ATTACHMENT 2

Project Description

SR 710 CORRIDOR MITIGATION PROJECT
CITY OF PASADENA

BACKGROUND AND PROJECT OBJECTIVE

In October 2000, the United States Congress passed the transportation bill H.R. 5394 that funded transportation projects throughout the nation. The bill specifically earmarked a total of $46 million for surface transportation improvements to mitigate traffic congestion in the SR-710 Corridor resulting from the freeway gap. The funds are to be shared by Pasadena, South Pasadena, and El Sereno (Los Angeles), with a total allocation to Pasadena of $24.5 million.

Eight projects in the corridor in the City of Pasadena were identified to specifically mitigate traffic congestion.

PROJECT DESCRIPTIONS

1. California Boulevard Right Turn Lane at Fair Oaks Avenue

A separate right turn lane on eastbound California Boulevard at Fair Oaks Avenue is proposed to improve the intersection capacity and decrease travel time through the intersection. This intersection currently operates at a low level of service during peak travel periods, and the right turn lane will significantly improve the operation of the intersection as well as reduce congestion and delay on a major arterial roadway. The right turn lane will also facilitate the movement of vehicles to the Fair Oaks Avenue travel corridor, encourage the use of Raymond Avenue and facilitate access to the Light Rail station at Fillmore Street/ Del Mar Boulevard. The project location is shown in Figure 1.

The project consists of curb, gutter, street, and sidewalk construction to increase the width of California Boulevard on the south side west of Fair Oaks Avenue from 50 feet to 60 feet to match the pavement width west of the project area. Right-of-way acquisition will be required to construct the proposed improvements. The property owner (Huntington Hospital) has agreed to dedicate the necessary right-of-way to the City.

Project Cost: $400,000

2. Raymond Avenue to SR 110 Connector

The proposed project will improve the connection between the southern terminus of Raymond Avenue and the Pasadena Freeway (SR 110) by widening Glenarm Street between Fair Oaks Avenue and SR 110, constructing an at-grade on-ramp from eastbound Glenarm Street to southbound SR 110, and widening southbound SR 110 to provide an auxiliary lane between the proposed on-ramp and the State Street off-ramp. The project will also include a raised center median on Glenarm Street and modifications to the railroad crossing protection system located west of SR 110. The project will provide additional roadway capacity between the Raymond Avenue corridor and SR 110 to accommodate projected future traffic volumes. This project will encourage the use of Raymond Avenue, which is currently under utilized. The project location is shown in Figure 2.

Widening will be required on the north and south side of Glenarm Street. The widening will be accomplished within the existing right-of-way on the north side and will require acquisition of right-of-way from the Pasadena Department of Water and Power property on the south side of the street. The widening on the south side of the street will impact a number of underground utilities including existing underground power tunnels and other facilities at the Water and Power plant. Utility relocations will be required. Work within Caltrans right-of-way will be required for the proposed on-ramp and auxiliary lane. Work within the Los Angeles County Metropolitan Transportation Authority (MTA) right of way will be required for the railroad crossing modifications.

Project Cost: $6,500,000

3. Lake Avenue/Walnut Street and Hill Avenue/Walnut Street Capacity Enhancements

Lake Street at Walnut Avenue is heavily congested, especially during the afternoon peak period, with motorists destined to SR 210. This project will widen the east side of Lake Avenue from Walnut Street to approximately 300 feet south of Walnut Street to install a northbound right turn lane. This improvement will facilitate the northbound to eastbound right turn movement and encourage the use of Walnut Street as an alternate access to eastbound SR 210 from Hill Avenue or Allen Avenue. In addition, installation of left turn phasing at Hill Avenue will facilitate the traffic movements to access the SR 210 interchange at Hill Avenue. This project will require the acquisition of right-of-way from Ralph's Market. The project location is shown in Figure 3.

Project Cost: $1,000,000

4. Arroyo Parkway Street Enhancements

This project is on Arroyo Parkway between Colorado Boulevard and Glenarm Street. The project length is 6,600 feet (1.25 miles). The project location is shown in Figure 4.

The Arroyo Parkway Street Enhancement project will add Intelligent Transportation Systems to the traffic signal control on Arroyo Parkway for more efficient movement of traffic, includes reconstruction of the concrete roadway and will provide additional betterments such as improved street lighting, pedestrian amenities, sidewalk reconstruction, and landscaping.

This project will improve rideability, improve the roadway to meet current standards and increase pedestrian safety on Arroyo Parkway. Caltrans has relinquished Arroyo Parkway to Pasadena, and two Gold Line transit stations will be built adjacent to Arroyo Parkway. Pedestrian activity is expected to significantly increase as transit routes are adjusted to interface with the Gold Line stations, and a major high school is located east of Arroyo Parkway at Glenarm Street.

Project Cost: $3,600,000

5. Raymond Avenue Widening

This project consists of widening Raymond Avenue between Del Mar Boulevard and Glenarm Street, from the existing width of 56 feet to 60 feet wide. The existing right-of-way width is 80 feet, which will accommodate 10-foot wide parkways in addition to the 60-foot street width. The additional street width will permit four through travel lanes and left turn lanes at the intersections. Also, there are existing power poles along Raymond Avenue within the project limits. The City, in conjunction with the Pasadena Water and Power Department, has developed a citywide priority list for undergrounding overhead electrical systems. The Raymond Avenue corridor is included on the citywide undergrounding priority list. It is anticipated that the design of the Raymond Avenue electric system undergrounding will be developed concurrently with the design of the Raymond Avenue Widening Project. The Pasadena Water and Power Department will prepare the design of the underground electric system. The project location is shown in Figure 5.

