Draft Environmental Assessment

I-35E/US 67 Project
Dallas District

I-35E from US 67 to I-30 and
US 67 from I-20 to I-35E
CSJs: 0442-02-088, 0196-03-269, 0261-03-030
Dallas County, Texas
July 2016

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

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ACRONYMS

The following is a list of acronyms used throughout this document and their definitions.

ACM	Asbestos Containing Material
ACS	American Community Survey
BMP	Best Management Practice
CD	Collector Distributor
CDC	Corridor Development Certificate
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMP	Congestion Management Process
CO	Carbon Monoxide
CSJ	Control-section-job number
DART	Dallas Area Rapid Transit
DFW	Dallas-Fort Worth
DSHS	Department of State Health Services
EA	Environmental Assessment
EJ	Environmental Justice
EO	Executive Order
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographic Information System
HMVM	Hundred Million Vehicle Miles
HOV	High Occupancy Vehicles
ISA	Initial Site Assessment
LBP	Lead Base Paint
LEP	Limited English Proficiency
MSA	Metropolitan Statistical Area
MSAT	Mobile Source Air Toxics
MS4	Municipal Separate Storm Sewer System
MTP	Metropolitan Transportation Plan
NCTCOG	North Central Texas Council of Governments
NFIP	National Flood Insurance Program
NOI	Notice of Intent
NOT	Notice of Termination
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
PA	Programmatic Agreement
PCN	Preconstruction Notification
ROW	Right-of-Way
RSA	Resource Study Area
RTC	Regional Transportation Council

SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Officer
STIP	Statewide Transportation Program
SW3P	Stormwater Pollution Prevention Plan
TAQA	Traffic Air Quality Analysis
TBPR	Texas Blackland Prairies Ecoregion
TCEQ	Texas Commission on Environmental Quality
TIP	Transportation Improvement Program
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TxDOT	Texas Department of Transportation
US	United States Highway
USCB	United States Census Bureau
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

The Texas Department of Transportation (TxDOT) proposes improvements to Interstate Highway 35 East (I-35E) and U.S. Highway 67 (US 67) within the City of Dallas, in Dallas County, Texas. The project is approximately 11 miles long and shown in **Appendix A: Exhibit 1: Project Location Map**. The proposed project is a breakout project of the larger I-35E/US 67 project (known as The Southern Gateway Project), for which an Environmental Assessment (EA) was prepared and environmentally cleared in 2006.

The proposed improvements are consistent with the financially constrained Metropolitan Transportation Plan (MTP) *Mobility 2040: The Metropolitan Transportation Plan for North Central Texas,* approved by the Regional Transportation Council (RTC*)* on March 10, 2016. The proposed project will be included in the associated Statewide Transportation Improvement Program (STIP) 2017-2020 currently under development and planned for approval in the November/December 2016 timeframe.

The reasonable alternatives considered in this EA include the No-Build Alternative and the Build Alternative. The No-Build Alternative represents the case in which the proposed project would not be constructed. The Build Alternative consists of the conversion of the reversible high occupancy vehicles (HOVs) to non-toll reversible express lanes between Colorado Boulevard (Blvd.) and Reunion Blvd., full reconstruction of the section of I-35E between US 67 and Colorado Blvd. and the addition of general purpose lanes along US 67 between I-20 and I-35E. Non-tolled reversible express lanes would be implemented within the entire project limits.[1] Sidewalks and bicycle accommodations would be implemented along those frontage roads and cross-streets proposed to be reconstructed. Due to the lack of recommendations from stakeholders, guidance from trail master plans, as well as safety and operational concerns, pedestrian and bicycle accomodations are not proposed along mainlanes or ramps.

The proposed project would generally follow the existing alignment and would require approximately 3.63 acres of additional right-of-way (ROW) and 1.56 acres for a permanent drainage easement. The easement is needed for the proposed storm sewer pipe along Ewing Avenue (Ave.) including the outfall to Cedar Creek. The proposed project would result in relocation of 1 residence, 24 businesses, and 3 billboards.

The proposed project would result in no impacts to federal threatened, endangered, or candidate species or designated critical habitat; groundwater; wetlands; migratory birds; water quality; prime farmlands; archaeological resources; floodplains; or air quality. The proposed project would not separate, divide, or isolate any distinct neighborhoods, ethnic groups or other specific groups because I-35E and US 67 are existing facilities.

[1] Non-toll express lanes would be open to all users including single occupancy vehicles (SOVs) and high occupancy vehicles (HOVs) and would function as a general purpose lane with limited access.

The proposed project occurs within an area with a minority population over 90 percent and a low-income population over 20 percent. Impacts to these populations include displacements and noise impacts. Benefits to these populations include improved bicycle and pedestrian facilities, improved vehicular mobility, improved connectivity, and aesthetic improvements. Considering planned public involvement, anticipated benefits, and mitigation (e.g. traffic noise barriers, relocation assistance), the proposed project is not expected to cause disproportionately high and adverse effects on any minority or low-income populations.

Potential impacts on historic resources are still under evaluation. The effects determination with be disclosed in the final EA.

The proposed project is located in Dallas County, which is part of the U.S. Environmental Protection Agency designated ten-county moderate nonattainment area for the 2008 eight-hour standard for the pollutant ozone. Conformity of the MTP and the Transportation Improvement Program with the Texas Commission on Environmental Quality State Implementation Plan is pending. TxDOT will not take final action on this environmental document until the proposed project is consistent with the conforming MTP and STIP.

Approximately 1.67 acres of riparian habitat could be impacted by the proposed construction activities.

Approximately 0.53 acre of disturbed prairie habitat present within the study area would be considered permanently impacted as a result of the construction of the proposed project.

Eleven state listed species have potential habitat within the study area, and 10 of these species may be impacted by the proposed project.

The proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances. The proposed project is located within the Trinity River Corridor Development Certificate (CDC) Regulatory Zone. A CDC would not be required because proposed work within the regulated zone is operational (conversion of HOV lanes to non-toll express lanes).

Eight water features and three wetland features were identified in the study area. It is estimated that approximately 0.004 acre of permanent fill impacts to three potentially jurisdictional water features would be required. Permanent and temporary impacts would be authorized by a Nationwide Permit 14 – Linear Transportation Crossings without a Preconstruction Notification. No impacts to the wetland features are anticipated by the proposed project.

A total of 437 receivers would be impacted by traffic noise. A total of 32 traffic noise barriers are proposed to abate traffic noise. Property owners who are adjacent to the proposed noise barriers will be contacted early in project development and given an opportunity to provide input on their desire to have a traffic noise barrier.

Of the 32 hazardous material sites categorized as a potential risk, 14 are considered high risk and 18 are considered low risk. Additional investigation and assessment of high risk sites will occur to identify if construction activities may encounter contamination.

Several areas within the area of influence for the induced growth analysis were identified for potential induced growth effects. The proposed project would not induce growth because the project's minor changes in access would not provide new access to properties that currently do not have access and most of the properties in the vicinity of the project are already developed.

Cumulative impacts were analyzed in terms of specific resources affected by past, present and reasonably foreseeable actions. The resource considered in the cumulative impacts analysis is vegetation. The cumulative impacts to vegetation were determined to be approximately 922 acres, which would account for approximately 8.2 percent of the approximately 11,280 acres of vegetation within the resource study area..

A public meeting to introduce the project was conducted in the spring of 2014. Following this meeting, a series of four public meetings were held in the summer of 2015 to provide the public with an opportunity to further learn about the proposed project and provide input. During these rounds of public involvement, including other meetings between TxDOT and elected officials, several concerns were expressed by the public including: additional ROW requirements and commercial displacements that would result from the project; access and ramping concerns; opposition to tolling and removal of the HOV lanes; safety concerns from the proposed improvements to the Zang Blvd. exit ramp; requests for a deck plaza to reunite the community; and disapproval due to the lack of general purpose capacity improvements along US 67.

As a result of the summer 2015 round of public involvement, TxDOT made several design changes to the proposed project to address public concerns with respect to displacements and tolling. The schematic was revised to minimize the acquisition of additional ROW, thus reducing the number of potential relocations, and to address specific access and ramping concerns. The most notable change to the project is that the managed lane would no longer be proposed as a toll facility. Instead, a non-tolled express lane facility open to all users would be implemented. In summary, the design changes resulted in a change of project limits/scope, reduction of ROW requirements, reduction of relocations, and the elimination of tolling. A second series of public meetings were conducted in the winter of 2015 to present the revised schematic and gather public input. The general consensus was support for the project. A public hearing is planned for the summer of 2016.

1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) proposes the improvements of Interstate Highway 35 East (I-35E) from U.S. Highway 67 (US 67) to I-30 and along US 67 from I-20 to I-35E for a total length of approximately 11 miles within the City of Dallas in Dallas County, Texas. The proposed project, previously referred to as "The Southern Gateway Managed Lanes Project" would consist of full reconstruction of the section of I-35E between US 67 and Colorado Boulevard (Blvd.), addition of general purpose lanes along US 67 between I-20 and I-35E, conversion of the concurrent high occupancy vehicles (HOV) lanes to reversible non-tolled express lane facility, conversion of the reversible HOV lanes to reversible non-tolled express lanes along I-35E from Colorado Blvd. to Reunion Blvd., and bicycle and pedestrian accommodations. Non-tolled reversible express lanes would be implemented within the entire project limits.[2] This environmental assessment addresses potential environmental impacts for the proposed project. See **Exhibit 1: Project Location Map** in **Appendix A**.

There are two previously cleared environmental documents associated with the proposed project, the full reconstruction of I-35E/US 67 and the I-30/I-35E reconstruction project (Dallas Horseshoe Project). The full reconstruction of I-35E/US 67, environmentally cleared in 2006, proposed the widening and full reconstruction of I-35E from I-20 to 8th Street (St.) and US 67 from Farm-to-Market 1382 to I-35E. This full reconstruction project did not advance to construction due to lack of funding. The I-30/I-35E project, environmentally cleared in 2012, included the extension of the I-35E HOVs lanes up to Reunion Blvd. and the replacement of the I-30 and I-35E bridge structures that cross the Trinity River. This project is currently under construction and is anticipated to be complete in 2017. The proposed I-35E/US 67 project overlaps with the I-30/I-35E project between 8th St. and Reunion Blvd. The I-35E/US 67 project will include construction of the ultimate section between US 67 and Colorado Blvd. and the conversion of the I-35E HOV lanes to reversible non-tolled express lanes from Colorado Blvd. to Reunion Blvd.

Two other projects occurring in the project area are the interim widening of US 67 from Beltline Rd. to I-20 and the ultimate reconstruction of US 67 from I-20 to I-35E. The schematic plans and environmental documents would be prepared separately to assess these two projects.

2 Non-toll express lanes would be open to all users including single occupancy vehicles (SOVs) and HOVs and would function as a general purpose lane with limited access.

1.1 Existing Facility

The I-35E highway was originally constructed in the late 1950's and early 1960's. Originally, US 67 was a two-lane roadway that connected Dallas to Midlothian and points south and west. When I-35E and US 67 were originally constructed, the cities south of Dallas had a more agriculturally based economy. As the population in southern Dallas County and Ellis County grew, commerce in this area increased.

Since their initial construction, additions to the existing facilities have been implemented to help accommodate the increased demand. Interim HOV lanes were constructed on I-35E and US 67 and opened to traffic in 2000. I-35E includes a single reversible HOV lane from US 67 to Colorado Blvd. US 67 includes one concurrent flow HOV lane in each direction from just north of I-20 to I-35E. Both I-35E and US 67 are functionally classified as "freeways." The existing posted speed limit is 65 miles per hour (mph) for US 67 and I-35E, except for a posted speed limit of 60 mph along the HOVs and 40 and 50 mph within the Dallas Horseshoe Project construction zones. An illustration of the existing typical sections is available in **Appendix B**.

I-35E between Colorado Blvd. and I-30 consists of five northbound and four southbound mainlanes that include an 11-foot (ft) wide reversible, barrier separated HOV lane. This section is currently under construction and was approved as part of the I-30/I-35E Project (Control-section-job number [CSJ.] 0196-03-205, etc.) which received a Finding of No Significant Impact on September 18, 2012. Once construction is complete (anticipated 2017), the I-35E northbound bridge will consist of three mainlanes, two reversible, barrier separated HOV lanes, and five Collector-Distributor (CD) lanes. The I-35E southbound bridge would consist of four mainlanes and four CD lanes. Both CDs include 6-ft sidewalks along the outside of each road. The right-of-way (ROW) at the Dallas Floodway crossing is approximately 878 ft wide.

Along I-35E, the existing lane configuration from US 67 to Colorado Blvd. is eight mainlanes, four in each direction; with one reversible, barrier separated HOV lane. I-35E between Fairshop Drive (Dr.) (southern limits of construction along I-35E) and US 67 is six mainlanes (three in each direction). South of Colorado Blvd., the existing ROW along I-35E varies from approximately 244 ft to 435 ft.

Along US 67 the existing lane configuration from I-20 to I-35E is four mainlanes, two in each direction, with one concurrent HOV lane separated by a double stripe. The existing ROW along US 67 varies from approximately 305 ft to 469 ft.

No bicycle accommodations exist within the I-35E/US 67 Project limits. However, bicycle accommodations within the section of I-35E between Colorado Blvd. and Reunion Blvd., are currently under construction as part of the I-30/I-35E Project.

Discontinuous pedestrian accommodations (sidewalks) currently exist within the project limits, particularly along I-35E, south of Colorado Blvd. The sidewalks are located intermittently throughout the corridors, mainly along the discontinuous frontage roads.

Sidewalks are located at the following cross streets: Reunion Blvd., Jefferson St., Houston Viaduct, Colorado Blvd., Fleming Blvd., 8th St., 10th St., Ewing Avenue (Ave.), Marsalis Ave., 12th St., Beckley Ave., Louisiana Ave., Illinois Ave., Kiest Blvd., Polk St., Ledbetter Dr., Swansee St., Hampton Rd., Red Bird Lane (Ln.), and Camp Wisdom Rd. Currently, there are no pedestrian accommodations at the following project crossings: Riverfront Blvd., Clarendon Dr., Brookhaven Dr., Overton Rd., or Saner Ave. Sidewalks are currently being implemented as part of the I-30/I-35E Project between Colorado Blvd. and Reunion Blvd.

2.0 PURPOSE AND NEED

The project is needed because I-35E from US 67 to I-30 and US 67 from I-20 to I-35E (a) do not meet current and future traffic volumes, resulting in congestion and reduced mobility, and (b) do not meet current design standards for vertical/horizontal curvature, bridge vertical clearances, ramp spacing, weaving distances, and shoulder widths.

Congestion and Reduced Mobility
I-35E between I-30 and US 67, which represents approximately half of the project, is ranked 22 on the TxDOT 2015 list of the 100 Most Congested Roadways in the State of Texas. According to the TxDOT's report, this section of I-35E is the 7th most congested roadway segment in Dallas County, for which 359,414 annual hours of delay per mile, representing an annual congestion cost of $46.44 million.

According to the TxDOT Transportation Planning and Programming Division, traffic along I-35E and US 67 are projected to increase by 43 and 54 percent, respectively, by the year 2037. Traffic volumes exceeding the capacity of the existing roadway is the result of major population growth in the region. According to the U.S. Census Bureau (USCB) *Census 2010*, the Dallas-Fort Worth (DFW) Metroplex is the fourth largest metropolitan area in the U.S. Between 2000 and 2010, the USCB data indicates that the DFW Metroplex added over 1.2 million residents, equating to a growth rate of approximately 23 percent. *Census 2010* also shows continued growth in Dallas County and the City of Dallas during the same time period. From 2000 to 2010, Dallas County gained 149,240 new residents, and the City of Dallas gained 9,236 new residents, equating to growth rates of approximately 7 percent and 1 percent, respectively.

According to the North Central Texas Council of Governments (NCTCOG) household population projections, dramatic growth will likely occur in the DFW Metropolitan Planning Area (MPA) through the year 2040 (Metropolitan Transportation Plan [MTP] planning horizon year). The NCTCOG *North Central Texas 2040 Demographic Forecast* projects that Dallas County and the City of Dallas household populations will grow to 3,357,469 and 1,640,309 residents, respectively, by 2040. This represents an increase of 897,051 persons for Dallas County including an increase of 479,808 persons for the City of Dallas. The NCTCOG *2040 Demographic Forecast* for North Central Texas also shows robust growth for four out of the five specific forecast districts which are traversed by the proposed project. According to the NCTCOG, household population for four forecast districts are projected to experience increases ranging from

approximately 18.4 to 359.1 percent and one forecast district would decrease by 1.5 percent, while the NCTCOG MPA is expected to increase 87.5 percent. NCTCOG's employment projections for the five project forecast districts indicate strong growth from 2005 to 2040, as it is projected to increase within a range of approximately 35.3 to 90.6 percent. Employment within the NCTCOG MPA population is expected to increase approximately 84.9 percent. The 2040 forecast districts encompassing the proposed project are included in **Exhibit 2**. It is anticipated, that additional growth will exacerbate the existing congestion problem that exists today.

Congestion can best be described in terms of level of service (LOS) and travel speeds along a roadway. The LOS is a qualitative measure of describing operational conditions within a traffic stream or at an intersection, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The LOS terms are designated from A through F (A being the best and F the worst) and cover the entire range of traffic operations that may occur. Under the No-Build conditions, the percent of segments that exhibit LOS D, E, and F in 2037 during the PM peak period are 87.0 percent and 64.7 percent of the freeway segments for I-35E and US 67, respectively. This percentage would decrease to 30.8 percent along I-35E and 34.2 percent along US 67 under future Build conditions in 2037.

Design Deficiencies

Since the existing roadways were originally constructed in the 1950's, the design standards for freeways and interstates have changed. Within project limits, there are sharp horizontal curves, vertical geometric design deficiencies, reduced lane widths, insufficient bridge clearances, short distances between ramps, and narrow shoulders.

Along I-35E from US 67 to Colorado Blvd. there are no existing inside shoulders along the northbound mainlanes and throughout the majority of the southbound mainlanes. In addition, the width of the outside shoulder does not meet the current design standards at Marsalis Ave. and Ewing Ave. There are short distances between ramps between the entrance and exit ramps at Saner Ave. for the northbound and southbound mainlanes. The distance is approximately 700 ft from ramp gore to ramp gore, while the current design criteria requires a minimum of 1,500 ft. A sharp horizontal curve exists along the I-35E mainlanes at Zang Blvd. where there is a 5 degree (1,145-ft radius) curve; the current design criteria for 65 mph requires a 1,660-ft radius or greater. In addition, there are several bridges that do not meet minimum vertical clearances standards. These bridges located at Illinois Ave., Louisiana Ave., Beckley Ave., Marsalis Ave., Page Ave., Ewing Ave., Davis Ave. and the I-35E mainlane bridge over Fleming Place do not meet the required 16 ft-6 in clearance. The vertical clearance deficiencies range from 14 ft-3 inch(in) to 15 ft-3 in.

Along US 67 from I-20 to I-35E there are a number of existing design deficiencies for inside and outside shoulder widths that are less than the design standard of 10 ft. Also vertical profile grade range from 3.5 to 8 percent are present throughout the existing facility; the current design criteria require a maximum of 3 percent along the mainlanes

and 7 percent along the frontage roads. Vertical clearance do not meet current design standards at Camp Wisdom Rd., Hampton Rd., Swansee St., Loop 12, Pentagon Parkway, and Polk St. The existing minimum vertical clearances range from 15 ft-6 in to 16 ft-0 in; the current design criteria require 16 ft-6 in clearance.

Closely spaced ramps result in weaving which is an undesirable situation because traffic must change lanes within a limited distance, to merge with traffic on the mainlane, or enter or exit the highway. As a result, the roadway does not operate efficiently because drivers compete for space.

Safety

According to TxDOT crash records for 2013, 2014 and 2015, the most common types of incidents, on average, were the rear-end (31 percent) and sideswipe (29 percent) along the I-35E mainlanes, and rear-end (34 percent) along the US 67 mainlanes. These types of collisions are consistent with the types of collision identified as those occurring within weaving areas.

In 2009, the NCTCOG Safety Program began calculating county level crash rates on limited access facilities within the MPA. NCTCOG compares the county level crash rates to the DFW regional crash rate on an annual basis. In 2014, NCTCOG reported that the Dallas County crash rate [in crashes/hundred million vehicle miles (HMVM)] of 45.64 was higher that the regional crash rate for that year or 43.95 crashes/HMVM[3]. High traffic volumes within project limits combined with complex lane movements contribute to numerous traffic crashes.

According to the TxDOT crash records obtained for years 2013 through 2015 (**Table 2-1**), there were a total of 489 crashes reported along the I-35E mainlanes and 366 crashes along the US 67 mainlanes. Within the same period, a total of 54 incidents were reported along the I-35E frontage roads and 89 were reported along the US 67 frontage roads. The crash rates within project limits are below the statewide crash rates in 2013 and 2014. As of March 2, 2016, statewide crash data was not available for 2015.

