr>
<tr>
<td>&gt; 80.1</td>
<td>F</td>
</tr>
</tbody>
</table>

### UNSIGNALIZED

<table>
<thead>
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<th>Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
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<td>00 &lt; 10.0</td>
<td>A</td>
</tr>
<tr>
<td>10.1 to 15.0</td>
<td>B</td>
</tr>
<tr>
<td>15.1 to 25.0</td>
<td>C</td>
</tr>
<tr>
<td>25.1 to 35.0</td>
<td>D</td>
</tr>
<tr>
<td>35.1 to 50.0</td>
<td>E</td>
</tr>
<tr>
<td>&gt; 50.1</td>
<td>F</td>
</tr>
</tbody>
</table>
The intersection analysis showed that all the intersections are projected to operate at LOS D or better with the proposed intersection and segment improvements.

Vehicle classification counts were conducted along SR-98 from west of David Navarro Avenue to east of SR 111. Table 8 summarizes the percentile of truck traffic on SR-98. The table indicates that the percentage of trucks on SR-98 in the project area range from 6.55 percent to 15.03 percent. The widening of SR-98 to a four-lane roadway should also improve general operation since the additional through lane would be used as a lane for passing truck traffic.

<table>
<thead>
<tr>
<th>Segment</th>
<th>ADT</th>
<th>Truck Traffic</th>
<th>Percent Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of David Navaro</td>
<td>9,200</td>
<td>787</td>
<td>8.55%</td>
</tr>
<tr>
<td>- David Navarro to Kloke Rd</td>
<td>11,200</td>
<td>856</td>
<td>7.64%</td>
</tr>
<tr>
<td>- Kloke Rd to Eady Ave</td>
<td>17,100</td>
<td>1,996</td>
<td>11.67%</td>
</tr>
<tr>
<td>- Eady Ave to V.V. Williams Ave</td>
<td>17,000</td>
<td>2,400</td>
<td>14.12%</td>
</tr>
<tr>
<td>- Estrada Blvd to Ollie Ave</td>
<td>22,400</td>
<td>2,617</td>
<td>11.68%</td>
</tr>
<tr>
<td>- Ollie Ave to SR-111</td>
<td>25,300</td>
<td>1,664</td>
<td>6.55%</td>
</tr>
<tr>
<td>- East of SR-111</td>
<td>26,400</td>
<td>3,967</td>
<td>15.03%</td>
</tr>
<tr>
<td>SR 111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of SR-98</td>
<td>33,100</td>
<td>2,883</td>
<td>8.71%</td>
</tr>
<tr>
<td>- South of SR-98</td>
<td>36,200</td>
<td>2,507</td>
<td>6.93%</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL CONSEQUENCES

Build Alternative
The City of Calexico General Plan Update indicates a need to add sidewalks and bike facilities to promote walking and biking as alternatives to driving. Sidewalks are proposed on both sides of the highway for the entire length of the project except for west of Dogwood Road where the highway tapers back into the existing facility. There are no bicycle lanes on SR-98 from David Navarro Avenue to SR-111. Class II bike lanes are also proposed for both sides of the entire project length. Existing pedestrian and bicycle traffic would be maintained throughout construction. Traffic circulation is not expected to be impacted, however a Transportation Management Plan (TMP) would be prepared to minimize the impact of construction activities.
Without improvements, SR-98 would continue to decrease in operability with increases in congestion and delays.

All work required for compliance with the Americans with Disabilities Act would be provided. This includes but is not limited to typical pedestrian facilities such as sidewalks, driveways, curb ramps, curb cuts, crosswalks and associated signage.

**No Build Alternative**
The ADT on SR-98 is expected to increase over the next 25+ years because of new and planned development within the area. This increase would cause a lengthening of peak period duration. Queuing would not only occur on SR-98 but city streets as well. Intersections operations would continue to decrease to level F.

This alternative would do nothing to relieve the existing or future projected traffic congestion within the proposed project limits. The No Build Alternative (See Table 9) would not address the current duration of congestion and the potential for vehicle/pedestrian and cyclists movements within the proposed project limits. See Table 9 for Intersections Operations LOS with the No build.

**AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES**
A Transportation Management Plan (TMP) would be prepared to reduce potential construction-related traffic conflicts, detours, and delays. A TMP, as described in Section 2.15 Construction Impacts, would be prepared to minimize the impact that construction activities would have on highway users.
Table 9 SR-98 Intersection Operations with No Improvements

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Peak Hour</th>
<th>Existing AM</th>
<th>2015 with Anza AM</th>
<th>2035 with Anza AM</th>
<th>Existing PM</th>
<th>2015 with Anza PM</th>
<th>2035 with Anza PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-98/Dogwood Rd</td>
<td>AM</td>
<td>15.1</td>
<td>B</td>
<td>--</td>
<td>PM</td>
<td>19.1</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>20.4</td>
<td>C</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>44.0</td>
<td>C</td>
</tr>
<tr>
<td>SR-98/David Navarro Ave</td>
<td>AM</td>
<td>14.2</td>
<td>B</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>34.5</td>
<td>C</td>
</tr>
<tr>
<td>SR-98/Kloke Rd</td>
<td>AM</td>
<td>59.6</td>
<td>E</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>28.3</td>
<td>C</td>
</tr>
<tr>
<td>SR-98/Eady Ave</td>
<td>AM</td>
<td>&gt;100.0</td>
<td>F</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>&gt;100.0</td>
<td>F</td>
</tr>
<tr>
<td>SR-98/V.V. Williams Ave/Lea Ave</td>
<td>AM</td>
<td>&gt;100.0</td>
<td>F</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>&gt;100.0</td>
<td>F</td>
</tr>
<tr>
<td>SR-98/Cesar Chavez Blvd</td>
<td>AM</td>
<td>&gt;100.0</td>
<td>F</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>&gt;100.0</td>
<td>F</td>
</tr>
<tr>
<td>SR-98/Estrada Blvd</td>
<td>AM</td>
<td>22.0</td>
<td>C</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>16.8</td>
<td>C</td>
</tr>
<tr>
<td>SR-98/Ollie Ave</td>
<td>AM</td>
<td>41.0</td>
<td>D</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>37.8</td>
<td>D</td>
</tr>
<tr>
<td>SR-98/SR-111/Imperial Ave</td>
<td>AM</td>
<td>43.8</td>
<td>D</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>52.8</td>
<td>D</td>
</tr>
<tr>
<td>Grant Ave/Cesar Chavez Blvd</td>
<td>AM</td>
<td>22.6</td>
<td>C</td>
<td>&gt;100.0</td>
<td>PM</td>
<td>98.0</td>
<td>F</td>
</tr>
<tr>
<td>2nd Street/Cesar Chavez Blvd</td>
<td>AM</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
<td>PM</td>
<td>-*</td>
<td>-*</td>
</tr>
<tr>
<td>2nd Street/SR-111</td>
<td>AM</td>
<td>27.6</td>
<td>C</td>
<td>78.5</td>
<td>PM</td>
<td>29.4</td>
<td>C</td>
</tr>
</tbody>
</table>

Footnote:
*The intersection cannot be calculated because the Traffic Synchro software does not accept existing lane geometrics for unsignalized intersections.

### SIGNALIZED DELAY/LOS THRESHOLDS

<table>
<thead>
<tr>
<th>Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 &lt; 10.0</td>
<td>A</td>
</tr>
<tr>
<td>10.1 to 20.0</td>
<td>B</td>
</tr>
<tr>
<td>20.1 to 35.0</td>
<td>C</td>
</tr>
<tr>
<td>35.1 to 55.0</td>
<td>D</td>
</tr>
<tr>
<td>&gt; 55.0</td>
<td>E</td>
</tr>
</tbody>
</table>

### UNSIGNALIZED DELAY/LOS THRESHOLDS

<table>
<thead>
<tr>
<th>Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 &lt; 10.0</td>
<td>A</td>
</tr>
<tr>
<td>10.1 to 15.0</td>
<td>B</td>
</tr>
<tr>
<td>15.1 to 25.0</td>
<td>C</td>
</tr>
<tr>
<td>25.1 to 55.0</td>
<td>D</td>
</tr>
<tr>
<td>&gt; 55.0</td>
<td>E</td>
</tr>
</tbody>
</table>
2.6 VISUAL / AESTHETICS

REGULATORY SETTING
National Environmental Policy Act (NEPA) of 1969 as amended establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically (emphasis added) and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state “with…enjoyment of aesthetic, natural, scenic and historic environmental qualities.” [CA Public Resources Code Section 21001(b)].

AFFECTED ENVIRONMENT
A Visual Impact Assessment (March 2008) was conducted to assess the potential visual impacts of the proposed project and to propose measures to offset visual impacts associated with the construction of the project on the surrounding visual environment. It is incorporated into this document by reference.

The project is located in an area already heavily disturbed, highly developed, or intensively farmed and impacted by roadways, overhead power lines, canals, and railway crossings. The project viewshed is illustrated in Figure 4. Depending on the location of the observer, the specific viewshed at any given point would vary as it is defined by surrounding slopes, irrigation canals, buildings, walls and other features that obscure views.

Existing Visual Character
The existing visual character of the project area is a combination of agricultural and constructed elements imposed on a flat topography. It is an area where the natural environment has been replaced by a man-made landscape. The project scene is a relatively monotonous blend of man-made features including streets, paving walls, residences, businesses, commercial signs utilities, and farm fields all located in a flat plain. It is a co-mingling of suburban, commercial and agricultural forms. Overall, the existing visual character of the project viewshed can be
considered to be a suburban transportation corridor through mixed development in an agricultural setting.

Existing Visual Quality
Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed.

Vividness is the visual power or memorability of landscape components as they combine in distinctive visual patterns. The project setting expresses a moderately low degree of vividness as a result of the lack of visual features along the route.

Intactness is the visual integrity of the landscape and its autonomy from encroaching elements. Due to the large number of conflicting elements distracting the viewer from the essential character of the landscape, the visual integrity of the project area is minimal.

The compositional integrity, or unity, is weak. The minimally visible natural elements of the visual environment do little to enhance the unity. The linear asphalt roadway and other elements of the transportation corridor define the characteristics of the viewshed. Unity is further diminished by the conflicting variety of urban and suburban structures of the built environment, especially open, disturbed soil, and overhead utilities.

Existing Viewer Groups, Viewer Exposure, and Viewer Awareness
Drivers and passengers in vehicles traveling on SR-98 would be the largest group of viewers subject to the project impacts. These viewers would be aware of the general regional context through which they are traveling, and have time to focus on the details of their surroundings. The exposure rating is considered to be moderately high.

Viewers from the nearby surrounding neighborhoods and mid-rise buildings observe the view in longer duration, and with more intensity and concentration than people in vehicles. These viewers are the most likely to perceive visual impacts, and in many cases are extremely close to the project site. Exposure rating is considered to be moderate.

Pedestrians traversing the intersections are one of the viewer groups likely to be most exposed to the visual affects of the project and have the longest duration view. The slow speeds allow
for a heightened perception of visual character and change. Exposure rating is considered to be high.

Cyclists would have a high viewer exposure due to the moderate speeds, and the ability to look around. Exposure rating for cyclists is considered to be moderately high.

Overall Visual Exposure and awareness can be considered to be moderately high.

**Viewer Response**

Viewer response is a combination of viewer sensitivity and viewer exposure. For the purposes of this project, viewer sensitivity considers the viewer’s observation and understanding of the existing diverse and eclectic agricultural, urban and suburban visual conditions, combined with the concern for preserving and enhancing the regional visual context expressed in the Calexico General Plan Update. The viewer sensitivity is considered to be moderate.

Viewer exposure in this location is highly impacted by the congested traffic. Due to the speed of travel, the need to pay close attention to traffic conditions and signage at this busy location, and the number of distractions to the motorist, the viewer exposure is considered to be moderately high.

**ENVIRONMENTAL CONSEQUENCES**

**Build Alternative**

Changes to visual character and quality would result from the greater expanse of paving from the roadway widening and addition of large fenced detention basins. This would reduce the size of some existing unpaved and landscape areas. The relocated power poles and wires would remain a detractor to visual quality.

Other visual effects associated with the project would result from grading. Due to the urbanized condition of the area, the presence of commercial and residential buildings, landform alterations, and the lack of recognized scenic resources in the area, visual changes as a result of the proposed project in combination with other projects would likely be low.
While elements of the proposed project would have an adverse effect on the visual quality, the overall aesthetic quality of the project area would not be affected with implementation of the proposed project and the mitigation measures in place.

**No Build Alternative**

No visual impacts or improvements would result from the No Build Alternative. In the No-Build Alternative, the upgrades specified for the project would not be implemented, and existing adverse conditions would be exacerbated through planned growth in the City and in the region in general.

**AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES**

A modest improvement in visual quality is anticipated as a result of adding street tree and median trees, other parkway landscaping and enhanced paving in the median. This would help offset the visual impacts of the widened road and removal of existing trees and lawn. Visual and landscape improvements proposed for the project are intended to establish a unique identity and character for the project design that is in keeping with the existing regional character.

The landscape design provides a transition from desert to the city, combining low water use planting with natural stone materials to provide an attractive combination of regionally appropriate elements. The goal of the design is to provide an attractive setting requiring a minimum of maintenance and water use. All visual mitigation would be designed and implemented with the concurrence of the District Landscape Architect.

To attain the visual goals, and reduce the visual impact, the mitigation design includes the following specific elements and recommendations:

**Medians:**

- The street medians would combine fan palms with flowering accent trees, thematic accent shrubs, rocks and decomposed granite to provide a focal interest for the street.
- Due to traffic safety restrictions where the posted speed limit is less than 35 MPH, tall trees such as palms would be included in the median. Where the posted speed limit is over 35 MPH, “small trees” would be planted. Caltrans defines “small trees” as trees with trunks less than 4 inches (10 centimeters) diameter after 10 years of growth.
Due to traffic safety restrictions, medians greater than 8 feet (2.4 meters) wide and less than 12 feet (3.6 meters) wide would be planted with “small trees” (Defined above).

Median less than 6 feet (1.8 meters) wide are too narrow for planting and would be paved with colored stamped concrete.

Rock cobble material would be cemented in place at the transition from stamped concrete to the decomposed granite.

Parkways:

- Street trees (size of the trees may range from large shade trees or palms to small "accent" trees) would be planted on both sides of SR-98 to provide shade and visual relief.
- Due to the overhead power lines on both sides of the street, the street trees must be small in scale to avoid utility conflicts.
- The ground surface would be covered with decomposed granite to minimize wind erosion and provide an attractive appearance.
- Shrubs and accent plants would be planted only at key locations, including the intersections with SR-111, Cesar Chavez Boulevard, the All American Canal, Kloke Road, and Dogwood Road.
- At accent locations, cobble rock paving would be installed along the sidewalk to add interest. A 5 feet (1.5 meters) wide sidewalk would be constructed adjacent to the street curbs. Rock is to be set in concrete.
- Where City maintained lawn exists, lawn would be installed in the adjacent project area to maintain consistency.

Storm Water Collection Basins:

- The linear basins along the right-of-way would hold storm run-off on a temporary basis. Caltrans requires that these basins should not be accessible to the public, and that a minimum 4 feet (1.2 meters) height perimeter fence surround each basin for safety.
- The sides of the basin are typically 2:1 in steepness, and would be covered with decorative cobble or fractured rock cemented in place.
- The basin fence is to be a durable, commercially produced decorative 48 inches (121.9 centimeters) high metal fence painted medium blue to evoke an image of water or dark, subtle green to reinforce and extend the color of the plants.
• Occasional random drifts of desert vegetation such as Agave or Yucca would be planted in the upper half of the basins to add interest. These would require a planting pocket in the slope paving, and irrigation.

Irrigation Concept:
• The plant materials would be irrigated using a low volume, automatically controlled irrigation system consisting of bubblers, emitters or low volume spray at each shrub and tree location.
• Irrigation application would be controlled by a flexible programmable irrigation controller with rain sensor, to detect excess flow and shut off the system master control valve in response to line breaks.
• The water source would be the City domestic water, unless recycled or irrigation water becomes available. The system would be designed to conserve water, while providing for plant health and growth.

Plant List
The plant list on the Landscape Concept Plan (Figure 5) has been developed for planting in the SR-98 project. The plants have been selected to thrive in Calexico with moderate maintenance after the initial establishment period. The following criteria for plant selection was used in preparation of the plant list:

• Low supplemental water after 2-3 years.
• Minimum leaf drop requiring clean up (leaves stay affixed to the plants, or are tiny and would not require clean up).
• Moderate pruning required.
• Minimum conflict with overhead utilities.
• Long-lived, minimum 20 years (or regenerates new foliage after original plant declines).
• Survival of temperatures of 20 degrees Fahrenheit (-6.6 Celsius) to 115 degrees Fahrenheit (46 Celsius).
• Survival of drought periods.
• Tolerant of silty-clay soils.
• Tolerant of wind.
• Tolerant of dust.
• Minimize pointed leaves, needles or thorns near sidewalks.
• Minimal fertilizer or special treatment.
• Sunset climate zone 13 – Low or Subtropical Desert Areas.

Inert Groundcover
The following inert groundcovers are proposed for the project:
• Rock Cobble, River Rock (natural tan and Iron oxide colors) for accent areas.
• Gravel for maintenance access roads.
• Decomposed granite
• Stamped concrete for narrow medians

Maintenance
The landscape mitigation measures rely on growth, maintenance and time to reach a size and maturity to perform their intended function. It is anticipated that the permanent mitigation measures itemized in this document will become substantially effective within 5 years of implementation. The maintenance for the project area will be determined by cooperative agreement between the City of Calexico and Caltrans. Maintenance agreements will be designed to promote the full potential of the mitigation measures proposed.

2.7 CULTURAL RESOURCES

REGULATORY SETTING
“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer...
(SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the “use” of land from historic properties.

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way.

**AFFECTED ENVIRONMENT**

The proposed project has been designed so that all the work is within Caltrans right of away or dedicated easements. A Historic Property Survey Report (HPSR) was completed November 8, 2007. The Area of Potential Effect (APE) for this project includes the state highway right of way for the entire project length, as well as properties adjacent to the right of way on both north and south sides of highway. The APE is included in the HPSR.

Background research for the report was conducted at the California State Library and Caltrans’ cultural resources library, both in Sacramento, as well as the public library in Calexico. Information on cultural resources in the vicinity of the project was obtained from the Southeast Information Center at Imperial Valley College in Ocotillo.