The Raymond Avenue widening will increase capacity in the SR 710 corridor between Pasadena and South Pasadena for an interim solution to traffic congestion until the SR 710 freeway gap is constructed.

Project Cost: $4,700,000

6. SR 110 to SR 210 Connector/Marengo Interchange Emphasis

This project will provide improvements to facilitate and connect two-way traffic flow between the 110 Freeway at Arroyo Parkway and the 210 Freeway at Marengo Avenue. The goal of this project is to direct traffic flow between the 110 Freeway at Arroyo Parkway and the 210 Freeway at Marengo Avenue onto major arterial streets and off of residential streets that are currently impacted by motorists making this freeway connection. Traffic improvements may include, but are not limited to: the installation of changeable message signs, traffic signal upgrades, striping modifications to include dual turn movements where possible and installation of traffic signs. The project location is shown in Figure 6.

Project Cost: $300,000

7. California Boulevard Right Turn Lane at Raymond Avenue

The project includes construction of curb and gutter, pavement, and sidewalk to increase the width on the north side of California Boulevard east of Raymond Avenue from 53 feet to 63 feet to provide

a separate westbound right turn lane. The westbound right turn lane is needed to improve traffic operations and to accommodate the vehicle queues at the rail crossing east of Raymond Avenue. The project location is shown in Figure 7.

This project benefits the Gold Line light rail train operation and increases the capacity in the corridor, which carries a significant volume of traffic between SR710 and SR110.

Project Cost: $1,600,000

8. Traffic Control and Monitoring System

The Traffic Control and Monitoring System – Intelligent Transportation Systems (ITS) Project involves the installation of ITS technology and various degrees of smart signals along major corridors throughout the City that are impacted by the 710 Freeway gap. The absence of the 710 Freeway has a direct impact and increases traffic volumes on several north/south and east/west corridors within the City, beyond the arterials directly adjacent to the 710 Freeway corridor. The ITS and smart signal technologies along these corridors are necessary to address and manage the traffic impacts on these streets. These systems provide better monitoring of traffic flows and allow staff to make adjustments to signal timing as needed to facilitate traffic operations.

A conceptual design plan for the Traffic Control and Monitoring System – ITS Project will be prepared to address the following corridors, which are listed below in priority order. The Traffic Control and Monitoring System – ITS Project will implement identified improvements on these corridors in the priority listed to enhance ITS technology and traffic flow improvements along as many of these corridors as possible with the available funding.

The corridors listed in priority are as follows:

1. Sierra Madre Blvd. from Michillinda Ave. to the south city limit
2. San Gabriel Blvd. from the 210 Freeway to the south city limit*
3. Marengo Ave. from Orange Grove Blvd. to Del Mar Blvd.
4. California Blvd. from St. John Ave. to either Arroyo Parkway or Lake Ave.
5. Hill Ave. from Orange Grove Blvd. to Del Mar Blvd.
6. Cordova St. from Arroyo Parkway to Hill Ave.
7. Allen Ave. from Orange Grove Blvd. to Del Mar Blvd.
8. Del Mar Blvd. from Orange Grove Blvd. to Rosemead Blvd.*
9. Orange Grove Blvd. from Colorado Blvd. to Sierra Madre Villa Ave. / Rosemead Blvd. from Sierra Madre Villa Ave. to Foothill Blvd.
10. Fair Oaks Ave. from Orange Grove Blvd. to the north city limit
11. Los Robles Ave. from Del Mar Blvd. to the north city limit

* This project will supplement LA County Dept. of Public Works signal upgrade
The project location is shown in Figure 8.

