



Final Environmental Assessment

Bell Boulevard Realignment, Austin District

From Cedar Park Drive to South of Buttercup Creek Boulevard

CSJ: 0151-05-115

Williamson County, Texas

July 2019

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List of Acronyms and Abbreviations

ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AOI	Area of Influence
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BCVI	Black-capped Vireo
BG	Block Group
BMP	Best Management Practice
CAA	Clean Air Act
CAMPO	Capital Area Metropolitan Planning Organization
CBRA	Coastal Barrier Resources Act of 1982
CER	Comprehensive Environmental Response
CERCLIS	Comprehensive Environmental Response Compensation and Liability System
CEQ	Council of Environmental Quality
CFR	Code of Federal Register
CGP	Construction General Permit
CHU	Critical Habitat Unit
CLOMR	Conditional Letter of Map Revision
CMP	Congestion Management Process
CO	Carbon Monoxide
CoCP	City of Cedar Park
CO TAQA	Carbon Monoxide Traffic Air Quality Analysis
CRIS	Crash Record Information System
CT	Census Tract
CWA	Clean Water Act
CZP	Contributing Zone Plan
DNPL	Delisted National Priority List
DRYC	Dry Cleaners
dBA	decibel (A-weighted)
EA	Environmental Assessment
EAC	Early Action Compact
EA/HCP	Environmental Assessment / Habitat Conservation Plan
ECOS	Environmental Conservation Online System
EMST	Ecological Mapping System of Texas
EO	Elemental Occurrence
EPA	Environmental Protection Agency
EPIC	Environmental Permits Issues and Commitment
ERNS	Emergency Response Notification System
ESA	Endangered Species Act
FED BWN	Federal Brownfields

FED EC	Federal Engineering Control
FED IC	Federal Institutional Control
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
GCP	General Construction Permit
GCWA	Golden-cheeked Warbler
GIS	Geographic Information System
HC	Hydrocarbons
HHS	Health and Human Services
IBWC	International Boundary and Water Commission
IPAC	Information for Planning and Conservation
JPS	Jollyville Plateau salamander
LEP	Limited English Proficiency
LOMR	Letter of Map Revision
LOS	Level of Service
LWCF	Land and Water Conservation Fund Act of 1965
MA	Managed Area
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
MS	Municipal Settings Designations
MSAT	Mobile Source Air Toxics
MSL	Mean Sea Level
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NFRPA	No Further Remedial Action Planned
NHD	National Hydrography Dataset
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NOT	Notice of Termination
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	National Resource Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High Water Mark
O3	Ozone
PA	Programmatic Agreement

PM	Particulate Matter
PPM	Parts Per Million
PPB	Parts Per Billion
PWC	Parks and Wildlife Code
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-Way
RPW	Relatively Permanent Waters
SEMS	Superfund Enterprise Management System
SGCN	Species of Greatest Conservation Need
SNA	State Natural Area
ST	State/ Tribal
ST BRN	State/ Tribal Brownfield
ST EC	State/ Tribal Engineering Control
ST VCP	State/ Tribal Voluntary Clean Up
STIP	Statewide Transportation Improvement Program
SWLF	State/Tribal Disposal or Landfill
SWP3	Stormwater Pollution Prevention Plan
TAQA	Traffic Air Quality Analysis
TARL	Texas Archeological Research Laboratory
TCAP	Texas Conservation Action Plan
TCEQ	Texas Commission on Environmental Quality
TCMP	Texas Coastal Management Program
TERP	Texas Emissions Reduction Plan
THC	Texas Historical Commission
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TNDD	Texas Natural Diversity Database
TNM	Traffic Noise Model
TNW	Traditional Navigable Water
TPDES	Texas Pollution Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TRB	Transportation Research Board
TSD	Treatment, Storage, and Disposal
TSS	Total Suspended Solids
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
USACE	U.S. Army Corps of Engineers
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
UST	Underground Storage Tank
VCP	Voluntary Clean Up

VMT

Vehicle Miles Traveled

1.0 Introduction

The Texas Department of Transportation (TxDOT) and the City of Cedar Park (CoCP) proposes to move existing Bell Boulevard roadway east onto Old Highway 183 along the full extent of Old Highway 183 from Cedar Park Drive to south of Buttercup Creek Boulevard (Appendix A). This project will be locally funded by CoCP.

Bell Boulevard is also known as U.S. Highway 183 and provides one of the main north-to-south access routes through CoCP. This corridor provides the community access to commercial, residential, and recreational use areas. Improving safety within the corridor would benefit the rapidly growing CoCP and the public at large.

In the fall of 2014, the CoCP began the Bell Boulevard Redevelopment Study, a comprehensive planning process, to create a plan for the successful revitalization of the Bell Boulevard corridor. Eventually, a final concept was developed, and the Master Plan was formally adopted by the City Council in August 2015. Most recently, on July 27, 2017, the Cedar Park City Council authorized the city manager to create an advanced funding agreement with the TxDOT for the design and construction of the Bell Boulevard Realignment Project. Furthermore, the project was included in the four-year Transportation Improvement Program (TIP) by the Capital Area Metropolitan Planning Organization (CAMPO). The Statewide Transportation Improvement Program (STIP) incorporates metropolitan and rural area TIPs. This project is included in the STIP and the STIP project details are included in Appendix E.

This Environmental Assessment (EA) has been developed in order to study the potential environmental consequences of construction of the Bell Boulevard Realignment Project, including the socioeconomic, physical, and environmental impacts. This document presents a description of the project, the need for and purpose of the proposed project, and interdisciplinary evaluations of the potential effects of the project to the environment.

2.0 Project Description

2.1 Existing Facility

Currently, the existing Bell Boulevard is a four-lane roadway, running generally north-south, with a continuous unprotected left turn lane through the proposed project area from Cedar Park Drive to south of Buttercup Creek Boulevard. Currently, Old Highway 183 is a two-lane roadway, running generally north-south and parallel to Bell Boulevard. Old Highway 183 diverges from Bell Boulevard at Buttercup Creek Boulevard and rejoins Bell Boulevard approximately 590 feet north of Park Street (see Appendix A: Project Location Map for current configuration, Appendix B: Project Photographs, Appendix C: Schematics for proposed Bell Boulevard Realignment, and Appendix D: Typical Sections).

Based on review of historical aerial photography, Bell Boulevard was moved from Old Highway 183 to its current alignment at some point between 1962 and 1976. Historic aerial photography of Bell Boulevard from 1976 shows the four-lane alignment with growing commercial and residential development along the corridor.

2.2 Proposed Project

The Bell Boulevard Realignment Project would move the four lane highway onto Old Highway 183 along the full extent of Old Highway 183 from Cedar Park Drive to south of Buttercup Creek Boulevard (Appendix A). The project includes grading, base, asphalt pavement, culverts, drainage improvements, utility relocation, water quality controls, signing, and pavement markings. To accommodate transitions with the existing lane configuration, the project would span from approximately 180 feet south of Cedar Park Drive to 700 feet south of the Buttercup Creek Boulevard / Bell Boulevard intersection.

The proposed preliminary design of the project includes approximately 0.8 mile of four lane roadway along the proposed Bell Boulevard with the following general features, which are subject to change:

- Two 12-foot lanes in each direction on Bell Boulevard;
- Raised median with protected turn lanes;
- 10-foot shared-use path along the west side of the roadway with crosswalks at Buttercup Creek Boulevard and Park Street intersection;
- Safety illumination; and
- Landscaping.

The Bell Boulevard Realignment Project is consistent with the publicly supported Destination Bell Boulevard Master Plan, which designates West Bell Boulevard as a non-through road. Through traffic would be directed east onto Bell Boulevard Realignment. This would separate the through traffic from the traffic attempting to access the existing commercial corridor on West Bell Boulevard. Through traffic may access the existing commercial corridor (and the future Destination Bell Boulevard amenities to the west) via a left turn bay partway between Brushy Creek Road and Park Street or a signalized left turn at Park Street. The Bell Boulevard Realignment would not add capacity because the total number of lanes for the through road (four lanes with left turn lane) and the secondary road (two lanes) would remain the same. The project study area includes the 0.8 mile proposed design and the properties immediately adjacent that have proposed disturbance.

Federal regulations require that federally funded transportation projects have logical termini (23 CFR 771.111(f)(1)). Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. This project is a non-federal project; however, the basis of the logical termini is included below. The logical termini were evaluated using past,

present, and future traffic counts, available crash reports, design requirements, public input, and rational locations with the existing environmental constraints in the corridor.

The realignment of through traffic onto the Bell Boulevard Realignment is the main driver in the southern and northern termini. The next major intersections along Bell Boulevard south and north of the Old Highway 183 are Cypress Creek Road and Cedar Park Drive, respectively.

Specific to the southern terminus, the Old Highway 183 alignment diverges from Bell Boulevard at the intersection of Buttercup Creek Boulevard. However, to accommodate the necessary intersection configuration at the Buttercup Creek Boulevard and Bell Boulevard intersection, the project was extended south of the Buttercup Creek Boulevard intersection. Therefore, the southern terminus was extended south of the Buttercup Creek Boulevard intersection to allow the necessary transitions for the existing Bell Boulevard profile to expand into the intersection profile.

Specific to the northern terminus, the Old Highway 183 alignment diverges from Bell Boulevard approximately 197 feet south of Cedar Park Drive. Cedar Park Drive is the next major intersection north of the Bell Boulevard/Old Bell Boulevard divergence. Fortunately, the lane configuration at the Cedar Park Drive/Bell Boulevard intersection match the existing Bell Boulevard profile and no transition to the existing Bell Boulevard profile will be required. Therefore, the Cedar Park Drive/Bell Boulevard intersection proved a logical northern terminus.

Federal regulations require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area (23 CFR 771.111(f)(2)). This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. This project is a non-federal project; and, the basis of the independent utility is included below. The proposed build alternative for this action would fulfill the need and purpose of the project, if selected as the preferred alternative. This action does not require any other actions to be constructed to meet its purpose and need. For example, the Bell Boulevard Realignment Project would meet its purpose and need independent of the development of Destination Bell Boulevard project by improving the public safety within the corridor while accommodating rapid population growth and increasing traffic demand. The need and purpose are further elaborated in the following section.

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements. 23 CFR 771.111(f)(3). This means the project must not dictate or restrict any future roadway alternatives. This project is a non-federal project; and, an explanation of how this project would not dictate or restrict future transportation improvements is included below. The project area is relatively built out with

existing commercial development and the project area is also confined by the Cap Metro rail corridor to the east. The project maintains east/west connections at the existing east/west intersections. No other arterial or regionally connecting roadways are anticipated within the project area, and the project does not restrict improvements to the Cap Metro rail corridor.

The project is estimated to cost \$14,000,000.00 which would be funded locally by the CoCP.

3.0 Need and Purpose

The need and purpose are the foundation of the decision-making process as it provides context and criteria for the development and review of alternatives to be considered. Only those alternatives that satisfy the established need and purpose are considered reasonable for further evaluation.

3.1 Need for the Proposed Project

The Bell Boulevard Realignment Project is needed as the existing commercial corridor along Bell Boulevard has seen an increase in population and through traffic since the 1980s, resulting in high crash rates and greater safety concerns for vehicles and pedestrians.

3.2 Supporting Facts and/or Data

3.2.1 Historical Population and Commercial Growth

In Cedar Park, between 1960 and 1970, the population almost doubled from 685 to 1,012. From there, the population more than tripled to 3,474 in 1980. The population growth between 1970 and 1990 in Cedar Park brought on a commercial boom and increased traffic. Based on discussions with Cedar Park civic leaders and long-time staff, we speculate that creating West Bell Boulevard and the Bell Boulevard Realignment was a response to increased traffic and demand for commercial businesses at that time. The continued increase in both population and traffic has outgrown the current design of the project area and a new roadway design with improved and controlled access is needed to accommodate the present increased traffic and population to improve safety and accessibility.

3.2.2 Regional Population Growth

In 2016, Williamson County was named the sixteenth fastest growing region in the country (US Census Bureau 2016). Specifically, the CoCP is the fourth-fastest growing city in Central Texas, expanding by 35.5% over the past five years (US Census Bureau 2016).

Cedar Park experienced a 400 percent increase in population between 1990 and 2000, and future projections indicate the rapid growth rate will continue over the next 20 years. In 2010, the population was 48,937 and by the year 2020, the population of Cedar Park is projected to have increased by almost 1,500 percent since 2000 (TWDB 2011).

Projections by the Texas Water Development Board (TWDB) estimate that Cedar Park’s population will increase to approximately 89,517 persons by 2030, a 4.15 percent average annual growth rate (TWDB 2011). Comparatively, the population for Williamson County is projected to increase at an average annual growth rate of about 3.97 percent through 2030 whereas Texas is projected to increase at an average annual growth rate of about 1.69 percent through 2030 (Table 3-1).

Table 3-1: Population and Population Projections, 1970-2030

Year	Cedar Park	Williamson County	Texas
1970 Census	1,012	37,305	11,196,730
1980 Census	3,474	76,521	14,229,191
1990 Census	5,161	139,551	16,986,510
2000 Census	26,049	249,967	20,851,790
2010 Census	48,937	442,679	25,145,561
Projected 2020	81,069	632,433	29,510,184
Projected 2030	89,517	794,478	33,628,653

Source: U.S. Census Bureau 1970, 1980, 1990, 2000, and 2010 Census; TWDB Regional Water Plan Data, 2016a.

3.2.3 Traffic Demands

In conjunction with the forecasted population increase in Williamson County and Cedar Park, TxDOT projects increased traffic within this section of Bell Boulevard. TxDOT traffic data shows approximately 40,000 vehicles as average daily traffic (ADT) volume in 2016 in this section. ADT represents the total traffic for a year divided by 365 resulting in the average traffic volume per day. TxDOT predicts a 20% increase by 2020 (to 48,000 ADT), a 63% increase by 2040 (to 65,400 ADT) and an 85% increase by 2050 (to 74,110 ADT).

This projected increase in traffic corresponds to an anticipated decrease in Level of Service (LOS). The LOS is a qualitative measure of the quality of traffic service for a roadway ranging from highest ranking of A (free flowing traffic) down to F (forced or breakdown flow). For signalized intersection operation, LOS A represents very low delay; most vehicles do not stop

at all. With LOS B, more vehicles stop than LOS A, increasing the average delay. Under LOS C, the number of vehicles stopping is significant; however, many still pass through the intersection without stopping. LOS D describes conditions where congestion is readily apparent with many vehicles stopping and individual cycle failures are noticeable. LOS E generally describes operation with poor progression, long cycle lengths and frequent cycle failures. LOS F describes unacceptable operations which include many cycle failures caused by arrival flow rates exceeding intersection capacity. As defined by Transportation Research Board's (TRB) Highway Capacity Manual, urban streets and auxiliary facilities should generally be designed for LOS B, however, LOS D may be acceptable for heavily developed urban areas (TRB 2000).

CoCP commissioned the Alliance Transportation Group to conduct an LOS and delay analysis for the project corridor comparing 2015 and 2035. Alliance's analysis anticipates a decrease in LOS and an increase in delay times across the 20-year period (Alliance 2017). Alliance's analysis included a comparison of existing conditions, the No Build Alternative (leaving the roadway in current Bell Boulevard conditions), and the Build Alternative (Bell Boulevard Realignment). The No Build Alternative analysis optimized signal timings to provide the best LOS outcome with the existing infrastructure, adjusting the peak hour factor for a more general peak period rather than using the lower existing 2015 peak period information. The Build Alternative analysis applied overall model growth rates to the existing 2015 counts to develop 2035 volumes and then utilized project-specific access points for trips through the study area. The decrease in LOS and increase in delay times were minimized under the Build Alternative in comparison with the No Build Alternative. This is shown in Table 3-2 below.

Table 3-2: Bell Boulevard Realignment Scenarios LOS and Delay

		Existing Bell Boulevard (2015)		Existing Bell Boulevard (2035) (No Bell Realignment)		Bell Boulevard Realignment (2035)	
		AM	PM	AM	PM	AM	PM
US 183 & Park Street	LOS	D	C	E	E	D	E
	Delay (sec.)	51.1	31.2	79.4	55.7	52.4	61.2
US 183 & Buttercup Creek	LOS	D	E	E	E	D	E
	Delay (sec.)	53.2	65.4	72.8	66.4	46.5	56.7

Source: Alliance transportation Group Traffic Analysis, 2017

3.2.4 Safety

The crash rate for a roadway is defined as the number of crashes per unit of traffic volume and provides a comparison of safety performance over time and between different roadways and measured in crashes per 100,000,000 Vehicle Miles Traveled (VMT). Between 2011 and 2015, the crash rate within the project limits was consistently and significantly higher than the statewide average for Urban US Highways (Table 3-3) (TxDOT 2017a).

Table 3-3: Crash Rates

Year	Segment Crash Rate	Statewide Average Urban US Highway Crash Rate
2011	245.39	113.69
2012	179.98	134.87
2013	319.33	139.53
2014	186.74	153.96
2015	312.57	187.44

Source: TxDOT Crash Records Information System (CRIS)

Vehicular turning movements into and out of the existing development conflict with the increasing through traffic demand along the corridor. Between 2011 and 2015, at least 127 reported crashes occurred within the limits of the project area, with an average of 25.4 crashes a year (Table 3-4). One fatal incident occurred in 2015 involving a two-vehicle collision in the 200 block of Bell Boulevard after the offending car crossed the center line into oncoming traffic. This accident also resulted in the injuries of three other individuals. Two more accidents occurred in the project area in 2015 resulting in two individuals sustaining incapacitating injuries, including a pedestrian.

Table 3-4: Crashes by Severity

Year	Non-Injury or Property Damage Only (PDO)	Possible Injury (C)	Non-Incap. Injury (B)	Incapacitating Injury (A)	Fatality (K)	Total
2011	18	7	1	0	0	26
2012	14	5	1	0	0	20
2013	17	8	8	0	0	33
2014	11	4	3	0	0	18
2015	18	3	6	2	1	30
Total	78	27	19	2	1	127
%	61.4%	21.3%	15.0%	1.6%	0.8%	100.0%

Source: TxDOT Crash Records Information System (CRIS)

The majority of the crashes (59.8%) include rear end crashes (Table 3-4). Rear end crashes likely occur as a result of the abundant commercial developments that host continuous ingress and egress of vehicles on Bell Boulevard. The proposed improvements would separate through traffic to the east of the commercial corridor, resulting in less vehicular volume. Angle crashes account for 20.5% of crashes (Table 3-5). Angle crashes are those that involve collision between two vehicles approaching from non-opposing angular directions, usually because one vehicle failed to either stop or yield right-of-way from a stop or yield sign, ran a red light, or was not cleared from the intersection upon the onset of the conflicting movement's green signal.

Table 3-5: Crashes by Major Type of Collision

Year	Head On	Run Off Road/Fixed Object/Overturn (ROR/FO/OT)	Side-swipe	Rear End	Left Turn	Angle	Other	Total
2011	0	0	1	17	0	7	1	26
2012	0	0	0	13	0	7	0	20
2013	1	1	1	21	4	4	1	33
2014	1	2	1	9	0	4	1	18
2015	1	3	2	16	3	4	1	30
Total	3	6	5	76	7	26	4	127
%	2.4%	4.7%	3.9%	59.8%	5.5%	20.5%	3.1%	100.0%

Source: TxDOT CRIS

3.3 Purpose for the Proposed Project

The purpose of the Bell Boulevard Realignment Project is to improve public safety within the corridor while accommodating increasing population growth and traffic demand in a manner consistent with the Destination Bell Boulevard Master Plan. During the Destination Bell Boulevard Master Plan process, the public selected the separation of the through traffic on Bell Boulevard Realignment and the commercial access traffic on what is proposed West Bell Boulevard. This separation seeks to improve safety and accessibility for vehicles and pedestrians accessing the commercial corridor between Cedar Park Drive and south of Buttercup Creek Boulevard.