Several listings of designated historic resource were checked for this project, including the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and the California Points of Historical Interest. None of the properties within the APE for this project is on any of these landmark lists.
Three properties were evaluated in HPSR. The three properties – a 1924 Craftsman bungalow, and two 1931 vernacular residence - evaluated are ineligible for the National Register listing and are not considered historic resources for the purpose of compliance with CEQA. The remaining properties within the APE have buildings that are less than 50 years old or have been substantially altered within the last 50 years, and are therefore exempt from evaluation.

No potential historic districts, historic landscapes, or other historic properties were identified within or partially within the project APE.

ENVIRONMENTAL CONSEQUENCES

Build Alternative
On January 30, 2008, Caltrans, under authority of the Federal Highway Administration (FHWA), initiated consultation with the State Historic Preservation Officer (SHPO) regarding the SR-98 Widening project. A HPSR with supporting technical studies was submitted to SHPO for review. Caltrans requested concurrence in the following National Register of Historic Places (NRHP) eligibility determinations: The three architectural resources are not eligible to the NRHP. Since no comments were received within the 30-day comment period, Caltrans on March 10, 2008, notified SHPO of an Assumption of Section 106 Findings, in Accordance with Programmatic Agreement X.B2.b.

No further studies would be needed as long as all work proposed is to be within the existing right of way.

No Build Alternative
The No Build Alternative would not impact any historical properties.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES
No archaeological or other architectural properties were identified within the undertaking’s APE. The following measures are standard provisions for monitoring and protecting cultural resources.
If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains would contact Karen Crafts, District 11 Environmental Branch, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.8 WATER QUALITY AND STORM WATER RUNOFF

REGULATORY SETTING
Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit from the U.S. Army of Engineers to dredge or fill within a water of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the Statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB’s Statewide General Construction Permit. All construction projects over 1 acre (0.4 hectare) require a Storm Water
Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Caltrans activities less than 1 acre (0.4 hectare) require a Water Pollution Control Program.

**AFFECTED ENVIRONMENT**

A Storm Water Data Report was prepared July 2008 for this project. The project is located in an area with temperate fall, winter, and spring and a harsh summer. The climate for Imperial is arid and dry desert area with little rainfall and temperatures between 4 and 42 degrees Celsius (39.2 –107.6 Fahrenheit). Average annual rainfall within the project area is approximately 8 centimeters (3.1 inches).

The project drains to the New River and Imperial Valley Drains, which consequently drain to the Salton Sea. The receiving water bodies are impaired according to the 2006 Clean Water Act Section 303(d) list of Water Quality Limited Segments.

The Colorado River Basin Regional Water Quality Board's listed constituents of concern are the following:

**Imperial Valley Drains**

<table>
<thead>
<tr>
<th>POLLUTANT/STRESSOR</th>
<th>POLLUTANT SOURCES</th>
</tr>
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<tbody>
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</tr>
<tr>
<td>Dieldrin</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>Endosulfan</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>PCB’s (Polychlorinated biphenyls)</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>Selenium</td>
<td>Agricultural Return Flows</td>
</tr>
<tr>
<td>Toxaphene</td>
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</table>
New River (Imperial)

<table>
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<tr>
<th>POLLUTANT/STRESSOR</th>
<th>POLLUTANT SOURCES</th>
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</thead>
<tbody>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>Industrial Point Sources</td>
</tr>
<tr>
<td></td>
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<td>Chlordane</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>Chloroform</td>
<td>Industrial Point Sources</td>
</tr>
<tr>
<td></td>
<td>Out-of-state source</td>
</tr>
<tr>
<td>Chlordane</td>
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</tr>
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<td>Copper</td>
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<td>Nutrients</td>
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<td></td>
<td>and/or wet weather discharge</td>
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<tr>
<td></td>
<td>Agricultural Return Flows</td>
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<tr>
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<td>Out-of-state source</td>
</tr>
<tr>
<td>Organic Enrichment/Low</td>
<td>Wastewater Inappropriate Waste Disposal/</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>Wildcat Dumping</td>
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<td></td>
<td>Out-of-state source/ Unknown Point</td>
</tr>
<tr>
<td></td>
<td>Source</td>
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<tr>
<td>o-Xylenes</td>
<td>Industrial Point Sources</td>
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<td>Out-of-state source</td>
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<tr>
<td>PCB's (Polychlorinated</td>
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</tr>
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<td>biphenyls)</td>
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<td>p-Cymene</td>
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<td>Out-of-state source</td>
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<td>p-Dichlorobenzene/DCB</td>
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<td>Agricultural turn Flows</td>
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</tr>
<tr>
<td>Selenium</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>Toluene</td>
<td>Industrial Point Sources</td>
</tr>
<tr>
<td></td>
<td>Out-of-state source</td>
</tr>
<tr>
<td>Toxaphene</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>Toxicity</td>
<td>Source Unknown</td>
</tr>
<tr>
<td>Trash</td>
<td>Out-of-state source</td>
</tr>
</tbody>
</table>

A 401 certification would not be necessary because the project does not involve discharges of dredged or fill material to waters of the United States, including wetlands and other water bodies, or involve construction of a hydroelectric facility.

The Colorado River Basin Regional Water Quality Control Board developed a Water Quality Control Plan for all of Imperial County, and portions of San Bernardino, Riverside, and San Diego Counties. The plan identifies the beneficial uses of all water bodies within the region in order to determine the water quality objectives necessarily to protect those uses.
The beneficial uses defined for the Imperial Valley are as follows:

**New River**
- Water Contact Recreation - Water for recreational activities involving body contact with water
- Non-contact Water Recreation - Water for recreational activities not involving body contact with water
- Warm Freshwater Habitats - Water that support warm water ecosystems
- Wildlife Habitat - Water that support terrestrial ecosystems
- Preservation of Rare, Threatened or Endangered Species - Water that supports habitats necessarily for the survival of plant or animal species established as rare, threatened, or endangered
- Freshwater Replenishment - Water for natural or artificial maintenance of surface water quantity or quality
- Potential Industrial Serve Supply – Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization

**Imperial Valley Drains**
- Water Contact Recreation - Water for recreational activities involving body contact with water
- Non-contact Water Recreation - Water for recreational activities not involving body contact with water
- Warm Freshwater Habitats - Water that support warm water ecosystems
- Wildlife Habitat - Water that support terrestrial ecosystems
- Preservation of Rare, Threatened or Endangered Species - Water that supports habitats necessarily for the survival of plant or animal species established as rare, threatened, or endangered
- Freshwater Replenishment - Water for natural or artificial maintenance of surface water quantity or quality
The beneficial uses defined for groundwater within Imperial Valley are as follows:

- Municipal and Domestic Supply - Water for community, military, or individual water supply systems
- Agricultural Supply - Water for farming, horticulture, or ranching
- Industrial Service Supply - Water for industrial activities that do not depend primarily on water quality
- Ground Water Recharge – Water for natural or artificial recharge of groundwater purposes of future extraction, maintenance of water quality, or halting salt water intrusion into fresh water aquifers

Soil borings drilled up to 15 meters (49.2 feet) beneath the existing ground surface within the project area. Groundwater was encountered at a depth of approximately 5 meters (16.4 feet) below the ground surface, which can be expected to vary depending on local irrigation, rainfall, and runoff. Since the anticipated maximum excavation depth for the project is 2 meters (6.6 feet), the proposed project is not expected to adversely affect groundwater, public water supply, or distribution networks.

ENVIRONMENTAL CONSEQUENCES

Build Alternative
Regional Water Quality Control Board Special Requirements
The Colorado River Basin Quality Control Board has jurisdiction with the project limits. The project discharges into the Colorado River Basin Quality Control Board hydrologic unit 723.10, known as Imperial. Section 303(d)(A)(1) of the Federal Clean Water Act (CWA) requires states to identify waterbodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated list, called the 303(d) List, to the U.S. Environmental Protection Agency (USEPA) every two years for approval. In addition, the law requires states to establish priority ranking for water bodies on the lists and develop control plans, called Total Maximum Daily Loads (TMDLs), to address the impairment. A TMDL serves as the means to attain and maintain water quality standards (WQSs) for the impaired water body.
A Total Maximum Daily Load (TMDL) for has been adopted by the Colorado River Basin Regional Water Quality Control Board for the following:

- Imperial Valley Drains has the following completed TMDLs.
  - Sedimentation/Siltation. The TMDL was adopted by the Regional Board on June 19, 2005 and approved by U.S EPA on September 30, 2005. The source of pollutants is agricultural return flows discharged from Imperial Valley farmland. The project is not anticipated to raise sedimentation/Siltation levels in the Imperial Valley Drains.

- The New River has the following completed TMDLs.
  - Pathogens. This TMDL was adopted by the Regional Board on October 10, 2001 and approved by US EPA on August 14, 2002. The main sources of pathogens as indicated by fecal coliforms and E. coli bacteria in the New River are discharges of municipal wastes from the Mexicali Valley, Mexico and undisinfected but treated wastewater discharges from five domestic wastewater treatment plants in the Imperial Valley (Water Quality Control Plan, Colorado River Basin June 2006). The project is not anticipated to raise pathogens levels in the New River.

  - Trash. This TMDL was adopted by the Regional Board on June 21, 2006 and approved by US EPA on September 24, 2007. The trash impairment is due to the lack of a solid waste management plan to collect and properly dispose of municipal solid waste in Mexicali, resulting in littering of open lots, unpaved roads, the New River itself, and the River’s tributaries within and peripheral to the Mexicali metropolitan area. The project is not anticipated to raise trash levels in the New River.

  - Sedimentation/Siltation. This TMDL was adopted by the Regional Board on June 26, 2002 and approved by US EPA on March 31, 2003. The source of pollutants is direct and indirect discharges of silt-laden agricultural tailwater into the river and drain maintenance operations. The silt carries insoluble pesticides such as DDT and its byproducts, which bioaccumulate in fish tissue. The project is not anticipated to raise sedimentation/Siltation levels in the New River.
The Regional Board has recently established Dissolved Oxygen and volatile Organic Compounds as TMDL projects for the New River. No information has been published as of June 2008 regarding these TMDL projects.

The potential pollutant sources within the project right-of-way to be treated consist primarily of highway runoff. These items for the most part include Total Suspended Solids (TSS), specifically sediment resulting from erosion, but also include particulate and dissolved metals from the wearing of brake pads and the combustion products of fossil fuels as well as grease and oil from automobiles.

As estimated, 3 hectares (HA) (7.4 acres) would be needed for installation of basins outside of state right-of-way. The private land, where the majority of the basins are proposed, is owned by local developers. The City of Calexico proposes to negotiate with the developers for dedicated easements as a stipulation of developing these parcels. Coordination between the City and the developers would continue to define land ownership and uses. There will be no additional right of way required for staging purposes, construction, and maintenance of Best Management Practices (BMPs). All permanent BMPs located outside agency right of way will be maintained by the City of Calexico or the developers. Land use adjacent to the improvements proposed for the widening consists primarily of commercial and residential development.

No Build Alternative
The No Build Alternative would not impact any groundwater, public water supply, or distribution networks.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES
Best Management Practices (BMPs) incorporated during design and implemented during construction would minimize the potential for erosion during project construction and post construction. Three categories of BMPs address the potential for erosion during construction and post construction through the implementation of Temporary Construction Site BMPs, Design Pollution Prevention BMPs and Permanent Treatment BMPs.

Proposed Temporary Construction Site BMPs to be used on Project.
Construction BMPs would include: implementation of erosion control such as fiber matrices and hydraulic mulch to protect graded slopes, and the usage of sediment control devices such as
silt fences and fiber rolls to prevent sediment pollution. These devices should remain in place until construction is complete and there is no potential for erosion and sediment transportation.

- Construction Site BMPs that have been designated include: Hydraulic Mulch; Fiber Rolls; Street Sweeping; Concrete Washout Facilities; Drainage Inlet Protection; and Silt Fences.

**Proposed Design Pollution Prevention BMPs to be used on the Project**

Design Pollution Prevention BMPs are permanent practices that address the design objective to prevent downstream erosion, to stabilize disturbed soil areas and to maximize vegetated surfaces.

The following concentrated flow conveyance systems are proposed:

- 6 basins
- 23 concrete headwalls
- 2,900 meters of underground storm drains (various sizes)

Soil stabilization BMPs would be utilized to prevent soil particles from detaching and becoming suspended in storm water and non-storm water runoff. These BMPs may include the following:

- The preservation of existing vegetation where feasible.
- The implementation of temporary soil stabilization measures at regular intervals throughout the rainy season.
- The stabilization of non-active areas within 14 days of cessation of construction activities.
- Implementation of slopes/surface protection systems would be implemented by disturbing slopes only when necessary, minimizing cut and fill areas to reduce slope lengths, providing cut and fill slopes flat enough to allow re-vegetation, and round and shaping slopes.

**Proposed Permanent Treatment BMPs to be used on the Project**

Since the existing drainage system would be altered, treatment BMPs must be analyzed.

- Basins - A basin allows temporary storage of excess storm water to be held for the short term and then slowly drain when water levels in the receiving channel recede. The proposed drainage improvements include a series of six basins that would collect 66% of the project’s roadway runoff and drain to either the All American Canal Drains #9 and #10 or be pumped to the existing 450mm (18 inch) CMP at the intersection of Kloke Road and SR-98.
Since no major storm drainage system or discharge locations are available to tie in proposed storm drain improvements, basins would be installed along the project to facilitate collection of and treatment of storm water. The basins have been sized to handle the water quality volume for water quality storm event and have drawdown time between 24 to 72 hours to meet the treatment requirements. The elongated basins have been positioned to meet right of way restrictions and fit into dedicated easements provided by local developments. In addition, the basins are designed with 1:2 side slopes, and bottom widths ranging from 2.5 meters (8 feet) to 10.2 meters (33 feet) wide. In addition, the inverts would be lined with permeable concrete.

**Maintenance BMPs (Drain Inlet Stenciling)**
- All new inlets should be stenciled with painted messages warning citizens not to dump pollutants into the drains.

### 2.9 HAZARDOUS WASTE/MATERIALS

**REGULATORY SETTING**

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning. Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

**AFFECTED ENVIRONMENT**

A previous Initial Site Assessment (ISA) was completed in August 2003 for this project, which encompassed post miles 31.2 through 32.2 (kilo post 50.2 through 51.8). This study concluded that no aerially deposited lead (ADL) is present in concentrations of concern for this area.

Since, the project limits increased, subsequent testing was conducted (August 2005 and February 2006). Soil samples were taken with the same findings that no ADL present in concentrations that exceeded state or federal criteria for hazardous waste and/or worker health and safety.

There is a known petroleum hydrocarbon plume originating from a former Fed Mart gasoline station located on the north side of SR-98 between Ollie Avenue and Imperial Avenue West. This groundwater plume presently extends beneath the existing SR-98 and several other properties adjacent to the former Fed Mart.

Within the SR-98 right of way, there are three monitoring/remediation wells along the south side of the highway in the eastbound shoulder, between Harold Avenue and Emerson Avenue. The
monitoring/remediation wells were placed there under a Caltrans Permit. There are also three additional monitoring/remediation wells located just outside of the state right of way north of SR-98, along the Birch Street frontage road between Ollie Avenue and Imperial Avenue. It appears that these three wells will lie within the paved shoulder of the future widening.

ENVIRONMENTAL CONSEQUENCES

Build Alternative
There was a site investigation at the intersection of SR-98 and Ollie Avenue where a new traffic signal would be installed and the known plume from the Fed Mart gas station is near. The conclusion of that study was that no impacted groundwater was present down to 15’ (4.6 meters) below ground surface at this location. Since the maximum depth of excavation for the project is anticipated to be less than that, it is not expected that impacted soil or groundwater will be encountered during the course of construction activities.

Because of the three operating gas stations and the one closed gas station (Fed Mart Gas Station), within the project limits, the project does have potential hazardous waste involvement. However, because the proposed project would likely involve minimal grading, and due to the distance of the project site to hazardous waste sources, it is unlikely that hazardous material would be encountered during construction.

No-Build Alternative
The No-Build would not impact any hazardous waste/materials.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES
Transfers of property between the owners of the former Fed Mart property (The Birch Corporation) and the state should recognize that the current property owners are, and will remain, the Primary Responsible Party (PRP) for all remedial actions related to this contamination case.

The disposition of all six of these wells should be coordinated with the Permits Office prior to the final design and any necessary actions with regard to these wells noted in the final design package.
2.10 AIR QUALITY

REGULATORY SETTING
The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to State Implementation Plan (SIP) for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as Southern California Association of Governments for Imperial County and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan (SIP) for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is “nonattainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter. A region is a
“nonattainment” area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as nonattainment areas but have recently met the standard are called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA and CEQA purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in “nonattainment” areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

AFFECTED ENVIRONMENT
This section is based on the Air Quality Impact Analysis prepared for the SR-98 Roadway Widening Project in December 2007 and incorporated by reference.

The proposed project is located in Imperial County and within the Salton Sea Air Basin (SSAB) where the climate exhibits characteristics typical of a desert: low annual precipitation, very hot summers, mild winters, high evaporation rates, and strong inversions.

One of the main determinants of climatology in Imperial County is a semi permanent high-pressure area (the Pacific High) in the eastern Pacific Ocean. In the summer, this pressure center is located well to the north, directing storm tracks north of California. This high-pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, weakened low-pressure storms and the orographic barrier bring little rainfall. The combination of subsiding air, protective mountains, and distance from the ocean severely limits precipitation. In Imperial County, the mean monthly temperature ranges from 55-90 degrees Fahrenheit (ºF) (12.7 – 32.2 Celsius) and an annual rainfall averaging 2.61 inches (6.6 centimeters).

The flat terrain of Imperial Valley and the strong temperature differentials created by intense solar heating produce moderate winds and deep thermal convection. The Imperial Valley region occasionally experiences periods of high winds. Predominant wind directions are westerly and west-southwesterly during all four seasons, and the average annual daily wind speed is 6.9 miles per hour (11.1 kilometers per hour).
A common atmospheric condition known as a temperature inversion affects air quality in Imperial County. During an inversion, air temperatures become warmer with increasing height rather than cooler. An inversion can be associated with little air movement and stagnant conditions. The inversion layer can persist for a day or more, causing air stagnation and pollution buildup. Inversions are common between November and June but appear to be relatively absent between July and October.

ENVIRONMENTAL CONSEQUENCES

Build Alternative

Regional Air Quality Conformity
The proposed project is fully funded and is in the SCAG 2008/2035 Regional Transportation Plan (RTP) page 1 of Modeled Projects List, which was found to conform by the Southern California Association of Governments (SCAG) on May 2008, and FHWA and FTA adopted the air quality conformity finding on June 5, 2008. The project is also included in SCAG financially constrained 2006/2011 Regional Transportation Improvement Program on page 1 of the project state highways listing. The SCAG Regional Transportation Improvement Program through Amendment 13 was found to conform by FHWA and FTA on June 5, 2008. The design concept and scope of the proposed project is consistent with the project description in the 2008/2035 RTP, the 2006/2011 RTIP, and the assumptions in the SCAG regional emissions analysis.