Project Cost: $9,575,000

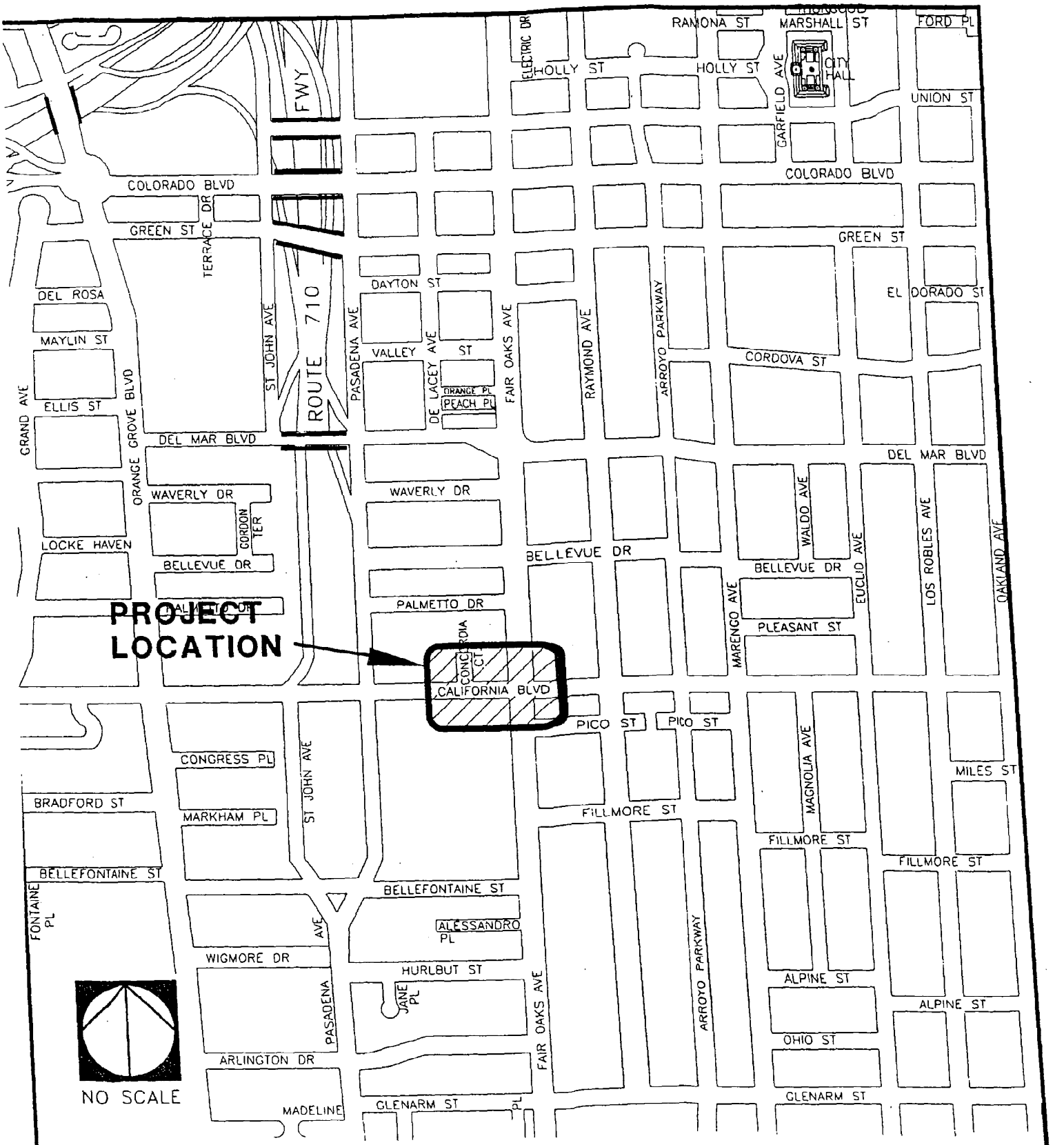

Figure 1
Location Map - SR 710 Mitigation Project
California Blvd. Right Turn Lane at Fair Oaks Avenue