[3] Source: http://www.nctcog.org/trans/safety/NCTCOGRegionCrashRates.asp

Table 2-1: Number of Crashes (2013-2015)

Project Section	Year	Mainlane Crashes	Frontage Road Crashes	Total Number of Fatalities	Calculated Crash Rate (Crashes/ HMVM)	Average Statewide Crash Rate by Highway System - Interstate (Urban)	Average Statewide Crash Rate by Roadway Type (Urban)* (Crashes/ HMVM)
I-35E from US 67 to Reunion Blvd.	2013	174	7	1	39.6	99.44	123.4
	2014	128	23	4	28.8	108.82	133.24
	2015	187	24	3	41.4	Not Available	Not Available
	Sub-Totals	**489**	**54**	**8**			
US 67 from I-20 to I-35E	2013	141	44	3	70.2	99.44	123.4
	2014	38	17	0	18.8	108.82	133.25
	2015	187	28	3	91.7	Not Available	Not Available
	Sub-Totals	**366**	**89**	**6**			
Totals		**855**	**143**	**14**			

Source: TxDOT Crash Records Information System (CRIS).
**Note: No statewide average crash rate for 2015 is available as of March 2016.*
HMVM: Hundred million vehicle miles

Roadway design deficiencies, which may result in weaving or lane changes, may be the main cause for incidents within project limits. These types of incidents are likely the result of congestion that occurs during peak hours. Capacity constraints due to high traffic volumes during peak hours cause congestion. Congestion is considered to contribute to the crashes within project limits.

Bicycle and pedestrian crash information is collected and analyzed by NCTCOG using a Geographic Information System (GIS)-based system. The system helps identify motor vehicle crash hot spots involving pedestrians and bicyclists. Bicycle and pedestrian crash information within project limits and directly adjacent to the project indicate that 41 incidents (four bicycle and 37 pedestrian) were reported between 2010 and 2014. From the 41 incidents, three (all pedestrian related) were fatal. Two of the three fatalities occurred at the intersections of Ewing Blvd. at I-35E and 8th St. at I-35E.

The purpose of the proposed project is to reduce traffic congestion, improve mobility, and meet current roadway design standards along I-35E and US 67 for all roadway users.

3.0 ALTERNATIVES

3.1 Build Alternative

The Build Alternative would consist of improvements to I-35E between US 67 and I-30 and to US 67 between I-20 and I-35E. **Appendix B** shows the proposed typical sections. The proposed project would include the following improvements.

a) I-35E between Colorado Blvd. and Reunion Blvd.: Convert two reversible HOV lanes under construction to two reversible non-tolled express lanes.
b) I-35E between the US 67 and Colorado Blvd.: Full reconstruction of the freeway and frontage roads and associated ramp modifications and intersection improvements to increase the mainlanes from eight to 10 lanes, include two reversible non-tolled express lanes, and increase the number of frontage road lanes from four to four to six lanes.
c) US 67 from I-20 to I-35E: Partial reconstruction to widen the mainlanes from four to six lanes and ramp modifications, change the existing two concurrent HOV lanes to one reversible non-tolled express lane within the existing median, and ramp modifications.
d) Sidewalks and shared use lanes to accommodate vehicles and bicyclists would be implemented along those frontage roads where reconstruction is proposed.
e) Dedicated bicycle lanes and sidewalks would be implemented at cross-streets proposed for reconstruction. Due to the lack of recommendations from stakeholders, guidance from from trail master plans, as well as safety and operational concerns, pedestrian and bicycle accomodations are not proposed along mainlanes or ramps.

Bicycle and Pedestrian Accommodations
The U.S. Department of Transportation (DOT) Policy Statement on Bicycle and Pedestrian Accommodation provides guidance on incorporating pedestrian and bicycling facilities into transportation projects. The policy guidance encourages local planning authorities to implement planning and incorporate design features to facilitate increased pedestrian and bicycling activity. In accordance to this policy, TxDOT proactively plans, designs, and construct facilities to safely accommodate bicyclists and pedestrians.

Additionally, *Mobility 2040: The Metropolitan Transportation Plan for North Central Texas (Mobility 2040)* includes policies, programs, and projects that support a range of mobility options such as bicycle and pedestrian facilities. Improving roadway design to accommodate bicycles and pedestrians can help reduce accidents and injuries.

The proposed project would include 6 to 6.5-ft sidewalks and 14-ft shared use lanes to accommodate vehicles and bicyclists along those frontage roads proposed to be reconstructed. Dedicated 5-ft bike lanes with a 3-ft buffer and 10-ft to 12-ft sidewalks

are proposed at cross-streets proposed to be reconstructed within project limits. The proposed improvements at the cross streets are included in **Appendix B**.

The location and configuration of the proposed pedestrian and bike facilities was based on the City of Dallas and Dallas County master trail plans as well as feedback from the adjacent stakeholders. Based on the master trail plans as well as stakeholder feedback, the pedestrian and bike facilities are proposed along reconstructed frontage roads and cross streets. Based on safety, operational concerns, the lack of request from the stakeholders, and guidance from the trail master plans, the bicycle and pedestrian improvements are not being proposed along the mainlanes and ramps (where frontage roads are discontinuous).
Table 3-1 presents a summary of the existing and proposed facilities.

Table 3-1: Summary of Existing and Proposed Facilities

Segment	Existing Facility	Proposed Project
I-35E from US 67 to Reunion Blvd.(1)	• I-35E north of the Trinity River: 4 lanes (2 in each direction); • Two-lane west bound discontinuous frontage road • Two-lane direct connector; • I-35E across Dallas Floodway: 8 lanes (4 in each direction); • Discontinuous 4 lane frontage road; and • One reversible HOV (HOV/R) lane.	• I-35E between Colorado Blvd. and Reunion Blvd. conversion of the reversible HOV to 2 non-tolled reversible express lanes. • I-35E between US 67 and Colorado Blvd.: full reconstruction and widen mainlanes from 8 to 10 lanes with associated ramp modifications, reconstruct frontage road lanes from 4 to 4 and 6 lanes, and convert the HOV/R to 2 HOV/R non-tolled express lanes.(2)
US 67 from I-20 to I-35E	• Between I-20 to US 67: 4 lanes (2 in each direction) and 2 concurrent HOV lanes.	• US 67 between I-20 and I-35E: reconstruction to convert the existing HOV lanes to one reversible non-tolled express lane within the existing median, and widening the mainlanes from 4 to 6 lanes.
Within project limits	• No bicycle accommodations included • Discontinuous sidewalks	• Implementation of sidewalks and 14-ft shared use lanes and sidewalks along those frontage roads proposed to be reconstructed; • Implementation of dedicated bike lanes; and, sidewalks at cross-streets where reconstruction is proposed

Notes: (1) The section of I-35E between Colorado Blvd. and I-30 is currently under reconstruction as part of the I-30/I-35E Project. Once this reconstruction is complete, the I-35E northbound direction bridge will consist of three mainlanes; two reversible HOV lanes, and five CD lanes; and the I-35E southbound bridge would consist of four mainlanes and four CD lanes. In summary, the I-35E bridge would consist of a total of seven mainlanes, nine CD lanes and two reversible HOV lanes.
(2) There is a discrepancy between the number of proposed frontage roads reported in this EA and what is reported in the 2040 MTP between US 67 and Marsalis Ave. The discrepancy is caused by different methods of accounting for frontage roads and ramps between MPO and TxDOT.

3.1.1 Logical Termini and Independent Utility

The proposed project is of independent utility and reasonable expenditure even if no additional transportation improvements in the area are made and there are no

restrictions on the consideration of alternatives for other reasonably foreseeable projects including those in the *Mobility 2040*. Based on beginning construction in 2017, the estimated time of completion (ETC) is 2021.

The logical termini for the project is I-30 to the north and I-20 to the south. The I-30 and I-20 facilities are considered major traffic generators.

Along I-35E, the construction limits account for transitions into the existing roadways and extend from approximately 5,440 ft south of the US 67/I-35E split (near Fairshop Rd.) to approximately 4,278 ft north of I-30, up to Reunion Blvd. The construction limits along US 67 would extend from approximately 500 ft north of I-20 to the US 67/I-35E split.

3.1.2 Right-of-Way/Easement Requirements

The existing ROW varies along I-35E from approximately 244 ft to 435 ft. The existing ROW along US 67 varies from approximately 305 ft to 469 ft. The proposed ROW along I-35E varies from approximately 313 ft to 472 ft. Approximately 3.63 acres of additional ROW and approximately 1.56 acre for one permanent easement along I-35E would be necessary for the proposed project. TxDOT would be responsible for the ROW acquisitions. One residence, three billboards, and 24 businesses would be displaced or relocated. **Section 4.2.1.2** (Relocations/Displacements section under Community Impacts) has more information on displacements.

3.1.3 Utilities

Several utilities are present in the area of the proposed improvements. Based on the proposed design, utility relocations would be required throughout the corridor; however, these relocations would be handled so there would be no substantial impacts to residences and businesses. Detailed information on the utility lines would be evaluated during the design phase of the project to identify the need to integrate the proposed improvements and utility systems into the design plans. All of the utilities can be either adjusted or relocated prior to the construction of the proposed project using standard TxDOT procedures.

3.1.4 Project Funding/Planning

The estimated construction cost for the proposed project is $626 million. This estimate includes construction and ROW but does not include potential optional amenities or enhancements. All funded through the District Discretionary Program Authority and local funds (Category 2 Metro Corridor, Congestion Mitigation and Air Quality, Surface Transportation Program- Metropolitan Mobility, Category 12, Category 11, and 121-RTR Account1). The proposed project is listed in the financially constrained *Mobility 2040,* approved by the RTC on March 10, 2016.

Regional transportation goals for mobility, quality of life, system sustainability, and implementation are defined in *Mobility 2040.* The I-35E and US 67 improvements would support many of these goals by improving the availability of transportation options for people and goods, supporting travel efficiency measures and system enhancements targeted at congestion reduction and management and enhancing the safety and reliability. Additionally, the proposed improvements support numerous policies and programs included in *Mobility 2040* such as:

- Support the congestion management process (CMP), which includes explicit consideration and appropriate implementation of travel demand management, transportation system management, and intelligent transportation system strategies during all stages of corridor development and operations. (Policy TDM3-001)
- Improve efficiency by promoting safety, mobility, and accessibility on the freight networks. (Policy FP3-007)
- Consider and implement as appropriate the addition and improvement of interchanges, frontage roads, and auxiliary lanes on all freeway/tollway facilities in order to accommodate a balance between mobility, access, operational, and safety needs (Policy FT3-007).
- Evaluate and implement all reasonable options to maximize corridor capacity, functionality, accessibility, and enhancement potential utilizing existing infrastructure assets and ROW (Policy FT3-014).
- Implement pedestrian and bicycle facilities that meet accessibility requirements and provide safe, convenient, and interconnected transportation for people of all ages and abilities (Policy BP3-002).

The design schematic encompassing the proposed improvements is available in **Appendix H** and for inspection at the TxDOT Dallas District Office, 4777 E. Highway 80, Mesquite, Texas 75150-6643.

3.2 No-Build Alternative

The No-Build Alternative consists of leaving I-35E and US 67 as they are today, and making no improvements. The No-Build Alternative would not require the conversion of approximately 3.63 acres of additional ROW or 1.56 acres of a drainage easement for transportation use. However, under the No-Build Alternative, design deficiencies and congestion issues would remain along the existing facility. Mobility and operational efficiency would not be improved. The No-Build Alternative would not meet the purpose and need of the project.

The No-Build Alternative is carried forward throughout the document as a baseline comparison to the Build Alternative.

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

In support of this EA, the following reports were prepared and are currently available for review at the TxDOT-Dallas District:

- Congestion Management Process Technical Report
- Quantitative Mobile Source Air Toxics (MSAT) Technical Report
- Carbon Monoxide (CO) Traffic Air Quality Analysis (TAQA) Technical Report
- Biological Evaluation
- Biological Resources Technical Report
- Community Impacts Technical Report
- Hazardous Materials Initial Site Assessment (ISA)
- Hazardous Materials Technical Report
- Induced Growth Technical Report
- Report for Historical Studies Survey
- Traffic Noise Technical Report (Available in **Appendix G**)
- Water Resources Technical Report
- Public Meeting Summaries (2014, 2015, and 2016)

4.1 Issues Excluded from Further Consideration

Based on the technical reports listed in **Section 4.0**, scoping, and thorough analysis, it was determined that the proposed project would have no impact on the following resources and were therefore excluded from further consideration.

4.1.1 International Boundary and Water Commission

The project is not located within the floodplain of the Rio Grande; therefore, coordination with the International Boundary and Water Commission would not be required.

4.1.2 Essential Fish Habitat

There are no tidally influenced waters in Dallas County; therefore, there is no requirement to address Essential Fish Habitat.

4.1.3 Navigable Waters/Lakes, Rivers, Streams

The Trinity River and the Historic Trinity River Channel are considered navigable waterways. However, no additional construction, only operational improvements would occur within the project section crossing these. Therefore; navigational clearance under the General Bridge Act of 1946, Section 9 and Section 10 of the Rivers and Harbors Act of 1899 would not be required.

The proposed project is within the Trinity River Corridor Development Regulatory Zone. However, a Corridor Development Certificate would not be required because only operational activities (conversion of HOV lanes to non-toll express lanes) would occur within the Trinity River Corridor zone.

4.1.4 Wild and Scenic Rivers

This project would not involve work within the designated segment of the Rio Grande; therefore, coordination with the National Park Service would not be required.

4.1.5 Section 4(f)/6(f)

The proposed project would not require the use of, nor substantially impair the purposes of any publicly owned land from a public park, recreational area, wildlife and waterfowl refuge lands, or historic sites of national, state, or local significance; therefore, a Section 4(f) Evaluation is not required. Properties funded by the Land and Water Conservation Fund were not identified within the proposed project limits; therefore, a Section 6(f) Evaluation is not required.

4.1.6 Airway-Highway Clearance

The Dallas Executive Airport is located on the west side of US 67 between Red Bird Lane and Hampton Rd. The I-35E/US 67 project area is aligned outside the Runway Protection Zones (RPZ) and would not penetrate the horizontal and vertical slope requirements for the existing runways of the Dallas Executive Airport. Although the proposed project is outside the RPZ, the Dallas Executive Airport would be notified of project construction activities.

4.2 Community Impacts

A community impacts analysis for the proposed project includes analyses of regional and community growth, public facilities and services, potential ROW acquisitions, easements, displacements and relocations, community cohesion, Limited English Proficiency (LEP) population impacts, and Environmental Justice (EJ) population impacts. Refer to the Community Impacts Technical Report for detailed information on the socioeconomic resource analysis prepared for the project.

Information was compiled using the USCB data, specifically the USCB American Community Survey (ACS) five-year estimates for 2010-2014 and the 2010 Census. Census areas partially or wholly contained within the proposed project represent the project study area for this analysis. The study area included 114 census block groups and 2,249 census blocks using the census boundaries delineated in the 2010 Census. Community cohesion, displacements and ROW acquisition, and access to public services and facilities were evaluated for potential impacts caused by the proposed project.

The No-Build Alternative would not result in negative impacts to community cohesion, EJ or LEP populations, or public facilities or services. The No-Build Alternative would not result in impacts related to relocations or purchase of additional ROW. However, the No-Build Alternative would not result in positive impacts to communities because it would not improve mobility, safety, and traffic operations; provide bicycle and pedestrian accommodations, access or aesthetic improvements. Neighborhoods would not be provided with opportunities to access proposed bicycle and pedestrian facilities.

4.2.1.1 Public Facilities and Services

A total of five hospitals, 15 medical facilities, one library, 87 schools, 18 places of worship, 49 parks and five post office facilities were identified within 1.5 miles from the ROW. The proposed project would not adversely impact any of these public facilities or services. The proposed improvements would not prohibit access to or use of any public facility or service, including schools, hospitals, parks, community centers and public safety facilities. Because mobility improvements are anticipated, access to these facilities and services would be enhanced after the completion of the proposed project.

The City of Dallas is evaluating the construction of a deck plaza over the I-35E freeway between Marsalis Ave. and Ewing Blvd. If built, the proposed deck plaza project would be sponsored by the City of Dallas and could be constructed as a part of the I-35E/US 67 project or as a separate project. The funding for the proposed construction of the deck plaza would likely be a public-private partnership between the City of Dallas, NCTCOG, and private donors. As proposed the construction cost would be Regional and Locally-funded, with regional contributions paid by the NCTCOG - Regional Transportation Council (RTC) and local contribution paid by the City of Dallas and private contributions. The construction of the deck would also require an agreement and commitment with the City of Dallas to operate and maintain the deck plaza.

4.2.1.2 Relocation/Displacements

The proposed project would result in one residential property, 12 commercial properties (24 individual businesses), and three billboard displacements. No public facilities or institutions would be displaced. The residential displacement would occur within the Ashleys subdivision according to the Dallas Central Appraisal District. As of May 2016, five comparable housing options are available within a 5-mile radius of the residential property displacement. TxDOT would provide relocation assistance to all displaced persons in accordance with the Uniform Relocation Assistance and Real Properties Acquisitions Policies Act. Approximately 57 to 335 employees could be impacted by the displacement of commercial establishments.

The commercial businesses that would be displaced from the proposed project include an auto retail facility, an auto repair facility, a medical facility, a storage facility, offices and multi-suite office buildings. Several office buildings are available for sale or rent within a 5-mile radius of the proposed project. Any of these facilities could be potential facilities for displaced businesses to relocate. Rental commercial properties are also available within a five-mile radius of the proposed project and are potential options for displaced businesses.

TxDOT would coordinate with the Workforce Solutions Greater Dallas (WFS Dallas) to mitigate the potential employment impacts associated with the proposed project. “Rapid response workshops” would be conducted on behalf of the employers. The WFS Dallas would coordinate with employers identified for relocation by TxDOT via the ROW acquisition phase of project development to engage and provide one to two hour “rapid response workshops” if requested by the employers, regardless of the number of

employees anticipated to be impacted. The WFS staff would also be present at the public hearing to assist and inform the public about programs and services available to individuals affected by businesses to be displaced or relocated as a result of the proposed project.

4.2.1.3 Community Cohesion

Several residential communities with varying socio-economic characteristics are located near the proposed project. Adverse impacts to residential communities associated with the proposed project could be attributed to increase in traffic noise and temporary construction impacts. The only residential displacement is located in the Ashleys subdivision. Residents of other communities not located directly adjacent to either I-35E or US 67 may experience negative impacts associated with changes in access to the I-35E and US 67 facilities and temporary disruption of travel and visual aesthetics during the construction phase of the project. However; these disruptions are temporary and would be outweighed by the overall benefit of the resulting improvements.

Positive impacts to residential communities would include improved mobility, safety, and traffic operations; bicycle and pedestrian accommodations; access improvements (i.e., ramp modifications); and aesthetic improvements (i.e., architectural bridge columns and custom textured wall designs). Neighborhoods would be provided with opportunities to access proposed bicycle and pedestrian facilities that offer multi-modal choices for accessing schools, community amenities, places of employment, entertainment venues, and other destinations.

4.2.1.4 Environmental Justice

Census data indicate that EJ populations comprise a majority of the population within the census areas adjacent or near the proposed project limits. The minority population accounts for approximately 91.3 percent of the total population within the proposed project limits. Approximately 24.2 percent of the total households within the proposed project have a median household income below the 2016 Department of Health and Human Services poverty guideline of $24,300 for a family of four.

Effects identified to potentially impact EJ populations include impacts from traffic noise, access changes, aesthetic changes, and displacements. None of these impacts would be localized in any section of the project and would be addressed through mitigation and abatement measures. The proposed design would change access within the corridor; however, access would not be prohibited to any portion of the area. Noise abatement measures (i.e., noise barriers) would be proposed to mitigate for traffic noise impacts as discussed in Section 4.8. Aesthetic changes would likely result in positive results as improvements would retain or improve upon existing conditions. The proposed project would result in one residential and 11 commercial property displacements. One commercial property is not located within a low-income or predominately minority census block; however, all other displaced properties are located within predominately minority census blocks or low-income census block groups. These businesses do not serve or provide a service specific to any minority

groups or populations and could impact both EJ and non-EJ populations. Replacement housing options are available within five miles of the property locations and relocation services would be provided for all displaced individuals. These displacements and impacts, as discussed previously would impact EJ populations as well as non-minority and non-low income populations.

Based upon the this information, the proposed project would not cause unfair distribution of benefits or adverse impacts, nor any disproportionately high and adverse impacts on minority or low-income populations in accordance with the provisions of Executive Order(EO) 12898 and Federal Highway Administration (FHWA) Order 6640.23.

4.2.1.5 Limited English Proficiency

LEP individuals are individuals who speak a language other than English and are characterized to have the ability to speak English less than "very well." The study area consists of 50 census block groups along the proposed project limits. For the population five years and older within the study area, approximately 19.1 percent of the total population speaks English less than "Very Well" (USCB 2010-2014 ACS 5-year estimates). Four of the 50 census block groups adjacent to the proposed project limits contain no LEP populations according to the 2010-2014 ACS. LEP populations among the 50 census block groups ranged from approximately 0.0 to 68.6 percent. The dominant language spoken other than English is Spanish

Spanish language newspaper notices, bilingual handouts for the public meeting materials and presence of Spanish interpreters at public meetings were available during the public involvement activities. The legal notices also included that requests for interpreters for the public meetings would be accommodated. A public hearing is anticipated for the proposed project in the summer of 2016. During the preparation for the public hearing, reasonable steps would be taken to ensure that such persons have meaningful access to the programs, services, and information that TxDOT provides. These reasonable steps include the publication of bilingual announcements in local papers, Spanish interpreters to be present at the public hearing, and the opportunity to request accommodations (for language or other special communication needs) to be available at the public hearing.

4.2.1.6 Visual/Aesthetic

Section 136 of the Federal Aid Highway Act of 1970 (Public Law 91-605) requires consideration of aesthetic values in the highway planning process. Aesthetic values would be emphasized for the proposed project. In order to achieve this goal, guidelines for aesthetic components that would cost 1 percent of the construction cost, have been developed in conjunction with the City of Dallas for the proposed project. The guidelines specifically address the texture, materials, and form of proposed traffic noise barriers, retaining walls, and columns throughout the project corridor. Elements along I-35E within the full reconstruction section would receive the complete application of the proposed aesthetics while elements along US 67 in the partial reconstruction section

would receive proposed aesthetics limited to treatments provided to the proposed traffic noise barriers. The partial reconstruction of elements such as bridge widening and retaining walls along US 67 would be constructed with similar material and finishes. It is anticipated that the aesthetic effect would be equal to or better than the existing area.

