Environmental Assessment

US 281

From SH 186 to FM 490

Hidalgo County, Texas

CSJ: 0255-07-140

December 2019

Texas Department of Transportation, Pharr District

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

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List of Acronyms

AADT	Annual Average Daily Traffic
ACS	American Community Survey
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BMP	Best Management Practice
CAA	Clean Air Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMP	Congestion Management Process
CO	Carbon Monoxide
CSJ	control-section-job
DHHS	Department of Health and Human Services
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMS	Emergency Medical Services
EMST	Ecological Mapping System of Texas
EO	Executive Order
EPA	Environmental Protection Agency
EPIC	Environmental Permits, Issues, and Commitments
ETC	estimated time of completion
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Farm-to-Market
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FR	Federal Register
FWCA	Fish and Wildlife Coordination Act
GIS	Geographic Information Systems
HEI	Health Effects Institute
HRSR	Historic Resources Survey Report
I-69	Interstate Highway 69
IBWC	International Boundary Water Commission
IRIS	Integrated Risk Information System
ISA	Initial Site Assessment
LOS	Level of Service
LWCF	Land and Water Conservation Fund
LEP	Limited English Proficiency
LPG	Liquid Petroleum Gas
LPST	Leaking Petroleum Storage Tank
MAPOs	Meetings with Affected Property Owners
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
MOVES	Motor Vehicle Emissions Simulator

mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSAT	Mobile Source Air Toxics
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NATA	National Air Toxics Assessment
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
OTHM	Official Texas Historical Marker
PA	Programmatic Agreement
PCR	Project Coordination Request
PM	Particulate Matter
PS&E	Plans, Specifications, and Estimates
PSLs	Project Specific Locations
PST	Petroleum Storage Tank
PWC	Parks and Wildlife Code
ROW	right-of-way
RRC	Railroad Commission of Texas
SAL	State Antiquities Landmark
SGCN	Species of Greatest Conservation Need
SH	State Highway
SHPO	State Historic Preservation Officer
SOP	Standard Operating Procedure
SW3P	Storm Water Pollution Prevention Plan
TAQA	Traffic Air Quality Analysis
TCEQ	Texas Commission on Environmental Quality
TERP	Texas Emissions Reduction Plan
THC	Texas Historical Commission
TIP	Transportation Improvement Program
TNM	Traffic Noise Model
TPDES	Texas Pollutant Discharge Elimination System
TPP	Transportation Planning and Programming
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
US	United States Highway
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles travelled
vpd	vehicles per day

1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) Pharr District is proposing roadway reconstruction and widening of a portion of United States Highway (US) 281 (future Interstate Highway 69 [I-69]) from 0.273 mile south of State Highway (SH) 186 to 0.023 mile north of Farm-to-Market (FM) 490 in Hidalgo County, Texas. The proposed improvements include, but are not limited to, widening the existing US 281 to a controlled-access facility with northbound and southbound frontage roads, the construction of grade separations, and the addition of retention ponds. The purpose of this Environmental Assessment (EA) is to study the potential environmental consequences of the proposed project and determine whether such consequences warrant preparation of an Environmental Impact Statement (EIS). The EA has been prepared to comply with TxDOT's environmental review rules and the National Environmental Policy Act (NEPA). This Draft EA was made available for public review and TxDOT considered all comments submitted. If TxDOT determines there are no significant adverse effects, a finding of no significant impact (FONSI) will be issued and made available to the public. Project location maps are provided as **Figures 1** and **2** in **Appendix A**. Representative photographs of the project area are included in **Appendix B**. The current engineering schematic and layout of the proposed project is included in **Appendix C**. **Figure 3** in **Appendix D** provides the existing and proposed typical sections. **Appendix E** contains copies of the planning documents. Resource specific maps are provided in **Appendix F**. The Environmental Permits, Issues, and Commitments (EPIC) sheet is provided in **Appendix H**.

2.0 PROJECT DESCRIPTION

2.1 Existing Facility

The existing US 281 facility is a divided highway, consisting of four 12-foot-wide travel lanes (two in each direction) with 8-foot-wide outside shoulders, 4-foot-wide inside shoulders, and a depressed grassy median varying from 68 feet to 140 feet wide (**Photo 1** in **Appendix B**). The existing US 281 roadway provides 24 irregularly spaced at-grade median breaks across the grassy median throughout the project length and contains several curves near the middle and southern ends of the project (**Photo 2** in **Appendix B**). The existing US 281 right-of-way (ROW) varies from 200 feet wide to 320 feet wide. The existing posted speed limit varies from 70 miles per hour (mph) to 75 mph. The existing typical section is provided on **Figure 3** in **Appendix D**.

2.2 Proposed Project

The proposed project would realign and widen the existing US 281 (future I-69) to straighten several existing roadway curves and construct a controlled-access facility consisting of four 12-foot-wide travel lanes (two in each direction) with 10-foot-wide inside and outside shoulders along the southbound mainlanes and a 10-foot-wide inside shoulder and 12-foot-wide outside shoulder along the northbound main lanes, with a 2-foot-wide concrete median barrier. The proposed project would also construct northbound and southbound frontage roads consisting of four 12-foot-wide travel lanes (two in each direction) with 8-foot-wide outside shoulders and 4-foot-wide inside shoulders. In addition, drainage improvements and 18 proposed retention ponds would be needed for the proposed project.

Additionally, the proposed roadway would replace the existing at-grade crossings with grade separations at the intersections with Los Venados Drive, Red Gate Road, and Laguna Seca Road. Access to these cross streets would be provided by exit ramps. U-turns would be provided at these intersection locations.

The length of the proposed project is approximately 7.04 miles and the proposed US 281 ROW would be approximately 320 feet in width. The proposed roadway and drainage improvements would require the acquisition of approximately 65.38 acres of additional ROW, of which 12.31 acres would be utilized for the proposed retention basins.

Federal regulations require that federally funded transportation projects have logical termini [23 Code of Federal Regulations (CFR) §771.111(f)(1)]. Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. The limits of project construction extend from 0.273 mile south of SH 186 to 0.023 mile north of FM 490; however, in accordance with 23 CFR §771.111(f)(1), the logical termini of the project have been defined as the major crossroads of SH 186 to the north and FM 490 to the south.

Federal regulations require that a project has independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area [23 CFR §771.111(f)(2)]. This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. Because the proposed project stands alone, it does not irretrievably commit federal funds for other future transportation projects and provides congestion relief between SH 186 and FM 490 by adding additional travel lanes and frontage roads; therefore, it has been determined that the project has independent utility.

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements [23 CFR §771.111(f)(3)]. This means that a project must not dictate or restrict any future roadway alternatives. The proposed project would not predetermine or preclude future work on US 281 and would not restrict the consideration of future transportation improvements. The proposed project would widen the existing transportation corridor and maintain access to cross streets. The current engineering schematic and layout of the proposed project is included in **Appendix C**, and proposed typical sections are provided on **Figure 3** in **Appendix D**.

The proposed project is consistent with the Hidalgo County Metropolitan Planning Organization (MPO)'s 2015-2040 Metropolitan Transportation Plan (MTP), adopted April 25, 2019, and the 2019-2022 Transportation Improvement Program (TIP), amended August 1, 2019 (**Appendix E**.) The proposed project would be funded with state and federal funds estimated at $93,549,000.

3.0 PURPOSE AND NEED

3.1 Need

The proposed project is needed because the existing US 281 does not meet current interstate highway design standards and lacks sufficient capacity to adequately support the projected increased traffic and population growth.

3.2 Supporting Facts and/or Data

According to projections approved by TxDOT's Transportation Planning and Programming (TPP) Division, travel demand is projected to continue to increase as average daily traffic on US 281 from 0.273 mile south of SH 186 to 0.023 mile north of FM 490 is anticipated to increase 51.6 percent between the existing base year 2024 and 2054. Average daily traffic volumes and roadway capacity can be applied to qualitatively determine how the US 281 roadway is functioning, or the level of service (LOS). A good LOS is defined as free flow or stable flow conditions where motorists can select their speeds and maneuver relatively unaffected. A tolerable LOS is when the roadway is approaching an unstable flow, where speed and maneuverability are comfortable but limited within a traffic stream. An undesirable LOS is defined as unstable flow or forced/breakdown flow, i.e. congestion is inevitable, or the roadway experiences more demand than the capacity can support causing constant traffic jams. Under the proposed project, US 281 from SH 186 to FM 490 would not be failing according to operational analysis. Projected average daily traffic volumes and LOS in the years 2024, 2044, and 2054 are shown in **Table 1**.

Table 1. US 281 Average Daily Traffic Projections

Year	Average Daily Traffic 0.273 mile south of SH 186 to 0.023 mile north of FM 490	Level of Service
2024 (Base Year)	20,450	A-B (Good Flow)
2044	27,495	C-D (Tolerable Flow)
2054	31,010	C-D (Tolerable Flow)

Source: TxDOT TPP Traffic Memo (July 27, 2018)

According to population projections taken from the Texas Water Development Board (TWDB), the population of Hidalgo County is projected to increase approximately 24 percent from 981,890 in 2020 to 1,219,225 in 2040 (TWDB 2018).

3.3 Purpose

The purpose of the proposed project (the Build Alternative) is to upgrade US 281 to current design standards and improve mobility and reduce congestion along US 281.

4.0 ALTERNATIVES

4.1 Build Alternative

The Build Alternative, as described in **Section 2.2**, would provide added capacity along US 281 with the addition of mainlanes and would provide grade-separations at three intersections. The Build Alternative would meet the need and purpose of the project by upgrading the facility to meet current design standards and improving mobility and reducing congestion along US 281.

4.2 No-Build Alternative

Under the No-Build Alternative, the existing facilities would operate as they currently do and normal maintenance activities would continue. There would be no substantial adverse environmental impacts associated with this alternative. However, the No-Build Alternative would not meet current design standards and would not reduce congestion or improve mobility; therefore, it would not address the need and purpose of the proposed project. The Build Alternative is the preferred alternative; however, the No-Build Alternative is carried forward in this EA to provide a baseline for comparison to the Build Alternative.

4.3 Preliminary Alternatives Analysis

No other Build Alternatives were identified; however, various alignment and design alternatives were considered during project development.

5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

In support of this EA, the following technical reports were prepared:

- Community Impacts Assessment Form
- Archeological Background Study
- Intensive Archeological Survey Report
- Project Coordination Request (PCR) for Historical Studies Form
- Historical Studies Research Design
- Historic Resources Survey Report (HRSR)
- Biological Evaluation Form/Tier 1 Site Assessment Form
- Air Quality Technical Report
- Hazardous Materials Initial Site Assessment (ISA) Form
- Traffic Noise Analysis Technical Report
- Documentation of Public Meeting

These technical reports, maps showing the project location and design, and other information regarding the project are on file and available for inspection Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. at the TxDOT Pharr District Office located at 600 W US Expressway 83, Pharr, TX 78577.

5.1 Right-of-Way/Displacements

The Build Alternative would require approximately 65.38 acres of new ROW from 37 parcels for the proposed improvements. (See the project schematic in **Appendix C**.) The proposed project would result in potential displacements, subject to final design considerations. See **Figures 4.1** through **4.4** in **Appendix F** for the location of potential displacements. The proposed project would potentially impact two residential properties; however, it was determined that comparable residential properties are available within the community. The proposed project would also potentially impact three additional structures: one City of Edinburg utility station, one windmill structure that is confirmed to be inactive, and one Official Texas Historical Marker (OTHM) for the La Noria Cardenena (see **Figure 4.3** in **Appendix F** and STA 282 on the project schematic in **Appendix C**. None of the potentially displaced facilities exhibit unique needs which would preclude them from relocating in the area. The utility facility and windmill structure could potentially be relocated within the existing parcel boundaries or within the study area. TxDOT would coordinate with the Texas Historical Commission (THC) to relocate the displaced OTHM as close to the original site as possible. ROW acquisition and relocation would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

The No-Build Alternative would not require the acquisition of ROW, nor would it result in relocations.

5.2 Land Use

The proposed project includes improvements to an existing transportation corridor that runs through Hidalgo County, Texas. The general land use adjacent to the proposed project is scattered rural, consisting primarily of mixed agricultural and residential uses, along with undeveloped areas. The proposed project area is an existing transportation corridor; therefore, the Build Alternative is not expected to result in direct or indirect changes to land use in the project area. (**Appendix B** provides representative photographs of the project area.) **Figures 4.1** through **4.4** in **Appendix F** provide an overview of the proposed project and adjacent land use, businesses, and community features.

The No-Build Alternative would not result in changes to land use.

5.3 Farmlands

The proposed project would convert farmland subject to the Farmland Protection Policy Act (FPPA) to a nonagricultural, transportation use. However, the combined scores of the relative value of the farmland on the FPPA Form NRCS-CPA 106 were less than 60; the scores and the site assessment do not warrant further consideration for protections (**Appendix G**). Therefore, coordination with the National Resources Conservation Service (NRCS) for the FPPA was not required for the Build Alternative.

The No-Build Alternative would not require coordination with the NRCS.

5.4 Utility/Emergency Services

Several utilities (including gas, water, and overhead and underground electrical) may require adjustments or relocations. Adjustment or relocation of these and other utilities would be addressed in the ROW acquisition process and would be conducted so that no substantial interruption in service would occur.

The Build Alternative is expected to result in a temporary increase in travel times and distances from temporary detours and changes in access would occur during construction. Access to all adjacent properties would be maintained throughout the construction phase of the project. The Linn-San Manuel Fire Department is located approximately 0.2-mile east of the US 281 and SH 186 intersection, and the Hidalgo County Sheriff's Office is located approximately 2.5 miles south of the project area on El Cibolo Road. There are no other local emergency services located within the project area; however, emergency services within the county include law enforcement, fire response, and emergency medical services (or EMS). Traffic, including these emergency services, currently using the 24 irregularly spaced median breaks along US 281would proceed to the proposed U-turns at the three grade-separated intersections at Los Venados Drive, Red Gate Road, and Laguna Seca Road, approximately every 2 miles in either direction. Although the project would improve overall travel time along the US 281 corridor, the Build Alternative is expected to result in an increase in travel times and distances for local commuters, including emergency service vehicles, within the 7-mile section, up to a maximum of 4 miles, due to the minimization of crossovers. TxDOT will coordinate with the Linn-San Manuel Fire Department during construction to avoid delays in service and response times during the construction phase and after project completion.

The No-Build Alternative would not impact existing utilities. Existing congestion is expected to increase under the No-Build Alternative due to projected traffic and population increases; therefore, emergency response time could increase under this alternative.

5.5 Bicycle and Pedestrian Facilities

The existing US 281 facility does not currently include sidewalks or bicycle lanes. Designated bicycle lanes and pedestrian accommodations were not considered as part of the proposed project; however, bicyclists would be able to use the outside shoulder of the frontage roads.

The No-Build Alternative would not result in impacts or benefits to bicycle or pedestrian facilities.

5.6 Community Impacts

The *Community Impacts Assessment Technical Report Form*, dated April 2018, concluded that the Build Alternative is not expected to result in substantial adverse impacts to community cohesion, access, or travel patterns. Impacts to the character or community cohesion in the project vicinity are not anticipated because the proposed improvements would be constructed along existing transportation corridors, and access to adjacent properties would be maintained throughout the project area. The proposed project would not result in the division or isolation of any businesses, distinct neighborhoods, ethnic groups, or other specific groups. The project would not result in new or additional barriers between communities, nor would access be denied to existing facilities.

Although the project is anticipated to help alleviate traffic congestion issues and improve overall travel time along the US 281 corridor, the Build Alternative is expected to permanently alter some access and travel patterns for the surrounding community. These changes were designed with the goal of improving local traffic conditions and are expected to result in an increase in travel times and distances for local commuters within the 7-mile section due to the minimization of crossovers. As stated in **Section 2.0** and **Section 5.4**, the existing facility contains 24 irregularly spaced median break crossings, and the proposed project would replace these with three grade-separated intersections approximately every 2 miles in either direction. Access to these cross streets would be provided by exit ramps, and U-turns would be provided at these intersection locations. Travel times and distances will increase due to the reduction in access points, up to a maximum distance of 4 miles. Drivers have to make a U-turn in order to access certain parcels on the other side of the roadway; therefore, continuous access to both sides of the roadway is not currently provided because of the grassy median. The impacts to travel distances are anticipated to be offset by the reduced congestion and improved mobility by the construction of frontage roads.

The No-Build Alternative would not result in direct adverse impacts to the adjacent communities.

5.6.1 Environmental Justice (EJ)

Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" requires each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

According to EO 12898, a person meeting any of the following criteria is considered a minority: Black: a person having origins in any of the black racial groups of Africa; Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race; Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent; American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America, and Central America, who maintains cultural identification through tribal affiliation or community recognition; Native Hawaiian and Other Pacific Islander: a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. A minority population can include any readily identifiable groups of minority persons living in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons, such as migrant workers or Native Americans, similarly affected by a proposed TxDOT project.

The U.S. Census Bureau classifies minority populations as Black; Hispanic or Latino; Asian or Pacific Islander; American Indian, Eskimo, or Aleut; or other non-white persons. Population, race, and ethnicity data from the 2010 U.S. Census were obtained for the state of Texas, Hidalgo County, census tracts, block groups, and census blocks within the project area (U.S. Census 2010). The data are provided in the *Community Impacts Assessment Technical Report Form*. Of the 66 census blocks identified within the study area, only 16 are populated, 14 of which include a predominantly minority

population. The data generally indicates that the community study area is characterized as a predominantly minority population, which is consistent with Hidalgo County as a whole.

The *Community Impacts Assessment Technical Report Form* also includes data from the 2012-2016 U.S. Census American Community Survey (ACS) regarding median household income within the project area. A low-income person is defined as a person whose median household income is at or below the U.S. Department of Health and Human Services (DHHS) poverty guidelines for a family of four for the current year. The poverty level at the time of analysis (2018) in the 48 contiguous states and the District of Columbia is $25,100 for a household of four (DHHS). Per the ACS, none of the block groups in the project area contain a low-income population.

Although EJ populations are present in the project area, the proposed improvements to US 281 would not result in disproportionately high or adverse impacts to these populations and are not anticipated to substantially alter the overall character or cohesion of the adjacent communities. Minimal displacements are anticipated, and residents living in the two potentially displaced properties outlined above are expected to be able to relocate within the community. Therefore, it is anticipated that these displacements would not impact community cohesion. The anticipated improvements associated with the project, such as improved mobility and reduced congestion through the construction of frontage roads, are expected to benefit the entire community, including EJ populations.

5.6.2 Limited English Proficiency (LEP)

EO 13166, "Improving Access to Service for Persons with Limited English Proficiency," requires federal agencies to examine the services they provide, identify any need for services to those with LEP, and develop and implement a system to provide those services so that LEP persons can have meaningful access to them. The executive order also requires federal agencies to ensure that recipients of federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

To determine if LEP populations may be affected by the proposed project, census data were collected from the 2012-2016 U.S. Census ACS, defined as populations who speak a language other than English and who speak English "less than very well." The data are provided in the *Community Impacts Assessment Technical Report Form*. Spanish-speaking LEP populations were identified throughout the study area, represented by Block Group 1, with the percentage of Spanish-speaking LEP persons accounting for 4.95 percent of the population. There were no LEP populations speaking "Asian or Pacific Island languages,' 'other Indo-European languages,' or any 'other languages' identified within the study area.

A public meeting was held on April 25, 2017, and in order to comply with EO 13166, public involvement announcements were provided in both English and Spanish, and Spanish-speaking staff was present at the meeting in case interpretation was needed. Meeting notices were also published in English in *The Monitor* and in Spanish in *El Periódico*, and materials handed out at the meeting were also provided in English and Spanish. TxDOT will continue to comply with EO 13166 by offering

to meet the needs of persons requiring special communication or accommodations in all future public involvement activities and notices.

5.7 Visual/Aesthetic Impacts

Using the Federal Highway Administration's (FHWA's) *Visual Impact Assessment for Highway Projects* guidance (FHWA-HI-88-054), an analysis of the potential visual impact of the proposed project was conducted. Visual impacts are defined as a change in the aesthetic value resulting from the introduction of modifications to the landscape. The project vicinity has been evaluated in terms of project impacts on visual character and scenic (visual) quality.

In an effort to determine the visual resource effects of the proposed project, an analysis of the landscape components affected by the proposed project was conducted. The regional landscape in the project area is relatively rural. No substantial changes to the vegetation surrounding the roadway corridor are anticipated as a direct result of the proposed project.

In order to determine the scale and dominance of the proposed project, the schematic was used to evaluate changes in elevation and potential impacts to the current viewshed in the project vicinity. The scale and dominance of the proposed structures were determined to be compatible with the project surroundings due in large part to the fact that a distinct transportation corridor within the project viewshed has already been established by the existing roadways. The existing transportation corridors would not be substantially altered or realigned under the Build Alternative.

Due to the aesthetic compatibility of the proposed improvements to the existing transportation features, the construction of a visual barrier was determined to not be necessary.

The No-Build Alternative would not result in visual impacts.

5.8 Cultural Resources

Cultural resources are structures, buildings, archeological sites, districts (a collection of related structures, buildings, and/or archeological sites), cemeteries, and objects. Both federal and state laws require consideration of cultural resources during project planning. At the federal level, NEPA and the National Historic Preservation Act (NHPA) of 1966, among others, apply to transportation projects such as this one. In addition, state laws such as the Antiquities Code of Texas apply to these projects. Compliance with these laws often requires consultation with the THC/Texas State Historic Preservation Officer (SHPO) and/or federally-recognized tribes to determine the project's effects on cultural resources. Review and coordination of this project followed approved procedures for compliance with federal and state laws.

5.8.1 Archeology

Based on the results of an *Archeological Background Study,* dated March 2018, it was determined that portions of the Area of Potential Effect (APE) had the potential to contain archeological deposits and archeological historic properties eligible for inclusion in the National Register of Historic Properties (NRHP) or archeological sites warranting State Antiquities Landmark (SAL) designation. An

intensive pedestrian survey was recommended. An intensive pedestrian survey, augmented by shovel testing, was performed within portions of the APE that coincide with proposed new ROW and where right of entry was granted at the time of survey (June 2018.) As shown on **Figures 5.1** through **5.4** in **Appendix F**, 24 parcels throughout the project length were not surveyed due to a lack of right of entry. All remaining parcels where right of entry was granted were surveyed. The *Intensive Archeological Survey Report*, dated July 2018, resulted in the identification of one surficial isolated find and one historic standing structure (HHPA 1), both of which were recommended as not eligible for inclusion in the NRHP under any criteria nor for designation as a SAL. It was recommended that no further investigation is warranted at these locations. The inaccessible portions of the APE where right of entry was not granted are characterized as low probability for the presence of intact archeological deposits due to observed extensive erosion and disturbances to the ground surface. No further work was recommended at the remaining locations, and construction should be allowed to proceed as planned.

Coordination with Native American tribes with an interest in the area was initiated and a response was received on September 10, 2018 from the Comanche Nation indicating there were no properties of concern associated with the proposed project. The SHPO concurred with TxDOT's finding of no adverse effect on an archeological historic properties or SAL on August 10, 2018. Copies of this coordination are included in **Appendix G**.

In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area will cease and TxDOT archeological staff will be contacted to initiate post-review discovery procedures under the provisions of the Programmatic Agreement (PA) and the Memorandum of Understanding (MOU) between TxDOT and the THC.

The No-Build Alternative would not impact archeological resources.

5.8.2 Historic Properties

As detailed in the *HRSR*, dated October 2018, a reconnaissance-level historic survey was completed in May and June of 2018 and identified 30 resources at 24 locations constructed in or prior to 1976 within the projects APE (**Figures 6.1** through **6.6** in **Appendix F**). None of the inventoried resources were recommended as eligible for listing on the NRHP either individually or as part of a larger property, historic district, or rural historic landscape. Individual project coordination with SHPO is not required.

The No-Build Alternative would not result in impacts to historic resources.

5.9 DOT Act Section 4(f), Land and Water Conservation Fund (LWCF) Act Section 6(f), and Parks and Wildlife Code (PWC) Chapter 26

There are no Section 4(f) or Section 6(f) properties present in the project area; therefore, coordination regarding Section 4(f), Section 6(f) or Chapter 26 resources is not required for this project.

The No-Build Alternative would not impact 4(f), 6(f), or Chapter 26 resources.

5.10 Water Resources

It was determined that no waters of the U.S. or special aquatic sites, including wetlands, would be impacted by the proposed project. It was determined that neither the Build nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.1 Clean Water Act Section 404

No waters of the U.S. or special aquatic sites, including wetlands, would be impacted by the proposed project. Therefore, a Section 404 permit would not be required.

5.10.2 Clean Water Act Section 401

Because the project would not require a permit under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, or the General Bridge Act/Section 9 of the Rivers and Harbors Act, the project does not require compliance with the Texas Commission on Environmental Quality (TCEQ) Water Quality Certification Program established under Section 401 of the Clean Water Act.

5.10.3 Executive Order 11990 Wetlands

No wetlands were identified within the existing or proposed ROW; therefore, EO 11990 on wetlands does not apply.

5.10.4 Rivers and Harbors Act

The project would not require a permit from the U.S. Coast Guard under Section 9 or Section 10 of the Rivers or Harbors Act.

5.10.5 Clean Water Act Section 303(d)

A search of the TCEQ's Draft 2016 Texas Integrated Report for the Clean Water Act Section 303(d), adopted on October 17, 2018, determined that the proposed action is not expected to contribute to a constituent of concern to an impaired water body (TCEQ 2018). **Figure 2** in **Appendix A** shows the nearest 303(d) impaired water body, which is approximately 19.6 miles south of the proposed project area.

5.10.6 Clean Water Act Section 402

The proposed project would include 5 or more acres of earth disturbance. Since the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP) authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies and procedures that govern the design and construction phases of the project. The Project Development Process Manual and Plans, Specifications, and Estimates (PS&E) Preparation Manual require a Storm Water Pollution Prevention Plan (SW3P) be included in the plans of all projects that disturb 1 or more acres. The Construction Contract Administration Manual requires that the CGP authorization documents (notice of intent [NOI] or site notice) by completed, posted, and submitted, when required by the CGP, to TCEQ and

the municipal storm sewer system (MS4) operator. It also requires that projects be inspected to ensure compliance with the CGP.

The PS&E Preparation Manual requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the "Required Specifications Checklists" require Special Provision 506-003 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SW3P and to complete the appropriate authorization documents.

5.10.7 Floodplains

The project is located within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain (**Figures 7.1** through **7.5**). The hydraulic design for the proposed project would be in accordance with current FHWA and TxDOT design policies. The facility would permit the conveyance of the 100-year flood, inundation of the roadway being acceptable, without causing significant damage to the facility, stream or other property.

This project is subject to and will comply with federal EO 11988 on Floodplain Management. The department implements this EO on a programmatic basis through its Hydraulic Design Manual. Design of this project will be conducted in accordance with the department's Hydraulic Design Manual. Adherence to the TxDOT Hydraulic Design Manual ensures that this project will not result in a "significant encroachment" as defined by FHWA's rules implementing EO 11988 at 23 CFR 650.105(q).

5.10.8 Wild and Scenic Rivers

This project is not located in a county that contains resources regulated under the Wild and Scenic Rivers Act. This project is not along and does not affect any wild or scenic river; therefore, the Wild and Scenic Rivers Act is not applicable.

5.10.9 Coastal Barrier Resources

The project is not located within a designated Coastal Barrier Resources Act map unit. Coordination with the United States Fish and Wildlife Service (USFWS) is not required.

5.10.10 Coastal Zone Management

The project is not located within a Texas Coastal Management Plan boundary. Therefore, a consistency determination is not required.

5.10.11 Edwards Aquifer

The proposed project is not located in a county regulated by the Edwards Aquifer Rules.

5.10.12 International Boundary and Water Commission

The proposed project would not cross or encroach upon the floodway of the International Boundary Water Commission (IBWC) ROW or an IBWC flood control project; therefore, coordination with the IBWC is not required.

5.10.13 Drinking Water Systems

Field investigations and site surveys of the proposed project area did not identify water wells or source water protection areas within the project area. In accordance with TxDOT's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells), any drinking water wells would need to be properly removed and disposed of during construction of the project

5.11 Biological Resources

The *Biological Evaluation Form* and *Tier 1 Site Assessment Form* and associated attachments, dated March 2018, describe the Texas Parks and Wildlife Department (TPWD) Ecological Mapping System of Texas (EMST) (**Figures 8.1** through **8.7** in **Appendix F**) and observed, or field-verified, vegetation (**Figures 9.1** through **9.7** in **Appendix F**). The forms also list the federal and state-listed threatened, endangered, and candidate species, as well as those considered species of greatest conservation need (SGCN) by the state and provides an assessment of their habitat requirements and the potential impacts of the proposed project. A summary of these findings is provided below.

5.11.1 Texas Parks and Wildlife Coordination

According to the Threshold Table PA for the MOU between TxDOT and TPWD, the proposed project would exceed the impact coordination threshold for Tallgrass Prairie, Grassland and Disturbed Prairie MOU Vegetation (TxDOT 2017a). The proposed project also provides suitable habitat for 11 SGCN plant species that do not have specified Best Management Practices (BMPs) in the current BMP PA (revised 2017) (TxDOT 2017b). Therefore, coordination with TPWD was initiated on March 21, 2018 and concluded on May 2, 2018 with no comments provided by TPWD. Copies of this coordination are included in **Appendix G**.

5.11.2 Impacts on Vegetation

The project area is located within the Western Gulf Coastal Plain Ecoregion. The project area consists primarily of existing transportation ROW, which includes the US 281 roadway and natural and maintained vegetation.

Table 2 and **Figures 9.1** through **9.7** provide the field-verified EMST vegetation types identified in the proposed project area and the Ecological System Type according to TPWD's *Draft Descriptions of Systems, Mapping Subsystems, and Vegetation Types for Phase V*. Based on the Threshold Table PA for the MOU between TxDOT and TPWD (effective September 1, 2013 and revised in 2017 [TxDOT 2017a]), **Table 2** also provides the TxDOT TPWD MOU vegetation type that corresponds with each EMST vegetation type identified in the project area.

Table 2. Potential Impacts to Field-verified MOU Vegetation

EMST Vegetation Type	TxDOT/TPWD MOU Vegetation Type	Acreage of Impacts*	MOU Threshold Value (acres)	Threshold Exceeded?
Row Crops	Agricultural	9.73	10.0	No
Total Permanent Impacts to Agricultural MOU Vegetation		**9.73**		
South Texas: Sandy Mesquite Savanna Grassland	Tallgrass Prairie, Grassland	14.4	2.0	**Yes**
South Texas: Sandy Mesquite Woodland and Shrubland	Tallgrass Prairie, Grassland	11.45		
Total Permanent Impacts to Tallgrass Prairie, Grassland MOU Vegetation		**25.85**		
Non-native Invasive: Salt Cedar Shrubland	Disturbed Prairie	3.24	3.0	**Yes**
South Texas: Disturbance Grassland	Disturbed Prairie	22.31		
Total Permanent Impacts to Disturbed Prairie MOU Vegetation		**25.55**		
Urban Low Intensity	Urban	178.4	NA	No
Total Permanent Impacts to Urban MOU Vegetation		**178.4**		

*Based on ROW to ROW impacts

According to the Threshold PA between TxDOT and TPWD, there is no threshold for Urban vegetation. The coordination threshold for Tallgrass Prairie, Grassland vegetation is 2.0 acre, and potential permanent acreage impact to this vegetation type is 25.85 acres. The coordination threshold for Disturbed Prairie vegetation is 3.0 acre, and potential permanent acreage impact to this vegetation type is 25.55 acres. Therefore, the project would exceed impact thresholds defined by TPWD/TxDOT, and coordination with TPWD was conducted. The proposed project is not anticipated to result in indirect encroachment impacts to vegetation.

Under the No-Build Alternative, the proposed project would have no effect on existing vegetation habitat in the project area.

5.11.3 Executive Order 13112 on Invasive Species

This project is subject to and will comply with federal EO 13112 on Invasive Species. TxDOT implements this EO on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.

5.11.4 Executive Memorandum on Environmentally and Economically Beneficial Landscaping

This project is subject to and will comply with the federal Executive Memorandum on Environmentally and Economically Beneficial Landscaping, effective April 26, 1994. TxDOT implements this Executive Memorandum on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.

5.11.5 Impacts to Wildlife

The Lower Rio Grande Valley is located in the subtropical Tamaulipan Biotic Province, which is characterized by thorny brush and a high level of biodiversity (Blair 1950). According to Blair (1950) and Dixon (2000), there are 23 species of amphibians in the Tamaulipan Biotic Province, including three species of salamanders and 20 anuran species (frogs and toads). Salamander species that could occur in the county are south Texas siren (*Siren* sp. 1), and barred tiger salamander (*Ambystoma tigrinum*). Anuran species in the region represent multiple genera including chorus frogs (*Pseudacris* spp.), spadefoot toads (*Scaphiopus* spp.), true frogs (*Rana* spp.), and true toads (*Bufo* spp.). Six species of turtles have been recorded in the region including ornate box turtle (*Terrapene ornata ornata*), red-eared slider (*Thrachemys scripta elegans*), Rio Grande river cooter (*Pseudemys gorzugi*), Texas spiny softshell turtle (*Apalone spinifera emoryi*), Texas tortoise (*Gopherus berlandieri*), and yellow mud turtle (*Kinosternon flavescens flavescens*). American alligator (*Alligator mississippiensis*) could also occur in the study area.

According to Blair (1950) and Dixon (2000), at least 22 lizard and 36 snake species occur in the Tamaulipan Biotic Province. There are 31 species of snakes known to occur in Hidalgo County (Keown 2007). Common lizards in the area include green anole (*Anolis carolinensis*), Mediterranean gecko (*Hemidactylus turcicus*), whiptails (*Aspidoscelis* spp.), and skinks (*Eumeces* spp.). Common snakes in the area include bullsnake (*Pituophis catenifer sayi*), diamondback rattlesnake (*Crotalus atrox*), Texas coral snake (*Micrurus fulvius tener*), Texas indigo snake (*Drymarchon corais*), rat snakes (*Elaphe* spp.), and water snakes (*Nerodia* spp.).

The study area contains abundant and diverse avifauna and is the most productive area for birding in the country. Over 515 avian species have been recorded in the Lower Rio Grande Valley. Common year-round resident bird species in the study area include altamira oriole (*Icterus gularis*), American coot (*Fulica americana*), barn swallow (*Hirundo rustica*), black-bellied whistling duck (*Dendrocygna autumnalis*), common pauraque (*Nyctidromus albicollis*), couch's kingbird (*Tyrannus couchii*), eastern meadowlark (*Sturnella magna*), golden-fronted woodpecker (*Melanerpes aurifrons*), great-tailed grackle (*Quiscalus mexicanus*), great kiskadee (*Pitangus sulphuratus*), green jay (*Cyanocorax yncas*), Harris's hawk (*Parabuteo unicinctus*), inca dove (*Columbina inca*), killdeer (*Charadrius vociferus*), ladder-backed woodpecker (*Picoides scalaris*), laughing gull (*Larus atricilla*), least grebe (*Tachybaptus dominicus*), long-billed thrasher (*Toxostoma longirostre*), northern mockingbird (*Mimus polyglottos*), olive sparrow (*Arremonops rufivirgatus*), plain chachalaca (*Ortalis vetula*), pyrrhuloxia (*Cardinalis sinuatus*), verdin (*Auriparus flaviceps*), and white-winged dove (*Zenaida asiatica*). Common migrant/summer resident bird species in the study area include brown-crested flycatcher (*Myiarchus tyrannulus*), cliff swallow (*Petrochelidon pyrrhonota*), common nighthawk (*Chordeiles minor*), dickcissel (*Spiza americana*), eastern kingbird (*Tyrannus tyrannus*), indigo bunting (*Passerina cyanea*), orchard oriole (*Icterus spurius*), scissor-tailed flycatcher (*Tyrannus forficatus*), summer tanager (*Piranga rubra*), and yellow-billed cuckoo (*Coccyzus americanus*). Common migrant/winter resident bird species include American white pelican (*Pelecanus erythrorhynchos*), eastern phoebe (*Sayornis phoebe*), orange-crowned warbler (*Oreothlypis celata*), yellow-rumped warbler (*Setophaga coronata*), and many various species of ducks. Other common migrant species in the region include

broad-winged hawk (*Buteo platypterus*), Franklin's gull (*Leucophaeus pipixcan*), Mississippi kite (*Ictinia mississippiensis*), savannah sparrow (*Passerculus sandwichensis*), scarlet tanager (*Piranga olivacea*), Wilson's phalarope (*Phalaropus tricolor*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*).

According to Blair (1950), 61 of the 143-mammal species in Texas historically occurred in the Tamaulipan Biotic Province. The ranges of at least 57 mammal species include Hidalgo County (Schmidly 2004). The most common mammals that potentially occur in the study area include species more tolerant of human activity such as black-tailed jackrabbit (*Lepus californicus*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), nine-banded armadillo (*Dasypus novemcinctus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*). Common rodent species in the study area include fulvous harvest mouse (*Reithrodontomys fulvescens*), hispid cotton rat (*Sigmodon hispidus*), hispid pocket mouse (*Chaetodipus hispidus*), and Mexican ground squirrel (*Spermophilus mexicanus*). These species may occur within undeveloped portions of the proposed ROW, and therefore may be impacted by the proposed project.

The following sections provide a summary of potential impacts to wildlife associated with the Build Alternative. Under the No-Build Alternative, the proposed project would have no effect on existing wildlife and habitat in the project area.

5.11.6 Migratory Bird Protections

This project will comply with applicable provisions of the Migratory Bird Treaty Act (MBTA) and Texas Parks and Wildlife Code Title 5, Subtitle B, Chapter 64, Birds. It is TxDOT's policy to avoid removal and destruction of active bird nests except through federal or state approved options. In addition, it is TxDOT's policy to, where appropriate and practicable:

- use measures to prevent or discourage birds from building nests on man-made structures within portions of the project area planned for construction, and
- schedule construction activities outside of typical nesting season.

A site survey did not identify migratory birds or active nests within the project action area. While no impact to migratory birds is expected, TxDOT will take all appropriate actions to prevent the take of migratory birds, their active nests, eggs, or young should they be discovered on the project site. Direction to contractors is provided on the standard Environmental Permits, Issues, and Commitments (EPIC) sheet.

5.11.7 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) of 1958 requires that federal agencies obtain comments from USFWS and TPWD. This coordination is required whenever a project involves impounding, diverting, or deepening a stream channel or other body of water. The proposed project

would have no impact to waters of the U.S. or wetlands and no Section 404 permit is required; therefore, no coordination under FWCA is required.

5.11.8 Bald and Golden Eagle Protection Act of 2007

Within the U.S. or anywhere within its jurisdiction, bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected by the Bald and Golden Eagle Protection Act of 2007. No eagles or potential eagle nests were observed in or adjacent to the project area during field visits. Based on the information available and observations made in the project area, the project does not have the potential to impact bald or golden eagles.

5.11.9 Magnuson-Stevens Fishery Conservation Management Act

The proposed project is not located in a coastal county; therefore, coordination with the National Marine Fisheries Service is not required.

5.11.10 Marine Mammal Protection Act

The project does not contain suitable habitat for marine mammals. Coordination with the National Marine Fisheries Service is not required.

5.11.11 Threatened, Endangered, Candidate Species, and Rare Species

A review of the threatened and endangered species lists for Hidalgo County, Texas, maintained by the USFWS (retrieved December 4, 2019) and the TPWD (May 16, 2016 version, retrieved January 8, 2018), identified federal and state-listed threatened, endangered, as well as those considered SGCN by the state (**Table 3**).