Department of Public Works-CAd20337.DWG 9-23-2002

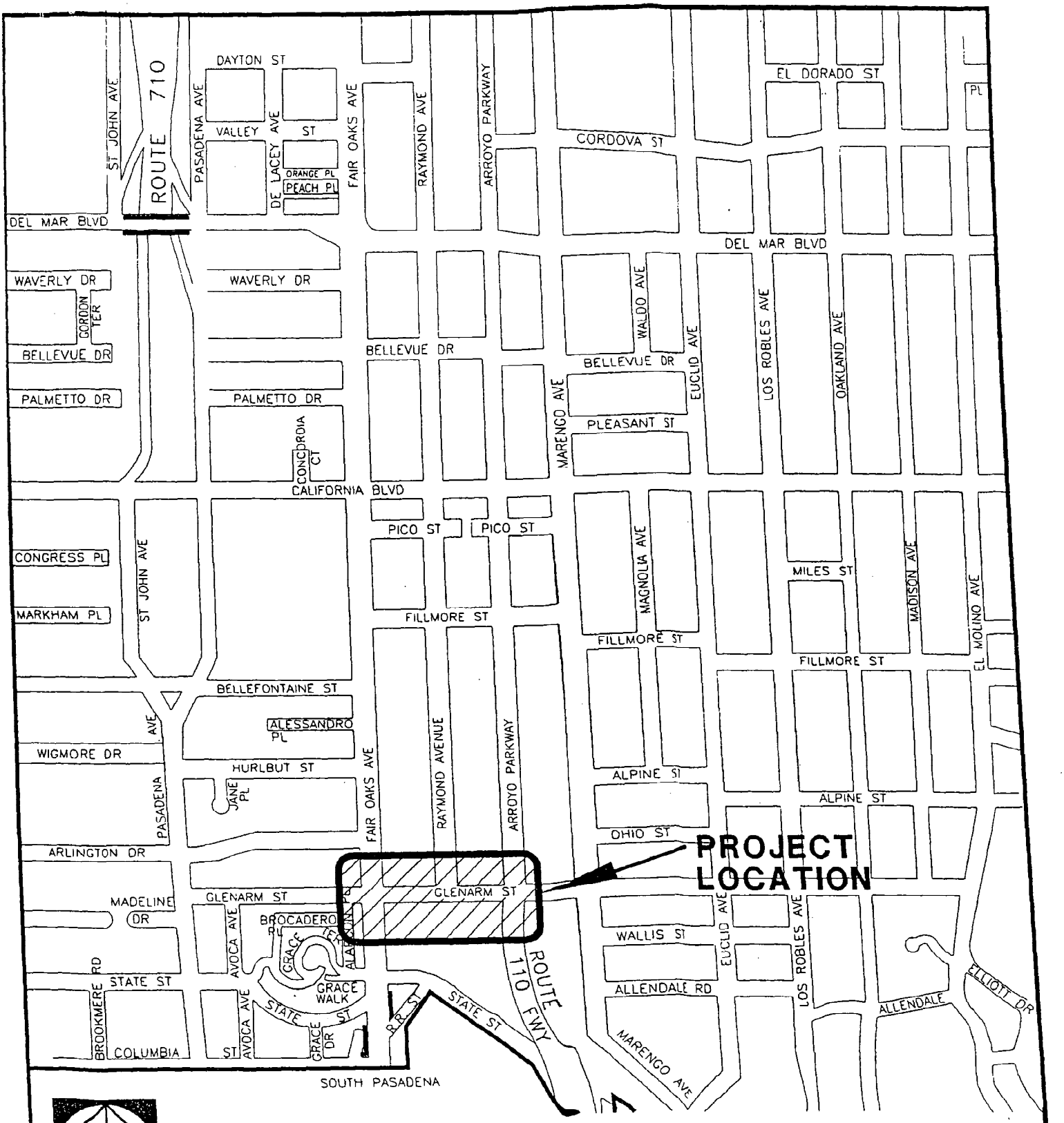

Figure 2
Location Map - SR 710 Mitigation Project
Raymond Avenue to SR 110 Connector

Department of Public Works-CAd20337.DWG 9-23-2002

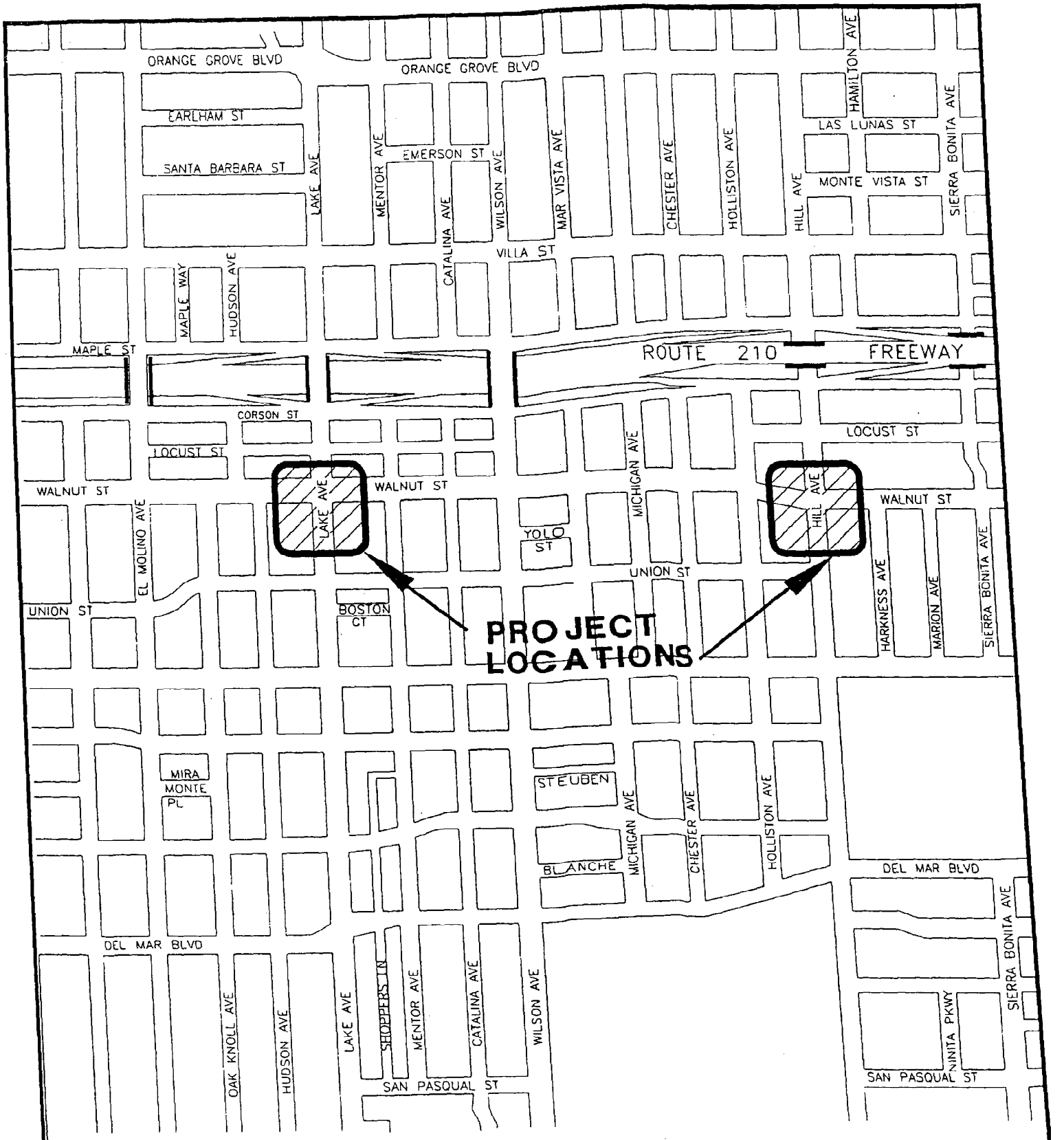

Figure 3
Location Map - SR 710 Mitigation Project
Lake Ave/Walnut St and Hill Ave/Walnut St Capacity Enhancements