The No-Build Alternative would not change the existing visual and aesthetic qualities of the project area.

4.3 Water Resources

The waterways in the study area are associated with the Trinity River Basin. The waterways include the Historic Trinity River Channel, the Upper Trinity River, Cedar Creek, Fivemile Creek, Woody Branch, and associated tributaries. The Upper Trinity River is a man-made channel that re-routed the hydraulic conveyance from the Historic Trinity River Channel to the present-day alignment and location. Cedar Creek is a perennial, first order stream located just south of Zang Blvd. along I-35E. Fivemile Creek is a perennial, second order stream located north of Loop 12 along I-35E and US 67. Woody Branch is a perennial, first order stream located just north of Westmoreland St. along US 67.

The study area for water resources encompasses the areas that could incur temporary and/or permanent impacts resulting from the construction of the proposed project. The study area encompasses the existing and proposed ROW limits. A permanent drainage easement is needed for the proposed storm sewer pipe along Ewing Ave. including the outfall to Cedar Creek. The proposed project is located within several regional watersheds including the Upper Fivemile Creek, Cedar Creek, Dallas West Bank, and Dallas East Bank.

A Water Resources Technical Report has been prepared for the proposed project and includes a detailed assessment of potential impacts to water resources. A summary from the technical report is included in the following sections. The conclusions reached were coordinated with Texas Commission on Environmental Quality (TCEQ) on February 4, 2016. Documentation of this coordination is included in **Appendix D.**

4.3.1 Groundwater

Southern Dallas County is underlain by the Trinity Aquifer subcrop and the Woodbine subcrop. The aquifer is used for municipal and industrial purposes. The study area is within Groundwater Management Area 8. The proposed project and the No-Build Alternative are not expected to impact groundwater.

Unknown active or abandoned wells are unlikely to occur within the study area due to the project corridor already being highly developed. Any wells, if encountered, would need to be properly plugged in accordance with state statutes.

4.3.2 Wetlands and Jurisdictional Waters of the U.S.

Pursuant to EO 11990 (Protection of Wetlands), Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act of 1899, an investigation was conducted to identify potential jurisdictional waters of the U.S., including wetlands, within the study area.

Two manuals [1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region] were used for identifying potential waters of the U.S. and wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. National Wetland Inventory maps, GIS data, US Geological Survey (USGS) maps, Federal Emergency Management Administration (FEMA) floodplain maps, and field observations on March 25 and 26, 2014 and December 21, 2015 were utilized to determine the features that are considered potentially jurisdictional waters and wetlands.

A total of 11 features were identified within the study area, eight water features and three wetland features. All eight of the water features noted during the field investigation were also identified as mapped waterbodies (blue lines) on the USGS topographic maps. The water and wetland features total approximately 15.16 acres. The features identified within the study area consist of emergent wetlands and perennial, intermittent, and ephemeral streams.

Permanent and temporary impacts would occur to three water features as a result of the proposed project. Permanent impacts would result from the placement of bridge piers within the delineated boundary of two of the features and the placement of rock rip-rap or velocity dissipaters at the outfall of a new culvert. Temporary impacts would result from the construction of temporary crossings.

It is estimated that approximately 0.004 acre of permanent fill impacts to three potentially jurisdictional water features would be required. No temporary or permanent impacts to wetlands would occur. Permanent and temporary impacts would be authorized by a Nationwide Permit (NWP) 14 – Linear Transportation Crossings without a Preconstruction Notification (PCN).

Temporary impacts to potential jurisdictional waters would result from temporary fills needed to construct the proposed project and would be authorized by NWP 14 without a PCN. In areas where temporary fills are needed, the affected areas would be returned to their pre-existing contours. If it is necessary for heavy machinery to work in a wetland then the placement of mats would occur to minimize soil disturbance.

The NWP 14 requires the use of Best Management Practices (BMPs) related to TCEQ Tier I Section 401 Water Quality Certifications. To meet the Section 401 requirements, the proposed project would utilize Tier I Erosion Control, Post-Construction Total Suspended Solids Control and Sedimentation Control BMPs. Appropriate Erosion Control BMPs would be implemented and maintained until construction is complete.

If design changes occur prior to construction, a re-assessment of impacts to each potentially jurisdictional feature would be necessary. If impacts to potentially jurisdictional features are identified after the proposed project is let for construction due to the construction contractor's elected construction methodologies or activities, the contractor would be responsible for obtaining the appropriate Section 404 permit from the US Army Corps of Engineers.

The No-Build Alternative would result in no impacts to wetlands or jurisdictional waters of the U.S.

4.3.3 Floodplains

FEMA Flood Insurance Rate Maps were reviewed to determine flood zones within the area for the proposed project. I-35E and US 67 cross five areas which are designated as special flood hazard areas inundated by the 100-year flood as Zone AE, base elevations determined. There are approximately 49 acres of 100-year floodplain within the study area. Of this total there would be approximately 0.05 acre of floodplain that would be impacted by the proposed project. The floodplain areas are located where I-35E and US 67 cross the waterways of Woody Branch, South Prong of Fivemile Creek, Cedar Creek, South Branch of Cedar Creek, and Trinity River.

Other areas are designated as Zone X, areas determined to be outside the 500-year floodplain. Dallas County and the City of Dallas are participants in the National Flood Insurance Program (NFIP).

The hydraulic design for this project would be in accordance with current FHWA and TxDOT design policies. The proposed project would be in compliance with 23 Code of Federal Regulations (CFR) 650 regarding location and hydraulic design of highway encroachments within the floodplains. The proposed project would comply with EO11988 which requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. The facility would permit the conveyance of the 100-year flood, inundation of the roadway being acceptable, without causing substantial damage to the facility, stream, or other property. The proposed

project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances. The No-Build Alternative would result in no impacts to floodplains.

4.3.4 Water Quality

The runoff from the proposed improvements would discharge into the Upper Trinity River (Segment 0805_04), a threatened/impaired water body, from the 2014 Texas Integrated Report of Surface Water Quality inventory.

Impaired Waters
Runoff from the proposed improvements would discharge into Segment 0805_04 of the Upper Trinity River which is listed as threatened/impaired for dioxin in edible tissue and polychlorinated biphenyls (PCBs) in edible tissue. The project and associated activities will be implemented, operated, and maintained using appropriate BMPs to control the discharge of pollutants from the project site. The proposed project is not expected to discharge dioxins or PCBs and therefore is not expected to contribute to future impairment of the Upper Trinity River.

Texas Pollutant Discharge Elimination System (TPDES)
This project would include five or more acres of earth disturbance. TxDOT would comply with TCEQ TPDES Construction General Permit (CGP). A Storm Water Pollution Prevention Plan (SW3P) would be implemented, and a construction site notice would be posted on the construction site. A Notice of Intent (NOI) and a Notice of Termination (NOT) would be required.

4.4 Biological Resources

The study area consists of the existing and proposed ROW and easements and is within the Texas Blackland Prairies Ecoregion (TBPR) as described in the 2012 Texas Conservation Action Plan . Due to historical changes in the landscape and vegetation, this ecoregion is considered critically threatened. The TBPR has been converted from historical tall grass prairies with abundant wildlife to mostly urban development and farmland.

The 2012 Texas Conservation Action Plan identifies issues associated with transportation projects which may negatively affect Species of Greatest Conservation Need (SGCN) populations, rare communities, and the habitats on which they depend in this region. Habitat fragmentation and habitat loss, including open-space land conversion, are broad issues that need to be addressed at various scales levels. Transportation improvements, whether upgrades of existing facilities or new construction, may create barriers to fish and wildlife resources daily and seasonal movements, opportunities for nonnative species invasions, water quality impacts through stormwater runoff, loss of nonjurisdictional wetlands, and impacts to important habitats that are not protected under current state or federal regulations.

The proposed transportation improvements are not expected to alter existing travel corridors to aquatic and terrestrial wildlife. The wooded riparian corridors containing streams are currently bridged and the proposed design would also bridge these areas. Impacts would occur to these riparian corridors during construction activities. After construction is completed, the areas of bare ground resulting from the construction activity would be reseeded/revegetated according to TxDOT standards.

Reconnaissance level surveys were conducted in March 2014 and December 2015 to determine habitat availability within the study area and to assess potential impact to habitat and wildlife species. A Biological Resources Technical Report has been

prepared for the proposed project and includes a detailed analysis of biological resources. A summary from the technical report is included in the following sections.

4.4.1 Vegetation and Wildlife Habitat

The existing habitat types in the study area consist of approximately 577.22 acres of urban habitat, 33.28 acres of floodplain habitat, 5.35 acres of riparian habitat, 2.83 acres of Edwards Plateau savanna, woodland, and shrubland habitat, 0.62 acres of disturbed prairie habitat. No tallgrass prairie and grassland and no agriculture habitat are located within the study area.

Urban and disturbed prairie areas contain trees, shrubs, and grasses associated with unmaintained properties. These areas provide minimal habitat for wildlife; however, certain species that have adapted more readily to co-exist with an urban environment can utilize some of these vegetated urban areas for foraging and habitat. Approximately 0.53 acre of disturbed prairie would be impacted by the proposed project. Based on field observations, riparian habitat is limited to vegetation associated with the Trinity River at I-35E and Cedar Creek at US 67. Floodplain vegetation is associated with the Trinity River at I-35E. Vegetation associated with these areas is limited to the aquatic feature margins and banks due to urban development and mowing. These habitat types provide soil conservation, habitat biodiversity, and influence food and cover for fish, reptiles, resident and migratory birds, small mammals, invertebrates, and the predators that feed on the other species. These areas can provide important nesting and foraging habitat for birds and waterfowl.

Edwards Plateau Savannah, Woodland, and Shrubland areas contain trees, shrubs, and grasses associated with undeveloped sites. These areas have potential to provide habitat for various wildlife species. However, due to habitat fragmentation, certain species that have adapted more readily to co-exist with an urban environment can utilize some of these vegetated woodland areas for foraging and habitat. Small areas of woodlands are observed adjacent to the study area. There are no impacts anticipated for the Edwards Plateau Savannah, Woodland, and Shrubland by the proposed project.

Approximately 1.67 of the 5.35 acres of riparian habitat could be permanently impacted as a result of the construction of the proposed project. The proposed project would exceed the 0.1 acre TxDOT/Texas Parks and Wildlife Department (TPWD) Memorandum of Understanding Programmatic Agreement (PA) threshold for riparian habitat; therefore, coordination with the TPWD was required. Efforts to protect riparian habitats during construction would occur as it may be possible to preserve some areas. The riparian and floodplain habitat located at the Trinity River would not be impacted as no construction activities would occur at this location for the proposed project. The TPWD coordination letter is included in **Appendix D**.

The No-Build Alternative would result in no vegetation impacts.

4.4.2 Threatened and Endangered Species

The Endangered Species Act affords protection for federally-listed threatened and endangered species and, where designated, critical habitat for these species. The U.S. Fish and Wildlife Service (USFWS) maintains a list of federally threatened and endangered species of potential occurrence for each Texas County. The USFWS lists the black-capped vireo (Vireo atricapilla), golden-cheeked warbler (Dendroica chrysoparia), least tern (Sterna antillarum), piping plover (Charadrius melodus), red knot (Calidris canutus rufa), and whooping crane (Grus americana) as potentially occurring in Dallas County. No suitable habitat was observed within the study area for the black-capped vireo or the golden-cheeked warbler; therefore, there will be no effect on these species. No new construction would occur at the Trinity River Crossing; and therefore, the project would have no effect on the interior least tern and whooping crane. The piping plover and red knot are included in the species list as needing consideration for wind energy projects. This is not a wind energy project, and no suitable habitat is present, so the project would have no effect on the piping plover or red knot.

TPWD maintains a list of threatened and endangered species (both state and federally-listed) and state species of concern for each Texas County. Based on the evaluation performed for the biological evaluation, 11 species have potential habitat within the study area and 10 of these species may be impacted by the proposed project. **Table 4-1** identifies the species and the appropriate BMPs for each species that will be included in the construction plans.

Table 4-1: Potential Impacts to State Listed Species and BMPs

Species	State Status	Species Impact	BMPs
Western Burrowing Owl		No impact	Bird BMPs
Wood Stork	T	May impact	Bird BMPs
Cave myotis bat	SGCN	May impact	Bridge Bat BMPs and Cave/Cliff Bat BMPs
Plains spotted skunk		May impact	Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered, and to avoid unnecessary impacts to dens
Louisiana pigtoe	T	May impact	Mussel BMPs
Sandbank pocketbook	T	May impact	Mussel BMPs
Texas heelsplitter	T	May impact	Mussel BMPs
Texas pigtoe	T	May impact	Mussel BMPs
Texas garter snake	SGCN	May impact	Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
Timber/ Canebrake rattlesnake	T	May impact	Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
Texas milk vetch	SGCN	May impact	Species-specific BMP is not included in the TxDOT-TPWD BMP PA and therefore is a trigger for coordination with TPWD.
T – State Listed Threatened SGCN – Species of greatest conservation need “blank“ – State listed Rare, but with no regulatory listing status			

Source: Study Team (May 2016)

Overall, there is minimal habitat for wildlife species beyond the limits of most of the study area due to urban development. No long-term impacts to wildlife populations are anticipated as a result of the proposed project. In areas temporarily impacted, wildlife species adapted to urban areas would likely re-colonize the available habitat areas after construction. Burrowing species or less mobile species would be more susceptible to impacts from construction activity.

The Bald Eagle has the potential to migrate through the area. However, there is no suitable foraging or roosting habitat for the Bald Eagle within the study area and therefore is not expected to occur within the study area. Due to the lack of suitable habitat, the National Bald Eagle Management Guidelines of 2007 is not applicable.

The No-Build Alternative would result in no impacts and/or no effects to threatened and endangered species.

4.4.3 Migratory Bird Treaty Act

Between October 1 and February 15, the contractor would remove all old migratory bird nests from any structures that would be affected by the proposed project, and complete any bridge work and/or vegetation clearing. In addition, the contractor would be prepared to prevent migratory birds from building nests between February 15 and October 1. In the event that migratory birds are encountered on-site during project construction, adverse impacts on protected birds, active nests, eggs, and/or young would be avoided.

4.4.4 Topography and Soils

The topography of the study area reflects a gentle slope from south to north and from east to west. The I-35E segment has an elevation at the north of 410 ft and extends upward to an elevation of 650 ft at the south. The US 67 segment of the project has an elevation of 550 ft and extends upward to an elevation of 800 ft at the southern terminus.

According to the National Resources Conservation Service (NRCS) Soil Survey of Dallas County, Texas (1980), there are three general soil types within the study area. The Eddy-Stephen-Austin is very shallow to moderately deep and gently sloping to moderately steep loamy and clayey soils on uplands. The Trinity-Frio is deep, nearly level clayey soils on floodplains. The Austin-Houston Black is deep, nearly level to sloping clayey soils on uplands.

Permanent soil erosion control features would be constructed as soon as feasible during the early stages of construction through proper sodding and/or seeding techniques. Disturbed areas would be restored and stabilized as soon as the

construction schedule permits and temporary sodding would be considered where large areas of disturbed ground would be left bare for a considerable length of time.

Farmland Protection Policy Act
The NRCS Web Soil Survey does contain one soil type designated as a "farmland of statewide importance" (Austin silty clay, 1-3 percent slopes) and one soil type designated as "all areas prime farmland" (Dalco clay, 1-3 percent slopes). These two soil types are located within the existing TxDOT ROW at, and north of, the US 67 and I-20 interchange. No additional ROW is needed for the proposed project at this location. The proposed project is not subject to Farmland Protection Policy Act requirements. The soil types that occur within the project area as described are not currently used as farmland and are not expected to be used as farmland in the future.

4.5 Cultural Resources

4.5.1 Historical Resources

A Report for Historical Studies Survey was prepared for the proposed project and includes a detailed assessment of potential effects to historic resources. A summary from the report is included in the following paragraphs.

Within the area of potential effect, there are four previously determined historic properties including the National Register of Historic Places (NRHP) Listed Tenth Street Historic District; a residence at 830 Betterton Circle; the Kovandovitch House at 523 Eads St., (also a City of Dallas Landmark); and the Dallas Floodway. One resource, a centennial marker commemorating Colonel William G. Cooke, located near Clarendon Dr., is recommended as eligible for listing in the NRHP at the State level of significance under Criteria A for its association with the 1936 program to promote Tourism during the celebration of the Texas Centennial in 1936.

No direct effect to these historic resources (NRHP-listed or determined NRHP-Eligible) is anticipated because no new ROW is required from these resources. Coordination with State Historic Preservation Officer (SHPO to obtain concurrence with this determination is in progress and will be complete prior to environmental clearance of this EA.

4.5.2 Archeological Resources

The proposed project, including the existing ROW, proposed new ROW and easements, were evaluated by TxDOT archaeologists. It was determined the proposed project has a low probability of encountering archaeological historic sites or a State Archaeological Landmark. These determinations were made in March of 2012, October of 2014, and January of 2016. The project would not result in impacts to any cemetery. Archeological resources documentation related to the proposed project can be found in **Appendix D**.

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

Under the No-Build Alternative, the proposed improvements would not occur; therefore, no impacts to cultural resources are anticipated.

4.6 Air Quality

4.6.1 Transportation Conformity

The proposed project is located in Dallas County, which is part of the US Environmental Protection Agency designated 10-county moderate nonattainment area for the 2008 eight-hour standard for the pollutant ozone; therefore, the transportation conformity rule applies. The proposed project is included in the MTP (*Mobility 2040)*, approved by the RTC on March 10, 2016, and will be included in the 2017-2020 TIP. Conformity of the MTP and the TIP with the TCEQ State Implementation Plan is pending. FHWA will review the proposed project and make a project-level conformity determination. TxDOT will not take final action on this environmental document until the proposed project is consistent with the conforming MTP and TIP. **Appendix F** includes copies of the MTP and TIP information for the proposed project.

4.6.2 Traffic Air Quality Analysis

Concentrations of CO for the Build Alternative are not expected to exceed national ambient air quality standards at any time. Please refer to the CO TAQA Technical Report for the detailed analysis. The No-Build Alternative would not result in impacts to CO concentrations.

4.6.3 Mobile Source Air Toxics

A quantitative analysis of MSATs was completed for the base scenario (2017), design year Build in 2037 and design year No-Build in 2037. The analysis indicates that a decrease in emissions can be expected for both the Build and No-Build Alternatives for the Build year 2037 versus the 2017 base year. Detailed information of the analysis can be found in the Quantitative MSAT Technical Report prepared for the project.

4.6.4 Congestion Management Process

The CMP is a process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. A CMP Technical Report was completed in June 2016. The report concluded that the congestion reduction strategies considered for this project would help alleviate congestion in the SOV study boundary, but would not eliminate it.

4.7 Hazardous Materials

A hazardous materials ISA and a Hazardous Materials Technical Report was completed in March 2016. Fourteen sites are considered high risk and 18 are considered low risk.

Additional investigation and assessment of the high risk sites may be conducted, if needed based on final design, to identify if construction activities including excavation at adjacent locations may encounter contaminants.

Bridge and building demolition would be required for the proposed improvements. Asbestos containing materials (ACM) and lead-based paint (LBP) testing would be performed on the existing bridge structures and building structures to be removed. TxDOT would notify the Department of State Health Services (DSHS) of the bridge demolition 10-working days prior to the scheduled demolition.

Utility adjustment requirements are anticipated, but specifics have not yet been determined. There is a potential for contamination to be encountered during underground utility adjustments. Coordination with utility companies concerning this contamination would be addressed during the ROW stage of project development.

Should unanticipated hazardous materials/substances be encountered during construction, TxDOT and/or the contractor would be notified and steps would be taken to protect personnel and the environment. Any unanticipated hazardous materials encountered during construction would be handled according to applicable federal, state, and local regulations per TxDOT Standard Specifications. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. All construction materials used for the proposed project would be removed as soon as the work schedules permit. The contractor would initiate early regulatory agency coordination during project development.

Under the No-Build Alternative, no impacts related to hazardous waste/substance are anticipated.

4.8 Traffic Noise

A traffic noise analysis was prepared in accordance with the TxDOT FHWA approved 2011 *Guidelines for Analysis and Abatement of Roadway Traffic Noise.* The proposed project would result in a traffic noise impact with feasible and reasonable abatement. A total of 437 receivers would be impacted. Thirty-two traffic noise barriers are proposed to abate traffic noise. For details, refer to the traffic noise technical report included in **Appendix G: Traffic Noise Technical Report**.

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers is expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and

specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

There are 374 noise receivers adjacent to the project corridor that are currently experiencing elevated noise levels that approach, equal or exceed the FHWA Noise Abatement Criteria, which is used to define noise impacts. If the No-Build Alternative were implemented, noise levels along the corridor would be expected to increase with an associated increase in traffic volumes.

5.0 INDUCED GROWTH EFFECTS

The schematic plans of the proposed project were reviewed to determine access modifications within the corridor, which in turn determine potential induced growth effects. The access changes resulting from the proposed project improvements are relatively minor and would not substantially provide additional or new access to any areas. No induced growth effects were determined to result from the proposed project. Although the proposed project could potentially impact the rate of development of some areas, the extent of the accessibility resulting from the proposed project would not alone influence the development or non-development of these areas. In addition, feedback from local planner interviews showed that planned developments (Dallas Executive Airport/Red Bird, Wynnewood Village and Oak Cliff) would occur independent of the proposed project. Planned developments would not depend upon the construction of the proposed project nor would be limited should the proposed project not be built. Refer to the Induced Growth Effects Technical Report for additional information on the induced growth effects analysis.

