

DRAFT

ENVIRONMENTAL ASSESSMENT
for the Proposed Construction, Repair, and Maintenance of
the Laredo South All-Weather Road, U.S. Border Patrol,
Laredo Sector, Laredo, TX

Department of Homeland Security
U.S. Customs and Border Protection
U.S. Border Patrol

January 2016

EXECUTIVE SUMMARY

The U.S. Department of Homeland Security (DHS) U.S. Customs and Border Protection (CBP) Border Patrol Facilities and Tactical Infrastructure Program Management Office is charged with ensuring that all U.S. Border Patrol (USBP) facilities and tactical infrastructure (including fencing, patrol roads, and lighting) are properly constructed, maintained, and repaired to support USBP operations and agent and personnel safety.

The Proposed Action would provide for needed repair and maintenance of the Laredo South All-Weather Road and improve access along its entire length. The Laredo South All-Weather Road lies within the USBP Laredo South Station's area of responsibility, located within the Laredo Sector (LRT) in Laredo, TX. The Proposed Action would improve visibility, shorten transit and response times for USBP agents, ensure the long-term viability of the road, enhance security, and provide a safe and efficient patrol and movement corridor for USBP agents and support staff. This proposal is consistent with the stated intent of the National Border Patrol Strategy (2012–2016) (CBP 2012) to secure the borders of the United States using information, integration, and rapid response. This project is slated to be performed using a combination of commercial contracting and military training construction.

The Laredo South All-Weather Road provides USBP agents the lateral mobility to effectively patrol the border areas near the Rio Grande. It is critical to achieving USBP's mission tasks of predicting, detecting, identifying, classifying, responding, and resolving emerging threats. The existing road is deteriorating and needs repair and maintenance. In some instances, the existing road along the riverside has totally eroded, so it is proposed that certain new segments of road be installed. No segments of existing road are proposed for closure, reclamation, or abandonment as a result of the new construction. In addition, several small spurs are being evaluated that would improve access to the road from additional points along its length. These added access points would significantly shorten transit and response time for USBP agents while conducting operations. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project would also repair multiple sections of the roadway with poor drainage by incorporating a combination of culverts, low-water crossings, and drainage ditches into the road design.

Continued degradation and potential loss of this existing infrastructure would hinder its use for intelligence and surveillance data, lengthen response times, and reduce the ability to apprehend along this stretch of U.S. border. This deterioration in turn would require increased investment of manpower, vehicles, equipment, and alternative surveillance technologies to achieve required enforcement levels. The purpose of the Proposed Action is to facilitate the primary goals and objectives of USBP's strategy: to enhance enforcement activities while providing safe working conditions for USBP agents. Current increasing trends in illegal border activity require increased access and shortened response times to enhance the operational capabilities of USBP and to protect personnel.

The U.S. Department of Homeland Security's U.S. Customs and Border Protection has prepared this Environmental Assessment (EA) to address the potential effects, beneficial and adverse, of the proposed repair and minor additional construction of approximately 2 miles of road.

The Proposed Action would improve visibility, shorten transit and response times for USBP agents, ensure the long-term viability of the road, enhance security, and provide a safe and efficient patrol and movement corridor for USBP agents and support staff. This proposal is consistent with the stated intent of the National Border Patrol Strategy (2012–2016) (CBP 2012) to secure the borders of the United States using information, integration, and rapid response. There are two alternatives carried forward for evaluation in the EA, the No Action and Proposed Action Alternatives:

No Action Alternative—Continued Maintenance and Repair of Existing Road Segments

Under the No Action Alternative, CBP would continue to maintain and repair the existing road segments through CBP’s Comprehensive Tactical Infrastructure Maintenance and Repair Program evaluated in the *Environmental Assessment Addressing Proposed Tactical Infrastructure Maintenance and Repair Along the U.S./Mexico International Border in Texas* (Texas TIMR EA) (CBP 2014) or the Categorical Exclusions available to the Department of Homeland Security. This maintenance would include maintenance removal of vegetation encroaching on the existing roadways. However, no drainage improvements, alternative accesses, minor road construction, or major road improvements would be conducted. Existing roads that could continue being repaired under the No Action Alternative are approximately 4,500 feet in length. The No Action Alternative would serve as a baseline against which the impacts of the Proposed Action could be evaluated. The No Action Alternative would not satisfy the purpose and need for the project.

Proposed Action Alternative—Repair, Maintenance, and Minor Additional Construction of the Laredo South All-Weather Road

The Proposed Action Alternative includes the construction of new road segments in areas where the existing road has totally eroded and the continued maintenance and repair of existing and new road segments. In addition CBP would add drainage improvements to allow for better all-weather use of road and prevent accelerated road deterioration due to water damage from heavy rain or flooding. This alternative would consist of upgrading the road to CBP standard design specifications. The Proposed Action includes entrances to the Laredo South All-Weather Road from the southern terminus of Marcella Avenue, and Market Street via the existing access road to the City Wastewater Treatment Plant (a/k/a Springfield Avenue) to its intersection with Jameson Street on the eastern end. In addition, temporary construction access is planned across the adjacent railroad yard via Market Street and other existing public streets. The roadway would be surfaced by hauling, placing, and compacting soil and gravel bases to the required bearing capacity needed to support expected traffic loads. Surface coating would also be applied where needed to provide a weatherproof wearing surface, minimize long-term erosion, and ensure proper tie-in to existing road surfaces.

This alternative would require construction across an arroyo at the Marcella Avenue terminus. The design available at the time of this writing does not identify the preferred water crossing structure. Construction of a box culvert bridge would require coordination with the U.S. Army Corps of Engineers Fort Worth District Regulatory Branch for evaluation and permitting.

Removed trees would be replaced in a mitigation plot on the Laredo Community College campus. All clearing and grubbing residues would be disposed of at an approved landfill. Bird nesting surveys would be conducted by qualified personnel when activities occur during the migratory bird nesting season, March 15 to September 15. Additional erosion and sedimentation control actions, such as placement of riprap, gabions, or erosion control blankets, would be undertaken as needed to prevent potential erosion impacts.

Environmental Considerations

This EA discusses in summary form the absence of direct effects of the Proposed Action on the following resource areas:

- Land use
- Socioeconomic resources
- Environmental justice
- Protection of children
- Sustainability and greening
- Aesthetics and visual resources
- Climate change
- Human health and safety
- Utilities and infrastructure

The EA then evaluates in greater detail the likely impacts of the project on the following resource areas:

- Geology and soils
- Vegetation
- Terrestrial and aquatic wildlife
- Threatened and endangered species
- Water resources (including hydrology and groundwater, surface waters, waters of the United States, and floodplains)
- Air quality
- Noise
- Cultural resources
- Roadways and traffic
- Hazardous materials and waste management

The discussion in Chapter 3 first examines the impacts likely to result from the Proposed Action considered by itself, and then the cumulative effects of the Proposed Action in combination with other historic, ongoing, or foreseeable activities in the project area.

This EA concludes that the project would have the following effects for each of the analyzed resources:

Resource Area		Alternative 1: No Action	Alternative 2: Proposed Action— Construction, Maintenance and Repair to Laredo All-Weather Road
Geology/ soils	Soil	Short-term: Minor, direct and indirect, adverse impacts on soils.	Short-term: Minor, direct and indirect adverse effects on soils.
		Long-term: Minor, direct and indirect, adverse impacts on soils.	Long-term: Minor, direct and indirect adverse effects on soils.
	Prime farmland	Short-term: no impact.	Short-term: no impact.
		Long-term: no impact.	Long-term: no impact.
	Seismic activity	Short-term: no impact.	Short-term: no impact.
		Long-term: Minor adverse impact	Long-term: Minor beneficial direct impact.
	Geology	Short-term: no impact.	Short-term: Localized, minor, adverse effects that are localized to the areas where ground disturbance has occurred.
		Long-term: no impact.	Long-term: Localized minor beneficial effects from stabilization of roadways and drainage structures.
Vegetation		Short-term: Minor to moderate, direct and indirect, adverse effects.	Short-term: Minor direct adverse impacts would be minimized through the use of appropriate best management practices.
		Long-term: Minor to moderate, direct and indirect, adverse effects.	Long-term: Minor beneficial direct impact.
Threatened and endangered species	All species	Short-term: No impact.	Short-term: CBP concludes this project is unlikely to adversely affect the six species considered in this EA.
		Long-term: No impact.	Long-term: CBP concludes this project is unlikely to adversely affect the six species considered in this EA.
	Plant species	Short-term: No impact.	Short-term: Potentially negligible direct adverse impacts.
		Long-term: No impact.	Long-term: Potentially negligible direct adverse impacts.
	Bird species	Short-term: No impact.	Short-term: Insignificant direct impact.
		Long-term: No impact.	Long-term: Insignificant direct impact.
	Mollusk species	Short-term: No impact.	Short-term: Unlikely to adversely effect.
		Long-term: No impact.	Long-term: Negligible, insignificant direct impacts.
	Cat species	Short-term: No impact.	Short-term: Insignificant to negligible adverse direct effects
		Long-term: No impact.	Long-term: Insignificant to negligible adverse direct effects
Water resources	Hydrology and groundwater	Short-term: No impact.	Short-term: Minor direct adverse impacts would be minimized through the use of appropriate best management practices (BMPs).
		Long-term: No impact.	Long-term: Negligible, unlikely to adversely effect.
	Floodplains	Short-term: No impact.	Short-term: Minor direct adverse impacts would be minimized through the use of appropriate BMPs.
		Long-term: No impact.	Long-term: Negligible, unlikely to adversely effect.

Resource Area	Alternative 2: Proposed Action— Construction, Maintenance and Repair to Laredo All-Weather Road	
	Alternative 1: No Action	
<i>Air quality</i>	Short-term: No impact.	Short-term: Negligible adverse localized short-term impacts.
	Long-term: Negligible adverse localized impacts.	Long-term: Moderate beneficial impact.
<i>Noise</i>	Short-term: Negligible to minor adverse impacts.	Short-term: Negligible to minor adverse impacts.
	Long-term: Negligible to minor adverse impacts.	Long-term: Long-term, periodic, and negligible to minor, adverse effects on the ambient noise environment.
<i>Cultural resources</i>	Short-term: No impact.	Short-term: No impact.
	Long-term: No impact.	Long-term: No impact.
<i>Roadways and traffic</i>	Short-term: No impact.	Short-term: Short-term, negligible to minor, adverse effects on transportation.
	Long-term: Minor to moderate adverse impacts.	Long-term: Long-term, minor to moderate, beneficial effects on transportation.
<i>Hazardous materials and waste management</i>	Short-term: No impact.	Short-term: Negligible to minor adverse impacts.
	Long-term: No impact.	Long-term: Negligible to minor, adverse impacts.

On the basis of the documentation and analysis of potential environmental consequences associated with the Proposed Action and alternatives within this EA, CBP concludes this project is unlikely to have direct or indirect significant environmental impacts on the human environment, nor would it incrementally contribute to significant cumulative environmental impacts when combined with other past, present, or reasonably foreseeable activities within the area of analysis.

Therefore, CBP has prepared a Finding of No Significant Impact (FONSI) for the Proposed Action.

TABLE OF CONTENTS

Chapter 1. PURPOSE AND NEED	1-1
1.1. PROJECT LOCATION	1-2
1.2. PURPOSE AND NEED.....	1-4
1.3. SCOPE OF THE ANALYSIS	1-4
1.4. PUBLIC INVOLVEMENT.....	1-5
1.5. ORGANIZATION OF THIS EA.....	1-6
 Chapter 2. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES	 2-1
2.1. NO ACTION ALTERNATIVE—CONTINUED MAINTENANCE AND REPAIR OF EXISTING ROAD SEGMENTS	2-1
2.2. PROPOSED ACTION ALTERNATIVE—REPAIR, MAINTENANCE, AND MINOR ADDITIONAL CONSTRUCTION OF THE LAREDO SOUTH ALL-WEATHER ROAD	2-2
 Chapter 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	 3-1
3.1. FRAMEWORK FOR ANALYSIS	3-1
3.2. ANALYTICAL METHODS.....	3-2
3.3. RESOURCES TO BE EVALUATED IN THIS ENVIRONMENTAL ASSESSMENT	3-3
3.3.1. Areas Evaluated in Extended Analysis	3-3
3.3.2. Areas Not Examined in Further Analysis	3-3
3.4. GEOLOGY/SOILS	3-6
3.4.1. Affected Environment.....	3-6
3.4.2. Environmental Consequences.....	3-7
3.5. VEGETATION.....	3-7
3.5.1. Affected Environment.....	3-8
3.5.2. Environmental Consequences.....	3-9
3.6. TERRESTRIAL AND AQUATIC WILDLIFE	3-9
3.6.1. Affected Environment.....	3-9
3.6.2. Environmental Consequences.....	3-10
3.7. THREATENED AND ENDANGERED SPECIES	3-11
3.7.1. Affected Environment.....	3-11
3.7.2. Environmental Consequences	3-17
3.8. WATER RESOURCES	3-18
3.8.1. Affected Environment.....	3-18
3.8.2. ENVIRONMENTAL CONSEQUENCES	3-20
3.9. AIR QUALITY	3-21
3.9.1. AFFECTED ENVIRONMENT	3-21
3.9.2. ENVIRONMENTAL CONSEQUENCES	3-22
3.10. NOISE.....	3-22
3.10.1. AFFECTED ENVIRONMENT	3-22
3.10.2. ENVIRONMENTAL CONSEQUENCES	3-24
3.11. CULTURAL RESOURCES	3-25

3.11.1. AFFECTED ENVIRONMENT	3-25
3.11.2. ENVIRONMENTAL CONSEQUENCES	3-25
3.12. ROADWAYS AND TRAFFIC.....	3-26
3.12.1. AFFECTED ENVIRONMENT	3-26
3.12.2. ENVIRONMENTAL CONSEQUENCES	3-26
3.13. HAZARDOUS MATERIALS AND WASTE MANAGEMENT	3-27
3.13.1. AFFECTED ENVIRONMENT	3-29
3.13.2. ENVIRONMENTAL CONSEQUENCES	3-31
3.14. CUMULATIVE AND OTHER ADVERSE EFFECTS	3-32
3.14.1. CBP ACTIVITIES INCLUDED IN THE CUMULATIVE IMPACTS ANALYSIS.....	3-34
3.14.2. NON-CBP ACTIVITIES INCLUDED IN THE CUMULATIVE IMPACTS ANALYSIS	3-34
3.14.3. RESOURCES EVALUATED FOR CUMULATIVE IMPACTS	3-36
3.14.4. RESOURCES NOT FURTHER EVALUATED FOR CUMULATIVE IMPACTS.....	3-36
3.14.5. CUMULATIVE IMPACTS: GEOLOGY/SOILS	3-39
3.14.6. CUMULATIVE IMPACTS: VEGETATION	3-39
3.14.7. CUMULATIVE IMPACTS: TERRESTRIAL AND AQUATIC WILDLIFE	3-39
3.14.8. CUMULATIVE IMPACTS: THREATENED, ENDANGERED, AND CANDIDATE SPECIES.....	3-40
3.14.9. CUMULATIVE IMPACTS: WATER RESOURCES	3-42
3.14.10. CUMULATIVE IMPACTS: AIR QUALITY	3-43
3.14.11. CUMULATIVE IMPACTS: NOISE.....	3-43
3.14.12. CUMULATIVE IMPACTS: CULTURAL RESOURCES	3-43
3.14.13. CUMULATIVE IMPACTS: ROADWAYS AND TRAFFIC.....	3-44
3.14.14. CUMULATIVE IMPACTS: HAZARDOUS MATERIALS AND WASTE MANAGEMENT	3-44
Chapter 4. REFERENCES	4-1
Chapter 5. LIST OF PREPARERS.....	5-1
Chapter 6. DISTRIBUTION LIST.....	6-1
Chapter 7. AGENCIES AND PERSONS CONSULTED	7-1
Appendix A. Relevant Policy Documents, Invoking Actions, Regulatory Requirements, and Status of Compliance	A-1
Appendix B. Best Management Practices	B-1
Appendix C. Coordination with The City of Laredo Concerning the Tree Ordinance	C-1

Tables

Table 3-1. Wildlife Species Observed in the Project Area for the Proposed Action.....	3-10
Table 3-2. Endangered Species in the Action Area	3-12
Table 3-3. Species and Determination of Effect	3-18
Table 3-4. National Ambient Air Quality Standards (NAAQS).....	3-21
Table 3-5. Equipment Predicted Noise Level	3-23
Table 7-1. Threatened and Endangered Plant Species That Could Occur Within the Action Area	B-5

Figures

Figure 1-1. Current Condition of Existing Laredo South All-Weather Road.....	1-1
Figure 1-2. Laredo South All-Weather Road, Existing Profile	1-2
Figure 1-3. Location of Project Area	1-3
Figure 2-1. Arroyo crossing at the western end of the road near Marcella Avenue and the Laredo Water Plant	2-3
Figure 2-2. Road construction areas including low-water and culvert crossings at the arrows, and temporary staging areas depicted by black polygons.....	2-4
Figure 2-3. Proposed Action Alternative temporary staging areas	2-5
Figure 2-4. Proposed Action Alternative Configuration.....	2-6
Figure 3-1. Water Resources in the Action Area.....	3-19
Figure 3-2. Remediation Evidence in the Action Area.....	3-30
Figure 3-3. Locations of Projects Included in Cumulative Impacts	3-33

ABBREVIATIONS AND ACRONYMS

1		
2		
3	ACM	asbestos-containing material
4	BA	Biological Assessment
5	BMP	Best Management Practice
6	CAA	Clean Air Act
7	CBP	Customs and Border Protection
8	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
9	CEQ	President's Council on Environmental Quality
10	CFR	Code of Federal Regulations
11	CO	carbon monoxide
12	COTR	Contracting Officer's Technical representative
13	CWA	Clean Water Act
14	dBA	A-weighted decibel
15	DBH	diameter at breast height
16	DDT	dichlorodiphenyltrichloroethane
17	DHS	U.S. Department of Homeland Security
18	EA	Environmental Assessment
19	EIS	Environmental Impact Statement
20	EO	Executive Order
21	EPA	U.S. Environmental Protection Agency
22	ESA	Endangered Species Act
23	FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
24	FONSI	Finding of no Significant Impact
25	FPPA	Farm Land Policy Act
26	GH	Grass and hardwoods
27	GHG	greenhouse gas
28	GL	Grassland
29	GPS	Global Positioning System
30	LBP	lead-based paint
31	MBTA	Migratory Bird Treaty Act
32	mm/year	millimeters per year
33	mph	miles per hour
34	NAAQS	National Ambient Air Quality Standards
35	NEPA	National Environmental Policy Act
36	NH	Native hardwood
37	NHPA	National Historic Preservation Act
38	NO ₂	nitrogen dioxide
39	NPDES	National Pollutant Discharge Elimination System
40	NPL	National Priorities List
41	NRCS	Natural Resources Conservation Service
42	N ₂ O	nitrous oxide
43	O ₃	ozone
44	OA	Open area
45	OHWM	ordinary high water mark
46	OSHA	Occupational Safety and Health Administration

1	Pb	lead
2	PCB	polychlorinated biphenyls
3	PCE	Polychloroethelyne
4	PM-10	Particulate Matter
5	Ppb	parts per billion
6	Ppm	parts per million
7	percent g	2 percent of the force of gravity
8	RCRA	Resource Conversation and Recovery Act
9	SC	Salt cedar
10	SME	Subject Matter Expert
11	SO ₂	sulfur dioxide
12	SOP	Standard Operating Procedure
13	SWPPP	Storm Water Pollution Prevention Plan
14	TCEQ	Texas Commission on Environmental Quality
15	TDS	total dissolved solids
16	TIMR	Tactical Infrastructure Maintenance and Repair
17	TPWD	Texas Parks and Wildlife Department
18	TSCA	Toxic Substances Control Act
19	TWDB	Texas Water Development Board
20	TX	Texas
21	USACE	U.S. Army Corps of Engineers
22	USBP	U.S. Border Patrol
23	USDA	U.S. Department of Agriculture
24	USFWS	U.S. Fish and Wildlife Service
25	USGS	U.S. Geological Survey
26	µg/m ³	microgram per cubic meter
27	WoUSA	Waters of the United States

Chapter 1.

PURPOSE AND NEED

The U.S. Department of Homeland Security (DHS) U.S. Customs and Border Protection (CBP) has prepared this Environmental Assessment (EA) to evaluate the potential effects, beneficial and adverse, of the proposed repair and minor additional construction of approximately 2 miles of road. The Laredo South All-Weather Road lies within the U.S. Border Patrol (USBP) Laredo South Station's area of responsibility, located within the Laredo Sector in Laredo, TX. This project would use a combination of commercial contracting and military training construction under the auspices of the Joint Task Force-North (JTF-N) Program. Current road conditions are shown in Figure 1-1.

Figure 1-1. Current Condition of Existing Laredo South All-Weather Road



The road gives USBP agents the lateral mobility to effectively patrol the proximate border areas near the Rio Grande. It is critical to achieving USBP's mission tasks of predicting, detecting, identifying, classifying, responding, and resolving emerging threats. Some reaches of the existing road are deteriorating and need repair and maintenance. In some reaches, the existing road along the riverside has totally eroded, so the roadbed would be completely reconstructed in these areas. In addition, several small spurs and staging areas are being evaluated that would improve access to the road from additional points along its length. These added access points

would significantly shorten transit and response time for USBP agents while conducting operations.

This project includes designing and repairing approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project would also repair multiple sections of the roadway with poor drainage by incorporating a combination of culverts, low-water crossings, and drainage ditches into the road design. Continued degradation and potential loss of this existing infrastructure would hinder its use for intelligence and surveillance data, lengthen response times, and reduce the ability to apprehend along this stretch of U.S. border. This deterioration in turn would require an increased investment of manpower, vehicles, equipment, and alternative surveillance technologies to achieve required enforcement levels. This project would help to provide a safe and more efficient working environment for USBP agents and support staff in support of the National Border Patrol Strategy (2012–2016) to secure the borders of the United States using information, integration, and rapid response (CBP 2012).

1.1. PROJECT LOCATION

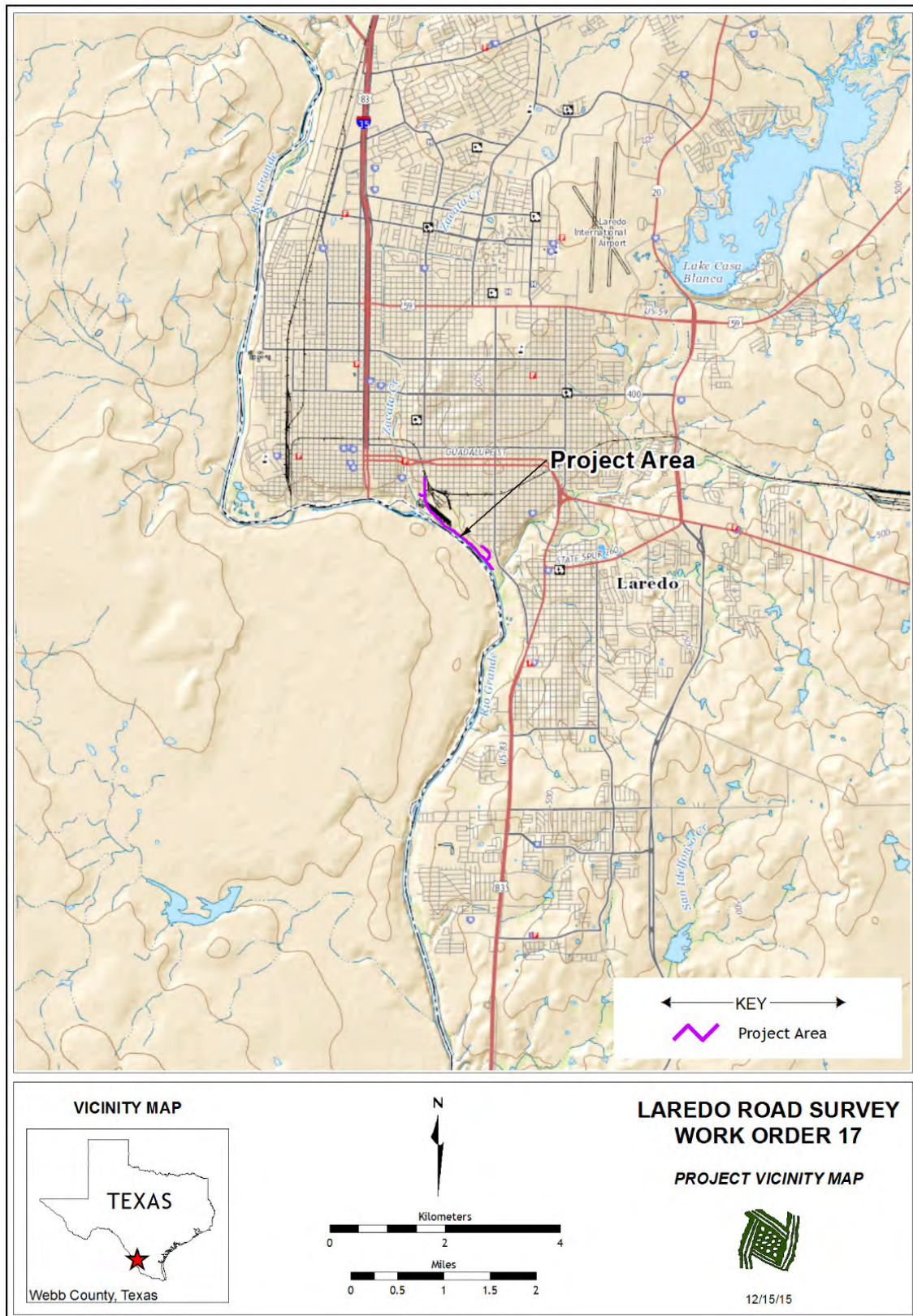
The Laredo South All-Weather Road is an existing USBP road located in Laredo, TX. The road is approximately 2 miles long and adjacent to the Rio Grande River (Figures 1-2 and 1-3).

Figure 1-2. Laredo South All-Weather Road, Existing Profile



1

Figure 1-3. Location of Project Area



1.2. PURPOSE AND NEED

The mission of CBP is to secure the borders of the United States and to prevent terrorists and terrorist weapons from entering the United States (CBP 2012). As an important component of CBP, USBP's mission is to detect and prevent terrorists and terrorist weapons from entering the country between official ports of entry. USBP will continue to advance its legacy mission to detect, interdict, and apprehend those who attempt to illegally enter or smuggle any person or contraband across—and identify, classify, respond, and resolve emerging threats along—the sovereign borders of the United States. The primary sources of authority granted to USBP agents are the Immigration and Nationality Act of 1952 (Public Law 82-414) contained in Title 8 of the United States Code (U.S.C.) “Aliens and Nationality” and other statutes relating to the immigration and naturalization of aliens. The USBP implemented the 2012–2016 Border Patrol National Strategy (CBP 2012). The new strategy is a risk-based approach to border security that uses information, integration, and rapid response to achieve two overall goals: secure America's borders and strengthen the Border Patrol.

The Border Patrol Facilities and Tactical Infrastructure Program Management Office is charged with ensuring that all USBP facilities and tactical infrastructure (including fencing, patrol roads, and lighting) are properly focused and maintained for USBP. The purpose of the Proposed Action is to facilitate the primary goals and objectives of USBP's strategy: to enhance enforcement activities while providing safe working conditions for USBP agents. Current illegal border activity requires increased access and shortened response times to enhance the operational capabilities of USBP and to protect personnel. The purpose for the Proposed Action is to provide river access through Zones 1-4. The need for the Proposed Action is to provide the following:

- More efficient and effective means of assessing cross-border activities
- Rapid detection and accurate characterization of potential threats
- Coordinated deployment of resources in the apprehension of illegal aliens
- Increased efficiency in surveillance and interdiction
- Enhanced deterrence of illegal cross-border activity
- Long-term viability of critical infrastructure
- Enhanced safety and security of USBP agents and border communities

1.3. SCOPE OF THE ANALYSIS

This EA includes the analysis of potential effects resulting from the repair, maintenance, and additional minor construction needed to correct existing deficiencies and ensure the long-term viability of the Laredo South All-Weather Road. This analysis does not include an assessment of USBP operations conducted in the field and away from the road. USBP operations would continue unchanged regardless of whether road improvements are undertaken beyond what is currently underway. The existing road and adjacent land areas identified for improvement are located in highly disturbed areas in downtown Laredo. The potentially affected biological and human environment would include resources associated with land located in the city of Laredo; however, most potential effects would be limited to the designated project area. CBP has conducted cultural and biological surveys of the project area, and the results of those surveys have been incorporated into this EA.