Department of Public Works-CAd20337.DWG 9-23-2002

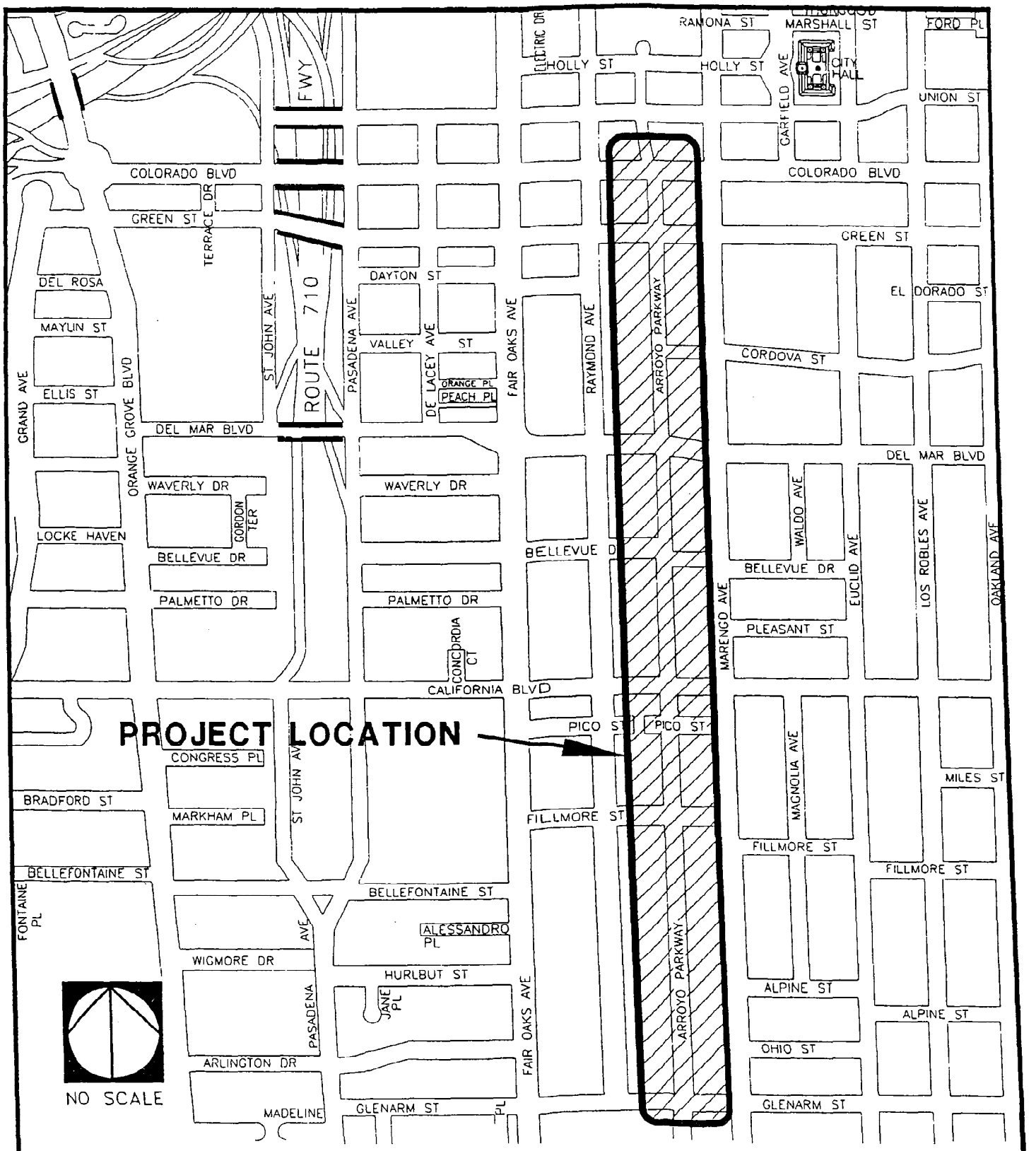

Figure 4
Location Map - SR 710 Mitigation Project
Arroyo Parkway Street Enhancement Project