Project Level Conformity
The federal CAA requires the adoption of national ambient air quality standards (NAAQS) to protect public health and welfare from the effects of air pollution. Current standards are set for SO2, CO, NO2, O3, PM10, PM2.5, and Pb. State standards have been established by the Air Resources Board (ARB), and these are generally more stringent than the NAAQS counterparts. Federal and state standards are depicted in the table below.
Table 10 Federal and State Air Quality Standards

<table>
<thead>
<tr>
<th>Criteria Pollutant</th>
<th>Averaging Time</th>
<th>Federal Standard NAAQS1</th>
<th>Federal Attainment Status</th>
<th>State CAAQS2 Standard</th>
<th>State Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Primary3</td>
<td>Secondary4</td>
<td>Concentration5</td>
<td></td>
</tr>
<tr>
<td>Ozone (O₃)³</td>
<td>1-Hour</td>
<td>-</td>
<td>Same as Primary Standard</td>
<td>Attainment</td>
<td>0.09 ppm (180 µg/m³)</td>
</tr>
<tr>
<td></td>
<td>8-Hour</td>
<td>0.08 ppm (157 µg/m³)</td>
<td>primaries</td>
<td>Nonattainment</td>
<td>0.070 ppm (137 µg/m³)</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>8-Hour</td>
<td>9.0 ppm (10 mg/m³)</td>
<td>None</td>
<td>Attainment</td>
<td>9.0 ppm (10 mg/m³)</td>
</tr>
<tr>
<td></td>
<td>1-Hour</td>
<td>35 ppm (40 mg/m³)</td>
<td>primaries</td>
<td></td>
<td>20 ppm (23 mg/m³)</td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO₂)</td>
<td>Annual Average</td>
<td>0.053 ppm (100 µg/m³)</td>
<td>Same as Primary Standard</td>
<td>Attainment</td>
<td>0.030 ppm (56 µg/m³)</td>
</tr>
<tr>
<td></td>
<td>1-Hour</td>
<td>-</td>
<td>primaries</td>
<td></td>
<td>0.018 ppm (338 µg/m³)</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>Annual Average</td>
<td>0.03 ppm (80 µg/m³)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24-Hour</td>
<td>0.14 ppm (365 µg/m³)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-Hour</td>
<td>-</td>
<td>0.5 ppm (1300 µg/m³)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-Hour</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Suspended Particulate Matter (PM₁₀)⁷</td>
<td>24-Hour</td>
<td>150 µg/m³*</td>
<td>Revoked</td>
<td>Same as Primary Standard</td>
<td>50 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual Arithmetic Mean</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20 µg/m³</td>
</tr>
<tr>
<td>Fine Particulate Matter (PM₂.₅)⁸</td>
<td>24-Hour</td>
<td>35 µg/m³</td>
<td>Same as Primary Standard</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Annual Arithmetic Mean</td>
<td>15 µg/m³</td>
<td>Same as Primary Standard</td>
<td>-</td>
<td>12 µg/m³</td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>30-Day Average</td>
<td>-</td>
<td>-</td>
<td>Attainment</td>
<td>1.5 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Calendar Quarter</td>
<td>1.5 µg/m³</td>
<td>Same as Primary Standard</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

¹ NAAQS (other than O₃, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. For PM₂.₅, the 24-hour standard is attained when 90 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the USEPA for further clarification and current federal policies.

² California Ambient Air Quality Standards for O₃, CO (except Lake Tahoe), SO₂ (1- and 24-hour), NO₂, PM₁₀, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.

³ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

⁴ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

⁵ Concentration expressed first in units in which it was promulgated. Ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.

⁶ On June 15, 2005 the 1-hour ozone standard was revoked for all areas except the 8-hour ozone nonattainment Early Action Compact Areas (those areas do not yet have an effective date for their 8-hour designations). Additional information on federal ozone standards is available at http://www.epa.gov/oar/oaaqps/greenbk/index.html.

⁷ Due to a lack of evidence linking health problems to long-term exposure to coarse particle pollution, the USEPA revoked the annual PM₁₀ standard on December 17, 2006.

⁸ Effective, December 17, 2006, the USEPA lowered the PM₂.₅ 24-hour standard from 65 µg/m³ to 35 µg/m³.

Specific geographic areas are classified as either “attainment” or “nonattainment” areas for each pollutant based upon the comparison of measured data with federal and state standards. Table 11 lists the current attainment status of each criteria pollutant in the Imperial County portion of the SSAB.
Table 11 Attainment Status for the Imperial County Portion of the Salton Sea Air Basin

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Attainment Status</th>
<th>Federal</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone – 1-Hour (O3)</td>
<td></td>
<td>--a</td>
<td>--a</td>
</tr>
<tr>
<td>Ozone 8-hour (O3)</td>
<td></td>
<td>Nonattainment Moderate</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>Particulate Matter (PM10)</td>
<td></td>
<td>Nonattainment Serious</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>Particulate Matter (PM2.5)</td>
<td></td>
<td>Attainment</td>
<td>Unclassified/Attainment</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td></td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO2)</td>
<td></td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO2)</td>
<td></td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td></td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
</tbody>
</table>

* - Repealed by law in June 2005. Sources: EPA 2007b; ARB 2007b

Ambient air pollutant concentrations in Imperial County are measured at air quality monitoring stations operated by Imperial County Pollution and Control District (ICAPCD). The nearest air quality monitoring station to the project site is the Calexico-Ethel Street monitoring station located at 1029 Belcher Street. Among other information, this station monitors O3, CO, NO2, SO2, PM10, and PM2.5.

**Carbon Monoxide**
Analysis of local CO and particulate impacts is also required to demonstrate conformity. Analysis of CO impacts in accordance with the *Transportation Project-Level Carbon Monoxide Protocol* shows that the project is satisfactory for local CO impacts.

**Particulate Matter - PM$_{10}$**
According to the March 2006 U.S. Environmental Protection Agency (EPA) rule relative to local PM10 and PM2.5 analysis for transportation projects, particulate impacts are of concern only on projects defined as “projects of air quality concern (POAQC).” The SR-98 Widening project was determined to not be a POAQC, and local particulate emissions would be acceptable.

The SR-98 widening project was submitted to the July 24, 2007, Transportation Conformity Working Group (TCWG) meeting and the project was determined to not be a POAQC. On August 6, 2007, the FHWA concurred in the determination (FHWA 2007).
A Qualitative PM hot spot analysis is required under the EPA Transportation Conformity rule for projects of air quality concern; therefore no qualitative analysis is needed for this project.

**Particulate Matter - PM$_{2.5}$**
The SSAB is not a federally designated PM2.5 nonattainment or maintenance area; therefore, the project does not require a PM2.5 hot-spot analysis.

**Mobile Source Air Toxics (MSAT)**
The SR 98 widening project would increase the capacity of the roadway. The forecast design year volumes in the project area would range from 9,300 to 47,100 average daily trips (ADT; LLG Engineers 2007). These volumes are less than the FHWA threshold value of 140,000 AADT as the minimum volume for higher potential MSAT effects (FHWA 2006a). Therefore, the project would be included in Category (2), projects with low potential for MSAT effects.

Technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives (FHWA 2006c).

The proposed project will significantly increase east-west SR-98 roadway capacity between Dogwood Road and SR 111, thereby providing relief to existing and forecast congested arterial roadways. The amount of MSATs emitted would be proportional to the VMT for the Build and No Build alternatives, assuming that other variables such as fleet mix are the same. The VMT have not been estimated for the two alternatives. With respect to through traffic, that is, traffic that does not originate or terminate in the project area, the VMT for the Build Alternative could be more or less than for the No Build Alternative depending on whether this widened roadway results in shorter or longer travel distance for the drivers attracted to this route in order to avoid other congested roadways. Overall, the VMT levels are anticipated to be greater because the
SR 98 widening would attract traffic from the expected new development that would generate and attract trips that were not occurring in this area before. Without the widening, some traffic generated by the new development would likely choose alternate routes instead of the congested SR 98. This increase in VMT means MSATs under the Build Alternative would probably be higher than the No Build Alternative in the study area. There could also be localized differences in MSATs from indirect effects of the project such as associated access traffic, emissions of evaporative MSATs (e.g., benzene) from parked cars, and emissions of diesel PM from delivery trucks, depending on the type and extent of development.

Widening of this section of SR 98 could lead to higher MSAT emissions along the alignment, with a corresponding decrease in MSAT emissions along the roadways in the network that lose traffic to this route. Emissions along the new roadway in future years will likely be lower than initial levels as a result of the EPA’s national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020 and ARB’s statewide programs. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great, even after accounting for an average national annual VMT growth, that MSAT emissions in the study area are likely to decrease in the future in nearly all cases.

The widening of SR 98 would have the effect of moving some traffic closer to some homes, schools, and businesses; therefore, with the proposed project there may be localized areas where ambient concentrations of MSATs could be higher than with the No Build Alternative. However, as discussed above, the magnitude and the duration of these potential increases compared to the No Build Alternative cannot be accurately quantified due to the inherent deficiencies of current models. In summary, with the Build Alternative, the localized level of MSAT emissions near SR 98 could be higher relative to the No Build Alternative. If so, MSATs would likely be lower in other locations when traffic shifts away from them. On a regional basis, EPA vehicle and fuel regulations, coupled with fleet turnover, would over time cause substantial reductions that, in almost all cases, will cause regionwide MSAT levels to be significantly lower than currently observed (FHWA 2006a).

**Construction Impacts**
The pollutants of most concern emitted during construction include PM10, PM2.5, and NOX. The principal source of PM10 and PM2.5 emissions would be fugitive dust from demolition and
earthmoving activities, storage piles, and vehicle travel on unpaved and paved surfaces. The principal source of NOX emissions would be the diesel engines of heavy construction equipment such as scrapers, graders, loaders, cranes, and heavy trucks. Construction of the SR 98 widening is anticipated to require 10 months to complete. Federal conformity regulations require analysis of construction impacts for projects when construction activities will last for more than 5 years. The proposed project would last less than 5 years; therefore, no quantitative estimates of regional construction emissions have been made. However, it is recommended that specific measures to control dust and particulates be incorporated into project specifications. These measures are identified the Avoidance, Minimization and/or Mitigation Measures found at the end of this section.

No Build Alternative
The No Build Alternative would not alter the existing highway. Traffic conditions are poor on the highway and this situation would worsen with forecasted vehicle traffic increases in the future. As the future conditions worsen with increased traffic, contributions of regional and local emissions would worsen.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES
In recognition of the nonattainment status of the project area for PM10 and O3, the following measures are recommended.

- Caltrans Standard Specifications 10-Dust Control, 17-Watering, and 18-Dust Palliative shall be incorporated into project specifications (Caltrans 2006).
- Idling of diesel-powered vehicles and equipment shall not be permitted during periods of nonactive vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:
  a) When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
  b) When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
  c) To bring the equipment to the manufacturer’s recommended operating temperature;
  d) When the ambient temperature is below 40°F or above 85°F; or when equipment is being repaired.
2.11 NOISE

REGULATORY SETTING

NEPA of 1969 and CEQA provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

*California Environmental Quality Act*

CEQA requires a strictly no-build versus build analysis to assess whether a proposed project would have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

*National Environmental Policy Act and 23 CFR 772*

For highway transportation projects with FHWA involvement (and Caltrans, as assigned), the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA).

The following table lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.
Table 12 Noise Abatement Criteria

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>NAC, Hourly A-Weighted Noise Level, dBA L_{eq}(h)</th>
<th>Description of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>57 Exterior</td>
<td>Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose</td>
</tr>
<tr>
<td>B</td>
<td>67 Exterior</td>
<td>Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.</td>
</tr>
<tr>
<td>C</td>
<td>72 Exterior</td>
<td>Developed lands, properties, or activities not included in Categories A or B above</td>
</tr>
<tr>
<td>D</td>
<td>--</td>
<td>Undeveloped lands.</td>
</tr>
<tr>
<td>E</td>
<td>52 Interior</td>
<td>Residence, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums</td>
</tr>
</tbody>
</table>

Table 13 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common.
In accordance with Caltrans *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project would have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an
engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

AFFECTED ENVIRONMENT
A Noise Study Report dated May 2, 2007 was prepared for this project and incorporated by reference. The report assesses the projects potential noise impacts by assessing the impact the project would have on receptors within the project area. Land uses adjacent to the project corridor consist of residential, schools, commercial uses and undeveloped areas.

Noise measurements were taken in April 2007 at eight locations within the project limits to establish the baseline conditions and to calibrate the future traffic noise model. Short-term measurements were conducted at a total of six sites for 20 minutes each, and long-term noise measurements were conducted at two sites for a minimum of 24 hours each.

Existing noise level measurements were conducted to evaluate existing noise levels in the vicinity of the project area. Monitoring results indicate that the existing traffic noise levels currently are below the Noise Abatement Criteria (NAC) at the majority of outdoor frequent human use area locations adjacent to the highway. Noise levels continue to increase in several areas for the projected year of 2035 whether or not the project is built.

Following is a table of receptor locations and land uses. In addition, these locations can be seen on the project features map Figures 2a – 2e.
## Table 14 Receptor Locations and Land Uses & Predicted Future Noise Levels.

<table>
<thead>
<tr>
<th>REC. NO.</th>
<th>LAND USE</th>
<th>LOCATIONS</th>
<th>EXISTING NOISE LEVELS</th>
<th>FUTURE PEAK HOUR NOISE LEVELS, Leq(h), dBA</th>
<th>PROJECT “NO BUILD” WITHOUT BARRIER</th>
<th>PROJECT “BUILD” WITHOUT BARRIER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
<tr>
<td>R 1</td>
<td>SFR</td>
<td>Paseo China - Lot 60, Calexico - Los Lagos Development</td>
<td>60&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 2</td>
<td>SFR</td>
<td>Paseo China - Lot 54, Calexico - Los Lagos Development</td>
<td>61&lt;sup&gt;E&lt;/sup&gt;</td>
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</tr>
<tr>
<td>R 3</td>
<td>SFR</td>
<td>Paseo China - Lot 48, Calexico - Los Lagos Development</td>
<td>61&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 4</td>
<td>SFR</td>
<td>Paseo China - Lot 43, Calexico - Los Lagos Development</td>
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<td>R 5</td>
<td>SFR</td>
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<td>62&lt;sup&gt;E&lt;/sup&gt;</td>
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<tr>
<td>R 6</td>
<td>SFR</td>
<td>1048 Horizon St, Calexico</td>
<td>62&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 8</td>
<td>SFR</td>
<td>1048 Horizon St, Calexico</td>
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<td>R 9</td>
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<td>1000 Horizon St, Calexico</td>
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<td>1100 David Navarro Ave, Calexico</td>
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<td>R 11</td>
<td>SCH</td>
<td>1201 Kloke Ave, Calexico - Blanche Charles Elementary School – Playground</td>
<td>59&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 11A</td>
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<td>1201 Kloke Ave, Calexico - Blanche Charles Elementary School – Playground</td>
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<td>R 12A</td>
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<td>R 14</td>
<td>SFR</td>
<td>617 W Canal St, Calexico</td>
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<td>R 15</td>
<td>SFR</td>
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<td>54&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 16</td>
<td>MFR</td>
<td>513 Canal St, Calexico - Casa Sonoma Apartments - Unit A3</td>
<td>52&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 17</td>
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<td>513 Canal St, Calexico - Casa Sonoma Apartments - Unit L47</td>
<td>54&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>R 18</td>
<td>SFR</td>
<td>4th Highway 98, Calexico</td>
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<td>R 24</td>
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<td>REC. NO.</td>
<td>LAND USE$^2$</td>
<td>LOCATIONS</td>
<td>EXISTING NOISE LEVELS LEVELS$^{1,3}$</td>
<td>FUTURE PEAK HOUR NOISE LEVELS, Leq(h), dBA</td>
<td>PROJECT &quot;NO BUILD&quot; WITHOUT BARRIER</td>
<td>PROJECT &quot;BUILD&quot; WITHOUT BARRIER</td>
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<td>R 25 W</td>
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<td>1021/1020 Mercado St, Calexico</td>
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<td>R 29</td>
<td>MFR</td>
<td>1051 Adler St, Calexico - Casa Imperial Apartments - Unit A5</td>
<td>54$^E$</td>
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<tr>
<td>R 30</td>
<td>MFR</td>
<td>Remington Condos, Calexico</td>
<td>66$^E$</td>
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<td>R 30A C</td>
<td>MFR</td>
<td>Remington Condos, Calexico</td>
<td>66$^E$</td>
<td>70</td>
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<td>R 31</td>
<td>MFR</td>
<td>Remington Condos, Calexico</td>
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<td>SCH</td>
<td>655 Sheridan Ave, Ca - Mains Elementary School - Playground</td>
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<td>60$^E$</td>
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<td>R 35 C</td>
<td>SCH</td>
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<td>65$^M$, ST3</td>
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<td>R 38 W</td>
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<td>R 39</td>
<td>SFR</td>
<td>1009 George Ave, Calexico</td>
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<td>R 40 C</td>
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<td>1017 Ollie Ave, Calexico</td>
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<td>R 41</td>
<td>MFR</td>
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<td>R 42</td>
<td>MFR</td>
<td>1032 Paulin Ave, Calexico - Birch Manor Apartments - Pool Area</td>
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<td>R 43</td>
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<td>58$^E$</td>
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</tr>
</tbody>
</table>

1. Leq(h) are A-weighted, peak hour noise levels in decibels.
2. Land Use: SFR - single-family residence; MFR - multi-family residence; COMM - commercial.
3. M - Measured noise level; STxx or LTxx - measurement site number; E - Estimated using future "No Build" and measured data; CAL - calibration site.
4. S = Substantial Increase (12 dBA or more); A/E = Approach or exceed NAC.
5. Barrier height recommended to meet requirements at adjacent receptor(s).
6. Traffic noise from the freeway only; other local noise sources are not included.
7. This measurement site does not represent an area of frequent human use. However, this is a measurement site and is equal distant to back yard/side yard from the highway; therefore, representative of back yard/side yard.
8. Noise measurement at this location is higher than "No Build" levels because measurement was performed above existing wall.
9. Noise measurement at this location is higher than "No Build" levels perhaps because of high wind speeds and/or birds chirping throughout measurement.