6.0 CUMULATIVE EFFECTS

Council on Environmental Quality (CEQ) regulations (40 CFR § 1508.7) defines cumulative impacts (i.e., effects) as “the impact on the environment which results from the incremental impact of the proposed action when added to other past, present and reasonably foreseeable future actions.” The purpose of a cumulative effects analysis is to view the direct and indirect impacts of the proposed project within the larger context of past, present, and future activities that are independent of the proposed project, but which are likely to affect the same resources in the future. This approach allows the evaluation of the incremental impacts of the proposed project in light of the overall health and abundance of selected resources. The evaluation process for each resource considered may be expressed in shorthand form as follows:

BASELINE CONDITION (historical and current)	+	FUTURE EFFECTS (expected projects)	+	PROJECT IMPACTS (direct and indirect)	=	CUMULATIVE EFFECTS

The following five-step approach as described in TxDOT *Cumulative Impacts Analysis Guidelines* (2014), was utilized to assess the potential cumulative effects of the past, present, and reasonably foreseeable actions to the resources in the study area:

1. Resource Study Area, Conditions and Trends;
2. Direct and Indirect Effects on Each Resource from the Proposed Project;
3. Other Actions – Past, Present, and Reasonably Foreseeable – and their Effect on Each Resource;
4. The Overall Effects of the Proposed Project Combined with other Actions; and
5. Mitigation of Cumulative Effects.

All of the resource categories considered in this EA are candidates for cumulative effects analysis. The initial step of the cumulative effects analysis uses information from the evaluation of direct and indirect impacts in the selection of environmental resources that should be evaluated for cumulative effects. TxDOT guidelines states: "If a project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource." CEQ guidance recommends focusing on key resource issues of national, regional, or local significance. To identify potential issues, the resource is considered whether it is protected by legislation or resource management plans; ecologically important; culturally important; economically important; or important to the well-being of a human community.

Applying this criteria, the resources or environmental issues considered for the cumulative effects analysis are listed in **Table 6-1**. As recommended by CEQ guidance, specific indicators of the condition of each resource are identified and shown. The use of indicators of the health, abundance, and/or integrity of resources are helpful tools in formulating quantitative or qualitative metrics for characterizing overall impacts to resources. These indicators are also key aspects of each resource that have already been evaluated in terms of the direct and indirect impacts of a project and facilitate greater consistency and objectivity in the analysis of cumulative effects.

Table 6-1: Resources Considered for the Cumulative Impacts Analysis

Resource or Topic Evaluated	TxDOT/CEQ Criteria[4]			Included for Cumulative Impacts Analysis	Explanation For Including or Excluding the Resource or Topic from Cumulative Effects Analysis
	Would the Resource or Topic be Directly or Indirectly Impacted?	Would the Direct or Indirect Impacts be Substantial?	Is the Resource in Poor or Declining Health?		
Air Quality	No	No	Yes	No	Excluded because impacts related to air quality (MSAT, ozone, etc.) from the proposed project and other transportation projects included in the MTP are evaluated during the MSAT analysis and regional transportation conformity determination.
Biological Resources					
Threatened and Endangered Species	Yes	No	Yes	No	Excluded because direct impacts are not anticipated to be substantial, BMPs are recommended to avoid potential direct impacts, and indirect impacts are not anticipated.
Migratory Birds	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.
Vegetation and Wildlife Habitat	Yes	Yes	No	Yes	Included because direct impacts are anticipated. The proposed project would impact various vegetation types.
Soils	Yes	No	No	No	Excluded because no substantial direct or indirect impacts are anticipated.
Farmland	No	No	Yes	No	Excluded because neither direct nor indirect impacts are anticipated.
Socio-economic Resources					
Community Cohesion	Yes	No	No	No	Excluded because no substantial direct or indirect impacts are anticipated.
EJ Populations	Yes	No	No	No	Excluded because no substantial direct or indirect impacts are anticipated.
LEP Populations	Yes	No	No	No	Excluded because no substantial direct or indirect impacts are anticipated.

[4] In accordance with TxDOT (2010) and CEQ (2007) selection criteria for limiting the scope of cumulative impacts analysis.

Resource or Topic Evaluated	TxDOT/CEQ Criteria[4]			Included for Cumulative Impacts Analysis	Explanation For Including or Excluding the Resource or Topic from Cumulative Effects Analysis
	Would the Resource or Topic be Directly or Indirectly Impacted?	Would the Direct or Indirect Impacts be Substantial?	Is the Resource in Poor or Declining Health?		
Public Facilities and Services	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.
Cultural Resources					
Historic Properties	To Be Determined	No	No	No	To be determined.
Archeological Resources	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.
Section 4(f) and 6(f)					
Section 4(f) Properties	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.
Section 6(f) Properties	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.
Water Resources					
Groundwater	No	No	No	No	Excluded because direct impacts are not considered substantial and no indirect impacts are anticipated to warrant a cumulative effects analysis.
Threatened or Impaired Waters	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.
Wetlands and Jurisdictional Waters of the U.S.	Yes	No	No	No	Bridge and culvert construction is anticipated to have permanent direct impacts to three water features. The direct impacts are not considered substantial and no indirect impacts are anticipated; therefore, wetlands and jurisdictional waters of the U.S. would not be included in the cumulative effects analysis.
Floodplains	Yes	No	No	No	Excluded because no substantial direct or indirect impacts are anticipated.
Water Quality	No	No	No	No	Excluded because neither direct nor indirect impacts are anticipated.

Source: Study Team (May 2016).

Although several topics were identified to have direct or indirect impacts (vegetation and wildlife, soils, floodplains, threatened and endangered species, EJ populations, LEP populations, wetlands and jurisdictional waters of the U.S.), the effects would not warrant a cumulative impacts analysis on these resources. Runoff impacts to impaired waters as a result of the proposed project are not considered substantial and no induced growth effects are anticipated. Direct impacts to waters of the U.S. as a result of bridge and culvert construction are anticipated; however, they would not be substantial and would not warrant a cumulative impacts analysis. For these reasons as discussed, the cumulative impacts analysis would not include these resources and topics.

Conversely, the resource eligible for a cumulative impacts analysis is vegetation. Cumulative impacts are analyzed in terms of the specific resource being affected. Direct impacts to this resource is addressed in **Section 4.0: Affected Environment and Environmental Consequences**. The following sections describe steps 1 through 5 applied to the resource eligible for the cumulative impacts analysis.

6.1 Vegetation

Step 1: Resource Study Area, Conditions and Trends

The resource study area (RSA) was determined using the boundaries for the watershed and subwatershed areas in which the proposed project is located. The watershed boundaries were used to delineate the RSA because vegetation types tend to be affected by the watershed areas and drainage influences the vegetation types that occur within the area. The vegetation types within the RSA are generally associated with urbanized development. The total area of the RSA is approximately 68,448 acres. Urbanized development dominates the RSA which covers approximately 84 percent of the entire RSA. The remaining areas consist of 10 percent woodland/shrublands and 6 percent riparian. The timeframe included in this cumulative analysis would be from 1959 through 2040 which are the years in which I-35E was first constructed, and the horizon year for the MTP, respectively. The timeframe was determined to provide sufficient range of time to determine reasonable and foreseeable actions to be included in the cumulative effects analysis.

According to the TPWD Ecological Mapping Systems of Texas data, the RSA consists of the following vegetation types: floodplain, riparian and swamp; grasslands; open water; row crops; urban; and woodlands and shrublands. The largest percentage of the RSA is categorized under the urban vegetation type which consists of approximately 84 percent of the entire RSA. Floodplain, riparian and swamp vegetation is approximately 6 percent of the RSA and the woodland and shrubland vegetation is approximately 10 percent of the RSA. Each of the remaining vegetation types covers less than 1 percent of the RSA. Refer to **Exhibit 3** for the **Vegetation Resource Study Area**.

According to the U.S. Census Bureau *2010 Census,* the DFW Metropolitan Statistical Area (MSA) is the fourth largest metropolitan area in the U.S. Between 2000 and 2010, the USCB estimates the DFW MSA added over 1.2 million residents, equating to a growth rate of approximately 23 percent. Between 2000 and 2010, the DFW MSA was

the third fastest growing metropolitan area in the U.S. The *2010 Census* also reveals continued growth in Dallas County and the City of Dallas during the same time period. From 2000 to 2010, Dallas County gained 149,240 new residents, and the City of Dallas gained 9,236 new residents, equating to growth rates of approximately 7 percent and 1 percent, respectively (USCB *2010 Census Briefs*, March 2011).

Step 2: Direct and Indirect Effects on Each Resource from the Proposed Project

Direct impacts to vegetation are confined to areas within the proposed ROW. Approximately 3.63 acres of additional ROW would result from the proposed project. Riparian habitat and disturbed prairie are the vegetation types that would be permanently impacted at approximately 1.67 acres and 0.53 acre respectively. The direct effects to vegetation are further discussed in **Section 4.4.1**.

Urbanized areas within the RSA provide minimal habitat for wildlife; however, certain species that have adapted more readily to co-exist with an urban environment can utilize some of the vegetated areas. Overall, there is minimal habitat for wildlife species due to urban development and altering of native habitat for urban use. Minimal woody vegetation is present within the project limits which would be removed as a result of the proposed project. No long-term impacts to wildlife populations are anticipated as a result of the proposed project. In areas temporarily impacted, wildlife species adapted to urban environments would likely re-colonize the available habitat areas after construction. Due to overall lack of suitable habitat within the RSA, the direct impacts to wildlife would be considered minor.

It was determined in the induced growth analysis that the proposed project would not result in induced growth effects to vegetation because no induced development would occur as a result of the proposed project. Further discussion of the induced growth analysis is provided in **Section 5.0: Induced Growth Effects** and in the **Induced Growth Technical Report**.

Step 3: Other Actions – Past, Present, and Reasonably Foreseeable – and their Effect on Each Resource

Past actions within the RSA include roadway and transit construction and commercial and residential developments. The I-35E facility was constructed in 1959 and US 67 was constructed in the late 1960s and early 1970s. At the time the roadway facilities were constructed, commercial and residential developments were already in place. Construction of the I-35E facility included portions that followed pre-existing roadways and newly aligned sections that were constructed within urbanized residential and commercial development areas. Much undeveloped land was converted for urban use in the construction of the US 67 facility from I-20 to the I-35E. It is estimated that several roadway improvements have occurred since initial construction of both facilities. Developments adjacent to the facility have occurred including the development of the Trinity Bottoms neighbourhood (located northeast of the proposed project) in the 1960s. Additional commercial and residential developments were constructed within the 1970s and 1980s. Additional developments in the late 2000s include redevelopment within the

Bishop Arts and Oak Cliff area. This revitalization had little impact on vegetation because of the existing urbanized development of the area.

Reasonable and foreseeable actions include the planned development/redevelopment of the Dallas Executive Airport and surrounding Red Bird area, the Wynnewood village area, and the Oak Cliff area as identified by local planners through the induced growth interview process. The Oak Cliff area includes the Oak Cliff Gateway and Bishop/Jefferson sub-districts identified by the City of Dallas Office of Economic Development as potential areas for revitalization and redevelopment. Because most of these areas are pre-existing development areas, the effects on the vegetation would be negligible as existing conditions are predominantly landscaping and vegetation types typical of urbanized environments; however, some undeveloped land is present in the Dallas Executive Airport and surrounding Red Bird area and consists of approximately 660 acres. These areas include undeveloped land adjacent to the airport which may have air clearance concerns and other constraints that have the potential to inhibit certain types of development such as residential subdivisions. Although residential development is unlikely to occur adjacent or near this facility because of the airport facility, commercial and industrial development would be reasonable and foreseeable and was identified as a result of planner interviews. Additional reasonable and foreseeable actions include the Trinity Parkway and Jefferson Memorial transportation projects. These transportation projects are located along the Trinity River which is on the northern end of the proposed project limits. Other developments would include the DART South Oak Cliff Blue Line Light Rail Expansion Project and the expansion of the University of North Texas (UNT) at Dallas campus. The City of Dallas is considering development of a deck plaza over the I-35E freeway. Four potential locations of the plaza are being considered between Overton Road and Upton Street. **Table 6-2** lists the potential undeveloped land in acres that could be impacted from these future developments. Only GIS aerial imagery was used to estimate potential areas of development for the Dallas Executive Airport/Red Bird area. For all other areas listed in **Table 6-2**, the acreages are estimated using available master plans and environmental documents.

Table 6-2: Reasonable and Foreseeable Action Areas

Future Action	Potential Impacts to Vegetation in Acres
UNT expansion	194
DART expansion	16
Dallas Executive Airport/Red Bird	660
Wynnewood	0
Oak Cliff	0
Trinity Parkway	50
Jefferson Memorial	N/A
Deck Plaza (with parking facility)	0
Total	**920**

Source: UNT Master Plan, DART South Oak Cliff Corridor Blue Line Extension Final Local Environmental Assessment (Chapter 5), USDOT/ FHWA Trinity Parkway Record of Decision (April 2015), GIS 2014 Aerial Imagery.

Step 4: The Overall Effects of the Proposed Project Combined with other Actions

Overall cumulative effects include past, present and future actions. **Table 6-3** shows the areas of impact quantitatively from the cumulative effects. The present action refers to impacted areas resulting from the proposed project and the future action includes areas resulting from potential future developments and reasonably foreseeable actions. The future actions include the UNT at Dallas expansion areas, DART Blue Line expansion areas, the Dallas Executive Airport/Red Bird potential development areas, and the Trinity Parkway anticipated impacts. Acreages were not included for the Wynnewood area and the Oak Cliff redevelopment areas because it would be redevelopment of existing urbanized environments. Potential areas of impact for the Jefferson Memorial transportation project is also not included because it is still under the planning phase of project development and areas of impact could not be estimated at this time.

Table 6-3: Cumulative Impacts to Vegetation within the RSA

Type of Action	Approximate Area of Impact
PRESENT ACTION	
Proposed Project	2 acres
FUTURE ACTION	
Potential Development Areas	920 acres
Total Area	**922 Acres**

Source: Study Team (June 2016).

The cumulative effects from past development, the proposed project, and future developments impact vegetation types over time through a conversion of undisturbed riparian and woodland/shrubland/prairie vegetation types to urbanized development and localized planting typical of urbanized environments. **Table 6-3** shows approximately 922 acres of vegetation could be impacted from cumulative effects as a result of the proposed project and other reasonable and foreseeable actions.

In the context of the entire RSA, the cumulative impacts to vegetation were determined to be approximately 922 acres, which would account for approximately 8.2 percent of the approximately 11,280 acres of vegetation within the RSA.. Irrespective of the proposed project, development/redevelopment and population growth would continue for this region. Overall, the cumulative effects would not substantially alter the existing urbanized environment and change the trends for growth and development.

Step 5: Mitigation of Cumulative Effects

Efforts would be taken through local, state and federal regulations to avoid and minimize any adverse effects from development or future activities. Additional BMPs such as seeding and replanting in accordance with TxDOT approved seeding specification could help mitigate effects from transportation projects. Similar activities of landscaping and planting where feasible could be performed to help mitigate for areas developed for urban use. Future city, county or local plans could help avoid and minimize impacts to these natural resources from future developments or activities. Any

impacts associated with future developments would be the responsibility of developers in coordination with the City of Dallas and local agencies.

7.0 INTERAGENCY COORDINATION AND PUBLIC INVOLVEMENT

7.1 Interagency Coordination

TxDOT has been planning and developing the proposed project in coordination with several state agencies. TxDOT has coordinated with TPWD regarding potential effects to natural resources. Archeological resources review related to the project were completed on March 28, 2012, October 17, 2014 and January 29, 2016. TPWD coordination was completed on April 27, 2016. TxDOT coordinated water resources and air quality with TCEQ on February 4, 2016. The coordination documentation is included in **Appendix D**. TxDOT will coordinate the project level conformity with FHWA, air quality with TCEQ, and historic resources with THC/SHPO if appropriate prior to final environmental decision.

7.2 Public Involvement

Public meetings were held to provide community involvement and input in the project development process. The list of meetings with their location and number of attendees are listed in **Table 7-1**.

Both series of public meetings were held in an open house format and were conducted from 5:30 p.m. to 7:30 p.m. Public meeting summaries have been prepared for each of the meetings and posted on the project website.

Table 7-1: Public Meetings

Date	Location	Total Number of Attendees
Thursday, March 27, 2014	Hilton Garden Inn 800 N. Main St., Duncanville, Texas 75116	199
Tuesday, June 23, 2015	Cedar Hill Recreation Center 310 E. Parkerville Rd., Cedar Hill, Texas 75104	85
Thursday, June 25, 2015	Hilton Garden Inn 800 N. Main St., Duncanville, Texas 75116	108
Tuesday, July 7, 2015	DeSoto Recreation Center 211 E. Pleasant Run Rd., DeSoto, Texas 75115	104
Thursday, July 9, 2015	Beckley-Saner Recreation Center 114 W. Hobson Ave., Dallas, Texas 75224	150
Tuesday, January 26, 2016	Beckley-Saner Recreation Center 114 W. Hobson Ave., Dallas, Texas 75224	180
Thursday, January 28, 2016	Thurgood Marshall Recreation Center 5150 Mark Tr., Dallas, Texas 75232	137

Source: Study Team (April 2016).

As shown in **Table 7-1**, the first public meeting had a total of 199 attendees registered at the sign-in table. In addition to the general public, other attendees included local agency representatives from City of Dallas and elected officials including the Mayor of Duncanville, Deborah Hodge; Mayor of Cedar Hill, Rob Franke; State Representative

Toni Rose; State Senator Royce West; city council members from the City of Duncanville and City of Cedar Hill as well as representatives from State Representative Yvonne Davis' office and Senator West's office. No media representatives attended this public meeting.

A total of 27 written comments were submitted during this round of public involvement. Twenty-three of the written comments were submitted during the public meeting. Four additional comments were received after the public meeting and within the 10-day comment period which ended on April 7, 2014.

Additional public meetings were held to provide project information and gather public input on design changes of the proposed project. A series of four public meetings were held in the summer of 2015. As a result of these meetings, substantial changes to the project occurred based upon stakeholder and public input. A second series of two public meetings were held in January 2016 to provide the public an opportunity to view the changes to the proposed project.

As shown in **Table 7-1**, the series of four public meetings in the summer of 2015 had a total of 447 attendees registered. In addition to the general public (including adjacent property and business owners), other attendees included local agency representatives from City of Dallas, City of Duncanville, Dallas County, Dallas Black Chamber of Commerce and NCTCOG; and elected officials including Mayor of Cedar Hill Rob Franke, Claude Spivey and Lemuel Price representing State Representative Yvonne Davis' office, State Senator Royce West and his representative Kelvin Bass, Duncanville Councilmember Patrick Harvey, DeSoto Mayor Carl Sherman, Dallas City Councilmember Erik Wilson, Lancaster City Councilmember Stanley Jaglowski, Cedar Hill City Councilmember Daniel Haydin, Dallas City Councilmember Carol King Arnold, Kelvin Bass from State Senator Royce West's office, Rhetta Andrews Bowers and Adebobola Vencent Owoseni from State Representative Toni Rose's office. One media representative from the Dallas Morning News attended the July 9th public meeting. No other media representatives attended the other public meetings in this series.

A total of 168 comments were received from summer 2015 public meetings. One hundred seven of the written comments were submitted during the public meeting. Sixty-one additional comments were received after the public meeting and within the 10-day comment period which ended on July 20, 2015. The majority of the comments received were related to tolling (fees and policies); operational improvements, drainage and design (HOV/managed lanes, frontage road lanes, number of proposed lanes, access, ramps, storm-water runoff, etc.); environmental (noise, air quality, relocations, and construction); economic impacts; project funding; project timeline; requests for consideration of other transportation alternatives; support/opposition for the project, and public involvement. Seven commenters specifically expressed support for the proposed project, 15 expressed opposition to the project, and 27 commenters expressed opposition to the tolling aspect of the proposed project.

As shown in **Table 7-1**, the second series of two public meetings in January 2016 had a total of 317 attendees registered at the sign-in table. In addition to the general public (including adjacent property and business owners), other attendees included local agency representatives from City of Dallas and NCTCOG and elected officials including Mayor Pro Tem of Dallas Erik Wilson, Dallas City Councilmembers Carolyn King Arnold and Lee Kleinman, State Representatives Yvonne Davis and Toni Rose, Lancaster Councilmember Stanley Jaglowski, and Luke Harvey representing U.S. Congresswoman Eddie Bernice Johnson. No media representatives attended the public meetings.

A total of 65 comments were received during this round of public involvement. Forty-one of the written comments were submitted during the public meeting. Twenty-four additional comments were received after the public meeting and within the 10-day comment period which ended on February 8, 2016. The majority of the comments received were related to the deck plaza; operational improvements/drainage/design; environmental (ROW, pollution, traffic noise impacts); economic impacts; project funding; tolling; requests for consideration of other transportation alternatives; support/opposition for the project, and public involvement. Two commenters specifically expressed support for the proposed project and three expressed opposition to the project. Several commenters expressed approval of the way TxDOT addressed public comments and concerns and made revisions to the schematic since the summer 2015 public meetings. The general consensus is satisfaction that the project would no longer be tolled.

