Appendix A

Project Description Technical Report

Project Description
Interstate 35
From Rundberg Lane to US 290 East
Travis County, Texas

CSJ: 0015-13-382, 0015-13-387

July 2016

Table of Contents

List of Acronyms

DC	direct connector
EB	eastbound
I-35	Interstate Highway 35
mph	Miles per hour
NB	northbound
ROW	right-of-way
SB	southbound
SUP	Shared-use path
TxDOT	Texas Department of Transportation
US 290	U.S. Highway 290
WB	westbound

1. Existing Facility

The Texas Department of Transportation (TxDOT) proposes improvements along 2.35 miles of the existing Interstate 35 (I-35) between Rundberg Lane and U.S. Highway 290 East (US 290E) and along 1.6 miles of US 183 between Georgian Drive and Cameron Road (Figure 1 in Appendix A).

1.1 I-35

The existing I-35 facility is a divided highway consisting of mainlanes and continuous one-way frontage roads in each direction within a right-of-way (ROW) that varies from approximately 300 to 550 feet. The mainlanes have three 12-foot lanes in each direction separated by a concrete median. The northbound (NB) mainlanes consist of variable 2- to 10-foot inside shoulder and variable 6- to 10-foot outside shoulder. The southbound (SB) mainlanes consist of a variable 4- to 10-foot inside shoulder and a variable 8- to 10-foot outside shoulder. The NB frontage roads have two 12-foot lanes, and the SB frontage roads have three 12-foot lanes. The existing typical sections at various locations along I-35 and US 183 are provided on Figure 2 in Appendix A.

Exit ramps from I-35 provide access to Rundberg Lane, US 183 (NB and SB), St. Johns Avenue, US 290E and E. Koenig Lane. Entrance ramps onto I-35 are provided at US 290E, US 183 SB and Rundberg Lane. Dedicated U-turns for NB to SB movements are provided at Rundberg Lane, US 183 and St. Johns Avenue. SB to NB dedicated U-turns are provided at US 183 and US 290E.

There is a multi-level interchange at US 183 and at US 290E, and a grade-separated interchange at Rundberg Lane and at St. Johns Avenue. The existing I-35 NB to US 183 NB direct connector (DC) consists of a 14-foot travel lane, a 4-foot inside shoulder and an 8-foot outside shoulder.

The existing St. Johns Avenue overpass consists of two 12-foot lanes, 2-foot outside shoulders and 6-foot sidewalks in the eastbound (EB) and westbound (WB) directions. A separate bridge structure allows NB to SB U-turn movements and consists of a 15-foot travel lane, a 4-foot inside shoulder and a 6-foot outside shoulder (Figure 2 in Appendix A).

Sidewalks totalling 4.62 miles are present within the project area along the I-35 NB and SB frontage roads. Traffic signals are located along the I-35 frontage roads at Rundberg Lane, US 183, St. Johns Avenue and US 290E. The posted speed limit between Rundberg Lane and US 290E is 70 miles per hour (mph) along the mainlanes and ranges between 45 and 55 mph along the frontage roads.

The existing SB frontage road configuration at the I-35/Rundberg Lane intersection consists of four lanes: a 12-foot U-turn lane, a 10-foot dedicated left turn lane, a 10-foot optional left-turn/through lane and a 10-foot optional right-turn/through lane. The NB to SB U-turn lane is approximately 18

feet wide and continues as an acceleration lane for approximately 500 feet to provide a third lane for the SB frontage road.

1.2 US 183

The existing US 183 facility is a divided highway consisting of two to three 12-foot mainlanes separated by a 26-foot median and continuous one-way frontage roads in each direction within a 475-foot ROW.

The NB mainlanes consists of a 10-foot inside shoulder and variable 6- to 10-foot outside shoulder. The SB mainlanes consists of a 10-foot inside shoulder and a variable 8- to 10-foot outside shoulder. The NB frontage road consists of three 12-foot lanes, and the SB frontage road consists of four 12-foot lanes (Figure 2 in Appendix A).

Exit ramps from US 183 provide access to I-35 (NB and SB) and Cameron Road. Entrance ramps onto US 183 are provided from I-35 and Cameron Road. A dedicated NB to SB U-turn is provided at I-35, and SB to NB dedicated U-turns are provided at Chevy Chase Drive and Cameron Road.

Traffic signals are located along US 183 NB frontage road at Cameron Road, I-35 frontage roads and Georgian Drive. Sidewalks totalling 1.6 miles are present along the US 183 NB frontage road within the project area. The posted speed limit between Georgian Drive and Cameron Road is 65 mph along the mainlanes and 45 mph along the frontage roads.

1.3 Drainage

Drainage within the project limits is currently accomplished by both open ditches and closed storm sewer system. There are two major bridge class culverts (structure numbers 142270001513089 and 142270001513090) located along I-35 within the project limits.

2. Proposed Facility

The proposed improvements along I-35 include:

- providing three DCs at the I-35/US 183 interchange in the following locations:
  - I-35 SB to US 183 SB
  - US 183 NB to I-35 NB
  - I-35 SB to US 183 NB
- adding dedicated lanes to the I-35 frontage road to bypass the St. Johns Avenue signalized intersection
- replacing the existing St. Johns Avenue bridge over I-35 to provide the required vertical clearance
- providing frontage road U-turns for the NB and SB direction at St. Johns Avenue

- modifying a segment of the existing I-35 NB to US 183 NB DC
- providing a bicycle and pedestrian facility along the frontage roads
- realigning the I-35 frontage roads to accommodate the additional space for the DCs and the bypass
- severing the Brooks Street access from the I-35 SB frontage road to eliminate weaving movements from the I-35 SB frontage road to the US 290E WB frontage road and adding a right-turn lane to facilitate the turning movement
- mill and overlay 2.35 miles of existing I-35 mainlanes pavement between Rundberg Lane and US 290E
- widening the NB to SB U-turn and adding lane capacity for the SB frontage road at the I-35/ Rundberg Lane intersection

The proposed improvements along US 183 include:

- realigning a portion of the US 183 NB frontage road to accommodate for vertical clearances and bridge columns for the DCs overhead
- mill and overlay 1.6 miles of US 183 mainlanes between Georgian Drive and Cameron Road

The proposed improvements would require approximately 7 acres of new ROW.

The vertical impact of the proposed improvements at the I-35/US 183 interchange will be consistent with standard road base construction and in general will not exceed 40 inches. Drill shafts associated with the DCs will be required, and the depth may be greater than 40 inches.

Driveways impacted by the proposed improvements would be reconstructed or would remain in place where possible. In areas where driveways are to be removed, access to those properties would be relocated.

2.1 I-35

The proposed typical sections along I-35 and US 183 are also provided on Figure 2 in Appendix A. The proposed project layout is provided in Appendix B.

The proposed I-35 section from Rundberg Lane to US 183 will maintain three 12-foot mainlanes in both directions, separated by a concrete traffic barrier, with a 2- to 14-foot inside shoulder and a 10-foot outside shoulder (Figure 2 in Appendix A). The mainlane facility north of US 183 would also be widened to accommodate auxiliary lanes for vehicles entering/exiting DC ramps. North of US 183, the I-35 NB and SB frontage roads will be realigned to accommodate the auxiliary lanes for the DCs while maintaining three 12-foot lanes (Appendix B, Sheet 3). The proposed ROW would vary from approximately 300 to 400 feet.

Between US 183 and US 290E, the I-35 mainlanes would range from three to four 12-foot lanes, with a 7- to 10-foot inside shoulder, a variable 8- to 10-foot outside shoulder and a concrete median (Figure 2 in Appendix A). The NB and SB frontage roads transition from three to two 11- foot lanes and maintains two lanes to the US 290E interchange.

The third lane develops into a two-lane collector-distributor for the NB and SB frontage roads, which pass under the St. Johns Avenue bridge. The SB mainlane includes a 12-foot auxiliary lane, while the NB mainlane includes a 12-foot deceleration lane/exit ramp to the I-35 NB to US 183 NB DC. A proposed braided ramp under the I-35 NB to US 183 NB DC exit ramp would eliminate weaving of vehicles entering the I-35 facility and vehicles exiting onto the I-35 NB to US 183 NB DC (Appendix B, Sheets 4 and 5).

In addition to the roadway improvements, bicycle and pedestrian facilities will be improved throughout the corridor. Where ROW is limited, a 6-foot sidewalk will be provided. In areas where space is available, an 8- to 10-foot shared-use path (SUP), which accommodates pedestrians and bicyclists, will be provided on each side of I-35 and on the US 183 NB realigned frontage road.

The proposed St. Johns Avenue overpass will provide a 12-foot inside lane, a 14-foot outside shared lane, a 6-foot outside shoulder and a 10-foot SUP in the EB and WB directions. The new structure will also include both NB to SB and SB to NB U-turn bridges, which would consist of a 14-foot lane, an 8-foot inside shoulder and a 4-foot outside shoulder (Figure 2 in Appendix A).

Improvements to the I-35/Rundberg Lane intersection include (Appendix B, Sheet 1):

- Extending the left-turn bay along the NB frontage road
- Adding pavement on the north side of the NB to SB U-turn lane
- Providing an additional through lane along the SB frontage road/Rundberg Lane intersection

The SB frontage road/Rundberg Lane intersection configuration will consist of a 11-foot shared U–turn/left-turn lane, a 11-foot optional left-turn/through lane, a 11-foot dedicated through lane and a 11-foot optional right-turn/through lane. The NB to SB U-turn lane will be widened to accommodate turning movements for larger trucks. South of the SB frontage road/Rundberg Lane intersection, the SB frontage road will be widened to accommodate three through lanes and the adjoining NB to SB U-turn lane. All work at Rundberg Lane will be done within the existing ROW.

2.2 US 183

The US 183 construction includes ramp connections to three proposed DCs, realignment of the NB frontage road and mill and overlay of the mainlanes. East of I-35, the two 12-foot through lanes will have 10-foot inside and outside shoulders separated by concrete barriers and a 26-foot grassy median (Figure 2 in Appendix A). West of I-35, the two 12-foot NB through lanes will transition into 11 foot lanes. The existing I-35 NB to US 183 NB DC will add another through lane to the NB

mainlanes and will transition from a 12- to 11-foot lane to accommodate the auxiliary lane for the proposed I-35 SB to US 183 NB DC.

The proposed US 183 SB mainlanes will maintain the two-lane configuration, which is west of I-35, consisting of two 12-foot lanes with 10-foot inside and outside shoulders. The proposed US 183 NB mainlanes west of Cameron Road will consist of two 12-foot through lanes and two 12-foot exit lanes. A dedicated exit lane will provide access to the US 183 NB to I-35 NB DC, and the other exit lane will provide access to Lamar Boulevard (Appendix B, Sheets 9 and 10).

The I-35 SB to US 183 SB DC would consist of a 14-foot lane with a variable 10- to 20-foot inside shoulder and a 4-foot outside shoulder. It will land adjacent to the US 183 mainlanes to provide an outer third lane. The Blessing Avenue entrance ramp will provide a fourth lane over Cameron Road.

The I-35 SB to US 183 NB DC would consist of a 14-foot lane with a variable 10- to 20-foot inside shoulder and a 4-foot minimum outside shoulder. This proposed DC will tie into the existing segmental bridge on the US 183 NB mainlane. The auxillary lane produced by the DC will continue for approximately 2,000 feet.

The proposed ROW would vary from approximately 350 to 475 feet.

2.3 Drainage

The majority of the facility will be a closed storm sewer system with some open drainage between the mainlanes and frontage roads. A detention pond will not be needed for this project.

3. Purpose and Need

The purpose of the proposed project is to:

- Improve connectivity between I-35 and US 183 to relieve congestion at the I-35/US 183 interchange.
- Improve mobility and safety.
- Improve traffic flow on I-35 between US 290 and US 183 to relieve congestion caused by traffic accessing I-35 and US 183.
- Improve the steep grade of the existing I-35 NB to US 183 NB DC.
- Replace the existing St. Johns bridge over I-35.

The proposed improvements are intended to satisfy the following needs identified within the project corridor:

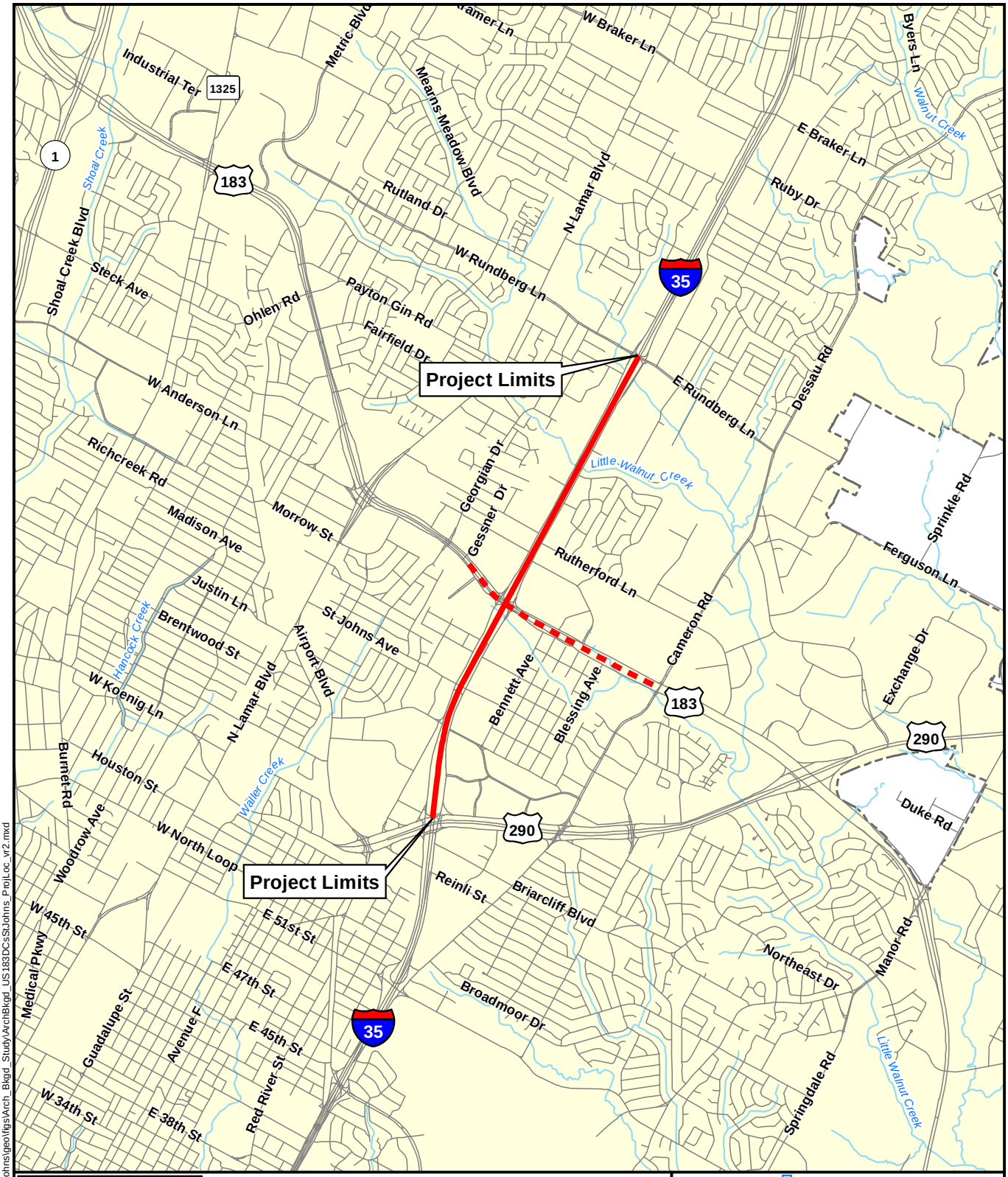
- There is poor connectivity at the I-35/US 183 interchange that impedes the efficient movement of traffic between I-35 SB to US 183 NB/SB as well as US 183 NB to I-35 NB.

- Between US 290 and US 183, the entering and exiting traffic accessing I-35 and US 183 impedes traffic flow and causes severe congestion on I-35 NB.
- The grade on the I-35 NB to US 183 NB DC is very steep (greater than 7 percent) and coupled with the single-lane configuration, it is problematic for large trucks to maintain sufficient speed on the DC, which causes congestion on I-35 NB.
- The vertical clearance of the existing St. Johns bridge over I-35 does not meet the current Interstate standard of 16 feet.

Representative photographs of the existing roadway and traffic conditions within the project limits are provided in Appendix C (Photographs 1 through 5).

Appendix A

Figures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N Lamar Blvd
Rutland Dr
W Rundberg Ln
183
1
Shoal Creek
Shoal Creek Blvd
Steck Ave
Ohlen Rd
Payton Gin Rd
Fairfield Dr
35
E Rundberg Ln
Dessau Rd
W Anderson Ln
Richcreek Rd
Madison Ave
Morrow St
Georgian Dr
Gessner Dr
Little Walnut Creek
Sprinkle Rd
Ferguson Ln
Rutherford Ln
Justin Ln
Brentwood St
Hancock Creek
St Johns Ave
Airport Blvd
N Lamar Blvd
Bennett Ave
Blessing Ave
Cameron Rd
Exchange Dr
W Koenig Ln
183
290
Burnet Rd
Houston St
Waller Creek
Woodrow Ave
W North Loop
290
Duke Rd
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E 51st St
Medical Pkwy
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Northeast Dr
Manor Rd
Guadalupe St
Avenue F
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Broadmoor Dr
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Red River St
Springdale Rd
Little Walnut Creek
W 34th St
E 38th St
Lampasas
Coryell
Falls
Bell
Burnet
Williamson
Milam
Travis
Lee
Blanco
Project Location
Hays
Bastrop
Comal
Caldwell
Fayette
Guadalupe
Gonzales
Bexar
Lavaca
City Limits
Project Limits
Direct Connector Transition
0
2,000
4,000
Feet
mobility 35
CAPITAL AREA
Figure 1
Project Location Map
I-35 Improvements
from Rundberg Lane to US 290E
AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387
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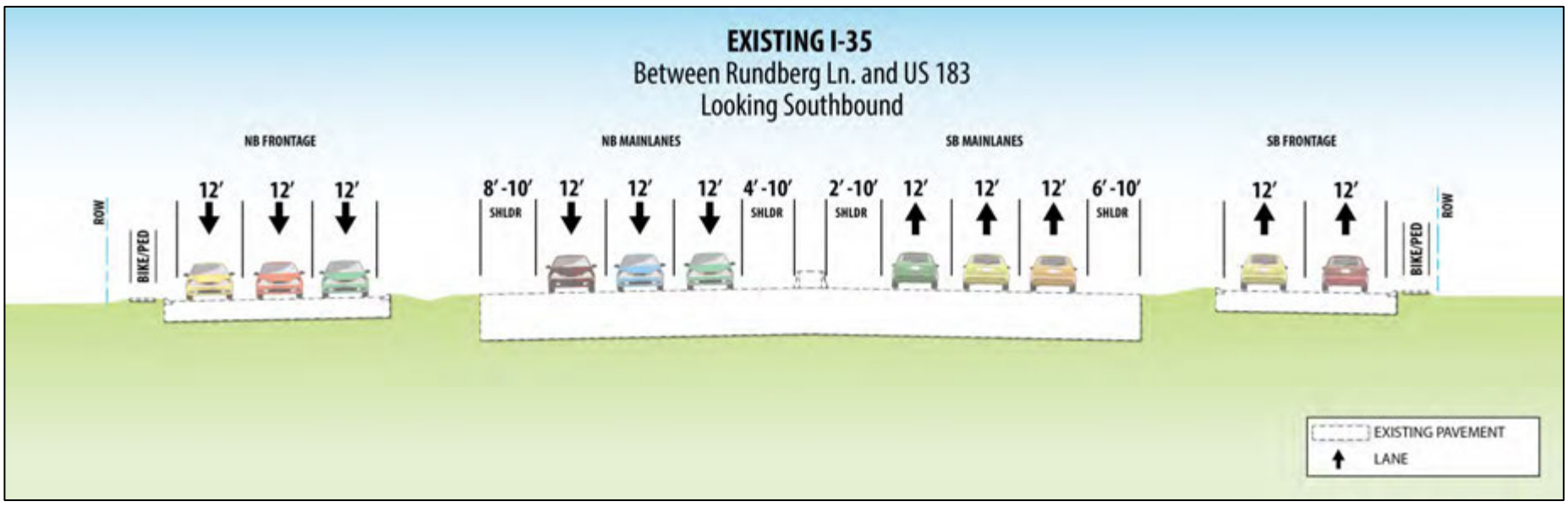
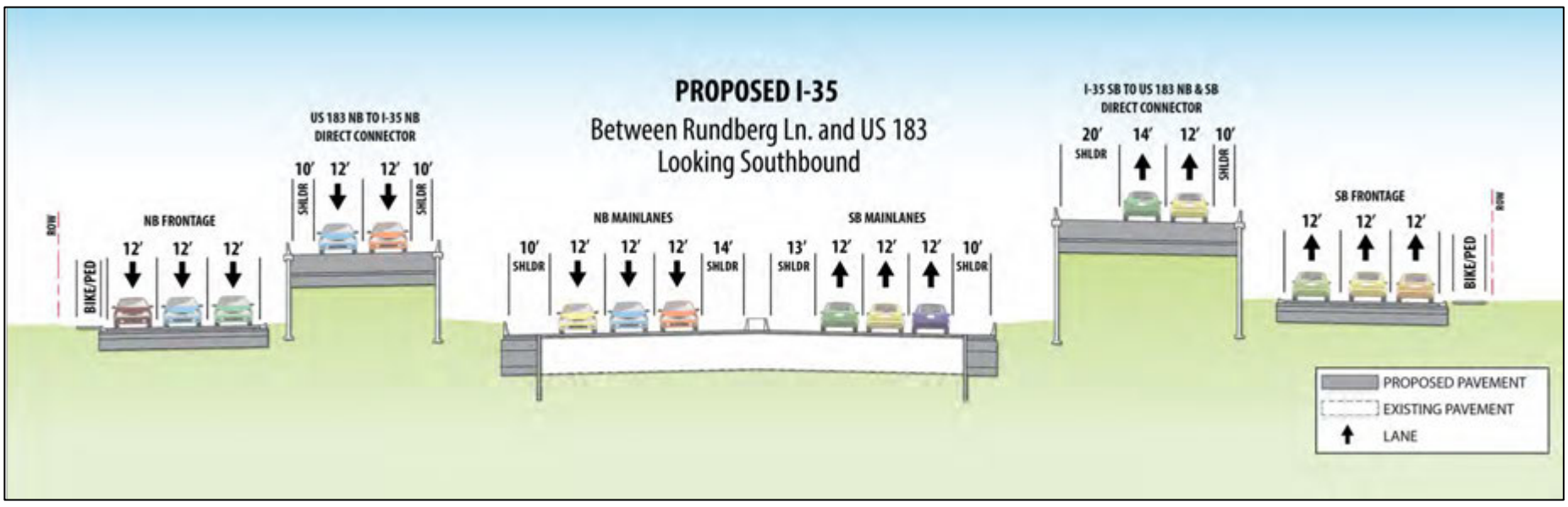
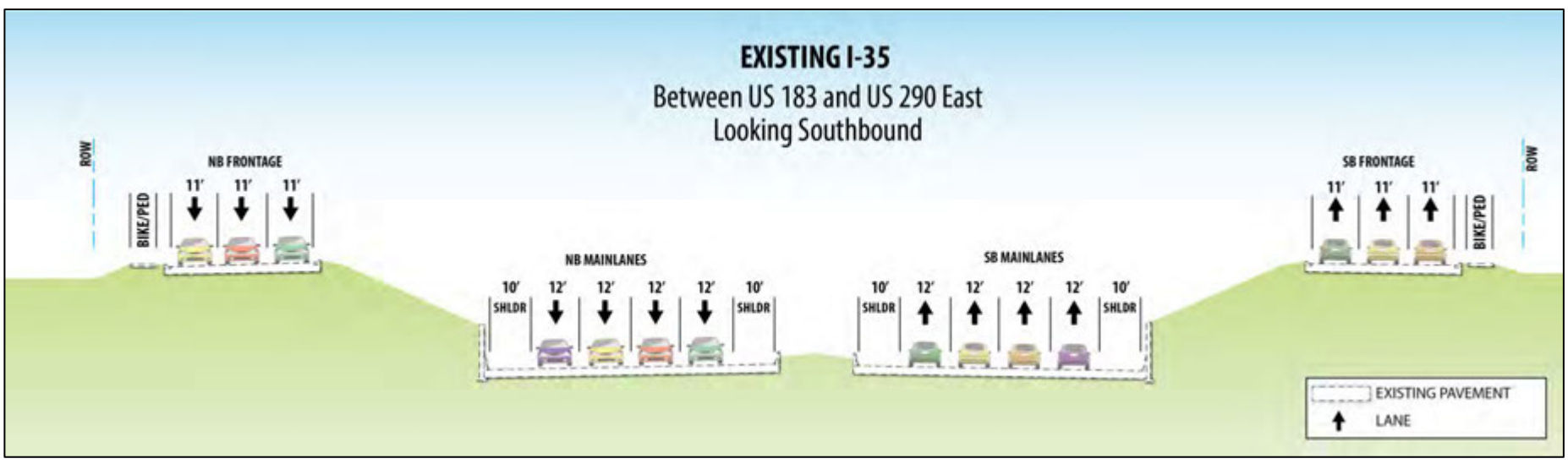
FIGURE 2: EXISTING AND PROPOSED TYPICAL SECTIONS



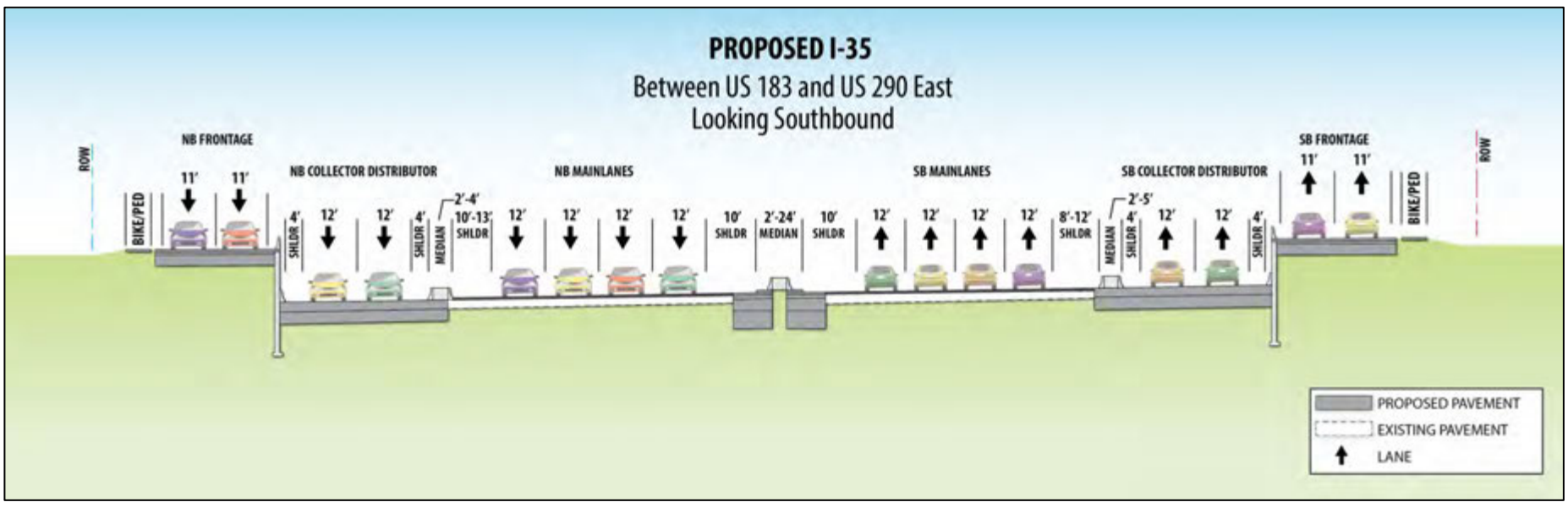
I-35 Existing Typical Section (Between Rundberg Lane and US 183)



I-35 Proposed Typical Section (Between Rundberg Lane and US 183)

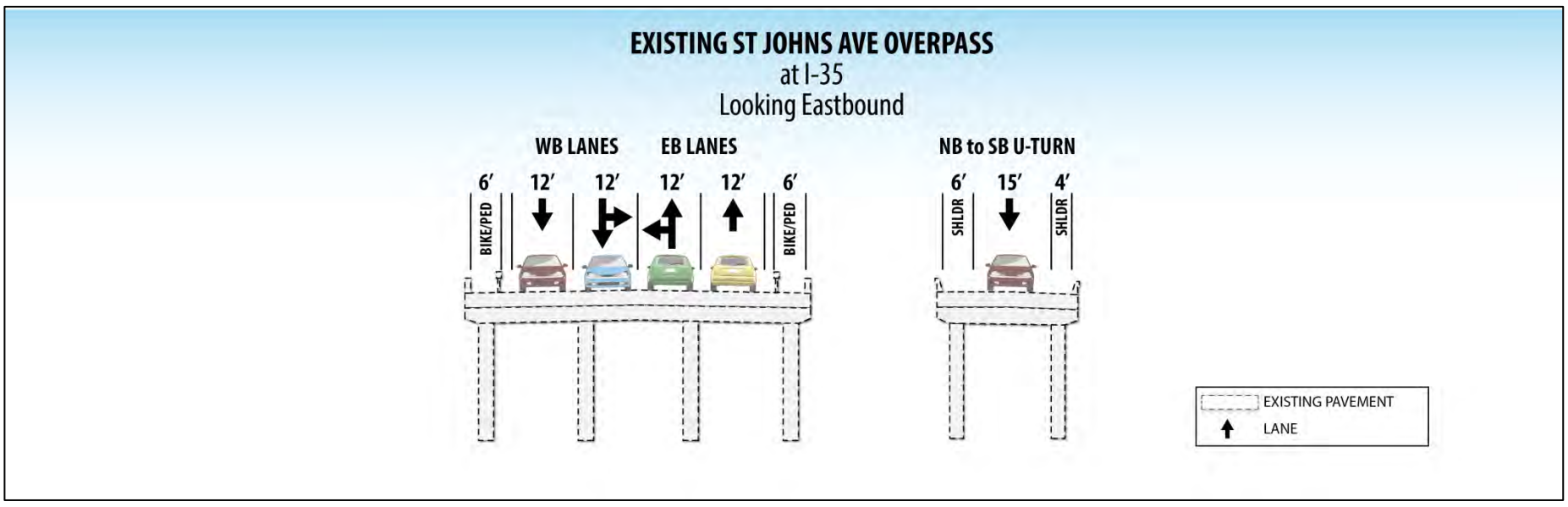


I-35 Existing Typical Section (Between US 183 and US 290E)