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
AMPHIBIANS					
Black-spotted Newt *Notophthalmus meridionalis*	—	T	Can be found in wet or sometimes wet area, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River.	No impact	No potential habitat is present within the proposed project area.
Mexican Treefrog *Smilisca baudinii*	—	T	Subtropical region of extreme southern Texas; breeds May-October coinciding with rainfall, eggs laid in temporary rain pools.	May impact	Temporary rain pools could be present within the proposed project area. Amphibian BMPs will be implemented.
Sheep Frog *Hypopachus variolosus*	—	T	Predominantly found in grasslands and savannas; moist sites in arid areas.	No impact	Grasslands and savannas are present within the proposed project area, but no moist areas are present.
South Texas Siren (large form) *Siren* sp. 1	—	T	Can be found in wet or sometimes wet area, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does not require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June.	No impact	No potential habitat is present within the proposed project area.
White-lipped Frog *Leptodactylus fragilis*	—	T	Grasslands, cultivated fields, roadside ditches, and a wide variety of other habitats; often hides under rocks or in burrows under clumps of grass; species requirements incompatible with widespread habitat alteration and pesticide use in south Texas.	No impact	No potential habitat is present within the proposed project area.
BIRDS					
American Peregrine Falcon *Falco peregrinus anatum*	DL	T	Nests in tall cliff eyries, year-round resident and local breeder in west Texas; migrant across state from more northern breeding areas in U.S. and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	No impact	There are no lake shores, coastlines, or barrier islands in the vicinity of the project, but peregrine falcons are a possible migrant and have been observed near the project. However, the proposed construction activities are not expected to impact individuals of the species.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Arctic Peregrine Falcon *Falco peregrinus tundrius*	DL	SGCN	Migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	No impact	There are no lake shores, coastlines, or barrier islands in the vicinity of the project, but peregrine falcons are a possible migrant and have been observed near the project. However, the proposed construction activities are not expected to impact individuals of the species.
Audubon's Oriole *Icterus graduacauda audubonii*	—	SGCN	Scrub, mesquite; nests in dense trees, or thickets, usually along water courses.	May impact	There are no water courses, but marginal habitat (mesquite scrub) is present within and adjacent to the project area. Bird BMPs would be implemented.
Brownsville Common Yellowthroat *Geothlypis trichas insperata*	—	SGCN	Tall grasses and brushes near ponds, marshes, and swamps.	No impact	No tall grasses or brush near ponds are present within the project area.
Cactus Ferruginous Pygmy-owl *Glaucidium brasilianum cactorum*	—	T	Riparian trees, brush, palm, and mesquite thickets; during day also roosts in small caves and recesses on slopes of low hills.	No impact	No suitable riparian habitat is located within or adjacent to the project area.
Common Black-hawk *Buteogallus anthracinus*	—	T	Cottonwood-lined rivers and streams; willow tree groves on the lower Rio Grande floodplain; formerly bred in south Texas.	No impact	No cottonwood-lined rivers or streams or willow groves are located within or adjacent to the project area.
Gray Hawk *Asturina nitida*	—	T	Locally and irregularly along US-Mexico border; mature riparian woodlands and nearby semiarid mesquite and scrub grasslands.	No impact	No mature riparian woodlands are located in or adjacent to the project area.
Hook-billed Kite *Chondrohierax uncinatus*	—	SGCN	Dense tropical and subtropical forests or open woodlands.	No impact	No tropical forests or woodlands are present in the vicinity of the proposed project.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Interior Least Tern *Sterna antillarum athalassos*	E	E	Subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also known to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc.); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony.	No effect	No suitable water features are present within or adjacent to the project area.
Mountain Plover *Charadrius montanus*	—	SGCN	Shortgrass plains or prairies and bare, dirt fields.	No impact	Suitable winter foraging habitat is present within the project area, but impacts to habitat would be minimal, and the project is not expected to impact individuals of the species.
Northern Aplomado Falcon *Falco femoralis septentrionalis*	E	E	Open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species.	No effect	No large, contiguous areas of savanna, open woodland, grassy plains, or valleys are within or immediately adjacent to the project area.
Northern Beardless-Tyrannulet *Camptostma imberbe*	—	T	Mesquite woodlands; near Rio Grande frequents cottonwood, willow, elm, and great leadtree.	May impact	Small areas of suitable habitat occur in or adjacent to the project area. Bird BMPs would be implemented.
Peregrine Falcon *Falco peregrinus*	DL[1]	T	Contains two sub species, the American peregrine falcon (*Falco peregrinus anatum)* and Arctic peregrine falcon (*Falco peregrinus tundrius*); considered potential fall and spring migrants from northern breeding areas in the U.S. and Canada to winter along the coast and farther south. The subspecies (*F. p. anatum)* is also resident breeder in west Texas; (*F. p. tundrius*) is no longer listed in Texas, but because the two sub species are not easily distinguishable from a distance and are generally referenced together at the species level.	No impact	There are no lake shores, coastlines, or barrier islands in the vicinity of the project, but peregrine falcons are a possible migrant and have been observed near the project. However, the proposed construction activities are not expected to impact individuals of the species.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Piping Plover *Charadrius melodus*	T	T	Wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats.	No effect	No beaches or bayside flats occur within or adjacent to the project area. Additionally, this species only needs to be evaluated for wind energy projects (USFWS 2017).
Red-crowned Parrot *Amazona viridigenalis*	C	—	Native to Mexico and is currently found in northeastern Mexico, inhabiting lush areas in arid lowlands and foothills, particularly gallery forests, deciduous woodlands, and dry, open, pine-oak woodlands on ridges.	No impact	No lush areas, forests, or deciduous or pine-oak woodlands are present within or adjacent to the project area.
Red Knot *Calidris canutus rufa*	T	SGCN	Prefers the shoreline of coast and bays and also uses mudflats during rare inland encounters; primarily seacoasts on tidal flats and beaches, herbaceous wetland, and tidal flat/shore.	No effect	No shoreline or mudflats are present within or adjacent to the project area. Additionally, this species only needs to be evaluated for wind energy projects (USFWS 2017).
Rose-throated Becard *Pachyramphus aglaiae*	—	T	Riparian trees, woodlands, open forest, scrub, and mangroves.	No impact	No suitable riparian habitat is present within or adjacent to the project area.
Sennett's Hooded Oriole *Icterus cucullatus sennetti*	—	SGCN	Often builds nests in and of Spanish moss (*Tillandsia usneoides*).	May impact	Small areas of suitable habitat occur in or adjacent to the project area. Bird BMPs would be implemented.
Sprague's Pipit *Anthus spragueii*	—	SGCN	Only in Texas during migration and winter, mid-September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west.	No impact	No native upland prairie is present in or immediately adjacent to the project area.
Texas Botteri's Sparrow *Aimophila botteri texana*	—	T	Grassland and short-grass plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses.	No impact	No undisturbed grassland or short-grass plains are present within or immediately adjacent to the project area.
Tropical Parula *Parula pitiayumi nigrilora*	—	T	Dense or open woods, undergrowth, brush, and trees along edges of rivers and resacas.	No impact	No dense or open woods or trees along edges of rivers are present within or immediately adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Western Burrowing Owl *Athene cunicularia hypugaea*	—	SGCN	Inhabits open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; occasionally nests and roosts in abandoned burrows.	May impact	Small areas of suitable habitat occur in or adjacent to the project area. Bird BMPs would be implemented.
Western Snowy Plover *Charadrius alexandrines nivosus*	—	SGCN	Uncommon breeder in the Texas panhandle; potential migrant; winter along coast.	No impact	No suitable coastal habitat is present within or adjacent to the project area.
White-faced Ibis *Plegadis chihi*	—	T	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.	No impact	No suitable aquatic habitat is located within or adjacent to the project area.
White-tailed Hawk *Buteo albicaudatus*	—	T	Found near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite, and oak savannas, and mixed savanna-chaparral.	May impact	Mesquite savannas are present within and adjacent to the project area. Bird BMPs would be implemented.
Wood Stork *Mycteria americana*	—	T	Forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including saltwater; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960.	No impact	No suitable aquatic habitat is located within or adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Zone-tailed Hawk *Buteo albonotatus*	—	T	Arid open country, including open deciduous or pine-oak woodland, mesa or mountain county, often near watercourses, and wooded canyons and tree-lined rivers along middle-slopes of desert mountains; nests in various habitats and sites, ranging from small trees in lower desert, giant cottonwoods in riparian areas, to mature conifers in high mountain regions.	No impact	No open deciduous or pine-oak woodland, wooded canyons, or tree-lined rivers are located within or adjacent to the project area.
FISHES					
American Eel *Anguilla rostrata*	—	SGCN	Coastal waterways below reservoirs to gulf; most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas.	No impact	No suitable aquatic habitat is located within or adjacent to the project area.
Rio Grande Shiner *Notropis jemezanus*	—	SGCN	Large, open, weedless rivers or large creeks with bottom of rubble, gravel and sand, often overlain with silt.	No impact	No suitable aquatic habitat is located within or adjacent to the project area.
Rio Grande Silvery Minnow *Hybognathus amarus*	E[1]	E	Extirpated; pools and backwaters of medium to large streams with low or moderate gradient in mud, sand, or gravel bottom; ingests mud and bottom ooze for algae and other organic matter; probably spawns on silt substrates of quiet coves.	No effect	Extirpated. This species is not likely to occur in the project area.
River Goby *Awaous banana*	—	T	Southern coastal waters; clear water with slow to moderate current, sandy or hard bottom, and little to no vegetation; also enters brackish and ocean waters.	No impact	No suitable aquatic habitat is located within or adjacent to the project area.
INSECTS					
A Mayfly *Campsurus decoloratus*	—	SGCN	Possibly clay substrates; mayflies distinguished by aquatic larval stage; adult stage generally found in shoreline vegetation.	No impact	No hardwood woodlands or Tamaulipan thornscrub with Texas ebony is located within or immediately adjacent to the project area.
A Royal Moth *Sphingicampa blanchardi*	—	SGCN	Hardwood woodlands; Tamaulipan thornscrub with caterpillar's host plant, Texas Ebony (*Pitheocellobium flexicaule*) an important element.	No impact	No hardwood woodlands or Tamaulipan thornscrub with Texas ebony is located within or immediately adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
A Tiger Beetle *Tetracha affinis angustata*	—	SGCN	Open sandy areas, beaches, or mudflats.	No impact	No sandy beaches or mudflats exist in the vicinity of the proposed project.
Arroyo Darner *Aeshna dugesi*	—	SGCN	Pools in streams from desert up to pine-oak zone.	No impact	No pools in streams exist within the proposed project area.
Los Olmos Tiger Beetle *Cicindela nevadica olmosa*	—	SGCN	Found in open, sunny areas; larvae live in vertical burrows in soil of dry paths, fields, or sandy beaches.	No impact	No sunny fields or beaches exist in the vicinity of the proposed project.
Manfreda Giant-skipper *Stallingsia maculosus*	—	SGCN	Subtropical thorn and pine forests associated with the host plant - Texas tuberose (*Manfreda maculosa*) or spice lily.	No impact	No subtropical thorn and pine forests associated with Texas tuberose are located within or adjacent to the project area.
Neojuvenile Tiger Beetle *Cicindela obsoleta neojuvenilis*	—	SGCN	Bare or sparsely vegetated, dry, hard-packed soil.	No impact	Potential habitat is present within the proposed project area, but proposed construction activities are not expected to impact the species.
Subtropical Blue-black Tiger Beetle *Cicindela nigrocoerulea subtropica*	—	SGCN	Found in open, sunny areas; larvae live in vertical burrows in soil of dry paths, fields, or sandy beaches.	No impact	Potential habitat is present within the proposed project area, but proposed construction activities are not expected to impact the species.
Tamaulipan Agapema *Agapema galbina*	—	SGCN	Found in Tamaulipan thornscrub with adequate densities of the caterpillar host plant, *Condalia hookeri*.	No impact	No areas of Tamaulipan thornscrub with high densities of Brasil (*Condalia hookeri hookeri*) trees or shrubs exists within or immediately adjacent to the project area.
MAMMALS					
Cave Myotis Bat *Myotis velifer*	—	SGCN	Colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (*Petrochelidon pyrrhonota*) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum caves of Panhandle during winter.	No impact	No suitable roosting habitat occurs in or adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Coues' Rice Rat *Oryzomys couesi*	—	T	Cattail-bulrush marsh with shallower zone of aquatic grasses near the shoreline; shade trees around the shoreline are important features; prefers salt and freshwater, as well as grassy areas near water.	No impact	No cattail-bulrush marsh or aquatic grasses near shoreline or shade trees near shoreline are located within or adjacent to the project area.
Gulf Coast Jaguarundi *Herpailurus yaguarondi*	E	E	Thick brushlands, near water favored.	No effect	No thick brushlands near water are present within or adjacent to the project area.
Jaguar *Panthera onca*	E[1]	E	Extirpated; dense chaparral.	No effect	Extirpated. This species is not likely to occur in the project area.
Mexican Long-tongued Bat *Choeronycteris mexicana*	—	SGCN	Deep canyons, caves and mine tunnels; also found in buildings.	No impact	Only one record from Texas and no deep canyons, caves or mine tunnels are present within or adjacent to the project area.
Ocelot *Leopardus pardalis*	E	E	Dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas.	No effect	No dense chaparral thickets, mesquite-thorn scrub, or live oak mottes are located within or adjacent to the project area. Based on field investigations, no suitable ocelot habitat was identified in the project area. Areas mapped as dense thornscrub by EMST were field-verified as mesquite woodland or shrubland that are not dense enough to provide suitable habitat (i.e. canopy cover was less than 75 to 95 percent). In addition, the closest documented ocelot population is approximately 30 miles east of the project area in Willacy County.
Plains Spotted Skunk *Spilogale putorius interrupta*	—	SGCN	Open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie.	May impact	The project area supports woodland/brush edges that could provide suitable habitat for the species. Contractors would be advised of the potential occurrence in the project area, and to avoid harming the species if encountered.
Southern Yellow Bat *Lasiurus ega*	—	T	Associated with trees, such as palm groves and other woodlands.	No impact	No palm groves or suitable woodlands are located within or adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
White-nosed Coati *Nasua narica*	—	T	Woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico.	No impact	No woodlands, suitable riparian corridors, or canyons within or adjacent to the project area.
MOLLUSKS					
Mexican Fawnsfoot Mussel *Truncilla cognata*	—	T	Largely unknown; possibly intolerant of impoundment; possibly needs flowing streams and rivers with sand or gravel bottoms based on related species needs; Rio Grande basin.	No impact	No suitable freshwater aquatic habitat is present in or adjacent to the project area.
Salina Mucket *Potamilus metnecktayi*	—	T	Lotic waters; submerged soft sediment (clay and silt) along river bank; other habitat requirements are poorly understood; Rio Grande Basin.	No impact	No suitable freshwater aquatic habitat is present in or adjacent to the project area.
Texas Hornshell *Popenaias popeii*	C[1]	T	Both ends of narrow shallow runs over bedrock, in areas where small-grained materials collect in crevices, along river banks, and at the base of boulders; not known from impoundments; Rio Grande Basin and several rivers in Mexico.	No impact	No suitable freshwater aquatic habitat is present in or adjacent to the project area.
REPTILES					
Black-striped Snake *Coniophanes imperialis*	—	T	Extreme south Texas; semi-arid coastal plain, warm, moist micro-habitats and sandy soils; proficient burrower.	No impact	No moist micro-habitats are present within or adjacent to the project area.
Northern Cat-eyed Snake *Leptodeira septentrionalis*	—	T	Gulf Coastal Plain south of the Nueces River; thorn brush woodland; dense thickets bordering ponds and streams; semi-arboreal.	No impact	No thorn brush woodland or dense thickets bordering ponds or streams are present within or adjacent to the project area.
Reticulate Collared Lizard *Crotaphytus reticulatus*	—	T	Open brush-grasslands; thorn-scrub vegetation, well-drained rolling terrain of shallow gravel, caliche, or sandy soils; scattered flat rocks below escarpments or isolated rock outcrops.	May impact	Open brush-grasslands on sandy soils are present in or adjacent to the proposed project. Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
Speckled Racer *Drymobius margaritiferus*	—	T	Extreme south Texas; dense thickets near water, Texas palm groves, riparian woodlands; often in areas with much vegetation litter on ground.	No impact	No dense thickets, Texas palm groves, or riparian woodlands are located within or adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Spot-tailed Earless Lizard *Holbrookia lacerata*	—	SGCN	Moderately open prairie-brushland and fairly flat areas free of vegetation and other obstructions including disturbed areas.	May impact	The project area supports woods/brush edges with bare ground that could provide suitable habitat for the species. Contractors would be advised of the potential occurrence in the project area, and to avoid harming the species if encountered.
Texas Horned Lizard *Phrynosoma cornutum*	—	T	Found in open, arid and semi-arid regions with sparse vegetation, scattered brush or scrubby trees; sandy to rocky soils; burrows into soil, enters rodent burrows, or hides under rocks when inactive; breeds March-September.	May impact	Areas of sparse vegetation typical of arid regions could provide habitat. Contractors would be advised of the potential occurrence in the project area, and to avoid harming the species if encountered. This should include avoiding harvester ant mounds in the selection of Project Specific Locations (PSLs).
Texas Indigo Snake *Drymarchon corais*	—	T	Thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter.	May impact	Portions of the project area could provide suitable habitat for the species. Contractors would be advised of the potential occurrence in the project area, and to avoid harming the species if encountered.
Texas Tortoise *Gopherus berlandieri*	—	T	Open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive, occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects.	May impact	Portions of the project area could provide suitable habitat for the species. Contractors would be advised of the potential occurrence in the project area, and to avoid harming the species if encountered. Utility trenches should be covered overnight to prevent tortoise being trapped. Utility trenches should be visually inspected before filling to avoid burial of the species.
PLANTS					
Amelia's Abronia *Abronia ameliae*	—	SGCN	Occurs on deep, well-drained soils of the South Texas Sand Sheet in grassy and/or herbaceous dominated openings within coastal live oak woodlands or mesquite-coastal live oak woodlands.	No impact	No coastal live oak woodlands or mesquite-coastal live oak woodlands occur in the project area.
Arrowleaf Milkvine *Matelea sagittifolia*	—	SGCN	Most consistently encountered in thornscrub in South Texas.	No impact	No thornscrub is present in or adjacent to the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Bailey's Ballmoss *Tillandsia baileyi*	—	SGCN	Epiphytic on various trees and tall shrubs, perhaps most common in mottes of live oak on vegetated dunes and flats in coastal portions of the South Texas Sand Sheet, but also on evergreen sub-tropical woodlands along resacas in the Lower Rio Grande Valley.	No impact	No live oak mottes on vegetated dunes or flats, and no evergreen sub-tropical woodlands are located within the project area.
Chihuahua Balloon-vine *Cardiospermum dissectum*	—	SGCN	Thorn shrublands or low woodlands on well to excessively well drained, calcareous, sandy to gravelly soils in drier uplands.	No impact	No low woodlands or thorn shrublands are present in the vicinity of the proposed project.
Cory's Croton *Croton coryi*	—	SGCN	Grasslands and woodland openings on barrier islands and coastal sands of South Texas, inland on South Texas Sand Sheet.	May impact	The project area supports grasslands and/or woodland openings on the South Texas Sand Sheet.
Falfurrias Milkvine *Matelea radiata*	—	SGCN	Texas endemic; uncertain, only known from two specimens: one from clay soil on dry gravel hills at altitude of 45 m; other from Falfurrias, no habitat descriptions.	May impact	No *Matelea* spp. were observed in the vicinity of the proposed project, but the presence of the species cannot be ruled out.
Gregg's wild-buckwheat *Eriogonum greggii*	—	SGCN	Sparingly vegetated openings in thorn shrublands in shallow soils on xeric ridges along the Rio Grande.	No impact	No thorn shrublands on xeric ridges are present in or adjacent to the project area.
Jones' Nailwort *Paronychia jonesii*	—	SGCN	Occurs in early successional open areas on deep well-drained sand.	May impact	Portions of the project area could provide suitable habitat for the species.
Large Selenia *Selenia grandis*	—	SGCN	Occurs in seasonally wet clayey soils in open areas.	No impact	No seasonally wet soils in open areas are located in the project area.
Mexican Mud-plantain *Heteranthera mexicana*	—	SGCN	Wet clayey soils of resacas and ephemeral wetlands in South Texas and along margins of playas in the Panhandle.	No impact	No resacas or ephemeral wetlands are located within the project area.
Runyon's Cory Cactus *Coryphantha macromeris v. runyonii*	—	SGCN	Gravelly to sandy or clayey, calcareous, sometimes gypsiferous or saline soils, often over Catahoula and Frio formations, on gentle hills and slopes to the flats between, at elevations ranging from 10 to 150 m (30 to 500 ft).	No impact	No suitable habitat in soils over Catahoula or Frio formations is present in the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Runyon's Water-willow *Justicia runyonii*	—	SGCN	Margins of and openings within subtropical woodlands or thorn shrublands on calcareous, alluvial, silty, or clayey soils derived from Holocene silt and sand floodplain deposits of the Rio Grande Delta; can be common in narrow openings such as those provided by trails through dense ebony woodlands and is sometimes restricted to microdepressions.	No impact	No openings within subtropical woodlands or thorn shrublands on calcareous, alluvial, silty, or clayey soils are located within to the project area.
Sand Brazos Mint *Brazoria arenaria*	—	SGCN	Sandy areas in South Texas.	May impact	Portions of the project area could provide suitable habitat for the species.
Sand Sheet Leaf-flower *Phyllanthus abnormis var. riograndensis*	—	SGCN	Semi-desert scrub of deep South Texas.	May impact	The project area supports semi-desert scrub.
Shortcrown Milkvine *Matelea brevicoronata*	—	SGCN	Primarily in grasslands on tight sandy or silty substrates.	May impact	No *Matelea* spp. were observed in the vicinity of the proposed project, but the presence of the species cannot be ruled out.
Siler's Huaco *Manfreda sileri*	—	SGCN	Rare in a variety of grasslands and shrublands on dry sites; Perennial.	May impact	Grasslands and shrublands in the project area could provide suitable habitat for the species.
Small-leaved Yellow Velvet-leaf *Thelypodiopsis shinnersii*	—	SGCN	Sandy loams or clays in shrublands or woodlands.	May impact	Woodlands and shrublands in the project area could provide suitable habitat for the species.
St. Joseph's Staff *Manfreda longiflora*	—	SGCN	Thorn shrublands on clays and loams with various concentrations of salt, caliche, sand, and gravel.	No impact	No thorn shrublands on clays or loams are present within the project area.
Star Cactus *Astrophytum asterias*	E	E	Gravelly clays or loams, possibly of the Catarina Series (deep, droughty, saline clays), over the Catahoula and Frio formations, on gentle slopes and flats in sparsely vegetated openings between shrub thickets within mesquite grasslands or mesquite-blackbrush thorn shrublands; plants sink into or below ground during dry periods.	No effect	No sparsely vegetated openings between shrub thickets on gravelly clays or loams are located in the project area.
Stinking Rushpea *Pomaria austrotexana*	—	SGCN	Open areas on deep well drained sands.	May impact	There is suitable soil and habitat within the project area.

Table 3. Federal and State-Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Hidalgo County

Species	Federal Status	State Status	Description of Suitable Habitat	Species Effect/Impact	Project Specific Information
Texas Ayenia *Ayenia limitaris*	E	E	Subtropical thorn woodland or tall shrubland on loamy soils of the Rio Grande Delta; known site soils include well-drained, calcareous, sandy clay loam (Hidalgo Series) and neutral to moderately alkaline, fine sandy loam (Willacy Series); also under or among taller shrubs in thorn woodland/thorn shrubland; flowering throughout the year with sufficient rainfall.	No effect	No subtropical thorn woodland or tall shrubland on loamy soil is located in the project area.
Texas Peachbush *Prunus texana*	—	SGCN	The species occurs at 0-200 m elevation at scattered sites in various well drained sandy situations such as deep sand, plains and sand hills, grasslands, and oak woods.	May impact	There is suitable soil and habitat within the project area.
Texas Stonecrop *Lenophyllum texanum*	—	SGCN	Shrublands on clay dunes (lomas) at the mouth of the Rio Grande and on xeric calcareous rock outcrops at scattered inland sites.	No impact	No lomas are located within the project area.
Vasey's Adelia *Adelia vaseyi*	—	SGCN	Mostly in subtropical evergreen/deciduous woodlands on loamy soils of Rio Grande Delta, but occasionally in shrublands on more xeric sandy to gravelly upland sites.	No impact	No evergreen/deciduous woodlands on loamy soils are located within the project area.
Walker's Manioc *Manihot walkerae*	E	E	Periphery of native brush in sandy loam.	No effect	No undisturbed native brush in the project area. The closest known colony is near La Joya, approximately 25 miles southwest of the project area.
Wright's Trichocoronis *Trichocoronis wrightii var. wrightii*	—	SGCN	Most records from Texas are historical, perhaps indicating a decline as a result of alteration of wetland habitats.	No impact	No wetland habitats are present in the project area.
Yellow-flowered Alicoche *Echinocereus papillosus*	—	SGCN	Under shrubs or in open areas on various substrates.	May impact	Suitable habitat is present in the project area and there is a TXNDD record within 1.5 mile of the project area.

E – Endangered; T – Threatened; PE – Proposed Endangered; C – Candidate; DL – Federally Delisted; "—" – No designation occurring within identified county; SGCN – Species of Greatest Conservation Need: rare, but with no regulatory listing status

[1] The USFWS does not list these species for Hidalgo County; however, these species are listed on the TPWD's county list.

Sources: USFWS (retrieved December 2, 2019), TPWD, Rare, Threatened, and Endangered Species of Texas by County, Hidalgo County (May 16, 2016 version, retrieved January 8, 2018), and Field Visit (January 2017).

No suitable habitat for federally listed threatened, endangered, or proposed threatened or endangered species was identified in or adjacent to the project area. Therefore, the project does not have the potential to affect any federally listed species.

Suitable habitat was identified for seven state-listed threatened species, the Mexican treefrog (*Smilisca baudinii*), northern beardless tyrannulet (*Camptostma imberbe*), white-tailed hawk (*Buteo albicaudatus*), reticulate collared lizard (*Crotaphytus reticulatus*), Texas horned lizard (*Phrynosoma cornutum*), Texas Indigo snake, and Texas tortoise. There is also potential habitat for 16 SGCNs: Audubon's oriole (*Icterus graduacauda audubonii*), Sennett's hooded oriole (*Icterus cucullatus sennetti*), western burrowing owl (*Athene cunicularia hypugaea*), plains spotted skunk (*Spilogale putorius interrupta*), spot-tailed earless lizard (*Holbrookia lacerata*), Cory's croton (*Croton coryi*), Falfurrias milkvine (*Matelea radiata*), Jones' nailwort (*Paronychia jonesii*), sand Brazos mint (*Brazoria arenaria*), sand sheet leaf-flower (*Phyllanthus abnormis var. riograndensis*), shortcrown milkvine (*Matelea brevicoronata*), Siler's huaco (*Manfreda sileri*), small-leaved yellow velvet-leaf (*Thelypodiopsis shinnersii*), stinking rushpea (*Pomaria austrotexana*), Texas peachbush (*Prunus texana*), and yellow-flowered alicoche (*Echinocereus papillosus*).

BMPs will be implemented to avoid impacts, where possible, including TPWD's Amphibian, Terrestrial Reptile, and Bird BMPs (TxDOT 2017b). Contractors will be advised of the potential occurrence of the plains spotted skunk within the project area, to avoid harming the species if encountered, and to avoid unnecessary impacts to dens. Contractors will be advised of the potential occurrence of the Texas horned lizard within the project area and will avoid harvester ant mounds in the selection of Project Specific Locations (PSLs), where feasible. Contractors will be advised of the potential occurrence of the Texas tortoise within the project area and will avoid harming to species if encountered, and utility trenches should be covered overnight and visually inspected before filling to avoid trapping or burying the species.

The current TxDOT/TPWD BMP PA does not specify BMPs for the 11-plant species, and no BMPs or plant surveys were recommended by TPWD through agency coordination. BMPs and direction to contractors is provided on the standard EPIC sheet (**Appendix H**).

The No-Build Alternative would not result in impacts to existing vegetation and wildlife habitat in the project area.

5.12 Air Quality

An air quality analysis was conducted for the proposed project in accordance with TxDOT's Environmental Handbook for Air Quality (TxDOT 2017c) and Standard Operating Procedure (SOP) for Preparing Air Quality Statements (TxDOT 2017d).

5.12.1 Transportation Conformity

This project is located within an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply.

5.12.2 Project-level Hot-spot Analysis Requirements

The proposed project is not located within a carbon monoxide (CO) or particulate matter (PM) nonattainment or maintenance area; therefore, a project level hot-spot analysis is not required.

5.12.3 Carbon Monoxide Traffic Air Quality Analysis (TAQA)

Traffic data projections for the estimated time of completion (ETC) year (2024) and design year (2044) are 20,450 vehicles per day (vpd) and 27,495 vpd, respectively. A prior TxDOT modeling study and previous analyses of similar projects demonstrated that it is unlikely that the CO standard would ever be exceeded as a result of any project with an annual average daily traffic (AADT) below 140,000 vpd. The AADT projections for the proposed project do not exceed 140,000 vpd; therefore, a TAQA is not required.

5.12.4 Mobile Source Air Toxics (MSAT)

Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act (CAA) Amendments of 1990, whereby Congress mandated that the Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register [FR], Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/iris/). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment (NATA) (https://www.epa.gov/national-air-toxics-assessment). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel PM, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these compounds the priority MSATs, the list is subject to change and may be adjusted in consideration of future EPA rules.

Motor Vehicle Emissions Simulator (MOVES)

According the to the EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010.

These new emissions data are for light- and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and vehicle miles travelled (VMT) data. MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010.

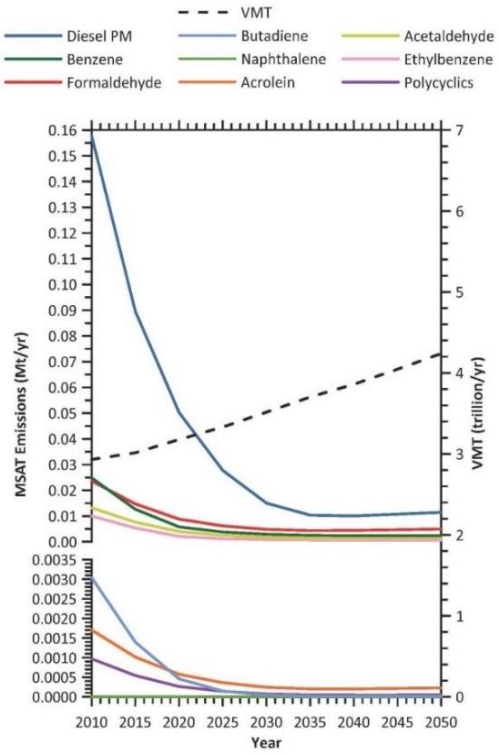
These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344).

Since the release of MOVES2014, the EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide (http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100NNCY.txt), the EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an

error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in particulate matter emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014. Using EPA's MOVES2014a model, as shown in **Insert 1**, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Insert 1.

PROJECTED NATIONAL MSAT EMISSION TRENDS 2010 – 2050
FOR VEHICLES OPERATING ON ROADWAYS
USING EPA's Moves2014a Model



Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.
Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorological, and other factors.

Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES2014a will notice some differences in emissions compared with MOVES2010b. MOVES2014a is based on updated data on some emissions and pollutant processes compared to MOVES2010b, and also reflects the latest Federal emissions standards in place at the time of its release. In addition, MOVES2014a emissions forecasts are based on lower VMT projections than MOVES2010b, consistent with recent trends suggesting reduced nationwide VMT growth compared to historical trends.

MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and

techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA. The FHWA, the EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

Project Specific MSAT Information

A qualitative MSAT analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA entitled, *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*, found at: https://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.cfm.

For the Build Alternative for the proposed project, the amount of MSAT emitted would be proportional to the VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for the Build Alternative is slightly higher than that for the No-Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, FHWA, October 12, 2016 (https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project will have the effect of moving some traffic closer to a nearby hospital; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No-Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built at the proposed grade-separated intersections, particularly at Laguna Seca Road. However, the magnitude and the duration of these potential increases compared to the No Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway

is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the CAA and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the IRIS, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/iris/). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents (http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm) Among the adverse health effects linked to MSAT compounds at high exposures are; cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects) As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel particulate matter. The EPA states that with respect to diesel engine exhaust, "[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust, Section II.C. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0642.htm#quainhal)."

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the CAA to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld the EPA's approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable (https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf).

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

5.12.5 Congestion Management Process (CMP)

This project is within an attainment or unclassifiable area for ozone and CO; therefore, a project level CMP analysis is not required.

5.12.6 Construction-related Emissions Reduction Strategies

During the construction phase of this project, temporary increases in particulate matter and MSAT emissions may occur from construction activities. The primary construction-related emissions of particulate matter are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel PM from diesel powered construction equipment and vehicles.

The potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at: https://www.tceq.texas.gov/airquality/terp.

However, considering the temporary and transient nature of construction-related emissions, the use of fugitive dust control measures, the encouragement of the use of TERP, and compliance with applicable regulatory requirements; it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.

5.13 Hazardous Materials

In the *Hazardous Materials ISA Form* dated March 2018, an ISA was conducted to identify potential hazardous materials within the proposed project study area. The components of the ISA included reviewing project design and ROW requirements, existing and previous land use, and federal and state regulatory databases and files. A database search for potential hazardous materials was conducted in January 2018 in general accordance with the American Society of Testing and Materials (ASTM) E1527 standards and TxDOT guidelines. An analysis of the ISA data indicates that most of the potential hazardous material sites are located outside of the TxDOT ROW. Contaminated soil, groundwater and surface water exceeding health-based benchmarks are not expected to be encountered in the proposed project area. A copy of the GeoSearch Database Radius Report is included as an appendix to the March 2018 *Hazardous Materials ISA Form*.

The proposed project includes the potential demolition of two residential properties as well as the potential demolition of a City of Edinburg water utility facility and a non-functional windmill. The structures may contain asbestos containing materials. Asbestos inspections, specifications, notification, license, accreditation, abatement and disposal, as applicable, should comply with the federal and state regulations. Asbestos issues should be addressed during the ROW acquisition process prior to construction. Several utilities (including gas, sewer, and water mains) are located adjacent to the project. Adjustment or relocation of these and other utilities would be necessary and would be handled so that no substantial interruption in service would occur.

During preliminary investigations, the Railroad Commission of Texas (RRC) Public Geographic Information System (GIS) viewer identified three natural gas pipelines that cross the proposed project area, and five liquid petroleum gas (LPG) sites within and adjacent to the project area (**Figure 10** in **Appendix F**). Coordination will be conducted with the pipeline owners to relocate or deepen any affected pipelines, and no work is proposed at the LPG locations. No concerns are anticipated.

Within the study area, there are three petroleum storage tank (PST) facilities; however, only two facilities are located adjacent to the project area. Of these, only one is listed in the leaking petroleum storage tank (LPST) database. No work will occur at these sites, and additional ROW is not required; therefore, no concerns are anticipated.

Impacts to active oil/gas wells is not anticipated; however, if oil/gas well-related contamination is encountered during construction, remediation would be conducted, as needed, prior to the continuation of construction activities. Hazardous materials may be encountered on the site during preconstruction and construction activities. Any unanticipated hazardous material and/or petroleum contamination encountered during construction of the proposed project would be handled according to applicable federal and state regulations per TxDOT Standard Specifications.

The No-Build Alternative would not result in hazardous materials impacts.

5.14 Traffic Noise

A traffic noise analysis was conducted in accordance with TxDOT's (FHWA-approved) Guidelines for Analysis and Abatement of Roadway Traffic Noise (2011). Traffic Noise Model version 2.5 (TNM 2.5) was utilized in the assessment.

The *Traffic Noise Analysis Technical Report*, dated December 2018, identified 44 representative receivers along the project length (**Table 4** and **Figures 11.1** through **11.7** in **Appendix F**).

Table 4. Traffic Noise Levels dB(A) Leq

Representative Receiver	NAC Category	NAC Level	Existing 2024	Predicted 2044	Change (+/-)	Noise Impact
R1 Residence	B	67	62	63	+1	No
R2 Residence	B	67	47	48	+1	No
R3 Church (interior)	D	52	39	39	0	No
R4 Residence	B	67	64	68	+4	**Yes**
R5 Residence	B	67	66	65	-1	No
R6 Residence	B	67	71	68	-3	**Yes**
R7 Residence	B	67	70	65	-5	No
R8 Residence	B	67	69	65	-4	No
R9 Residence	B	67	65	65	0	No
R10 Residence	B	67	70	68	-2	**Yes**
R11 Residence	B	67	63	66	+3	**Yes**
R12 Residence	B	67	67	67	0	**Yes**

Table 4. Traffic Noise Levels dB(A) Leq

Representative Receiver	NAC Category	NAC Level	Existing 2024	Predicted 2044	Change (+/-)	Noise Impact
R13 Residence	B	67	68	68	0	**Yes**
R14 Residence	B	67	67	66	-1	**Yes**
R15 Residence	B	67	66	64	-2	No
R16 Residence	B	67	69	69	0	**Yes**
R17 Residence	B	67	72	70	-2	**Yes**
R18 Residence	B	67	66	68	+2	**Yes**
R19 Residence	B	67	67	68	+1	**Yes**
R20 Residence	B	67	60	62	+2	No
R21 Residence	B	67	66	67	+1	**Yes**
R22 Residence	B	67	60	63	+3	No
R23 Residence	B	67	69	68	-1	**Yes**
R24 Mobile Home	B	67	72	68	-4	**Yes**
R25 Residence	B	67	62	62	0	No
R26 Residence	B	67	46	47	+1	No
R27 Residence	B	67	52	55	+3	No
R28 Residence	B	67	55	58	+3	No
R29 Residence	B	67	66	67	+1	**Yes**
R30 Residence	B	67	58	62	+4	No
R31 Residence	B	67	65	67	+2	**Yes**
R32 Residence	B	67	54	59	+5	No
R33 Restaurant	E	72	68	69	+1	No
R34 Residence	B	67	65	67	+2	**Yes**
R35 RV Park	B	67	69	67	-2	**Yes**
R36 RV Park	B	67	69	68	-1	**Yes**
R37 Residence	B	67	66	67	+1	**Yes**
R38 Residence	B	67	60	62	+2	No
R39 Residence	B	67	68	67	-1	**Yes**
R40 Residence	B	67	64	66	+2	**Yes**
R41 Residence	B	67	62	65	+3	No
R42 Residence	B	67	63	66	+3	**Yes**
R43 Residence	B	67	63	66	+3	**Yes**
R44 Residence	B	67	57	58	+1	No

As indicated in **Table 4**, the proposed project would result in traffic noise impacts to receivers; therefore, noise walls were evaluated for each of the impacted receiver locations, the results of which are described in detail in the 2018 *Traffic Noise Analysis Technical Report*. None of the noise abatement measures would be both feasible and reasonable; therefore, no abatement measures are proposed for this project.

To avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the predicted (2044) noise impact contours (**Table 5**). A copy of the traffic noise analysis will be made available to local officials. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

Table 5. Predicted Noise Impact Contours

Land Use	Impact Contour	Distance from ROW
NAC category B & C	66 dB(A)	185 feet
NAC category E	71 dB(A)	30 feet

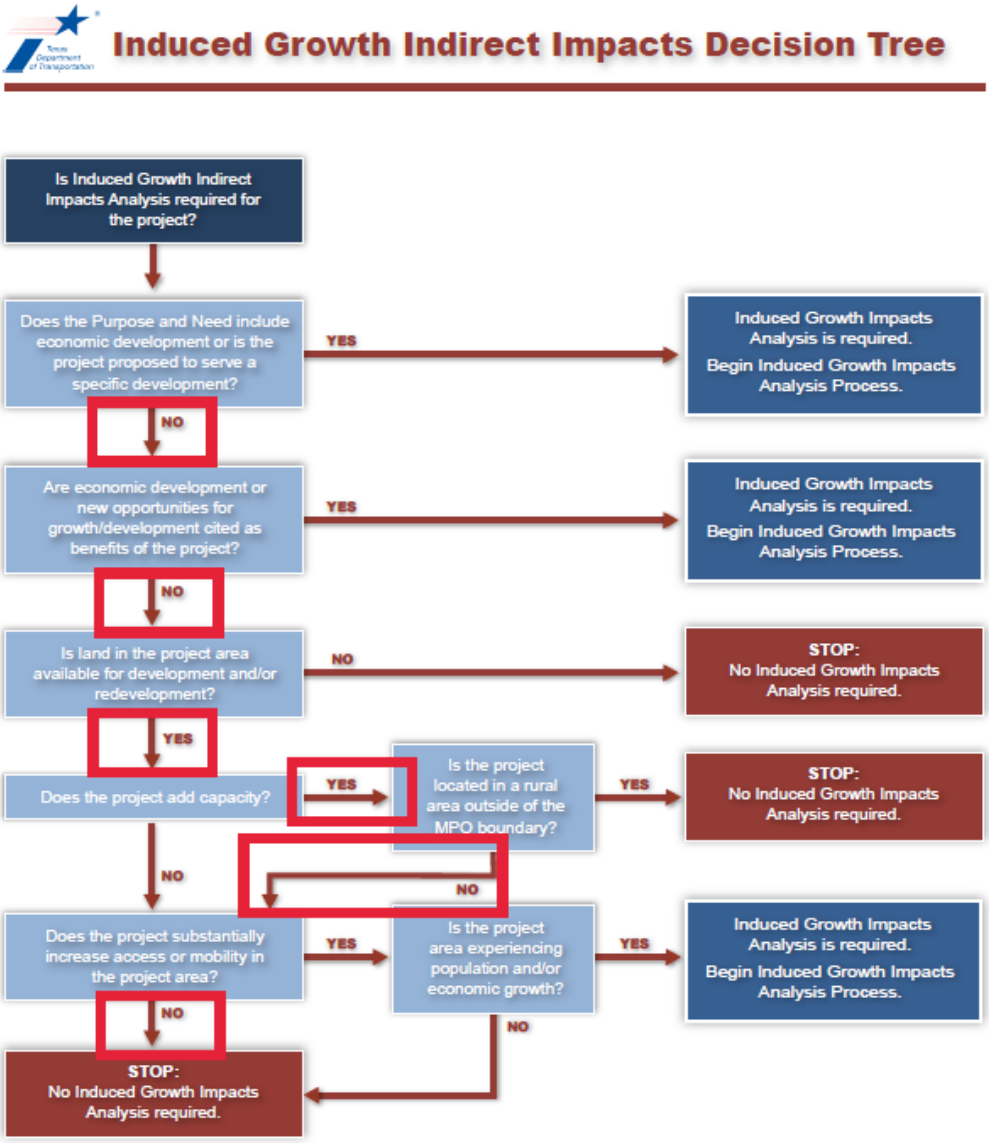
Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. The receiver is not expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

The No-Build Alternative may maintain existing traffic noise levels or noise levels may change as traffic volumes increase with time.

5.15 Induced Growth

Indirect impacts are defined as those caused by an action and are later in time or farther removed in distance, but still reasonably foreseeable. Indirect impacts are not directly associated with the construction or operation of the roadway and are often caused by related development and induced growth. This, in turn, can result in a variety of related impacts such as changes in land use, population density or growth rate, economic vitality, and impacts on air and water and other natural resources. Utilizing TxDOT's Induced Growth Indirect Impacts Decision Tree (April 2014), it was determined that an induced growth impacts analysis was not required because: 1) economic development and growth are not the purpose of the proposed project and the project is not intended to serve a specific development; 2) economic development and new opportunities for growth or development are not cited as benefits of the project; and although 3) land in the project area is available for development and 4) the project does add capacity, 5) the project would not substantially increase access or mobility in the project area. See **Insert 2** for the decision tree.

Insert 2.



This is not a project likely to stimulate complementary land development (e.g., an interchange bringing new access in a rural area) because the proposed project consists of improvements along an existing roadway alignment. Although certain properties may be available for redevelopment, the scope of the project (the reconstruction of existing US 281 and construction of frontage roads) are not expected to influence development or redevelopment in the project area. The expressway facility would eliminate various intersections and median breaks; however, grade separations with U-turns would be provided every 2 miles in either direction throughout the length of the project to maintain access along the proposed frontage roads. Travel times and distances will increase due to the reduction in access points, up to a maximum of 4 miles. No additional access would be provided as part of the proposed project, and the project would not substantially increase access to previously inaccessible areas. In addition, although the project would increase capacity to meet future traffic needs and thereby improve mobility, this improvement is not expected to be so substantial as to

influence or induce growth Therefore, the proposed project is not expected to make the area more attractive for development or redevelopment.

Given the scope of the proposed improvements, the proposed project is not expected to induce growth. Therefore, an induced growth impacts analysis is not required.

5.16 Cumulative Impacts

Cumulative impacts result from individually minor, but collectively significant, actions taking place over a period of time (40 CFR §1508.7). They are defined as impacts on the environment that result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Utilizing TxDOT's Cumulative Impacts Decision Tree (2014), it was determined that a cumulative impacts analysis was not required because: 1) the proposed project would not have substantial direct or indirect impacts on any resource; and 2) although some resources in the project area are in poor or declining health, the proposed project is not expected to result in impacts to these resources or contribute to their poor or declining health. See **Insert 3** for the decision tree. Based on the analysis of direct impact and encroachment alteration effected depicted in **Table 6**, no resources will be carried forward for a cumulative impact analysis.

Insert 3.

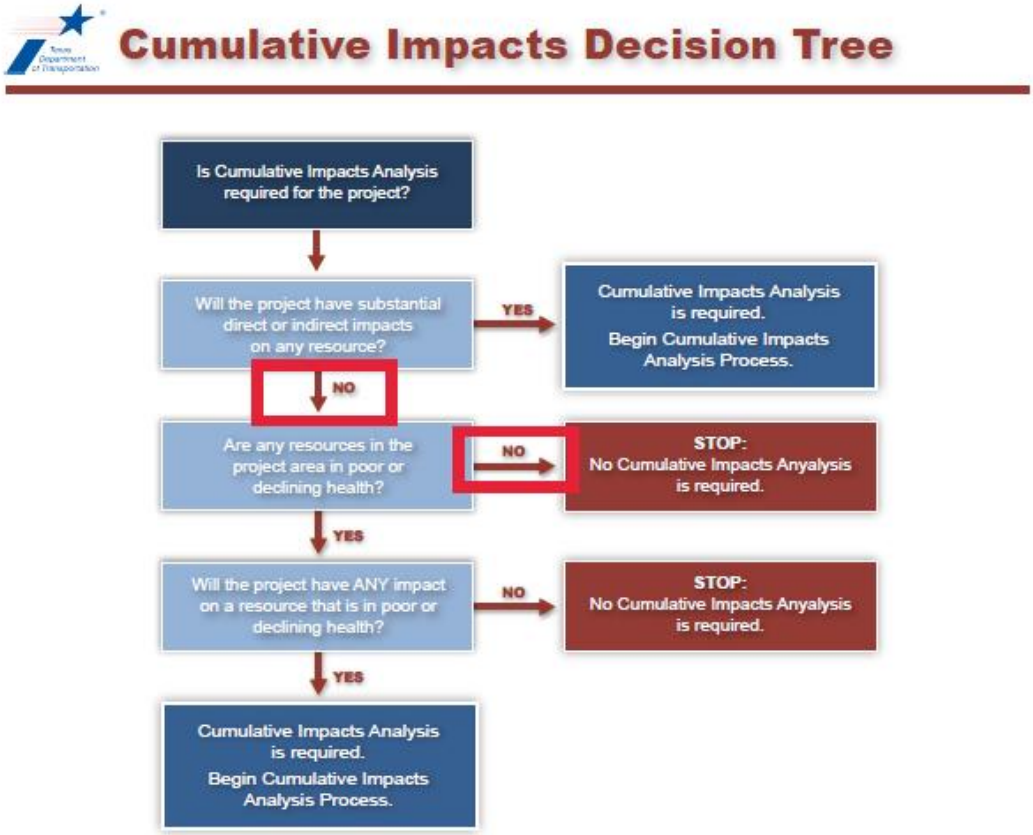


Table 6. Summary of Resources Evaluated

Resources	Potential Impacts and Effects	Carried Forwards for Cumulative Effects Analysis?
Farmland	According to the NRCS, important Farmland Soils subject to the FPPA are within the project area and would be converted to transportation use. Results of the Farmland Conversion Impact Rating Form (NRCS-CPA-106) were scored at 34, which is less than 60, and therefore does not warrant coordination with NRCS.	No. The Build Alternative would not result in substantial direct impacts or encroachment-alteration effects to farmland.
Air Quality	The project is located in Hidalgo County, which is in an area in attainment or unclassifiable for all NAAQS; therefore, the transportation conformity rules do not apply. Neither criteria pollutant nor MSAT impacts are expected as a result of this project.	No.
Water Resources	The proposed project is not anticipated to impact any potential waters of the U.S. or known isolated wetlands outside of the TxDOT ROW. Although a portion of the project is located within the 100-year floodplain, the proposed project actions would not involve a "significant encroachment" as defined by 23 CFR 650, Subpart A.	No.
Threatened and Endangered Species and their Habitat	No suitable habitat for federally listed threatened or endangered species was identified; therefore, there were no federally listed species of poor and declining heath identified in the project area. Additionally, the project area contains potential habitat for seven state-threatened species and 16 species of greatest conservation need. BMPs are available and would be implemented, where possible. BMPs are not available for the state-listed plant species.	No. Potential impacts to the state-listed species would be avoided and minimized through the implementation of BMPs. TPWD coordination was initiated and completed for the state-listed plant species.
Archeological Resources	A survey resulted in the identification of one surficial isolated find and one historic standing structure, which are not recommended as eligible for inclusion in the NRHP under any criteria, nor for designation as a SAL. No archeological sites were identified within the APE.	No.
Historic Resources	The HRSR recommended that none of the inventoried resources are eligible for listing on the NRHP either individually or as part of a larger property, historic district, or rural historic landscape.	No.
Traffic Noise	The traffic noise analysis predicted future noise impacts at adjacent noise-sensitive receivers, and noise abatement was considered. However, noise barriers were not both feasible and reasonable and therefore are not proposed for incorporation into the project.	No.

Table 6. Summary of Resources Evaluated

Resources	Potential Impacts and Effects	Carried Forwards for Cumulative Effects Analysis?
Socioeconomic Resources	**Effects of Displacements** The proposed project would potentially displace two residential properties and would potentially result in impacts to structures on two additional properties: one City of Edinburg utility station and one windmill structure. Comparable replacement housing is available within the community for residential displacements and none of the potentially displaced properties exhibit unique needs which would preclude them from relocating in the area. **Effects of Changes in Access and Travel Patterns** Due to the fact that the improvement to US 281 would be constructed along an existing transportation corridor, the project would not result in new or additional barriers within communities. Although the expressway facility would eliminate various intersections and median breaks, grade separations with U-turns would be provided every 2 miles in either direction throughout the project area. Travel times and distances will increase due to the reduction in access points, up to a maximum of 4 miles. Although the proposed project would result in increased travel times and distances, it is not anticipated that the proposed project would result in the division or isolation of any businesses, distinct neighborhoods, ethnic groups, or other specific groups, nor would access be denied to existing facilities. **EJ Populations** The project study area contains both minority and low-income populations. Although EJ populations are present in the project area, impacts are not anticipated to be disproportionately high and adverse. The proposed project is expected to benefit the entire community, including EJ populations.	**No.** The Build Alternative would not result in substantial direct impacts or encroachment-alteration effects to socioeconomic resources.