C. Critical design receiver. W. Includes the benefits of an existing soundwall/property wall.
ENVIRONMENTAL CONSEQUENCES

Some of the short-term measurements were conducted during time intervals outside of the peak noise hour. These measurements have been adjusted to reflect peak hourly noise levels using the results of the nearby long-term noise measurements. The peak noise hour was determined by a long-term measurement taken on the same day as each short-term measurement. The difference in noise level between the hour in which the short-term level was recorded and the hour that the actual peak hour level occurred was then applied to each of the short-term levels to adjust it to the peak hour.

The 2035 peak hour traffic volumes supplied by Caltrans were modeled to determine the traffic noise for the future year. The 2035 PM peak hour traffic volumes used for “No Build” and “Build” scenarios of this project vary from one intersection to the next.

Build Alternative

Future build traffic noise levels were modeled using 2035 peak hour traffic volumes. The predicted peak hour Leq(h) at noise sensitive representative receptors along the highway range from 54 to 70 dBA. Soundwall heights from 2.4 m (8 ft) up to 4.9 m (16 ft) were considered to abate the predicted traffic noise impacts at the representative noise sensitive areas within the proposed project area. The recommended noise barriers were designed to reduce traffic noise levels by at least the minimum requirement of 5 dB. In addition, the recommended wall heights are designed to block the line-of-sight to heavy truck exhaust stacks. Along the corridor there are nine locations where soundwalls are considered, which would benefit a total of 14 residences and two schools (nine frontage units).

No Build Alternative

The No Build would not build additional traffic lanes or reconfigure intersections and would not increase noise levels for residential, commercial or recreational uses along the SR-98 project corridor.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

A Preliminary Noise Abatement Report (NADR) dated December 2007 was prepared for this project and incorporated by reference. The report documents the decision of the overall feasibility and reasonableness of providing abatement measures.
Feasibility refers to the minimum noise reduction performance of 5 decibels or more for proposed noise abatement when built to engineered standards (safety, height, highway and local access considerations, topography, etc.). The determination of the reasonableness of noise abatement is more subjective than the determination of its feasibility. The overall reasonableness of noise abatement is determined by many factors including: cost, absolute noise levels, existing versus design-year noise levels, achievable noise reduction, date of development along the highway, and abatement benefits. A final decision is determined after environmental impacts and public input are considered.

The preliminary reasonableness determination is made by calculating an allowance that is considered to be a reasonable amount of money per benefited residence to spend on abatement. This reasonable allowance is then compared to the engineer's cost estimate of the abatement. If the engineer's cost estimate is less than the allowance, the preliminary determination is that the abatement is reasonable. If the cost estimate is greater than the allowance, the preliminary determination is that abatement is not reasonable.

Build Alternative

**Soundwall S502**: Soundwall S502 would be 2.4 meters (8 feet) in height located along the eastbound side of SR-98 between stations 501+94 and 502+11. The wall would provide feasible reduction for a single-family residence represented by Receptor R19 from highway traffic noise. The outdoor use area for the single-family residence is the side yard where there is a swing set and a barbeque grill. The analysis shows that the side wings of the wall may be 1.8 meters (6 feet) in height and Receptor 19 would still receive a 5 dB reduction and cut the line of sight to truck exhaust stacks. The reasonable cost allowance is $48,000. The estimated construction cost without easements is $72,039. The estimated construction cost exceeds the reasonable allowance by 50%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwall S502 is not recommended.

**Soundwall S511**: Soundwall S511 would be 3.7 meters (12 feet) in height located along the westbound side of SR-98 between stations 510+32 and 511+66. The wall would provide feasible reduction for a school represented by Receptors R11 and R11A from highway traffic noise. The outdoor use area for the school is the schoolyard. Although Receptor R11 is not
impacted, a 5 dB reduction can be achieved with the recommended wall height of 3.7 meters (12 feet). The reasonable cost allowance is $152,000. The estimated construction cost without easements is $570,561. The estimated construction cost exceeds the reasonable allowance by 275%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwall S511 is not recommended.

**Soundwalls S516A/S516B/S516C:** Soundwalls S516A, 516B, and S516C would be 3.0 meters (10 feet) in height located along the eastbound side of SR-98 between stations 514+80 and 515+10, 515+30 and 515+83, as well as 516+03, and 516+44, respectively. These walls would provide feasible reduction for a multi-family residences represented by Receptors R30, R30A, and R31 from highway traffic noise. Receptors R30 through R31 represent the Remington Condominium complex which has not been built as of September 2008. The Noise Study Report assumed that there would be frequent outdoor use areas facing SR-98. Soundwalls S516A, 516B, and S516C work as a system. The reasonable cost allowance is $304,000. The estimated construction cost without easements is $385,244. The estimated construction cost exceeds the reasonable cost allowance by 27%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwalls S516A, 516B, and S516C are not recommended.

**Soundwall S518:** Soundwall S518 would provide feasible reduction for a school represented by Receptors R33 through R35 from highway traffic noise. The wall would be 3.7 meters (12 feet) in height located along the eastbound side of SR-98 between stations 517+28 and 519+17. The outdoor use area for the school is the schoolyard. It should be noted that if the total cost allowance at these locations is less than the total cost allowance, then the wall would likely be incorporated into the project. The reasonable cost allowance is $200,000. The estimated construction cost without easements is $882,778. The estimated construction cost exceeds the reasonable allowance by 341%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwall S518 is not recommended.
Soundwall S520A: Soundwall S520A would be 3.0 meters (10 feet) located along the eastbound side of SR-98 between stations 519+18 and 519+47. The wall would provide feasible reduction for a single-family residence represented by Receptor R36 from highway traffic noise. The outdoor use area for the single-family residence is the back yard. The reasonable cost allowance is $50,000. The estimated construction cost without easements is $92,018. The estimated construction cost exceeds the reasonable allowance by 84%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwall S520A is not recommended.

Soundwall S520B: Soundwall S520B would be 3.7 meters (12 feet) in height, located along the eastbound side of SR-98 between stations 519+71 and 520+33. The wall would provide feasible reduction for two single-family residences represented by Receptor R37 from highway traffic noise. The outdoor use area for the single-family residences is the back yard. The reasonable cost allowance is $100,000. The estimated construction cost without easements is $224,407. The estimated construction cost exceeds the reasonable allowance by 124%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwall S520B is not recommended.

Soundwall S526: Soundwall S526 would provide feasible reduction for single-family residences represented by Receptor R40 from highway traffic noise. The wall would be 3.0 meters (10 feet) in height located along the westbound side of SR-98 between stations 524+82 and 525+22. The outdoor use area for the single-family residences is the back yard. The reasonable cost allowance is $100,000. The estimated construction cost without easements is $120,357. The estimated construction cost exceeds the reasonable allowance by 20%.

The wall is feasible but not reasonable due to the estimated construction cost being higher than the reasonable cost allowance. Construction of Soundwall S526 is not recommended.

Table 15 summarizes the barrier analysis, and whether the barriers are reasonable and feasible.
<table>
<thead>
<tr>
<th>Receptors</th>
<th>Barrier No. &amp; Location</th>
<th>Existing Noise Level ((t, h)) Leq ((h)), dBA</th>
<th>Predicted Noise Level without Project (dBA)</th>
<th>Predicted Noise Level with Project w/out barrier (dBA)</th>
<th>Predicted Noise Level with Abatement (dBA)</th>
<th>Reasonable &amp; Feasible (^{(6)})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Barrier Height</td>
<td></td>
</tr>
<tr>
<td>R19</td>
<td>S502/Private Property Property Line EB SR-98</td>
<td>65 (^{(5)})</td>
<td>67</td>
<td>68</td>
<td>61 (^{(R,T)})</td>
<td>59</td>
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<tr>
<td>R11 and R11A</td>
<td>S511 Property Line WB SR-98</td>
<td>59 (^{(5)})</td>
<td>63 (^{(5)})</td>
<td>59</td>
<td>61</td>
<td>57</td>
</tr>
<tr>
<td>R30</td>
<td>S516A S516B S516C Property Line EB SR-98</td>
<td>66 (^{(5)})</td>
<td>66 (^{(5)})</td>
<td>66 (^{(5)})</td>
<td>66</td>
<td>69</td>
</tr>
<tr>
<td>R33</td>
<td>S518 Property Line EB SR-98</td>
<td>61 (^{(5)})</td>
<td>60 (^{(5)})</td>
<td>65 (^{(M, STE3)})</td>
<td>65</td>
<td>66</td>
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<tr>
<td>R36</td>
<td>S520A Property Line EB SR-98</td>
<td>62 (^{(5)})</td>
<td>65</td>
<td>66</td>
<td>59</td>
<td>57 (^{(R,T)})</td>
</tr>
<tr>
<td>R37</td>
<td>S520B Property Line EB SR-98</td>
<td>62 (^{(5)})</td>
<td>65</td>
<td>66</td>
<td>59</td>
<td>58</td>
</tr>
<tr>
<td>R40</td>
<td>S526 Property Line EB SR-98</td>
<td>67 (^{(5)})</td>
<td>70</td>
<td>70</td>
<td>65</td>
<td>64 (^{(R,T)})</td>
</tr>
</tbody>
</table>

Notes: 1. - Leq(h) are A-weighted, peak hour noise levels in decibels
2. - Land Use: SFR - single-family residence; MFR - multi-family residence; SCH - School
3. - M – Measured noise level; STxx or LTxx – measurement site number; E – Estimated using future “No Build” and measured data; CAL – calibration site
4. - R – Recommended height to meet feasibility requirements of Departments Noise Abatement Protocol
5. - T- Minimum height required to block the line of sight from the receptor to truck exhaust stacks.
6. - Based on the base reasonable allowance of $32,000 per residence (Caltrans, 2006).
BIOLOGICAL ENVIRONMENT

2.12 NATURAL COMMUNITIES
This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value. This section was developed out of the information within the June 2007 Natural Environment Study (Minimal Impacts).

AFFECTED ENVIRONMENT
The project site lies at sea level and is predominantly flat land. The majority of the area near the project site consists of urban development (commercial, residential, and industrial), disturbed habitat, and agricultural fields. Land uses are mostly urban and commercial on the east end of the alignment, residential and commercial in the central portion of the alignment, and mainly residential and agricultural on the west end of the alignment. The All-American Canal also passes under SR-98 within the project site.

The California Natural Diversity Data Base (CNDDB; CDFG 2006) and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2006) were used to determine the potential occurrence of sensitive species in the region surrounding the project site. The results of the CNDDB data query of the Calexico, El Centro, Heber, and Holtville West U.S. Geological Survey (USGS) quadrangles are displayed in Figure 6. A complete listing of sensitive plant and animal species occurring in the region is attached as Appendix D. Habitat assessment surveys for these and other species were conducted at the project site.

Within the study area but outside of the permanent and temporary impact footprint, scattered young willow (Salix sp.), tamarisk (Tamarix sp.), and arundo (Arundo donax), which would all be considered freshwater marsh, occur along the levee of the All-American Canal but are not quantified due to the sparse distribution of individual plants. Disturbed habitat within the project area occurs in association with developed areas, road sides, and vacant lots. These areas are mostly devoid of vegetation, with some scattered disturbance-related plant species,
due to frequent disturbance activities. Plant species typical of disturbed habitats onsite include big saltbush (*Atriplex lentiformis*), goosefoot (*Chenopodium* sp.), Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), alkali mallow (*Malvella leprosa*), and prickly lettuce (*Lactuca serriola*).

Actively cultivated agricultural fields occur on both the north and south sides of SR-98 within the westernmost portion of the project site. The project site also contains ornamental vegetation associated with both residential and commercial development, east of the All-American Canal. The majority of the ornamental trees onsite occur along a vegetated median strip along SR-98, between Eady Avenue and V.V. Williams Avenue. Ornamental tree species include eucalyptus (*Eucalyptus* sp.), pines (*Pinus* sp.), and palms. A majority of the project site consists of paved roads. A list of plant species observed within the project site can be found in Appendix E.

Due to the developed and disturbed nature of the project site, no other major wildlife movement corridors occur on or through the site. However, irrigation canals and ditches provide some habitat that may aid in avian movement on both a local and potentially regional (e.g., the All-American Canal) scale.

**ENVIRONMENTAL CONSEQUENCES**

**Build Alternative**
Due to the developed and highly disturbed nature of the project site and surrounding area, no sensitive plant species are expected to occur within the project site. A habitat assessment and general wildlife and botanical reconnaissance surveys (August 2006) conducted during a visit to the site found no state or federally listed plant or animal species.

**No Build**
The No Build would not have permanent impacts to any natural communities within the project limits.

**AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES**
The project would not cause any impacts to Natural Communities; therefore, no additional measures are necessary.
2.13 ANIMAL SPECIES

REGULATORY SETTING
Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.20 below. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:
- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations pertaining to wildlife include the following:
- California Environmental Quality Act
- Sections 1601 – 1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

AFFECTED ENVIRONMENT
Burrowing owl, a state species of special concern, was observed within the study area and suitable habitat for this species is present along the levees associated with the canals and drainages within the study area. Focused surveys for this species were conducted. During the first focused survey for this species on June 6, 2006, three active burrows were detected. Locations of these burrows are provided in Figure 6. At least one owl was observed during each of the four surveys, and fledglings were detected during 3 of the 4 surveys.

A habitat suitability assessment for Yuma clapper rail and California black rail was also conducted on June 6, 2006. It was determined after this assessment and through discussions with regional experts that suitable habitat for both species is not present within the study area. No other sensitive wildlife species are expected to occur onsite due to the lack of suitable habitat.
ENVIRONMENTAL CONSEQUENCES

Build Alternative
Eucalyptus and other ornamental trees within and adjacent to the project site may provide suitable nesting habitat for raptors and other passerine birds protected under the Migratory Bird Treaty Act. No nests were observed during the general wildlife survey. A list of animal species observed within the project area can be found in Appendix F.

No Build Alternative
The No Build Alternative would not have any impacts to special status animal species.

AVOIDANCE AND MINIMIZATION MEASURES
Due to the presence of burrowing owls onsite and immediately offsite, preconstruction surveys are to be conducted within 30 days prior to initial ground-disturbing activity. The preconstruction surveys are required to avoid impacts to nesting burrowing owls from construction activities associated with the project. During focused 2006 surveys, one burrowing owl burrow was detected within the project impact area. If this burrow cannot be avoided, and/or burrowing owls are detected within 500 feet of project construction, mitigation measures recommended in guidelines provided by the CBOC and the California Department of Fish and Game (CDFG) would be implemented. These measures include preparing a Burrowing Owl Study submitted to the CDFG, and relocation of burrowing owls prior to the breeding season of the species (i.e., prior to the period from 1 February to 31 August). Final mitigation would be determined through coordination between Caltrans and the resource agencies. In addition, a preconstruction nesting bird survey is recommended if construction activities are to occur during the avian nesting season (1 February to 31 August), so that owls can be relocated prior to nesting.

Eucalyptus and other ornamental trees found within 500 feet of the project site provide potential nesting sites for raptors and other birds. Any trees or large shrubs to be removed as part of the project should be cleared outside of the breeding season (i.e., avoid the period from 1 February to 31 August). If any clearing and grubbing is required during the breeding season, a staff biologist must be notified prior to construction to locate any possible nesting birds, and direct field crews accordingly.
2.14 INVASIVE SPECIES

REGULATORY SETTING

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the state’s noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

AFFECTED ENVIRONMENT

The study area of SR-98 currently supports the following invasive species: tamarisk (Tamarix sp.), arundo (Arundo donax), Bermuda grass (Cynodon dactylon), Russian thistle (Salsola tragus), goosefoot (Chenopodium sp.), and prickly lettuce (Lactuca serriola). The majority of these species are found along the disturbed habitats along the right of way, with the exception of arundo and tamarisk, which grow within the All American Canal.

ENVIRONMENTAL CONSEQUENCES

Build Alternative

Several of the invasive species currently found in the right of way could spread during construction activities. During construction, ground disturbance activities provide new areas for weeds to germinate. If minimization measures listed below are implemented; the growth of invasive species may be reduced.

No Build Alternative

The no build alternative would not disturb any new ground; however, existing invasive species problems would likely become worse through time and species spread.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The widening of SR-98 provides an opportunity to control some of the invasive species along the right of way of the project. Through careful handling of the soil and equipment that works
the soil, the invasive plants currently within the impact area can be removed. The following avoidance measures are recommended:

- Revegetation of the cleared areas would require maintenance to keep the weed species from reinvading.
- All heavy equipment would be washed and cleaned of debris prior to entering the project area to minimize spread of invasive weeds.
- No species on the Invasive Plant Council list would be planted onsite.
- The right of way would be landscaped with non-invasive species as part of the project.

2.15 CONSTRUCTION IMPACTS


**Air Quality**

In recognition of the nonattainment status of the project area for PM10 and O3, the following measures are recommended.

- Caltrans Standard Specifications 10-Dust Control, 17-Watering, and 18-Dust Palliative shall be incorporated into project specifications (Caltrans 2006).
- Idling of diesel-powered vehicles and equipment shall not be permitted during periods of nonactive vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:

  - When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
  - When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
  - To bring the equipment to the manufacturer’s recommended operating temperature;
  - When the ambient temperature is below 40°F or above 85°F; or
  - When equipment is being repaired.
Traffic Circulation and Access
Construction of the proposed project would result in temporary disruption to existing vehicular travel patterns due to lane-restrictions, temporary detours, and other construction-related activities for approximately six months. These changes are likely to be a nuisance for residents along the alignment and for motorists traveling on this segment of SR-98. Measures would be implemented that will maintain vehicular access and mobility in a form that would allow residents and motorists to reach their destinations.

Preliminary construction work would be divided into stages. Staging would be necessary to minimize traffic disturbances and maintain current traffic flow during construction.

A Transportation Management Plan (TMP) would be prepared to minimize the impact of construction activities on highway users. Preceding roadway design, a final TMP, would be prepared to reduce potential construction-related traffic conflicts, detours, and delays. The elements to be considered for the highway-widening project include, but are not limited to the following:

The TMP may include the following strategies:
- Development of a Public Awareness Campaign prior to and during construction to inform residents and motorists of construction activities.
- Real-time communications with motorists, including changeable message signs and highway advisory radio announcements.
- Provisions for tow truck service during peak-hours.
- Placement of appropriate signs, cones, and barricades near construction to increase safety and driver certainty.
- Development of plans that ensure emergency access and access to existing residences and businesses within the construction area.
- Inclusion of construction activities on the Caltrans Highway Information Network (CHIN), a public information line. (1-800-427-ROAD).

Temporary Construction Easements
Construction of the proposed project would require acquisition of portions of the properties adjacent to SR-98 for a temporary construction easement. The use of these portions of the property, while temporary (lasting approximately six months) would still have the potential to
reduce the ability to conduct business. Mitigation measures would be implemented that would maintain access to the business property and maintain visibility of the business from the road.