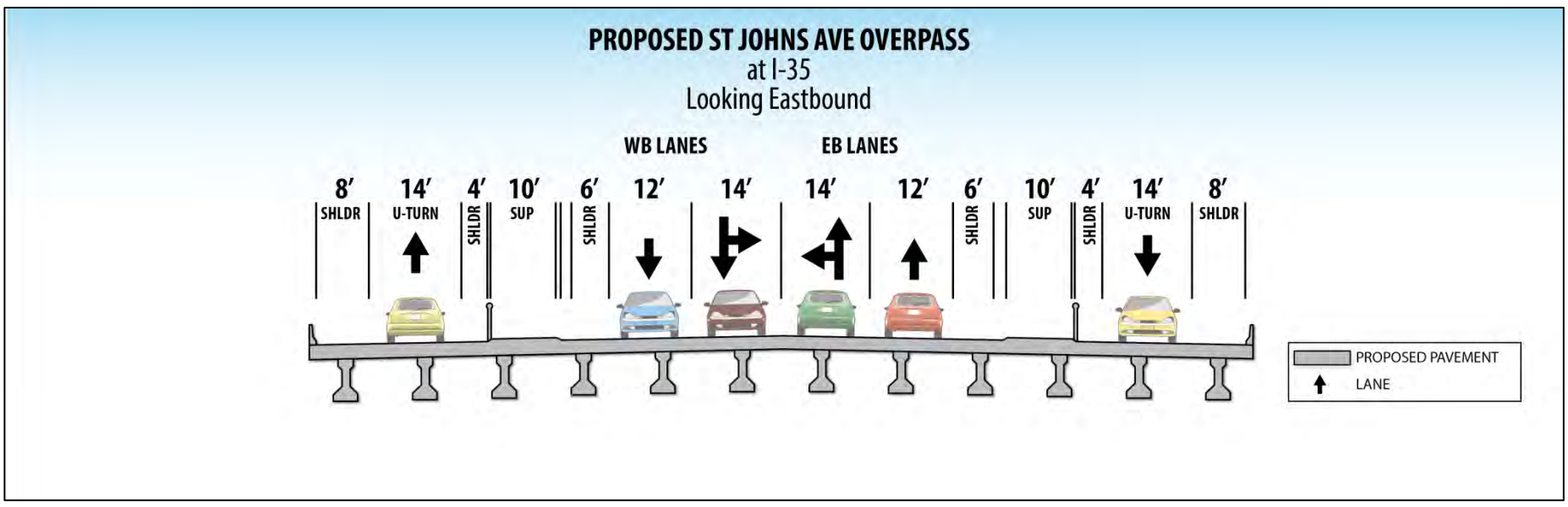


I-35 Proposed Typical Section (Between US 183 and US 290E)

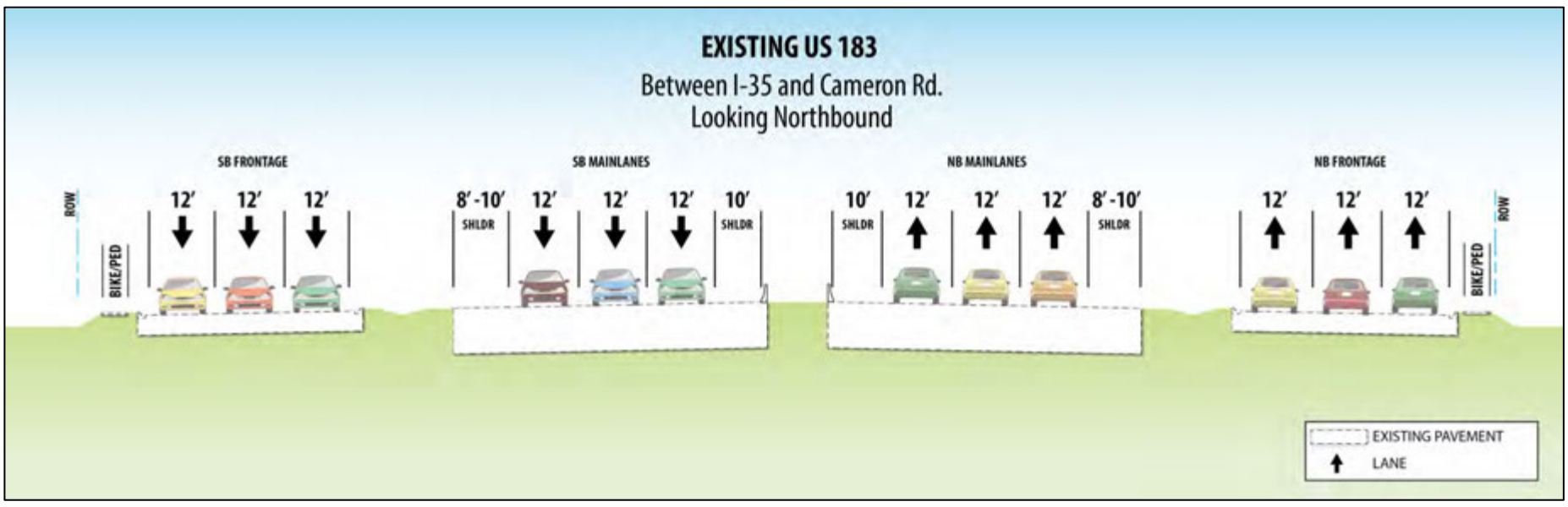
FIGURE 2: I-35 EXISTING AND PROPOSED TYPICAL SECTIONS



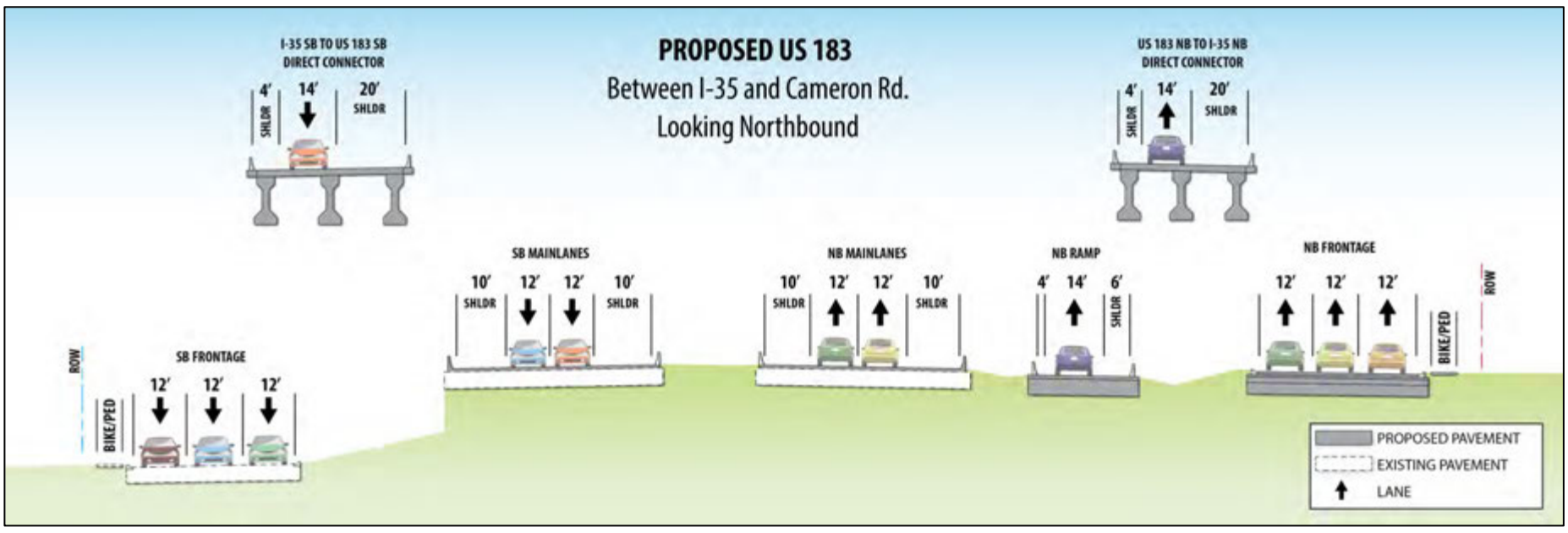
St. Johns Avenue Existing Typical Section



St. Johns Avenue Proposed Typical Section



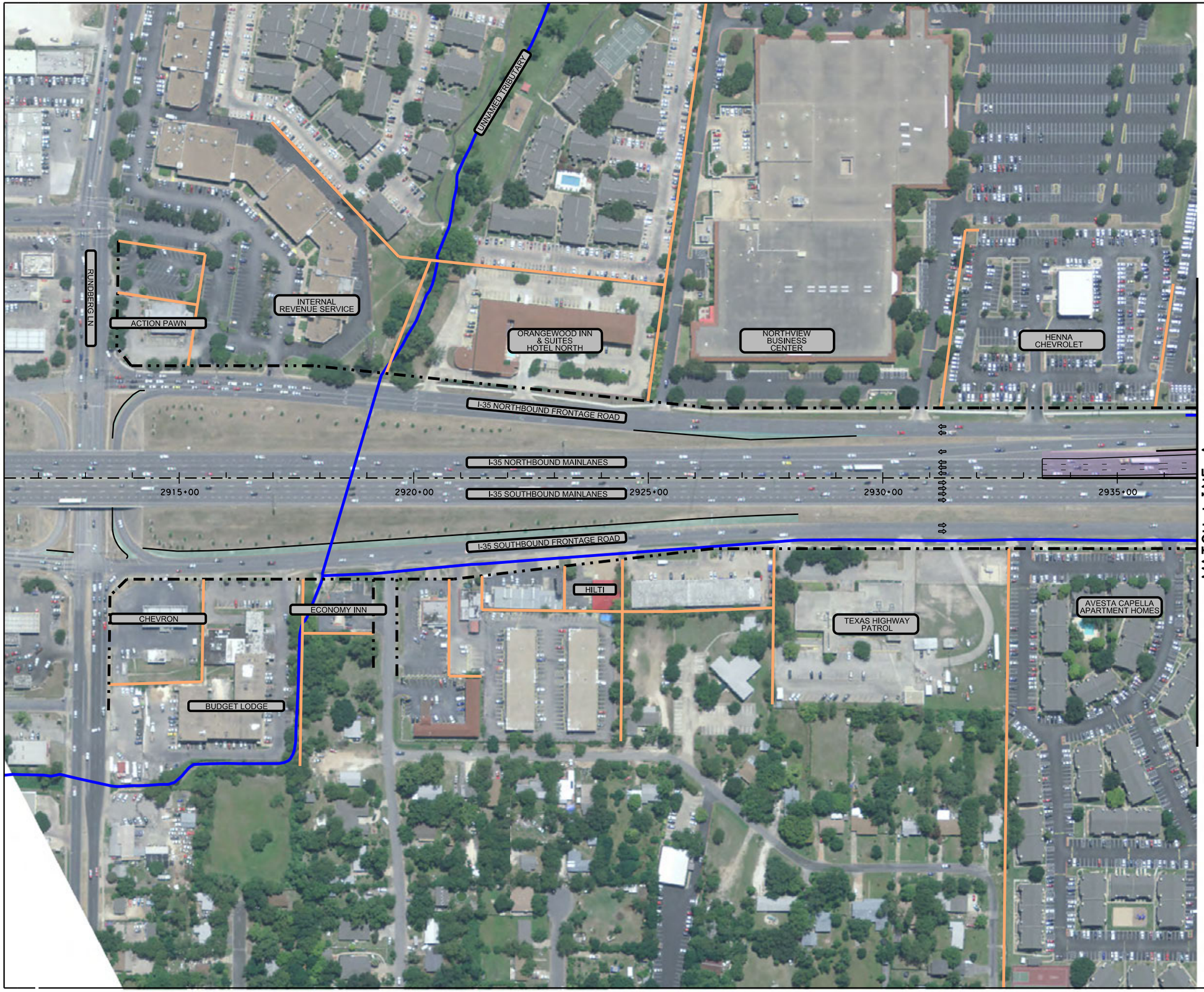
US 183 Existing Typical Section



US 183 Proposed Typical Section

Appendix B

Project Layout



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- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

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TRAVIS COUNTY, TEXAS

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PARK PLAZA DR

FUJIAN GRAND CHINA BUFFET

LUMBER LIQUIDATORS, INC

LITTLE WALNUT CREEK

HERMITAGE DR

VETERANS OF FOREIGN WARS

FENELON DR

I-35 NORTHBOUND FRONTAGE ROAD

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND MAINLANES

I-35 SOUTHBOUND FRONTAGE ROAD

2940+00

2945+00

2950+00

2955+00

2960+00

AVESTA SOLANO APARTMENT HOMES

HOLIDAY INN EXPRESS

BARWOOD PARK

CEDARS INTERNATIONAL ACADEMY

WOODLAND HEIGHTS APARTMENTS

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility 35 CAPITAL AREA

I-35 IMPROVEMENTS

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TRAVIS COUNTY, TEXAS

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LONE STAR RESTAURANT SUPPLY

EXTENDED STAY AMERICA

RUTHERFORD LN

SUNGARD AVAILABILITY SERVICES

NORWOOD PARK BLVD

TEXAS DEPARTMENT OF TRANSPORTATION

I-35 NORTHBOUND FRONTAGE ROAD

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND MAINLANES

2965+00

2975+00

2980+00

2985+00

I-35 SOUTHBOUND FRONTAGE ROAD

WOODLAND HEIGHTS APARTMENTS

AUSTIN SUITES

RED ROOF INN

E POWELL LN

SUPER 8 MOTEL

DISCOVERY AUTO SALES

E WONSLEY DR

AUSTIN RISING FAST MOTOR CARS

MOTEL 6

TOWNE OAKS APARTMENTS

UNIVERSITY INN

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1": 200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

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TRAVIS COUNTY, TEXAS

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MATCH LINE D

VACANT

NATIONAL WESTERN LIFE INSURANCE

DAYS INN HOTEL

VACANT

VICTORY CHRISTIAN CENTER

HAMPTON INN & SUITES

BUTTERMILK BRANCH CREEK

US 183 NORTH TO I-35 NORTH DIRECT CONNECTOR

I-35 SOUTH TO US 183 SOUTH DIRECT CONNECTOR

I-35 NORTHBOUND FRONTAGE ROAD

I-35 NORTH TO US 183 NORTH DIRECT CONNECTOR

I-35 NORTHBOUND OFF RAMP

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND ON RAMP

I-35 SOUTHBOUND MAINLANES

I-35 SOUTHBOUND FRONTAGE ROAD

UNIVERSITY INN

I-35 SOUTH TO US 183 NORTH DIRECT CONNECTOR

BUFFALO WILD WINGS

AUSTIN-PEEL & SON FUNERAL HOME

LA QUINTA INN & SUITES

US 183 NORTHBOUND MAINLANES

US 183 SOUTHBOUND MAINLANES

REPUBLIC OF TEXAS MUSEUM

NORTHROP GRUMMAN

VACANT

CITIZENS, INC

1025+00

1030+00

1035+00

1040+00

1045+00

2990+00

2995+00

3000+00

3005+00

3010+00

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

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TRAVIS COUNTY, TEXAS

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SPRING TERRACE APARTMENTS

BURGER KING

AUSTIN REGIONAL CLINIC

VACANT

CAMINO LA COSTA DRIVE

DRURY INN AND SUITES NORTH

CHILI'S

SUSHI JAPON

I-35 NORTHBOUND FRONTAGE ROAD

COLLECTOR DISTRIBUTOR

I-35 NORTH TO US 183 NORTH DIRECT CONNECTOR

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND MAINLANES

COLLECTOR DISTRIBUTOR

I-35 SOUTHBOUND FRONTAGE ROAD

3015+00

3020+00

3025+00

3030+00

3035+00

VACANT

CONOCO

EXXON

DENNY'S

MOTEL 6

AT&T

HUNTLAND DRIVE

CHOSUN GALBI

SHANGHAI CHINESE

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

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TRAVIS COUNTY, TEXAS

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CROWNE PLAZA
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LAVACA DR
DOUBLETREE HOTEL
I-35 NORTHBOUND FRONTAGE ROAD
I-35 NORTHBOUND MAINLANES
I-35 SOUTHBOUND MAINLANES
I-35 SOUTH TO US 290 EAST DIRECT CONNECTOR
I-35 SOUTHBOUND FRONTAGE ROAD
THE LINC
MIDDLE FISKVILLE RD
TIRADO STREET
BROOKS STREET
US 290E
US 290E TO I-35 SOUTH DIRECT CONNECTOR
I-35 NORTH TO US 290E DIRECT CONNECTOR
I-35 SOUTH TO US 290E DIRECT CONNECTOR
3040+00
3045+00
3050+00
3055+00
3060+00

MATCH LINE E

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:44 PM
Model Name: US 183
Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh10.dgn

SANTA MARIA VILLAGE APARTMENTS
AUSTIN PARKE APARTMENTS
PURNELL DR
GETHSEMANE LUTHERAN CHURCH
AUSTIN HUMANE SOCIETY
GEORGIAN DR
US 183 NORTHBOUND FRONTAGE ROAD
US 183 NORTHBOUND MAINLANES
US 183 SOUTHBOUND MAINLANES
US 183 SOUTHBOUND FRONTAGE ROAD
1075+00
1070+00
1065+00
1060+00
1055+00
GUADALUPE ST
BROWN ELEMENTARY
LORD'S CHURCH OF AUSTIN
NOVA RECOVERY CENTER IOP
EXECUTIVE OFFICE TERRACE
RED LOBSTER
NORTHCREST BLVD
WHOLESALE PARTS DIRECT
G4S SECURE SOLUTIONS USA
MATCH LINE F

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:55 PM

Model Name: US 183

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOCV60203-S-RD-EA-Exh11

MATCH LINE F

MATCH LINE G

MOTEL 6
TOWNE OAKS APARTMENTS
GESSNER DR
CITIZENS, INC.
US 183 NORTHBOUND FRONTAGE ROAD
US 183 NORTHBOUND MAINLANES
US 183 SOUTHBOUND MAINLANES
US 183 SOUTHBOUND FRONTAGE ROAD
UNIVERSITY INN
REPUBLIC OF TEXAS MUSEUM
I-35 SOUTH TO US 183 NORTH DIRECT CONNECTOR
I-35 SOUTHBOUND ON RAMP
I-35 NORTHBOUND OFF RAMP
TEXAS DEPARTMENT OF TRANSPORTATION
VACANT
US 183 NORTH TO I-35 NORTH DIRECT CONNECTOR
DAYS INN HOTEL
G4S SECURE SOLUTIONS USA
ALCOHOLIC BEVERAGE COMMISSION
CHEVY CHASE DR
NORTHROP GRUMMAN
AUSTIN-PEEL & SON FUNERAL HOME
VACANT
LA QUINTA INN & SUITES
BUFFALO WILD WINGS
I-35 SOUTHBOUND FRONTAGE ROAD
I-35 SOUTHBOUND MAINLANES
I-35 NORTHBOUND MAINLANES
I-35 NORTHBOUND FRONTAGE ROAD
I-35 NORTH TO US 183 NORTH DIRECT CONNECTOR
I-35 SOUTH TO US 183 SOUTH DIRECT CONNECTOR
SUTTERMILK BRANCH CREEK
HAMPTON INN & SUITES
1050+00
1045+00
1040+00
1035+00
1030+00
2995+00
2990+00
2985+00
2980+00

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility 35 CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:28:06 PM

Model Name: US 183

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh12.dgn

MATCH LINE G

MATCH LINE H

TEXAS DEPARTMENT OF TRANSPORTATION

GOODWILL

NATIONAL WESTERN LIFE INSURANCE

VACANT

FIRESTONE AUTO CARE

CLOCKTOWER DR

TACO BELL

McDONALD'S

NORWOOD PARK BLVD

US 183 NORTHBOUND FRONTAGE ROAD

US 183 NORTHBOUND MAINLANES

1025+00

1020+00

1015+00

1010+00

1005+00

US 183 SOUTHBOUND MAINLANES

US 183 SOUTHBOUND FRONTAGE ROAD

VICTORY CHRISTIAN CENTER

BENNETT AVE

CARVER AVE

BETHUNE AVE

PROVIDENCE AVE

MEADOR AVE

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:28:18 PM
Model Name: US 183
Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ..\EA DOC\60203-S-RD-EA-Exh13.dgn

MATCH LINE H

TEXAS HIGHER EDUCATION COORDINATING BOARD
KIDD ROOFING
LUBY'S
WENDY'S
CIRCLE K GAS STATION
CAMERON RD
US 183 NORTHBOUND FRONTAGE ROAD
US 183 NORTHBOUND MAINLANES
US 183 SOUTHBOUND MAINLANES
US 183 SOUTHBOUND FRONTAGE ROAD
1000+00
995+00
990+00
985+00
980+00
BLESSING AVE
WILDWOOD APARTMENTS
BUTTERMILK BRANCH

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility 35 CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

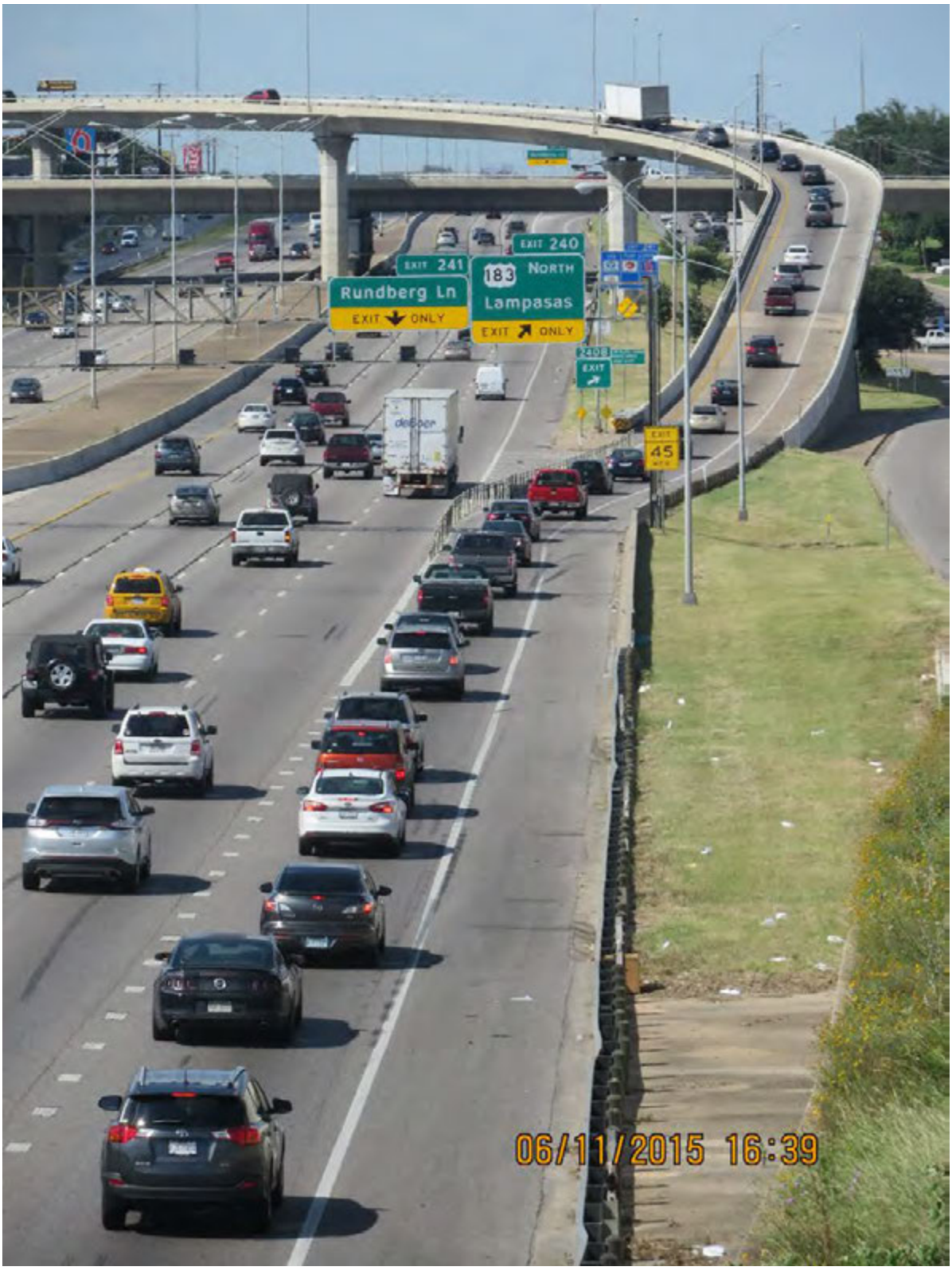
Appendix C

Photographs

Photograph 1: Congestion on I-35 NB Frontage Road at the I-35/US 183 interchange

Photograph 2: Exisiting roadway and drainage conditions
(I-35 SB Frontage Road north of the I-35/US 183 interchange)

Photograph 3: Congestion on I-35 during peak period
(I-35 between US 290 and St. Johns Avenue)



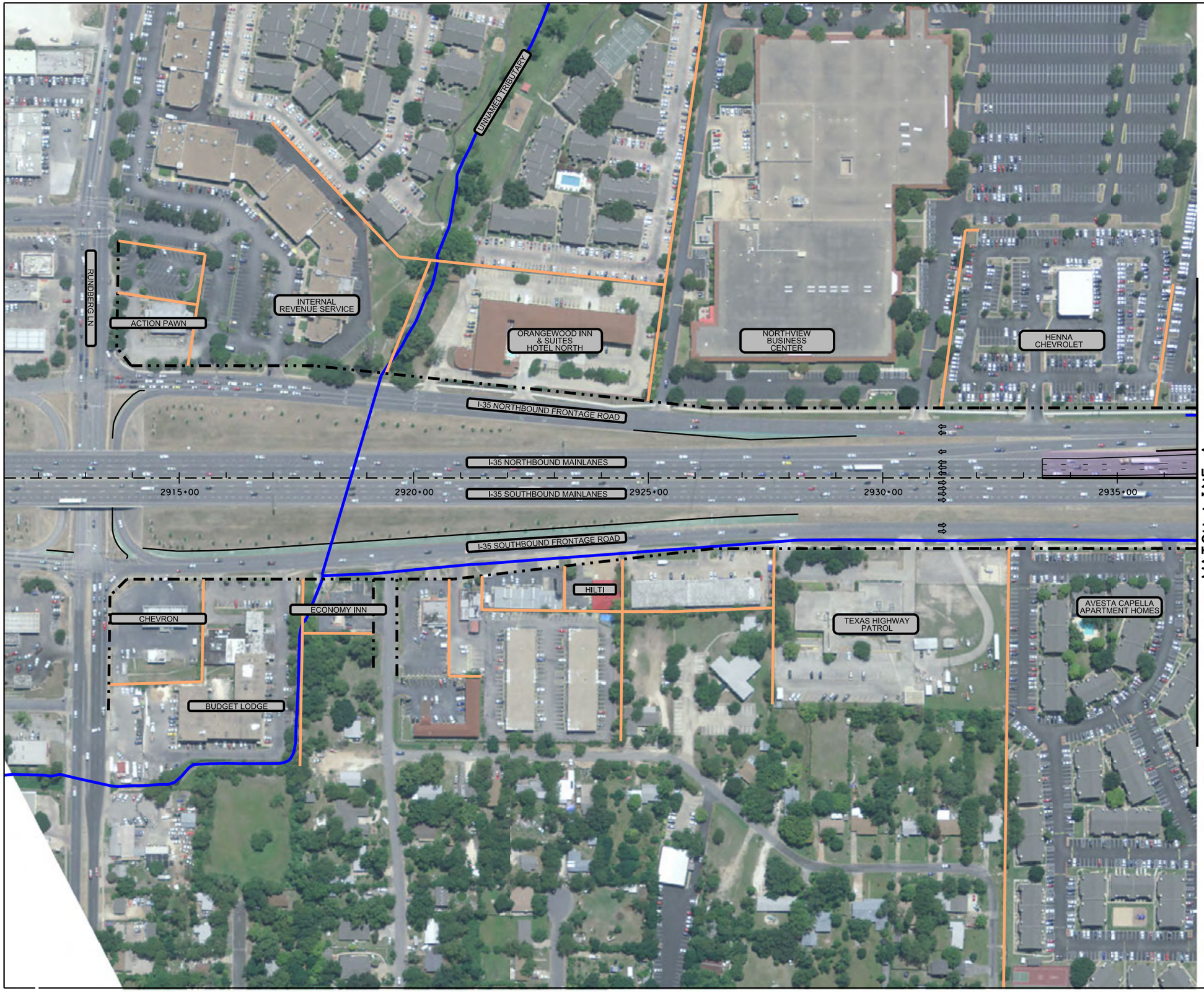
Photograph 4: Congestion on I-35 NB mainlanes due to steep grade of I-35 NB to US 183 NB DC

Photograph 5: St. Johns Avenue Bridge over I-35 mainlanes
(substandard interstate vertical clearance)

Appendix B

Project Plans

Project Layout



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Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh01.dgn

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:26:50 PM

Model Name: Default

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh02.dgn

MATCH LINE A

MATCH LINE B

HENNA CHEVROLET

PARK PLAZA DR

FUJIAN GRAND CHINA BUFFET

LUMBER LIQUIDATORS, INC

LITTLE WALNUT CREEK

HERMITAGE DR

VETERANS OF FOREIGN WARS

FENELON DR

I-35 NORTHBOUND FRONTAGE ROAD

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND MAINLANES

I-35 SOUTHBOUND FRONTAGE ROAD

2940+00

2945+00

2950+00

2955+00

2960+00

AVESTA SOLANO APARTMENT HOMES

HOLIDAY INN EXPRESS

BARWOOD PARK

CEDARS INTERNATIONAL ACADEMY

WOODLAND HEIGHTS APARTMENTS

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility 35 CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:01 PM

Model Name: Default

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh03.dgn

MATCH LINE B

MATCH LINE C

LONE STAR RESTAURANT SUPPLY

EXTENDED STAY AMERICA

RUTHERFORD LN

SUNGARD AVAILABILITY SERVICES

NORWOOD PARK BLVD

TEXAS DEPARTMENT OF TRANSPORTATION

I-35 NORTHBOUND FRONTAGE ROAD

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND MAINLANES

2965+00

2975+00

2980+00

2985+00

I-35 SOUTHBOUND FRONTAGE ROAD

WOODLAND HEIGHTS APARTMENTS

AUSTIN SUITES

RED ROOF INN

E POWELL LN

SUPER 8 MOTEL

DISCOVERY AUTO SALES

E WONSLEY DR

AUSTIN RISING FAST MOTOR CARS

MOTEL 6

TOWNE OAKS APARTMENTS

UNIVERSITY INN

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1": 200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:12 PM
Model Name: Default
Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh04.dgn

