

# FINAL ENVIRONMENTAL UPDATE

SANTAN FREEWAY (SR 202L)  
56<sup>TH</sup> STREET TO PRICE FREEWAY

*Prepared for:*

ARIZONA DEPARTMENT OF TRANSPORTATION



APRIL 1999



ENTRANCO

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REMARKS	

May 4, 1999

Don Rerick  
Flood Control District of Maricopa County  
2801 W. Durango Street  
Phoenix, Arizona 85009

Dear Mr. Rerick:

Please find enclosed one copy of the Final Environmental Update for the Santan Freeway from 56<sup>th</sup> Street to the Price Freeway. The document has been transmitted for your information/use.

If you have any questions or require additional copies please contact me at 889-7045. Thank You.

Sincerely  
ENTRANCO

Brenda Martinez  
Environmental Scientist

BM:bm

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ARIZONA DEPARTMENT OF TRANSPORTATION  
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ENVIRONMENTAL PLANNING SECTION  
205 SOUTH 17<sup>th</sup> AVENUE  
PHOENIX, ARIZONA 85007

FINAL ENVIRONMENTAL UPDATE

for

SANTAN FREEWAY (SR 202L)  
56<sup>TH</sup> STREET TO PRICE FREEWAY

Project No. RAM 600-7-505  
TRACS No. 202L MA 054 H5088 01C  
Santan, I-10 TI, East Half

Project No. RAM 600-7-507  
TRACS No. 202L MA 054 H5150 01C  
Price/Santan TI, West Half

Project No. RAM 600-7-506  
TRACS No. 202L MA 052 H5151 01C  
Kyrene Road – McClintock Drive

Approved by: <sup>For</sup> Richard M. Duarte Date: 4-28-99  
Richard M. Duarte, Manager  
Environmental Planning Section

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## LIST OF MITIGATION MEASURES

The following list describes measures that will be implemented as part of the project to avoid, reduce, or otherwise mitigate environmental impacts associated with the project.

### Arizona Department of Transportation (ADOT) Design Responsibilities:

- The exact noise barrier heights and locations will be finalized during the final design process. Noise barrier mitigation will be considered during the final design process for future developments that are approved by the City of Chandler prior to the approval date of this Environmental Update. (ref. p. 3-20)
- During final design, ADOT will consider opportunities to reduce visual impacts on adjacent land uses. Possible measures include architectural treatment of bridges and walls. (ref. p. 3-21)
- Effects of spillover lighting will be considered further in final design. (ref. p. 3-21)
- ADOT Utilities and Railroad Engineering Section will coordinate with utility companies during the design phase of the project to ensure proper relocation planning, as needed. Relocation of utilities will be closely coordinated with ADOT and Flood Control District of Maricopa County (FCDMC) construction activities and other projects in the area to minimize disruption to adjacent properties and traffic. Project planning will include careful scheduling of disruptions and prior notification to adjacent properties that would be affected by temporary service cut-offs. (ref. p. 3-21)
- ADOT will coordinate with affected landowners and utilities during project design to resolve any conflicts with irrigation facilities. (ref. p. 3-21)
- Landscaping plans for the proposed action will be developed in coordination with ADOT Roadside Development and the Arizona Department of Water Resources to ensure that the appropriate materials are used along the Santan Freeway corridor. (ref. p. 3-22)
- The Roadside Development Section will determine who will prepare the Storm Water Pollution Prevention Plan (SWPPP). (ref. p. 3-23)
- The design consultant will develop a traffic control plan for construction of the collector channel and associated drainage facilities in accordance with Maricopa County procedures. (ref. p. 3-22)
- All wells within the project right-of-way limits will be identified by ADOT Utilities and Railroad Section during final design. To eliminate the potential for groundwater contamination from stormwater runoff, all abandoned wells within the right-of-way will be reviewed to assure proper well closure procedures were followed. (ref. p. 3-21, 3-22)

### ADOT District Construction Responsibility:

- The public will be adequately notified of construction operations using methods including distribution of construction alert publications. (ref. p. 3-20)
- Because a NPDES permit is required, the District Construction Office will submit a Notice of Intent (NOI) and a Notice of Termination (NOT) to the Environmental Protection Agency (EPA) and copies to the Arizona Department of Environmental Quality (ADEQ). (ref. p. 3-23)
- Access to the Gila River Indian Community at Kyrene Road will be maintained throughout roadway construction so that there will be no substantial impacts on bus service to nearby schools. Prior to construction activities, ADOT District Construction will coordinate with the Kyrene School District regarding any road closures that may have temporary impacts on bus services. (ref. p. 3-7, 3-8)

### Contractor Responsibilities:

- In accordance with Maricopa County Rule 310, *Fugitive Dust Ordinance*, an approved Application for Earth Moving Permit and Demolition & Dust Control Plan will be obtained from the Maricopa County Environmental Services Department prior to construction. The permit will describe measures to control and regulate air pollutants during construction. (ref. p. 3-17)
- Minimize dirt track-out by washing or cleaning trucks before leaving the construction site. (ref. p. 3-17)
- To minimize noise impacts from construction activities, the following measures will be taken: (ref. p. 3-20)
  - All exhaust systems on equipment will be in good working order. Properly designed engine enclosures and intake silencers will be used where appropriate.
  - Construction equipment will be maintained on a regular basis.
  - New construction equipment will be subject to new product emission standards.
  - Stationary, noise-generating equipment will be located as far away from sensitive receptors as possible.
- Because a NPDES permit is required, the contractor will submit a Notice of Intent (NOI) and a Notice of Termination (NOT) to the Environmental Protection Agency (EPA) and copies to the Arizona Department of Environmental Quality (ADEQ). (ref. p. 3-23)

### Standard Specifications:

- Access to adjacent residences will be maintained at all times and to businesses during regular operating hours. (ref. p. 3-10)
- If previously unidentified cultural resources are encountered during construction, work will cease at that location, and the ADOT Engineer will be contacted to arrange for proper treatment of these resources. (ref. p. 3-24, 3-25)
- Construction-related noise, dust, and other nuisances from construction activities will be minimized and enforced per specifications, ordinances, and regulations of the state and city jurisdictions. (ref. p. 3-25)
- ADOT will prepare a detailed traffic control plan for freeway construction in accordance with the *Arizona Department of Transportation Traffic Control Supplement* (ADOT, 1996) to *Part VI of the Manual on Uniform Traffic Control Devices* (ADOT, 1988) and will coordinate with the affected public agencies and services in preparing this plan. ADOT will monitor the effectiveness of the traffic control plan during construction and make any necessary adjustments. (ref. p. 3-8, 3-25)

## 1.0 PROJECT LOCATION, NEED FOR PROJECT, AND EXISTING CONDITIONS

### 1.1 Project Location

The proposed project area is a 4.8-mile segment of the Santan Freeway, extending from 56<sup>th</sup> Street to the Price Freeway (101L). It is located north of the Pecos Road alignment in the city of Chandler in Maricopa County, Arizona (see Figure 1-1, State Map, and Figure 1-2, Location Map). The project location has not changed since 1988. The Santan Freeway would serve as a beltway around the East Valley connecting I-10 to the Superstition Freeway (US 60). The completed Santan Freeway would serve the cities of Chandler, Tempe and Mesa; the Town of Gilbert; the Gila River Indian Community; and unincorporated portions of Maricopa County.

### 1.2 Project Need

The Santan Freeway would serve regional transportation-related needs and relieve congestion on local arterial streets. The Santan Freeway is needed for the following reasons: (1) *system linkage/legislation* – the Santan Freeway is an integral element of the Maricopa Association of Government's (MAG's) adopted county-wide freeway and expressway system and is a major transportation component included in the general plans for the city of Chandler; (2) *local traffic* - to alleviate congestion on the local street network; and (3) *economic development* – to serve projected growth and development in the East Valley. The project need has not changed since 1988.

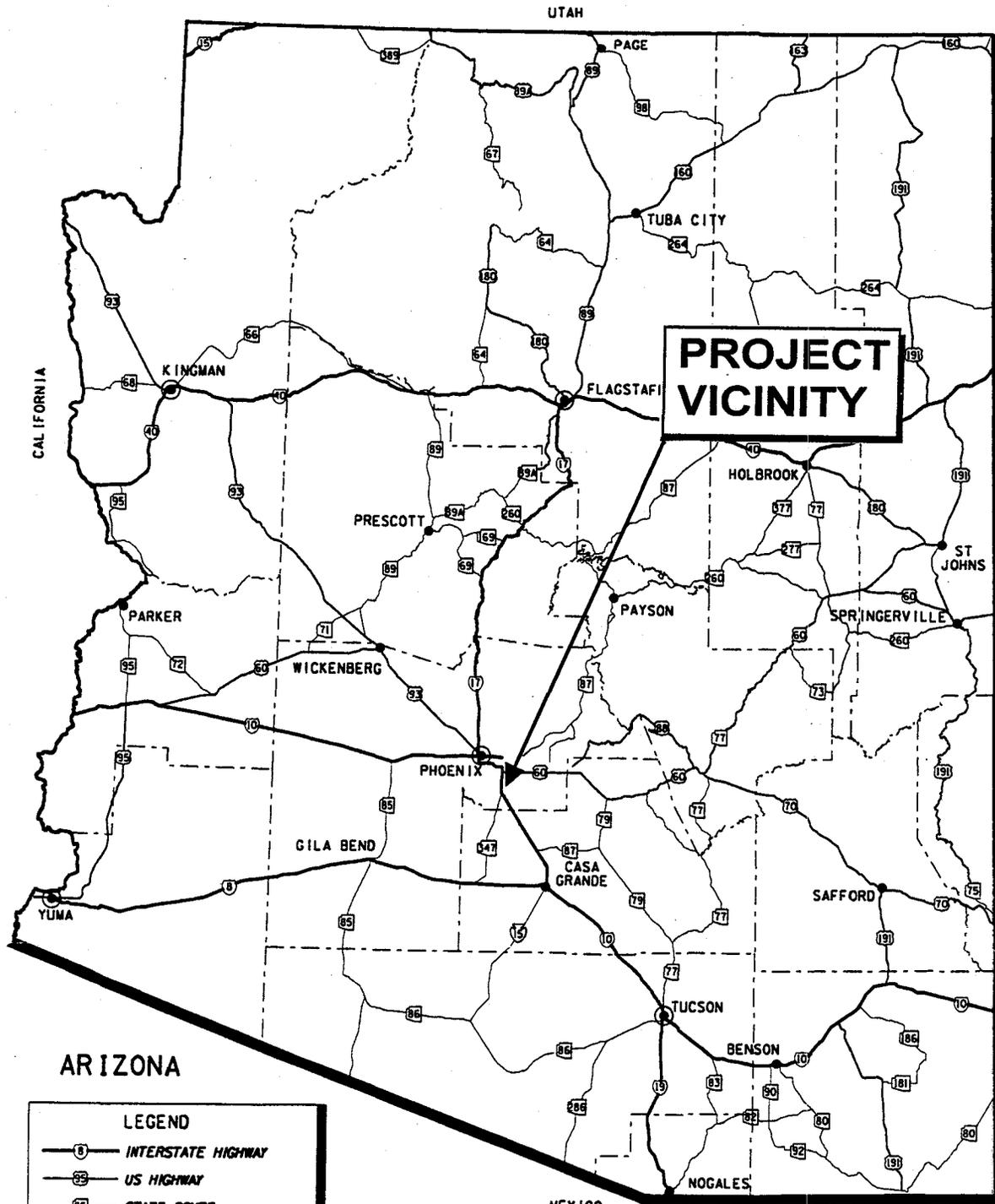
In the *Red Mountain and Santan Corridors Major Investment Study (MIS)* (MAG, 1996), projections are given for population and employment increases from 1995 through 2015. Population in the East Valley was projected to increase by 59 percent, and employment by 68 percent over the twenty years following this study. Population within the Santan corridor was projected to increase from 28,790 (1995) to 112,456 (2015), and average vehicle miles traveled (VMT) was projected to increase on major streets from 394,447 to 1,127,881 and on non-local roads (freeways, expressways, arterials, and collectors) from 395,336 to 1,137,100. Increased employment opportunities were projected to shift toward the East Valley. This project would serve the East Valley in response to projected increases in population and employment opportunities and alleviate the VMT on major streets, distributing traffic more evenly across the freeway system. Projected traffic conditions that would result with the development of this segment of the Santan Freeway are provided below.

#### 1.2.1 Traffic

The afternoon peak hour traffic volumes projected for the year 2020 for this segment of the Santan Freeway vary across the project limits from 3,910 to 4,658 vehicles westbound and 3,596 to 4,530 vehicles eastbound. These volumes are shown in detail in Table 1-1, 2020 PM Peak Hour Traffic Volumes.

Travel Direction	56 <sup>th</sup> Street to Kyrene Road	Kyrene Road to McClintock Drive	McClintock Drive to Price Freeway
Westbound	4,120	4,658	3,910
Eastbound	3,596	4,530	3,906

Source: Maricopa Association of Governments (September 17, 1998)



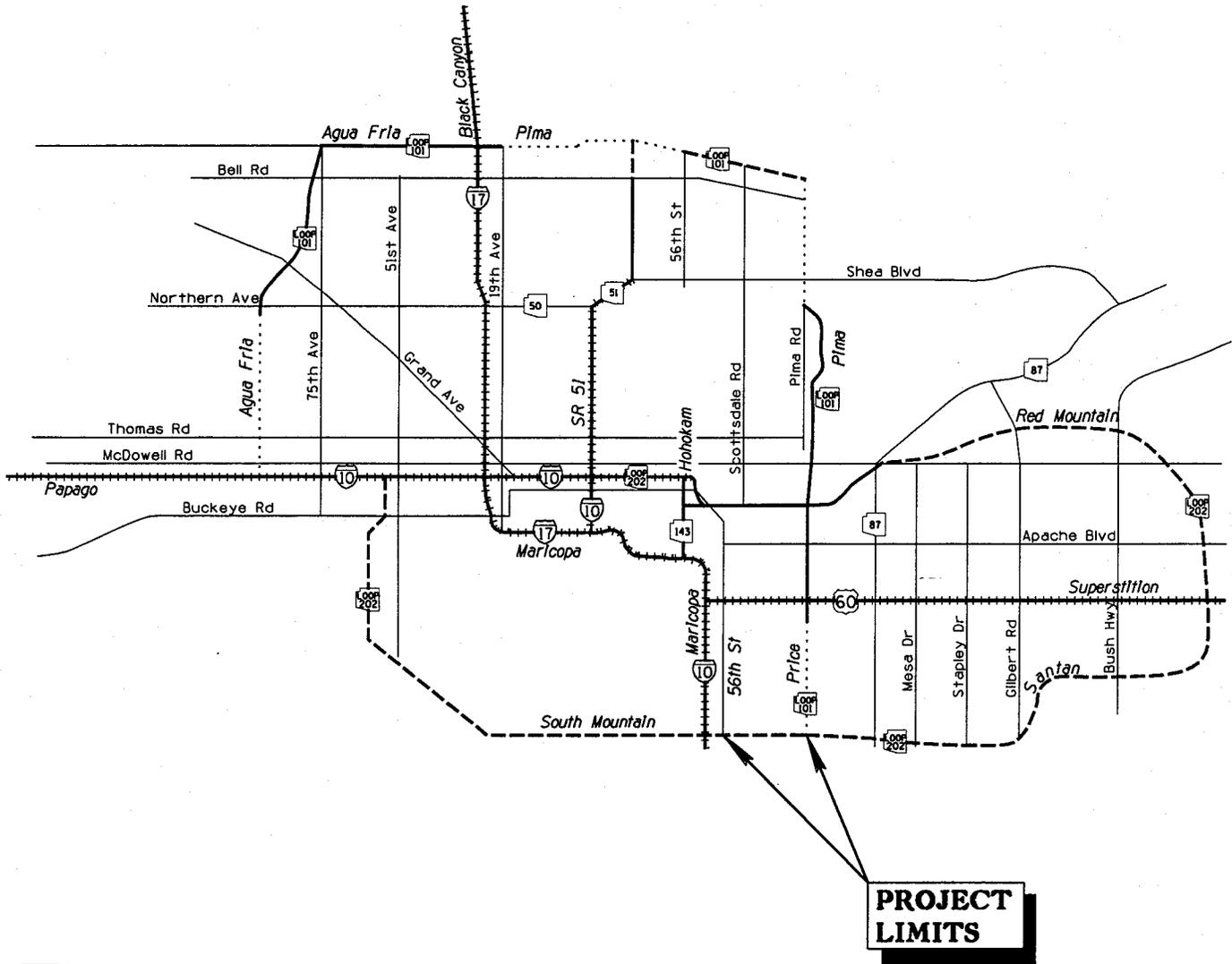
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*State Map  
Santan Freeway Environmental Update  
56th Street to Price Freeway*



**Figure 1-1**

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not to scale

**LEGEND:**

- +++++ MAG Planned & Existing HOV Facilities
- Existing Freeways
- Proposed Freeways
- ..... Freeway Under Construction

**Location Map**  
**Santan Freeway Environmental Update**  
**56th Street to Price Freeway**



**Figure 1-2**

SANTEAD100N

The proposed project will reduce potential impacts of projected traffic increases that will result with rising population and employment opportunities in the area by redistributing vehicle travel from existing freeways, major arterials, and local streets to the Santan Freeway.

### **1.3 Existing Conditions**

#### **1.3.1 General Features and Geometrics**

The project area is characterized by a relatively flat landscape situated within the city of Chandler and north of the Gila River Indian Community. The project right-of-way and much of the land south of the right-of-way, within the Gila River Indian Community, is undeveloped. The project right-of-way occurs north of the existing Pecos Road alignment, which is unpaved. North of the project right-of-way is residential and industrial development, undeveloped land, and Stellar Airpark.

#### **1.3.2 Right-of-Way**

Almost all right-of-way for this segment of the Santan Freeway has been obtained by ADOT. The exception is a 1.8-acre of private land north of and adjacent to the existing right-of-way near 56<sup>th</sup> Street. The right-of-way varies generally in width from between approximately 250 feet and 700 feet (east of 56<sup>th</sup> Street there is a portion that is over one-quarter mile wide). The right-of-way is 4.8 miles long, extending from 56<sup>th</sup> Street to the Price Freeway.

#### **1.3.3 Existing Land Use**

Land on the north side of the project right-of-way, and on the south side from the Gila Drain to 56<sup>th</sup> Street, is under the jurisdiction of the City of Chandler. There is residential development, vacant land, and the Stellar Airpark on the north side of the proposed roadway within Chandler city limits. Commercial and industrial development is being planned for some of the vacant land that was formerly agricultural, including the development of a large, regional shopping mall at the northeast corner of the project area. Industrial development is present west of Kyrene Road.

South of the proposed right-of-way, from Kyrene Road to the Price Freeway project terminus, the land is owned by the Gila River Indian Community. A more detailed description of existing land use is included in Section 3.1, Land Use, Ownership, and Potential Relocation.

## **2.0 ALTERNATIVES CONSIDERED**

### **2.1 Project Description**

The proposed Santan Freeway project extends from 56<sup>th</sup> Street easterly to the Price Freeway. The project limits are shown on Figure 1-2, Location Map. This segment of the proposed Santan Freeway is located north of the Pecos Road alignment in the city of Chandler, Maricopa County, Arizona. To the west, the project would connect to a segment of the proposed Santan Freeway extending from the I-10/SR 202L System Traffic Interchange to 56<sup>th</sup> Street. To the east, the project would connect to a segment of the proposed Santan Freeway extending from the Santan Freeway/Price Freeway System Traffic Interchange to Baseline Road. Section 2.2.2, Build Alternative, includes a detailed description of the Build Alternative.

### **2.2 Alternatives Selection Process Undertaken**

A number of alternatives were studied for the Santan Freeway in the *Final Environmental Assessment for the Southeast Loop Highway, SR 220 Santan Freeway* (ADOT, 1988b). Within the proposed project limits, two specific alternatives were considered.