For all resources, the potential direct impacts anticipated as part of the project were determined to not be substantial due to the avoidance, minimization, and mitigation measures implemented for these resources. In addition, no substantial induced growth impacts to any resources are expected. Although resources within the study area do require regulatory consideration, the nature of the potential project impacts, compliance with regulations, and proposed BMPs are not expected to lead to any resource reaching a “tipping point” that could lead to irreversible declines. Therefore, although the project would result in impacts to resources, the impacts would not be substantial, and a cumulative impacts analysis was determined not to be required.

5.17 Construction Phase Impacts

Construction of the proposed project may require temporary closures and detours; however, these are expected to be of short duration with no major traffic flow disruptions on the existing roadways. TxDOT will work with community members to notify them of closures and limited access. **Section 5.12.6** further discusses the construction-related air emissions, and **Section 5.14** further discusses the construction-related noise impacts.

Under the No-Build Alternative, no construction would occur, therefore, no construction impacts would happen.

6.0 AGENCY COORDINATION

Over the course of project development TxDOT has coordinated with numerous local, state, and federal agencies regarding the proposed project. Copies of agency coordination documents are available in **Appendix G.**

- Coordination with the NRCS for the FPPA was determined to not be required due to the score on the FPPA Form NRCS-CPA 106.
- Coordination with Native American tribes with an interest in the area was initiated and a response from the Comanche Nation was received on September 10, 2018.
- As part of Section 106 Consultation regarding historic resources, TxDOT coordinated with the SHPO, who concurred with TxDOT's finding August 10, 2018.
- Coordination with TPWD was initiated on March 21, 2018 and concluded on May 2, 2018 with no comments from TPWD.

7.0 PUBLIC INVOLVEMENT

A series of Meetings with Affected Property Owners (MAPOs) were held throughout the life of the project. In late 2016, TxDOT coordinated with Mr. Calvin Bentsen and Mrs. Margo Bentsen, providing copies of the preliminary schematic alternatives, discussing design concerns to their property, specifically the gate, home, trees, and fence along the length of the property, and how the proposed project would change access to their property. In January 2018, TxDOT coordinated over email with the family of Moises Molina to discuss that ROW would not be required from the property owners for the proposed project. In February 2018, TxDOT spoke with Mr. Bruce Mediros to discuss how the project will affect his property and cattle operations, and concerns about surveys conducted on his property. Copies of the MAPO documentation can be found in **Appendix I**. As a result of the comments received during public outreach, including the MAPOs and the public meeting, the proposed design was modified to reverse ramps, and a Notice of Geometric Design Changes was sent to adjacent property owners (**Appendix K**).

On Tuesday, April 25, 2017, TxDOT held a Public Meeting at the Brewster Elementary School, located at 22420 FM 1017, Edinburg, Texas 78541. Notices of the meeting were published in English in *The Monitor* and in Spanish in *El Periódico* on April 9, 2017 and April 12, 2017, respectively. Meeting handouts were available in both English and Spanish, and interpreters were available at the meeting. A total of 116 members of the public signed in at the meeting. Sixteen comments were received during the public comment period. Six of the comments stated support for the project, three

comments requested corrections to well locations and parcel ownership identified on the exhibits, one comment requested reduced speed limits, two comments expressed concerns about noise impacts, and four comments expressed concerns about the proximity of ramps and access roads to their properties and impacts to access. The complete Public Meeting Summary is available for review at the TxDOT Pharr District, and the comment response matrix is available in **Appendix J**.

When the Draft EA was made available for public review, an opportunity was also afforded to the public to request a hearing to review the results of the environmental studies. Notices were published in English in *The Monitor* and in Spanish in *El Periódico* on July 28, 2019 and July 24, 2019, respectively. Less than ten public hearing requests were received; therefore, no hearing was required, and the Public Hearing Opportunity Certification was signed on August 28, 2019. The completed Documentation of Public Hearing Opportunity is available in **Appendix K**.

8.0 POST-ENVIRONMENTAL CLEARANCE ACTIVITIES AND CONTRACTOR COMMUNICATIONS

8.1 Post-Environmental Clearance Activities

After issuance of a FONSI, there are unresolved environmental activities that will need to be performed and finalized. These activities are detailed below.

1. The Build Alternative would include 5 or more acres of earth disturbance. TxDOT would comply with TCEQ's TPDES CGP. An SW3P would be prepared and implemented, and a construction site notice would be posted on the construction site. An NOI would be required.

2. Construction of the proposed project may require temporary lane closures. However, these are expected to be of short duration with no major traffic flow disruptions on the existing roadways. TxDOT will work with community members to notify them of closures and limited access.

3. As stated in **Section 5.1**, coordination with the THC is required to relocate the displaced OTHM for the La Noria Cardenena as close to the original site as possible. ROW acquisition and relocation would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

4. The proposed project includes the potential demolition of two residential properties as well as the potential demolition of a City of Edinburg water utility facility and a non-functional windmill. The structures may contain asbestos containing materials. Asbestos inspections, specifications, notification, license, accreditation, abatement and disposal, as applicable, should comply with the federal and state regulations. Asbestos issues should be addressed during the ROW acquisition process prior to construction.

8.2 Contractor Communications

Project-specific avoidance measures and special instructions, including BMPs are provided on the standard EPIC sheet (**Appendix H**), and detailed below.

1. If unanticipated archeological deposits are encountered during construction, work in the immediate area will cease and TxDOT archeological staff will be contacted to initiate post-review discovery procedures.

2. In the event that migratory birds are encountered on-site during project construction, every effort would be made to avoid protected birds, active nests, eggs, and/or young. Contractors would not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit. Bird Exclusion devices may need to be implemented and potentially planned for this project during construction.

3. The proposed project contains potential habitat for the Texas horned lizard. Terrestrial Reptile BMPs will be implemented and contractors would be advised of the potential occurrence in the project area, and to avoid harming the species if encountered. This should include avoiding harvester ant mounds in the selection of PSLs, where feasible.

4. The proposed project contains potential habitat for the Texas tortoise. Terrestrial Reptile BMPs will be implemented and contractors would be advised of the potential occurrence within the project area and will avoid harming to species if encountered, and utility trenches should be covered overnight and visually inspected before filling to avoid trapping or burying the species.

5. The proposed project contains potential habitat for the Audubon's oriole, northern beardless tyrannulet, Sennett's hooded oriole, western burrowing owl, and white-tailed hawk; therefore, Bird BMPs will be implemented.

6. The proposed project contains potential habitat for the Mexican treefrog; therefore, amphibian BMPs will be implemented.

7. The proposed project contains potential habitat for the plains spotted skunk. Contractors will be advised of the potential occurrence within the project area, and to avoid harming the species if encountered, and to avoid unnecessary impacts to dens.

8. In accordance with the EO 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping, permanent soil erosion control features would be constructed as soon as feasible during the early stages of construction through proper sodding and/or seeding techniques. Disturbed areas would be restored and stabilized as soon as the construction schedule permits. Therefore, seeding and replanting with TxDOT Pharr District native permanent rural seed mix would be performed.

9. The potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. TxDOT encourages construction contractors to use TERP and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions.

10. Any unanticipated hazardous material and/or petroleum contamination encountered during construction of the proposed project would be handled according to applicable federal and state regulations per TxDOT Standard Specification.

9.0 CONCLUSION

The analysis of alternatives for the proposed project determined that improvements proposed under the Build Alternative would meet the need and purpose of the project. The engineering, social, economic, and environmental studies conducted on the improvements as proposed by the Build Alternative indicate that the project would not result in significant adverse impacts on the human or natural environment at a level that would warrant an Environmental Impact Statement; therefore, a FONSI is recommended.

10.0 REFERENCES

Blair, W. F. 1950. The biotic provinces of Texas. Texas Journal of Science 2:93-117.

Dixon, J. R. 2000. Amphibians and reptiles of Texas. Second Edition. Texas A&M University Press, College Station, Texas.

Keown, G. 2007. A checklist of the snakes of Hidalgo County, Texas. Southwestern Center for Herpetological Research. Website. http://www.southwesternherp.com/articles/hidalgoco checklist.html. Accessed November 2018.

Schmidley. D. J. 2004. The mammals of Texas. 6th Edition. Austin, Texas: University of Texas Press. Austin, Texas.

Texas Commission on Environmental Quality. 2018. Draft 2016 Texas Integrated Report – Texas 303(d) List (Category 5).

Texas Department of Transportation. 2011. Guidelines for Analysis and Abatement of Roadway Traffic Noise.

_____. 2016. Indirect Impacts Analysis Guidance.

_____. 2014. Cumulative Impacts Decision Tree.

_____. 2017a. Threshold Table Programmatic Agreement Between Texas Department of Transportation and Texas Parks and Wildlife Department Under the 2013 MOU, 2017 Revision.

_____. 2017b. Best Management Practices Programmatic Agreement Between Texas Department of Transportation and Texas Parks and Wildlife Department Under the 2013 MOU, 2017 Revision.

_____. 2017c. Environmental Handbook - Air Quality. TxDOT Environmental Affairs Division. Version 5. Effective Date: May 2017. 210.01.GUI.

_____. 2017d. Standard Operating Procedure for Preparing Air Quality Statements. TxDOT Environmental Affairs Division. Version 2. Effective Date: January 2017. 210.01.SOP.

Texas Water Development Board (TWDB). 2018. 2016 Regional Water Plan County Population Projections for 2020-2070. January 2015. Accessed November 2018.

United States Census Bureau. 2010. Total Population 2010 Census Summary File. Website. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_P1&prodType=table. Accessed November 2018.

United States Department of Health and Human Services (DHHS). 2018. U.S. Federal Poverty Guidelines. https://aspe.hhs.gov/poverty-guidelines. Accessed April 2018.

Appendix A

Project Location Maps

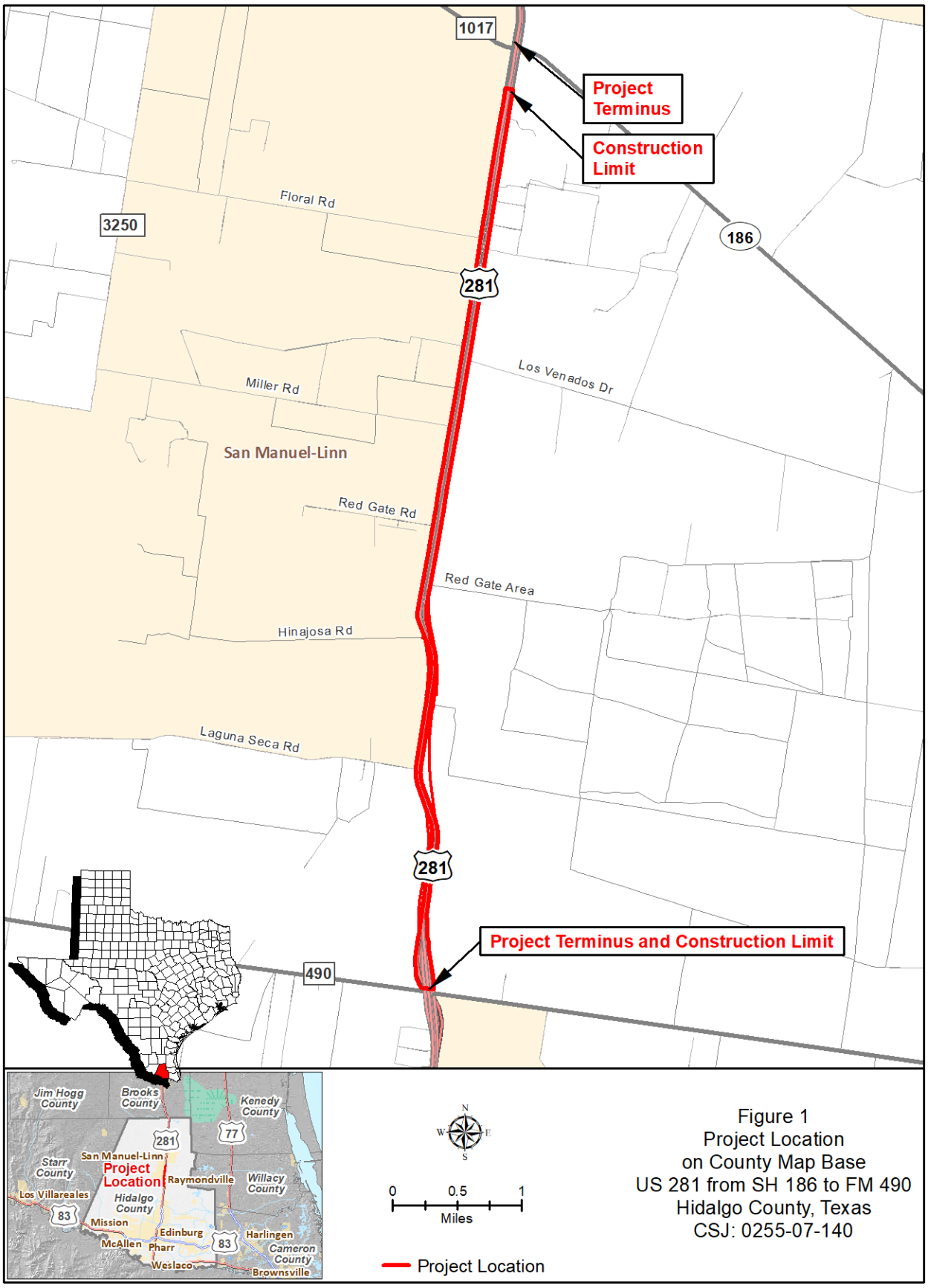
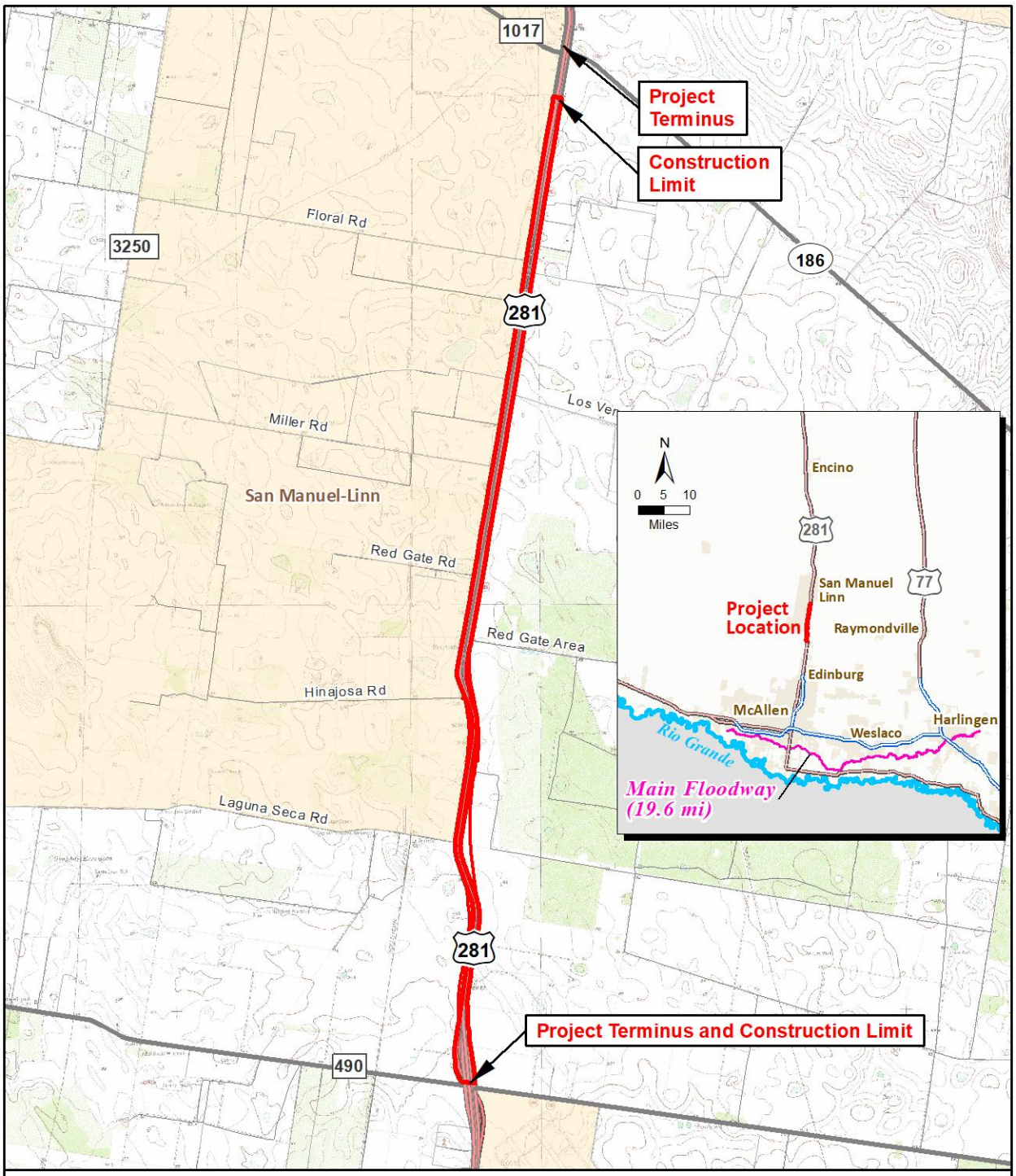


Figure 1
Project Location
on County Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



Project Location

303(d) Impaired Stream Segment (TCEQ 2015)

Base Map: 7.5' USGS Topographic Quadrangle
Faysville, Texas (1966, Map ID No. 26098-D2)
Linn Siding, Texas (1979, Map ID No. 26098-E2)
Linn, Texas (1980, Map ID No. 26098-E1)

N
W E
S

0 0.5 1
Miles

Figure 2
Project Location and
Proximity to Nearest 303(d) Stream
on Topographic Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Appendix B

Project Photos

Photo 1. Existing US 281 roadway near FM 490, facing north

Photo 2. Existing curves in US 281 near southern project limit, facing north

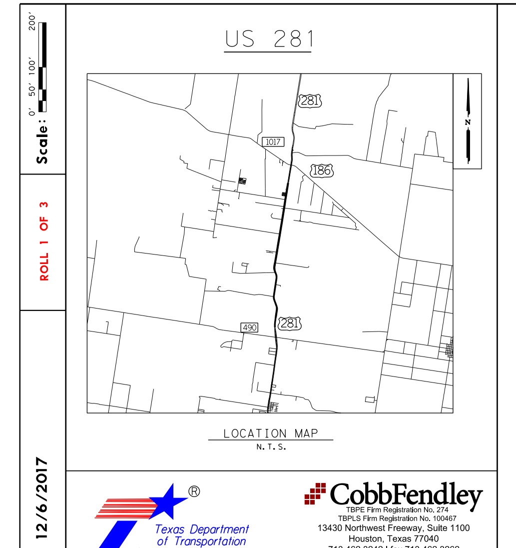
Photo 3. Existing US 281 with at-grade crossing near current curve in the middle of the project area, facing south (courtesy of Google Maps)

Photo 4. View of project end just south of SH 186, facing south (courtesy of Google Maps)

Appendix C

Schematics

US 281



Texas Department of Transportation © 2017

CobbFendley
TBPE Firm Registration No. 274
TBPLS Firm Registration No. 100467
13430 Northwest Freeway, Suite 1100
Houston, Texas 77040
713.462.3242 | fax 713.462.3262
www.cobbfendley.com

TEXAS DEPARTMENT OF TRANSPORTATION
PRELIMINARY DESIGN SCHEMATIC
US HIGHWAY 281
HIDALGO COUNTY

LIMITS: From: 0.690 MILES SOUTH OF SH 186
To: 0.34 MILES NORTH OF FM 490

C-S-J-: 0255-07-140
FED. AID PROJECT NO.:
LENGTH: 7.040 MILES

Existing Posted Speed: 70 MPH - MAINLANES

OFFICE OF DISTRICT ENGINEER
PHARR DISTRICT

DESIGN SPEED: 75 MPH - Mainlane; 50 MPH Frontage Roads

Functional Classification: Rural Freeway
Chapter 3, Section 6 Freeways

Superelevation Rate e_{max} = 6%

12/6/2017

APPROVED: DESIGN DIVISION LETTER DATED

APPROVED: FHWA LETTER DATED
FED. RD. DIV. NO. 6

APPROVED:
________, 2016
DISTRICT ENGINEER

CORRECT:
________, 2016
AREA ENGINEER

RECOMMENDED FOR APPROVAL:
________, 2016
DIRECTOR OF TRANSPORTATION PLANNING AND DEVELOPMENT

AVERAGE DAILY TRAFFIC VOLUMES

CSJ 0255-07-140
US 281 MAINLANES
From: 0.690 MILES SOUTH OF SH 186
To: 0.34 MILES NORTH OF FM 490

EXIST 2015	LETTING 2020	DESIGN 2040
14,453	20,700	29,000

GEOMETRIC DESIGN

These documents are not intended for Construction, Bidding, or Permit Purposes. They were prepared by, or under the supervision of :

Mahmoud Salehi, P.E. PE #89552 Date

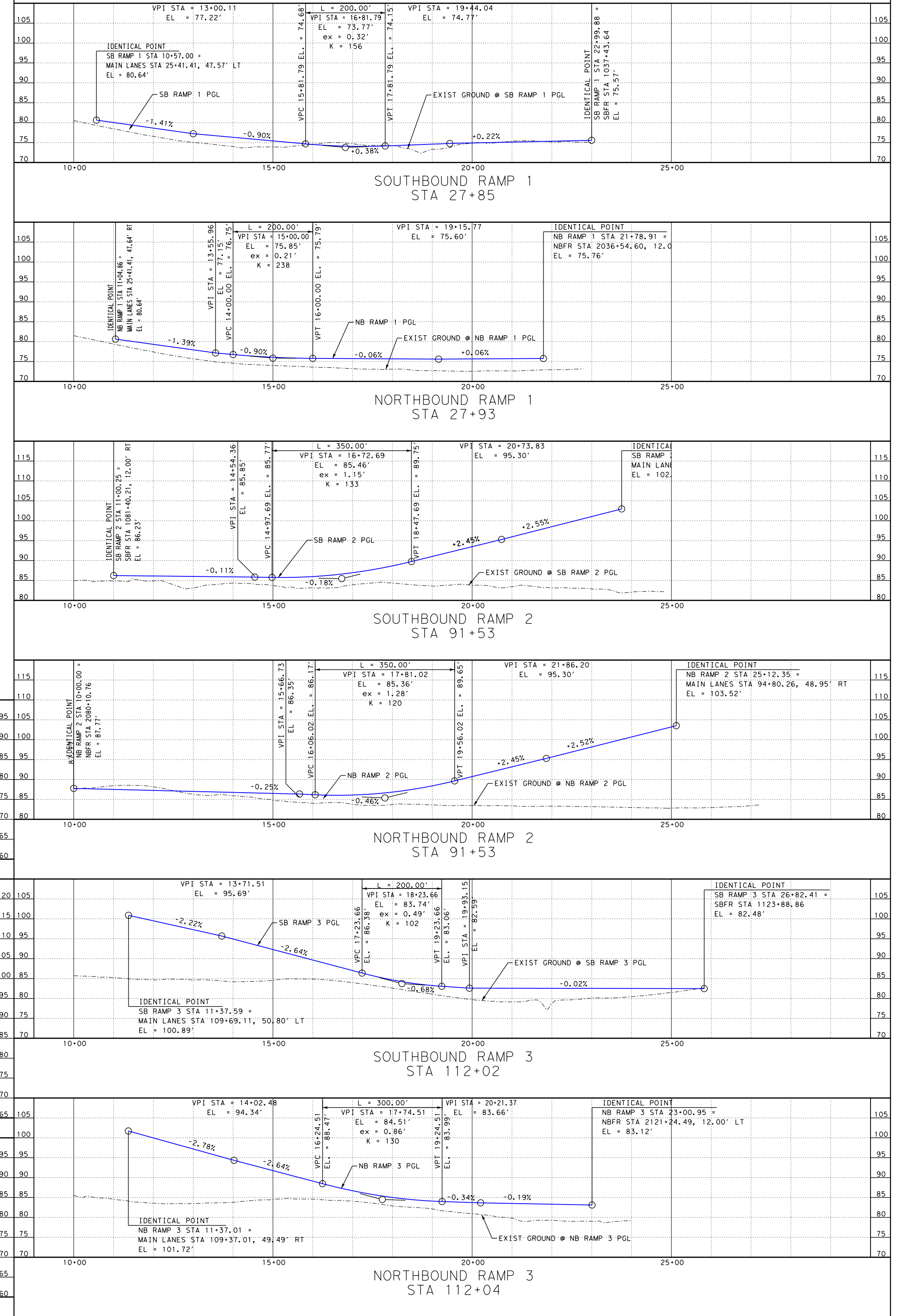
COLOR LEGEND

- FREEWAY MAINLANES (WIDENING OR RECONSTRUCTION)
- FRONTAGE ROAD
- RAMPS
- PROPOSED BRIDGE STRUCTURES
- PROPOSED RETAINING WALLS
- T1-1 EXISTING AT&T
- T2-1 EXISTING ATT FIBER OPTIC LINE
- OHE EXIST OVERHEAD ELECTRIC
- E1-1 EXIST ELECTRIC
- W1-1 EXIST WATER
- PL-2-D EXIST DCP/MIDSTREAM PIPELINE
- PL-1 EXIST KINDER MORGAN PIPELINE

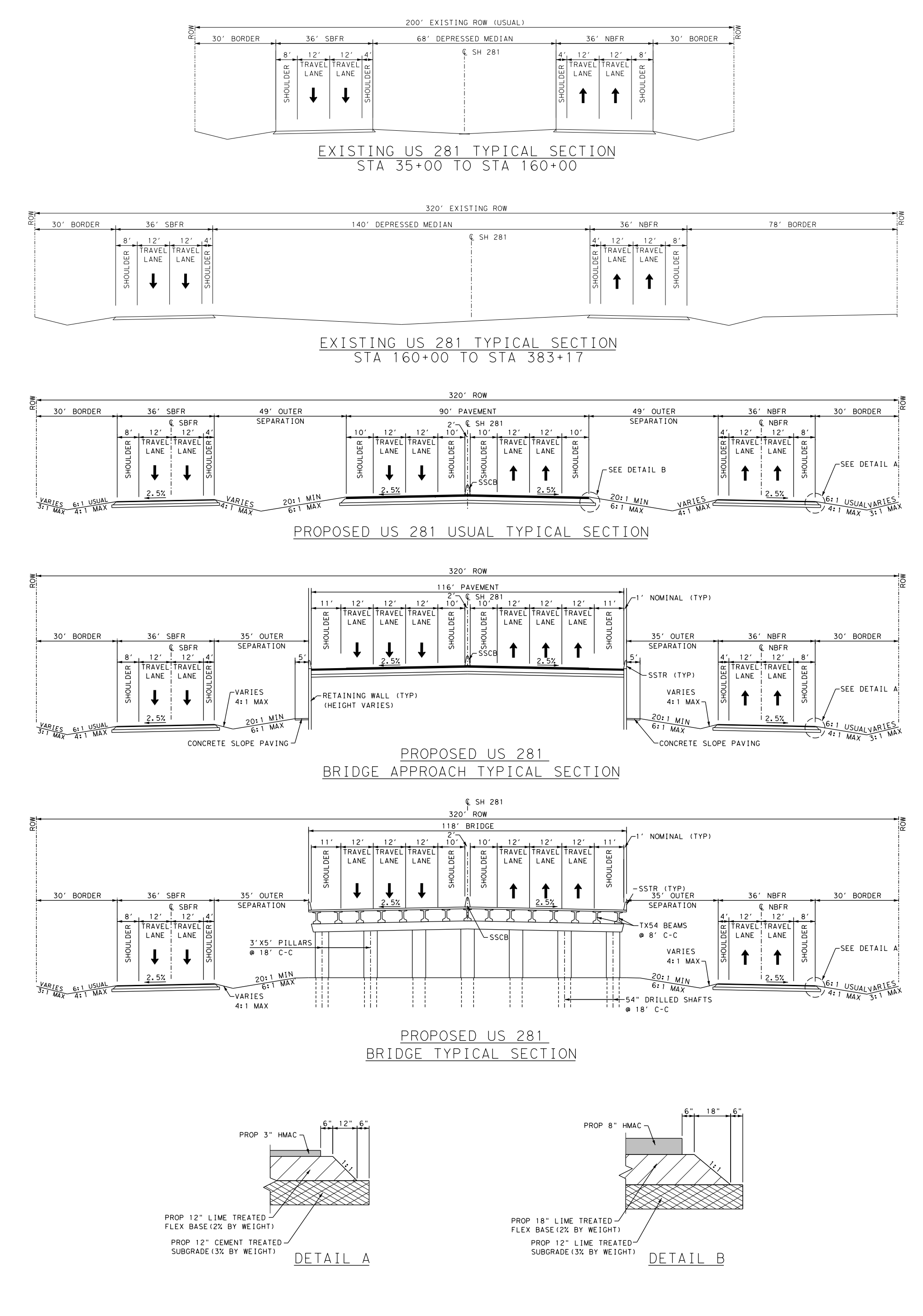
FILE: D:\cfa\2016\11013_US*281*Schematic*ENV\USTN\project\xschem801.dgn
DATE: 12/6/2017 10:07:12 AM

Date: 12/6/2017
CSJ: 0255-07-140
Texas Department of Transportation US 281 © 2017

RAMP PROFILES



TYPICAL SECTIONS



Scale: 0' 50' 100' 200'
ROLL 1 OF 3
Date: 12/6/2017
CSJ: 0255-07-140
Texas Department of Transportation US 281

US 281

LOCATION MAP

Texas Department of Transportation

CobbFendley
Consulting Engineers, Inc.
Surveying, Mapping, Land Development
Transportation, Environmental
Water Resources, Water Supply
Wastewater Collection & Treatment
Solid Waste Management
Construction Services
Geotechnical Services
Materials Testing
Construction Materials Testing
Environmental Services
Phone: (512) 837-8300
Fax: (512) 837-8301
Texas Registered Firm F-1704

TEXAS DEPARTMENT OF TRANSPORTATION
PRELIMINARY DESIGN SCHEMATIC
US HIGHWAY 281
FROM: 0.5 MILE NORTH OF
LOOP 1604 (BLANCO ROAD)
TO: 0.5 MILE NORTH OF
LOOP 1604 (BEXAR COUNTY LINE)
Bexar County: 15.000 - Blanco: 16.000
Control Section: 15.000 - Blanco: 16.000
Control Number: 0281-01-AB

APPROVED FOR PRELIMINARY DESIGN

DATE

DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL

DIRECTOR OF TRANSPORTATION PLANNING AND PROJECT MANAGEMENT

AVERAGE DAILY TRAFFIC VOLUMES
(2-WAY VOLUMES)
YEAR 2010 = 15,000 VPD
YEAR 2030 = 22,000 VPD
(1 - 12.00 HOUR WEEK DAY VPD)
DESIGN STANDARDS
FREEWAY (FR)
FREEWAY (FR) - RURAL

GEOMETRIC DESIGN

These documents are not intended for construction, bidding, or permit purposes. These plans prepared by: or under the supervision of:

Registered Engineer, P.E. - TX #

Date

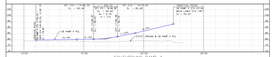
COLOR LEGEND
PROPOSED ROADWAY
PROPOSED RETAINING, BRIDGE OR RECONSTRUCTION
EXISTING ROADWAY
EXISTING RETAINING, BRIDGE OR RECONSTRUCTION
PROPOSED RIGHT OF WAY
PROPOSED BRIDGE WALL
PROPOSED CONCRETE PAVING
PROPOSED ASPHALT PAVING
EXISTING CONCRETE PAVING
EXISTING ASPHALT PAVING
PROPOSED CONCRETE PAVING
PROPOSED ASPHALT PAVING

SOUTHBOUND FRONTAGE ROAD

MAIN LANES

NORTHBOUND FRONTAGE ROAD

RAMP PROFILES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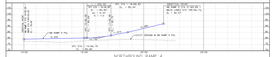
STA 192+00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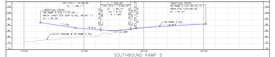
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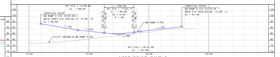
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STA 211+48

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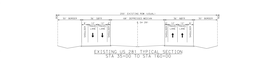
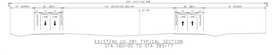

EXISTING US 281 TYPICAL SECTION
STA 189+00 TO STA 190+00


EXISTING US 281 TYPICAL SECTION
STA 190+00 TO STA 191+71

PROPOSED US 281 UNIVAL TYPICAL SECTION

PROPOSED US 281
BRIDGE APPROACH TYPICAL SECTION

PROPOSED US 281
BRIDGE TYPICAL SECTION

DETAIL A

DETAIL B

US 281

Texas Department of Transportation

CobbFendley
Cobb, Fendley & Associates, Inc.
Transportation, Water, Land Development
Environmental, Surveying, Construction Services
TBPE Firm No. 2165
TBPLS Firm No. 10194600

TEXAS DEPARTMENT OF TRANSPORTATION
PRELIMINARY DESIGN SCHEMATIC
US HIGHWAY 281
FROM: 1MILE NORTH OF RED GATE RD.
TO: 1MILE SOUTH OF FLORAL RD.
LOCAL ROAD
STATE HIGHWAY
CONTROL 0202 SECTION 01 JOB 00
ROADWAY LENGTH: 1.0 MILES
BRIDGE LENGTH: 0.0 MILES
STRUCTURE LENGTH: 0.0 MILES
DATA IS BASED UPON
PRELIMINARY DESIGN
Urban Area: El Paso, Hudspeth, Jeff Davis County Area: _____
Functional Classification: Rural Principal Arterial Terrain: Level Rolling Mountainous
Superelevation Rate: Trans. 0.0% Loc. 0.0%
10/18/2021

APPROVED: DESIGN DIVISION (DTD) DATE: _____ CONTROL: 0202
DESIGN: CAD SYSTEM: MICROSTATION V8 DATE: 10/18/2021 FILE NAME: _____
DESIGN: PRE-PRELIM. DESIGN
DESIGNER: DPW RECOMMENDED FOR APPROVAL: DPW
DISTRICT DESIGNER: _____ DIRECTOR OF TRANSPORTATION PLANNING AND DEVELOPMENT

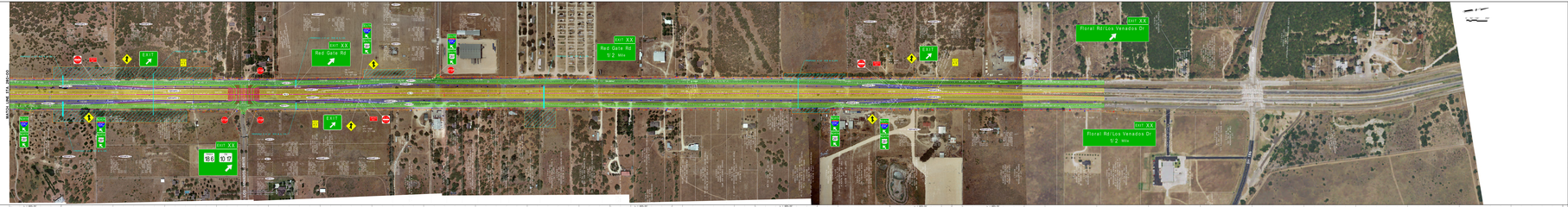
AVERAGE DAILY TRAFFIC VOLUMES
(2-WAY VOLUMES)
YEAR 2021 = 2,000 VEHICLES AT 7% TRUCKS
YEAR 2041 = 2,500 VEHICLES AT 7% TRUCKS
DESIGN STANDARDS BASED ON
AASHTO GREEN BOOK
TEXAS HIGHWAY MANUAL
TEXAS MUTCD

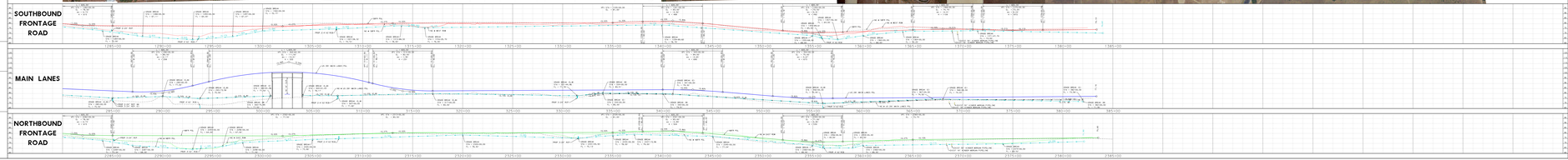
GEOMETRIC DESIGN

These documents are not intended for construction, bidding, or permit purposes. They were prepared by, or under the direct supervision of:

Registered Engineer, P.E. TBPE #F-8000 Date:

COLOR LEGEND
PROPOSED ROADWAY
PROPOSED ROADWAY, VERTICAL OR HORIZONTAL RECONSTRUCTION
EXISTING ROADWAY
PROPOSED BRIDGE STRUCTURE
EXISTING BRIDGE STRUCTURE
PROPOSED RETAINING WALLS
EXISTING RETAINING WALLS
PROPOSED ROADWAY DRAINAGE
EXISTING ROADWAY DRAINAGE
PROPOSED ROADWAY UTILITIES
EXISTING ROADWAY UTILITIES
PROPOSED ROADWAY WATERLINE
EXISTING ROADWAY WATERLINE





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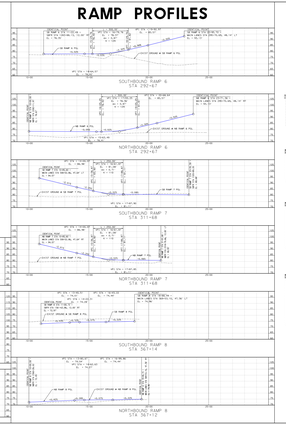

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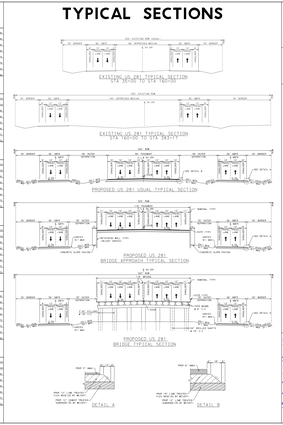
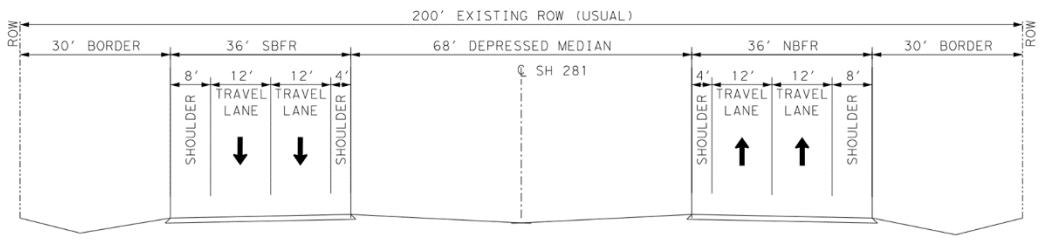
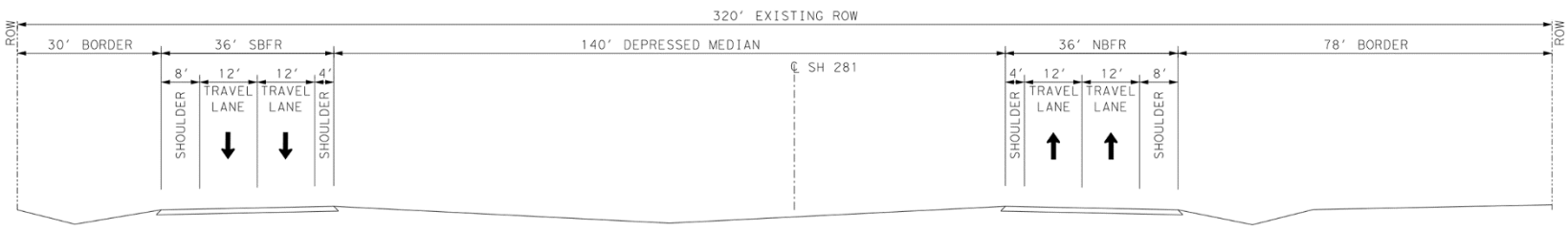


Appendix D

Typical Sections



EXISTING US 281 TYPICAL SECTION
STA 35+00 TO STA 160+00



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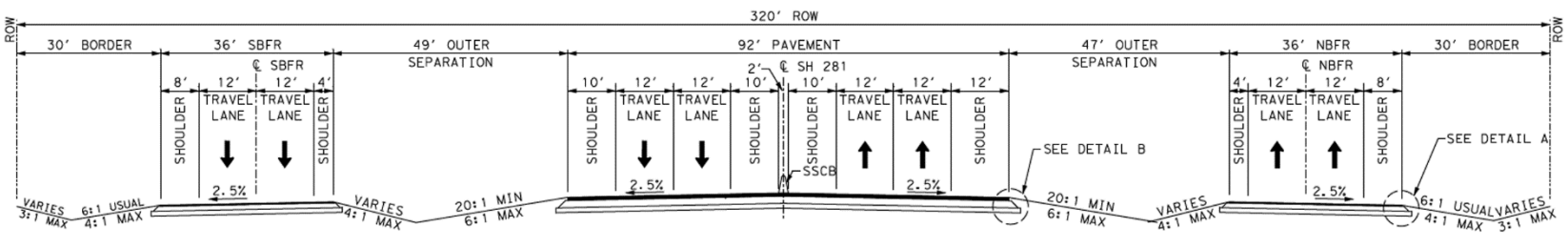
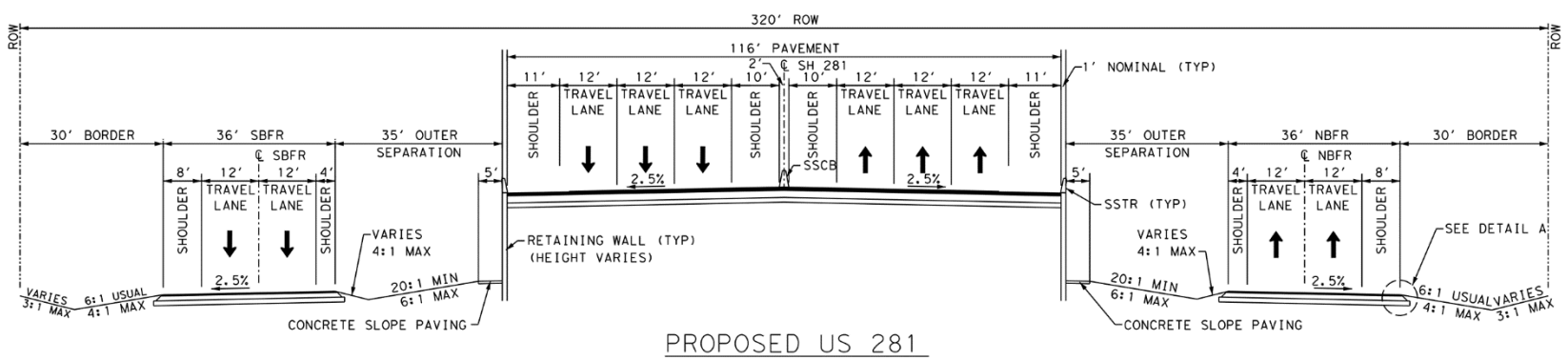
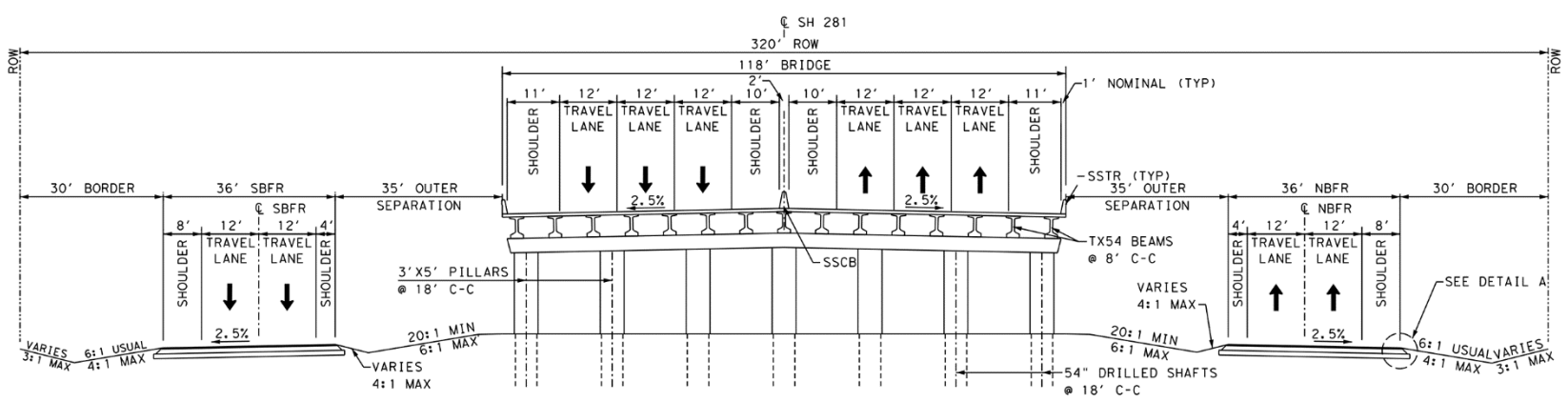
STA 160+00 TO STA 383+17