MATCH LINE C

MATCH LINE D

VACANT

NATIONAL WESTERN LIFE INSURANCE

DAYS INN HOTEL

VACANT

VICTORY CHRISTIAN CENTER

HAMPTON INN & SUITES

BUTTERMILK BRANCH CREEK

US 183 NORTH TO I-35 NORTH DIRECT CONNECTOR

I-35 SOUTH TO US 183 SOUTH DIRECT CONNECTOR

I-35 NORTHBOUND FRONTAGE ROAD

I-35 NORTH TO US 183 NORTH DIRECT CONNECTOR

I-35 NORTHBOUND OFF RAMP

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND ON RAMP

I-35 SOUTHBOUND MAINLANES

I-35 SOUTHBOUND FRONTAGE ROAD

UNIVERSITY INN

I-35 SOUTH TO US 183 NORTH DIRECT CONNECTOR

BUFFALO WILD WINGS

AUSTIN-PEEL & SON FUNERAL HOME

LA QUINTA INN & SUITES

US 183 NORTHBOUND MAINLANES

US 183 SOUTHBOUND MAINLANES

REPUBLIC OF TEXAS MUSEUM

NORTHROP GRUMMAN

VACANT

CITIZENS, INC

1025+00

1030+00

1035+00

1040+00

1045+00

2990+00

2995+00

3000+00

3005+00

3010+00

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:23 PM
Model Name: Default
Pen Table:TexasTwoStep+pentable+co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh05.dgn

MATCH LINE D

MATCH LINE E

ST. JOHNS AVENUE

SPRING TERRACE APARTMENTS

BURGER KING

AUSTIN REGIONAL CLINIC

VACANT

CAMINO LA COSTA DRIVE

DRURY INN AND SUITES NORTH

CHILI'S

SUSHI JAPON

I-35 NORTHBOUND FRONTAGE ROAD

COLLECTOR DISTRIBUTOR

I-35 NORTH TO US 183 NORTH DIRECT CONNECTOR

I-35 NORTHBOUND MAINLANES

I-35 SOUTHBOUND MAINLANES

COLLECTOR DISTRIBUTOR

I-35 SOUTHBOUND FRONTAGE ROAD

3015+00

3020+00

3025+00

3030+00

3035+00

VACANT

CONOCO

EXXON

DENNY'S

MOTEL 6

AT&T

HUNTLAND DRIVE

CHOSUN GALBI

SHANGHAI CHINESE

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:33 PM

Model Name: Default

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh06.dgn

CROWNE PLAZA
PAPPADEUX SEAFOOD KITCHEN
LAVACA DR
DOUBLETREE HOTEL
I-35 NORTHBOUND FRONTAGE ROAD
I-35 NORTHBOUND MAINLANES
I-35 SOUTHBOUND MAINLANES
I-35 SOUTH TO US 290 EAST DIRECT CONNECTOR
I-35 SOUTHBOUND FRONTAGE ROAD
THE LINC
MIDDLE FISKVILLE RD
TIRADO STREET
BROOKS STREET
US 290E
US 290E TO I-35 SOUTH DIRECT CONNECTOR
I-35 NORTH TO US 290E DIRECT CONNECTOR
I-35 SOUTH TO US 290E DIRECT CONNECTOR
3040+00
3045+00
3050+00
3055+00
3060+00

MATCH LINE E

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

I-35 IMPROVEMENTS

FROM: RUNDBERG LN.
TO: US 290 EAST
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:44 PM
Model Name: US 183
Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh10.dgn

SANTA MARIA VILLAGE APARTMENTS
AUSTIN PARKE APARTMENTS
PURNELL DR
GETHSEMANE LUTHERAN CHURCH
AUSTIN HUMANE SOCIETY
GEORGIAN DR
US 183 NORTHBOUND FRONTAGE ROAD
US 183 NORTHBOUND MAINLANES
US 183 SOUTHBOUND MAINLANES
US 183 SOUTHBOUND FRONTAGE ROAD
1075+00
1070+00
1065+00
1060+00
1055+00
GUADALUPE ST
BROWN ELEMENTARY
LORD'S CHURCH OF AUSTIN
NOVA RECOVERY CENTER IOP
EXECUTIVE OFFICE TERRACE
RED LOBSTER
NORTHCREST BLVD
WHOLESALE PARTS DIRECT
G4S SECURE SOLUTIONS USA
MATCH LINE F

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:27:55 PM

Model Name: US 183

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOCV60203-S-RD-EA-Exh11

MATCH LINE F

MATCH LINE G

MOTEL 6
TOWNE OAKS APARTMENTS
GESSNER DR
CITIZENS, INC.
US 183 NORTHBOUND FRONTAGE ROAD
US 183 NORTHBOUND MAINLANES
US 183 SOUTHBOUND MAINLANES
US 183 SOUTHBOUND FRONTAGE ROAD
UNIVERSITY INN
REPUBLIC OF TEXAS MUSEUM
I-35 SOUTH TO US 183 NORTH DIRECT CONNECTOR
I-35 SOUTHBOUND ON RAMP
I-35 NORTHBOUND OFF RAMP
TEXAS DEPARTMENT OF TRANSPORTATION
VACANT
US 183 NORTH TO I-35 NORTH DIRECT CONNECTOR
DAYS INN HOTEL
G4S SECURE SOLUTIONS USA
ALCOHOLIC BEVERAGE COMMISSION
CHEVY CHASE DR
NORTHROP GRUMMAN
AUSTIN-PEEL & SON FUNERAL HOME
VACANT
LA QUINTA INN & SUITES
BUFFALO WILD WINGS
I-35 SOUTHBOUND FRONTAGE ROAD
I-35 SOUTHBOUND MAINLANES
I-35 NORTHBOUND MAINLANES
I-35 NORTHBOUND FRONTAGE ROAD
I-35 NORTH TO US 183 NORTH DIRECT CONNECTOR
I-35 SOUTH TO US 183 SOUTH DIRECT CONNECTOR
SUTTERMILK BRANCH CREEK
HAMPTON INN & SUITES
1050+00
1045+00
1040+00
1035+00
1030+00
2995+00
2990+00
2985+00
2980+00

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility 35 CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:28:06 PM

Model Name: US 183

Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ...\EA DOC\60203-S-RD-EA-Exh12.dgn

MATCH LINE G

MATCH LINE H

TEXAS DEPARTMENT OF TRANSPORTATION

GOODWILL

NATIONAL WESTERN LIFE INSURANCE

VACANT

FIRESTONE AUTO CARE

CLOCKTOWER DR

TACO BELL

McDONALD'S

NORWOOD PARK BLVD

US 183 NORTHBOUND FRONTAGE ROAD

US 183 NORTHBOUND MAINLANES

1025+00

1020+00

1015+00

1010+00

1005+00

US 183 SOUTHBOUND MAINLANES

US 183 SOUTHBOUND FRONTAGE ROAD

VICTORY CHRISTIAN CENTER

BENNETT AVE

CARVER AVE

BETHUNE AVE

PROVIDENCE AVE

MEADOR AVE

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

mobility CAPITAL AREA

US 183 IMPROVEMENTS

FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Scale: 1:200
Plotted on: 7/19/2016 4:28:18 PM
Model Name: US 183
Pen Table:TexasTwoStep*pentable*co.tbl
Design Filename: ..\EA DOC\60203-S-RD-EA-Exh13.dgn

MATCH LINE H

TEXAS HIGHER EDUCATION COORDINATING BOARD
KIDD ROOFING
LUBY'S
WENDY'S
CIRCLE K GAS STATION
CAMERON RD
US 183 NORTHBOUND FRONTAGE ROAD
US 183 NORTHBOUND MAINLANES
US 183 SOUTHBOUND MAINLANES
US 183 SOUTHBOUND FRONTAGE ROAD
1000+00
995+00
990+00
985+00
980+00
BLESSING AVE
WILDWOOD APARTMENTS
BUTTERMILK BRANCH

LEGEND

- EXISTING ROW
- PROPERTY LINE
- PROPOSED ROW
- PROPOSED LANE
- EXISTING LANE
- STREAM
- PROPOSED MAINLANES
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMP
- PROPOSED DIRECT CONNECTOR
- PROPOSED DRIVEWAY (EXACT LOCATION TBD)
- PROPOSED ROADWAY UNDER BRIDGE
- REMOVAL

PRELIMINARY
SUBJECT TO CHANGE
7/19/2016

SCALE: PLAN 1":200'

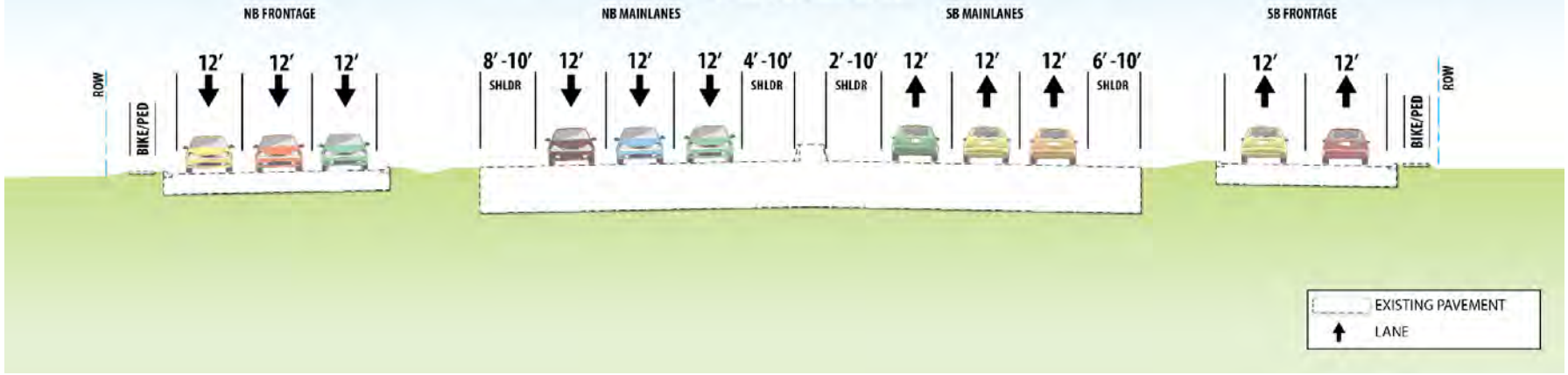
mobility 35 CAPITAL AREA

US 183 IMPROVEMENTS

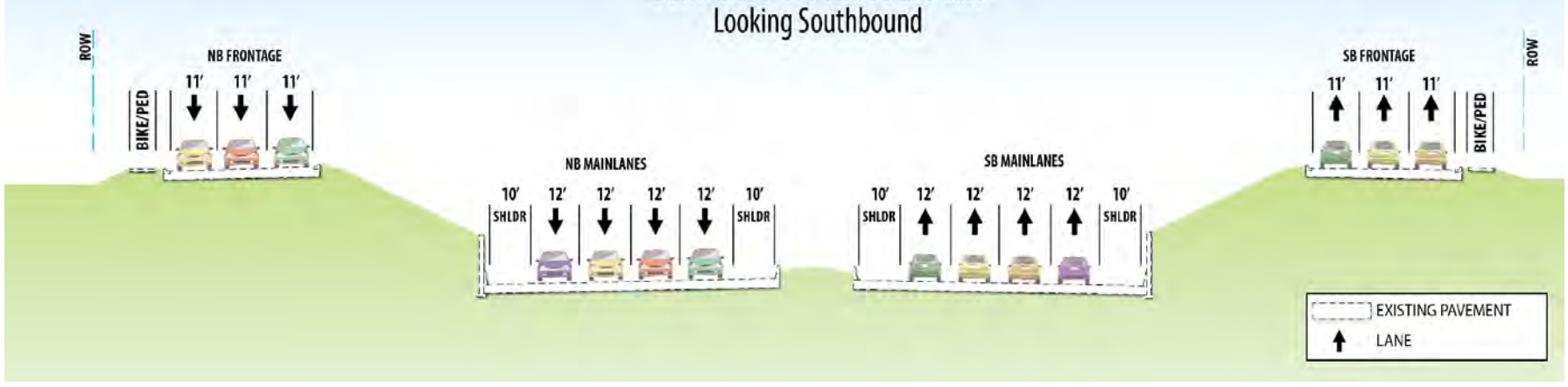
FROM: GEORGIAN DR.
TO: CAMERON RD.
TRAVIS COUNTY, TEXAS

Existing Typical Sections

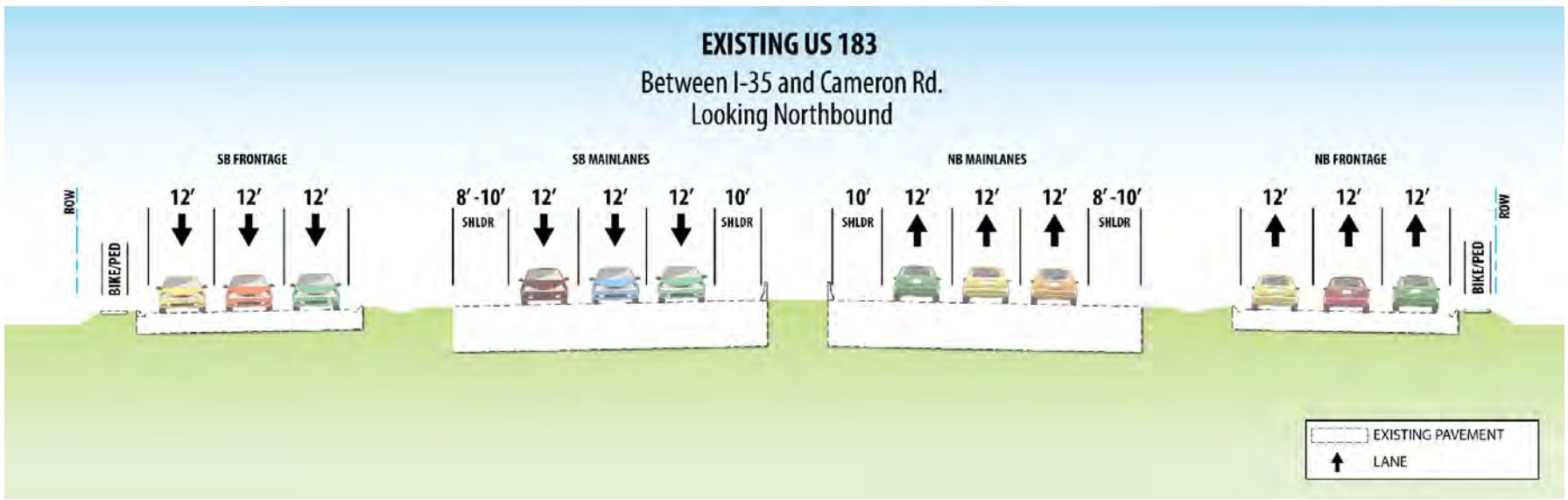
EXISTING I-35
Between Rundberg Ln. and US 183
Looking Southbound



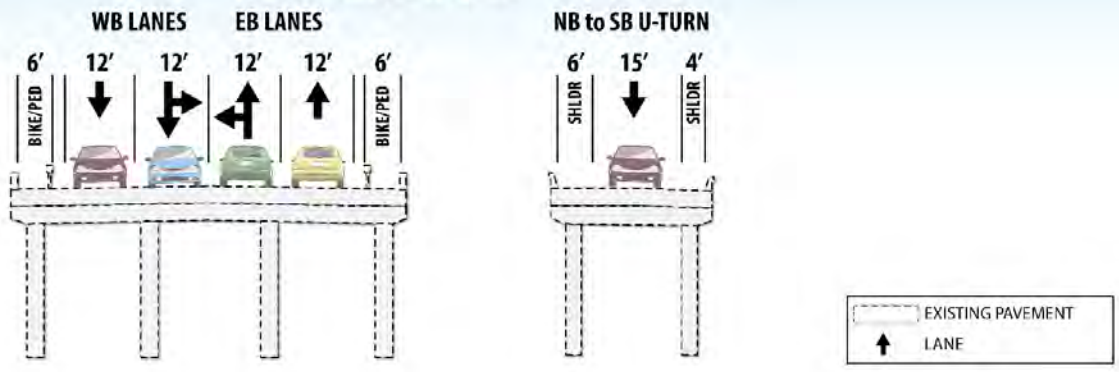
EXISTING I-35
Between US 183 and US 290 East
Looking Southbound



EXISTING US 183
Between I-35 and Cameron Rd.
Looking Northbound



EXISTING ST JOHNS AVE OVERPASS
at I-35
Looking Eastbound



mobility 35 CAPITAL AREA

Existing Typical Sections

I-35 Improvements
from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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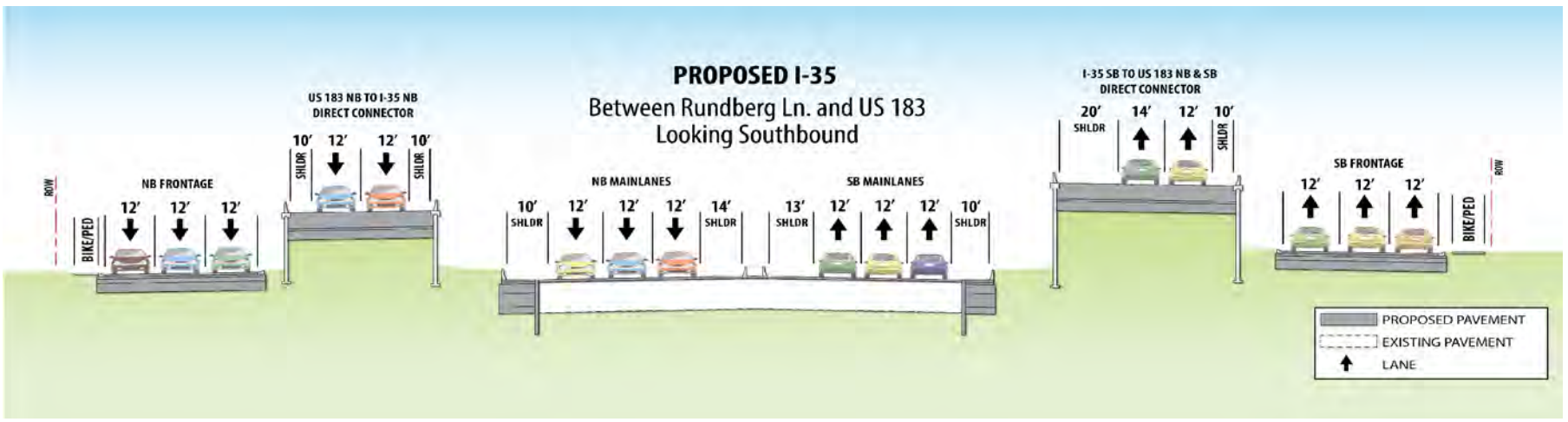
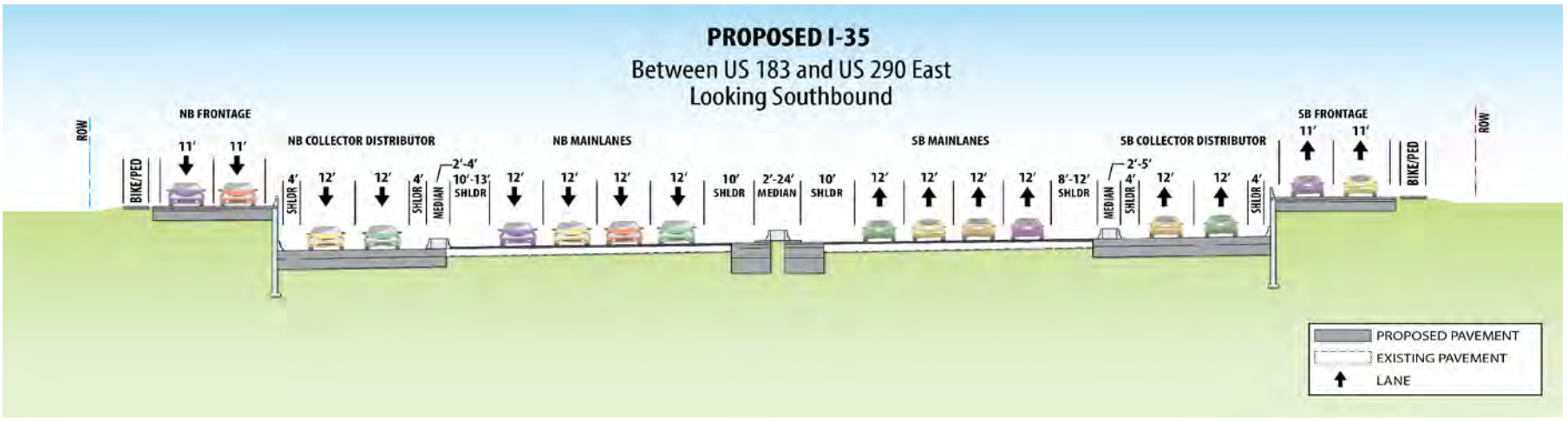
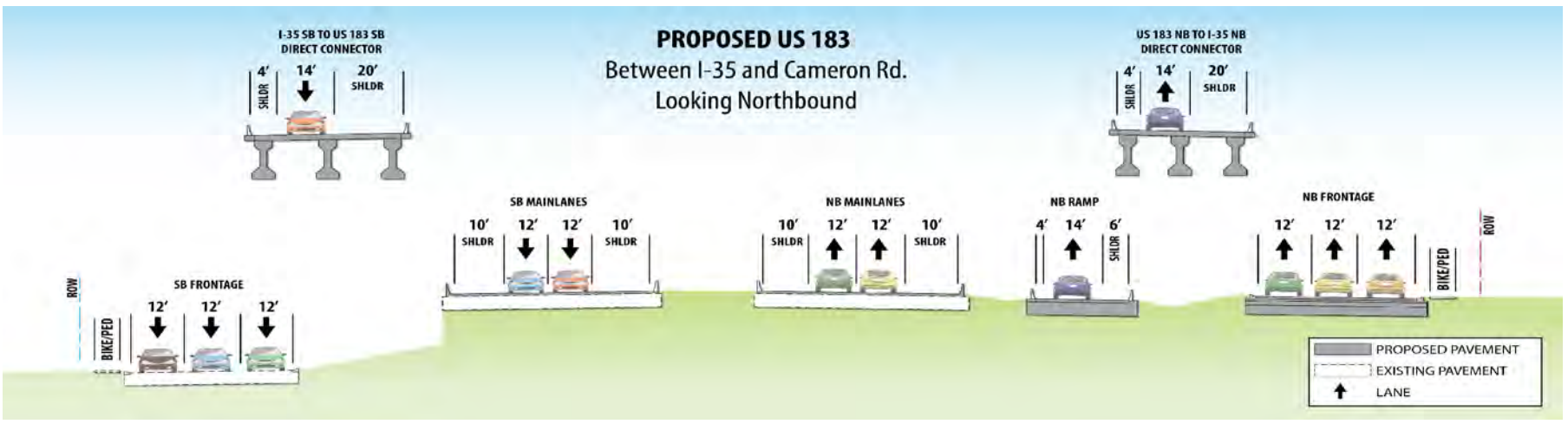
Proposed Typical Sections







mobility 35 CAPITAL AREA

Proposed Typical Sections

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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Appendix C

Project-Related Material

Applicable Pages of the Transportation Improvement Program and Regional Transportation Plan

FY 2015-2018 Transportation Improvement Program (TIP)

Appendix C

Projects in this list are anticipated to be constructed after the current TIP timeframe, but are currently undergoing environmental evaluation.

District	Project Sponsor	Project Name	Project County	Project City	CSJ Number (if available)	Limits		Project Description	Revision Date	Project History (if applicable)
						From	To			
Austin	TxDOT	IH 35	Williamson, Travis, Hays	various	unknown	SH 130	Posey Road	study for various operational improvements on mainlanes and frontage roads, plus potential future transportation corridor (added capacity)		
Austin	TxDOT	US 183 N	Williamson, Travis	Austin	0151-05-100	Lp 1	SH 45/RM620	managed lane study		
Austin	TxDOT	Loop 1 S	Travis	Austin	3136-01-015	Cesar Chavez	Slaughter Ln	ROW acquisition and construction of managed lanes		
Austin	TxDOT	FM 2304	Travis	Austin	2689-01-023	RAVENSCROFT	FM 1626	RECONSTRUCT 5 LANE URBAN ROADWAY		
Austin	TxDOT	RM 1431	Williamson	Cedar Park	1378-02-038	COTTON WOOD CREEK TR IN CEDAR PARK	FM 734 (RONALD REAGAN)	WIDEN TO 6-LN DIVIDED ROADWAY		

Traffic Data
(I-35 from Rundberg Lane to US 290E)

Grouped Projects (continued)

ID	Sponsor	Cosponsor	County	Project	Limits/Location	Description	Let Year	YOE Cost (In Millions)
	TxDOT		Travis	IH-35	South of US 290 - South of Airport Blvd	Operational improvements, ramps and collector distributor road	2018	$65.0
	TxDOT		Travis	IH-35	US 290 - Rundberg Ln	Operational improvements, construction collector distributor road	2018	$105.0

Appendix D

Air Quality Technical Report

Air Quality Study
Interstate 35
From Rundberg Lane to US 290 East
Travis County, Texas

CSJ: 0015-13-382, 0015-13-387

October 2015

Table of Contents

List of Acronyms

CAMPO	Capital Area Metropolitan Planning Organization
CO	carbon monoxide
DC	Direct connector
EPA	U.S. Environmental Protection Agency
I-35	Interstate Highway 35
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NB	northbound
ROW	right-of-way
RTP	Regional Transportation Plan
SB	southbound
TAQA	Traffic Air Quality Analysis
TERP	Texas Emissions Reduction Plan
TIP	Transportation Improvement Plan
TxDOT	Texas Department of Transportation
US 290	U.S. Highway 290

1. Project Overview

The Texas Department of Transportation (TxDOT) proposes improvements along 2.35 miles of the existing Interstate 35 (I-35) between Rundberg Lane and U.S. Highway 290 East (US 290E) and along 1.6 miles of US 183 between Georgian Drive and Cameron Road. The detailed project description is available in the Project Description technical report[1].

The proposed improvements along I-35 include:

- providing three direct connectors (DC) at the I-35/US 183 interchange in the following locations:
  - I-35 southbound (SB) to US 183 SB
  - US 183 northbound (NB) to I-35 NB
  - I-35 SB to US 183 NB
- adding dedicated lanes to the I-35 frontage road to bypass the St. Johns Avenue signalized intersection
- replacing the existing St. Johns Avenue bridge over I-35 to provide the required vertical clearance
- providing frontage road U-turns for the NB and SB directions at St. Johns Avenue
- modifying a segment of the existing I-35 NB to US 183 NB DC
- providing a bicycle and pedestrian facility along the frontage roads
- realigning the I-35 frontage roads to accommodate the additional space for the direct connectors and the bypass
- severing access to Brooks Street from the I-35 SB frontage road to eliminate weaving movements from the I-35 SB frontage road to the US 290E WB frontage road and adding a right-turn lane to facilitate the turning movement
- mill and overlay approximately 2.35 miles of existing I-35 mainlanes pavement between Rundberg Lane and US 290E
- widening the NB to SB U-turn and adding lane capacity for the SB frontage road at the I-35/ Rundberg Lane intersection

The proposed improvements along US 183 include:

- realigning a portion of the US 183 NB frontage road to accommodate for vertical clearances and bridge columns for the DCs overhead

[1] Texas Department of Transportation. 2015. Project Description Interstate 35 from Rundberg Lane to US 290 East Travis County, Texas CSJ: 0015-13-382, 0015-13-387.

- mill and overlay approximately 1.6 miles of US 183 mainlanes between Georgian Drive and Cameron Road

The proposed improvements would require approximately 7 acres of new right-of-way (ROW).

2. Project Consistent with Transportation Plans and Funding

The proposed project is consistent with Capital Area Metropolitan Planning Organization's (CAMPO) 2035 Regional Transportation Plan (RTP) and the 2015–2018 Transportation Improvement Plan (TIP). The project is located in Travis County, which is in an area in attainment or unclassifiable for all National Ambient Air Quality Standards (NAAQS); therefore, the transportation conformity rule requirements do not apply.

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 carbon monoxide analysis is not required.

4. Congestion Management Process

This project is not adding single occupancy vehicle capacity to an existing facility or increasing vehicle miles travelled on that facility. In addition, the project is not in a nonattainment area for ozone or carbon monoxide (CO); therefore, a Congestion Management Process analysis is not required.

5. Mobile Source Air Toxic Analysis

The purpose of this project is to increase efficiency and mobility along Interstate 35 (I-35) by constructing improvements including collector-distributor lanes, shoulders, and bicycle and pedestrian accommodations. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxics (MSAT) concerns. This project will not result in changes in traffic volumes, vehicle mix, basic project location or any other factor that would cause an increase in MSAT impacts of the project from that of the No-Build Alternative.

Moreover, U.S. Environmental Protection Agency (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 MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050, while vehicle-miles of travel are projected to increase by over 100 percent. This will

both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

6. Indirect and Cumulative Air Quality Impacts

The project will not result in any meaningful changes in traffic volumes, vehicle mix, location of existing roadways, or any other factor that would cause an increase in emissions impacts relative to the No-Build Alternative. Therefore, the project will not result in actions that could possibly impact air quality. As such, TxDOT has determined that this project would generate minimal indirect and cumulative impacts on air quality. Consequently, an Indirect and Cumulative Impacts analysis for air quality is not required for this project.

7. Construction and Post-Construction Emissions

During the construction phase of this project, temporary increases in air pollutant emissions may occur from construction activities. The primary construction-related emissions are particulate matter (fugitive dust) from site preparation. These emissions are temporary in nature (only occurring during actual construction). However, the potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures such as covering or treating disturbed areas with dust suppression techniques, wetting exposed surfaces (staging areas, soil piles, graded areas and unpaved access roads), covering loaded trucks, limiting vehicle speeds on unpaved areas, minimizing and removing dirt track-out on roadways and other dust abatement controls, as appropriate. Fugitive dust control measures are highly effective, for example, covering a storage pile when a wind event is declared has a particulate matter control efficiency of 90 percent.

The construction activity phase of this project may generate a temporary increase in MSAT emissions from construction equipment and related vehicles (such as delivery and vendor trucks). The primary construction-generated MSAT emissions are diesel particulate matter from diesel-powered construction equipment and vehicles during the site preparation phase of construction. The Texas Emissions Reduction Plan (TERP)[2] includes incentive programs to encourage the development of multi-pollutant approaches to ensure that the air in Texas is both safe to breathe and meets minimum federal standards. TxDOT encourages construction contractors to utilize this program to the fullest extent possible to minimize emissions from diesel-powered vehicles and equipment.

However, considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.

[2] Information about the TERP can be found at http://www.tceq.state.tx.us/implementation/air/terp/

8. Summary of Findings

As shown in the air quality impact analysis provided within this technical study, the proposed improvements are consistent with CAMPO's 2035 RTP and the 2015–2018 TIP. Transportation conformity rule requirements would not apply to the proposed improvements because the project is located in an area designated attainment or unclassifiable for all NAAQS. A detailed CO analysis is not required because the project area is in attainment for carbon monoxide and is not adding single occupancy vehicle capacity to an existing facility or increasing vehicle miles travelled on that facility. In addition, a Congestion Management Process analysis is not required.

This project has been determined to generate minimal operational air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. In addition, the project will not result in actions that could possibly result in a substantial adverse air quality impact. As such, TxDOT has determined that this project would generate minimal indirect and cumulative impacts on air quality.