#### **2.2.1 Alternatives Considered in 1988 EA**

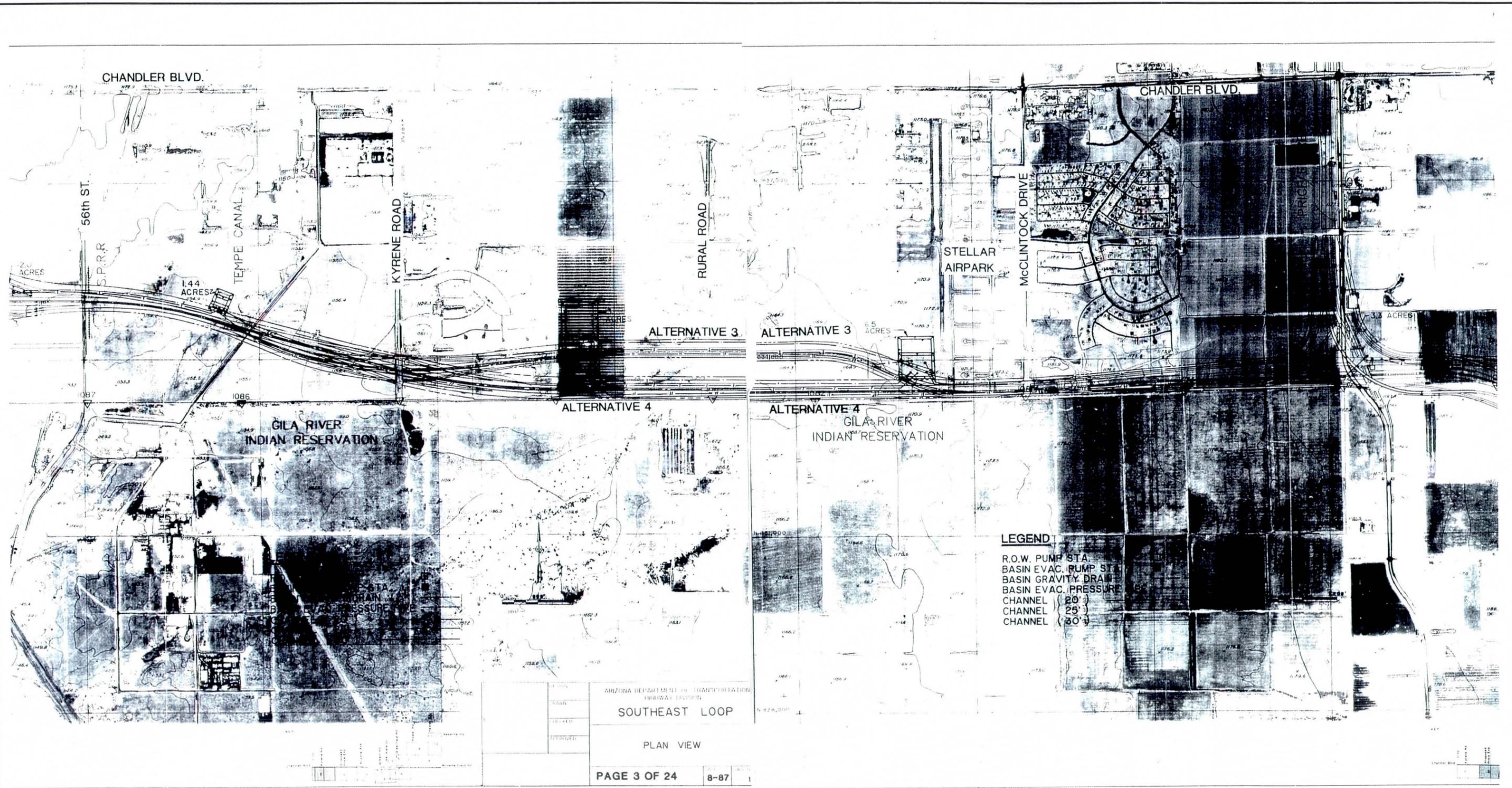
The following discussion presents the alternatives considered in the 1988 EA. Two alternatives (Alternatives 3 and 4) for the segment of the Santan Freeway extending from 56<sup>th</sup> Street to one-half mile west of the Price Freeway were considered (ADOT, 1988b) (see Figure 2-1, Alternatives Considered in 1988 Environmental Assessment). Alternative 3 was located 800 feet north of the northern exterior boundary of the Gila River Indian Community. Alternative 4 was aligned directly adjacent to the northern exterior boundary of the Gila River Indian Community. Alternative 4 was chosen as the adopted alignment. According to the 1988 EA, Alternative 4 was selected and Alternative 3 was rejected as a result of (1) review of the public hearing and transcript; (2) letters received during the public comment period; (3) action and comments received from the Chandler City Council and staff; (4) meetings with key stakeholders; and (5) discussions with ADOT staff.

#### **2.2.2 Build Alternative**

This Environmental Update analyzes potential impacts of the Build Alternative (see Figure 2-2, Build Alternative). The Build Alternative discussed in this section was selected as the adopted alignment in the 1988 Final EA.

Typical roadway cross sections are shown in Figure 2-3, Typical Sections. Within the project area, the roadway would consist of six or eight 12-foot wide traffic lanes, a median that will vary in width, and 10-foot exterior and 8-foot interior shoulders. From 56<sup>th</sup> Street to west of Kyrene Road, and between McClintock Drive and Country Club Way there would be three 12.0-foot wide traffic lanes and one 12.0-foot wide auxiliary lane in each direction. From west of Kyrene Road to McClintock Drive, and from Country Club Way to Price Freeway there would be three 12.0-foot wide traffic lanes in each direction.

Traffic interchanges would be provided at the freeway crossings of Kyrene Road and McClintock Drive. The Kyrene Road traffic interchange would be constructed as a full diamond interchange. The McClintock Drive interchange would be constructed as a half-diamond interchange providing a westbound on-ramp to the freeway and an eastbound off-ramp to McClintock Drive. Two-lane connector roads would be located on both sides of the freeway from McClintock Drive to Country Club Way.

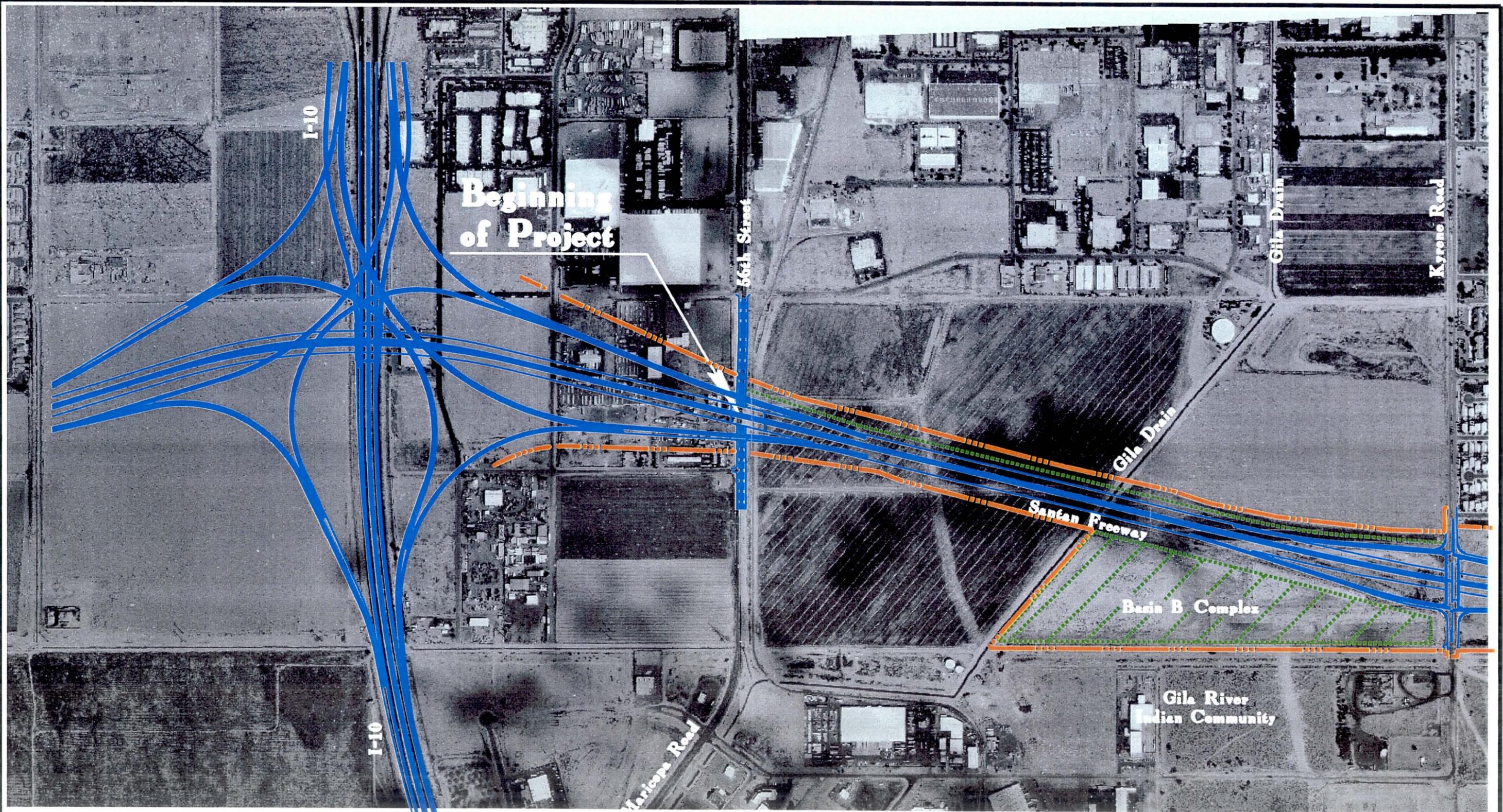


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*Alternatives Considered in 1988 Environmental Assessment  
Santan Freeway; Environmental Update  
56th Street to Price Freeway*

**Figure 2-1**

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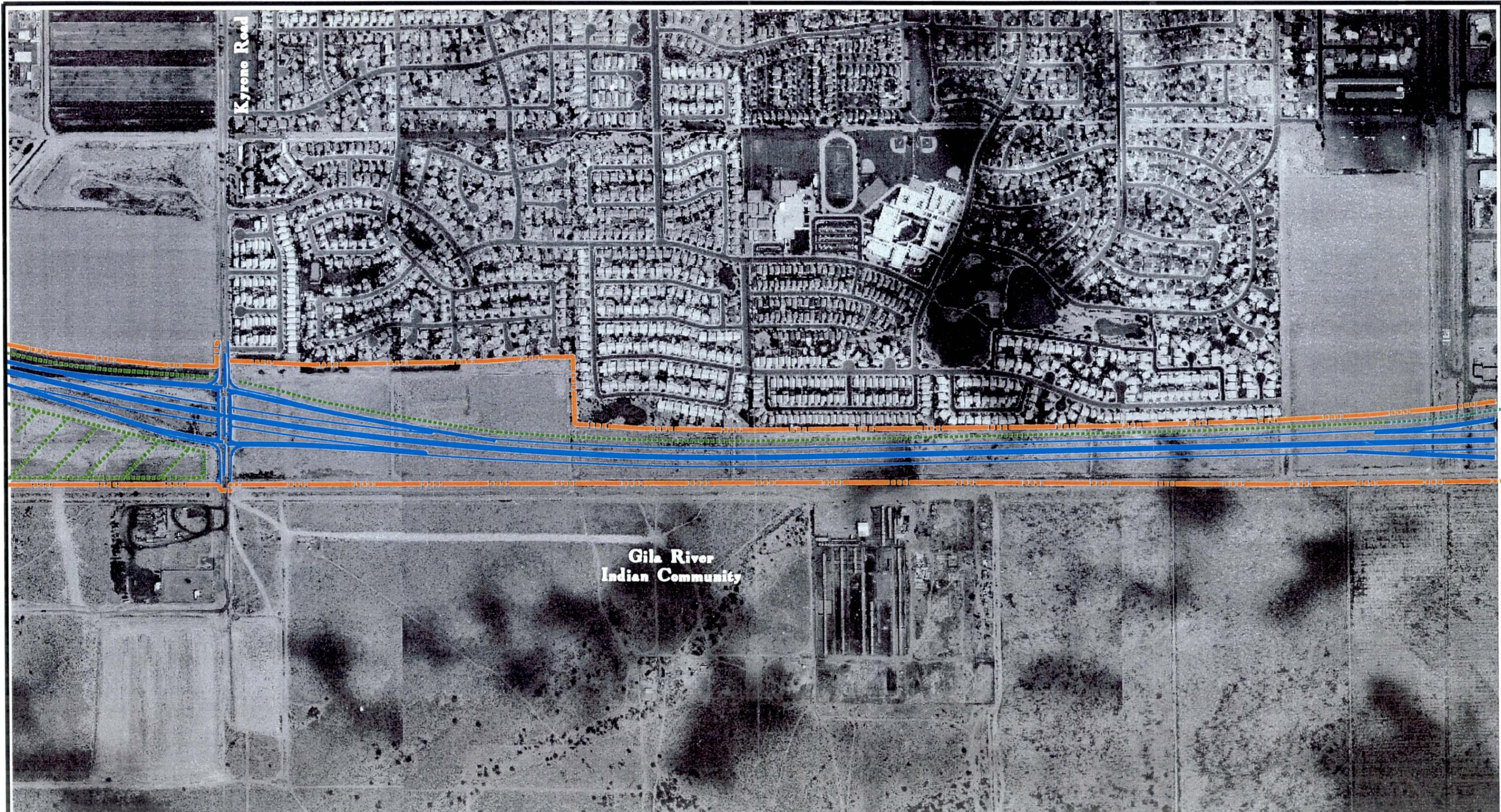
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- Legend:**
- Santan Freeway
  - - - ADOT Right-of-Way
  - . . . Collector Channel/Basin B Complex

*Build Alternative  
Santan Freeway; Environmental Update  
56th Street to Price Freeway*

**Figure 2-2**

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**Legend:**

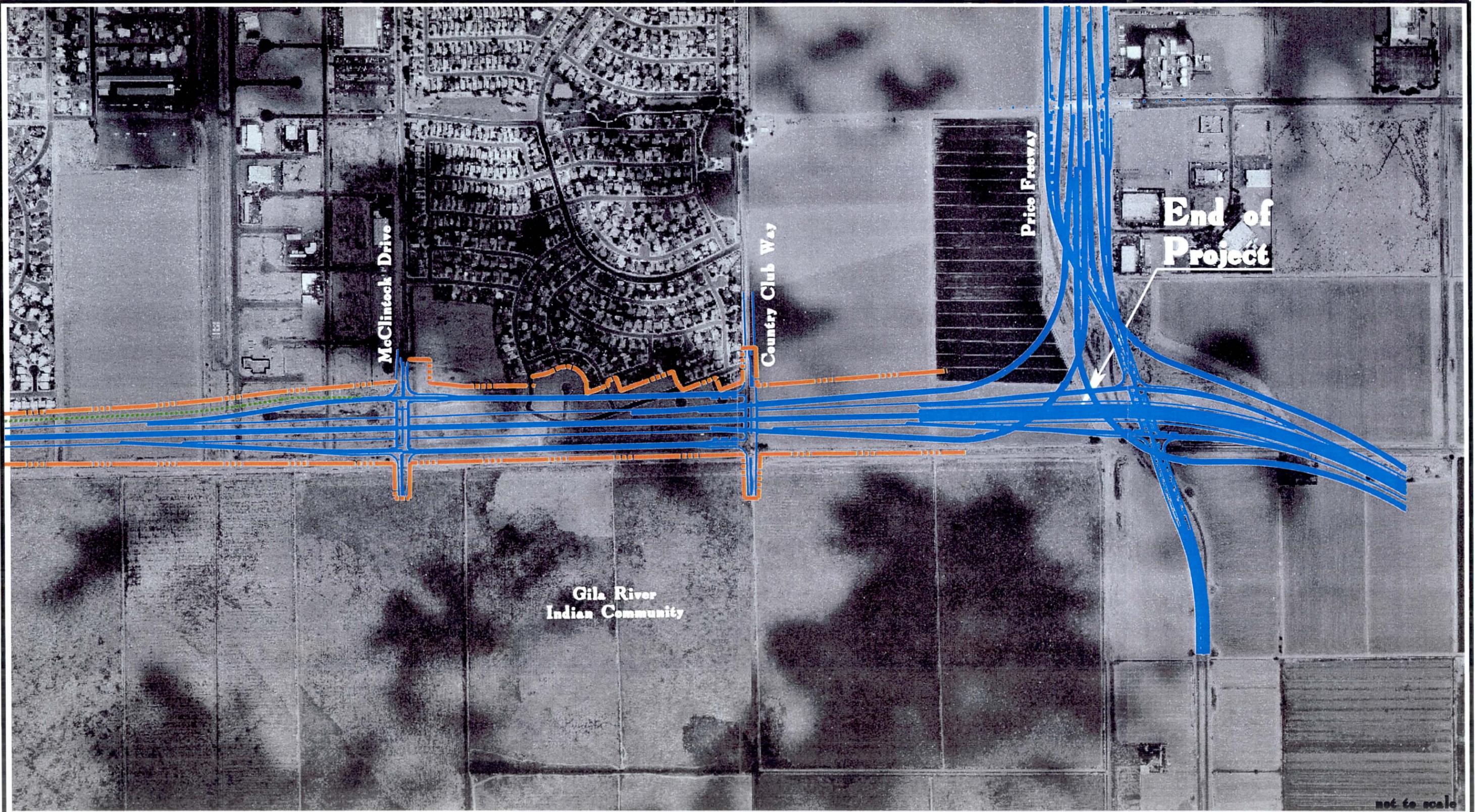
-  Santan Freeway
-  ADOT Right-of-Way
-  Collector Channel/Basin B Complex

*Build Alternative  
Santan Freeway; Environmental Update  
56th Street to Price Freeway*



Continued  
Figure 2-2

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**Legend:**

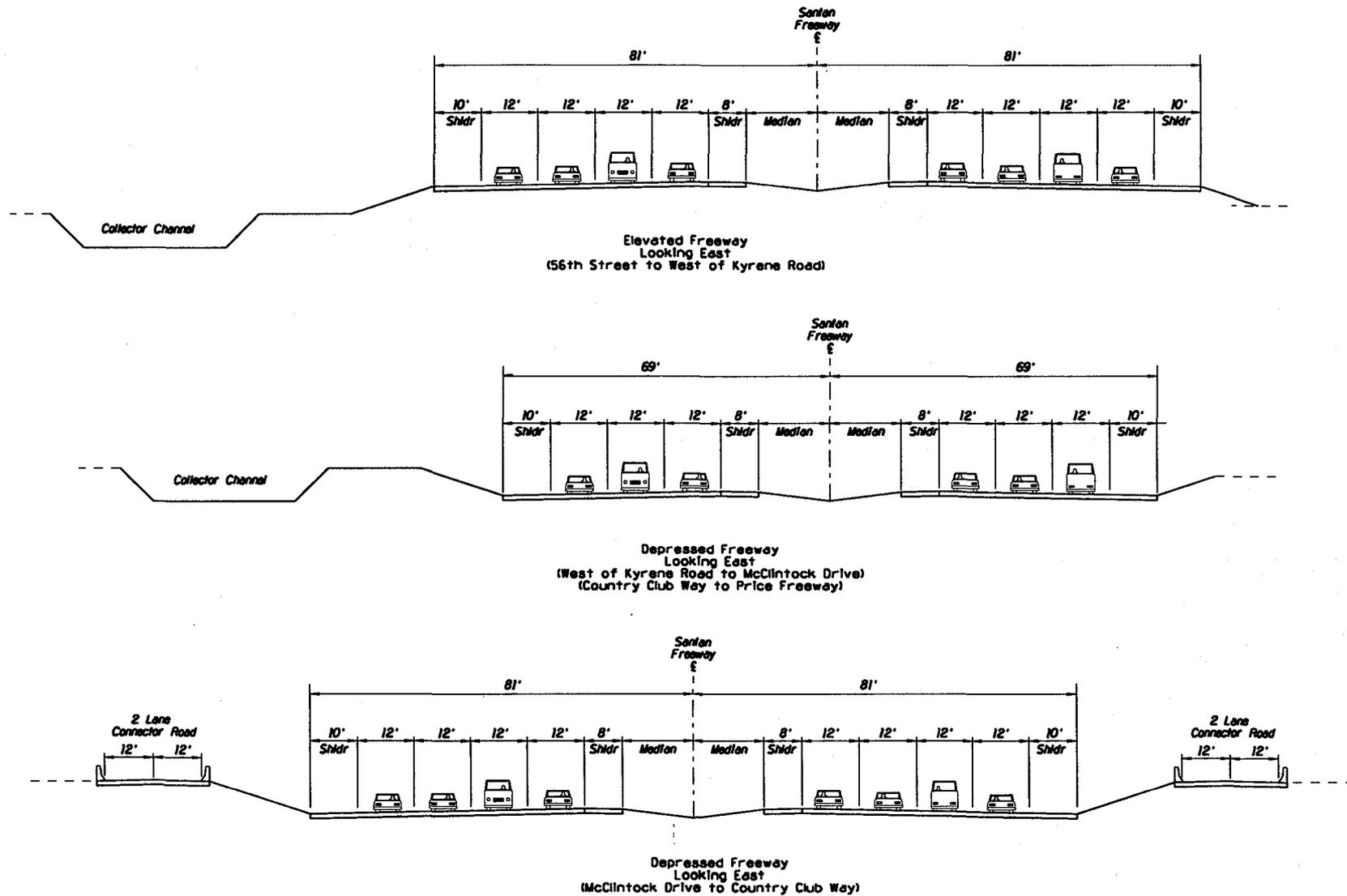
- Santan Freeway
- - - ADOT Right-of-Way
- . . . Collector Channel/Basin B Complex

*Build Alternative  
Santan Freeway; Environmental Update  
56th Street to Price Freeway*



Continued  
Figure 2-2

SANTEA16.DGN



Note: Median varies in width.

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**Typical Sections**  
**Santan Freeway Environmental Update**  
**56th Street to Price Freeway**

**Figure 2-3**

The roadway would be elevated from 56<sup>th</sup> St. to west of Kyrene Road, and depressed or slightly depressed from west of Kyrene Road to the Price Freeway (see Figure 2-4, Freeway Profiles). Depressed sections typically would be depressed below ground level to allow crossroad traffic to cross over the freeway. Slightly depressed sections would typically be depressed three to six feet below existing ground level. The connector roads from McClintock Drive to Country Club Way would be at grade.

The Southeast Valley Regional Drainage System (SEVRDS) project is jointly sponsored by ADOT and the Flood Control District of Maricopa County (FCDMC). The SEVRDS project is an important part of the proposed Santan Freeway project. When completed, the SEVRDS system would provide a drainage outlet for the Santan Freeway and flood control benefits to East Valley communities and unincorporated areas. A portion of the SEVRDS project is shown on Figure 2-5, Southeast Valley Regional Drainage System – Basin B Complex. The drainage system would collect surface runoff from north of the Santan Freeway, pump station discharges from east of the Price Freeway, and on-site flows from the Santan Freeway.

The SEVRDS project is being developed in three phases. Phase I included the design and grading construction of Basin B and associated basins. Phase I has been constructed. Phase II, which is under construction, consists of construction of outfall channel segments and piping facilities in the Basin B Complex. Phases I and II of the SEVRDS project are discussed in the *Draft Final Drainage Report Santan Channel Project*, (ADOT, 1997). The potential social, economic, and environmental impacts of Phase II of the SEVRDS project were analyzed in the *Environmental Assessment for the Santan Outfall Channel Project* (ADOT, 1998c).

Phase III of the SEVRDS system is being evaluated in this Environmental Update. This phase includes construction of a collector channel along the north side of the proposed Santan Freeway. Phase III also includes construction of a pump station and two water treatment cells near Basin B. One treatment cell would be vegetated and one would be non-vegetated to provide the necessary treatment for water quality.