1.4. PUBLIC INVOLVEMENT

CBP consulted and coordinated with Federal, state, and local agencies while preparing this EA. Copies of this correspondence are provided in Chapter 7 and include formal and informal coordination conducted with the following agencies:

Federal Agencies:

- U.S. Fish and Wildlife Service

State Agencies:

- Texas Historical Commission

Native American Tribes:

- Alabama-Quassarte Tribal Town
- Apache Tribe of Oklahoma
- Comanche Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Quapaw Tribe of Oklahoma
- Thlopthlocco Tribal Town
- Tonkawa Tribe of Oklahoma
- Wichita and Affiliated Tribes

This Draft EA and Finding of No Significant Impact (FONSI) are available for public review for 45 days, and the Notice of Availability was published in the Laredo Morning Times, the Laredo Sun, and the San Antonio Express News newspapers. A copy of the Notice of Availability text will be included in the final EA. The Draft EA and FONSI are also available electronically at <http://www.cbp.gov/about/environmental-cultural-stewardship/nepa-documents/docs-review> and for review at the Laredo Public Library and the Texas A&M University Laredo Campus Library. Information and concerns are being solicited from local, state, and Federal regulatory agencies, and this Draft EA has been distributed to those agencies for comments. All comments received on this Draft EA along with CBP responses will be provided in an appendix of the Final EA.

1.5. ORGANIZATION OF THIS EA

This draft EA contains Chapters 1 through 7 and Appendices A and B, as described below.

- Chapter 1: Introduction—provides background information on the purpose and need for the Proposed Action, describes the scope of this EA, and summarizes the public involvement in developing this EA.
- Chapter 2: Proposed Action and Alternatives—describes the Proposed Action and the alternatives, and summarizes impacts of the alternatives.
- Chapter 3: Affected Environment and Environmental Consequences—describes the potentially affected resources within the project site and describes the potential direct, indirect, and cumulative impacts of the proposed alternatives.
- Chapter 4: References
- Chapter 5: List of Preparers
- Chapter 6: Distribution List
- Chapter 7: Agencies and Persons Consulted

The appendices include descriptions of methods used to estimate environmental impacts of the alternatives and the detailed information to support the impact analyses. The appendices are as follows:

- Appendix A: Relevant Policy Documents, Invoking Actions, Regulatory Requirements, and Status of Compliance
- Appendix B: Best Management Practices
- Appendix C: Coordination with The City of Laredo Concerning the Tree Ordinance.

Chapter 2.

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This chapter describes CBP's No Action and Proposed Action Alternatives evaluated in this EA. The Proposed Action would provide for needed repair and maintenance of the existing road and improve access along its entire length. The Proposed Action would improve visibility, shorten transit and response times for USBP agents, ensure the long-term viability of the road, enhance security, and provide a safe and efficient patrol and movement corridor for USBP agents and support staff. This proposal is consistent with the stated intent of the National Border Patrol Strategy (2012–2016) (CBP 2012) to secure the borders of the United States using information, integration, and rapid response. There are two alternatives carried forward for evaluation in the EA:

- No Action Alternative—Continued Maintenance and Repair of Existing Road Segments
- Proposed Action—Repair, Maintenance, and Minor Additional Construction of the Laredo South All-Weather Road (Proposed Action)

CBP looked for other alternatives, but because of the congested nature of the area along the border, other alternative road alignments were considered but not carried forward for analysis.

2.1. NO ACTION ALTERNATIVE—CONTINUED MAINTENANCE AND REPAIR OF EXISTING ROAD SEGMENTS

Under the No Action Alternative, CBP would continue to maintain and repair the existing road segments through its Comprehensive Tactical Infrastructure Maintenance and Repair Program evaluated in the *Environmental Assessment Addressing Proposed Tactical Infrastructure Maintenance and Repair Along the U.S./Mexico International Border in Texas* (Texas TIMR EA) (CBP 2014) or via the Categorical Exclusions available to the Department of Homeland Security. These activities would include vegetation control bordering the existing road segments. However, no drainage improvements, alternative accesses, minor road construction, or major road improvements would be conducted. Existing road segments that could continue being repaired under the No Action Alternative are approximately 4,500 feet long. The No Action Alternative would serve as a baseline against which the impacts of the Proposed Action would be evaluated. The No Action Alternative would not satisfy the purpose and need for the project.

2.2. PROPOSED ACTION ALTERNATIVE—REPAIR, MAINTENANCE, AND MINOR ADDITIONAL CONSTRUCTION OF THE LAREDO SOUTH ALL-WEATHER ROAD

The Proposed Action includes the construction of new road segments in areas where the existing road has totally eroded and the continued maintenance and repair of existing and new road segments. In addition CBP would add water crossings and drainage improvements to allow for better all-weather use of road and prevent accelerated road deterioration due to water damage from heavy rain or flooding (Figure 2-1). The green line in Figure 2-4 indicates the location and configuration evaluated in the Proposed Action.

This alternative includes upgrading the road to CBP Standard Road specifications. The Proposed Action includes entrances to the Laredo South All-Weather Road from the terminus of Marcella Avenue, south of Guatemozin Street, and from Market Street on the western end, to its intersection with South Meadow Avenue on the eastern end. Access roads at Wooster Street extension, South Stone Avenue, Foster, and Botage Streets would also be maintained. This alternative would include installing culverts as a bridge across an unnamed arroyo that empties into Zacata Creek. The crossing construction details available at the time of this writing are illustrated in Figure 2-1 below. The design available at the time of this writing does not identify the proposed structure to be employed; however, the use of a box culvert or bridge could be employed, requiring Clean Water Act coordination with the U.S. Army Corps of Engineers Fort Worth District Regulatory Branch.

The Proposed Action would involve clearing and grubbing as required to expand the width of the existing roadway to a full 20 feet plus 2 feet on each side to create usable shoulders. Clearing and grubbing would be completed with side boom mowers, rotary tillers, and/or bladed excavation equipment (such as bulldozers or bucket loaders). Culverts, low-water crossings, and drainage structures would then be installed in accordance with approved highway engineering practices. Figure 2-2 shows the road construction areas as well as the low-water or culvert crossings. The roadway would then be surfaced by hauling, placing, and compacting soil and gravel bases to the required bearing capacity needed to support expected traffic loads. Surface coating would also be applied where needed to provide a weatherproof wearing surface, minimize long-term erosion, and ensure proper tie-in to existing road surfaces. This alternative consists of approximately 4,500 feet of existing roads and would require construction of 5,500 feet of new roads totaling approximately 10,000 feet of roads to be repaired or constructed in areas where the existing road has totally eroded and subsequently maintained.

There would be temporary construction impacts during the Proposed Action. It is anticipated that the project would take several years to complete, because it is being accomplished by a combination of JTF-N training deployments and contracted services. The maintenance of shrubs and removal of vegetation will occur throughout the life of the project. Construction is currently planned to begin at the western terminus near Marcella Avenue and proceed downriver from there until completed. Road construction footprints would likely extend up to an additional 5 feet on each side of the final road and shoulder footprint. Also included in the Proposed Action would be temporary maintenance of four existing areas as staging areas, as shown below in Figures 2-2 and 2-3. The staging areas would include the cleared area at the terminus of Marcella Avenue, and near the proposed culvert bridge across the unnamed arroyo;

within the railway area abutting the water treatment plant; and at the downriver side of the project near Jameson and Foster Streets.

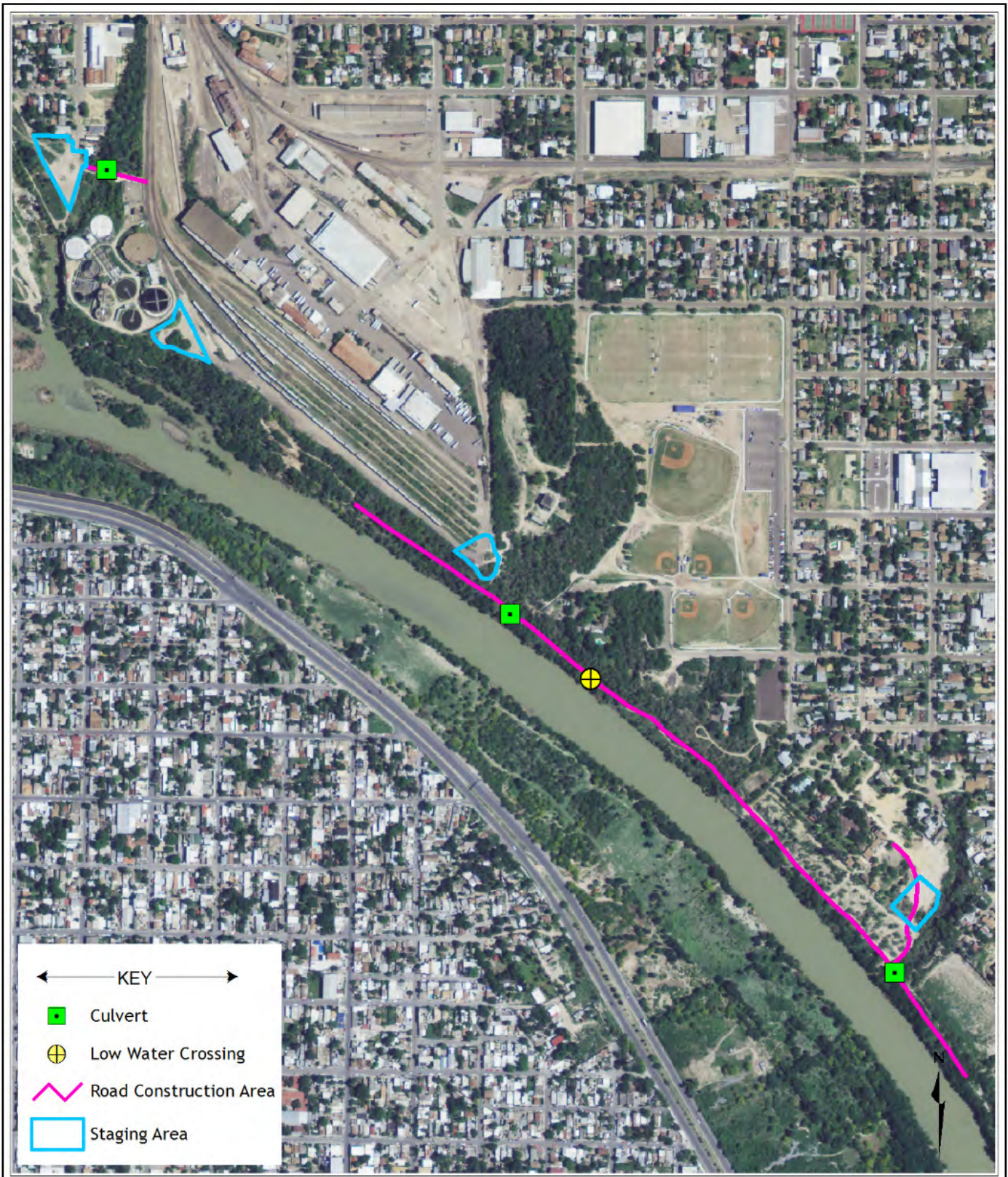
No existing segments of road would be abandoned as a result of the new construction; therefore, no segments of road are slated for closure, reclamation, or abandonment.

All road segments would be maintained by periodic blading of the road surface to retain a crown and shed precipitation. Vegetation would be maintained such that an overhead clearance of 15 feet and a roadside clearance 4 feet beyond the 20-foot plus shoulder footprint of the roadbeds would be achieved by removal and proper disposal of vegetation debris in an approved landfill. Vegetation removal would be subject to prevailing BMPs as listed in an Appendix to the Final EA to protect migratory birds during nesting season. Repairs would be made to road segments where erosion or other damage occurred to return the damaged road to its original constructed contours and width. If additional drainage features become required due to continued erosion, the proper clearances if required, will be obtained from the Fort Worth District, Army Corps of Engineers Regulatory Branch.

Figure 2-1. Arroyo crossing at the western end of the road near Marcella Avenue and the Laredo Water Plant



1 Figure 2-2. Road construction areas including low-water and culvert crossings at the
2 arrows, and temporary staging areas depicted by black polygons



1

Figure 2-3. Proposed Action Alternative temporary staging areas

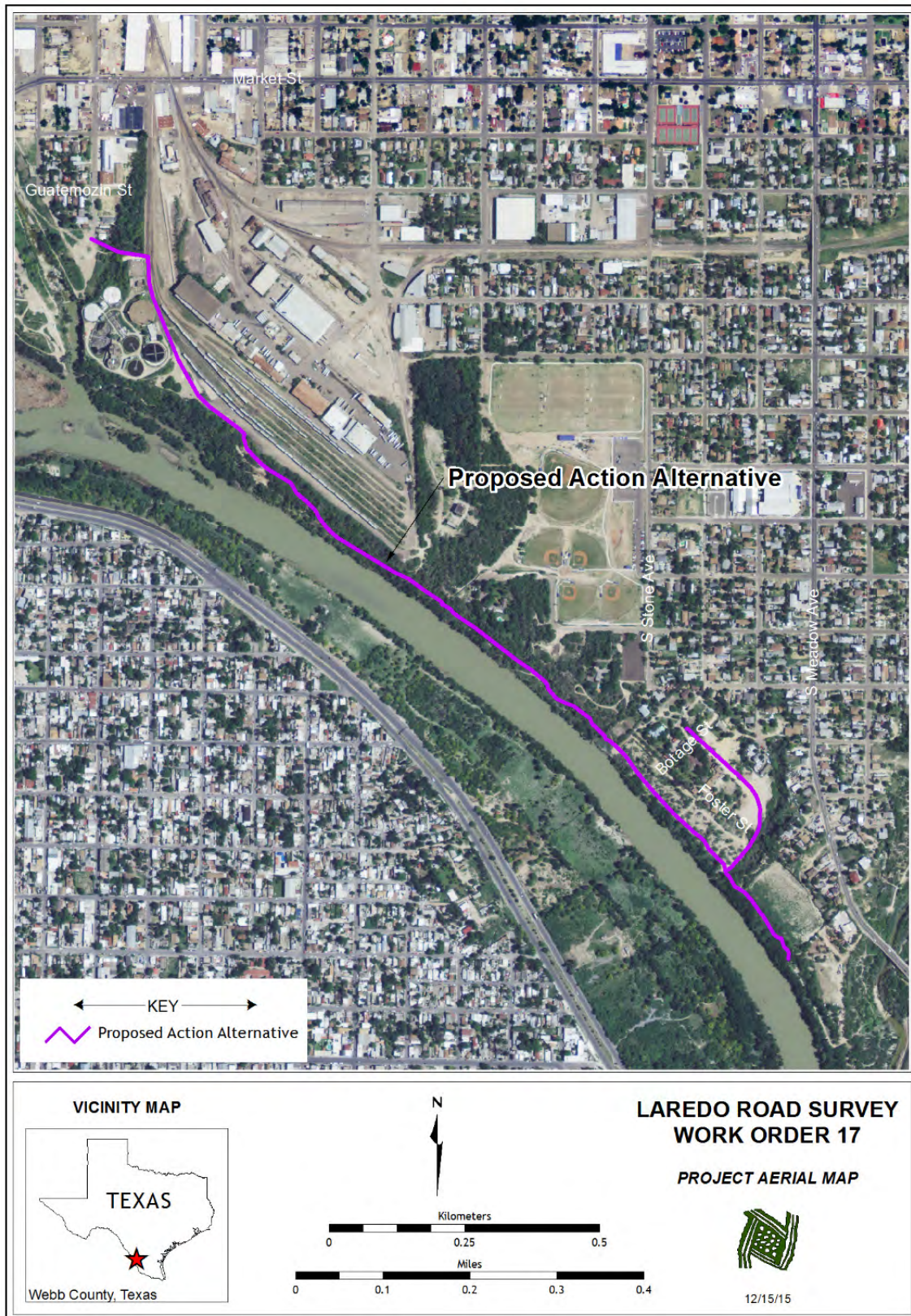


2

3

1

Figure 2-4. Proposed Action Alternative Configuration



Chapter 3.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment and potential environmental and human health impacts of conducting the Proposed Action considered in this EA, as well as those of the No Action Alternative. It discusses environmental impacts in detail with regard to geology and soils, vegetation, terrestrial and aquatic wildlife, threatened and endangered species, water resources, air quality, noise, cultural resources, roadways and traffic, hazardous materials and waste management. It discusses in general summary form the insignificant impacts for the resource areas of land use, socioeconomic resources, environmental justice, protection of children, sustainability and greening, aesthetics and visual resources, climate change, human health and safety, and utilities and infrastructure.

These resource areas were analyzed in a manner commensurate with their importance or the relative expected level of impact using the sliding-scale assessment approach. The general impact assessment methodology used to evaluate each resource area is also discussed in this chapter. Mitigation and monitoring, where applicable are discussed in Appendix B, Best Management Practices.

3.1. FRAMEWORK FOR ANALYSIS

NEPA is a Federal statute requiring Federal agencies to identify and analyze potential environmental impacts of their proposed actions before going forward with them. The President's Council on Environmental Quality (CEQ) is the principal Federal agency responsible for administering NEPA. CEQ regulations mandate that all Federal agencies use a systematic, interdisciplinary approach to environmental planning and the evaluation of actions that might affect the environment. This process evaluates the potential environmental consequences of a Proposed Action and considers alternative courses of action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed Federal decisions.

The process for implementing NEPA is codified in 40 Code of Federal Regulations (CFR) 1500–1508, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act; and DHS Directive 023-01, Environmental Planning Program; and CBP policies and procedures. The CEQ was established under NEPA to implement and oversee Federal policy in this process. CEQ regulations specify that an EA may be prepared to:

- Briefly provide evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).
- Aid in an agency's compliance with NEPA when an EIS is unnecessary.
- Facilitate preparation of an EIS when one is necessary.

To comply with NEPA, the planning and decision-making process for actions proposed by Federal agencies involves a study of other relevant environmental statutes and regulations. The

process does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them cooperatively in the form of an EA or EIS, which enables the decision maker to have a comprehensive view of the major environmental issues and requirements involved in the Proposed Action.

According to CEQ regulations, the requirements of NEPA must be integrated “with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively.” Within the framework of environmental impact analysis under NEPA, additional authorities that might be applicable include the Clean Air Act (CAA), Clean Water Act (CWA) (including a National Pollutant Discharge Elimination System [NPDES] stormwater discharge permit and Section 404 permit), Section 10 of the Rivers and Harbors Act of 1899, Noise Control Act, Endangered Species Act (ESA), Migratory Bird Treaty Act, National Historic Preservation Act (NHPA), Archaeological Resources Protection Act, Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), and various Executive Orders (EOs).

3.2. ANALYTICAL METHODS

This section characterizes the affected environment and analyzes the potential direct and indirect effects each alternative would have on the affected environment.

Each alternative was evaluated for its potential to affect physical, biological, and socioeconomic resources. Cumulative and other effects are discussed in Section 3.14. This EA considers all potentially relevant resource areas. The following are possible characteristics of impacts:

- *Short-term or long-term.* These characteristics are determined case by case and do not refer to any rigid time period. In general, short-term effects are those that would occur only with respect to a particular activity or for a finite period or only during the time required for maintenance and repair activities. Long-term effects are those that are more likely to be persistent and chronic.
- *Direct or indirect.* A direct effect is caused by and occurs contemporaneously at or near the location of the action. An indirect effect is caused by a Proposed Action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action. For example, a direct effect of erosion on a stream might include sediment-laden waters in the vicinity of the action, whereas an indirect effect of the same erosion might lead to lack of spawning and result in lowered reproduction rates of indigenous fish downstream.
- *Negligible, minor, moderate, or major.* These terms are used to characterize the relative magnitude or intensity of an impact.
 - Negligible effects are generally those that might be perceptible but are at the lower level of detection.
 - A minor effect is slight, but detectable.
 - A moderate effect is readily apparent.
 - A major effect is one that is severely adverse or exceptionally beneficial.

- *Adverse or beneficial.* An adverse effect is one having unfavorable or undesirable outcomes on the man-made or natural environment. A beneficial effect is one having positive outcomes. A single act might result in adverse effects on one environmental resource and beneficial effects on another resource.
- *Significance.* Significant effects are those that, in their context and due to their intensity (severity), meet the thresholds for significance set forth in CEQ regulations (40 CFR Part 1508.27).
- *Context.* The context of an effect can be localized or more widespread (for example, regional).
- *Intensity.* The intensity of an effect reflects several factors, including whether an alternative might have an adverse impact on the unique characteristics of an area (such as historical resources or ecologically critical areas), public health or safety, endangered or threatened species, or designated critical habitat. Effects are also considered in terms of their potential for violation of Federal, state, or local environmental law; their controversial nature; the degree of uncertainty or unknown effects, or unique or unknown risks; whether there are precedent-setting effects; and their cumulative effects (see Section 4).

3.3. RESOURCES TO BE EVALUATED IN THIS ENVIRONMENTAL ASSESSMENT

3.3.1. Areas Evaluated in Extended Analysis

This EA evaluates in detail the No Action and the Proposed Action Alternatives in terms of their potential impact on the following resource areas:

- Geology and Soils
- Vegetation
- Terrestrial and Aquatic Wildlife
- Threatened and Endangered Species
- Water Resources
- Air Quality
- Noise
- Cultural Resources
- Roadways and Traffic
- Hazardous Materials and Waste Management

3.3.2. Areas Not Examined in Further Analysis

Impacts to the following resources areas would not be directly affected by the Proposed Action or the No action Alternative. Due to the lack of direct effect from the Proposed Action and No Action Alternatives, these areas are not evaluated further in this EA.

- **Land Use:** No effects on land use plans or policies are anticipated from either the Proposed Action or the No Action Alternative. Portions of the project area are occupied by industrial and urban areas, including roads, railyards, homes, and apartments. Both

alternatives would be compatible with the existing land uses in the action area, and neither would result in any changes in land use.

- **Socioeconomic Resources:** Impacts on socioeconomic conditions would be considered significant if they included displacement or relocation of residences or commercial buildings, increases in long-term demands for public services in excess of existing and projected capacities, and disproportionate impacts on minority and low-income families. Road replacement, repair, and maintenance activities as described by the Proposed Action would result in short-term, minor, and beneficial impacts on the region's economy. There would be no adverse impacts on residential areas, populations, or minority or low-income families.
- **Environmental Justice:** Impacts on environmental justice would be considered significant if an action had a disproportionately high and adverse effect on minority and low-income populations. A large proportion of the Webb County population self-identifies as Hispanic or Latino. Furthermore, the county is below both the national and state median household income and has a greater percentage of its population in poverty relative to both the state and the country. As a result, the project could encounter both minority and low-income populations. However, this Proposed Action is not located within a predominantly minority and low-income neighborhood and therefore is not likely to affect minority or low-income populations.
- **Protection of Children:** Impacts on protection of children would be considered significant if an action had a disproportionately high and adverse effect on children. EO 13045 requires each Federal agency "to identify and assess environmental health risks and safety risks that may disproportionately affect children" and "ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." This EO was prompted by the recognition that children, still undergoing physiological growth and development, are more sensitive to adverse environmental health and safety risks than adults. The potential for impacts on the health and safety of children is greater where projects are located near residential areas.

The Proposed Action would not be close to neighborhoods. For most of its length, the project parallels industrial areas such as a water treatment plant and a rail switching yard. Part of the project area adjoins a playground, however, so using best management practices (BMPs) (Appendix B) to limit speed on the roadways should provide protection for children. In addition, the playground is located atop a bluff nearly 100 feet above the actual construction, repair, and maintenance areas of the Proposed Action. The Proposed Project would not require any additional demands on public services, such as schools or day care facilities, during or after its activities. Construction and maintenance crews would stop work if any children were observed approaching the project area, and would safely guide them away from the site before resuming work. Therefore, the Proposed Action would not pose a threat to the health of the children in the project area.

- 1 • **Sustainability and Greening:** The Proposed Action and No Action Alternative would
2 both use only negligible amounts of resources. Beneficial effects on long-term
3 sustainability and greening would be expected, because after completion of the
4 Proposed Action, U.S. Border Patrol agents would need to make fewer trips through
5 the neighborhoods to accomplish the required patrolling. Agents would be able to travel
6 along the entire length of the road without making trips from the streets to the river for
7 each unconnected section.
8
- 9 • **Aesthetics and Visual Resources:** Neither the Proposed Action nor the No Action
10 Alternative would have a significant impact on aesthetics or visual resources. Existing
11 infrastructure would be maintained or repaired, and no additional infrastructure would
12 be installed. The Proposed Action area is closed to public access and used only by CBP
13 personnel. Therefore, there would be no impact to public enjoyment and/or
14 appreciation of resources. The removal of deadfall along the patrol road would be a
15 benefit to project location aesthetics. Therefore, the appearance of tactical
16 infrastructure would not change significantly, and no major effect on aesthetic and
17 visual resources would be anticipated.
18
- 19 • **Climate Change:** Both the Proposed Action and No Action Alternatives would result
20 in a temporary increase in vehicle exhaust emissions during construction and
21 maintenance and would minimally increase greenhouse gas (GHG) emissions.
22 However, long-term benefits can also be anticipated. Following completion of the
23 Proposed Action, CBP would need less fuel per patrol for vehicles on north-south trips,
24 as a result of the improved road conditions. Additionally, CBP would honor the
25 replacement of any trees removed as a result of the Proposed Action. Such trees would
26 be replenished with species that have superior carbon capture abilities.
27
- 28 • **Human Health and Safety:** Safety in implementing the Proposed Action and No
29 Action Alternatives is largely a matter of adhering to regulatory requirements imposed
30 for the benefit of employees and adopting operational practices that reduce risks of
31 illness, injury, death, and property damage. The Occupational Safety and Health
32 Administration (OSHA) and the EPA issue standards that specify the amount and type
33 of training required for industrial workers, the use of protective equipment and
34 clothing, engineering controls, and maximum exposure limits with respect to
35 workplace stressors. Personnel are exposed to safety risks from inherent dangers at any
36 maintenance and repair site. Contractors would be required to establish and maintain
37 safety programs at the maintenance and repair site. The Proposed Action would not
38 expose members of the general public to increased safety risks because the area is
39 currently, and will remain, closed to the general public. Therefore, because the
40 Proposed Action would not introduce new or unusual safety risks, and assuming
41 appropriate protocols are followed and implemented, this EA does not evaluate safety
42 in further detail.
43
- 44 • **Utilities and Infrastructure:** Due to the location of the action area, impacts on existing
45 utilities and infrastructure would not be expected. No transmission lines would be
46 affected. Although the Proposed Action is somewhat close to rail and waterway

1 infrastructure, it would not have an impact or infringe on rights of way. If applicable,
2 existing modern underground utility lines would be located and marked before
3 initiating any construction actions.
4

5 **3.4. GEOLOGY/SOILS**

6 **3.4.1. Affected Environment**

7 Geological resources consist of the Earth's surface and subsurface materials. Within a
8 given physiographic province, these resources typically are described in terms of topography and
9 physiography, geology, soils, and, where applicable, geologic hazards and paleontology.
10

11 Topography and physiography pertain to the general shape and arrangement of a land
12 surface, including its height and the position of its natural and human-made features. Geology is
13 the study of the Earth's composition and provides information on the structure and configuration
14 of surface and subsurface features. Such information derives from field analysis based on
15 observations of the surface and borings to identify subsurface composition.
16

17 Soils are the unconsolidated materials overlying bedrock or other parent material. Soils
18 typically are described in terms of their complex type, slope, and physical characteristics.
19 Differences among soil types in terms of their structure, elasticity, strength, shrink-swell potential,
20 and erosion potential affect their abilities to support certain applications or uses. In appropriate
21 cases, soil properties must be examined for their compatibility with particular construction
22 activities or types of land use. Soils associated with the site are typically Laredo Silt Loam (NRCS
23 1906).
24

25 Prime farmland is protected under the Farmland Protection Policy Act (FPPA) of 1981.
26 Prime farmland is defined as land that has the best combination of physical and chemical
27 characteristics and is available for producing food, feed, forage, fiber, and oilseed crops. No effects
28 on prime farmland would be expected as a result of the Proposed Action.
29

30 The project site in Laredo is within the Gulf Coastal Plains physiographic region, which
31 includes three sub-provinces. From west to east along the border region, they are the Blackland
32 Prairies, the Interior Coastal Plains, and the Coastal Prairies. The action area is located in the
33 Interior Coastal Plains sub-province but is riverine in nature, as the site is directly adjacent to the
34 Rio Grande. Elevations along the Gulf Coastal Plains within the border region gently decrease to
35 the south and east. The highest elevations are approximately 1,000 feet above sea level just south
36 of Del Rio. The elevation of the action area is approximately 420 feet.
37

38 The 2008 Texas Seismic Hazard Map (USGS 2008) shows that the seismic hazard for the
39 Texas portion of the U.S./Mexico international border ranges from 0 to 2 percent of the force of
40 gravity (percent g) along the Gulf of Mexico coast to up to 30 percent g along the western boundary
41 with Mexico, south of El Paso. This indicates that, during a seismic event, little damage would
42 occur toward the coast, but major damage could occur south of El Paso (EPA2011c).
43 Approximately 10 faults have been identified within 30 miles of the Texas portion of the
44 U.S./Mexico international border. Each has an estimated slip rate of less than 0.2 millimeters per

1 year (mm/year), with the last major ruptures ranging from less than 130,000 years to less than
2 1.6 million years ago (USGS 2008). Therefore, movement along faults within the action area is
3 unlikely to occur.