During the construction phase of this project, temporary increases in air pollutant emissions may occur from construction activities. The primary construction-related emissions are particulate matter (fugitive dust) from site preparation. These emissions are temporary in nature (only occurring during actual construction). The construction activity phase of this project may generate a temporary increase in MSAT emissions from construction equipment and related vehicles (such as delivery and vendor trucks). The primary construction-generated MSAT emissions are diesel particulate matter from diesel-powered construction equipment and vehicles during the site preparation phase of construction. However, considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.

Appendix E

Community Impact Technical Report

Community Impact Technical Report Interstate 35 From Rundberg Lane to US 290 East Travis County, Texas

CSJ: 0015-13-382, 0015-13-387

October 2015

Table of Contents

List of Acronyms

ACS	American Community Survey
AISD	Austin Independent School District
BG	Block Group
CAMPO	Capital Area Metropolitan Planning Organization
CEQ	Council on Environmental Quality
CT	Census Tract
dB(A)	A-weighted decibels
DC	direct connector
DOT	U.S. Department of Transportation
EJ	environmental justice
EO	Executive Order
FHWA	Federal Highway Administration
FR	*Federal Register*
GIS	Geographic Information System
HHS	U.S. Department of Health and Human Services
I-35	Interstate Highway 35
LEP	Limited English Proficiency
MSA	metropolitan statistical area
NB	northbound
NEPA	National Environmental Policy Act
ROW	right-of-way
SB	southbound
SUP	shared-use path
TWC	Texas Workforce Commission
TxDOT	Texas Department of Transportation
US 290 E	U.S. Highway 290 East
USDOT	U.S. Department of Transportation
WB	westbound

1. Project Overview

The proposed project is located within the Austin city limits north of downtown in Travis County. The Texas Department of Transportation (TxDOT) proposes improvements along 2.35 miles of the existing Interstate 35 (I-35) between Rundberg Lane and U.S. Highway 290 East (US 290E) and along 1.6 miles of US 183 between Georgian Drive and Cameron Road. The detailed project description is available in the Project Description technical report[1].

The proposed improvements along I-35 include:

- providing three direct connectors (DCs) at the I-35/US 183 interchange in the following locations:
  - I-35 southbound (SB) to US 183 SB
  - US 183 northbound (NB) to I-35 NB
  - I-35 SB to US 183 NB
- adding dedicated lanes to the I-35 frontage road to bypass the St. Johns Avenue signalized intersection
- replacing the existing St. Johns Avenue bridge over I-35 to provide the required vertical clearance
- providing frontage road U-turns for the NB and SB directions at St. Johns Avenue
- modifying a segment of the existing I-35 NB to US 183 NB DC
- providing a bicycle and pedestrian facility along the frontage roads
- realigning the I-35 frontage roads to accommodate the additional space for the DCs and the bypass
- severing access to Brooks Street from the I-35 SB frontage road to eliminate weaving movements from the I-35 SB frontage road to the US 290E westbound (WB) frontage road and adding a right-turn lane to facilitate the turning movement
- mill and overlay approximately 2.35 miles of existing I-35 mainlanes pavement between Rundberg Lane and US 290E
- widening the NB to SB U-turn and adding lane capacity for the SB frontage road at the I-35/ Rundberg Lane intersection

The proposed improvements along US 183 include:

- realigning a portion of the US 183 NB frontage road to accommodate for vertical clearances and bridge columns for the DCs overhead

[1] Texas Department of Transportation. 2015. Project Description Interstate 35 from Rundberg Lane to US 290 East Travis County, Texas CSJ: 0015-13-382, 0015-13-387.

- mill and overlay approximately 1.6 miles of US 183 mainlanes between Georgian Drive and Cameron Road

2. Impact Causing Activities

2.1 Right-of-Way Needs

Approximately 7.0 acres of new right-of-way (ROW) would be needed for the proposed project. The additional ROW is necessary to accommodate the changes being implemented to the I-35/US 183 interchange and accommodate improvements to the St. Johns interchange along I-35.

2.2 Displacements

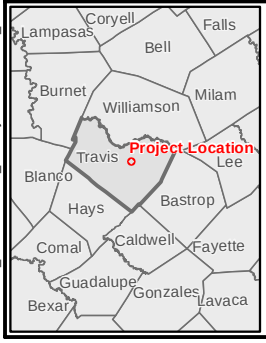
The proposed project would require ROW acquisitions that would result in displacements at five locations along the I-35 SB and NB frontage roads (north of US 183). The displacements would include Discovery Auto Sales, Lone Star Restaurant Supply store, Days Inn Hotel, University Inn Hotel and Towne Oaks Apartments (Figure 1). No community facilities would be displaced; however, a museum would be impacted along the US 183 NB frontage road.

2.3 Access Changes

The proposed project would provide DCs between I-35 SB to US 183 SB, US 183 NB to I-35 NB, and I-35 SB to US 183 NB. If constructed, vehicles travelling SB on I-35 would have a direct connection to US 183 SB. Currently vehicles must exit, turn left at a signalized intersection, travel through another signalized intersection, and merge onto the US 183 mainlanes from the US 183 SB frontage road. Vehicles travelling NB on US183 to I-35 NB would have a direct connection to I-35 NB, where currently they must exit on to the US 183 NB frontage road and turn right at a signalized intersection to access the I-35 NB frontage road and then merge onto the I-35 NB mainlanes. Vehicles travelling SB on I-35 would have a direct connection to US 183 NB, where currently they must exit onto the I-35 frontage road, turn right through a signalized intersection on to the US 183 NB frontage road, travel through another signalized intersection and merge from the US 183 NB frontage road onto the US 183 mainlanes.

Also, the proposed project would include:

- adding NB and SB collector-distributor lanes to the I-35 frontage road to bypass the St. Johns Avenue intersection,
- replacing the existing St. Johns Avenue bridge over I-35 to provide two lanes in each direction with a center-turn lane as well as frontage road U-turn bridges in each direction,
- modifying the existing I-35 NB to US 183 NB DC,
- reducing the right-turn lane radius from the US 290E westbound (WB) frontage road to I-35 NB frontage road,



Business Displacement
Residential Displacement
Existing ROW
Proposed ROW
Parcel Boundary

0 100 200
Feet

mobility 35 CAPITAL AREA

Figure 1
Displacements

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJ : 0015-13-382, 0015-13-387

Sheet 1 of 2

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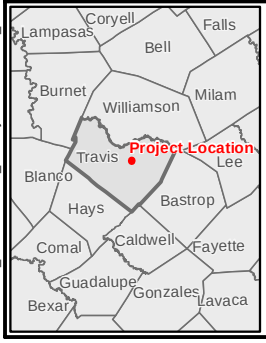

Business Displacement
Residential Displacement
Existing ROW
Proposed ROW
Parcel Boundary

0 100 200
Feet

mobility 35 CAPITAL AREA

Figure 1
Displacements

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJ : 0015-13-382, 0015-13-387

Sheet 2 of 2

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- severing access to Brooks Street from the I-35 SB frontage road to reduce weaving movements between the I-35 SB exit ramp and the US 290E WB frontage road, and
- providing bicycle and pedestrian facilities along the frontage roads.

Overall, permanent access along the frontage roads would not be changed to the area community. While alterations in access are anticipated, no current driveways or access points would be removed without new driveways or access points being located to the frontage road system.

2.3.1 Temporary Changes in Access

The proposed project would likely require traffic detours during the construction phase and this could result in temporary access alterations and potential increases in travel time for some users. While some business and residential access would be altered during construction, the TxDOT procedures require that access to properties be maintained through at least one access point to the nearest roadway. The TxDOT ROW acquisition process would determine what measures are required to provide access points or address other specific concerns. A "temporary access plan" would be developed during final design, and coordination with affected businesses and residents would occur prior to construction. Overall, access to businesses and adjacent properties would be maintained during construction.

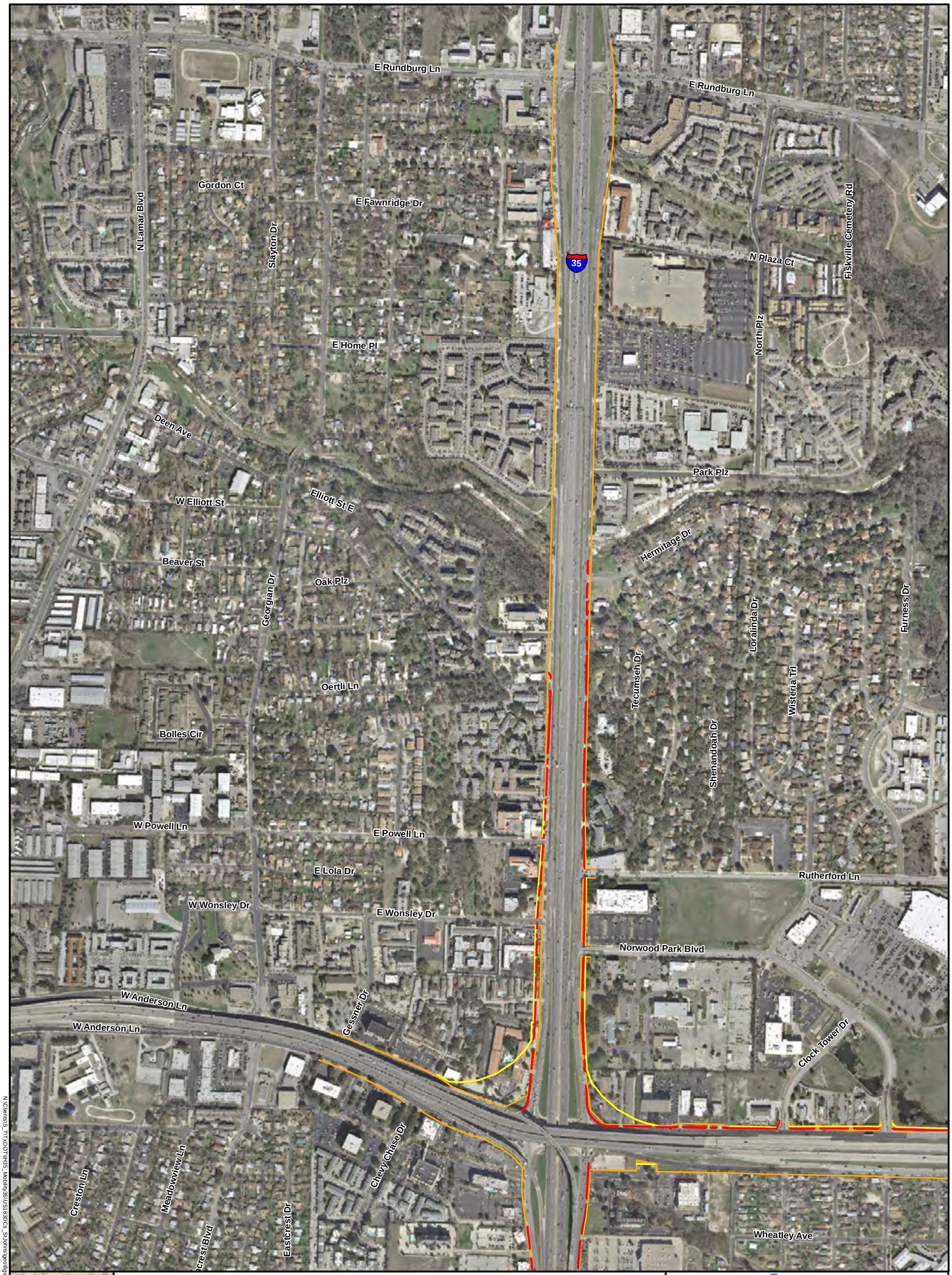
2.4 Changes for Pedestrians and Bicyclists

The purpose of the project is to develop a limited access facility, which cannot safely accommodate pedestrian or bicycle traffic (TxDOT, 2011). However, TxDOT has acquired sufficient ROW to create a bicycle and pedestrian facility along the I-35 and US 183 frontage roads, which has been incorporated in the preliminary schematics for the proposed project. Bicycle and pedestrian facilities would be improved throughout the corridor (Figure 2); where ROW is limited, a 6-foot sidewalk would be provided. In areas where space is available, an 8- to 10-foot shared-use path (SUP) that accommodates pedestrians and bicyclists would be provided on each side of I-35 and on the US 183 NB realigned frontage road. The proposed St. Johns Avenue overpass would include a 10-foot SUP in the eastbound and WB directions.

3. Community

3.1 Land Use

To determine the extent of the study area, an evaluation of city of Austin Geographic Information System (GIS) data was used to help determine the size of the study area. This segment of I-35 and US 183 is predominantly commercial and transportation land uses with I-35 being the dominant roadway facility in the area (Figure 3). The study area was determined by identifying the areas near the project that had the greatest potential for changes in access or the highest potential for overall project related impact. Essentially, the study area limits consist of the project boundaries and extend to the adjacent parcels for which ROW would be acquired and access could be impacted (Figures 1 and 3).



Proposed Shared-Use Path

Proposed Sidewalk

Proposed ROW

Existing ROW

0 350 700

Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 2

Bicycle and Pedestrian Facilities

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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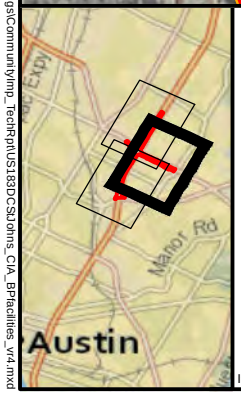

Proposed Shared-Use Path

Proposed Sidewalk

Proposed ROW

Existing ROW

0 350 700

Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 2

Bicycle and Pedestrian Facilities

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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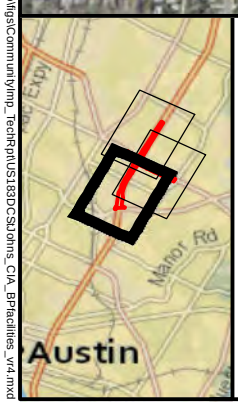

Proposed Shared-Use Path
Proposed Sidewalk
Proposed ROW
Existing ROW

0 350 700
Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 2

Bicycle and Pedestrian Facilities

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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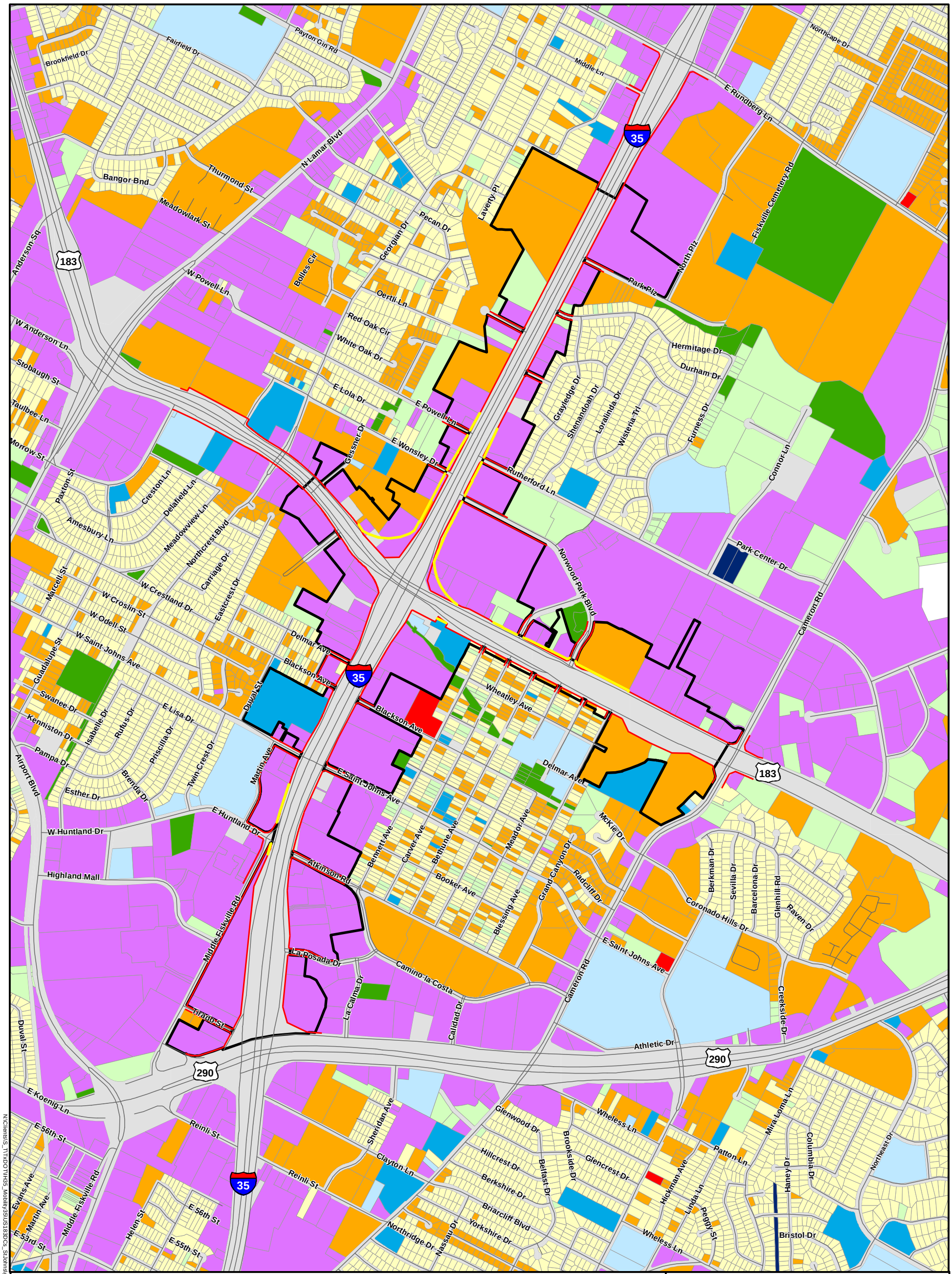
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Brookfield Dr
Middle Ln
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N Lamar Blvd
Bangor Bnd
Thurmond St
Meadowlark St
Anderson Sq
183
Georgian Dr
Pecan Dr
Lavery Pl
35
Fiskville Cemetery Rd
North Plz
Park Plz
Bolles Cir
W Powell Ln
Oertli Ln
Red Oak Cir
White Oak Dr
W Anderson Ln
Stobaugh St
Taulbee Ln
Morrow St
E Lola Dr
E Powell Ln
E Wonsley Dr
Gessner Dr
Hermitage Dr
Durham Dr
Grayledge Dr
Shenandoah Dr
Loralinda Dr
Wisteria Trl
Furness Dr
Connor Ln
Rutherford Ln
Paxton St
Creston Ln
Delafield Ln
Meadowview Ln
Amesbury Ln
Northcrest Blvd
Carriage Dr
Eastcrest Dr
Marcell St
W Crestland Dr
W Croslin St
W Odell St
W Saint Johns Ave
Guadalupe St
Swanee Dr
Kenniston Dr
Isabelle Dr
Ruths Dr
E Lisa Dr
Priscilla Dr
Twin Crest Dr
Pampa Dr
Esther Dr
Brenda Dr
Airport Blvd
Duval St
Delmar Ave
Blackson Ave
Martin Ave
E Huntland Dr
W Huntland Dr
Highland Mall
Middle Fiskville Rd
Park Center Dr
Norwood Park Blvd
Cameron Rd
Wheatley Ave
Blackson Ave
E Saint Johns Ave
Delmar Ave
183
Atkinson Rd
Bennet Ave
Carver Ave
Bethune Ave
Booker Ave
Meador Ave
Blessing Ave
Grand Canyon Dr
Radcliff Dr
McKie Dr
Berkman Dr
Sevilla Dr
Barcelona Dr
Glenhill Rd
Raven Dr
Coronado Hills Dr
E Saint Johns Ave
Creekside Dr
La Posada Dr
Camino la Costa
La Calma Dr
Calidad Dr
Tirado St
Athletic Dr
290
E Koenig Ln
E 56th St
Reinli St
Evans Ave
Martin Ave
E 53rd St
Middle Fiskville Rd
Helen St
E 55th St
Sheridan Ave
Clayton Ln
Glenwood Dr
Hillcrest Dr
Berkshire Dr
Briarcliff Blvd
Yorkshire Dr
Northridge Dr
Nassau Dr
Belfast Dr
Brookside Dr
Glencrest Dr
Wheless Ln
Hickman Ave
Linda Ln
Peggy St
Patton Ln
Mira Loma Ln
Haney Dr
Columbia Dr
Northeast Dr
Bristol Dr
Single Family Residential
Multi-Family Residential
Commercial & Office
Government Services
Educational
Institutional
Undeveloped
Parks & Open Space
Rail & Transporation
Utilities
Proposed ROW
Existing ROW
Study Area
0
625
1,250
Feet
mobility 35 CAPITAL AREA
Figure 3
Land Use in the Study Area
I-35 Improvements
from Rundberg Lane to US 290E
AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387
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This section outlines the study area for evaluating the community that could be affected by the proposed project. The study area for this community impact assessment begins at Rundberg Lane and travels south along I-35 to US 290E. The study area also includes portions of the US 183 corridor from Gessner Road to Cameron Road.

The project is located within Austin city limits north of downtown in Travis County. Urban development within the study area is primarily commercial, with residential neighborhoods scattered both east and west of I-35 and north and south of the southern project terminus at US 290E (see photographs in Appendix A).

The city of Austin's GIS land use data (updated 2014) (City of Austin, 2012) was used as a baseline of land use conditions. As shown in Table 1, commercial and office was at 47.6 percent of the total acres in the study area and is the largest land use. Rail and transportation at 30.3 percent, multi-family residential at 15.3 percent, and institutional at 3.3 percent are the top land uses in the study area (Table 1).

Table 1. Land Use within Study Area

Land Use	Acres	Share (%)
Commercial & Office	257.5	47.6
Rail & Transportation	163.7	30.3
Multi-Family Residential	82.5	15.3
Institutional	17.8	3.3
Undeveloped	15.5	2.9
Single Family Residential	1.6	0.3
Parks and Open Space	1.3	0.2
Educational	0.9	0.2
Total	540.9	100.0

Source: City of Austin, Land Use GIS shapefile, updated 2014

Commercial

The primary land use along the I-35 corridor is commercial with retail stores anchoring large shopping centers and strip malls, numerous restaurants, gas stations, automobile dealerships and other highway-oriented development line the NB and SB frontage roads.

Residential

Dense residential neighborhoods exist on both sides of I-35 adjacent to the study area, all of which are separated from the highway by commercial development both on the NB and SB frontage roads. Neighborhoods east of I-35 include Windsor Hills and St. Johns and neighborhoods west of I-35 include Gracy Woods, Quail Creek, Georgian Acres and East Crestview.

Community Facilities

Several community facilities are located within close proximity to the proposed project. However, only one is located in the study area. The Cedars International Academy located at Barwood Park on the west side of I-35 is a public charter school serving Travis County residents for pre-kindergarten through eighth grade (see Figure 4).

The TxDOT I-35 Campus is located near US 183 and I-35. The Texas Department of Public Services district office is located in the northeast portion of the study area. The Daughters of the Republic of Texas Museum, which preserves the history of the Republic of Texas period, is located in the western portion of the study area along US 183 NB frontage road.

Parks

There are three parks located near the I-35 project study area: Buttermilk Neighborhood Park, Buttermilk Branch Greenbelt and St. Johns Park. The parks are publicly owned by the city of Austin and available for use by the public (City of Austin, 2014). However, none of the parks are in the project study area (Austin Parks, 2015a, 2015b).

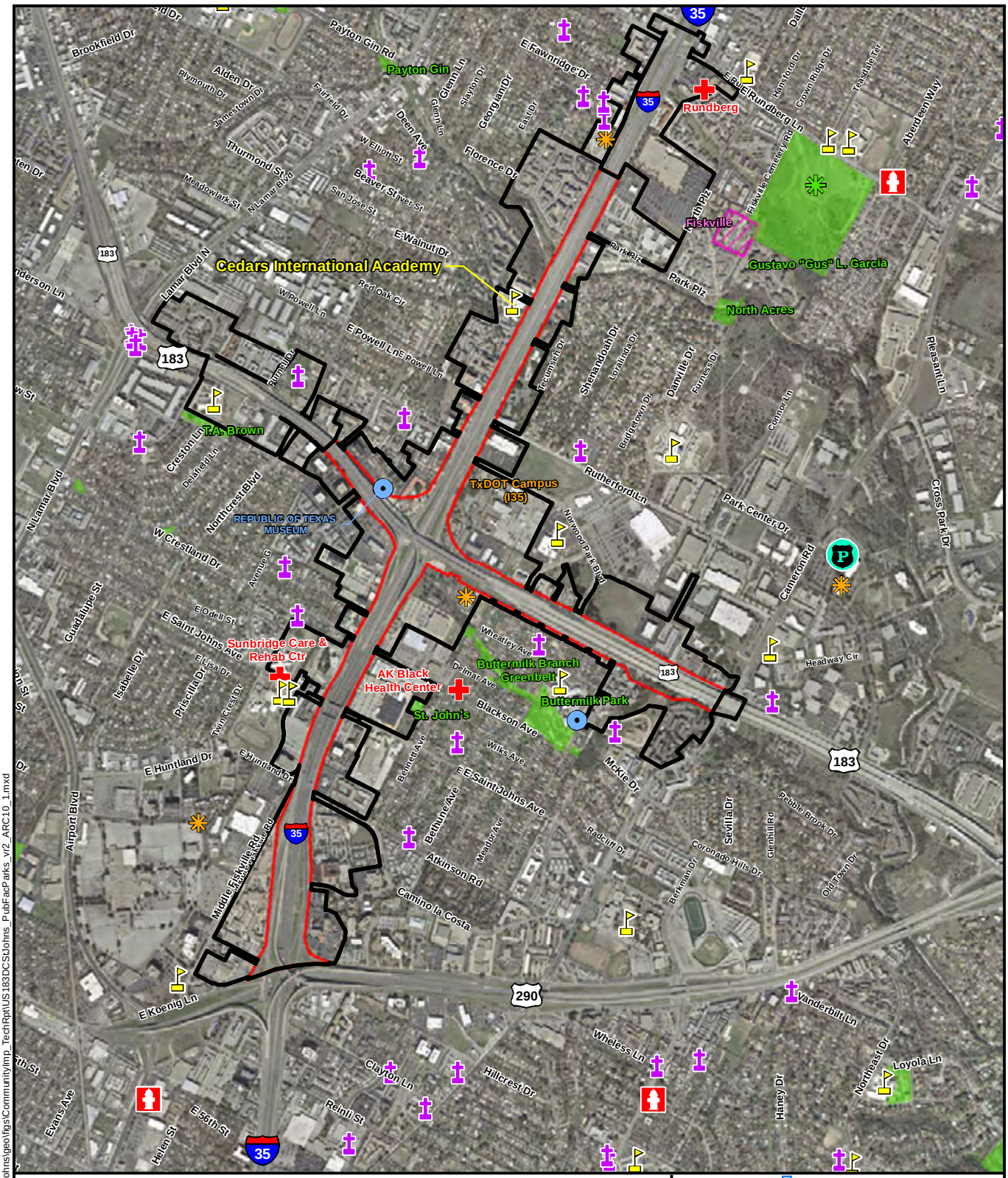
3.2 Demographics

The demographic study area was developed for the project, which includes all census block groups (and the blocks within them) that intersect with study area (Figures 5, 6 and 7). The study area includes portions of the city of Austin and Travis County. The census geography in the study area includes 9 block groups and 115 blocks.

The 2009–2013 American Community Survey Data were used to determine demographics for the city of Austin, Travis County and the study area (Figure 5). Census data were used to evaluate minority populations, household income data and limited English population (LEP), median age and disabled population. With the exception of median age and disabled population, all of those topics are discussed further in depth below. Median ages in the study area were not substantially different from the city as a whole, and a disabled population is not present in the study area in large numbers so there will be no further analysis.