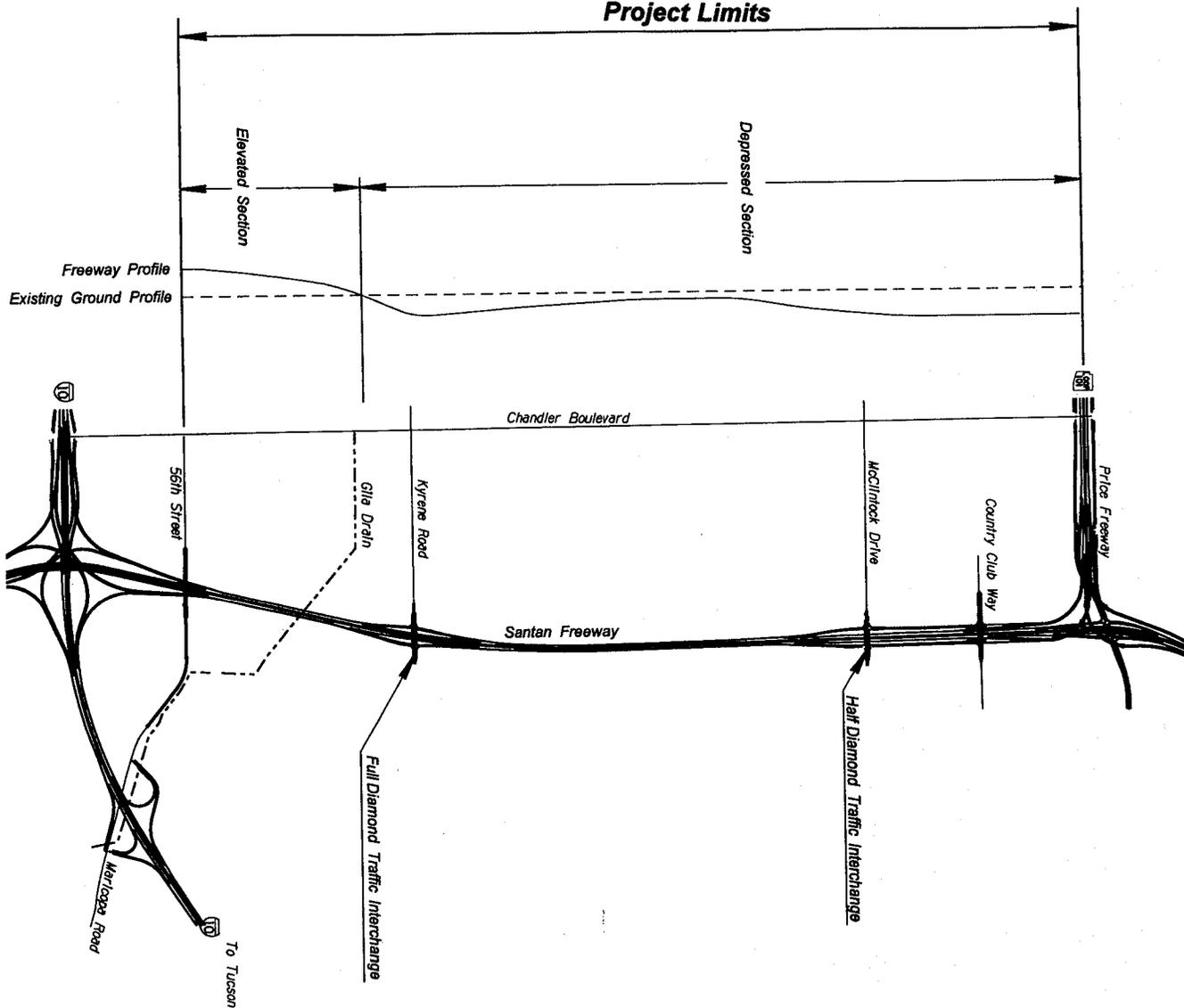
The collector channel would be concrete lined, with concrete box culverts at street intersections and under the connector road located north of the freeway from Country Club Way to McClintock Drive. Storm water runoff would be collected in the collector channel and taken across the Santan Freeway west of Kyrene Road into the Basin B Complex. The collector channel would be located within the project right-of-way, which will be entirely fenced.

The “first flush” of stormwater would discharge from the collector channel into the “first flush” equalization basin after crossing under the Santan Freeway in a reinforced concrete box culvert. The “first flush” equalization basin would capture the majority of the potential pollutants in the storm water runoff. Flow from the “first flush” equalization basin would be metered into the water treatment cells. The treatment cells would assist in the cleaning of storm water. Water from the treatment cells would flow into Basin B and would eventually be pumped into the constructed Santan Outfall Channel.

The Gila Drain is a Salt River Project (SRP) managed and Bureau of Reclamation (BOR) owned irrigation channel that crosses the proposed Santan Freeway between 56<sup>th</sup> Street and Kyrene Road. The collector channel would cross the Gila Drain north of the proposed freeway. The outfall channel would cross the Gila Drain south of the proposed freeway. Both channels would be siphoned under the Gila Drain. The Gila Drain would cross under the Santan Freeway in a reinforced concrete box culvert.

A discussion of water quality is included in this report in Section 3-10, Water Resources.

Project Limits



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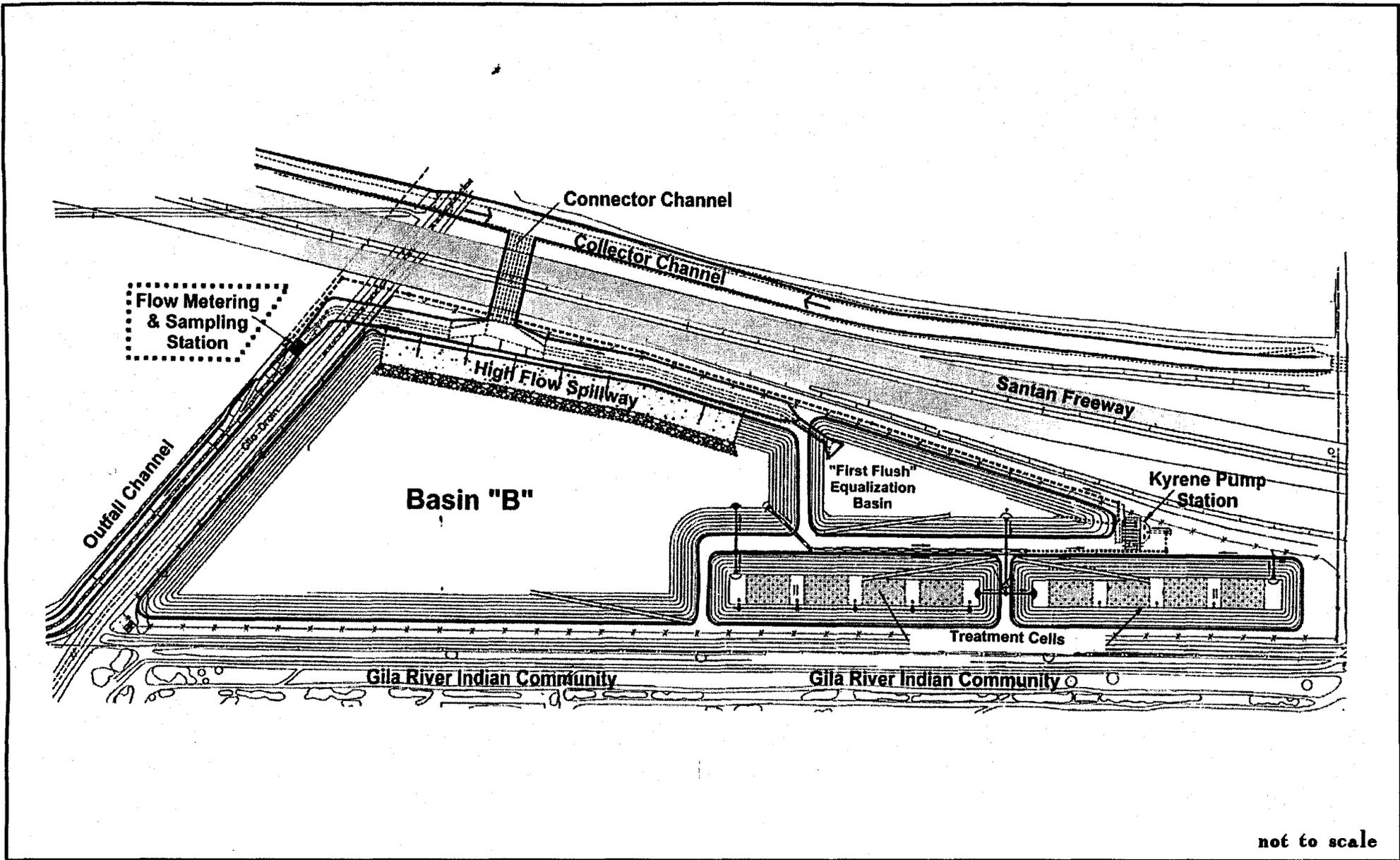
NOTES:  
 Depressed sections typically would be depressed below ground level to allow for traffic to cross over the freeway. Some sections of the freeway would be depressed only 3' - 6' below existing ground level.

**Freeway Profile**  
**Santan Freeway Environmental Update**  
**56th Street to Price Freeway**

SANTEA03.DGN



Figure 2-4



*Southeast Valley Regional Drainage System - Basin B Complex  
 Santan Freeway Environmental Update  
 56th Street to Price Freeway*

 **Figure 2-5**

Page 2-9

### **2.2.2.1 Right-of-Way**

Additional right-of-way required for the proposed project is a 1.8-acre parcel of private land that is located north of and adjacent to the existing right-of-way east of 56<sup>th</sup> Street. In addition, four temporary construction easements (TCEs) would be required to accommodate construction of the roadway and SEVRDS system. Three of these TCE locations are located north of the proposed freeway. A .014-acre TCE would be located west of 79<sup>th</sup> Street; a .013-acre TCE would be located east of 79<sup>th</sup> Street; and a 0.30-acre TCE would be required at Kyrene Road. Additionally, a 0.27-acre TCE will be required south of the proposed freeway and west of the Gila Drain.

### **2.2.2.2 Construction and Design Project Schedule**

Final design of the freeway is scheduled for summer 2000 to spring 2003. SEVRDS Phase III final design would be complete by October 1999. Phase III construction is scheduled to commence in the fall of 1999 and roadway construction is scheduled to begin April 2003. December 2004 is the projected date for opening of the Santan Freeway from I-10 to the Price Freeway. An accelerated schedule by advance funding would move these scheduled freeway completion dates up by one year.

### **2.2.2.3 Project Cost**

The preliminary cost estimate to construct the state-funded Build Alternative is \$74,151,000. The estimate includes all costs excluding costs for right-of-way acquisition, most of which has already been obtained. The estimated cost includes approximately \$4,000,000 in funding from the FCDMC, who is a partner in the SEVRDS project.

Actual costs are subject to change as design refinements occur to the build alternative during final project design.

## **3.0 SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS**

This chapter describes the critical aspects of the existing environment within the project area. It also identifies impacts that may result from the proposed action, and measures to avoid, reduce, or otherwise mitigate those impacts.

### **3.1 Land Use, Ownership, and Potential Relocation**

Existing land use in the project area was briefly described in Section 1.0, Project Location, Project Need, and Existing Conditions. The following sections provide greater detail regarding existing and approved land uses in the project area. Please reference the Bibliography/Reference Section of this document for supporting information.

#### **3.1.1 Land Use**

The proposed project is located within the city of Chandler. The project corridor is bounded to the north, west, and east by the city of Chandler and to the south by the Gila River Indian Community. As depicted in Figure 3-1, Land Use, a variety of land uses occur in the project area. Existing and proposed land use north of the proposed freeway includes a mixture of small lot, high-density, and large lot residential; commercial; industrial; and recreational open space. Stellar Airpark is located north of the proposed freeway corridor and west of McClintock Drive. Please reference Section 3.3, Social Impacts, for a discussion of existing and planned parks, schools, and public facilities in the project area.

Existing and proposed land use within the Gila River Indian Community, along the proposed freeway corridor, is almost exclusively agricultural. One small area of low-density residential housing exists just east of Kyrene Road. Small commercial development lots are located at Kyrene Road and McClintock Drive and a small industrial lot is located approximately mid-way between Kyrene Road and McClintock Drive. The Pacific Livestock Auction is located east of Kyrene Road and south of Pecos Road.

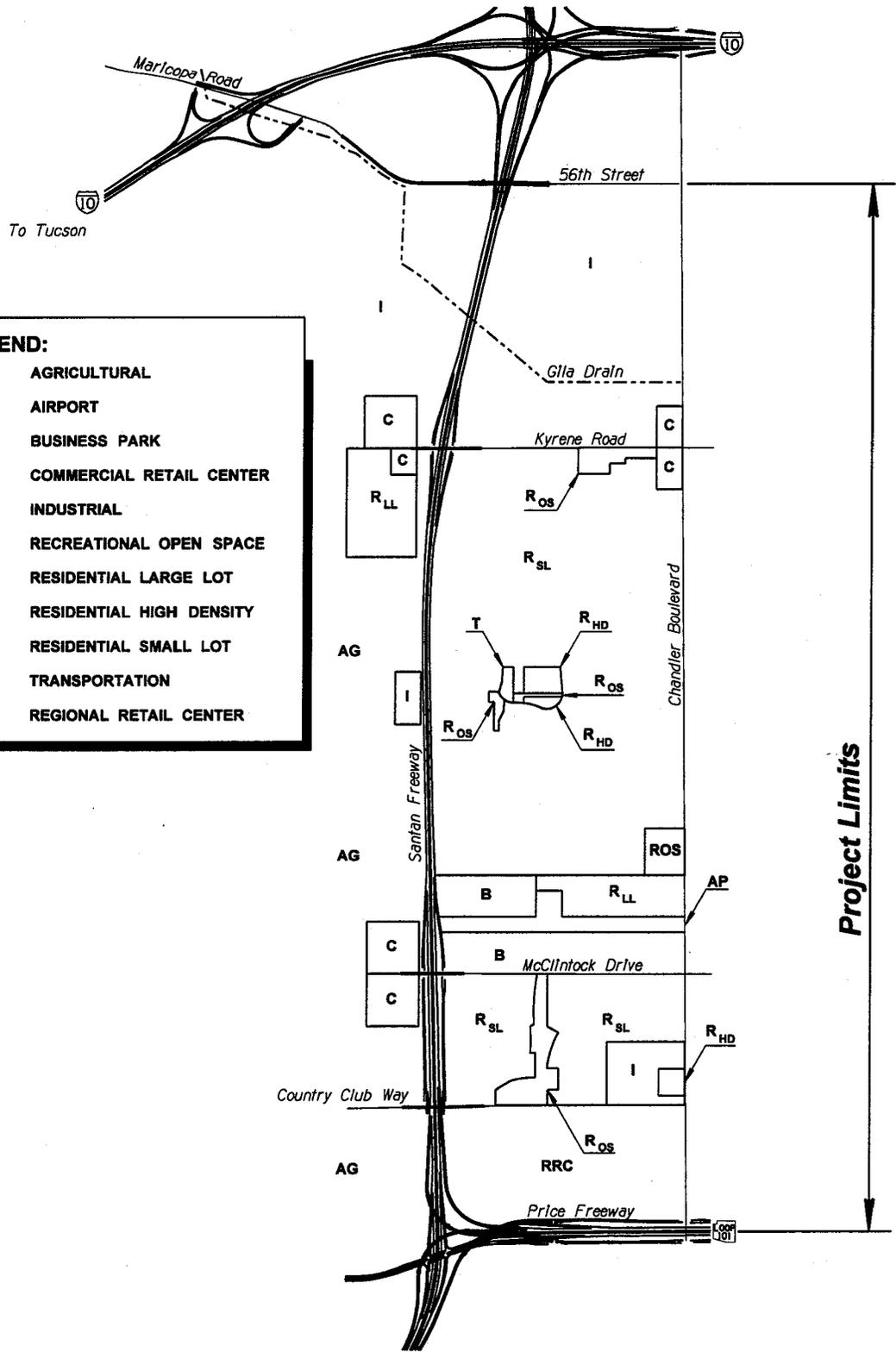
##### **3.1.1.1 Land Use Impacts**

As discussed earlier in this document, all but 1.8-acres of right-of-way has been obtained for this project. Proposed new right-of-way is adjacent to and north of the existing right-of-way east of 56<sup>th</sup> Street. No additional right-of-way acquisition is anticipated. Only minimal construction would occur outside the existing ADOT right-of-way in TCE locations described in Section 2.2.2.1, Right-of-Way. There will be no permanent land use impacts.

The proposed project may have temporary construction-related impacts (noise, dust, and traffic congestion) on land uses sensitive to these types of effects. These construction-related impacts and the associated mitigations are described in Section 3.13, Temporary Construction Impacts. No additional relocation of residents or businesses would occur as a result of the proposed project.

#### **3.1.2 Zoning Consistency and General Plan Compatibility**

City of Chandler planning and zoning ordinances regulate land use in the project area. Zoning generally provides the City of Chandler the authority and procedures to guide the physical development of land and promote a high standard of living while protecting the environment for the general, health, safety, and welfare of the public.



**LEGEND:**

AG	AGRICULTURAL
AP	AIRPORT
B	BUSINESS PARK
C	COMMERCIAL RETAIL CENTER
I	INDUSTRIAL
R <sub>OS</sub>	RECREATIONAL OPEN SPACE
R <sub>LL</sub>	RESIDENTIAL LARGE LOT
R <sub>HD</sub>	RESIDENTIAL HIGH DENSITY
R <sub>SL</sub>	RESIDENTIAL SMALL LOT
T	TRANSPORTATION
RRC	REGIONAL RETAIL CENTER

Source:  
City of Chandler

not to scale

SANTEA05.DGN

**Land Use  
Santan Freeway; Environmental Update  
56th Street to Price Freeway**



**Figure 3-1**

As depicted in Figure 3-2, Zoning, a variety of zoning designations are found along the project area. Zoning in the project area includes a mixture of planned area development, single family lots, commercial, industrial, and agricultural designations. The proposed project would be compatible with the zoning designations established by the City of Chandler.

The *City of Chandler Land Use Element of the General Plan* (City of Chandler, 1998) represents the blueprint for development and physical form of the community. It is the primary tool to implement land use decisions. The proposed Santan Freeway is identified in the *City of Chandler Land Use Element of the General Plan* as a proposed freeway corridor.

The proposed Santan Freeway is consistent with the goals and policies of the *City of Chandler Economic Development Plan* (City of Chandler, 1995). The plan references policy 6.3 on Infrastructure and Public Services. This policy states that the City of Chandler recognizes the economic development potential of the Santan Freeway corridor and will exert every effort to accelerate its development and to assure the proper planning of the immediately affected areas to their appropriate compatible uses.

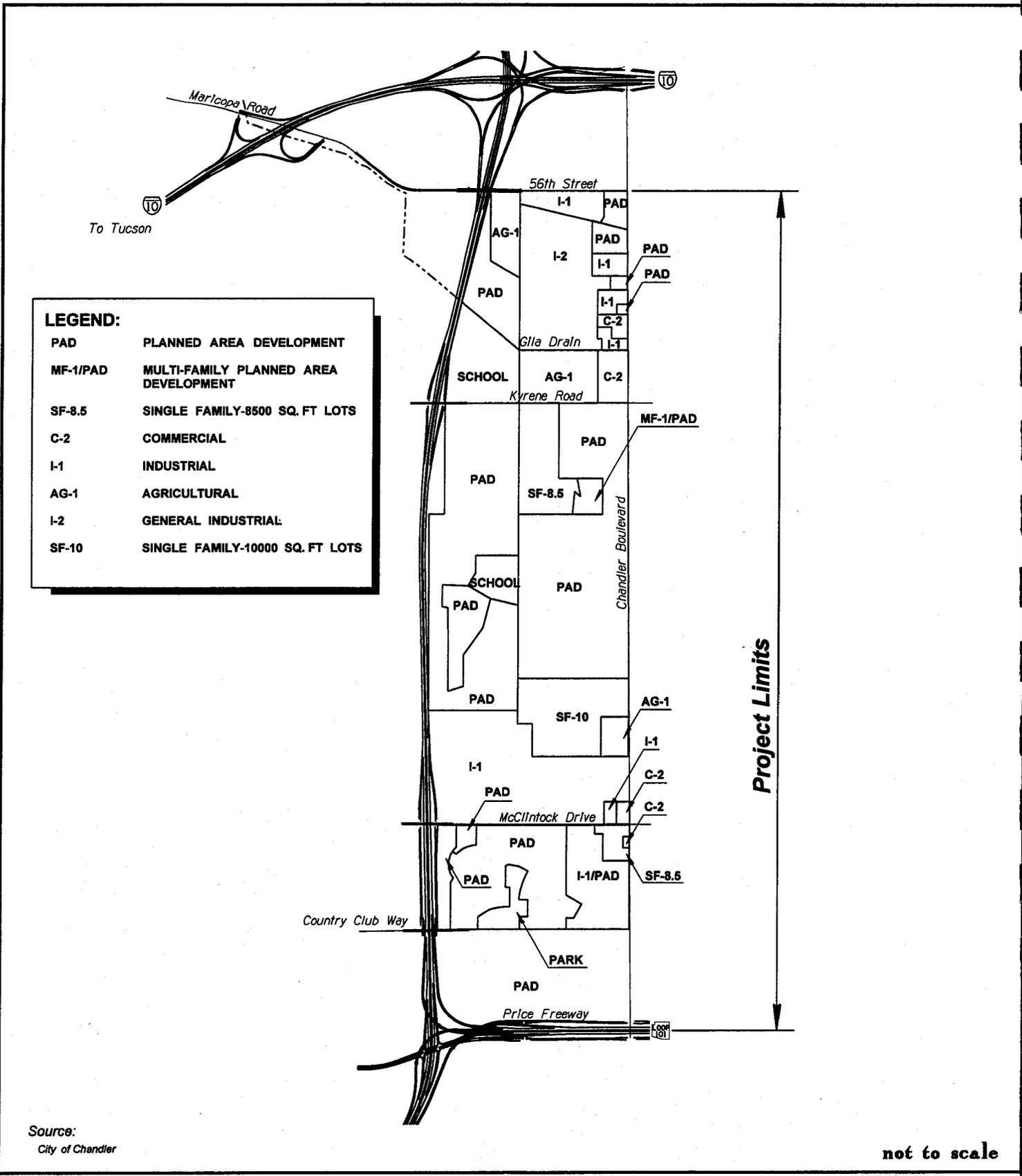
The proposed Santan Freeway corridor is considered in the *City of Chandler Housing Plan, An Element of the General Plan* (City of Chandler, 1989). The plan discusses the opportunity to create a viable "interface" zone between neighborhoods and the proposed Santan Freeway.