4.0 Alternatives

The process of developing the build alternative that meets the need and purpose of the project included three steps: 1) identification of preliminary alternatives, 2) analysis of the preliminary alternatives and 3) identification of reasonable alternatives to be carried forward through the environmental review process.

4.1 Build Alternative

The preferred alternative selected by the public and stakeholders during the Destination Bell Boulevard Master Planning process was Alternative #3: Picket Alternative which realigned Bell Boulevard onto Old Highway 183. Accordingly, this build alternative was analyzed using Geographic Information Systems (GIS) to determine the potential for environmental constraints. The following constraints were analyzed in GIS and shown on Appendix F, Exhibit 1:

- Known archeological sites,
- Churches,
- Cell/Radio towers,
- Cemeteries,
- Commercial structures,
- Potential hazardous materials sites,
- Historical markers,
- National Hydrography Dataset (NHD) flowlines/waterbodies,
- National Wetlands Inventory (NWI) features,
- Public parks/recreational areas,
- Residential structures,
- Schools,
- Designated mitigation areas, and
- Wildlife refuges.

Field reconnaissance, where right-of-entry was allowed, for several of these environmental constraints were identified and logged using a Global Positioning System receiver and digital photos were taken. Of these environmental constraints, avoiding commercial displacements was given the most importance when designing the build alternative alignment.

4.2 No Build Alternative

Under the No Build Alternative, the proposed project would not be constructed. The No Build Alternative would not require the acquisition of 1.77 acres of right-of-way (ROW) by CoCP. However, the No Build Alternative would not result in the increase in mobility or safety for both vehicles and pedestrians. Selection of the No Build Alternative would not alleviate expected worsening traffic congestion. Although the No Build Alternative does not meet the need and purpose of the project and is not the recommended alternative, it was carried forward for comparison purposes.

4.3 Preliminary Alternatives Considered but Eliminated from Further Considerations

The following three preliminary alternatives were evaluated and discussed with the public in the Destination Bell Boulevard Redevelopment Master Plan (COCP 2015) are listed here:

- **Alternative #1: Board on Board Alternative:** this alternative would reconstruct the five-lane roadway in place with a center lane, widen the sidewalks, and preserve about 30 acres for a destination district west of the highway.
- **Alternative #2: Split Rail Alternative:** this alternative would split Bell Boulevard between Brushy Creek Road/Buttercup Creek Boulevard and Park Street into two one-way couplets with two lanes in each direction with a center lane. Southbound lanes would use the Bell Boulevard roadway and northbound traffic would use the rebuilt Old Highway 183 roadway.
- **Alternative #3: Picket Alternative:** This alternative would move all five lanes of Bell Boulevard east to replace Old Highway 183 next to the railroad line. This would connect 14 acres on the east side of Bell Boulevard to the existing commercial development and ultimately create a walkable 40-acre development area.

The public selected preliminary alternative #3 (Picket Alternative), and this alternative was developed into the proposed build alternative.

5.0 Affected Environment and Environmental Consequences

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

- Need and Purpose Technical Report
- Water Resources Technical Report;
- Biological Resources Technical Report;
- Community Impact Assessment Technical Report;
- Air Quality Technical Report;
- Noise Technical Report;
- Archeological Technical Report;
- Project Coordination Request for Historical Studies Project;
- Induced Growth Technical Report;
- Hazardous Materials Technical Report;
- Public Meeting Summary Report; and,
- Public Hearing Summary Report.

These technical reports are available for public review and may be inspected and copied upon request at the TxDOT Austin District Office located at 7901 N. I-35, Austin, Texas 78753; and at the CoCP City Hall located at 450 Cypress Creek Rd, Cedar Park, TX 78613.

The following sections address impacts associated with the Build Alternative and No Build Alternative for comparison.

5.1 Right-of-Way/Displacements

Build Alternative: The Build Alternative would require the acquisition of up to approximately 1.77 acres new (additional) ROW, permanent easements, and driveway licenses by TxDOT and CoCP. The additional ROW would convert commercial use land to public transportation use.

Potential displacements include:

- **Parcel R325310**, previously occupied by Callahan's Feed and Pet Supply and currently occupied by a playscape company, Centex Playscape Refurbishers, which would be potentially displaced.
- **Parcel R031882**, previously occupied by Firestone Complete Auto Care and currently occupied by a used car lot, Neighborhood Park N Sell, which would be potentially displaced.
- **Parcel R0311923**, currently occupied by CoCP Parks Department administrative offices which would be potentially displaced.
- **Parcel R031909**, currently occupied by Plush Upholstery Studios and Plush Fabrics which would be potentially displaced. This parcel also contains an unpermitted apartment that may be displaced.
- **Parcel R031951**, currently occupied by three structures. The two structures closest to Old Highway 183 are in operation as Connie's Carwash and would be potentially affected. Connie's Carwash would be potentially displaced.

Table 5-1 shows from the parcels under current commercial use land that would be potentially converted (at least in part) to public transportation. No residential facilities would be displaced. This project is not a Federal Highway Administration (FHWA) project. This project will conduct ROW acquisition and relocation in accordance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act).

Table 5-1: Affected Properties and ROW within Project Area

Parcel No: Owner (Current Use)	ROW Potentially Converted to Transportation Use	Public Utility Easement (Permanent)	Drainage Easement (Permanent)	Driveway License (Temporary)	Construction Easement (Temporary)
R031879: Horizon Bank SSC (Sovereign Bank)	X	X		X	X
R031882: Danny Kent Bell (Used Car Lot)	X	X			
R031890: 706 W. 34 th LLC & Florence Raw Land LLC (Texas Car Title Loan)	X	X			X
R031909: 312 314 Old Hwy 183 LP (Plush)	X				
R031912: Ky & Anh H Thi (Century Food and Gas)				X	
R031923: City of Cedar Park (Parks Department Admin)	X				

Parcel No: Owner (Current Use)	ROW Potentially Converted to Transportation Use	Public Utility Easement (Permanent)	Drainage Easement (Permanent)	Driveway License (Temporary)	Construction Easement (Temporary)
R031951: N.E. Walker Inc. (Connie's Car Wash)	X				
R036951: Lura L. Gunlock Estate (Park Street Residential Lot)					X
R031908: Hawkins Family Partners LP (American Pawn)		X		X	
R102658: Goodwill Industries of Central Texas (Goodwill)	X			X	
R306673: Armstrong Buttercup Creek LP (Buttercup Commons)	X				
R325310: 218 Old Hwy. 183, LP (Centex Playscape Refurbishers)	X				
R325311: Cedar Park Square Two LTD (Carr Property)	X	X			

Parcel No: Owner (Current Use)	ROW Potentially Converted to Transportation Use	Public Utility Easement (Permanent)	Drainage Easement (Permanent)	Driveway License (Temporary)	Construction Easement (Temporary)
R388464: City of Cedar Park (Eye Doctor Lot)		X			
R388465: City of Cedar Park (Dominos etc.)	X	X			
R399375: David Forbes (Loan Star Pawn)	X				
R447738: Smokey Denmark's LTD			X		
R447739: Smokey Denmark's LTD	X	X	X		
R082166: Aceitera LLC (Jiffy Lube)				X	
R031974: Phuong & Jun Liu Tran Kim Phung Restaurant				X	

No Build Alternative: Under the No Build Alternative, no potential displacements would occur as no new ROW would be acquired.

5.2 Land Use

Historic aerial imagery indicates that between 1964 and 1967, Highway 183 was split through Cedar Park. Land use in the project area was undeveloped until 1973 when commercial businesses begin to appear, the same year Cedar Park was incorporated following a growth in population due to the growth of Austin. Between 1996 and 2004, a large increase in commercial businesses appears on previously undeveloped land. The 183A toll road was opened in March 2007. No residential land use zones are located in the project area.

Current land use of the project area consists primarily of commercial uses, interspersed with undeveloped land. According to CoCP Official Zoning Districts, the project area is categorized as “Local Retail” and “General Retail” (2016). Commercial shopping centers and strip malls are currently located on the east and west side of Bell Boulevard at the southern terminus of the project area. Along the east side of Old Highway 183, commercial businesses continue, including a Goodwill and a car wash. Operational railroad tracks are located east of the commercial development along Old Highway 183 but are outside the project area. On the west side of Bell Boulevard at the northern terminus of the project area are commercial businesses, including Enterprise Rent-A-Center and Daylight Donuts, among other businesses. The commercial development along Bell Boulevard and Old Highway 183 is not experiencing the level of growth or activity as would be expected due to the increasing vehicular traffic volumes on the roads.

Build Alternative: Approximately 1.77 acres of new ROW would convert commercial use land to public transportation use. The project area is within CoCP and has been zoned for future development.

No Build Alternative: Land use effects would not change in a no build alternative as no additional ROW is needed and no acreage of commercial use land would be converted to public transportation use.

5.3 Farmlands

Build Alternative: Coordination with the National Resources Conservation Service (NRCS) for the Farmland Protection Policy Act (FPPA) would not be required for the Build Alternative because the project is not in areas mapped as prime farmland unique farmland, statewide importance, or locally important by the NRCS Web Soil Survey or Census Bureau.

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

5.4 Utilities/Emergency Services

Build Alternative: The proposed project would require the adjustment or relocation of underground and/or overhead utilities. At the current phase of project development, the locations of utilities potentially requiring adjustment or relocation have not yet been identified. Impacted utilities would be identified during the detailed design phase. At that time, coordination with utility owners and service providers would occur and relocation/adjustment plans would be developed.

Cedar Park Fire Station #1, located at 503 Brushy Creek Road, serves the project area. Cedar Park Regional Medical Center, located at 1401 Medical Parkway, and St. David's Emergency Center (Cedar Park) located at 14016 N. Highway 183, provide emergency medical services in the project area. Although project-related delays would be anticipated during construction, every reasonable effort would be made to minimize delays. Once construction is complete, emergency response times are expected to be lower than current response times as an increase in mobility is expected. The proposed project would facilitate more reliable emergency response.

No Build Alternative: Under the No Build Alternative, there would be no project-related impacts to utilities. Emergency response would continue to be hindered by heavy congestion and response times would grow even longer as congestion in the corridor worsens over time.

5.5 Bicycle and Pedestrian Facilities

Build Alternative: The proposed Build Alternative includes relocating all five lanes of Bell Boulevard east to replace Old Highway 183 next to the railroad line, which would connect 14 acres on the east side of Bell Boulevard to the existing commercial development and ultimately create a walkable 40-acre development area. This alternative is consistent with the publicly supported Destination Bell Boulevard Master Plan, which includes sidewalks along the road frontage. Moving Bell Boulevard east provides an opportunity for safer ingress and egress to existing commercial development along West Bell Boulevard. This will also minimize or avoid conflicts between through traffic, turning traffic, and pedestrian activity along the existing commercial development corridor. The Build Alternative would include construction of a 10-footwide shared-use path along the southbound side of the Bell Boulevard Realignment, from Park Street to Buttercup Creek Boulevard. Improvements are envisioned to connect the proposed project area to the future Destination Bell Boulevard trail. The Build Alternative would also include sidewalk improvements along the northbound side of the Bell Boulevard Realignment from the project southern terminus to the approximate midpoint of the project. Finally, the Build Alternative would also include sidewalks along Park Street up to the Bell Boulevard Realignment and a new sidewalk/railroad crossing on the north side of Park Street between the Bell Boulevard Realignment and Kings Canyon Drive. The sidewalk improvements would be Americans with Disabilities Act (ADA) compliant.

Bicycle lanes would be provided on the northbound side along the entire corridor and on the southbound side north of Park Street and south of Buttercup Creek Boulevard.

No Build Alternative: Under the No Build Alternative, no improvements to bicycle or pedestrian access would be provided.

5.6 Community Impacts

The project area was surveyed for proximity of residences and businesses to the roadway. The project area is largely commercial, with no residential areas. Residential areas exist near the project area to the east and northwest. Five commercial businesses would be potentially displaced; Neighborhood Park N Sell, Plush fabrics, Plush Upholstery Studios, Centex Playscape Refurbishers, and Connie's Car wash. Additionally, the CoCP Parks Department administration building would be potentially displaced.

Bell Boulevard would become a non-through road (West Bell Boulevard) entered on the north side, to have exclusive access to the commercial corridor, while through traffic would be directed onto Old Highway 183 to the east, the Bell Boulevard Realignment, providing safer ingress and egress to existing commercial development. The separation of through traffic onto Bell Boulevard Realignment seeks to improve safety and accessibility for vehicles and pedestrians accessing the commercial corridor between Cedar Park Drive and south of Buttercup Creek Boulevard in a manner consistent with the publicly supported Destination Bell Boulevard Master Plan.

Community cohesion is a term that refers to the overall quality of a residential area. Cohesion is a social attribute that indicates a sense of community, community responsibility, and social interaction among people who live or work within a limited geographical area. It is the degree to which residents have a sense of belonging to their neighborhood or community or a strong attachment to neighbors, groups, and institutions as a continual association over time. A goal of the Bell Boulevard Master Plan is for greater community cohesion by ensuring "a connected neighborhood fabric that encourages walkability, activates the community's civic and commercial spaces and promotes an interactive, urban experience" (CoCP 2015). New connections between the Brushy Creek Regional Trail, the Buttercup Creek Natural Area, and the Bell Boulevard area are expected to foster community cohesion. All community facilities within the study area and in the surrounding community will remain accessible and open.

The build alternative may lead to an increase in the cohesion of the communities affected by this project.

5.6.1 Environmental Justice

Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" requires each Federal agency to "make achieving

environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations.” FHWA has identified three fundamental principles of environmental justice:

1. To avoid, minimize or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and low-income populations;
2. To ensure full and fair participation by all potentially affected communities in the transportation decision-making process; and
3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations.

Disproportionately high and adverse human health or environmental effects are defined by FHWA as adverse effects that: (1) are predominately borne by a minority population and/or a low-income population, or (2) will be suffered by the minority population and/or low-income population and are appreciably more severe or greater in magnitude than the adverse effects that will be suffered by the non-minority population and/or non-low-income population.

Low-income persons can be defined as those whose median household incomes are below the U.S. Department of Health and Human Services (HHS) poverty threshold; low-income communities can be defined as those whose poverty rates exceed the poverty rates of a geographically appropriate reference area. The HHS poverty guideline for a family of four is \$25,750 in 2019 (ASPE 2019).

Build Alternative:

In compliance with EO 12898 regarding environmental justice, this project was assessed in order to determine whether or not the proposed activities would have a disproportionate adverse impact on low-income or minority populations. As detailed in the Community Impacts Assessment Technical Report, income in the project area block groups ranged from \$54,896 to \$113,875 in 2015. No high concentrations of low income populations are within the project area block groups.

U.S. Census Data shows that three of the 11 blocks adjacent to the project have high minority populations. The three blocks with high minority populations include:

- Census Tract (CT) 203.17, Block Group (BG) 1, Block 1024 – 49% minority population;
- CT 203.22, BG 2, Block 2000 – 44% minority population; and
- CT 203.22, BG 4, Block 4000 – 49% minority population.

The blocks are located in the southern portion of the project area and would not be affected by new ROW acquisition.

There are no census blocks that meet the criteria for minority populations and no census block groups that meet the criteria for low-income populations; therefore, there are no disproportionately high or adverse impacts to minority or low-income populations anticipated. There will be minor impacts due to changes in access, travel patterns, and cohesion but, as discussed above, they are expected to be largely positive. These impacts would be experienced by the community at large including any minority or low-income persons.

No Build Alternative: No project-related impacts to minority or low-income populations would occur under the No Build Alternative as the proposed project would not be constructed.

5.6.2 Limited English Proficiency

EO 13166 “Improving Access to Services for Persons with Limited English Proficiency” requires agencies to examine the services they provide, identify any need for services to those with Limited English Proficiency (LEP), and develop and implement a system to provide those services so that LEP persons can have meaningful access to them. The 2010-2014 American Community Survey 5-Year Estimates was used from the U.S. Census Bureau for Household Language by Household and Limited English-Speaking Status (USCB 2010c).

Any persons who speak English less than “very well” are considered LEP. Within five of the six block groups, less than six percent were identified as speaking English less than “very well” by the 2010-2014 American Community Survey 5-Year Estimates. Four of the six block groups are comparable to the LEP population (3.37 percent) of Williamson County that is five years of age or older. Spanish was the estimated primary language for the majority of the LEP population (351 people), although 43 LEP persons are estimated to speak Asian and Pacific Island languages. In Cedar Park as a whole, Spanish was the primary language for approximately 68 percent of the LEP population.

The two blocks above Williamson County LEP population include CT 203.27, BG 1 with a 5.16 percent LEP population and CT 203.13, BG 2, where 12.76 percent of the population was identified as LEP persons, a slight increase to the surrounding census tracts and larger regional data. Of the 3,623 LEP residents within CT 203.13, BG 2, 462 are LEP persons. CT 203.13 is the second-largest tract affected (1521.11 acres) and the affected blocks in CT 203.13 (251.21 acres) only account for 16.51 percent of the area. CT 203.13 reaches 1.7 miles east of the project area across TX-183A toll road, covering many diverse neighborhoods.

This project, consistent with the publicly supported Destination Bell Boulevard Master Plan, seeks to follow TxDOT’s public involvement policy including identifying stakeholders, creating and maintaining a mailing list, maintaining a project-specific information website, holding

public meetings, soliciting comment cards from the public, distributing FAQ brochures, and maintaining a positive, working relationship with local news reporters. Before public meetings, citizens were encouraged to request language assistance, whether verbal or written, if needed. Telephone numbers, email, and comment cards were provided. No requests for special accommodations were made for the public meeting held March 20, 2018 or the public hearing on February 21, 2019. However, Spanish speaking professionals were on-hand at both the public meeting and hearing. Efforts will continue to be made throughout the project development process to engage LEP populations by, upon request, providing project and meeting materials and notices in English and Spanish, or the language requested.

5.7 Visual/Aesthetics Impacts

Currently, the existing Highway 183 / Bell Boulevard is a four-lane roadway and Old Highway 183 is a two-lane roadway. The roadways and project area are surrounded by commercial use land, comprising of general and local retail. Generally, the vegetation within the ROW consists of maintained grass with little tree cover.

Build Alternative: The proposed project would generally follow the alignment of existing Highway 183 / Bell Boulevard and Old Highway 183, with the primary changes to the visual environment occurring at the south end of existing Highway 183 / Bell Boulevard, which would become a non-through road (West Bell Boulevard) entered on the north side, to have exclusive access to the commercial corridor present. The Build Alternative includes a raised median along Old Highway 183 with protected turn lanes, safety illumination, and landscaping. The landscaping would use native and non-invasive, locally-adapted vegetation when reasonable and feasible.

No Build Alternative: The No Build Alternative would not result in project-related visual impacts as the proposed improvements would not be constructed.

5.8 Cultural Resources

5.8.1 Archeology

A detailed analysis of the cultural resources of the project area can be found in the Archeology Technical Report. As discussed, after examining the soils, geology, landforms, and previously recorded sites and surveys in the Area of Potential Effect (APE), it was determined that there was a low probability for prehistoric sites to exist. The soils are shallow and not likely to contain intact cultural deposits. Although the geologic units are known to contain the lithic resources utilized by native peoples, the project area has been heavily modified and disturbed as a result of current transportation and commercial development. This is due in large part to the substantial disturbance of the APE by the construction of Bell Boulevard and the businesses that are located along the street on both sites. A pedestrian survey of the realignment project supported this determination as the

project area has been previously disturbed due to residential and commercial building and structures.