Race and Ethnicity

Census data for 2010 were used for a block level analysis, as 2009–2013 American Community Survey (ACS) census data are not available at the block level. Only 37 of the 115 blocks intersected or adjacent to I-35 within the study area have a reported 2010 population. A total of 32 of the 37 populated blocks have a reported minority population of greater than 50 percent (Table 1 and Figure 6). The 2013 Census data were used for Census Tract (CT) and Block Group (BG) analysis.



mobility 35 CAPITAL AREA

Figure 4

Public Facilities and Parks

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
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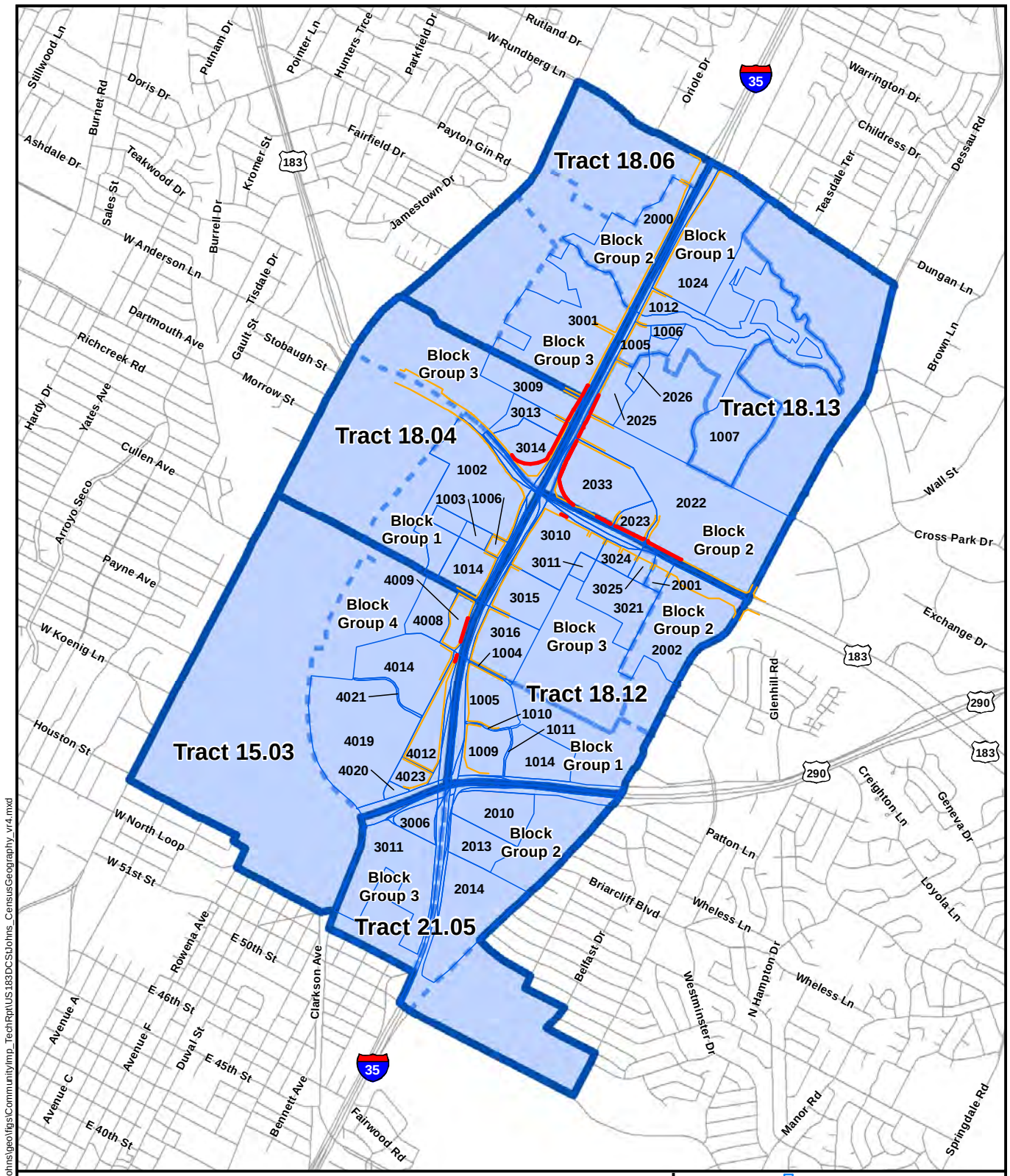

mobility 35 CAPITAL AREA

Figure 5

US Census Geography

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs : 0015-13-382, 0015-13-387

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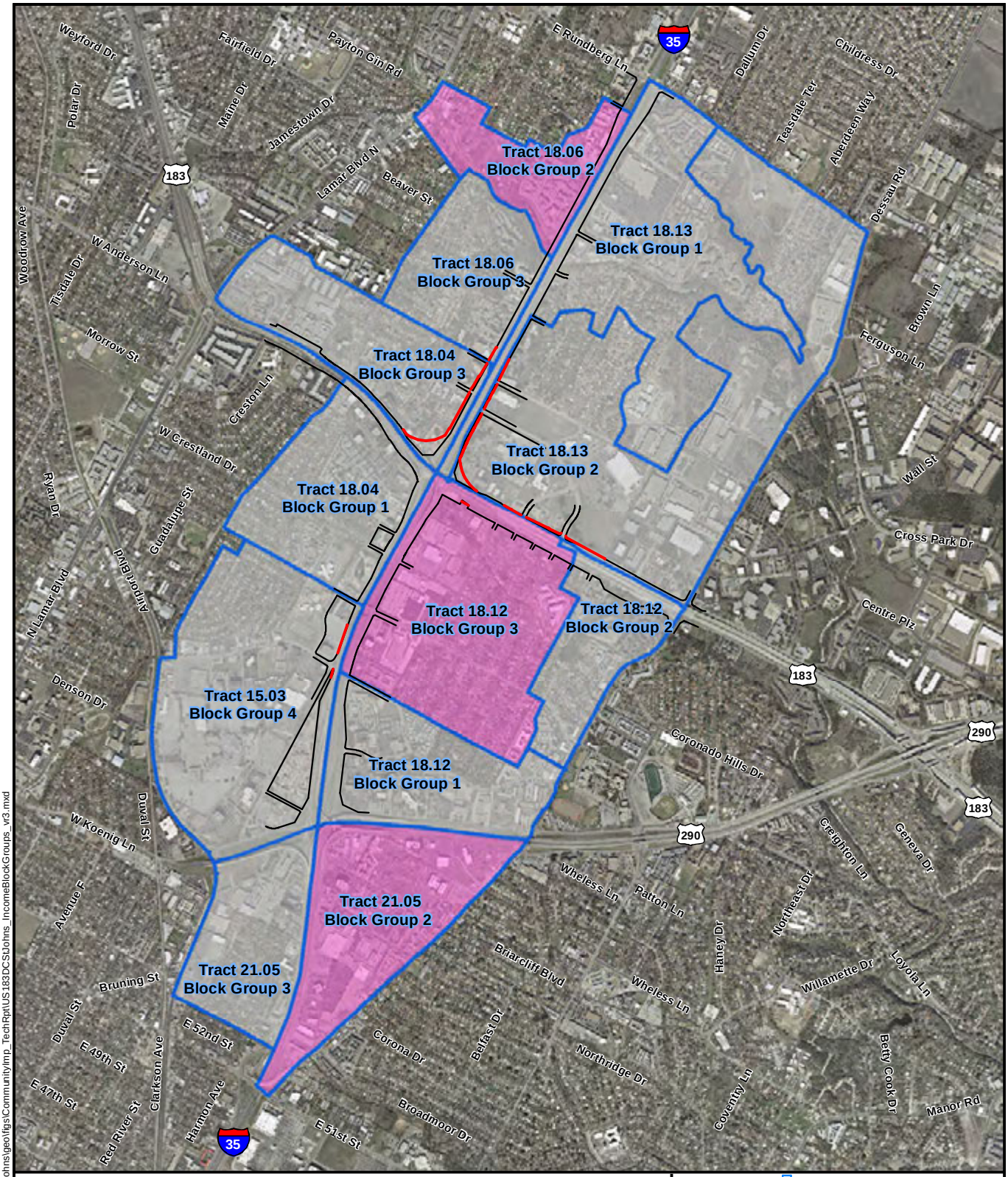

Low Income Block Group

Moderate and Higher Income Block Groups

Proposed ROW

Existing ROW

0 1,250 2,500

Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 6

Income By Block Groups

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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Census 2010 Block

Block Groups with Minority Population Greater than or Equal to 50%

Block Groups with Minority Population Less than 50%

Proposed ROW

Existing ROW

0 1,250 2,500

Feet

Imagery: CAPCOG 2013

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mobility 35 CAPITAL AREA

Figure 7

Minority Population By Block Group

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
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According to 2009–2013 Census data, the city of Austin has a minority population of 51.3 percent, and Travis County has a minority population of 49.5 percent. The population of the study area is predominantly Hispanic/Latino, followed by whites and then by black or African American. Compared to the city of Austin and Travis County, the study area is home to a larger share of minority populations (Table 2).

Table 2. Race and Ethnicity Census Data for Minority Populations

Census Tract[3]	Block Group[3]	Block[3]	Total Population	% White	% Hispanic or Latino[4]	% Black	% American Indian or Alaska Native	% Asian-American	% Native Hawaiian or Other Pacific Islander	% Some Other Race Alone	% Two or More Races	Total Minority Population[2]
CT 15.03[1]	4	--	742	46.4	34.4	17.3	0.7	1.3	0.0	0.0	0.0	53.6
CT 15.03	4	4008	35	54.3	40.0	2.9	0.0	0.0	0.0	0.0	2.9	45.7
CT 15.03	4	4012	2	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0
CT 15.03	4	4023	115	5.2	81.7	7.0	0.0	6.1	0.0	0.0	0.0	94.8
CT 18.04[1]	1	--	1,831	30.0	42.5	12.0	0.0	7.8	0.0	0.0	7.7	60.0
CT 18.04	1	1002	1,431	17.0	71.7	8.1	0.1	1.3	0.1	0.1	1.6	83.0
CT 18.04	1	1003	83	9.6	66.3	19.3	0.0	4.8	0.0	0.0	0.0	90.4
CT 18.04	1	1006	1	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
CT 18.04	1	1014	31	19.4	54.8	25.8	0.0	0.0	0.0	0.0	0.0	79.6
CT 18.04	1	1016	4	25.0	25.0	0.0	0.0	0.0	50.0	0.0	0.0	75.0
CT 18.04[1]	3	--	3,685	4.9	80.6	5.5	0.0	9.0	0.0	0.0	0.0	94.1
CT 18.04	3	3009	239	12.1	80.3	3.8	0.0	3.8	0.0	0.0	0.0	87.9
CT 18.04[1]	3	3013	569	12.1	76.6	8.8	0.5	0.1	0.0	0.1	1.7	87.9
CT 18.04[1]	3	3014	277	30.0	60.0	8.3	0.0	1.4	0.0	0.0	0.3	70.0
CT 18.06[1]	2	--	2,218	19.5	77.9	2.7	0.0	0.0	0.0	0.0	0.0	80.5
CT 18.06[1]	2	2000	1,442	7.6	85.8	5.0	0.0	1.2	0.0	0.0	0.3	92.4
CT 18.06[1]	3	--	2,074	18.6	64.5	14.7	0.2	0.4	0.0	0.0	1.5	81.4
CT 18.06[1]		3001	1,939	17.5	65.0	15.4	0.2	0.3	0.1	0.1	1.5	82.5
CT 18.12[1]	1	--	1,417	43.0	30.3	17.7	0.0	7.1	0.0	0.0	1.9	57.0
CT 18.12	1	1005	7	57.1	0.0	0.0	0.0	14.3	0.0	0.0	28.6	42.9
CT 18.12	1	1014	4	25.0	50.0	25.0	0.0	0.0	0.0	0.0	0.0	75.0
CT 18.12[1]	2	--	3,445	3.3	81.0	15.1	0.0	0.0	0.0	0.0	0.6	96.7
CT 18.12	2	2001	76	3.9	75.0	21.1	0.0	0.0	0.0	0.0	0.0	96.1
CT 18.12	2	2002	2,043	5.4	78.2	15.0	0.1	0.4	0.0	0.1	6.9	94.6
CT 18.12[1]	3	--	2,774	5.8	81.9	11.8	0.0	0.0	0.0	0.0	0.5	94.2

Census Tract[3]	Block Group[3]	Block[3]	Total Population	% White	% Hispanic or Latino[4]	% Black	% American Indian or Alaska Native	% Asian-American	% Native Hawaiian or Other Pacific Islander	% Some Other Race Alone	% Two or More Races	Total Minority Population[2]
CT 18.12	3	3010	135	12.6	75.6	10.4	0.0	0.7	0.0	0.0	0.7	87.4
CT 18.12	3	3011	46	2.2	84.8	13.0	0.0	0.0	0.0	0.0	0.0	97.8
CT 18.12	3	3015	65	16.9	58.5	23.1	0.0	0.0	0.0	0.0	1.5	83.1
CT 18.12	3	3016	207	36.7	29.0	32.9	0.0	0.0	0.0	0.0	1.4	63.3
CT 18.12	3	3021	256	3.7	84.6	10.4	0.0	0.0	0.0	0.0	1.4	96.3
CT 18.12	3	3024	177	2.8	70.1	27.1	0.0	0.0	0.0	0.0	0.0	97.2
CT 18.12	3	3025	76	1.3	75	23.7	0.0	0.0	0.0	0.0	0.0	98.7
CT 18.13[1]	1	--	3,680	13.5	72.3	11.2	0.0	3.0	0.0	0.0	0.0	86.5
CT 18.13	1	1005	32	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
CT 18.13	1	1006	37	54.1	43.2	0.0	2.7	0.0	0.0	0.0	0.0	45.9
CT 18.13	1	1007	88	52.3	31.8	1.1	0.0	13.6	0.0	0.0	1.1	47.7
CT 18.13	1	1012	717	3.6	91.4	3.6	0.0	0.0	0.0	0.4	1.0	94.4
CT 18.13	1	1024	1,244	4.3	89.2	5.2	0.2	0.2	0.0	0.0	0.8	95.7
CT 18.13	1	1028	48	25.0	50.0	20.8	4.2	0.0	0.0	0.0	0.0	75.0
CT 18.13[1]	2	--	2,601	18.8	72.3	4.6	2.0	2.7	0.0	0.0	0.0	71.2
CT 18.13	2	2025	46	47.8	43.5	6.5	0.0	0.0	0.0	0.0	2.2	52.2
CT 18.13	2	2026	36	75.0	22.2	0.0	2.8	0.0	0.0	0.0	0.0	25.0
CT 18.13	2	2033	7	42.9	0.0	0.0	0.0	57.1	0.0	0.0	0.0	57.1
CT 21.05[1]	2	--	2,981	9.0	68.3	18.1	0.0	3.0	0.0	0.0	1.6	91.0
CT 21.05	2	2010	555	20.9	35.5	40.2	0.0	1.4	0.0	0.0	2.0	79.1
CT 21.05	2	2013	724	5.7	79.0	13.1	0.0	1.0	0.0	0.0	1.2	94.3
CT 21.05	2	2014	528	2.7	88.3	7.6	0.0	0.4	0.0	0.0	1.1	97.3
CT 21.05[1]	3	--	455	50.5	44.6	1.8	0.	0.0	0.0	0.0	3.1	49.5
CT 21.05	3	3011	361	28.8	45.4	19.7	0.3	2.2	0.0	0.3	3.3	71.2

Source: U.S. Census Bureau (2010a, 2010b) Census Summary File 1.

1 U.S. Census Bureau American Community Survey 2009–2013 5-Year Estimates.

2 (Total population – White alone population) ÷ Total Population = Percent Minority

3. CT/BG/Blocks within and/or adjacent to the project area were used to represent the population potentially affected by the proposed project.

4. Total of persons reporting as Hispanic or Latino ethnic origin. As race and ethnic origin are two separate and distinct concepts, these persons may be of any race.

Limited English Proficiency

The National Environmental Policy Act (NEPA) requires that projects undergoing scoping and environmental analysis communicate with local residents who could be affected by the construction and operations of a proposed project. Meaningful communication includes conveying messages, reports and other materials in language(s) that local citizens can understand to the greatest extent practical. LEP is defined as having "limited ability to read, write, speak, or understand English" (67 *Federal Register* [FR] 41459). Data from the 2009–2013 ACS were gathered at the Census tract level to identify if there are LEP populations that could be affected by the proposed project. As Census data are self-reported, an individual's ability to speak English represents the respondent's own perception about his/her ability to speak English.

As shown in Table 3, more than a third of the population (5 years old and over) in the study area speaks English only (39.9 percent) and over half speaks Spanish or Spanish Creole (55.1 percent). Additionally, signs in Spanish were observed during a May 2015 field visit. There are other LEP speakers in the project area; however, they account for a small share of the LEP speakers.

Table 3. Languages Spoken and Limited English Proficiency for Study Area Census Tracts

Language	Total Speakers	LEP Speakers
Total Speakers (5 years and over)	32,906	n/a
English only	13,136 39.9%	n/a
Spanish or Spanish Creole	18,131 55.1%	11,292 34.3%
Vietnamese	347 1.1%	184 0.6%
Chinese	135 0.4%	83 0.3%
Tagalog	134 0.4%	68 0.2
German	124 0.4	24 0.1

Source: U.S. Census Bureau (2014), 2009–2013 ACS – B16001 Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over.

LEP = Speaks English less than well ÷ Total Speakers

In order to provide meaningful communication to the people that could be affected by the project, project materials were made available in the dominant languages spoken (English and Spanish) and translation services will be offered for Spanish-speaking populations or other languages upon request. In compliance with Presidential Executive Order (EO) 13166, the public involvement activities and communications for the proposed project were conducted to ensure full and fair participation.

Household Income

Household income is used to identify the presence of low-income populations. According to the U.S. Department of Health and Human Services (HHS) 2015 poverty guidelines, a four-person household is considered low income if they earn less than $24,250. As shown in Table 4, CT 18.06 BG 2, CT 18.12 BG 3 and CT 21.05 BG 2 have income below $24,250; therefore, each would be considered a low-income block group (Figure 6).

Table 4. Household Income (2013 Dollars)

	Median Household Income	Average Household Size	Total Households
Travis County	$58,025	2.53	411,876
City of Austin	$53,946	2.42	366,459
CT 15.03	$53,024	2.31	1,737
BG 4	$44,792	2.82	263
CT 18.04	$34,333	2.75	2,540
BG 1	$45,942	2.45	747
BG 3	$31,369	3.12	1,181
CT 18.06	$24,709	2.86	2,122
BG 2	$20,655	2.90	764
BG 3	$29,481	2.86	978
CT 18.12	$25,964	2.60	2,915
BG 1	$29,801	1.62	865
BG 2	$26,705	2.90	1,182
BG 3	$23,575	3.18	868
CT 18.13	$19,493	3.11	2,017
BG 1	$30,107	2.97	1,241
BG 2	$28,333	3.35	776
CT 21.05	$28,333	2.51	2,118
BG 2	$19,881	2.74	1,088
BG 3	$34,808	2.42	188

Source: U.S. Census Bureau (2015), 2009–2013 ACS B19001 Household Income in the Past 12 Months; B19013 Median Household Income; B25010 Average Household Size of Occupied Housing Units by Tenure

3.3 Environmental Justice

EO 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations, mandates that federal agencies "identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs on minority and low-income populations" (59 FR 7629-7633, February 16, 1994). The three fundamental principles of environmental justice (EJ) are to:

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

According to Federal Highway Administration (FHWA) Order 6640.23 and U.S. Department of Transportation (USDOT) Order 5610.2(a), disproportionately high and adverse effects on minority or low-income populations generally means an adverse effect that is predominantly borne by a minority and/or low-income population, or would be suffered by the minority and/or low-income population, and is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority and/or non-low-income population (USDOT, 2012).

3.3.1 Identification of Low-income and Minority Populations

As shown in Table 4, three census tracts (CT 18.06 BG 2, CT 18.12 BG 3 and CT 21.05 BG 2) have income below $24,250 (U.S. Census Bureau, 2015); therefore, each would be considered a low-income block group (Figure 6).

As defined by the Council on Environmental Quality (CEQ) report, Environmental Justice Guidance Under NEPA, a minority population should be identified where either (a) the minority population of the affected area exceeds, by FHWA guidance, 50 percent of the block, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

As defined by the May 2, 2012, update to the DOT Departmental Order 5610.2(a) (Actions to Address Environmental Justice in Minority Populations and Low-Income Populations), a minority person is someone who is:

- **Black**: a person having origins from any of the black racial groups of Africa
- **Hispanic or Latino**: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race

- **Asian American**: a person having origins in any of the original peoples of the Far East, Southeast Asia, or Indian subcontinent
- **American Indian and Alaskan Native**: a person having origins in any of the original people of North America, South America (including Central America) and who maintains cultural identification through tribal affiliation or community recognition
- **Native Hawaiian and Other Pacific Islander**: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands
- **Low income:** defined in Order 5610.2(a) as a person whose median household income is at or below the HHS poverty guidelines

The demographic characteristics of the study area are discussed above. As shown in Table 2 and on Figure 7, minority populations in project area blocks range from 25 to 100 percent, and 32 of the 37 populated blocks have a reported minority population of 50 percent or more. These blocks are considered minority populations.

3.4 Unemployment

By 2035, Capital Area Metropolitan Planning Organization (CAMPO) projects that Travis County will have over 1 million jobs, most of which will be within the city limits of Austin. While downtown Austin will remain an important employment center, CAMPO projects future employment growth will occur along major highways and outside the city core (CAMPO, 2010).

The Texas Workforce Commission (TWC) lists Austin's 2014 unemployment rate as 3.7 percent, which was lower than the State of Texas' 5.1 percent (Table 5).

Table 5. Austin Area Unemployment 2010–2014 (Percent)

Area	2014	2013	2012	2011	2010
City of Austin	3.7	4.6	5.1	5.8	6.2
Austin Metropolitan Statistical Area	4.2	5.1	5.7	6.6	7.0
Travis County	4.0	5.0	5.5	6.4	6.8
State of Texas	5.1	6.2	6.7	7.8	8.1

Source: TWC (2015).

Annual average, not seasonally adjusted

3.5 Community Cohesion

Community cohesion is generally characterized by the interaction amongst neighbors and friends, participation in community activities and organizations, involvement in local government and politics, and access to community resources. Cohesive communities may also have several

generations of families, extended families, and strong informal (non-governmental) social support networks that can provide for childcare, emergency assistance and spiritual guidance, among other possibilities. Transportation and land use changes can have effects on community cohesion. People and relationships can be separated by barriers and greater distances, affecting their ability to see and communicate with one another easily or access community facilities and services. It should be noted that the existing I-35 and US 183 corridors currently function as a type of barrier between areas east and west of I-35 and north and south US 183, respectively.

3.6 Traffic Noise Impacts

A traffic noise analysis was prepared for the proposed project (Atkins, 2015)[2]. The FHWA traffic noise modeling software (TNM 2.5) was used to calculate existing and predicted traffic noise levels at receiver locations that represent land uses adjacent to the proposed project that might be impacted by traffic noise and could possibly require noise abatement.

The existing noise levels were calculated at 30 locations (for a total of 34 receivers). Of the 34 receivers, 26 were classified as residential, 2 were funeral home/place of worship, 5 were commercial/hotel/restaurant, and 1 was a tennis court/school. The proposed project was modeled and was found to result in impacts at 25 of the 34 receivers, of which 22 are residential and 1 is a place of worship.

Based on TxDOT's *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT, 2011), a traffic noise abatement measure is considered feasible and reasonable if (1) it is able to reduce the traffic noise level by at least 5 dB(A) (A-weighted decibels) at greater than 50 percent of impacted first-row receivers, (2) it does not exceed the cost-effectiveness criterion of $25,000 for each receiver that would benefit by a reduction of at least 5 dB(A), and (3) it is able to reduce the traffic noise level at (a minimum) of one impacted, first row receiver by at least 7 dB(A).

Traffic noise barriers were evaluated for each of the impacted receiver locations. It was determined that traffic noise barriers would not be feasible and reasonable for any of the impacted receivers and therefore are not proposed for incorporation into the project.

[2] Texas Department of Transportation. 2015. Traffic Noise Analysis Interstate 35 from Rundberg Lane to US 290 East Travis County, Texas CSJ: 0015-13-382, 0015-13-387.

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Figure 8

Traffic Noise Receiver Locations

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
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Sheet 1 of 3


R7
R8
R6
R5
R29
R28A
R4A
R28B
R4C
R4B
R9
R2
R30
R11
R13
R15
R17
R19
R10
R12
R14
R16
R18
R20
R21
R22
R23
R24
35
183
290
E Powell Ln
Grayledge Dr
Loralinda Dr
Furness Dr
Connor Ln
Cameron Rd
Cross Park Dr
Park Center Dr
Rutherford Ln
E Anderson Ln
Wheatley Ave
Blackson Ave
Wilks Ave
E Saint Johns Ave
Bennett Ave
Carver Ave
Providence Ave
Meador Ave
Blessing Ave
McKie Dr
Berkman Dr
Barcelona Dr
Glenhill Rd
Coronado Hills Dr
Westheimer Dr
Atkinson Rd
Middle Fiskville Rd
Camino la Costa
La Posada Dr
Impacted Traffic Noise Receiver
Non-Impacted Traffic Noise Receiver
Proposed ROW
Existing ROW
0
350
700
Feet
Imagery: CAPCOG 2013
mobility 35 CAPITAL AREA
Figure 8
Traffic Noise Receiver Locations
I-35 Improvements
from Rundberg Lane to US 290E
AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387
Sheet 2 of 3
N:\Clients\S_TTX\DOT\H35_Mobility35\US183DCs_StJohns\gis\arcgis\projects\CommunityImp_Tech Rpt\US183D CSJ Johns_CIA_NoiseImpacts_v2.mxd

N:\Clients\S_TTX\DOT\IH35_Mobility35\US183DCs_SJohns\geo\figs\Community\mp_TechRpt\US183D CSJohns_CIA_NoiseImpacts_v#2.mxd

Impacted Traffic Noise Receiver

Non-Impacted Traffic Noise Receiver

Proposed ROW

Existing ROW

0 350 700

Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 8

Traffic Noise Receiver Locations

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

4. Impacts to the Community

4.1 Right of Way Acquisition and Displacements

The proposed project would require approximately 7.0 acres of new ROW, which will result in five displacements. The displacements would require ROW acquisitions that would result in loss of property at Discovery Auto Sales, Lone Star Restaurant Supply Store, Days Inn Hotel, University Inn Hotel and Towne Oaks Apartments (Figure 1). Access to adjacent properties would be maintained with the proposed improvements, although entry and exit points would be modified in some cases.

Discovery Auto Sales is a used car seller that caters to the Spanish-speaking public. There are vacant lots located within 1 mile of Discovery Auto Sales that could be used by the car seller. The loss of this Spanish-speaking sales lot could be offset by Austin Rising Fast Motor Cars, another Spanish-speaking used car lot located across from Discovery Auto Sales at East Wonsley Drive.

The loss of the 81-room University Inn and the 146-room Days Inn hotels could potentially impact tourists to Austin; however, this impact could be offset by current hotel construction projects, such as the Holiday Inn Express and Airport Gateway hotels (Hotel Planner, 2015a, 2015b). According to the *Austin American Statesman*, construction began on a new Holiday Inn Express at 9th and Red River Streets in March 2015. The Holiday Inn Express would add 164 rooms to the affordable hotel market, Airport Gateway will be a 60-acre mixed-use project with 350 hotel rooms, with Residence Inn being the first hotel (Theis, 2015). These new hotels could provide additional rooms to the Austin area. Additionally, an *Austin Business Journal* article from January 2015 states that 8,649 hotels rooms are currently in development in the Austin metro area. These hotels would represent a 28 percent increase in the existing metro- wide hotel supply (Buchholz, 2015).

Lone Star Restaurant Supply is being treated as a displacement due to having the front entrance being modified to be unfeasible. The store parking lot and entrance could be reconfigured to maintain access at a later date.

Residential displacements would occur as a result of the proposed project. A multi-family residential complex with 114 units would have approximately 8 units (4 two-bedroom units and 4 one-bedroom units) in two buildings taken as a result of the proposed project. Anyone displaced by the proposed project would be eligible for the relocation assistance. Rents in this area are between $750 and $1,200 a month. A search of replacement rental units found over 20 rental units within a 1-mile radius that all lease under $1,100 a month. This mitigation measure will be discussed further in Section 5.0.

Additionally other multi-family dwelling units are being built. A search of the Texas A&M Real Estate Data Center indicates there were 9,047 building permits for multi-family dwelling units (for five or more units on a property) issued in the Austin metropolitan statistical area (MSA) (Texas A&M,

2015a). Additionally there were 7,637 building permits for multi-family dwelling units in Travis County in 2014 (Texas A&M, 2015b).

4.2 Changes in Access and Travel Patterns

4.2.1 Permanent Changes in Access and Travel Patterns

The proposed project would require changes in travel patterns that were discussed in Section 2.3. The changes would be beneficial and increase efficiency of access by constructing three DCs. Permanent access along the frontage roads would be maintained to the area community. However, access to Brooks Street (located north of the I-35 SB frontage road and US 290E intersection) would be severed to eliminate weaving movements from the I-35 SB frontage road to the US 290E WB frontage road. A right-turn lane would be added to facilitate the SB to WB movement. The proposed project would sever the existing access to Brooks Street from the I-35 SB frontage road; however, access to all properties and businesses on Brooks Street would be maintained. Currently, vehicles access Brooks Street from the I-35 SB frontage road or via the US 290E WB frontage road. Vehicles travelling on the I-35 SB frontage road would access Brooks Street by continuing south approximately 400 feet to the US 290E frontage road intersection, turning right and travelling west approximately 120 feet to Brooks Street. As access to all properties and driveways on Brooks Street would be maintained, the change in access would not be significant.
Access from East Huntland Drive to the I-35 SB exit ramp would also be impacted; weaving movements would be further conflicted as a result of the merging of the I-35 SB collector-distributor lanes into the frontage road.

The dominant land use in the study area is transportation. As a result there are not many community facilities such as churches, schools, grocery stores or parks in the study area. However, the proposed project would make travelling to community facilities outside the study area more efficient.

Victory Church Austin, the sole church in the study area, located on the NB frontage road of I-35 near US 183 would experience less traffic and congestion in the vicinity. Currently vehicles travelling SB on I-35 access US 183 SB by using the 183 SB frontage road. The DC would reduce the amount of vehicles on that frontage road.

Community members accessing Cedars International Academy, the sole school in the study area, would experience less congestion on the frontage road in the vicinity as result of the proposed project.

Walmart, the nearest grocery store to the study area, is located in the Norwood Park shopping center. Community members accessing the shopping center would experience less congestion as a result of the proposed project. This effect would also apply to any community members wishing to access any of the parks located outside of the study area.

The proposed project would also result in increased safety gains with the reduction of congestion, and the addition of the bicycle and pedestrian facility along the frontage roads would increase access to community resources. Additionally emergency response would be anticipated to slightly improve as a result of reduced congestion and direct access to US 183 SB from I-35 SB and direct access from US 183 NB to I-35 NB.

4.2.2 Temporary Changes in Access and Travel Patterns

The proposed project would likely require traffic detours during the construction phase, and this could result in temporary increases in travel time for some users. During the construction the Rundberg exit and entrance ramps would undergo a ramp reversal at the SB side of I-35. A vehicle traveling SB on the I-35 mainlanes would exit to the frontage road from the existing entrance just south of Rundberg. A vehicle traveling SB on the I-35 frontage road would enter at the location of the existing exit north of US 183.

The proposed project would require a temporary construction easement area, to maintain driveway access to the frontage roads during construction, estimated at approximately 3,953 linear feet with an average depth of approximately 15 feet. Access to businesses and adjacent properties would be maintained during construction.

4.3 Land Use Impacts

Commercial, Residential, and Community Facilities

As stated above there will be five displacements, four commercial and one residential, which includes eight units from an apartment complex. However, no permanent incorporation of public parkland would result from the proposed project. Access to the adjacent properties would be maintained with the proposed improvements, although entry and exit points would be modified in some cases. Mitigation measures for the displacements are further discussed in Section 5.0.

4.4 Unemployment

The business displacements could potentially impact employment. Given that unemployment was 3.7 percent in 2014, the displacement of four businesses would not be a substantial impact to employment or community cohesion (TWC, 2015). Additionally, 8,649 hotels rooms are currently in development in the Austin metro area. These hotels would require staffing and offer job opportunities (Buchholz, 2015).

4.5 Community Cohesion

While there would be no direct effect to parks, schools, neighborhood destinations such as the Walmart, churches, etc., the proposed project may have an effect on community cohesion as the following explains. Additionally, access to these facilities would not be substantially altered from what exists today.

The proposed project would require eight residential displacements from an apartment complex and a total of four business displacements. The majority of the existing neighborhood would remain intact and would not be separated.

The displacement of the multi-family residential property could have an impact on the community. As stated in Section 4.1, a search for replacement rental units found over 20 rental units within a 1-mile radius that all lease under $1,100 a month. Therefore, it is likely there would be an adequate supply of replacement housing available for displaced people, and displaced residents would not have to leave the neighborhood if they do not want to.

The proposed project would provide a benefit to community cohesion in the form of increased pedestrian and bicycle safety. The proposed project would provide bicycle and pedestrian access improvements proposed throughout the study area that could serve to connect neighborhoods to parks, open spaces and area businesses to a greater extent. Additionally, the DCs could lessen the amount of through vehicle trips on the frontage roads.

4.6 Consideration of Impacts to Low-Income and Minority Populations

Although there are low-income populations in the study area, the project would not have adverse community impacts. The displacements that are occurring are of a limited number and not occurring in the low-income portion of the neighborhoods. Also, as indicated in Section 4.1, there are local, safe and adequate replacement housing for the eight housing units that would be displaced. Additionally, there would be beneficial impacts from the proposed project, such as increased safety on neighborhood frontage roads and increased safety from improved pedestrian and bicycle facilities. There would be no loss in access to roadways and no adverse effects to community cohesion. Therefore, the proposed project is consistent with EO 12898 regarding environmental justice and would not have disproportionate, high and adverse effects on minority populations.