PROPOSED US 281 USUAL TYPICAL SECTION



PROPOSED US 281
BRIDGE APPROACH TYPICAL SECTION



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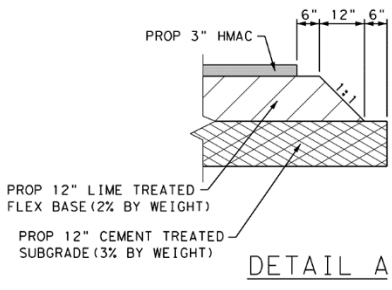
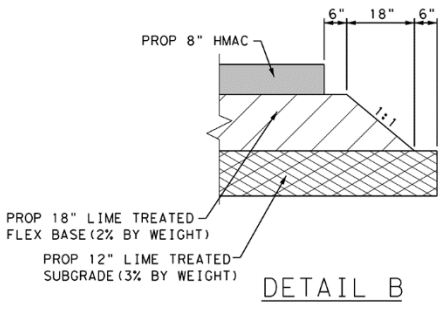
BRIDGE TYPICAL SECTION



DETAIL A



DETAIL B

Figure 3
Existing and Proposed Typical Sections
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Appendix E

Plan and Program Excerpts

HIDALGO COUNTY METROPOLITAN PLANNING ORGANIZATION METROPOLITAN TRANSPORTATION PLAN PROJECT DATA

								Proposed Project Data		Total Project Cost									Funding Categories										
Line Numbers	System Sort	Highway	From	To	MTP#	CSJ #	Project Length (mi)	Type of Improvement	Jurisdiction	Current Construction Cost Estimate	Letting Year Construction dollars	ROW cost (12% 2011 const cost)	Preliminary Engineering (4.9% 2011 const cost)	CE Cost (<$2 M 7.5%, $2-$10 M 5%, >$10 M 4.5%, of 2011 const cost)	Contingencies (<$2M 7%, $2-$25 M 6.5%, $25-$50 M 6.0%, >$50 M 7% of 2010 const cost)	Total Project Cost	Year of Expenditure Dollars (YOE)	Cat 1 Funding	Cat 2 Funding	Cat 4 - Statewide Connectivity	Cat 7 Funding (CE & Contingencies)	Cat 9 Funding	Cat 11 Funding	Cat 12 Funding	CBI - Eligible	Earmark Funding	Other Funds (Local, Bond, etc)	TRENDS - Innovative Financing	TOTAL
281	Off	CS - Cesar Chavez - **ROW**	Bus 83	Ridge	HC-344r	0921-02-399	1	Widen to 4 lanes	San Juan / Alamo / County 1-2	$ 5,955,000	$ 6,193,200	$ 1,000,000	$ 249,994	$ 655,000	$ -	$ 8,482,172	$ 1,000,000				$ 1.00								$ 1.00
173	Off	Taylor Rd	Bus 83	I-2 (US 83)	HC-256	0921-02-327	1	Widen 4 lanes with left turn lane	Mission / McAllen	$ 4,500,000	$ 4,500,000	$ 1,192,488	$ 371,667	$ 500,000	$ 365,050	$ 7,277,407	$ 5,000,000				$ 5.00								$ 5.00
40	On	FM 676 (Mile 5 N)	SH 364 (La Homa Rd)	SH 107 (Conway)	HC-117b	1064-01-032	2.39	Widen to 4 Lane Divided	Alton / County 3	$ 15,000,000	$ 15,000,000	$ 1,200,000	$ 423,987	$ 450,000	$ 650,000	$ 18,343,987	$ 15,000,000	$ 2.00	$ 10.00				$ 3.00						$ 15.00
207	Off	Anzalduas Int'l Port of Entry	Anzalduas Int'l Port of Entry		HC-277	0921-02-303		Construction of Southbound Inspection Station	Analduas Int'l Bridge Board	$ 7,241,012	$ 7,241,012	$ -	$ 354,810	$ 362,051	$ 470,666	$ 8,877,482	$ 7,241,012								$ 0.10		$ 7.14		$ 7.24
229	On	SH 68	US 83	FM 1925	HC-295c	3629-01-001	10	Construct new 4 lane divided rural highway facility	TxDOT	$ 55,000,000	$ 55,000,000	$ 92,629,626	$ 6,500,000	$ 2,475,000	$ 3,850,000	$ 163,864,626	$ 55,000,000							$ 55.00					$ 55.00
245	Off	International Bridge Trade Corridor (IBTC) - **ROW**	365 Tollway at FM 493	IH-2	RMA-3	0921-02-142		4 lane divided - at grade - non toll facility	HCRMA	$ 80,812,000	$ 80,812,000	$ 35,688,406	$ 5,435,921	$ -	$ -	$ 121,936,327	$ 35,688,406							$ 12.07			$ 23.62		$ 35.69
274	On	Bus 281 / SH 107	Bus 281-W	I-69C (US 281)	HC-337	0342-01-093	1.3	Operational Improvements and Rehabilitation	County 4	$ 19,000,000	$ 19,000,000	$ 1,000,000	$ 1,219,012	$ 855,000	$ 1,235,000	$ 24,487,012	$ 19,000,000		$ 19.00										$ 19.00
307	Off	Jackson Hike Bike Phase II - **TAP**	Bicentennial H/B & Wisconsin (McAllen)	Canton Rd & Jackson Rd (Edinburg)	HC-370	0921-02-431	2.8	Jackson Rd Hike & Bike Project Phase II	McAllen / Edinburg	$ 2,753,775	$ 2,753,775	$ 370,000	$ -	$ -	$ -	$ 3,123,775	$ 2,753,775					$ 0.40					$ 2.35		$ 2.75
308	Off	PSJA TriCity Ped Improv Ph II - **TAP**	City Pharr	City Alamo	HC-371	0921-02-432	13.4	New construction of pedestrian safety improvements	Pharr / San Juan / Alamo	$ 2,196,840	$ 2,196,840	$ -	$ -	$ -	$ -	$ 2,196,840	$ 2,196,840					$ 1.30					$ 0.90		$ 2.20
																	$ 158,048,218				**$ 16,500,000**								
		FY 2021	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	**FY 2021**	
216	Off	Mile 3 N (Phase I)	Tom Gill Road	FM 492 (Goodwin Rd)	HC-286a	0921-02-321	3.8	Widen to 4 Lane Divided - Curb & Gutter Section	County 3	$ 12,300,302	$ 14,389,614	$ 1,186,754	$ 526,451	$ 1,637,306	$ -	$ 18,353,281	$ 17,213,674				$ 16.81			$ 0.40					$ 17.21
57	Off	Mile 10 North - **ROW**	Westgate (Mile 6 W)	FM 1015	HC-264r	0921-02-360	3	Widen to 4 lanes - Urban	Weslaco / County 1	$ 9,266,768	$ 12,194,434	$ 2,200,000	$ 992,840	$ 1,700,000	$ -	$ 18,428,602	$ 2,200,000				$ 2.20								$ 2.20
278	Off	CS - Inspiration Rd/ Military Pkwy Loop - **ROW**	IH-2	FM 1016	HC-341r	0921-02-395		Widen to 4 Lane Divided	Mission / McAllen / Hidalgo	$ 16,477,935	$ 20,047,928	$ 3,000,000	$ 1,276,483	$ 2,205,272	$ -	$ 27,624,057	$ 3,000,000				$ 3.00								$ 3.00
296	Off	Cano Hike & Bike Trail Lighting Project - **TAP**	Cano St.	Freddy Gonzalez	HC-359	0921-02-392	1	Installation of solar powered lighting along the Cano walking trail	Edinburg	$ 534,400	$ 534,400	$ -	$ -	$ -	$ -	$ 534,400	$ 534,400					$ 0.42					$ 0.11		$ 0.53
297	Off	Donna Sidewalk Project - **TAP**	S. International Blvd.		HC-360	0921-02-393	4.9	Rehabilitation of deteriorated sidewalks and construction of new	Donna	$ 340,741	$ 340,741	$ -	$ -	$ -	$ -	$ 340,741	$ 340,741					$ 0.27					$ 0.07		$ 0.34
298	Off	Donna Int'l Bridge	@ Donna Int'l Bridge		HC-361	0921-02-394	1.2	Construction commercial facilities northbound loaded / empty and	Donna	$ 37,352,850	$ 37,352,850	$ -	$ 4,545,234	$ 1,500,000	$ -	$ 43,398,084	$ 43,398,084								$ 8.90		$ 34.50		$ 43.40
243	On	FM 494	FM 1924 (Mile 3)	FM 676 (Mile 5)	HC-292b	0864-01-069	2	Widen to 4 lane	County 3	$ 7,397,344	$ 9,000,000	$ 500,000	$ 392,000	$ 450,000	$ 585,000	$ 11,485,000	$ 9,000,000						$ 9.00						$ 9.00
97	On	FM 2629	FM 491 (Mile 1 W)	Cameron County Line	HC-14	2621-01-008	4	Proposed Super 2	HCRMA	$ 15,000,000	$ 15,000,000	$ 5,000,000	$ 735,000	$ 675,000	$ 975,000	$ 23,315,000	$ 15,000,000		$ 15.00										$ 15.00
																	$ 90,686,899				**$ 22,413,674**								
		FY 2022	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	**FY 2022**	
123	Off	CS - Taylor Rd	0.36mi S Mile 2	Business 83	HC-257	0921-02-328	2	4 lanes divided urban	Mission / McAllen / County 3	$ 6,006,390	$ 6,006,390	$ 2,011,852	$ 743,333	$ 887,802	$ 376,725	$ 10,385,439	$ 6,894,192				$ 6.89								$ 6.89
74a	Off	Mile 6 W Rd	Mile 9 N	Mile 11 N	HC-148ba	0921-02-420	2	Widen to 4 Lane	Weslaco / County 1	$ 11,403,687	$ 11,403,687	$ 1,800,000	$ 1,614,606	$ 1,200,000	$ -	$ 16,726,293	$ 12,603,687				$ 11.60			$ 0.40		$ 0.60			$ 12.60
74b	Off	Mile 6 W Rd - **ROW**	SH 107	Mile 11 N	HC-148bbr	0921-02-286	5.5	Widen to 4 Lane	County 1	$ 22,541,630	$ 31,202,489	$ 4,396,313	$ 992,000	$ 3,410,000	$ 1,316,000	$ 42,571,802	$ 4,396,313				$ 4.40								$ 4.40
214	Off	Liberty Blvd (Phase I)	US 83	Mile 3 Rd	HC-284a	0921-02-194	2.4	Widen to 4 lanes with dedicated left turn lane	Penitas	$ 8,400,000	$ 9,448,858	$ 1,185,242	$ 219,782	$ 1,086,619	$ -	$ 12,526,330	$ 10,535,477				$ 10.14			$ 0.40					$ 10.54
224	On	FM 494	SH 107	FM 676 (Mile 5)	HC-292a	0864-01-068	2	Widen to 4 lane	County 3	$ 8,657,966	$ 8,657,966	$ 2,957,145	$ 392,000	$ -	$ -	$ 12,543,905	$ 8,657,966		$ 8.66										$ 8.66
222	On	FM 1925	10th St	McColl Rd	HC-290	1803-01-092	1.28	Widen to 6 lane with raised median	Edinburg / County 4	$ 8,240,000	$ 8,240,000	$ 630,000	$ 403,760	$ -	$ 535,600	$ 10,320,240	$ 8,240,000		$ 8.24										$ 8.24
98	On	FM 2220 (Ware Rd)	SH 107	FM 1925 (Monte Cristo)	HC-20	2094-01-063	2.5	6 Lanes Divided Urban Section	McAllen / County 3-4	$ 17,000,000	$ 17,000,000	$ 2,640,000	$ 833,000	$ 765,000	$ 1,105,000	$ 23,397,000	$ 17,000,000		$ 17.00										$ 17.00
158	On	CS - Veterans Blvd (Future SH 495)	IH-2/US 83	SH 364 (La Homa Rd)	HC-50	0865-01-108	2.3	4 Lanes divided urban	Palmview / County 3	$ 11,360,000	$ 11,360,000	$ 2,699,360	$ 843,140	$ 511,200	$ 738,400	$ 16,856,420	$ 11,360,000		$ 11.36										$ 11.36
275	On	FM 1925	Wallace	10th St	HC-338	1803-01-094	3.5	6 lane with raised median	County 4	$ 20,000,000	$ 20,000,000	$ 3,000,000	$ 980,000	$ 900,000	$ 1,300,000	$ 27,420,000	$ 20,000,000		$ 20.00										$ 20.00
51	On	FM 1925	FM 88 E	FM 491 (Mile 1 W)	HC-13	1803-02-038	2.7	Widen to 4 Lane Divided	HCRMA	$ 15,700,000	$ 15,700,000	$ 5,200,000	$ 769,300	$ 706,500	$ 1,020,500	$ 24,369,700	$ 15,700,000		$ 15.70										$ 15.70
43	On	FM 676 (Mile 5 N)	SH 107 (Conway)	Taylor Rd	HC-117c	1064-01-027	3	Widen to 4 Lane Divided	Alton / County 3	$ 7,656,456	$ 10,075,374	$ 918,775	$ 493,693	$ 453,392	$ 654,899	$ 13,220,806	$ 10,075,374		$ 5.20				$ 4.88						$ 10.08
70aa	On	FM 1925	FM 907 (Alamo Rd)	Sharp Rd	HC-12aa	1803-02-035	1.57	Widen to 4 Lane Divided	County 4	$ 10,000,000	$ 10,000,000	$ 1,010,000	$ 490,000	$ 450,000	$ 549,543	$ 13,119,543	$ 10,000,000		$ 10.00										$ 10.00
280	On	SH 107 (Conway)	FM 676	SH 107	HC-343	0528-01-112	2	Construct 6 lane divided urban	Alton / County 3	$ 15,000,000	$ 15,000,000	$ -	$ 735,000	$ 675,000	$ 975,000	$ 18,315,000	$ 15,000,000		$ 15.00										$ 15.00
39	On	SH 107 (Conway)	FM 676 (Mile 5 N)	FM 1924 (Mile 3 N)	HC-224	0528-01-113	1.954	Construct 6 Lane Divided Rural	Palmhurst/Alton/County 3	$ 9,423,361	$ 10,600,000	$ -	$ 519,400	$ 525,760	$ 210,940	$ 11,856,100	$ 10,600,000		$ 10.60										$ 10.60
320	On	SH 107 (Conway)	FM 1924 (Mile 3 N)	SH 495	HC-383	0528-01-118	1	Construct 6 Lane w Raised Median	Mission/Palmhurst /County 3	$ 17,779,927	$ 20,000,000	$ -	$ 980,000	$ 992,000	$ 398,000	$ 22,370,000	$ 22,370,000	$ 2.37	$ 20.00										$ 22.37
252	Off	CS - Dove Ave	41st Street	Bentsen	HC-315	0921-02-341	0.25	Construct 4 lane urban roadway	McAllen	$ 1,404,225	$ 1,404,225	$ -	$ 68,807	$ 70,211	$ 91,275	$ 1,721,580	$ 1,495,500										$ 1.50		$ 1.50
321	On	US 281	0.273 mi N SH 186	0.023 mi N FM 490	HC-384	0255-07-140	7.089	Rural Expressway Facility	County 4	$ 80,000,000	$ 80,000,000	$ 4,813,000	$ 3,920,000	$ 3,912,000	$ 904,000	$ 93,549,000	$ 93,549,000			$ 77.59			$ 15.96						$ 93.55
																	$ 278,477,508				**$ 33,825,982**								
		FY 2023	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	**FY 2023**	
13	On	FM 676	Taylor Rd	FM 2220	HC-144	1064-01-043	1	Widen to 4 Lane Divided	McAllen / County 3	$ 4,326,923	$ 4,500,000	$ 1,000,000	$ 671,870	$ 500,000	$ -	$ 6,950,870	$ 6,000,000				$ 6.00								$ 6.00
273	Off	CS - Hi Line East	Cage	Veterans	HC-336	0921-02-375	1	Widen to 2 lane with continuous left turn lane	Pharr	$ 4,173,551	$ 4,173,551	$ 350,000	$ 204,504	$ 208,678	$ 271,281	$ 5,466,774	$ 4,523,551				$ 4.52								$ 4.52

2019-2022 Statewide Transportation Improvement Program

August 2019 Quarterly Revision

Highway Projects

2019-2022 Statewide Transportation Improvement Program

Hidalgo County MPO

Highway Projects

2019-2022 STIP — **08/2019 Revision: Pending Approval**

DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST
PHARR	HIDALGO COUNTY	HIDALGO	0255-07-140	2022	US 281	C,E,R	COUNTY	$ 93,549,000

LIMITS FROM 0.273 MI S SH 186
LIMITS TO 0.023 MI N FM 490
PROJECT DESCR RURAL EXPRESSWAY FACILITY
REMARKS P7 E = PRELIMINARY AND CONSTRUCTION ENGINEERING
PROJECT HISTORY NEW PROJECT; MODIFIED LIMITS
PROJECT SPONSOR TXDOT
REVISION DATE 08/2019
MPO PROJ NUM HC-384
FUNDING CAT(S) 4,11

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 3,920,000
ROW PURCH	$ 4,813,000
CONSTR	$ 80,000,000
CONST ENG	$ 3,912,000
CONTING	$ 904,000
INDIRECT	$ 0
BOND FIN	$ 0
PT CHG ORD	$ 0
TOTAL CST	$ 93,549,000

COST OF APPROVED PHASES $ 93,549,000

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
4	$ 62,072,000	$ 15,518,000	$ 0	$ 0	$ 0	$ 77,590,000
11	$ 12,767,200	$ 3,191,800	$ 0	$ 0	$ 0	$ 15,959,000
TOTAL	$ 74,839,200	$ 18,709,800	$ 0	$ 0	$ 0	$ 93,549,000

2019-2022 STIP — **08/2019 Revision: Pending Approval**

DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST
PHARR	HIDALGO COUNTY	HIDALGO	0921-02-375	2022	CS	C,R	PHARR	$ 4,523,551

LIMITS FROM ON HI LINE EAST FROM CAGE BLVD
LIMITS TO VETERANS
PROJECT DESCR WIDEN TO 2 LANE WITH CONTINUOUS LEFT TURN LANE
REMARKS P7 CAT 7 FOR ROW = $350,000, CAT 7 FOR CONSTRUCTION = $4,173,551
PROJECT HISTORY UPDATED YEAR AND SCOPE; MOVED TO FY 2022 FROM FY 2023
PROJECT SPONSOR PHARR
REVISION DATE 08/2019
MPO PROJ NUM HC-336
FUNDING CAT(S) 7

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 204,504
ROW PURCH	$ 350,000
CONSTR	$ 4,173,551
CONST ENG	$ 208,678
CONTING	$ 271,281
INDIRECT	$ 258,760
BOND FIN	$ 0
PT CHG ORD	$ 0
TOTAL CST	$ 5,466,774

COST OF APPROVED PHASES $ 4,523,551

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
7	$ 3,618,841	$ 0	$ 0	$ 904,710	$ 0	$ 4,523,551
TOTAL	$ 3,618,841	$ 0	$ 0	$ 904,710	$ 0	$ 4,523,551

2019-2022 STIP — **08/2019 Revision: Pending Approval**

DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST
PHARR	HIDALGO COUNTY	HIDALGO	0921-02-328	2022	CS	C,E	VARIOUS	$ 6,894,192

LIMITS FROM ON TAYLOR RD @MILE 2 N
LIMITS TO BUSINESS 83
PROJECT DESCR 4 LANES DIVIDED URBAN
REMARKS P7 E = CONSTRUCTION ENGINEERING
PROJECT HISTORY UPDATED SCOPE; MODIFIED LIMITS
PROJECT SPONSOR HIDALGO COUNTY
REVISION DATE 08/2019
MPO PROJ NUM HC-257
FUNDING CAT(S) 7

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 743,333
ROW PURCH	$ 2,011,852
CONSTR	$ 6,006,390
CONST ENG	$ 887,802
CONTING	$ 376,725
INDIRECT	$ 359,337
BOND FIN	$ 0
PT CHG ORD	$ 0
TOTAL CST	$ 10,385,439

COST OF APPROVED PHASES $ 6,894,192

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
7	$ 5,515,354	$ 0	$ 0	$ 1,378,838	$ 0	$ 6,894,192
TOTAL	$ 5,515,354	$ 0	$ 0	$ 1,378,838	$ 0	$ 6,894,192

PENDING REVIEW

Appendix F

Resource-specific Maps

Figure 4.1
Project Area Community Features
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

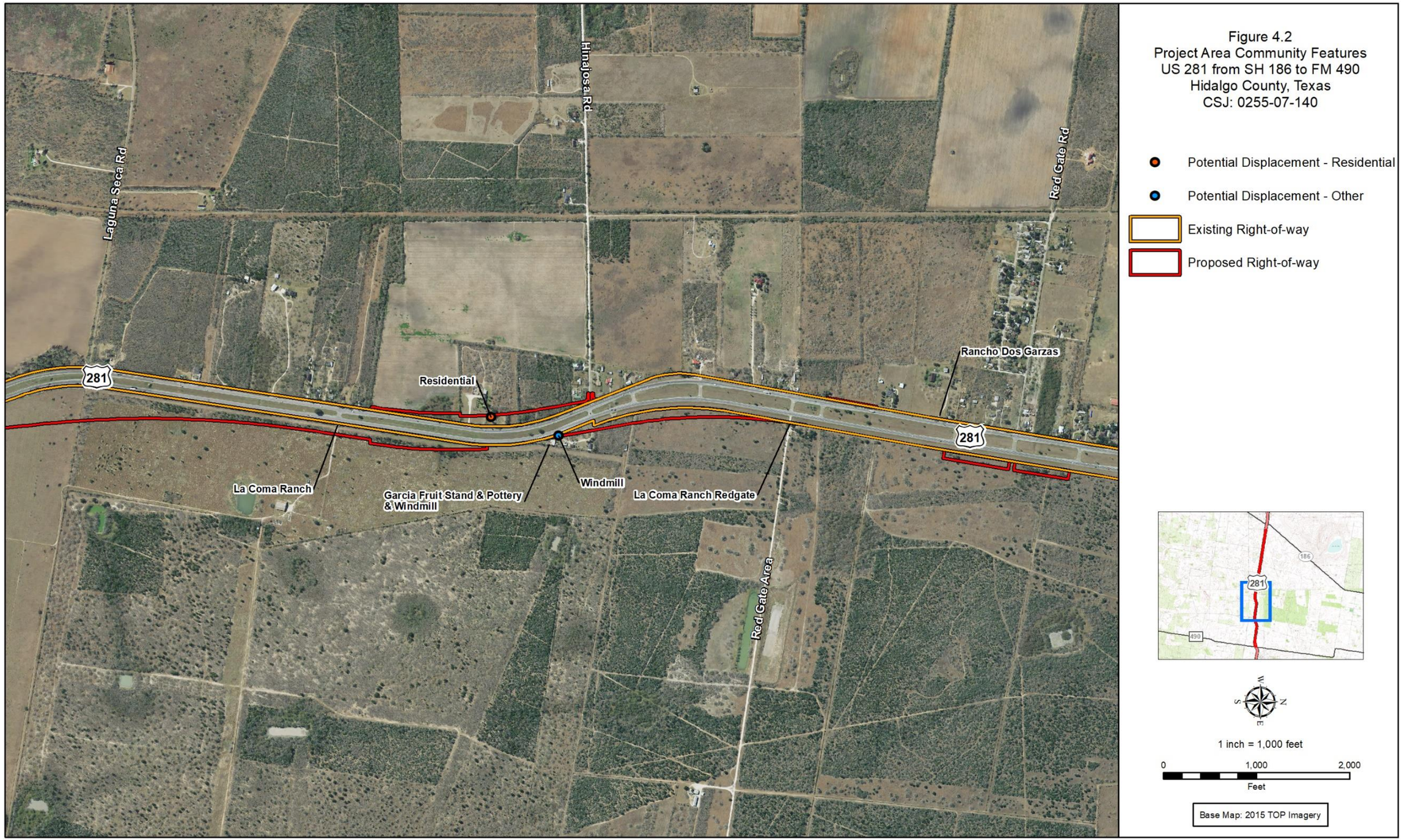


Figure 4.2
Project Area Community Features
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Figure 4.3
Project Area Community Features
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Potential Displacement - Other

Existing Right-of-way

Proposed Right-of-way

1 inch = 1,000 feet

0 1,000 2,000
Feet

Base Map: 2015 TOP Imagery

Figure 4.4
Project Area Community Features
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Community Facility

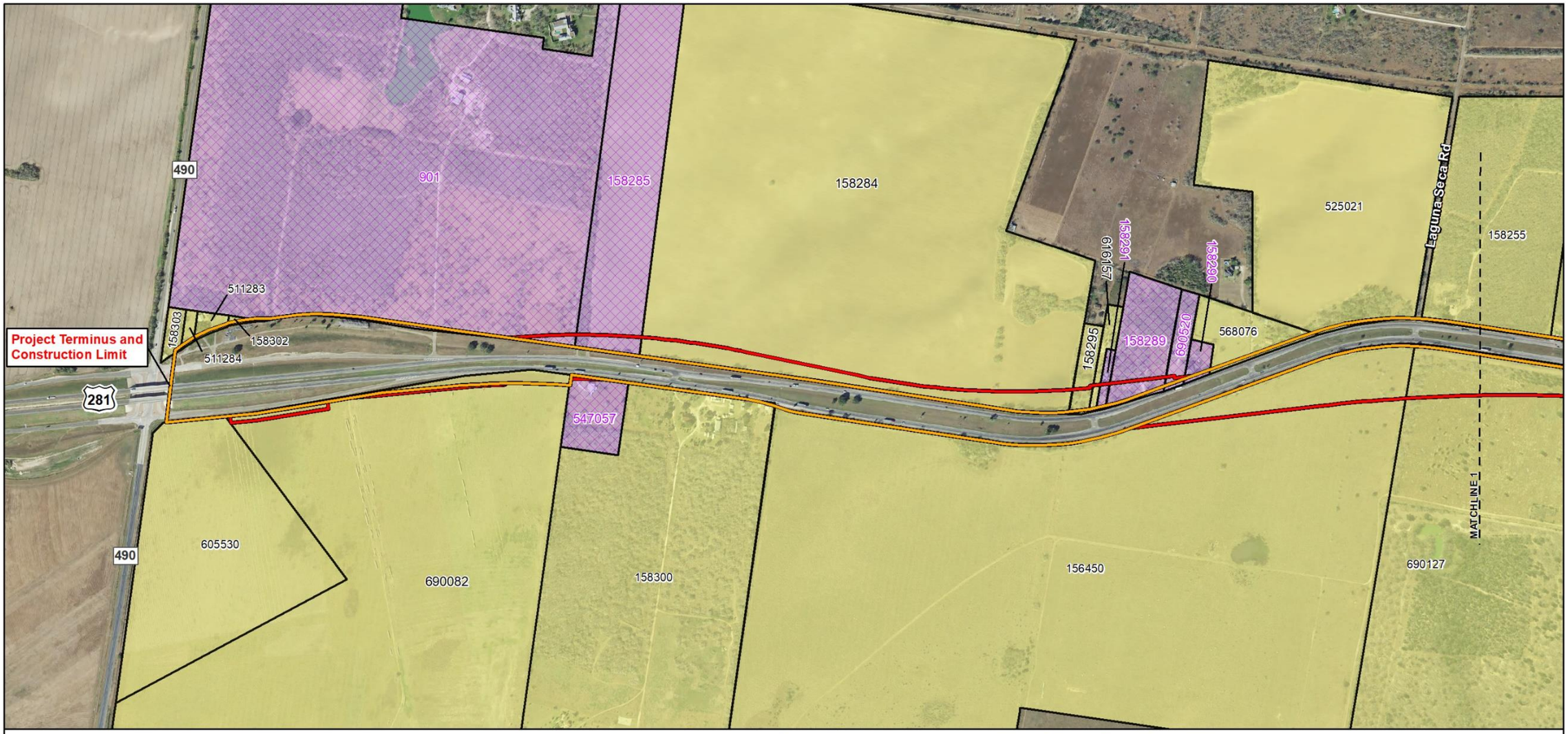
Existing Right-of-way

Proposed Right-of-way

1 inch = 1,000 feet

0 1,000 2,000
Feet

Base Map: 2015 TOP Imagery



Area of Potential Effects

- Existing Right-of-way
- Proposed Right-of-way
- Parcel Boundary
- ROE Granted - Archeological Survey Conducted
- ROE Not Granted - No Archeological Survey Conducted

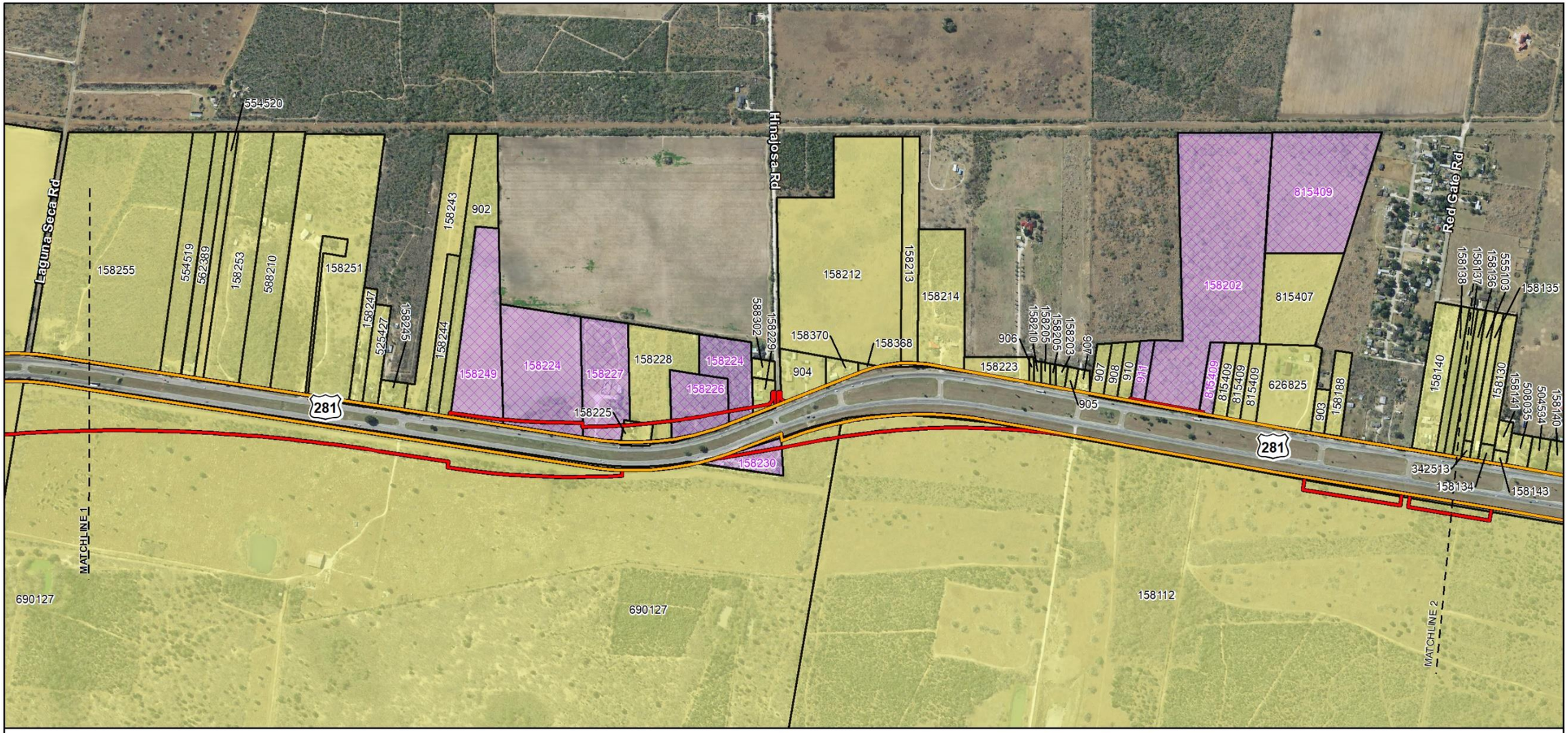
1 inch = 750 feet

0 200 400 Meters

0 500 1,000 Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 5.1
Archeological Survey Parcels
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



Area of Potential Effects

- Existing Right-of-way
- Proposed Right-of-way
- Parcel Boundary
- ROE Granted - Archeological Survey Conducted
- ROE Not Granted - No Archeological Survey Conducted

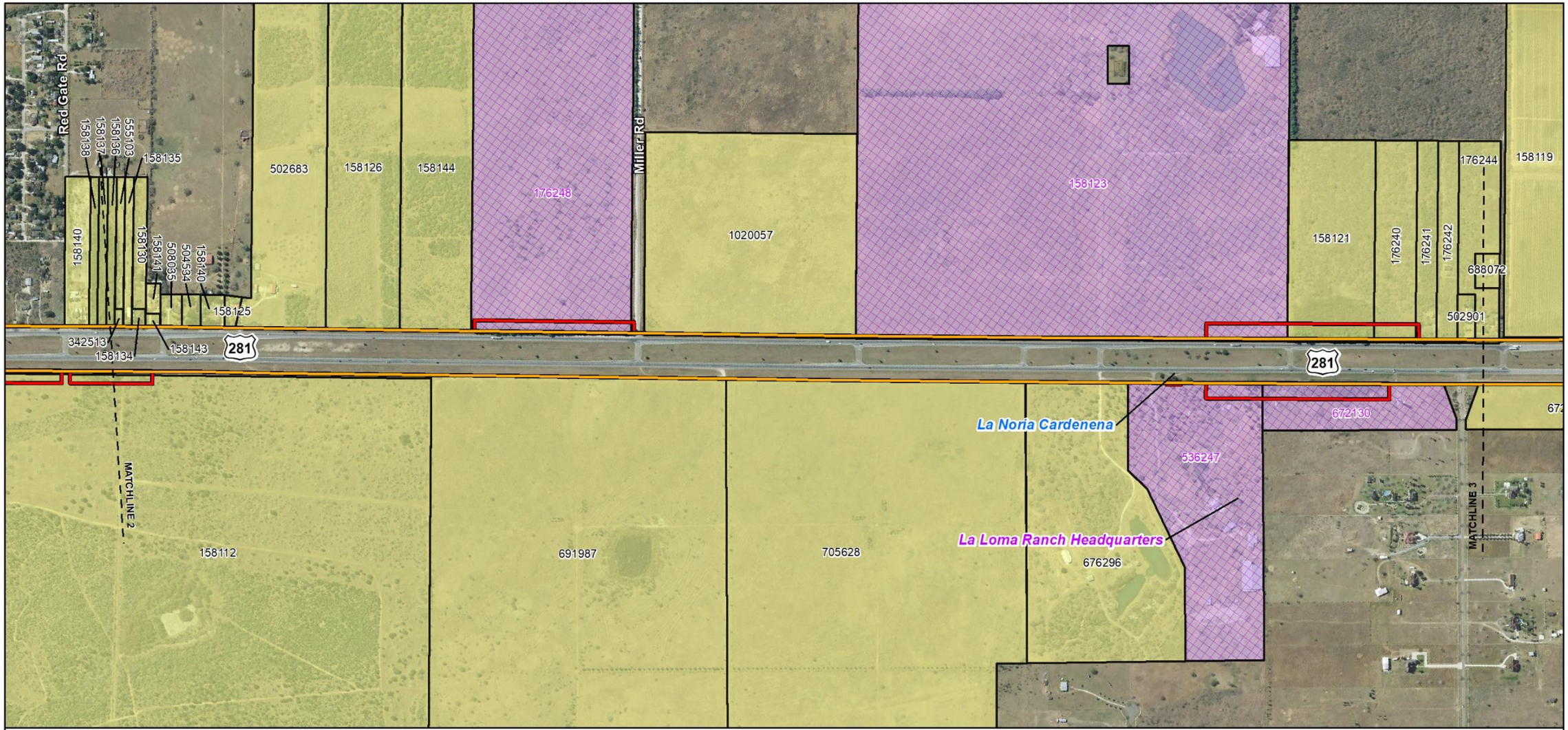
1 inch = 750 feet

0 200 400
Meters

0 500 1,000
Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 5.2
Archeological Survey Parcels
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



Area of Potential Effects

- Existing Right-of-way
- Proposed Right-of-way
- Parcel Boundary
- ROE Granted - Archeological Survey Conducted
- ROE Not Granted - No Archeological Survey Conducted

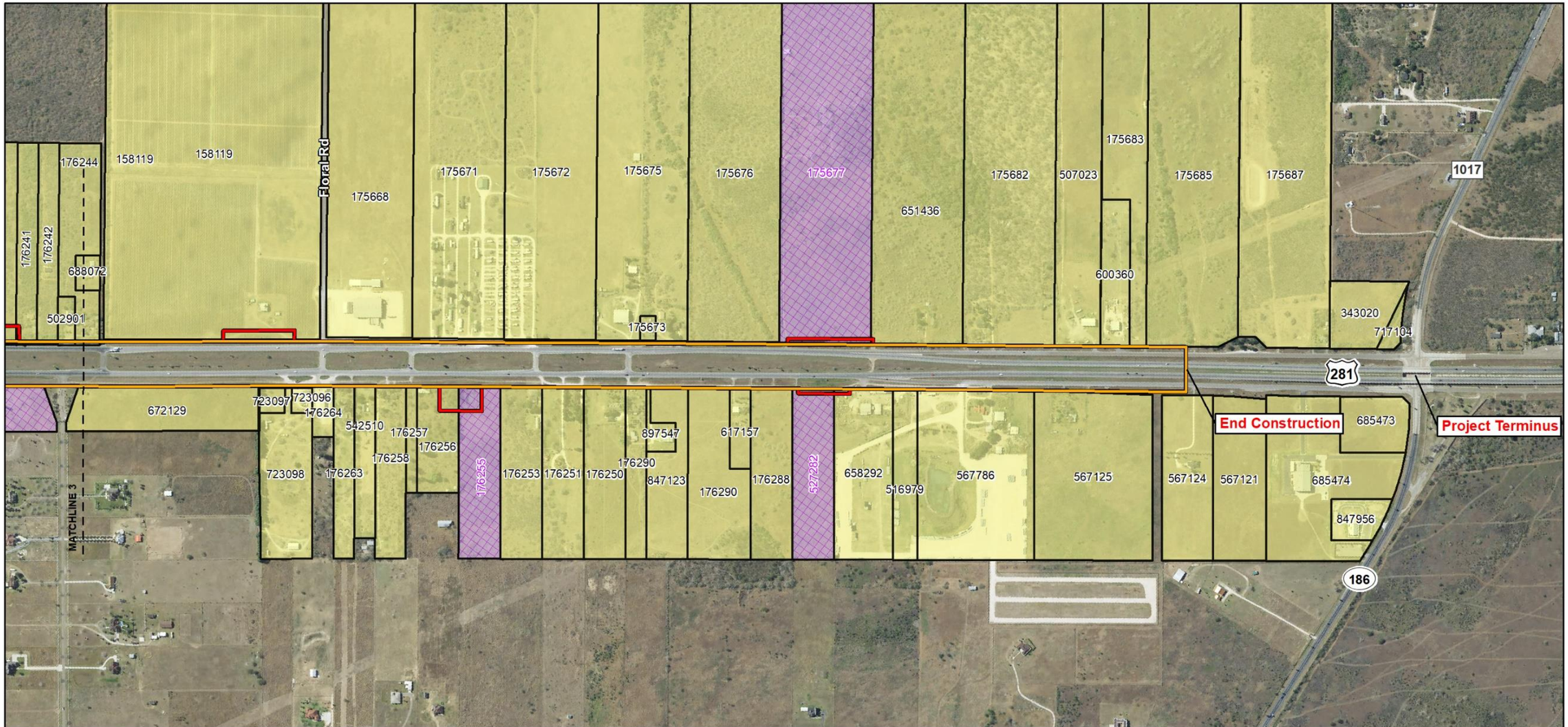
1 inch = 750 feet

0 200 400
Meters

0 500 1,000
Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 5.3
Archeological Survey Parcels
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



Area of Potential Effects

- Existing Right-of-way
- Proposed Right-of-way
- Parcel Boundary
- ROE Granted - Archeological Survey Conducted
- ROE Not Granted - No Archeological Survey Conducted

1 inch = 750 feet

0 200 400 Meters

0 500 1,000 Feet

Base Map: Texas Orthoimagery Program, 2015

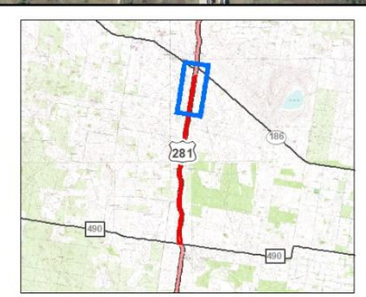


Figure 5.4
Archeological Survey Parcels
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Figure 6.1
Inventoried Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Recommended not NRHP-eligible Resource (#)
- La Noria Cardenena
- Area of Potential Effect (150 feet)
- Existing Right-of-way
- Proposed Right-of-way
- Parcels within the APE

According to the Texas Historical Commission's Historic Sites Atlas and THC survey files, within the study area there are no standing structures designated as State Antiquities Landmarks, or buildings designated as National Historic Landmarks. In addition, according to TxDOT's Historic Districts and Properties Map and Google Earth historic bridge layer, there are no previously evaluated historic resources, historic districts, or historic-age bridges within the APE.

1 inch = 700 feet

0 350 700 1,400
Feet

Base Map: 2015 TOP Imagery

Figure 6.2
Inventoried Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Recommended not NRHP-eligible Resource (#)
- La Noria Cardenena
- Area of Potential Effect (150 feet)
- Existing Right-of-way
- Proposed Right-of-way
- Parcels within the APE

According to the Texas Historical Commission's Historic Sites Atlas and THC survey files, within the study area there are no standing structures designated as State Antiquities Landmarks, or buildings designated as National Historic Landmarks. In addition, according to TxDOT's Historic Districts and Properties Map and Google Earth historic bridge layer, there are no previously evaluated historic resources, historic districts, or historic-age bridges within the APE.

1 inch = 700 feet

0 350 700 1,400
Feet

Base Map: 2015 TOP Imagery

Figure 6.3
Inventoried Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Recommended not NRHP-eligible Resource (#)
- La Noria Cardenena
- Area of Potential Effect (150 feet)
- Existing Right-of-way
- Proposed Right-of-way
- Parcels within the APE

According to the Texas Historical Commission's Historic Sites Atlas and THC survey files, within the study area there are no standing structures designated as State Antiquities Landmarks, or buildings designated as National Historic Landmarks. In addition, according to TxDOT's Historic Districts and Properties Map and Google Earth historic bridge layer, there are no previously evaluated historic resources, historic districts, or historic-age bridges within the APE.

1 inch = 700 feet

0 350 700 1,400
Feet

Base Map: 2015 TOP Imagery

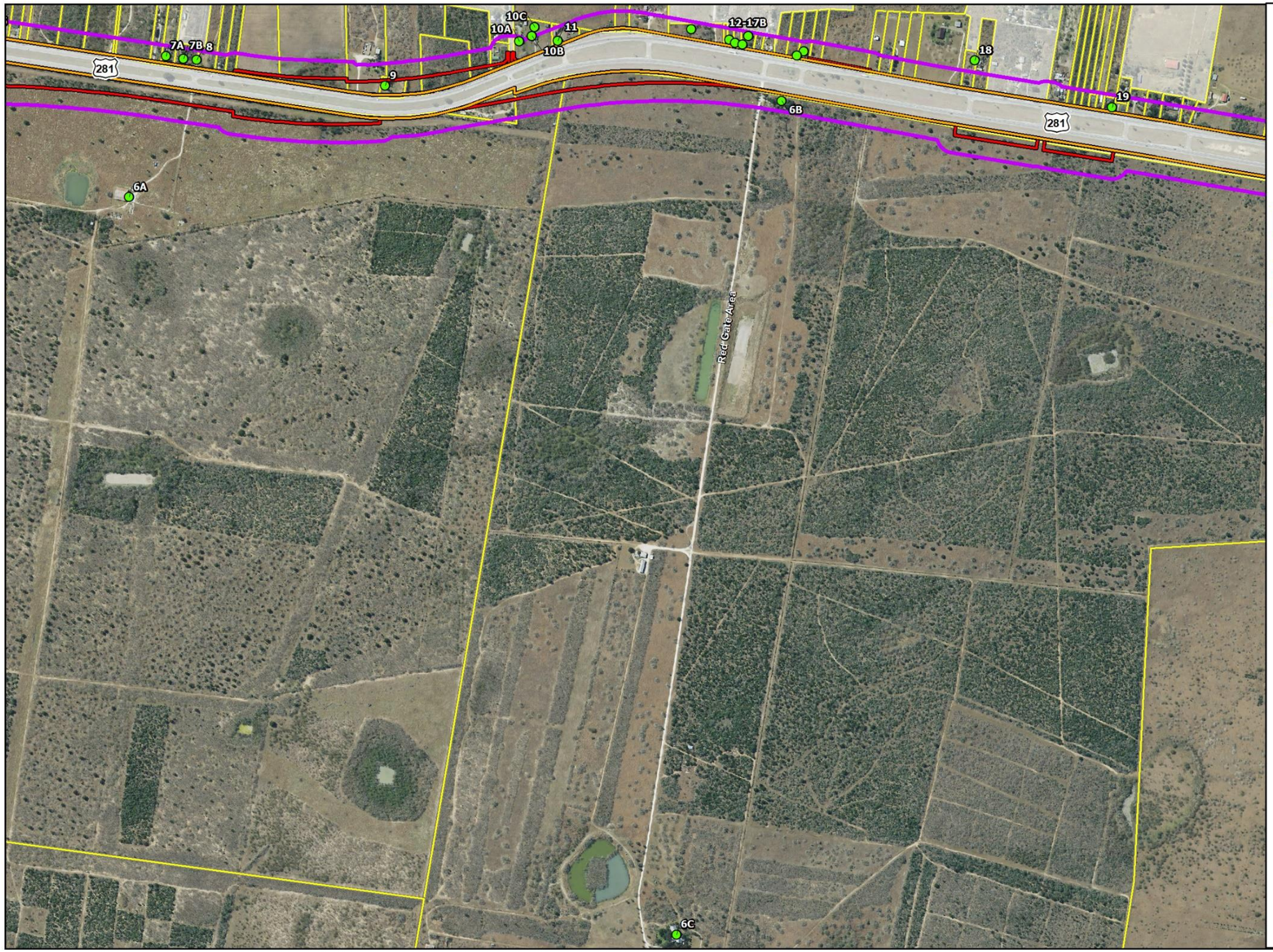


Figure 6.4
Inventoried Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Recommended not NRHP-eligible Resource (#)
- Area of Potential Effect (150 feet)
- Existing Right-of-way
- Proposed Right-of-way
- Parcels within the APE

According to the Texas Historical Commission's Historic Sites Atlas and THC survey files, within the study area there are no standing structures designated as State Antiquities Landmarks, or buildings designated as National Historic Landmarks. In addition, according to TxDOT's Historic Districts and Properties Map and Google Earth historic bridge layer, there are no previously evaluated historic resources, historic districts, or historic-age bridges within the APE.