A literature review of the Texas Historical Commission (THC) Archeological and Historic Sites databases, historic maps, and records from the Texas Archeological Research Laboratory (TARL) revealed that one previous archeological survey partially aligns with the project area. While no sites are recorded in the APE, five previously recorded sites are located within one kilometer of the APE, along with two cemeteries. The Hill Top Baptist Cemetery is more than 500 meters southeast of the project limits and is located behind the Hill Top Baptist Church. The Cedar Park Cemetery is located adjacent to the project on the southwest corner of the intersection of Park Street and Bell Boulevard. The Cemetery is gated and well-marked. The cemetery would be avoided and would not be impacted by the proposed project. The closest known archeological site is five meters west of the project extent on Buttercup Creek Boulevard. The site was last visited in 1984, during which investigators determined the site to be thoroughly disrupted due to road and residential construction and no longer contains significant intact cultural resources. All other archeological sites are at least 200 meters outside of the project extents and would not be impacted by the proposed project.

Over the course of project development, the project team submitted the Archeological Technical Report to THC for comment. THC reviewed the Archeological Technical Report and concurred with the findings.

Build Alternative: The overall cultural investigation included a desktop review of the project area, basic archival research, a National Register of Historic Places eligibility assessment, and a project area site visit. Given the negative results from the previously conducted linear survey within the project area and similarly negative surveys nearby, along with the current land use and heavily commercially-modified area, it is unlikely that any archeological properties have remained intact in the project area. No further cultural investigation is recommended. In the unlikely event that archeological resources are inadvertently discovered, TxDOT and CoCP should contact a professional archeologist for consultation.

No Build Alternative: Under the No Build Alternative, no project-related impacts on archeological resources would occur.

5.8.2 Historic Properties

As detailed in the Project Coordination Request for Historical Studies Project prepared for/by TxDOT, no historic-age resources are located within the project area, including historic-age bridges or rock masonry features. Furthermore, no relocation of historical markers is required. In compliance with the Antiquities Code of Texas and the MOU, TxDOT historians determined project activities have no potential for adverse effects. The APE for the proposed project is the existing or proposed ROW or easements. Individual project coordination with the THC is not required. There are no listed State Antiquities Landmarks within the APE.

Build Alternative: Given the lack of historic-age resources, buildings, and features within the project area, impacts to historic properties are not expected.

No Build Alternative: Under the No Build Alternative, no project-related impacts on any historic resources would occur.

5.9 DOT Act Section 4(f), LWCF Act Section 6(f), and PWC Chapter 26

Coordination regarding Section 4(f), Section 6(f) or Chapter 26 properties is not required for this project. There would be no use of a Section 4(f) or Chapter 26 property, and no Section 4(f)/Chapter 26 property would be impacted by the proposed project. There were no properties identified in the project area that were acquired or developed, partially or wholly, with Land and Waters Conservation Fund assistance. Therefore, Section 6(f) does not apply.

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

5.10 Water Resources

Portions of the proposed ROW for the build alternative that cross potential jurisdictional waters may be regulated under Section 303(d), 401, 402, 404, and 408 of the Clean Water Act (CWA) and Sections 9, 10 and 14 of the Rivers and Harbors Act of 1899. Section 303(d) addresses state-listed impaired waters while Sections 401, 402, and 404 of the CWA regulate impacts to surface waters, including wetlands. The Rivers and Harbors Act specifically addresses development in traditional navigable waters (TNW) and Federal Project levees. These regulatory acts are further examined below.

The No Build Alternative would not impact water resources.

5.10.1 Clean Water Act Section 404

One potentially jurisdictional flowline, Cluck Creek, was identified that would likely fall under the jurisdiction of Section 404 of the Clean Water Act within the project area boundary.

Cluck Creek is a Relatively Permanent Water (RPW) and has a defined bed, bank, and ordinary high water mark (OHWM) for a length of approximately 98 linear feet within the proposed project area (Appendix F, Exhibit 2). Cluck Creek generally travels from north to south through the proposed project area and crosses Buttercup Creek Boulevard in the southern end of the project area. According to a desktop assessment, Cluck Creek flows downstream into the Brazos River. The average OHWM of Cluck Creek within the proposed project area is approximately 17 feet. The total area of potential jurisdiction within the proposed project area is approximately 1,666 square feet, or approximately 0.038 acre. The FEMA “1% annual chance flood hazard zone” and the “0.2% annual chance flood hazard zone” intersect the proposed project area along Cluck Creek (Appendix F, Exhibit 9).

According to the most recent schematic, the Buttercup Creek Boulevard bridge includes striping modifications and minor elevation adjustments. No fill would be placed in the creek.

No impacts to the quality or quantity of surface water in the project area are expected due to the proposed improvements.

5.10.2 Clean Water Act Section 401

Section 401 of the CWA requires a state water quality certification for certain activities resulting in discharges into waters of the U.S. In Texas, the Texas Commission on Environmental Quality (TCEQ) requires a Section 401 water quality certification before a Section 404 permit authorization can be issued by the U.S. Army Corps of Engineers (USACE). No Section 404 authorization is anticipated for the project because no impacts to waters of the US are anticipated. Therefore, no Tier I or Tier II water quality certification is anticipated. However, stormwater quality would be maintained and monitored during construction under a stormwater pollution prevention plan (SWP3) (see Clean Water Act Section 402 below).

5.10.3 Executive Order 11990 Wetlands

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

5.10.4 Rivers and Harbors Act

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

5.10.5 Clean Water Act Section 303(d)

Section 303(d) of the Clean Water Act identifies and lists polluted or impaired waters and develops plans to restore them. According to the 303(d) Listed Waters (EPA 2014), one impaired water is within 5 miles of the project area: Waterbody ID TX-1244_04, Brushy Creek, from the confluence of Lake Creek upstream to the confluence of South Brushy Creek. The impaired waterbody is located in the San Gabriel watershed and identified as a freshwater stream. The impairment of the waterbody is for the recreation use designation due to bacteria (pathogens). The impairment has been listed on the 2006, 2008, 2010, 2012, and 2014 cycles. The project area is located in the south central portion of the San Gabriel watershed and is approximately 4.55 miles west of the impaired waterbody.

To date, TCEQ has not identified (through a total maximum daily load (TMDL) or the review of projects under the TCEQ MOU) a need to implement control measures beyond those required by the construction general permit (CGP) on road construction projects. Therefore, compliance with a project's CGP, along with coordination under the TCEQ MOU for certain transportation projects, collectively meets the need to address impaired waters during the environmental review process. This impaired assessment unit does not have EPA-approved TMDLs but the project would be implemented, operated, and maintained using best management practices to control the discharge of pollutants from the project site.

5.10.6 Clean Water Act Section 402

To maintain compliance with Section 402, national pollutant discharge elimination system (NPDES) and Texas pollutant discharge elimination system (TPDES) requirements for a CGP TXR 150000, a SWP3 would be prepared for the project. Additionally, a notice of intent (NOI) and notice of termination (NOT) would be filed with the TCEQ prior to and after construction completion, respectively. Throughout the duration of the construction phase of the proposed development, temporary erosion and sedimentation controls would be implemented in accordance with TPDES. The pre-construction measures may include perimeter silt fences and stabilized construction entrances. Control measures during construction may include rock berms, additional silt fencing, slope stabilization, permanent erosion controls, and site restoration. All temporary sedimentation controls would be considered a minimum and regularly monitored and maintained. If, during construction, the measures are determined to not be working effectively, immediate steps would be taken to upgrade the installation.

5.10.7 Floodplains

The project area was investigated for encroachments into the “1 percent annual chance flood hazard” zone. Information was obtained from the FEMA Flood Insurance Rate Maps for Williamson County. The “1 percent annual chance flood hazard” zone that occurs along Cluck Creek, flows through the proposed project area (FEMA 2016). Current design does not anticipate any rise in the floodplain elevation, therefore no Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) with FEMA is anticipated.

5.10.8 Wild and Scenic Rivers

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

5.10.9 Coastal Barrier Resources

The proposed project is not within a county affected by the federal Coastal Barrier Resources Act of 1982 (CBRA), therefore, the CBRA does not apply.

5.10.10 Coastal Zone Management

The proposed project is not within the Texas Coastal Management Program (TCMP) coastal zone management boundary, and therefore Title 31 of the Texas Administrative Code does not apply.

5.10.11 Edwards Aquifer

Three major aquifers, the Northern Segment of the Edwards Aquifer, the Trinity Aquifer, and the Carrizo-Wilcox Aquifer, are found within Williamson County (TWBD 2016). Within the project area, the Edwards Aquifer outcrop overlays the Trinity Aquifer subcrop. The proposed project area is within the Edwards Aquifer Contributing Zone (Appendix F, Exhibit 4). The Carrizo-Wilcox Aquifer is present only in the far southeast portion of Williamson County, distant from the project.

According to the Region 6 Sole Source Aquifer map, the Edwards Aquifer is a sole source aquifer. A Sole Source Aquifer is an aquifer designated by EPA as the "sole or principal source" of drinking water for a given service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should the aquifer become contaminated (USEPA 2016a). The extent of the Edwards Aquifer designated as a sole source aquifer reaches the southwestern boundary of Travis County and ends south of Sunset Valley (USEPA 2016b). This extent does not reach the proposed project area.

Since the project occurs within the Edwards Aquifer Contributing Zone, a Contributing Zone Plan (CZP) would be required under the Build Alternative. In accordance with TCEQ's Edwards Aquifer Rules (30 TAC 213), erosion control measures and best management practices (BMPs) would be implemented during construction to minimize degradation to surface water quality. Based on the schematic design, permanent stormwater BMPs would include a Jellyfish filtration system within the storm sewer system. As designed, the Jellyfish filtration system would remove more than 80% of the increase in Total Suspended Solids (TSS) in accordance with the non-degradation standards in the Edwards Aquifer Rules. The Build Alternative also proposes a detention pond east of the Bell Boulevard Realignment.

On November 9, 2018, TxDOT submitted the Waters Resource Technical Report to TCEQ for review and comment. TCEQ reviewed the project and, on November 30, 2018, stated that the documentation sufficiently addressed surface and groundwater quality.

5.10.12 International Boundary and Water Commission

The proposed project would not require work within the floodplain of International Boundary Water Commission (IBWC) flood control projects or right-of-way, therefore, coordination with the IBWC is not required.

5.10.13 Drinking Water Systems

According to the Texas Water Development Board (TWDB) Groundwater Well Database (2016b), the nearest water well is located approximately 720 feet west of the project alignment (Appendix F, Exhibit 3). In total, 19 monitor wells and two environmental soil borings are located within 500 feet of the proposed project alignment. The project area is supplied by City of Cedar Park municipal water. Two monitor wells may occur within the project area ROW.

The northernmost monitor well, ID # 407414, is located at 104 South Bell Boulevard and is owned by Doug Archer. According to the well report, the monitor well was drilled in 2015 and is 35 ft. deep. This well has been plugged.

The southernmost monitor well, ID # 402343, is located at 251 South Bell Boulevard and is owned by Doug Archer. According to the well report, the monitor well was drilled in 2015 and is 35 ft. deep. This well has been plugged.

Both of these monitoring wells are recorded as plugged. If either is encountered during construction, the well would be sealed and abandoned following applicable State regulations by a licensed well driller.

5.11 Biological Resources

The Biological Resources Technical Report details the ecological requirements and known occurrences of federally listed threatened or endangered species of potential occurrence in the area as well as any effects or impacts to federally listed species that may result from the project. The Biological Resources Technical Report includes the Tier I Site Assessment performed by a TxDOT qualified biologist, the Tier II Site Assessment requirements addressed in the Programmatic Agreement (PA) and includes the completed TxDOT Biological Evaluation Form.

5.11.1 Texas Parks and Wildlife Department Coordination

On May 6, 2014, the Director of Environmental Affairs with TxDOT released a memo stating the PA with the Texas Parks and Wildlife Department (TPWD) to apply the 2013 Memorandum of Understanding (MOU) between TxDOT and TPWD were final. The PA's clarify the BMPs and thresholds for determining whether or not TPWD coordination is required (TxDOT 2014a). In 2017, TxDOT and TPWD revised the BMP PA (TxDOT 2017b). Based on *Section 2.206. Coordination Triggers* the proposed project does not require coordination with TPWD (TAC 2013).

Based on TPWD Annotated County list of Rare Species, 89 SGCN species may occur in Williamson County. Table 5-2 below lists each of the species, their potential to occur within the project area, and if so, the potential for impacts to the species.

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Table 5-2: State Listed Threatened and Endangered Species and Species of Greatest Conservation Need in Williamson County, Texas

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/Impact	Description	Justification
Barton Springs salamander	<i>Eurycea sosorum</i>	E	LE	Y	No	No	Dependent upon water flow/quality from the Barton Springs pool of the Edwards Aquifer; known from the outlets of Barton Springs and subterranean water-filled caverns; found under rocks, in gravel, or among aquatic vascular plants and algae, as available; feeds primarily on amphipods	Not near species range and no suitable spring habitat present.
Georgetown salamander	<i>Eurycea naufragia</i>		LT	Y	No	No	Known from springs and waters in and around town of Georgetown in Williamson County	Not near species range and no suitable spring habitat present.
Houston toad	<i>Anaxyrus houstonensis</i>	E	LE	Y	No	No	Primary habitat is sandy soil which supports populations of <i>Pinus taeda</i> , water in pools, ephemeral pools, stock tanks; breeds in spring especially after rains; burrows in soil of adjacent uplands when inactive; breeds February-June; associated with soils of the Sparta, Carrizo, Goliad, Queen City, Recklaw, Weches, and Willis geologic formations.	Not near species range and no suitable spring habitat present.
Jollyville Plateau salamander	<i>Eurycea tonkawae</i>		LT	Y	No	No	Known from springs and waters of some caves north of the Colorado River	No suitable or cave habitat present.
Salado Springs salamander	<i>Eurycea chisholmensis</i>		LT	Y	No	No	Surface springs and subterranean waters of the Salado Springs system along Salado Creek	Not near species range and no suitable spring habitat present.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
southern crawfish frog	<i>Lithobates areolatus areolatus</i>			Y	No	No	The Southern Crawfish Frog can be found in abandoned crawfish holes and small mammal burrows. This species inhabits moist meadows, pasturelands, pine scrub, and river flood plains. This species spends nearly all of its time in burrows and only leaves the burrow area to breed.	The project area is not consistent with habitat.
Strecker's chorus frog	<i>Pseudacris streckeri</i>			Y	No	No	Wooded floodplains and flats, prairies, cultivated fields and marshes. Likes sandy substrates.	The project area is not consistent with habitat.
Texas salamander	<i>Eurycea neotenes</i>			Y	No	No	Troglobitic; springs, seeps, cave streams, and creek headwaters; often hides under rocks and leaves in water; restricted to Helotes and Leon Creek drainages	No suitable or cave habitat present.
Woodhouse's toad	<i>Anaxyrus woodhousii</i>			Y	No	No	Extremely catholic up to 5,000 feet, does very well (except for traffic) in association with man.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
Bone Cave harvestman	<i>Texella reyesi</i>		LE	Y	No	No	Small, blind, cave-adapted harvestman endemic to several caves in Travis and Williamson counties; weakly differentiated from <i>Texella reddelli</i>	No caves, surface expression of karst development, or subsurface voids known in the project area.
No accepted common name	<i>Cicurina vibora</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Cicurina trivisiae</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
								this species habitat is unlikely.
No accepted common name	<i>Tartarocreagris infernalis</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Cicurina browni</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Eidmannella reclusa</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
Reddell harvestman	<i>Texella reddelli</i>		LE	Y	No	No	Small, blind, cave-adapted harvestman endemic to a few caves in Travis and Williamson counties	The project area is not consistent with habitat.
bald eagle	<i>Haliaeetus leucocephalus</i>	T		Y	No	No	Found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	The project area is not located near types of habitat.
black rail	<i>Laterallus jamaicensis</i>		PT	Y	No	No	Salt, brackish, and freshwater marshes, pond borders, wet meadows, and grassy swamps; nests in or along edge of marsh, sometimes on damp ground, but usually on mat of previous years dead grasses; nest usually hidden in marsh grass or at base of Salicornia	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
black-capped vireo	<i>Vireo atricapilla</i>	E		Y	No	No	Oak-juniper woodlands with distinctive patchy, two-layered aspect; shrub and tree layer with open, grassy spaces; requires foliage reaching to ground level for nesting cover; return to same territory, or one nearby, year after year; deciduous and broad-leaved shrubs and trees provide insects for feeding; species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure; nesting season March-late summer	The project area is not consistent with habitat.
Franklin's gull	<i>Leucophaeus pipixcan</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
golden-cheeked warbler	<i>Setophaga chrysoparia</i>	E	LE	Y	No	No	Ashe juniper in mixed stands with various oaks (<i>Quercus</i> spp.). Edges of cedar brakes. Dependent on Ashe juniper (also known as cedar) for long fine bark strips, only available from mature trees, used in nest construction; nests are placed in various trees other than Ashe juniper; only a few mature junipers or nearby cedar brakes can provide the necessary nest material; forage for insects in broad-leaved trees and shrubs; nesting late March-early summer.	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
interior least tern	<i>Sternula antillarum athalassos</i>	E	LE	Y	No	No	Sand beaches, flats, bays, inlets, lagoons, islands. Subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc.); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony	The project area is not consistent with habitat.
mountain plover	<i>Charadrius montanus</i>			Y	No	No	Breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
piping plover	<i>Charadrius melodus</i>	T	LT	Y	No	No	Beaches, sandflats, and dunes along Gulf Coast beaches and adjacent offshore islands. Based on the November 30, 1992 Section 6 Job No. 9.1, Piping Plover and Snowy Plover Winter Habitat Status Survey, algal flats appear to be the highest quality habitat. Some of the most important aspects of algal flats are their relative inaccessibility and their continuous availability throughout all tidal conditions. Sand flats often appear to be preferred over algal flats when both are available, but large portions of sand flats along the Texas coast are available only during low-very low tides and are often completely unavailable during extreme high tides or strong north winds. Beaches appear to serve as a secondary habitat to the flats associated with the primary bays, lagoons, and inter-island passes. Optimal site characteristics appear to be large in area, sparsely vegetated, continuously available or in close proximity to secondary habitat, and with limited human disturbance.	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
red knot	<i>Calidris canutus rufa</i>		LT	Y	No	No	Red knots migrate long distances in flocks northward through the contiguous United States mainly April-June, southward July-October. The Red Knot prefers the shoreline of coast and bays and also uses mudflats during rare inland encounters. Primary prey items include coquina clam (<i>Donax</i> spp.) on beaches and dwarf surf clam (<i>Mulinia lateralis</i>) in bays, at least in the Laguna Madre. Wintering Range includes- Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kennedy, Kleberg, Matagorda, Nueces, San Patricio, and Willacy. Habitat: Primarily seacoasts on tidal flats and beaches, herbaceous wetland, and tidal flat/shore.	The project area is not consistent with habitat.
swallow-tailed kite	<i>Elanoides forficatus</i>	T		Y	No	No	Lowland forested regions, especially swampy areas, ranging into open woodland; marshes, along rivers, lakes, and ponds; nests high in tall tree in clearing or on forest woodland edge, usually in pine, cypress, or various deciduous trees	The project area is not consistent with habitat.
western burrowing owl	<i>Athene cunicularia hypugaea</i>			Y	No	No	Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows	The project area is not consistent with habitat.
white-faced ibis	<i>Plegadis chihi</i>	T		Y	No	No	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; currently confined to near-coastal rookeries in so-called hog-wallow prairies. Nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
whooping crane	<i>Grus americana</i>	E	LE	Y	No	No	Small ponds, marshes, and flooded grain fields for both roosting and foraging. Potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties.	The project area is not consistent with habitat.
wood stork	<i>Mycteria americana</i>	T		Y	No	No	Prefers to nest in large tracts of bald cypress (<i>Taxodium distichum</i>) or red mangrove (<i>Rhizophora mangle</i>); forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960	The project area is not consistent with habitat.
zone-tailed hawk	<i>Buteo albonotatus</i>	T		Y	No	No	Arid open country, including open deciduous or pine-oak woodland, mesa or mountain county, often near watercourses, and wooded canyons and tree-lined rivers along middle-slopes of desert mountains; nests in various habitats and sites, ranging from small trees in lower desert, giant cottonwoods in riparian areas, to mature conifers in high mountain regions	The project area is not consistent with habitat.
alligator gar	<i>Atractosteus spatula</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
american eel	<i>Anguilla rostrata</i>			Y	No	No	Coastal waterways below reservoirs to gulf; spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries; diet varies widely, geographically, and seasonally	The project area is not consistent with habitat.
chub shiner	<i>Notropis potteri</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
Guadalupe bass	<i>Micropterus treculii</i>			Y	No	No	Endemic to perennial streams of the Edwards Plateau region; introduced in Nueces River system	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.
Guadalupe darter	<i>Percina apristis</i>			Y	No	No	Most common over gravel or gravel and sand raceways of large streams and rivers.	The project area is not consistent with habitat.
headwater catfish	<i>Ictalurus lupus</i>			Y	No	No	Originally throughout streams of the Edwards Plateau and the Rio Grande basin, currently limited to Rio Grande drainage, including Pecos River basin; springs, and sandy and rocky riffles, runs, and pools of clear creeks and small rivers	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
								Buttercup Creek Boulevard. No fill will be placed in the creek.
sharpnose shiner	<i>Notropis oxyrhynchus</i>		LE	Y	No	No	Endemic to Brazos River drainage; also, apparently introduced into adjacent Colorado River drainage; large turbid river, with bottom a combination of sand, gravel, and clay-mud	The project area is not consistent with habitat.
silverband shiner	<i>Notropis shumardi</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
smalleye shiner	<i>Notropis buccula</i>		LE	Y	No	No	Endemic to upper Brazos River system and its tributaries (Clear Fork and Bosque); apparently introduced into adjacent Colorado River drainage; medium to large prairie streams with sandy substrate and turbid to clear warm water; presumably eats small aquatic invertebrates	The project area is not consistent with habitat.
Texas shiner	<i>Notropis amabilis</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
a mayfly	<i>Procloeon distinctum</i>			Y	No	No	Mayflies distinguished by aquatic larval stage; adult stage generally found in shoreline vegetation	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.
a mayfly	<i>Pseudocentropiloides morihari</i>			Y	No	No	Mayflies distinguished by aquatic larval stage; adult stage generally found in shoreline vegetation	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.
American bumblebee	<i>Bombus pensylvanicus</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
Coffin Cave mold beetle	<i>Batrisodes cryptotexanus</i>			Y	No	No	Resident, small, cave-adapted beetle found in small Edwards Limestone caves in Travis and Williamson counties.	No karst features or caves known within the project area. No evidence of subsurface voids.
Coffin Cave mold beetle	<i>Batrisodes texanus</i>		LE	Y	No	No	Resident, small, cave-adapted beetle found in small Edwards Limestone caves in Travis and Williamson counties	No karst features or caves known within the project area. No evidence of