5. Mitigation Measures

The ROW acquisition program would be conducted in accordance with the Uniform Act, and relocation resources would be made available to all residential and business displacees without discrimination. Any residential or commercial relocations or displacements would be eligible for assistance under the requirements of the Federal Uniform Relocation Act. In addition to TxDOT, local municipalities may participate in ROW acquisition and provide relocation assistance.

Access to adjacent properties would be maintained with the proposed improvements, although entry and exit points would be modified in some cases. The TXDOT procedures require that access to properties be maintained through at least one access point to the nearest roadway. The TxDOT ROW acquisition process would determine what measure are required to provide access points or address other specific concerns. A “temporary access plan” would be developed during final design, and coordination with affected businesses and residents would occur prior to construction.

6. Summary

The proposed project would provide DCs between I-35 SB to US 183 SB, US 183 NB to I-35 NB, and I-35 SB to US 183 NB. Approximately 7.0 acres of new ROW would be needed for the proposed project. The study area was determined by identifying the areas near the project that had the greatest potential for changes in access or the highest potential for overall project related impact. The study area limits consist of project boundaries and extend to the adjacent parcels for which ROW would be acquired and access could be impacted.

The displacement of four business-related structures would result from the proposed project. The businesses include two automobile sales lots, two hotels and one apartment complex. No community facilities would be displaced or impacted. None of the impacts from displacements would be substantial and would not adversely affect community cohesion or employment. This segment of I-35 and US 183 is predominantly commercial and transportation land uses with I-35 being the dominant roadway facility in the area. The population of the study area is predominantly Hispanic/Latino, followed by whites and then by black or African American. Compared to the city of Austin and Travis County, the study area is home to a larger share of minority populations.

Although there are low-income and minority populations in the study area, the project would not have disproportionate, high or adverse community impacts. The displacements that are occurring are of a limited number and not occurring in the low-income portion of the neighborhoods. Also, as indicated in Section 4.1, there is local, decent, safe and sanitary replacement housing for the eight housing units that would be displaced.

The proposed project would provide a benefit to community cohesion in the form of increased pedestrian and bicycle safety. Additionally, the DCs could lessen the amount of through vehicle trips on the frontage roads.

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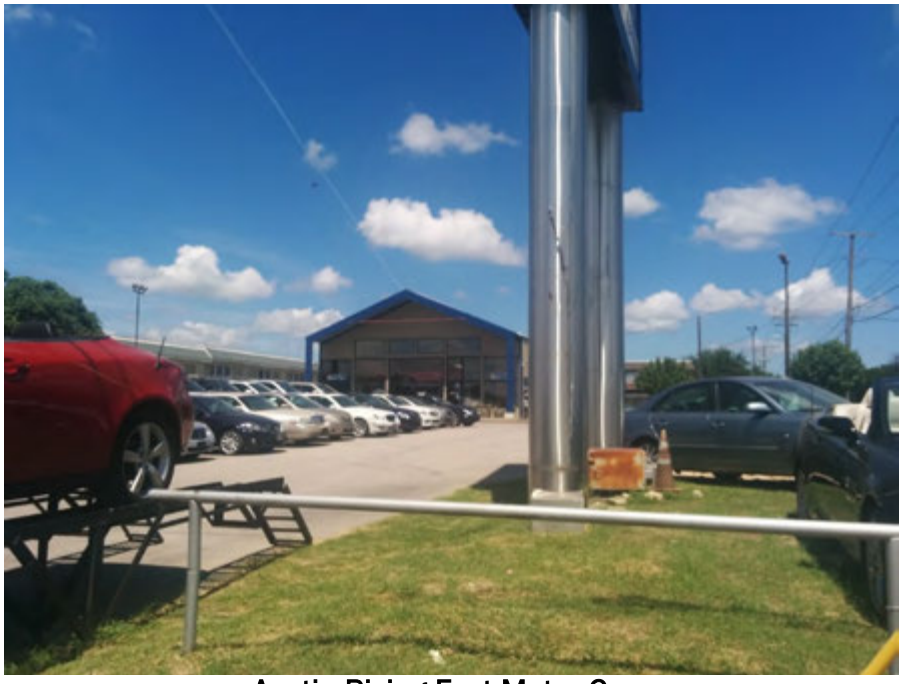
Appendix

Photographs

Days Inn

Internet Cafe

Discovery Auto Sales



Austin Rising Fast Motor Cars

Motel 6

Towne Oaks Apartments

University Inn

183 Frontage Road

Daughters of the Republic of Texas Museum/US 183 Frontage Road

Cedars International Academy

US 183 from Bethune Avenue

Biological Evaluation Form

CSJ: 0015-13-382, 0015-13-387
Interstate 35
From Rundberg Lane to US 290 East

Jonathan M. Barton, Atkins North America, Inc.

TxDOT Environmental Affairs Division
Release Date: 5/2014
320.01.FRM
Version 1

CSJ: 0015-13-382, 0015-13-387 ☐ *Project has no Federal nexus.*

Date of Evaluation: December 15, 2014

Proposed Letting Date: Unknown

County: Travis

Roadway Name: Interstate 35

Project Limits: From Rundberg Lane to US 290 East

Project Description: Improvements to 2.35 miles of existing I-35 between Rundberg Lane and US 290E and along 1.6 miles of US 183 between Georgian Drive and Cameron Road, including the addition of direct connectors, collector distributor lanes, and bicycle and pedestrian facilities, along with frontage road improvements and increased vertical clearances. The total new ROW required is 7 acres.

Endangered Species Act (ESA)

1. No Is the action area of the proposed project within the range and in suitable habitat of federally protected species?

Date USFWS County List Accessed: November 14, 2014

Comments:

The Biological Resources Technical Report is included as an attachment to this Biological Evaluation Form. In summary, based on high rates of urbanization and highly altered stream habitats within the proposed project area, no potential habitat is present for any of the five Central Texas candidate mussel species. Additionally, no suitable habitat is present within the proposed project ROW for any of the other federally-listed species known to occur in Travis County, refer to Table 2 in the Biological Resources Technical Report.

Resources consulted or activities conducted to make effect determination (if applicable):

☒ TPWD County List ☒ USFWS Critical Habitat Maps ☐ Species Expert Consulted

☒ Aerial Photography ☐ Coastal Areas Maps ☒ Site Visit

☒ Topographic Map ☐ Species Study Conducted ☐ Karst Zone Maps

☒ Ecological Mapping System of Texas (EMST) ☒ Natural Diversity Database (NDD)

Other:

Migratory Bird Treaty Act (MBTA)

1. Yes — Is there potential for nesting birds to be present in the project action area during construction?

   1.1 No — Were active nests identified during the site survey?

2. Yes — Will BMPs will be incorporated to protect migratory bird nests?

Comments:

Appropriate measures, as prescribed by the TxDOT-TPWD 2013 MOU, would be taken to avoid adverse impacts on migratory birds and would include the following:

- The disturbance, destruction, or removal of active nests, including ground nesting birds, during the nesting season would be prohibited;
- The removal of unoccupied, inactive nests would be avoided;
- The establishment of active nests during the nesting season on TxDOT-owned and operated facilities and structures proposed for replacement or repair would be prevented; and
- The collection, capture, relocation, or transportation of birds, eggs, young, or active nests with-out a permit would be prohibited.

Bald and Golden Eagle Protection Act (BGEPA)

1. No — Does the proposed project have the potential to impact Bald or Golden Eagles?

Comments:

Fish and Wildlife Coordination Act (FWCA)

1. No — Does the project have impacts on one or more Waters of the U.S. or wetlands?

Comments:

Executive Order 13112 on Invasive Species

1. Yes — Would the proposed project be in compliance with EO 13112?

Comments

Revegetation of disturbed areas would include native plant species, including seed mixes where applicable.

Executive Memorandum on Beneficial Landscaping

1. Yes — Would landscaping be included in the proposed projects?

Describe landscaping activities:

Upon completion of earthwork operations, disturbed areas would be restored and reseeded in accordance with TxDOT's Vegetation Management Guidelines and in compliance with the intent of Executive Order 13112 on Invasive Species.

2. Yes — Would the proposed project be in compliance with the Executive Memorandum on Beneficial Landscaping?

Comments

A mix of native grasses and native forbs would be used to revegetate the ROW, as available.

Farmland Protection Policy Act (FPPA)

1. Yes — Would the project require new ROW or permanent easements (*Do not include temporary easements*)?

2. Yes — Is the proposed project exempt from the provisions of FPPA in accordance with §523.11 of the act?

Comments:

The project area falls within the U.S. Census Bureau 2010 Urbanized Area (UA) for Austin (project area) and is therefore exempt from the protections of the FPPA.

General Comments

TPWD Analysis Section

Coordination Conditions

1. No — Is the project limited to a maintenance activity exempt from coordination? https://ftp.dot.state.tx.us/pub/txdot-info/env/env_assessment.pdf

2. No — Has the project previously completed coordination with TPWD?

Tier I Site Assessment

MOU-Triggers

1. Yes — Is the project within range of a state threatened or endangered species or SGCN and suitable habitat is present?

*Explanation:

The proposed project ROW contains potential habitat for two species of greatest conservation need as identified by the TPWD County List of Rare and Protected Species, the Texas garter snake and Correll's false dragon-head. Implementation of BMPs as defined in the MOU would be required to avoid coordination with the TPWD. For additional information, see Table 2 in the Biological Resources Technical Report.

Date TPWD County List Accessed: June 1, 2015

Date that the NDD was accessed: June 1, 2015

What agency performed the NDD search? TPWD

NDD Search Results for EOIDs and Tracked Managed Areas

EOID Number	Common Name	Scientific Name	Listing Status	Buffer Zone
4475	Heller's marbleseed	*Onosmodium helleri*	SGCN	1.5 Mile
93604	Texas fescue	*Festuca versuta*	SGCN	1.5 Mile
8277	Texas garter snake	*Thamnophis sirtalis annectens*	SGCN	1.5 Mile
7450	Texas garter snake	*Thamnophis sirtalis annectens*	SGCN	1.5 Mile
11359	Correll's false dragon head	*Physostegia correllii*	SGCN	1.5 Mile

1.1 Yes — Does the BMP PA eliminate the requirement to coordinate for species?

*Explanation:

In the case of the Texas garter snake, BMPs will be implemented by advising contractors of the potential occurrence of the species in the project area and to avoid harming the species if encountered. As there are no specific BMPs for Correll's false dragon-head, general project and vegetation BMPs should be followed to fulfill the MOU.

2. No — NDD and TCAP review indicates adverse impacts to remnant vegetation?

Comments:

3. No — Does the project require a NWP with PCN or IP by USACE?

Comments:

4. No — Does the project include more than 200 linear feet of stream channel for each single and complete crossing of one or more of the following that is not already channelized or otherwise maintained:

Comments:

5. No — Does the project contain known isolated wetlands outside the TxDOT ROW that will be directly impacted by the project?

Comments:

6. No — Would the project impact at least 0.10 acre of riparian vegetation?

Comments:

7. No — Does project disturb a habitat type in an area equal to or greater than the area of disturbance indicated in the Threshold Table Programmatic Agreement?

Comments:

*Attach associated file of EMST output (Mapper Report or other Excel File which includes MOU Type, Ecosystem Name, Common/Vegetation Type Name) in ECOS

Excel File Name:

Table 1

7.1 Yes — Is there a discrepancy between actual habitat(s) and EMST mapped habitat(s)?

*Explanation:

Actual habitat differs slightly from mapped; Urban High Intensity is lower, and Urban Low Intensity is higher. There is also more Floodplain Hardwood Forest present within the proposed ROW than mapped. Open Water habitat was not mapped, but does occur in the project area.

Attach file showing discrepancy between actual and EMST mapped habitat(s).

File Name:

Table 1

Is TPWD Coordination Required?

No - No coordination is required because Trigger #1 was met but BMPs were implemented and included in EPIC sheets

BMPs Implemented (as required by BMP Programmatic Agreement):

Texas garter snake - contractors will be advised of potential occurrence in the project area and to avoid harming the species if encountered.

Correll's false dragon-head - minimize the amount of native vegetation cleared, utilize locally adapted native species for revegetation and landscaping.

Findings

Endangered Species Act (ESA)

No suitable habitat was observed for any federally listed species; therefore there will be no effect on federally listed species. However, measures to avoid harm to any threatened and endangered species will be taken should they be observed during construction of the proposed project. Coordination with the USFWS will not be required. The USFWS County List was accessed on November 14, 2014.

Essential Fish Habitat (EFH)

EFH is defined by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Tidally influenced waters do not occur within the project area. Coordination with National Marine Fisheries Service (NMFS) is not required.

Coastal Barrier Resources Act (CBRA)

The CBRA established the Coastal Barrier Resources System (CBRS) to protect a defined set of geographic units along the coast of the U.S.

This project is not located within a designated CBRA map unit. Coordination with the USFWS is not required.

Marine Mammal Protection Act (MMPA)

Marine mammals are protected under the MMPA. The Texas coast provides suitable habitat and is within range of several marine mammals including the West Indian Manatee (Trichechus manatus), and bottlenose dolphin (Tursiops truncatus).

The project action area does not contain suitable habitat for marine mammals. Coordination with NMFS is not required.

Migratory Bird Treaty Act (MBTA)

The 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 MBTA's policies and regulations.

TxDOT will take all appropriate actions to prevent the take of migratory birds, their active nests, eggs, or young by the use of proper phasing of the project or other appropriate actions. An MBTA appropriate EPIC will be included in the PS&E.

Bald and Golden Eagle Protection Act (BGEPA)

The proposed project does not have the potential to impact Bald or Golden Eagles.

Executive Order 13112 on Invasive Species

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

Executive Memorandum on Beneficial Landscaping

Disturbed areas would be revegetated according to TxDOT's standard practices for rural areas, which to the extent practicable, is in compliance with Executive Memorandum on Beneficial Landscaping.

Farmland Protection Policy Act (FPPA)

The purpose of the FPPA is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. The proposed project includes the acquisition of additional right of way and uses farmland protected by the FPPA, but the project activity is exempt from the FPPA. This type of determination requires documentation in the project file supporting that the project activities meet the FPPA exemption criteria.

Fish and Wildlife Coordination Act (FWCA)

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

The proposed project is authorized under a Section 404 of the Clean Water Act Nationwide Permit; therefore, no coordination under FWCA would be required.

_____

TxDOT Reviewer Date

Suggested Attachments

Aerial Map (with delineated project boundaries)

USFWS T&E List

TPWD T&E List

Species Impact Table

NDD EOID List and Tracked Managed Areas (Required for TPWD Coordination)

NOAA EFH Mapper Printout

USFWS CBRA Mapper Printout

EMST Project MOU Summary Table (Required for TPWD Coordination)

TPWD SGCN List

FPPA Documentation

Landscaping Plans

Photos (Required for TPWD Coordination)

Previous TPWD Coordination Documentation (if applicable)

The following table shows the revision history for this guidance document.

Revision History	
Effective Date Month, Year	Reason for and Description of Change

The following table shows the revision history for this guidance document.

Revision History	
Effective Date Month, Year	Reason for and Description of Change

Biological Resources Technical Report Interstate 35 From Rundberg Lane to US 290 East Travis County, Texas

CSJ: 0015-13-382, 0015-13-387

July 2016

Table of Contents

List of Acronyms

BMPs	Best Management Practices
DC	direct connector
EMST	Ecological Mapping Systems of Texas
EORs	Element of Occurrence Records
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
I-35	Interstate 35
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
NB	northbound
NWP	Nationwide Permit
PCN	Pre-construction notification
ROW	right-of-way
SB	southbound
SGCN	species of greatest conservation need
TPWD	Texas Parks and Wildlife
TxDOT	Texas Department of Transportation
TXNDD	Texas Natural Diversity Database
UA	Urbanized Area
US 183	U.S. Highway 183
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1. Project Overview

The Texas Department of Transportation (TxDOT) proposes improvements along 2.35 miles of the existing Interstate 35 (I-35) between Rundberg Lane and U.S. Highway 290 East (US 290E) and along 1.6 miles of US 183 between Georgian Drive and Cameron Road. The detailed project description is available in the Project Description technical report.

The proposed improvements along I-35 include:

- providing three direct connectors (DCs) at the I-35/US 183 interchange in the following locations:
  - I-35 southbound (SB) to US 183 SB
  - US 183 northbound (NB) to I-35 NB
  - I-35 SB to US 183 NB
- adding dedicated lanes to the I-35 frontage road to bypass the St. Johns Avenue signalized intersection
- replacing the existing St. Johns Avenue bridge over I-35 to provide the required vertical clearance
- providing frontage road U-turns for the NB and SB directions at St. Johns Avenue
- modifying a segment of the existing I-35 NB to US 183 NB DC
- providing a bicycle and pedestrian facility along the frontage roads
- realigning the I-35 frontage roads to accommodate the additional space for the DCs and the bypass
- severing access to Brooks Street from the I-35 SB frontage road to eliminate weaving movements from the I-35 SB frontage road to the US 290E westbound frontage road and adding a right-turn lane to facilitate the turning movement
- mill and overlay approximately 2.35 miles of existing I-35 mainlanes pavement between Rundberg Lane and US 290E
- widening the NB to SB U-turn and adding lane capacity for the SB frontage road at the I-35/ Rundberg Lane intersection

The proposed improvements along US 183 include:

- realigning a portion of the US 183 NB frontage road to accommodate for vertical clearances and bridge columns for the DCs overhead
- mill and overlay approximately 1.6 miles of US 183 mainlanes between Georgian Drive and Cameron Road

The proposed improvements would require approximately 7 acres of new right-of-way (ROW).

2. Surrounding Area

2.1 Land Use

The project area is located approximately 4 miles northeast of downtown Austin in central Travis County (Figure 1 in Appendix A). Prior to the construction of I-35, land use primarily consisted of row crops and pastureland with scattered woodlots. By the 1970s, a majority of the project area consisted of urban residential housing, infrastructure, and commercial establishments. Currently, urban development within the project area is primarily commercial and infrastructure, with residential neighborhoods north of US 183 (Figure 2 in Appendix A).

2.2 Natural Setting

The proposed project area occurs within the Blackland Prairies Ecoregion of Texas. The Blackland Prairie covers approximately 11.5 million acres, including the San Antonio and Fayette Prairies. This region is classified as a true prairie and is characterized by gently rolling to nearly level grasslands underlain by dark, fertile soil with rapid surface drainage (Correll and Johnston, 1979). Various species of hardwood trees are characteristic of the riparian corridors that traverse this region. As a result of ease of clearing and soil fertility, the majority of the region has been cultivated.

The proposed project area lies within the Colorado River drainage basin. The Colorado River headwaters are in northeastern Dawson County and flows southeast for approximately 860 miles to its final destination in Matagorda Bay. Three streams were identified within the project area: Little Walnut Creek, Buttermilk Branch Creek, and an unnamed tributary to Buttermilk Branch Creek. These streams are entirely within the Colorado River drainage basin. Topography of the proposed project area is gently rolling, with elevations ranging from approximately 630 to 730 feet above mean seal level (U.S. Geological Survey [USGS], 1988). Portions of the proposed ROW are within the 100-year floodplain as illustrated on Figure 3.

3. Specific Areas of Environmental Concern

3.1 Vegetation

3.1.1 Description of Vegetation in the Project Area

According to requirements of the September 1, 2013, the TxDOT- Texas Parks and Wildlife (TPWD) Memorandum of Understanding (MOU), the Ecological Mapping Systems of Texas (EMST) was utilized to calculate vegetation in the proposed project ROW. As stated above, TxDOT proposes improvements along 2.35 miles of the existing I-35 between Rundberg Lane and US 290E and along 1.6 miles of US 183 between Georgian Drive and Cameron Road. The total new ROW required is 7 acres. The acres discussed below include the entire project survey ROW (~155.61

acres). The largest area of MOU habitat in the proposed project area is listed as "Urban High Intensity" and totals 132.35 acres (Table 1). Other communities present included Central Texas: Floodplain Hardwood Forest, Open Water, and Urban Low Intensity. These communities are depicted in Table 1, illustrated on Figures 4 and 5 in Appendix A, and their general EMST descriptions are provided below. Project area photographs are provided in Appendix B.

Table 1. Vegetation Within the Existing ROW and Impacted by the Proposed Project Within the New ROW

Vegetation Community	MOU Vegetation Type[1]	Area Within the Existing ROW (acres)[2]	Impacted Area Within the New Right of Way (acres)[2]
Urban High Intensity	Urban	132.35	0.0
Urban Low Intensity	Urban	21.08	7.20
	Urban Total	153.43	7.20
Central Texas: Floodplain Hardwood Forest	Riparian	2.13	0.0
	Riparian Total	2.13	0.0
Open Water	Mainly Natural Azonal Mapped Types	0.05	0.0

[1]MOU vegetation types are identified for each vegetation community in accordance with the Threshold Table Programmatic Agreement. See Section 3.0 for further discussion.

[2]Roadway and previously improved medians were subtracted from EMST vegetation types utilizing TxDOT's Roadway Vegetation for Geographic Information Systems (TxDOT, 2014) and are not included in calculated totals.

Urban High Intensity

The urban high intensity vegetation type consists of built-up areas and wide transportation corridors that are dominated by impervious cover (see Figure 4 in Appendix A). Dominant vegetation found in the maintained TxDOT ROW includes Japanese brome (*Bromus japonicus*), Johnsongrass (*Sorghum halepense*), ragweed (*Ambrosia* spp.), Bermudagrass (*Cynodon dactylon*), silverleaf nightshade (*Solanum elaeagnifolium*), King Ranch bluestem (*Bothriochloa ischaemum*) and sideoats grama (*Bouteloua curtipendula*). Approximately 132.35 acres of this vegetation community occurs within the existing ROW, but 0.0 acre would be impacted by the proposed project.

Urban Low Intensity

The urban low intensity vegetation type includes areas that are built-up but not entirely covered by impervious cover and includes most of the nonindustrial areas within cities and towns (see Figure 4 in Appendix A). Similar vegetation was noted within this community as was presented above in the

Urban High Intensity community. Approximately 21.08 acres of this vegetation community occurs within the existing ROW, and 7.20 acres would potentially be impacted by the proposed project.

Central Texas: Floodplain Hardwood Forest

This vegetation community often contains sugarberry (*Celtis laevigata*), cedar elm (*Ulmus crassifolia*), American sycamore (*Platanus occidentalis*), oaks (*Quercus* spp.), black willow (*Salix nigra*), ash (*Fraxinus* spp.), and pecan (*Carya illinoinensis*) in the canopy (see Figure 4 in Appendix A). This community was located along Little Walnut Creek and observed dominant species include cedar elm, sugarberry, pecan, winged elm (*Ulmus alata*), poison ivy (*Toxicodendron radicans*), possumhaw (*Ilex decidua*), southern dewberry (*Rubus trivialis*), mustang grape (*Vitis mustangensis*), and johnsongrass. Approximately 2.13 acres of this vegetation community occurs within the existing ROW, but 0.0 acre would potentially be impacted by the proposed project.

Open Water

Most open water consists of reservoirs or large ponds, although large rivers, including the Colorado and Brazos, are also mapped as open water. Approximately 0.05 acre of open water occurs within the existing ROW at Little Walnut Creek. No impacts are anticipated by the proposed project.

3.1.2 Unusual Vegetation and Special Habitat Features

In accordance with the 2013 TxDOT-TPWD MOU, unusual vegetation features or special habitat features occurring within the proposed project area were identified and described during field investigations. Unusual vegetation features are described in the MOU as including:

- Unmaintained vegetation;
- Trees or shrubs along a fenceline adjacent to a field (fencerow vegetation);
- Riparian vegetation (particularly where fields/cropland extend up to or about the vegetation associated with the riparian corridor);
- Trees that are considered historically significant, ecologically significant, or locally important (such as champion trees located on the Texas A&M Forest Service Big Tree Registry http://txforestservice.tamu.edu/main/article.aspx?id=1336); and
- Unusual stands or islands (isolated) of vegetation.

Unusual vegetation features identified within the proposed project area included riparian/ floodplain vegetation adjacent to Little Walnut Creek. Riparian vegetation is associated with the Central Texas: Floodplain Hardwood Forest community described above.

Special habitat features are described in the 2013 TXDOT-TPWD MOU as including:

- Bottomland hardwoods;
- Caves;

- Cliffs and bluffs;
- Native prairies (particularly those with climax species of native grasses and forbs);
- Ponds (temporary and permanent, natural, and man made);
- Seeps or springs;
- Snags (dead trees) or groups of snags;
- Waterbodies (creeks, streams, rivers, lakes, etc.);
- Existing bridges with known or easily observed bird or bat colonies;
- Rookeries; and
- Prairie dog towns.

Special habitat features observed during field investigations include three waterbodies, Little Walnut Creek (Intermittent flow), tributary to Little Walnut Creek (Intermittent flow), and Buttermilk Branch Creek (Ephemeral flow). Little Walnut Creek appears to have connectivity to portions of its original floodplain and with stands of riparian vegetation present on the western portion of the project area. Buttermilk Branch Creek has been highly modified by the construction of I-35 and surrounding commercial developments. The creek flows underneath I-35 through a culvert and lacks original sinuosity and riparian vegetation.

3.2 Wildlife

3.2.1 Endangered Species Act of 1973, State-Listed Species, and Species of Greatest Conservation Need

Databases of sensitive species maintained by the U.S. Fish and Wildlife Service (USFWS) and TPWD identified federally listed threatened, endangered, proposed endangered or candidate species that may occur or have historically occurred in Travis County, including three amphibians, five arachnids, five birds, one fish, two insects, one mammal, four mollusks, and one plant (Appendix C). Additionally, four state-listed species that are not federally listed could potentially occur in Travis County. These include one mollusk, one reptile, and two birds. The TPWD and USFWS lists differ due to differences in the procedures for collecting and disseminating data on recorded occurrences.

Table 2 presents federally and state-listed threatened and endangered species that could occur within Travis County. Table 2 also lists species with no regulatory status that are considered Species of Greatest Conservation Need (SGCN) or rare in Texas that could occur within Travis County. The SGCN species are listed due to limited distributions and/or declining populations, face the threat of extirpation or extinction but lack legal protection. In addition, Table 2 lists the current status and habitat requirements for each species, and a determination as to whether the proposed project could potentially impact or have an effect on any species.

Table 2. Candidate, Threatened, or Endangered Species of Travis County

Species	State Status	Federal Status	Potential Habitat Present	Species Effect/ Impact	Justification
Austin Blind Salamander *Eurycea waterlooensis*	SGCN	FE	No	No Effect/ Impact	Only known from outlets of Barton Springs, which are not in the proposed project area.
Barton Springs Salamander *Eurycea sosorum*	SE	FE	No	No Effect/ Impact	Only known from outlets of Barton Springs, which are not in the project area.
Jollyville Plateau Salamander *Eurycea tonkawae*	SGCN	FT	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Pedernales River Springs Salamander *Eurycea sp.*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Bee Creek Cave Harvestman *Texella reddelli*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Bone Cave Harvestman *Texella reyesi*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Tooth Cave Pseudoscorpion *Tartarocreagris texana*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Bandit Cave Spider *Cicurina bandida*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Tooth Cave Spider *Neoleptoneta myopica*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Warton's Cave Meshweaver *Cicurina wartoni*	SGCN	FC	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
American Peregrine Falcon *Falco peregrinus anatum*	ST	DL	No	No Effect/ Impact	No suitable habitat present. No high cliffs or tall buildings found within or adjacent to the proposed project ROW.
Arctic Peregrine Falcon *Falco peregrinus tundrius*	SGCN	DL	No	No Effect/ Impact	No suitable habitat present. No high cliffs, tall buildings, coastlines, mountains, or open areas near water found within or adjacent to the proposed project ROW.

Species	State Status	Federal Status	Potential Habitat Present	Species Effect/ Impact	Justification
Bald Eagle *Haliaeetus leucocephalus*	ST	DL	No	No Effect/ Impact	No suitable habitat present. No tall trees, cliffs, coasts near large bodies of water found within or adjacent to the proposed project ROW.
Black-capped Vireo *Vireo atricapilla*	SE	FE	No	No Effect/ Impact	No suitable habitat present. No early successional vegetation in the project area.
Golden-cheeked Warbler *Dendroica chrysoparia*	SE	FE	No	No Effect/ Impact	No suitable habitat present. No oak-juniper stands found in the project area.
Interior Least Tern *Sterna antillarum athalassos*	SE	FE	No	No Effect/ Impact	No suitable habitat present. No nests or major rivers found within the proposed project ROW.
Peregrine Falcon *Falco peregrinus*	ST	DL	No	No Effect/ Impact	No suitable habitat present. No tall trees, cliffs, coasts near large bodies of water found within or adjacent to the proposed project ROW.
Sprague's Pipit *Anthus spragueii*	SGCN	FC	No	No Effect/ Impact	No suitable habitat present. No native upland prairie or coastal grasslands within or adjacent to the proposed project ROW.
Whooping Crane *Grus americana*	SE	FE	No	No Effect/ Impact	No suitable habitat present. No estuaries, prairie marshes savannah, grasslands, cropland pastures found within or adjacent to the proposed project ROW.
Mountain Plover *Charadrius montanus*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No shortgrass prairies or plowed fields with shallow depressions present in the proposed project ROW.
Red Knot *Calidris canutus rufa*	SGCN	T	No	No Effect/ Impact	No suitable habitat present. No coastal shorelines or large mudflats present in the proposed project ROW.
Western Burrowing Owl *Athene cunicularia hypugaea*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No open grasslands present in the proposed project ROW. Project occurs beyond what is generally the maximum observed extend of southward migration and nesting.
Smalleye Shiner *Notropis buccula*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No broad open sandy channels within the proposed project ROW.;
Guadalupe Bass *Micropterus treculii*	SGCN	--	No	No Effect/ Impact	No suitable habitat present within the proposed ROW; endemic to perennial streams of the Edward's Plateau region.

Species	State Status	Federal Status	Potential Habitat Present	Species Effect/ Impact	Justification
Tooth Cave Blind Rove Beetle *Cylindropsis sp.*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Kretschmarr Cave Mold Beetle *Texamaurops reddelli*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Tooth Cave Ground Beetle *Rhadine persephone*	SGCN	FE	No	No Effect/ Impact	No suitable habitat present. No karst features were found within or adjacent to the proposed project ROW.
Cave Myotis Bat *Myotis velifer*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No cave features were found within or adjacent to the proposed project ROW. Edwards Plateau is generally the extent of preferred habitat.
Plains Spotted Skunk *Spilogale putorius interrupta*	SGCN	--	No	No Effect/ Impact	No suitable habitat present within the proposed ROW. Requires extensive vegetative cover regardless of habitat type used and prefers early successional vegetative communities.
Red Wolf *Canis rufus*	SE	FE	No	No Effect/ Impact	Extirpated from Texas.
Bifurcated Cave Amphipod *Stygobromus bifurcatus*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No cave features were found within or adjacent to the proposed project ROW.
Unnamed Amphipod Species *Stygobromus russelli*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No cave features were found within or adjacent to the proposed project ROW.
Balcones Cave Amphipod *Stygobromus balconis*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No cave features were found within or adjacent to the proposed project ROW.
False Spike Mussel *Quadrula mitchelli*	ST	--	No	No Effect/ Impact	No suitable habitat present within proposed project ROW.
Smooth Pimpleback *Quadrula houstonensis*	ST	FC	No	No Effect/ Impact	No suitable habitat present within proposed project ROW.
Texas Fatmucket *Lampsilis bracteata*	ST	FC	No	No Effect/ Impact	No suitable habitat present within proposed project ROW.
Texas Fawnsfoot *Truncilla macrodon*	ST	FC	No	No Effect/ Impact	No suitable habitat present within proposed project ROW.
Texas Pimpleback *Quadrula petrina*	ST	FC	No	No Effect/ Impact	No suitable habitat present within proposed project ROW.