1 inch = 900 feet

0 350 700 1,400
Feet

Base Map: 2015 TOP Imagery

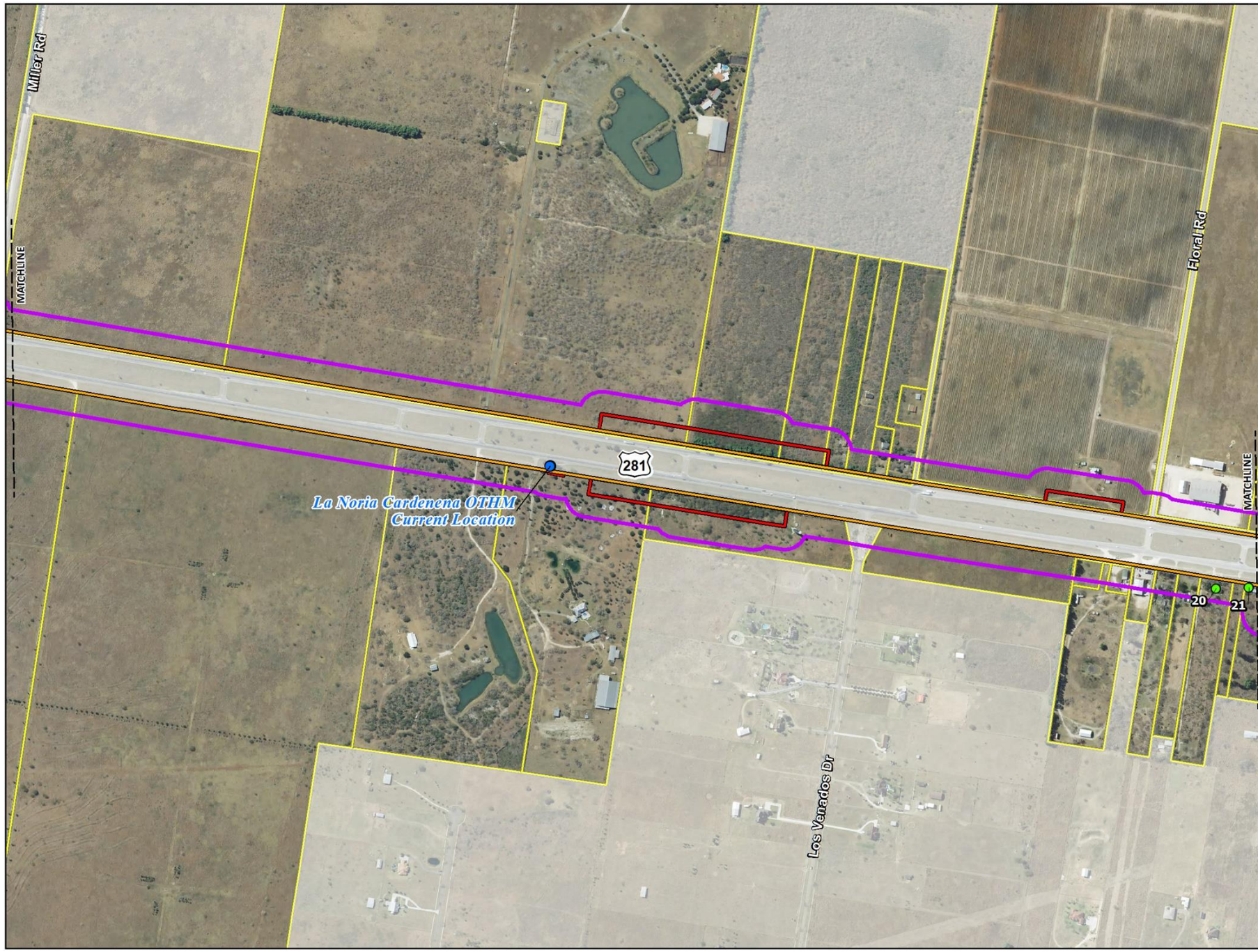


Figure 6.5
Inventoried Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Recommended not NRHP-eligible Resource (#)
- La Noria Cardenena
- Area of Potential Effect (150 feet)
- Existing Right-of-way
- Proposed Right-of-way
- Parcels within the APE

According to the Texas Historical Commission's Historic Sites Atlas and THC survey files, within the study area there are no standing structures designated as State Antiquities Landmarks, or buildings designated as National Historic Landmarks. In addition, according to TxDOT's Historic Districts and Properties Map and Google Earth historic bridge layer, there are no previously evaluated historic resources, historic districts, or historic-age bridges within the APE.

1 inch = 700 feet

0 350 700 1,400
Feet

Base Map: 2015 TOP Imagery

Figure 6.6
Inventoried Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Recommended not NRHP-eligible Resource (#)
- La Noria Cardenena
- Area of Potential Effect (150 feet)
- Existing Right-of-way
- Proposed Right-of-way
- Parcels within the APE

According to the Texas Historical Commission's Historic Sites Atlas and THC survey files, within the study area there are no standing structures designated as State Antiquities Landmarks, or buildings designated as National Historic Landmarks. In addition, according to TxDOT's Historic Districts and Properties Map and Google Earth historic bridge layer, there are no previously evaluated historic resources, historic districts, or historic-age bridges within the APE.

1 inch = 700 feet

0 350 700 1,400
Feet

Base Map: 2015 TOP Imagery

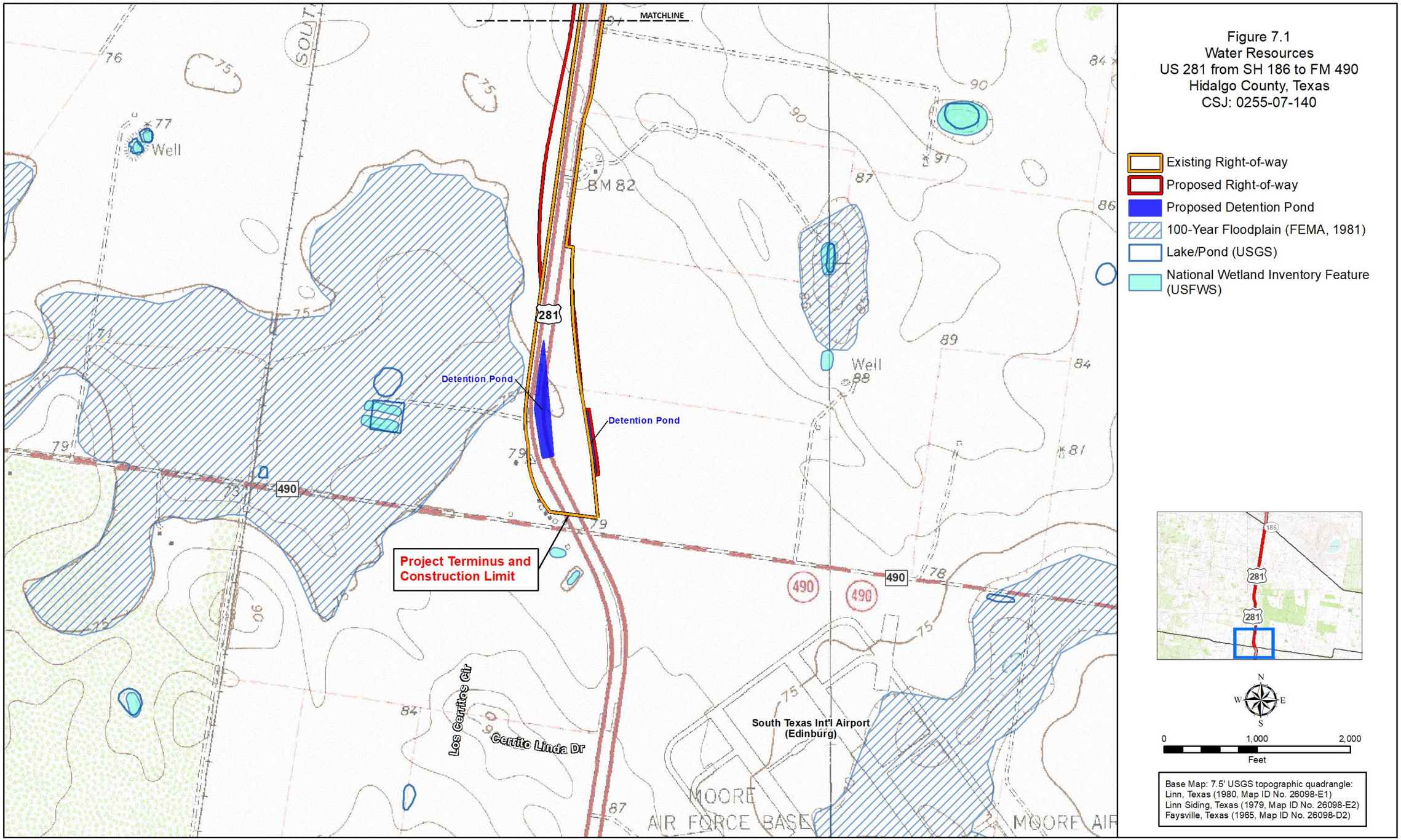


Figure 7.1
Water Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

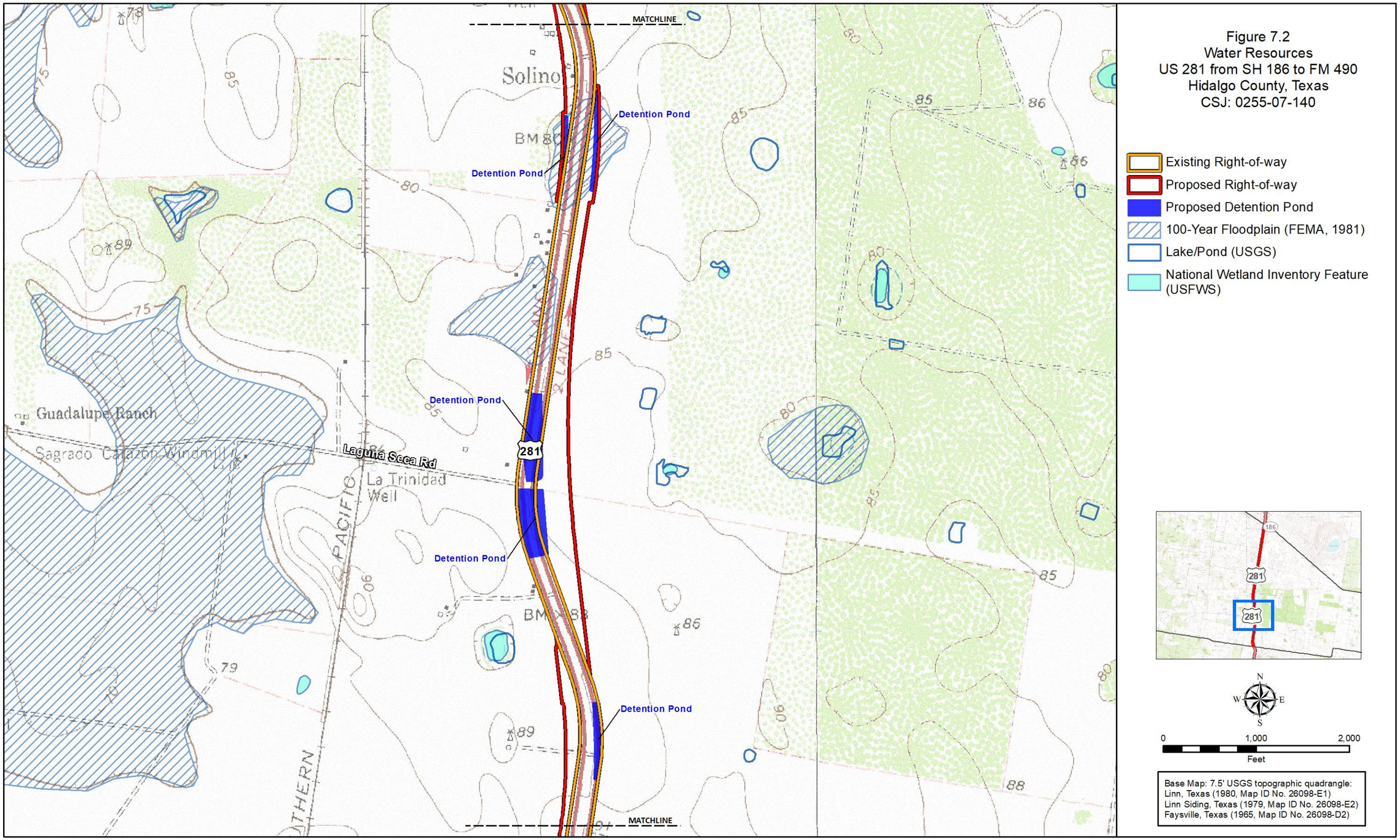


Figure 7.2
Water Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

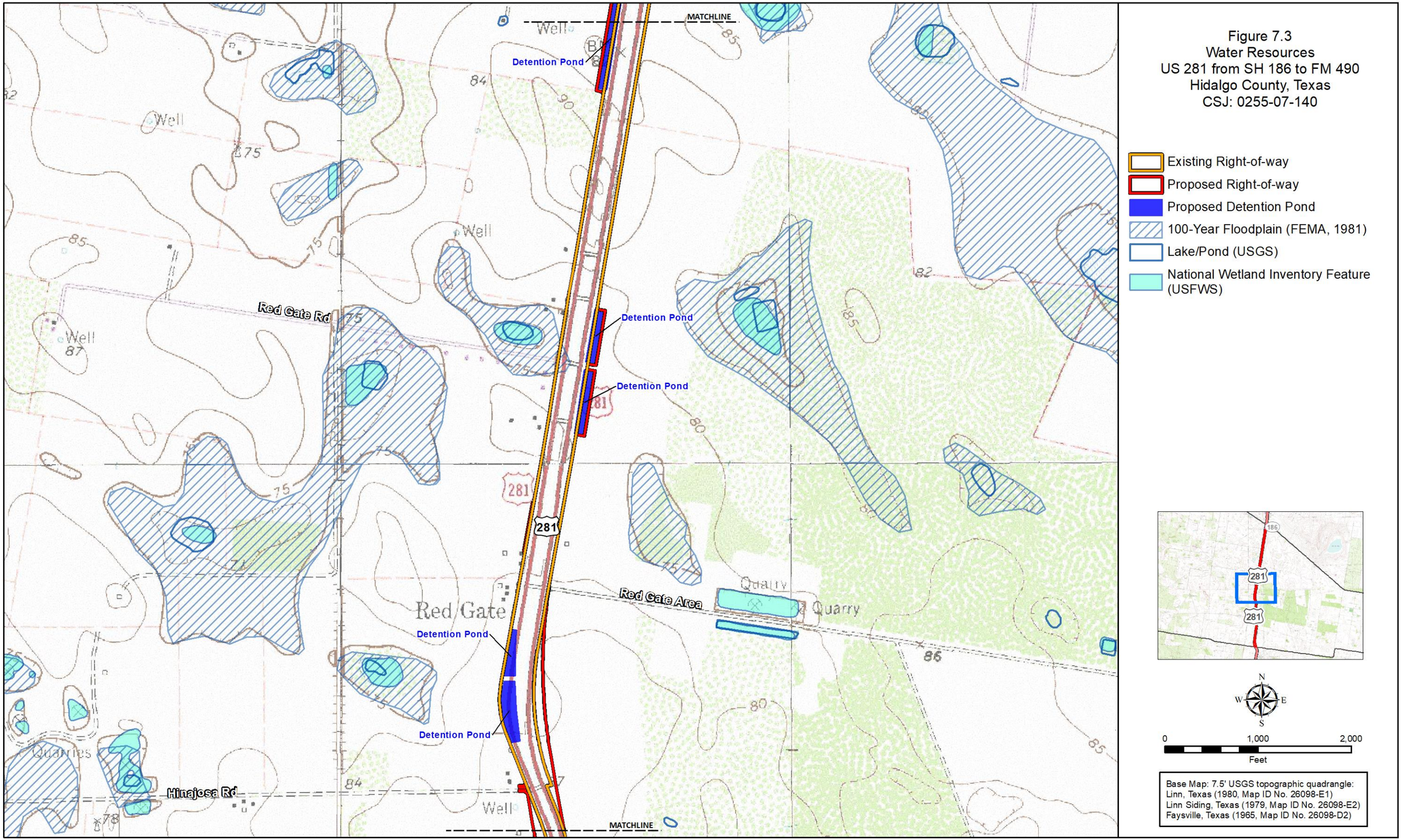


Figure 7.3
Water Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

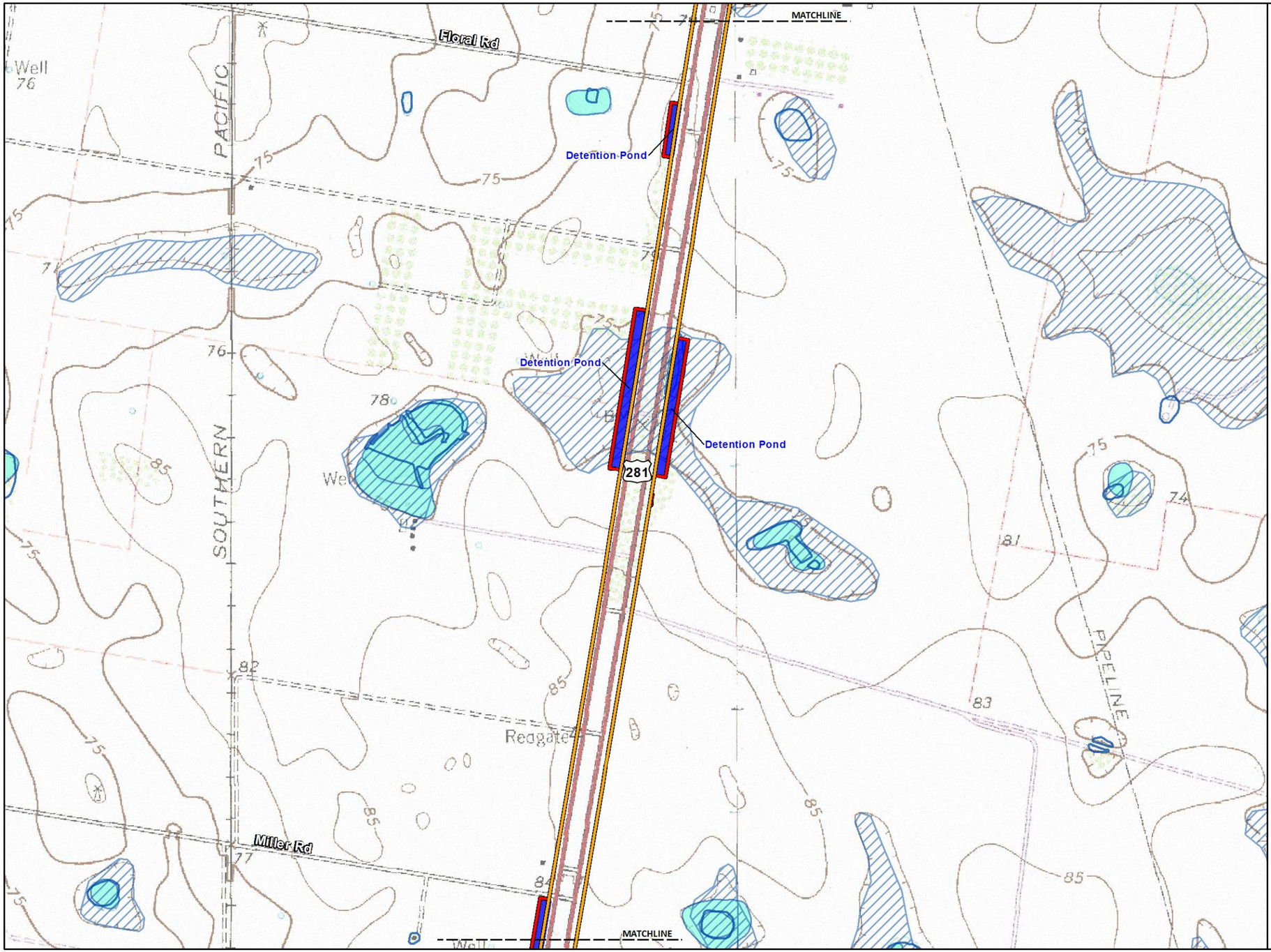


Figure 7.4
Water Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

- Existing Right-of-way
- Proposed Right-of-way
- Proposed Detention Pond
- 100-Year Floodplain (FEMA, 1981)
- Lake/Pond (USGS)
- National Wetland Inventory Feature (USFWS)

N
W E
S

0 1,000 2,000
Feet

Base Map: 7.5' USGS topographic quadrangle:
Linn, Texas (1980, Map ID No. 26098-E1)
Linn Siding, Texas (1979, Map ID No. 26098-E2)
Faysville, Texas (1965, Map ID No. 26098-D2)

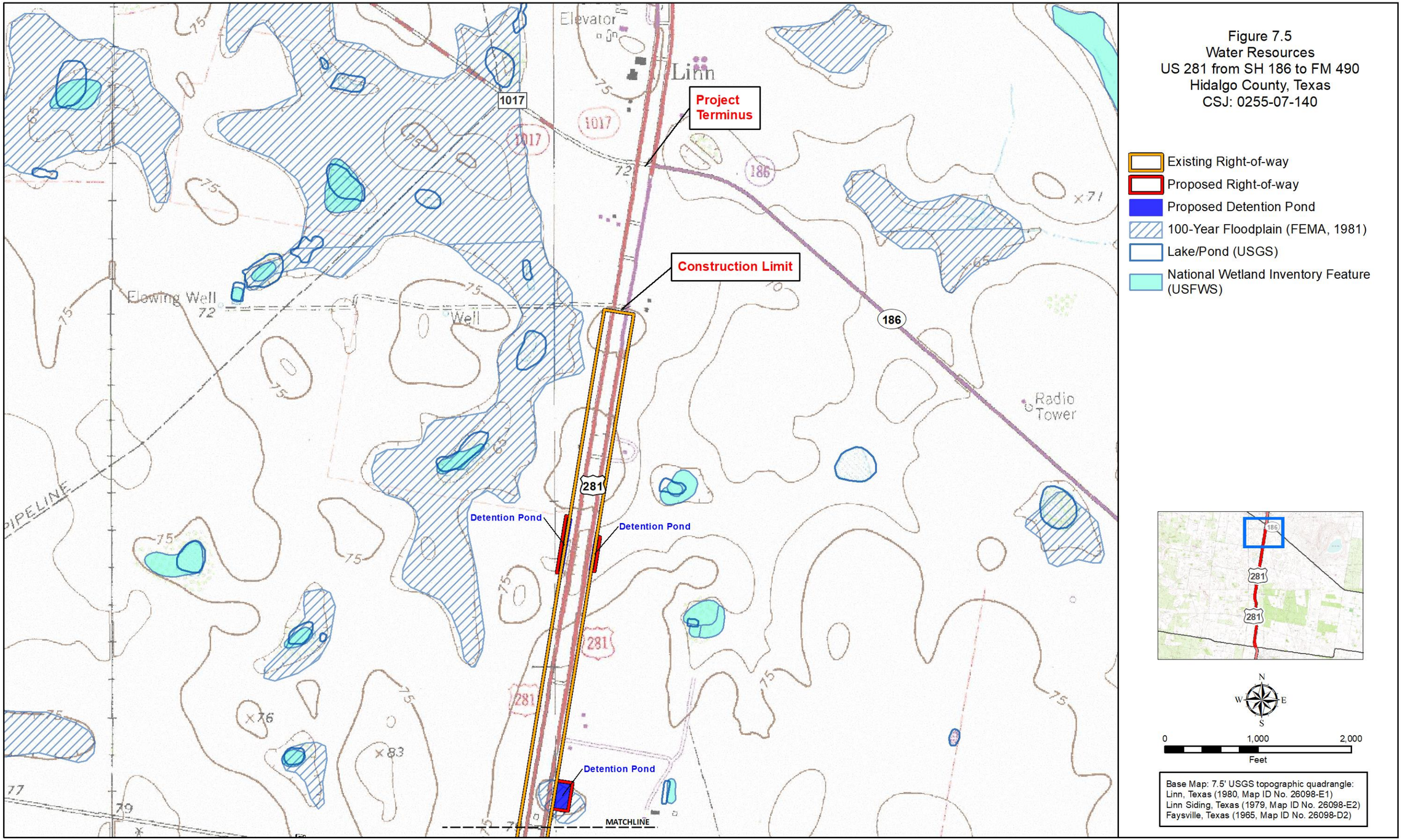


Figure 7.5
Water Resources
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Figure 8.1
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

Row Crops

South Texas: Disturbance Grassland

South Texas: Sandy Mesquite Dense Shrubland

South Texas: Sandy Mesquite Savanna Grassland

South Texas: Sandy Mesquite Woodland and Shrubland

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

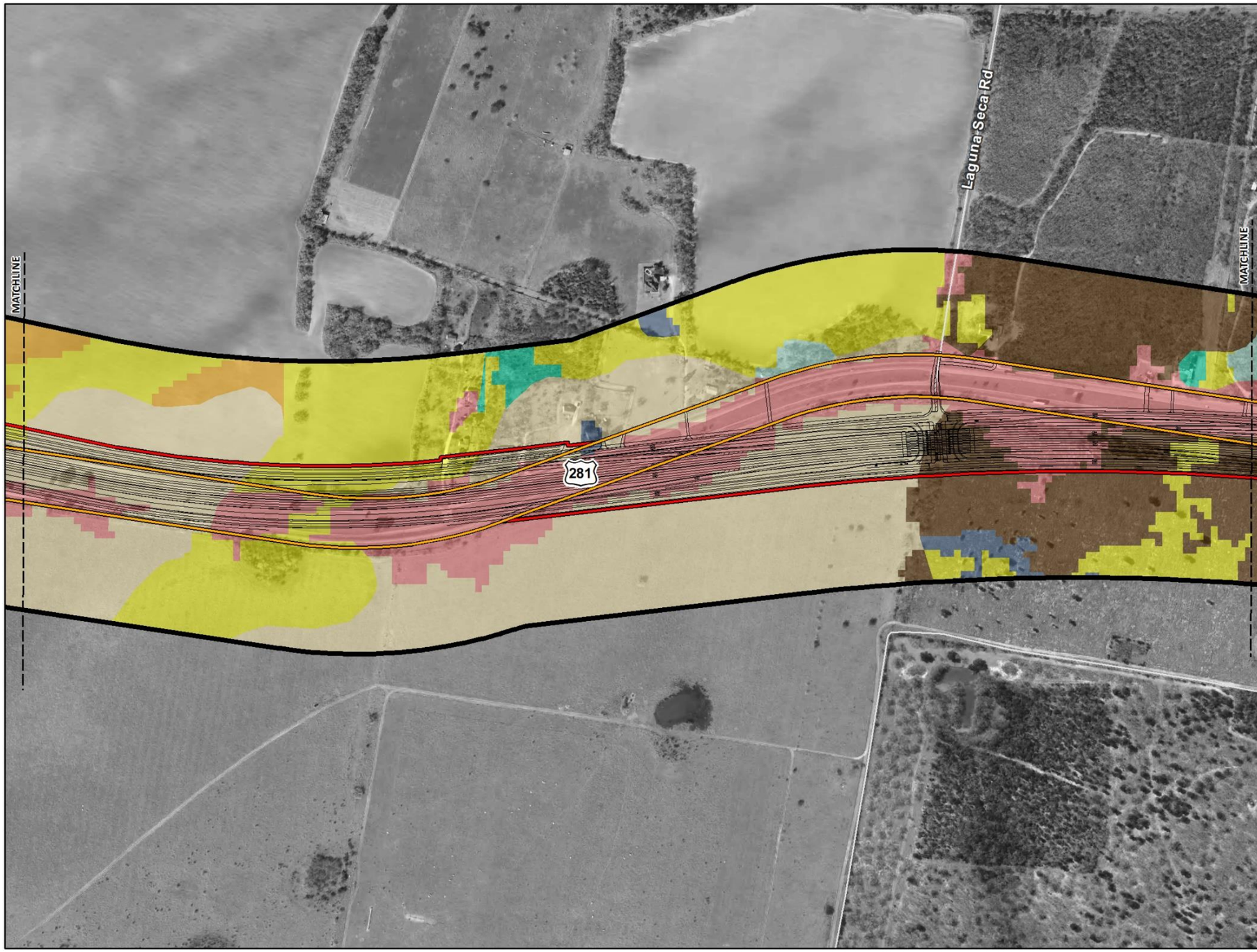


Figure 8.2
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

Row Crops

South Texas: Clayey Blackbrush Mixed Shrubland

South Texas: Clayey Mesquite Mixed Shrubland

South Texas: Disturbance Grassland

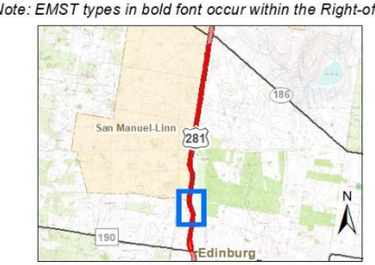
South Texas: Sandy Mesquite Dense Shrubland

South Texas: Sandy Mesquite Savanna Grassland

South Texas: Sandy Mesquite Woodland and Shrubland

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*



0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

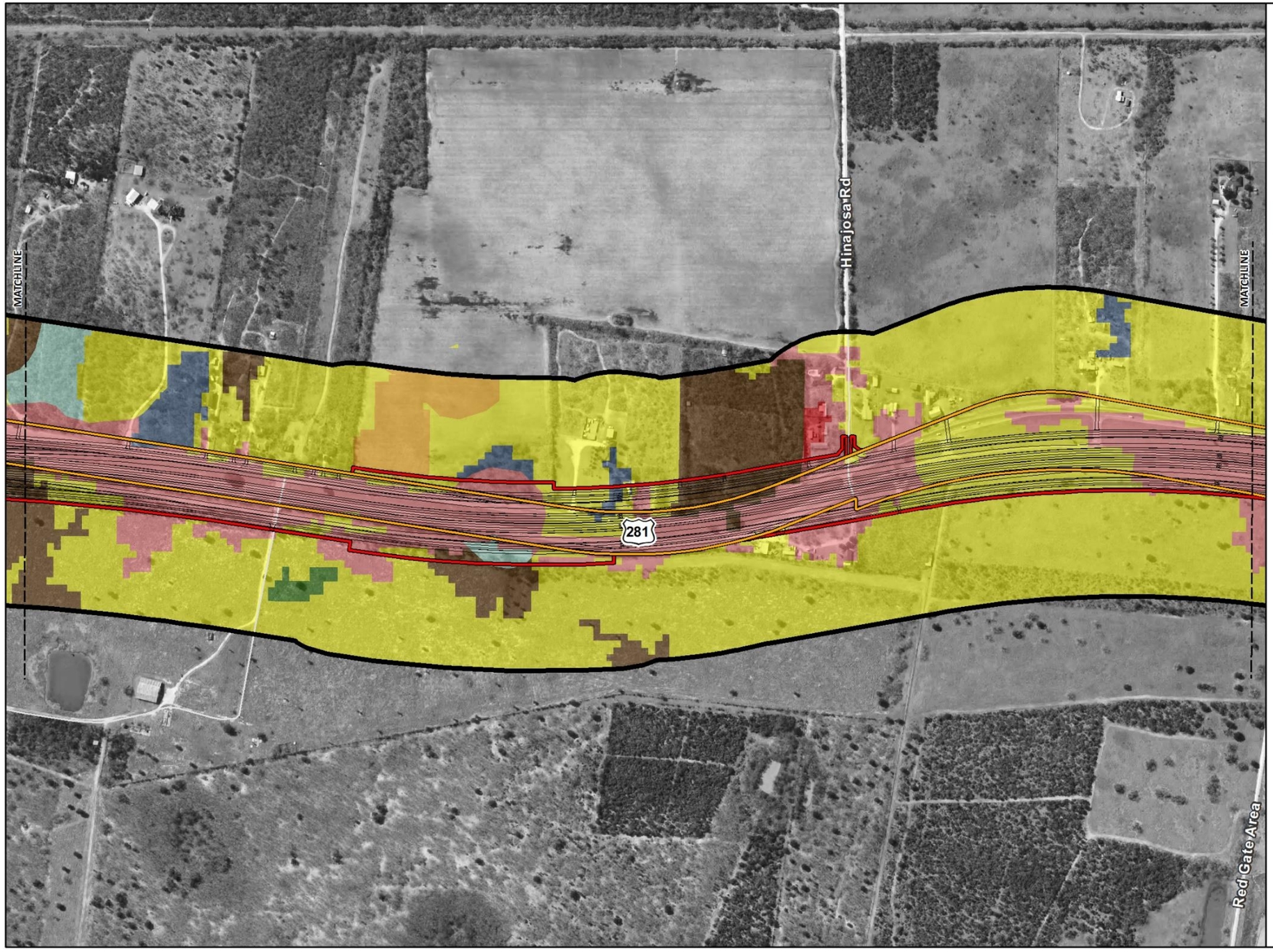


Figure 8.3
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

Row Crops

South Texas: Clayey Blackbrush Mixed Shrubland

South Texas: Disturbance Grassland

South Texas: Sandy Mesquite - Evergreen Woodland

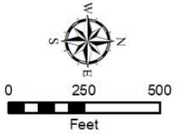
South Texas: Sandy Mesquite Dense Shrubland

South Texas: Sandy Mesquite Woodland and Shrubland

Urban High Intensity

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*



Base Map: Texas Orthoimagery Program, 2015

Figure 8.4
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

Coastal and Sandsheet: Deep Sand Grassland

Coastal and Sandsheet: Deep Sand Live Oak Shrubland

South Texas: Clayey Blackbrush Mixed Shrubland

South Texas: Clayey Mesquite Mixed Shrubland

South Texas: Disturbance Grassland

South Texas: Sandy Mesquite - Evergreen Woodland

South Texas: Sandy Mesquite Dense Shrubland

South Texas: Sandy Mesquite Savanna Grassland

South Texas: Sandy Mesquite Woodland and Shrubland

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

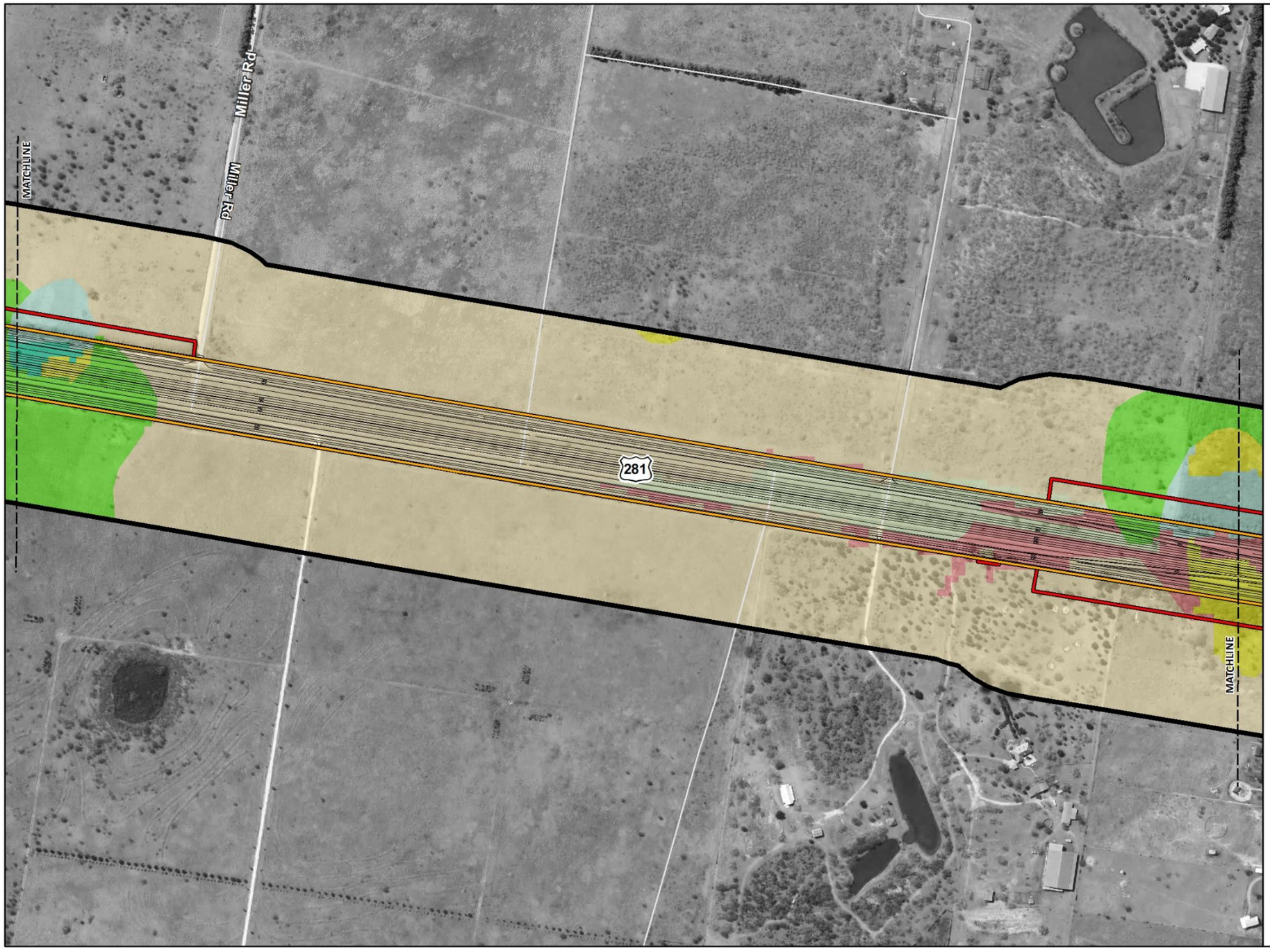


Figure 8.5
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

Coastal and Sandsheet: Deep Sand Grassland

Coastal and Sandsheet: Deep Sand Grassland Swale Marsh

South Texas: Clayey Blackbrush Mixed Shrubland

South Texas: Clayey Mesquite Mixed Shrubland

South Texas: Disturbance Grassland

South Texas: Sandy Mesquite Savanna Grassland

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 8.6
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

Barren

Coastal and Sandsheet: Deep Sand Grassland

Row Crops

South Texas: Clayey Blackbrush Mixed Shrubland

South Texas: Clayey Mesquite Mixed Shrubland

South Texas: Disturbance Grassland

South Texas: Sandy Mesquite Dense Shrubland

South Texas: Sandy Mesquite Savanna Grassland

South Texas: Sandy Mesquite Woodland and Shrubland

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 8.7
Ecological Mapping System of Texas Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

500-ft Buffer

Ecological Mapping System of Texas Vegetation Type*

South Texas: Disturbance Grassland

South Texas: Sandy Mesquite - Evergreen Woodland

South Texas: Sandy Mesquite Dense Shrubland

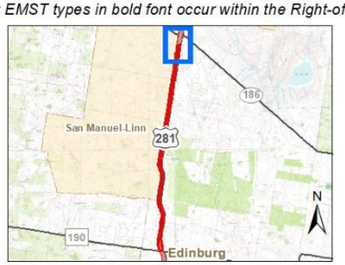
South Texas: Sandy Mesquite Savanna Grassland

South Texas: Sandy Mesquite Woodland and Shrubland

Urban High Intensity

Urban Low Intensity

**Note: EMST types in bold font occur within the Right-of-way.*



0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 9.1
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

Field-verified Vegetation Type

- Row Crops
- South Texas: Disturbed Grassland
- Existing Transportation
- South Texas: Sandy Mesquite Woodland and Shrubland
- South Texas: Sandy Mesquite Savanna Grassland
- Urban Low Intensity

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

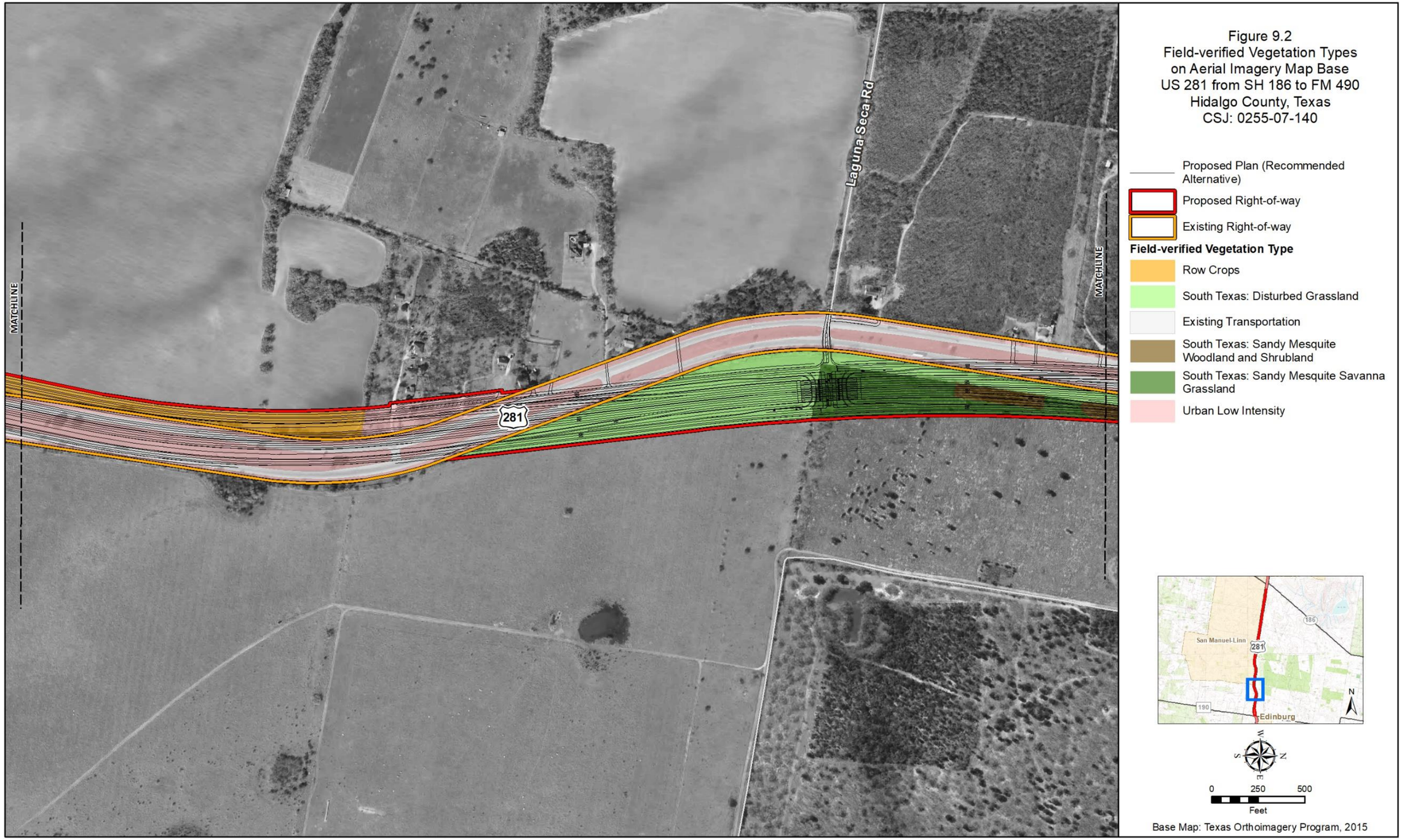


Figure 9.2
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Figure 9.3
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

Field-verified Vegetation Type

Row Crops

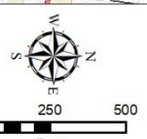
South Texas: Disturbed Grassland

Existing Transportation

South Texas: Sandy Mesquite Woodland and Shrubland

South Texas: Sandy Mesquite Savanna Grassland

Urban Low Intensity



0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

Figure 9.4
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

Field-verified Vegetation Type

- South Texas: Disturbed Grassland
- Existing Transportation
- South Texas: Sandy Mesquite Woodland and Shrubland
- Non-native Invasive Salt Cedar Shrubland
- South Texas: Sandy Mesquite Savanna Grassland
- Urban Low Intensity