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
								subsurface voids.
Kretschmarr Cave mold beetle	<i>Texamaurops reddelli</i>		LE	Y	No	No	Small, cave-adapted beetle found under rocks buried in silt; small, Edwards Limestone caves in of the Jollyville Plateau, a division of the Edwards Plateau	No karst features or caves known within the project area. No evidence of subsurface voids.
No accepted common name	<i>Bombus variabilis</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Lymantes nadineae</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Oncopodura fenestra</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Rhadine noctivaga</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
No accepted common name	<i>Rhadine russelli</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
								unlikely.
No accepted common name	<i>Rhadine subterranea</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
Tooth Cave ground beetle	<i>Rhadine persephone</i>		LE	Y	No	No	Resident, small, cave-adapted beetle found in small Edwards Limestone caves in Travis and Williamson counties	No karst features or caves known within the project area. No evidence of subsurface voids.
American badger	<i>Taxidea taxus</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
big brown bat	<i>Eptesicus fuscus</i>			Y	No	No	Any wooded areas or woodlands except south Texas. Riparian areas in west Texas.	The project area is not consistent with habitat.
big free-tailed bat	<i>Nyctinomops macrotis</i>			Y	No	No	Habitat data sparse but records indicate that species prefers to roost in crevices and cracks in high canyon walls, but will use buildings, as well; reproduction data sparse, gives birth to single offspring late June-early July; females gather in nursery colonies; winter habits undetermined, but may hibernate in the Trans-Pecos; opportunistic insectivore	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
cave myotis bat	<i>Myotis velifer</i>			Y	No	No	Colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (<i>Hirundo pyrrhonota</i>) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore.	No karst features or caves known within the project area. No evidence of subsurface voids.
eastern red bat	<i>Lasiurus borealis</i>			Y	No	No	Found in a variety of habitats in Texas. Usually associated with wooded areas. Found in towns especially during migration.	The project area is not consistent with habitat.
eastern spotted skunk	<i>Spilogale putorius</i>			Y	No	No	Open fields prairies, croplands, fence rows, farmyards, forest edges & woodlands. Prefer wooded, brushy areas & tallgrass prairies. <i>S.p. ssp. interrupta</i> found in wooded areas and tallgrass prairies, preferring rocky canyons and outcrops when such sites are available.	The project area is not consistent with habitat.
hoary bat	<i>Lasiurus cinereus</i>			Y	No	No	Known from montane and riparian woodland in Trans-Pecos, forests and woods in east and central Texas.	The project area is not consistent with habitat.
long-tailed weasel	<i>Mustela frenata</i>			Y	No	No	Includes brushlands, fence rows, upland woods and bottomland hardwoods, forest edges & rocky desert scrub. Usually live close to water.	The project area is not consistent with habitat.
Mexican free-tailed bat	<i>Tadarida brasiliensis</i>			Y	No	No	Roosts in buildings in east Texas. Largest maternity roosts are in limestone caves on the Edwards Plateau. Found in all habitats, forest to desert.	The project area is not consistent with habitat.
mink	<i>Neovison vison</i>			Y	No	No	Intimately associated with water; coastal swamps & marshes, wooded riparian zones, edges of lakes. Prefer floodplains.	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
mountain lion	<i>Puma concolor</i>			Y	No	No	Rugged mountains & riparian zones.	The project area is not consistent with habitat.
southern short-tailed shrew	<i>Blarina carolinensis</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
swamp rabbit	<i>Sylvilagus aquaticus</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
thirteen-lined ground squirrel	<i>Ictidomys tridecemlineatus</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
tricolored bat	<i>Perimyotis subflavus</i>			Y	No	No	Forest, woodland and riparian areas are important. Caves are very important to this species.	No karst features or caves known within the project area. No evidence of subsurface voids.
western hog-nosed skunk	<i>Conepatus leuconotus</i>			Y	No	No	Habitats include woodlands, grasslands & deserts, to 7200 feet, most common in rugged, rocky canyon country; little is known about the habitat of the ssp. <i>telmalestes</i>	The project area is not consistent with habitat.
woodland vole	<i>Microtus pinetorum</i>			Y	No	No	Include grassy marshes, swamp edges, old-field/pine woodland ecotones, tallgrass fields; generally sandy soils.	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
false spike mussel	<i>Fusconaia mitchelli</i>	T		Y	No	No	Possibly extirpated in Texas; probably medium to large rivers; substrates varying from mud through mixtures of sand, gravel and cobble; one study indicated water lilies were present at the site; Rio Grande, Brazos, Colorado, and Guadalupe (historic) river basins	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.
smooth pimpleback	<i>Quadrula houstonensis</i>	T	C	Y	No	No	Small to moderate streams and rivers as well as moderate size reservoirs; mixed mud, sand, and fine gravel, tolerates very slow to moderate flow rates, appears not to tolerate dramatic water level fluctuations, scoured bedrock substrates, or shifting sand bottoms, lower Trinity (questionable), Brazos, and Colorado River basins	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.
Texas fawnsfoot	<i>Truncilla macrodon</i>	T	C	Y	No	No	Little known; possibly rivers and larger streams, and intolerant of impoundment; flowing rice irrigation canals, possibly sand, gravel, and perhaps sandy-mud bottoms in moderate flows; Brazos and Colorado River basins	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
eastern box turtle	<i>Terrapene carolina</i>			Y	No	No	Eastern box turtles inhabit forests, fields, forest-brush, and forest-field ecotones. In some areas they move seasonally from fields in spring to forest in summer. They commonly enter pools of shallow water in summer. For shelter, they burrow into loose soil, debris, mud, old stump holes, or under leaf litter.	The project area is not consistent with habitat.
slender glass lizard	<i>Ophisaurus attenuatus</i>			Y	No	No	Prefers relatively dry microhabitats, usually associated with grassy areas. Habitats include open grassland, prairie, woodland edge, open woodland, oak savannas, longleaf pine flatwoods, scrubby areas, fallow fields, and areas near streams and ponds, often in habitats with sandy soil.	The project area is not consistent with habitat.
Texas garter snake	<i>Thamnophis sirtalis annectens</i>			Y	No	No	Irrigation canals and riparian-corridor farmlands in west; marshy, flooded pastureland, grassy or brushy borders of permanent bodies of water; coastal salt marshes. Wet or moist microhabitats are conducive to the species occurrence but is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August.	The project area is not consistent with habitat.
Texas horned lizard	<i>Phrynosoma cornutum</i>	T		Y	No	No	Occurs to 6000 feet, but largely limited below the pinyon-juniper zone on mountains in the Big Bend area. Open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September.	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
timber (canebrake) rattlesnake	<i>Crotalus horridus</i>	T		Y	No	No	Swamps, floodplains, upland pine and deciduous woodland, riparian zones, abandoned farmland. Limestone bluffs, sandy soil or black clay. Prefers dense ground cover, i.e. grapevines, palmetto.	The project area is not consistent with habitat.
western box turtle	<i>Terrapene ornata</i>			Y	No	No	Ornate or western box turtles inhabit prairie grassland, pasture, fields, sandhills, and open woodland. They are essentially terrestrial but sometimes enter slow, shallow streams and creek pools.	The project area is not consistent with habitat.
bigflower cornsalad	<i>Valerianella stenocarpa</i>			Y	No	No	Usually along creekbeds or in vernal moist grassy open areas.	While the proposed project area intersects Cluck Creek, only striping modifications and minor elevation adjustments will occur at the bridge at Buttercup Creek Boulevard. No fill will be placed in the creek.
Elmendorf's onion	<i>Allium elmendorfii</i>			Y	No	No	Grassland openings in oak woodlands on deep, loose, well-drained sands; in Coastal Bend, on Pleistocene barrier island ridges and Holocene Sand Sheet that support live oak woodlands; to the north it occurs in post oak-black hickory-live oak woodlands over Queen City and similar Eocene formations; one anomalous specimen found on Llano Uplift in wet pockets of granitic loam; Perennial; Flowering March-April, May	The project area is not consistent with habitat.
gravelbar brickellbush	<i>Brickellia dentata</i>			Y	No	No	Essentially restricted to frequently-scoured gravelly alluvial beds in creek and river bottoms; Perennial; Flowering June-Nov; Fruiting June-Oct	The project area is not consistent with habitat.

Common Name	Scientific Name	State Status	Federal Status	SGCN	Potential Habitat Present	Species Effect/ Impact	Description	Justification
Heller's marbleseed	<i>Onosmodium helleri</i>			Y	No	No	Occurs in loamy calcareous soils in oak-juniper woodlands on rocky limestone slopes, often in more mesic portions of canyons; Perennial; Flowering March-May	The project area is not consistent with habitat.
Plateau loosestrife	<i>Lythrum ovalifolium</i>			Y	No	No	Banks and gravelly beds of perennial (or strong intermittent) streams on the Edwards Plateau, Llano Uplift and Lampasas Cutplain; Perennial; Flowering/Fruiting April-Nov	The project area is not consistent with habitat.
plateau milkvine	<i>Matelea edwardsensis</i>			Y	No	No	Occurs in various types of juniper-oak and oak-juniper woodlands; Perennial; Flowering March-Oct; Fruiting May-June	The project area is not consistent with habitat.
Texas almond	<i>Prunus minutiflora</i>			Y	No	No	Wide-ranging but scarce, in a variety of grassland and shrubland situations, mostly on calcareous soils underlain by limestone but occasionally in sandier neutral soils underlain by granite; Perennial; Flowering Feb-May and Oct; Fruiting Feb-Sept	The project area is not consistent with habitat.
Texas claret-cup cactus	<i>Echinocereus coccineus var. paucispinus</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.
Wright's milkvetch	<i>Astragalus wrightii</i>			Y	No	No	Habitat description is not available at this time.	The project area is within a previously disturbed TxDOT ROW. Encountering this species habitat is unlikely.

Source: TPWD 2019
Threatened (T); Endangered (E); Species of Greatest Conservation Need (SGCN)

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5.11.2 Impacts on Vegetation

The Ecological Mapping System of Texas (EMST) was produced by TPWD in cooperation with federal, state, and private entities to create a vegetation classification map for Texas. This classification system is based on NatureServe's Ecological System Classification System as described by Comer et al. (2003). The EMST is a mapping layer that estimates the ecological systems across the state. This TPWD project provides more site-specific classifications of vegetation, habitat, and hydrology than the general ecoregions across the state. The EMST has been developed into a GIS compatible layer that allows projects to evaluate which ecological systems interact with the project. This section compares the estimated acreage of each ecological system that intersects the project area.

Build Alternative: According to the EMST for the Edwards Plateau Region, the following classifications intersect the proposed project area: the Edwards Plateau: Riparian Hardwood Forest, Native Invasive: Deciduous Woodland, Urban High Intensity, and Urban Low Intensity (TPWD 2012a).

The majority of the alignment is intersected by the Urban designations. Urban High Intensity is defined as having urban development with approximately 70 percent or greater impervious cover. Urban Low Intensity is defined as having urban development with approximately 70 percent or less impervious cover (TPWD 2012a). These two designations are consistent with the existing conditions along the proposed project corridor.

The Edwards Plateau: Riparian Hardwood Forest and Native Invasive: Deciduous Woodland classifications only intersect the proposed project area near Cluck Creek along Buttercup Creek Boulevard. The Edwards Plateau: Riparian Hardwood Forest includes deciduous forests with cedar elm, plateau live oak, Texas oak, sugar hackberry, American sycamore, green ash, pecan, or boxelder. The Native Invasive: Deciduous Woodland is characterized as dominantly having sugar hackberry, cedar elm, or mesquite and Ashe juniper or eastern red cedar may be present (TPWD 2012a). These two designations are consistent with the existing conditions along the proposed project corridor. Under the Build Alternative, the only improvements at the existing Buttercup Creek Boulevard crossing over Cluck Creek include restriping of the existing structure. No clearing or grubbing would be necessary in this area; therefore, no impacts to Edwards Plateau: Riparian Hardwood Forest and Native Invasive: Deciduous Woodlands would occur.

No Build Alternative: Under the no build alternative, the proposed project would not be constructed, and vegetation would not be impacted.

5.11.3 Executive Order 13112 on Invasive Species

Revegetation of disturbed areas would be in compliance with the EO on Invasive Species (EO 13112). Regionally native and non-invasive plants will be used to the extent practicable in re-vegetation.

5.11.4 Executive Memorandum on Environmentally and Economically Beneficial Landscaping

If revegetation is needed, disturbed areas would be revegetated according to TxDOT's standard practices, which to the extent practicable, complies with Executive Memorandum on Environmentally and Economically Beneficial Landscaping.

5.11.5 Impacts to Wildlife

The project study area is located within one Texas Conservation Action Plan (TCAP) ecoregion: Edwards Plateau (TPWD 2012b).

According to the TCAP Species of Greatest Conservation Need (SGCN) list, the following species types have the potential to occur within the Edwards Plateau ecoregion (TCAP 2011b):

- 23 mammals,
- 32 birds,
- 31 reptiles and amphibians,
- 14 freshwater fishes,
- 219 invertebrates, and
- 81 plants.

TCAP documentation on the Edwards Plateau does not include further details regarding locations or geographic distribution on the SGNC's within the ecoregion. Therefore, they may occur in the project area. The SGNC that may occur within Williamson County and their respective likelihood of occurring within the project areas is included earlier in Table 5-2.

5.11.6 Migratory Bird Protections

The Migratory Bird Treaty Act (MBTA) states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a federal permit issued in accordance within the Act's policies and regulations.

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

5.11.7 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) of 1958 requires that federal agencies obtain comments from United States Fish and Wildlife Service (USFWS) and TPWD. This coordination is required whenever a project involves impounding, diverting, or deepening a stream channel or other body of water. The proposed project does not include any

impoundment, stream diversion or channel modification. No coordination under FWCA is required.

5.11.8 Bald and Golden Eagle Protection Act of 2007

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

5.11.9 Magnuson-Stevens Fishery Conservation Management Act

The project is not within a coastal county; therefore, the Magnuson-Stevens Fishery Conservation Management Act does not apply.

5.11.10 Marine Mammal Protection Act

The project would not have the potential to affect marine mammals, therefore, the Marine Mammal Protection Act does not apply.

5.11.11 Threatened, Endangered, and Candidate Species

Section 9 of the Endangered Species Act (ESA) prohibits certain activities that may result in the “take” of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS). “Take” is defined in the ESA as “harass, harm, pursue, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” has been defined to include activities that modify or degrade habitat in a way that significantly impairs essential behavior patterns and results in death or injury. Alteration of the quality and/or quantity of endangered species habitat may “harm” the listed species that inhabit those areas. The USFWS and National Marine Fisheries Service (NMFS) are the agencies within the U.S. Department of the Interior and U.S. Department of Commerce, respectively that evaluate threats to species. A number of potential impacts, directly or indirectly related to human activities, are of concern to USFWS and may be regulated by that agency to prevent “take” or “harm” of these listed species.

According to the USFWS *Environmental Conservation Online System (ECOS), Information, Planning, and Conservation System (IPaC)*, seventeen federally listed candidate, threatened, or endangered species have the potential to occur within Williamson County (USFWS 2019a). Of the seventeen species, five are federally listed as candidates, five are federally listed as threatened, and seven are federally listed as endangered.

Three of the bird species, least tern (*Sterna antillarum*), piping plover (*Charadrius melodus*), and red knot (*Calidris canutus*), are federally listed as endangered, threatened, and threatened, respectively, in Williamson County. However, the USFWS ECOS IPaC database (USFWS 2019a) states that each of these three species should only be considered in an

effects analysis if the project is a wind energy project. Since the proposed activities are not related to a wind energy project, potential impacts associated with the proposed project to the least tern, piping plover, and red knot will not be assessed in this review.

According to the TPWD *Rare, Threatened, Endangered Species List*, seven additional species are state listed as threatened or endangered in Williamson County.

A map of the TPWD Texas Natural Diversity Dataset (TNDD) elemental occurrences can be seen on Appendix F, Exhibit 6.

Table 5-3 lists the federally listed candidate, threatened, and endangered species within Williamson County, Texas. A discussion of the project’s potential to impact federally listed threatened or endangered species is included below Table 5-3.