A public hearing is anticipated to be held in the summer of 2016. The public hearing would consist of a formal presentation followed by an open house session. Staff from the WFS Dallas would attend the public hearing to answer questions and present services information. Contact information for the WFS Dallas would also be distributed to each property owner during the ROW acquisition process.

During the preparation for the public involvement process, reasonable steps were taken to ensure that such persons have meaningful access to the programs, services, and information that TxDOT provides. These efforts include the publication of announcements in both Spanish and English newspapers informing the public of the opportunity to request the assistance for language or other special communication needs at the meetings, and Spanish interpreters for LEP individuals will be present at the meeting. The Civil Rights Restoration Act of 1987 provides that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

Besides the listed public meetings, TxDOT has participated in stakeholder forums/meetings including the Southern Dallas Transportation Forum, City of Dallas Councilmembers Griggs and Caraway, Senator West, Eggs and Issues, Texas Represenatitive Rafaeil Anchia, Oak Cliff Stakeholders, Oak Cliff Chamber of

Commerce, and many more. For a complete list of meetings, and the dates these were held, refer to the Public Agency Involvement attachment included in **Appendix E**.

8.0 MITIGATION/PERMITS/ISSUES AND ENVIRONMENTAL COMMITMENTS

Waters of the U.S., including Wetlands
A NWP 14 would authorize the permanent and temporary impacts of the proposed project. A PCN would not be required. If temporary fills are needed in jurisdictional waters or wetlands then the affected areas would be returned to their pre-existing elevations. If it is necessary for heavy machinery to work in a wetland then the placement of mats would occur to minimize soil disturbance. The NWP 14 requires the use of BMPs related to TCEQ's Tier I Section 401 Certification.

Floodplains
The proposed project is located within a FEMA designated 100-year floodplain within the City of Dallas in Dallas County, both participants of the NFIP. Therefore, coordination with the local floodplain administrator would be required.

Water Quality
Impacts to stormwater would be minimized as much as possible by utilizing approved temporary and permanent erosion and sediment control BMPs as specified by TCEQ CGP (TXR 150000). The CGP requires that a SW3P, NOI, and NOT be prepared for the proposed project. The proposed project is located within the boundaries of the City of Dallas and TxDOT Municipal Separate Storm Sewer System (MS4) Phase I permits, and TxDOT would need to comply with the applicable MS4 requirements.

Threatened and Endangered Species/SGCN
BMPs from the TxDOT/TPWD PA will be utilized for the listed species that could occur within the study area.
Bird BMPs will be used for all migratory bird species and include:

- Not disturbing, destroying, or removing active nests, including ground nesting birds, during the nesting season;
- Avoiding the removal of unoccupied, inactive nests, as practicable;
- Preventing the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair;
- Not collecting, capturing, relocating, or transporting birds, eggs, young, or active nests without a permit.

Cave myotis bat BMPs include:

Bridge Bat BMPs

- Survey by a qualified biologist to determine if bats are present.
- If bats are present, take appropriate measures as practical to ensure that bats are not harmed such as exclusion or timing activities. For maternity colonies, exclusion activities should be timed to avoid separating lactating females from nursing pups.

- If structures used by bats are removed as a result of construction, replacement structures should incorporate bat-friendly design, or artificial roosts should be constructed to replace these features as practical.

Cave/Cliff Bat BMPs

- When TxDOT activities have the potential to impact cliffs or caves adjacent to roadways, these features will be surveyed by a qualified biologist to determine if bats are present.
- Newly acquired TxDOT ROW will be surveyed by a qualified biologist for cliff/cave features. Conversion of property containing cave or cliff features to transportation purposes should be avoided where feasible.
- If bats are present take appropriate measures as practical to ensure that bats are not harmed such as exclusion or timing activities. For maternity colonies, exclusion activities should be timed to avoid separating lactating females from nursing pups. If features used by bats are removed as a result of construction, artificial roosts should be constructed to replace these features as practical.

Freshwater Mussel BMPs include:

- When work is in the water; survey project footprints for state listed species where appropriate habitat exists.
- When work is in the water and mussels are discovered during surveys; relocate state listed and SGCN mussels under TPWD permit and implement Water Quality BMPs.
- When work is adjacent to the water; Water Quality BMPs implemented as part of the SWPPP for a construction general permit or any conditions of the 401 water quality certification for the project will be implemented. (Note, SWPPP and 401 BMPS are not listed in this PA). No TPWD Coordination required.

Texas garter snake BMPs include:

- Contractors will be advised of potential occurrence in the study area, and to avoid harming the species if encountered.

Migratory Bird Treaty Act

Between October 1 and February 15, the contractor may remove all old migratory bird nests that would be affected by the proposed project and complete vegetation clearing. If any active nests are found during construction activities, the contractor shall cease work in that immediate area and contact the TxDOT project manager who would contact, as needed, the local USFWS office or local TPWD office.

Vegetation

After construction activities are completed, the areas of bare ground would be reseeded/revegetated according to TxDOT standards in accordance with EO 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping.

Traffic Noise

Traffic noise barriers are proposed to abate traffic noise. In accordance with TxDOT *Guidelines for Analysis and Abatement of Roadway Traffic Noise*, polling of adjacent property owners will take place to determine whether or not property owners desire the noise barriers. Additionally, traffic noise workshops will be held to provide information on

the proposed noise barriers to adjacent property owners. The traffic noise workshop(s) would be held after the public hearing. If the barrier status changes, additional notification will be made to affected property owners to discuss change. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

Hazardous Materials
Additional investigation and assessment of the high risk sites may be conducted, if needed based on final design, to identify if construction activities including excavation at adjacent locations may encounter contaminants.

ACM and LBP testing would be performed on the existing bridge structures and building structures to be removed. TxDOT would notify the DSHS of the bridge demolition 10-working days prior to the scheduled demolition.

There is a potential for contamination to be encountered during underground utility adjustments. Coordination with utility companies concerning this contamination would be addressed during the ROW stage of project development.

Should unanticipated hazardous materials/substances be encountered during construction, TxDOT and/or the contractor would be notified and steps would be taken to protect personnel and the environment. Any unanticipated hazardous materials encountered during construction would be handled according to applicable federal, state, and local regulations per TxDOT Standard Specifications. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. All construction materials used for the proposed project would be removed as soon as the work schedules permit. The contractor would initiate early regulatory agency coordination during project development.

Air Quality
Potential impacts of particulate matter emissions would be minimized by using fugitive dust control measures such as covering or treating disturbed areas with dust suppression techniques, sprinkling, covering loaded trucks, and other dust abatement controls.

Community
During the preparation for the public involvement process, reasonable steps were taken to ensure that such persons have meaningful access to the programs, services, and information that TxDOT provides. These efforts include the publication of announcements in both Spanish and English newspapers informing the public of the opportunity to request the assistance for language or other special communication needs at the meetings.Presence of Spanish interpreters for LEP individuals at the meetings will be provided. Staff from the WFS Dallas would attend the public hearing to answer questions and present services information. Contact information for the WFS

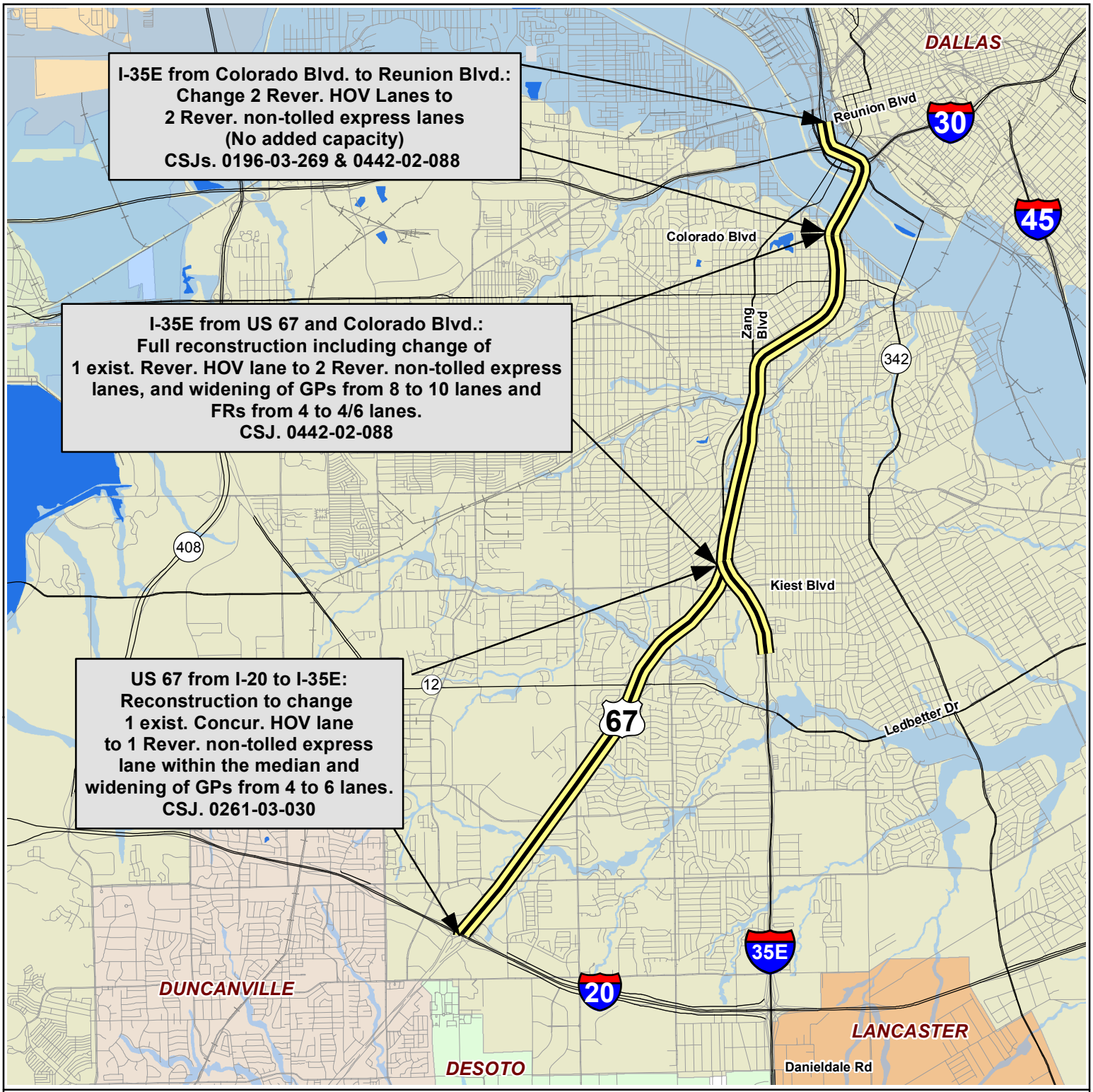
Dallas would also be distributed to each property owner during the ROW acquisition process.

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

9.0 CONCLUSION

The engineering, social, economic, and environmental investigations conducted thus far indicate that the Build Alternative option best meets the purpose and need of the proposed project and would result in no significant impacts to the quality of the human or natural environment. The No-Build Alternative would not meet the purpose and need of the proposed project. Implementation of the proposed project would not be a major federal action significantly affecting the quality of the human environment.

APPENDIX A: EXHIBITS



N

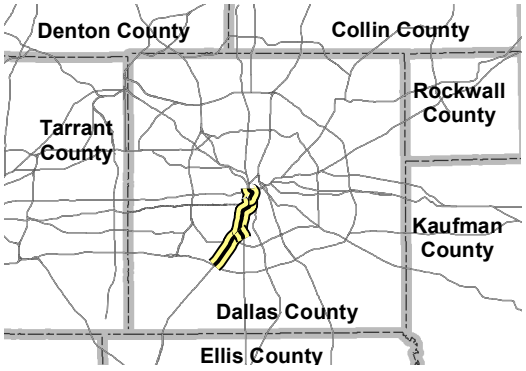
0 1 2

Miles

Texas Department of Transportation®

LEGEND

Project Limits



Sources: NCTCOG GIS Data - counties, cities, streets, rivers, and lakes

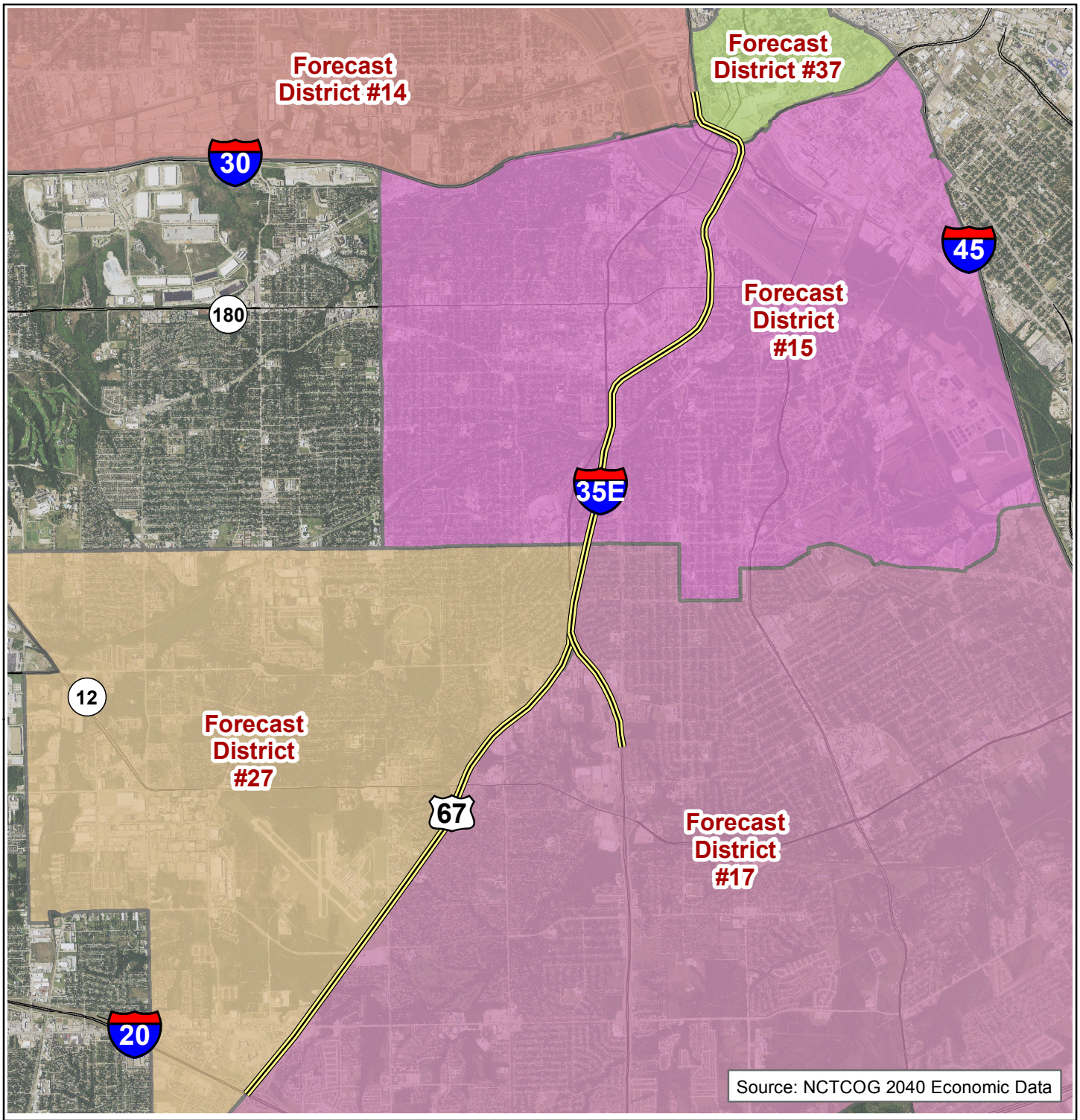
EXHIBIT 1
PROJECT LOCATION MAP

I-35E/ US 67 PROJECT

I-35E FROM US 67 TO REUNION BLVD.
AND
US 67 FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT

DALLAS COUNTY, TEXAS



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Texas Department of Transportation®

LEGEND

Project Limits

Forecast District

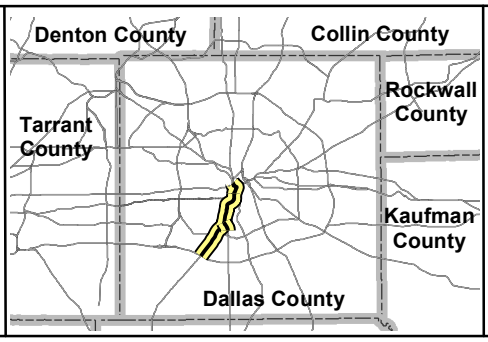
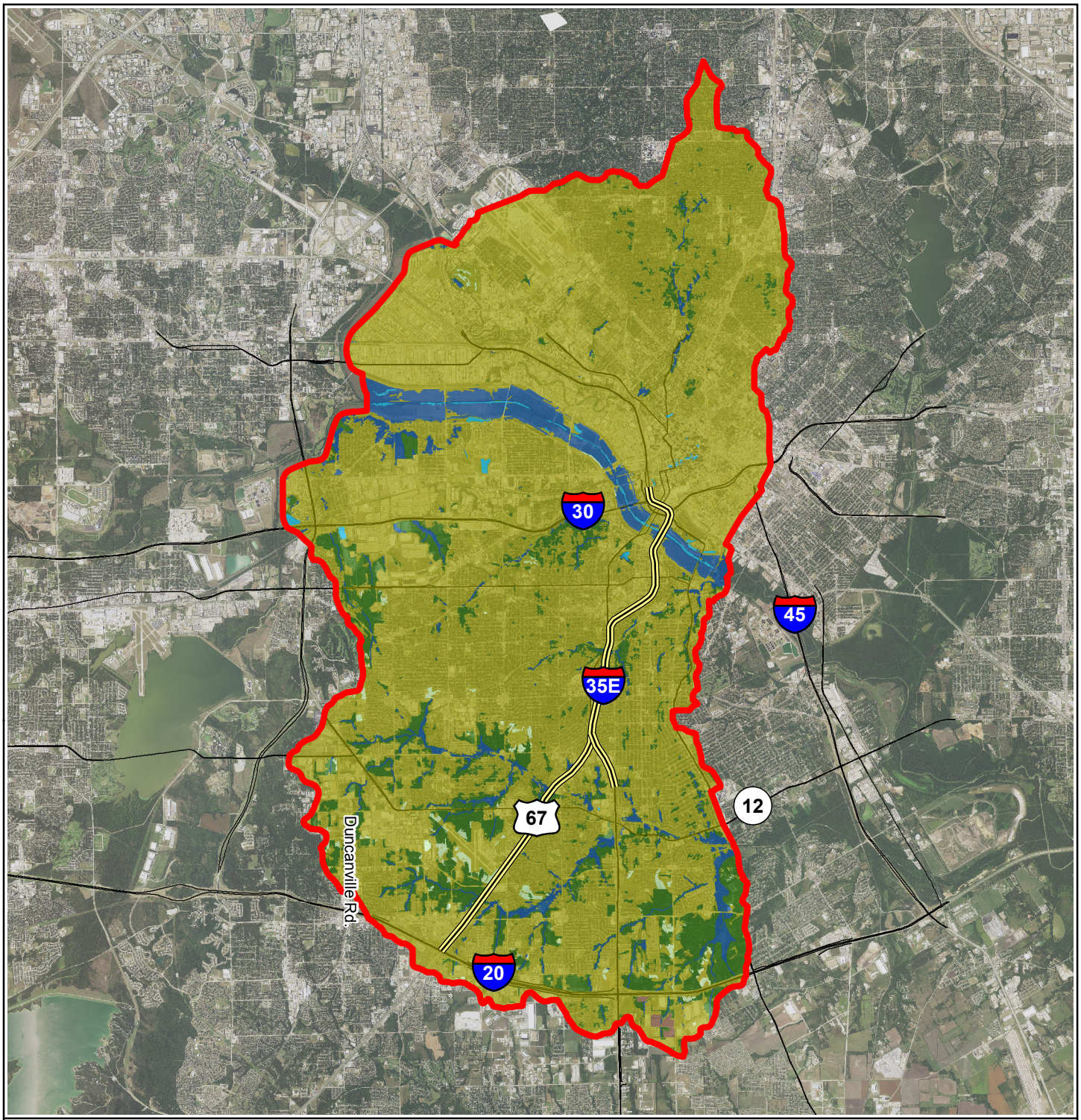


EXHIBIT 2
2040 DEMOGRAPHIC FORECAST DISTRICT AREAS

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS



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Miles

Texas Department of Transportation®

LEGEND

- Project Limits
- RSA

Vegetation Type

- Urban
- Floodplain, Riparian and Swamp
- Woodland and Shrubland
- Grassland
- Open Water
- Row Crops