The following measures would be implemented:

- **Signage for directions to businesses during construction.**
- **Views of display vehicles at G & G Auto Sales/U-Save Car and Truck Rental and Rios Auto Sales would be maintained during construction. Vehicular and pedestrian access would need to be maintained for the business as well.**
- **Additionally, Caltrans temporary construction easements at these businesses would be minimized to allow for continued display of vehicles for sale and rent at the businesses.**
- **Construction at the corner of SR-98 and David Navarro Avenue would be conducted to minimize impacts to the residences at the northwest and southeast corners.**

**NOISE**

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications, July 2002, Section 7-1.01I, Sound Control Requirements. These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufacturers’ specifications.

Table 16 summarizes noise levels produced by construction equipment commonly used on roadway construction projects. Equipment involved in construction is expected to generate noise levels ranging from 74 to 85 dBA at a distance of 15 meters (50 feet). Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications and would be short-term, intermittent, and dominated by local traffic noise. Implementing the following measures would minimize temporary construction noise impacts:

- **All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust.**
As directed by the Caltrans resident engineer, the contractor shall implement appropriate additional noise abatement measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

Table 16 Construction Equipment Noise

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Maximum Noise Level (dBA at 50 feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrapers</td>
<td>89</td>
</tr>
<tr>
<td>Bulldozers</td>
<td>85</td>
</tr>
<tr>
<td>Heavy Trucks</td>
<td>88</td>
</tr>
<tr>
<td>Backhoe</td>
<td>80</td>
</tr>
<tr>
<td>Pneumatic Tools</td>
<td>85</td>
</tr>
<tr>
<td>Concrete Pump</td>
<td>82</td>
</tr>
</tbody>
</table>


2.16 CLIMATE CHANGE (CEQA)

REGULATORY SETTING
While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas\(^1\) (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations would apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California’s GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal

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\(^1\) Greenhouse gases related to human activity, as identified in AB 32, include: H\text{Carbon} \text{dioxide}, H\text{Methane}, H\text{Nitrous oxide}, H\text{Tetrafluoromethane}, H\text{Hexafluoroethane}, H\text{Sulfur hexafluoride}, H\text{HFC-23}, H\text{HFC-134a}, and H\text{HFC-152a}.
was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state’s Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. However, California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHGs as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., U.S. Supreme Court No. 05–1120. 549 U.S. _________. Argued November 29, 2006—Decided April 2, 2007). The court ruled that GHGs do fit within the Clean Air Act’s definition of a pollutant, and that EPA does have the authority to regulate GHGS. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting greenhouse gas emissions.

According to a recent white paper by the Association of Environmental Professionals², “an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing

² Hendrix, Micheal and Wilson, Cori. Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents (March 5, 2007), p. 2.
the Climate Action Program at Caltrans (December 2006). Transportation’s contribution to GHG emissions is dependent on 3 factors: the types of vehicles on the road, the type of fuel the vehicles use, and the time/distance the vehicles travel.

One of the main strategies in Caltrans’ Climate Action Program to reduce GHG emissions is to make California’s transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph; the most severe emissions occur from 0-25 miles per hour (see Figure below). Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors would lead to an overall reduction in GHG emissions.

![Fleet CO2 Emissions vs. Speed (Highway)](source)


The project is designed to alleviate peak hour traffic congestion, meet anticipated traffic increases and improve traffic flow on SR-98 between Dogwood Road and SR-111.

Currently two of the intersections along this corridor operate at a Level of Service F with a peak hour total delay of 22 minute along this two mile segment. In the 2035 No- Build condition, every intersection along this corridor, with the exception of SR-98/Ollie Avenue, would operate at a Level of Service F with a peak hour total delay of 49 minutes. Without improvements, SR-98 would continue to decrease in operability with increases in congestion and delays.

The widening of SR-98 to a four-lane roadway should also improve general operation since the additional thru lane would be used as a lane for passing truck traffic. Sidewalks are also
proposed along both sides of SR-98 for the entire length of the project to encourage pedestrian use. This alternative would also incorporate a new Class II Bike Lane in order to promote bicycle use.

Due to the reduction in vehicle time delays, improved traffic flow, and alternatives to driving, carbon dioxide emissions should be reduced despite what may be an increase in vehicle miles traveled.

The proposed project is included in the Southern California Association of Governments 2008 (SCAG 2008) Regional Transportation Plan (RTP ID 8020, Page 1 of Modeled Project Lists), and 2006 Regional Transportation Improvement Plan (RTIP) (Project ID 8020, page 1 of the Imperial County Listing of State Projects) (SCAG 2007a) as amended. The project description of the proposed project matches the project description in the 2008 RTP and 2006 cost-constrained RTIP.

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, accurate modeling of GHG emissions levels, including carbon dioxide at the project level, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific or regulatory-based conclusion regarding whether the project’s contribution to climate change is cumulatively considerable.

Caltrans continues to be actively involved on the Governor’s Climate Action Team as ARB works to implement AB 1493 and AB 32. As part of the Climate Action Program at Caltrans (December 2006), the department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California Davis.
Figure 3

Existing and Future Land Uses

PROJECT AREA

NOT TO SCALE


Caltrans

Figure 3

Existing and Future Land Uses
Figure 4
Project Viewshed Map
Results of CNDDB Query and Burrowing Owl Burrows

Figure 6

Source: CNDDB March 2007; AirPhotoUSA 2005; Konecny 2006

LEGEND
- SR-98 Project Footprint
- Burrowing Owl Burrow (Konecny 2006)
- Study Area

CNDDB Data- Accuracy Class, Description
- Class 4, Circular feature with a 150-meter radius
- Class 9, Circular feature with a 1,600-meter radius

Abram's spurge
Western yellow bat
Yellow warbler
American badger
Chaparral sand-verbena

New River
Union Pacific Railroad
SR-11 Imperial Ave
Rockwood Ave
Dogwood Rd

Scale: 1:2,000; 1 inch = 2,000 feet

Caltrans
Chapter 3 – COMMENTS AND COORDINATION

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, and interagency coordination meetings. This chapter summarizes the results of the Department’s efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

In the development of this project, Caltrans has been in close coordination with the City of Calexico, Imperial Irrigation District and Southern Association of California Governments (SCAG).

Project Development Team (PDT) meetings were held every month from 2005 until the present to discuss issues related to the project. The City of Calexico often had representatives at the meetings to discuss matters of concern to the City. Such concerns included providing access to new developments off of SR-98 and the possible closure of access to current streets. Other representatives including that of the proposed new developments and the Imperial Irrigation District (IID) were also present at certain meetings. Caltrans and the various representatives would work to resolve problems at these meetings.

Caltrans prepared an extensive list of interested agencies and parties and distributed the draft environmental document to them for review. A list of all parties in which the document was sent to can be found in Chapter 5. The draft document went through the public review process from September 11, 2008 to October 10, 2008. Caltrans held a Public Hearing for the project on September 30, 2008 at Calexico City Hall. Six people attended the meeting and no comments were received. During the public review period eight letters were received. The letters are included in this section along with the responses to comments. Comment letters were received from the following agencies and individual:

- Air Pollution Control District
- Native American Heritage Association
- California Department of Fish and Game
On September 30, 2008 Caltrans submitted to FHWA a request for the project-level conformity determination for the SR-98 Roadway Widening project pursuant to 23 USC 327(a)(2)(B)(ii)(1). The project is in an area that is designated Nonattainment for Ozone and Nonattainment for Particulate Matter PM10. The project level conformity analysis submitted by Caltrans indicated that the transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Southern California Association of Governments (SCAG) currently conforming Transportation 2035 Plan (RTP), and the 2006 Regional Transportation Improvement Program (RTIP). The current conformity determinations for the RTP and RTIP were approved by FHWA and the Federal Transit Administration (FTA) on June 5, 2008. As required by 40 C.F.R. 93.116 and 93.123, the localized PM10 analyses are included in the documentation. The analyses demonstrate that the project will not create any new violation of the standards or increase the severity or number of existing violations. FHWA found that the Conformity Determination for SR-98, from Dogwood Road to SR-111 road widening project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93. A copy of this letter is included at the beginning of the Comment and Coordination Section.
Pedro Orso-Delgado, District Director  
California Department of Transportation  
District 11  
4050 Taylor Street  
San Diego, CA 92110

Attention: Mr. David Nagy

Dear Mr. Nagy:

SUBJECT: FHWA Project Level Conformity Determination for SR-98, Dogwood Road to SR-111, Roadway Widening

On September 30, 2008, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for a project level conformity determination for a roadway widening project on SR-98 from Dogwood Road through SR-111, PM 30.0 to 32.6 in Imperial County. The project is in an area that is designated Nonattainment for Ozone and Nonattainment for Particulate Matter PM10.

The project level conformity analysis submitted by Caltrans indicates that the transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Southern California Association of Governments (SCAG) currently conforming Transportation 2035 Plan (RTP), and the 2006 Regional Transportation Improvement Program (RTIP). The current conformity determinations for the RTP and RTIP were approved by FHWA and the Federal Transit Administration (FTA) on June 5, 2008. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 C.F.R. 93.116 and 93.123, the localized PM10 analyses are included in the documentation. The analyses demonstrate that the project will not create any new violation of the standards or increase the severity or number of existing violations.

MOViNG THE AMERICAN ECONOMY
Based on the information provided, FHWA finds that the Conformity Determination for SR-98, from Dogwood Road to SR-111 road widening project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.

If you have any questions pertaining to this conformity finding, please contact Stew Sonnenberg, FHWA Air Quality Specialist, at (916) 498-5889.

Sincerely,

[Signature]

For
Gene K. Fong
Division Administrator

MOVING THE
AMERICAN
ECONOMY
August 22, 2008

Mr. Mario Orso
Caltrans District 11
4050 Taylor Street
San Diego, CA. 92110

Re: Williams Greenbelt along Hwy 98

The purpose of this letter is to reiterate previous conversations regarding the above referenced subject. Pursuant to Table P-A of the General Plan Update 2007, this area is deemed to be a “greenbelt – park” however, it does not serve any recreational activities. In an effort to improve the aesthetic quality of the greenbelt area, the city landscaped the property and continues to provide maintenance as a greenbelt. During these improvements no recreational amenities were added to the property. Due to the location and surrounding constraints, the area can only be utilized as a greenbelt buffer.

The city concurs that the use of the greenbelt area would not result in any temporary or permanent adverse change to the activities, features, or attributes which are important to the purposes or functions that qualify the resource for protection under section 4(f).

Additionally, the city acknowledges that the width of the greenbelt buffer is greater than what’s required for the ultimate ROW width of Hwy. 98. Any remaining unused areas should be reverted back to greenbelt areas.

Should you have any questions please do not hesitate to contact me at (760) 768-2105 or via e-mail at armandogv@calexico.ca.gov.

Sincerely,

City of Calexico

Armando G. Villa
Director of Planning &
Development Services

C: Ralph Velez, City Manager
   Luis Estrada, Utilities Services Director
   Nick Finley, General Services Director
STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

October 14, 2008

David Nagy
California Department of Transportation, District 11
4050 Tayler Street
San Diego, CA 92110

Subject: SR-98 Widening
SCH#: 2008091055

Dear David Nagy:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on October 10, 2008, and no state agencies submitted comments by that date. 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 call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse
October 9, 2008

David Nagy
Environmental Analysis – Branch B, Chief
California Department of Transportation – District 11
4050 Taylor Street, MS 242
San Diego, CA 92110

SUBJECT: Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment (Notice of Intent to Adopt a Negative Declaration (ND))

Dear Mr. Heuberger:

The Imperial County Air Pollution Control District (Air District) has finalized its review of the Initial Study/Negative Declaration for the SR-98 Roadway Widening Project. The project is to be widened from two to four lanes from Dogwood Road through just west of Olle Avenue and from four to six lanes from Olle Avenue through SR-111 lying back to the existing road to Rockwood avenue. Improvements to traffic operations, enhanced bicycle and pedestrian access and improved drainage performance on SR 98 (SR-98). The Air District has no comment at this time.

For your information our entire rule book including all new regulations can be accessed via the internet at http://www.imperialcounty.net under “Air Pollution Control.” As always, thank you for giving the Air District an opportunity to comment on this project. Should you have any questions please do not hesitate to call the office at (760) 462-4606.

Sincerely,

Monica N. Soucie
APC Environmental Coordinator
A records search for the State Route 98 project (11-IMP-98); PM 30.0 – 32.6 was conducted in 2006 at the Southeast Information Center, Imperial Valley College Desert Museum, Ocotillo, CA. No prehistoric sites were identified.

On January 30, 2008, Caltrans, under authority of the Federal Highway Administration (FHWA), initiated consultation with the State Historic Preservation Officer (SHPO) regarding the SR-98 Widening project. Three historic archaeological properties were evaluated. Results of the Archaeological Survey Report (ASR) concluded that there were no prehistoric properties.

Contract plans would include language to deal with the inadvertent discovery of cultural resources during construction. Archaeologists as well as Native Americans would be consulted in the event that remains are discovered.

The Native American Heritage Commission (NAHC) performed:

1. **Sacred Lands File (SLF) search of the project area of potential effect (APE):** No known Native American Cultural Resources were identified. However, the NAHC SLF is not exhaustive and local tribal contacts should be consulted from the attached list.

2. **Use of Native American Monitors:** When professional archaeologists or the equivalent are employed by project proponents, in order to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American Cultural resource may be known only to a local tribe(s).

3. **Archaeological inventory surveys:** These are required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department.** All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.

- **The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.**

- **A Sacred Lands File search of the project area of potential effect (APE):** The results: No known Native American Cultural Resources were identified. However, the NAHC SLF is not exhaustive and local tribal contacts should be consulted from the attached list.

- **The NAHC advises the use of Native American Monitors:** When professional archaeologists or the equivalent are employed by project proponents, in order to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American Cultural resource may be known only to a local tribe(s).

- **Lack of surface evidence of archaeological resources does not preclude their subsurface existence.**

- **Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archaeological resources per California Environmental Quality Act (CEQA) §15064.5 (f).**

- **In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.**

- **A culturally-affiliated Native American tribe may be the only source of information about a Sacred Site/Native American cultural resource.**

- **Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.**
Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

- CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

- Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5(d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

- Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse
### Native American Contacts

**Imperial County**  
**October 9, 2008**

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Address 1</th>
<th>Address 2</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Posta Band of Mission Indians</td>
<td>Gwendolyn Parada, Chairperson</td>
<td>PO Box 1120, Diegueno - Boulevard, CA 91905</td>
<td>(619) 478-2113, 619-478-2125</td>
</tr>
<tr>
<td>Kwaaymii Laguna Band of Mission Indians</td>
<td>Carmen Lucas, P.O. Box 775, Pine Valley, CA 91962</td>
<td>(619) 709-4207</td>
<td></td>
</tr>
<tr>
<td>Manzanita Band of Kumeyaay Nation</td>
<td>Leroy J. Elliott, Chairperson</td>
<td>PO Box 1302, Kumeyaay Boulevard, CA 91905</td>
<td>(619) 766-4930, 619-766-4957 Fax</td>
</tr>
<tr>
<td>Fort Yuma Quechan Indian Nation</td>
<td>Mike Jackson, Sr., President</td>
<td>PO Box 1899, Quechan Yuma, AZ 85366</td>
<td>(619) 766-4930, <a href="mailto:qitpres@quechantribe.com">qitpres@quechantribe.com</a>, (619) 766-4957 Fax</td>
</tr>
<tr>
<td>Campo Kumeyaay Nation</td>
<td>Monique LaChappa, Chairperson</td>
<td>36190 Church Road, Suite 1, Kumeyaay Boulevard, CA 91906</td>
<td><a href="mailto:chairman@campo-nsn.gov">chairman@campo-nsn.gov</a>, (619) 478-5818 Fax</td>
</tr>
<tr>
<td>Manzanita Band of Mission Indians</td>
<td>ATTN: Keith Adkins, EPA Director</td>
<td>PO Box 1302, Kumeyaay Boulevard, CA 91906</td>
<td>(619) 766-4930, (619) 766-4957 Fax</td>
</tr>
<tr>
<td>Kumeyaay Cultural Heritage Preservation</td>
<td>Paul Cuero</td>
<td>36190 Church Road, Suite 5, Diegueno/ Kumeyaay Boulevard, CA 91906</td>
<td><a href="mailto:chairman@campo-nsn.gov">chairman@campo-nsn.gov</a>, (619) 478-9046, (619) 478-9505, (619) 478-5818 Fax</td>
</tr>
<tr>
<td>Manzanita Band of the Kumeyaay Nation</td>
<td>Nick Elliott, Cultural Resources Coordinator</td>
<td>P.O. Box 1302, Kumeyaay Boulevard, CA 91906</td>
<td>(619) 766-4930, (619) 925-0952 - cell, (619) 766-4957</td>
</tr>
</tbody>
</table>

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2008091558; CEQA Notice of Completion; also 23 U.S.C. 327 (b)(2) Federal Environmental Requirements; Mitigated Negative Declaration for the S.R. 98 Widening Project; City of Calexico; location; Caltrans Project; Imperial County.

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<table>
<thead>
<tr>
<th>Contacts</th>
<th>Address 1</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quenchan Indian Nation</td>
<td>Bridget Nash-Chrabascz, THPO</td>
<td>PO Box 1899, Quechan Yuma, AZ 85366</td>
</tr>
</tbody>
</table>

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2008091051; CEQA Notice of Completion; also 23 U.S.C. 327 (b)(2) Federal Environmental Requirements; Mitigated Negative Declaration for the S.R. 98 Widening Project; City of Calexico; location; Caltrans Project; Imperial County.
Avoidance/minimization provisions have been made for the Western Burrowing Owl.

Due to the presence of burrowing owls onsite and immediately offsite, preconstruction surveys are to be conducted within 30 days prior to initial ground-disturbing activity. The preconstruction surveys are required to avoid impacts to nesting burrowing owls from construction activities associated with the project.

During focused 2006 surveys, one burrow was detected within the project impact area. If this burrow cannot be avoided, and/or burrowing owls are detected within 500 feet (152 meters) of project construction, mitigation measures recommended in guidelines provided by the California Burrowing Owl Consortium (CBOC) and California Department of Fish and Game (CDFG) would be implemented.

These measures may include preparing a Burrowing Owl Study for submission to the CDFG, and relocation of burrowing owls prior to the breeding season (i.e., prior to the period from 1 February to 31 August). Final mitigation would be determined through coordination between Caltrans and CDFG.
Facilities with historic uses that may have resulted in unauthorized releases within the project study area have been identified through review of government agency documentation and file review (NPL, DTSC, RCRA, CERCLIS, SWIS, LUST, local sources, US Army Corps of Engineers) and through field review, and are referenced on page 56 of the Initial Study.
An Initial Site Assessment was performed and it determined that it is unlikely that hazardous waste materials will be encountered during construction. Preventative measures will be identified in project special provisions to avoid or mitigate any unknown hazardous waste related impacts not identified in the hazardous waste studies performed in accordance with Federal, State, and Local regulations.