The *City of Chandler Transportation Plan* (City of Chandler, 1993) was adopted in 1985. A proposed alignment for the Southeast Loop (Santan Freeway) through the city of Chandler was presented in the plan. Recommendations for land uses in the vicinity of the proposed freeway also were proposed in the plan. The City has since used the proposed Santan Freeway alignment as a basis for planning decisions regarding future development.

The *Chandler Transportation Plan Update, Final Report* (City of Chandler, 1993) includes an Interim Roadway Plan and a Long Range Roadway Plan. The Interim Roadway Plan includes recommendations for roadway improvements that are warranted by future traffic growth within the next 15 to 20 years. The Interim Roadway Plan includes a recommendation to complete construction of the Santan Freeway and a statement that completion of the Santan Freeway is an important long-range goal of the City. The Interim Roadway Plan also includes a statement that construction of the Santan Freeway would help to relieve traffic congestion on the adjacent arterial system and provide access to major activity centers such as the Downtown and Airpark areas. The Long Range Roadway Plan for the city of Chandler represents the roadway system that would best satisfy long-range future traffic demands when city of Chandler land capacity is fully utilized. It is based on year 2040 socioeconomic data, forecasts, and analyses. Completion of the proposed Santan Freeway also is recommended in this plan.

A comparison of forecasted traffic volumes was performed for the Interim Roadway Plan. Some of the major findings and conclusions regarding the proposed Santan Freeway include the following:

- Having no construction along the Santan Freeway would cause more trips to utilize the Price Freeway.
- The completed Santan Freeway would draw approximately 24 percent more trips into the municipal planning area because the Santan Freeway would increase mobility and accessibility throughout the Chandler area.
- The traffic volumes on east-west arterial streets would decrease by approximately eight percent with the completed Santan Freeway. The reduction in arterial street traffic would occur because long distance regional trips would be able to utilize the regional freeway system rather than the arterial street system. Some arterials would have higher traffic volumes because traffic is accessing the freeway system at these locations.



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**Zoning Map  
Santan Freeway Environmental Update  
56th Street to Price Freeway**



**Figure 3-2**

- The completion of the Santan Freeway would distribute east-west traffic and north-south traffic more evenly throughout the Chandler Municipal Planning Area.
- The Santan Freeway should be constructed to minimize future traffic congestion in north Chandler and on parallel arterial routes.

The proposed Santan Freeway is included in MAG's 1999-2003 Transportation Improvement Program (TIP) and 1997-2015 Long Range Transportation Plan.

### 3.1.2.1 Impacts Associated with Zoning Consistency and General Plan Compatibility

The proposed Santan Freeway is consistent with the plans and goals discussed above. No impacts to zoning are anticipated as a result of this project.

## 3.2 Minority Considerations and Environmental Justice

Title VI of the *Civil Rights Act* of 1964 and related statutes assure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, or disability. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs that programs, policies, and activities not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations.

Census tract data, compiled by the Arizona Department of Economic Security, was evaluated to assess the demographic makeup of the project corridor. Three census tracts are located within the project area as identified in Table 3-1, Census Tract Locations.

Tract Number	Location
5227.21	Interstate 10 to Kyrene Road (West to East)
5227.10	Kyrene Road to McClintock Drive (West to East)
5227.12	McClintock Drive to Price Freeway (West to East)
Source: Phoenix Metropolitan Street Atlas, 1997 Census Tract Edition	

The *Final Department of Transportation Order on Environmental Justice* (USDOT, 1997) defines low-income as a median household income at or below the Department of Health and Human Services poverty guideline, which is \$15,150 for a family of four.

None of the census tracts in the project area are composed of large percentages of minority populations, low-income populations, or disabled populations when compared to the local population structure (see Table 3-2, Population Characteristics). Section 4.0, Coordination, provides more detailed information regarding the public involvement opportunities that were provided throughout the decision-making process, including the MIS process.

**Table 3-2  
 Population Characteristics**

	Total Population	Total Households	Average Persons/Household	Sex <sup>1</sup>		Income Median Household Income/ Family of Four <sup>2,3</sup>	Age Composition <sup>1</sup>					Ethnic Composition <sup>1</sup>						Mobility/Self Care Disability <sup>2,4</sup>	
				Male	Female		0-17	18-21	22-54	55-59	60 & Over	Hispanic Origin	White Not Hispanic	Black Not Hispanic	Native American Not Hispanic	Asian Not Hispanic	Other Not Hispanic		Percent Minority
Maricopa County	2,551,765	957,730	2.6	50.2	49.8	\$41,457	26.9	5.3	47.8	3.9	16.1	20.5	71.9	3.5	1.5	1.9	0.7	28.1	3.6
City of Chandler	132,360	45,727	2.8	50.5	49.5	\$44,541	31.2	4.3	53.9	2.9	7.7	19.3	73.3	2.7	.92	3.0	.75	26.7	2.1
Census Tract 5227.21	7,988	2,875	2.8	51.1	48.9	\$49,286	30.6	3.4	58.9	2.3	4.8	10.1	78.5	3.2	.61	6.9	.77	21.5	.56
Census Tract 5227.10	7,909	2,674	2.9	51.1	48.9	\$49,145	32.6	2.9	57.1	2.3	5.1	10.5	82.7	2.7	.54	2.7	.82	17.3	.81
Census Tract 5227.12	11,493	4,071	2.8	50.2	49.8	\$45,168	31.8	3.0	58.1	2.4	4.7	12.9	77.4	3.8	.76	4.6	.59	22.6	1.7

Source: Maricopa County Special Census, 1995

<sup>1</sup> Number represents percentage of total population

<sup>2</sup> 1990 Census Information

<sup>3</sup> Department of Health and Human Services poverty guideline = \$15,150 for a family of four

<sup>4</sup> Percent in Universe: Civilian noninstitutionalized people 16 and over

### **3.2.1 Impacts Associated with Minority Populations and Environmental Justice**

The proposed project is not anticipated to have any disproportionately high and adverse effects on these populations for the following reasons: the proposed project is located along an area currently designated for an urban freeway system; no homes or businesses would be relocated; and the proposed project is expected to benefit residents living in the project area and the overall region by improving mobility and reducing congestion. Further, the minimal amount of new right-of-way and construction required outside the existing ADOT right-of-way would not impact existing development and access patterns.

### **3.3 Social Considerations**

A discussion regarding public services located adjacent to the project area follows.

#### **3.3.1 Parks**

Three public parks are located in close proximity to the project right-of-way. Mountain View Park is less than a quarter mile north of the project area on Twelve Oaks Boulevard. It is 19 acres in size and contains a playground, picnic ramadas, lighted volleyball courts, and a lighted basketball court. Price Park is one-half mile north of the project area, located on Country Club Way. Price Park is a 13.4-acre playground. Pueblo Alto is a small park, less than one-half acre in size. It is located on Calle Segunda, south of Chandler Boulevard, and contains a children's playground, a basketball court, and a picnic ramada. All three are city parks, and are accessed primarily from streets north of the proposed freeway.

The City of Chandler is planning a pool and sports facility in the area, which is currently in the design phase (letter from City of Chandler, Community Services Department, September 14, 1998). This facility would be located south of Chandler Boulevard, along Kyrene Road, east of the Gila Drain.

##### **3.3.1.1 Impacts on Parks**

Other recreational opportunities are provided to the public at the public schools described below. Because the project area is situated along an unpaved road that is not frequently used, access to these parks would not be affected during roadway construction and development.

#### **3.3.2 Schools**

The project area is within the Kyrene School District. Two schools are located less than a half mile north of the project area. Kyrene del Pueblo Middle School is located at 360 South Twelve Oaks Boulevard, north of Whitten Street. Kyrene de la Paloma Elementary School is located at 5000 West Whitten Street, east of Ponderosa Forest Drive.

The Tempe Union High School District owns land directly north of the proposed Santan Freeway and west of Kyrene Road. There are plans to build a high school in this area within the next five years.

##### **3.3.2.1 Impacts on Schools**

Kyrene district bus routes include several stops along Pecos Road, between McClintock Drive and Kyrene Road, to pick up children from the Gila River Indian Community. Access to the Gila River Indian Community at Kyrene Road will be maintained throughout roadway construction so that there will be no substantial impacts on bus service to nearby schools. Prior to construction activities, ADOT District Construction will coordinate with the Kyrene School District regarding any road closures that

may have temporary impacts on bus services. Minor delays may temporarily affect bus service during project construction, but this can be avoided with minimal adjustment to the bus schedule by the Kyrene School District.

### **3.3.3 Police, Fire, and Hospitals**

Police service is provided by the Chandler Police Department, the Maricopa County Sheriff's Department, and the State of Arizona Department of Public Safety. The Chandler Police Department is located at the intersection of Chandler Boulevard and Arizona Avenue, which is four miles east of the project area.

Two fire stations are located within a mile and a half of the project area. Chandler Fire Station 3 is located east of the Price Freeway, but is currently being relocated to Frye Road and Ellis Street, about one half-mile northeast of the project area. Fire Station 4 is located north of Chandler Boulevard and east of Kyrene Road, over one mile north of the project area.

Chandler Regional Hospital is the hospital nearest to the project area. It is located on Dobson and Frye Roads, over two miles east of the project area.

#### **3.3.3.1 Impacts on Police, Fire, and Hospitals**

Because roadway construction would avoid existing police, fire, and emergency service routes, it is unlikely that freeway construction related traffic congestion would cause any delays in response times for these services while construction is underway. The completed freeway would facilitate more efficient travel for police, fire, and emergency vehicles.

ADOT will prepare a detailed traffic control plan for freeway construction in accordance with the *Arizona Department of Transportation Traffic Control Supplement* (ADOT, 1996c) to *Part VI of the Manual on Uniform Traffic Control Devices* (ADOT, 1988a) and will coordinate with the affected public agencies and services in preparing this plan. ADOT will monitor the effectiveness of the traffic control plan during construction and make any necessary adjustments.

### **3.3.4 Public Transit and Bicycle Facilities**

The Regional Public Transportation Authority through Chandler Public Transit, operates four local bus routes (Routes 4, 72, 81, and 156), two express routes (540 and 541), and a dial-a-ride. Express routes are located on Warner Road, the Superstition Freeway (US 60), and the Price Freeway (101L). The local route nearest to the project area is located one mile to the north, on Chandler Boulevard. Currently, the transit system operates on weekdays only.

The *Chandler Transit Plan* accommodates population and employment growth in this city, projecting that increases would occur in close proximity to the project area. By the year 2002, the five-year, short-term plan would increase bus service to weekends and evenings, and routes to between one-quarter and one mile apart in response to population density. The proposed Santan Freeway is not identified in the recommended five-year implementation plan of the *Chandler Transit Plan*. Additionally, the corridor is not identified as a future express bus route or transit facility. The project corridor is identified as a potential high-capacity-transit corridor for light-rail trolley in the *Chandler Transit Plan*. The *Chandler Transit Plan* (City of Chandler, 1997) would be adopted if a proposed sales tax increase passes in the Chandler elections on May 18, 1999.

The *Chandler Bicycle Plan* (City of Chandler, 1991) was prepared to promote and encourage bicycle travel, and to coordinate bicycle travel with other forms of public transit. A five-year plan was established, which identifies a proposed major bike path, as well as bike lanes along arterial and collector roads. Six of the bike lanes within collector roadways are within one half-mile of the project area. The proposed right-of-way is not identified as a bicycle arterial route in Chandler's bicycle plan. The *Arizona Department of Transportation Bicycle Policy* (ADOT, 1998a) for accommodating bicycle travel on the State Highway System indicates that the entire Loop 202 route, including the Santan Freeway, is prohibited to bicycling.

#### **3.3.4.1 Impacts on Public Transit and Bicycle Facilities**

Because the project area is located on the boundary of the city of Chandler and roadway construction would avoid existing designated public transit and bicycle routes; therefore, no impacts to public transit or bicycle facilities are anticipated.

#### **3.3.5 Libraries and Post Offices**

Chandler has two public libraries and two post offices. None of these facilities are in close proximity to the project area. The Chandler Public Library is located on Commonwealth Avenue, over four miles from the east terminus of the project area. The Hamilton Library is located on Arizona Avenue, over three miles southeast of the project area. A new library is planned near the intersection of Ray and Rural Roads, two miles north of the project right-of-way. Construction of this new library is scheduled to commence in the fall of 1999.

One of the Chandler post offices is located on Colorado Street, over 4 miles east of the east project terminus. The other post office is on West Carla Vista Drive, about 2.5 miles east of the project area.

##### **3.3.5.1 Impacts on Libraries and Post Offices**

No impacts to the use of or access to public libraries and post offices are anticipated during roadway construction since none of these facilities are located in close proximity to the project area.

#### **3.4 Economics**

There are very few businesses located near the project area. Stellar Airpark is a privately owned airport, located west of McClintock Drive and adjacent to the northern boundary of the project area. Access to the airpark would be maintained during roadway construction. The proposed Santan Freeway would not interfere with operations at Stellar Airpark.

The Pacific Livestock Auction is located east of Kyrene Road and south of the southern boundary of the project area. The auction lies within the boundaries of the Gila River Indian Community and is currently accessed from the east via 79<sup>th</sup> Street and Pecos Road. When the project is complete access to the auction would be available from the east via McClintock Road and Pecos Road. Access to the Pacific Livestock Auction would be maintained during construction.

A large, regional shopping mall is being planned, west of the Price Freeway, at the northeast corner of the project area (see Figure 3-1, Land Use). Depending on the project schedule for construction of this commercial facility, access for development or patronage may be temporarily impacted by construction-related traffic congestion during roadway development. This may have a temporary impact on business if the mall is open to the public by the time roadway development commences; however, primary access

would be from the Price Freeway and Chandler Boulevard, and only limited access is anticipated from the south.

As discussed in Section 3.1, Land Use, Ownership, and Potential Relocation, the proposed Santan Freeway is consistent with the goals and policies of the *City of Chandler Economic Development Plan*, (City of Chandler, 1995). The plan includes policy 6.3 on Infrastructure and Public Services. This policy states that the City of Chandler recognizes the economic development potential of the Santan Freeway corridor and will exert every effort to accelerate its development and to assure the proper planning of the immediately affected areas to their appropriate compatible uses.

### **3.4.1 Economic Impacts**

Because there would be no conversion of existing land uses as a result of this project, there would be no impact on the city of Chandler's property tax base. Access to nearby businesses and residences will be maintained during construction.

As previously stated, a detailed traffic control plan in accordance with the *Arizona Department of Transportation Traffic Control Supplement* (ADOT, 1996c) to *Part VI of the Manual on Uniform Traffic Control Devices* (ADOT, 1988a) will be prepared for freeway construction in an effort to minimize congestion during construction. Reasonable access to businesses will be maintained during regular operating hours. Once the project is complete, sales by local businesses, and related sales tax revenues, would not be affected by construction activity.

### **3.5 Hazardous Materials**

A Pre-Phase I Assessment, including a field observation and records review, for hazardous materials was conducted for the project area. Field observations were limited to exposed materials and do not represent complete observation of all materials, such as materials that may be concealed by concrete slabs or other construction details. Refer to the Bibliography/Reference Section of this document for a detailed list of the records that were reviewed at the Arizona Department of Environmental Quality (ADEQ).

Field observation indicated that there are small amounts of surface dumping in the project area that are residential in nature. The dumping consists of residential trash, dead vegetation, construction debris, and an old rusted irrigation pump.

#### **3.5.1 Impacts Associated with Hazardous Materials**

No hazardous materials concerns were identified. No further hazardous materials investigation is required. If suspected hazardous materials are encountered during construction, work will cease at that location and the ADOT Engineer will be contacted to arrange for proper treatment or disposal of those materials.

### **3.6 Air Quality**

An overview of the existing air quality and a summary of the air quality impacts of the proposed project are presented below. Detailed discussions of existing air quality and the methods used to assess project impacts can be found in the *Air Quality Analysis Report* (ADOT, 1999a), available at the ADOT Environmental Planning Section, 205 South 17<sup>th</sup> Avenue, Phoenix, Arizona.

### 3.6.1 Overview

The *Clean Air Act Amendments* of 1990 authorize the U.S. Environmental Protection Agency (EPA) to designate areas as nonattainment and classify them according to their degree of severity. This classification initiates a set of control requirements designed to achieve attainment by a specified date. A nonattainment area is an area in which compliance with the National Ambient Air Quality Standards (NAAQS) has not been established for one or more pollutants. The NAAQS for these and other criteria pollutants are presented in Table 3-3, National Ambient Air Quality Standards.

Pollutant	Averaging Time	Primary	Secondary
Carbon Monoxide	1-hour	35 ppm	**
	8-hour	9 ppm	**
Nitrogen Dioxide	Annual	100 µg/m <sup>3</sup>	100 µg/m <sup>3</sup>
Ozone	1-hour	0.12 ppm	0.12 ppm
	8-hour	0.08 ppm	0.08 ppm
PM <sub>10</sub>	24-hour	150 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual	50 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
PM <sub>2.5</sub>	24-hour	65 µg/m <sup>3</sup>	65 µg/m <sup>3</sup>
	Annual	15 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
Sulfur Dioxide	3-hour	**	1300 µg/m <sup>3</sup>
	24-hour	365 µg/m <sup>3</sup>	**
	Annual	80 µg/m <sup>3</sup>	**
Lead	Calendar Quarter	1.5 µg/m <sup>3</sup>	1.5 µg/m <sup>3</sup>

Notes: ppm = parts per million  
 µg/m<sup>3</sup> = micrograms per cubic meter  
 \*\* = No standard

Source: Arizona Department of Environmental Quality, 1997

The Santan Freeway project area lies within a nonattainment area for carbon monoxide (CO), ozone, (O<sub>3</sub>), and particulate matter containing particles with diameters of 10.0 micron or less (PM<sub>10</sub>). The project area lies within a nonattainment area for CO, O<sub>3</sub>, and PM<sub>10</sub>. A brief description of the three pollutants is provided below:

CO is a colorless, odorless gas, which primarily affects the cardiovascular system. Vehicular emissions are a major source of CO.

O<sub>3</sub> is a product of reactions among chemicals produced by burning coal, gasoline, and other fuels, and chemicals found in products including solvents and paints. Ozone affects the respiratory system.

Particulate matter may cause irritation and damage to the respiratory system. Particulate matter includes dust, soot, and other tiny bits of solid materials that are released into and move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks and buses, incineration of garbage, mixing and application of fertilizers and pesticides, and road construction. In 1987 the EPA revised the particulate standard to address those particles with diameters of 10 microns or less. These smaller particles are referred to as PM<sub>10</sub>.

Maricopa County is currently designated as a "serious" nonattainment area for CO, O<sub>3</sub>, and PM<sub>10</sub> pollutants. The Maricopa County CO nonattainment area was reclassified from "moderate" to "serious" by the EPA effective August 28, 1996. The reclassification requires MAG to prepare, within 18 months of the effective date, a new State Implementation Plan (SIP) that demonstrates attainment of the NAAQS for CO by December 31, 2000. A draft CO plan was prepared in September 1998. The plan is currently being revised in response to comments received at a public hearing held in September 1998. MAG anticipates submittal of the revised plan in early 1999.

The Maricopa County PM<sub>10</sub> nonattainment area was reclassified by the EPA from "moderate" to "serious" with an effective date of June 10, 1996. The reclassification requires MAG to prepare a new SIP within 18 months of the effective date that demonstrates attainment of the NAAQS for PM<sub>10</sub> before December 31, 2001. A PM<sub>10</sub> plan was prepared in December 1997. The plan is currently being revised in response to comments received from the EPA. MAG anticipates submittal of the revised plan in mid-year 1999.

On November 6, 1997 the EPA issued a final rule, which reclassified the Maricopa County O<sub>3</sub> nonattainment area from "moderate" to "serious" and denied the State's application for a one-year extension of the November 15, 1996 attainment date. As a result of this final action, continued progress toward attainment of the one-hour standard would be required through the development of a new SIP (originally due December 8, 1998) that demonstrates O<sub>3</sub> attainment by November 15, 1999. A direct final rule was issued in November 1998 to extend the December 8, 1998 deadline to March 1999.