Table 5-3: Federally Listed Threatened and Endangered Species and Candidate Species within Williamson County, Texas

Common Name	Latin Name	Federal Status	State Status
<i>Amphibians</i>			
Georgetown salamander	<i>Eurycea naufragia</i>	T	-
Jollyville Plateau salamander	<i>Eurycea tonkawae</i>	T	E
Salado salamander	<i>Eurycea chisholmensis</i>	T	-
<i>Arachnids</i>			
Bone Cave harvestman	<i>Texella reyesi</i>	E	-
Tooth Cave spider	<i>Neoleptoneta myopica</i>	E	-
<i>Birds</i>			
Golden-cheeked warbler	<i>Setophaga chrysoparia</i>	E	-
Least tern*	<i>Sterna antillarum</i>	E	-
Piping plover*	<i>Charadrius melodus</i>	T	-
Red knot*	<i>Calidris canutus rufa</i>	T	-
Whooping crane	<i>Grus americana</i>	E	E
<i>Freshwater Mussels</i>			
Smooth pimpleback	<i>Quadrula houstonensis</i>	C	T
Texas fatmucket	<i>Lampsilis bracteata</i>	C	-
Texas fawnsfoot	<i>Truncilla macrodon</i>	C	T
Texas pimpleback	<i>Quadrula petrina</i>	C	-
<i>Insects</i>			
Coffin Cave mold beetle	<i>Bastrisodes texanus</i>	E	-
Tooth Cave ground beetle	<i>Rhadine persephone</i>	E	-
<i>Plants</i>			
Bracted twistflower	<i>Streptanthus bracteatus</i>	C	-

Source : TPWD 2019; USFWS 2019

Threatened (T); Endangered (E); *Considered only for wind energy projects.

As it relates to the Georgetown salamander and the Salado salamander, the project area is distant from any known locations for the Georgetown salamander or Salado salamander and does not intersect any of the tributaries known to contain these salamander species habitats. The nearest proposed critical habitat and Georgetown salamander occurrence is approximately nine miles northeast of the project area near the South Fork of the San Gabriel River in the Shadow Canyon Preserve. The nearest proposed critical habitat and Salado salamander occurrence is approximately 28 miles northeast of the project area along Rumsey Creek (TPWD 2017).

As it relates to the Jollyville Plateau salamander (JPS), the project is located within the Edwards Aquifer Contributing Zone (as opposed to the Recharge Zone). On October 26, 2016, a USFWS-permitted cave biologist conducted a site reconnaissance of the existing US 183 and Old Highway 183 ROWs and the potential additional ROW for the Build Alternative. During site reconnaissance, no potential recharge features were observed within the existing ROWs of US 183 and Old Highway 183 or the additional ROW anticipated under the Build Alternative.

Treehouse Cave is the closest JPS occurrence to the project. Treehouse Cave is located within the 3.5-acre Treehouse Cave Preserve approximately 1.1 miles west-southwest of the project. The Treehouse Cave Preserve and a host of other preserves combine to form the greater Westside Cave Preserve system, a preserve system established in 1997 after USFWS issued Lumberman's Investment Corporation a Section 10(a)(1)(B) incidental take permit for a 420-acre Buttercup Creek mixed use development (USFWS 1997). Treehouse Cave was gated in 1996 to restrict access and the Treehouse Cave preserve is maintained under the Cave Preserve Management Plan required in the Section 10(a)(1)(B) permit. The JPS was included in the 1997 Section 10(a)(1)(B) permit for Buttercup Creek, and USFWS determined the proposed development would not impact JPS (including in Treehouse Cave) based on the preserve system design and operation and management. Over the past 20 years the Buttercup Creek project has built out.

The general topography of southwest Williamson County drops from southwest to northeast from the Williamson/Travis County line (along the Colorado River and Brazos River watershed divide) toward the IH-35 corridor. This general drop in elevation from southwest to northeast is consistent in the project area. The approximate surface elevation of Treehouse cave is 949 feet above mean seal level (MSL) and the surface elevation with the closest point along the project is approximately 918 feet above MSL. Treehouse Preserve is also located immediately west of an unnamed tributary of Cluck Creek that joins Cluck Creek downstream and south of the project area. Therefore, it is highly unlikely stormwater or surface water from the project area would flow west, uphill toward Treehouse Cave.

The closest downgradient JPS occurrences and critical habitat are: Avery springhouse spring, hill marsh spring, and Avery deer spring which are approximately 3.3 miles (4.7 stream miles) east of the project. At these three springs, USFWS has designated surface and

subsurface critical habitat of 300 meters and 80 meters, respectively. Avery springhouse spring, hill marsh spring and Avery deer spring are all located within the headwaters of secondary drainages south of Brushy Creek (USFWS 2013b).

The Bone Cave harvestman, Tooth Cave spider, Coffin Cave mold beetle, and the Tooth Cave ground beetle are cave species that can be found under rocks in subsurface caves or karst habitat. The general setting of the project is a suburban developed commercial corridor and the Old Highway 183 alignment has been since before 1941 (the date of the earliest historical aerial available for the site). According to the TCEQ recharge maps for the Edwards Aquifer (TCEQ 2005), the project intersects the contributing zone of the Edwards Aquifer (Appendix F, Exhibit 4). In 1992 (revised 2007), Veni and Associates delineated four karst zones to define geologic areas with the potential for subsurface endangered karst invertebrates. The northern two-thirds of the project is in Karst Zone 1 (areas known to contain listed invertebrate karst species) and the southern third is in Karst Zone 3 (areas that have a low probability for containing listed invertebrate karst species) (Appendix F, Exhibit 5). The project occurs within the Cedar Park karst faunal region (USFWS 1994).

The current schematic design anticipates utilizing the existing ROWs of Bell Blvd. and Old Highway 183 and additional ROW and temporary and permanent easements. These areas of existing ROW and additional ROW and easements are fully contained within the commercial corridor along the project alignment. The project corridor has been previously disturbed and is either roadway pavement, concrete, or maintained frontage vegetation. Various subsurface utilities currently reside within and immediately adjacent to the Old Highway 183 ROW. No pristine or undisturbed areas would be acquired as part of the Build Alternative.

As part of the project design, Arias Geoprofessional prepared a Bell Boulevard Geotechnical Design Memorandum (Arias 2017). During the preparation, Arias drilled 10 borings to a depth of 10 feet each along the project alignment. In general, the borings encountered weathered limestone from 2.5 to 10 feet, but generally was 6–8 feet below existing grade. Additionally, none of the borings encountered subsurface voids and were generally described as not “solution-featured” limestone (Arias 2017). Additional subsurface documentation review revealed another soil boring near the southern extent of the project area in 2015. Ranger Environmental (2015) drilled a 40-foot soil boring to sample and install a monitoring well at Century Food Mart at 500 South Bell Boulevard (at the southeast corner of Bell Boulevard and Brushy Creek Road). Ranger’s soil bore log documents solid limestone and no subsurface voids or groundwater encountered to the maximum depth of 40 feet. On October 26, 2016, a USFWS-permitted cave biologist conducted a site reconnaissance of the existing US 183 and Old Highway 183 ROWs and the potential additional ROW for the Build Alternative. During site reconnaissance, no potential recharge features were observed. Therefore, no impact to endangered karst invertebrates within the proposed Build Alternative are anticipated.

The whooping crane is a migratory species that prefers large flooded areas and open croplands. These types of habitat are not existent within the project area. According to USFWS Critical Habitat Portal, the nearest occurrence of critical habitat for the whooping crane is approximately 162 miles southeast of the project alignment within the Aransas National Wildlife Refuge in Aransas County, Texas (USFWS 2017b). No take is anticipated of the whooping crane from the proposed project under the no build or build alternative.

The golden-cheeked warbler is a migratory songbird that breeds in Texas between March and August. The project area is entirely within a developed, urban environment. The only series of trees is a row of maintained tree individuals between Old Highway 183 and the existing rail road tracks. The understory of the trees was removed by railroad crews in the fall of 2016. The trees include live oak, sugar hackberry, and Ashe juniper. The project area ROW lacks the distinctive vegetation that categorizes GCWA habitat. There are no areas within the project ROW that are consistent with mature or moderately mature Ashe juniper, deciduous trees, or canyon/cliff features. The only hydrologic areas within the proposed ROW are drainages within maintained ROW. These areas consist of grassy vegetation that is continuously maintained by the City of Cedar Park. The project is within and along the limits of the ROW which has been subject to previous and repeated disturbances and clearing during the construction of Old Highway 183. Periodic and regular maintenance activities occur within this ROW. Residential development and commercial surround the project area within 300 feet of the ROW. No take is anticipated of GCWA from the proposed project under the no build or build alternative.

No take of federally listed threatened or endangered species is anticipated as a result of the project under No Build or Build Alternative. No take of candidate species or state listed species is anticipated as a result of the proposed project under the no build or build alternative.

5.12 Air Quality

Build Alternative: Criteria pollutants and MSAT were evaluated in accordance with the regulatory requirements in 5.12.1 through 5.12.6 and no specific air quality impacts have been identified associated to this project.

No Build Alternative: The No Build Alternative would abandon the proposed construction for the Bell Boulevard Realignment Project and would maintain the current projected environment. The projected population growth and associated traffic and air quality impacts are reasonably foreseeable within the project study area and region.

Under both the Build and the No Build Alternative, the current trend of improving air quality in the region is expected to continue for mobile source air toxics (MSAT). Emissions would likely be lower than present levels in future years as a result of the EPA's national control regulations. Even with an increase in vehicle miles traveled (VMT) and possible temporary

emission increases related to construction activities, the EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions of on road emissions, MSAT, and the ozone precursors VOC and NOx.

5.12.1 Transportation Conformity

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

5.12.2 Project-level Hot-spot Analysis Requirements

The proposed Bell Boulevard Realignment Project is not located within a carbon monoxide (CO) or particulate matter (PM) nonattainment or maintenance area; therefore, a project level hot-spot analysis is not required (TxDOT 2014b).

5.12.3 Carbon Monoxide Traffic Air Quality Analysis

Generally, projects such as the proposed action are considered exempt from a traffic air quality analysis (TAQA) because they are intended to enhance traffic safety and improve traffic flow. The proposed action would not add capacity to an existing facility. Current and future emissions should continue to follow existing trends not being affected by this project. Due to the nature of this project, further CO analysis was not required.

5.12.4 Mobile Source Air Toxics

The purpose of this project is to improve safety and accessibility for vehicles and pedestrians accessing the commercial corridor by redirecting through traffic onto Bell Boulevard Realignment. This project has been determined to generate minimal air quality impacts for Clean Air Act (CAA) criteria pollutants and has not been linked with any special MSAT concerns. This project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent (FHWA 2016). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

5.12.5 Congestion Management Process

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

5.12.6 Construction-related Emission Reduction Strategies

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

The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment (TCEQ 2018b). TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions.

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

5.13 Hazardous Materials

A review of selected federal and state regulatory databases was conducted to determine the potential for encountering hazardous materials and substances within the project study area. In addition, field surveys of the project area were conducted on various occasions and confirm the location of selected listed facilities. The regulatory listings are limited and include only those sites that were known to the regulatory agencies at the time of publication to be contaminated or in the process of evaluation for potential contamination. The databases were searched within the standard search radii of the project study area per the American Society for Testing and Materials (ASTM) standards.

Thirty-three registered and mapped hazardous material sites were identified within the appropriate search radius to the project site (Appendix F, Exhibit 7). Three additional unmapped sites were also included. The potential for impacts to the project related to hazardous material sites is negligible due to compliance history and physical locations. Based on the review of the database and a field screening, there does not appear to be any hazardous materials issues along the proposed project area.

The three unmapped sites include a reported train derailment (ERNS) with no reported releases and two PST sites that had the tanks removed in the late 1980s.

Build Alternative: The build alternative has proposed ROW, temporary and permanent easements, and temporary driveway licenses within various parcels in the project area. Table 5-4 below lists the parcels the proposed ROW intersects and their potential for hazardous materials.

Table 5-4: Parcels that Intersect the Proposed ROW, Easements, and Driveway Licenses

Map ID	CAD PIN	Owner	Site Address	Facility Within Parcel	Hazardous Material Issues
2	R082166	Aceitera LLC	400 N BELL BLVD, CEDAR PARK, TX 78613	Lube Pit Stop	None – PST removed from ground
-	R036951	Gunlock, Lura L Estate	101 Kings Canyon Drive, Cedar Park, TX 78613	Residential Home	None
-	R031879	Horizon Bank SSC	150 S Bell Blvd, Cedar Park, Tx 78613	Sovereign Bank	None
-	R031882	Bell, Danny Kent	104 Bell Blvd S, Cedar Park, Tx 78613	Neighborhood Park N Sell	None
-	R031890	706 W. 34th LLC & Florence Raw Land LLC	100 Bell Blvd S, Cedar Park, Tx 78613	Texas Car Title	None
3	R031909	312 314 Old Hwy 183 LP	314 Old Hwy 183, Cedar Park, TX 78613	Plush Upholstery Studio and Plush Fabrics	None – Map ID #3 mapped incorrectly. It is not at this location. Correct location is 314 S Bell Blvd, Cedar Park, TX 78613.
-	R031923	City Of Cedar Park	220 183 Old Hwy, Cedar Park, TX 78613	City of Cedar Park Parks Department	None
-	R031951	N. E. Walker Inc.	400 Old Hwy 183, Cedar Park, TX 78613	Connie's Car Wash & New Storage	None
-	R036951	Lura L. Gunlock Estate	101 N. Kings Canyon Dr. Cedar Park, TX 78613	Park Street Residential Lot	None
-	R325310	218 Old Hwy 183, LP	218 Old Hwy 183, Cedar Park, TX 78613	Centex Playscape Refurbishers	None

Map ID	CAD PIN	Owner	Site Address	Facility Within Parcel	Hazardous Material Issues
	R031908	Hawkins Family Partners LP	510 Old Hwy. 183 Cedar Park, TX 78613	American Pawn	None
6	R325311	Cedar Park Square Two Ltd	200 Bell Blvd S, Cedar Park, TX 78613	Business Park – Multiple Offices	DRYC – Facility Appears to be Closed
-	R388464	City of Cedar Park	302 Bell Blvd S, Cedar Park, TX 78613	Eye Doctor Lot	None
-	R102658	Goodwill Industries of Central Texas	75 Brushy Creek Road, Cedar Park, TX 78613	Goodwill Store	None
-	R388465	City of Cedar Park	306 S Bell Blvd, Cedar Park, TX 78613	Dominos, etc.	None
1	R031912	Ky & Anh H Thi	500 Bell Blvd S, Cedar Park, TX 78613	Century Food Store	Resolved, See HazMat Technical Report
-	R447738	Smokey Denmark LTD	415 S Bell Blvd, Cedar Park, TX 78613	Undeveloped lot	None
-	R399375	Forbes, David	406 183 Old Hwy S, Cedar Park, TX 78613	Lone Star Pawn	None
-	R447739	Smokey Denmark LTD	405 S Bell Blvd, Cedar Park, TX 78613	Undeveloped lot with Cluck Creek	None
12	R306673	Armstrong Buttercup Creek LP	200 Buttercup Creek Blvd, Cedar Park, TX 78613	Buttercup Commons	None
	R031974	Phuong & Jun Liu Tran	315 N. Bell Blvd., Cedar Park, TX 78613	Kim Phung Restaurant	None

No Build Alternative: Under the No Build Alternative, the proposed project would not be constructed. No project related hazardous material impacts would occur.

5.14 Traffic Noise

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

Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB." Sound occurs over a wide range of frequencies; however, not all frequencies are detectable by the human ear. Therefore, during noise modeling an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dB(A)".

A noise impact occurs when either the absolute or relative criterion is met. The definitions for both are included below:

Absolute Criterion: the predicted noise level at a receiver approaches, equals or exceeds the defined noise abatement criteria. "Approach" is defined as one dB(A) below the FHWA noise abatement criteria. For example: a noise impact would occur at a residence if the noise level is predicted to be 66 dB(A) or above.

Relative Criterion: the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal or exceed the noise abatement criteria. "Substantially exceeds" is defined as more than 10 dB(A). For example: a noise impact would occur at a residence if the existing level is 54 dB(A) and the predicted level increases 11 dB(A) to 65 dB(A).

The proposed project is relocating a major traffic thoroughfare (Bell Boulevard) up to 300+ feet east of current alignment. To record background noise east of the current alignment, the project team measured existing noise levels at receivers located greater than 500 feet east of Bell Boulevard. The existing noise receivers would be closer to the proposed build alternative.

Sound level meters were installed at two locations in the project area and measured existing noise levels for a continuous 24-hour period to determine existing background noise levels. Monitoring Location A is located at the end of Glacial Drive and Monitoring Location B is at 201 S. Kings Canyon Drive (Appendix F, Exhibit 8). The closest modeled receivers to Monitoring Location A and B are R8 and R47, respectively. The modelled noise levels in year 2040 at R8 and R47 were 61 dBA and 58 dBA with rises of one and two dBA, respectively.

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

The proposed project would not result in a traffic noise impact. However, to avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (year 2040) noise impact contours.

A copy of this traffic noise analysis will be available to local officials. On the date of approval of this document (Date of Public Knowledge), TxDOT and CoCP are no longer responsible for providing noise abatement for new development adjacent to the project.

5.15 Induced Growth

This analysis utilized TxDOT's 2014 Induced Growth Indirect Impacts Decision Tree (TxDOT 2014c) to determine that the likelihood the Bell Boulevard Realignment Project would result in induced growth and related effects. Induced Growth Impacts Analysis is required due to economic development or new opportunities for growth/development, land available for development/redevelopment, increased access or mobility and population/economic growth.

The Area of Influence (AOI) was defined as the Bell Boulevard Realignment project area and partial surrounding areas. An approximate 160.29-acre study area was delineated for the indirect effects analysis. The proposed project would not affect access to or from side streets and; therefore, the AOI is confined to the Bell Boulevard and Old Highway 183 corridors. Furthermore, the proposed project is partially interrelated with Destination Bell Boulevard and; therefore, includes properties included in that plan. The indirect effects study area and entire limits of the project area are located within the City of Cedar Park. The indirect effects study area includes parcels adjacent to the project area which encompass a range of locales where people work and shop, a small section of a residential area, and the Buttercup Creek Natural Area which is a public nature preserve. This indirect effects analysis represents the onset of the current residential growth trend throughout the design life of the proposed project. The timeframe for the analysis was set from the time the proposed project would be constructed to the year 2030, while also considering recent past trends.

Land use trends were examined using historic aerial imagery which indicated that between 1964 and 1967, Highway 183 was split through Cedar Park. Land use in the project area was undeveloped until 1973 when commercial businesses begin to appear, the same year Cedar Park was incorporated following a growth in population due to the growth of Austin. Between 1996 and 2004, a large increase in commercial businesses appears on previously undeveloped land. The increase in commercial businesses correlates with the increase in

population. Using this information, it is reasonable to expect the area will continue to experience an increase in commercial business growth as the population grows.

Most of the AOI includes parcels categorized as likely to experience growth due to access to utilities, mainly including all but the Buttercup Creek Nature Area. Furthermore, approximately 95% of the AOI is marked as planning areas for the Bell Corridor, aligning with Destination Bell Boulevard. The purpose of the proposed project is to improve public safety within the corridor while accommodating increasing population growth and traffic demand in a manner consistent with the Destination Bell Blvd Master Plan. Due to separating the through traffic from the traffic aimed to access the commercial corridor, commercial developers may be attracted to the area for increased commercial traffic volumes anticipated from improved mobility and safety.