Minimization or mitigation measures will be performed and documented in accordance with Federal, State, and Local laws, regulations, practices, and standards. A site-specific Hazardous Waste Management Plan and Health and Safety Plan will be prepared. Site investigations have been conducted in areas with a potential for hazardous waste issues.

Conditions requiring oversight by the proper regulatory agencies were not found during the investigations performed; encountering hazardous waste is not anticipated.
5) If buildings or other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediating in compliance with California environmental regulations and policies.

6) Project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Local Disposal Requirements (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

7) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6142. Certain hazardous waste treatment practitioners of hazardous materials handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

9) If the project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).

10) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented.

No buildings or structures are planned for demolition during the project. Demolition of asphalt and concrete surfaces is a part of the project, however, hazardous waste issues (hazardous chemicals, lead paint, mercury, asbestos) have not been identified with demolition of these items.

Soil encountered during construction that contains unknown hazardous waste issues/materials will be properly handled in accordance with Federal, State, and Local regulations. According to the project scope, import fill material is not necessary on this project. Should import fill material become necessary, it will be evaluated prior to use onsite to ensure it does not contain contaminants.

Encountering conditions resulting in need for a health risk assessment are not anticipated for this project.

Hazardous waste materials used for construction will be handled and managed in accordance with Federal, State, and Local regulations. It is not anticipated that the project will result in generation of hazardous wastes. A site-specific Health and Safety Plan and Hazardous Waste Management Plan shall be prepared by qualified personnel that will be designed to minimize risk to human health and the environment during construction should unknown hazardous waste issues be encountered.

Waste water will be discharged under a NPDES permit, as indicated on pages 46 through 54 of the Initial Study/Environmental Assessment.

Thank you for your guidance. Please see response to comments 6 and 8 above.
For this project, Preconstruction surveys will be required within 30 days prior to initial ground disturbing activity to avoid impacts to nesting burrowing owls from construction of the project. During protocol surveys (2006), one burrowing owl burrow was detected within the project impact area. If this burrow cannot be avoided, and/or burrowing owls are detected within 500 feet (152 meters) of project construction, mitigation measures recommended in guidelines provided by the California Burrowing Owl Consortium (CBOC) and California Department of Fish and Game (CDFG) should be implemented. These measures would include preparing a Burrowing Owl Study for submission to the CDFG, and relocation of burrowing owls prior to the breeding season (i.e., prior to the period from 1 February to 31 August). Final mitigation would be determined through coordination between Caltrans and CDFG.

In addition, a preconstruction nesting bird survey are required if construction activities are to occur during the avian nesting season (1 February to 31 August).
Caltrans completed a detailed study of mountain plovers and their usage of different agricultural fields within the Imperial Valley in 2002. This report was forwarded to the U.S. Fish and Wildlife Service. During this study, the closest locations of mountain plover use were over 1 mile away from the project. The study found that mountain plovers favor alfalfa and Bermuda grass fields to other crops. The majority of the agricultural fields onsite are farmed in wheat and only a small area at the western end of the project is currently farmed for alfalfa. The sliver of impact along SR 98 is not anticipated to adversely affect the wintering habitat available for mountain plover. Our study found that there is over 388,000 acres of crops in cultivation in the Imperial Valley as of March 2002.

A preconstruction nesting bird survey is required if construction activities are to occur during the avian nesting season (1 February to 31 August). Any trees or large shrubs to be removed as part of the project would be cleared outside of the breeding season (i.e., avoid the period from 1 February to 31 August). If this time window is not feasible, a staff biologist must be notified prior to construction to locate any possible nesting birds, and direct field crews accordingly. See Burrowing Owl conservation measures in response to Comment 1.

There are existing utility lines that will be relocated. There are no new lines to be added for this project. Any required relocations or protection measures would be coordinated with the utility owners during the design process.
We also recommend that you contact the CDFG to obtain a list of State-listed and sensitive species that may occur in the area of the proposed project and are required for the CEQA review.

We are available to work with you on avoidance and minimization measures for federally listed and sensitive species. Please contact Peggy Bartels of my staff at (760) 431-9440 if you have any questions regarding our comments on the SR 98 Roadway Widening Project or to schedule a meeting to discuss these issues.

Sincerely,

[Signature]

Karen Goebel
Assistant Field Supervisor

cc: Craig Weightman, California Department of Fish and Game, Bermuda Dunes
    Jurgen Heuberger, Imperial Local Agency Formation Commission, El Centro, California
The Imperial Irrigation District (IID) Water Department reviewed the Initial Study for State Route 98 Roadway Widening Project. The project is located on the Westside of the City of Calexico (City) along the south line of Sections 10 and 11, T. 17 S., R. 14 E., S.B.M. The following are comments regarding this project:

1. California Department of Transportation (Caltrans) should supply the IID with copies of all environmental documents (CEQA, NEPA, Mitigated Negative Declaration, etc.). Modifications of IID canals and drains may have project level environmental or biological impacts that should be analyzed on a site specific basis. Caltrans must address any new or reconstructed IID facilities required for and by the project (which can include auxiliary utility work such as drainage structures) in the project’s CEQA documentation. Caltrans is responsible for any and all mitigation efforts required as a result of project development.

2. Caltrans must obtain a copy of the IID Water Department Developer Project Guide 2008 (Developer Guide), which addresses general, irrigation and discharge issues and mitigation of impacts with regard to IID’s irrigation and drainage systems. This document also details how a project is processed through the Water Department. This guide includes the following: Standard drawings for connection to IID drainage systems, utility crossings, standard details, encroachment permit application and other forms that may be applicable to the project. The Developer Guide can be obtained at the following address:

Thank you for your guidance. A copy of the IID Water Department Developer Project Guide 2008 (Developer Guide) has been downloaded from your website.
Birch Lateral 3 and 4 will be impacted by the Los Lagos development, which will be constructed prior to the SR-98 Widening. This development’s traffic generation is the cause for widening in this area. Birch Lateral 2-A is discussed below. The All American Canal (AAC) is not impacted by this project. Undergrounding of this facility will not be necessary. All American Drain 9 and 10 will be modified to accept storm water from basins in accordance with the IID Water Department Project Guide.

In the May 22, 2007 PDT meeting it was suggested that “the pipeline be abandoned and the school buy water from the City, as the City has sewer and potable water lines on the project site.” John Kilps, from IID, also mentioned that “IID could relinquish ownership of the pipe to the school and then Caltrans would just need to coordinate with the school and City.” Further coordination between IID and Caltrans will be needed during the PS&E phase to determine the best solution to the conflict.

Agreed, Birch Lateral 3 and 4 are directly impacted by the project. Birch Lateral 3 and 4 will be impacted during Phase II of the construction of the SR-98 Widening. This phase of the project will not be required until the developments, such as Los Lagos, are constructed. Therefore, this pipeline improvement will be completed in coordination with Los Lagos and the other developments in the area. If for any reason the roadway widening occurs prior to the construction of the developments, Caltrans will be responsible for relocating this pipeline. Coordination with the developers, Caltrans, and IID will be necessary in the PS&E phase to assure that this conflict gets resolved.

Agreed, coordination with Bureau of Reclamation (BOR) and IID will continue through the PS&E phase and all required permits and relocations will be obtained prior to construction.
7. IID operates and maintains the AAC which crosses State Route 98. The expansion of this State Route 98 will impact the IID’s ability to access, operate and maintain this canal. Caltrans must provide adequate access from State Route 98 for all IID vehicles get onto and off of the AAC banks safely. This may also include turn around areas to avoid heavy equipment having to travel on State Route 98. To mitigate all possible impacts to IID Caltrans will need to evaluate this more closely during the design phase of the State Route 98 Expansion.

8. This project proposes possible storm water discharge connections to All American Drain 10 and All American Drain 9. Caltrans will be required to obtain encroachment permits from both IID and BOR. The primary purpose of these drains is to collect seepage water from the AAC. Proper drainage analysis of these drains will be required to determine if there is adequate capacity to accept the storm water. Depending on the outcome of the analysis Caltrans may need to seek different discharge locations or may be subject to restrictions and/or mitigation.

9. IID encroachment permit(s) will be required for all proposed stormwater and any other underground utilities that will encroach upon existing and proposed IID right-of-way. Encroachment permit(s) are also required for all surface improvements, including proposed new streets, driveways, parking lots, and landscape that will encroach upon existing and proposed right-of-way. A copy of the encroachment permit application is included in the attached Developer Guide. Please contact IID Real Estate Section at 760-392-3929 for additional information regarding encroachment permits. 

10. IID reviews drainage impacts from projects. Analysis of these development drain impacts requires a detailed drain hydraulic analysis to properly design system modifications to mitigate development impacts. As such, IID is reviewing drainage impacts from development from a system standpoint to ensure proper design analysis and review. Each development area will be reviewed to determine the appropriate change to ensure proper design analysis and review from development drainage impacts. Completion of the analysis may indicate the need for additional capital improvements, the cost of which would be borne by the developer.

This proposed project may impact the IID power facilities, if so, please contact the IID Energy Division Office at 760-496-3400.
Imperial Irrigation Letter

Mr. David Nagy
October 9, 2009
Page 4

If you have any questions, please call Ms. Olivia Alcaraz at (760) 339-9108.

Sincerely,

[Signature]

JOHN F. KILPS, P.E.
Supervising Engineer
Engineering Services

cc: Supervisor, Real Estate
Supervisor, Environmental Compliance
Superintendent, Southend Water Division
Superintendent, Western Division
Project Management, Water
Key Customer Coordinator

Response to Comments
Imperial Irrigation District

October 7, 2008

Mr. David Nagy
Environmental Branch Chief
4000 Taylor Street, MS 242
San Diego, CA 92110

Subject: SR-98 Roadway Widening Project (Electrical Facilities)

Dear Mr. Nagy:

The impact of this project to the Imperial Irrigation District (IID) electrical facilities would be significant. At a minimum, an existing 92KV transmission line, 2 double circuit 7.2/12.6KV 3 phase overhead primary lines, 7.2KV single phase overhead primary lines, 7.2/12.6KV 3 phase underground primary lines that serve commercial and residential areas and a steel pole at Hwy. 98 and Emerson Ave may be impacted.

Also various street lights for the City of Calexico, County of Imperial and Caltrans which are fed from IID lines will be impacted. These existing infrastructures will need to be relocated at Caltrans expense to an area agreeable to IID Water, Power, Environmental and Real Estate Departments.

The Imperial Irrigation District’s existing prior rights need to be observed and recognized as superior to Caltrans currently acquired easements. In addition any and all environmental mitigation necessary as a result of the relocation or reconstruction of IID facilities is to be the responsibility of the project proponent.

Please note that for any new service requested to be served by IID, you will need to apply at Customer Operations Office. If you may have any questions please feel free to contact me at (760)432-3468.

Sincerely,

Alfred M. Ornelas
Project Manager
Customer Service Operations-IV

a.m.o.

cc: Ms. Olga Estrada

CUSTOMER OPERATIONS • 1659 W. MAIN STREET STE. A • EL CENTRO, CA 92243

Caltrans is committed to working with the IID and other utility companies to minimize impacts and reach workable solutions for all facilities impacted by our project. Financial liability for relocation costs is determined by prior rights.
GREETINGS FROM BELOW SEA LEVEL,

I WANT RESPOND ON THE ENVIRONMENTAL ASPECT OF THIS PROJECT.

I WOULD ENCOURAGE CALTRANS TO LOOK INTO BUILDING PEDISTRIAN OVERHEAD WALKWAYS FOR THOSE INTERSECTIONS THAT HAVE PROXIMITY TO ALL SCHOOLS ON HIGHWAY 98. INCLUDING THE INTERSECTION OF HIGHWAY 111 AND HIGHWAY 98, AND THE RAILROAD CROSSING.

IF, IN FACT, WE ARE ALL LOOKING AT THE SMART GROWTH AND FUTURE OF CALEXICO LET'S VIEW THE INCREASED FLOW OF TRAFFIC THROUGH THE CITY AND WORK TOWARDS REDUCING, HOPEFULLY, REMOVING ANY FUTURE PEDISTRIAN/VEHICLE FATALITIES ON HIGHWAY 98.

COST WILL ALWAYS BE AN ISSUE, HOWEVER, CALTRANS HAS THE FORESIGHT AND WHEREWITHALL TO INTEGRATE AND BALANCE "HUMAN LIFE" WITH ANY VISION OF THE FUTURE, ESPECIALLY FOR SMALL RURAL CITIES.

ALSO, PLEASE CONSIDER THE SAME FOR THE AREA AROUND THE ALL AMERICAN CANAL AND HIGHWAY 111. TOO MANY CLOSE CALLS WHEN PEOPLE CROSS KENNEDY GARDENS AREA TO MERVYN'S/FOOD4LESS SHOPPING AREA.

BEST REGARDS AND THANK YOU FOR YOUR CONSIDERATION.

RUDY MALDONADO
800 KEMP COURT
CALEXICO, CA
(760) 791-3717

"THE BEST WAY TO PREDICT THE FUTURE...IS TO CREATE IT"

Thank you for your comments and suggestions.

If pedestrian overcrossings were to be built, it would require three overcrossings to adequately serve the three schools in the area. In addition, the crossings would be very close to proposed signalized intersections.

In case of Vincent Memorial Catholic High School, it would be close to SR-98 and V.V. Williams intersection which would be a signalized intersection and would have a pedestrian phase.

In case of Mains Elementary School, it will be close to Rte 98 and Eady Ave. intersection which is a signalized intersection and will remain so with a pedestrian phase.

In case of Enrique Camarena Junior High School, it will be close to SR-98 and Kloke Ave. intersection which is a signalized intersection and will remain so with a pedestrian phase.

The proximity of schools within the project foot print does not warrant addition of Pedestrian Overcrossings. Based on California Manual of Uniform Traffic Control Devices (MUTCD) guidance, the existing and proposed pedestrian crossings for SR 98 project are adequate. A Pedestrian overcrossing should be considered only when an at-grade pedestrian crossing is not satisfactory.

The specified location, SR-111 and All American Canal, is 1/2 mile north of SR-98 and is outside of project limits.
CHAPTER 4 – LIST OF PREPARERS

This IS/EA was prepared by the San Diego Region of the California Department of Transportation (Caltrans). The following Caltrans staff prepared this document.

Ambrosi, Rafael - Environmental Engineering/Air Studies; MS Civil Engineering (post date May 2008), San Diego State University (SDSU); MS Computer Science, SDSU; BS Bioengineering, University of California San Diego (UCSD), 6 months Caltrans experience.

Barron, Claudia – Senior Graphic Artist, Document graphics, B.A. Fine Arts and Illustration, 17 years Caltrans experience.

Bell, Helene - Landscape Architect # 3805, AA in Ornamental Horticulture, 29 years Caltrans experience, 10 years NPDES/Stormwater experience, 10 years International Erosion Control Association member.

Bentz, Jeff – Landscape Associate; Master of Landscape Architecture, University of CA Berkeley; Bachelor of Architecture, University of NE Lincoln; 30 years experience, 9 years Caltrans experience.

Clayton, Jacque - Air Quality & Noise Specialist; A.S. Construction Inspection, Southwestern College; 25 years experience, 16 years Caltrans experience.

Crafts, Karen – District Archaeologist, Associate Environmental Planner (Archaeology); B.A. Anthropology; 27 years Caltrans experience.

Dowda, Jayne – Senior Transportation Engineer; B.S. Civil Engineering; 7 years of environmental engineering experience.

Estrada, Olga – Associate Environmental Planner, Document Writer; B.A. Psychology, 17 years Caltrans experience, 3 years as environmental generalist.

Hoang, Anh - Transportation Engineer; Bachelor of Science, San Diego State University; 9 years Caltrans experience.

Johnson, Sandy - Senior Transportation Planner, Regional Air Quality, 16 years Caltrans experience.

Kloth, Joel – Hazardous Waste Specialist; B.S. in Geology, California Lutheran University; 25+ years experience in environmental; 7 + years Caltrans experience.
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Mamdani, Kazim - Design Manager, Design Study; B.S. Civil Engineering from University of Texas; 18 years Caltrans experience.

Nagy, David – Environmental Branch Chief, Senior Environmental Planner, BS Forestry and Natural Resources Management from California Polytechnic State University; 9 years Caltrans experience.

Orso, Mario – Project Manager, BS Civil Engineering, 18 years Caltrans experience.

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Trudell, Michelle - Associate Environmental Planner; B.A. Environmental Studies, University of California Santa Barbara; Master of City Planning, San Diego State University; 10 years of professional experience with Caltrans.