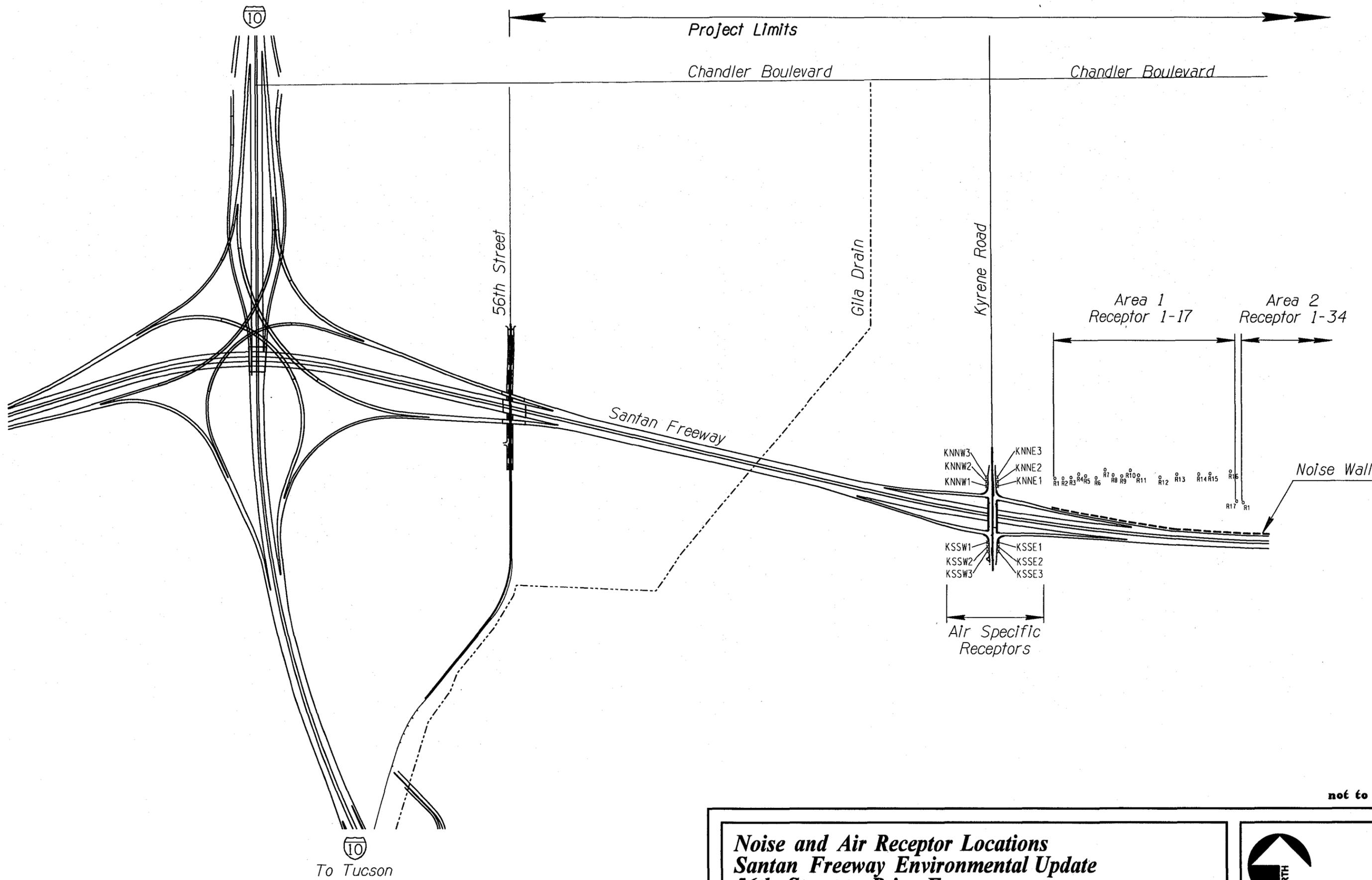
Of the various vehicular-emitted air pollutants, CO is the primary concern and is analyzed in this document. CO is a project-by-project related concern because of its potential hazard to public health at excessive concentrations. The methodology used for the analysis is industry-standard and is described further in the *Air Quality Analysis Report* (ADOT, 1999a).

The air quality project-level analysis performed for assessing impacts from the proposed project focused on vehicle emissions of CO. Other pollutants, such as PM<sub>10</sub>, nitrogen oxides (NO<sub>x</sub>), and hydrocarbons, also are components of vehicular emissions; however, the impacts of CO are most easily assessed and provide a convenient measure of air quality impacts. The EPA is currently developing modeling guidance for project-level PM<sub>10</sub> analysis. This analysis, therefore, was restricted to a project-level CO modeling analysis of vehicular emissions in the vicinity of the Santan Freeway project area. The modeled impacts were compared to the applicable ambient air quality standards to determine if the project would cause any localized violations.

### **3.6.2 Impacts on Air Quality**

#### **3.6.2.1 Project Level Impacts**

Predicted maximum one-hour concentrations of CO were calculated for 94 receptors along the project area for the future build condition. The locations of these air receptors are shown on Figure 3-3, Noise and Air Receptor Locations. All estimated one-hour concentrations for the proposed project, as listed in Table 3-4, Estimated Carbon Monoxide Concentrations, are below the one-hour standard (35ppm). One-



not to scale

**Noise and Air Receptor Locations  
Santan Freeway Environmental Update  
56th Street to Price Freeway**



**Figure 3-3**

SANTEAL.DGN

Project Limits

Chandler Boulevard

LOOP 101

Area 2  
Receptors 1-34

Area 3  
Receptors 1-19

McCintock Drive

Price Freeway

Noise Wall

Noise Wall

Santan Freeway

Country Club Way

MCNNW3  
MCNNW2  
MCNNW1

MCNNE3  
MCNNE2  
MCNNE1

MCSSW1  
MCSSW2  
MCSSW3

MCSSE1  
MCSSE2  
MCSSE3

Air Specific  
Receptors

not to scale

**Noise and Air Receptor Locations  
Santan Freeway Environmental Update  
56th Street to Price Freeway**



**Figure 3-3  
Continued**

SANTEAU2.DGN

hour CO concentrations were converted to eight-hour concentrations. None of the eight-hour averages exceed the eight-hour standard of 9 ppm.

**TABLE 3-4  
ESTIMATED CARBON MONOXIDE CONCENTRATIONS**

Receptor Number <sup>a</sup>	Existing One-Hour	Existing Eight-Hour <sup>b</sup>	2020 No Build One-Hour	2020 No Build Eight-Hour <sup>b</sup>	2020 Build One-Hour	2020 Build Eight-Hour <sup>b</sup>
AREA 1						
1	4.0	2.8	4.0	2.8	4.1	2.9
2	4.0	2.8	4.0	2.8	4.1	2.9
3	4.0	2.8	4.0	2.8	4.1	2.9
4	4.0	2.8	4.0	2.8	4.1	2.9
5	4.0	2.8	4.0	2.8	4.1	2.9
6	4.0	2.8	4.0	2.8	4.1	2.9
7	4.0	2.8	4.0	2.8	4.1	2.9
8	4.0	2.8	4.0	2.8	4.1	2.9
9	4.0	2.8	4.0	2.8	4.1	2.9
10	4.0	2.8	4.0	2.8	4.1	2.9
11	4.0	2.8	4.0	2.8	4.1	2.9
12	4.0	2.8	4.0	2.8	4.1	2.9
13	4.0	2.8	4.0	2.8	4.1	2.9
14	4.0	2.8	4.0	2.8	4.1	2.9
15	4.0	2.8	4.0	2.8	4.1	2.9
16	4.0	2.8	4.0	2.8	4.1	2.9
17	4.0	2.8	4.0	2.8	4.2	2.9
AREA 2						
1	4.0	2.8	4.0	2.8	4.2	2.9
2	4.0	2.8	4.0	2.8	4.2	2.9
2	4.0	2.8	4.0	2.8	4.3	3.0
4	4.0	2.8	4.0	2.8	4.0	2.8
5	4.0	2.8	4.0	2.8	4.3	3.0
6	4.0	2.8	4.0	2.8	4.2	2.9
7	4.0	2.8	4.0	2.8	4.2	2.9
8	4.0	2.8	4.0	2.8	4.3	3.0
9	4.0	2.8	4.0	2.8	4.2	2.9
10	4.0	2.8	4.0	2.8	4.3	3.0
11	4.0	2.8	4.0	2.8	4.3	3.0
12	4.0	2.8	4.0	2.8	4.3	3.0
13	4.0	2.8	4.0	2.8	4.3	3.0
14	4.0	2.8	4.0	2.8	4.3	3.0
15	4.0	2.8	4.0	2.8	4.3	3.0
16	4.0	2.8	4.0	2.8	4.3	3.0
17	4.0	2.8	4.0	2.8	4.3	3.0
18	4.0	2.8	4.0	2.8	4.3	3.0
19	4.0	2.8	4.0	2.8	4.3	3.0
20	4.0	2.8	4.0	2.8	4.3	3.0
21	4.0	2.8	4.0	2.8	4.3	3.0

<sup>a</sup> Locations of receptors are shown in Figure 3-3.

<sup>b</sup> A persistence factor of 0.7 was applied to each One-Hour estimate to provide an estimate of the Eight-Hour Average.

Note: One-Hour and Eight-Hour concentrations are shown in parts per million (ppm).

A background concentration of 4.0 ppm is included in the One-Hour and Eight-Hour concentrations.

**TABLE 3-4 CONTINUED  
ESTIMATED CARBON MONOXIDE CONCENTRATIONS**

Receptor Number <sup>a</sup>	Existing One-Hour	Existing Eight-Hour <sup>b</sup>	2020 No Build One-Hour	2020 No Build Eight-Hour <sup>b</sup>	2020 Build One-Hour	2020 Build Eight-Hour <sup>b</sup>
<b>Area 2 Continued</b>						
22	4.0	2.8	4.0	2.8	4.3	3.0
23	4.0	2.8	4.0	2.8	4.3	3.0
24	4.0	2.8	4.0	2.8	4.3	3.0
25	4.0	2.8	4.0	2.8	4.3	3.0
26	4.0	2.8	4.0	2.8	4.3	3.0
27	4.0	2.8	4.0	2.8	4.3	3.0
28	4.0	2.8	4.0	2.8	4.3	3.0
29	4.0	2.8	4.0	2.8	4.3	3.0
30	4.0	2.8	4.0	2.8	4.3	3.0
31	4.0	2.8	4.0	2.8	4.3	3.0
32	4.0	2.8	4.0	2.8	4.3	3.0
33	4.0	2.8	4.0	2.8	4.2	2.9
34	4.0	2.8	4.0	2.8	4.3	3.0
<b>Kyrene Road Interchange</b>						
KNNE1	N/A	N/A	N/A	N/A	5.4	3.8
KNNE2	N/A	N/A	N/A	N/A	5.0	3.5
KNNE3	N/A	N/A	N/A	N/A	4.8	3.4
NNNW1	N/A	N/A	N/A	N/A	6.3	4.4
KNNW2	N/A	N/A	N/A	N/A	5.6	3.9
KNNW3	N/A	N/A	N/A	N/A	5.1	3.6
KSSE1	N/A	N/A	N/A	N/A	4.8	3.4
KSSE2	N/A	N/A	N/A	N/A	4.6	3.2
KSSE3	N/A	N/A	N/A	N/A	4.4	3.1
KSSW1	N/A	N/A	N/A	N/A	5.3	3.7
KSSW2	N/A	N/A	N/A	N/A	5.0	3.5
KSSW3	N/A	N/A	N/A	N/A	4.8	3.4
<b>AREA 3</b>						
1	4.0	2.8	4.0	2.8	4.4	3.1
2	4.0	2.8	4.0	2.8	4.4	3.1
3	4.0	2.8	4.0	2.8	4.4	3.1
4	4.0	2.8	4.0	2.8	4.3	3.0
5	4.0	2.8	4.0	2.8	4.4	3.1
6	4.0	2.8	4.0	2.8	4.4	3.1
7	4.0	2.8	4.0	2.8	4.3	3.0
8	4.0	2.8	4.0	2.8	4.3	3.0
9	4.0	2.8	4.0	2.8	4.3	3.0
10	4.0	2.8	4.0	2.8	4.3	3.0
11	4.0	2.8	4.0	2.8	4.2	2.9
12	4.0	2.8	4.0	2.8	4.3	3.0
13	4.0	2.8	4.0	2.8	4.3	3.0
14	4.0	2.8	4.0	2.8	4.3	3.0

<sup>a</sup> Locations of receptors are shown in Figure 3-3.

<sup>b</sup> A persistence factor of 0.7 was applied to each One-Hour estimate to provide an estimate of the Eight-Hour Average.

Note: One-Hour and Eight-Hour concentrations are shown in parts per million (ppm).

A background concentration of 4.0 ppm is included in the One-Hour and Eight-Hour concentrations.

N/A = Not Applicable. Interchange does not exist under existing and 2020 No-Build scenarios.

**TABLE 3-4 CONTINUED  
ESTIMATED CARBON MONOXIDE CONCENTRATIONS**

Receptor Number <sup>a</sup>	Existing One-Hour	Existing Eight-Hour <sup>b</sup>	2020 No Build One-Hour	2020 No Build Eight-Hour <sup>b</sup>	2020 Build One-Hour	2020 Build Eight-Hour <sup>b</sup>
Area 3 Continued						
15	4.0	2.8	4.0	2.8	4.4	3.1
16	4.0	2.8	4.0	2.8	4.4	3.1
17	4.0	2.8	4.0	2.8	4.3	3.0
18	4.0	2.8	4.0	2.8	4.3	3.0
19	4.0	2.8	4.0	2.8	4.3	3.0
McClintock Drive Interchange						
MCNN1	N/A	N/A	N/A	N/A	4.7	3.3
MCNN2	N/A	N/A	N/A	N/A	5.4	3.8
MCNN3	N/A	N/A	N/A	N/A	5.4	3.8
MCNNE1	N/A	N/A	N/A	N/A	5.0	3.5
MCNNE2	N/A	N/A	N/A	N/A	4.8	3.4
MCNNE3	N/A	N/A	N/A	N/A	4.7	3.3
MCSSE1	N/A	N/A	N/A	N/A	6.1	4.3
MCSSE2	N/A	N/A	N/A	N/A	5.0	3.5
MCSSE3	N/A	N/A	N/A	N/A	4.7	3.3
MCSSW1	N/A	N/A	N/A	N/A	5.0	3.5
MCSSW2	N/A	N/A	N/A	N/A	4.7	3.3
MCSSW3	N/A	N/A	N/A	N/A	4.6	3.2

<sup>a</sup> Locations of receptors are shown in Figure 3-3.

<sup>b</sup> A persistence factor of 0.7 was applied to each One-Hour estimate to provide an estimate of the Eight-Hour Average.

Note: One-Hour and Eight-Hour concentrations are shown in parts per million (ppm).

A background concentration of 4.0 ppm is included in the One-Hour and Eight-Hour concentrations.

N/A = Not Applicable. Interchange does not exist under existing and 2020 No-Build scenarios.

Upon completion, the proposed project would not impair the air quality in the surrounding area. Some deterioration of air quality can be expected during construction, due to the operation of construction equipment combined with the slower traffic speeds that are associated with a construction zone. This would be a localized condition that would be discontinued when the project is completed. The roadway contractor shall observe and comply with all pollution ordinances, regulations, orders, etc. from local jurisdictions. In accordance with Maricopa County Rule 310, *Fugitive Dust Ordinance*, an approved Application for Earth Moving Permit, Demolition & Dust Control Plan will be obtained from the Maricopa County Environmental Services Department prior to construction. The permit will describe measures to control and regulate air pollutants during construction.

As previously mentioned the proposed project is located in a PM<sub>10</sub> nonattainment area. ADEQ has requested that the following preventive and mitigative measure be taken to minimize the possible particulate and sediment pollution problem: Minimize dirt track-out by washing or cleaning trucks before leaving the construction site.

This project is in an air quality nonattainment area, which has transportation control measures in the State and Federal Implementation Plans. The FHWA has determined that both the Transportation Plan and the TIP conform to these Implementation Plans. The project is included in the 1999-2003 TIP and is included in the future year conformity analysis, as part of the 1997-2015 Long Range Transportation Plan.

### 3.7 Noise

Detailed discussions of the existing noise and the methods used to assess project impacts can be found in the *Noise Study Report* (ADOT, 1998d), available at the ADOT Environmental Planning Section, 205 South 17<sup>th</sup> Avenue, Phoenix, Arizona.

#### 3.7.1 Traffic Noise

The analysis of potential noise impacts in the project area was made pursuant to the *ADOT Noise Abatement Policy* (ADOT, 1996a). The policy includes a table of Noise Abatement Criteria (NAC) levels that delineates the criteria by types of land use activities, or land use categories.

Three receptor areas were modeled for predicted noise levels. Noise receptor locations are shown on Figure 3-3, Noise and Air Receptor Locations. A-weighted sound levels are used to describe the response of human hearing and perception and are expressed as dBA. Traffic noise is averaged over peak traffic periods and expressed as an equivalent noise level (Leq). All of the sensitive noise receptors in the project area are residences and are therefore classified as Category B, with a NAC of 67 dBA for Leq. Sound levels are expressed in units called decibels (dB). Since ADOT defines impacts as occurring when the criterion is approached within two dBA, impacts occur when the predicted Leq levels exceed 65 dBA for residential receptors. Table 3-5, Summary of Sensitive Receptors, is a summary of sensitive receptors in the project area. All of the receptors identified in the Santan Freeway project area are adjacent to the northern boundary and are first row with respect to the location of the proposed Santan Freeway.

Receptor Area	Number of residences in area	Location/Description
1	25	Kyrene Road to Pineview Drive/Kesler Street
2	77	Pineview Drive to Stellar Airpark/Kesler Lane and Geronimo Street Area
3	19	East of McClintock Drive/Pecos Road Area

Existing and future noise levels are provided in Table 3-6, Summary of Existing and Future Noise Levels. Existing noise levels were measured at several sites along the project area. Predictions were made for future (2020) conditions, with the proposed Santan Freeway in place, and 2020 traffic volumes for the worst noise hour. The predictions were made using the FHWA computer model STAMINA 2.0/OPTIMA, which is the currently accepted method for calculating future noise levels from highways.

Receptor Area	Number of residences	1998 Existing Leq (dBA)	2020 Predicted Leq (dBA)	Number of Impacted Receptors
1	25	40	60-65	42*
2	77	37	69-72	150*
3	19	43	64-69	26*

Leq = equivalent noise level  
 dBA = A-weighted sound levels  
 \*includes some 2<sup>nd</sup> row receptors.

A review of Table 3-6, Summary of Existing and Future Noise Levels, shows that all three receptor areas have impacts, according to the ADOT policy. Consequently, abatement analysis was performed for these locations. Since the horizontal alignment is fixed and traffic control measures such as truck or speed restrictions are not feasible, the only feasible abatement measure remaining is the construction of noise barriers. Barriers were analyzed for the three locations. Design criteria for the barriers, in accordance with ADOT policy, is a minimum seven dBA insertion loss and a final Leq value of less than 65 dBA. Any residence receiving five dBA or more noise reduction is "benefited" according to the ADOT policy. Table 3-7, Summary of Noise Barriers, shows the results of the barrier analysis for the three areas where impacts were predicted for the year 2020.

Area	Number of benefited Receptors	Average Barrier Height	Approximate Barrier Length	Insertion Loss (dBA)	Leq w/barrier (dBA)
1	42	18 ft	3600 ft	7	53-58
2	77	12 ft	4800 ft	7	62-65
3	15	13 ft	2200 ft	7	59-62

dBA = A-weighted sound levels

In addition to the analysis of future noise levels with the Santan Freeway project completed and carrying 2020 traffic, the 2020 No-Build option also was examined (ADOT 1998d). Under that scenario, none of the cross streets would experience a significant change in traffic, nor would there be any noticeable change in other noise sources. Therefore, the 2020 No-Build option would produce 2020 noise levels similar to those for the existing case, as shown in Table 3-6, Summary of Existing and Future Noise Levels.

Table 3-8, Summary of Recommended Noise Barriers, provides an average height for two proposed barriers in the project area.

Area	Number of Benefited Receptors	Average Barrier Height	Approximate Barrier Length	Approximate Begin Station	Approximate End Station
1, 2	119	15 ft	8000 ft	1354+00	1434+00
3	15	13 ft	2200 ft	1463+00	1485+00

### 3.7.1.1 Impacts Associated with Traffic Noise

Although the noise areas were analyzed separately for impacts and abatement, Areas 1 and 2 may result in one continuous barrier. For these combined areas there are 119 residences that receive at least a 5 dBA noise reduction, including 17 in the second row in Area 1. In Area 2, there are approximately 150 residences that are impacted; however, none of those in the second row would experience a reduction of 5 dBA as a result of the barrier because the first row of houses are so close together that they minimize the noise reduction characteristics. In Area 3, there are 15 residences that receive at least a 5 dBA noise reduction, all on the first row. There are no second row residences that are benefited from the construction of a noise wall because the right-of-way in this area is such that the second row is not parallel with the Santan Freeway travel lanes. The closest few first row houses receive a 7 dBA reduction; the remainder of the first row houses receive between 5 and 7 dBA reduction.

The exact noise barrier heights and locations will be finalized during the final design process. Noise barrier mitigation will be considered during the final design process for future developments that are approved by the City of Chandler prior to the approval date of this Environmental Update.

### **3.7.2 Construction Noise**

Construction noise differs from traffic noise in several ways:

- Construction noise lasts only for the duration of the construction contract, and it is usually limited to daylight hours when most human activity occurs.
- Construction activities generally are of a short-term nature, and depending on the nature of construction operations, it could last from seconds (e.g., a truck passing a receptor) to months (e.g., constructing a bridge).
- Construction noise also is intermittent and depends on the type of operation, location, and function of the equipment, and the equipment usage cycle. Traffic noise, on the other hand, is present in a more continuous fashion after construction activities are completed.

#### **3.7.2.1 Impacts Associated with Construction Noise**

Land uses in the project vicinity would be exposed to noise from construction activity. To minimize noise impacts from construction activities, the following measures will be taken:

- All exhaust systems on equipment will be in good working order. Properly designed engine enclosures and intake silencers will be used where appropriate.
- Equipment will be maintained on a regular basis.
- New equipment will be subject to new product emission standards.
- Stationary equipment will be located as far away from sensitive receptors as possible.
- The public will be adequately notified of construction operations using methods including distribution of construction alert publications.

### **3.8 Visual Quality**

Visual impacts are defined as a change in the aesthetic value resulting from the introduction of modifications to the landscape. The proposed Santan Freeway corridor is characterized by visual elements associated with residential, agricultural, and commercial development in a relatively flat terrain setting.

There are essentially no land users south of the proposed facility that benefit from visual resources that are in close enough proximity to be affected by the proposed project. Potential for visual impacts exist only for existing residences north of the proposed freeway. Currently, the majority of residences along the Santan Corridor back on to the proposed facility. Generally, views are shielded by existing rear yard privacy walls. Potentially, views from these residences may be realized from raised decks and/or second floors. From these vantage points, foreground and mid-range views of relatively flat, agricultural lands may be observed.

The most substantial alteration in the corridor would be the change from largely undeveloped land to a divided freeway section. The proposed connector roads west of Country Club Way and traffic interchanges proposed at Kyrene Road and McClintock Drive would introduce features into the surrounding visual environment. Proposed noise walls in residential areas would shield these features from many of the residential properties adjacent to the corridor. Since the freeway would be below grade

in the area from Kyrene Road to the Price Freeway, the freeway would not be as noticeable to residents living in that area and would be shielded generally even by standard privacy walls.