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015

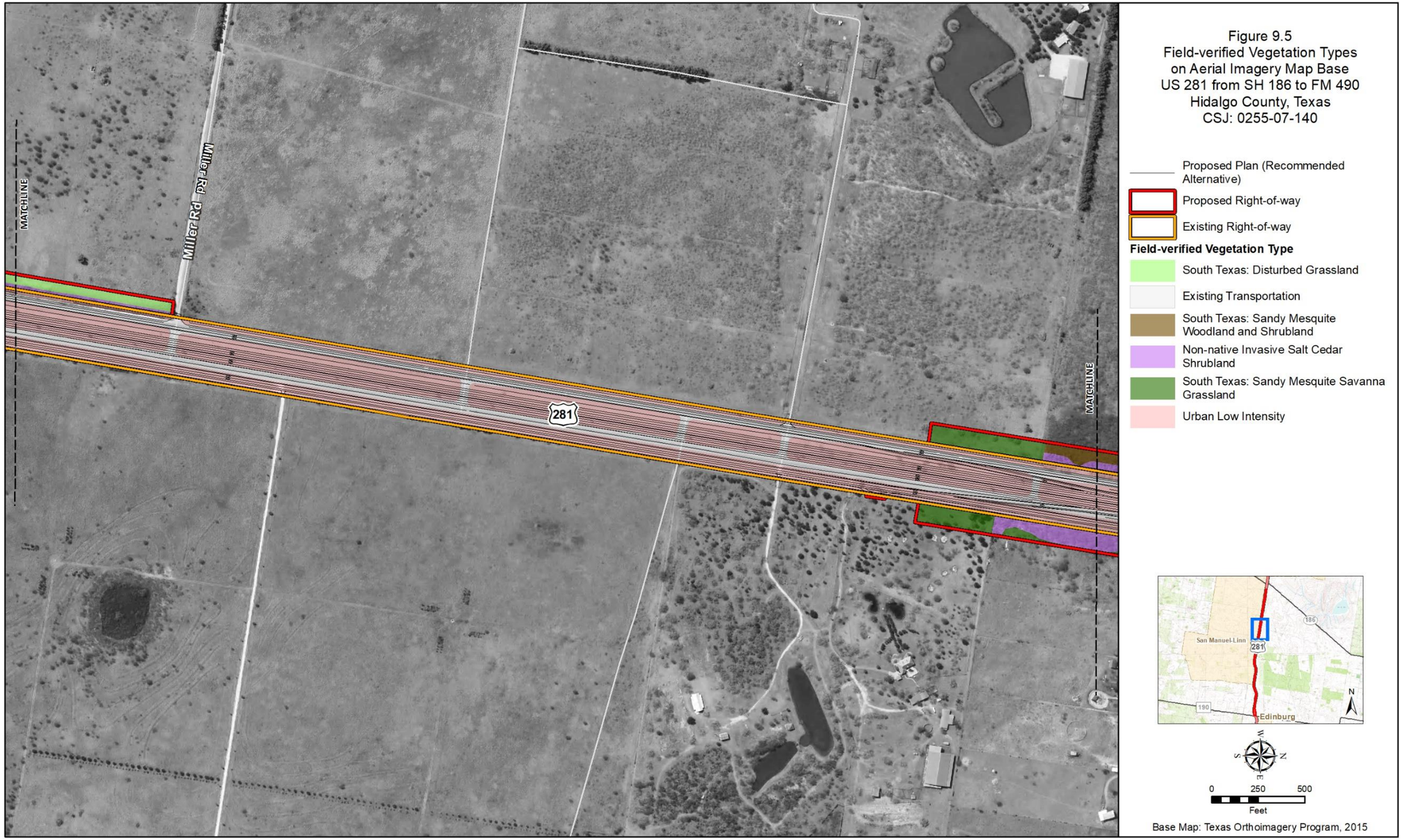


Figure 9.5
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

Field-verified Vegetation Type

South Texas: Disturbed Grassland

Existing Transportation

South Texas: Sandy Mesquite Woodland and Shrubland

Non-native Invasive Salt Cedar Shrubland

South Texas: Sandy Mesquite Savanna Grassland

Urban Low Intensity

Base Map: Texas Orthoimagery Program, 2015

Figure 9.6
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Proposed Plan (Recommended Alternative)

Proposed Right-of-way

Existing Right-of-way

Field-verified Vegetation Type

South Texas: Disturbed Grassland

Existing Transportation

South Texas: Sandy Mesquite Woodland and Shrubland

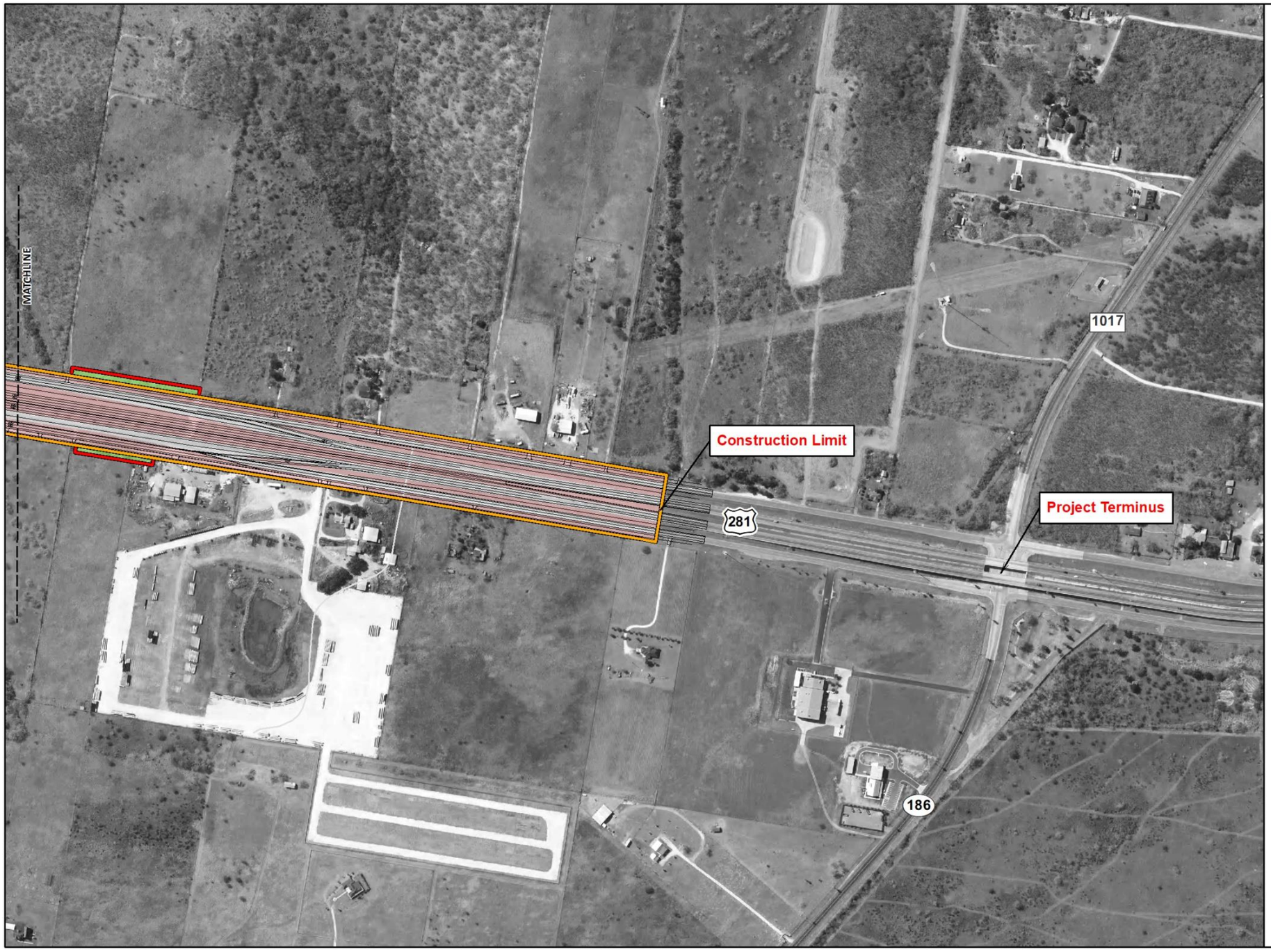
Non-native Invasive Salt Cedar Shrubland

South Texas: Sandy Mesquite Savanna Grassland

Urban Low Intensity

Base Map: Texas Orthoimagery Program, 2015

Figure 9.7
Field-verified Vegetation Types
on Aerial Imagery Map Base
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



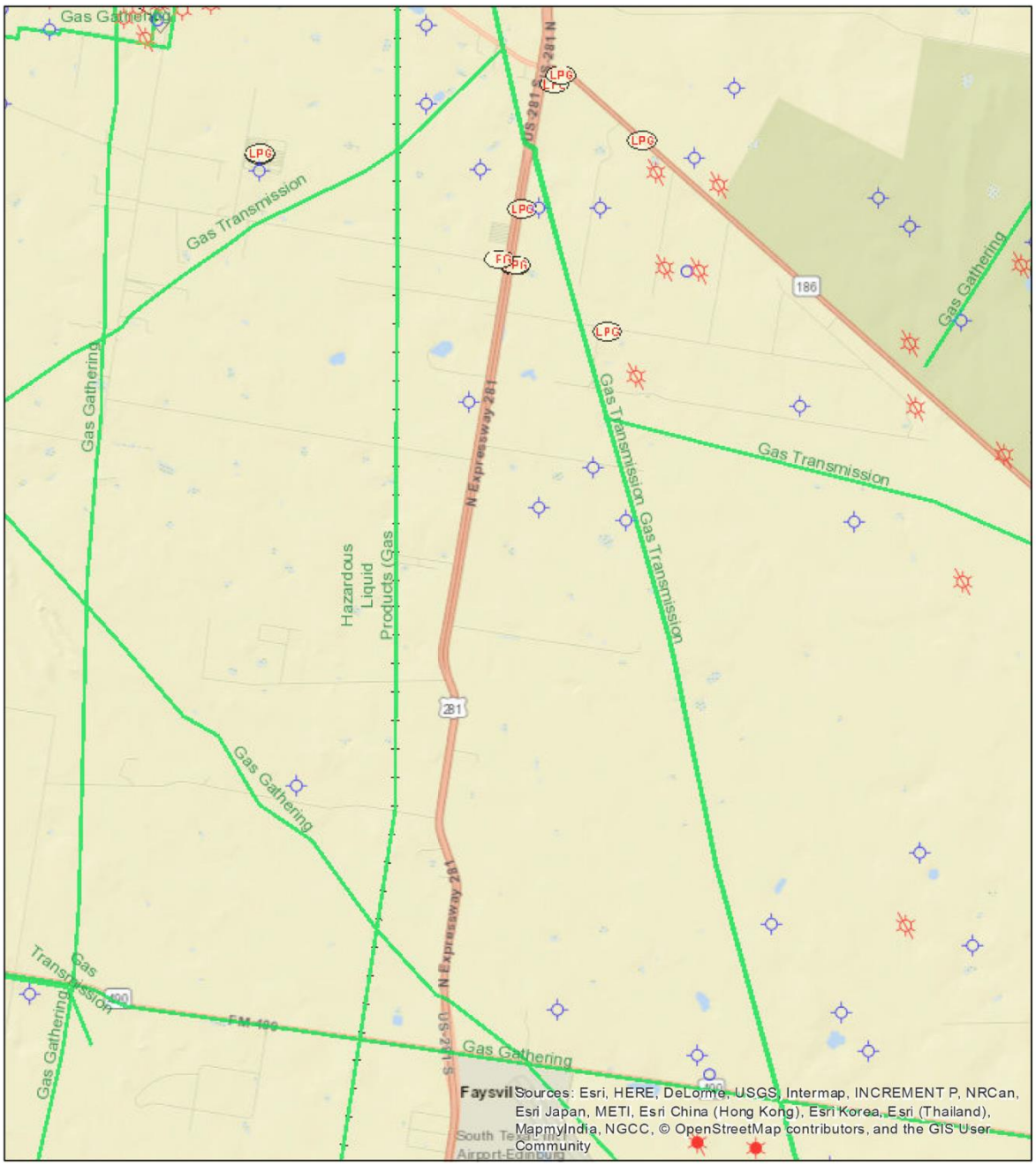
Proposed Plan (Recommended Alternative)
Proposed Right-of-way
Existing Right-of-way

Field-verified Vegetation Type

South Texas: Disturbed Grassland
Existing Transportation
Urban Low Intensity

0 250 500
Feet

Base Map: Texas Orthoimagery Program, 2015



1 inch = 6,019 feet

0 0.6 1.2 1.8 2.4
Miles

0 3,350 6,700 13,400 20,100 26,800
Feet

February 8, 2018

PREPARED BY:

RAILROAD COMMISSION of TEXAS

P.O. BOX 12967
AUSTIN,TX 78711-2967
Source: RRC Public GIS Viewer

NOTICE/DISCLAIMER: Mapping data sets are provided for informational purposes only. These data sets are continuosly being updated and refined. Users are responsible for checking the accuracy, completeness, currency, and/or suitability of these data sets themselves. This is not a survey grade product and should not be used to define or establish survey boundaries.

Figure 10
Railroad Commission of Texas (RCC)
Public GIS Viewer
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

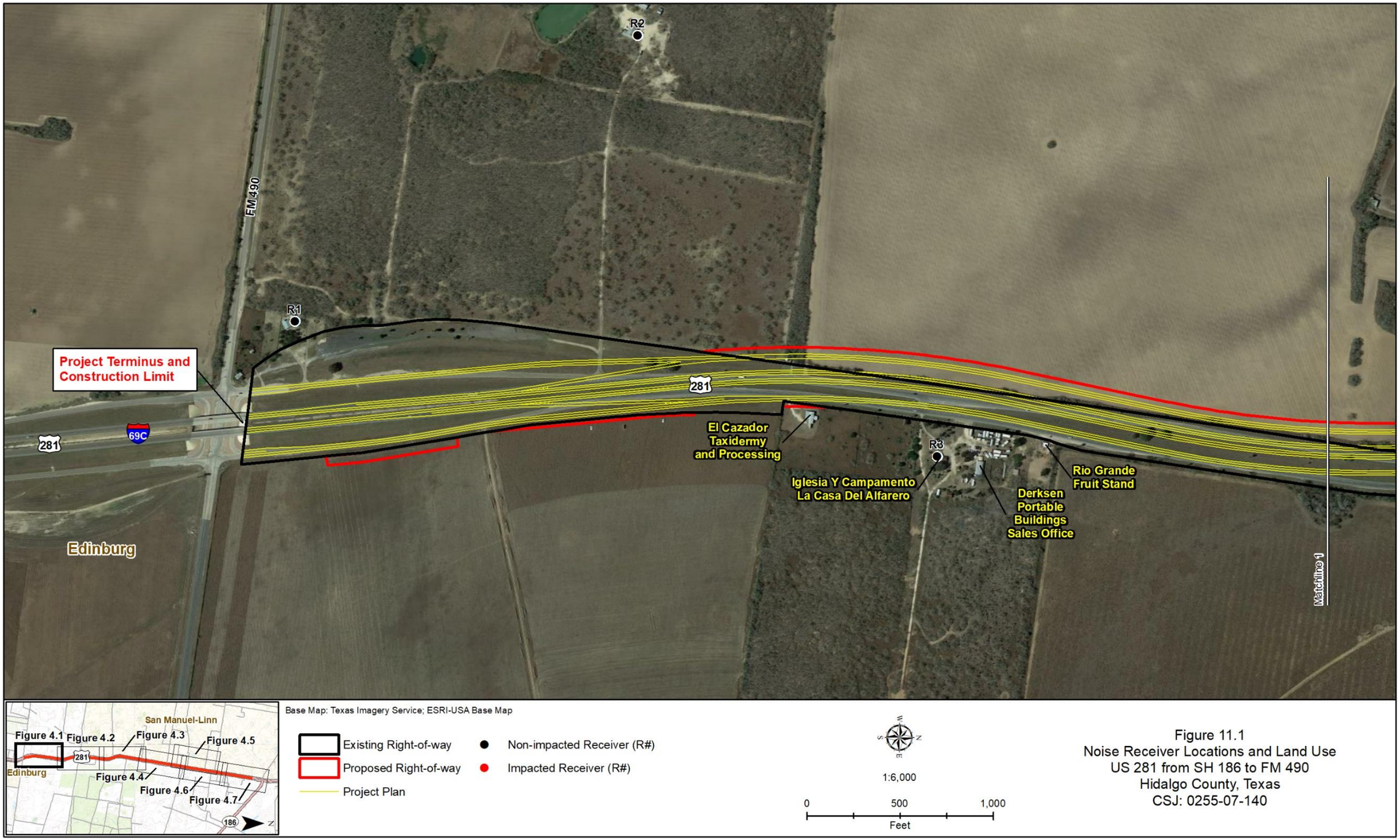
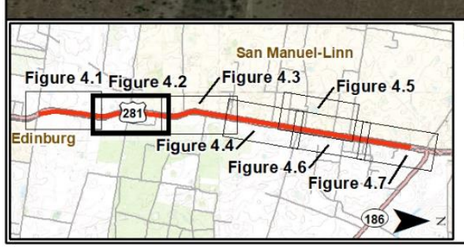


Figure 11.1
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



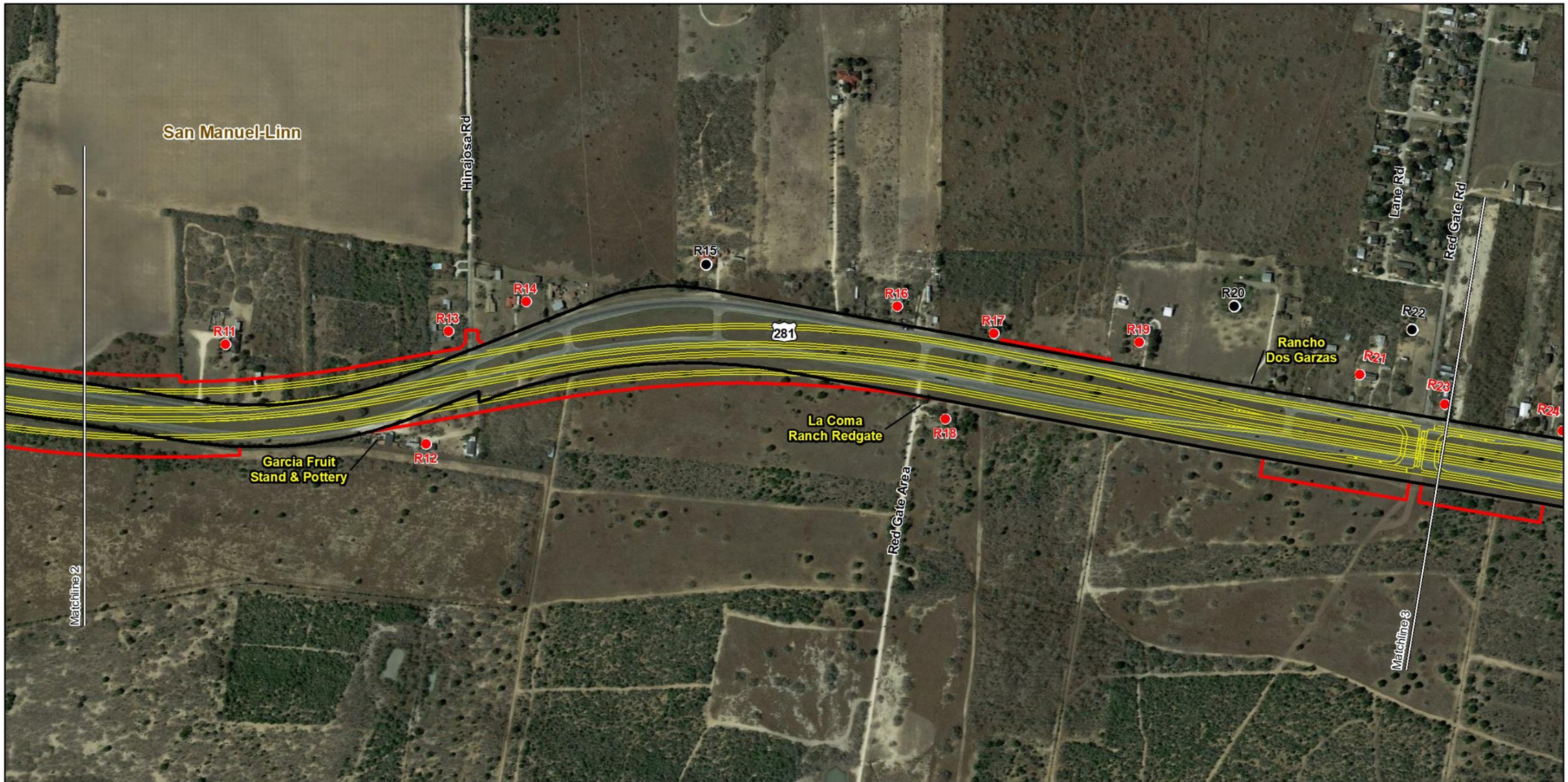
Base Map: Texas Imagery Service; ESRI-USA Base Map

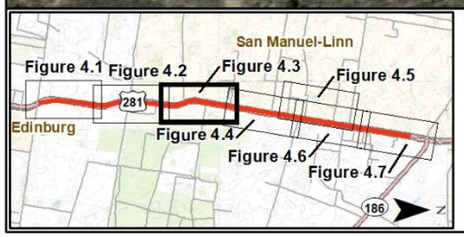
Existing Right-of-way
Proposed Right-of-way
Project Plan
Non-impacted Receiver (R#)
Impacted Receiver (R#)

1:6,000

0 500 1,000
Feet

Figure 11.2
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140





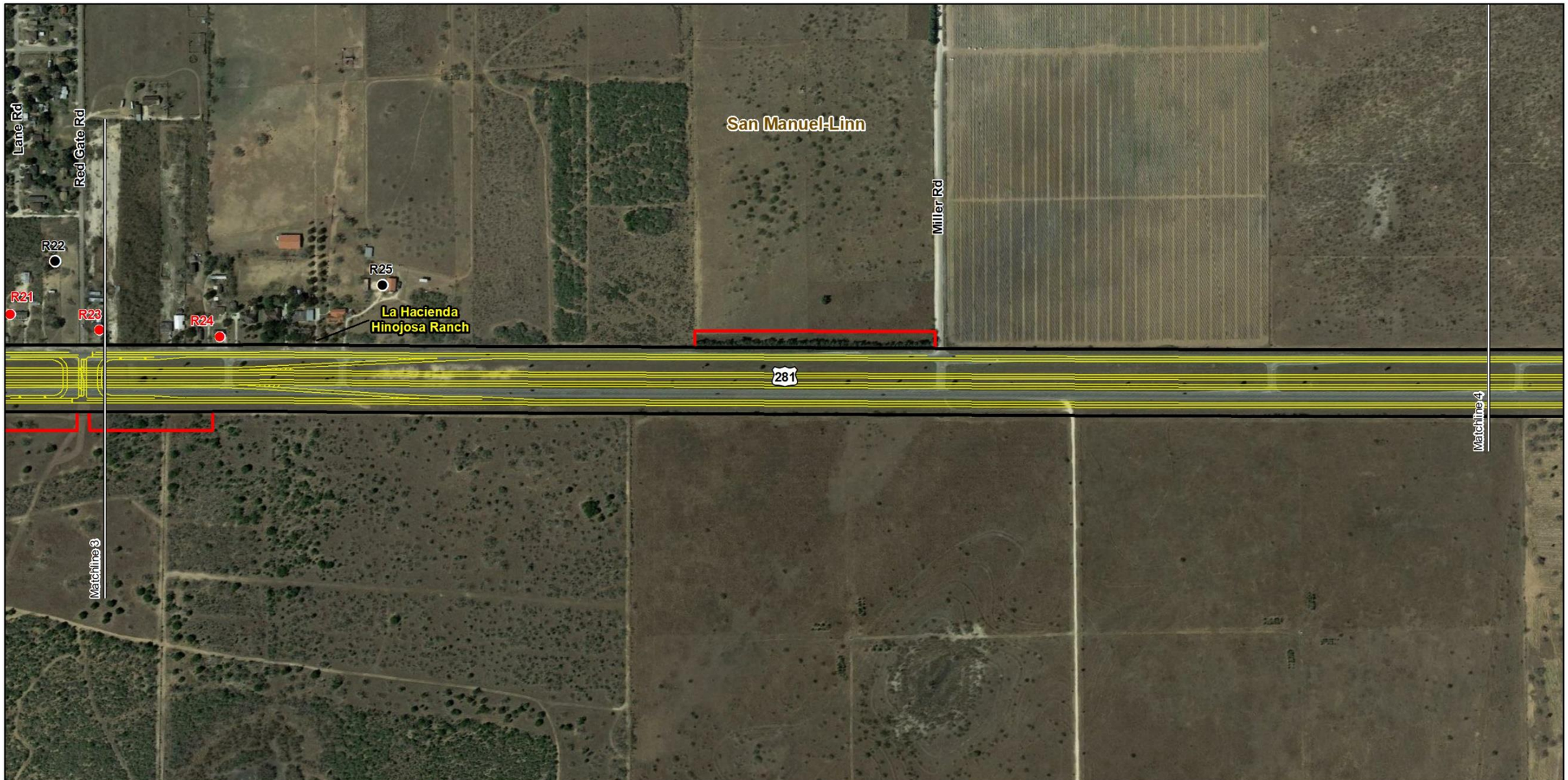
Base Map: Texas Imagery Service; ESRI-USA Base Map

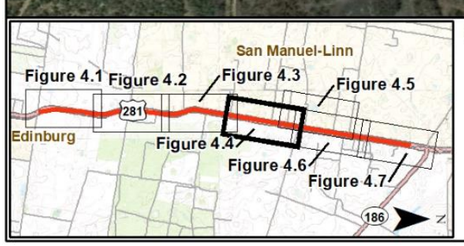
Existing Right-of-way
Proposed Right-of-way
Project Plan
Non-impacted Receiver (R#)
Impacted Receiver (R#)

1:6,000

0 500 1,000
Feet

Figure 11.3
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140





Base Map: Texas Imagery Service; ESRI-USA Base Map

Existing Right-of-way
Proposed Right-of-way
Project Plan
Non-impacted Receiver (R#)
Impacted Receiver (R#)

1:6,000

0 500 1,000
Feet

Figure 11.4
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

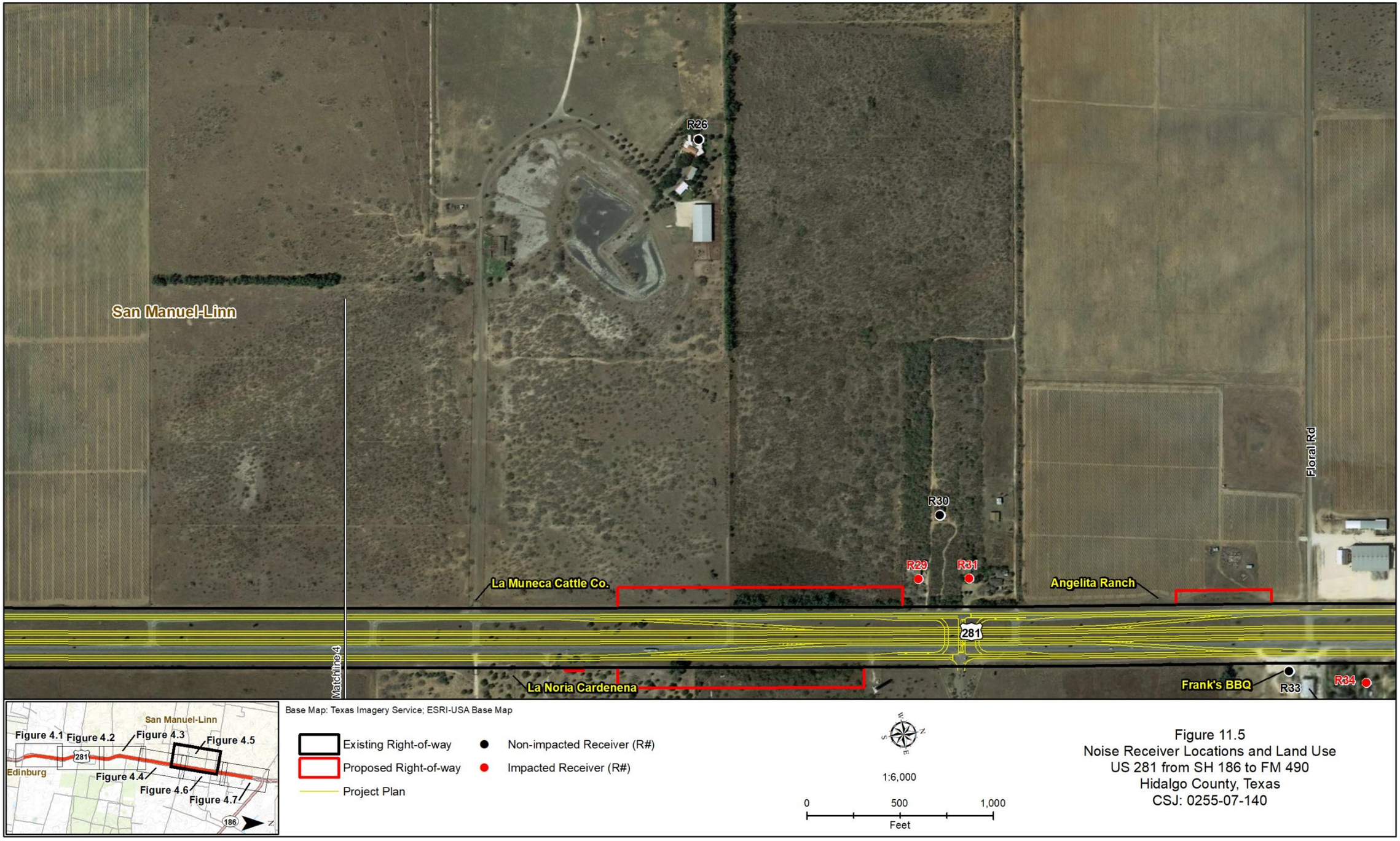
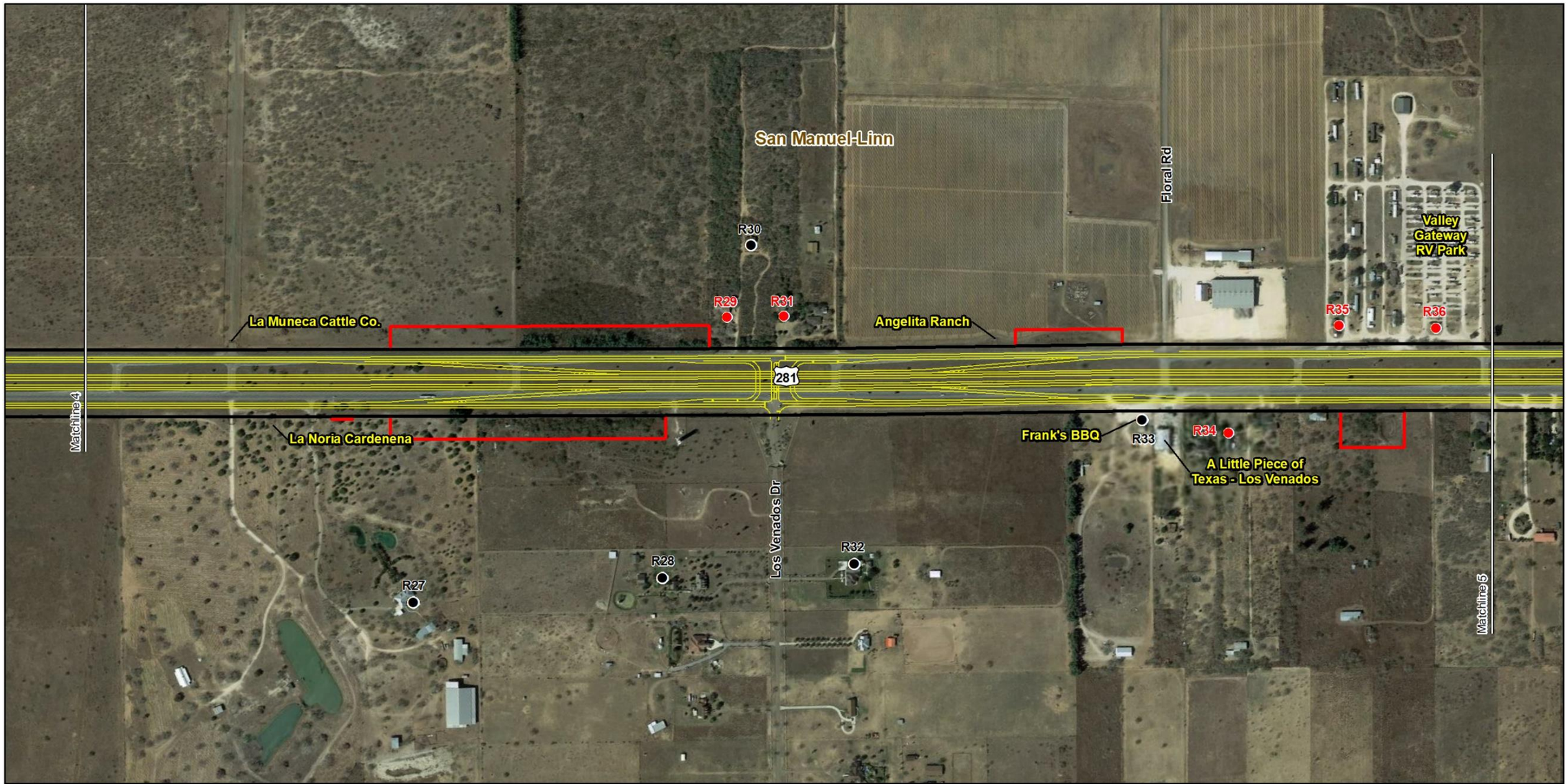
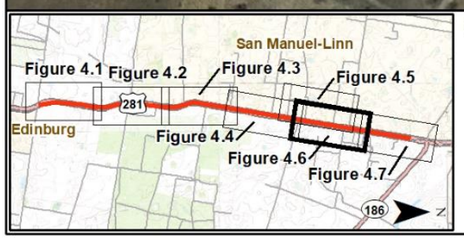


Figure 11.5
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140





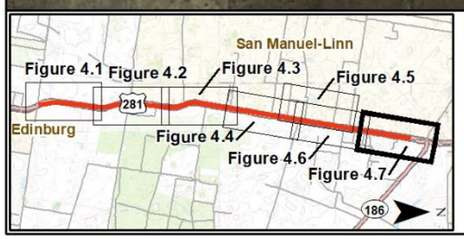
Base Map: Texas Imagery Service; ESRI-USA Base Map

Existing Right-of-way
Proposed Right-of-way
Project Plan
Non-impacted Receiver (R#)
Impacted Receiver (R#)

1:6,000

0 500 1,000
Feet

Figure 11.6
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140



Base Map: Texas Imagery Service; ESRI-USA Base Map

Existing Right-of-way
Proposed Right-of-way
Project Plan
Non-impacted Receiver (R#)
Impacted Receiver (R#)

1:6,000

0 500 1,000
Feet

Figure 11.7
Noise Receiver Locations and Land Use
US 281 from SH 186 to FM 490
Hidalgo County, Texas
CSJ: 0255-07-140

Appendix G

Resource Agency Coordination

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 10/24/19	4. Sheet 1 of 1
1. Name of Project US 281	5. Federal Agency Involved TxDOT	
2. Type of Project Road Improvement	6. County and State Hidalgo, Texas	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS	2. Person Completing Form
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☐		4. Acres Irrigated / Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor				
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points	Corridor A	Corridor B	Corridor C	Corridor D
1. Area in Nonurban Use	15	15			
2. Perimeter in Nonurban Use	10	10			
3. Percent Of Corridor Being Farmed	20	10			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	2			
6. Creation Of Nonfarmable Farmland	25	1			
7. Availablility Of Farm Support Services	5	5			
8. On-Farm Investments	20	0			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	43	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	0	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	43	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	43	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: Neil Wollin

DATE 10/24/19

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?
(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

COMANCHE NATION

Texas Department of Transportation
ATT: Scott Pletka
125 East 11th Street
Austin, TX 78701

September 10, 2018

RE: TXDOT US 281 from FM 490 to SH 186 Improvement Project, Hidalgo County, Pharr District CSJ: 0255-07-140

Dear Mr. Pletka,

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of ***"No Properties"*** have been identified. (IAW 36 CFR 800.4(d)(1)).

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office. Please contact the Comanche Nation Tribal Historical Preservation Office at (580) 595-9618, if you require additional information on this project.

Best Regards,

Martina Callahan

Comanche Nation Historic Preservation Office
Martina Callahan, Tribal Historic Preservation Officer
#6 SW "D" Avenue, Suite C
Lawton, OK. 73501
martinac@comanchnation.com
(580) 595-9618/Fax (580) 595-9733

"To preserve historic and sacred landmarks of the Comanche Nation"

Texas Department of Transportation

125 EAST 11TH STREET, AUSTIN, TEXAS 78701-2483 | 512.463.8588 | WWW.TXDOT.GOV

RECEIVED
AUG 10 2018

August 9, 2018

Section 106 Consultation/ Antiquities Code of Texas
Transmittal of Blanton and Associates Survey Report; *Intensive Archeological Survey: US 281 from FM 490 to SH 186 Hidalgo County, Texas*
Pharr District, CSJ: 0255-07-140
THC Antiquities Permit No. 8413

Ms. Pat Mercado-Allinger,
Division of Archeology, Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Ms. Mercado-Allinger:

The above proposed project will be undertaken with state and federal funds. As required by the Programmatic Agreement (PA, 2015) and the Memorandum of Understanding with your agency, we are continuing consultation with your office on this project and are enclosing for your review and processing a draft report of an archeological survey recently conducted by American Archeology Group for the undertaking.

Blanton and Associates conducted the Intensive Archeological Survey and examined the proposed US 281 Improvement Project from FM 490 to SH 186, Hidalgo County, Texas. The approximately 7.04-mile long US 281 roadway improvement project has an Area of Potential Effect (APE) totaling approximately 322.1 acres. Blanton and Associates assessed existing US 281 ROW and considered it to be very low probability given the prior roadway construction disturbance and modification. Given these impacts, the pedestrian survey focused on the 65.4 acres of proposed new ROW within the APE. Of the 65.4 acres, 49.9 acres had denied Right of Entry (ROE). The survey recorded no archeological sites within the areas of new ROW examined and determined that the 15.5 acres inaccessible were low probability based on field observations of ground disturbances from the existing ROW detailed in the report.

TxDOT reviewed the report and concluded that all high probability areas within the new ROW were within ROE accessible areas and had been well surveyed including intensive shovel testing. TxDOT concurred with Blanton and Associates findings that no further investigations are warranted including the 256.7 acres of existing ROW or 15.5 acres of inaccessible new ROW heavily impacted by historic land use modification. In the unlikely event any sites were locatedin these impacted portions of the APE, they would lack sufficient integrity of location, association,and materials to be able to address important questions of prehistory or history and would not considered eligible for listing to the NRHP (36 CFR 60.4) or for designation as a SAL (13 TAC 26.8). Based on the results of the survey, no further work is warranted for the proposed project. A report of investigation is enclosed.

TxDOT seeks THC concurrence that:

1. Blanton and Associates Inc. conducted a survey under TAC 8413 to access the potential to affect archeological historic properties (36 CFR Part 800.16(1) or State Antiquities Landmarks (13 TAC 26.12). Despite ROE constraints detailed above, Blanton and Associates has conducted a good faith effort of the APE and determined no archeological historic properties or State Antiquities Landmarks are present within the APE, none will be affected by the proposed undertaking, and no further archeological investigations are warranted.

2. Since the survey was conducted under an individual THC Antiquities Permit, we are forwarding the draft for your review and processing in partial fulfillment of THC Antiquities Permit No. 8413. TxDOT finds the report acceptable as a draft and pending any final report review comments from your office, we request your concurrence that the report may proceed toward production and that it provides sufficient documentation that the proposed undertaking will have no effect on an archeological historic properties or State Archeological Landmarks.

In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area will cease and TxDOT archeological staff will be contacted to initiate post-review discovery procedures under the provisions of the PA and the Memorandum of Understanding between TxDOT and the THC. Thank you for your consideration of this matter. If you have any questions regarding the survey report, please contact me at 416-2647.

Sincerely,

Christopher Ringstaff, Archeological Studies Program
Environmental Affairs Division

Cc w/attachment: Robin Gelston, TxDOT Pharr District Environmental Coordinator; Anthony Horne, ENV-PD; Christopher Ringstaff ENV-Arch TxDOT

cc w/o attachments: ECOS Scan

Concurrence By:

for: Mark Wolfe, Executive Director and SHPO
Texas Historical Commission

8/10/18
Date

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

DRAFT REPORT
ACCEPTABLE
by
for Mark Wolfe
Executive Director, THC
Date 8/10/18
Track#

Texas Department of Transportation

DRAFT
Intensive Archeological Survey

US 281 from FM 490 to SH 186
Hidalgo County, Texas
TxDOT Pharr District
CSJ: 0255-07-140

Prepared by Blanton & Associates, Inc.
Texas Antiquities Permit No. 8413
Principal Investigator: Andrea Stahman Burden, M.A., RPA

July 2018

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

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Table

Table 1: Previous Investigations within 1 km of APE 16
Table 2: Resources within 1 km (3,274 feet) of APE 17

Nolan Nicolas

From: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Sent: Wednesday, May 02, 2018 4:50 PM
To: Nolan Nicolas
Subject: RE: US 281 Upgrade - CSJ No. 0255-07-140 - TPWD Early Coordination

Nolan,

Thanks for the answers. I don't have any further questions or comments.

Thank you for submitting the following project for early coordination: US 281 upgrade (CSJ 0255-07-140). TPWD appreciates TxDOT's commitment to implement the practices listed in the Tier I Site Assessment submitted on March 21, 2018 and in subsequent emails. Based on a review of the documentation, the avoidance and mitigation efforts described, and provided that project plans do not change, TPWD considers coordination to be complete. However, please note it is the responsibility of the project proponent to comply with all federal, state, and local laws that protect plants, fish, and wildlife.
According to §2.204(g) of the 2013 TxDOT-TPWD MOU, TxDOT agreed to provide TXNDD reporting forms for observations of tracked SGCN (which includes federal- and state-listed species) occurrences within TxDOT project areas. Please keep this mind when completing project due diligence tasks. For TXNDD submission guidelines, please visit the following link: http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/txndd/submit.phtml

Thank you,

Sue Reilly
Transportation Assessment Liaison
TPWD Wildlife Division
512-389-8021

From: Nolan Nicolas [mailto:Nolan.Nicolas@txdot.gov]
Sent: Tuesday, May 01, 2018 4:05 PM
To: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Subject: RE: US 281 Upgrade - CSJ No. 0255-07-140 - TPWD Early Coordination

Sue,

Thanks for your quick review of the above mention project.
The answers to your question below are highlighted in yellow.

Let me know if you need anything else.

Thanks.

Nolan Nicolas
Environmental Specialist
Texas Dept. of Transportation – Pharr District
600 West Interstate 2

Pharr, TX. 78577
Tel. 956-702-6182

From: Sue Reilly [mailto:Sue.Reilly@tpwd.texas.gov]
Sent: Tuesday, May 01, 2018 11:52 AM
To: Nolan Nicolas
Subject: RE: US 281 Upgrade - CSJ No. 0255-07-140 - TPWD Early Coordination

Nolan,

It looks like the new road will straighten out the curves. Will the old road be removed? - Yes, due to flattening the existing curves.

How many detention ponds are there? - There are 18 detention sites with variable areas along the proposed alignment

Thanks,

Sue Reilly
Transportation Assessment Liaison
TPWD Wildlife Division
512-389-8021

From: WHAB_TxDOT
Sent: Friday, March 23, 2018 2:14 PM
To: Nolan Nicolas <Nolan.Nicolas@txdot.gov>
Cc: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Subject: RE: US 281 Upgrade - CSJ No. 0255-07-140 - TPWD Early Coordination

The TPWD Wildlife Habitat Assessment Program has received your request and has assigned it project ID # 39590. The Habitat Assessment Biologist who will complete your project review is copied on this email.

Thank you,

John Ney
Administrative Assistant
Texas Parks & Wildlife Department
Wildlife Diversity Program – Habitat Assessment Program
4200 Smith School Road
Austin, TX 78744
Office: (512) 389-4571

Thursday, January 17, 2019

Andrea Burden
Blanton & Associates, Inc.
5 Lakeway Centre Ct., Ste. 200
Austin, TX 78734

Re: Project review under the Antiquities Code of Texas
Final Report: US 281 Improvement Project from FM490 to SH186, CSJ: 0255-07-140
Texas Antiquities Permit # 8413
COMPLETED PERMIT

Dear Colleague:

Thank you for your correspondence describing the above referenced project. This letter presents the comments of the Executive Director of the Texas Historical Commission, the state agency responsible for administering the Antiquities Code of Texas.

The Archeology Division is in receipt of the final report, a completed Abstracts in Texas Contract Archeology form, shape file, curation form, and a tagged PDF copy of the report on CD for the above referenced permit. The submission of the above items demonstrates completion of your permit requirements under Permit #8413

Thank you for your cooperation in this state review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please call Nick Barrett at 512/475-0129 .

Sincerely,

for
Mark Wolfe
Executive Director

Appendix H

Environmental Permits, Issues, and Commitments Sheet

During the planning phase of project development, the following Environmental Permits, Issues and Commitments have been developed during coordination with resource agencies, local governmental entities and the general public. Any change orders and/or deviations from the final design must be reported to the Engineer prior to the commencement of construction activities as additional environmental clearances may be required.

I. Clean Water Act, Section 402; Stormwater Pollution Prevention

Action Items Required : ☐ No Action Required

1. ☒ The contractor must implement the SW3P by installing Best Management Practices (BMPs) as indicated in the construction plans and maintained appropriately throughout construction. BMPs must be in place prior to the start of construction. The SW3P may need to be revised as necessary as construction progresses.

2. ☒ For all construction PSL's off the ROW, the contractor must certify compliance with all applicable laws, rules and regulations pertaining to the preservation of cultural resources, natural resources and the environment.