4 5 **3.4.2. Environmental Consequences**

6 Protection of unique geological features, minimization of soil erosion, and the siting of
7 facilities in relation to potential geologic hazards are considered when evaluating potential effects
8 of a Proposed Action on geological resources. Generally, adverse effects can be avoided or
9 minimized by incorporating proper construction techniques, erosion-control measures, and
10 structural engineering design into project development.

11
12 Effects on geology and soils would be significant if they would alter the lithology (the
13 character of a rock formation), stratigraphy (the layering of sedimentary rocks), and geological
14 structures that control groundwater quality, distribution of aquifers and confining beds, and
15 groundwater availability; or change the soil composition, structure, or function within the
16 environment.

17 18 **3.4.2.1. PROPOSED ACTION ALTERNATIVE**

19 No long-term impacts on geology would be anticipated from implementing the Proposed
20 Action. The Proposed Action would be expected to result in long-term, minor, in-direct, beneficial
21 effects on soils, primarily from compaction and the control of vegetation and use of herbicides.

22
23 Implementing the Proposed Action would be beneficial, because it would result in repairs
24 to infrastructure that reduce the potential for erosion and sedimentation, and would remove debris
25 from a geological event. CBP would use best management practices to lessen soil erosion and
26 sedimentation. The BMPs for the Proposed Action are given in Appendix B.

27 28 **3.4.2.2. NO ACTION ALTERNATIVE**

29 Under the No Action Alternative, tactical infrastructure maintenance and repair activities
30 in the project area would continue and the road would be maintained as needed. There would be a
31 potential for short- and long-term, minor, direct and indirect, adverse impacts on soils due to soil
32 disturbance from grading and other ground-disturbing maintenance activities. By completing
33 maintenance and repair work as needed and not periodically, the potential exists for an increased
34 impact on soils from emergency repair activities, such as repair of a road after washout. Therefore,
35 it is possible that greater impacts would occur under the No Action Alternative than the Proposed
36 Action, because the former would not take a proactive approach to maintenance and repair and the
37 potential for erosion and sedimentation would be greater.

38 **3.5. VEGETATION**

39 Vegetation resources include all terrestrial and aquatic plants that are found within the
40 action area.

3.5.1. Affected Environment

The state of Texas has 12 distinct ecoregions that differ according to the characteristics of environmental resources, such as geology, climate, soils, and hydrology (Griffith et al. 2004). An ecoregion contains geographically distinct environmental communities and conditions. Because ecoregions are defined by their shared biotic and abiotic characteristics, they represent practical units on which to base conservation planning. The project area for the Proposed Action is in the South Texas Plains ecoregion. This ecoregion historically was classified as having predominantly grassland vegetation, but urban development and other management practices have caused a shift in vegetative structure and composition to a vegetative community dominated by Carrizo cane (also known as giant cane, *Arundo donax*), salt cedar, guineagrass (*Urochloa maxima*), and buffelgrass (*Pennisetum ciliare*). The South Texas Plains ecoregion, however, is further defined into smaller ecoregions that are based on geography, vegetation types, and land use (Griffith et al. 2004). The project area for the Proposed Action falls into two of these smaller ecoregions: the Rio Grande Floodplain and Terraces. Plant communities within the project area for the Proposed Action are dominated by invasive species such as giant cane, salt cedar, and buffelgrass.

The plant community classification system employed is a general classification method incorporating a landscape-scale analysis based on field verification, color aerial interpretation, U.S. Geological Survey (USGS) topographical maps, and local soil surveys. CBP conducted a biological survey of the project area in October 2014 and demarcated representative plant communities on the basis of Texas Parks and Wildlife Department (TPWD) vegetative community descriptions (TPWD 1984). Within those communities, vegetative structure and composition may vary slightly among similarly classified communities (sub-communities may exist within a single community), but general habitat qualities are the same.

The Biological Assessment (CBP 2015) prepared for the Proposed Action identifies five different vegetation zones present. They include grasslands, hardwoods (including some native hardwoods), some open areas that were highly disturbed, three groves of twisted salt cedar, and a distinct riparian zone. Trees identified during a site visit within the Proposed Action area were enumerated, measured, and inventoried in a letter coordinating with the city of Laredo concerning the potential impact covered by the city's tree ordinance (Appendix D).

The tree species in the hardwood zones generally included honey mesquite (*Prosopis glandulosa*), tall and shrubby palmetto (*Sabal texana* (Cook) Becc.), and tepequaje (*Leucaena pulverulenta* (Schl.) Benth.). In the grassy areas, the dominant vegetation species is tepequaje and guineagrass (*Urochloa maxima* (Jacq.) R.D. Webster), with some bermudagrass (*Cynodon dactylon* (L.) Pers.) a few sand dropseeds (*Sporobolus cryptandrus* (Torr.) A. Gray), and several big sacaton (*Sporobolus wrightii* Monro ex. Scribn.) present. The disturbed zones are generally sparsely vegetated and dominated by guineagrass and buffelgrass. The twisted salt cedar vegetative zone is totally dominated by salt cedar with very little other vegetation present. The riparian community is close to the bank of the Rio Grande and along the banks of Chacon and Zacate creeks. Canopy and sub-canopy common associates in these strata include honey mesquite (*Prosopis glandulosa*), huisache (*Acacia farnesiana*), retama (*Parkinsonia aculeata*), spiny hackberry (*Celtis pallida*), and netleaf hackberry (*Celtis reticulata*). The groundcover stratum is dominated by guineagrass and buffelgrass, and smaller patches of giant cane (*Arundo donax*) and

common reed (*Phragmites australis*) along the banks and undeveloped natural floodplains of the Rio Grande.

3.5.2. Environmental Consequences

Effects on vegetation resources would be significant if the species or habitats were adversely affected over relatively large areas. Effects would also be considered significant if disturbances cause substantial or permanent reductions in population size or distribution of a species.

The level of significance of effects on vegetation is based on the following:

- The importance (legal, commercial, recreational, ecological, or scientific) of the resource
- The portion of the resource that would be affected relative to its occurrence in the region
- The sensitivity of the resource to proposed activities
- The duration of ecological ramifications.

3.5.2.1. PROPOSED ACTION ALTERNATIVE

Under this alternative, a long-term, beneficial impact on vegetation would occur from the reduced potential for erosion and sedimentation from the periodic, scheduled inspections and maintenance of crossings and structures. Adverse impacts on vegetation would be minimized by using appropriate BMPs as outlined in Appendix B. Trees removed from the roadway during construction or temporary construction for the Proposed Action that are not invasive species and above 4 inches in diameter at breast height would be replaced at a mitigation area located near Laredo Community College in the RiverBend Road area of Laredo in compliance with the Laredo tree ordinance, as coordinated in a report to the City of Laredo (Appendix D).

3.5.2.2. NO ACTION ALTERNATIVE

Under the No Action Alternative, short- and long-term, minor to moderate, direct and indirect, adverse effects on vegetation would occur. Under the No Action Alternative, CBP would continue current maintenance and repair activities, and tactical infrastructure would be maintained and repaired as needed. It is possible that impacts under the No Action Alternative would be greater than under the Proposed Action, because the lack of a proactive approach to maintenance and repair would increase the potential for habitat disturbances.

3.6. TERRESTRIAL AND AQUATIC WILDLIFE

3.6.1. Affected Environment

The native fauna of Texas includes 633 bird, 184 mammal, 65 amphibian, and 156 reptile species. The study area is in the South Texas Brush Country (TPWD 2001). Common amphibian species of south Texas include Blanchard's cricket frog (*Acris crepitans blanchardi*), eastern green toad (*Bufo debilis insidior*), Great Plains narrowmouth toad (*Gastrophryne olivacea*), and Couch's

spadefoot (*Scaphiopus couchii*) (Bartlett and Bartlett 1999). Common reptile species include the Texas banded gecko (*Coleonyx brevis*), Texas horned lizard (*Phrynosoma cornutum*), western river cooter (*Pseudemys gorzugi*), red-eared slider (*Trachemys scripta elegans*) (Bartlett and Bartlett 1999), Great Plains rat snake (*Elaphe guttata emoryi*), and western diamondback rattlesnake (*Crotalus atrox*) (Tennant 1984). Mammals associated with this region include the bobcat (*Lynx rufus*), collared peccary (*Tayassu tajacu*), common raccoon (*Procyon lotor*), coyote (*Canis latrans*), deer mouse (*Peromyscus maniculatus*), nine-banded armadillo (*Dasypus novemcinctus*), and whitetailed deer (*Odocoileus virginianus*) (Davis and Schmidly 1997). Common bird species include the black vulture (*Coragyps atratus*), Harris's hawk (*Parabuteo unicinctus*), redtailed hawk (*Buteo jamaicensis*), scaled quail (*Callipepla squamata*), killdeer (*Charadrius vociferous*), Inca dove (*Columbina inca*), and loggerhead strike (*Lanius ludovicianus*) (Sibley 2000). Table 3-1 lists the wildlife species observed during a field reconnaissance survey in October 2014.

Table 3-1. Wildlife Species Observed in the Project Area for the Proposed Action

Common name	Scientific name	Biological class
Northern cardinal	<i>Cardinalis</i>	Aves
Common grackle	<i>Quiscalus quiscula</i>	Aves
Great tailed grackle	<i>Quiscalus mexicanus</i>	Aves
Killdeer	<i>Charadrius vociferus</i>	Aves
Green jay	<i>Cyanocorax yncas</i>	Aves
Green Kingfisher	<i>Chloroceryle americana</i>	Aves
Woodpecker	<i>Picoides ssp.</i>	Aves
Great kiskadee	<i>Pitangus sulphuratus</i>	Aves
Scissor-tailed flycatcher	<i>Tyrannus forficatus</i>	Aves
Great Egret	<i>Ardea alba</i>	Aves
Green anole	<i>Anolis carolinensis</i>	Reptilia
Cuban anole	<i>Anolis equestris</i>	Reptilia

3.6.2. Environmental Consequences

Impacts on wildlife and aquatic resources would be considered significant if they included a substantial reduction in ecological processes or populations that would threaten the long-term viability of a species, or result in the substantial loss of a sensitive habitat that could not be offset or otherwise compensated. Habitat losses can be temporary (such as disturbance of brush piles, or noise that disturbs wildlife) or permanent (such as a permanent loss of habitat).

3.6.2.1. PROPOSED ACTION ALTERNATIVE

The Proposed Action would have minor impacts due to the amount of native habitat contained within and surrounding the project corridor. Although there is habitat for wildlife and aquatic resources within and adjacent to the project area, it is highly disturbed; given the preponderance of invasive species, the area provides little habitat for native wildlife species and aquatic resources. Due to the vast amount of similar non-native habitat contained within and surrounding the project corridor, the juxtaposition of the project corridor with other disturbed

1 and developed areas, and the fact that the current and future proposed road repair,
2 maintenance, and replacement road-building project would be completed in phases, the long-
3 term viability of wildlife species and communities in the area of the Proposed Action would
4 not be threatened.

5
6 In addition, before project activities, CBP would conduct site surveys for migratory
7 bird species nests and take steps to avoid or relocate them, and perform other appropriate
8 mitigation measures as deemed necessary. There could be a short-term temporary loss of habitat
9 due to brush clearing and adverse wildlife effects due to noise, but the effects should be short-
10 term in nature, and are likely to be insignificant in that only small portions of the road would
11 be subject to construction repair or maintenance. In the long term, there should be no adverse
12 impacts, given that most of the project length of the Proposed Action is existing road.
13 Construction, repair, and long-term maintenance should have a minor positive impact, since
14 they should minimize erosion effects. Thus, the Proposed Action would not have any long
15 term adverse impact on wildlife or aquatic habitat resources.

16 17 **3.6.2.2. NO ACTION ALTERNATIVE**

18 The No Action Alternative would have impacts similar to the Proposed Action. Repair of
19 existing roads would be expected to have similar short-term impacts from noise and removal of
20 brush. The long-term effects of the No Action Alternative should have marginally higher impacts
21 than the Proposed Action Alternative, because repairs would be as needed and more frequent. If
22 repairs are scheduled after they are needed rather than planned beforehand, damage to the road
23 would likely cause erosion of soils and sedimentation before the repair is completed.

24 25 **3.7. THREATENED AND ENDANGERED SPECIES**

26 **3.7.1. Affected Environment**

27 CBP determined that five federally listed endangered species and one candidate
28 endangered species may occur within the action area and could be affected by the project (Table
29 3-2). This determination is based on the U.S. Fish and Wildlife Service (USFWS) Southwest
30 Region online database of threatened and endangered species (USFWS 2015) for Webb County.
31 A biological Assessment was prepared (CBP 2015) and consultation was initiated with USFWS
32 (March 31, 2015). CBP also determined that five threatened species listed by the TPWD (TPWD
33 2015) as occurring in Webb County could be affected by the project.

34
35 This EA contains descriptions, distributions, habitat requirements, and threats for each of
36 the federally listed and candidate endangered species and analyzes the impacts on those six species.
37 It details the elemental occurrences of federally endangered species in the action area documented
38 by NatureServe (2010).¹ An elemental occurrence means that a species is located in appropriate
39 habitat at the appropriate time of the year and is naturally occurring (NatureServe 2010).

¹ NatureServe (2010) defines an elemental occurrence as an area of land or water where a species or natural community is, or was, present and has conservation value.

1

Table 3-2. Endangered Species in the Action Area

Taxon	Common name	Scientific name	Federal status	State status
Plants	Johnston's frankenia	<i>Frankenia johnstonii</i>	LE-PDL	E
Plants	Ashy dogweed	<i>Thymophylla tephroleuca</i>	LE	E
Birds	Interior least tern	<i>Sterna antillarum athalassos</i>	LE	E
Clams	Texas hornshell	<i>Popenaias popei</i>	C	T
Mammals	Jaguarundi	<i>Herpailurus yaguarondi</i>	LE	E
Mammals	Ocelot	<i>Leopardus pardalis</i>	LE	E
Reptiles	Reticulate collared lizard	<i>Crotaphytus reticulatus</i>		T
Reptiles	Texas indigo snake	<i>Drymarchon melanurus erebennus</i>		T
Reptiles	Texas tortoise	<i>Gopherus berlandieri</i>		T
Reptiles	Texas horned lizard	<i>Phrynosoma cornutum</i>		T

Source: USFWS 2015; TPWD 2015

Note: C = Candidate, E = Endangered, LE = Listed endangered, LE-PDL = Listed endangered-Proposed for delisting, T = Threatened.

3.7.1.1. INTERIOR LEAST TERN

The least tern (*Sterna antillarum*) is a small bird—at 9 inches long, the smallest member of the gull and tern family. Its body is predominantly gray and white, with black streaking on the head. Least terns have a forked tail and narrow pointed wings. Those less than 1 year old have less distinctive black streaking on the head and less of a forked tail (USFWS 2015).

The interior population of the least tern, or interior least tern, was federally listed as endangered May 28, 1985 (50 Federal Register 21784-21792). No critical habitat has been listed for this species.

DISTRIBUTION

Interior populations of the least tern are known to occur in Webb County (TPWD 2015) as well as at three reservoirs along the Rio Grande River (TPWD 2015).

HABITAT REQUIREMENTS

Nesting habitat of the interior least tern includes sparse vegetation or bare sand, shell, or gravel beaches. Also suitable are sandbars, islands, and salt flats associated with rivers and reservoirs, so long as they are bare or mostly devoid of vegetation. Nesting locations are often at the higher elevations away from the water's edge, since nesting usually starts when river levels are high. The size of the nesting areas depends on water levels and the extent of associated sandbars and beaches. Terns are very adapted to nesting in disturbed sites, such as building sites, ash disposal areas, and sand and gravel pits (TPWD 2015). Terns move colony sites annually if necessary to obtain the preferred habitat type, depending on landscape disturbance and vegetation

growth at established colonies. Interior least terns need shallow water with an abundance of small fish for feeding. They prefer shallow water areas of lakes, ponds, and rivers close to nesting areas.

THREATS

Modification of natural water flow and flood control along with channelization, irrigation, and the construction of reservoirs and pools have contributed to the elimination of much of the tern's natural nesting habitat. Discharges from dams built along river systems pose additional problems for the birds nesting in the remaining habitat. Before rivers were altered, summer flow patterns were more predictable. The nesting habits of the least tern evolved to coincide with natural declines in river flows. Today, flow regimes in many rivers differ greatly from historic regimes. High-flow periods may now extend into the normal nesting period, thereby reducing the availability of quality nest sites and forcing terns to nest in less than optimum locations. Extreme fluctuations can inundate potential nesting areas, flood existing nests, and dry out feeding areas. This is particularly true along the Rio Grande where water allotments and supply are heavily influenced by the dams at Amistad and Falcon.

Historical flood regimes scoured areas of vegetation, providing additional nesting habitat. However, diversion of river flows into reservoirs has resulted in encroachment of vegetation and reduced channel width along many rivers, thereby reducing sandbar habitat. Reservoirs also trap much of the sediment load, limiting formation of suitable sandbar habitat.

In Texas and elsewhere, rivers are often the focus of recreational activities. Fishing, camping, and all-terrain vehicle use on and near sandbar habitat are potential threats to nesting terns. Studies have shown that human presence reduces reproductive success, and human disturbance remains a threat throughout the bird's range.

Water pollution from pesticides and irrigation runoff is another potential threat. Pollutants entering rivers upstream and within breeding areas can degrade water quality and fish populations in tern feeding areas. Least terns are known to accumulate contaminants that can affect reproduction and chick survival. Mercury, selenium, dichlorodiphenyltrichloroethane (DDT) derivatives, and polychlorinated biphenyls (PCBs) have been found in least terns throughout their range at levels warranting concern, although reproductive difficulties have not been observed.

Lastly, too little water in some river channels may be a common problem that reduces the birds' food supply and increases access to nesting areas by humans and predatory mammals. Potential predators include coyotes, gray foxes, raccoons, domestic dogs and cats, raptors, American crows, great egrets, and great blue herons (TPWD 2015).

3.7.1.2. TEXAS HORNSHELL

The Texas hornshell (*Popenaias popeii*) is a member of the freshwater mussel family Unionidae. Shells of Texas hornshell are trapezoidal, compressed, gently rounded posteriorly, and generally dark brown to dark green (Howells 1996). Maximum length has been reported as 116 mm (4 in.) (Howells 1996). The Texas hornshell was listed as a candidate for endangered status January 6, 1989 (54 Federal Register 554 579) and remains a candidate for listing as of December 4, 2014 (79 Federal Register 72449 72497). It is a regional endemic species known from the Rio

Grande drainage in Texas (Burlakova and Karatayev 2011). No critical habitat is listed for this species.

DISTRIBUTION

The Texas hornshell is a regional endemic known from the Rio Grande Drainage in Texas, Black River in New Mexico, and several Mexican tributaries of the Rio Grande. In Texas, live hornshell were reported from Las Moras Creek, Devils River, Pecos River, and several distinct areas in the Rio Grande. In 2008, a state-wide survey of freshwater mollusks in Texas, funded by the State Wildlife Grant Program, found live hornshell in the Rio Grande at two sites: Terrell County and Webb County. Two more live Texas hornshell were found by T. Miller (Laredo Community College) in the Devils River (Val Verde County) in 2008 (Burlakova and Karatayev 2011). Vaughan reported a population of them at La Bota Ranch above Laredo in 2014 (Texas Clean Rivers Program 2014). T. Miller reported finding several larger populations of hornshell above La Bota Ranch and just above the bridges in Laredo in the Rio Grande (T. Miller, personal communication, 2014).

HABITAT

Texas hornshell are found where small-grained substrata (clays, silts, sands, and gravel) collect in undercut riverbanks, crevices, shelves, and at the base of large boulders (Lang 2006). Within these macrohabitat types, Texas hornshell occur singly or aggregated in shallow water microhabitats that serve as flow refugia (Strayer 1999) during large-volume discharge periods associated with annual precipitation events (Lang 2001). These macrohabitat types are found in the Rio Grande under large boulders or beneath limestone ledges where clay seams provide a stable substrate (Burlakova and Karatayev 2011, p. 2).

THREATS

The predominant threat to Texas hornshell is destruction of suitable habitat through channelization or siltation from upland erosion or by impoundment.

3.7.1.3. ASHY DOGWEED

Ashy dogweed (*Thymophylla tephroleuca*) is a perennial herb growing up to 30 cm (12 in.) tall. This plant has a woody base and is covered with ashy-white wooly hairs (USFWS 1987). The leaves are alternate and linear and exude a pungent odor when crushed. The flowers, which usually bloom from March to May, are golden yellow (NatureServe 2010). Ashy dogweed was federally listed as endangered on August 20, 1984 (49 Federal Register 29232 29234). No critical habitat has been designated for this species.

DISTRIBUTION

Ashy dogweed is known to occur in Starr, Webb, and Zapata counties (TPWD 2015c). At the time a recovery plan was published (USFWS 1987), the total population occupied approximately 25 acres and was estimated at 1,300 individual plants on a right-of-way owned by the Texas Department of Transportation and an adjacent private tract of land (USFWS 1987).

NatureServe data show no record of an elemental occurrence in the action area (NatureServe 2010b).

HABITAT REQUIREMENTS

Ashy dogweed requires unique soils that exist in South Texas. Existing populations are located on sandy pockets of Maverick-Catarina, Copita-Zapata, and Nueces Comita soils (TPWD 2009). These sand or sandy-loam soils that occur upon level or rolling grasslands are often shrub invaded with Mesquite-Acacia thorn brush (NatureServe 2010).

THREATS

Threats to the ashy dogweed population include right-of-way maintenance activities for the highway adjacent to known populations and adjacent ranching industry practices. These maintenance activities include mowing and blading along the right-of-way. Ranching industry practices that threaten the ashy dogweed include trampling of seedlings, clearing and grubbing, and the introduction of exotic grasses such as buffelgrass (*Cenchrus ciliaris*) (USFWS 1987).

3.7.1.4. JOHNSTON'S FRANKENIA

Johnston's frankenia (*Frankenia johnstonii*) is a low, somewhat sprawling, perennial shrub. When mature, the plants are rounded in appearance and 30.5 to 45.7 cm (12 to 18 in.) high and 30.5 to 61 cm (12 to 24 in.) wide. The plant is grayish-green or bluish-green most of the year, turning rusty brown in late fall, when it is easily detected. The gray-green leaf surfaces are hairy, and salt crystals are frequently visible on the underside of the leaves. The small flowers have five slightly fringed or toothed white petals and a distinct yellow center. Flowering occurs from April to November and depends on precipitation (NatureServe 2010). Johnston's frankenia was federally listed as endangered under the Endangered Species Act on September 6, 1984 (49 Federal Register 31418 31421). No critical habitat has been designated for this species. Johnston's frankenia is currently being considered for delisting under the Endangered Species Act (ESA).

DISTRIBUTION

Johnston's frankenia populations have a clumped distribution, occurring in openings of the Tamaulipan thornscrub with high light intensity. Johnston's frankenia is found in Webb, Zapata, and Starr counties. NatureServe data show no record of an elemental occurrence in the action area.

HABITAT REQUIREMENTS

Johnston's frankenia generally grows on open or sparsely vegetated, rocky, gypseous hillsides or saline flats (NatureServe 2010).

THREATS

Threats include a severely restricted distribution, low numbers of individual plants, road construction, residential development, and oil- and natural gas-related activities. This species also has a very low reproductive potential (NatureServe 2010). Federal Register 66018 66021).

3.7.1.5. GULF COAST JAGUARUNDI

The Gulf Coast jaguarundi (*Herpailurus yagouaroundi cacomitli*) is a small, slender-bodied, long-tailed, unspotted, weasel-like cat that hunts during the early morning and evening. It has a long and flat head instead of a round one. The ears are short and rounded, and it is one of the few cat species that does not have a contrasting color on the backs of the ears. Its eyes are small

and set closely together. The jaguarundi has two distinct color phases, red and gray, although the latter phase has also been called blue. A third color phase, black, has also been reported, but apparently does not occur in Texas (USFWS 2013). The Gulf Coast jaguarundi was federally listed as endangered under the Endangered Species Act on June 14, 1976 (41 Federal Register 24062 24067). No critical habitat has been designated for this species.

DISTRIBUTION

The Gulf Coast jaguarundi historical range is from the Lower Rio Grande Valley in southern Texas into the eastern portion of Mexico in the states of Coahuila, Nuevo Leon, Tamaulipas, San Luis Potosi, and Veracruz. In Texas, jaguarundis historically were limited to Cameron, Hidalgo, Willacy, and Starr counties. No historical records of jaguarundis have been documented north of the Rio Grande Valley of Texas. The last confirmed sighting of this subspecies in the United States was in April 1986, when a road-killed specimen was collected 2 miles east of Brownsville, TX (USFWS 2013).

NatureServe data show 17 records of elemental occurrence of jaguarundi both upriver and downriver of Laredo, but no occurrences in the action area. These were within the boundaries of the Southmost, East Brownsville, West Brownsville, San Juan SE, Las Milpas, Santa Maria, La Paloma, Mission, La Joya, Sullivan City, and Falcon Village USGS topographic quadrangle maps below Laredo, and in the Carrizo Springs East, Carrizo Springs West, El Indio, and Deadman's Hill maps above Laredo. The number of jaguarundi in South Texas is unknown. Webb County has had no surveys or confirmed sightings in recent years. The last unconfirmed sightings in Webb County were in the mid-1980s and in 1993.

HABITAT REQUIREMENTS

The jaguarundi habitat is within the Tamaulipan biotic province, which includes several variations of subtropical thornscrub brush. Typical habitat consists of mixed thornscrub, which includes the following species: desert yaupon (*Schaefferia cuneifolia*), wolfberry (*Lycium berlandieri*), lotebush, amargosa (*Castela erecta*), white-brush (*Aloysia gratissima*), catclaw acacia (*Acacia greggii*), blackbrush acacia (*Vachellia rigidula*), lantana (*Lantana achyranthifolia*), guayacan (*Guajacum angustifolium*), cenizo (*Leucophyllum frutescens*), elbowbush (*Forestiera angustifolia*), and Texas persimmon (*Diospyros texana*). Trees that can be included within the thornscrub include mesquite, live oak (*Quercus* sp.), Texas ebony (*Ebenopsis ebano*), and hackberry (*Celtis laevigata*). Riparian areas and bunchgrass pastures with intermixed thorn brush are also used by the jaguarundi (USFWS 2013).