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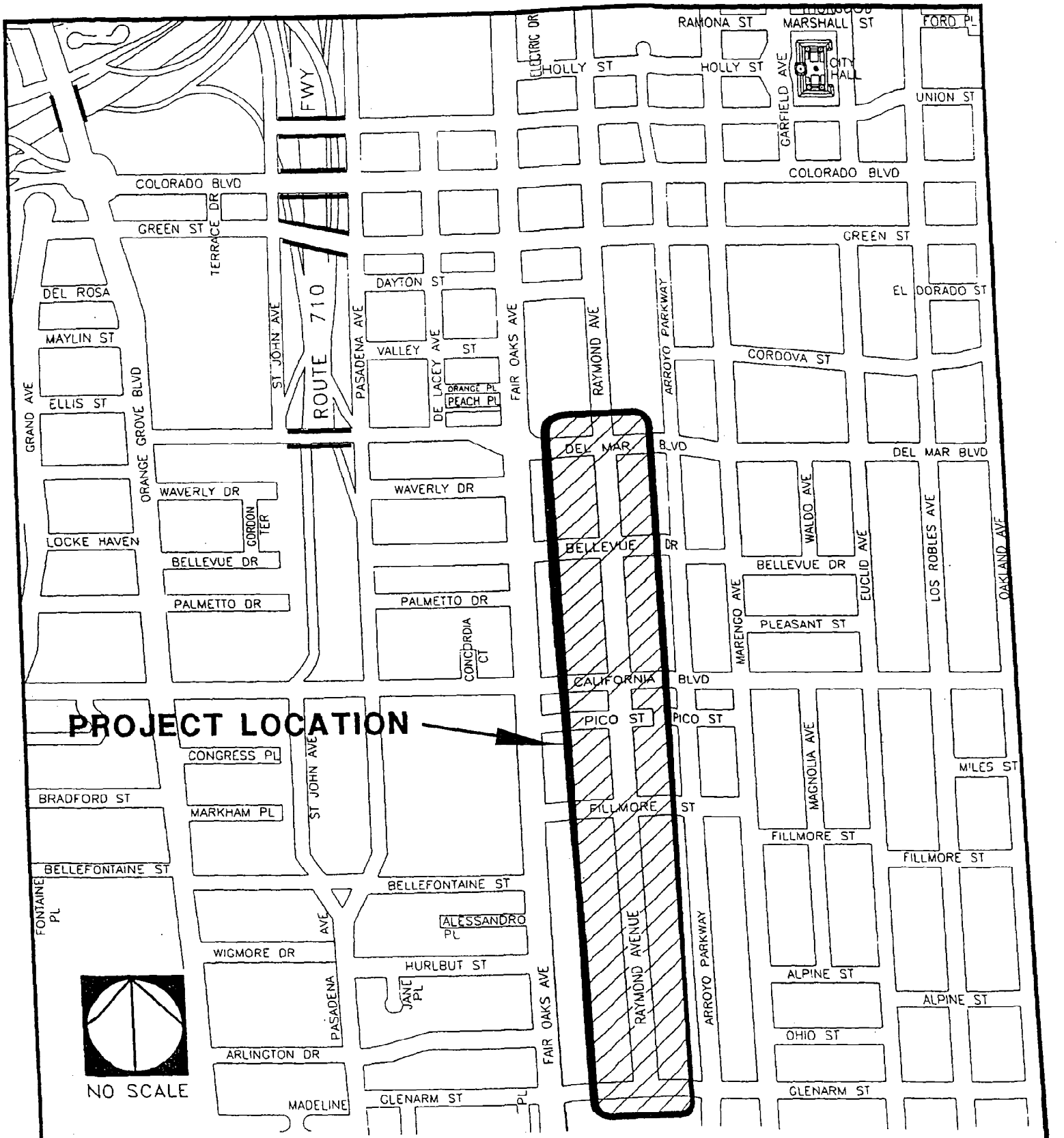