3. ☒ Based on the acreage of impact, select the appropriate box below:

   ☐ This project will disturb less than 1 acre of soil and is not part of a larger common plan of development; therefore, a NOI and TPDES Site Notice are not required for this project.

   or

   ☐ This project will disturb equal to or more than 1 acre of soil but less than 5 acres; therefore a NOI is not required but a TPDES Site Notice is required. The Construction Site Notice (CSN) is required to be posted at the construction site in a publicly accessible location for review by the public, TCEQ, EPA and other Inspectors.

   or

   ☒ This project will disturb equal to or more than 5 acres of soil and will require a NOI and TPDES Site Notice. The NOI and Site Notice are required to be posted at the construction site in a publicly accessible location.

4. ☒ Need to address MS4 requirements (Cameron & Hidalgo Counties only) ☐ MS4 requirements not needed

II. Clean Water Act, Sections 401 and 404 Compliance

Action Items Rquired : ☒ No Action Required

1. ☐ Filling, dredging or excavating in any water bodies, rivers, creeks, streams, wetlands or wet areas is prohibited unless specified in the USACE permit and approved by the Engineer. The contractor shall adhere to all agreements, mitigation plans, and BMPs required by the NWP as regulated by the USACE.

   The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

   ☐ No Permit Required

   ☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)

   ☐ Nationwide Permit 14 - PCN Required (1/10th to <1/2 acre, 1/3 in tidal waters)

   ☐ Individual 404 Permit Required

   ☐ Other Nationwide Permit Required: NWP#_____

2. ☐ The contractor is responsible for obtaining new or revised Section 404 permit(s) for Contractor initiated changes in construction methods that change Impacts To Waters Of The U.S., including wetlands. The Contractor will ensure that the water quality of the State will be maintained and not degraded.

3. ☐ Best Management Practices for applicable Section 401 General Conditions:

General Condition 12 - Categories I and II BMPs required

Category I (Erosion Control)

☐ Temporary Vegetation	☐ Interceptor Swale	☐ Mulch Filter Berms and/or Socks
☐ Blankets, Matting	☐ Diversion Dike	☐ Compost Filter Berms and/or Socks
☐ Mulch	☐ Erosion Control Compost	☐ Compost Blankets
☐ Sodding		

Category II (Sedimentation Control)

☐ Silt Fence	☐ Hay (Straw) Bale Dike	☐ Mulch Filter Berms and/or Socks
☐ Rock Berm	☐ Brush Berms	☐ Compost Filter Berms and/or Socks
☐ Triangular Filter Dike	☐ Sediment Basins	☐ Stone Outlet Sediment Traps
☐ Sand Bag Berm	☐ Erosion Control Compost	

General Condition 21 - Category III BMPs required

Category III (Post-Construction TSS Control)

☐ Vegetative Filter Strips	☐ Wet Basins	☐ Mulch Filter Berms and/or Socks
☐ Retention/Irrigation	☐ Grassy Swales	☐ Compost Filter Berms and/or Socks
☐ Extended Detention Basin	☐ Vegetation-Lined Ditches	☐ Sand Filter Systems
☐ Constructed Wetlands	☐ Erosion Control Compost	☐ Sedimentation Chambers

II. Clean Water Act, Sections 401 and 404 Compliance - Continued:

4. ☒ The Contractor's designated and qualified Contractor Responsible Person Environmental (CRPe) will monitor the project site daily to ensue compliance with SW3P and TPDES General Permit TXR 150000. Daily Monitoring Reports shall be provided to TxDOT within 48 hours, in accordance with Item 506.3.1.

5. ☐ Other Project Specific Actions:

   1.

   2.

III. Cultural Resources

Action Items Required : ☐ No Action Required

1. ☒ Refer to the 2014 TxDOT Standard Specifications For Construction And Maintenance Of Highways, Streets, And Bridges, Item 7.7.1., in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

2. ☒ Other Project Specific Actions:

   1. Coordination with the THC is required to relocate the displaced OTHM for the La Noria Cardenena as close to the original site as possible. ROW acquisition and relocation would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

   2.

IV. Vegetation Resources

Action Items Required : ☐ No Action Required

1. ☐ In accordance with the 2014 TxDOT Standard Specifications; Item 164 - Seeding For Erosion Control; provide and install temporary or permanent seeding for erosion control as shown on the plans or as directed by the Engineer for all seeding and replanting of right of way where possible. (Required for Urban Settings)

2. ☒ In accordance with Executive Order 13112 on invasive species and the Executive Memorandum on Beneficial Landscaping, native species of plants shall be used for all seeding and replanting of right of way where possible for rural roadways. (Required for Rural Settings)

3. ☒ Preserve vegetation where possible throughout the project and minimize clearing, grubbing and excavation within stream banks, bed and approach sections.

4. ☐ Other Project Specific Actions:

   1.

   2.

Pharr District Contact No. 956-702-6100 Revised 01/30/2017

List of Abbreviations

BMP: Best Management Practice	NWP: Nationwide Permit
CGP: Construction General Permit	PCN: Pre-Construction Notification
CRPe: Contractor Responsible Person Environmental	PSL: Project Specific Location
DSHS: Texas Department of State Health Services	SPCC: Spill Prevention Control and Countermeasure
FEMA: Federal Emergency Management Agency	SW3P: Storm Water Pollution Prevention Plan
FHWA: Federal Highway Administration	TCEQ: Texas Commission on Environmental Quality
MOA: Memorandum of Agreement	THC: Texas Historical Commission
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
MSAT: Mobile Source Air Toxic	TxDOT: Texas Department of Transportation
MBTA: Migratory Bird Treaty Act	T&E: Threatened and Endangered Species
NOI: Notice of Intent	USACE: U.S. Army Corp of Engineers
NOT: Notice of Termination	USFWS: U.S. Fish and Wildlife Service

Texas Department of Transportation
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PHARR DISTRICT

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 1 OF 2

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	US 281		
STATE	DISTRICT	COUNTY	
TEXAS	PHR	Hidalgo	SHEET NO.
CONTROL	SECTION	JOB	
0255	07	140	

Date Printed: X-X-XX

V. Federal Listed, and Proposed Threatened and Endangered Species, Critical Habitat, State Listed Species, Candidate Species and Migratory Birds

Action Items Required : ☐ No Action Required

1. ☒ Under the Migratory Bird Treaty Act (MBTA) of 1918, codified at 16 U.S.C. § 703-712 and as enforced by the USFWS, the proposed construction work will not remove active nests from bridges, trees, ground and other structures during migratory bird nesting season, (February 1st. through October 1st.). If the Contractor needs to perform work within the right of way during nesting season, a qualified Biologist shall conduct a survey to determine if active nests are present. If present, the Contractor shall maintain a buffer zone around the nest(s) as directed by the Biologist. The buffer zone will be protected from clearing and disturbance until such time as the Biologist has determined that the nest(s) is no longer active. Prior to the nesting season, existing bridges and culverts should be treated against migratory bird nesting by utilizing Bird Exclusion Methods. Bird Exclusion Methods should be monitored and maintained throughout the nesting season. Refer to Standard Bird Exclusion Details.

2. ☒ There is the potential for the presence of state-listed species & species of concern in the project area and state law prohibits the taking (incidental or otherwise) of state-listed species. Taking is defined as the collection, hooking, hunting, netting, shooting, or share by any means or devices. If any listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately.

3. ☒ Other Project Specific Actions:

   1. The proposed project contains potential habitat for the plains spotted skunk, Texas horned lizard, and Texas tortoise. See EPIC Sheet Supplementals for TPWD BMPs to be implemented.

   2. The proposed project contains potential habitat for the Audubon's oriole, northern beardless tyrannulet, Sennett's hooded oriole, western burrowing owl, and white-tailed hawk. See EPIC Sheet Supplementals for TPWD Bird BMPs to be implemented.

   3. The proposed project contains potential habitat for the Mexican treefrog. See EPIC Sheet Supplementals for TPWD amphibian BMPs to be implemented.

VI. Hazardous Materials on Contamination Issues

Action Items Required : ☐ No Action Required

General (applies to all projects):

Comply with the Hazard Communication Act (HCA) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the HCA.

Maintain an adequate supply of on-site spill response materials as indicated in the MSDS. In the event of a spill, take immediate action to mitigate the spill as indicated in the MSDS and in accordance with safe work practices. Contact the TxDOT Pharr District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

- Dead or distressed vegetation (identified as not normal)
- Trash piles, drums, canisters, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of contaminant substances

Any other evidence indicating possible hazardous materials or contamination discovered on site.

1. ☒ If potentially hazardous material and/or contaminated media (i.e.: soil, groundwater, surface water, sediment, building materials) are unexpectedly encountered during construction, assure that such materials and contamination are handled according to applicable federal and state regulations, cease work in the immediate area and contact the Engineer immediately.

   The project includes the demolition of one residential property and one utility facility. These buildings may contain asbestos containing materials. Asbestos inspections, specifications, notification, license, accreditation, abatement and disposal, as applicable, should comply with the federal and state regulations.

VI. Hazardous Materials on Contamination Issues - Continued:

2. Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

   ☐ Yes ☒ No

   If "No", then no further action required.
   If "Yes", then TxDOT is responsible for completing an asbestos assessment/inspection.

3. Are the results of the asbestos inspection positive (is asbestos present)?

   ☐ Yes ☐ No

   If "Yes", then TxDOT must retain a Texas Department of State Health Services (DSHS) licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled abatement activities and/or demolition.

   If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

4. ☒ The Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and an Asbestos Consultant in order to minimize construction delays and subsequent claims.

VII. Other Environmental Issues

Action Items Required : ☐ No Action Required

1. ☒ Noise

   Contractor shall make every reasonable effort to minimize construction noise through abatement measures such as work hour controls and proper maintenance of equipment mufflers.

2. ☒ Air

   Contractor shall practice common dust control techniques such as surface chemical treatment or watering of unpaved road surfaces and vehicle speed reduction shall be implemented to minimize and prevent airborne dust during construction.

   Contractor should minimize MSAT by utilizing measures to encourage use of EPA required cleaner diesel fuels, limits on idling, increase use of cleaner burning diesel engines, and other emission limitation techniques, as appropriate.

Pharr District Contact No. 956-702-6100 Revised 01/30/2017

List of Abbreviations

BMP: Best Management Practice	NWP: Nationwide Permit
CGP: Construction General Permit	PCN: Pre-Construction Notification
CRPe: Contractor Responsible Person Environmental	PSL: Project Specific Location
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FEMA: Federal Emergency Management Agency	SW3P: Storm Water Pollution Prevention Plan
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MOA: Memorandum of Agreement	THC: Texas Historical Commission
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
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NOI: Notice of Intent	USACE: U.S. Army Corp of Engineers
NOT: Notice of Termination	USFWS: U.S. Fish and Wildlife Service

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PHARR DISTRICT

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 2 OF 2

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	US 281		
STATE	DISTRICT	COUNTY	
TEXAS	PHR	Hidalgo	SHEET NO.
CONTROL	SECTION	JOB	
0255	07	140	

Date Printed: X-X-XX

TPWD BMPs

The Programmatic Agreement defines Best Management Practices (BMPs) to be implemented by Texas Department of Transportation (TxDOT) per §2.213 (Programmatic Agreements) of the 2017 Memorandum of Understanding (MOU) between TxDOT and Texas Parks and Wildlife Department (TPWD). These BMPs are measures that TxDOT and TPWD agree will result in avoidance and minimization of potential impacts to natural resources and in some cases apply to particular types of TxDOT projects.

The purpose of this section is to provide BMPs to minimize impacts to species or groups of species. Implementation of these BMPs by TxDOT eliminates the need for coordination under §2.206(1)of the MOU, except as noted.

Due diligence should be used to avoid killing or harming any wildlife species in the implementation of TxDOT projects.

☒ Bird BMPs (Required)

In addition to complying with the Migratory Bird Treaty Act (MBTA) perform the following BMPs:

- ☒ Prior to construction, perform daytime surveys for nests including under bridges and in culverts to determine if they are active before removal. Nests that are active should not be disturbed.
- ☒ Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season.
- ☒ Avoid the removal of unoccupied, inactive nests, as practicable.
- ☒ Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair.
- ☒ Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.

☐ Bald Eagle *(Haliaeetus leucocephalus)*

- ☐ Bird BMPs and Bald and Golden Eagle Protection Act compliance

☐ Reddish Egret *(Egretta rufescens)* or
☐ White-faced Ibis *(Plegadis chihi)*

- ☐ Bird BMPs unless project is within 300 meters (984 feet)of a known colonial water bird rookery then coordinate with TPWD.

☐ Rookeries (Recommendations)

In general, nesting dates for herons and egrets range from early February to late August in Texas, depending on the species. Great Blue Herons (GBHE) are usually the first to nest. When GBHE get disrupted from the nest and abandon nesting, then the other species of herons and egrets may not attempt to nest at the colony that year. Breeding dates for rookery species are approximately as follows:

Species	Dates
Cattle Egret	Early April to late October
Little Blue Heron	Late March to late July
Snowy Egret	Late March to early August
Great Egret	Early March to early August
Black-crowned Night Heron	Early February to late July
Great Blue Heron	February to late August

☐ Rookeries (Recommendations) (Continued)

- ☐ Vegetation clearing in a primary buffer area of 300 meters (984 feet) from a heronry periphery should be avoided. Utilizing areas that have already been cleared within this buffer area may be acceptable depending on site-specific characteristics. Additionally, human foot-traffic or machinery use should not occur within this buffer area during the nesting season.
- ☐ Clearing activities or construction using heavy machinery in a secondary buffer area of 1,000 meters (3,281 feet) from the heronry periphery should be avoided during the breeding season (courting and nesting).

☒ Bat BMPs (Required)

To determine the appropriate BMP to avoid or minimize impacts to bats, review the habitat description for the species of interest on the TPWD Rare, Threatened, and Endangered Species of Texas by County List or other trusted resources. All bat surveys and other activities that include direct contact with bats shall comply with TPWD' recommended white-nose syndrome protocols located on the TPWD Wildlife Habitat Assessment Program website under "Project Design and Construction".

The following survey and exclusion protocols should be followed prior to commencement of construction activities. For the purposes of this document, structures are defined as bridges, culverts (concrete or metal), wells, and buildings.

- ☒ For activities that have the potential to impact structures, cliffs or caves, or trees; a qualified biologist will perform a habitat assessment and occupancy survey of the feature(s) with roost potential as early in the planning process as possible or within one year before project letting.
- ☒ For roosts where occupancy is strongly suspected but unconfirmed during the initial survey, revisit feature(s) at most four weeks prior to scheduled disturbance to confirm absence of bats.
- ☒ If bats are present or recent signs of occupation (i.e., piles of guano, distinct musky odor, or staining and rub marks at potential entry points) are observed, take appropriate measures to ensure that bats are not harmed, such as implementing non-lethal exclusion activities or timing or phasing of construction.
- ☒ Exclusion devices can be installed by a qualified individual between September 1 and March 31. Exclusion devices should be used for a minimum of seven days when minimum nighttime temperatures are above 50°F and minimum daytime temperatures are above 70°F. Prior to exclusion, ensure that alternate roosting habitat is available in the immediate area. If no suitable roosting habitat is available, installation of alternate roosts is recommended to replace the loss of an occupied roost. If alternate roost sites are not provided, bats may seek shelter in other inappropriate sites, such as buildings, in the surrounding area. See Additional Bat BMPs (Recommendations) for recommended acceptable methods for excluding bats from structures.
- ☒ If feature(s) used by bats are removed as a result of construction, replacement structures should incorporate bat-friendly design or artificial roosts should be constructed to replace these features, as practicable.
- ☒ Conversion of property containing cave or cliff features to transportation purposes should be avoided where feasible.

Pharr District Contact No. 956-702-6100

☒ Bat BMPs (Required)(Continued)

- ☒ Avoid unnecessary removal of dead fronds on native and ornamental palm trees in south Texas (Cameron, Hidalgo, Willacy, Kenedy, Brooks, Kleberg, Nueces, and San Patricio counties) from April 1st through October 31st. If removal of dead fronds is necessary at other times of the year, limit frond removal to extended warm periods (nighttime temperatures: 55°F for at least two consecutive nights), so bats can move away from the disturbance and find new roosts.
- ☒ Large hollow trees, snags (dead standing trees), and trees with shaggy bark should be surveyed for colonies and, if found, should not be disturbed until the bats are no longer occupying these features. Post-occupancy surveys should be conducted by a qualified biologist prior to tree removal from the landscape.
- ☒ Retain mature, large diameter hardwood forest species and native/ornamental palm trees where feasible.
- ☒ In all instances, avoid harm or death to bats. Bats should only be handled as a last resort and after communication with TPWD.

☐ Mexican Long-tongues Bat *(Choeronycteris mexicana)*

- ☐ Avoid unnecessary impacts to cacti and agave species.
- ☐ Bat BMPs.

☐ Additional Bat BMPs (Recommendations)

- ☐ Bat surveys of structures should include visual inspections of structural fissures (cracked or spalled concrete, damaged or split beams, split or damaged timber railings), crevices (expansion joints, space between parallel beams, spaces above supports piers), and alternative structures (drainage pipes, bolt cavities, open sections between support beams, swallow nests) for the presence of bats.
- ☐ Before excluding bats from any occupied structure, bat species, weather, temperature, season, and geographic location must be incorporated into any exclusion plans to avoid unnecessary harm or death to bats. Winter exclusion must entail a survey to confirm either, 1) bats are absent or 2) present but active (i.e. continuously active - not intermittently active due to arousals from hibernation).
- ☐ Avoid using materials that degrade quickly, like paper, steel wool or rags, to close holes.
- ☐ Avoid using products or making structural modifications that may block natural ventilation, like hanging plastic sheeting over an active roost entrance, thereby altering roost microclimate.
- ☐ Avoid using chemical and ultrasonic repellents.
- ☐ Avoid use of silicone, polyurethane or similar non-water-based caulk products.
- ☐ Avoid use of expandable foam products at occupied sites.
- ☐ Avoid the use of flexible netting attached with duct tape.

Revised 07/12/2017

List of Abbreviations

BMP: Best Management Practice
CGP: Construction General Permit
CRPe: Contractor Responsible Person Environmental
DSHS: Texas Department of State Health Services
FEMA: Federal Emergency Management Agency
FHWA: Federal Highway Administration
MOA: Memorandum of Agreement
MOU: Memorandum of Understanding
MS4: Municipal Separate Stormwater Sewer System
MSAT: Mobile Source Air Toxic
MBTA: Migratory Bird Treaty Act
NOI: Notice of Intent
NOT: Notice of Termination
NWP: Nationwide Permit
PCN: Pre-Construction Notification
PSL: Project Specific Location
SPCC: Spill Prevention Control and Countermeasure
SW3P: Storm Water Pollution Prevention Plan
TCEQ: Texas Commission on Environmental Quality
THC: Texas Historical Commission
TPDES: Texas Pollutant Discharge Elimination System
TPWD: Texas Parks and Wildlife Department
TxDOT: Texas Department of Transportation
T&E: Threatened and Endangered Species
USACE: U.S. Army Corp of Engineers
USFWS: U.S. Fish and Wildlife Service

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PHARR DISTRICT

EPIC SHEET SUPPLEMENTALS

TPWD BMPs

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	US 281		
STATE	DISTRICT	COUNTY	
TEXAS	PHR	Hidalgo	SHEET NO.
CONTROL	SECTION	JOB	
0255	07	140	

Date Printed: X-X-XX

☐ Additional Bat BMPs (Recommendations) (Continued)

☐ In order to avoid entombing bats, exclusion activities should be only implemented by a qualified individual. A qualified individual or company should possess at least the following minimum qualifications:

- Experience in bat exclusion (the individual, not just the company).
- Proof of rabies pre-exposure vaccinations.
- Demonstrated knowledge of the relevant bat species, including maternity season date range and habitat requirements.
- Demonstrated knowledge of rabies and histoplasmosis in relation to bat roosts.

☐ Contact TPWD for additional resources and information to assist in executing successful bat exclusions that will avoid unnecessary harm or death in bats.

☐ Fossorial Mammal BMPs (Required)

☐ If black-tailed prairie dog (BTPD) burrows or pocket gopher mounds are to be excavated/directly impacted coordinate with TPWD WHAB.
☐ When a construction zone is adjacent to active BTPD burrows or pocket gopher mounds, erect barriers to discourage individuals moving through or into the construction area.
☐ When seeding or revegetation is planned in an area adjacent to BTPD burrows or pocket gopher mounds, a vegetative barrier should be considered in the planting to discourage dispersal into the ROW.

☐ Coues' Rice Rat *(Oryzomys couesi)*

☐ Minimize impacts to wetland, Resaca, oxbow lakes, and marsh habitats.
☐ Contractors will be advised of potential occurrence in the project area and to avoid harming the species if encountered.
☐ Water Quality BMPs.

☒ Plains Spotted Skunk *(Spilogale putorius interrupta)* or
☐ Swift Fox *(Vulpes velox)*

☒ Contractor will be advised of potential occurrence in the project area and to avoid harming the species if encountered and to avoid unnecessary impacts to dens.

☐ White nosed Coati *(Nasua narica)*
☐ Yellow nosed Cotton Rat *(Sigmodon ochrognathus)*

☐ Contractors will be advised of potential occurrence in the project area and to avoid harming the species if encountered.

☒ Terrestrial Reptile BMPs (Required)

☒ Apply hydro mulching and/or hydro seeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydro mulching and/or hydro seeding are not feasible due to site conditions, utilize erosion control blankets or mats that contain no netting or contain loosely woven, natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.
☒ For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1 :1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling.
☒ Inform contractors that if reptiles are found on project site allow species to safely leave the project area.
☒ Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter where feasible.
☒ Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

☒ Texas Tortoise *(Gopherus berlandieri)*

☒ Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
☒ Utility trenches should be covered overnight or visually inspected before filling to avoid burial of the species.
☒ Terrestrial Reptile BMPs.

☒ Texas Horned Lizard *(Phrynosoma cornutum)*

☒ Avoid harvester ant mounds in the selection of Project Specific Locations (PSLs) where feasible.
☒ Terrestrial Reptile BMPs.

☒ Additional Reptile BMPs (Recommendations)

☒ Due to increased activity (mating) of reptiles during the spring, construction activities like clearing or grading should attempt to be scheduled outside of the spring (April-May) season. Also, timing ground disturbing activities before October when reptiles become less active and may be using burrows in the project area is also encouraged.
☒ When designing roadways with curbs, consider using Type I or Type III curbs to provide a gentle slope to enable turtles and small animals to get out of roadways.
☒ If Texas Tortoises are present in a project area, they should be removed from the area. After removal of the tortoises, the area that will be disturbed during active construction and project specific locations should be fenced off to exclude tortoises and other reptiles. The exclusion fence should be constructed and maintained as follows:

a. The exclusion fence should be constructed with metal flashing or drift fence material.
b. Rolled erosion control mesh material should not be used.
c. The exclusion fence should be buried at least 6 inches deep and be at least 24 inches high.
d. The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed site has been revegetated.

☒ Amphibian and Aquatic Reptile BMPs (Required)

Unless absence of the species can be demonstrated, assume presence in suitable habitat and implement the following BMPs. Absence can only be demonstrated using TPWD-approved survey efforts (contact TPWD for minimum survey protocols for species and project site conditions).

☒ For projects within one mile of a known occupied location or observation of the species recorded from 1980 until the current year and suitable habitat is present, coordinate with TPWD.
☒ For new location roadway projects, coordinate with TPWD.
☒ For projects within existing right-of-way (ROW) when work is in water or will permanently impact a water feature and potential habitat exists for the target species complete the following:

a) Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
b) Minimize impacts to wetland, temporary and permanent open water features, including depressions, and riverine habitats.
c) Maintain hydrologic regime and connections between wetlands and other aquatic features.

Pharr District Contact No. 956-702-6100

☒ Amphibian and Aquatic Reptile BMPs (Continued)

d) Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.
e) Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydromulching and/or hydroseeding are not feasible due to site conditions, using erosion control blankets or mats that contain no netting, or only contain loosely woven natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.
f) Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.
g) When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and overwinter sites (e.g., brush and debris piles, crayfish burrows) where feasible.
h) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, which may be refugia for terrestrial amphibians, where feasible.
i) If gutters and curbs are part of the roadway design, where feasible install gutters that do not include the side box inlet and include sloped (i.e. mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.

☐ For projects that require acquisition of additional ROW and work within that new ROW is in water or will permanently impact a water feature, implement a) - i) above plus j) -l) below, where applicable:

j) For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two.
k) For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.
l) When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Where feasible, biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.

Revised 07/12/2017

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PHARR DISTRICT

EPIC SHEET SUPPLEMENTALS

TPWD BMPs

SHEET 2 OF 3

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	US 281		
STATE	DISTRICT	COUNTY	
TEXAS	PHR	Hidalgo	
CONTROL	SECTION	JOB	SHEET NO.
0255	07	140	

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T&E: Threatened and Endangered Species
USACE: U.S. Army Corp of Engineers
USFWS: U.S. Fish and Wildlife Service

Date Printed: X-X-XX

☐ Sheep Frog *(Hypopachus variolosus)*

- ☐ Minimize disturbance to burrows or downed woody debris.
- ☐ Water Quality BMPs.
- ☐ Amphibian BMPs.

☐ South Texas Siren (Large Form) *(Siren sp 1)*

- ☐ Minimize impacts to warm, shallow waters with vegetative cover such as ponds and ditches.
- ☐ Water Quality BMPs.
- ☐ Amphibian BMPs.

☐ Freshwater Mussel BMPs (Required)

- ☐ When work is in the water; survey project footprints for state listed species where appropriate habitat exists.
- ☐ When work is in the water and mussels are discovered during surveys; relocate state listed and SGCN mussels under TPWD authorization and implement Water Quality BMPs.
- ☐ When work is adjacent to the water; Water Quality BMPs implemented as part of the SWPPP for a construction general permit or any conditions of the Section 401 water quality certification for the project will be implemented.

☐ Fish BMPs (Required)

- ☐ For projects within the range of a SGCN or State-Listed fish and work is adjacent to water: Use Water Quality BMPs. No TPWD Coordination required.
- ☐ For projects within the range of a SGCN or State-Listed fish, and work is in the water: TPWD coordination is required.

☒ Water Quality BMPs (Required)

In addition to BMPs required for a TCEQ Storm Water Pollution Prevention Plan and/or Section 401 water quality permit:

- ☒ Minimize the use of equipment in streams and riparian areas during construction. When possible, equipment access should be from banks, bridge decks, or barges.
- ☒ When temporary stream crossings are unavoidable, remove stream crossings once they are no longer needed and stabilize banks and soils around the crossing.

☐ Additional Water Quality BMPs (Recommendations)

- ☐ Wet-Bottomed detention ponds are recommended to benefit wildlife and downstream water quality. Consider potential wildlife-vehicle interactions when siting detention ponds.
- ☐ Rubbish found near bridges on TxDOT ROW should be removed and disposed of properly to minimize the risk of pollution. Rubbish does not include brush piles or snags.

☐ Aquatic Mitigation (Recommendations)

- ☐ In-kind compensatory mitigation should be considered for all unavoidable impacts to aquatic resources including, but not limited to streams, wetlands, oysters, seagrass and mudflats, regardless of their jurisdictional status.
- ☐ Compensatory mitigation plans should be developed in consultation with TPWD Transportation Conservation Coordinator.

☐ Stream Crossings (Recommendations)

- ☐ Use spanning bridges rather than culverts when feasible.
- ☐ If using a culvert, staggered culverts that concentrate low flows but provide conveyance of higher flows through staggered culverts placed at higher elevations is recommended.
- ☐ Bottomless culverts are recommended to allow for fish and other aquatic wildlife passage in the low flow channel. If bottomless culverts are not feasible, making a low flow channel for fish passage is recommended.
- ☐ Avoid placing riprap across stream channels and instead use alternative stabilization such as biotechnical stream bank stabilization methods including live native vegetation or a combination of vegetative and structural materials. When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of aquatic and terrestrial wildlife underneath the bridge. In some instances, riprap may be buried, back-filled with topsoil and planted with native vegetation.
- ☐ Incorporate bat-friendly design into bridges and culverts.
- ☐ Design bridges for adequate vertical and horizontal clearances under the roadway to allow for terrestrial wildlife to safely pass under the road.
- ☐ A span wide enough to cross the stream and allow for dry ground and a natural surface path under the roadway is encouraged. For culverts, incorporation of an artificial ledge inside the culvert on one or both sides for use by terrestrial wildlife is recommended.
- ☐ Riparian buffer zones should remain undisturbed where possible.

☒ Vegetation BMPs (Recommendations)

- ☒ Minimize the amount of vegetation cleared. Removal of native vegetation, particularly mature native trees and shrubs should be avoided to the greatest extent practicable. Wherever practicable, impacted vegetation should be replaced with in-kind on-site replacement/restoration of native vegetation.
- ☒ To minimize adverse effects, activities should be planned to preserve mature trees, particularly acorn, nut or berry producing varieties. These types of vegetation have high value to wildlife as food and cover.
- ☒ It is strongly recommended that trees greater than 12 inches in diameter at breast height (dbh) that are removed be replaced. TPWD's experience indicates that for ecologically effective replacement, a ratio of three trees for every one (3:1) lost should be provided to the extent practicable either on-site or off-site. Trees less than 12 inches dbh should be replaced at a 1:1 ratio.
- ☒ Replacement trees should be of equal or better wildlife quality than those removed and be regionally adapted native species.
- ☒ When trees are planted, a maintenance plan that ensures at least an 85 percent survival rate after three (3) years should be developed for the replacement trees.
- ☒ The use of any non-native vegetation in landscaping and revegetation is discouraged. Locally adapted native species should be used.
- ☒ The use of seed mix that contains seeds from only locally adapted native species is recommended.
- ☒ Avoid vegetation clearing activities during the general bird nesting season, March through August, to minimize adverse impacts to birds.

☐ Invasive Species BMPs (Recommendations)

- ☐ For all work in waters listed in the distribution of Zebra mussels on http://texasinvasives .org/ as well as those waters specified in 31 TAC §57.972 and any TPWD emergency orders regarding prevention of the spread of Zebra mussels all machinery, equipment, or vehicles coming in contact with such waters should follow clean/drain/dry protocols to prevent the potential spread of invasive Zebra mussels.
- ☐ Care should be taken to avoid the spread of aquatic invasive plants (such as Giant Salvinia, Hydrilla, Hyacinth, Watermilfoil, Water Lettuce, and Alligatorweed) from infested water bodies into areas not currently infested. All machinery/equipment/vehicles coming in contact with waters containing aquatic invasive plant species should follow clean/drain/dry protocols to prevent the potential spread of invasive plants.
- ☐ Colonization by invasive plants should be actively prevented on disturbed sites in terrestrial habitats. Vegetation management should include removing invasive species as soon as practical while allowing the existing native plants to revegetate the disturbed areas. If using hay bales for sediment control, use locally grown weed-free hay to prevent the spread of invasive species. Leave the hay bales in place and allow them to break down, as this acts as mulch assisting in revegetation.

☐ Wildlife Crossings (Recommendations)

- ☐ Design roadways on new location to incorporate wildlife crossings, particularly in areas that bisect wildlife travel corridors or seasonal movement routes.
- ☐ Consider using cable median barrier instead of concrete traffic barrier when feasible to increase permeability for animals encountering barriers.

Pharr District Contact No. 956-702-6100

Revised 07/12/2017

List of Abbreviations

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PHARR DISTRICT

EPIC SHEET SUPPLEMENTALS

TPWD BMPs

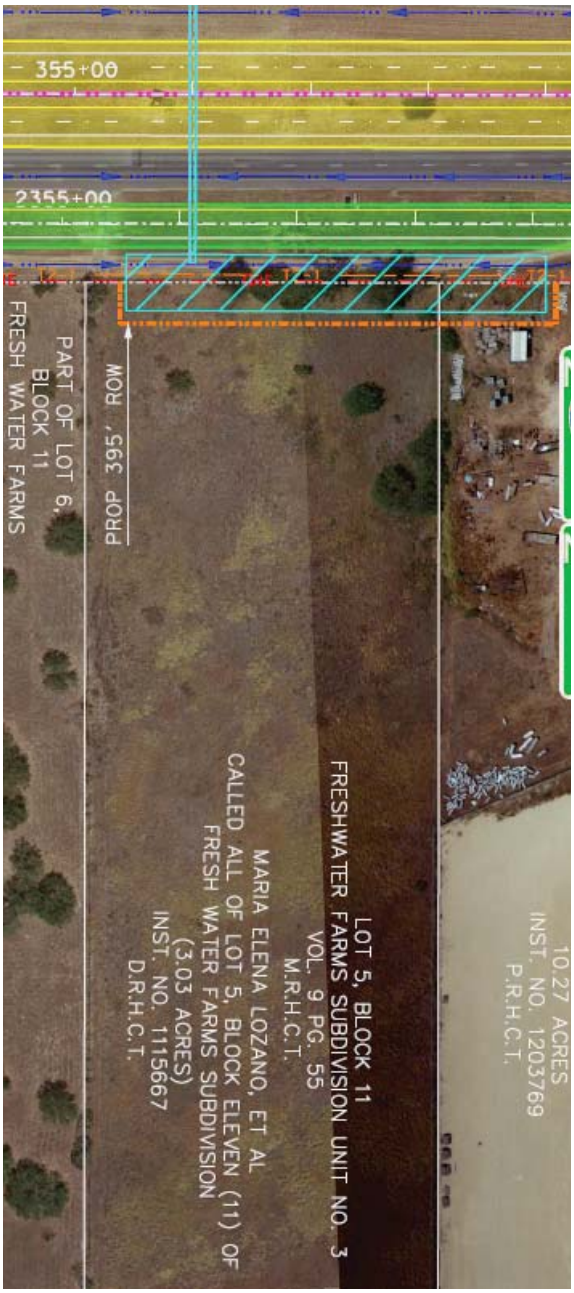
SHEET 3 OF 3

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	US 281		
STATE	DISTRICT	COUNTY	SHEET NO.
TEXAS	PHR	Hidalgo	
CONTROL	SECTION	JOB	
0255	07	140	

Date Printed: X-X-XX

Appendix I

Meetings with Affected Property Owners Documentation



On 2-12-18, Mr. Bruce Mediros spoke to Ramon Jimenez regarding property on the US 281 project between FM 490 and FM 186. He says his property is Fresh Water Farms III. He noted some survey stakes on his property and wanted to talk to someone about the project and how it will affect his operations. Ramon sent Melba Schaus an email to please call him back at 210-870-5140.

On 2-13-18 Melba Schaus spoke to Mr. Bruce Mediros who stated the property was owned by his wife (Maria Elena Lozano) and four siblings (Carmen Palomin, Guadalupe Villanueva, Loreta Gutierrez and Hortencia Reyes). Mr. Mediros had seen ROW stakes on the property and wanted to know how the property would be affected since they kept cattle on the property. I advised Mr. Mediros that I would look into the property he was referring to and advise him of what was proposed. I found the property he was talking about (see pic on left). He was also concerned that someone had entered property without their consent.

On 2-14-18, spoke with Tim Frost (Cobb Fendly – ROW)

Melba Schaus

From: Melba Schaus
Sent: Wednesday, January 24, 2018 10:16 AM
To: [redacted]
Subject: US 281 - Moises Molina Property
Attachments: Moises Molina_Laguna Seca Overpass.pdf; Moises Molina_NO PROP ROW.pdf

Anabeth,

Attached are two "snapshots" of your parent's property. The first shows Laguna Seca Overpass to the South of their property. The second is a close up view of their property and property line. The orange thin dashed line indicates the current ROW. The orange heavier dashed lines indicate proposed ROW (mostly on the west side of US 281). The current schematic indicates that there is not any new proposed ROW that would impact your parent's property. I hope the information provided helps. I apologize for the delay but please call me or have your family come by the office if they have any additional questions.

Melba R. Schaus, P.E.
District Planning Engineer

Texas Department of Transportation
600 W Interstate 2, Pharr, TX 78577
(956) 702-6181 (office)
(956) 358-7319 (mobile)
Email: melba.schaus@txdot.gov

Nolan Nicolas

From: Melba Schaus
Sent: Friday, October 28, 2016 8:02 AM
To: [redacted]
Cc: Griselda Saldivar; Margil Maldonado Jr
Subject: US 281 - SH 186 to FM 490
Attachments: 16-07-21 Schematic_Alternative_A.PDF; 16-07-21 Schematic_Alternative_B.PDF

Margo,

As discussed, attached are preliminary schematic alternatives for the US 281 project from SH 186 to FM 490, a project length of approximately 7 miles. The attached schematics shown 1 overpass at Miller Rd. but there is a potential to 1-2 more, for a total of 2-3 within the project limits. The current curves in the area will be straightened out a bit as well in order to meet interstate standards.

Please review the attached documents and provide any comments or concerns you may have. As discussed, we are available to meet at the district with you and your father when your schedule allows. Please provide a few potential dates and meeting times and I will schedule a meeting.

I will be sending 2 other files in a separate email since the files were too large to be sent all at once.

Melba R. Schaus, P.E.
Project Manager
TPP | Project & Portfolio Management Section (PPM Team)

Texas Department of Transportation
600 W Interstate 2, Pharr, TX 78577
Tel (956) 702-6181 | Fax (956) 702-6110

TPP Division Site | **PPM Team Site** | **Crossroads** | **TxDOT Website**

Bringing you advanced project and portfolio management solutions for success.

Nolan Nicolas

From: Melba Schaus
Sent: Friday, October 28, 2016 8:03 AM
To: [redacted]
Cc: Griselda Saldivar; Margil Maldonado Jr
Subject: US 281 - SH 186 to FM 490
Attachments: 16-07-21 Schematic_Alternative_C.pdf; 16-07-21 Schematic_Alternative_D.pdf

Margo,

As discussed, attached are preliminary schematic alternatives for the US 281 project from SH 186 to FM 490, a project length of approximately 7 miles. The attached schematics shown 1 overpass at Miller Rd. but there is a potential to 1-2 more, for a total of 2-3 within the project limits. The current curves in the area will be straightened out a bit as well in order to meet interstate standards.

Please review the attached documents and provide any comments or concerns you may have. As discussed, we are available to meet at the district with you and your father when your schedule allows. Please provide a few potential dates and meeting times and I will schedule a meeting.

Thanks,

Melba R. Schaus, P.E.
Project Manager
TPP | Project & Portfolio Management Section (PPM Team)

Texas Department of Transportation
600 W Interstate 2, Pharr, TX 78577
Tel (956) 702-6181 | Fax (956) 702-6110

TPP Division Site | PPM Team Site | Crossroads | TxDOT Website
Bringing you advanced project and portfolio management solutions for success.

Nolan Nicolas

From: Melba Schaus
Sent: Thursday, November 10, 2016 4:38 PM
To: [redacted]
Cc: Margil Maldonado Jr
Subject: US 281 - Benstsen Property (La Coma Red Gate Corp)
Attachments: alt a close.pdf; alt b close.pdf; alt c close.pdf; alt d close.pdf

Margo & Mr. Bentsen,

After my meeting with Mr. Bentsen, I advised him I would provide him a “close up view” of how the proposed project would impact his entrance to the property, specifically his gate, home, trees, or 8’ fence along the length of his property.

Depending on the alternative chosen a segment of fence will have to be relocated to the new proposed ROW line. If you have any additional questions, please let me know. If you would like to schedule an in person meeting, please call in advance or send me an email and we can set that up as well.

Thanks,

Melba R. Schaus, P.E.
Project Manager
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Melba R. Schaus, P.E.
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Bringing you advanced project and portfolio management solutions for success.

From: Norma Garza
To: Melba Schaus
Cc: Margil Maldonado Jr; Sanjay Upadhyay
Subject: US 281- Voicemail and telephone call with Margo Bentsen
Date: Tuesday, December 13, 2016 3:50:23 PM

I received a voice mail from Margo Bentsen today (approximately 1:50 pm), and called her back this afternoon (approximately 3:35 pm).

She wanted to know how far the NB exit to Red Gate Road overpass was, and if persons traveling NB would be able to exit at Red Gate Road overpass and access their main gate. I told her the distance between the NB exit point (ramp and FR intersection) and the Red Gate Road was approximately 1,800 LF based on the schematic with four alternatives. I told her people would not be able to access their main gate from Red Gate Road, but would instead have to travel further north and exit at Laguna Seca Road and take the turnaround south (approximately 0.25 miles) to their main gate. She understood, and said thank you for the information. (She was hoping people could access directly from Red Gate Road overpass.)

This is for your project file….let me know if you have any questions or need clarification.

Norma Y. Garza, P.E.
Advanced Project Development Supervisor
District RMA Liaison
TxDOT- Pharr District
Office (956) 702-6180
Mobile (956) 638-3518
Email: Norma.Garza@txdot.gov

Mtg with Calvin Bentsen
11-3-16

Attendees: Calvin Bentsen, Margil Maldonado (PHR District), Melba Schaus (TPP-PPM)

Unplanned visit from Calvin Bentsen – owner of Red Gate La Copa Corporation
[redacted]crbentsen@aol.com
Phone: (956) 686-0205
Phone: 1-800-ben(236)-tsen(8736)

I showed Mr. Bentsen current schematic, with 4 alternatives, with 1 overpass at Miller Rd. Schematic typical section showed 2-12' lanes with 4' inside shoulder and 10' outside shoulder in both directions.

Main concerns were:

1. Would the design impact the entrance gate(red gate)?
2. Would the design impact the home located near existing ROW line?
3. Would the design impact trees adjacent to existing ROW line?
4. Would the design impact the 8' deer proof fence located along existing ROW line?
5. Having to drive N. to proposed overpass at Miller Rd to make turnaround to drive South to Edinburg.

Mr. Bentsen advised that trucks/traffic that enter property are mostly on a routine basis. Mr. Bentsen requested a blow-up of his property for all 4 alternatives shown. Mr. Bentsen requested the blow-up sheets show the distance from proposed ROW line to his property line as well as the distance from proposed ROW to existing home adjacent to existing ROW line.

Appendix J

Public Meeting Comment Response Matrix

US 281 (Future I-69C) From FM 490 to SH 186/FM1017					
Commenter Number	Commenter Name	Date Received	Source	Comment Topic	Response
1	Alejandra Skillbred	4/25/17	Comment card	I live on Los Vendos Dr. Any alternative would work for a easy turnaround/access on our property. I'm happy we'll get a direct access to avoid merging into speeding traffic when we are trying to to on 281 north or south.	Thank you for your comments.
2	Beatrice Vela	4/25/17	Comment card	I am absolutely thrilled that we will have a frontage road instead of expressway running in front of our home. Presently, the traffic is extreme, very fast, and very noisy. It is also very difficult to get on expressway when there is so much traffic approaching coming that from overpass on 186 and 10. Can't wait for this project to be done. It's a prayer answered!	Thank you for your comments.
3	Donald Kelley	4/25/17	Comment card	Checking waterwell along ranch, 281 inside game fence.	We will check the location of the existing well however; if it is responsibility of the property owner if the well is located on private property.
4	Norberto Galvan	4/25/17	Comment card	I have been waiting for this for quite some time now. Safety is my primary reason for hoping for this to take place. I have witnessed these semi trailers with tons of load traveling 65, 75 mph come to a screeching stop because a school bus decides to stop in front of them to drop off children. This project could not wait any longer. I hope we will be allowed to bike ride on the frontage rd.	Safety is an element of the project purpose and need and is considered in project concept and design. Dedicated bike lanes have been evaluated and will not be part of the project.
5	Terri Villarreal	4/25/17	Comment card	Since the construction will not begin for 3 years - could the speed limit in the curves after 490 going north to Red Gate Road be reduced due to the number of accidents - especially gets worse when it rains.	The current posted speed limit is 70 mph. The speed limit for the new facility will be evaluated upon construction. In the meantime, TxDOT has noted your request and will explore the possibility of reducing the posted speed in this area.
6	Abigail & Rick Rodriguez, Adina & Juan Lopez	4/25/17	Comment card	No. 1663438 has the wrong owner listed. Wendell Crutchfield hasn't been the owner for approximately 10 years. Please correct files. Current owners are listed above.	Verified and corrected.
7	Corliss Rink	4/25/17	Comment card	Looking forward to safer on-off on Floral Road! Maybe you could look at improving Lazy Palm Dr from end of pavement to 1017/186. Trees block half of this gravel road and we could get off on 186 exit and comen down 107 to our road and home w/o having to go back south to Floral and home.	The proposed ramp placement locations are desiged to meets the State (TxDOT) and Federal Interstate roadway design and highway geometric guidelines and standards. We will revisit the proposed geometry and make any correction if necessary. Lazy Palm Drive is outside the scope of work in this study.

8	Jim Bob Feller	3/16/18	Emailed	I own Valley Gateway RV Park, which is just north of Floral Rd. on Hwy 281. As a business owner, I have concern about the future expansions. It seems like after they resurfaced the road a few years back the noise is greater, and really hurting my business. Please keep me informed of any drawings, plans, etc. I will make every effort to be back in the valley for the April 25 meeting at Brewster Elementary. I live in Granbury, TX.	The proposed ramp placement locations are desiged to meets the State (TxDOT) and Federal Interstate roadway design and highway geometric guidelines and standards. We will revisit the proposed geometry and make any correction if necessary. It is best for the driveway to be place at least 600' from the gore. Additionally, during the environmental studies, a traffic Noise Analysis will be completed to determine if a Noise Barrier is reasonable and feasible. If that determination is made, affected property owners will have the opportunity to vote on whether the barrier is desired.
9	Jim Bob Feller	4/17/18	Emailed	I am glad to have exit in front of park. My only concern is if it is too close to the main entrance. It could be a hazard with 65 ft trailers trying to turn sharply off the ramp. If possible, it would be better a few feet north, about where the crossover is now.	The proposed roadway surface ware course will be composed of Hot Mix Asphaltic Concrete (HMAC) and it is relatively less noisier that concrete. There are no ROW taking planned in this area.
10	Angelina Carrizales	4/25/17	Comment card	INST.No. 783999, ownership is incorrect - Carl S. & Paula T Witt; should be Angela & Gilbert Carrizales	Verified and corrected.
11	Rolando Zamora	5/1/17	Emailed	1) At the entrance of my property on east side on HWY 281 at my gate entrance there was a water pipe on hwy property about 10-15 yards from my fence line avoe ground surface. I think they capped it. You need to notify me so that I can tell you where it Is before you all start digging. Will you provide driveway entrance to my property?	The topographical survey does indicate an pipe located within the existing US 281 ROW. There are no ROW taking is planned planned in this area however; we will visually examine and address it if deemed necessary. A driveway will be providedfrom roadway to ROW.