THREATS

The greatest threat to jaguarundi populations in the United States is habitat loss and fragmentation (USFWS 2013).

3.7.1.6. OCELOT

The ocelot (*Leopardus pardalis*) is a medium-sized nocturnal cat, measuring up to 0.9 meters (3 feet) in body length and weighing twice as much as a large domestic cat. It is slender and covered with irregular-shaped rosettes and spots that run the length of its body. The ocelot's background coloration can range from light yellow to reddish gray, gold, and grayish gold (USFWS 2010). The ocelot was federally listed as endangered under the Endangered Species Act

on August 20, 1982 (47 Federal Register 31670 31672). No critical habitat has been designated for this species.

DISTRIBUTION

The historical range of the ocelot in the United States was much more extensive than its currently known range. The ocelot once inhabited southern and eastern Texas, north to Hedley and west to Marfa. Currently, the ocelot ranges from extreme southern Texas and southern Arizona through the coastal lowlands of Mexico to Central America, Ecuador, and northern Argentina. The Texas ocelot is isolated from the Arizona ocelot by the Sierra Madre highlands and the Mexican Plateau. The two Texas populations occur on private ranches in Willacy and Kenedy counties and on the Laguna Atascosa National Wildlife Refuge in eastern Cameron County. These populations are outside the action area, isolated from each other by about 30 km (19 miles), and occupy remnant habitat fragments (USFWS 2010).

NatureServe data show nine records of elemental occurrence of the ocelot in the action area. These were within the boundaries of the Southmost, East Brownsville, Las Milpas, La Joya, Eagle Pass NE, Deadman's Hill, Quemado SE, and Brackettville USGS topographic quadrangle maps. The current population estimate for the ocelot in Texas is between 80 and 120 individuals. However, the population in Webb County remains unknown due to the lack of surveys in the area and lack of confirmed sightings of the animal. The last unconfirmed sighting of an ocelot occurred in 1980 in Webb County (CBP 2007).

HABITAT REQUIREMENTS

The ocelot, similar to the jaguarundi, uses a wide range of habitat throughout its range in the Western Hemisphere, although it does not appear to be a habitat generalist. The ocelot is found within the Tamaulipan biotic province, which includes several variations of subtropical thornscrub brush. Ocelots prefer dense thornscrub habitats with greater than 95 percent canopy cover (USFWS 2010).

THREATS

Threats to ocelots include the destruction, modification, and curtailment of suitable habitat or range and illegal hunting. Habitat loss and degradation have been attributed to deforestation, agriculture, and ranching. Habitat loss and fragmentation, especially along the Rio Grande, pose a critical threat to the long-term survival of the ocelot. In South Texas, the fragmentation imperils ocelots as they traverse open space between suitable habitat pockets and encounter motor vehicles. Efforts are underway to preserve key habitat and biological corridors necessary for ocelot survival (USFWS 2010).

3.7.2. Environmental Consequences

3.7.2.1. PROPOSED ACTION ALTERNATIVE

The Proposed Action is Not Likely to Adversely Affect the six species considered in this EA (Table 3-3).

1

Table 3-3. Species and Determination of Effect

Species	Listing status	Year listed or proposed	CBP determination
Ashy dogweed (<i>Thymophylla tephroleuca</i>)	Endangered	1984	Unlikely to adversely affect
Johnston's frankenia (<i>Frankenia johnstonii</i>)	Endangered	1984	Unlikely to adversely affect
Interior least tern	Endangered	1985	Unlikely to adversely affect
Texas hornshell	Candidate	1989	Unlikely to adversely affect
Gulf Coast jaguarundi (<i>Herpailurus yagouaroundi cacomitli</i>)	Endangered	1976	Unlikely to adversely affect
Ocelot (<i>Leopardus pardalis</i>)	Endangered	1982	Unlikely to adversely affect

2

3

4

The Proposed Action is unlikely to adversely affect any critical habitat in the action area. It involves the maintenance and repair of existing roads or the construction of roads to replace those lost to erosion. All of the Proposed Action's activities would take place within and immediately adjacent to the footprint of those existing roads. The new construction to replace the eroded or lost roads would not cross any known populations of endangered species or any critical habitat. In fact, the majority of the Proposed Action's new construction area passes through a grove of the invasive species Salt Cedar. CBP would implement BMPs (Appendix B) to avoid directly harming protected species and to minimize other direct and indirect adverse effects.

12

13

3.7.2.2. NO ACTION ALTERNATIVE

14

With respect to endangered species and critical habitat, the No Action Alternative is not significantly different from the Proposed Action. Under the No Action Alternative, there would be no new construction of roads to replace those lost to erosion, but maintenance and repair would continue on the existing road segments. The No Action Alternative's activities would take place within and immediately adjacent to the footprint of those existing roads and would not cross any known populations of endangered species or any critical habitat.

20

21

3.8. WATER RESOURCES

22

3.8.1. Affected Environment

23

3.8.1.1. HYDROLOGY AND GROUNDWATER

24

Groundwater resources consist of subsurface hydrology in which one or more aquifers may be present. The Texas coastal uplands aquifer system is subdivided into four aquifers, including the Carrizo-Wilcox aquifer, which is recharged through infiltration of direct rainfall and municipal and agricultural water use (Texas Water Development Board [TWDB] 1995). Groundwater quality within an aquifer depends on its reactions with bulk-mineral composition. Total dissolved solids (TDS) increase along the flow path (north to south) as the groundwater reacts with the bulk rock

25

26

27

28

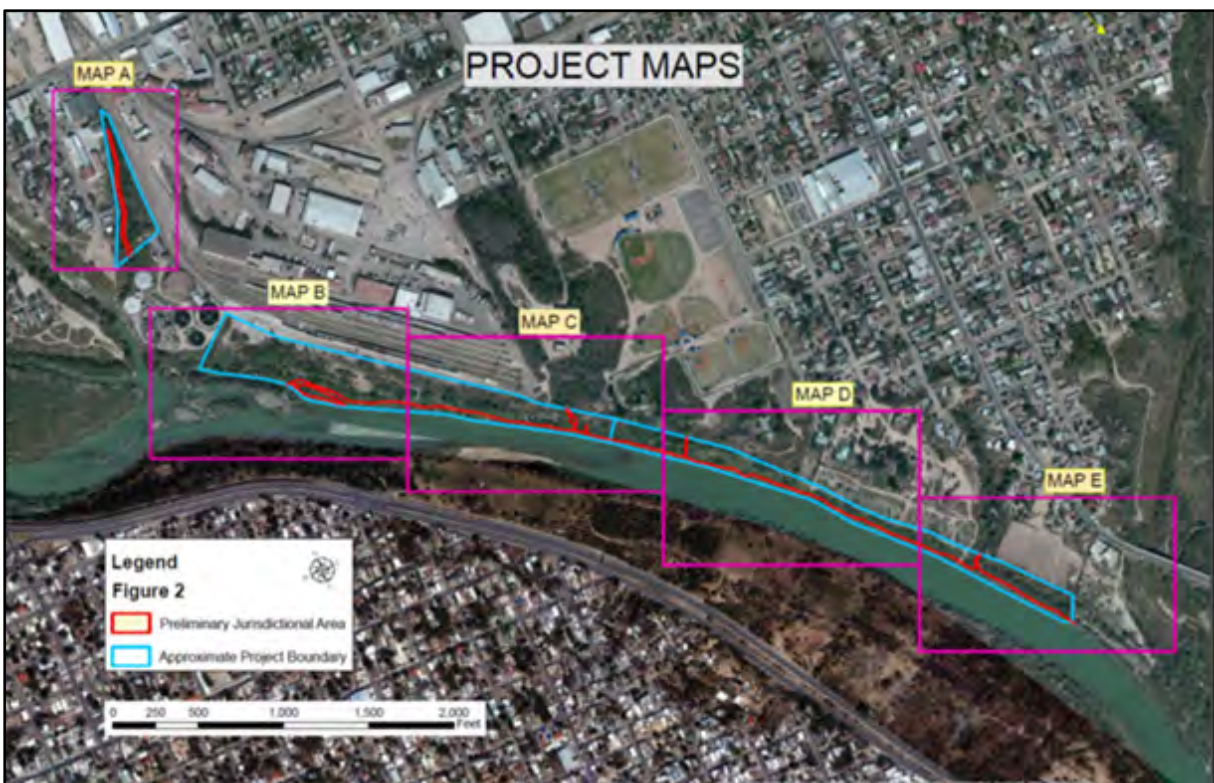
29

that composes the aquifer; therefore, higher amounts of TDS correlate with discharge areas of aquifers, such as river basins. Generally, water in much of the Carrizo-Wilcox aquifer contains less than 500 milligrams per liter of dissolved solids (TWDB 1995).

3.8.1.2. SURFACE WATERS AND GROUNDWATERS OF THE UNITED STATES

Major surface hydrologic systems in the study area are streams, canals, drainage ditches, and the Rio Grande. All of these surface water resources constitute the surface hydrology of the watershed. Surface water features entering the project area and discharging into the Rio Grande include Chacon Creek, Zacate Creek, Sombrerito Creek, and several unnamed intermittent streams (Figure 3-1).

Figure 3-1. Water Resources in the Action Area



Several small tributaries flow toward the Rio Grande across the adjacent flood terrace. The ordinary high water mark (OHWM) of these tributaries changes in bank slope, vegetation type, and density, as well as changes in substrate size from cobbles and gravel-dominated active channels to the finer sediments typical of the terrace.

3.8.1.3. Floodplains

The action area was surveyed for waters of the United States (WoUSA) to provide a preliminary delineation of the OHWM for a reach of the Rio Grande River near Laredo. This delineation gives DHS guidance for avoiding impacts on jurisdictional waters of the United States during construction of a roadway along a flood terrace of the Rio Grande. The delineation utilized

1 field observations of channel geomorphology and associated vegetation. CBP noted vegetation,
2 substrate, bank height, and channel width to help with interpretation.

3
4 CBP mapped observation points using survey-grade GPS data and interpolated areas
5 between the points using recent aerial photography. By necessity, all observations were made from
6 the United States side of the river and could not measure cross-sections. Also, discharge
7 measurements are unreliable because there is no gaging record for the Rio Grande near the project
8 area. The closest discharge measurements are made more than 100 miles upstream of the site.
9 Border Patrol agents familiar with the site identified debris from the last major flood event (2010)
10 that could be mapped to locate the highest elevations of the flood terrace.

11
12 In general, CBP mapped the extent of the OHWM at the top of a nearly vertical bank that
13 rises from the low-water, active channel. This bank is heavily vegetated with riparian plants,
14 nonnative Carrizo cane, and grasses. Light flood debris and trash is evident on the steep bank,
15 which ranges in height from about 8 to 15 feet. A similar geomorphic feature at similar elevation
16 is evident on the Mexico side of the river. The flood terrace, outside the OHWM, is a gently sloping
17 terrace, ranging in width from 100 to 200 feet, composed of fine sediment.

18 19 **3.8.2. ENVIRONMENTAL CONSEQUENCES**

20 **3.8.2.1. Proposed Action Alternative**

21 The Proposed Action is expected to have no adverse impacts on groundwater, water supply,
22 or floodplains. Some Laredo municipal water would be required during the construction phase,
23 and as a dust suppressant in some instances of maintenance. The roads to be repaired and
24 maintained currently exist or, in the case of construction to replace roads lost due to erosion,
25 construction would be placed so as not to impede water flow during a flood event. Temporary
26 impacts to WoUSA are possible from rain during construction due to siltation and runoff. These
27 effects are expected to be minimal due to the employment of construction BMPs (listed in
28 Appendix B) such as silt fencing, use of a stormwater pollution prevention plan, and others. There
29 would be no long-term effects of road construction on WoUSA. There would be installation of
30 certain erosion control structures to minimize erosion from and damage to the roads.

31
32 One of the intermittent streams, an unnamed arroyo located near Marcella Avenue and the
33 water plant, will be crossed by a culvert. The crossing as well as four potential additional low-
34 water crossings will be coordinated with the U.S. Army Corps of Engineers Fort Worth District
35 Regulatory Branch.

36
37 These items have not yet been described by the design available at the time of this writing,
38 but would be subject to BMPs and the conditions of the CWA, and they would be reviewed by the
39 U.S. Army Corps of Engineers Fort Worth District Regulatory Branch.

40 41 **3.8.2.2. No Action Alternative**

42 The No Action Alternative is expected to have no adverse impacts to groundwater, water
43 supply, or floodplains. Some Laredo municipal water would be required as a dust suppressant
44 during maintenance of existing roads. The roads to be repaired and maintained currently exist and

do not impede water flow during a flood event. Temporary impacts to WoUSA are possible from rain during maintenance and repair of these existing roads due to siltation and runoff. These effects are expected to be minimal due to the employment of construction BMPs (listed in Appendix B) such as silt fencing, employment of a stormwater pollution prevention plan, and others. There would be no long-term effects of road maintenance on WoUSA.

3.9. AIR QUALITY

3.9.1. AFFECTED ENVIRONMENT

To protect public health and welfare from adverse air quality, the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM-10), and lead (Pb). Primary NAAQS are levels meant to protect human health, especially those of asthmatics, children, and the elderly. Secondary NAAQS are specified at levels to protect public welfare from impacts such as decreased visibility and damage to animals, crops, vegetation, and buildings. The NAAQS appear in Table 3-4.

Table 3-4. National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary/ Secondary		Averaging Time	Level	Form
Carbon monoxide	Primary		8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead	Primary and secondary		Rolling 3-month average	0.15 µg/m ³ (1)	Not to be exceeded
Nitrogen dioxide	Primary		1-hour	100 ppb	98th percentile, averaged over 3 years
	Primary and secondary		Annual	53 ppb (2)	Annual mean
Ozone	Primary and secondary		8-hour	0.075 ppm (3)	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle pollution	PM _{2.5}	Primary	Annual	12 µg/m ³	Annual mean, averaged over 3 years
		Secondary	Annual	15 µg/m ³	Annual mean, averaged over 3 years
		Primary and secondary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	Primary and secondary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur dioxide	Primary		1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Secondary		3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: <http://www.epa.gov/air/criteria.html>.

Areas that do not meet these NAAQS are called non-attainment areas or maintenance areas; areas that meet both primary and secondary standards are known as attainment areas. The Federal Conformity Final Rule (40 CFR Parts 51 and 93) specifies criteria or requirements for conformity determinations for Federal projects. The Federal Conformity Rule was first promulgated in 1993 by the EPA, following the passage of amendments to the Clean Air Act (CAA) in 1990. The rule mandates that an agency must perform a conformity analysis when a Federal action generates air pollutants in a region that has been designated as a non-attainment or maintenance area for one or more NAAQS.

A conformity analysis is the process for determining whether a Federal action meets the requirements of the general conformity rule. It requires the responsible Federal agency to evaluate the nature of the Proposed Action Alternative and associated air pollutant emissions, calculate emissions as a result of the Proposed Action Alternative, and mitigate emissions if de minimis thresholds are exceeded.

The project area is located in Webb County, which is in attainment for all NAAQS.

3.9.2. ENVIRONMENTAL CONSEQUENCES

3.9.2.1. Proposed Action Alternative

Under the proposed alternative, there would be adverse short-term impacts to local air quality due to emissions from the construction equipment required for the project. The movement of earth could also create fugitive dust during construction. BMPs would be followed to minimize these impacts.

In the long run (after construction is complete), the new roads would lead to lower levels of fugitive dust in areas that are currently serviced by dirt roads. The new road .in areas where the existing road has totally eroded would open more areas to patrol vehicles, but overall emissions would be still be reduced, because patrol vehicles would be able to take shorter routes transiting the road rather than more frequent trips to the river from existing streets leading to some moderate increase in patrol vehicle emissions.

3.9.2.2. No Action Alternative

Under the No Action Alternative, there would be no impact on air quality due to construction activities. However, in some sections of the project area, the current dirt roads would remain in use and continue to generate fugitive dust that could adversely increase particulate levels in the local area.

3.10. Noise

3.10.1. AFFECTED ENVIRONMENT

Sound is defined as a particular auditory effect produced by a given source. Noise is defined as any sound that is undesirable because it interferes with communication, is strong enough to damage hearing, or is otherwise bothersome. Noise can be sporadic or continuous, steady or

spontaneous, and can include any number of sources and frequencies. Noise can be readily distinguishable or generally nondescript. Human response to increased sound levels varies according to the source type, features of the sound source, distance between source and receptor, receptor sensitivity, and time of day. Affected receptors can be specific (such as churches, schools, or hospitals) or broad areas (such as nature preserves or designated districts) in which occasional or sensitivity to noise is above ambient levels.

3.10.1.1. Noise Metrics and Regulations

Although human response to noise varies, measurements can be calculated with instruments that record instantaneous sound levels in decibels. A-weighted decibel (dBA) is used to characterize sound levels that can be sensed by the human ear. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA (EPA 1981a). A whisper is normally 30 dBA and considered to be very quiet, while an air conditioning unit 20 feet away is considered an unpleasant noise at 60 dBA. Noise levels can become annoying at 80 dBA and very annoying at 90 dBA. To the human ear, each 10 dBA increase in noise level makes noise seem twice as loud (EPA 1981b).

3.10.1.2. Construction Sound Levels

Maintenance and repair work can cause an increase in sound that is well above the ambient level. A variety of sounds are emitted from loaders, trucks, saws, and other work equipment. Table 3-5 lists noise levels associated with common types of construction equipment.

Table 3-5. Equipment Predicted Noise Level

Equipment	at 50 feet (dBA)
Bulldozer	80
Grader	80–93
Truck	83–94
Roller	73–75
Backhoe	72–93
Jackhammer	81–98
Concrete mixer	74–88
Welding generator	71–82
Paver	86–88

Source: EPA 1971

The Proposed Action is predominantly adjacent to urban/industrial areas, although a recreational area and a neighborhood are also located along one section of the area considered in the Proposed Action. Prominent existing sources of noise in these areas are most likely trains and train yard switching, large vehicles moving into and out of the warehouse area, vehicle traffic, and aircraft.

3.10.2. ENVIRONMENTAL CONSEQUENCES

Noise impacts are based on the potential changes to the existing noise environment that would result from a Proposed Action. Potential changes can be beneficial, if they reduce the number of sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound level; negligible, if the total number of sensitive receptors exposed to unacceptable noise levels is essentially unchanged; or adverse, if they result in increased sound exposure to unacceptable noise levels or ultimately increase the ambient sound level. Projected noise effects were evaluated for the alternatives considered.

3.10.2.1. Proposed Action Alternative

Long-term, periodic, negligible to minor, adverse effects on the ambient noise environment would occur. The specific noise levels and effects would vary depending on the location, type, and quantity of maintenance or repair being performed, and the distance from the source of the noise to sensitive populations. Maintenance and repair activities usually involve the use of more than one piece of equipment simultaneously, such as a paver and haul truck. It is likely that the few pieces of construction apparatus active at any given construction repair or maintenance period would be indistinguishable from ambient noise from the adjacent railroad switching yard and warehouse district. BMPs are listed in Appendix B to deal with noise and include dawn-to-dusk scheduling of activities to avoid excessive noise.

Short-term, noise impacts due to construction activities should likewise, be negligible to minor in comparison to the ambient noise activities associated with the industrial land use patterns and railyard located between the site and most receptors.

Noise-sensitive receptors in remote areas could be more sensitive to noise disturbances than those in urban environments; however, the noise from equipment used for maintenance and repair activities would be localized, short-term, and intermittent during machinery operations and would also likely be indistinguishable from the existing ambient noise from the railyard and warehouse district.

3.10.2.2. No Action Alternative

Impacts on noise from the No Action Alternative would be similar to those described for the Proposed Action. However, because roads would not be repaired to an all-weather status, ongoing maintenance and repair could occur more frequently. There would be no period of construction of new replacement road sections. The neighborhood closest to any of the proposed construction impacts is near the intersection of Roosevelt Street and South Meadow Avenue. It is approximately 65 feet from a small section of the maintenance area of one of the segments of existing road. However, short-term impacts on noise from implementing the No Action Alternative could be greater than those from the Proposed Action, because it is possible that reactive maintenance and repair would occur more frequently, be less easily scheduled, and occur on a larger scale.

3.11. Cultural Resources

3.11.1. AFFECTED ENVIRONMENT

The term “cultural resources” refers to a broad range of properties relating to history, prehistory, or places important in traditional religious practices. While not formally cited in NEPA or other heritage-related laws and Executive Orders, cultural resources are referred to in several Federal laws and EOs, including the NHPA, the Archeological and Historic Preservation Act (ARHA), the American Indian Religious Freedom Act (AIRFA), the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act (NAGPRA). The NHPA focuses on property types such as prehistoric and historic sites, buildings and structures, districts, and other places that have physical evidence of human activity considered important to a culture or a community for scientific, traditional, religious, or other reasons. These resources can prove useful in understanding and describing the cultural practices of past peoples or retain cultural and religious significance to modern groups. Resources judged significant under criteria established in the NHPA are considered eligible for listing in the National Register of Historic Places (NRHP). The NRHP refers to these places as “historic properties,” which are protected under the NHPA.

The NHPA requires Federal agencies to take into account the effects of their activities and programs on NRHP-eligible properties. Regulations for Protection of Historic Properties (36 CFR Part 800) establish a process for Federal agencies to consult with the appropriate State Historic Preservation Office (SHPO), Native American groups, other interested parties, and when appropriate the Advisory Council on Historic Preservation (ACHP). This process ensures that agencies adequately consider the impacts their undertaking have on historic properties.

NAGPRA, a Federal law passed in 1990, establishes a process for museums and Federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants, culturally affiliated Indian tribes, and Native Hawaiian organizations.

CBP conducted a cultural resources survey of the project area, a total of 18.2 acres, in October 2014 and located no cultural resources as a result of that study. CBP initiated consultation with the Texas Historical Commission in April 2015 and provided it with a copy of the survey report. On April 14, 2015, that commission concurred with CBP’s determination that the Proposed Action would not have an effect on historic properties. A copy of this correspondence appears in Chapter 7.

3.11.2. ENVIRONMENTAL CONSEQUENCES

Cultural resources can be impacted in variety of ways. Subsurface resources can be damaged by construction activities such as trenching and excavation. Surface resources can be impacted visually and physically. The Proposed Action involves maintenance and repair of tactical infrastructure along existing corridors and the construction of new roadway.

3.11.2.1. Proposed Action Alternative

In October, 2014 CBP conducted a cultural resources survey of the project area, a total of 18.2 acres. No cultural resources were located as a result of that study. CBP initiated consultation with the Texas Historical Commission in April 2015 and provided it with a copy of the survey report. On April 14, 2015, that commission concurred with CBP's determination that the Proposed Action would not have an effect on historic properties. A copy of this correspondence appears in Chapter 7.

3.11.2.2. No Action Alternative

CBP conducted a cultural resources survey of the project area, a total of 18.2 acres, in October 2014 and located no cultural resources as a result of that study. CBP initiated consultation with the Texas Historical Commission in April 2015 and provided it with a copy of the survey report. On April 14, 2015, that commission concurred with CBP's determination that the No Action Alternative would not have an effect on historic properties. A copy of this correspondence appears in Chapter 7.

3.12. Roadways and Traffic

3.12.1. AFFECTED ENVIRONMENT

Most access roads proposed for maintenance and repair or for construction of replacement sections are existing city streets that will not be maintained by CBP, save for the juncture between the city streets and the beginning of CBP-maintained roadways. On the western terminus of the Proposed Action area, access will occur through a mixed-use, light industrial/residential area near Marcella Avenue. This area is likely to see little construction traffic due to the small amount of proposed construction proposed for the land west of the water treatment plant. Construction access on the western end of the Proposed Action area will be from Market Street through the railyard. Market Street is a primary access road to the major arterial roadways TX 359 and I-83.

On the eastern end of the Proposed Action area, construction access will be directly from Jameson Street, or from South Meadow Avenue and Roosevelt Street, or through Gates Street to Burr Street. Meadow is a major collector street. Roosevelt, Gates, and Burr Streets are secondary streets.

Operationally, Roosevelt Street, Gates Street to Burr Street, Guatemozin Street, and Botaga Street are primarily used by the USBP to limit illegal border intrusion, and very little public traffic is present.

3.12.2. ENVIRONMENTAL CONSEQUENCES

Impacts on transportation are evaluated by how well existing roadways can accommodate changes in traffic. Adverse effects would occur if drivers experience high delays because the Proposed Action altered traffic patterns beyond existing lane capacity or resulted in the closure or detour of roadways.

3.12.2.1. Proposed Action Alternative

Short-term, negligible to minor, adverse effects on transportation could be experienced from the Proposed Action due to short-term, local, minor increases in traffic from the vehicles of workers performing maintenance and repair or delivering equipment or supplies. Long-term, minor to moderate, beneficial effects on transportation would be expected by improving the conditions of the patrol road. Traffic impacts would be minor and generally beneficial, since USBP would be able to patrol along the entire length of the patrol road rather than repeatedly returning to a city street and moving along it to drop down to the patrol road again where it is discontinuous, so the need for repeated access using city streets would be diminished. Due to the limited number of vehicles anticipated to be needed for the proposed maintenance and repair activities, impacts on traffic volume would be negligible to minor.

Improvements to the quality of roads would allow the USBP to respond to threats faster, more safely, and more efficiently. Better quality roads would lessen the wear and tear on USBP vehicles and minimize the potential for blown tires, damaged vehicle components, and stuck vehicles. Improvements to these roadways would not increase the amount of long-term traffic, because patrols by USBP would not increase in frequency, and most of the roads proposed for repair and maintenance are not used by the public.

3.12.2.2. No Action Alternative

The roadways proposed by CBP for maintenance and repair under the No Action Alternative would continue to be repaired as needed. Most repairs would be reactions to immediate issues affecting these roadways and would not fulfill long-term preventative maintenance requirements. Repairs performed as needed would not be considered sustainable in quality, because they would result in gradual degradation of these roadways. The No Action Alternative would result in slightly greater impacts on roadways and traffic than the Proposed Action. The No Action Alternative could entail slightly larger and longer disruptions in the flow of traffic, due to reactionary maintenance and repair activities that could require greater intensity of effort, less easily scheduled interruptions, and disruption of alternative routes by CBP personnel responding to law enforcement requirements but forced to use alternative routes than those identified as part of a preventative maintenance plan. Conversely, the periodic maintenance and repair activities envisioned under the Proposed Action would result in more occurrences of minor roadwork and fewer occurrences of major roadwork, which CBP expects to result in a shorter disruption to traffic.

3.13. Hazardous Materials and Waste Management

Hazardous materials are defined by 49 CFR 171.8 as “hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions” in 49 CFR Part 173. Transportation of hazardous materials is regulated by U.S. Department of Transportation regulations within 49 CFR Parts 105–180.

A hazardous substance, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. 9601(14)), is defined as “(A) any

1 substance designated pursuant to section 1321(b)(2)(A) of Title 33; (B) any element, compound,
2 mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous
3 waste having the characteristics identified under or listed pursuant to section 3001 of RCRA, as
4 amended, (42 U.S.C. 6921); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E)
5 any HAPs [hazardous air pollutants] listed under section 112 of the CAA (42 U.S.C. 7412); and
6 (F) any imminently hazardous chemical substance or mixture which the Administrator of EPA has
7 taken action pursuant to section 2606 of Title 15.” The term hazardous substance does not include
8 petroleum products.

9
10 Hazardous wastes are defined by RCRA at 42 U.S.C. 6903(5), as amended by the
11 Hazardous and Solid Waste Amendments, as “a solid waste, or combination of solid wastes, which
12 because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A)
13 cause, or significantly contribute to an increase in mortality or an increase in serious irreversible,
14 or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human
15 health or the environment when improperly treated, stored, transported, or disposed of, or
16 otherwise managed.” Certain types of hazardous wastes are subject to special management
17 provisions intended to ease the management burden and facilitate the recycling of such materials.