Figure 5
Location Map - SR 710 Mitigation Project
Raymond Avenue Widening

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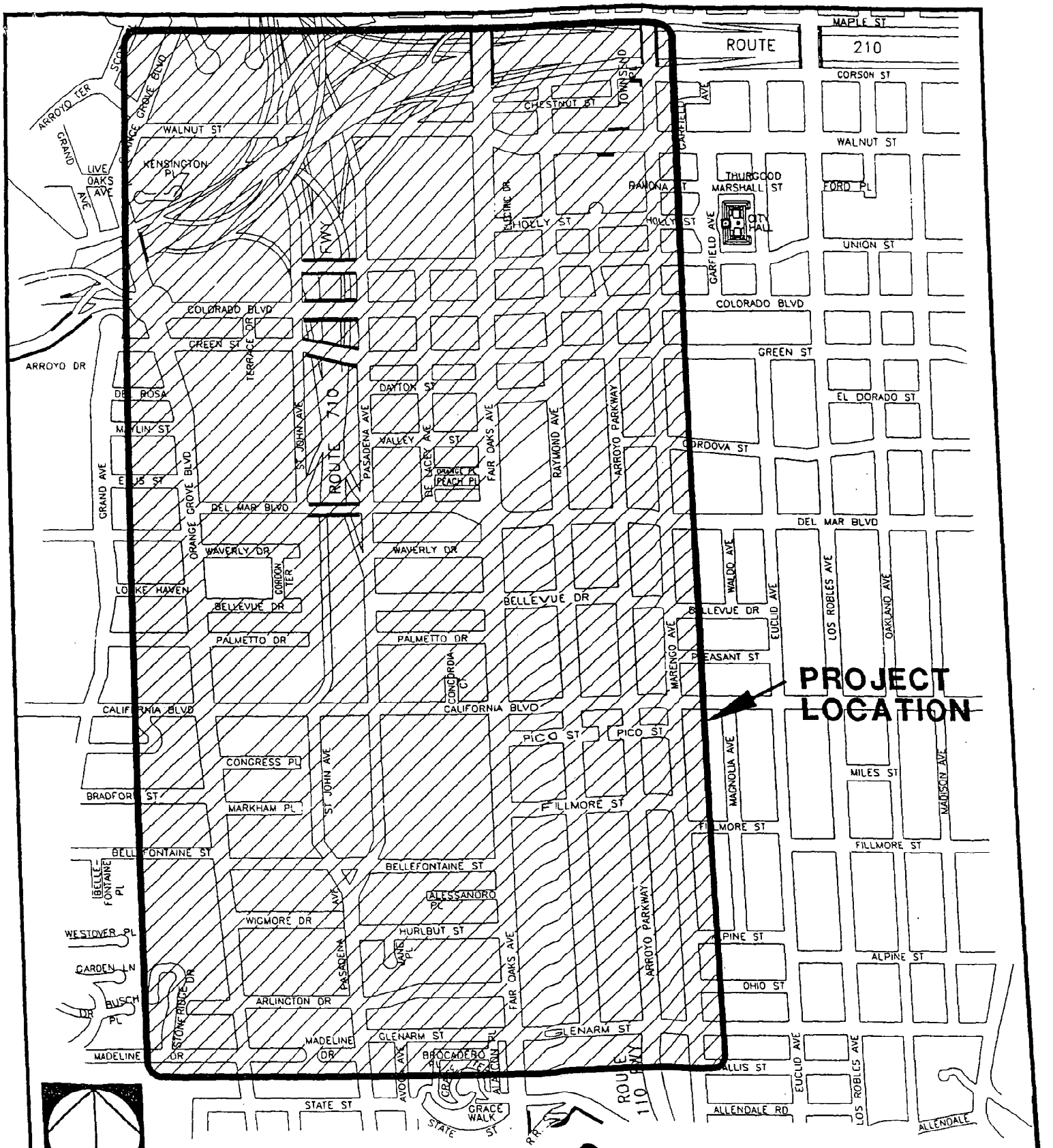