While there are no proposed changes to access on side streets or major access changes within the corridor or new access to previously inaccessible properties, the proposed project could potentially induce growth due to future planned development.

TxDOT Indirect Guidance requires an inventory of all resources present on the areas identified as likely to experience induced growth. The project team inventoried and analyzed land use and socio-economic as the primary resources with the potential to be indirectly impacted by induced growth.

The induced growth indirect impacts analysis concludes induced growth is expected, especially given the current population and economic growth CoCP has been experiencing for the past 16 years. However, no substantial indirect impacts were discovered, and mitigation was determined to not be needed.

No encroachment impacts are anticipated as the Bell Boulevard corridor is already commercially developed and no substantial direct impacts were identified. No encroachment alteration impacts are anticipated as the area is already commercially developed and the project area ecosystem is not expected to be altered by the Bell Boulevard Realignment Project, which is consistent with the publicly supported Destination Bell Boulevard Master Plan.

5.16 Cumulative Impacts

This analysis utilized TxDOT's 2014 Cumulative Impacts Decision Tree (TxDOT 2014d) to determine if Cumulative Impacts Analysis is required for the Bell Boulevard Realignment. Due to lack of direct or potential indirect impacts on any resource as a result of the Bell Boulevard Realignment Project, no cumulative impacts analysis is required.

5.17 Construction Phase Impacts

Build Alternative: Construction of the proposed project may require temporary lane closures. However, these lane closures are expected to be of short duration with no substantial effect

on traffic flow on the existing roadways. TxDOT will work with community members to notify them of closures and limited access. Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

No Build Alternative: Under the No Build Alternative, no construction would occur; therefore, no construction impacts would be expected.

6.0 Agency Coordination

Over the course of project development, TxDOT submitted the Waters Resource Technical Report to TCEQ for comment and the Archeological Technical Report to Texas Historical Commission for comment. TCEQ reviewed the project and stated that the documentation sufficiently addressed surface and groundwater quality. THC reviewed the project and concurred with the project's finding of no impact to archeological sites and no further field investigation was necessary. Correspondence with the both agencies are included in Appendix G.

7.0 Public Involvement

One public meeting was held on March 20, 2018, to disseminate information about the project as well as to gather comments and concerns from local community and stakeholders in the project area. Comments received during the meeting were used to help determine the alignment of the project. The public meeting presented the general study area and build alternative, including a presentation of the corridor alternatives and preliminary design analysis, and a discussion of the project development process. The comments received included persons supporting and opposed to the project. Noise impacts to the residential area east of the project was the primary point of concern raised from public comments. Several members of the public also commented on pedestrian improvements along Park Street.

A public hearing was held on February 21, 2019 to receive public comments on the project and present the draft Environmental Assessment. The public hearing presented the general study area and build alternative, including a presentation of the corridor alternatives and preliminary design analysis, a discussion of the project development process, and the proposed selection of the build alternative. The comments received included persons supporting and opposed to the project. Noise impacts to the residential area east of the

project was the primary point of concern raised from public comments. Several members of the public also commented on pedestrian improvements along Bell Boulevard and Park Street.

Public Involvement Summaries are available for review at the TxDOT Austin District Office located at 7901 N. I-35, Austin, Texas 78753; and at the CoCP City Hall located at 450 Cypress Creek Rd., Cedar Park, TX 78613.

8.0 Post-Environmental Clearance Activities and Contractor Communications

8.1 Post-Environmental Clearance Activities

The Build Alternative would include 1.77 acres of earth disturbance, TxDOT would comply with TCEQ's TPDES Construction General Permit and a CZP. An SW3P would be prepared and implemented, and a construction site notice would be posted on the construction site. An NOI would be required.

SW3P and TPWD BMPs for water quality protection will be implemented throughout the lifetime of the project.

8.2 Contractor Communications

The following environmental commitments will be communicated to the contractor on the EPIC sheet and at the project kickoff meeting.

All equipment and fuel storage areas will have spill containment BMPs. Fuel and hazardous material storage areas will have primary and secondary containment.

In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area would cease, and TxDOT archeological staff would be contacted to initiate post review discovery procedures.

In the event that migratory birds are encountered on-site during project construction, every effort would be made to avoid protected birds, active nests, eggs, and/or young. Contractors would not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.

In accordance with the EO 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping, seeding and replanting with TxDOT approved seeding specifications would be performed where possible.

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

Construction of the proposed project may require temporary lane closures. However, these lane closures are expected to be of short duration with no substantial effect on traffic flow on the existing roadways. Construction of the proposed project would not prevent access to any adjacent property during construction.

9.0 Conclusion

The analysis of alternatives for the proposed project determined that improvements proposed under the Build Alternative would meet the need and purpose of the project. Specifically, the Build Alternative would improve public safety within the corridor, accommodate increasing population growth and traffic demand, and do so in a manner consistent with the Destination Bell Blvd Master Plan.

The engineering, social, economic, and environmental studies conducted on the improvements as proposed by the Build Alternative (Preferred Alternative) indicate that the project would result in no significant adverse impacts on the human or natural environment at a level that would warrant an Environmental Impact Statement. Consequently, TxDOT and CoCP anticipate a Finding of No Significant Impact (FONSI).

10.0 REFERENCES

Alliance Transportation Group, Inc. 2017. July City of Cedar Park Council Briefing. Cedar Park, Texas.

Arias Geoprosessionals. 2017. Geotechnical Design Memoradum- Revision 1. Bell Boulevard Realignment. Arias Geoprosessionals, Austin, Texas. December 20, 2017. 26 pgs.

(ASPE) Office of the Assistant Secretary for Planning and Evaluation. 2019. U.S. Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Federal Programs. Washington, D.C. Available online: <https://aspe.hhs.gov/poverty-guidelines>. Last accessed January 29, 2019.

(CAMPO) Capital Area Metropolitan Planning Organization. 2015. CAMPO 2040 Regional Transportation Plan. Adopted: May 11, 2015. Amended: September 21, 2015. 268 pp.

(CoCP) City of Cedar Park. 2015. Bell Boulevard Redevelopment Master Plan. Last Updated: August 2016. Available online at: <http://www.destinationbellblvd.com/>. Last accessed: May 7, 2019.

Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and J. Teague. 2003. Ecological Systems of the United States: A Working Classification of U.S. Terrestrial Systems. NatureServe, Arlington, VA.

(EPA) Environmental Protection Agency. 2014. Texas 303(d) Listed Waters for Reporting year 2014. Last accessed: September 25, 2018. Available online at: https://ofmpub.epa.gov/waters10/attains_impaired_waters.impaired_waters_list?p_state=TX&p_cycle=2014.

(FEMA) Federal Emergency Management Agency. 2016. Flood Map Service Center. Available online at: <https://msc.fema.gov/portal>. Last Accessed: May 7, 2019.

(FHWA) Federal Highways Administration. 2016. Memorandum; Information: Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Last accessed January 5, 2019. Available online at: https://www.fhwa.dot.gov/environMent/air_quality/air_toxics/policy_and_guidance/msat/

Ranger Environmental. 2015. Soil Boring Report for TCEQ LPST 119645-14278, Century Food Mart, 500 South Bell Blvd, Cedar Park, Texas. Report to TCEQ.

- (TAC) Texas Administrative Code. 2013. Section 2.206. Coordination triggers. TAC: Title 43, Part 1, Chapter 2, Subchapter G. Updated: September 1, 2013.
- (TCEQ) Texas Commission on Environmental Quality. 2005. Edwards Aquifer Protection Program, Chapter 213 Rules - Recharge Zone, Transition Zone, Contributing Zone, and Contributing Zone within the Transition Zone. Digital data. September 1, 2005. Austin, Texas.
- (TCEQ) Texas Commission on Environmental Quality. 2018b. Texas Emissions Reduction Plan (TERP). Last accessed: May 18, 2019. Available online at: <https://www.tceq.texas.gov/airquality/terp>.
- (TPWD) Texas Parks and Wildlife Department. 2012b. Texas Conservation Action Plan (TCAP) 2012-2016: Edwards Plateau Handbook. Ed: Wendy Connally – TCAP Coordinator: Austin, Texas.
- (TPWD) Texas Parks and Wildlife Department. 2019. Rare, Threatened, and Endangered Species List. Last Accessed: June 5, 2019. <http://tpwd.texas.gov/gis/rtest/>.
- (TRB) National Research Council. Transportation Research Board (TRB). 2000. Highway Capacity Manual. 3rd Edition. Special Report 209. Washington D.C.
- (TWDB) Texas Water Development Board. 2016a. 2016 Regional Water Plan Data. Available online at: <https://www.twdb.texas.gov/waterplanning/data/projections/2017/popproj.asp> Last accessed: May 7, 2019.
- (TWDB) Texas Water Development Board. 2016b. Groundwater Database (GCDB) Reports – Water Data Interactive. Available online at: <http://www2.twdb.texas.gov/apps/WaterDataInteractive/GroundwaterDataViewer/?map=gwdb>. Last Accessed: May 7, 2019.
- (TxDOT) Texas Department of Transportation. 2011. Guidelines for Analysis and Abatement of Roadway Traffic Noise. TxDOT Environmental Affairs Division. Release Date: 3/2011. 730.02.GUI. Version 1. 31 pgs.
- (TxDOT) Texas Department of Transportation. 2014a. Environmental Handbook. Hazardous Materials. TxDOT Environmental Affairs Division. July 2014. Version 3. 510.01 GUI
- (TxDOT) Texas Department of Transportation. 2014b. Standard Operating Procedure for Complying with Hot-Spot Requirements. Last accessed: May 7, 2019. Available online at: <http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/210-03-sop.pdf>.

- (TxDOT) Texas Department of Transportation. 2014c. Induced Growth Indirect Impacts Decision Tree. April.
- (TxDOT) Texas Department of Transportation. 2014d. Cumulative Impacts Decision Tree. April.
- (TxDOT) Texas Department of Transportation. 2017a. Crash Records Information System (CRIS) Crash Data Summary, 2011-2015. Texas Department of Transportation; Highway US 183, Control 0151-05, Williamson County, Texas. Prepared February 2, 2017.
- (TxDOT) Texas Department of Transportation. 2017b. Revised Best Management Practices Programmatic Agreement between Texas Department of Transportation and Texas Parks and Wildlife under the 2013 MOU. Effective May 2017.
- U.S. Census Bureau. 2009. County Population Estimates. Resident Population Estimates for the 100 Fastest Growing U.S. Counties with 10,000 or More Population in 2009: April 1, 2000 to July 1, 2009 (CO-EST2009-08). Available online at: <http://www.census.gov/popest/counties/CO-EST2009-08.html>. Last accessed: May 7, 2019.
- U.S. Census Bureau. 1970. 1970 General Population Census. Available online at: https://www2.census.gov/prod2/decennial/documents/1970a_v1pAs1-01.pdf. Last accessed May 7, 2019.
- U.S. Census Bureau. 1980. 1980 General Population Census. Available online at: https://www2.census.gov/prod2/decennial/documents/1980/1980censusofpopu8011u_bw.pdf. Last accessed May 7, 2019.
- U.S. Census Bureau. 1990. 1990 Census of Population. Available online at: <https://www.census.gov/library/publications/1992/dec/cp-1.html>. Last accessed May 7, 2019
- U.S. Census Bureau. 2000. 2000 Census of Population and Housing. Available online at: <https://www.census.gov/prod/cen2000/phc-1-1-pt1.pdf>. Last accessed May 7, 2019
- U.S. Census Bureau. 2010. 2010 Census of Population and Housing. Available online at: <https://www.census.gov/prod/cen2010/cph-1-1.pdf>. Last accessed May 7, 2019.
- U.S. Census Bureau. 2010c. 2010-2014 American Community Survey 5-year Estimates. Available online at:

<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>. Last accessed May 7, 2019.

(USEPA) U.S. Environmental Protection Agency. 2016a. Overview of the Drinking Water Sole Source Aquifer Program - What is a SSA? Last Updated: October 27, 2016. Available online at: https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#What_Is_SSA. Last Accessed: May 7, 2019.

(USEPA) U.S. Environmental Protection Agency. 2016b. Sole Source Aquifers Web App Viewer. Available online at: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>. Last Accessed: May 7, 2019.

(USFWS) U.S. Fish and Wildlife Service. 1994. Recovery Plan for Endangered Karst Invertebrates in Travis and Williamson Counties, Texas. Albuquerque, New Mexico. 154 pp.

(USFWS) U.S. Fish and Wildlife Service. 1997. Environmental Assessment and Habitat Conservation Plan Issuance of an Endangered Species Plan 10(a)(1)(B) Permit for the Incidental Take of the Tooth Cave Ground Beetle (*Rhadine persephone*) During Construction and Operation of the 420-acre Mixed Use Development Buttercup Creek, Section 4 and Phase V, Williamson County, Texas. USFWS, Austin Ecological Service. October 1997. Pg. 29.

(USFWS) U.S. Fish and Wildlife Service. 2018. Endangered and Threatened Wildlife and Plants; Removing the Black-capped vireo from the Federal List of Endangered and Threatened Wildlife. Final Rule. Federal Register, 83 FR 16228-16242.

(USFWS) U.S. Fish and Wildlife Service. 2019a. Information, Planning, and Conservation System: Williamson Co, Texas. Environmental Conservation Online System. Last Accessed: June 5, 2019. <https://ecos.fws.gov/ipac/>.

(USFWS) U.S. Fish and Wildlife Service. 2019b. Critical Habitat Portal. Last Accessed: June 5, 2019. <http://ecos.fws.gov/crithab>.

Veni & Associates. 1992 (revised 2007). Geologic controls on cave development and the distribution of cave fauna in the Austin, Texas, region. Prepared for U.S. Fish and Wildlife Service: Austin, Texas.

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Appendix A
Project Location Map

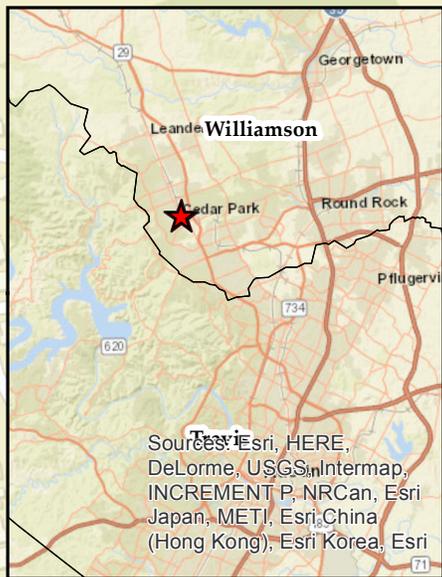
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Northern Terminus:
180ft South of Cedar Park Drive

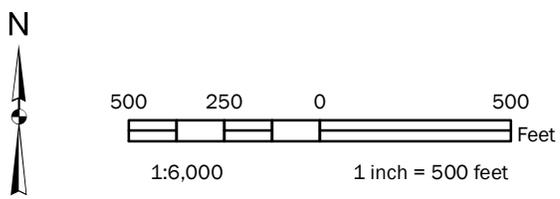
- Proposed Easement
- Proposed Additional ROW
- Detention Pond
- Driveway License
- Construction Easement
- Existing ROW/Project Limits

Southern Terminus:
700ft South of Buttercup
Creek Blvd



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



Appendix B
Project Photographs

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75 Brushy Creek; Parcel ID R102658; Goodwill Industries of Central Texas Built 1997



100 S Bell Boulevard; Parcel ID R031890; Cedar Park Cemetery Assoc (Central Texas Children's Home); Built 1984



75 Brushy Creek; Parcel ID R102658; Goodwill Industries of Central Texas Built 1997



104 S Bell Boulevard; Parcel ID R031882; Bell, Danny Kent Built 1978



104 S Bell Boulevard; Parcel ID R031882; Bell, Danny Kent
Built 1978



150 S Bell Boulevard; Parcel ID R031879; Sovereign Bank
Built 1980



150 S Bell Boulevard; Parcel ID R031879; Sovereign Bank;
Built 1980



200 Buttercup Creek Boulevard; Parcel ID R306673; Armstrong
Buttercup Creek LP; Built 1986



200 Buttercup Creek Boulevard; Parcel ID R306673; Armstrong Buttercup Creek LP; Built 1986



200 Buttercup Creek Boulevard; Parcel ID R306673; Armstrong Buttercup Creek LP; Built 1986



200 Buttercup Creek Boulevard; Parcel ID R306673; Armstrong Buttercup Creek LP; Built 1986



200 Buttercup Creek Boulevard; Parcel ID R306673; Armstrong Buttercup Creek LP; Built 1986



200 S Bell Boulevard; Parcel ID Parcel ID R325311; Cedar Park Square Two Ltd; Built 1969



200 S Bell Boulevard; Parcel ID Parcel ID R325311; Cedar Park Square Two Ltd; Built 1969



200 S Bell Boulevard; Parcel ID Parcel ID R325311; Cedar Park Square Two Ltd; Built 1969



200 S Bell Boulevard; Parcel ID Parcel ID R325311; Cedar Park Square Two Ltd; Built 1969



218 Old Highway 183; Parcel ID R325310; 218 OLD HWY 183, LP
Built 1990



251 N Bell Boulevard; Parcel ID R033681; Roxbury Holding Company
LLC; Built 1988



218 Old Highway 183; Parcel ID R325310; 218 OLD HWY 183, LP
Built 1990



251 N Bell Boulevard; Parcel ID R033681; Roxbury Holding Company
LLC; Built 1988



220 Old Highway 183; Parcel ID R031923; Cedar Park City Of
Built 1970



303 N Bell Boulevard; Parcel ID R033685; Yi, Pyong Hwa
Built 1979



302 S Bell Boulevard; Parcel ID R388464; Quadra Properties LLC
Built 1972



306 S Bell Boulevard; Parcel ID R388465; Quadra Properties LLC
Built 1980



309 N Bell Boulevard; Parcel ID R343720; Rich, River City
Built 1978



315 N Bell Boulevard; Parcel ID R031974; Tran, Phuong & Jun Liu
Built 1973



312-314 Old Highway 183; Parcel ID R031909; 312 314 OLD HWY 183
LP; Built 1974



319 N Bell Boulevard; Parcel ID R379627; Papa Johns USA Inc
Built 1998



325 N Bell Boulevard; Parcel ID R379626; Berke Enterprises LTD
Built 1998



406 Old Highway 183; Parcel ID R399375; Forbes, David Dr
Built 1960



400 Old Highway 183; Parcel ID R031951; NE Walker Inc
Built 1997



406 Old Highway 183; Parcel ID R399375; Forbes, David Dr
Built 1960



500 S Bell Boulevard; Parcel ID R031912; Thi, Ky & Anh N
Built 1980



601 S Bell Boulevard; Parcel ID R347612; Trovato, John J & Odelle A
Hall; Built 1995



510 S Bell Boulevard; Parcel ID R031908; Hawkins Family Partnership
LP
Built 1988



605 S Bell Boulevard; Parcel ID R347613; Blue Sage INC
Built 1996



Culvert near 312-314 Old Highway 183, on east side of Old Highway 183, facing north