18
19 These are called universal wastes, and their associated regulatory requirements are
20 specified in 40 CFR Part 273.

21
22 Special hazards are those substances that might pose a risk to human health and are addressed
23 separately from other hazardous substances. Special hazards include asbestos-containing material
24 (ACM), PCBs, and lead-based paint (LBP). The EPA has authority to regulate these special hazard
25 substances by the TSCA Title 15 U.S.C. Chapter 53. EPA has established regulations regarding
26 asbestos abatement and worker safety under 40 CFR Part 763, with additional regulation concerning
27 emissions (40 CFR Part 61). Whether from lead abatement or other activities, depending on the
28 quantity or concentration, the disposal of LBP waste may be regulated by the RCRA at 40 CFR 260.
29 The disposal of PCBs is addressed in 40 CFR Parts 750 and 761.

30
31 Pesticides are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act
32 (FIFRA) of 1947 (40 CFR Parts 150–189). In 1972, Congress enacted the Federal Environmental
33 Pesticide Control Act, which amended FIFRA by specifying methods and standards of control in
34 greater detail. Subsequent amendments have clarified the duties and responsibilities of the EPA.
35 These regulations stipulate that the EPA must regulate all pesticides that are sold and distributed
36 in the United States. The term “pesticides” includes pesticides, herbicides, rodenticides,
37 antimicrobial products, biopesticides, and other substances used to control a wide variety of pests.

38
39 All generators of hazardous oil and gas waste must employ reasonable and appropriate
40 measures—considering the nature and location of the facility and the types and quantities of
41 hazardous oil and gas waste maintained at the site—in operating and maintaining the generation
42 site to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release
43 of hazardous oil and gas wastes or hazardous oil and gas waste constituents to air, soil, or surface
44 water that could threaten human health or the environment. Evaluation of hazardous materials and
45 wastes focuses on the storage, transport, handling, and use of pesticides, herbicides, petroleum
46 products, fuels, solvents, and other hazardous substances. Evaluation also extends to generation,

1 storage, transportation, and disposal of hazardous wastes when such activity occurs at or near the
2 project site. In addition to being a threat to humans, the improper release of hazardous materials
3 and wastes can threaten the health and well-being of wildlife species, botanical habitats, soil
4 systems, and water resources. If hazardous materials or wastes are released, the extent of
5 contamination varies based on the type of soil, topography, and water resources.

6
7 Solid waste management primarily relates to the availability of landfills to support a
8 population's residential, commercial, and industrial needs. In some localities, landfills are
9 designed specifically for and limited to disposal of construction and demolition debris. Recycling
10 programs are available for various waste categories.

11 12 **3.13.1. AFFECTED ENVIRONMENT**

13 Federal and state agencies regulate the management of hazardous substances, petroleum
14 products, hazardous and petroleum wastes, pesticides, solid waste, ACMs, LBP, and PCBs.

15
16 Each state has its own regulatory agency and associated regulations. The state agencies
17 either adopt the Federal regulations or have their own regulations that are more restrictive than the
18 Federal regulations. Likewise, the Federal government and state agencies also have regulations for
19 the handling, disposal, and remediation of special hazards; however, the nature and age of the CBP
20 tactical infrastructure is such that the handling or disposal of these materials is unlikely for the
21 activities in the Proposed Action.

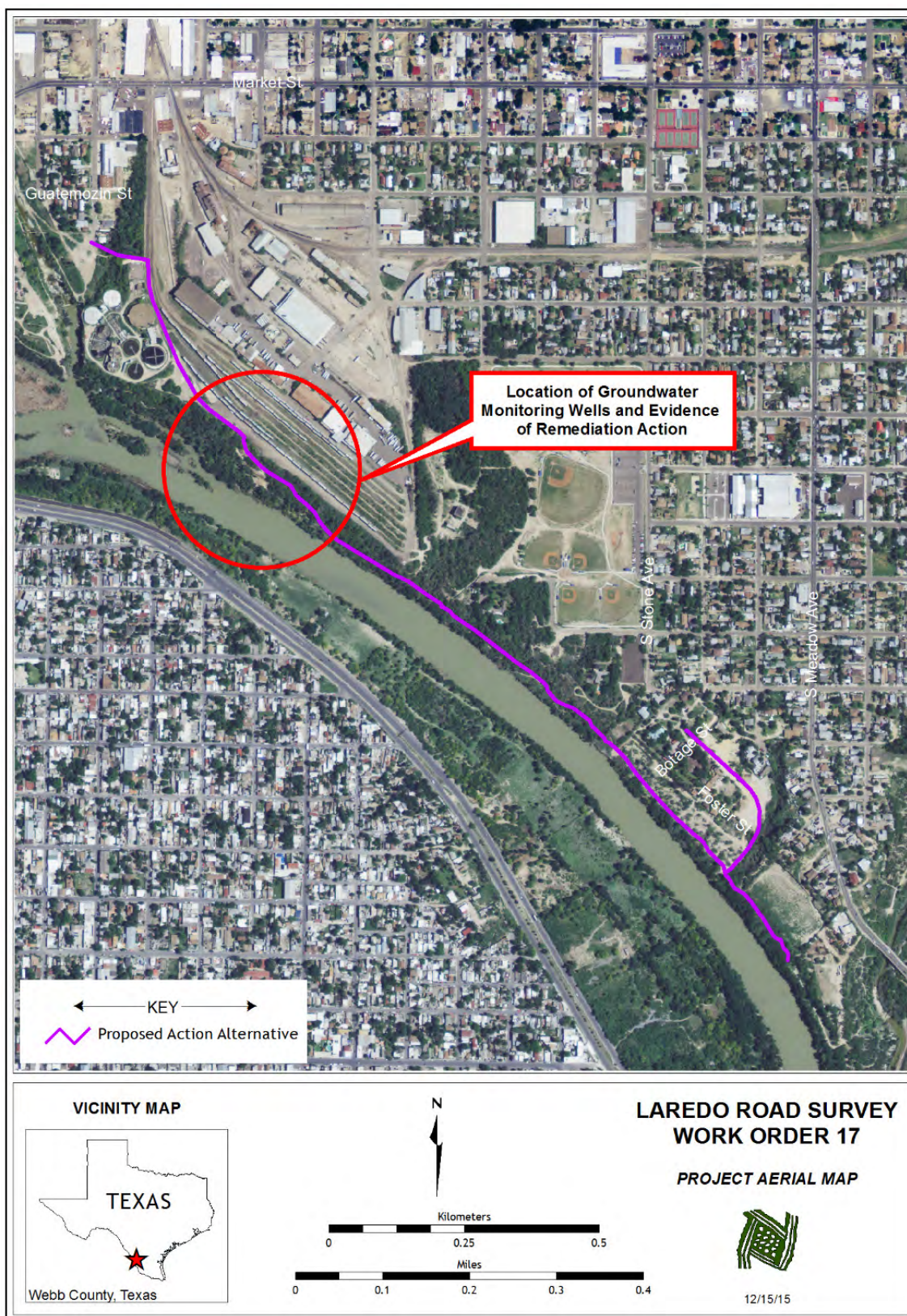
22
23 The Waste Reduction Policy Act of 1991 was adopted by the Texas Legislature to prevent
24 pollution in Texas. The Texas Commission on Environmental Quality (TCEQ) adopted
25 corresponding rules. This act requires that certain facilities handling hazardous materials and waste
26 prepare a 5-year pollution prevention plan. In conducting tactical infrastructure maintenance and
27 repair activities as needed, USBP or its contractors currently store, transport, handle, use, generate,
28 and dispose of various types and quantities of hazardous substances, petroleum products, and
29 hazardous and petroleum wastes. These materials are used for or generated directly by the
30 maintenance and repair activities, and by operating and maintaining the equipment necessary for those
31 activities. The primary hazardous substances and petroleum products likely include materials such as
32 lead-acid batteries, motor oil, antifreeze, paint and paint thinners, cleaners, hydraulic oils, lubricants,
33 and liquid fuels (diesel and gasoline). The hazardous substances, petroleum products, and hazardous
34 and petroleum wastes are stored at various USBP or contractor maintenance shops and managed in
35 accordance with each group's standard operating procedures (SOPs) for hazardous materials. The
36 wastes are recycled or disposed of offsite in accordance with Federal, state, and local regulations.

37
38 Several public and private storage areas, facilities, maintenance areas, and other operations
39 store, transport, handle, use, generate, and dispose of various types and quantities of hazardous
40 substances, petroleum products, and hazardous and petroleum wastes within and near the action area.

41
42 During the site visit, CBP identified an open pit and a bank cut in the project area with
43 visible free product present. The free product has not been analyzed by CBP but resembles tar or
44 other heavyweight petroleum product. In addition, CBP identified a number of groundwater
45 sampling wells that surround this open pit. The location of this area is shown in Figure 3-2.

1

Figure 3-2. Remediation Evidence in the Action Area



2

CBP has coordinated with the city of Laredo regarding this site and learned that it is property previously owned by Kansas City Southern Railroad (KCS), previously known as the Texas Mexican Railway Company (KCS 2015). In July of 2015 CBP inquired about the area from the current property owner (The City of Laredo) and the previous property owner (KCS). KCS retains a right of entry to continue their corrective action.

KCS responded by providing information regarding the nature of the area (KCS 2015). In January 1998 the Texas Natural Resources Conservation Commission (TNRCC) region 15 office issued a “notice of Solid Waste Violation and Corrective Action Directives” to the Texas Mexican Railway Company. The letter noted that the railway had operated a surface impoundment at the Embargo Yard, and that numerous discharges from this surface impoundment had occurred that were “apparently not authorized.” The impoundment and Embargo Yard were the site of the city of Laredo’s asphalt pit in the 1920s, and the nature of the contaminants indicated tar that when subjected to 100°F ambient temperatures liquefies enough to flow. Contaminated soils were identified by TNRCC, and a cleanup and characterization were requested as part of the notice. In March 1999, TNRCC wrote a letter to the Texas Mexican Railway Company stating that the commission had reviewed a final report and that the cleanup had achieved Risk Reduction Standard no. 2 pursuant to Title 30 of the Texas Administrative Code.

The city has issued an Industrial User Permit (No. 008-TMR-IU-0215) to KCS for effluent from the pump and treat operation employed to treat groundwater at this site.

3.13.2. ENVIRONMENTAL CONSEQUENCES

Impacts on hazardous materials management would be considered significant if a Proposed Action resulted in worker, resident, or visitor exposure to these materials above established limits or resulted in noncompliance with applicable Federal and state regulations, or increased the amounts generated or procured beyond current CBP hazardous materials management procedures and capacities. An effect on solid waste management would be significant if the Proposed Action exceeded existing capacity or resulted in a long-term interruption of waste management, a violation of a permit condition, or a violation of an approved plan for that utility.

3.13.2.1. Proposed Action Alternative

Long-term, negligible to minor, adverse impacts due to hazardous substances, petroleum products, hazardous and petroleum wastes, and pesticides would be expected from implementation of the Proposed Action. These impacts are expected to be slightly less frequent than in the no-action alternative. Since the Proposed Alternative allows patrol vehicles to patrol the area along the river in a single road without frequent detours back to city streets, fewer vehicle miles are expected in the area. Because roads are repaired using compacted material and good drainage practices, fewer repairs are expected to be required. Maintenance vehicles containing hazardous substances such as petroleum products would be deployed less frequently than in the No Action Alternative, decreasing the probability of a spill or release. Before pesticide application, TCEQ would be consulted for the appropriate permits or instruction on the quantity and approved application techniques. No impacts due to ACMs, LBP, or PCBs would be expected from the Proposed Action, as the tactical infrastructure is not anticipated to contain ACMs, LBP, or PCBs. If maintenance and repair activities require disturbance of a known or encountered solid waste

landfill, TCEQ would be consulted before disturbance to significantly reduce or eliminate any potential exposure to ACMs, LBP, or PCBs that might be in the landfill. No impacts on solid waste management would be expected from the Proposed Action. The volumes of solid waste produced during repair and maintenance would be minimal and unlikely to increase.

The road construction and repair activities are not expected to interfere with the corrective action found in the area of the Proposed Action. CBP will not excavate or repair road in the area adjacent to or overlying the KCS Embargo Yard corrective action.

3.13.2.2. No Action Alternative

The No Action Alternative is reactive in nature and could eventually result in greater deterioration of tactical infrastructure over time due to lack of preventative maintenance, which could result in more frequent maintenance and repair of tactical infrastructure. This could create greater volumes of solid waste. Impacts due to hazardous substances, petroleum products, hazardous and petroleum wastes, or pesticides would be expected from the No Action Alternative.

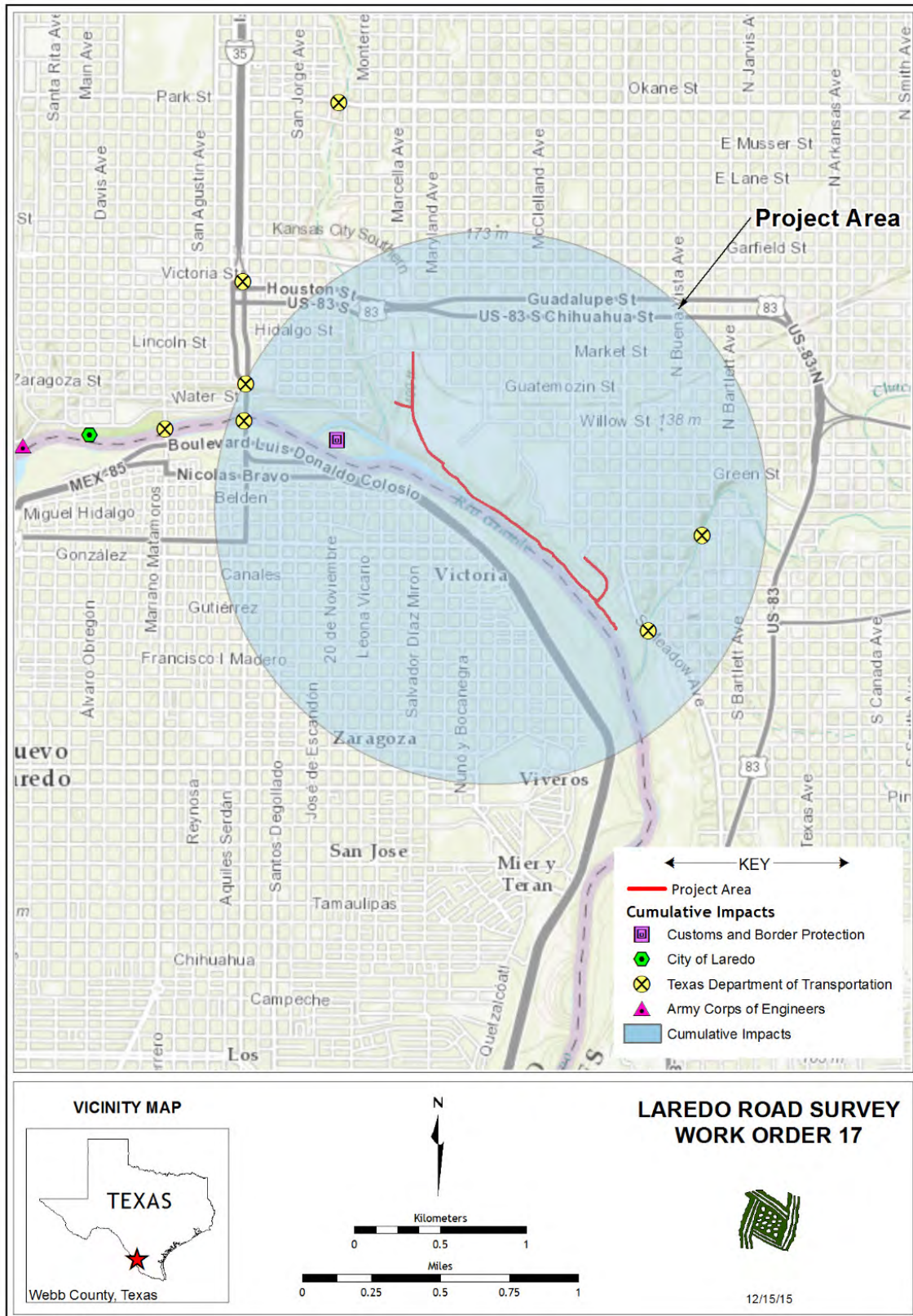
The No Action Alternative would continue the existing storage, transport, handling, use, generation, and disposal of hazardous substances, petroleum products, hazardous and petroleum wastes, and pesticides as previously described. Patrol operations would require detours from the segments of the riverside patrol area back to city streets due to the lack of continuity of the road segments. More total patrol miles would be expected. The tactical infrastructure would continue to be maintained and repaired as needed. Because the existing roads would not be repaired to design specifications using compacted materials and appropriate drainage infrastructure, repairs could be expected to increase in frequency and severity. No new chemicals or toxic substances would be used or stored. Before applying pesticides, CBP should consult the appropriate state agency for the appropriate permits or instruction on the quantity and approved application techniques. If maintenance and repair activities require disturbance of a known or encountered solid waste landfill, CBP would consult the appropriate state regulatory agency before disturbance to reduce significantly or eliminate any potential exposure to ACMs, LBP, or PCBs that might be in the landfill. The No Action Alternative does not guarantee that all BMPs would be implemented during emergency repair activities. Therefore, the No Action Alternative could result in greater impacts from hazardous materials and wastes than the Proposed Action.

3.14. Cumulative and Other Adverse Effects

Cumulative impacts can result from individually minor but collectively significant past, present, and foreseeable future actions. This section of the EA addresses the potential cumulative impacts of the alternatives and other projects or programs planned for the region. The CEQ defines cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR 1508.7). This definition further states that “[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” For the purposes of this EA, the area of potential effect (APE) is shown in Figure 3-3. The APE for this Proposed Action is localized near the Rio Grande in Laredo, TX.

1

Figure 3-3. Locations of Projects Included in Cumulative Impacts



The APE for cumulative impacts relative to the Proposed Action is a 1-mile radius around the project area. This standard is used and accepted by the Texas Historical Commission and the Secretary of the Interior. No cultural resources are recorded within this area. The activities related to the Proposed Action would have no cumulative effect on cultural resources.

3.14.1. CBP ACTIVITIES INCLUDED IN THE CUMULATIVE IMPACTS ANALYSIS

Past and present actions are those CBP maintenance and repair actions that occurred within the geographic scope of cumulative effects before the development of this EA. Present actions consist of the current ad hoc, as-needed approach to the maintenance and repair of existing tactical infrastructure, and future actions would consist of the maintenance and repair of all current tactical infrastructure. USBP has been conducting law enforcement actions along the border since its inception in 1924 and has continually transformed its methods as new missions, CBP modes of operations, agent needs, and national enforcement strategies have evolved.

Adverse impacts of future and ongoing projects would be prevented or minimized with continued funding and implementation of USBP's environmental conservation measures, including environmental education and training of its agents, use of biological and archaeological monitors, wildlife water systems, and restoration activities. However, recent, ongoing, and reasonably foreseeable proposed projects would result in cumulative impacts. In particular, within the next 15 years, 135 miles of cane removal and control and additional patrol road construction is anticipated to be completed. Furthermore, the development of additional tactical infrastructure is proposed in the Riverbend area of the Laredo Station's area of operations. This activity includes the construction of all-weather access and patrol roads, installation of a boat repair facility, and clearing of an unpaved overlook.

CBP activities have had many positive cumulative impacts. For example, construction and maintenance activities resulting in reductions in cross-border violations such as illegal drug smuggling have had cumulative positive impacts on socioeconomic resources within the border area. Activities completed by the Immigration and Naturalization Service (INS, predecessor to CBP) from 1994 to 1999 have provided information on more than 100 new cultural resource sites potentially eligible for NRHP listing.

The U.S. Department of Agriculture's Agricultural Research Service (with support funding from CBP) is conducting research on two biological control agents that prey on Carrizo cane. The first two biological control agents are approved. The Arundo wasp (*Tetramesa romana*) is established in the Laredo area and could heavily impact the Carrizo cane if distributed on a larger scale. The Arundo Scale (*Rhizaspidiotis donacis*) has been released in limited areas of Laredo near Laredo Community College. The use of biological control agents would not cause further damage to non-target native plants or animals.

3.14.2. NON-CBP ACTIVITIES INCLUDED IN THE CUMULATIVE IMPACTS ANALYSIS

Plans by other agencies that would also affect the region's natural and human environment include various road improvements by the Texas Department of Transportation (TxDOT) and Webb County. All of the projects would be expected to occur along existing corridors or within

1 previously disturbed sites. The magnitude of the impacts would depend upon the length and
2 width of the road right of way and the conditions existing within and adjacent to the right of way.
3

4 The following projects are approved by the Texas Department of Transportation and occur
5 near the project area (TxDOT 2007):
6

- 7 • Realignment of Flecha Lane and Las Cruces Drive along Farm to Market (FM) 1472
8 and pre-excavation work of a grade sewer entry point at Calton Road and Santa Maria
9 intersection (July 2008)
- 10 • Construction of a border safety inspection facility in the vicinity of a General
11 Services Administration facility (September 2008)
- 12 • Construction of a replacement for an existing bridge on Sanchez-Gustavus at Zacate
13 Creek (May 2009)
- 14 • U.S. 83—Construction of a four-lane divided facility with an interchange at U.S. 83
15 (January 2010)
- 16 • Installation of weigh-in-motion and vehicle identification devices, and a host
17 computer system at all four Laredo points of entry (June 2010)
- 18 • Replacement of bridge and approaches on Meadow Street (June 2010)
- 19 • Construction of a hike-and-bike trail at Chacon Creek in Laredo (August 2010).
20

21 In addition, other Federal entities are planning projects that could affect areas in use by
22 USBP. The 2005 and 2008 EAs and the 2007 Supplemental Environmental Assessment
23 provided an extensive list of past or foreseeable Federal projects within the region. These
24 project descriptions are also incorporated herein by reference (CBP 2005a, 2007, and 2008). Of
25 these projects, the Laredo Section 206 Aquatic Ecosystem Restoration Project proposed by the city
26 of Laredo and the U.S. Army Corps of Engineers would take place just west and north of the
27 Proposed Action area. This restoration project would remove invasive species and revegetate
28 the Riverbend area with native plant species.
29

30 Union Pacific Railroad Company requested from the Department of State²² a permit to
31 build a new railroad bridge between Laredo, TX, and Nuevo Laredo, Mexico, a project that would
32 include building rail lines in both countries to connect the new bridge to existing mainline tracks.
33 The proposed railroad bridge would be 6.5 miles northwest of the existing international railroad
34 bridge crossing at Laredo. The work involves building approximately 1.7 miles of new track on
35 the U.S. side; building a 1,169-foot-long bridge spanning the Rio Grande and the border; and
36 building 8.95 miles of new track in Mexico. It is expected that the new rail bridge will:
37

- 38 • Eliminate about 90 percent of Union Pacific rail traffic from downtown Laredo
- 39 • Reduce inconvenience to the public due to blocked crossings
- 40 • Allow for anticipated future rail traffic growth generated by the North American Free
41 Trade Agreement.
42

²² The Department of State is charged with issuing presidential permits for building international bridges under the International Bridge Act of 1972.

1 Earthwork and grading for the project will be designed and constructed to permit the
2 operation of a double mainline track. However, the second mainline will be constructed in the
3 future as demand increases. The proposed rail corridor will be 200–400 feet wide, with the
4 additional width required for the curved transition into the existing tracks. The corridor will traverse
5 undeveloped land and will not require purchase or relocation of any homes or businesses.
6

7 The Webb County Rural Rail Transportation District in conjunction with the Corporación
8 para Desarrollo Fronteriza—the Corporation for Border Development (CODEFRONT), a Nuevo
9 León state agency headquartered in Monterrey, Mexico—proposes to construct a new
10 international railroad bypass around the city of Laredo. The bypass would be approximately
11 20 miles upriver from Laredo. The project would include a new rail bridge over the Rio Grande
12 in the vicinity of the existing Colombia-Solidarity Bridge, as well as approximately 22.5 miles of
13 new rail line to connect with existing rail lines.
14

15 The city of Laredo periodically mows the Carrizo cane along an approximately 1.5 mile
16 corridor parallel to the Rio Grande in downtown that is upriver of this project's footprint.
17 The mowing corridor is approximately 50 feet wide; surrounding a city park. The City of
18 Laredo will presumably continue mowing the vegetation along this 1.5-mile long corridor.
19

20 As described earlier in this document, a corrective action and groundwater monitoring wells
21 are located in the project area. Free product is observed in an excavation and elsewhere near the
22 Proposed Action area. This corrective action is administered by KCS Railroad.
23

24 **3.14.3. RESOURCES EVALUATED FOR CUMULATIVE IMPACTS**

25 This EA evaluates cumulative impacts due to the Proposed Action and No Action
26 Alternatives. Both are evaluated for their potential impact on the following resource areas:
27

- 28 • Geology and Soils
- 29 • Vegetation
- 30 • Terrestrial and Aquatic Wildlife
- 31 • Threatened and Endangered Species
- 32 • Water Resources
- 33 • Air Quality
- 34 • Noise
- 35 • Cultural Resources
- 36 • Roadways and Traffic
- 37 • Hazardous Materials and Waste Management
- 38

39 **3.14.4. RESOURCES NOT FURTHER EVALUATED FOR CUMULATIVE IMPACTS**

40 Cumulative impacts on the following resources would be limited due to the lack of direct
41 effect from the Proposed Action and No Action Alternatives, so the cumulative impact on these
42 areas is not evaluated further.
43

- 1 • **Land Use:** No effects on land use plans or policies are anticipated from either the
2 Proposed Action or the No Action Alternative. Therefore it is not expected that either
3 alternative would have any cumulative impacts on land use.
- 4 • **Socioeconomic Resources:** Impacts on socioeconomic conditions would be significant
5 if they included displacement or relocation of residences or commercial buildings,
6 increases in long-term demands for public services in excess of existing and projected
7 capacities, and disproportionate impacts on minority and low-income families. Road
8 replacement, repair, and maintenance as described by the Proposed Action would result
9 in short-term, minor, beneficial impacts on the region's economy. There would be no
10 cumulative adverse impacts on residential areas, populations, or minority or low-
11 income families.
- 12 • **Environmental Justice:** Impacts on environmental justice would be significant if they
13 had a disproportionately high and adverse effect on minority and low-income
14 populations. Webb County has a large proportion of its population identifying itself as
15 of Hispanic or Latino origin. Furthermore, the county is below both the national and
16 state median household income, and a greater percentage of the county population lives
17 in poverty relative to both the state and the country. As a result, the project could
18 encounter both minority and low-income populations. However, this Proposed Action
19 is not located within a predominantly minority or low-income neighborhood and
20 therefore is not likely to impact minority or low-income populations. The overall
21 cumulative impact of the other actions in the Proposed Action area includes decreases
22 in crime rates and criminal activities and an increase in employment, which should
23 have a minor to moderate positive impact in the region.
- 24 • **Protection of Children:** Impacts on the protection of children would be significant if
25 they had a disproportionately high and adverse effect on children. EO 13045 requires
26 each Federal agency to "identify and assess environmental health risks and safety risks
27 that may disproportionately affect children" and to "ensure that its policies, programs,
28 activities, and standards address disproportionate risks to children that result from
29 environmental health risks or safety risks." This EO was prompted by the recognition
30 that children, still undergoing physiological growth and development, are more
31 sensitive to adverse environmental health and safety risks than adults. The potential for
32 impacts on the health and safety of children is greater where projects are located near
33 residential areas.
34 The Proposed Action is not close to residential neighborhoods. For most of its length
35 the project parallels industrial-use areas such as a water treatment plant and a rail
36 switching yard. Part of the project area adjoins a playground, however, so BMPs
37 (Appendix B) that limit speed on the roadways should help protect children. In addition
38 the playground is located atop a bluff above the actual construction, repair, and
39 maintenance areas of the Proposed Action. The Proposed Action activities would not
40 require any additional demands on public services, such as schools or day care
41 facilities, during or after the actions. Construction and maintenance crews would stop
42 work activities if any children were observed approaching the project area, and would
43 safely guide them away from the site before resuming work. Therefore, the Proposed
44 Action would not pose a threat to the health of the children in the project area. The
45 cumulative effects of BP activities located along the Rio Grande in Laredo should have
46 a moderate positive impact regarding the protection of children. Cross-border violators

and smugglers would be more easily and economically interdicted and therefore not continue to increase costs for U.S. citizens. Increased costs stem from apprehension, detention, and incarceration of criminals and, indirectly, loss of property, illegal participation in government programs, and increased insurance costs indirectly impacting children in the region.