NO SCALE

Figure 6

Location Map - SR 710 Mitigation Project

110 Fwy to 210 Fwy Connector/Marengo Interchange Emphasis

Department of Public Works-CAd20337.DWG 9-23-2002

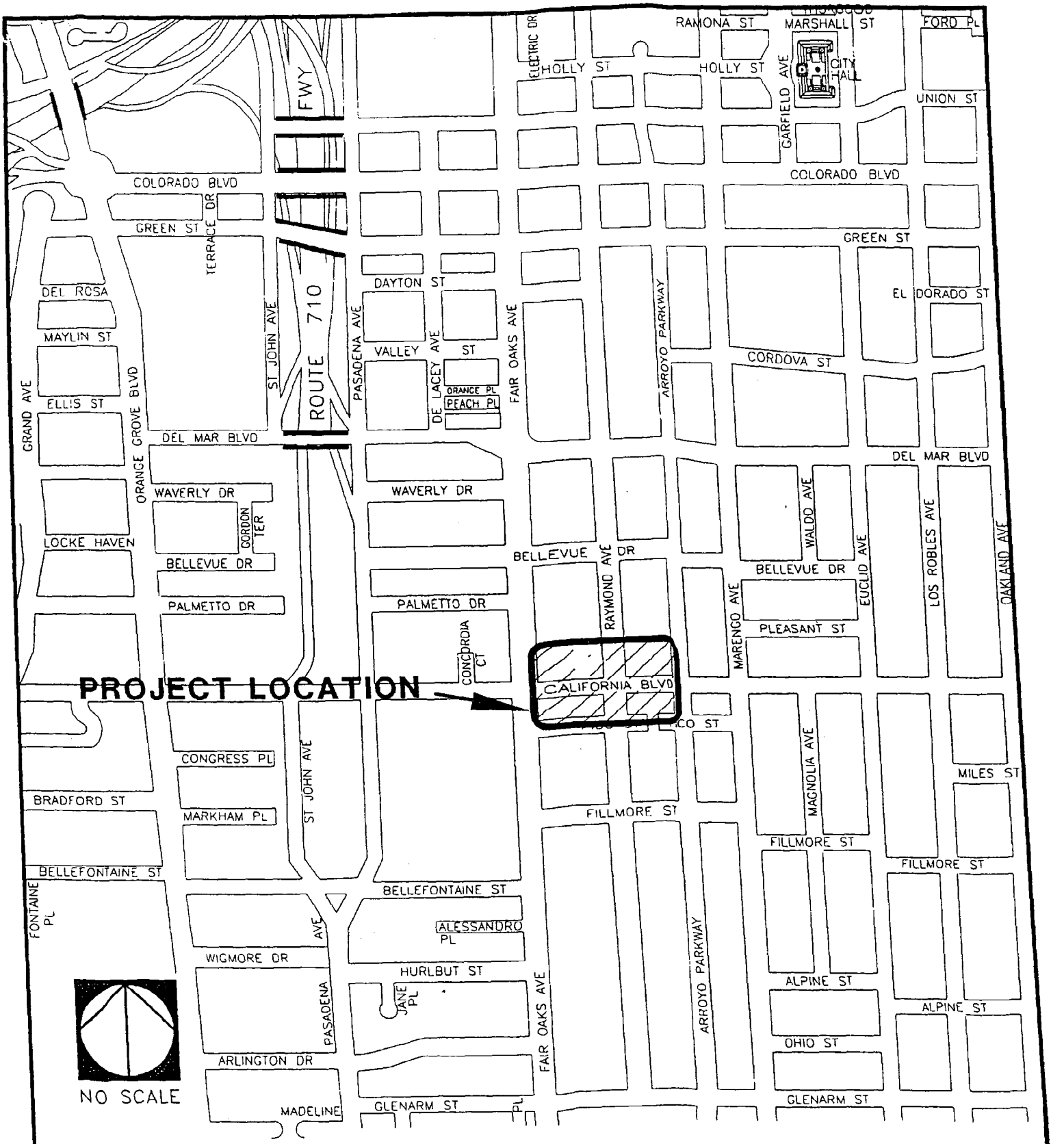

Figure 7
Location Map - SR 710 Mitigation Project
California Blvd Right Turn Lane at Raymond Ave

Department of Public Works–CAd20337.DWG 9-23-2002

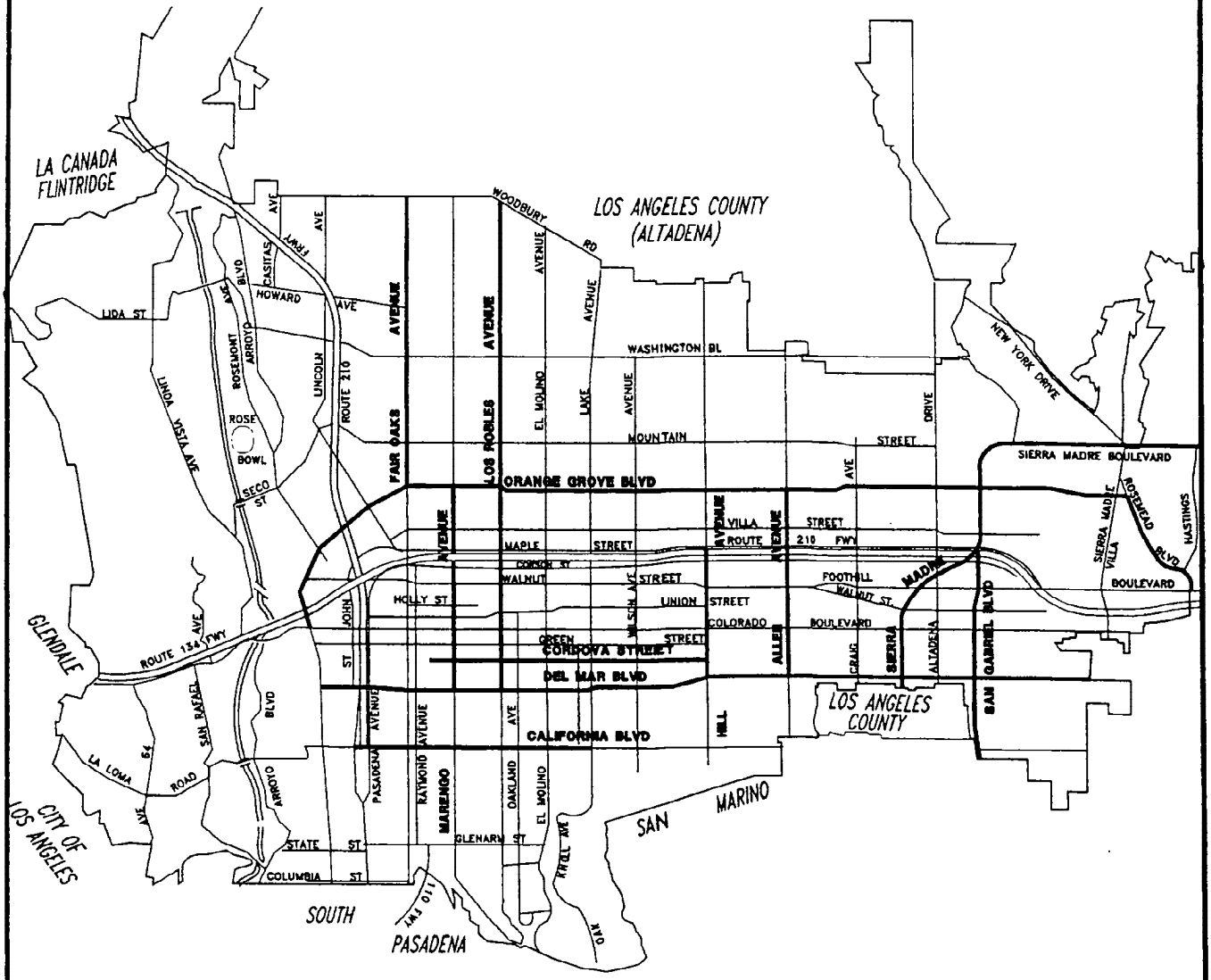

FIGURE 8

Location Map - SR 710 Mitigation Project Traffic Control and Monitoring System-Intelligent Transportation Systems (ITS)

Department of Public Works–CAD20337.DWG 3–25–2003