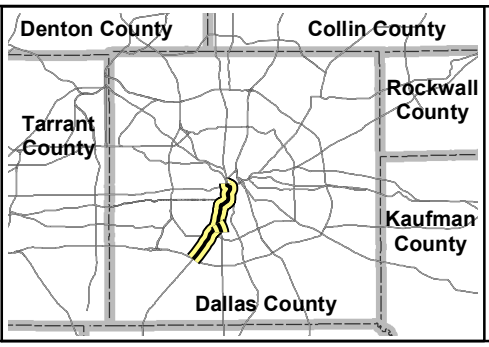
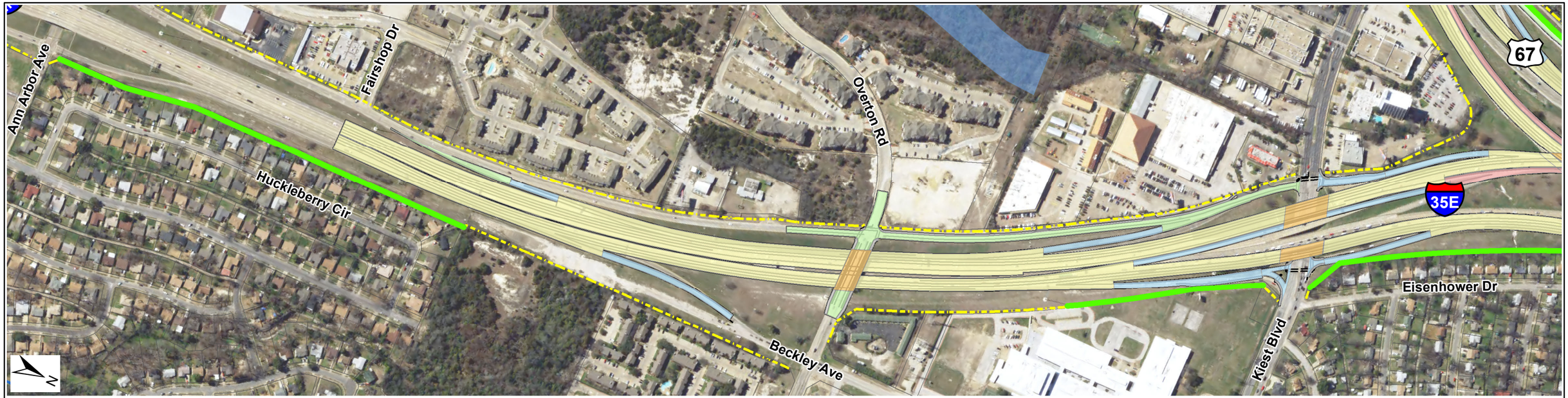


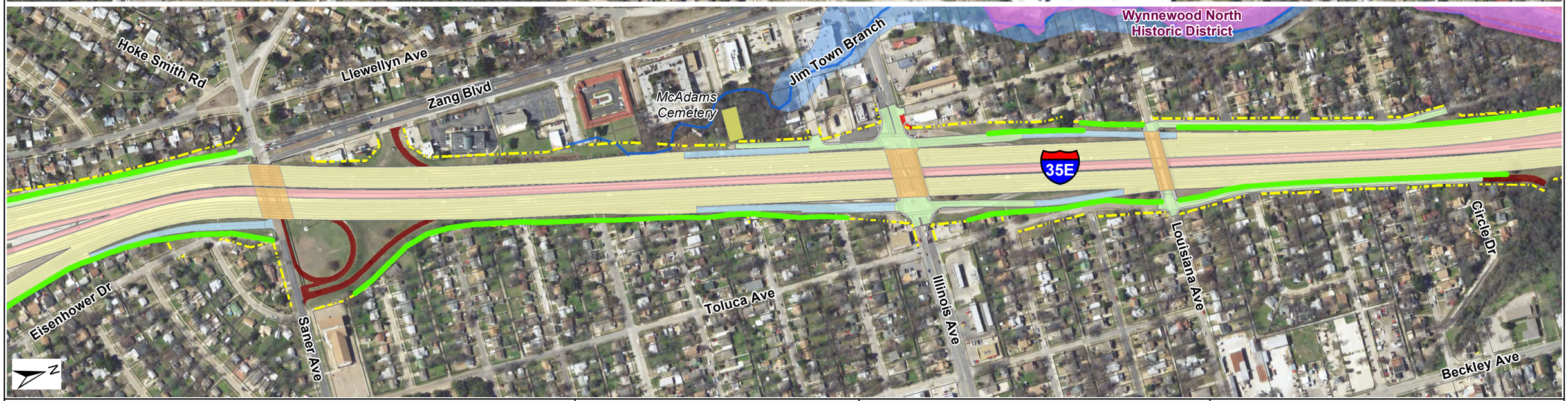
EXHIBIT 3
VEGETATION RESOURCE STUDY AREA

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

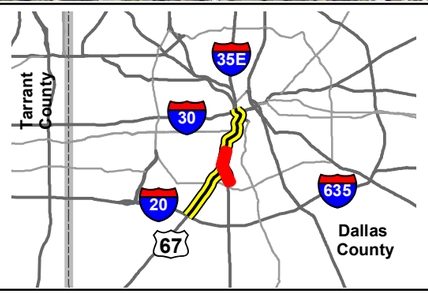
ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS





LEGEND

- Existing ROW
- Proposed ROW
- Proposed Easement
- Riparian Habitat
- Displacement*
- Water
- Wetland
- Stream
- 100-Yr Floodplain
- NRHP Eligible Property
- NRHP Listed Property
- NRHP Eligible District
- NRHP Listed District
- Historical Marker
- Cemetery
- Proposed Pavement
- High Risk Hazardous Materials Site **
- Proposed Noise Barrier ***
- Bridge
- Driveway
- Frontage/ Crossroad
- General Purpose
- Express Lane
- Ramp
- Lane Removal
- Sidewalk
- Horseshoe Lane Conversion



0 500 1,000

Feet

Texas Department of Transportation®

*Map ID numbers correspond to displacements detailed in the Community Impacts Technical Report.
**Map ID numbers correspond to high risk sites detailed in the Hazardous Materials Technical Report.
***Detailed information on traffic noise barriers is included in the Traffic Noise Technical Report.
Based on July 2016 Schematic Plan

EXHIBIT 4
ENVIRONMENTAL MAP
SHEET 1 OF 5

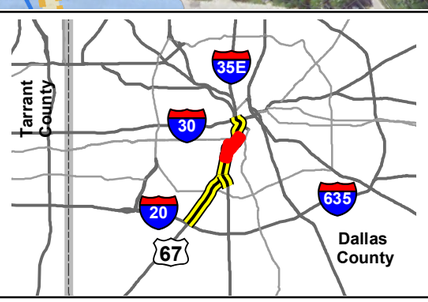
I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Easement
- Riparian Habitat
- Displacement*
- Water
- Wetland
- Stream
- 100-Yr Floodplain
- NRHP Eligible Property
- NRHP Listed Property
- NRHP Eligible District
- NRHP Listed District
- Historical Marker
- Cemetery
- Proposed Pavement
- High Risk Hazardous Materials Site **
- Proposed Noise Barrier ***
- Bridge
- Driveway
- Frontage/ Crossroad
- General Purpose
- Express Lane
- Ramp
- Lane Removal
- Sidewalk
- Horseshoe Lane Conversion



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Feet

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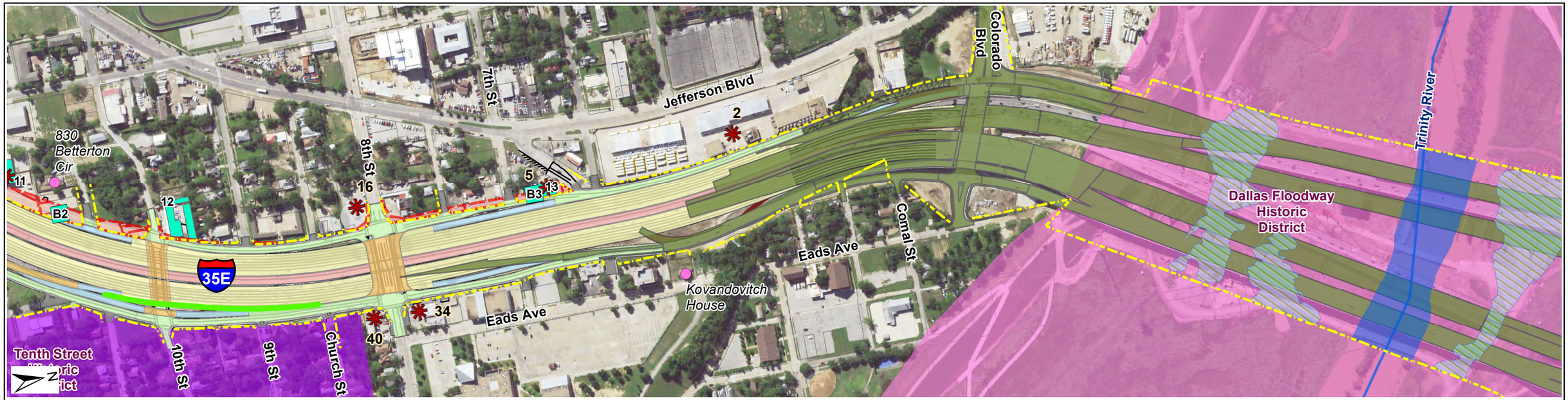
Based on July 2016 Schematic Plan

EXHIBIT 4
ENVIRONMENTAL MAP
SHEET 2 OF 5

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS



LEGEND

- Existing ROW
- Proposed ROW
- Proposed Easement
- Riparian Habitat
- Displacement*
- Water
- Wetland
- Stream
- 100-Yr Floodplain
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- NRHP Listed Property
- NRHP Eligible District
- NRHP Listed District
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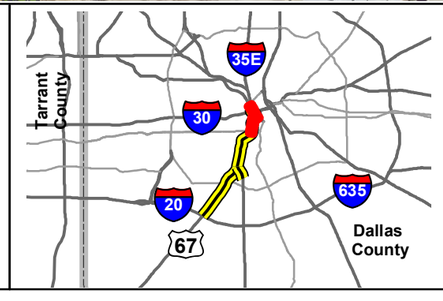
- High Risk Hazardous Materials Site **
- Proposed Noise Barrier ***
- Bridge
- Driveway
- Frontage/ Crossroad
- General Purpose
- Express Lane
- Ramp
- Lane Removal
- Sidewalk
- Horseshoe Lane Conversion



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Feet

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Based on July 2016 Schematic Plan

EXHIBIT 4
ENVIRONMENTAL MAP
SHEET 3 OF 5

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Easement
- Riparian Habitat
- Displacement*
- Water
- Wetland
- Stream
- 100-Yr Floodplain
- NRHP Eligible Property
- NRHP Listed Property
- NRHP Eligible District
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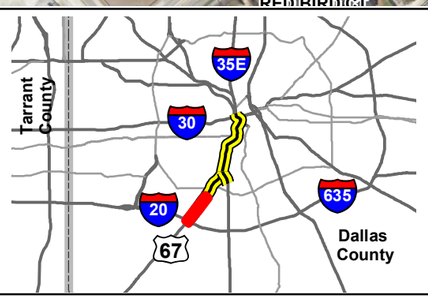
- Bridge
- Driveway
- Frontage/ Crossroad
- General Purpose
- Express Lane
- Ramp
- Lane Removal
- Sidewalk
- Horseshoe Lane Conversion



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Feet

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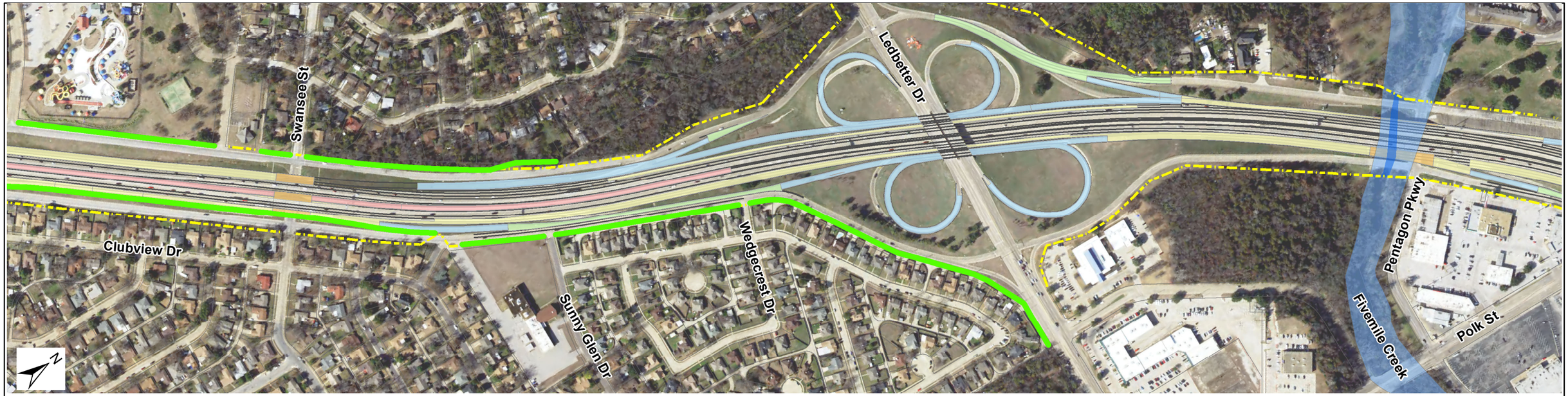
Based on July 2016 Schematic Plan

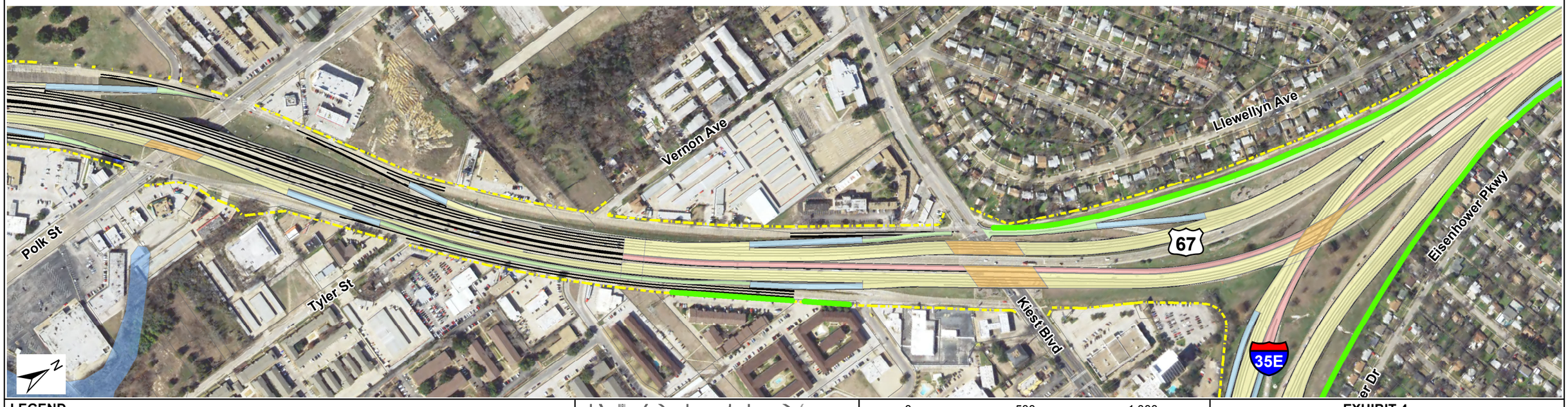
EXHIBIT 4
ENVIRONMENTAL MAP
SHEET 4 OF 5

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS





LEGEND

- Existing ROW
- Proposed ROW
- Proposed Easement
- Riparian Habitat
- Displacement*
- Water
- Wetland
- Stream
- 100-Yr Floodplain
- NRHP Eligible Property
- NRHP Listed Property
- NRHP Eligible District
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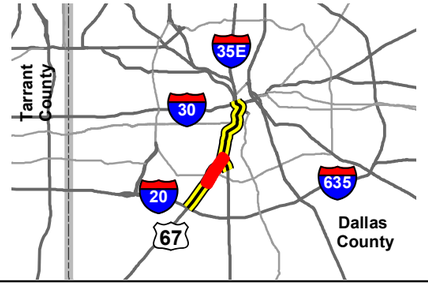

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Feet

Texas Department of Transportation®

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***Map ID numbers correspond to high risk sites detailed in the Hazardous Materials Technical Report.*
****Detailed information on traffic noise barriers is included in the Traffic Noise Technical Report.*
Based on July 2016 Schematic Plan

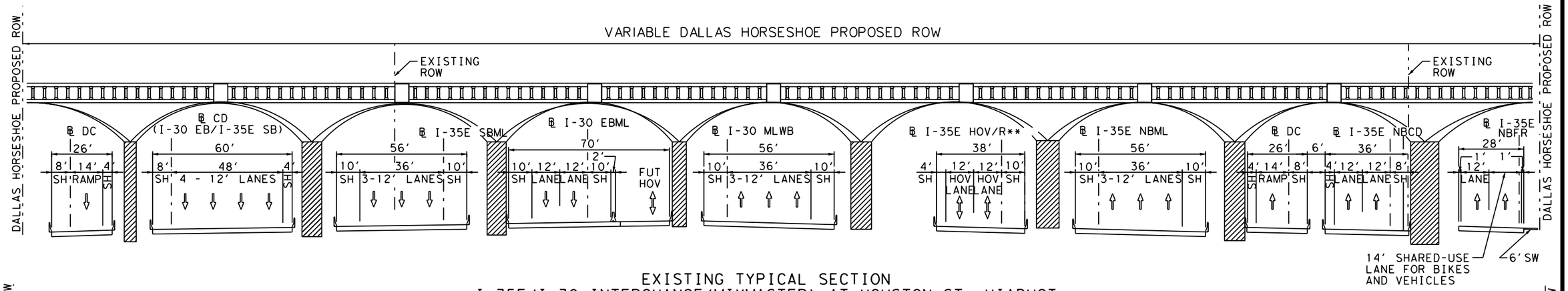
EXHIBIT 4
ENVIRONMENTAL MAP
SHEET 5 OF 5

I-35E/US 67 PROJECT

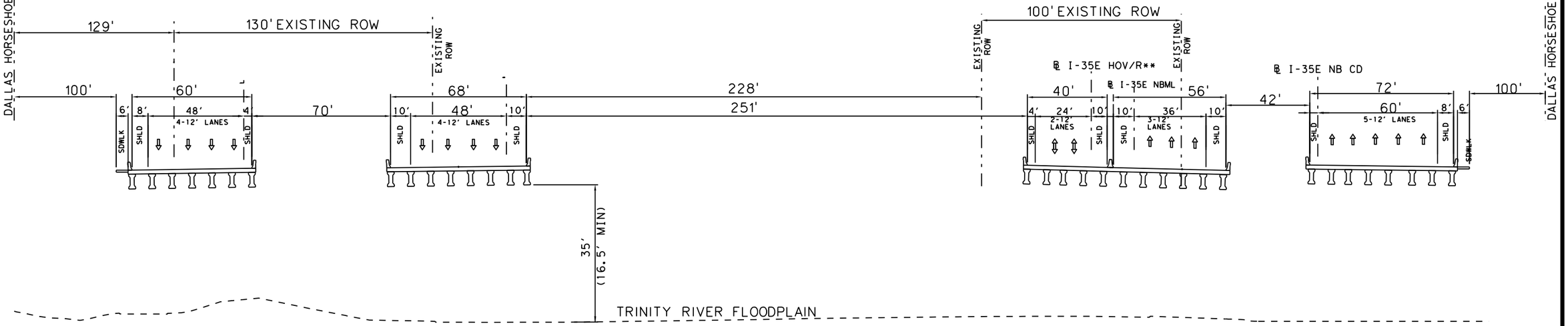
I-35E: FROM US 67 TO I-30
US 67 : FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS

APPENDIX B: TYPICAL SECTIONS



EXISTING TYPICAL SECTION
I-35E/I-30 INTERCHANGE (MIXMASTER) AT HOUSTON ST. VIADUCT
(CURRENTLY UNDER CONSTRUCTION AS PART OF THE DALLAS HORSESHOE PROJECT)



EXISTING TYPICAL SECTION
I-35E FROM COLORADO BLVD. AND I-30 (AT THE DALLAS FLOODWAY)
(CURRENTLY UNDER CONSTRUCTION AS PART OF THE DALLAS HORSESHOE PROJECT)

Notes:
CD=Collector Distributor
NBML=Northbound Mainlane
SBML=Southbound Mainlane
NBFR=Northbound Frontage Road
SBFR=Southbound Frontage Road
SW=Sidewalk
SH=Shoulder
**HOV/R Proposed for conversion to reversible non-tolled express lanes

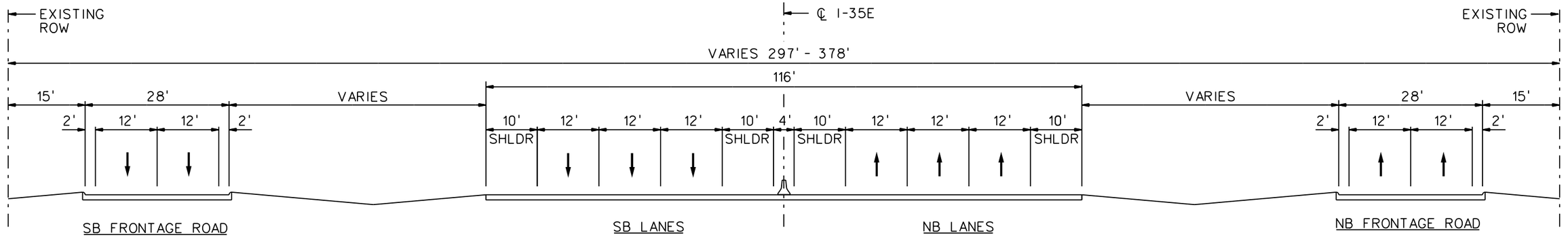
Texas Department of Transportation

TYPICAL SECTIONS
SHEET 1 OF 5

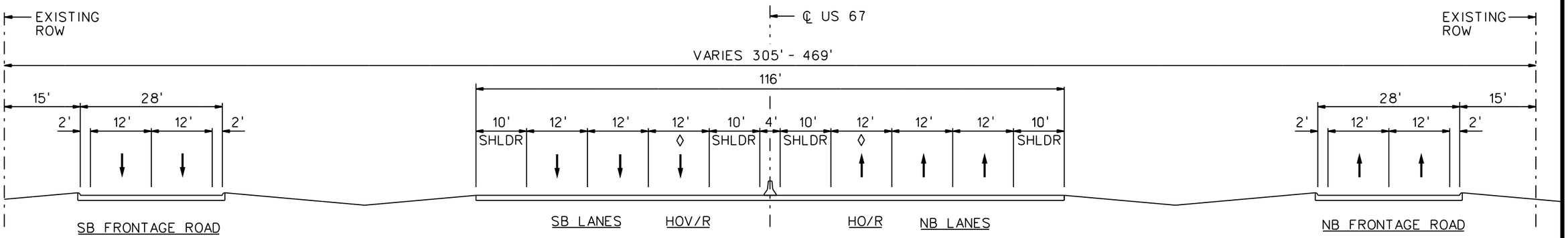
I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

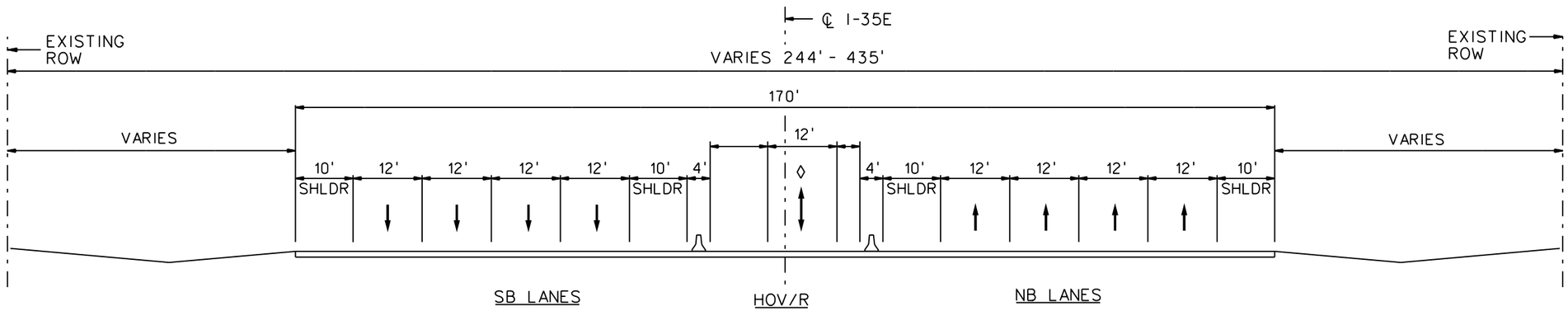
ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS



EXISTING TYPICAL SECTION
I-35E FROM FAIRSHOP RD. TO US 67



EXISTING TYPICAL SECTION
US 67 FROM I-20 TO I-35E



EXISTING TYPICAL SECTION
I-35E FROM US 67 TO COLORADO BLVD.