### **3.8.1 Visual Quality Impacts**

The proposed Santan Freeway would introduce night-time illumination into some areas where little or no lighting currently exists. This visual effect would be minimal since the mainline of the freeway would be below grade, which also lowers the lighting fixtures. Effects of spillover lighting will be considered further in final design.

The view for travelers on the proposed Santan Freeway is dependent on the grade and profile of the roadway surface. In the fully depressed sections of the roadway, views would be limited to the immediate transportation elements including paved surfaces, adjacent landscaping, walls, and structures. In the slightly depressed sections views would expand to encompass adjacent properties.

During final design, ADOT will consider opportunities to reduce visual impacts on adjacent land uses. Possible measures include architectural treatment of bridges and walls.

### **3.9 Utilities**

Several utilities are located within the project area. These utilities include electricity, natural gas, water, sanitary sewer, telephone, cable television, and irrigation facilities. ADOT Utilities and Railroad Engineering Section will coordinate with utility companies during the design phase of the project to ensure proper relocation planning, as needed. Utilities that are anticipated to be relocated by the appropriate utility companies include electricity, telephone, and natural gas. It is anticipated that ADOT would relocate sanitary sewer and water lines, as necessary. The responsibility of any utility relocation costs would be determined during design and in consideration of any established prior rights for existing utility locations. Properties served by affected utilities may experience short-term disruptions to service while new connections are made and utility lines are relocated.

The Pecos Drain is an existing small concrete-lined irrigation ditch located in the project area. The Pecos Drain is an SRP facility. In the project area, the primary function of the Pecos Drain is tailwater (unused irrigation water) collection. This tailwater eventually drains into the Gila Drain. ADOT Utilities and Railroad Engineering Section will coordinate with affected landowners and utilities (e.g. SRP) during project design to resolve any conflict with irrigation facilities.

#### **3.9.1 Impacts on Utilities**

Disruptions to utility service, if necessary, would be restricted to short-term localized disruptions. Advanced planning would be accomplished during design so that interruptions in utility services to customers would not occur or would be minimized. ADOT and the project contractors will continue to coordinate with utility providers during design and project construction to identify potential problems and/or conflicts and provide opportunities to resolve them. Relocation of utilities will be closely coordinated with ADOT and FCDMC construction activities and other projects in the area to minimize disruption to adjacent properties and traffic. Project planning will include careful scheduling of disruptions and prior notification to adjacent properties that will be affected by temporary service cut-offs.

There are no wells that remain in use within the project limits; therefore, there will be no impacts on any wells. All wells within the project right-of-way limits will be identified by ADOT Utilities and Railroad

Section during final design. All abandoned wells identified within the right-of-way will be reviewed to assure that proper well closure procedures were followed.

### **3.10 Water Resources**

The proposed action is within the Phoenix Active Management Area (PAMA) where water conservation measures are encouraged. The PAMA Second Management Plan requires use of low-water-use (water conserving) plants in landscaping of public right-of-way. Landscaping plans for the proposed action will be developed in coordination with ADOT Roadside Development and the Arizona Department of Water Resources to ensure that the appropriate materials are used along the Santan Freeway corridor. The City of Chandler has reclaimed water from their Ocotillo Plant that is available for landscaping activities.

#### **3.10.1 Water Quality**

The proposed project would not negatively affect surface water quality because stormwater runoff would be channeled into a treatment facility (SEVRDS) where pollutant levels would be reduced (ADOT, 1997). Presently, stormwater is channeled into a variety of channels and drains with no treatment capability. The first flush of stormwater typically contains levels of a variety of pollutants that exceed state water quality standards (ADOT, 1997). By channeling stormwaters into a retention basin, and treating the first flush to remove or reduce pollutant levels, the project would improve water quality prior to release. Released waters from the system would flow into the Santan Outfall Channel which drains to the Gila Drain Floodway (Queen Creek floodplain) on the Gila River Indian Community (ADOT, 1997).

The SEVRDS design channels the "first flush" of stormwater via collector channels (along the highway) into a system of treatment basins. In the treatment basins, pollutants would be removed from the water. Natural processes in the basins assist in cleaning the stormwater. Water would be cycled through the system until the desired water quality is obtained. The treatment basins and "first-flush" holding basin would be lined with impervious material to prevent any recharge to groundwater of the pollutant laden "first-flush" waters. The design consultant will develop a traffic control plan for construction of the collector channel and associated drainage facilities in accordance with Maricopa County procedures.

##### **3.10.1.1 Water Quality Impacts**

No principal or sole-source aquifers as designated under Section 1424(e) of the *Safe Drinking Water Act* would be affected by the proposed project. In addition, no wellhead protection areas as authorized by the 1986 Amendments to the *Safe Drinking Water Act* would be affected by the proposed project.

There will be no water quality impacts to any wells in or adjacent to the project area. The final drainage design will assure that stormwater runoff will not pond out side of the right-of-way. All wells within the project right-of-way limits will be identified by ADOT Utilities and Railroad Section during final design. To eliminate the potential for groundwater contamination from stormwater runoff, all abandoned wells within the right-of-way will be reviewed to assure proper well closure procedures were followed.

No negative effects to surface water quality or groundwater are anticipated as a result of this project.

#### **3.10.2 Floodplains**

The contribution by the proposed project to overall stormwater runoff volumes is expected to be minor. The potential does exist for the project to contribute to flooding in the project area, primarily as a result of increased impervious surface areas. As described above in Section 3.10.1, Water Quality, adequate

drainage facilities will be designed during the final design process to avoid any contribution to existing flooding that may occur in the area. The Santan Freeway will not be a barrier to drainage conditions.

### **3.10.2.1 Impacts on Floodplains**

A review of the Federal Emergency Management Agency Flood Insurance Rate Maps for the project area indicates that the project is not located within the 100-year floodplain. Therefore, there would be no involvement with any 100-year floodplain as a result of construction of this project.

### **3.10.3 Wetlands**

No wetlands are present within or adjacent to the project right-of-way or proposed new right-of-way.

#### **3.10.3.1 Impacts on Wetlands**

The project would not have any effect on wetlands.

### **3.10.4 Clean Water Act - Sections 401, 402, and 404 Permits**

Because five or more acres of land will be disturbed, a National Pollutant Discharge Elimination System (NPDES) permit will be required. The Roadside Development Section will determine who will prepare the Storm Water Pollution Prevention Plan (SWPPP). The District Construction office and contractor will submit the Notice of Intent (NOI) and the Notice of Termination (NOT) to the EPA and copies to the ADEQ.

#### **3.10.4.1 Clean Water Act Impacts**

Based on discussion between ADOT and the COE, it has been determined that the existing Gila Drain is not considered a jurisdictional water of the United States (January 25, 1999 meeting minutes included in Appendix A, Project Correspondence); therefore, a Section 404 *Clean Water Act* permit would not be required for the proposed work at the drain. There are no jurisdictional waters of the U.S. within the project area.

### **3.11 Biotic Communities**

A biological evaluation of the project area was performed in September 1998 involving a review of maps and photos; and a site visit. Little natural vegetation remains in the project vicinity due to extensive clearing. Housing and business developments are increasing, also altering the landscape. Occasional four-winged saltbush (*Atriplex canescens*) and seepwillow (*Baccharis* sp.) are all that remains of the natural vegetation.

The U.S. Fish and Wildlife Service's (USFWS) list of endangered, threatened, proposed, and candidate species for Maricopa County was reviewed by a qualified biologist. Common wildlife of the project area includes species usually associated with agriculture and those tolerant of urban areas. These species include coyote, jackrabbit, cottontail rabbit, and various small rodents. Common birds include mourning dove, gambel quail, cactus wren, Gila woodpecker, house finch, roadrunner, and others. No significant wildlife populations occur in the project vicinity.

The only aquatic resource in the project vicinity is the Gila Drain, an agricultural drain. The Gila Drain would be crossed by the project. The Gila Drain supports no substantial or significant fish or aquatic

animal populations that would be of concern to state or federal wildlife agencies. The SEVRDS stormwater systems and related Santan Outfall Channel are designed to accommodate the stormwater runoff from the Santan Freeway project. The *Environmental Assessment for the Santan Outfall Channel Project* (ADOT, 1998c) discusses aquatic resource impacts of the stormwater releases from the SEVRDS system. The document states that none of the aquatic habitats that may be affected are considered of high value to the AGFD, Gila River Indian Community Department of Environmental Quality, or USFWS.

### **3.11.1 Impacts on Biotic Communities**

It was determined that no listed species or designated critical habitat would be affected by the construction of the project because the area does not support any critical habitat. Coordination with the Arizona Game and Fish Department (AGFD) indicated that the agency has no comment on the project. There are no plants present in the project area protected by the Arizona Native Plant Law.

### **3.12 Cultural Resources**

There are no significant cultural resources known to occur within the project area. A number of cultural resource inventories have been conducted within and surrounding the project right-of-way. In the late 1980's, a survey, as well as a comprehensive cultural resources literature review, was conducted for this project (ADOT, 1987). This study resulted in the identification of a number of potential prehistoric canal locations, a possible prehistoric reservoir associated with Los Muertos, which is a significant Hohokam village site, and two artifact loci within the project right-of-way. More recently, a compilation of all available information on prehistoric canals indicated that three canals and the reservoir were likely to cross the project area (Howard and Huckleberry, 1991).

Additional surveys and background research for this project were recently conducted by Archaeological Consulting Services, Ltd. (ADOT, 1998b). These surveys and research resulted in the identification of a previously unrecorded archaeological site, which was recommended as potentially eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion D, and a potentially significant historic canal (the Gila Drain). Artifact loci previously recorded were not relocated during recent surveys, and considerable surface disturbances were noted. Archaeological test investigations of the previously unrecorded archaeological site and the potential prehistoric canal locations were recommended to evaluate their National Register eligibility. Additional research of the Gila Drain led to its evaluation as ineligible for the NRHP. The State Historic Preservation Office, the BOR, and the SRP formally concurred with this determination (documentation is included in Appendix A, Project Correspondence).

An archaeological testing plan to address the eligibility of the previously unrecorded archaeological site, the canals, and the reservoir was developed, approved, and implemented (ADOT, 1999b). No significant buried features were identified during testing, and it was recommended that this project would have no effect on any historic properties potentially eligible for inclusion in the National or Arizona Registers of Historic Places. The State Historic Preservation Office has concurred with this recommendation (Appendix A, Project Correspondence).

#### **3.12.1 Impacts on Cultural Resources**

The project would have no impacts on cultural resources. A 1.8-acre parcel of new right-of-way and four TCEs are required for this project as described in Section 2.2.2.1, Right-of-Way. All of these locations were previously surveyed, and there are no known archaeological sites that will be affected by the new right-of-way or TCEs. If previously unidentified cultural resources are encountered during construction,

work will cease at that location and the ADOT Engineer will be contacted to arrange for proper treatment of these resources.

### **3.13 Temporary Construction Impacts**

Construction activities would have some minor temporary negative effects on businesses and residences in the vicinity of the project area. During construction, traveling motorists, as well as those people living and working in the surrounding area would experience temporary inconveniences associated with detours and construction dust and noise.

A detailed traffic control plan for freeway construction will be developed in accordance with the *Arizona Department of Transportation Traffic Control Supplement* (ADOT, 1996c) to *Part VI of the Manual on Uniform Traffic Control Devices* (ADOT, 1988a). The design consultant will develop a traffic control plan for construction of the collector channel and associated drainage facilities in accordance with Maricopa County procedures. Access to nearby businesses and residences will be maintained throughout construction.

Construction-related noise, dust, and other nuisances from construction activities also would negatively affect neighboring businesses and residences. These impacts will be minimized and enforced per specifications, ordinances, and regulations of the state and city jurisdictions. Construction activities will be performed in accordance with provisions set forth in the *Arizona Department of Transportation Standard Specifications for Road and Bridge Construction*, Section 107.14 (1990 Edition) or Section 104.08 (1996 Edition). The reader is referred to Section 3.6, Air Quality, of this chapter for additional mitigation associated with construction impacts.

### **3.14 Farmland**

This project is state funded; therefore, it is exempt from the requirements of the Farmland Protection Policy Act (7 USC 4202, Rules 7 CFR Part 658).

#### **3.14.1 Impacts on Farmland**

This project would not impact any farmlands of statewide or local importance located in the project area, because all construction activities would occur within the existing and proposed new ADOT right-of-way.

### **3.15 Wild and Scenic Rivers and Riparian Habitats**

There are no wild or scenic rivers in the vicinity of the proposed project.

#### **3.15.1 Impacts on Wild and Scenic Rivers and Riparian Habitats**

There would be no impact to any wild or scenic rivers as a result of this project.

## 4.0 COORDINATION

### 4.1 Scoping Process

Public and agency scoping processes were used to determine important environmental issues to be addressed in the *Final Environmental Assessment for the Southeast Loop Highway, SR 220 Santan Freeway* (ADOT, 1988b) and in this draft Environmental Update for the Santan Freeway project. These processes also were undertaken to gain agency and public input relative to the proposed project. The following paragraphs describe the scoping processes that have taken place related to the Santan Freeway project.

#### Southeast Loop Highway EA

Numerous coordination and public involvement activities were conducted during the development of the *Final Environmental Assessment for the Southeast Loop Highway, SR 220 Santan Freeway* (ADOT, 1988b) and Location and Design Study. The 1988 Final EA documents the considerable communication and coordination with jurisdictions, government agencies, utilities, businesses, and citizens that occurred. Community relations activities included developing a newsletter and fliers; conducting a public information meeting; a series of five open house meetings; and a public hearing. In addition, numerous meetings and discussions were held with a variety of individual agencies, special interest groups, officials, homeowner groups, and citizen groups.

Many stakeholders were involved during the development of the EA representing jurisdictions, public agencies, elected officials, utilities, special interest groups, and businesses. In August 1986, the Southeast Loop Technical Advisory Committee (TAC) was formed. The TAC was the major agency coordination forum comprised of representatives of relevant government agencies, which met over 30 times from 1986 to 1989. The TAC consisted of technical and policy representatives from the following jurisdictions:

- Arizona Department of Transportation
- City of Mesa
- City of Chandler
- Town of Gilbert
- Maricopa County
- Gila River Indian Community
- Flood Control District of Maricopa County

#### Red Mountain and Santan Corridors Major Investment Study

In July 1996 MAG completed the *Red Mountain and Santan Corridors Major Investment Study* (MIS). The purpose of the MIS was to develop or refine a plan concept and lead to decisions by the Metropolitan Planning Organization, in cooperation with participating agencies. The MAG planning process, as well as the ADOT project development and programming procedures included extensive opportunities for public involvement. A public meeting was held on the MIS in July 1996. Additionally, public meetings on the annual update of the MAG plan also have been held.

#### Environmental Update

A TAC was formed for preparation of this Environmental Update. The committee's purpose is to maintain communication with the affected jurisdictions and agencies. The TAC consists of technical and policy representatives from ADOT, the City of Chandler, and the Gila River Indian Community.

The TAC has held monthly project meetings.

A meeting was held with the Silverbrush Homeowners Association on December 7, 1998. Representatives of the homeowners association, ADOT, and consultant representatives were in attendance. The purpose of the meeting was to inform members of the association about roadway modifications in the area of Kyrene Road and Kesler Drive. Members of the association had questions including, but not limited to, access; the location of the freeway; the location of proposed noise walls; the location of the collector channel; and the project schedule.

A public information meeting was held on Thursday, December 10, 1998 for the proposed Santan Freeway from 56<sup>th</sup> Street to the Price Freeway. The meeting was held from 6:00 p.m. to approximately 8:45 p.m. at Kyrene de la Mirada Elementary School, 5500 W. Galveston Street, Chandler, Arizona. Notification of the public information meeting was published in two area newspapers: the Arizona Republic on November 29 and December 7, 1998 and the Chandler Independent on December 2 and December 9, 1998. Fliers containing display ads also were sent to residents in the project area, the City of Chandler, the Gila River Indian Community, elected officials, and members of the Santan Alliance.

The meeting was held to: (1) provide the public with information regarding the study; (2) present elements that are being evaluated in the Environmental Update and design; and (3) provide the public with the opportunity to express comments, concerns, and ideas about the project.

Approximately 76 citizens attended the public information meeting, not including study team members and other consultant representatives. The meeting was open to public questions and comments. Many residents expressed concerns and questions at the meeting. Also, as a result of the public information meeting, ENTRANCO has received 16 responses submitted in the form of comment sheets, and E-mails. Many respondents provided numerous comments regarding the proposed project.

Comments received were grouped into the following categories:

- Design considerations;
- Concerns regarding noise;
- Construction considerations;
- Concerns for safety; and
- Miscellaneous issues.

The majority of comments received expressed an opinion regarding design considerations and concerns regarding noise, including the following:

- Many people would like to see the freeway fully depressed throughout the Santan Freeway corridor from 56<sup>th</sup> Street to Price Freeway due to their perception that this would result in the least amount of noise from the freeway. Current plans indicate that the freeway would be slightly depressed in the area of Rural Road.
- Many comments support proposed noise walls. Requests were made to include these noise walls in the final design and to assure that they are of adequate height.

Comments received regarding construction considerations pertain to the following:

- Hours that daily construction work would occur;
- Construction trucks using the residential streets; and
- Blowing dust in the surrounding neighborhoods.

Comments relating to safety concerns included:

- A request that temporary walls be placed between the drainage channel and the walls of the homes during construction; and
- A concern for increased crime due to freeway proximity.

Miscellaneous comments included:

- Requests to inform residents of future meetings; and
- Concerns for sound, exhaust, and light pollution.

A Design Public Informational Meeting would be held at the Stage III project submittal (60% plans). The purpose of the meeting would be to inform the public of the progress of the project and to update the public regarding final design.

The preparation of this Environmental Update was coordinated with the following agencies and organizations:

- Arizona Department of Transportation
- Arizona State Historic Preservation Office
- Arizona Department of Environmental Quality
- Arizona Department of Water Resources
- Arizona Game and Fish Department
- City of Chandler
- Gila River Indian Community
- Maricopa Association of Governments
- Maricopa County Parks and Recreation
- Maricopa County Department of Transportation
- Flood Control District of Maricopa County
- Salt River Project
- U.S. Department of the Interior, Bureau of Reclamation
- U.S. Department of Agriculture, Natural Resource Conservation Service
- U.S. Department of the Army, Corps of Engineers
- U.S. Fish and Wildlife Service

All of the agencies listed above were given the opportunity to comment and provide input on this final Environmental Update. All were contacted regarding the schedule for the final comment period, and all were contacted prior to the close of the final comment period as a reminder. Following the close of the final comment period, agencies from whom there had been no response were contacted again for a final opportunity to state their concerns. No concerns were raised.

All input received to date will be considered during final design and has been addressed to the extent possible in the preparation of this document. Project correspondence is included in Appendix A, Project Correspondence.

## **4.2 Project Coordination**

This document was written by Brenda Martinez and Laurene Montero, of ENTRANCO. Support in developing the document came from the following:

- Javier Guana (ADOT, Project Manager)
- Richard Duarte (ADOT Environmental Manager)
- Karim Dada (ADOT Environmental Planner)
- Liz Szews (ADOT Air Quality and Noise Specialist)
- Fred Garcia (ADOT Air Quality and Noise Specialist)
- Bob Gasser (ADOT Cultural Resource Specialist)
- Thomas M. Monchak, PE (DMJM Arizona, Inc.)
- Jeffrey Minch (DMJM Arizona, Inc.)
- Paul Waung (DMJM Arizona, Inc.)
- Barbara Macnider (Archaeological Consulting Services, Ltd.);
- Louis Cohn (University of Louisville)
- Roswell A. Harris (University of Louisville)
- Jerry Zovne (HDR Engineering)

For more information, please contact:

- Richard Duarte, ADOT Environmental Manager, 205 South 17<sup>th</sup> Avenue, Mail Drop 619E, Telephone (602) 712-7760, Fax (602) 712-3066.
- Javier Guana, ADOT Project Manager, 205 South 17<sup>th</sup> Avenue, Mail Drop 614E, Telephone (602) 712-8545, Fax (602) 712-7630.

## BIBLIOGRAPHY/REFERENCES

### Arizona Department of Economic Security

- 1992 1990 Census Data
- 1996 1995 Special Census Data

### Arizona Department of Environmental Quality (ADEQ)

- 1996 National Pollutant Discharge Elimination System Permitted Facilities
- 1997 Air Quality Data for Arizona: 1996
- 1997 Water Quality Compliance for Federal & State Permits List: Reuse, Waste Water Treatment Plants, Mining, Industrial and National Pollutant Discharge Elimination System
- 1997 Remedial Project Section Information Packet
- 1988 Directory of Active and Inactive Solid Waste Landfills
- 1998 Directory of Closed Solid Waste Landfills
- 1998 Drinking Water Systems: Quick Look Report of Active Regulated Systems in Arizona listed by System ID number
- 1998 Drywell Registration
- 1998 Hazardous Materials Logbook
- 1998 Leaking Underground Storage Tanks by Zip Code
- 1998 RCRA/RCRIS Database
- 1998 Underground Storage Tanks
- 1998 Zip ACIDS List (Arizona CERCLA Information and Data Systems)
- 1998 Aquifer Protection Permitted Facilities
- 1998 RCRA Compliance Log

### Arizona Department of Transportation (ADOT)

- 1987 Cultural Resources Technical Report for the Southeast Loop Highway. Prepared by Dames and Moore.
- 1988a Manual on Uniform Traffic Control Devices
- 1988b Final Environmental Assessment for the Southeast Loop Highway, SR220 Santan Freeway. Prepared by Dames and Moore.
- 1990 Standard Specifications for Road and Bridge Construction
- 1995 Erosion and Pollution Control Manual
- 1996a Noise Abatement Policy
- 1996b Standard Specifications for Road and Bridge Construction
- 1996c Traffic Control Supplement
- 1997 Draft Final Drainage Report Santan Channel Project Southeast Valley Regional Drainage System, Phase I Basin Grading, Phase 2 Outlet Channel. Prepared by HDR Engineering, Inc.
- 1998a Bicycle Policy
- 1998b Cultural Resources Assessment of the Santan Freeway, Chandler, Maricopa County, Arizona. ADOT Project No. RAM 600 7 401, ADOT TRACS No. 202L MA 054 H5088 01C. Archaeological Consulting Services, Ltd. Project 98-42.
- 1998c Environmental Assessment for the Santan Outfall Channel Project. Prepared by ENTRANCO
- 1998d Santan Freeway 56<sup>th</sup> Street to Price Freeway Metropolitan Phoenix, Arizona Noise Study Report. Prepared by Louis F. Cohn and Roswell A. Harris.
- 1999a Air Quality Technical Report – Santan Freeway: 56<sup>th</sup> Street to Price Freeway. Prepared by ENTRANCO.