Species	State Status	Federal Status	Potential Habitat Present	Species Effect/ Impact	Justification
Spot-tailed Earless Lizard *Holbrookia lacerata*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. No open prairie-brushland with areas free of vegetation found within the proposed project ROW.
Texas Garter Snake *Thamnophis sirtalis annectens*	SGCN	--	Yes	Potential Effect/ Impact	Prefers wet or moist microhabitats such as riparian areas with saturated soils. Potential habitat present along Little Walnut within the proposed ROW; however, impacts to potential habitat from this project are minimal.
Texas Horned Lizard *Phrynosoma cornutum*	ST	--	No	No Effect/ Impact	No suitable habitat present within the proposed ROW. No sandy soils or harvester ants observed during field surveys.
Basin Bellflower *Campanula reverchonii*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. There are no loose gravel or gravelly sand soils on open slopes within the proposed project ROW.
Texabama Croton *Croton alabamensis var. texensis*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. There are no rocky slopes in forested limestone canyons within the proposed project ROW.
Boerne bean *Phaseolus texensis*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. There are no rocky canyons with limestone soils within the proposed project ROW.
Correll's False Dragon-head *Physostegia correllii*	SGCN	--	Yes	Potential Effect/ Impact	Prefers wet, silty clay loams on streamsides and in creekbeds, irrigation channels, and roadside ditches. Potential habitat along Little Walnut Creek within the proposed ROW; however, impacts to potential habitat from this project are minimal.
Warnock's Coral-root *Hexalectris warnockii*	SGCN	--	No	No Effect/ Impact	No suitable habitat present. There are no oak-juniper woodlands on shaded slopes within the proposed project ROW.
Bracted Twistflower *Stretanthus bracteatus*	SGCN	FC	No	No Effect/ Impact	No suitable habitat present. There are no rocky hillsides, slopes, or thin clay soils within the proposed project ROW.

Source: USFWS (2014) and TPWD (2015a).

USFWS (E = Endangered, EXPN = Experimental population, non-essential, DL = Delisted Taxon, DM = Delisted monitoring, C = Candidate, and NL = Not listed)

TPWD (DL = Delisted Taxon, FT = Federal threatened, FE = Federal endangered, FC = Federal Candidate species SE = State endangered, ST = State threatened, SC = State Candidate Species and -- = No regulatory status)

Texas Natural Diversity Database

The TPWD's Texas Natural Diversity Database (TXNDD) maintains a record of observations of tracked rare, threatened or endangered species, SGCN, and assemblages throughout the state. These observances are called Element of Occurrence Records (EORs) and are defined as an area of land and/or water where a species or ecological community is or was present that has practical conservation value (NatureServe, 2015). Considered collectively, the TXNDD results and the TPWD and USFWS county lists identify several species that have historically occurred in Travis County. It should be noted that information from the TXNDD cannot be used for presence/absence determinations. The TXNDD was searched for EORs by TPWD on June 1, 2015, to determine whether any reports of species have occurred within a 1.5-mile radius of the proposed project (Table 3).

Table 3. Texas Parks and Wildlife Department Natural Diversity Database Search Results

EOID	Scientific Name	Common Name	Status
4475	*Onosmodium helleri*	Heller's marbleseed	SGCN
93604	*Festuca versuta*	Texas fescue	SGCN
8277	*Thamnophis sirtalis annectens*	Texas garter snake	SGCN
7450	*Thamnophis sirtalis annectens*	Texas garter snake	SGCN

Source: TPWD (2015b).

As noted in Table 3, this database search indicated that no federal- or state-listed species have been documented within 1.5 miles of the project area. Element Occurrences for three SGCN species, Heller's marbleseed (*Onosmodium helleri*), Texas fescue (*Festuca versuta*), and Texas garter snake (*Thamnophis sirtalis*) were recorded adjacent to or within the project area as illustrated in Figure 6. Due to intensive urbanization associated with the existing I-35 corridor, no potential habitat is present for Heller's marbleseed or Texas fescue. Potential habitat for the Texas garter snake and Correll's false dragon-head may exist within the proposed project ROW along Little Walnut Creek based on the species' preference for riparian vegetation and damp soils adjacent to waterbodies (Dixon and Werler, 2000).

Potential Impacts to Federally Listed or Candidate Species, State-listed Species, and Species of Greatest Conservation Need

Desktop analysis and field investigations conducted in November 2014 revealed that no suitable habitat exists within the proposed project's ROW for federal- and/or state-listed threatened or endangered species or federal candidate species. However, based on the presence of riparian habitat along Little Walnut Creek within the proposed project ROW, potential habitat does exist for two species of greatest conservation need: the Texas garter snake and Correll's false dragon-head.

Outside of these two species, the project area lacked suitable habitat for sensitive flora and fauna and existing vegetation was dominated primarily by ruderal herbaceous species and a mixture of native and ornamental woody plantings.

3.2.2 Migratory Bird Treaty Act

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 with the MBTA's policies and regulations.

Migratory birds, primarily generalist such as great-tailed grackle (*Quiscalus mexicanus*), northern mockingbird (*Mimus polyglottos*), northern cardinal (*Cardinalis cardinalis*), house finch (*Haemorhous mexicanus*) and doves (*Zenaida* spp.), were observed during field investigations. These species, in addition to neotropical migrants and may find suitable breeding habitat within woody vegetation in the project area to breed during construction of the proposed project. Species not protected under the MBTA, e.g., European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and rock pigeon (*Columba livia*), comprised a large portion of avian abundance observed during field surveys. Appropriate measures would be taken to avoid adverse impacts on migratory birds and would include the following:

- The disturbance, destruction, or removal of active nests, including ground nesting birds, during the nesting season would be prohibited;
- The removal of unoccupied, inactive nests would be avoided;
- The establishment of active nests during the nesting season on TxDOT-owned and -operated facilities and structures proposed for replacement or repair would be prevented; and
- The collection, capture, relocation or transportation of birds, eggs, young, or active nests without a permit would be prohibited.

3.2.3 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA), as amended in 1964, was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect that water-related projects would have on fish and wildlife resources, take action to prevent loss or damage to these resources, and provide for the development and improvement of these resources. Though detailed drainage design for the proposed project has not been completed at this time, it is not anticipated that the proposed project would require authorization under a U.S. Army Corps of Engineers (USACE) Section 404 Nationwide Permit (NWP); therefore, no coordination under the FWCA would be required.

3.2.4 Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA), as detailed in Subtitle I of Title XV of the Agricultural and Food Act of 1981, provides protection to prime and unique farmlands, as well as farmlands of statewide or local importance. Prime farmland soils, as defined by the U.S. Department of Agriculture (USDA), are soils that are best suited to producing food, feed, forage, and oilseed crops. Such soils have properties that are favorable for the production of sustained high yields. Prime farmland can include cropland, pastureland, rangeland, or forestland, but does not include land converted to urban, industrial, transportation, or water uses. The project area falls within the U.S. Census Bureau 2010 Urbanized Area (UA) for Austin (project area) and is therefore exempt from the protections of the FPPA.

3.2.5 Executive Order 13112 on Invasive Species

Upon completion of earthwork operations, disturbed areas would be restored and reseeded in accordance with TxDOT's Vegetation Management Guidelines and in compliance with the intent of Executive Order 13112 on Invasive Species. A mix of native grasses and native forbs would be used to revegetate the ROW, as available.

3.2.6 Federal Highway Administration Memorandum on Environmentally and Economically Beneficial Landscaping

The Federal Highway Administration (FHWA) Memorandum on Environmentally and Economically Beneficial Landscaping was implemented in April 1995 as guidance designed to minimize the adverse effects of landscaping. The practices described in this memorandum apply to federal facilities and federally funded projects and include implementation, where affordable and practicable, of the following:

- Use regionally native plants for landscaping;
- Design, use, or promote construction practices that minimize adverse effects on the natural habitat;
- Seek to prevent pollution by, among other things, reducing fertilizer and pesticide use, using integrated pest management techniques, recycling green waste, and minimizing runoff;
- Implement water-efficient practices, such as the use of mulches, efficient irrigation systems, audits to determine exact landscaping water-use needs, and recycled or reclaimed water and the selecting and siting of plants in a manner that conserves water and controls soil erosion; and
- Create outdoor demonstrations incorporating native plants, as well as pollution prevention and water conservation techniques, to promote awareness of the environmental and economic benefits of implementing this directive.

Upon completion of earthwork operations, disturbed areas would be restored and reseeded in accordance with TxDOT's Vegetation Management Guidelines and in compliance with the intent of the FHWA Executive Memorandum on Environmentally and Economically Beneficial Landscape Practices.

4. Texas Parks and Wildlife Department Coordination

As detailed in § 2.206 of the 2013 MOU, coordination with the TPWD is required for projects that trigger one or more of the following:

1) The project is within range of a state threatened or endangered species or SGCN as identified by the TPWD County list of Rare and Protected Species, and there is suitable habitat, unless Best Management Practices (BMPs) as defined in this MOU are implemented as part of a programmatic agreement.
2) The project may adversely impact important remnant vegetation based on the judgment of a qualified biologist or as mapped in the TXNDD.
3) The project requires a nationwide permit with pre-construction notification or an individual permit, issued by the USACE.
4) The project includes in the TxDOT ROW or conservation, construction, or drainage easement more than 200 linear feet of stream channel for each single and complete crossing of one or more of the following that is not already channelized or otherwise maintained:

   a) Channel realignment; or

   b) Stream bed or stream bank excavation, scraping, clearing, or other permanent disturbance.
5) The project contains known isolated wetlands outside existing TxDOT ROW that would be directly impacted by the project.
6) The project may impact 0.10 acre of riparian vegetation based on the judgment of a qualified biologist or as mapped in the EMST.
7) The project disturbs habitat in an area equal to or greater than the area of disturbance indicated in the Threshold Table Programmatic Agreement.

The proposed project ROW contains potential habitat for two species of greatest conservation need as identified by the TPWD County List of Rare and Protected Species, the Texas garter snake and Correll's false dragon-head. Implementation of BMPs as defined in the MOU would be required to avoid coordination with the TPWD. In the case of the Texas garter snake, BMPs will be implemented by advising contractors of the potential occurrence of the species in the project area and to avoid harming the species if encountered. As there are no specific BMPs for Correll's false dragon-head, general project and vegetation BMPs should be followed to fulfill the MOU.

The Threshold Table Programmatic Agreement groups vegetation types into broader MOU types and sets a disturbance threshold for each type by ecoregion that, if met or exceeded, triggers coordination with the TPWD. For projects that have vegetation impacts in multiple ecoregions and the thresholds differ between these regions for a single MOU type, the average of the thresholds for that MOU type is used to determine coordination requirements with the TPWD. A review of the Threshold Table Programmatic Agreement determined that vegetation within the proposed project falls into three MOU types: Urban; Floodplain, and Open Water. The Threshold Table Programmatic Agreement sets a disturbance threshold of 0.5 acre for Floodplain. There is no threshold for Urban. Vegetation impacts quantified in Table 1 shows that the proposed project would not exceed the threshold for any of the MOU types; therefore, coordination with TPWD would not be required.

Detailed drainage design for the proposed project has not been completed at this time; however, it is not anticipated that the proposed project would require authorization under a USACE Section 404 NWP.

The proposed project would not impact important remnant vegetation, result in channel realignment or stream bed or stream bank excavation, scraping or clearing, or impact isolated wetlands outside of the TxDOT ROW.

5. Permits and Commitments

The following permits and commitments would be required for the proposed project:

- Impacts to vegetation would be avoided or minimized by limiting disturbance to only that which is necessary to construct the proposed project. The removal of native vegetation, particularly mature native trees and shrubs, would be avoided to the greatest extent practicable. An approved seed mix would be used in the landscaping and revegetation of disturbed areas.

Appropriate measures would be taken to avoid adverse impacts on migratory birds and would include the following:

- The disturbance, destruction, or removal of active nests, including ground nesting birds, during the nesting season would be prohibited;
- The removal of unoccupied, inactive nests would be avoided as practicable;
- The establishment of active nests during the nesting season on TxDOT-owned and -operated facilities and structures proposed for replacement or repair would be prevented; and
- The collection, capture, relocation, or transportation of birds, eggs, young, or active nests without a permit would be prohibited.

Upon completion of earthwork operations, disturbed areas would be restored and reseeded in accordance with TxDOT's Vegetation Management Guidelines and in compliance with the intent of Executive Order 13112 on Invasive Species and the FHWA Executive Memorandum on Environmentally and Economically Beneficial Landscape Practices.

6. References

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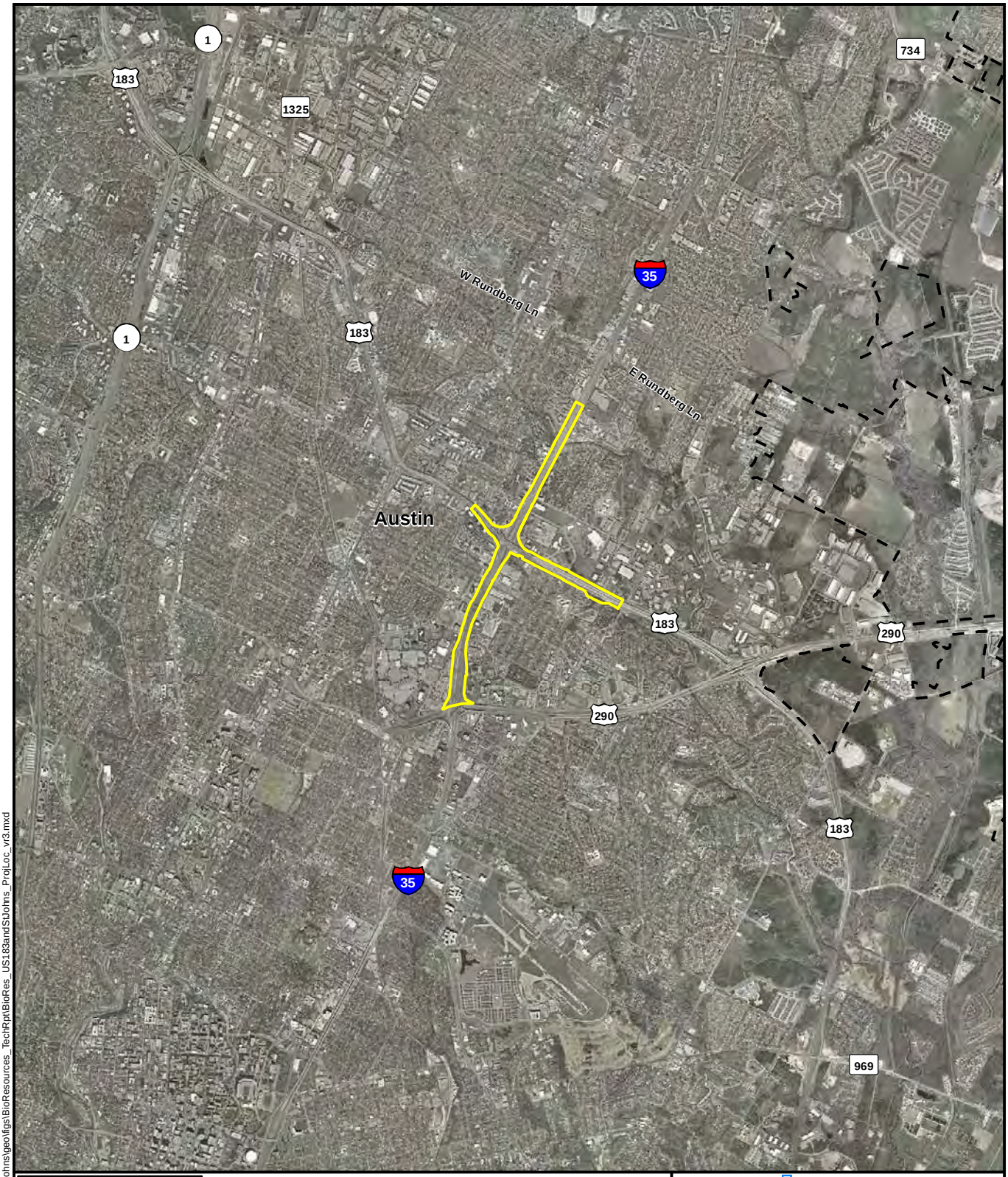
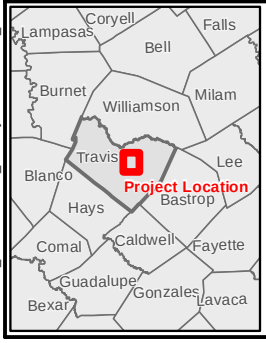
Appendix A

Figures





Project Location

City Limit

0 0.5 1

Miles

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 1

Project Location

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS

CSJs: 0015-13-382, 0015-13-387

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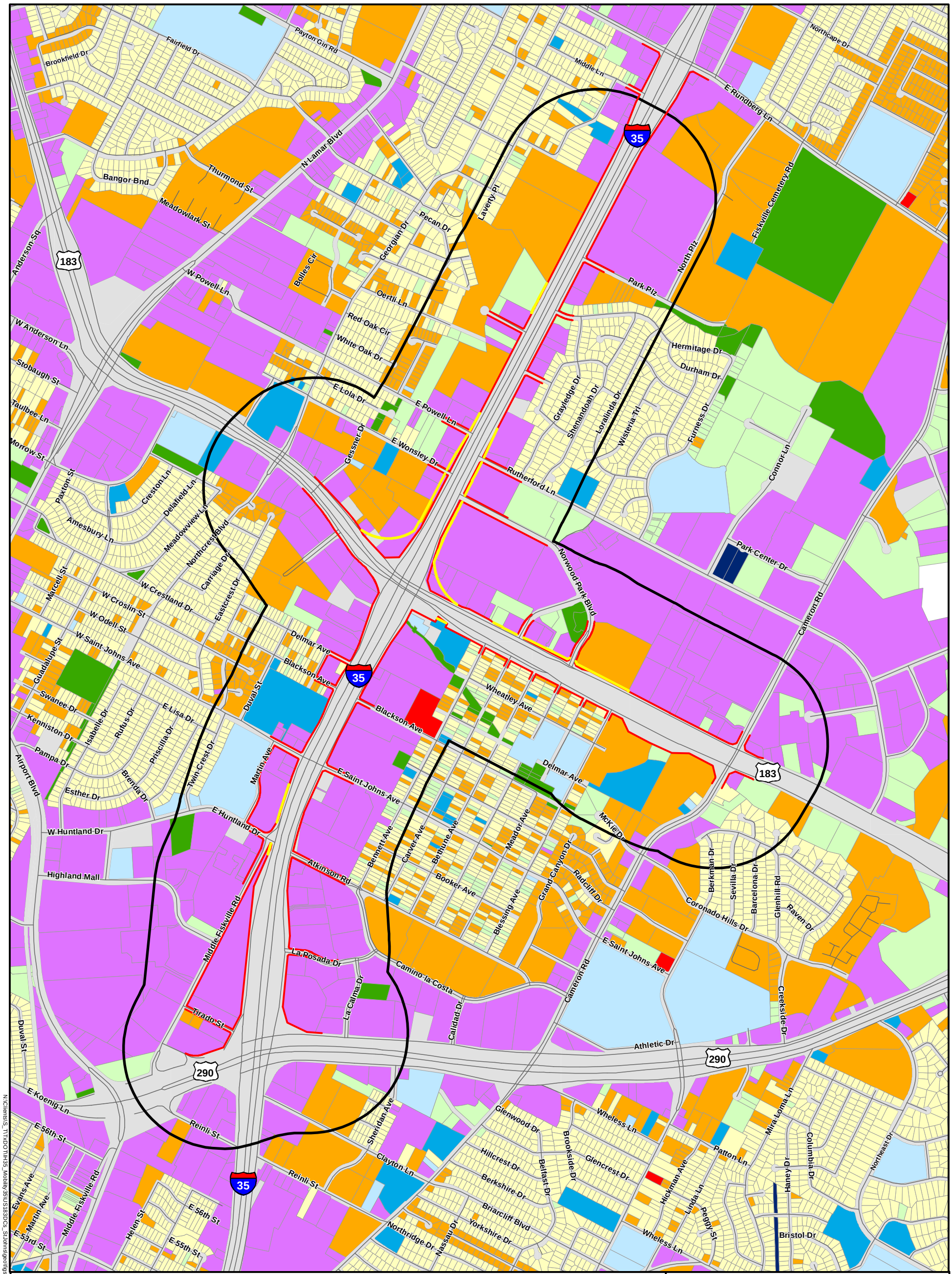

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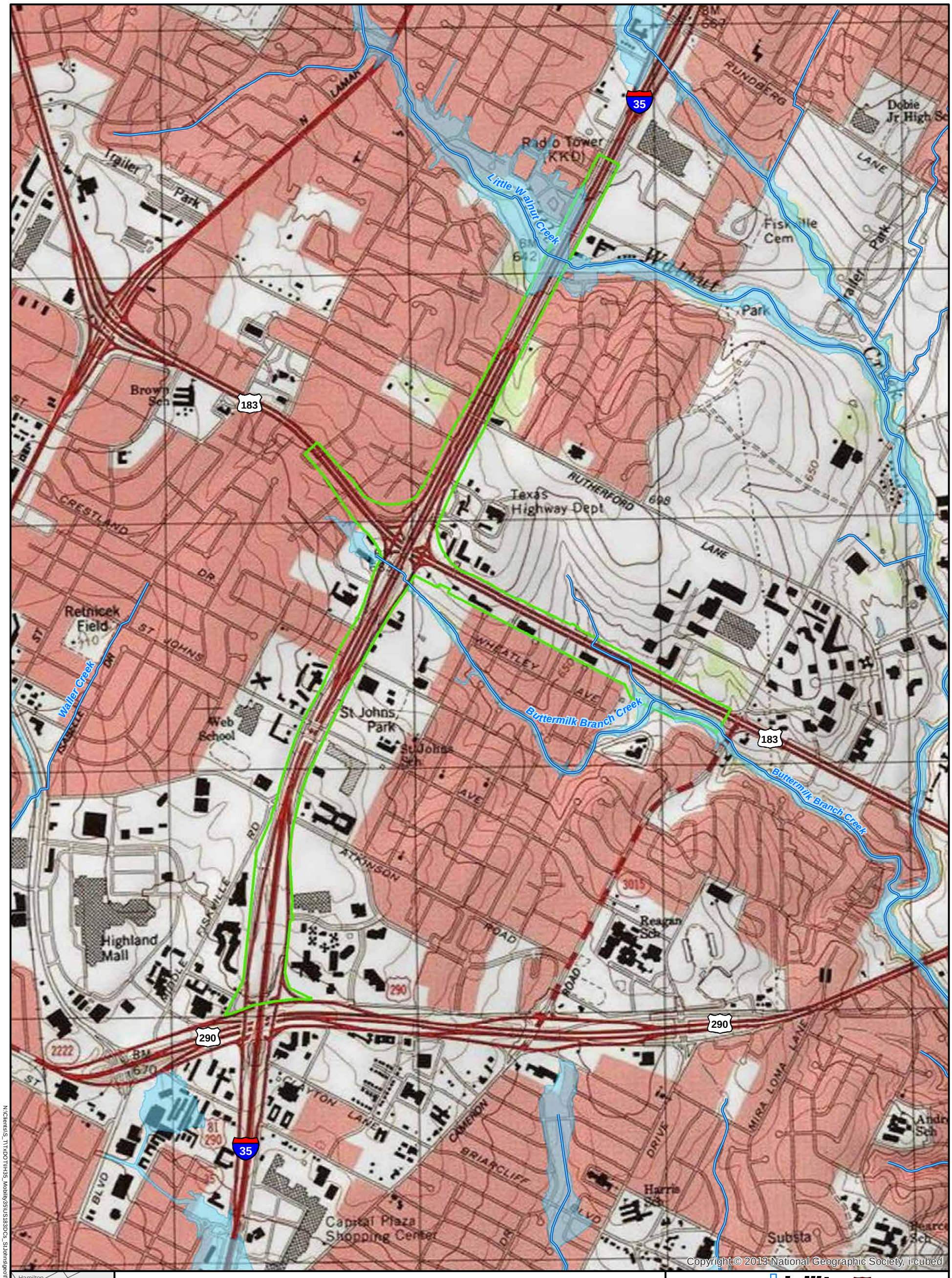
mobility 35 CAPITAL AREA

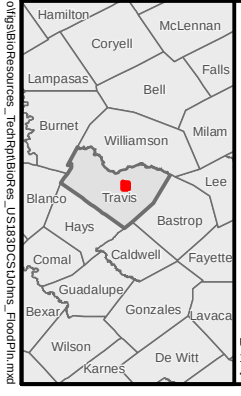
Figure 2

Land Use in the Study Area

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387





Stream/Creek

100-year Floodplain

Project Area

0 625 1,250

Feet

USGS, National Geographic, i-cubed. USA Topo Maps. 25 September 2014. 1:24,000; generated by Atkins; using ArcMap. <http://services.arcgisonline.com/ArcGIS/rest/services/USA_Topo_Maps/MapServer> (08 June 2015)

mobility 35 CAPITAL AREA

Figure 3

Floodplain Map

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN EAST QUADRANGLE
AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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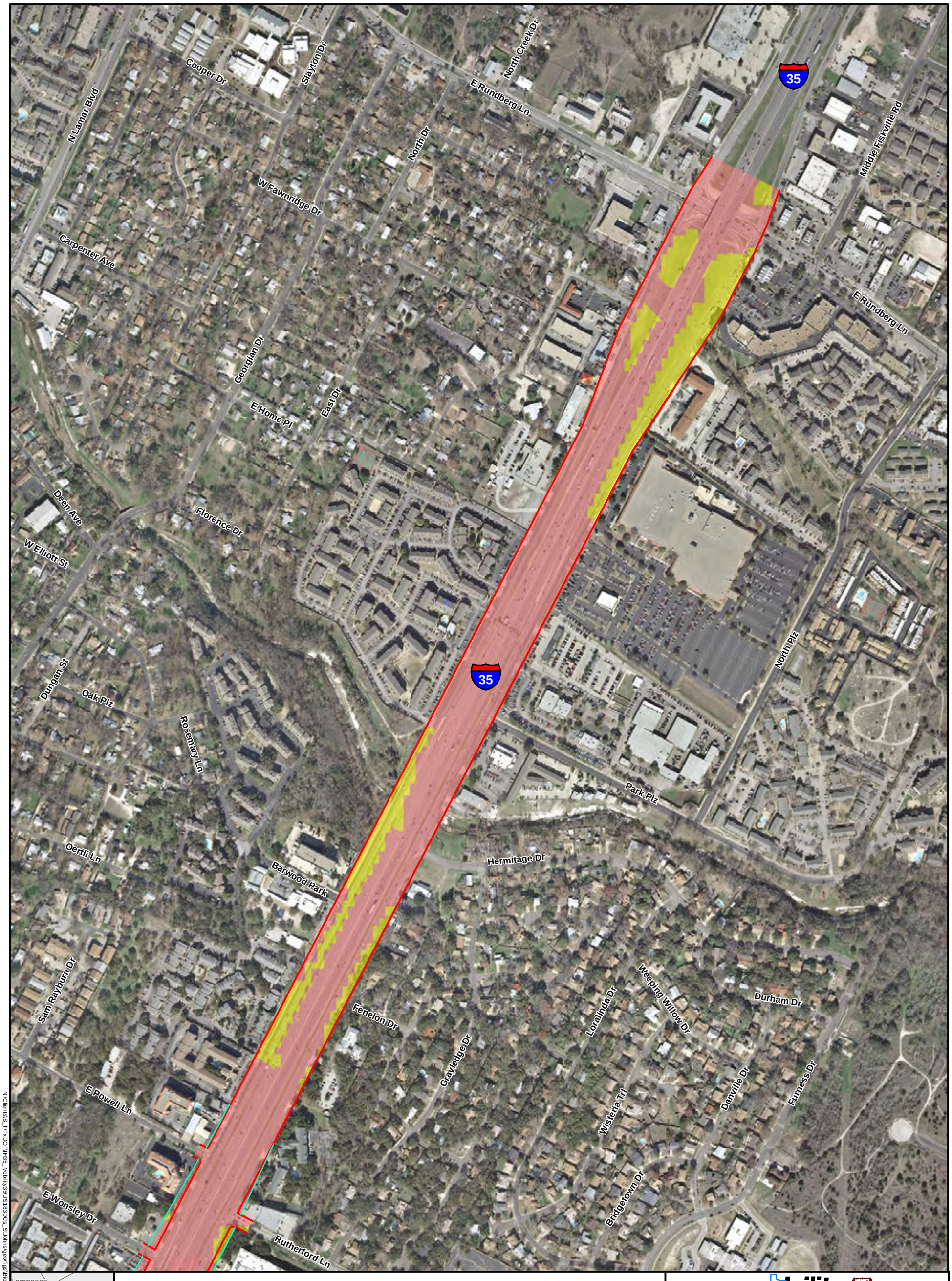

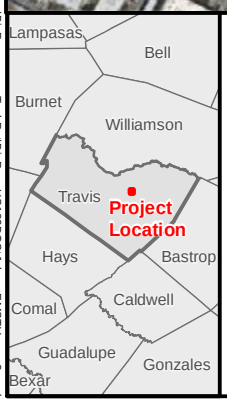

Urban High Intensity
Urban Low Intensity
Proposed ROW
Existing ROW

0 250 500
Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 4

EMST Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

Sheet 1 of 4

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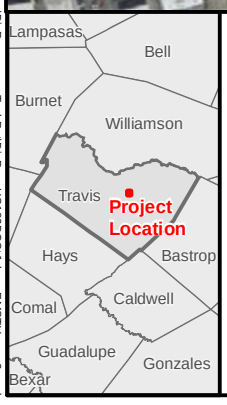

Urban High Intensity
Urban Low Intensity
Proposed ROW
Existing ROW

0 250 500
Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 4

EMST Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

N:\Clients\S_TTx\DOT\IH35_Mobility35\US183DCs_StJohns\gis\figs\BioResources_TechRpt\BioRes_US183DCStJohns_EMSTVeg_v2.mxd