Notes:
NB=Northbound
SB=Southbound
HOV/R=Reversible high occupancy vehicles lane

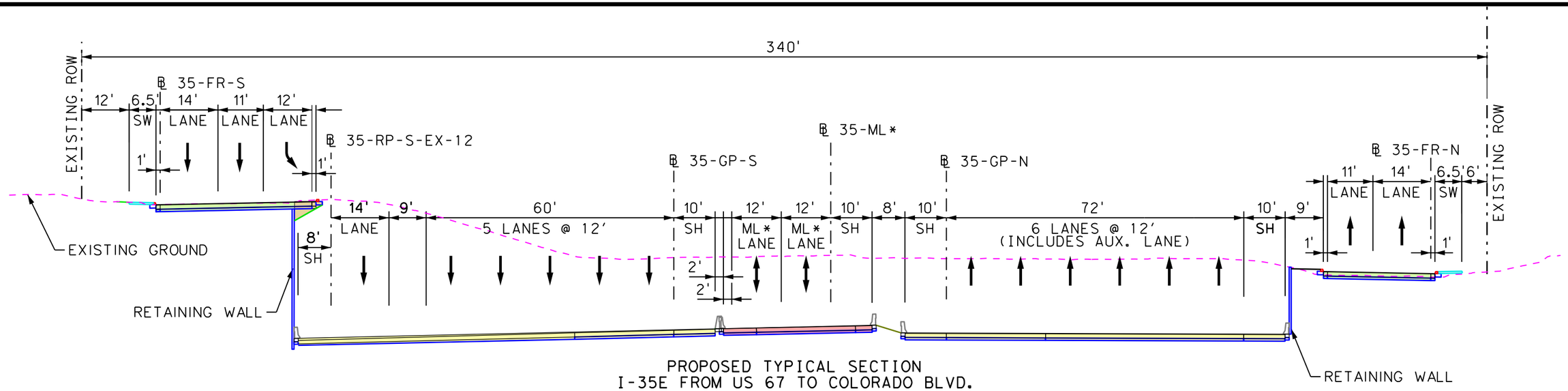
Texas Department of Transportation

TYPICAL SECTIONS
SHEET 2 OF 5

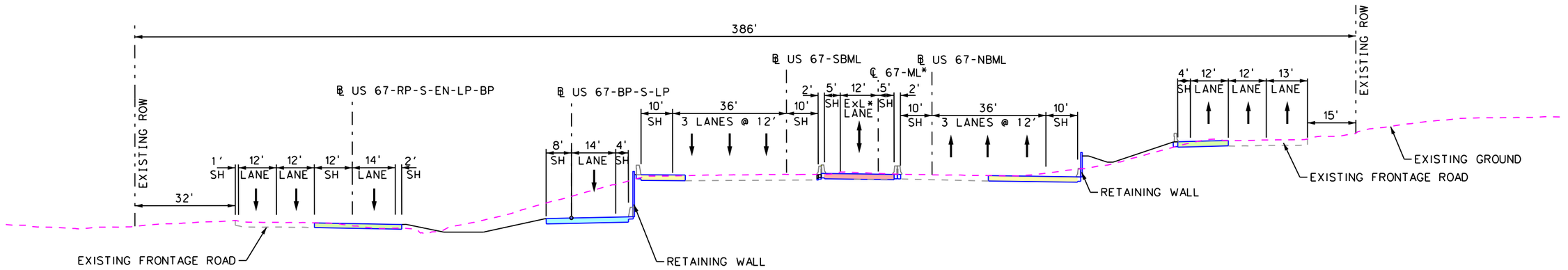
I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS



PROPOSED TYPICAL SECTION
I-35E FROM US 67 TO COLORADO BLVD.
LANES NOTED "ExL" ARE NON-TOLLED EXPRESS LANES



PROPOSED TYPICAL SECTION
US 67 FROM I-20 TO I-35E
LANES NOTED "ExL" ARE NON-TOLLED EXPRESS LANES

Notes:
CD=Collector Distributor
NBML=Northbound Mainlane
SBML=Southbound Mainlane
NBFR=Northbound Frontage Road
SBFR=Southbound Frontage Road
SW=Sidewalk
ExL=Non-tolled Express Lane
SH=Shoulder

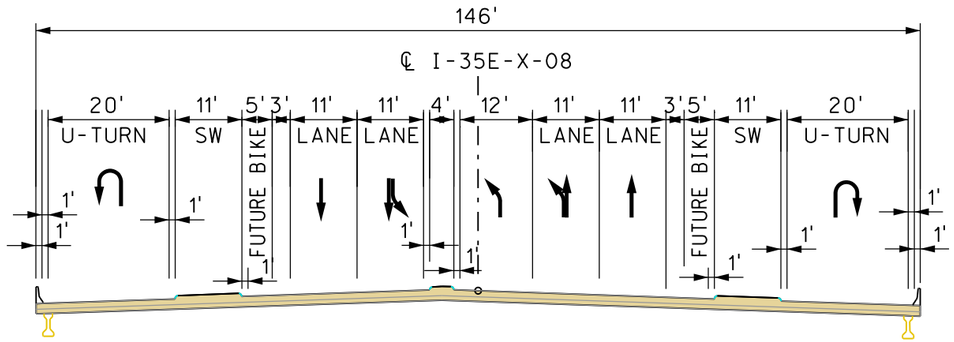
Texas Department of Transportation

TYPICAL SECTIONS
SHEET 3 OF 5

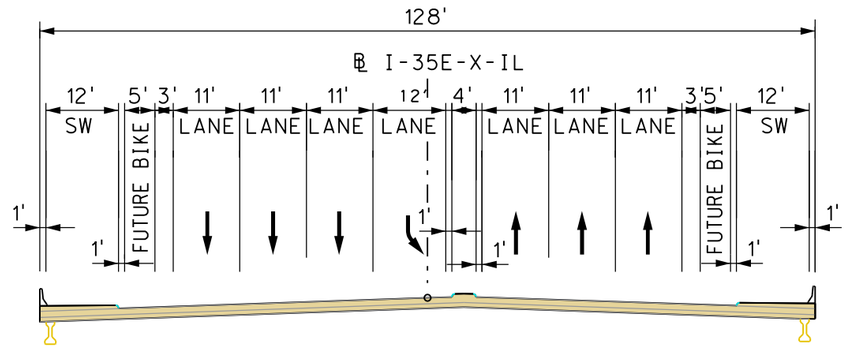
I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

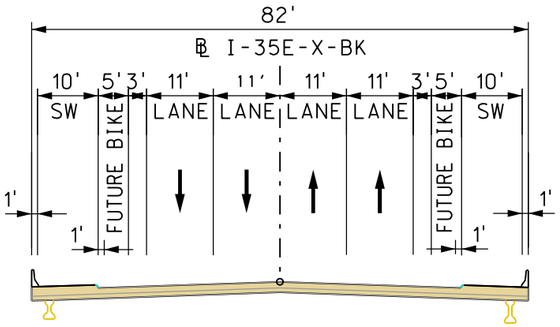
ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS



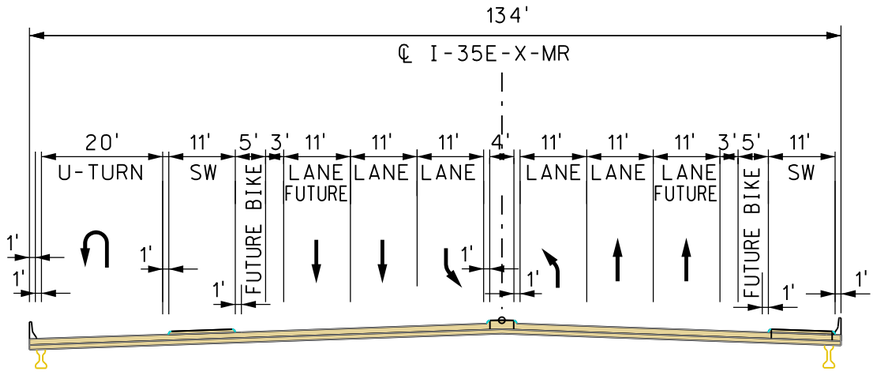
PROPOSED CROSS STREET
8TH STREET



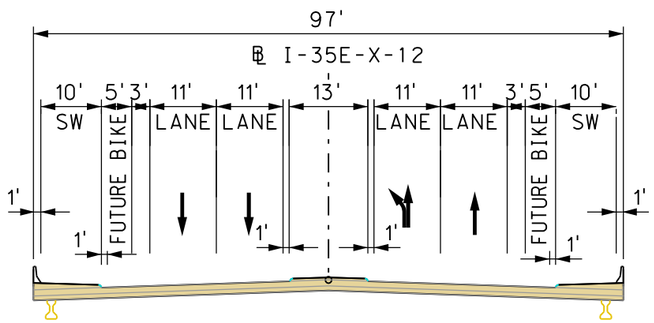
PROPOSED CROSS STREET
ILLINOIS AVENUE



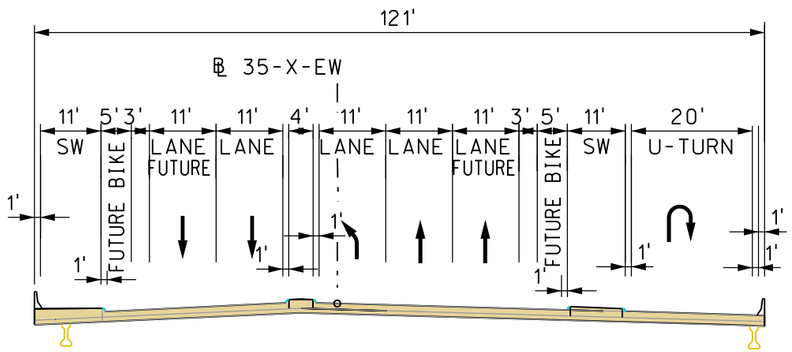
PROPOSED CROSS STREET
BECKLEY STREET



PROPOSED CROSS STREET
MARSALIS AVENUE



PROPOSED CROSS STREET
12TH STREET



PROPOSED CROSS STREET
EWING AVENUE

Notes:
SW=Sidewalk

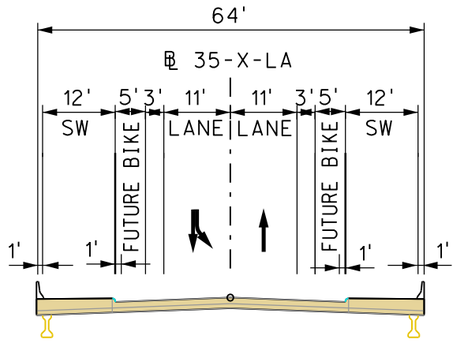
Texas Department of Transportation

TYPICAL SECTIONS
SHEET 4 OF 5

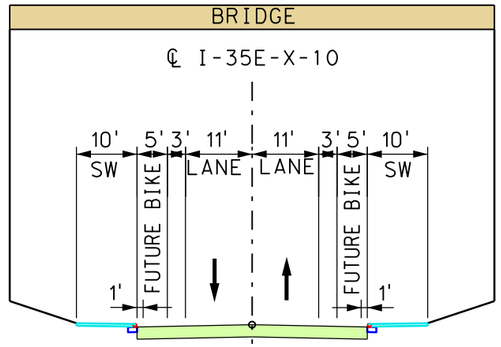
I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

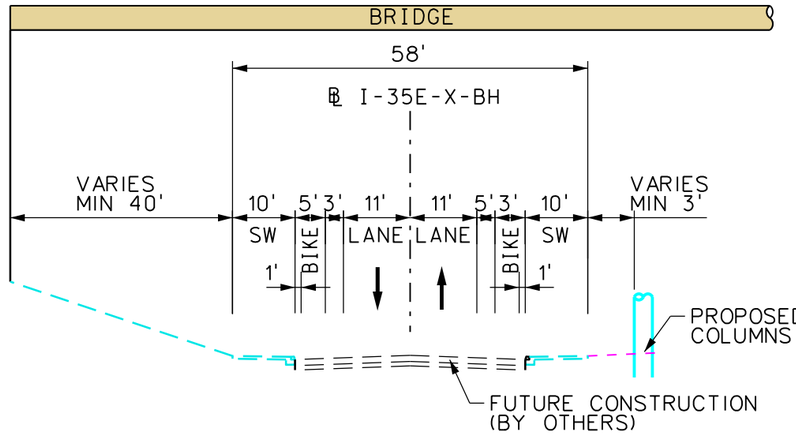
ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS



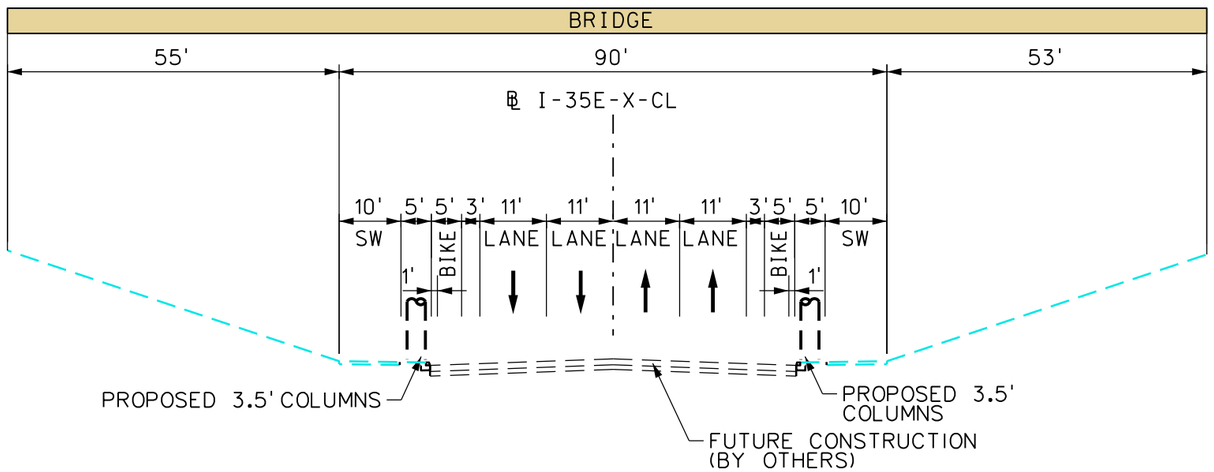
PROPOSED CROSS STREET
LOUISIANA STREET



PROPOSED CROSS STREET
10TH STREET



PROPOSED CROSS STREET
BROOKHAVEN DRIVE



PROPOSED CROSS STREET
CLARENDON DRIVE

Notes:
SW=Sidewalk

Texas Department of Transportation

TYPICAL SECTIONS
SHEET 5 OF 5

I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

ENVIRONMENTAL ASSESSMENT
DALLAS COUNTY, TEXAS

APPENDIX C: PROJECT PHOTOGRAPHS

PROJECT PHOTOGRAPHS

Looking north from 8th Street at the I-35E corridor.

Looking north from along the southbound frontage road south of Kiest Boulevard at the I-35E/Kiest Boulevard intersection.

Looking northeast along the southbound frontage road of I-35E south of Marsalis Avenue.

Looking northeast along the southbound frontage road of I-35E north of Storey Street.

Looking north along northbound I-35E south of Illinois Avenue.

Looking south onto Fleming Street from the northbound frontage road of I-35E south of 10th Street.

Looking south from north of Hampton Road along the southbound US 67 frontage road.

Looking south from north of Camp Wisdom Road along the southbound US 67 frontage road.

APPENDIX D: AGENCY COORDINATION

MEMORANDUM

Texas Department of Transportation

TO: 850 File, IH 30 and IH 35E--Dallas Horseshoe Project (Pegasus Partial Implementation), IH 30 from Sylvan Avenue to west of IH 45 and IH 35E from 8th St. to Commerce Street; CSJ: 0196-03-205, 0442-02-118, 0442-02-132, 1068-04-099, 1068-04-116, 0009-11-226; Dallas County, Dallas District

re: No Effect

FROM: Barbara J Hickman **DATE:** 28 March 2012

SUBJECT: Internal review under the Programmatic Agreement (PA) Among the Federal Highway Administration, Texas State Historic Preservation Office, Advisory Council on Historic Preservation, and the Texas Department of Transportation; and the Memorandum of Understanding (MOU) Between the Texas Historical Commission and the Texas Department of Transportation

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The above referenced proposed project would use federal funds to improve Interstate Highway (IH) 30 and IH35E near downtown Dallas in Dallas County, Texas, a distance of approximately 5 miles. In accordance with the terms of the PA and MOU, we are initiating documentation for internal review of this project.

The proposed improvements are referred to collectively as the "Dallas Horseshoe Project," and include the replacement of the IH 30 and IH 35E bridge structures that cross the Trinity River. The proposed project would allow replacement of the IH 30 and IH 35E bridge structures crossing the Dallas Floodway, reconstruction of the IH 30/IH 35E interchange, locally known as the "Mixmaster," and associated roadways, frontage roads, ramps, direct connectors, and collector distributor roads. The proposed bicycle and pedestrian facilities along IH 30 would potentially connect to this trail network (specifically the Coombs Creek Trail and proposed Trinity Levee Trail near or at Beckley Avenue). The proposed project would require the acquisition of right-of-way (ROW), a joint-use agreement, and 11 displacements including two single family residences, seven commercial buildings, and two billboards. It is anticipated that approximately 55 parcels would be associated with the ROW acquisitions for the proposed project.

The Dallas Horseshoe Project was originally part of a larger project. The Dallas Horseshoe Project is a breakout of Project Pegasus (CSJ (CSJ 0009-11-181, 1068-04-116), 1068-04-116) and focuses primarily on the replacement of the IH 30 and IH 35E bridge structures, which require replacement because of deteriorating condition. Project Pegasus proposed the reconstruction of IH 30 from Sylvan Avenue on the west to IH 45, IH 35E from 8th Street to Empire Central Drive, and SH 183 from IH 35E to Empire Central. Project Pegasus encompassed all cross streets and associated direct connections and access ramps, including IH 30 interchanges with IH 45, and IH 35E; and the IH 35E interchanges with Spur 366 (Woodall Rodgers Freeway), Dallas North Tollway (DNT), and SH 183. In addition to the highway improvements, Project Pegasus proposed improvements to High Occupancy Vehicle (HOV) lanes, Intelligent Transportation Systems (ITS), and bicycle-pedestrian improvements for streets crossing the highways. The total length of Project Pegasus was approximately 11 miles. Project Pegasus received a Finding of No Significant Impact (FONSI) from FHWA in 2005.