Wiedemeier, Melisa L - P.E. Transportation Engineer

Win, Sai - Transportation Engineer, Project Engineer; B.S Civil Engineering, Cal Poly Pomona University; 7 years as a Professional Engineer, 10 years of Caltrans Experience.
### CHAPTER 5 – DISTRIBUTION LIST

| The Honorable Barbara Boxer  
US Senators  
600 B Street, Ste 2240  
San Diego, CA 92101 |
|---------------------------|
| The Honorable Dianne Feinstein  
US Senator  
750 B Street, Ste 1030  
San Diego, CA 92101 |
| State Assembly 80th District  
Bonnie Garcia  
1450 S. Imperial Avenue  
El Centro, CA 92243 |
| State Senator 40th District  
Denise Ducheny  
1224 State Street, Ste D  
El Centro, CA 92243 |
| US Representative 51st District  
Bob Filner  
1101 Airport Road, Ste D  
Imperial, CA 92251 |
| US Department of Transportation  
FHWA South Region  
CA Division Attn: Cesar Perez  
650 Capitol Mall, Ste 4-100  
Sacramento, CA 95814 |
| City of Calexico  
City Clerk Lourdes Cordova  
City Of Calexico  
608 Heber Avenue  
Calexico, CA 92231 |
| Mayor Louis Fuentes  
City of Calexico  
City Council Chambers  
608 Heber Avenue  
Calexico, CA 92231 |
| City of Calexico  
City Manager Ralph Velez  
City Council Chambers  
608 Heber Avenue  
Calexico, CA 92231 |
| County of Imperial  
City Clerks Office  
940 Main Street, Ste 209  
El Centro, CA 92243 |
| Imperial Valley Board of Supervisors  
District 1 - Victor M. Carrillo  
940 Main Street  
EL Centro, CA 92243 |
| General Services  
San Diego Field Office  
880 Front Street, Ste 4236  
San Diego, CA 92101-8897 |
| Imperial Valley Association of Governments  
940 W. Main Street, Ste. 208  
El Centro, CA 92243 |
| Imperial County Air Pollution Control District (APCD)  
150 South 9th Street  
APCO - Stephen Birdsall  
El Centro, CA 92243-2801 |
| Southern California Association of Governments  
818 W. Seventh Street, 12th Floor  
Los Angeles, CA 90017 |
| US Fish and Wildlife  
Attn: Kurt Roblek  
6010 Hidden Valley Road  
Carlsbad, CA 92001 |
| Imperial Irrigation District  
333 E Barioni  
Imperial, CA 92251 |
| State Clearing House  
Office of Planning & Research  
1400 Tenth Street  
Sacramento, CA 95814 |
| Secretary Resource Agency  
1416 Ninth Street, Ste 1311  
Sacramento, CA 95814 |
| CA Department of Fish & Game  
4949 Viewridge Avenue  
San Diego, CA 92123 |
| CA Department of Fish & Game Regional Office  
3602 Inland Empire Boulevard, Suite C-220  
Ontario, CA 91764 |
| Camarena Memorial Library  
850 Encinas Avenue  
Calexico, CA 92231 |
| CHP – Border Division  
El Centro (625)  
2331 Hwy, 86  
Imperial, CA 92251 |
| Calexico Unified School District  
901 Andrade Avenue  
Calexico, CA 92231 |
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<tr>
<th>Imperial County Free Library System</th>
<th>Director</th>
<th>Colorado River Basin Regional Water Quality Board</th>
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<tr>
<td>Heber Branch</td>
<td>Director</td>
<td>City of Calexico, Director Planning &amp; Development Services</td>
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<tr>
<td>1078 Dogwood Road, Ste 105</td>
<td>CA Department of Water Resources</td>
<td>Armando G. Villa</td>
</tr>
<tr>
<td>Heber, CA 92249-1530</td>
<td>1416 - 9th Street, Rm 1115-1</td>
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<tr>
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<th>Chair</th>
<th>Executive Officer</th>
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<td>State Water Resources Control Board</td>
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<td>P.O. Box 2815</td>
<td>Sacramento, CA 95825-8202</td>
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<tbody>
<tr>
<td>836 West Main Street</td>
<td>13181 Crossroads Pkwy No.</td>
<td>City of Industry, CA 91746</td>
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<tr>
<th>Director</th>
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<tr>
<td>CA Department of Parks &amp; Recreation</td>
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<td>CA Department of Conservation</td>
</tr>
<tr>
<td>1416 9th Street</td>
<td>California Air Resources Board</td>
<td>801 K Street, MS 24-01</td>
</tr>
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<th>Mayor Pro Tem David B. Quzan</th>
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<td>Los Angeles District</td>
<td>State Water Resources</td>
<td>City of Calexico</td>
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<td>Los Angeles, CA 90017</td>
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<td>Calexico, CA 92231</td>
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| Council Member John Moreno                        | Council Member Luis J. Castro | Council Member Daniel Romero |
| City of Calexico                                  | City of Calexico             | City of Calexico |
| City Council Chambers                             | City Council Chambers        | City Council Chambers |
| 608 Heber Avenue                                  | 608 Heber Avenue             | 608 Heber Avenue |
| Calexico, CA 92231                                | Calexico, CA 92231           | Calexico, CA 92231 |

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<tr>
<th>Calexico Unified School District</th>
<th>Blanche Charles Elementary School</th>
<th>Mains Elementary School</th>
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<tr>
<td>901 Andrade Avenue</td>
<td>1201 Kloke Road</td>
<td>655 W. Sheridan</td>
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<th>Rockwood Elementary School</th>
<th>William Moreno Jr. High School</th>
<th>Vincent Memorial High School</th>
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<tr>
<td>1000 Rockwood Avenue</td>
<td>1202 Kloke Road</td>
<td>525 W. Sheridan</td>
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<th>CA Public Utilities Commission</th>
<th>US General Services Administration</th>
<th>Southern California Gas</th>
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<tbody>
<tr>
<td>San Francisco Office (Headquarters)</td>
<td>Pacific Rim Region (9)</td>
<td>Centralized Correspondence</td>
</tr>
<tr>
<td>505 Van Ness Avenue</td>
<td>450 Golden Gate Avenue</td>
<td>P.O. Box 3150</td>
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<tr>
<td>San Francisco, CA 94102</td>
<td>San Francisco, CA 94102</td>
<td>San Dimas, CA 91773</td>
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</table>
Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or compensation measures under the appropriate topic headings in Chapter 2.

**Project Title:**
State Route 98 Widening Project

**Lead Agency Name and Address:**
California Department of Transportation, District 11
4050 Taylor Street
San Diego, CA 92110

**Contact Person and Phone Number:**
Olga Estrada, Environmental Planner, Environmental Division (619) 688-0172

**Project Location:**
The proposed project is located on SR-98 in Calexico in Imperial County, from KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6)

**Project Sponsor:**
California Department of Transportation, District 11
4050 Taylor Street
San Diego, CA 92110

**General Plan Designation:**
The project area is located within the SR-98 right of way. There is no adopted general plan land use designation for the property. The roadway is shown as a circulation element road in the City General Plan.

**Zoning:**
The property is State right of way. The areas outside state right of way are zoned commercial highway, industrial, residential apartment or single family and open space.

**Description of Project:**
The California Department of Transportation (Caltrans) and the City of Calexico have worked together to develop a solution to address existing and anticipated traffic congestion on SR-98.

The project proposes to improve traffic operations, enhance bicycle and pedestrian safety and access, and improve drainage performance on SR-98. The project is located on SR-98 from .35 kilometers (0.22 miles) west of Dogwood Road to Rockwood Avenue, KP 48.2 to KP 52.5 (PM 30.0 to PM 32.6). The project length is 2.66 miles.

The road would be widened from two to four lanes from Dogwood Road through just west of Ollie Avenue, and from four to six lanes from Ollie Avenue through SR-111. In addition, the
The proposed lane widths are a standard 3.6 meters (12 feet) and a raised median that averages 4.3 meters (14 feet) in width would be incorporated throughout the length of the project.

There would also be new intersections constructed or right-turn lanes lengthened to create access to new developments. Some intersections would be closed with the addition of the raised median. Left turn movements at these intersections onto SR-98 would be restricted by the addition of the raised median. The proposed improvements would allow for better flow of traffic on SR-98 and reduce traffic congestion on the surface streets.

Several intersections within the project limits would be signalized. The intersections that are currently unsignalized that would be signalized as a result of this project. Existing intersections that are currently signalized would remain so.

Sidewalks are proposed along either side of SR-98 for the entire length of the project to encourage pedestrian use as well as enhance the safety of pedestrians. This alternative would also incorporate a new Class II Bike Lane in order to promote bicycle use as well as enhance bicyclist safety. A Class II Bike Lane provides a striped lane for one-way bike travel on a street or highway.

The project proposes to include a standard drainage system. Six detention basins would be constructed along the project at various locations. The capacity of the basins would be sized to hold the volume generated by a 100-year, 24-hour storm.

**Surrounding Land Uses and Setting:**
Calexico is characterized by a low-rise sprawling development pattern with a variety of land uses. Calexico is currently not fully built out and contains both parcels in development and in the planning stage. The Imperial County General Plan (2003) has designated land adjacent to SR-98 as Urban land east of Dogwood Road and as Agricultural west of Dogwood Road. Land uses adjacent to the proposed project have been identified as Low Density Residential, High Density Residential, and Commercial Neighborhood, Public Facility and Industrial by the City of Calexico General Plan Update.

**Other Agencies Whose Approval Is Required:**
No outside agency approvals are required for this project.

**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.

- [x] Aesthetics
- [ ] Agriculture Resources
- [ ] Air Quality
- [ ] Biological Resources
- [ ] Cultural Resources
- [ ] Geology/Soils
- [ ] Hazards & Hazardous Materials
- [x] Hydrology/Water Quality
- [ ] Land Use/Planning
- [ ] Mineral Resources
- [ ] Noise
- [ ] Population/Housing
- [x] Public Services
- [ ] Recreation
- [ ] Transportation & Traffic (Bicycle)
- [ ] 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.

- [x] 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.

______________________________  __________________________
Signature                      Date

______________________________  __________________________
Printed Name                    For
This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

<table>
<thead>
<tr>
<th>I. AESTHETICS -- Would the project:</th>
<th>Less Than Significant Impact</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>[ ]</td>
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<td>X</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>X</td>
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<tr>
<td>c) Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>[ ]</td>
<td>X</td>
<td>[ ]</td>
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<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>X</td>
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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 Dept. 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 non-agricultural use? | [ ] | [ ] | [ ] | X |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | [ ] | [ ] | [ ] | X |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | [ ] | [ ] | [ ] | X |

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:
Less Than Significant  
Potentially Significant  
With Mitigation Incorporation  
Less Than Significant  
Impact  
Impact  
Impact

a) Conflict with or obstruct implementation of the applicable air quality plan?  

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?  

e) Create objectionable odors affecting a substantial number of people?  

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 US 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?
V. CULTURAL RESOURCES -- Would the project:

<table>
<thead>
<tr>
<th></th>
<th>Less Than Significant Impact</th>
<th>Potentially Significant With Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b)</td>
<td>Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c)</td>
<td>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d)</td>
<td>Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

VI. GEOLOGY AND SOILS -- Would the project:

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<tr>
<th></th>
<th>Less Than Significant Impact</th>
<th>Potentially Significant With Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>i)</td>
<td>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 or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>ii)</td>
<td>Strong seismic ground shaking?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>iii)</td>
<td>Seismic-related ground failure, including liquefaction?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>iv)</td>
<td>Landslides?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b)</td>
<td>Result in substantial soil erosion or the loss of topsoil?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c)</td>
<td>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?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d)</td>
<td>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?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>e)</td>
<td>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?</td>
<td>☒</td>
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</table>
VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:

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<th>Less Than Significant Impact</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Mitigation Incorporation</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b)</td>
<td>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?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c)</td>
<td>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d)</td>
<td>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?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>e)</td>
<td>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?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
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</tr>
<tr>
<td>f)</td>
<td>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?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
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<tr>
<td>g)</td>
<td>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>h)</td>
<td>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?</td>
<td>☒</td>
<td>☐</td>
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</table>

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

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<th>Less Than Significant Impact</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Mitigation Incorporation</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a)</td>
<td>Violate any water quality standards or waste discharge requirements?</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
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</tr>
<tr>
<td>b)</td>
<td>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)?</td>
<td>☒</td>
<td>☐</td>
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</table>
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?  

<table>
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<th>Potentialy Significant Impact</th>
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</table>

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?  

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<th>Potentialy Significant Impact</th>
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</table>

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?  

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f) Otherwise substantially degrade water quality?  

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</table>

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?  

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</table>

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?  

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</table>

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?  

<table>
<thead>
<tr>
<th>Potentialy Significant Impact</th>
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</table>

j) Inundation by seiche, tsunami, or mudflow?  

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<tr>
<th>Potentialy Significant Impact</th>
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<th>Less Than Significant Impact</th>
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</thead>
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</table>

IX. LAND USE AND PLANNING - Would the project:  

a) Physically divide an established community?  

<table>
<thead>
<tr>
<th>Potentialy Significant Impact</th>
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<th>No Impact</th>
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<tr>
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<td>X</td>
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</tbody>
</table>

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?  

<table>
<thead>
<tr>
<th>Potentialy Significant Impact</th>
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<tbody>
<tr>
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</table>

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?  

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<thead>
<tr>
<th>Potentialy Significant Impact</th>
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<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tr>
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<td>X</td>
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</table>

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?  

<table>
<thead>
<tr>
<th>Potentialy Significant Impact</th>
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<tbody>
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</tbody>
</table>

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?  

<table>
<thead>
<tr>
<th>Potentialy Significant Impact</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
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? ☒ ☐ ☐ ☐

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? ☒ ☐ ☐ ☐

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? ☒ ☐ ☐ ☐

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)? ☒ ☐ ☐ ☐

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? ☒ ☐ ☐ ☐
XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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? [ ] [ ] [ ] [X]
- Police protection? [ ] [ ] [ ] [X]
- Schools? [ ] [ ] [X] [ ]
- Parks? [ ] [ ] [X] [ ]
- Other public facilities? [ ] [ ] [ ] [X]

XIV. RECREATION –

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? [ ] [ ] [X] [ ]

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? [ ] [ ] [ ] [X]

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)? [ ] [ ] [ ] [X]

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? [ ] [ ] [ ] [X]

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? [ ] [ ] [ ] [X]

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? [ ] [ ] [ ] [X]

e) Result in inadequate emergency access? [ ] [ ] [ ] [X]

f) Result in inadequate parking capacity? [ ] [ ] [ ] [X]
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

XVI. UTILITIES AND SERVICE SYSTEMS –

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

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?

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

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?

f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

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?

b) Does the project have impacts that are individually limited, but cumulatively considerable?

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?
Appendix B

Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA  94273-0001
PHONE (916) 654-5266
FAX (916) 654-6008
TTY (916) 653-4086

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

*Caltrenz improves mobility across California*
<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DESIGN KICK-OFF</strong></td>
<td>Project Manager</td>
<td>Beginning of 1 phase</td>
<td></td>
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<tr>
<td><strong>PRE-LOG-IN REVIEW</strong></td>
<td>Design</td>
<td>90% Plans</td>
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<tr>
<td><strong>ENVIRONMENTAL PS&amp;E REVIEW</strong></td>
<td>Environmental Coordinator</td>
<td>District PS&amp;E Circulation</td>
<td></td>
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</tr>
<tr>
<td><strong>IN-HOUSE PRECONSTRUCTION MEETING</strong></td>
<td>Project Manager</td>
<td>Contract Award</td>
<td></td>
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<tr>
<td><strong>TRANSFER RESIDENT ENGINEER BOOK</strong></td>
<td>Project Engineer (RE)</td>
<td>Preconst Meeting</td>
<td></td>
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</tr>
<tr>
<td><strong>PREJOB MEETING WITH CONTRACTOR</strong></td>
<td>Construction</td>
<td>Beginning of Construction</td>
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<tr>
<td><strong>ENVIRONMENTAL COMPLIANCE REVIEW</strong></td>
<td>Construction</td>
<td>Safety Review</td>
<td></td>
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<tr>
<td><strong>DESIGN FEATURES MEMORANDUM</strong></td>
<td>Construction / Design</td>
<td>Post Construction</td>
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</table>

**BIOLOGY**

Preconstruction surveys are required within 30 days prior to initial ground-disturbing activity to avoid impacts to nesting burrowing owls from construction of the project. During focused 2006 surveys, one burrowing owl burrow was detected within the project impact area. If this burrow cannot be avoided, and/or burrowing owls are detected within 500 feet of project construction, mitigation measures recommended in guidelines provided by the California Burrowing Owl Consortium (CBOC) and the California Department of Fish and Game (CDFG) should be implemented. These measures may include preparing a Burrowing Owl Study for submission to the CDFG, and relocation of burrowing owls prior to the breeding season (i.e., prior to the period from 1 February to 31 August). Final mitigation would be determined through coordination between Caltrans and CDFG.

- R.E./ Qualified Biologist/Construction: Preconstruction/Const.
- Qualified Biologist: Preconstruction/Const.
<table>
<thead>
<tr>
<th>Task and Brief Description</th>
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</thead>
<tbody>
<tr>
<td>Eucalyptus and other ornamental trees found within 500 feet of the project site provide potential nesting sites for raptors and other passerine birds. Any trees or large shrubs to be removed as part of the project would be cleared outside of the breeding season (i.e., avoid the period from 1 February to 31 August). If this time window is not feasible, a staff biologist must be notified prior to construction to locate any possible nesting birds, and direct field crews accordingly.</td>
<td>Qualified Biologist/R.E.</td>
<td>Preconst.</td>
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<tr>
<td><strong>BIOLOGY - Invasive Species</strong></td>
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<tr>
<td>* Revegetation of the slopes would require maintenance to keep the weed species from reinvading the new slopes.</td>
<td>Resident Engineer/Construction</td>
<td>Const</td>
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<tr>
<td>* All heavy equipment would be washed and cleaned of debris prior to entering the project area to minimize spread of invasive weeds.</td>
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<tr>
<td>* No species on the Invasive Plant Council list would be planted onsite.</td>
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<tr>
<td>* The right of way would be landscaped with non-invasive species as part of the project.</td>
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<tr>
<td><strong>AIR QUALITY</strong></td>
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<tr>
<td>Caltrans Standard Specifications 10-Dust Control, 17-Watering, and 18-Dust Palliative shall be incorporated into project specifications.</td>
<td>Resident Engineer/Construction</td>
<td>During Construction</td>
<td></td>
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<tr>
<td>Idling Restrictions. Idling of diesel-powered vehicles and equipment shall not be permitted during periods of nonactive vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:</td>
<td>Resident Engineer/Construction/</td>
<td>Const</td>
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<tr>
<td>• When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;</td>
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<tr>
<td>• When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;</td>
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<tr>
<td>• To bring the equipment to the manufacturer’s recommended operating temperature;</td>
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<tr>
<td>• When the ambient temperature is below 40°F or above 85°F; or • When equipment is being repaired.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### COMMUNITY

<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>To offset the temporary disruptions to circulation during construction, a Transportation Management Plan (TMP) would be implemented.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td>Initial Date</td>
</tr>
<tr>
<td>Detours would be developed to address access closures along SR 98, and signage for directions to businesses would be included as part of the TMP.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicular and pedestrian access to all residences, businesses, and community serving facilities along SR-98 would be maintained at all times.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper Best Management Practices would be required to reduce dust generation.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Views of G &amp; G Auto Sales/U-Save Car and Truck Rental and Rios Auto Sales would be required so that view of the vehicles on display would be maintained during construction. Vehicular and pedestrian access would need to be maintained for the business as well.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CULTURAL

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains would contact Karen Crafts, District 11 Environmental Branch, so that they may work with the MLD on the respectful treatment and disposition of the remains.