- 1999b Archaeological Testing at AZ U:9:202 (ASM) and Projected Prehistoric Canal Locations Along the Santan Freeway Corridor, Maricopa County, Arizona. ADOT Project No. RAM 600-7-401, ADOT TRACS 202L MA 054 H5088 01C. Archaeological Consulting Services, Ltd. Project 98-42A.

Arizona Game and Fish Department (AGFD)

- 1997 Wildlife of Special Concern in Arizona. Nongame and Endangered Wildlife Program

City of Chandler

- 1989 City of Chandler Housing Plan, An Element of the General Plan  
1991 Chandler Bicycle Plan  
1993 City of Chandler Parks and Recreation Master Plan  
1993 Final Report Chandler Transportation Plan Update  
1995 City of Chandler Economic Development Plan  
1995 Chandler Redevelopment Element  
1997 City of Chandler Final Report Transit Plan  
1998 City of Chandler Land Use Element an Element of the General Plan  
No Date Chandler – Land Use Element

Howard, Jerry B. and Gary Huckleberry

- 1991 Map of Canal System. In *The Operation and Evolution of an Irrigation System: the East Papago Canal Study*, Figure 1.1 Soil Systems Publications in Archaeology No. 18. Phoenix.

Maricopa Association of Governments (MAG)

- 1996 Red Mountain and Santan Corridors Major Investment Study  
1998 FY 1999-2003 Transportation Improvement Program

U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA)

- 1997 Final DOT order on Environmental Justice

U.S. Fish and Wildlife Service (USFWS)

- 1996 Listed, Proposed, and Candidate Species for Maricopa County.

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**APPENDIX A**

**PROJECT CORRESPONDENCE**

---



# United States Department of the Interior

Bureau of Reclamation  
Phoenix Area Office  
PO Box 81169  
Phoenix, AZ 85069-1169

IN REPLY REFER TO:  
PXAO-1500 ENV-3.00

Mr. Robert E. Gasser  
Historic Preservation Specialist  
Environmental Planning Section  
Arizona Department of Transportation  
Intermodal Transportation Division  
205 South 17th Avenue  
Room 213E, MD 619E  
Phoenix, Arizona 85007-3212

Subject: Gila Drain National Register of Historic Places (NRHP) Eligibility,  
Santan West, Project RAM 600-7-401, TRACS 202L MA 054 H5088 01C  
(Your Letter Dated October 29, 1998)

Dear Mr. Gasser:

The Cultural Resources staff from our office has reviewed the subject letter and the supporting cultural resources documentation. Our staff concurs with your assessment that the Gila Drain is not eligible for listing on the NRHP. I support staff recommendation and, thus, determine that the Gila Drain is not eligible for NRHP listing.

It is my understanding that your office will formally consult with the State Historic Preservation Office regarding effects to the Gila Drain as a result of the subject construction project and NRHP eligibility.

Thank you for providing us with an opportunity to comment on your undertaking. If you have any questions, please address them to Mr. Thomas Lincoln at 602-216-3859.

Sincerely,

Bruce D. Ellis  
Chief, Environmental Resource  
Management Division

cc: Ms. Ann V. Howard, State Historic Preservation Office, Arizona State  
Parks, 1300 West Washington, Phoenix, Arizona 85007  
Mr. John Keane, Salt River Project/PAB355, Environmental Affairs,  
PO Box 52025, Phoenix, Arizona 85072-2025



Arizona Department of Transportation

Intermodal Transportation Division

Environmental Planning Section

205 South 17th Avenue, Room 213E, MD 619E • Phoenix, Arizona 85007-5212

RECEIVED

OCT 02 1998



Systems & Information Resources  
Environmental Services

Jane Dee Hull  
Governor

Thomas G. Schmitt  
State Engineer

Mary E. Peters  
Director

October 29, 1998

Rick Anduze, Archaeologist  
Salt River Project  
P.O. Box 52025  
Phoenix, AZ 85072-2025

RE: Santan West  
Project RAM 600-7-401  
TRACS 202L MA 054 H5088 01C  
Gila Drain, National Register Eligibility

*RIC*  
Dear Mr. Anduze:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) are planning to construct a new freeway, the Santan Freeway, between Interstate 10 and US 60 (Superstition Freeway) within the cities of Phoenix, Mesa, Chandler and Gilbert. This proposed new freeway will be constructed in segments, one of which is known as Santan West; it will occur north of Pecos Road between 56th Street and the Price Expressway. The Santan West portion will be state-funded while the remaining segments will be federally funded.

Enclosed is a copy of "Cultural Resource Assessment of the Santan Freeway, Chandler, Maricopa County, Arizona" prepared by Archaeological Consulting Services (ACS). This report provides an overview of this project area, and contains the results of additional survey. A historic drainage channel known as the Gila Drain is located within this project area. I understand that the Salt River Project (SRP) maintains an easement for the Gila Drain and that it is owned by the Bureau of Reclamation (BOR). I am consulting with SRP regarding the eligibility of the Gila Drain for the National Register of Historic Places. I am concurrently consulting with the BOR regarding the same subject.

Based on the information contained in the ACS report, ADOT is of the opinion that the Gila Drain is not eligible for inclusion in the National Register. This drainage feature never functioned as intended and was abandoned soon after construction. It later functioned to remove irrigation tailwater, and later to convey storm water to the Gila River. It is our opinion that this drain never played a significant role in the development of the Salt River Valley and is certainly not noteworthy for its engineering.

Please review the enclosed report. If you agree that the Gila Drain is not eligible for the Arizona or National Register of Historic Places, would you please sign below. If we do not hear from you within the next 30 days, I will consult with the State Historic Preservation Office (SHPO) seeking their opinions on eligibility. Obviously, we would like your input before doing that. If you have any questions, please do not hesitate to contact me at 255-8636.

Sincerely,

ROBERT E. GASSER  
Historic Preservation Specialist  
Environmental Planning Section

*[Signature]*  
Concur, Salt River Project

Date  
11/30/98



# Arizona Department of Transportation

## Intermodal Transportation Division

### Environmental Planning Section

205 South 17th Avenue, Room 213E, MD 619E • Phoenix, Arizona 85007-3212



1995 Pioneer Award Recipient

Jane Dee Hull  
Governor

Thomas G. Schmitt  
State Engineer

Mary E. Peters  
Director

January 25, 1999

JoAnne Miller  
Compliance Specialist  
State Historic Preservation Office  
Arizona State Parks  
1300 W. Washington Street  
Phoenix, AZ 85007

RE: **Santan West**  
**Project RAM 600-7-505**  
**TRACS 202L MA 054 H5088 01C**

*JoAnne Miller*  
Dear Ms. Miller:

I am writing as a follow-up to our prior consultations on this proposed state-funded project to send you a copy of the archaeological testing report prepared by Archaeological Consulting Services (ACS). As you know, we inventoried the project area and noted the presence of the historic Gila Drain, an archaeological site known as AZ U:9:202 (ASM), and the potential for the project area to contain prehistoric canals. In consultation with the Salt River Project, the Bureau of Reclamation, and your office, we have determined that the Gila Drain is not eligible for the Arizona or National Register of Historic Places. All that remained was to test AZ U:9:202 (ASM) and the suspected locations of the prehistoric canals.

Enclosed is a copy of "Archaeological Testing at AZ U:9:202 (ASM) and Project Prehistoric Canal Locations along the Santan Freeway Corridor, Maricopa County, Arizona" prepared by ACS. Please note that the testing proposal was amended in accordance with your comments. The testing of site 202 did not reveal the presence of any significant buried cultural remains. This "site" appears to be nothing more than surface artifacts that were mounded by mechanical means and we assume that the cultural remains are derived from elsewhere. This site clearly is not eligible for inclusion in the Arizona Register of Historic Places. In addition, testing in the suspected canal locations did not reveal any prehistoric canals in the area.

Given the lack of significant cultural resources within the Santan West project area, we are of the opinion that this state-funded project should have no effect on any properties that might be eligible for inclusion in the Arizona Register of Historic Places. If you agree, would you please sign below. I look forward to your response. If you have any questions, please contact me at 255-8636.

Sincerely,

ROBERT E. GASSER  
Historic Preservation Specialist  
Environmental Planning Section

*JoAnne Miller*  
SHPO Concur

*Jan 24, 1999*  
Date

**ARIZONA DEPARTMENT OF TRANSPORTATION  
ROADWAY ENGINEERING GROUP  
OFFICE MEMO**

January 6, 1999

**TO:** Karim Dada, ADOT/EPS  
Javier Guana, ADOT/SPM  
✓ Brenda Martinez, Entranco  
Barbara Macnider, ACS  
Tom Lincoln, BOR  
John Keane, SRP

**FROM:** Bob Gasser  
Environmental Planning Section

**RE:** Santan West, Project RAM 600-7-505  
TRACS 202L MA 054 H5088 01C

I am pleased to enclose a copy of a letter dated December 23, 1998 from the State Historic Preservation Office (SHPO) that states that they agree that the Gila Drain is not eligible for inclusion in the National Register of Historic Places. The SHPO incorrectly stated that these consultations were done pursuant to 36 CFR Part 800 (federal regulations). As you know, Santan West is a state-funded project.

We still need to complete our consultations on this project regarding effect. However, we cannot do that until the results of the archaeological testing are submitted to SHPO. SHPO has already approved of the archaeological testing proposal, subject to minor modifications and saying that we cannot do data recovery on the canals.



December 23, 1998

Robert E. Gasser, Historic Preservation Specialist  
Environmental Planning Section  
Arizona Dept. of Transportation  
205 S. 17th Ave.  
Phoenix, AZ 85007-3212

Re: Santan Freeway, Proj. No. RAM 600-7-505  
TRACS No. 202L MA 054 H5088 O1C  
FHWA/ADOT  
Gila Drain

Dear Mr. Gasser:

Thank you for the material related to the above referenced project. I have reviewed the material pursuant to 36 CFR Part 800 and have the following comments:

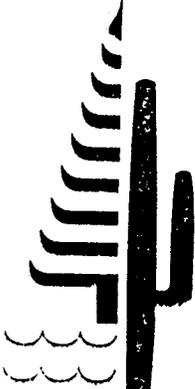
1. I concur with your recommendations that the Gila Drain is not eligible for listing in the National Register of Historic Places.

If you have any questions or requests, please call me at (602) 542-7159.

Sincerely,



William S. Collins  
Historian  
State Historic Preservation Office



Arizona State Parks

Jane Dee Hull  
Governor

STATE PARKS  
BOARD MEMBERS

Chairman  
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J. Dennis Wells  
State Land  
Commissioner

Kenneth E. Travous  
Executive Director

Rafael Payan  
Assistant Director

1300 West Washington  
Phoenix, Arizona 85007

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From (520) area code  
http://www.pr.state.az.us

General Fax:  
602-542-4180

Director's Office Fax:  
602-542-4188



**Chandler · Arizona**  
*Where Values Make The Difference*

September 14, 1998

Ms. Brenda Martinez  
Entranco  
2400 W Dunlap Avenue, Suite 100  
Phoenix, AZ 85021-2813

Dear Brenda,

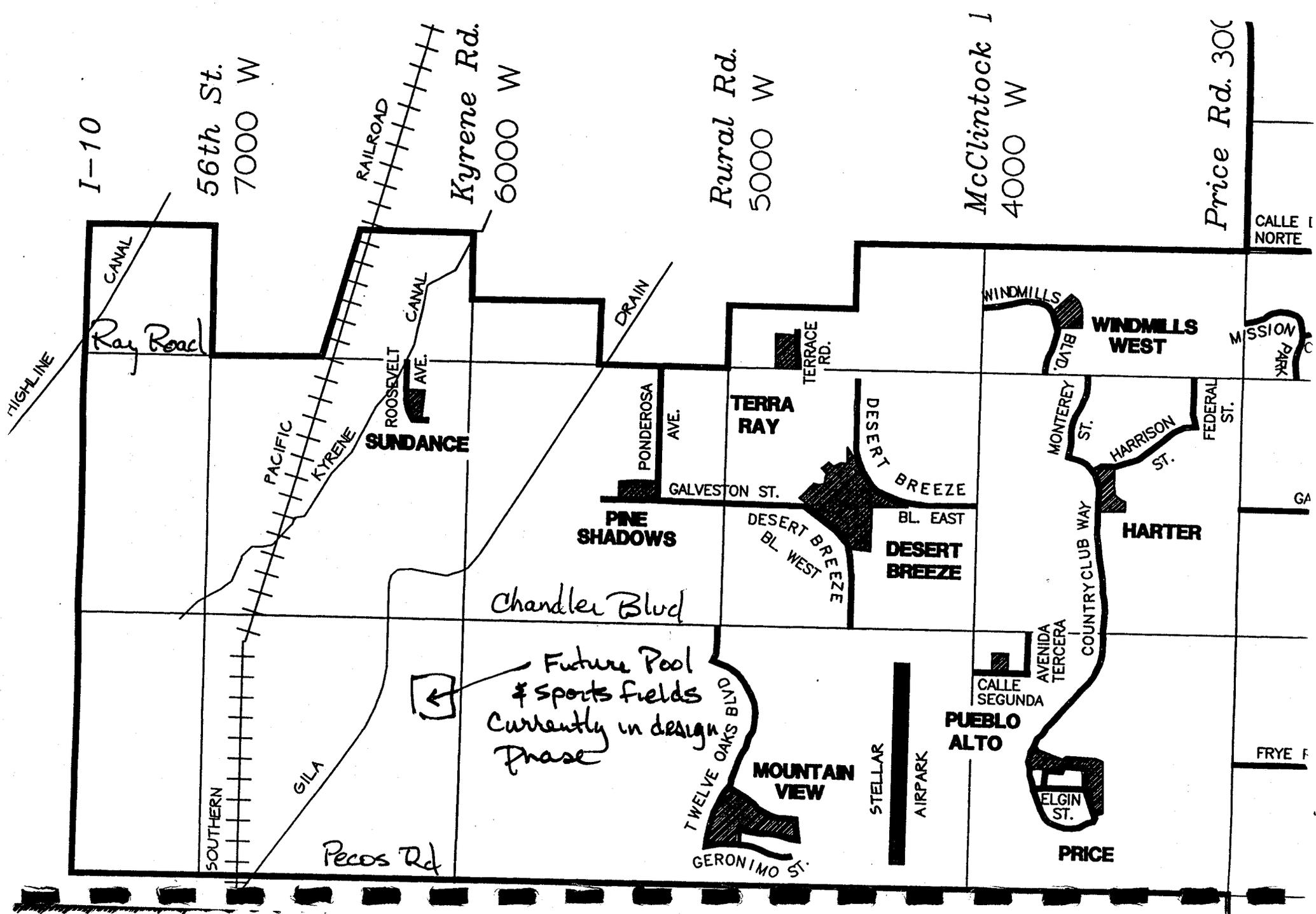
Attached is a map of our existing and planned parks within the project area of this phase of the San Tan Freeway.

Please give me a call at 786-2786 if you need any additional information.

Sincerely,

David E. McDowell  
Park Development and Operations Manager





I-10

56th St.  
7000 W

Kyrene Rd.  
6000 W

Rural Rd.  
5000 W

McClintock I  
4000 W

Price Rd. 3000

CANAL

Ray Road

HIGHLINE

RAILROAD

CANAL

DRAIN

PACIFIC KYRENE

SUNDANCE

ROOSEVELT AVE.

PONDEROSA AVE.

TERRA RAY

TERRACE RD.

DESERT BREEZE

WINDMILLS

WINDMILLS WEST

MISSION PARK

GALVESTON ST.

PINE SHADOWS

DESERT BREEZE  
BL WEST

BL EAST

DESERT BREEZE

MONTEREY ST.

HARRISON ST.

FEDERAL ST.

GA

Chandler Blvd

Future Pool & sports fields  
Currently in design  
Phase



TWELVE OAKS BLVD

MOUNTAIN VIEW

STELLAR

AIRPARK

PUEBLO ALTO

CALLE SEGUNDA

AVENIDA TERCERA

COUNTRY CLUB WAY

HARTER

ELGIN ST.

PRICE

FRYE F

SOUTHERN

GILA

Pecos Rd

GERONIMO ST.

CALLE NORTE

**ARIZONA DEPARTMENT OF TRANSPORTATION  
ROADWAY ENGINEERING GROUP  
OFFICE MEMO**

**Environmental Planning Section**

February 1, 1999

**TO: Brenda Martinez, Entranco  
Court Morgan, Dames & Moore**

**FROM: Karim Dada** 

**RE: 1/25/99 Informal Meeting with US Army Corps of Engineers (Revised)  
Santan Freeway EA, 56th Street to Price Freeway  
I-10/Maricopa Road TI**

Summary of Meeting:

The meeting was regarding the SRP-owned Gila Drain (irrigation ditch) to determine whether it is Waters of the US or not. After a discussion with Mr. Larry Flatau of the US Army Corps of Engineers (COE), the unofficial determination is that the Gila Drain is not Waters of the US. For the project area, we used an aerial photograph (Scale: 1" to 1000 feet), topographic maps, and general knowledge of the existing land use conditions to assist in understanding the area in question. The maps and photograph showed that there is no apparent natural drainage contributing to the concrete-lined irrigation ditch, thus eliminating it from the COE jurisdiction. The water source that fills the Gila Drain is irrigation and tailwater.

In conclusion, ADOT has made the determination of not submitting a delineation of Waters of the US to the COE for approval or include any of the Section 404 Nationwide Permit requirements (mitigations) in the EA's for the Santan West portion and I-10/Maricopa Road TI.

cc. Javier Guana, ADOT  
Steve Thomas, FHWA



# THE NAVAJO NATION

Milton Bluehouse, Sr. President

## Historic Preservation Department

December 3, 1998

Brenda Martinez, Environmental Planner  
Entranco  
2400 W Dunlap  
Suite 100  
Phoenix, AZ 85201-2813

RE: Santan Freeway TRACS No. 202L MA 054 H5088 01C

Dear Ms. Martinez:

The Historic Preservation Department, authorized under Navajo Nation Law to advise Federal Agencies on matters related to cultural resources, has received and briefly reviewed your correspondence dated October 19, 1998 and referenced above. We offer the following comments and make the following requests:

1) The project proposed clearly and obviously (especially given the apparent need for materials) has the potential to adversely affect historic properties eligible to the National Register of Historic Places and, assuming the direct or indirect jurisdiction or involvement by a Federal Agency in this project or any larger program or project of which this project is a part, constitutes an undertaking under Section 106 of the National Historic Preservation Act. Of particular concern are historic properties that may be affected as a result of contractor secured borrow or other materials that are clearly foreseeable as part of this proposed project. Since these historic properties that may be affected may include properties of traditional religious and cultural importance to Federally Recognized Indian Tribes, identification of such properties is a clear responsibility of the lead Federal agency. Identification efforts must be completed and determinations of eligibility and effect finalized prior to any Federal approval or license associated with this project. Please note that the NHPA mandates that the Federal agency must "take into account the effect of the undertaking on ANY district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." Regulations implementing Section 106 can be found at 36 CFR Part 800 and must be followed by all Federal agencies.

When properties of traditional religious and cultural importance to a federally recognized Indian Tribe are identified by the Federal Agency as described in 36 CFR 800.4, consultation between the Federal agency and the affected tribes will be required under Section 101 of the NHPA. Please note that, in general, Indian Tribes do not accept a letter of notification from a private contractor as Government-to-Government consultation. Many tribes insist that these consultations, when they occur, will conform to the Government-to-Government protocols established in law and implemented by the policy directives developed by the President of the United States.

3) Decisions regarding implementation of Section 106 of the National Historic Preservation Act can be made only by the Federal Agency or through a delegation consistent with law. Despite claims to the contrary, the Arizona Department of Transportation has no such delegation consistent with law to act in lieu of any federal agency or any Agency Official regarding compliance with Section 106 for the project in question.

Letter to Brenda Martinez  
December 3, 1998

The Navajo Nation declares itself and must be considered an interested party for any federal undertakings associated with any part of the proposed project. Contrary decisions cannot be made unilaterally by Arizona or its agents. In addition to our concerns regarding devastating impacts to and desecration of Sacred places caused by the FHWA and ADOT's policy on materials, and in spite of these agencies' clear and cognizant defiance of Federal law, one of the bases for the Nation's interests in these undertakings is the clear potential for conflict(s) of interest faced by the State when implementing the Federal Highway Administration's trust responsibility toward Indian Tribes under any legally sufficient assumption of Section 106 responsibilities. Separately, the Nation's need to be considered an interested party in these Federal undertakings extends to issues involving environmental justice and possible discrimination against minority and low-income populations independent of the specific presence or absence of Navajo places of traditional cultural and religious importance affected by the project.

4) Section 303 ( C ) of the Department of Transportation Act (49 U.S.C. 303) contains the following provision (note emphasis added):

**The Secretary may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge . . . or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials, having jurisdiction over the park, area, refuge, or site) only if --**

- (1) there is no prudent and feasible alternative to using that land; and
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from use.

Please provide us with a description of the planning activities currently underway that are focused on minimizing harm to historic sites. If such planning activities are not exhaustive, we request that anyone responsible for the compilation of any draft or final environmental documentation, as well as appropriate State and Federal agency officials provide us a clear, written, explanation of current interpretation and best practices regarding both agency implementation of the United States Government's policies and the specific applicability of this provision of federal law to lands containing historic sites that are used as a result of contractor selected borrow, logistical or material source areas. We note for the record that despite providing copies of this request to the Federal Highway Administration on more than thirty (30) occasions, that Federal Agency has yet to respond in any meaningful fashion to these requests. We further request that this information be provided, along with a reasonable review time, prior to any official environmental determination by any Federal official or their agent(s) regarding this project.