- **Sustainability and Greening:** Both the Proposed Action and the No Action Alternatives would use negligible amounts of resources. Beneficial effects on long-term sustainability and greening would be expected. Following the completion of the Proposed Action, fewer trips through the neighborhoods would be required to accomplish the required patrolling. BP Agents would be able to travel along the entire length of the road without making trips from the streets to the river for each unconnected section.
- **Aesthetics and Visual Resources:** The Proposed Action and No Action Alternatives would not have a significant impact on aesthetics or visual resources. Existing infrastructure would be maintained or repaired, and no additional infrastructure would be installed other than some new lengths of road. The Proposed Action area is closed to public access and used only by CBP personnel. Therefore, there would be no impact on public enjoyment and/or appreciation of the resource. A benefit to project location aesthetics is the removal of deadfall along the patrol road. Therefore, areas north of the border would experience minor beneficial, indirect cumulative effects from the reduction of trash, soil erosion, and wildfires produced by cross-border violators.
- **Climate Change:** Both the Proposed Action and No Action Alternatives would temporarily increase vehicle exhaust emissions during construction and maintenance and would minimally increase GHG emissions. However, long-term benefits can also be anticipated. Following completion of the Proposed Action, less fuel would be needed for vehicles on north-south trips per patrol, as a result of the improved road conditions. Additionally, CBP would replace any trees removed as a result of the Proposed Action with species that have superior carbon capture abilities. The cumulative effects would be a minor to moderate positive impact on the number of vehicles and trips directly along the river.
- **Human Health and Safety:** Safety in implementing the Proposed Action and No Action Alternatives is largely a matter of adhering to regulatory requirements imposed for the benefit of employees and using operational practices that reduce risks of illness, injury, death, and property damage. OSHA and the EPA issue standards that specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits with respect to workplace stressors. Personnel are exposed to safety risks from the inherent dangers at any maintenance and repair site. Contractors would be required to establish and maintain safety programs at the maintenance and repair site. The Proposed Action would not expose members of the general public to increased safety risks. Therefore, because the Proposed Action would not introduce new or unusual safety risks, and assuming appropriate protocols are followed and implemented, this EA does not include a detailed examination of safety. The likelihood is extremely low that the Proposed Action would impact the health and safety of humans other than USBP agents and contractors or USBP personnel performing the road improvements. The Proposed Action, in conjunction with other actions by CBP and other entities, would not have

- 1 cumulative adverse impacts on human health and safety, due to the mostly urban
 2 location of the project corridor and the type of personnel used for project purposes.
- 3 • **Utilities and Infrastructure:** Impacts on the protection of utilities and infrastructure
 4 would be significant if they had a disproportionately high and adverse effect such as
 5 endangering the infrastructure, or overtaxing demand on such things as roads, water
 6 supply, or electricity. Given that this Proposed Action would require input from the
 7 utilities and would probably reduce the number of trips through city streets by agents,
 8 it seems likely that the Proposed Action would have no negative impacts or contribute
 9 to cumulative impacts with other projects in the region.

11 **3.14.5. CUMULATIVE IMPACTS: GEOLOGY/SOILS**

12 The potential for effects on geology and soils is limited to areas where ground disturbance
 13 would occur within projects. The cumulative effects of construction in the area considered could
 14 be increased erosion and concomitant siltation of the Rio Grande. Long-term siltation of the Rio
 15 Grande by the Proposed Action and the No Action Alternative would be avoided with appropriate
 16 BMPs listed in Appendix B. Cumulatively this approach would reduce the impacts of past
 17 maintenance and repair activities and ensure that future potential erosion is well managed.
 18 Consequently, maintenance and repair of roadways built during past, present, and foreseeable
 19 future construction activity would be expected to have short-term, minor, adverse effects that are
 20 localized to the areas where ground disturbance has occurred. Long-term, beneficial effects would
 21 be expected from stabilizing roadways and drainage structures throughout the action area. If
 22 multiple maintenance and repair activities or any ground-disturbing activities were to occur
 23 simultaneously and in proximity, then minor, short-term and negligible long-term, adverse,
 24 cumulative effects could occur.

26 **3.14.6. CUMULATIVE IMPACTS: VEGETATION**

27 Impacts on native vegetation would be considered significant if they included a
 28 substantial reduction in ecological processes, communities, or populations that would threaten
 29 the long-term viability of a species or result in the substantial loss of a sensitive community that
 30 could not be offset or otherwise compensated. Vegetation control and clearing of plant
 31 communities for road construction and maintenance of the road corridor, as identified in the
 32 Proposed Action and No Action Alternatives and other proposed projects in the region, would
 33 not have an adverse cumulative impact on vegetation, due to the vast amount of similar habitat
 34 contained within and surrounding the project area and the juxtaposition of the project area with
 35 other disturbed and developed areas. The proposed Union Pacific railroad bypass bridge far north
 36 of Laredo will likely affect vegetation in a narrow corridor. Given the distance of the proposed
 37 railroad bridge from the Preferred Action and the intervening vegetated area between the railroad
 38 bridge and the Preferred Action it seems unlikely that there will be any potential to adversely affect
 39 vegetation within the region.

41 **3.14.7. CUMULATIVE IMPACTS: TERRESTRIAL AND AQUATIC WILDLIFE**

42 Impacts on wildlife and aquatic resources would be significant if they included a
 43 substantial reduction in ecological processes or populations that would threaten the long-term
 44 viability of a species, or result in the substantial loss of a sensitive habitat that could not be offset

or otherwise compensated. Vegetation control throughout Webb County, including removal of Carrizo cane and salt cedar, would have minor cumulative impacts due to the vast amount of native habitat contained within and surrounding the project area, and the low value of invasive species as habitat for native wildlife species.

As a result of past and planned projects within the Laredo Sector, cumulative short-term impacts due to fragmentation of habitat would be considered minor. Most of the land parallel to the Rio Grande within the Laredo Sector would be devoid of Carrizo cane and salt cedar, once all proposed and planned projects are completed. However, it is anticipated that in the long term, native riparian vegetation would replace the invasive Carrizo cane and salt cedar adjacent to this project area as a result of the replanting of native vegetation associated with the Carrizo Cane Pilot Project and the Riverbend Road mitigation project, and provide cumulative beneficial impacts.

Due to the vast amount of similar non-native habitat contained within and surrounding the project area, the juxtaposition of the project area with other disturbed and developed areas, and the fact that the current and future proposed road repair, maintenance, and replacement building project would be completed in phases, the long-term viability of wildlife species and communities in the project region would not be threatened. In addition, before project activities, CBP would perform site surveys for migratory bird species nests, plan for their avoidance or relocation, and conduct other appropriate mitigation measures, as deemed necessary. Thus, when combined with other ground-disturbing or development projects in the project region, the Proposed Action would not have a cumulative adverse impact on the region's biological resources.

3.14.8. CUMULATIVE IMPACTS: THREATENED, ENDANGERED, AND CANDIDATE SPECIES

This section describes the cumulative impacts of the Proposed Action and other actions in the area on federally threatened, endangered, and candidate species. CBP developed species-specific BMPs to avoid or minimize direct and indirect impacts on these species. Appendix B lists the BMPs that CBP would implement to protect the environment and non-listed species, and those that comply with other regulations such as the Migratory Bird Treaty Act (MBTA).

As documented in the following analyses, direct and indirect effects on threatened, endangered, and candidate species would be avoided or range from no effect to minor. Because the contribution of the Proposed Action to the cumulative effects on threatened and endangered species would be very small, cumulative effects are described here for all species in the aggregate and are not discussed further for each individual species or group of species.

Within the action area, future state, tribal, local, and private actions that are reasonably foreseeable, and that would contribute to cumulative anthropogenic effects on threatened and endangered species, include the following:

- Urban development within the adjacent Laredo metropolitan area
- Wind energy, transmission, and other renewable energy projects
- Construction and maintenance of roads and other infrastructure by private landowners and county and local governments

- Dispersed recreational activities throughout lands with public access
- Illegal cross-border activities along the international border
- Withdrawals of groundwater for agriculture, urban development, and other needs
- An ongoing CERCLA corrective action within the action area (Union Pacific
- Continued use and development of railyards within and adjacent to the action area
- Continued use and development of the warehouse/industrial district adjacent to the action area.

A few planning documents discuss reasonably foreseeable future nonfederal actions within the action area, so CBP did not compile a list or map of the locations of those activities that could contribute to cumulative effects. Instead, CBP considered the general types and locations of activities described to evaluate the cumulative effects of the road repair, maintenance, and construction project on threatened and endangered species.

Anthropogenic (manmade) influences that have contributed and will continue to contribute to reductions in the range and habitat availability and reduced populations of threatened and endangered species within the action area include agriculture, livestock grazing, urban development, road construction, trampling and off-road vehicle use, industrialization, fragmentation of habitat or isolation of travel corridors, and altered fire regimes. Installation of a Union Pacific bridge, far north of Laredo will provide an additional break in habitat connectivity and slightly reduce habitat. Given the distance of the proposed railroad bridge from the Preferred Action and the intervening vegetated area between the railroad bridge and the Preferred Action it seems unlikely that there will be any potential to adversely affect either migratory pathways or overall habitat availability. The corrective action taking place within the polygon of the Preferred Action has been ongoing and pre-dates the Preferred Action. The Preferred Action should not adversely affect either habitat or transit corridors. In fact maintenance of the roadway parallel to the river should have a minor beneficial overall impact by reducing the number of vehicle transits perpendicular to the river, and maintenance of vegetation in the area should decrease the amount of invasive species cover slightly enhancing habitat and suitable transit corridor within the region. Once natural vegetation and habitat are disturbed, introduced species can colonize more readily and outcompete native species.

Cumulatively, future activities would continue to adversely affect threatened and endangered species. The Endangered Species Act will continue to protect threatened and endangered species with the goal of recovery. CBP concludes that the Proposed Action to repair and replace roads in the action area would have a negligible contribution to cumulative effects on threatened and endangered species for the following reasons:

- Project activities would result in a very small incremental increase in human activities within the action area.
- Project activities would occur within and immediately adjacent to disturbed areas and would result in little or no additional habitat degradation, loss, or fragmentation.
- BMPs would be implemented to avoid effects on listed species.
- The road repair, maintenance, and construction involves no new withdrawals of water.

- Increased BP presence in the Proposed Action area and other areas along the Rio Grande would tend to decrease illegal cross-border activity as well as such activities as illicit dumping of garbage or other refuse.

3.14.9. CUMULATIVE IMPACTS: WATER RESOURCES

Impacts on water resources would be considered significant if they substantially depleted groundwater supplies or interfered with groundwater recharge. There would be no adverse cumulative impact on groundwater resources, as no water would be withdrawn for Proposed Action activities. When combined with other proposed cane removal and control projects in the region, the Proposed Action would have a beneficial cumulative impact on groundwater recharge, since reducing Carrizo cane and salt cedar in the Proposed Action area would reduce water loss through evapotranspiration.

3.14.9.1. WATERS OF THE UNITED STATES

Erosion and sedimentation control measures would reduce erosion and sedimentation to negligible levels during road building, repair, and some maintenance activities, including installation of stormwater structures to protect those roads and would eliminate post-construction erosion and sedimentation from the site. The same measures would be implemented for other CBP projects; therefore, there would be no adverse cumulative impacts.

Minor soil erosion and displacement would likely occur from this and other projects in the area due to construction activities, but would be negligible and not likely to cumulatively adversely affect the local or regional environment. Erosion and sedimentation control measures from the Proposed Action and other projects in the region include hydroseeding with native grasses and placing silt fences and straw bales during construction to minimize construction-related erosion and sedimentation impacts on creeks and the Rio Grande.

The combination of the Proposed Action with other projects in the project area would have a beneficial impact on surface water supplies, because the high evapotranspiration rates associated with cane and salt cedar would be removed from the system. Furthermore, replanting native trees greater than 4 inches in diameter at breast height that may be lost during construction and repair activities with native vegetation upriver in the Carrizo Cane Pilot Project or in the Riverbend Road mitigation replanting area would allow for reestablishing native vegetation-based habitat along the Rio Grande, which would have cumulative beneficial impacts on water quality and water temperatures of the Rio Grande and its tributaries.

Adequate municipal water exists for use in dust suppression. Past CBP projects have also used municipal water sources. When combined with past and foreseeable CBP projects in the APE there would not be any cumulative adverse impacts on municipal water supply.

3.14.9.2. FLOODPLAINS

Adverse impacts on floodplains would be considered significant if they resulted in direct or indirect losses to property or other flood damages affecting human safety, health, and welfare. Compliance with EO 11988 and the local floodplain regulations would ensure that any potential

adverse impacts on the floodplain are offset. Therefore, when combined with other existing and proposed projects in the region, there would not be any cumulative adverse impacts on floodplains.

3.14.10. CUMULATIVE IMPACTS: AIR QUALITY

Impacts on air quality would be considered significant if the action resulted in a violation of air quality standards, obstructs implementation of an air quality plan, or exposes sensitive receptors to substantial pollutant concentrations. The emissions generated during and after the road construction, repair, or maintenance would be short-term and minor. Identified projects all have Federal partners, so conformity analyses would be required to ensure that project emissions did not contribute to significant cumulative impacts. Within the Laredo area, no violation of air quality standards, obstruction of air quality plans, or exposure of sensitive receptors would occur. Deterrence and improved response time resulting from cane removal and control would reduce the need for off-road enforcement actions that are currently required by USBP agents, benefiting air quality.

3.14.11. CUMULATIVE IMPACTS: NOISE

Impacts on noise levels would be considered significant if they permanently increased ambient noise levels over 65 dBA. Most of the noise generated by the Proposed Action would occur during construction and repair activities, would be short-term, and thus would not contribute to cumulative impacts on ambient noise levels. Routine maintenance of the road surface and corridor would result in slight short-term and sporadic increases in noise levels that would continue to occur over the long term. Potential sources of noise from other projects in combination with routine maintenance are not enough to increase ambient noise levels above the 65 dBA range over area or time. Thus the noise generated by the Proposed Action's activities, when considered with other existing and proposed projects in the region, would not have a cumulative adverse impact.

3.14.12. CUMULATIVE IMPACTS: CULTURAL RESOURCES

Construction activities can have an adverse effect on cultural resources. Ground-disturbing activities such as blading, bulldozing, and excavation can damage surface and subsurface properties. Similarly activities can introduce elements that can destroy, damage, or alter historically important elements of the built environment. Ground-disturbing activities related to the proposed undertaking pose the most relevant potential impact to significant cultural resources. CBP undertook a cultural resources survey and prepared a detailed document before construction. That survey identified no cultural resources, so this undertaking has no potential to impact historic properties.

The APE for cumulative impacts relative to the Proposed Action is a 1-mile radius around the project area. This standard is used and accepted by the Texas Historical Commission and the Secretary of the Interior. No cultural resources are recorded within this area. The activities related to the Proposed Action would have no cumulative effect on cultural resources.

3.14.13. CUMULATIVE IMPACTS: ROADWAYS AND TRAFFIC

Impacts on roadways and traffic conditions would be considered significant if they included major traffic delays and/or detours that affect the current transportation patterns to a degree exceeding current management capabilities. The potential for delays and disruption of traffic would not occur, as the Proposed Action area is not within a publicly travelled area. Equipment for the Proposed Action and other projects in the area would be stockpiled at a temporary staging area, also located within the area of the Proposed Action. Therefore, cumulative impacts on traffic would be minor on the local and regional level, and roadways and traffic would return to normal conditions after construction and repair actions. This effort is likely to be accomplished over a period of 1 to 2 years, with several military training units and commercially contracted entities performing the project in sections. Reduced cross-border traffic would lead to fewer load vehicles on the local roadways, thus improving safety for travelers.

3.14.14. CUMULATIVE IMPACTS: HAZARDOUS MATERIALS AND WASTE MANAGEMENT

Significant impacts would occur if an action created a public hazard, if the site is considered a hazardous waste site that poses health risks, or if the action would impair the implementation of an adopted emergency response or evacuation plan. Only minor increases in the use of hazardous substances (such as petroleum/oil/lubricants or herbicides) would occur as a result of replacement building, repair, and maintenance of roads. The herbicides are approved for aquatic use and are of low toxicity to animals. No health or safety risks would be created by the Proposed Action. The effects of the Proposed Action, when combined with other on-going and proposed projects in the region, would not be considered an adverse cumulative effect.

Chapter 4.

REFERENCES

- Bartlett, R. D., and Patricia P. Bartlett
1999 *A Field Guide to Texas Reptiles and Amphibians*. Gulf Publishing Company, Houston, TX.
- Bell, G. P.
2002 *Ecology and Management of Arundo donax and Approaches to Riparian Habitat Restoration in Southern California*. The Nature Conservancy of New Mexico, 212 E. Marcy Street, Suite 200, Sante Fe, NM.
- Burlakova, L., and Karatayev, A.
2011 *Survey of Texas Hornshell Populations in Texas*. Final Report. Grant TXE-132-R-1 Texas Parks and Wildlife.
- CBP (U.S. Customs and Border Protection)
2007 Environmental Assessment. Carrizo Cane Control Pilot Project. Laredo, TX.
2012 *2012–2016 Border Patrol Strategic Plan, The Mission: Protect America*. May 7, 2012. http://www.cbp.gov/xp/cgov/border_security/border_patrol/bp_strat_plan/.
2014 *Environmental Assessment Addressing Proposed Tactical Infrastructure Maintenance and Repair Along the U.S./Mexico International Border in Texas*
2015 Biological Assessment: Laredo South Roads. LMI, Tysons Virginia 61 pp.
- Davis, William B. and David J. Schmidly
1997 *The Mammals of Texas—Online Edition*. <http://www.nsrl.ttu.edu/tmot1/copyright.htm>. Accessed: January 30, 2015.
- Everitt, J. H., D.L. Drawe
1993 *Trees, Shrubs and Cacti*. Texas Tech University Press. Box 41037 Lubbock, Texas 79409-1037 U.S.A.
- Everitt, J. H., D. L. Drawe, C. R. Little, and R. I. Lonard
2011 *Grasses of South Texas*. Texas Tech University Press. Box 41037. Lubbock, TX 79409-1037 U.S.A.
- Gough, B.
2014 Nature Conservancy, The (TNC). *Texas by Nature. Invasive Species Watch: Buffelgrass*. <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/texas/explore/texas-by-nature-buffelgrass>.
- Griffith, G. E., S. A. Bryce, J. M. Omernik, J. A. Comstock, A. C. Rogers, B. Harrison, S. L. Hatch, and D. Bezanson
2004 “Ecoregions of Texas” (color poster with map, descriptive text, and photographs): Reston, VA, U.S. Geological Survey (map scale 1:2,500,000).

- Hanselka, C. W.
1988 *Buffelgrass—south Texas wonder grass*. Rangelands.
- Howells, R. G.
1996 *Distributional surveys of freshwater bivalves in Texas. Progress report for 1994*. Management Data Series 120. Texas Parks and Wildlife Department, Austin, TX. 53 pp.
- Immigration and Nationality Act of 1952 (Public Law 82-414) contained in Title 8 of the United States Code (U.S.C.) “Aliens and Nationality” and other statutes relating to the immigration and naturalization of aliens.
- KSC
2015 Correspondence between Kansas City Southern and Customs and Border Protection regarding KCS’s ongoing remediation near the project site.
- Lang, B. K.
2001 *Status of the Texas hornshell and native freshwater mussels (Unionoidea) in the Rio Grande and Pecos River of New Mexico and Texas*. Completion Report, New Mexico Department of Game and Fish, Conservation Services Division, Santa Fe, NM. 68 pp.
- Miller, T.
2014 Thomas Miller, Director Rio Grande International Study Center. Personal communication with Frank Reilly October 2014.
- NatureServe
2015 Accessed January 23, 2015.
2010 *NatureServe Explorer: An Online 2008 encyclopedia of life* [web application]. Version 7.0. NatureServe, Arlington, VA. <<http://www.natureserve.org/explorer/>>.
- NRCS (Natural Resources Conservation Service)
1906 Soil Survey Map of Webb County, TX.
- Racelis, A.
2009 “Preliminary Investigations of the Potential for Biological Control of Guineagrass, Elephant Ear, and Chinese Privet” (color poster, descriptive text photographs and maps). USDA-ARS, Weslaco, TX.
- Sibley, David Allen
2000 *National Audubon Society—The Sibley Guide to Birds*. Alfred A. Knopf, Inc., New York.
- Strayer, D. L.
1999 “Use of flow refuges by unionid mussels in rivers.” *Journal of the North American Benthological Society*, 18:468476.
- Tennant, Alan
1984 *The Snakes of Texas*. Texas Monthly Press, Inc., Austin, TX.

- 1 Texas Clean Rivers Program
 2 2014 “Texas Clean Rivers Program for the Rio Grande Basin: Middle Rio Grande Coordinated
 3 Monitoring Meeting.”
 4 [http://www.ibwc.gov%2Fcrp%2Fdocuments%2Fmiddle%2520minutes%2520and%2520](http://www.ibwc.gov%2Fcrp%2Fdocuments%2Fmiddle%2520minutes%2520and%2520agenda%25202014.pdf)
 5 [agenda%25202014.pdf](http://www.ibwc.gov%2Fcrp%2Fdocuments%2Fmiddle%2520minutes%2520and%2520agenda%25202014.pdf). Accessed January 24, 2015.
 6
- 7 TPWD (Texas Parks and Wildlife Department)
 8 1984 *The Vegetation Types of Texas*. Internet Resource:
 9 http://www.tpwd.state.tx.us/gis/vegetation_types/. Last accessed December 27, 2003.
 10 2015a <http://tpwd.texas.gov/gis/ris/es/SpeciesList.aspx?parm=Webb>. Accessed January 23,
 11 2015.
 12 2015b <https://tpwd.texas.gov/huntwild/wild/species/leasttern/>. Accessed January 23, 2015.
 13 2015c <http://tpwd.texas.gov/huntwild/wild/species/ashy/>. Accessed January 23, 2015.
 14 2001 “Natural Regions of Texas.” Map. Produced by Texas Parks and Wildlife Department
 15 2001. http://tpwd.texas.gov/publications/pwdpubs/media/pwd_mp_e0100_1070t_08.pdf.
 16 Accessed: February 4, 2015.
 17
- 18 TWDB (Texas Water Development Board)
 19 1995 *Aquifers of Texas*. Texas Water Development Board Report 345.
 20
- 21 TxDOT (Texas Department of Transportation)
 22 2007 Statewide Transportation Improvement Program FY 2008-2010. Laredo
 23 District. [http://www.dot.state.tx.us/publications/transportation_planning/STIP_08_11/lare](http://www.dot.state.tx.us/publications/transportation_planning/STIP_08_11/laredo.pdf)
 24 [do.pdf](http://www.dot.state.tx.us/publications/transportation_planning/STIP_08_11/laredo.pdf).
 25
- 26 USDA (U.S. Department of Agriculture)
 27 2006 *Texas State Noxious Weeds*. Internet URL: <http://plants.usda.gov/>. Last accessed May 14,
 28 2008.
 29
- 30 USFWS (U.S. Fish and Wildlife Service)
 31 1987 *Ashy Dogweed (Thymophylla tephroleuca) Recovery Plan*. USFWS. Albuquerque, NM. 46
 32 pp.
 33 2010 *Draft Ocelot (Leopardus pardalis) Recovery Plan*, First Revision. USFWS, Southwest
 34 Region, Albuquerque, NM.
 35 2013 *Gulf Coast Jaguarundi (Puma yagouaroundi cacomitli) Recovery Plan*, First Revision.
 36 U.S. Fish and Wildlife Service, Southwest Region. Albuquerque, NM.
 37 2015 http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=48479.
 38 Accessed January 23, 2015.
 39
- 40 USGS (U.S. Geological Survey)
 41 2008 Simplified 2008 Hazard Map (PGA, 2% in 50 years). USGS.
 42 <http://earthquake.usgs.gov/hazards/products/conterminous/2008/maps/graphic2pct50.pdf>
 43 Accessed May 8, 2015.
 44
 45

Chapter 5.
LIST OF PREPARERS

Logistics Management Institute (LMI)

19	
20	Mark Woolley
21	BA Economics
22	MPP Master of Public Policy
23	Years of Experience: 9
24	
25	Anna Bower
26	BS Environmental Sustainability, Health
27	and Safety
28	MS Sustainability Science and Policy
29	Years of Experience: 1
30	
31	Sarah Daly
32	BS Environmental Science
33	Years of Experience: 1

Northland Research, Inc.

45	Brent Kober
46	BA Anthropology
47	MGIS Information
48	Years of Experience: 22
49	
50	
51	
52	
53	Allen Haden
54	BS Forestry
55	MS Biology
56	Years of Experience: 18

Natural Channel Design

Allen Haden
BS Forestry
MS Biology
Years of Experience: 18

Chapter 6. DISTRIBUTION LIST

Federal Agency Contacts

6 Mr. John Blevins	24 Ms. Cathy Gilmore
7 Division Director	25 Section Chief
8 U.S. Environmental Protection Agency	26 U.S. Environmental Protection Agency
9 Region 6	27
10	28 Mr. Richard E. Greene
11 Mr. Tom Bruechert	29 Administrator
12 Texas Environmental Team Leader	30 U.S. Environmental Protection Agency
13 U.S. Department of Transportation	31
14	32 Ms. Sue Masica
15 Commissioner Edward Drusina	33 Regional Director
16 Commissioner	34 National Park Service
17 U.S. International Boundary and Water	35
18 Commission	36 Mr. Ernesto Reyes
19	37 Texas DOI State Border Coordinator
20 Ms. Andree DuVarney	38 U.S. Fish and Wildlife Service
21 National Environmental Coordinator	39
22 U.S. Department of Agriculture	40 Mr. Adam Zerrenner
23	41 Field Supervisor
	42 U.S. Fish and Wildlife Service
	43

State Agencies

44	64 Mr. John Howard
45	65 Environmental Policy Director
46 Mr. Stephen J. Benn	66 Governor's Policy Office
47 Area Manager	67
48 Texas Parks and Wildlife	68 Mr. Carter Smith
49	69 Executive Director
50 Mr. John Davis	70 Texas Parks and Wildlife
51 Director	71
52 Texas Parks and Wildlife, Wildlife Diversity	72 Lt. Gen. Joe Weberm USMC (ret)
53 Program	73 Executive Director
54	74 Texas Department of Transportation
55 Mr. Jaime A. Garza	75
56 Regional Director	76 Mr. Mark Wolfe
57 Texas Commission on Environmental	77 State Historic Preservation Officer
58 Quality	78 Texas Historical Commission
59	79
60 Ms. Jody Henneke	
61 Deputy Commissioner	
62 Texas General Land Office	
63	

1

2

Local Contacts

3 Barrio de Colores
 4 C/O Israel Reyna
 5
 6 Mr. Adrian Gause
 7 Building Development Services
 8 City of Laredo
 9
 10 Mr. Gabriel Perez
 11 Environmental Manager
 12 Union Pacific Railroad
 13
 14 Ms. Celina Rivera
 15 Land Acquisition Manager
 16 City of Laredo
 17
 18 The Honorable Pete Saenz
 19 Mayor
 20 City of Laredo

23 The Honorable Danny Valdez
 24 County Judge
 25 Webb County
 26
 27 Mr. Carlos R. Villarreal
 28 City Manager
 29 City of Laredo
 30
 31 Laredo Public Library
 32 1120 E. Carlton Rd.
 33 Laredo, TX 78041
 34
 35 Texas A and M University
 36 Sue and Radcliffe Killam Library
 37 5201 University Blvd.
 38 Laredo, Texas 78041

21

22

39

40

41

Tribal Entities

42
 43 Mrs. Augustine Asbury
 44 Alabama-Quassarte Tribal Town
 45
 46 Mr. Jimmy Arterberry
 47 Comanche Nation of Oklahoma B-3
 48
 49 Michael Burgess, Chairman
 50 Comanche Nation of Oklahoma
 51
 52 Mr. Darren Cisco
 53 Apache Tribe of Oklahoma
 54
 55 Mr. Charles Coleman
 56 Thlopthlocco Tribal Town
 57
 58

59 Ms. Linda Langley
 60 Coushatta Tribe of Louisiana
 61
 62 Ms. Jean Ann Lambert
 63 Quapaw Tribe of Oklahoma
 64
 65 Ms. Miranda "Nax'ce" Myer
 66 Tonkawa Tribe of Oklahoma
 67
 68 President Terri Parton
 69 President
 70 Wichita and Affiliated Tribes
 71

Chapter 7.