### WATER QUALITY/NPDES

Best Management Practices (BMPs) incorporated during design and implemented during construction would minimize the potential for erosion during project construction and post construction. Three categories of BMPs address the potential for erosion during construction and post construction through the implementation of Temporary Construction Site BMPs, Design Pollution Prevention BMPs and Permanent Treatment BMPs.
<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Temporary Construction Site BMPs to be used on Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction BMPs should include: implementation of erosion control such as fiber matrices and hydraulic mulch to protect graded slopes, and the usage of sediment control devices such as silt fences and fiber rolls to prevent sediment pollution. These devices should remain in place until construction is complete and there is no potential for erosion and sediment transportation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Construction Site BMPs that have been designated include: Hydraulic Mulch; Fiber Rolls; Street Sweeping; Concrete Washout Facilities; Drainage Inlet Protection; and Silt Fences.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proposed Design Pollution Prevention BMPs to be used on the Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Pollution Prevention BMPs are permanent practices that address the design objective to prevent downstream erosion, to stabilize disturbed soil areas and to maximize vegetated surfaces.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The following concentrated flow conveyance systems are proposed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 6 basins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 23 concrete headwalls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 2,900 meters of underground storm drains (various sizes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil stabilization BMPs would be utilized to prevent soil particles from detaching and becoming suspended in storm water and non-storm water runoff. These BMPs may include the following:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The preservation of existing vegetation where feasible.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The implementation of temporary soil stabilization measures at regular intervals throughout the rainy season.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The stabilization of non-active areas within 14 days of cessation of construction activities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Implementation of slopes/surface protection systems would be implemented by disturbing slopes only when necessary, minimizing cut and fill areas to reduce slope lengths, providing cut and fill slopes flat enough to allow re-vegetation, and round and shaping slopes.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Proposed Permanent Treatment BMPs to be used on the Project

Since the existing drainage system would be altered, treatment BMPs must be analyzed. Basins - A basin allows temporary storage of excess storm water to be held for the short term and then slowly drain when water levels in the receiving channel recede. The proposed drainage improvements include a series of six basins that would collect 66% of the project’s roadway runoff and drain to either the All American Canal Drains #9 and #10 or be pumped to the existing 450mm (18 inch) CMP at the intersection of Kloke Road and SR-98.

<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Permanent Treatment BMPs to be used on the Project</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance BMPs (Drain Inlet Stenciling)</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Water Pollution Control Plan would be prepared to determine the minimum control requirements to be included in the SWPPP</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard erosion control practices will be implemented to minimize soil erosion following construction activities. Typical measures utilized during construction include applications of fiber rolls for slope stability and sediment control, temporary drainage inlet protection, temporary concrete washouts for concrete spoils, street sweeping, contour grading, temporary silt fence, and temporary hydraulic mulch.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent erosion and sedimentation control features may include but will not be limited to the following: permanent fiber rolls and improvement of drainage facilities to handle excess runoff.</td>
<td>Design</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Task and Brief Description

#### VISUAL/LANDSCAPE

**To reduce the visual impact, the project would include: Medians:**
- The street medians would combine fan palms with flowering accent trees, thematic accent shrubs, rocks and decomposed granite to provide a focal interest for the street.
- Due to traffic safety restrictions where the posted speed limit is less than 35 MPH, tall trees such as palms would be included in the median. Where the posted speed limit is over 35 MPH, "small trees" would be planted. Caltrans defines "small trees" as trees with trunks less than 4 inches (10 centimeters) diameter after 10 years of growth.
- Due to traffic safety restrictions, medians greater than 8 feet (2.4 meters) wide and less than 12 feet (3.6 meters) wide would be planted with “small trees” (Defined above).
- Median less than 6 feet (1.8 meters) wide are too narrow for planting and would be paved with colored stamped concrete.
- Rock cobble material would be cemented in place at the transition from stamped concrete to the decomposed granite.

<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkways:</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Street trees (size of the trees may range from large shade trees or palms to small &quot;accent&quot; trees) would be planted on both sides of SR-98 to provide shade and visual relief.</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Due to the overhead power lines on both sides of the street, the street trees must be small in scale to avoid utility conflicts.</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The ground surface would be covered with decomposed granite to minimize wind erosion and provide an attractive appearance.</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Shrubs and accent plants would be planted only at key locations, including the intersections with SR-111, Cesar Chavez Boulevard, the All American Canal, Kloke Road, and Dogwood Road.</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* At accent locations, cobble rock paving would be installed along the sidewalk to add interest. A 5 feet (1.5 meters) wide sidewalk would be constructed adjacent to the street curbs. Rock is to be set in concrete.</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Where City maintained lawn exists, lawn would be installed in the adjacent project area to maintain consistency.</td>
<td>Design/Landscape Architect</td>
<td>Const.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX C ENVIRONMENTAL COMMITMENTS RECORD (ECR)

**11-Imperial County - 98**

**KP 48.2 - 52.5**

**PM 30.0 - 32.6**

**080200**

**Hwy Widening**

<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storm Water Collection Basins:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The linear basins along the right-of-way would hold storm run-off on a temporary basis. Caltrans requires that these basins should not be accessible to the public, and that a minimum 4 feet (1.2 meters) height perimeter fence surround each basin for safety.</td>
<td>Design/Landscape Architect</td>
<td>Const</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The sides of the basin are typically 2:1 in steepness, and would be covered with decorative cobble or fractured rock cemented in place.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The basin fence is to be a durable, commercially produced decorative 48 inches (121.9 cm) high metal fence painted medium blue to evoke an image of water or dark, subtle green to reinforce and extend the color of the plants.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Occasional random drifts of desert vegetation such as Agave or Yucca would be planted in the upper half of the basins to add interest. These would require a planting pocket in the slope paving, and irrigation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Irrigation Concept:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The plant materials would be irrigated using a low volume, automatically controlled irrigation system consisting of bubblers, emitters or low volume spray at each shrub and tree location.</td>
<td>Design/Landscape Architect</td>
<td>Const</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Irrigation application would be controlled by a flexible programmable irrigation controller with rain sensor, to detect excess flow and shut off the system master control valve in response to line breaks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The water source would be the City domestic water, unless recycled or irrigation water becomes available. The system would be designed to conserve water, while providing for plant health and growth.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inert Groundcover</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The following inert groundcovers are proposed for the project:</td>
<td>Design/Landscape Architect</td>
<td>Const</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Rock Cobble, River Rock (natural tan and Iron oxide colors) for accent areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Gravel for maintenance access roads.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Decomposed granite.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Stamped concrete for narrow medians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TRAFFIC

A Transportation Management Plan (TMP) would be prepared to minimize the impact of construction activities on highway users. Preceding roadway design, a final TMP, would be prepared to reduce potential construction-related traffic conflicts, detours, and delays. The elements to be considered for the highway-widening project include, but are not limited to the following:

The TMP may include the following strategies:
- Development of a Public Awareness Campaign prior to and during construction to inform residents and motorists of construction activities.
- Real-time communications with motorists, including changeable message signs and highway advisory radio announcements.
- Provisions for tow truck service during peak-hours.
- Placement of appropriate signs, cones, and barricades near construction to increase safety and driver certainty.
- Development of plans that ensure emergency access and access to existing residences and businesses within the construction area.
- Inclusion of construction activities on the Caltrans Highway Information Network (CHIN), a public information line. (1-800-427-ROAD).
- Signage for directions to businesses during construction.

<table>
<thead>
<tr>
<th>Task and Brief Description</th>
<th>Responsible Branch / Staff</th>
<th>Timing / Phase</th>
<th>Action Taken to Comply with Task</th>
<th>Task Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design/Traffic</td>
<td>Const</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX  D

**CNDDDB Data Query - Sensitive Plant & Animal Species Occurring in the Region**

<table>
<thead>
<tr>
<th>Record</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Element Code</th>
<th>Federal Status</th>
<th>State Status</th>
<th>CDFG</th>
<th>CNPS List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>Abronia villosa var. aurita</em></td>
<td>chaparral sand-verbena</td>
<td>PDNYC010P1</td>
<td>None</td>
<td>None</td>
<td>1B.1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><em>Athene cunicularia</em></td>
<td>burrowing owl</td>
<td>ABNSB10010</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><em>Bufo alvarius</em></td>
<td>Colorado river toad</td>
<td>AAABB01010</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><em>Buteo regalis</em></td>
<td>ferruginous hawk</td>
<td>ABNKC19120</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><em>Chamaesyce abramsiana</em></td>
<td>Abrams' spurge</td>
<td>PDEUP0D010</td>
<td>None</td>
<td>None</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><em>Dendroica petechia brewsteri</em></td>
<td>yellow warbler</td>
<td>ABPBX03018</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><em>Eucnide rupestris</em></td>
<td>rock nettle</td>
<td>PDLOA02020</td>
<td>None</td>
<td>None</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><em>Eumops perotis californicus</em></td>
<td>western mastiff bat</td>
<td>AMACD02011</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td><em>Imperata brevifolia</em></td>
<td>California satintail</td>
<td>PMPOA3D020</td>
<td>None</td>
<td>None</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td><em>Lasiurus xanthinus</em></td>
<td>Western yellow bat</td>
<td>AMACC05070</td>
<td>None</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td><em>Mentzelia hirsutissima</em></td>
<td>hairy stickleaf</td>
<td>PDLOA030K0</td>
<td>None</td>
<td>None</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td><em>Nyctinomops femorosaccus</em></td>
<td>pocketed free-tailed bat</td>
<td>AMACD04010</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td><em>Nyctinomops macrotis</em></td>
<td>big free -tailed bat</td>
<td>AMACD04020</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td><em>Pholisma sonorae</em></td>
<td>sand food</td>
<td>PDLNN02020</td>
<td>None</td>
<td>None</td>
<td>1B.2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td><em>Phrynosoma mcallii</em></td>
<td>flat-tailed horned lizard</td>
<td>ARACF12040</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td><em>Taxidea taxus</em></td>
<td>American badger</td>
<td>AMAJF04010</td>
<td>None</td>
<td>None</td>
<td>SC</td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX E

**PLANT SPECIES OBSERVED WITHIN THE SR-98 MINIMAL IMPACT PROJECT SITE**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MONOCOTS</strong></td>
<td></td>
</tr>
<tr>
<td>Arecaceae</td>
<td></td>
</tr>
<tr>
<td>Purse-like fruit, ornamental</td>
<td></td>
</tr>
<tr>
<td>Poaceae</td>
<td></td>
</tr>
<tr>
<td><em>Arundo donax</em></td>
<td>Giant reed</td>
</tr>
<tr>
<td>Avena barbata</td>
<td>Wild oat</td>
</tr>
<tr>
<td><em>Cynodon dactylon</em></td>
<td>Bermuda grass</td>
</tr>
<tr>
<td><strong>DICOTS</strong></td>
<td></td>
</tr>
<tr>
<td>Aizoaceae</td>
<td></td>
</tr>
<tr>
<td><em>Trianthema portulacastrum</em></td>
<td>Horse-purslane</td>
</tr>
<tr>
<td>Amaranthaceae</td>
<td></td>
</tr>
<tr>
<td><em>Atriplex elegans</em></td>
<td>Wheelscale</td>
</tr>
<tr>
<td><em>Atriplex lentiformis</em></td>
<td>Big saltbush</td>
</tr>
<tr>
<td>Chenopodium sp.</td>
<td>Goosefoot</td>
</tr>
<tr>
<td><em>Salsola tragus</em></td>
<td>Russian-thistle</td>
</tr>
<tr>
<td>Asteraceae</td>
<td></td>
</tr>
<tr>
<td><em>Coneza canadensis</em></td>
<td>Horseweed</td>
</tr>
<tr>
<td><em>Lactuca serriola</em></td>
<td>Prickly lettuce</td>
</tr>
<tr>
<td>Fabaceae</td>
<td></td>
</tr>
<tr>
<td><em>Prosopis sp.</em></td>
<td>Mesquite (ornamental)</td>
</tr>
<tr>
<td>Heliotropaceae</td>
<td></td>
</tr>
<tr>
<td><em>Heliotropium curassavinum</em></td>
<td>Salt heliotrope</td>
</tr>
<tr>
<td>Malvaceae</td>
<td></td>
</tr>
<tr>
<td><em>Malvella leprosa</em></td>
<td>Alkali mallow</td>
</tr>
<tr>
<td>Myrtaceae</td>
<td></td>
</tr>
<tr>
<td><em>Eucalyptus sp.</em></td>
<td>Eucalyptus</td>
</tr>
<tr>
<td>Portulacaceae</td>
<td></td>
</tr>
<tr>
<td><em>Portulaca oleracea</em></td>
<td>Common purslane</td>
</tr>
<tr>
<td>Salicaceae</td>
<td></td>
</tr>
<tr>
<td><em>Salix sp.</em></td>
<td>Willow</td>
</tr>
<tr>
<td>Solanaceae</td>
<td></td>
</tr>
<tr>
<td><em>Solanum sp.</em></td>
<td>Nightshade</td>
</tr>
<tr>
<td>Tamaricaceae</td>
<td></td>
</tr>
<tr>
<td><em>Tamarix sp.</em></td>
<td>Salt-cedar</td>
</tr>
<tr>
<td><strong>CONIFERS</strong></td>
<td></td>
</tr>
<tr>
<td>Pinaceae</td>
<td></td>
</tr>
<tr>
<td><em>Pinus sp.</em></td>
<td>Pine (ornamental)</td>
</tr>
</tbody>
</table>

* nonnative species
## APPENDIX F
### WILDLIFE SPECIES OBSERVED WITHIN PROJECT SITE

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FISH</strong></td>
<td></td>
</tr>
<tr>
<td>Family Poeciliidae</td>
<td></td>
</tr>
<tr>
<td><em>Gambusia affinis</em></td>
<td>mosquitofish</td>
</tr>
<tr>
<td><strong>CICONIIFORMES</strong></td>
<td><strong>HERONS, STORKS, VULTURES, AND RELATIVES</strong></td>
</tr>
<tr>
<td>Family Ardeidae</td>
<td></td>
</tr>
<tr>
<td><em>Butorides virescens</em></td>
<td>green heron</td>
</tr>
<tr>
<td><strong>FALCONIFORMES</strong></td>
<td><strong>DIURNAL BIRDS OF PREY</strong></td>
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<tr>
<td>Family Falconidae</td>
<td></td>
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<tr>
<td><em>Falco sparverius</em></td>
<td>American kestrel</td>
</tr>
<tr>
<td><strong>COLUMBIFORMES</strong></td>
<td><strong>PIGEONS AND DOVES</strong></td>
</tr>
<tr>
<td>Family Columbidae</td>
<td></td>
</tr>
<tr>
<td><em>Columba livia</em></td>
<td>rock dove</td>
</tr>
<tr>
<td><em>Columbina passerine</em></td>
<td>ground dove</td>
</tr>
<tr>
<td><em>Zenaida macroura</em></td>
<td>mourning dove</td>
</tr>
<tr>
<td><strong>STRIGIFORMES</strong></td>
<td><strong>OWLS</strong></td>
</tr>
<tr>
<td>Family Strigidae</td>
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</tr>
<tr>
<td><em>Athene (=Speotyto) cunicularia</em></td>
<td>burrowing owl</td>
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<tr>
<td><strong>APODIFORMES</strong></td>
<td><strong>HUMMINGBIRDS, SWIFTS</strong></td>
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<tr>
<td>Family Apodidae</td>
<td></td>
</tr>
<tr>
<td><em>Calypte anna</em></td>
<td>Anna’s hummingbird</td>
</tr>
<tr>
<td><strong>PASSEERIFORMES</strong></td>
<td><strong>PERCHING BIRDS</strong></td>
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<tr>
<td>Family Tyrannidae</td>
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<tr>
<td><em>Tyrannus verticalis</em></td>
<td>western kingbird</td>
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<tr>
<td><em>Sayornis nigrans</em></td>
<td>black phoebe</td>
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<tr>
<td><em>Sayornis saya</em></td>
<td>Say's phoebe</td>
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<tr>
<td>Family Corvidae</td>
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</tr>
<tr>
<td><em>Corvus corax</em></td>
<td>common raven</td>
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<td>Family Sturnidae</td>
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<tr>
<td><em>Sturnus vulgaris</em></td>
<td>European starling</td>
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<td>Family Emberizidae</td>
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<tr>
<td><em>Pipilo alberti</em></td>
<td>Abert’s towhee</td>
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<tr>
<td><em>Melospiza melodia</em></td>
<td>song sparrow</td>
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<tr>
<td><em>Carpodacus mexicanus</em></td>
<td>house finch</td>
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<tr>
<td><em>Quiscalus mexicanus</em></td>
<td>great-tailed grackle</td>
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<tr>
<td>Family Icteridae</td>
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<tr>
<td><em>Molothrus ater</em></td>
<td>brown-headed cowbird</td>
</tr>
<tr>
<td><em>Sturnella neglecta</em></td>
<td>western meadowlark</td>
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<tr>
<td><strong>CARNIVORA CARNIVORES</strong></td>
<td><strong>domestic dog</strong></td>
</tr>
<tr>
<td>Family Canidae</td>
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<tr>
<td><em>Canis familiaris</em></td>
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</tr>
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</table>


APPENDIX G
List of Technical Studies

Air Quality Impact Analysis
SR-98 Roadway Widening Project
Calexico, California

Prepared by: EDAW, Inc
1420 Kettner Boulevard, Suite 500
San Diego, Ca 92101
December 4, 2007

Visual Impact Assessment
98 West
District 11 – Imperial County – SR- 98
11-Imp-98 KP 48.2/52.5 (PM 30.0/32.6)

Prepared by: Estrada Land Planning, Inc.
755 Broadway Circle, Suite 300
San Diego, California 92101

Natural Environment Study - Minimal Impacts (NESMI)
State Route 98 Widening Project
City of Calexico, Imperial County, California
West of Dogwood Road to Rockwood Avenue

Prepared by: EDAW, Inc
1420 Kettner Boulevard, Suite 500
San Diego, Ca 92101
June 2007

Preliminary Drainage Study
State Route 98
Dokken Engineering
January 2008

Community Impact Assessment
SR 98 Roadway Widening Project
Calexico, California

Prepared by:
EDAW, Inc.
1420 Kettner Boulevard, Suite 620
San Diego, California 92101
January 2008

Geotechnical Design Report
State Route 98
Calexico
Caltrans District 11
Imperial County, California

Prepared by:
Southern California Soil & Testing Inc.
6280 Riverdale Street
San Diego, CA 92120
September 2006

Historic Property Survey Report
Imperial State Route 98
Prepared by Caltrans
November 2007

Final Traffic Volumes/Traffic Operational Report
SR- 98 Widening Update
City Of Calexico, California

Prepared by Linscott, Law & Greenspan (LLG)
April 23, 2007

NOISE STUDY REPORT
State Route 98 Widening Project

Prepared by Parsons
100 West Walnut Street,
Pasadena, California 91124
May 2007

Report of Environmental Site Assessment
For Aerially Deposited Lead
State Route 98
Calexico, CA

Prepared by:
Southern California Soil & Testing Inc.
6280 Riverdale Street
San Diego, CA 92120
March 2006

Draft Preliminary Noise Abatement Decision Report (NADR)
State Route 98 West Widening Project

Prepared by:
Dokken Engineering
December 2007