Railroad tracks behind 218 Old Highway 183, facing southeast



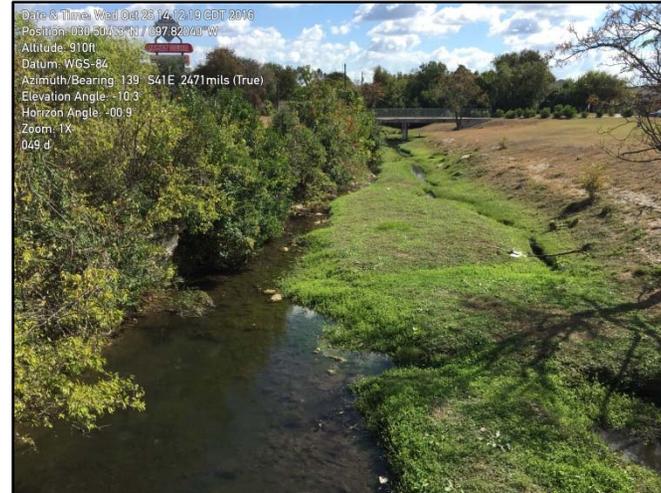
Culvert near 400 Old Highway 183; running underneath Bell Boulevard, facing west



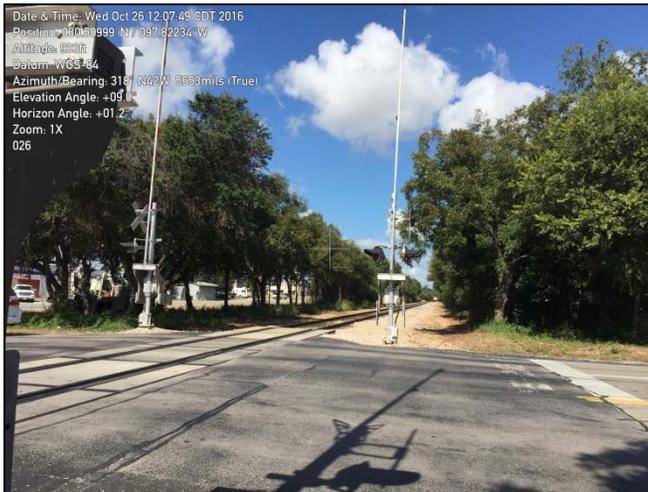
Culvert near 220 Old Highway 183; running underneath Old Highway 183, facing east



Culvert near 220 Old Highway 183; running underneath Old Highway 183, facing south



Buttercup Creek Boulevard crossing over Cluck Creek, facing south



At-grade railroad crossing at Park Street, facing north



Buttercup Creek Boulevard crossing over Cluck Creek, facing east

Appendix C

Schematics

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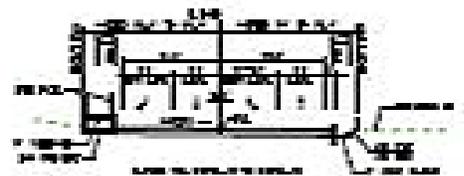
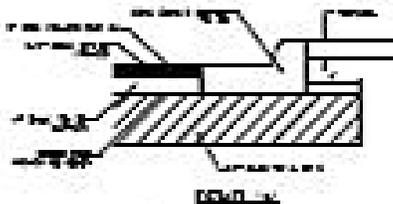
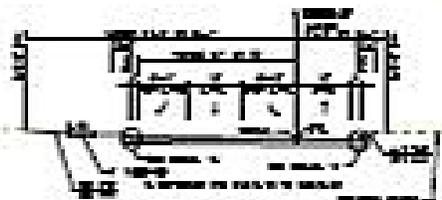
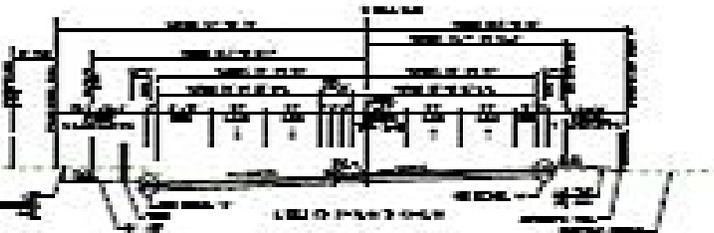
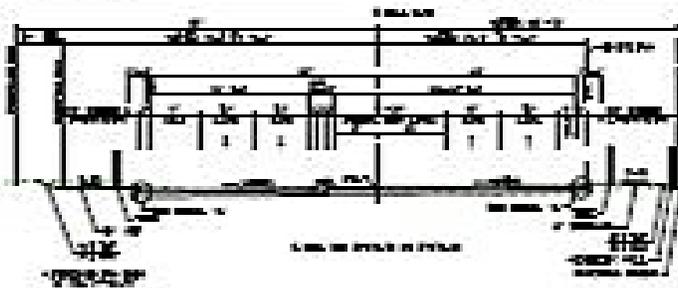
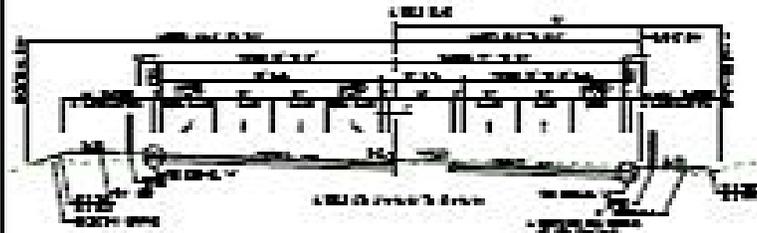
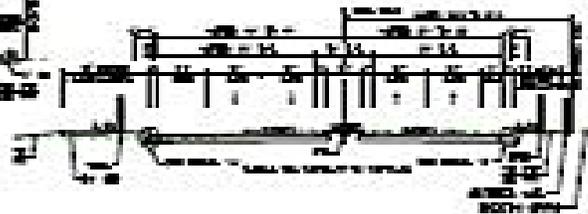
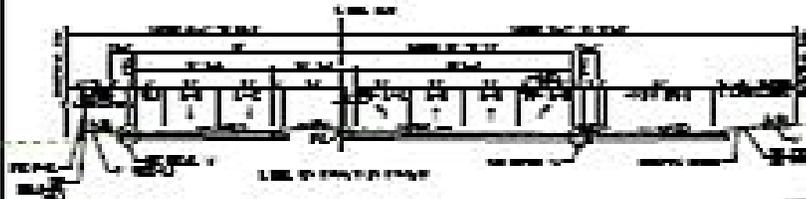
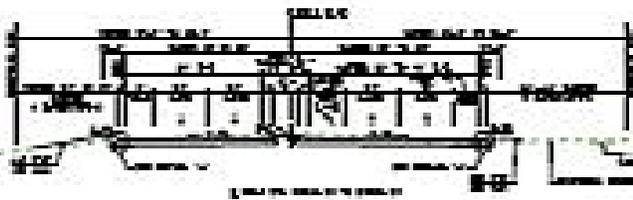
Appendix D
Typical Sections

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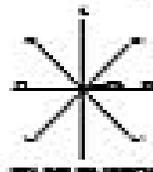
EXISTING TYPICAL SECTION SITE



PROPOSED TYPICAL SECTION SITE



DIMENSIONS (IN FEET)			
SECTION	EXISTING	PROPOSED	DIFFERENCE
1. OVERALL LENGTH	100.0	100.0	0.0
2. OVERALL WIDTH	20.0	20.0	0.0
3. COLUMN SPACING	12.0	12.0	0.0
4. ROOM WIDTH	8.0	8.0	0.0
5. ROOM LENGTH	12.0	12.0	0.0
6. CORRIDOR WIDTH	4.0	4.0	0.0
7. CEILING HEIGHT	10.0	10.0	0.0
8. FLOOR SLAB THICKNESS	4.0	4.0	0.0
9. ROOF SLAB THICKNESS	4.0	4.0	0.0
10. FOUNDATION DEPTH	4.0	4.0	0.0



Appendix E

Plan and Program Excerpts

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Logged in as Sonya Hernandez

Log Out

Project Management

Reports

Support

Project Management > Area List > STIPs (M-CAMPO) > Revisions () > TIP Instances (Unassigned) > Highway Projects (Unassigned) > Project Details

Color Key: - Business rule violation - Value changed in current session - Different from DCIS or latest approved copy

Data

Statewide

TIP Revision

Phase Construction

Total Project Cost Information

District

County

Engineering

Prelim Engineering

MPO

Highway

Environmental

ROW Purchase

CSJ - -

TIP FY

Engineering

Construction Cost

Right-of-Way

Const Engineering

Acquisition

Contingencies

Utilities

Indirect Costs

Transfer

Bond Financing

Revision Date [07/2018](#)

NOX (Kg /D):

Potential Chg Ord

Project Sponsor

VOC (Kg /D):

Total Project Cost

MPO Proj Number

PM10 (Kg /D):

YOE Cost

MTP Reference

PM2.5 (Kg /D):

Toll

City

CO (Lbs /D):

TCM

Limits From

Limits To

Project Description

P7 Remarks

Project History 

Authorized Funding by Category/Share

Category	Federal	State	Regional	Local	Local Contributions	Total
3LC	\$0	\$0	\$0	\$10,710,000	\$0	\$10,710,000
Total	\$0.00	\$0.00	\$0.00	\$10,710,000	\$0.00	\$10,710,000

DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
AUSTIN	CAMPO	WILLIAMSON	0151-05-115	2019	US 183	C	OTHER	\$ 10,710,000	
LIMITS FROM: Cedar Park Dr							PROJECT SPONSOR: City of Cedar Park		
LIMITS TO: South of Buttercup Creek Blvd							REVISION DATE: 07/2018		
PROJECT DESCR: Relocation of 4-Lane US 183 to 4-Lane Old Hwy 183							MPO PROJ NUM: 61-00116-00		
REMARKS P7:							FUNDING CAT(S): 3LC		
TOTAL PROJECT COST INFORMATION				AUTHORIZED FUNDING BY CATEGORY/SHARE					
PRELIM ENG:	\$ 645,686	COST OF APPROVED PHASES \$ 10,710,000	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH:	\$ 0		3LC	\$ 0	\$ 0	\$ 0	\$ 10,710,000	\$ 0	\$ 10,710,000
CONST COST:	\$ 13,177,280		TOTAL	\$ 0	\$ 0	\$ 0	\$ 10,710,000	\$ 0	\$ 10,710,000
CONST ENG:	\$ 645,686								
CONTING:	\$ 164,716								
INDIRECT:	\$ 0								
BOND FIN:	\$ 0								
POT CHG ORD:	\$ 719,479								
TOTAL COST:	\$ 15,352,847								

TIP History

2019-2022 STIP				07/2018 Revision: Not Approved 09/28/2018					
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
AUSTIN	CAMPO	WILLIAMSON	0151-05-115	2019	US 183	C	OTHER	\$ 10,710,000	
LIMITS FROM: Cedar Park Dr							PROJECT SPONSOR: City of Cedar Park		
LIMITS TO: South of Buttercup Creek Blvd							REVISION DATE: 07/2018		
PROJECT DESCR: Realignment Of Existing Us 183 To Old Hwy 183. Old 183 To Be Widened And Realigned Include Relocation							MPO PROJ NUM: 61-00116-00		
REMARKS P7:							FUNDING CAT(S): 3LC		
TOTAL PROJECT COST INFORMATION				AUTHORIZED FUNDING BY CATEGORY/SHARE					
PRELIM ENG:	\$ 645,686	COST OF APPROVED PHASES \$ 10,710,000	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH:	\$ 0		3LC	\$ 0	\$ 0	\$ 0	\$ 10,710,000	\$ 0	\$ 10,710,000
CONST COST:	\$ 13,177,280		TOTAL	\$ 0	\$ 0	\$ 0	\$ 10,710,000	\$ 0	\$ 10,710,000
CONST ENG:	\$ 645,686								
CONTING:	\$ 164,716								
INDIRECT:	\$ 0								
BOND FIN:	\$ 0								

POT CHG ORD: \$	719,479
TOTAL COST: \$	15,352,847

Comment History

Time	User	Comment	Related Approval
2018/09/26 09:55:55	Jose Campos	Not approved. Project description appears incomplete regarding relocation of Old 183. Additionally, the project description indicates widening of Old 183, but does not indicate the existing and subsequent number of lanes. Approval is withheld pending clarification of the project description.	07/2018: Not Approved



Appendix F
Resource-Specific Maps

- Exhibit 1: Environmental Constraints
- Exhibit 2: Potentially Jurisdictional Waters of the U.S.
- Exhibit 3: TWDB Groundwater Wells
- Exhibit 4: Edwards Aquifer Contributing Zone
- Exhibit 5: Karst Zones
- Exhibit 6: TNDD Elemental Occurrences (EO) with EO ID
- Exhibit 7: Banks Environmental Summary
- Exhibit 8: Roadway Traffic Noise Analysis
- Exhibit 9: FEMA Flood Hazard Zones

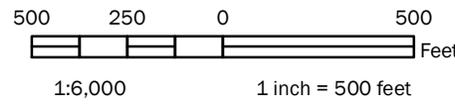
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- Proposed Easement
- Proposed Additional ROW
- Detention Pond
- Driveway License
- Construction Easement
- Existing ROW/Project Limits

Esri, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



- Potential Hazardous Materials Sites
- NHD Flowlines
- NHD Waterbody

- NWI Feature
- Public Lands
- Cemeteries

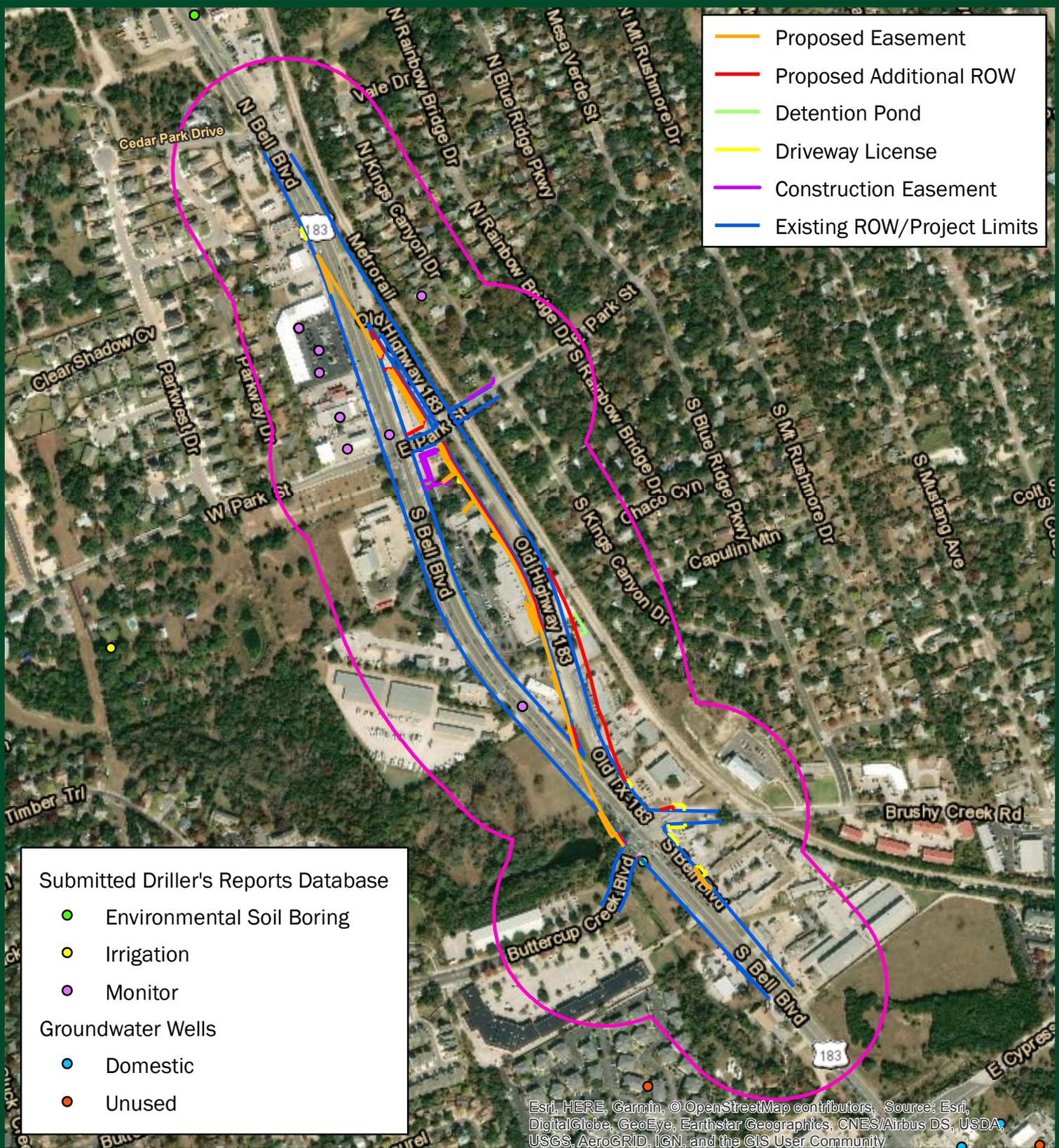




This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.

aci consulting
austin • denver

P:\Project Folders\05-16-110 Bell Blvd Realignment\GIS\maps\Task 3.3 Environmental Assessment\May 2019 Finals\Appendix F_ Ex3_Groundwater.mxd

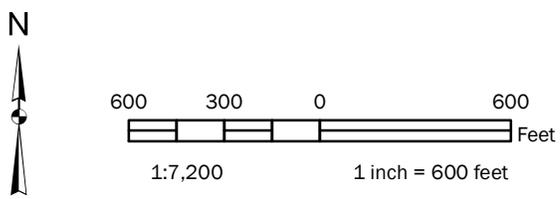


- Proposed Easement
- Proposed Additional ROW
- Detention Pond
- Driveway License
- Construction Easement
- Existing ROW/Project Limits

- Submitted Driller's Reports Database**
- Environmental Soil Boring
 - Irrigation
 - Monitor
- Groundwater Wells**
- Domestic
 - Unused

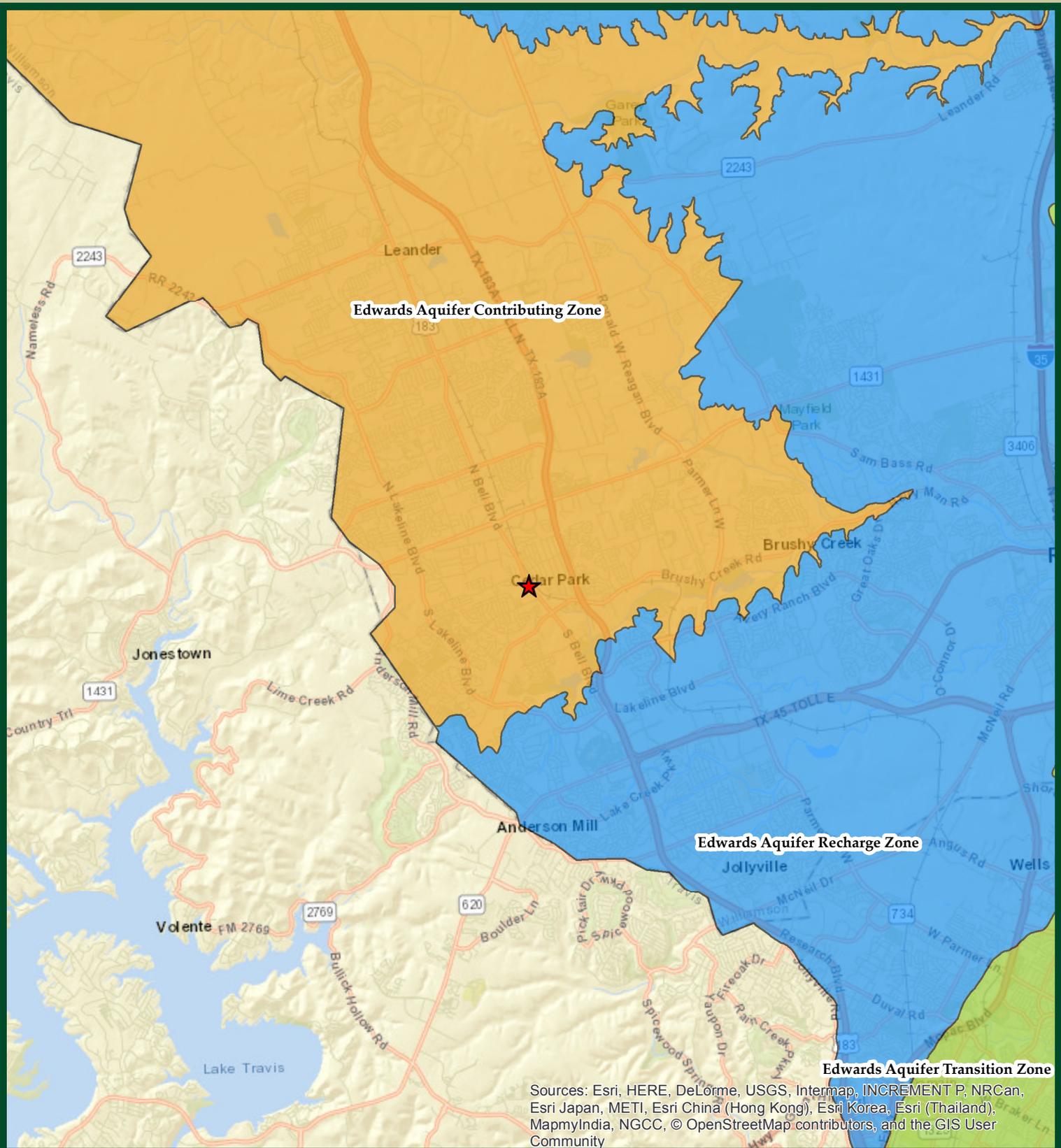
Esri, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