AGENCIES AND PERSONS CONSULTED

Federal Agencies

USFWS

State Agencies

Texas Historical Commission

Tribal Entities

Alabama-Quassarte Tribal Town

Apache Tribe of Oklahoma

Comanche Nation of Oklahoma B-3

Comanche Nation of Oklahoma

Coushatta Tribe of Louisiana

Quapaw Tribe of Oklahoma

Thlopthlocco Tribal Town

Tonkawa Tribe of Oklahoma

Wichita and Affiliated Tribes



**U.S. Customs and
Border Protection**

April 16, 2015

Mr. Ernesto Reyes
U.S. Fish and Wildlife Service
Texas DOI State Border Coordinator
Alamo Ecological Service Sub-Office
3325 Green Jay Rd
Alamo, TX 78516

Subject: Biological Assessment for Laredo South All Weather Road, U.S. Department of Homeland Security, U.S. Customs and Border Protection, U.S. Border Patrol

Dear Mr. Reyes:

U.S. Customs and Border Protection (CBP) intends to repair, maintain, and rebuild approximately 2 miles of roads paralleling the Rio Grande and multiple access roads to this road in the city of Laredo, Texas.

Pursuant to the Endangered Species Act of 1973, 16 U.S.C. 1531 *et seq.* (ESA), U.S. Customs and Border Protection (CBP) has prepared the enclosed Biological Assessment (BA) for Laredo South All-Weather Roads. In accordance with Section 7 (c) of the ESA, CBP has prepared the BA to identify and assess the potential effects on Federally listed and candidate species from the proposed action. In addition, CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the construction, operation, and maintenance and repair of the Laredo South All-Weather Road. A copy of this EA will be sent to you for your review when available.

CBP requests that U.S. Fish and Wildlife Service (USFWS) accept this BA and initiate consultation as defined under Section 7 of the ESA. As noted in this BA, CBP has determined that the proposed action is unlikely to adversely affect, the following species noted as potentially occurring in Webb County, Texas: Ashy dogweed (*Thymophylla tephroleuca*), Johnston's frankenia (*Frankenia johnstonii*), Interior least tern, Gulf Coast jaguarundi (*Herpailurus yagouaroundi cacomitli*), and the candidate species, Texas hornshell. CBP requests your concurrence with this determination. CBP looks forward to working with USFWS to develop a Biological Opinion.

Mr. Ernesto Reyes

Page 2

We appreciate your assistance with this project. If you have any questions or concerns please feel free to contact Ms. Audra Upchurch at (202) 748-4435 or by email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Enriquez". The signature is fluid and cursive, with the first name "Paul" being more prominent than the last name "Enriquez".

Paul Enriquez
Division Director (A)
Real Estate and Environmental Services
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



United States Department of the Interior
FISH AND WILDLIFE SERVICE
Texas Coastal Ecological Service Field Office
3325 Green Jay Rd
Alamo, TX 78516

May 13, 2015

Paul Enriquez
Environmental Branch Chief
Border Patrol Facilities and Tactical Infrastructure
Program Management Office
U.S. Customs and Border Protection
1300 Pennsylvania Avenue NW
Washington, DC 20229

Consultation No. 02ETCC00-2015-I-0397

Dear Mr. Enriquez:

Thank you for your April 16, 2015, letter regarding proposed road improvement effects on federally listed species in Webb County, Texas. We also evaluated your project with respect to wetlands and other federal trust species and resources. Our comments and recommendations follow.

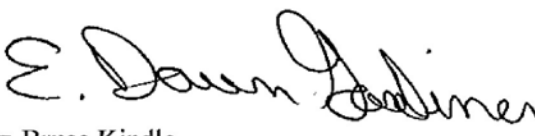
The U.S. Customs and Border Protection (CBP) proposes the Laredo South All-Weather Road be repaired and that flooded and eroded sections be replaced to maintain existing patrol and access roads along the Rio Grande in Laredo. Roads will be widened up to 20 feet with a 2-foot shoulder. Also, several small spurs are being evaluated to improve overall access. Future maintenance will require clearing vegetation up to 15 feet in height, within four feet of the roadside.

Temporary construction impacts will occur beyond the road footprint and disturbed areas will be replanted with a native grass seed mixture. Also, trees in the proposed work area have been catalogued, and if necessary to remove any, they will be replaced in accordance with City of Laredo Green Space Ordinance, except for invasive species, in a mitigation plot on the Laredo Community College campus.

Many bird species protected by the Migratory Bird Treaty Act nest in the project area. As the Federal agency responsible for the protection of migratory birds, the Service recommends that vegetation disturbance be avoided during the general March through August nesting period. If not feasible, we recommend a biologist trained with bird identification survey the areas proposed for disturbance in order to avoid the inadvertent destruction of nests, eggs, etc. and preclude violation of the Migratory Bird Treaty Act.

The CBP made a "may affect, not likely to adversely affect" determination for ocelot, jaguarundi, ashy dogweed, Johnston's frankenia, and interior least tern. Based on project information and our understanding that listed best management practices will be used, the Service concurs with this determination. We appreciate the opportunity to provide planning information and if we can assist further, contact Ernesto Reyes at (956) 784-7560.

Sincerely,


for Bruce Kindle
Acting Field Supervisor

U.S. Customs and
Border Protection

April 3, 2015

Mr. Mark Wolfe
State Historic Preservation Office
Texas Historical Commission
108 W. 16th Street
Austin, TX 78701

Subject Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Mr. Wolfe:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties. A copy of the report, "*A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed.

Mr. Mark Wolfe

Page 2

The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA, however, no surveys have been conducted for that portion of the project. If CBP decides to conduct road maintenance and/or construction in this additional area, CBP will coordinate with your office.

We request concurrence on our determination of no historic properties affected, as contained in the enclosed report. If you have any questions or concerns please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, reading "Paul Enriquez".

Paul Enriquez

Director (A)

Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure



Note: Areas within purple polygons were surveyed as part of the cultural survey. Area marked in green will be evaluated in the EA, however, no surveys have been conducted for the site.

TEXAS HISTORICAL COMMISSION

REQUEST FOR SHPO CONSULTATION:

Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at <http://www.thc.state.tx.us/crm/crmsend.shtml>.

- ☒ This is a new submission.
- ☐ This is additional information relating to THC tracking number(s): _____

Project Information			
PROJECT NAME Laredo South All-Weather Road			
PROJECT ADDRESS 2 miles of road in Laredo, Texas		PROJECT CITY Laredo	PROJECT ZIP CODE(S)
PROJECT COUNTY OR COUNTIES Webb			
PROJECT TYPE (Check all that apply)			
<input checked="" type="checkbox"/> Road/Highway Construction or Improvement		<input type="checkbox"/> Repair, Rehabilitation, or Renovation of Structure(s)	
<input type="checkbox"/> Site Excavation		<input type="checkbox"/> Addition to Existing Structure(s)	
<input type="checkbox"/> Utilities and Infrastructure		<input type="checkbox"/> Demolition or Relocation of Existing Structure(s)	
<input type="checkbox"/> New Construction		<input type="checkbox"/> None of these	
BRIEF PROJECT DESCRIPTION: Please explain the project in one or two sentences. More details should be included as an attachment to this form. Design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.			

Project Contact Information			
PROJECT CONTACT NAME Audra Upchurch		TITLE Environmental Specialist	ORGANIZATION LMI Government Consulting
ADDRESS 1331 Pennsylvania Ave, NW, Suite 1220N		CITY Washington	STATE DC
PHONE 202-344-2634		ZIP CODE 20229	
		EMAIL Audra.Upchurch@cbp.dhs.gov	

Federal Involvement (Section 106 of the National Historic Preservation Act)			
Does this project involve approval, funding, permit, or license from a federal agency?			
<input checked="" type="checkbox"/> Yes (Please complete this section)		<input type="checkbox"/> No (Skip to next section)	
FEDERAL AGENCY Department of Homeland Security		FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE U.S. Customs and Border Protection	
CONTACT PERSON Paul Enriquez		PHONE 949-425-7043	
ADDRESS 24000 Avila Road, Suite 5020 Laguna Niguel, CA 92677		EMAIL Paul.Enriquez@cbp.dhs.gov	

State Involvement (Antiquities Code of Texas)	
Does this project occur on land or property owned by the State of Texas or a political subdivision of the state?	
<input type="checkbox"/> Yes (Please complete this section) <input checked="" type="checkbox"/> No (Skip to next section)	
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND	
CONTACT PERSON	PHONE
ADDRESS	EMAIL

Identification of Historic Properties: Archeology

Does this project involve ground-disturbing activity?
☒ Yes (Please complete this section)
 ☐ No (Skip to next section)

Describe the nature of the ground-disturbing activity, including but not limited to depth, width, and length. Repair and, in some places, replace approximately 2 miles of damaged or lost road segments and conduct ongoing maintenance of the road segments. This project will be performed using a combination of commercial contracting and military training construction under the auspices of the Joint Task Force (JTF) North Program

Describe the previous and current land use, conditions, and disturbances.
 Previously disturbed areas with existing roads and mixed land use.

Identification of Historic Properties: Structures

Does the project area or area of potential effects include buildings, structures, or designed landscape features (such as parks or cemeteries) that are 45 years of age or older?
☐ Yes (Please complete this section)
 ☒ No (Skip to next section)

Is the project area or area of potential effects within or adjacent to a property or district that is listed in or eligible for listing in the National Register of Historic Places?
☐ Yes, name of property or district:
 ☒ No
 ☐ Unknown

In the space below or as an attachment, describe each building, structure, or landscape feature within the project area or area of potential effect that is 45 years of age or older.

ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE

Attachments
 Please see [detailed instructions regarding attachments](#).
 Include the following with each submission:
☐ Project Work Description
☐ Maps
☐ Identification of Historic Properties
☐ Photographs
 For Section 106 reviews only, also include:
☐ Consulting Parties/Public Notification
☐ Area of Potential Effects
☐ Determination of Eligibility
☐ Determination of Effect

Submit completed form and attachments to the address below. Faxes and email are not acceptable.
 Mark Wolfe
 State Historic Preservation Officer
 Texas Historical Commission
 P.O. Box 12276, Austin, TX 78711-2276 (mail service)
 108 W. 16th Street, Austin, TX 78701 (courier service)

For SHPO Use Only



**U.S. Customs and
Border Protection**



May 26, 2015

Mr. Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
108 W. 16th Street
Austin, TX 78701

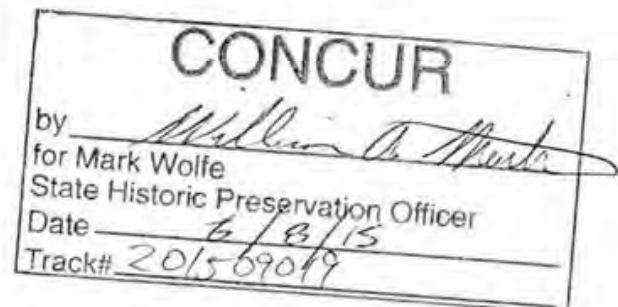
Subject Cultural Resources Survey of 11.4 Miles of Road Segments in the Laredo Sectors
in Webb and Zapata Counties, Texas, U.S. CBP; Track 201507413

Dear Mr. Wolfe:

U.S. Customs and Border Protection (CBP) plans to assume maintenance of 11.4 miles of road segments in Webb and Zapata Counties, Texas. CBP's consultant performed a cultural resources survey of the road segments within the project area and produced a report entitled, "*A Cultural Resources Survey of 11.4 Miles Of Roads Along The Rio Grande River, Laredo Sector, Webb And Zapata Counties, Texas*", by Brent Kober, Northland Research Technical Report 15-17." CBP provided a copy of this report to your office with a letter dated April 3, 2015. Your office reviewed the report and assigned the project the tracking number 201507413.

In a letter dated May 6, 2015, your office indicated that the report was not accepted. The main deficiency was the lack of National Register of Historic Places (NRHP) eligibility determination for previously recorded archaeological sites. CBP has addressed this issue by determining that the areas of the sites that occur within the project Area of Potential Effect (APE) lack sufficient depth, artifacts, and features, and do not retain horizontal or vertical integrity to be eligible for the NRHP. A revised copy of the report is included with this letter.

We request concurrence on our determination of no adverse effects on cultural resource as contained in the enclosed report. If you have any questions or concerns please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov.





**U.S. Customs and
Border Protection**

April 3, 2015

Mrs. Augustine Asbury
Tribal Historic Preservation Officer
Alabama-Quassarte Tribal Town
117 N. Main St.
Wetumka, OK 74883

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Mrs. Asbury:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Mrs. Augustine Asbury

Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





**U.S. Customs and
Border Protection**

April 3, 2015

Mr. Darren Cisco
Tribal Historic Preservation Officer
Apache Tribe of Oklahoma
620 E. Colorado Dr.
Anadarko, OK 73005

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Mr. Cisco:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Mr. Darren Cisco

Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





**U.S. Customs and
Border Protection**

April 3, 2015

Mr. Jimmy Arterberry
Tribal Historic Preservation Officer
Comanche Nation of Oklahoma
584 NW Bingo Rd.
Lawton, OK 73502

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Mr. Arterberry:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Mr. Jimmy Arterberry

Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





U.S. Customs and
Border Protection

April 3, 2015

Ms. Linda Langley
Tribal Historic Preservation Officer
Coushatta Tribe of Louisiana
1940 C.C. Bel Rd.
Elton, LA 70532

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Ms. Langley:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Ms. Linda Langley

Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





U.S. Customs and
Border Protection

April 3, 2015

Mr. Charles Coleman
Tribal Historic Preservation Officer
Thlopthloco Tribal Town
P.O. Box 188
Okemah, OK 74859

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Mr. Coleman:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Mr. Charles Coleman
Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, reading "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





U.S. Customs and
Border Protection

April 3, 2015

Ms. Miranda "Nax'ce" Myer
Tribal Historic Preservation Officer
Tonkawa Tribe of Oklahoma
1 Rush Buffalo Rd.
Tonkawa, OK 74653-4449

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Ms. Myer:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Ms. Miranda "Nax'ce" Myer

Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





U.S. Customs and
Border Protection

April 3, 2015

Ms. Jean Ann Lambert
Tribal Historic Preservation Officer
Quawpaw Tribe of Oklahoma
5681 S 630 Rd.
Quawpaw, OK 74363

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear Ms. Lambert:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

Ms. Jean Ann Lambert

Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)





U.S. Customs and
Border Protection

April 3, 2015

The Honorable Leslie Standing
President
Wichita and Affiliated Tribes
P.O. Box 729
Anadarko, OK 73005

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear President Standing:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,



Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)

cc: Mr. Gary McAdams
NAGPRA Representative
P.O. Box 729
Anadarko, OK 73005





U.S. Customs and
Border Protection

April 3, 2015

The Honorable Leslie Standing
President
Wichita and Affiliated Tribes
P.O. Box 729
Anadarko, OK 73005

Subject: Cultural Resources Survey of 18.2 Acres in the Laredo Sectors in Webb County,
Texas

Dear President Standing:

U.S. Customs and Border Protection (CBP) plans to undertake maintenance and construction activities along 2 miles of road segments encompassing a total of 18.2 acres near Laredo, Webb County, Texas (see attached figure).

The archaeological Area of Potential Effect (APE) for the road segments is defined as the 2-mile 44-foot wide footprint for the proposed road segment and two adjacent parcels encompassing 2.9 acres and 11.4 acres. The existing road is deteriorating and is in need of repair and maintenance. In some instances, the existing road along the riverside has totally eroded, thus it is proposed that certain new segments of road be installed. In addition, several small spurs are being evaluated which would provide improved access to the All-Weather Road from additional points along its length. These added access points will significantly shorten transit and response time for U.S. Border Patrol agents for operations in the middle of the road. This project includes the design and repair of approximately 2 miles of a 20-foot wide all-weather roadway, plus 2-foot shoulders on either side. The project will also repair multiple sections of the roadway with poor drainage conditions by incorporating a combination of culverts, low water crossings, and drainage ditches into the road design.

CBP is developing an Environmental Assessment (EA) to evaluate the potential impacts of the proposed road maintenance and construction. The EA will evaluate the No Action Alternative in which current operations and maintenance activities will continue for existing road segments and action alternatives for the repair and construction of the road. A copy of the EA will be sent to you for your review and comment.

Northland Research, Inc. (Northland) was contracted by CBP to complete the fieldwork to address the Department of Homeland Security (DHS) Directive (D) 023-01 and CBP requirements that ensure CBP compliance with Section 106 of the National Historic Preservation Act (NHPA). The archaeological survey did not locate any historic properties.

The Honorable Leslie Standing
Page 2

A copy of the report, " *A Cultural Resources Survey Of 18.2 Acres for the Laredo South All-Weather Road in Laredo, Webb County Texas*", by Pamela Rainey, Northland Research Technical Report 14-59 is enclosed. The areas inside of the purple polygons in the attached figure were included in the cultural survey. The area marked in green outside of the purple polygon will be evaluated in the EA however no surveys have been conducted for that portion of the project.

CBP has concluded that this undertaking will have no effect on significant cultural resources. Please let us know if you would like more information about this undertaking or this determination. If you have any questions or concerns about this project please feel free to contact Ms. Audra Upchurch at 202-748-4435 or via email at audra.upchurch@cbp.dhs.gov. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul Enriquez".

Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure(s)

cc: Mr. Gary McAdams
NAGPRA Representative
P.O. Box 729
Anadarko, OK 73005



1 **Appendix A.**
2 **Relevant Policy Documents, Invoking Actions, Regulatory Requirements, and**
3 **Status of Compliance**

4
5 Table A-1 summarizes relevant policy documents, invoking actions, regulatory requirements,
6 and compliance status.

Table A-1. Relevant Policy Documents, Invoking Actions, Regulatory Requirements, and Status of Compliance

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
Archaeological Resources Protection Act of 1979 16 U.S.C. 470 et seq.	Department of the Interior	Excavation, removal, damage, or other alteration or defacing; or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands. 43 Code of Federal Regulations (CFR) 7.4	Because activities are exclusively for purposes other than the excavation and/or removal of archaeological resources, even though those activities might incidentally result in the disturbance of archaeological resources, no permit shall be required.	To be addressed in the EA
Clean Air Act of 1963	Environmental Protection Agency (EPA)	Any CBP action where the total of direct and indirect emissions in a non-attainment area would equal or exceed the provided rates. 40 CFR 51	Project emission levels were determined to be less than de minimis thresholds; therefore, a determination of conformity with applicable implementation plan is not required.	To be addressed in the EA
Endangered Species Act of 1973 16 U.S.C. 1531 et seq.	USFWS	All actions in which there is discretionary CBP involvement or control. 50 CFR 402.03	Determination of no jeopardy to listed species and no destruction or adverse modification of critical habitat through consultation with the USFWS.	To be addressed in the EA
Farmland Protection Policy Act of 1981 7 U.S.C. 9601 et seq.	Natural Resource Conservation Service	Any CBP action. 7 CFR 658	Identify and take into account the adverse effects on the protection of farmland.	To be addressed in the EA
Migratory Bird Treaty Act of 1918 16 U.S.C. 703	USFWS	Any CBP action resulting in the potential take of any migratory bird, or the parts, nests, or eggs of such bird. 50 CFR 21.11	Avoidance of take or application for permit.	Proposed surveys before any construction beginning during nesting season
National Historic Preservation Act of 1966 16 U.S.C. 470 et seq.	Advisory Council on Historic Preservation	Any undertaking by CBP. 36 CFR 800.3	Assessment of effects through consultation with the Advisory Council on Historic Preservation.	To be addressed in the EA

Table A-1. Relevant Policy Documents, Invoking Actions, Regulatory Requirements, and Status of Compliance

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
Occupational Health and Safety Act of 1970 29 U.S.C. 651 et seq.	Occupational Safety and Health Administration, Department of Labor	Employees performing in a workplace. 29 CFR 1910.5(a)	Adherence to occupational health and safety standards.	To be completed by Facilities Management & Engineering during design and operation
Executive Order (EO) 11988: Floodplain Management 42 Federal Register (FR) 26951 (May 24, 1997)	Water Resources Council, Federal Emergency Management Agency, Council on Environmental Quality	Acquisition and management of Federal lands; federally undertaken, financed, or assisted construction; conducting Federal activities affecting land use.	Determine whether the Proposed Action would occur in a floodplain, then evaluate potential effects of any action in a floodplain.	To be addressed in the EA
EO 11990: Protection of Wetlands 42 FR 26,691 (May 24, 1977)	U.S. Army Corps of Engineers, EPA	Acquisition and management of Federal lands; federally undertaken, financed, or assisted construction; conducting Federal activities affecting land use.	Take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.	To be addressed in the EA
EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations 59 FR 7629 (February 11, 1994)	EPA	All programs or activities receiving Federal financial assistance that affect human health or the environment.	Analyze the environmental effects, including human health, economic, and social effects of CBP actions, including effects on minority communities and low-income communities.	To be addressed in the EA
EO 13045: Protection of Children from Environmental Health Risks and Safety Risks 62 FR 19883 (April 23, 1997)	EPA	Any CBP action.	Identify and assess environmental health risks and safety risks that may disproportionately affect children.	To be addressed in the EA
City of Laredo Greenspace Ordinance (Ordinance 2004-0-105)	City of Laredo	Removal of trees in a project area near a riparian zone with a diameter at breast height (DBH) greater than 4 inches.	Pre-construction and post construction survey with letter reports to the city of Laredo, and mitigation requirements for replacement of certain trees.	Pre-construction survey is complete

Appendix B.

Best Management Practices

The City of Laredo has a tree ordinance, and CBP has coordinated with the city regarding trees in the Proposed Action area (Appendix D). Before clearing and grubbing, all trees with a diameter at breast height (DBH) greater than 4 inches were recorded and would be protected to prevent damage (some trimming of branches would be required). If needed, any trees removed would be replaced in accordance with the Laredo greenspace ordinance (Ordinance 2004-0-105) (except for invasive species). Removed trees would be replaced in a mitigation plot on the Laredo Community College campus. All clearing and grubbing residues would be disposed of at an approved landfill.

Bird nesting surveys would be conducted by qualified personnel when activities during the migratory bird nesting season, March 15 to September 15.

Additional erosion and sedimentation control actions, such as placement of riprap, gabions, or erosion control blankets, would be undertaken as needed to prevent potential erosion impacts.

The following best management practices (BMPs) will be implemented for all project activities.

EOLOGY AND SOIL RESOURCES

1. Silt fencing and floating silt curtains should be installed and maintained to prevent movement of soil and sediment and to minimize turbidity increases in water.
2. Implement routine road maintenance practices to avoid making windrows with the soils once grading activities are complete and use any excess soils on site to raise and shape the road surface.
3. Only apply soil-binding agents during the late summer/early fall months to avoid impacts on federally listed species. Do not apply soil-binding agents in or near (within 100 feet) surface waters (e.g., wetlands, perennial streams, intermittent streams, washes). Only apply soil-binding agents to areas that lack any vegetation.
4. Obtain materials such as gravel, topsoil, or fill from sources that are compatible with the project area and are from legally permitted sites. Do not use materials from undisturbed areas adjacent to the project area.

VEGETATION

1. Herbicide and pesticide applications must be made under the supervision of a licensed applicator. A log of the chemical used, amount used, and specific location must be maintained.
2. If mechanical methods are used to remove invasive plants, the entire plant should be removed and placed in a disposal area. If herbicides are used, the plants will be left in place. All chemical applications on federally managed land must be used in coordination with the Federal land manager. Training to identify nonnative invasive plants will be provided for CBP personnel or contractors, as necessary.

3. New guidance from the U.S. Environmental Protection Agency (USEPA) on herbicide application in riparian areas is imminent. Check with Contracting Officer's Technical Representative (COTR) on the status of these regulations prior to applying herbicide in such areas.
4. Coordinate with the CBP environmental subject matter expert (SME) to determine if the maintenance activities occur in a highly sensitive area or an area that poses an unacceptable risk of transmitting diseases and invasive species. If it is determined that maintenance activities occur in such an area, follow the CBP cleaning protocol.
5. A fire prevention and suppression plan will be developed and implemented for all maintenance and repair activities that require welding or otherwise have a risk of starting a wildfire.
6. Identify fill material, sandbags, hay bales, and mulch brought in from outside the project area by its source location. Use sources that are sterile or weed-free.
7. Clearly demarcate the perimeter of all new areas to be disturbed using flagging or temporary construction fencing. Do not allow any disturbance outside that perimeter. Riparian vegetation should be protected during maintenance activities.
8. Avoid the removal of mature trees providing shade or bank stabilization within the riparian area of any waterway during maintenance or repair activities.
9. If vegetation must be removed, allow natural regeneration of native plants by cutting vegetation with hand tools, mowing, trimming, or using other removal methods that allow root systems to remain intact to prevent disturbance that encourages establishment of invasive plant species. In addition, all soils that are disturbed that will not otherwise be stabilized during maintenance activities shall be reseeded using species native to the project vicinity. This BMP does not apply to any nonnative, invasive vegetation control that might occur as part of the Proposed Action.
10. Vegetation targeted for retention will be flagged for avoidance to reduce the likelihood of being treated.
11. Periodic inspections of tactical infrastructure by the CBP SME will be conducted to evaluate and document conditions, including erosion, and to ensure that prescriptions are followed and performed in the appropriate community types. As necessary, maintenance will be scheduled to minimize erosion and correct other adverse conditions.
12. Clearing of riparian vegetation will not occur within 100 feet of aquatic habitats to provide a buffer area to protect the habitat from sedimentation.
13. In accordance with the City of Laredo Greenspace Ordinance, CBP conducted an initial tree survey to record each native tree with a diameter at breast height (DBH) greater than or equal to 4 inches within the project corridor. CBP performed this study in order to document trees that may be removed as a result of road repairs, maintenance, and replacement. At the time of the proposed road maintenance and repair, important trees will be protected by marking exclusion areas and spared whenever possible. If the action should require the removal of trees with a DBH of 4 inches or greater, the results of this study will be used to document their previous location species and diameter for mitigation purposes. CBP will mitigate lost native, non-invasive, trees by replanting a number of younger trees with diameters equal to the total number of DBH inches lost on an inch by inch basis. CBP will not be mitigating for invasive species such as salt cedar. The plantings will be in one of three locations as is appropriate, and include the project site as space permits, the Carrizo Cane replanting area in the Riverbend Road area in

downtown Laredo, and at the CBP habitat mitigation site located near Laredo Community College. Overall, CBP will be trying to avoid vegetation impacts

WILDLIFE

1. If hollow bollards are necessary (i.e., those that will be filled with a reinforcing material such as concrete), cover them to prevent wildlife from entrapment. Deploy covers (and ensure they remain fully functioning) when the posts or hollow bollards arrive on the site and are unloaded, until they are filled with reinforcing material.
2. Ensure temporary light poles and other pole-like structures used for maintenance activities have anti-perch devices to discourage roosting by birds.
3. Clearing of riparian vegetation will not occur within 100 feet of aquatic habitats to provide a buffer area to protect the habitat from sedimentation.
4. Minimize animal collisions during maintenance and repair activities by not exceeding speed limits of 35 miles per hour (mph) on major unpaved roads (i.e., graded with ditches on both sides) and 25 mph on all other unpaved roads. During periods of decreased visibility (e.g., night, poor weather, curves), do not exceed speeds of 25 mph.
5. Do not permit pets owned or under the care of the contractor or sector personnel inside the project boundaries, adjacent native habitats, or other associated work areas.
6. To prevent entrapment of wildlife species, ensure excavated, steep-walled holes or trenches are either completely covered by plywood or metal caps at the close of each work day or provided with one or more escape ramps (at no greater than 1,000-foot intervals and sloped less than 45 degrees) constructed of earth fill or wooden planks.
7. Each morning before the start of maintenance activities and before such holes or trenches are filled, ensure they are thoroughly inspected for trapped animals. Ensure that any animals discovered are allowed to escape voluntarily (by escape ramps or temporary structures), without harassment, before maintenance activities resume; or are removed from the trench or hole by a qualified person and allowed to escape unimpeded.