E Powell Ln
35
Grayledge Dr
Loralinda Dr
Furness Dr
Sheldon Cv
Brettonwoods Ln
Norwood Park Blvd
Connor Ln
Park Center Dr
Rutherford Ln
Clock Tower Dr
183
Carver Ave
Wheatley Ave
Bethune Ave
Providence Ave
Meador Ave
Cameron Rd
Bennett Ave
Carver Ave
Blackson Ave
Blessing Ave
Wilks Ave
Providence Ave
E Saint Johns Ave
Grand Canyon Dr
Radcliff Dr
Coronado Hills Dr
Berkman Dr
Barcelona Dr
Booker Ave

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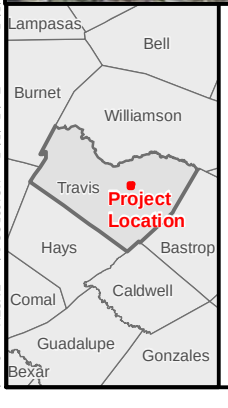


Urban High Intensity
Urban Low Intensity
Proposed ROW
Existing ROW

0 250 500
Feet

Imagery: CAPCOG 2013

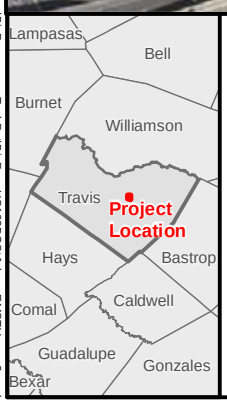
mobility 35 CAPITAL AREA

Figure 4

EMST Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387



Urban High Intensity
Urban Low Intensity
Proposed ROW
Existing ROW

0 250 500
Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 4

EMST Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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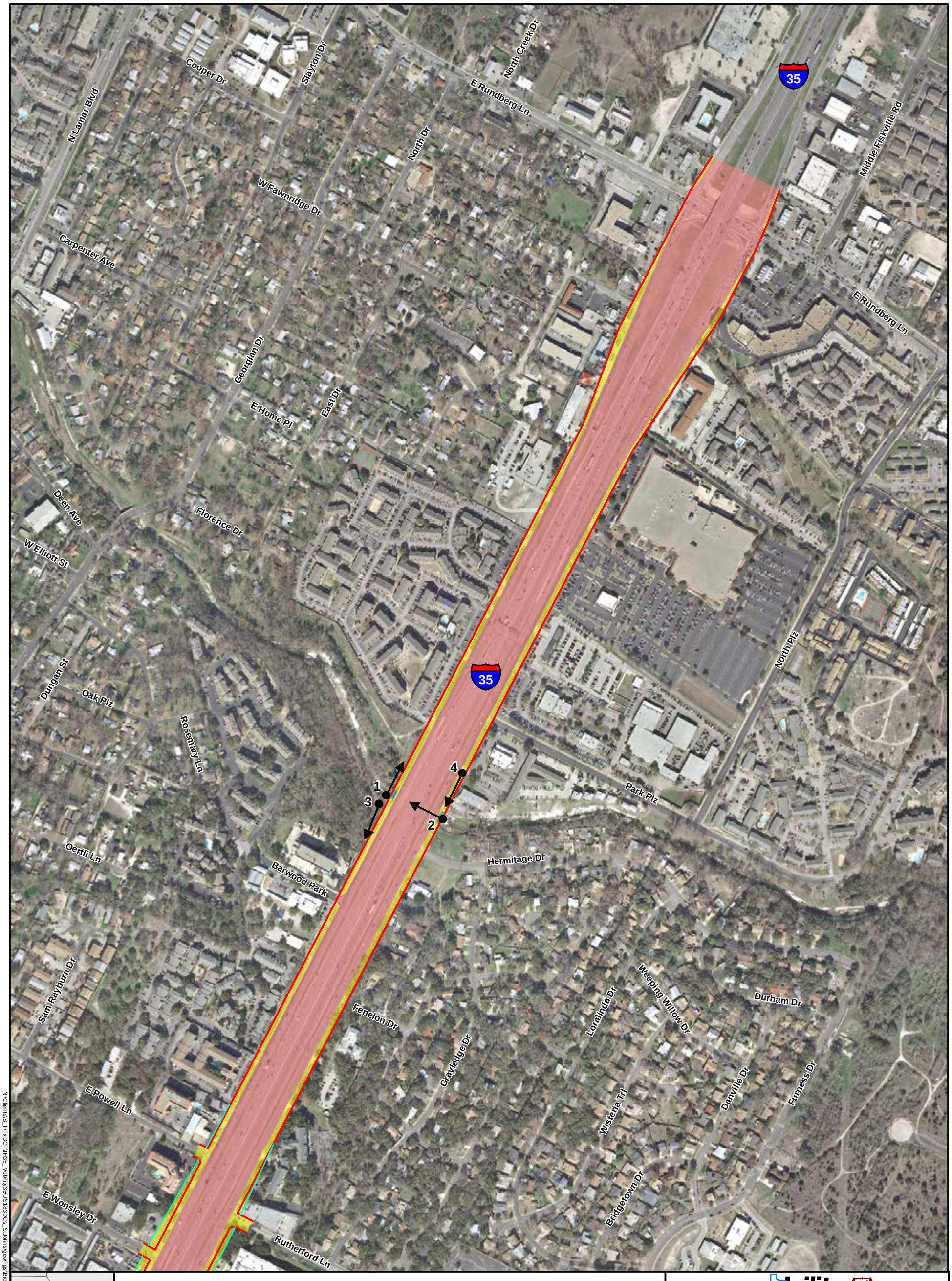

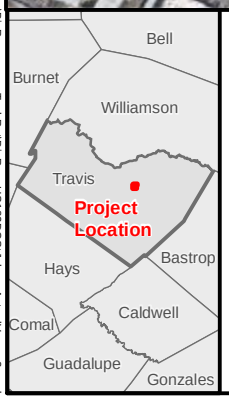

Central Texas: Floodplain Hardwood Forest

Open Water

Urban High Intensity

Urban Low Intensity

1 Photo Location/Direction (refer to Project Area Photos in Appendix B)

Proposed ROW

Existing ROW

0 250 500

Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 5

Actual Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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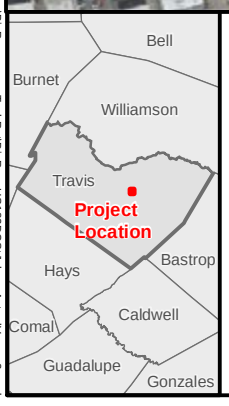


Central Texas: Floodplain Hardwood Forest

Open Water

Urban High Intensity

Urban Low Intensity

1 Photo Location/Direction (refer to Project Area Photos in Appendix B)

Proposed ROW

Existing ROW

0 250 500

Feet

Imagery: CAPCOG 2013

N:\Clients\S_TTx\DOT\IH35_Mobility35\US183DCs_StJohns\gis\figs\BioResources_TechRpt\BioRes_US183DCStJohns_ActualVeg_v2.mxd

mobility 35 CAPITAL AREA

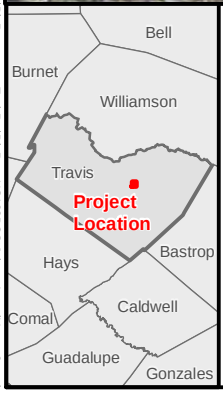
Figure 5

Actual Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

E Powell Ln
35
Grayledge Dr
Loralinda Dr
Furness Dr
Sheldon Cv
Brettonwoods Ln
Norwood Park Blvd
Connor Ln
Park Center Dr
Rutherford Ln
Clock Tower Dr
183
Carver Ave
Wheatley Ave
Bethune Ave
Providence Ave
Meador Ave
Cameron Rd
Bennett Ave
Carver Ave
Blackson Ave
Blessing Ave
Wilks Ave
Providence Ave
E Saint Johns Ave
Grand Canyon Dr
Radcliff Dr
Coronado Hills Dr
Berkman Dr
Barcelona Dr
Booker Ave



Central Texas: Floodplain Hardwood Forest
Open Water
Urban High Intensity
Urban Low Intensity

1 Photo Location/Direction (refer to Project Area Photos in Appendix B)
Proposed ROW
Existing ROW

0 250 500
Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 5

Actual Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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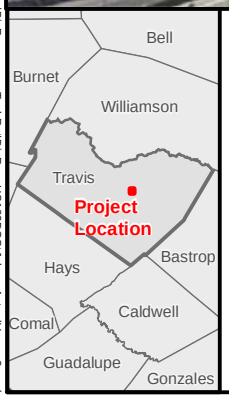


Central Texas: Floodplain Hardwood Forest

Open Water

Urban High Intensity

Urban Low Intensity

1 Photo Location/Direction (refer to Project Area Photos in Appendix B)

Proposed ROW

Existing ROW

0 250 500

Feet

Imagery: CAPCOG 2013

mobility 35 CAPITAL AREA

Figure 5

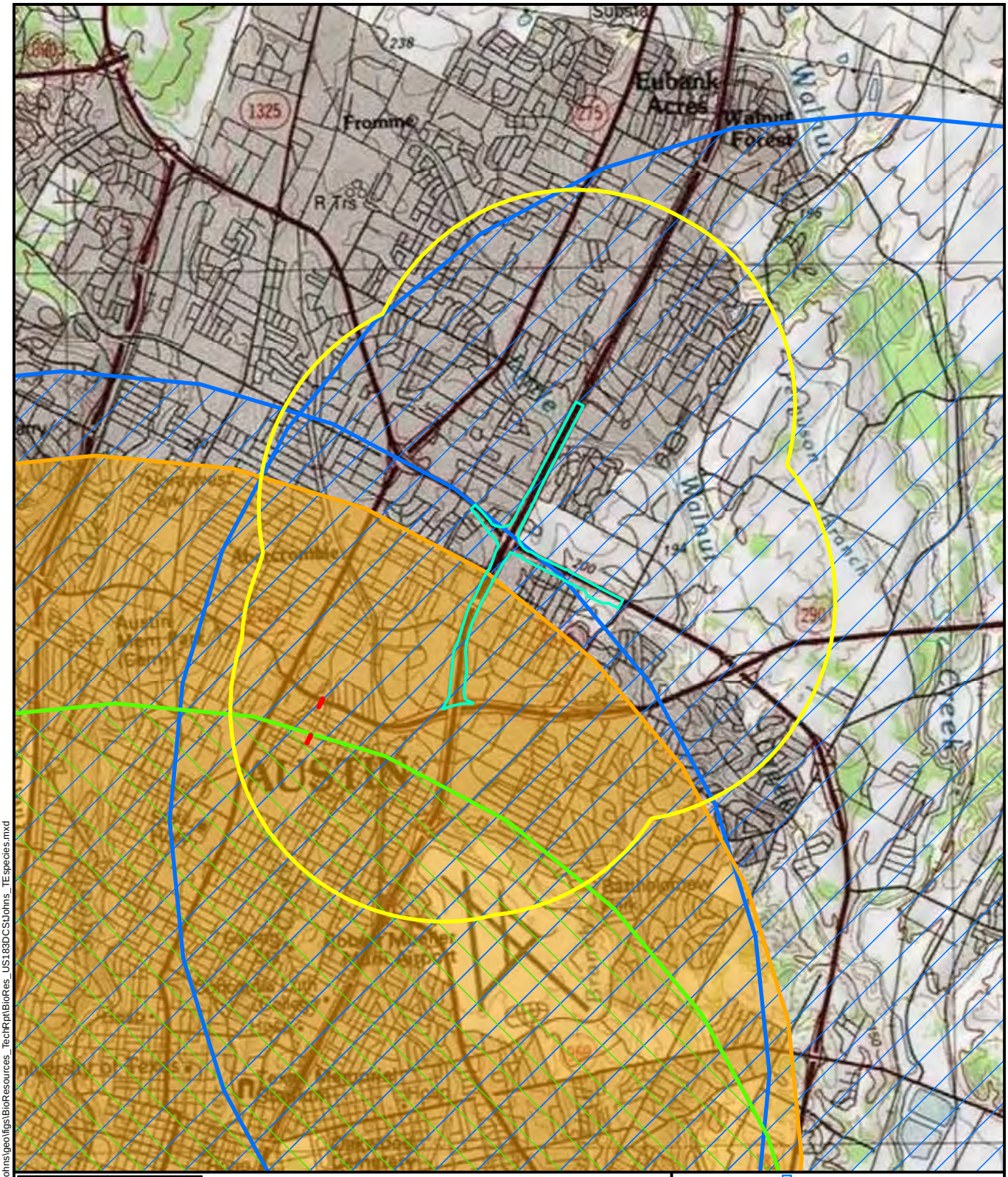
Actual Vegetation Types

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

Sheet 4 of 4

N:\Clients\S_TTX\DOT\IH35_Mobility35\US183\DCs_Stubns\gis\mxd\gis\BioResources_TechRpt\BioRes_US183DCStubns_ActualVeg_yr2.mxd



Common Name

- Correll's False Dragon-Head
- Texas Fescue
- Heller's Marbleseed
- Texas Garter Snake
- Project Area
- 1.5-mile Buffer

0 0.5 1
Miles

USGS, National Geographic, i-cubed.
USA Topo Maps. 1 March 2015.
1:63,360; generated by Atkins; using ArcMap.
<http://services.arcgisonline.com/ArcGIS/rest/services/USA_Topo_Maps/MapServer> (08 June 2015)

mobility 35 CAPITAL AREA

Figure 6
Rare, Threatened, or Endangered Species with the Potential to Occur within
1.5-mile Radius of the Proposed Project

I-35 Improvements from Rundberg Lane to US 290E

AUSTIN QUADRANGLE
AUSTIN, TRAVIS COUNTY, TEXAS
CSJs: 0015-13-382, 0015-13-387

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Appendix B

Project Area Photographs

Photo 1: Looking north across Little Walnut Creek on the west side of I-35. Open-water habitat within the project area.

Photo 2: Looking west from Little Walnut Creek on the east side of I-35.

Photo 3: Looking south to Floodplain Hardwood Forest on the west side of I-35 near Little Walnut Creek.

Photo 4: Looking south from the east side of I-35 along typical Urban Low Intensity habitat within the project area.

Photo 5: Looking south from typical Urban Low Intensity MOU habitat within the project area.


Photo 6: Looking north to the I-35 and US 183 intersection, with High and Low Urban Intensity MOUs.

Photo 7: Looking south along I-35 near US 290 for typical Urban habitat in the project.

Appendix C

Threatened and Endangered Species Lists

																			Other Notes	
Scientific Name	**Common Name**	**Status**		**Abundance Ranking**		**CHIH - AZNM**	**HIPL**	**SWTB**	**TBPR**	**ECPL**	**WGCP**	**CRTB**	**CGPL**	**EDPT**	**GCPM Upper**	**GCPM Mid**	**GCPM Lower**	**STPL**	**for rationale supporting additions, deletions and other changes, see ADD/DEI document Dec 2010**	**Endemic in Texas**
Blarina hylophaga plumblea	Elliot's short-tailed shrew			G5T1Q	S1				TBPR	ECPL					GCPM-UP	GCPM-MID				N
Geomys attwateri	Attwater's pocket gopher			G4	S4				TBPR	ECPL					GCPM-UP	GCPM-MID	GCPM-LWR	STPL		Y
Lutra canadensis	River otter			G5	S4				TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID			Appendix II, CITES	N
Mustela frenata	Long-tailed weasel			G5	S5	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Statewide	N
Myotis austroriparius	Southeastern myotis			G3G4	S3				TBPR	ECPL	WGCP				GCPM-UP				added to GCPM-UP	N
Myotis velifer	Cave myotis			G5	S4	CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL	EDPT				STPL		N
Puma concolor	Mountain lion			G5	S2	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	(GCPM-LWR)	STPL	Statewide	N
Spilogale putorius	Eastern spotted skunk			G4T	S4		HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL		N
Sylvilagus aquaticus	Swamp rabbit			G5	S5				TBPR	ECPL	WGCP	CRTB		EDPT	GCPM-UP	GCPM-MID				N
Tadarida brasiliensis	Brazilian free-tailed bat			G5	S5	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	(GCPM-LWR)	STPL	Statewide	N
Taxidea taxus	American badger			G5	S5	CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL		N
Ursus americanus	Black bear	SAT	T	G5	S3	CHIH			TBPR	ECPL				EDPT					added to TBPR, ECPL; see also Louisiana black bear; may overlap with Louisiana border	N
Anas acuta	Northern Pintail			G5	S3B,S5N		HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL		GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Winter	2
Colinus virginianus	Northern Bobwhite			G5	S4B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	deleted for CHIH	4
Tympanuchus cupido	Greater Prairie-Chicken (Interior)			G4	S1B				TBPR			CRTB							Year-round	6
Meleagris gallopavo	Wild Turkey			G5	S5B	CHIH		SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round, added *merriami* for CHIH	8
Ixobrychus exilis	Least Bittern			G5	S4B				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR		Breeding	11
Egretta thula	Snowy Egret			G5	S5B				TBPR	ECPL	WGCP	CRTB			GCPM-UP	GCPM-MID	GCPM-LWR		Breeding	12
Egretta caerulea	Little Blue Heron			G5	S5B				TBPR	ECPL	WGCP	CRTB			GCPM-UP	GCPM-MID	GCPM-LWR		Breeding	13
Butorides virescens	Green Heron			G5	S5B				TBPR	ECPL	WGCP	CRTB			GCPM-UP	GCPM-MID	GCPM-LWR		Breeding	16
Mycteria americana	Wood Stork		T	G4	SHB,S2N				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR		Migrant	18
Ictinia mississippiensis	Mississippi Kite			G5	S4B		HIPL	SWTB	TBPR	(ECPL)	WGCP	CRTB	CGPL		GCPM-UP	GCPM-MID	GCPM-LWR		Breeding	20
Haliaeetus leucocephalus	Bald Eagle			G5	S3B,S3N				TBPR	ECPL	WGCP	CRTB	CGPL		GCPM-UP	GCPM-MID	GCPM-LWR		Year-round, added CRTB	22
Circus cyaneus	Northern Harrier			G5	S2B,S3N	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round	23
Buteo lineatus	Red-shouldered Hawk			G5	S4B				TBPR	ECPL	WGCP	CRTB		EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round	26
Pluvialis dominica	American Golden-Plover			G5	S3				TBPR	ECPL	WGCP	CRTB	CGPL		GCPM-UP	GCPM-MID	GCPM-LWR		Migrant	39
Charadrius montanus	Mountain Plover	PT		G3	S2	CHIH	HIPL		TBPR							GCPM-MID		STPL	Winter	43
Scolopax minor	American Woodcock			G5	S2B,S3N				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR		Winter (some breeding during that time)	51
Sternula antillarum	Least Tern	LE*	E*	G4	S3B			SWTB	TBPR	ECPL		CRTB	CGPL					STPL	Year-round; subspecies *athalassos*	54
Asio flammeus	Short-eared Owl			G5	S4N		HIPL	SWTB	TBPR	ECPL		CRTB	CGPL		GCPM-UP	GCPM-MID	GCPM-LWR		Winter	65
Caprimulgus carolinensis	Chuck-will's-widow			G5	S3S4B			SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID			Breeding	66
Melanerpes erythrocephalus	Red-headed Woodpecker			G5	S3B			SWTB	TBPR	ECPL	WGCP	CRTB	CGPL						Year-round	67
Dryocopus pileatus	Pileated Woodpecker			G5	S4B				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Year-round	69
Tyrannus forficatus	Scissor-tailed Flycatcher			G5	S3B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Breeding	71
Lanius ludovicianus	Loggerhead Shrike			G4	S4B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round	73
Vireo bellii	Bell's Vireo			G5	S3B	CHIH		SWTB	TBPR	ECPL		CRTB		EDPT				STPL	Breeding	74
Poecile carolinensis	Carolina Chickadee			G5	S5B			SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID			Year-round	76
Thryomanes bewickii (bewickii)	Bewick's Wren			G5	S5B				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Year-round, red-backed form only	77
Cistothorus platensis	Sedge Wren			G5	S4				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Winter	78
Hylocichla mustelina	Wood Thrush			G5	S4B				TBPR	ECPL	WGCP				GCPM-UP				Breeding	79
Anthus sprague ii	Sprague's Pipit	C		G4	S3N				TBPR	ECPL		CRTB	CGPL	EDPT		GCPM-MID	GCPM-LWR	STPL	Winter	80
Dendroica dominica	Yellow-throated Warbler			G5	S4B				TBPR	ECPL	WGCP			EDPT	GCPM-UP				Breeding	84
Protonotaria citrea	Prothonotary Warbler			G5	S3B				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Breeding	86
Limnothlypis swainsonii	Swainson's Warbler			G4	S3B				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Breeding	88
Seiurus motacilla	Louisiana Waterthrush			G5	S3B				TBPR	ECPL	WGCP			EDPT	GCPM-UP	GCPM-MID			Breeding	89
Oporornis formosus	Kentucky Warbler			G5	S3B				TBPR	ECPL	WGCP								Breeding	90
Spizella pusilla	Field Sparrow			G5	S5B		HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round	96
Ammodramus savannarum	Grasshopper Sparrow			G5	S3B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round	97
Chondestes grammacus	Lark Sparrow			G5	S4B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round	98
Ammodramus henslowii	Henslow's Sparrow			G4	S2S3N,SXB				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Winter	100
Ammodramus leconteii	Le Conte's Sparrow								TBPR	ECPL	WGCP	CRTB		EDPT	GCPM-UP	GCPM-MID	GCPM-LWR		Winter	101
Zonotrichia querula	Harris's Sparrow			G5	S4			SWTB	TBPR	ECPL		CRTB	CGPL	EDPT		GCPM-MID			Winter	103
Calcarius mccownii	McCown's Longspur			G4	S4	CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL						Winter, TBPR (northern), ECPL (northern)	104

		Status		Abundance Ranking														Other Notes	
Scientific Name	Common Name					CHIH - AZNM	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM Upper	GCPM Mid	GCPM Lower	STPL	for rationale supporting additions, deletions and other changes, see ADD/DEI document Dec 2010	Endemic in Texas
Calcarius pictus	Smith's Longspur								TBPR	ECPL									Winter	105
Piranga rubra	Summer Tanager			G5	S5B	CHIH			TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Breeding	106
Passerina ciris	Painted Bunting			G5	S4B	CHIH		SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Breeding	107
Spiza americana	Dickcissel			G5	S4B		HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Breeding	108
Sturnella magna	Eastern Meadowlark			G5	S5B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Year-round; subspecies *lilliana* added for CHIH	109
Euphagus carolinus	Rusty Blackbird			G4	S3				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID			Winter	110
Icterus spurius	Orchard Oriole			G5	S4B	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Breeding	111
Anaxyrus (Bufo) woodhousii	Woodhouse's toad			G5	SU	CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL	EDPT						
Apalone mutica	smooth softshell turtle						HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP				added	
Apalone spinifera	spiny softshell turtle					CHIH	HIPL	SWTB	TBPR	ECPL	WGCP		CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	added, not AZNM	
Cheylydra serpentina	Common snapping turtle					CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID		STPL	added	
Crotalus atrox	Western diamondback rattlesnake				S4	CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL		
Crotalus horridus	Timber (Canebrake) Rattlesnake		T	G4	S4				TBPR	ECPL	WGCP	CRTB			GCPM-UP	GCPM-MID				
Graptemys caglei	Cagle's map turtle		T	G3	S1				TBPR	ECPL				EDPT						
Graptemys versa	Texas map turtle			G4	SU				TBPR			CRTB	CGPL	EDPT						
Heterodon nasicus	Western hognosed snake					CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	added	
Macrochelys temminckii	alligator snapping turtle		T	G3G4	S3				TBPR	ECPL	WGCP	CRTB	CGPL		GCPM-UP	GCPM-MID			added	
Ophisaurus attenuatus	western slender glass lizard								TBPR	ECPL	WGCP		CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR		added	
Phrynosoma cornutum	Texas horned lizard		T	G4G5	S4	CHIH	HIPL	SWTB	TBPR	ECPL		CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL		
Pseudacris streckeri	Strecker's Chorus Frog			G5	S3				TBPR	ECPL	WGCP	CRTB		EDPT	GCPM-UP	GCPM-MID	GCPM-LWR			
Sistrurus catenatus	massasagua					CHIH	HIPL	SWTB	TBPR			CRTB	CGPL	EDPT		GCPM-MID	GCPM-LWR	STPL	added	
Terrapene carolina	Eastern box turtle			G5	S3				TBPR	ECPL	WGCP			EDPT	GCPM-UP	GCPM-MID	GCPM-LWR			
Terrapene ornata	Ornate box turtle			G5	S3	CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL		
Thamnophis sirtalis	Common Garter Snake			G5	S2			SWTB	TBPR	ECPL		CRTB	CGPL	EDPT						
Trachemys scripta	Red-eared slider					CHIH	HIPL	SWTB	TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	added	
Anguilla rostrata	American eel			G4	S5	CHIH			TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL		
Atractosteus spatula	alligator gar					CHIH			TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR	STPL	added	
Cycleptus elongatus	Blue sucker		T	G3G4	S3				TBPR	ECPL	WGCP	CRTB			GCPM-UP	GCPM-MID				
Etheostoma fonticola	Fountain darter	LE	E	G1	S1				TBPR											Y
Macryhbopsis storeriana	Silver chub								TBPR	ECPL		CRTB	CGPL							
Micropterus treculii	Guadalupe bass			G3	S3				TBPR			CRTB		EDPT		GCPM-MID				Y
Notropis atrocaudalis	Blackspot shiner								TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR			
Notropis bairdi	Red River shiner								TBPR	ECPL	WGCP	CRTB	CGPL							
Notropis buccula	Small eye shiner	C		G2Q	S2				TBPR	ECPL									added	Y
Notropis chalybaeus	Ironcolor shiner								TBPR	ECPL	WGCP									
Notropis oxyrhynchus	Sharpnose shiner	C		G3	S3			SWTB	TBPR	ECPL		CRTB	CGPL							Y
Notropis potteri	Chub shiner		T	G4	S3			SWTB	TBPR	ECPL	WGCP	CRTB	CGPL							
Notropis shumardi	Silverband shiner								TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR			
Percina apristis	Guadalupe darter								TBPR	ECPL				EDPT		GCPM-MID				Y
Polyodon spathula	Paddlefish		T	G4	S3				TBPR	ECPL	WGCP	CRTB			GCPM-UP				added	
Satan eurystomus	Widemouth blindcat		T	G1	S1				TBPR										karst; deleted from ECPL Y	
Trogloglanis pattersoni	Toothless blindcat		T	G1	S1				TBPR										karst; deleted from ECPL	Y
Bombus pensylvanicus	American bumblebee			GU	SU*		HIPL		TBPR	ECPL	WGCP	CRTB	CGPL	EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Terrestrial - Insect - Bee/Wasp/Ant	
Chimarra holzenthali	Holzenthal's Philopotamid caddisfly			G1G2	S1				TBPR	ECPL	WGCP								Aquatic - Insects - Caddisflies; added TBPR, ECPL	
Cotinis boylei	A scarab beetle			G2*	S2*				TBPR	ECPL					GCPM-UP	GCPM-MID	GCPM-LWR		Terrestrial - Insect - Beetles	
Nicrophorus americanus	American Burying Beetle	LE		G1	S1				TBPR										Terrestrial - Insect - Beetles	
Potamilus amphichaenus	Texas heelsplitter		T	G1G2	S1				TBPR	ECPL	WGCP	CRTB							Aquatic - Freshwater - Mollusks; new state rank and threatened state status	
Procambarus regalis	Regal burrowing crayfish			G2G3	S2?*				TBPR										Aquatic - Crustaceans – Crayfish	
Procambarus steigmani	Parkhill prairie crayfish			G1G2	S1S2*				TBPR										Aquatic - Crustaceans - Crayfish	
Pseudocentroptiloides morihari	A mayfly			G2G3	S2?*				TBPR										Aquatic - Insects – Mayflies	
Sphinx eremitoides	Sage sphinx			G1G2	S1?*	CHIH			TBPR					EDPT					Terrestrial - Insect - Butterflies/Moths	
Susperatus tonkawa	A mayfly			G1	S1*				TBPR	ECPL									Aquatic - Insects - Mayflies	
Agalinis densiflora	Osage Plains false foxglove			G3	S2				TBPR			CRTB	CGPL	EDPT					Terrestrial	N

																				Other Notes	
Scientific Name	**Common Name**	**Status**		**Abundance Ranking**		**CHIH - AZNM**	**HIPL**	**SWTB**	**TBPR**	**ECPL**	**WGCP**	**CRTB**	**CGPL**	**EDPT**	**GCPM Upper**	**GCPM Mid**	**GCPM Lower**	**STPL**	**for rationale supporting additions, deletions and other changes, see ADD/DEI document Dec 2010**	**Endemic in Texas**
Astragalus reflexus	Texas milk vetch			G3	S3				TBPR		WGCP			EDPT				STPL	Terrestrial	Y
Calopogon oklahomensis	Oklahoma grass pink			G3	S1S2				TBPR	ECPL	WGCP				GCPM-UP				Terrestrial	N
Carex edwardsiana	canyon sedge			G3G4S3S4	S3S4				TBPR			CRTB		EDPT					Wetland	Y
Carex shinnersii	Shinner's sedge			G3?	S2				TBPR	ECPL		CRTB							Wetland	N
Crataegus dallasiana	Dallas hawthorn			G3Q	S3				TBPR										Terrestrial	Y
Cuscuta exaltata	tree dodder			G3	S3				TBPR	ECPL		CRTB		EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Terrestrial	N
Dalea hallii	Hall's prairie-clover			G3	S3				TBPR					EDPT					Terrestrial	Y
Echinacea atrorubens	Topeka purple-coneflower			G3	S3				TBPR		WGCP	CRTB			GCPM-UP	GCPM-MID	GCPM-LWR		Terrestrial	N
Hexalectris nitida	Glass Mountains coral-root			G3	S3	CHIH			TBPR			CRTB		EDPT					Terrestrial	N
Hexalectris warnockii	Warnock's coral-root			G2G3	S2	CHIH			TBPR					EDPT					Terrestrial	N
Liatris glandulosa	glandular gay-feather			G3	S3				TBPR			CRTB							Terrestrial	Y
Paronychia setacea	bristle nailwort			G3	S3				TBPR	ECPL	WGCP				GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Terrestrial	Y
Phlox oklahomensis	Oklahoma phlox			G3	SH				TBPR										Terrestrial	N
Physaria engelmannii	Engelmann's bladderpod			G3	S3				TBPR	ECPL		CRTB	CGPL	EDPT					Terrestrial	Y
Polygonella parksii	Parks' jointweed			G2	S2				TBPR	ECPL									Terrestrial	Y
Prunus texana	Texas peachbush			G3G4	S3S4				TBPR	ECPL				EDPT	GCPM-UP	GCPM-MID	GCPM-LWR	STPL	Terrestrial	Y
Thalictrum texanum	Texas meadow-rue			G2	S2				TBPR	ECPL					GCPM-UP	GCPM-MID	GCPM-LWR		Terrestrial	Y
Zizania texana	Texas wild rice	LE	E	G1	S1				TBPR					EDPT					Aquatic	Y