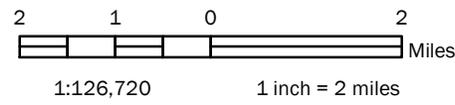
500ft Buffer





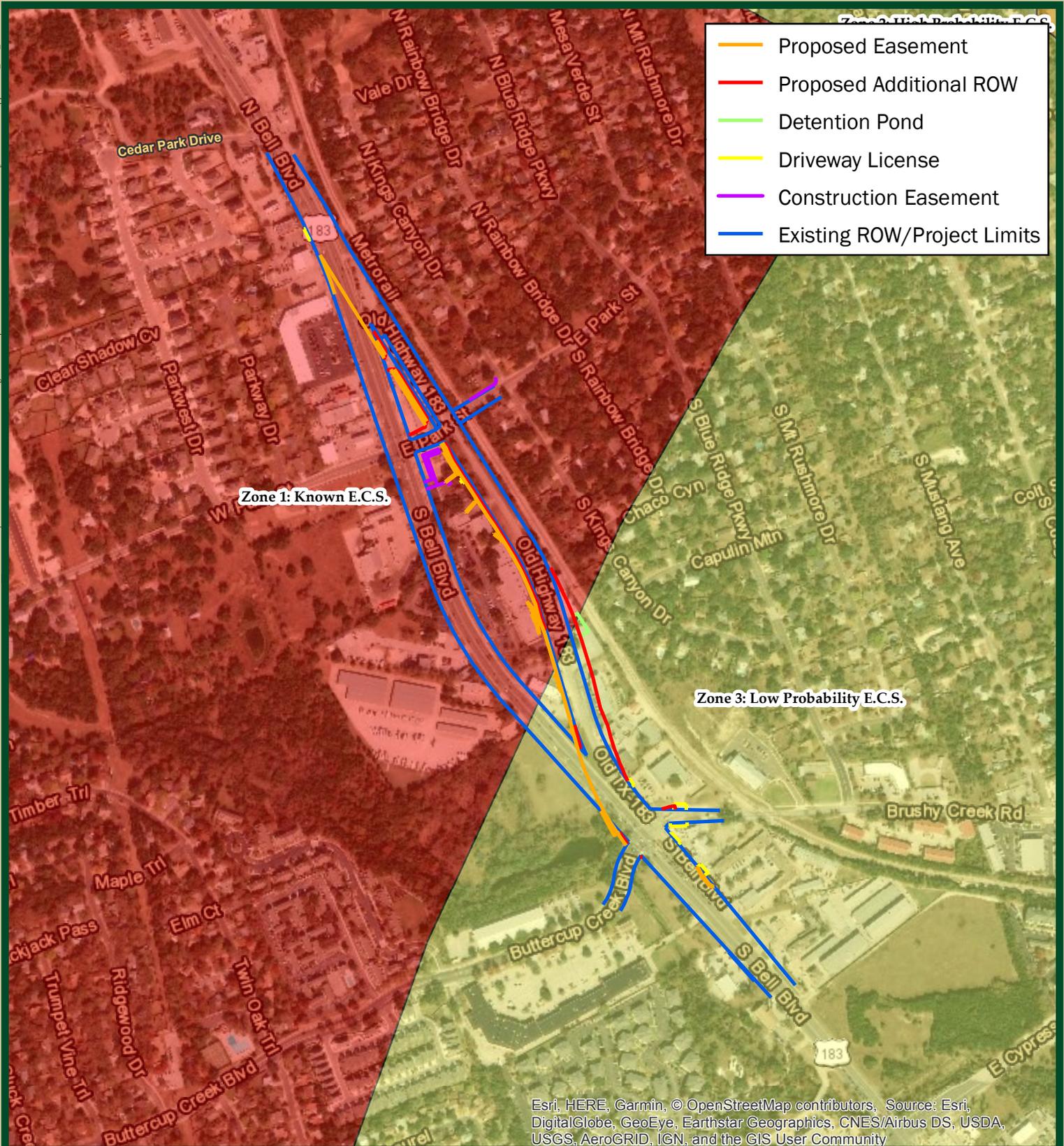
Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



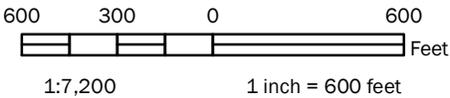
-  Project Location
-  Edwards Aquifer Contributing Zone
-  Edwards Aquifer Recharge Zone
-  Edwards Aquifer Transition Zone





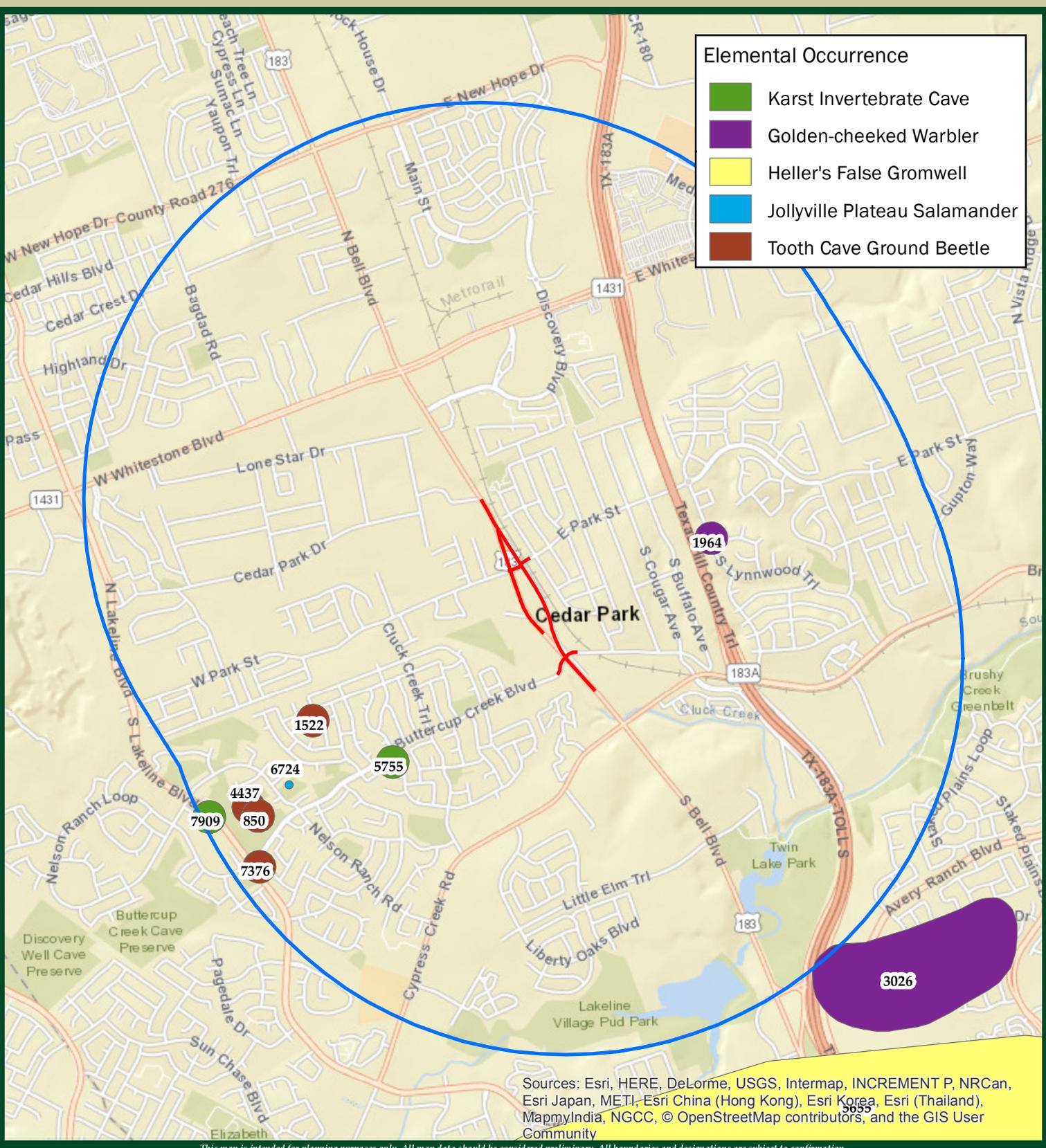
Esri, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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- Zone 1, Known E.C.S.
- Zone 2, High Probability E.C.S.
- Zone 3, Low Probability E.C.S.



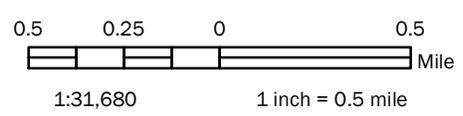


Elemental Occurrence

- Karst Invertebrate Cave
- Golden-cheeked Warbler
- Heller's False Gromwell
- Jollyville Plateau Salamander
- Tooth Cave Ground Beetle

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

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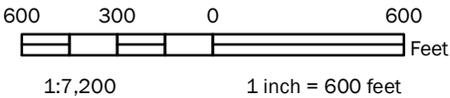
- Project Action Centerline
- 1.5 Mile Buffer





Esri, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Appendix G

Resource Agency Coordination

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From: [Sonya Hernandez](mailto:Sonya.Hernandez@txdot.gov)
To: NEPA@tceq.texas.gov
Subject: US 183/Bell Blvd. Realignment (Williamson County, CSJ 0151-05-115, Austin District) TCEQ Coordination
Date: Friday, November 09, 2018 8:32:46 AM

To Whom It May Concern:

TxDOT requests the TCEQ evaluate this US 183/Bell Blvd. Realignment Project (From Cedar Park Drive to South of Buttercup Creek Boulevard) per 43 TAC 2.305.

The Texas Department of Transportation (TxDOT) and the City of Cedar Park (CoCP) propose to move existing Highway 183 / Bell Boulevard roadway east onto Old Highway 183 along the full extent of Old Highway 183 from Cedar Park Drive to south of Buttercup Creek Boulevard. The project is 0.8 mile in length and includes grading, base, asphalt pavement, culverts, drainage improvements, utility relocation, water quality controls, signing and pavement markings. To accommodate transitions with the existing lane configuration, the project will span from approximately 180 feet south of Cedar Park Drive to 700 feet south of the Buttercup Creek Boulevard / Bell Boulevard intersection.

We are requesting this TCEQ review since the project meets MOU triggers related to the Edwards Aquifer.

An electronic version of the US 183 (Bell Boulevard Realignment) Water Resources Technical Memorandum (file name BellBlvd_Water Resources_TM_August 2018.pdf) will be transmitted to your office using our FTP system.

Please let me know if you have any questions.

Sonya Y. Hernandez, P.G.
Environmental Specialist
Austin District
Texas Department of Transportation

Sonya.Hernandez@txdot.gov
Office: 512-832-7096

**PLEASE NOTE**

To download a file, click the filename once. Exercise the same degree of caution as you would with any other file you download from the internet, if you don't know what this is don't download it.

Drop-Off Summary	
Claim ID:	0rSLFPgeJ1WCZmDw
Claim Passcode:	Q2ZJRRc9kF7rBiGE
F R O M	Name: Sonya Hernandez
	Organization: TxDOT
	Email: sonya.hernandez@txdot.gov
	Sent From: nttdata608401.dot.state.tx.us 09 Nov 2018 08:35:18 AM
	Confirm Delivery: yes
T O	Name & Email: TCEQ (nepa@tceq.texas.gov)

Filename	Type	Size	Description
 BellBlvd_Water Resources_TM_August 2018.pdf	application/pdf	2.0 MB	US 183 (Bell Boulevard Realignment) Water Resources Technical
1 file			

None of the files have been picked-up yet.

[Return to the Dropbox Service main menu.](#) [Logout](#)

Version 2.1 | TxDOT Dropbox Service | you are currently logged in as *SHERMAN*

From: [NEPA](#)
To: [Sonya Hernandez](#)
Subject: RE: US 183/Bell Blvd. Realignment (Williamson County, CSJ 0151-05-115, Austin District) TCEQ Coordination
Date: Friday, November 30, 2018 3:35:58 PM

This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Re: Response to Request for TCEQ Environmental Review

The Texas Commission on Environmental Quality (TCEQ) received a request from the Texas Department of Transportation (TxDOT) regarding the following project: US 183/Bell Blvd. Realignment (Williamson County, CSJ 0151-05-115, Austin District) TCEQ Coordination.

In accordance with the Memorandum of Understanding between TxDOT and TCEQ addressing environmental reviews, which is codified in Chapter 43, Subchapter I of the Texas Administrative Code (TAC) and 30 TAC § 7.119, TCEQ is responding to your request for review by providing the below comments.

TCEQ has examined the information submitted for NEPA review concerning this project. Section 4.6. Edwards Aquifer, describes a Sole Source Aquifer and points out that the project is not located within that portion of the Edwards Aquifer designated as a Sole Source Aquifer. This points out adequate measures to protect the quality of water entering the Edwards Aquifer.

We are in support of the project. The environmental assessment addresses issues related to surface and groundwater quality.

TxDOT will still need to follow all other applicable laws related to this project, including applying for applicable permits.

If you have any questions, please feel free to contact the NEPA Coordinator at (512) 239-3500 or NEPA@tceq.texas.gov.

Violet Mendoza
NEPA Coordinator
TCEQ, MC-119
NEPA@tceq.texas.gov

From: Sonya Hernandez <Sonya.Hernandez@txdot.gov>
Sent: Friday, November 9, 2018 8:33 AM
To: NEPA <NEPA@tceq.texas.gov>
Subject: US 183/Bell Blvd. Realignment (Williamson County, CSJ 0151-05-115, Austin District) TCEQ Coordination

To Whom It May Concern:
TxDOT requests the TCEQ evaluate this US 183/Bell Blvd. Realignment Project

(From Cedar Park Drive to South of Buttercup Creek Boulevard) per 43 TAC 2.305.

The Texas Department of Transportation (TxDOT) and the City of Cedar Park (CoCP) propose to move existing Highway 183 / Bell Boulevard roadway east onto Old Highway 183 along the full extent of Old Highway 183 from Cedar Park Drive to south of Buttercup Creek Boulevard. The project is 0.8 mile in length and includes grading, base, asphalt pavement, culverts, drainage improvements, utility relocation, water quality controls, signing and pavement markings. To accommodate transitions with the existing lane configuration, the project will span from approximately 180 feet south of Cedar Park Drive to 700 feet south of the Buttercup Creek Boulevard / Bell Boulevard intersection.

We are requesting this TCEQ review since the project meets MOU triggers related to the Edwards Aquifer.

An electronic version of the US 183 (Bell Boulevard Realignment) Water Resources Technical Memorandum (file name BellBlvd_Water Resources_TM_August 2018.pdf) will be transmitted to your office using our FTP system.

Please let me know if you have any questions.

Sonya Y. Hernandez, P.G.
Environmental Specialist
Austin District
Texas Department of Transportation

Sonya.Hernandez@txdot.gov
Office: 512-832-7096



October 15, 2018

Bill Martin
Archeology Division
Texas Historical Commission
PO Box 12276
Austin, TX 78711-2276

Re: Project Review Request for the Bell Boulevard Realignment Project in Cedar Park, Williamson County, Texas.

Dear Mr. Martin,

The purpose of this memorandum is to request a THC review of Bell Boulevard Realignment Project in Williamson County, Texas. The Texas Department of Transportation (TxDOT) and the City of Cedar Park (CoCP) proposes to move existing Highway 183 / Bell Boulevard roadway east onto Old Highway 183 along the full extent of Old Highway 183 from Cedar Park Drive to south of Buttercup Creek Boulevard (Figure 1). The project is 0.8 mile in length and includes grading, base, asphalt pavement, culverts, drainage improvements, utility relocation, water quality controls, signing and pavement markings. To accommodate transitions with the existing lane configuration, the project will span from approximately 180 feet south of Cedar Park Drive to 700 feet south of the Buttercup Creek Boulevard / Bell Boulevard intersection.

Bell Boulevard is also known as U.S. Highway 183 and provides one of the main north-to-south access routes through the City of Cedar Park. This corridor provides the community access to commercial, residential, and recreational use areas. Improving the safety within the corridor would benefit the public and the continuously growing City of Cedar Park.

In the fall of 2014, the City of Cedar Park began the Bell Boulevard Redevelopment Study, a comprehensive planning process to create a plan for the successful revitalization of the Bell Boulevard corridor. Eventually, a final concept was developed and the Master Plan was formally adopted by the City Council in August 2015. Most recently on July 27, 2017, the Cedar Park City Council authorized the city manager to create an advanced funding agreement with TxDOT for the design and construction of the Bell Boulevard Realignment Project. Furthermore, the project was included in the four-year Transportation Improvement Program (TIP) by the Capital Area Metropolitan Planning Organization (CAMPO).

Based on the limited availability of federal funding on the immediate horizon and the anticipation of the City of Cedar Park funding the project, the project funding has changed from federal funding to State and local funding. Consequently, TxDOT has requested that aci consulting, on behalf of the CoCP, submit our findings to THC directly.

Please email jshipp@aci-group.net if you need further information or have questions or comments concerning this project.

Sincerely,



Julie Shipp, MS, RPA
Principal Investigator

Enclosure: Archeology Technical Memo

Katie Canavan

From: noreply@thc.state.tx.us
Sent: Tuesday, October 23, 2018 4:17 PM
To: Katie Canavan; reviews@thc.state.tx.us
Subject: Project Review: 201901127



TEXAS HISTORICAL COMMISSION
real places telling real stories

Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas
201901127

Bell Boulevard Realignment Project
Bell Boulevard and Park Street
Cedar Park, TX 78613

Dear Katie Canavan:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the Executive Director of the Texas Historical Commission (THC), pursuant to review under the Antiquities Code of Texas.

The review staff led by Bill Martin has completed its review and has made the following determinations based on the information submitted for review:

Archeology Comments

- THC/SHPO concurs with information provided .
- No archeological survey of the project area is needed.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: bill.martin@thc.texas.gov.

Sincerely,

For Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.