12	Edward Vasquez	4/27/17	Emailed	This letter is an attempt to highlight the important of the store, Los Venados, in Linn-San Manuel, Texas north of Edinburg. Our community has been informed that as an expansion of highway 281, an overpass will be constructed in front of the gated neighborhood, Los Venados Subdivision. If an overpass is placed in this area, it will greatly affect the accessibilty to our only community store. Business for this store is generated by our community, as it is our only source of groceries and other necessities, and by the travelers through our community for fuel and food. Our concern is that the store will not survive without constant flow of traffic and easy accessibility. In previous years, the community has had Chapa's Shamrock, owned by Patricia Chapa and Romeo Garza's Phillips 66 across from Chapa's. When the overpass was built, several years back, on FM 1017, both of these stores closed and hurt the community greatly. I, along with others from the Linn-San Manuel community, urge you to construct the new overpass on Floral Road which would make accessing the store more feasible and make it easier for the store to generate business. The community as a whole wold benefit more by an overpass on Floral Road than by one in front of a gated subdivision that has not reached capacity.	The proposed ramp placement locations are desiged to meets the State (TxDOT) and Federal Interstate roadway design and highway geometric guidelines and standards. We will revisit the proposed geometry and make any correction if necessary.
13	Bill Ward	4/26/17	Emailed	In response to proposed routes A-D, my mother, Margaret Garcia wouldvote her preferences in this order:: 1st-best fit; 2nd-East Side; 3rd-50/50; 4th-West Side	Thank you for your comments.
				Shawn Snider Fire Chief, City of Edinburg. I just wanted to make a couple of comments. Number 1, probably the most important for emergency response is that I've been responding to incidents in this area for 26 years, and have seen some horrific accidents, some complete blockage of raodways and passages, by having current existing conditions as they are. I think that having this project move through with the least amount of impact to the residents adjoining the property is a smart thing to do and an effective way of moving the project forward. It is vitally important, I think, for the safety of the traveling public that it's not only from this area here, but, as well, the Rio Grande Valley, to have this passage created and completed. Along with that, the other important factor that needs to be considered is that this is one of three corridors for hurricane evacuation, not only to evacuate out, but also to bring resources in, in the event of a	

14	Shawn Snider	4/25/17	Transcript	resources in, in the event of a catastrophic hurricane or rain event. We've already seen what hurricanes can do to the past, gaining access out of the Rio Grande Valley, especially up in the Encino area, where the ground water level and rain and drainage can actually take over the roadway. So having this roadway system built will allow for the continuation of flow to get north of San Manuel, Linn-San Manuel, and also the state countralow plan that is in place today that we all rely on as emergency managers and fire chiefs to be able to implement in the event that we need to move people out. This project here will allow for the continuation of flow of residents in the area on the frontage roads without impacting the contraflow piece. But back to the original piece.We've been asking for improvements to this area for years. The roadway construction, as it is with the speeds and the amount of traffic and the flow that is passign throught this area, it's critically important that this project move as fast as possible to ease that burden that the amount of traffic that's coming through here can be done safely and manage effectively with the propert roadway system.	Thank you for your comments.
15	Jim Bob Feller	5/8/17	Emailed	I own Valley Gateway RV Park, 34961 Hwy 281 N, which is on the north end of the proposed expansion. The current drawings have the exit ramp just passing my main entrance. I attended the meeting on April 25, 2017 and have voice my concerns to Melba Schaus, and one of the other engineers present at the meeting. I also filled out a form with a brief description. My concern is that the exit, as proposed, will present a safety hazard for people trying to exit into our park pulling large travel trailers. The engineer that I spoke to said it might be possible to back it up a few feet. To do so would make a big difference. For the exit to begin where the current crossover is now would be great. I have attached a photo, with an orange line depicting what I am talking about. We have 3 entrances, the first from the north is not used much, the second is the main entrance. I plan to block off the 1st and 3rd entrances with gates, to lime drive thru traffic. Another question, will campground sign be available before exit? Several years ago the highway was resurfaced. Since that time the road noise has really hurt our business. Some of our permananet residents are less than 50 years from the highway. Will the new surfaces, and frontage road be different? I plan to build a 7 ft tall fence for a sound barrier. It is my understanding, from Melba, that none of our frontage will be taken in. I need to verify that before I build the fence.	The proposed ramp placement locations are desiged to meets the State (TxDOT) and Federal Interstate roadway design and highway geometric guidelines and standards. We will revisit the proposed geometry and make any correction if necessary. It is best for the driveway to be place at least 600' from the gore. Additionally, during the environmental studies, a traffic Noise Analysis will be completed to determine if a Noise Barrier is reasonable and feasible. If that determination is made, affected property owners will have the opportunity to vote on whether the barrier is desired.

16	Jim Bob Feller	4/25/18	Comment card	Concerned about exit ramp too close to my entrance, dangerous for 65' travel trailers to make the turne	The proposed ramp placement locations are desiged to meets the State (TxDOT) and Federal Interstate roadway design and highway geometric guidelines and standards. We will revisit the proposed geometry and make any correction if necessary. It is best for the driveway to be place at least 600' from the gore.

Appendix K

Documentation of Public Hearing Opportunity

Documentation of Public Hearing Opportunity

Project Location
Hidalgo County, Texas

US 281 (Future I-69C)
CSJ: 0255-07-140

Project Limits
From FM 490 to SH 186/FM 1017

Contents

A. Notices provided (including newspaper ad tear sheets, copy of notices sent, list of notice recipients, and project website screen capture)
B. Certification

A. Notices

US 281 (Future I-69C)
CSJ: 0255-07-140

Newspaper Ad Tear Sheets

US 281 (Future I-69C)
CSJ: 0255-07-140

Texas Department of Transportation

Aviso
Evaluación Ambiental Preliminar Disponible para Revisión Pública
y
Oportunidad para una Audiencia Pública

Us 281 (Futura I-69 C)
de FM 490 a SH 186/FM 1017
CSJ: 0255-07-140
Condado de Hidalgo, Texas

El Departamento de Transporte de Texas (TxDOT, por sus siglas en ingles) es la agencia principal que propone reconstruir y mejorar la US 281 (futura I-69 C) desde FM 490 a SH 186/FM 1017 en el Condado Hidalgo, Texas. La distancia total del proyecto es aproximadamente 7.04 millas. Conforme al Código Administrativo de Texas, Título 43, §2.106 y §2.108, este aviso informa al público que una evaluación preliminar ambiental (EA) está disponible para revisión pública y que TxDOT ofrece una oportunidad para una audiencia pública sobre el proyecto propuesto. La revisión ambiental, consultas y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo, o han sido, llevadas a cabo por TxDOT bajo las reglas 23 U.S.C. 327 y un Memorando de Entendimiento fechado el 16 de diciembre de 2014 y ejecutado por FHWA y TxDOT.

Las mejoras planificadas para US 281 consisten en la reconstrucción y la mejora de la carretera dividida rural existente a estándares interestatales como parte del futuro I-69C. US 281 se designará como I-69C una vez que se complete la construcción. El proyecto propuesto incluirá ampliar la instalación existente de una carretera dividida de 4 carriles a una autopista urbana con vías de acceso continuas en cada dirección. Específicamente, las mejoras incluyen la construcción de 4 carriles principales (2 en cada dirección) y caminos laterales de 2 carriles en cada dirección. Las mejoras completas agregarían 2 carriles principales (1 carril en cada dirección) cuando sean necesarios para absorber las futuras necesidades de trafico. Además, puentes se agregarían sobre la Calle Laguna Seca, la Calle Red Gate, y la Avenida de Los Venados. La distancia total del proyecto propuesto es aproximadamente 7.04 millas. El propósito del proyecto propuesto sería de mejorar la movilidad, la seguridad, y las operaciones de tráfico a lo largo de US 281 (futura I-69C).

El proyecto propuesto se construirá generalmente dentro del derecho de vía existente (ROW por sus siglas en ingles) que varía entre 200 pies y 320 pies. Sin embargo, se requerirán aproximadamente 65.38 acres de ROW adicional, en ciertas ubicaciones, para mejorar las instalaciones.

El proyecto propuesto podría impactar potencialmente a dos propiedades residenciales, una instalación de agua de la ciudad de Edinburg y un molino de viento que no funciona. La información sobre el programa de TxDOT de asistencia para reubicación, los beneficios y servicios para los desplazados, así como la información sobre los horarios provisionales para la adquisición y construcción de ROW se pueden obtener en la oficina del distrito de TxDOT en la dirección que se indica a continuación. La asistencia de reubicación está disponible para personas y empresas desplazadas.

Algunas áreas del proyecto propuesto están ubicadas dentro de una llanura de inundación de 100 años designada por la Agencia Federal para el Manejo de Emergencias (FEMA por sus siglas en ingles). El diseño hidráulico para el proyecto propuesto estaría de acuerdo con los estándares de diseño actuales de FHWA y TxDOT. El proyecto también requerirá la reubicación de un Marcador Oficial Histórico de Texas (OTHM) para La Noria Cardenena.

La evaluación ambiental preliminar, los mapas que muestran la ubicación y el diseño del proyecto, el programa de construcción provisionales y otra información relacionada con el proyecto están archivados y disponibles para inspección de lunes a viernes de 8:00 a.m. a 5:00 p.m. en la oficina del distrito de TxDOT Pharr, 600 West Interstate 2, Pharr, Texas 78577, y (956) 702-6181 y en el sitio web de TxDOT en www.txdot.gov, palabra clave: "US 281 Future I-69C".

Cualquier persona interesada puede solicitar una audiencia pública que cubra los efectos sociales, económicos y ambientales de la ubicación y el diseño propuesto para este proyecto. Las solicitudes para una audiencia pública deben enviarse por escrito antes del 27 de agosto de 2019 a TxDOT Pharr District Office, Melba Schaus, P.E., Project Manager, 600 West Interstate 2, Pharr, Texas 78577. La audiencia se llevará a cabo si diez o más personas envían solicitudes por escrito para una audiencia, o si una agencia con jurisdicción sobre el proyecto envía una solicitud por escrito para una audiencia que esté respaldada por razones por las cuales una audiencia será útil.

Adicionalmente, cualquier comentario sobre la evaluación ambiental preliminar se puede enviar a la dirección incluida arriba. Los comentarios deben enviarse antes del 27 de agosto de 2019. Si tiene preguntas o inquietudes generales sobre el proyecto propuesto o la oportunidad para la audiencia pública, comuníquese con Melba Schaus, PE, Gerente de Proyecto, al (956) 702-6181, o por correo electrónico a Melba.Schaus@txdot.gov.

La revisión ambiental, consultas y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo, o han sido, llevadas a cabo por TxDOT bajo las reglas 23 U.S.C. 327 y un Memorando de Entendimiento fechado el 16 de diciembre de 2014 y ejecutado por FHWA y TxDOT.

Traspaso de la presidencia de Tricamex del Valle de Texas

McAllen.- La Cónsul encargada del Consulado de México en McAllen, Texas, Socorro G. Jorge Cholula, recibió la Presidencia y Secretaría del grupo TRICAMEX, integrado además por los Consulados de El Salvador, Guatemala y Honduras, en esta ciudad la semana anterior. Durante esta sesión de trabajo, la Cónsul de Honduras en McAllen, Ana Bulnes rindió un informe en el que citó las diversas actividades llevadas a cabo por el grupo de concertación durante el primer semestre de 2019 de presidencia hondureña, que contribuyeron al intercambio de buenas prácticas consulares, sobre todo en materia de protección a los nacionales de los respectivos países. También el grupo dio la bienvenida al nuevo titular del Consulado de Guatemala en McAllen, Cónsul Walther Noak Sierra. La presidencia mexicana de TRICAMEX McAllen concluirá en el mes de enero de 2020 y será el Consulado de El Salvador, quien recibirá la presidencia semestral. Cabe destacar que el 2 de diciembre de este año, está previsto el 4to Aniversario de creación del grupo de concertación consular TRICAMEX McAllen.

McAllen.- La cónsul Socorro Jorge Cholula asumió la presidencia de Tricamex.

MyMonitorNews.com - 07/28/2019 Copy Reduced to 49% from original to fit letter page Page : A12

Off-duty Los Angeles police officer killed; gunman sought

BY STEFANIE DAZIO
THE ASSOCIATED PRESS

LOS ANGELES — An off-duty Los Angeles police officer was shot and killed at a Lincoln Heights taco stand early Saturday and authorities are searching for a suspect.

Officer Juan Diaz was out with his girlfriend and two other males when he was shot, according to an official who had been briefed on the investigation but was not authorized to speak publicly.

Diaz

Diaz was standing in line at the food truck with his girlfriend and two other males when he noticed a man vandalizing something nearby and approached him, the official said. The official did not know if Diaz identified himself as a police officer.

The man left and a short time later returned with a group of other males and lifted up his shirt to display a handgun, the official said. The official added that Diaz and the others tried to get into a car to avoid violence but the man started shooting.

Assistant Chief Beatrice Girmala said a civilian flagged down a motorcycle officer at around 1 a.m. Saturday and reported shots fired. The officer found two men had been shot.

Diaz died from his wounds and the other man was hospitalized in unknown condition.

Police believe the gunman is a member of the Avenues gang, which is now the focus of the department's investigation, according to the official who was not authorized to speak publicly.

"Words cannot match the depth of sorrow that Angelenos are feeling today," Mayor Eric Garcetti said in a statement, calling it a senseless murder.

The LA Police Protective League released a statement calling for the police chief to utilize every department resource to find the gunman.

"We mourn the loss of our brother and we will always remember his service and sacrifice to the Los Angeles Police Department and the residents of our city," it said.

Chief Michel Moore asked for the public's help finding the attacker.

Guatemalan activists protest migrant asylum pact with US

BY SONNY FIGUEROA
THE ASSOCIATED PRESS

GUATEMALA CITY — Hundreds of Guatemalans gathered Saturday to protest an agreement that President Jimmy Morales' government signed with Washington to require migrants passing through the Central American country to seek asylum here, rather than pushing on to the U.S.

Carrying the blue and white national flag, demonstrators rallied in front of the presidential palace in Guatemala City. They called on Morales to resign for having caved in to U.S. demands to make Guatemala a "safe third country" for migrants, including those headed north from El Salvador and Honduras.

The protesters also carried signs calling for Guatemala to maintain its sovereignty and expressing support for a United Nations-backed anti-corruption commission that Morales expelled from the country. Morales' four-year term ends in January, and an August runoff election is scheduled to determine his successor.

Oliver de Ros | The Associated Press

Demonstrators demand the resignation of Guatemalan President Jimmy Morales, featured in the poster that reads in Spanish "Traitor," outside the Presidential House on Saturday in Guatemala City.

Human rights activist Brenda Hernández, one of the organizers of the protest march, said this poor nation can barely take care of its own people, much less shelter vulnerable migrants.

"Guatemala doesn't have the capacity to be a safe country for migrants that aren't desired in the United States," she said.

The same conditions driving Salvadorans and Hondurans to flee their country — gang violence, poverty, joblessness and a prolonged drought that has severely hit crop yields — are also present in Guatemala.

Guatemala's state attorney for human rights, Jordán Rodas, also criticized the accord with the U.S., saying it violates the Vienna Convention because Guatemala signed under duress.

As talks toward an immigration agreement stumbled, U.S. President Donald Trump threatened to tax remittances sent home by Guatemalans working in the U.S., to impose import tariffs on Guatemalan goods and to restrict travel to the U.S. by Guatemalans.

Rodas described the accord as "immoral and illegal."

Guatemala's top court has said the agreement must be approved by the country's congress to be enforceable.

Texas Department of Transportation

NOTICE

Draft Environmental Assessment Available for Public Review and Opportunity for a Public Hearing

Us 281 (Future I-69 C)
From FM 490 to SH 186/FM 1017
CSJ: 0255-07-140
Hidalgo County, Texas

The Texas Department of Transportation (TxDOT) is the lead agency proposing to reconstruct and improve US 281 (future I-69 C) from FM 490 to SH 186/FM 1017 in Hidalgo County, Texas. The total distance of the project is approximately 7.04 miles. Pursuant to Texas Administrative Code, Title 43, §2.106 and §2.108, this notice advises the public that a draft environmental assessment (EA) is available for public review and that TxDOT is affording an opportunity for a public hearing on the proposed project. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

The planned improvements to US 281 consist of reconstructing and upgrading the existing rural divided highway to interstate standards as part of the future I-69C. US 281 will be designated as I-69C once construction is complete. The proposed project would include widening the existing facility from a 4-lane divided highway to an urban freeway with continuous frontage roads in each direction. Specifically, the improvements include constructing 4 main lanes (2 in each direction) and 2-lane frontage roads in each direction. The ultimate completed improvements would add 2 main lanes (1 lane each direction) as future traffic warrants. Additionally, overpasses would be added at Laguna Seca Road, Red Gate Road, and Los Venados Drive. The length of the proposed project is approximately 7.04 miles. The purpose of the proposed project would be to enhance mobility, safety, and improve traffic operations along US 281 (future I-69C).

The proposed project will be constructed generally within the existing right-of-way (ROW) which varies between 200 feet and 320 feet. However, approximately 65.38 acres of additional ROW will be required, at select locations, to upgrade the facility.

The proposed project would potentially impact two residential properties, a City of Edinburg water utility facility and a non-functional windmill. Information about the TxDOT Relocation Assistance Program, benefits and services for displacees, as well as information about the tentative schedules for ROW acquisition and construction can be obtained from the TxDOT district office at the address listed below. Relocation assistance is available for displaced persons and businesses.

Some areas of the proposed project are located within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain. The hydraulic design for the proposed project would be in accordance with current FHWA and TxDOT design policies. The project will also require the relocation of an Official Texas Historical Marker (OTHM) for the La Noria Cardenena.

The draft EA, maps showing the project location and design, tentative construction schedules, and other information regarding the project are on file and available for inspection Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. at TxDOT Pharr District office, 600 West Interstate 2, Pharr, Texas 78577, and (956) 702-6181 and at TxDOT website at www.txdot.gov, keyword: "US 281 Future I-69C".

Any interested person may request a public hearing covering the social, economic and environmental effects of the proposed location and design for this project. Requests for a public hearing must be submitted in writing on or before August 27, 2019 to the TxDOT Pharr District Office, Melba Schaus, P.E., Project Manager, 600 West Interstate 2, Pharr, Texas 78577. A hearing will be held if ten or more individuals submit timely written requests for a hearing, or if an agency with jurisdiction over the project submits a timely written request for a hearing that is supported by reasons why a hearing will be helpful.

Additionally, any comments on the draft EA can be submitted to the address included above. Comments must be submitted on or before August 27, 2019. If you have general questions or concerns regarding the proposed project or the opportunity for the public hearing, contact Melba Schaus, P.E., Project Manager, at (956) 702-6181, or by email at Melba.Schaus@txdot.gov.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

EEISD

From Page 1A

Both monthly payroll and bi-weekly payroll staff will receive a projected increase of $1,000. Combined, this is a group numbers about 355 and totals about $355,000.

Following passage of House Bill 3, which reformed school finance, provided property tax relief and mandated pay raises, 30% from state revenue must go toward pay compensation. 75% of this portion is mandated toward teachers, counselors, nurses and librarians. The remaining 25% will be allocated to non-administrative staff members.

Administration, which totals 41 staff members, received a projected increase of $3,000. These were not mandated by House Bill 3 but the costs could be made up, Rivera said in a presentation.

All employees will receive a $500 August incentive pay and another $500 December incentive pay.

> "It wasn't just monies for salaries, it was money for other programs as well, so I think they did a tremendous job in Austin this past summer, (in) getting much needed monies to all school districts in Texas."
>
> **Richard Rivera**
> Interim Superintendent

"I think we were able to come up with a healthy pay raise for all staff members, especially with the bonuses," Rivera said. "I feel our staff deserves this … they did not get a raise last year, the staff last year did not get a raise at all."

The district will additional revenue of over $4.8 million following the legislative session, with pay increases and stipends totaling to over $1.4 million.

Early education was among one of the largest allotments, with over $1.1 million according to the funding recap presented at the board meeting. High School, transportation, school safety and bilingual were among other programs to receive allocations.

"It wasn't just monies for salaries, it was money for other programs as well, so I think they did a tremendous job in Austin this past summer, (in) getting much needed monies to all school districts in Texas," he said.

McAllen, Monte Alto, Mission and Sharyland are among the other school districts in Hidalgo County which have approved their pay compensation plans.

Other school districts have recently held workshops to discuss the matter, including the Edinburg and Mercedes school districts.

jhoang@themonitor.com

CHARGES

From Page 1A

The investigation, dubbed Operation Blue Shame, was far reaching. It resulted in the arrest of 15 people and a total of four law enforcement officers, including Beltran and Polanco. Nine others, including a former Houston police officer and a former officer with the Harris County Constable's Office have previously pleaded guilty and are pending sentencing.

The drug trafficking organization "created fake bundles of drugs and used law enforcement officers to seize them in order to cover up the theft," the news release said, later adding Beltran and Polanco "abused their positions of trust as law enforcement officers to further the conspiracy."

The pair would provide reports of the seizure to Meyer, who would then deliver the paperwork to Gulf Cartel members in Mexico as proof the drugs had been seized. Fake cocaine would be turned in as evidence, and the actual drugs were later sold for profit.

All three defendants testified at trial and denied participating in the scheme, but the jury did not believe them.

Aside from the conspiracy charge, Polanco and Meyer were also found guilty of one and two counts, respectively, of possession with intent to distribute cocaine. Polanco was also convicted of making a false statement to federal agents, while Meyer was also found guilty of kidnapping.

U.S. District Judge Keith P. Ellison allowed Beltran and Polanco to remain on bond pending their sentencing hearing set for Oct. 8. Meyer will remain in custody. All face a minimum of 10 years and up to life in prison as well as a possible $10 million fine.

The U.S. Drug Enforcement Administration and Immigration and Customs Enforcement's Homeland Security Investigations conducted Operation Blue Shame.

ID

From Page 1A

So Spradley and her team work with other teams working in Mexico on missing person cases who are also taking DNA samples.

She also works with the Calibrí Center, an organization that partners with families and forensic scientists to find missing people and identify those who have died on the border.

This organization collects detailed missing persons reports and DNA samples from families searching for missing loved ones.

The goal is to identify each and every set of remains and reunite those people with their loved ones.

"That is our goal. We would love to repatriate everybody," she said. "It is really difficult and most people say, 'Oh, you only identified 33.' Those 33, it took a lot of work to get there."

And the work is far from over.

"It seems like it could go on for a long time," Spradley said.

mreagan@brownsvilleherald.com

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Notices and List of Recipients

US 281 (Future I-69C)
CSJ: 0255-07-140

Notice
Draft Environmental Assessment Available for Public Review
and
Opportunity for a Public Hearing

US 281 (Future I-69 C)
From FM 490 to SH 186/FM 1017
CSJ: 0255-07-140
Hidalgo County, Texas

The Texas Department of Transportation (TxDOT) is the lead agency proposing to reconstruct and improve US 281 (future I-69 C) from FM 490 to SH 186/FM 1017 in Hidalgo County, Texas. The total distance of the project is approximately 7.04 miles. Pursuant to Texas Administrative Code, Title 43, §2.106 and §2.108, this notice advises the public that a draft environmental assessment (EA) is available for public review and that TxDOT is affording an opportunity for a public hearing on the proposed project. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

The planned improvements to US 281 consist of reconstructing and upgrading the existing rural divided highway to interstate standards as part of the future I-69C. US 281 will be designated as I-69C once construction is complete. The proposed project would include widening the existing facility from a 4-lane divided highway to an urban freeway with continuous frontage roads in each direction. Specifically, the improvements include constructing 4 main lanes (2 in each direction) and 2-lane frontage roads in each direction. The ultimate completed improvements would add 2 main lanes (1 lane each direction) as future traffic warrants. Additionally, overpasses would be added at Laguna Seca Road, Red Gate Road, and Los Venados Drive. The length of the proposed project is approximately 7.04 miles. The purpose of the proposed project would be to enhance mobility, safety, and improve traffic operations along US 281 (future I-69C).

The proposed project will be constructed generally within the existing right-of-way (ROW) which varies between 200 feet and 320 feet. However, approximately 65.38 acres of additional ROW will be required, at select locations, to upgrade the facility.

The proposed project would potentially impact two residential properties, a City of Edinburg water utility facility and a non-functional windmill. Information about the TxDOT Relocation Assistance Program, benefits and services for displacees, as well as information about the tentative schedules for ROW acquisition and construction can be obtained from the TxDOT district office at the address listed below. Relocation assistance is available for displaced persons and businesses.

Some areas of the proposed project are located within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain. The hydraulic design for the proposed project would be in accordance with current FHWA and TxDOT design policies. The project will also require the relocation of an Official Texas Historical Marker (OTHM) for the La Noria Cardenena.

The draft EA, maps showing the project location and design, tentative construction schedules, and other information regarding the project are on file and available for inspection Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. at TxDOT Pharr District office, 600 West Interstate 2, Pharr, Texas 78577, and (956) 702-6181 and at TxDOT website at www.txdot.gov, keyword: "US 281 Future I-69C".

Any interested person may request a public hearing covering the social, economic and environmental effects of the proposed location and design for this project. Requests for a public hearing must be submitted in writing on or before August 27, 2019 to the TxDOT Pharr District Office, Melba Schaus, P.E., Project Manager, 600 West Interstate 2, Pharr, Texas 78577. A hearing will be held if ten or more individuals submit timely written requests for a hearing, or if an agency with jurisdiction over the project submits a timely written request for a hearing that is supported by reasons why a hearing will be helpful.

Additionally, any comments on the draft EA can be submitted to the address included above. Comments must be submitted on or before August 27, 2019. If you have general questions or concerns regarding the proposed project or the opportunity for the public hearing, contact Melba Schaus, P.E., Project Manager, at (956) 702-6181, or by email at Melba.Schaus@txdot.gov.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

Aviso
Evaluación Ambiental Preliminar Disponible para Revisión Pública
y
Oportunidad para una Audiencia Pública

US 281 (Futura I-69 C)
de FM 490 a SH 186/FM 1017
CSJ: 0255-07-140
Condado de Hidalgo, Texas

El Departamento de Transporte de Texas (TxDOT, por sus siglas en ingles) es la agencia principal que propone reconstruir y mejorar la US 281 (futura I-69 C) desde FM 490 a SH 186/FM 1017 en el Condado Hidalgo, Texas. La distancia total del proyecto es aproximadamente 7.04 millas. Conforme al Código Administrativo de Texas, Título 43, §2.106 y §2.108, este aviso informa al público que una evaluación preliminar ambiental (EA) está disponible para revisión pública y que TxDOT ofrece una oportunidad para una audiencia pública sobre el proyecto propuesto. La revisión ambiental, consultas y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo, o han sido, llevadas a cabo por TxDOT bajo las reglas 23 U.S.C. 327 y un Memorando de Entendimiento fechado el 16 de diciembre de 2014 y ejecutado por FHWA y TxDOT.

Las mejoras planificadas para US 281 consisten en la reconstrucción y la mejora de la carretera dividida rural existente a estándares interestatales como parte del futuro I-69C. US 281 se designará como I-69C una vez que se complete la construcción. El proyecto propuesto incluirá ampliar la instalación existente de una carretera dividida de 4 carriles a una autopista urbana con vías de acceso continuas en cada dirección. Específicamente, las mejoras incluyen la construcción de 4 carriles principales (2 en cada dirección) y caminos laterales de 2 carriles en cada dirección. Las mejoras completas agregarían 2 carriles principales (1 carril en cada dirección) cuando sean necesarios para absorber las futuras necesidades de trafico. Además, puentes se agregarían sobre la Calle Laguna Seca, la Calle Red Gate, y la Avenida de Los Venados. La distancia total del proyecto propuesto es aproximadamente 7.04 millas. El propósito del proyecto propuesto sería de mejorar la movilidad, la seguridad, y las operaciones de tráfico a lo largo de US 281 (futura I-69C).

El proyecto propuesto se construirá generalmente dentro del derecho de vía existente (ROW por sus siglas en ingles) que varía entre 200 pies y 320 pies. Sin embargo, se requerirán aproximadamente 65.38 acres de ROW adicional, en ciertas ubicaciones, para mejorar las instalaciones.

El proyecto propuesto podría impactar potencialmente a dos propiedades residenciales, una instalación de agua de la ciudad de Edinburg y un molino de viento que no funciona. La información sobre el programa de TxDOT de asistencia para reubicación, los beneficios y servicios para los desplazados, así como la información sobre los horarios provisionales para la adquisición y construcción de ROW se pueden obtener en la oficina del distrito de

TxDOT en la dirección que se indica a continuación. La asistencia de reubicación está disponible para personas y empresas desplazadas.

Algunas áreas del proyecto propuesto están ubicadas dentro de una llanura de inundación de 100 años designada por la Agencia Federal para el Manejo de Emergencias (FEMA por sus siglas en ingles). El diseño hidráulico para el proyecto propuesto estaría de acuerdo con los estándares de diseño actuales de FHWA y TxDOT. El proyecto también requerirá la reubicación de un Marcador Oficial Histórico de Texas (OTHM) para La Noria Cardenena.

La evaluación ambiental preliminar, los mapas que muestran la ubicación y el diseño del proyecto, el programa de construcción provisionales y otra información relacionada con el proyecto están archivados y disponibles para inspección de lunes a viernes de 8:00 a.m. a 5:00 p.m. en la oficina del distrito de TxDOT Pharr, 600 West Interstate 2, Pharr, Texas 78577, y (956) 702-6181 y en el sitio web de TxDOT en www.txdot.gov, palabra clave: "US 281 Future I-69C".

Cualquier persona interesada puede solicitar una audiencia pública que cubra los efectos sociales, económicos y ambientales de la ubicación y el diseño propuesto para este proyecto. Las solicitudes para una audiencia pública deben enviarse por escrito antes del 27 de agosto de 2019 a TxDOT Pharr District Office, Melba Schaus, P.E., Project Manager, 600 West Interstate 2, Pharr, Texas 78577. La audiencia se llevará a cabo si diez o más personas envían solicitudes por escrito para una audiencia, o si una agencia con jurisdicción sobre el proyecto envía una solicitud por escrito para una audiencia que esté respaldada por razones por las cuales una audiencia será útil.

Adicionalmente, cualquier comentario sobre la evaluación ambiental preliminar se puede enviar a la dirección incluida arriba. Los comentarios deben enviarse antes del 27 de agosto de 2019. Si tiene preguntas o inquietudes generales sobre el proyecto propuesto o la oportunidad para la audiencia pública, comuníquese con Melba Schaus, PE, Gerente de Proyecto, al (956) 702-6181, o por correo electrónico a Melba.Schaus@txdot.gov.

La revisión ambiental, consultas y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo, o han sido, llevadas a cabo por TxDOT bajo las reglas 23 U.S.C. 327 y un Memorando de Entendimiento fechado el 16 de diciembre de 2014 y ejecutado por FHWA y TxDOT.

This notice was included with the NAOPH

Notice
Geometric Design Changes (Ramp Reversals)

US 281 (Future I-69 C)
From FM 490 to SH 186/FM 1017
CSJ: 0255-07-140
Hidalgo County, Texas

The Texas Department of Transportation (TxDOT) is the lead agency proposing to reconstruct and improve US 281 (future I-69 C) from FM 490 to SH 186/FM 1017 in Hidalgo County, Texas. The total distance of the project is approximately 7.04 miles.

This is to inform you that some geometric changes (ramp reversals) have been made to the proposed US 281 schematic as a result of the comments received during and after the public meeting conducted by the Texas Department of Transportation (Pharr District) at Brewster School on April 25, 2017.

The updated schematic is available for inspection Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. at TxDOT Pharr District office, 600 West Interstate 2, Pharr, Texas 78577, and (956) 702-6181 and at TxDOT website at www.txdot.gov, keyword: "US 281 Future I-69C". If coming in person to view schematic or ask any questions, it is recommended that you make an appointment with Melba Schaus, P.E., Project Manager at (956) 702-6181 or by email at melba.schaus@txdot.gov.

Aviso
Cambios en el Diseño Geométrico (Reversiones de Rampas)

US 281 (Futuro I-69 C)
de FM 490 a SH 186 / FM 1017
CSJ: 0255-07-140
Condado de Hidalgo, Texas

El Departamento de Transporte de Texas (TxDOT) es la agencia principal que propone reconstruir y mejorar la US 281 (futura I-69 C) de FM 490 a SH 186 / FM 1017 en el Condado de Hidalgo, Texas. La distancia total del proyecto es de aproximadamente 7.04 millas.

Esto es para informarle que se han realizado algunos cambios geométricos (reversiones de rampas) en el esquema propuesto de US 281 como resultado de los comentarios recibidos durante y después de la reunión pública realizada por el Departamento de Transporte de Texas (Distrito de Pharr) en la Escuela Brewster el 25 de abril de 2017.

El esquema actualizado está disponible para inspección de lunes a viernes entre las 8:00 a.m. y las 5:00 p.m. en la oficina del distrito de TxDOT Pharr, 600 West Interstate 2, Pharr, Texas 78577, y (956)702-6181 y en el sitio web de TxDOT en www.txdot.gov, palabras clave: "US 281 Future I-69C". Si desea venir en persona para ver el esquema o hacer algunas preguntas, se recomienda que haga una cita con Melba Schaus, P.E., Gerente de Proyecto al (956) 702-6181 o por correo electrónico a melba.schaus@txdot.gov.

TxDOT US 281 (Future I-69C) NAOPH Ramps Letter Recipients

KVS FAMILY LIMITED PARTNERSHIP
[redacted]
McALLEN, TX 78502-5790

ELLISON & ELLISON, LTD
[redacted]
PHARR, TX 78577

DEBORAH PRINGLE ET AL
[redacted]
BROWNSVILLE, TX 78250-7412

ALEJANDROSILVA MARROQUIN
[redacted]
McALLEN, TX 78504-5738

EDUARDO D. MD & CRISTELA H. FLORES MD
[redacted]
EDINBURG, TX 78539-7014

GINGER MELISSA PEREZ
[redacted]
EDINBURG, TX 78539-4465

NORBERTO GALVAN
[redacted]
EDINBURG, TX 78542-9670

NORA POLANIS
[redacted]
HOUSTON, TX 77065

JESUS RUBEN SALINAS
[redacted]
EDINBURG, TX 78539-6135

RODOLFO DARREN SALINAS
[redacted]
EDINBURG, TX 78541

KVS FAMILY LIMITED PARTNERSHIP
[redacted]
McALLEN, TX 78502-5790
DUPLICATE

PRISCILLA & ROBERTO TIJERINA
[redacted]
LINN, TX 78563-0027

MARGARET H. GARCIA
[redacted]
SAN ANTONIO, TX 78213-3434

HOMER SALAZAR
[redacted]
EDINBURG, TX 78541,

JOSE R. GARCIA JR.
[redacted]
EDINBURG, TX 78542

EVA MURPHY
[redacted]
NEW CARROLTON, MD 20784-3612

SANDRA G. SALINAS
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EDINBURG, TX 78539-3302

MARGARET H. GARCIA
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SAN ANTONIO, TX 78213-3434

JOSE L. ZAMORA, JR & NINFA P. ZAMORA
[redacted]
EDINBURG, TX 78540-1706

OLIVIA C. CASTILLO
[redacted]
LINN, TX 78563-0269

JESUS GUTIERREZ JR
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EDINBURG, TX 78541-4597

La Coma Red Gate Corp.
[redacted]
McAllen, TX 78503-1257

MARIA DEL ROSARIO TREVINO GUERRA
[redacted]
EDINBURG, TX 78540-0757

BIC DEVELOPMENT CORP.
[redacted]
EDINBURG, TX 78539-9308

TOMAS VILLARREAL JR
[redacted]
ALBUGUERQUE, NM 87107

EDMUNDO SILLAS
[redacted]
EDINBURG, TX 78539

ALEJANDRO THOMAS MARTINEZ
[redacted]
LINN, TX 78563-0155

GUERRA BROTHERS MASTER PARTNERSHIP
[redacted]
LINN, TX 78563-0038

GARCO LTD.
[redacted]
McALLEN, TX 78504

GILBERTO & ANGELINA CARRIZALES
[redacted]
EDINBURG, TX 78542-4954

TxDOT US 281 (Future I-69C) NAOPH Ramps Letter Recipients

VETERANS LAND BOARD C/O MAGIN
EDWARD CARRIZALES
[redacted]
EDINBURG, TX 78542-6152

EDWARD G. VASQUEZ
[redacted]
EDINBURG, TX 78539

ABIGAIL & RICARDO RODRIQUEZ JUAN
J. & ADINA LOPEZ
[redacted]
EDINBURG, TX 78542-3843

GARCO LTD.
[redacted]
McALLEN, TX 78504
DUPLICATE

RAQUEL FLORES
[redacted]
LINN, TX 78563-0037

LORETTA GUTIERREZ
[redacted]
EDINBURG, TX 78542

STAGS UNLIMITED INC.
[redacted]
EDINBURG, TX 78542-1215

JACKSON HURST
[redacted]
KENNESAW,GEORGIA 30144

This notice was included with the NAOPH

Notice
Additional Right-of-Way (ROW) Identification for
US 281 (Future I-69 C)

From FM 490 to SH 186/FM 1017
CSJ: 0255-07-140
Hidalgo County, Texas

The Texas Department of Transportation (TxDOT) is the lead agency proposing to reconstruct and improve US 281 (future I-69 C) from FM 490 to SH 186/FM 1017 in Hidalgo County, Texas. The total distance of the project is approximately 7.04 miles.

The review of drainage improvements required additional Right of Way (ROW) to be acquired from certain properties along the project's proposed ROW. The additional ROW to be acquired will serve as linear detention ponds that will run parallel to the US 281 frontage roads.

The updated schematic is available for inspection Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. at TxDOT Pharr District office, 600 West Interstate 2, Pharr, Texas 78577, and (956) 702-6181 and at TxDOT website at www.txdot.gov, keyword: "US 281 Future I-69C". If coming in person to view schematic or ask any questions, it is recommended that you make an appointment with Melba Schaus, P.E., Project Manager at (956) 702-6181 or by email at melba.schaus@txdot.gov.

Aviso

Identificación de Derecho de Vía Adicional (ROW por sus siglas en ingles) para US 281 (Futuro I-69 C)

de FM 490 a SH 186 / FM 1017

CSJ: 0255-07-140

Condado de Hidalgo, Texas

El Departamento de Transporte de Texas (TxDOT) es la agencia principal que propone reconstruir y mejorar la US 281 (futura I-69 C) de FM 490 a SH 186 / FM 1017 en el Condado de Hidalgo, Texas. La distancia total del proyecto es de aproximadamente 7.04 millas.

La revisión de las mejoras de drenaje requirió la adquisición de derecho de vía (ROW por sus siglas en ingles) adicional a lo largo del área propuesto para el proyecto. El ROW adicional que se adquirirá servirá como estanques de detención de agua lineales que se construirán en paralelo a las carreteras de acceso de US 281.

El esquema actualizado está disponible para inspección de lunes a viernes entre las 8:00 a.m. y las 5:00 p.m. en la oficina del distrito de TxDOT Pharr, 600 West Interstate 2, Pharr, Texas 78577, y (956) 702-6181 y en el sitio web de TxDOT en www.txdot.gov, palabras clave: "US 281 Future I-69C". Si desea venir en persona para ver el esquema o hacer algunas preguntas, se recomienda que haga una cita con Melba Schaus, P.E., Gerente de Proyecto al (956) 702-6181 o por correo electrónico a melba.schaus@txdot.gov.

TxDOT US 281 (Future I-69C) NAOPH Right of Way Letter Recipients

BIC DEVELOPMENT CORP.
[redacted]
EDINBURG, TX 78539-9308

TOMAS VILLARREAL JR
[redacted]
ALBUGUERQUE, NM 87107

GUERRA BROTHERS MASTER PARTNERSHIP
[redacted]
TX 78563-0038

GARCO LTD.
[redacted]
McALLEN, TX 78504

VETERANS LAND BOARD C/O MAGIN EDWARD CARRIZALES
[redacted]
EDINBURG, TX 78542-6152

EDWARD G. VASQUEZ
[redacted]
EDINBURG, TX 78539

ABIGAIL & RICARDO RODRIQUEZ JUAN J. & ADINA LOPEZ
[redacted]
EDINBURG, TX 78542-3843

RAQUEL FLORES
[redacted]
LINN, TX 78563-0037

LORETTA GUTIERREZ
[redacted]
EDINBURG, TX 78542

STAGS UNLIMITED INC.
[redacted]
EDINBURG, TX 78542-1215

GARCO LTD.
[redacted]
McALLEN, TX 78504
DUPLICATE

TxDOT Project Webpage

US 281 (Future I-69C)
CSJ: 0255-07-140

TxDOT US 281 (Future I-69C), Hidalgo County, Project Webpage for NAOPH

Notice Affording an Opportunity for a Public Hearing and Draft Environmental Assessment Available - US 281 (future I-69C)

Purpose: The purpose of this notice is to advise the public that a draft environmental assessment (EA) is available for public review and that TxDOT is affording an opportunity for a public hearing on the proposed project US 281 (the future I-69C) from FM 490 to SH 186/FM 107 in Hidalgo County, Texas. Requests for a public hearing must be submitted in writing on or before Tuesday, August 27, 2019.

Description: The proposed improvements to US 281 consist of reconstructing and upgrading the existing rural divided highway to interstate standards as part of the future I-69C. US 281 will be designated as I-69C once construction is complete. Additionally, overpasses would be constructed at Laguna Seca Road, Red Gate Road, and Los Venados Drive. The length of the proposed project is approximately 7.04 miles. The purpose of the proposed project would be to enhance mobility, safety, and improve traffic operations along US 281 (future I-69C).

The proposed project will be constructed generally within the existing right of way (ROW) which varies between 200 feet and 320 feet. However, approximately 65.38 acres of additional ROW will be required, at select locations, to upgrade the roadway.

The proposed project would potentially impact two residential properties, a City of Edinburg water utility facility and a non-functional windmill. Information about the TxDOT Relocation Assistance Program, benefits and services for displacees, as well as information about the tentative schedules for ROW acquisition and construction can be obtained from the TxDOT district office at the address listed below. Relocation assistance is available for displaced persons and businesses.

Some areas of the proposed project are located within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain. The hydraulic design for the proposed project would be in accordance with current FHWA and TxDOT design policies. The project will also require the relocation of an Official Texas Historical Marker (OTHM) for the La Noria Cardenena.

The draft EA, maps showing the project location and design, tentative construction schedules, and other information regarding the project are on file and available for inspection Monday through Friday between the hours of 8 a.m. and 5 p.m. at TxDOT Pharr District office, 600 W Interstate 2, Pharr, Texas 78577, and (956) 702-6181 and at TxDOT website at www.txdot.gov, keyword: "US 281 Future I-69C".

Any interested person may request a public hearing covering the social, economic and environmental effects of the proposed location and design for this project. Requests for a public hearing must be submitted in writing to:

TxDOT Pharr District Office
US 281 (future I-69C) Project Manager
600 West Interstate 2
Pharr, Texas 78577

A hearing will be held if 10 or more individuals submit timely written requests for a hearing, or if an agency with jurisdiction over the project submits a timely written request for a hearing that is supported by reasons why a hearing will be helpful. Additionally, any comments on the draft EA can be submitted to the address included above. If you have general questions or concerns regarding the proposed project or the opportunity for the public hearing, contact the US 281 Project Manager, at (956) 702-6181.

Memorandum of Understanding: The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

Downloads:

- Draft Environmental Assessment
- Notice
- Notice (Español)

Contact:

TxDOT Pharr District
600 West Interstate 2
Pharr, Texas 78577

(956) 702-6181
Email

Posted July 18, 2019

B. Certification

US 281 (Future I-69C)
CSJ: 0255-07-140

Public Hearing Opportunity Certification

Project Name:

County Name:

Control Section Job Numbers (CSJ): Include all associated CSJs

Project Limits From:

Project Limits To:

I certify that the following statements are true and apply to the project identified above.

A. An opportunity has been afforded the public to request a hearing addressing the project location and design.

B. Less than ten public hearing requests were received. ◉

C. No hearing request from an agency with jurisdiction supported with reasons why a hearing will be helpful were received. ◉

D. The economic and social effects of the project location and design and its impacts on the environment have been considered.

E. In determining economic, social, and environmental effects, the statutory provisions of the Civil Rights Act of 1964 have been considered and complied with.

F. The project consistency with the goals and objectives of urban planning, as dictated by the community, has been considered. ◉

G. Requirements of Texas Administrative Code, Title 43, Part 1, Chapter 2, Subchapter E, Section 2.106 have been met.

◉ Select if assigned under NEPA Assignment MOU.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

Rex Costley, P.E.

TxDOT Representative Name

08/28/19

Date