Threatened and Endangered Species and Other Protected Species

GENERAL BMPS

1. Coordinate with COTR or environmental SME to determine which threatened and endangered species could occur in the vicinity of maintenance activities. In areas where there are no threatened and endangered or other species concerns, the personnel performing the maintenance activities are responsible for monitoring the implementation of general maintenance and repair BMPs to avoid impacts on the environment.
2. To protect individuals of listed species within the project area, suspend work in the immediate vicinity of the individual until it moves out of harm's way on its own, or enlist a qualified specialist (individuals or agency personnel with a permit to handle the species) to relocate the animal to a nearby safe location in accordance with accepted species-handling protocols.
3. Check visible space underneath all vehicles and heavy equipment for listed species and other wildlife prior to moving vehicles and equipment at the beginning of each workday and after vehicles have idled for more than 15 minutes.
4. Coordinate with the CBP environmental SME to determine if the maintenance activities occur in a highly sensitive area or an area that poses an unacceptable risk of transmitting

diseases and invasive species. If it is determined that maintenance activities occur in such an area, follow the CBP cleaning protocol for all equipment.

5. CBP will not use surface water from aquatic or marsh habitats for maintenance and repair projects, if that site supports aquatic federally listed species or if it contains nonnative invasive species or disease vectors based on the best available information provided by USFWS.
6. CBP will not use surface water from untreated sources, including water used for irrigation purposes, for maintenance and repair projects located within one mile of aquatic habitat for federally listed aquatic species. Groundwater or surface water from a treated municipal source will be used when within one mile of such habitats.

MIGRATORY BIRD BMPs

1. Initial mechanical and chemical vegetation clearing and subsequent mechanical vegetation control should be timed to avoid the migration, breeding, and nesting timeframe of migratory birds (March 15 through September 15). Herbicide retreatments could occur throughout the year. When initial mechanical and chemical vegetation control must be implemented during March 15 through September 15, a survey for nesting migratory birds will be conducted immediately prior to the start of activities. If an active nest is found, a buffer zone (91 meters [300 feet]) will be established around the nest and no activities will occur within that zone until nestlings have fledged and abandoned the nesting area.
2. A survey for migratory birds will also be conducted prior to all other maintenance and repair activities to be implemented during the nesting period in areas where migratory birds might be nesting.
3. If maintenance is scheduled during the migratory bird-nesting season, take steps to prevent migratory birds from establishing nests in the potential impact area. These steps could include covering equipment and structures, and use of various excluders (e.g., noise). Birds can be harassed to prevent them from nesting on the site. Once a nest is established, they cannot be harassed until all young have fledged and left the nest site. If nesting birds are found during the supplemental survey, defer intrusive maintenance activities until the birds have left the nest. Confirmation that all young have fledged should be made by qualified personnel.

Species-Specific BMPs

PLANTS

Ashy dogweed (*Thymophylla tephroleuca*), Johnston's frankenia (*Frankenia johnstonii*),

1. Vegetation control in suitable habitat of threatened or endangered plant species will be avoided (see Table A-1 for a description of suitable habitat) unless a survey is conducted by a qualified biologist. If vegetation-control activities occur in areas of known occurrences of these species, critical habitat, and suitable habitat (see Table A-1) and are unavoidable then a qualified biologist will conduct a survey during the appropriate blooming season (see Table A-1). An area of sufficient size would be flagged to create a buffer large enough to ensure that threatened or endangered plant species are not directly or indirectly affected.

2. If maintenance and repair activities will occur in undisturbed areas outside of the footprint of tactical infrastructure in areas of suitable habitat within the range or designated critical habitat of threatened or endangered plant species (see Table A-1), a qualified biologist will conduct a survey during the appropriate blooming season (see Table A-1) within the maintenance area. An area of sufficient size will be flagged to create a buffer large enough to ensure that threatened and endangered plant species are not directly or indirectly affected. Use of herbicides will not occur within areas of suitable habitat within the range or designated critical habitat of threatened or endangered plant species (see Table A-1) unless approved by the USFWS.

*Table 7-1. Threatened and Endangered Plant Species
That Could Occur Within the Action Area*

Common Name	Habitat	Blooming Season
Ashy dogweed	Open areas on fine sandy-loam soils on level or rolling grasslands.	March through May
Johnston's frankenia	Open or sparsely vegetated rocky gypseous hillsides and saline flats.	Year-round

MAMMALS

Gulf Coast jaguarundi (*Herpailurus yagouaroundi cacomitli*), ocelot (*Leopardus pardalis*)

1. Avoid noise and lighting impacts during the night by conducting maintenance activities during daylight hours only. If night lighting is unavoidable, light would shine directly onto the work area to ensure worker safety and efficiency, and light would not exceed 1.5 foot-candles in jaguarundi and ocelot habitat (i.e., dense thornscrub).
2. Minimize animal collisions during maintenance and repair activities by not exceeding speed limits of 35 mph on major unpaved roads (i.e., graded with ditches on both sides) and 25 mph on all other unpaved roads. During periods of decreased visibility (e.g. night, poor weather, curves), do not exceed speeds of 25 mph.
3. Should an ocelot or jaguarundi be spotted on the project site, the Corpus Christi Office of the Coastal Ecological Services Field Office, (361) 994-9005, or the South Texas Refuge Complex (STRC) Dispatch at Santa Ana NWR, (956) 784-7520, will be called immediately. If CBP, contractors, or biological monitors locate a dead, injured, or sick ocelot or jaguarundi, initial notification must be made to the USFWS Law Enforcement Office in McAllen, TX, (956) 686-8591, STRC Dispatch, (956) 784-7520 or Corpus Christi (361) 994-9005. To the extent practicable, the finder has the responsibility to ensure evidence intrinsic to the specimen is not unnecessarily disturbed.

WATER RESOURCES

1. The environmental SME must be consulted to validate the need for site-specific SWPPPs, spill protection plans, and regulatory approvals. Site-specific SWPPPs and spill protection plans will be prepared and regulatory approval sought, if necessary, in cases of highly sensitive work sites and large scopes of work that pose a significant risk. Where a site-specific SWPPP is not necessary, the personnel performing the maintenance will comply with a generic SWPPP and spill protection plan that covers most routine maintenance and repair activities. Prior to arrival on the work site, key personnel will understand correct implementation of these BMPs and their responsibility to address deficiencies.
2. The environmental SME will provide locations that have the potential for wetlands or other waters of the United States. If no current existing U.S. Army Corps of Engineers (USACE) jurisdictional determination is available, a delineation will be conducted and jurisdictional determination will be obtained from the USACE. Prior to conducting any activities that have the potential to affect wetlands and other waters of the United States, all Federal and state Clean Water Act (CWA) Section 404 individual or applicable nationwide permits and 401 and other applicable permits will be obtained.
3. Prepare and implement an SWPPP as required by regulation prior to applicable maintenance activities (greater than one acre of exposed dirt or as required by property manager). Implement BMPs described in the SWPPP to reduce erosion. Consider areas with highly erodible soils when planning the maintenance activities and incorporate measures such as wattles, aggregate materials, and wetting compounds in the erosion control BMPs.
4. Coordinate with the environmental SME to determine which maintenance activities occur within the 100-year floodplain. Maintenance activities within the 100-year floodplain will be conducted in a manner consistent with Executive Order (E.O.) 11988 and other applicable regulations.
5. All maintenance contractors and personnel will review the CBP-approved spill protection plan and implement it during maintenance and repair activities.
6. Coordinate with the environmental SME to ensure that CWA permits are in place for any changes to existing boat ramps.
7. Contact the environmental SME to coordinate with waterway permitting agencies when performing work below the ordinary high water mark.
8. Wastewater from pressure washing must be collected. A ground pit or sump can be used to collect the wastewater. Wastewater from pressure washing must not be discharged into any surface water.
9. If soaps or detergents are used, the wastewater and solids must be pumped and cleaned out and disposed of in an approved facility. If no soaps or detergents are used, the wastewater must first be filtered or screened to remove solids before being allowed to flow off site. Detergents and cleaning solutions must not be sprayed over or discharged into surface waters.
10. If the surrounding area has dense, herbaceous cover (primarily grasses) and there are no listed plant species or habitat for such, the wastewater (with or without detergent) could be discharged directly to the grassy area without collection or filtering as long as it is well

- 1 dispersed and all the wastewater can percolate into the grass and soil. If wastewater runs
2 off the grassy area, it must be filtered.
- 3 11. Prevent runoff from entering drainages or storm drains by placing fabric filters, sand bag
4 enclosures, or other capture devices around the work area. Empty or clean out the capture
5 device at the end of each day and properly dispose of the wastes.
- 6 12. Avoid contaminating natural aquatic and wetland systems with runoff by limiting all
7 equipment maintenance, staging, laydown, and dispensing hazardous liquids (e.g., fuel
8 and oil) to designated upland areas.
- 9 13. Avoid contamination of ground and surface waters by collecting concrete wash water in
10 open containers and frequently disposing of it on site by application as a binder to riprap
11 areas. Avoid contamination of ground and surface waters by storing any water that has
12 been contaminated (e.g., with maintenance materials, oils, equipment residue) in closed
13 containers on site until removed for disposal. In upland areas, storage tanks must be on-
14 ground containers.
- 15 14. Avoid contamination of ground and surface waters by ensuring that water tankers that
16 convey untreated surface water do not discard unused water where it has the potential to
17 enter any aquatic or wetland habitat.
- 18 15. Cease work during heavy rains and do not resume work until conditions are suitable for
19 the movement of equipment and materials.
- 20 16. Uncured concrete should not be allowed to enter the water.
- 21 17. Work should be done from the top of the bank or a floating barge, when practicable.
22 Heavy equipment use within the active flowing channel should be avoided.
- 23 18. For all in-water work in streams, sediment barriers will be used to avoid downstream
24 effects of turbidity and sedimentation.
- 25 19. Operate pressure-washing equipment according to manufacturer's recommendations.
- 26 20. Except for emergency repairs required to protect human life, limit work within drainages
27 to dry periods to reduce effects on downstream water quality.
- 28 21. Riprap should be placed on a layer of geotextile fabric to prevent underlying sediment
29 from being washed out through the openings of the riprap.
- 30 22. Riprap should be keyed into the wash/streambed to ensure its stability and effectiveness.

31 32 **NOISE**

- 33 1. All Occupational Safety and Health Administration requirements will be followed with
34 respect to maintenance and repair noise impacts. Ensure all motorized equipment possess
35 properly working mufflers and are kept properly tuned to reduce backfires. Ensure all
36 motorized generators will be in baffle boxes (a sound-resistant box that is placed over or
37 around a generator), have an attached muffler, or use other noise abatement methods in
38 accordance with industry standards. For activities involving heavy equipment, seasonal
39 restrictions might be required to avoid impacts on threatened or endangered species in
40 areas where these species or their potential habitat occur. See species-specific BMPs.

41 42 **CULTURAL RESOURCES**

- 43 1. If Native American human remains are discovered during maintenance and repair of
44 tactical infrastructure, CBP will consult with culturally affiliated tribes and the Texas
45 State Historic Preservation Officer regarding their management and disposition in
46 compliance with Native American Graves Protection and Repatriation Act.

2. Obtain all pertinent training materials for cultural resources for the areas where maintenance and repair activities will occur. Prior to arrival on the work site, ensure key personnel are aware of the cultural resources potentially occurring in the project area and understand the proper BMPs to implement should cultural resources be encountered in the project area.

ROADWAYS AND TRAFFIC

1. Access maintenance sites using designated, existing roads. Do not allow any off-road vehicular travel outside those areas. Ensure all parking is in designated disturbed areas. For longer-term projects, mark designated travel corridors with easily observed removable or biodegradable markers.
2. All contractors and maintenance personnel will operate within the designed/approved maintenance corridor.

HAZARDOUS MATERIALS AND WASTE MANAGEMENT

1. Where hazardous and regulated materials are handled, workers should collect and store all fuels, waste oils, and solvents in clearly labeled closed tanks and drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein.
2. If maintenance activities will continue at night, direct shielded light only onto the area required for worker safety and productivity. Lights will not exceed 1.5-foot candles within the lit area.
3. Implement proper and routine maintenance of all vehicles and other maintenance equipment such that emissions are within the design standards of all maintenance equipment.
4. Minimize site disturbance and avoid attracting predators by promptly removing waste materials, wrappers, and debris from the site. Any waste that must remain on site more than 12 hours should be properly stored in closed containers until disposal.

SOCIOECONOMIC RESOURCES, ENVIRONMENTAL JUSTICE, AND PROTECTION OF CHILDREN

No BMPs were identified for socioeconomics, environmental justice, or the protection of children.

1 **Appendix C.**
2 **Coordination with The City of Laredo Concerning the Tree Ordinance**

JUN 10 2015



**U.S. Customs and
Border Protection**

Mr. Jesus M. Olivares
City Manager
City of Laredo
1110 Houston Street
Laredo, TX 78040

Subject: Tree Resources near the Laredo South All Weather Road Slated for Repair and Maintenance by Customs and Border Protection

Dear Mr. Olivares:

U.S. Customs and Border Protection (CBP) is preparing to repair and continue to maintain and repair road segments in Laredo, Texas along the Rio Grande. The project is located from near Marcella Avenue to near South Meadow Avenue (Enclosure 1).

In accordance with the City of Laredo Greenspace Ordinance, CBP conducted an initial tree survey to record each native tree with a diameter at breast height (DBH) greater than or equal to 4 inches within the project corridor. The purpose of this letter is to report the results of the tree survey conducted within the project corridor, present the results of the survey, and indicate CBP actions moving forward.

CBP conducted a survey of the trees within the road project zone and 187 trees were identified. Global Positioning System (GPS) coordinates were recorded for the trees located within the project area and the diameter of each tree with a 4 inch or greater DBH was measured and recorded. The results of the survey are shown in the 2014 Tree Survey – Laredo, Texas (Enclosure 2). The DBHs ranged from 4 inches up to 55 inches. The types of trees found included net-leaf hackberry, white ash, honey mesquite, salt cedar, spiny hackberry, tepequaje, two different types of palmettos: tall and shrubby and black walnut.

All of the tree species listed above are native, with the exception of the salt cedar, which is not native to this region. Salt cedar, a Texas noxious plant, was introduced from Eurasia in the 1800s as an ornamental, erosion control agent, and windbreak (USDA 2006, Texas A&M University 2003). By 1850, salt cedar had escaped from these areas and infested many river systems and drainages in the Southwest, often displacing native vegetation. Numerous salt cedars are located intermittently throughout and adjacent to the project corridor.

A series of maps are included with this letter show the locations of the trees within the project area. The dominant tree species in map 5 are salt cedar (SC) and white ash (NH). In the native hardwood zone, spiny hackberry, netleaf hackberry and palmetto also occurred in small groves.

Mr. Jesus M. Olivares

Page 2

Other species of trees occurring in the study area are honey mesquite and tepeguaje (NH and GH). Dominant species of grass in GL and GH is guineagrass with some buffelgrass plants present. The open area is bare and is currently in-use as an all-weather road.

CBP has performed this study in order to document trees that may be removed as a result of road repairs, maintenance, and replacement. At the time of the proposed road maintenance and repair, important trees will be protected by marking exclusion areas and spared whenever possible. If the action should require the removal of trees, the results of this study will be used to document their previous location species and diameter for mitigation purposes. CBP will mitigate lost native, non-invasive, trees by replanting a number of younger trees with diameters equal to the total number of DBH inches lost on an inch by inch basis. CBP will not be mitigating for invasive species such as salt cedar. The plantings will be in one of three locations as is appropriate, and include the project site as space permits, the Carrizo Cane replanting area in the Riverbend Road area in downtown Laredo, and at the CBP habitat mitigation site located near Laredo Community College. Overall, CBP will be trying to avoid vegetation impacts.

If you have any questions, please feel free to contact Audra Upchurch at audra.upchurch@cbp.dhs.gov or 202-748-4435. Thank you for your cooperation.

Sincerely,



Paul Enriquez
Director (A)
Real Estate and Environmental Services Division
Border Patrol Facilities & Tactical Infrastructure
Program Management Office

Enclosure

cc: Riazul Mia, P.E., Director, City of Laredo, Environmental Services Department

Enclosure 1: Project Area Map.



Enclosure 2: List of Trees, Locations and Diameter at Breast Height for Trees in Project Area

Record #	Tree species	Location Coordinates		Diameter at mean breast height (inches)
1	Netleaf hackberry	452502.68	3040716.05	5
2	Netleaf hackberry	452502.85	3040717.14	5
3	Netleaf hackberry	452503.58	3040716.35	4
4	Netleaf hackberry	452501.99	3040716.74	5
5	Netleaf hackberry	452503.58	3040715.55	4
6	Netleaf hackberry	452503.98	3040717.07	5
7	Netleaf hackberry	452504.52	3040723.10	6
8	Netleaf hackberry	452486.15	3040740.46	5
9	Netleaf hackberry	452489.98	3040743.64	4
10	Netleaf hackberry	452488.82	3040744.97	4
11	Netleaf hackberry	452485.57	3040735.88	5
12	Netleaf hackberry	452483.43	3040749.31	5
13	Netleaf hackberry	452482.57	3040749.13	4
14	Honey mesquite	452465.03	3040779.64	6.5
15	Honey mesquite	452464.09	3040783.14	4.5
16	Netleaf hackberry	452440.16	3040797.89	4.5
17	Honey mesquite	452435.98	3040805.67	5.5
18	Honey mesquite	452435.04	3040806.42	7
19	Honey mesquite	452436.23	3040806.74	6
20	Honey mesquite	452434.96	3040807.45	6
21	White ash	452397.34	3040851.12	6.5
22	White ash	452397.06	3040852.43	7.5
23	White ash	452398.41	3040851.64	5
24	Netleaf hackberry	452399.53	3040857.56	7
25	Honey mesquite	452375.18	3040891.66	24

Record #	Tree species	Location Coordinates		Diameter at mean breast height (inches)
26	Honey mesquite	452375.00	3040899.79	11
30	Salt cedar	452182.33	3041106.20	7.5
31	Salt cedar	452181.99	3041107.90	6
32	Salt cedar	452184.03	3041106.81	6
33	Salt cedar	452182.81	3041104.63	7
34	Salt cedar	452185.23	3041107.92	7
35	Salt cedar	452157.95	3041124.26	9
36	Salt cedar	452155.90	3041124.20	8
37	Salt cedar	452156.58	3041125.42	9
38	Salt cedar	452158.35	3041125.69	11
39	Salt cedar	452157.51	3041123.63	10.5
40	Salt cedar	452155.78	3041130.49	21
41	Salt cedar	452159.28	3041129.62	6.5
42	Salt cedar	452157.93	3041131.85	14
43	Salt cedar	452146.08	3041124.26	13
44	Salt cedar	452144.02	3041121.82	8
45	Honey mesquite	452149.36	3041133.78	6
47	Salt cedar	452147.14	3041142.02	6
48	Honey mesquite	452134.74	3041152.50	9
49	Honey mesquite	452131.26	3041149.76	10
50	Salt cedar	452133.20	3041155.09	7
51	Salt cedar	452132.13	3041156.22	5
52	Salt cedar	452133.90	3041156.49	8
53	Salt cedar	452134.71	3041154.99	8
54	Salt cedar	452132.91	3041161.88	9
55	Salt cedar	452129.12	3041161.32	9.5
56	Salt cedar	452128.10	3041160.76	9.5
57	Salt cedar	452125.81	3041159.74	15
58	Salt cedar	452124.69	3041162.12	5
59	Salt cedar	452124.48	3041161.02	7
60	Salt cedar	452124.41	3041165.01	5
61	Salt cedar	452122.38	3041164.18	10
62	Salt cedar	452122.52	3041162.98	7
64	Salt cedar	452116.72	3041171.19	8.5
65	Salt cedar	452114.98	3041171.52	6
66	Salt cedar	452112.22	3041174.13	5
67	Salt cedar	452108.23	3041181.53	9.5
68	Salt cedar	452106.36	3041183.34	6
69	Salt cedar	452105.31	3041184.72	6
70	Salt cedar	452104.30	3041179.05	11
71	Salt cedar	452102.34	3041180.02	6

Record #	Tree species	Location Coordinates		Diameter at mean breast height (inches)
72	Salt cedar	452031.17	3041242.13	5
73	Salt cedar	452031.51	3041245.05	7
74	Salt cedar	452025.40	3041251.22	6
75	Salt cedar	452022.65	3041250.30	7.5
76	Salt cedar	452010.25	3041249.47	14.5
77	Salt cedar	452010.46	3041245.64	5
79	Salt cedar	451999.83	3041251.81	9.5
80	Salt cedar	451998.77	3041251.53	5
81	Salt cedar	451997.68	3041252.07	10
82	Salt cedar	451995.73	3041257.06	6
83	Salt cedar	451993.26	3041256.83	6
84	Salt cedar	451989.91	3041260.88	5
85	Salt cedar	451986.68	3041259.41	17
86	Salt cedar	451987.42	3041261.93	9
87	Salt cedar	451985.57	3041263.76	15
88	Salt cedar	451983.83	3041265.57	14
89	Salt cedar	451972.55	3041270.28	7
90	Salt cedar	451972.05	3041276.08	10
91	Salt cedar	451971.61	3041276.68	8
92	Salt cedar	451968.72	3041276.85	8.5
93	Salt cedar	451970.32	3041278.24	6
94	Salt cedar	451960.31	3041281.58	7.5
95	Salt cedar	451957.98	3041283.07	8.5
96	Salt cedar	451946.44	3041303.36	6
97	Salt cedar	451945.28	3041303.01	13
98	Salt cedar	451942.95	3041301.71	10
99	Salt cedar	451942.85	3041303.21	7
100	White ash	451939.53	3041295.40	9
101	White ash	451940.53	3041296.75	8
102	White ash	451940.53	3041296.75	7
103	White ash	451938.63	3041296.89	8.5
104	White ash	451936.03	3041306.50	8
105	White ash	451935.23	3041307.76	5
106	White ash	451937.13	3041307.76	5
107	White ash	451927.73	3041308.88	6
108	White ash	451927.53	3041310.30	6.5
109	White ash	451925.98	3041309.87	6
111	White ash	451898.80	3041332.97	6
112	Black walnut	451857.50	3041370.45	8.5
113	Salt cedar	451856.74	3041375.44	15
114	Netleaf hackberry	451848.96	3041365.29	7.5
115	Salt cedar	451819.09	3041388.33	13.5
116	Salt cedar	451820.71	3041389.78	13
117	Salt cedar	451817.28	3041391.22	32

Record #	Tree species	Location Coordinates		Diameter at mean breast height (inches)
118	Salt cedar	451819.54	3041400.25	14.5
119	Honey Mesquite	451829.26	3041395.92	11
120	Honey Mesquite	451826.29	3041400.30	10
121	Spiney Hackberry	451825.23	3041400.91	13
122	Spiney Hackberry	451785.63	3041419.41	4.5
123	Netleaf Hackberry	451784.33	3041420.47	4.5
124	Netleaf Hackberry	451772.85	3041429.37	6
125	Salt Cedar	451742.23	3041453.08	6
126	Salt Cedar	451737.99	3041453.33	6
127	Salt Cedar	451739.00	3041455.86	14
128	Salt Cedar	451736.19	3041454.96	13
129	Salt Cedar	451734.43	3041454.89	5
130	Salt Cedar	451733.86	3041454.14	55
131	Salt Cedar	451726.52	3041460.44	6
132	Salt Cedar	451725.97	3041462.66	14
132	Salt Cedar	451715.83	3041468.28	31
133	Salt Cedar	451720.92	3041465.20	13
133	Salt Cedar	451708.40	3041468.04	19
135	Salt Cedar	451703.58	3041479.51	11
136	Salt Cedar	451705.06	3041478.25	10
136	Salt Cedar	451703.58	3041477.88	13.5
137	Salt Cedar	451695.83	3041482.94	17
138	Salt Cedar	451695.13	3041481.90	13
139	Salt Cedar	451689.11	3041484.97	14
140	Salt Cedar	451685.40	3041486.49	12
141	Salt Cedar	451681.72	3041485.01	8.5
142	Salt Cedar	451665.59	3041502.35	12
143	Salt Cedar	451663.45	3041506.24	11
144	Salt Cedar	451661.18	3041503.69	13
145	Palmetto	451655.91	3041508.90	5
146	Huisache	451494.48	3041623.34	50
148	Tepequaje	451304.70	3042239.17	22
148	Tepequaje	451479.00	3041628.44	11
149	Tepequaje	451303.09	3042239.96	16
150	Tepequaje	451300.19	3042238.80	12
151	Tepequaje	451301.23	3042238.19	9
152	Tepequaje	451301.28	3042236.78	10
153	Tepequaje	451301.77	3042236.66	5
154	Tepequaje	451301.99	3042231.96	5
155	Tepequaje	451302.65	3042233.23	9.5

Record #	Tree species	Location Coordinates		Diameter at mean breast height (inches)
156	Palmetto	451294.43	3042137.60	6
157	Tepequaje	451295.87	3042138.37	12
158	Tepequaje	451292.24	3042134.74	9.5
159	Tepequaje	451292.79	3042136.16	7
160	Honey Mesquite	451302.83	3042136.93	4.5
161	Honey Mesquite	451302.62	3042136.45	16
162	Palm, sp.	451290.36	3042136.10	5.5
163	Palm, sp.	451291.73	3042136.24	14
164	Tepequaje	451248.44	3042023.58	14
165	Tepequaje	451250.68	3042020.92	6
165	Honey Mesquite	452396.32	3040877.04	11
166	Tepequaje	451248.38	3042020.65	7
166	Honey Mesquite	452401.90	3040883.60	5
167	Palmetto tall	451245.38	3042020.65	6
167	Honey Mesquite	452403.25	3040882.47	4.5
168	Palmetto tall	451245.93	3042022.96	6
168	Honey Mesquite	452403.25	3040885.49	6
169	Palmetto shrubby	451250.82	3042022.69	5
171	Honey Mesquite	452410.50	3040893.51	4.5
172	Honey Mesquite	452424.26	3040905.51	5.5
173	Honey Mesquite	452424.92	3040905.77	5
174	Honey Mesquite	452434.65	3040919.04	5.5
175	Honey Mesquite	452435.06	3040928.72	6
176	Honey Mesquite	452430.51	3040924.78	5
177	Honey Mesquite	452415.92	3040924.08	4.5
178	Honey Mesquite	452416.12	3040915.22	6
179	Honey Mesquite	452416.33	3040916.50	4.5
180	Honey Mesquite	452416.22	3040918.08	5
181	Honey Mesquite	452414.43	3040917.45	4
182	Honey Mesquite	452413.79	3040915.76	4.5

Record #	Tree species	Location Coordinates		Diameter at mean breast height (inches)
183	Honey Mesquite	452415.24	3040913.96	7
183	Honey Mesquite	452413.26	3040914.70	4
184	Honey Mesquite	452406.49	3040908.43	4.5
185	Honey Mesquite	452407.98	3040900.45	4
186	Honey Mesquite	452395.95	3040891.18	9
187	Honey Mesquite	452393.85	3040890.25	5

Enclosure 3: Maps of Trees listed in Enclosure 2

Map 1



Map 2



Map 3



Map 4



Map 5