5) Since properties of traditional religious and cultural importance may be involved, and especially since these historic properties may be critical to the practice of Native American healing practices, this Federal action has the clear and obvious potential to result in an adverse impact to the human environment. In the absence of a directed effort to address this issue or clear evidence that adverse impacts will not result, we believe that an environmental impact statement is absolutely required for this proposed Federal Action. We insist that an Environmental Assessment be completed and that it address this issue. Further, the Navajo Nation OBJECTS to any categorical exclusion or exemption for this project or to any NEPA compliance determination that does not address impacts to the health and healing practices of Native American communities.

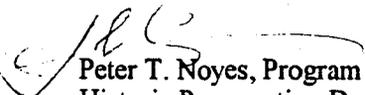
Letter to Brenda Martinez  
December 3, 1998

6) Should this project exceed five acres in size, a "NPDES" permit will be required under the Clean Water Act. Issuance or approval of such a permit is a federal undertaking requiring compliance with Section 106. By providing a copy of this letter to the US Environmental Protection Agency, we request that agency not issue any permit for this or any other such undertaking unless and until full and sufficient Compliance with the National Historic Preservation Act and the National Environmental Policy Act has been completed and can be documented.

7) Should it be the case that there is no direct or indirect jurisdiction or involvement by any federal agency (for example issuance of a "404 permit" by the U.S. Corps of Engineers or an "NPDES" or other permit by the U.S. E.P.A.) in this project, and assuming that this project is not part of a larger program, action or undertaking arbitrarily segmented by any federal agency or its agents, we request that you take these comments as concerns expressed under state or local code or policy and consider them to the extent feasible.

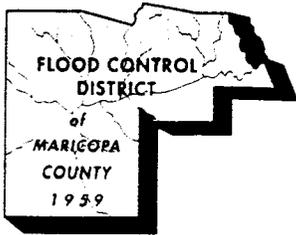
Thank you for your letter. Please keep this office informed of any action taken on this issue or this proposed project. By providing copies of this letter to the Federal and State Agencies listed below we request that they respond directly to these comments and to this request for additional information, as appropriate. Please call with any questions. I can be reached as indicated below.

Sincerely:

  
Peter T. Noyes, Program Supervisor  
Historic Preservation Department  
P.O. Box 4950  
Window Rock, Navajo Nation AZ 86515

(520) 871-7144  
(520) 871-7886(f)

c: c:\files\SMITH2.LTR  
R. Hollis, FHWA-AZ  
V. Cherwick, FHWA-DC  
R. Duarte, ADOT  
J. Garrison, AZSHPO  
C. Gleichman, ACHP-WPRO  
M. Naber, ACHP-DC  
D. Liden, USEPA



**FLOOD CONTROL DISTRICT**  
of  
**Maricopa County**

2801 West Durango Street • Phoenix, Arizona 85009-6399  
Telephone (602) 506-1501  
Fax (602) 506-4601  
TT (602) 506-5897

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BOARD OF DIRECTORS  
Jan Brewer  
Fulton Brock  
Andrew Kunasek  
Don Stapley  
Mary Rose Garrido Wilcox

September 14, 1998

Ms. Brenda Martinez  
Environmental Planner  
Entranco  
2400 West Dunlap Avenue, Suite 100  
Phoenix, Arizona 85021

**Subject: Santan Freeway Updated Environmental Assessment**

Ms. Martinez:

This letter is in response to your recent letter regarding an update of the Santan Freeway Environmental Assessment (EA). The Flood Control District has the following comment with respect to the project:

Water Quality

The Flood Control District has been working with ADOT and others on the South East Valley Regional Drainage System (SEVRDS) for some time. A component of the SEVRDS project includes first flush treatment of the SEVRDS drainage, including that of the Santan Freeway.

We assume that ENTRANCO is aware of this design plan and ask that ENTRANCO carefully consider water quality issues during the EA process. Any information regarding pollutant potential identified by ENTRANCO will be very useful during the first flush treatment design.

The Flood Control District has no other comments regarding the updated EA. I have forwarded your request for floodplain information to our Customer Service Department. If you have any questions or comments, feel free to contact me.

Sincerely,

Marilyn DeRosa, R.G.  
Environmental Branch Manager



U.S Department  
of Transportation

Federal Aviation  
Administration

Western-Pacific Region  
Airports Division

P.O. Box 92007  
Worldway Postal Center  
Los Angeles, CA 90009

September 25, 1998

Ms. Brenda Martinez  
Environmental Planner  
Entranco  
2400 West Dunlap Avenue, Suite 100  
Phoenix, AZ 85021-2813

Dear Ms. Martinez:

**Santan Freeway Extension  
Chandler, Arizona**

As requested by your letter of August 19, 1998, the Federal Aviation Administration (FAA) has reviewed the proposed three-mile freeway segment. The FAA has no comments at this time, but does recommend submitting the enclosed FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, for our review. This form allows us to properly evaluate all airspace issues such as construction equipment height, elevation of the freeway, or other obstacles that might pose an air navigation hazard to Chandler Municipal Airport. We further request that all future developmental segments of the freeway be submitted for our review utilizing this form.

Thank you for allowing the FAA to comment on your proposed project. Should future questions arise, please call our office and speak with Mr. Charles Lieber, Airport Planner, at (310) 725-3614.

Sincerely,

Mickeal R. Agaibi  
Supervisor, Planning Section

Enclosure



**Chandler • Arizona**  
*Where Values Make The Difference*

October 12, 1998

Brenda Martinez  
Environmental Planner  
Entranco  
2400 W. Dunlap Avenue  
Suite 100  
Phoenix, Arizona 85021-2813

RE: Santan Freeway  
Project No. : RAM 600 7 401  
TRACS No.: 202L MA 054 H5088 01C

Dear Ms. Martinez:

I have attached your map and provided our current fire stations and the location where we will be relocating existing fire station #3. (This station is being relocated due to the Price Road freeway) At this time, the Fire Department has no plans to construct and future fire stations along Pecos Road. We are considering a location at this time in the area of Chandler Blvd. and McClintock. I have marked this area in black on your map.

In regards to emergency response that may be associated with construction, most of Pecos Road on my inspection is dirt or unimproved roadway. This could cause a delay if this area is not accessible due to rain, or mud situation. In addition, before construction begins, I would suggest we have a meeting with the contractors due to Pecos Road is the divider between the City of Chandler and the Gila Indian Reservation so any calls for assistance can be identified and sent to the correct, closest 911 center.

Please feel free to contact me if I can be of any further assistance.

Ron Knight  
Assistant Fire Chief  
Chandler Fire Department  
PO Box 4008, MS 801  
Chandler, Arizona 85244-4008  
786-2893

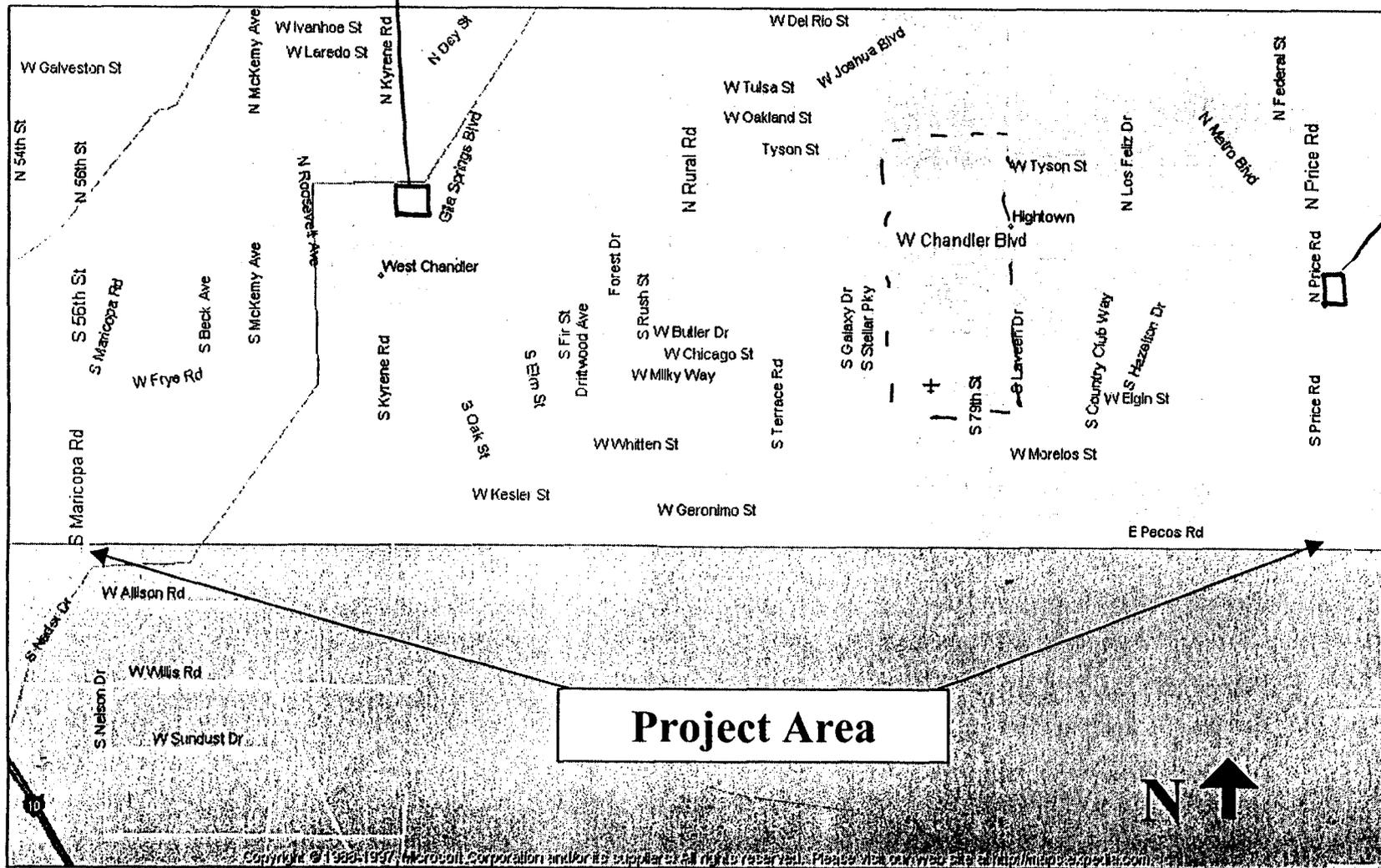
Mailing Address:  
Mail Stop 801  
PO Box 4008  
Chandler, Arizona 85244-4008

**Fire Department**  
Telephone (602) 786-2712  
FAX (602) 786-2709

Location:  
221 East Boston Street  
Chandler, Arizona



CURRENT STA. 4



EXISTING STATION moving to  
 ↓  
 □  
 FRYE & ELLIS  
 CONST. TO BEGIN JAN 90

Project Area



not to scale

SANTEA10.DGN

**Project Area**  
**Santan Freeway; Environmental Assessment Update**  
**56th Street to Price Freeway**



**Figure 3**

**ARIZONA DEPARTMENT OF WATER RESOURCES**  
500 North Third Street, Phoenix, Arizona 85004  
Telephone (602) 417-2465  
Fax (602) 417-2422



JANE DEE HULL  
Governor

RITA P. PEARSON  
Director

September 10, 1998

Brenda Martinez  
Environmental Manager  
ENTRANCO  
2400 West Dunlap Avenue, Suite 100  
Phoenix, Arizona 85021-2813

**RE: San Tan Freeway, TRACS No. 202L MA 054 H5088 01C**

Dear: Ms Martinez:

In reference to your letter sent to Rita Pearson on August 19, 1998 notifying the Department of the plan to construct a segment of the proposed Santan Freeway between Kyrene Road and the Price Freeway along the boundary with the Gila River Indian Community. The Department's concerns in any new freeway construction pertain to the Phoenix Active Management Area, Second Management Plan, which requires the use of Department approved low water use plants within public rights-of-way. This provision would pertain to any landscapes within the proposed freeway right-of-way of this project.

If you have any questions about this provision, please contact me at 417-2465.

Sincerely,

A handwritten signature in cursive script that reads "Gordon Wahl".

Gordon Wahl  
Compliance & Enforcement  
Phoenix Active Management Area



# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull

Russell F. Rhoades, Director

September 28, 1998

Ms. Brenda Martinez  
Environmental Planner  
Entranco  
2400 W. Dunlap Avenue, Ste. 100  
Phoenix, AZ 85021-2813

**RE: Santan Freeway  
TRACS No.: 202L MA 054 H5088 01C**

Dear Ms. Martinez:

The purpose of this letter is to provide you with comments on the possible impacts to air quality and water quality by the proposed action. The proposed activity or action is located in a  $PM_{10}$  non-attainment area and may contribute to increases in particulate matter in the atmosphere and sediment in watercourses, we would request that steps are taken to minimize the amount of particulate matter (dust) and sediment generated and transported off construction sites by wind or water, as well as tracking of dirt off the construction site by machinery and trucks.

We recommend that the following preventive and mitigative measures be taken to minimize the possible particulate and sediment pollution problem:

## I. Site Preparation

- A. Minimize land disturbance;
- B. Use watering trucks to minimize dust;
- C. Cover trucks when hauling dirt;
- D. Stabilize the surface of dirt piles if not removed immediately;
- E. Use windbreaks and drainage management practices to prevent any accidental particulate or sediment transport;
- F. Limit vehicular paths and stabilize drainage from temporary roads; and
- G. Pave all unpaved construction roads and parking areas to road grade for a length no less than 50 feet where such roads and parking areas exit the construction site to prevent dirt from washing onto paved roadways or into surface water drainage ways.

II. Construction Phase

- A. Cover trucks when transferring materials;
- B. Use dust suppressants on traveled paths which are not paved;
- C. Minimize unnecessary vehicular and machinery activities; and
- D. Minimize dirt track-out by washing or cleaning trucks before leaving the construction site.
- E. Apply temporary drainage controls where ever construction activity might result in runoff and increased sediment transport.

III. Completion Phase

- A. Revegetate any disturbed land not used;
- B. Remove unused material;
- C. Remove dirt piles; and
- D. Revegetate all vehicular paths created during construction to avoid future off-road vehicular activities.
- E. Reestablish all drainage ways to pre construction conditions.

Applicable state rules are contained in A.A.C. R18-11-101 through R18-11-123 (Water Quality standards for Surface Water) and A.A.C. R18-2-604, R18-2-605, R18-2-606, and R18-2-607 for Air Quality. In addition, please be aware that portable sources of air pollution such as rock, sand, gravel, and asphaltic concrete plants are required to receive permits from ADEQ to operate in the State. Furthermore construction on or around a bridge may require a Dredge and Fill Permit from the US Army Corps of Engineers and a Water Quality Certification from ADEQ Water Quality Division. I have enclosed a copy of the ADEQ Permits Handbook which contains the federal and state contacts for those programs.

Thank you for the opportunity to comment. Should you have any further questions, please contact this office ( 602) 207-2254.

Sincerely,



Jack B. Bale  
Local Government Ombudsman  
Enclosure

cc: Andra Juniel, OAC

**ARIZONA DEPARTMENT OF PUBLIC SAFETY**

2102 WEST ENCANTO BLVD. P. O. BOX 6638 PHOENIX, ARIZONA 85005-6638 (602) 223-2000



JANE DEE HULL  
GOVERNOR

JOE ALBO  
DIRECTOR

October 16, 1998

Ms. Brenda Martinez  
ENTRANCO  
2400 West Dunlap Avenue  
Suite 100  
Phoenix, Arizona 85021-2813

Dear Ms. Martinez:

Thank you for the opportunity to provide input into the assessment being conducted by your organization. I have discussed your correspondence with the Department of Public Safety District Commander for the area which includes your project area. We do not have any input at this time.

If I can be of any further assistance please feel free to contact me at (602) 223-2504.

Thank you again.

A handwritten signature in cursive script, appearing to read "David P. Gonzales".

David P. Gonzales, Captain  
Commander, Region IV  
Operations Bureau

tw

Entranco  
Brenda Martinez  
Environmental Planner  
2400 W. Dunlap Ave. Suite 100  
Phoenix, Arizona 85021-2813

Dear Brenda

In answer to your letter of August 19, 1998 Re San Tan Freeway.

We have issued Job # 721A170 to remove our plant on Kyrene Rd. and the plant we have in Stellar Air Park that conflicts with the proposed San Tan Freeway. I don't know the status of this job, but it may be completed. At any rate we don't think we will have any conflicts on Kyrene Rd. and in Stellar Air Park.

We have written a job to remove the plants we have in Heathston Subdivision that is in conflict with the proposed Freeway but this job has not been raised, because we are waiting on the SRP Power Department to issue us a one-line drawing for joint trench in the subdivision. They have not issued such a drawing.

We anticipate that this job will be done in plenty of time so that we will have no conflicts with the proposed Freeway. We have no other plant involved

Yours truly

John Aker by me  
(USWEST)

Thomas R. Buick, P.E.  
Chief Public Works Officer,  
Transportation Director & County Engineer



## DEPARTMENT OF TRANSPORTATION

October 5, 1998

Ms. Brenda Martinez  
Entranco  
2400 W. Dunlap Ave.  
Suite 100  
Phoenix, AZ 85021-2813

RE: Santan Freeway Environmental Assessment Update

Dear Ms. Martinez:

In response to your letter of September 22, 1998, the Maricopa County Department of Transportation has reviewed the proposed freeway project and determined that MCDOT does not have any roads that will be affected by this freeway segment. Thank you for the opportunity to review ADOT's proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Craig Seppelfrick".

Craig Seppelfrick  
Manager  
Environmental Planning

CS:ps



**KINDER MORGAN**  
ENERGY PARTNERS, L.P.

September 14, 1998

SFPP, L.P.  
Operating Partnership

ENG 4-2-1 (23.6-to 26 - 53)  
File Reference #98-277-1

Ms. Brenda Martinez  
Environmental Planner  
Entranco  
2400 W. Dunlap Avenue, Suite 10  
Phoenix, AZ 85021-2813

RE: Santan Freeway  
TRACS No. 202L MA 054 H5088 01C

Dear Ms. Martinez:

This is in reply to your letter of August 19, 1998, regarding the referenced Santan Freeway Project in Chandler, Arizona.

Enclosed for your information is one copy of Drawing Line Section 53, sheet 11 indicating the general alignment of SFPP, L.P.'s 6-inch high pressure refined product pipeline in the vicinity of the three-mile segment between Kyrene Road and Price Road. The pipeline is located on the Gila Indian Reservation within an easement running parallel and south of Pecos Road.

We have been corresponding with ADOT concerning the freeway project and do not have any additional comments to offer for the EA update.

Related questions or comments can be directed to me at (714) 560-4940 and please include the file reference number above with all correspondence.

Sincerely,



D. R. Quinn

Enclosure

Drq/H:drq/letters/eng4-2-1/98-277-1

cc: Mr. Al Field  
MAG Freeway Utility Coordinator  
Arizona Department Of Transportation  
Intermodal Transportation Division  
Utility & Railroad Engineering Section  
205 South 17<sup>TH</sup> Avenue, Mail Drop 618E  
Phoenix, Arizona 85007-3276



**SOUTHWEST GAS CORPORATION**

September 14, 1998

Ms. Brenda Martinez  
ENTRANCO  
2400 West Dunlap Avenue, Suite 100  
Phoenix, AZ 85021-2813

Dear Ms. Martinez:

SUBJECT: San Tan Freeway – Kyrene Rd to Price Freeway  
TRACS No: 202L MA 054 H5088 01C

Enclosed are Southwest Gas Corporation (SWG) gas facility maps S12-44, S12-45, S12-47, S12-49, S12-50, S13-44, along with a copy of SWG Work Order No. 9801568210. This Work Order has been issued to our construction department for scheduling. This currently is the extent of Southwest Gas facilities within your project limits.

Thank you for your cooperation on this project. Please feel free to contact either Wade Patrick at 484-5649 or myself if you have any questions or require additional information.

Sincerely,

  
Dominique Mitchell  
Distribution Engineer  
Mail Station 420-586  
(602) 484-5306

wsp

enclosures

c Wade Patrick   
File 9808625810



**SOUTHWEST GAS CORPORATION**

September 25, 1998

Ms. Brenda Martinez  
ENTRANCO  
2400 West Dunlap Avenue, Suite 100  
Phoenix, AZ 85021-2813

Dear Ms. Martinez:

SUBJECT: SAN TAN FREEWAY, 56<sup>th</sup> STREET TO PRICE FREEWAY  
TRACS No: 202L MA 054 H5088 01C

Enclosed are Southwest Gas Corporation (SWG) gas facility maps S12-40 and S12-41 as you requested. This currently is the extent of Southwest Gas facilities within your project limits.

Thank you for your cooperation on this project. Please feel free to contact either Wade Patrick at 484-5649 or myself if you have any questions or require additional information.

Sincerely,

Dominique Mitchell  
Distribution Engineer  
Mail Station 420-586  
(602) 484-5306

wsp

enclosures

c Wade Patrick *wp*  
File 9808625810

Thomas R. Buick, P.E.  
Chief Public Works Officer,  
Transportation Director & County Engineer



## DEPARTMENT OF TRANSPORTATION

April 20, 1999

Ms. Brenda Martinez  
ENTRANCO  
7740 N. 16<sup>th</sup> St.  
Suite 200  
Phoenix, AZ 85020-4462

RE: Draft Environmental Update for Santan Freeway, 56<sup>th</sup> St.- Price Freeway

Dear Ms. Martinez:

Thank you for providing the Maricopa County Department of Transportation with a draft copy of the Environmental Update for the Santan Freeway. MCDOT is interested in the Price Freeway and any impacts that may affect Maricopa Road and the traffic interchange located south of the Price Freeway traffic interchange.

We have completed our review of the document and do not anticipate that this project as described in the draft Environmental Update will have any impact on Maricopa County transportation facilities in the region. Please provide me with a copy of the Final Update upon its completion.

Sincerely,

A handwritten signature in cursive script, appearing to read "Craig Seppelfrick".

Craig Seppelfrick, Manager  
Environmental Planning

Cc: Richard Duarte, ADOT