Geo-Marine, Inc. submitted a background study and reconnaissance report for the Pegasus project to TxDOT in 2003 entitled, *Assessing the Potential for Intact Archeological Deposits within the Pegasus Project: Reconstruction of the IH-30/IH-35E Corridor (Canyon/Mixmaster/Lower Stemmons) in Dallas*

County, Texas by Melissa Green and Duane Peter. In the report, Green and Peter argued that the potential for encountering intact prehistoric archeological deposits was very low. However, GMI saw more potential for buried historic features sealed under fill in the APE. They recommend avoidance of the historic Houston Street Viaduct, historic site 41DL377, with monitoring near 41DL377. THC concurred with GMI's recommendations on 3 July 2003. TxDOT made a commitment to have GMI present during earthmoving activities. Section 106 consultation with federally recognized Native American tribes with a demonstrated historic interest in the area was completed on 16 January 2004. No objections or expressions of concern were received within the comment period.

The area of potential effects comprises the existing ROW within the project limits and any areas of new ROW or easements. The APE extends to a maximum depth below the modern ground surface. Thus the APE for archeological resources would cover a 4.87 mile alignment with an average width of approximately 150 feet. The existing ROW consists of a total of 95.2 acres, while the proposed new ROW has a total area of 108.24 acres. The maximum vertical APE would extend between 75 to 85 feet deep for the proposed drill shaft locations, based on current engineering practices.

On 22 December 2011, Barbara Hickman (TxDOT ENV) and Melissa Green (GMI) discussed plans for a subsurface investigation of the project area with Michelle Dippel and Lupe Pettit of HNTB Corporation in a conference call. Ms. Green stated that based on previous work she completed at the depository building, there could be items within 10 feet of the surface and that there is potential for historic archeological resources along the bluff edge. However, because there has been extensive disturbance within these areas Ms. Green suggested looking at geotechnical borings to determine if intensive survey (backhoe trenching) was needed for the Horseshoe Project.

Ms. Green stated that she would need the geotechnical borings map and proposed design files from HNTB to superimpose on historical maps in order to help determine which borings to analyze. After analyzing the borings, GMI and TxDOT would determine whether backhoe trenching was warranted.

The attached report details the geotechnical study conducted by GMI during February 2012. Examination of the core samples indicated that the cores reflected a river channel or near-channel environment rather than deposition associated with terracing above the river. Indeed the Trinity River is known to have several meander channels within the project area as well as the twentieth century artificial relocation of the river further south of downtown Dallas (the current "floodway"). The scattered fragments of nineteenth and twentieth century concrete and brick suggest discarded debris rather than indicating historic-age intact cultural deposits. It is likely that the historically mapped structures lie outside the Horseshoe Project APE.

Pursuant to Stipulation VI of the PA-TU, TxDOT finds that the APE does not contain archeological historic properties (36 CFR 800.16(l)), and thus the proposed undertaking would not affect archeological historic properties. The project does not merit further field investigations. Project planning can also proceed, in compliance with 13 TAC 26.20(2) and 43 TAC 2.24(f)(1)(C) of the MOU. If unanticipated archeological deposits are encountered during construction, work in the immediate area will cease, and TxDOT archeological staff will be contacted to initiate post-review discovery procedures under the provisions of the PA and MOU.

The proposed project can proceed to construction.

Approved by _____ Date March 29, 2012
For FHWA and TxDOT
Attachments

Original for 850: Lindsey Kimmitt, ENV PM
Cc w/ attachments: PA project file; ETS Data Entry; Robert Hall, Dallas District Environmental Coordinator
Cc w/out attachments: Barbara Hickman, ENV Archeologist

MEMO

October 17, 2014

To: 850 File, Various Road Projects, Various CSJs, Various Districts

From: Scott Pletka, Ph.D.

Subject: Internal review under the First Amended Programmatic Agreement Among the Federal Highway Administration, the Texas Department of Transportation, the Texas State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings (PA-TU), and internal review under the Memorandum of Understanding (MOU) Between the Texas Historical Commission and the Texas Department of Transportation

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Listed below, are the projects reviewed internally by qualified TxDOT archeologists from 10/9/14 to 10/17/14. These projects either do not warrant survey as a result of a low probability of encountering archeological historic properties and State Archeological Landmarks, or the projects were inspected by survey or impact evaluation and do not warrant further work. As provided under the PA-TU, consultation with the Texas State Historic Preservation Officer is not necessary for these undertakings. As provided under the MOU, the proposed projects do not require individual coordination with the Texas Historical Commission.

CSJ	DISTRICT	ROADWAY	WORK PERFORMED
0911-39-042 0911-39-043 0911-39-044 0911-39-045	Lufkin	CR 4323	No Survey
0083-02-048	Paris	SH 11	No Survey
0910-08-065	Tyler	CR 4801	No Survey
0442-02-088	Dallas	US 67	No Survey
0913-09-050	Yoakum	CR 409	No Survey
0913-09-051	Yoakum	CR 242	No Survey
0913-09-057	Yoakum	CR 231	No Survey

Signature _____ Date: 10 / 17 / 2014

For FHWA and TxDOT

cc: ECOS Data Entry; PD; ENV_ARC: PA File *Table Template for Weekly List Memo.doc*

MEMO

January 29, 2016

To: 850 File, Various Road Projects, Various CSJs, Various Districts

From: Scott Pletka, Ph.D.

Subject: Internal review under the First Amended Programmatic Agreement Among the Federal Highway Administration, the Texas Department of Transportation, the Texas State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings (PA-TU), and internal review under the Memorandum of Understanding (MOU) Between the Texas Historical Commission and the Texas Department of Transportation

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Listed below are the projects reviewed internally by qualified TxDOT archeologists from 1/21/16 to 1/26/16. The projects will have no effect on archeological historic properties. As provided under the PA-TU, consultation with the Texas State Historic Preservation Officer is not necessary for these undertakings. As provided under the MOU, the proposed projects do not require individual coordination with the Texas Historical Commission.

CSJ	DISTRICT	COUNTY	ROADWAY	DESCRIPTION	WORK PERFORMED
0062-01-035	Atlanta	Bowie & Cass	SH 8	Bridge Replacement	Intensive Survey
0335-01-031	Bryan	Leon	SH 7	Roadway Widening	No Survey
1111-07-004	Corpus Christi	Nueces	US 77	Backage Road	No Survey
0442-02-088	Dallas	Dallas	IH 35E	Add Drainage Easement	No Survey
0073-08-183	San Antonio	Bexar	IH 37	Add Southbound Frontage Road	No Survey
0215-02-056	San Antonio	Comal	Landa Street	Bicycle and Pedestrian Facility	No Survey
0215-06-039	San Antonio	Kendall	SH 46	Road Improvements	No Survey

Signature _____ Date: 01 / 29 / 2015

For TxDOT

cc: ECOS Data Entry; PD; ENV_ARC: PA File *Table Template for Weekly List Memo.doc*

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

Scott Ford

From: NEPA <NEPA@tceq.texas.gov>
Sent: Wednesday, February 04, 2015 3:31 PM
To: Scott Ford
Cc: Sandra Williams
Subject: RE: Water Quality Review, Southern Gateway Managed Lanes Project, Dallas County, CSJs 0442-02-088, etc.

The Texas Commission on Environmental Quality (TCEQ) received the Texas Department of Transportation's (TxDOT) request for environmental review of the following project: **Southern Gateway Managed Lanes Project, Dallas County, CSJs 0442-02-088, etc.**

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

TCEQ does not have any comments.

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

If you have any questions, please feel free to contact Ms. Elizabeth McKeefer, CAPM, NEPA Coordinator, at (512) 239-2997 or NEPA@tceq.texas.gov.

From: Scott Ford [mailto:Scott.Ford@txdot.gov]
Sent: Wednesday, January 28, 2015 9:33 AM
To: TxDot
Cc: Sandra Williams
Subject: Water Quality Review, Southern Gateway Managed Lanes Project, Dallas County, CSJs 0442-02-088, etc.

Hello,

TxDOT requests the TCEQ evaluate the Southern Gateway Managed Lanes project according to 43 TAC 2.305. As part of this project, TxDOT proposes improvements to IH 35E from IH 20 to Reunion Blvd. (10.5 miles) and along US 67 from FM 1382 to the IH 35E/US 67 Split (9.4 mi.) in Dallas County, Texas.

At this time, we are requesting a water quality evaluation of the water quality environmental report. At a later date, we will request evaluation of an air quality environmental report.

An electronic version of the water quality environmental report will be transmitted to your office using our FTP system. Please let me know if you have any questions.

Thanks,
Scott Ford, AICP
Project Delivery Manager
TxDOT- Environmental Affairs
Phone: (512) 416-2687
email: SFORD@dot.state.tx.us

Drive Smart in Winter Weather

Leslie Mirise

From: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Sent: Wednesday, April 27, 2016 3:05 PM
To: Leslie Mirise
Cc: Dan Perge; Sandra Williams; Scott Ford; John Nguyen; Jan Heady; Stirling Robertson
Subject: RE: CSJ 0442-02-088 The Southern Gateway Project, Early Coordination
Attachments: 0442-02-088_TSG_TPWD_Coord_Complete_4-14-15.pdf

Good afternoon, Leslie,

Thank you for submitting the Southern Gateway Project (CSJ 0442-02-088) in Dallas County for early coordination. TPWD appreciates TxDOT's commitment to implement the Best Management Practices discussed in the information provided and attached to this email. Based on a review of the project description and the avoidance and minimization efforts described, and provided that the project plans do not change, TPWD considers coordination to be complete. However, please note it is the responsibility of the project proponent to comply with all federal, state, and local laws that protect fish, wildlife, and plants.

Sincerely,

Laura Zebehazy, CWB
Transportation Conservation Coordinator
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: Leslie Mirise [mailto:Leslie.Mirise@txdot.gov]
Sent: Tuesday, April 26, 2016 3:06 PM
To: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Cc: Dan Perge <Dan.Perge@txdot.gov>; Sandra Williams <Sandra.Williams2@txdot.gov>; Scott Ford <Scott.Ford@txdot.gov>; John Nguyen <John.Nguyen@txdot.gov>; Jan Heady <Jan.Heady@txdot.gov>; Stirling Robertson <Stirling.Robertson@txdot.gov>
Subject: RE: CSJ 0442-02-088 The Southern Gateway Project, Early Coordination

Hi Laura,

The following additional information is provided in response to your questions 2 & 3:

2. TxDOT would implement the TxDOT commitments and responses to TPWD recommendation per the previous coordination (completion date April 14, 2015) as applicable to the revised project scope/project area (see below) and site conditions. I've attached that coordination documentation to this email for reference.

3. The project area is in the range and suitable habitat of the same state-listed/SGCN species as the previous coordination with the exception that Texas milk vetch (a SGCN) has since been added to the TPWD County List. As stated in the Biological Evaluation Form under the Tier 1 site assessment #2 Explanation, "Texas milk vetch suitable habitat may be present along roadside ditches with clay soils which occur along US 67 from I-20 to Red Bird Ln and again on US 67 around Sunny Glen Dr. Due to no proposed ROW at these locations and the existing ROW being maintained, it is unlikely for the Texas milk vetch to occur within the proposed project area." A full-scale site survey for individual Texas milk vetch plants has not been performed.

Please let me know if you have any questions or need further information.

Thanks,

Leslie Mirise
Environmental Specialist
Dallas District – Advance Planning
Texas Department of Transportation
4777 East Highway 80
Mesquite, Texas 75150
(214) 320-6162 office
(214) 320-4470 FAX

From: John Nguyen
Sent: Tuesday, April 26, 2016 2:18 PM
To: Laura Zebehazy; Leslie Mirise
Cc: Dan Perge; Sandra Williams; Scott Ford
Subject: RE: CSJ 0442-02-088 The Southern Gateway Project, Early Coordination

Laura and Leslie,
Below is the project scope clarification.

The scope of the 2015 project included:
Total reconstruction of IH 35E from Colorado to US 67, with 2 lanes of reversible tolled HOV/managed lanes. Also, for IH 35E from US 67 to I-20 we only add 1 lane of reversible Tolled HOV/managed lane in the center median; for US 67 from IH 35E to I-20, we are adding 2 lanes of reversible Tolled HOV/managed lanes in the center median; and for US 67 from I-20 to FM 1382 we are adding 1 lane of reversible Tolled HOV/managed lane in the center median.

The current project scope 2016:
Total reconstruction of IH 35E from Colorado to US 67, with 2 lanes of reversible NON-tolled Express lanes (same as previous). IH 35E scope from US 67 to I-20 is removed; for US 67 from IH 35E to I-20, we are adding 1 lanes (instead of 2) of reversible NON-tolled Express lanes in the center median and adding 3rd general purpose lane; and US 67 scope from I-20 to FM 1382 is removed.

See attached maps for previous and current scopes. Let me know if you have any questions.

From: Laura Zebehazy [mailto:Laura.Zebehazy@tpwd.texas.gov]
Sent: Tuesday, April 26, 2016 2:00 PM
To: Leslie Mirise
Cc: Dan Perge; John Nguyen; Sandra Williams; Scott Ford
Subject: RE: CSJ 0442-02-088 The Southern Gateway Project, Early Coordination

Good afternoon, Leslie,

I have begun my preliminary review of the Southern Gateway Project in Dallas County, and I have a couple of questions:

- Can you describe what exactly has changed about the project description for this project versus when the project was coordinated with TPWD April of 2015? Providing this specificity will allow me to focus my review to the revised portions of this project since it was reviewed just one year ago.
- Is TxDOT going to implement the TPWD recommendations from the coordination correspondence from March 2015 for this revised project?

- Was the project area surveyed for Texas milk-vetch?

Please let me know if you have any questions,
Laura

Laura Zebehazy, CWB
Transportation Conservation Coordinator
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: WHAB_TxDOT
Sent: Tuesday, April 12, 2016 4:28 PM
To: Leslie Mirise <Leslie.Mirise@txdot.gov>; WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Cc: Dan Perge <Dan.Perge@txdot.gov>; John Nguyen <John.Nguyen@txdot.gov>; Sandra Williams <Sandra.Williams2@txdot.gov>; Scott Ford <Scott.Ford@txdot.gov>; Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Subject: RE: CSJ 0442-02-088 The Southern Gateway Project, Early Coordination

Good afternoon,

The TPWD Wildlife Habitat Assessment Program has received your request for Early Coordination and has assigned it project ID #36485. The Habitat Assessment Biologist who will complete your project review is copied on this email.

Thank you,
Gloria Garza
Administrative Assistant
Texas Parks and Wildlife Dept
Wildlife Division - Habitat Assessment Program
4200 Smith School Rd
Austin, TX 78744

Office: (512) 389-4571
Fax: (512) 389-4599

gloria.garza@tpwd.texas.gov

Support Texas Wildlife!
Order a conservation license plate today at www.conservationplate.org

From: Leslie Mirise [mailto:Leslie.Mirise@txdot.gov]
Sent: Tuesday, April 12, 2016 2:47 PM
To: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Cc: Dan Perge <Dan.Perge@txdot.gov>; John Nguyen <John.Nguyen@txdot.gov>; Sandra Williams <Sandra.Williams2@txdot.gov>; Scott Ford <Scott.Ford@txdot.gov>
Subject: CSJ 0442-02-088 The Southern Gateway Project, Early Coordination

Hello,

Early coordination was completed for the above project (by TPWD biologist Karen Hardin) on April 14, 2015. However, the project description has changed; therefore, TxDOT requests Early Coordination for The Southern Gateway Project (CSJ 0442-02-088). I have attached the following:

1. The Biological Evaluation Form, that contains a summarized project description, the Tier 1 Site Assessment, and BMPs to be implemented;
2. The Biological Evaluation Supporting Documents, that contains the project area map and limits, EMST documentation, and NDD EOID results; and
3. The Biological Technical Report and Attachments which is a comprehensive biological analysis of the project and includes all of the previously mentioned information.

These documents are also available in ECOS under the CSJ 0442-02-088, Documents/Biology section.

Please feel free to contact me with an questions or if you need any additional information.

Sincerely,

Leslie Mirise
Environmental Specialist
Dallas District – Advance Planning
Texas Department of Transportation
4777 East Highway 80
Mesquite, Texas 75150
(214) 320-6162 office
(214) 320-4470 FAX

APPENDIX E: SUPPLEMENTAL DATA

Public And Agency Involvement

TxDOT Public Meeting

TxDOT has held and will continue to hold public meetings for stakeholders, the general public, local and elected officials, and special interest groups to gather input and answer questions. The past public meetings for the proposed project include:

Past Public Meetings:

March 27, 2014
Hilton Garden Inn
Duncanville, Texas

June 23, 2015
Cedar Hill Recreation Center
Cedar Hill, Texas

June 25, 2015
Hilton Garden Inn
Duncanville, Texas

July 7, 2015
DeSoto Recreation Center,
DeSoto, Texas

July 9, 2015
Beckley-Saner Recreation Center,
Dallas, Texas

January 26, 2016
Beckley-Saner Recreation Center,
Dallas, Texas

January 28, 2016
Thurgood Marshall Recreation Center,
Dallas, Texas

Stakeholder Public Forum

Several public forums have been organized by stakeholders. The purpose of the forums was to discuss the proposed project. At the request of forum organizers, TxDOT participated in the forums by presenting project information and answering questions.

Past Public Forums:

November 11, 2014
Southern Dallas Transportation
Forum Project Update
Southwest Center Mall, Dallas, Texas

January 13, 2015
City of Dallas Councilmembers
Griggs and Caraway Public
Transportation Forum
Methodist Hospital, Dallas, Texas

March 21, 2015
Senator West, Eggs & Issues
Transportation Forum
University of North Texas at Dallas,
Dallas, Texas

March 30, 2015
City of Dallas Councilmembers
Griggs and Caraway Public
Transportation Forum
Beckley-Saner Recreation Center,
Dallas, Texas *(Organized by CM Scott Griggs)*

September 9, 2015
Texas Representative Rafael Anchia and
Oak Cliff Stakeholders
Oak Cliff Chamber of Commerce,
Dallas, Texas *(Organized by Oak Cliff Chamber of Commerce)*

October 22, 2015
Texas Representative Yvonne Davis,
City of Dallas Councilmember Carolyn
King Arnold and Oak Cliff Stakeholders
Beckley-Saner Recreation Center,
Dallas, Texas *(Organized by Yvonne Davis)*

November 9, 2015
Lunch & Learn Councilwoman (CM)
Arnold for Southern Gateway
Ann's Health Food Center,
Dallas, Texas *(Organized by Citizen Task Force and Kessler Park Neighborhood Association)*

November 10, 2015
Texas State Representative Linda Koop,
Rafael Anchia and Oak Cliff Stakeholders
Methodist Hospital,
Dallas, Texas

December 1, 2015
District 8 Community Input Meeting
Southwest Center Mall,
Dallas, Texas

TxDOT Public Hearing

TxDOT will conduct a public hearing for stakeholders, the general public, local and elected officials, and special interest groups to provide project design information, project alternatives and environmental findings.

Planned Public Hearing:

Summer 2016

TxDOT Public Meetings and Public Hearings are conducted in accordance with the requirements of 23 CFR 771.111 and 43 TAC Part 1, Chapter 2, Subchapter E and other federal requirements as part of the NEPA process.

APPENDIX F: PLANNING DOCUMENTATION

Corridor ID	Corridor	MTP ID	Facility	From	To	2017*	2027*	2037*	2040*	Description	YOE Corridor Cost
42	Southern Gateway	7.80.3	IH 35E	Colorado Blvd	8th Street	8 (Frwy) + 1 (HOV-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	Widen from 8 to 10 lanes & additional reversible Express Lanes	$705,500,000
	Southern Gateway	7.80.4	IH 35E	8th Street	Marsalis Avenue	8 (Frwy) + 1 (HOV-R), 4 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	Widen from 8 to 10 lanes & additional reversible Express Lanes	
	Southern Gateway	7.80.5	IH 35E	Marsalis Avenue	US 67	8 (Frwy) + 1 (HOV-R), 4/6 (Frtg-D)	10 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	10 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	10 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	Widen from 8 to 10 lanes & additional reversible Express Lanes	
	Southern Gateway	7.90.1	IH 35E	US 67	Laureland Road	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy) + 1 (ExL-R), 4/6 (Frtg-D)	Reconstruct general purpose lanes and construct 1 reversible Express Lane	
	Southern Gateway	7.90.2	IH 35E	Laureland Road	IH 20	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)	Reconstruct general purpose lanes	
	Southern Gateway	38.10.1	US 67	IH 35E	IH20	4 (Frwy) + 2 (HOV-C), 4 (Frtg-D)	6 (Frwy) + 1 (ExL-R), 2/6 (Frtg-D)	6 (Frwy) + 1 (ExL-R), 2/6 (Frtg-D)	6 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	Widen from 4 to 6 lanes	
	Southern Gateway	38.20.1	US 67	IH 20	Belt Line Road	4 (Frwy), 4 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	Widen from 4 to 6 lanes	
43	Trinity Parkway	29.10.1	SM Wright	IH 45	US 175/SH 310	6 (Frwy), 4 (Frtg-D)	6 (Art)	6 (Art)	6 (Art)	Downgrade 6-lane freeway to 6-lane arterial	$1,849,621,000
	Trinity Parkway	26.10.1	Trinity Pkwy	SH 183/IH 35E	Woodall Rodgers Freeway	0	0	4 (Toll)	6 (Toll)	Phase construct new 6-lane toll road	
	Trinity Parkway	26.10.2	Trinity Pkwy	Woodall Rodgers Freeway	IH 45/US 175	0	0	4 (Toll), 4 (Frtg-D)	6 (Toll), 4 (Frtg-D)	Phase construct new 6-lane toll road	
	Trinity Parkway	26.20.1	Trinity Pkwy	IH 45/US 175	SH 310	0	4 DC, 6 (Frtg-D)	4 (Frwy) + 4 DC, 6 (Frtg-D)	6 (Frwy) + 4 DC, 6 (Frtg-D)	Phase construct new 6-lane toll road with 4 Direct Connectors	
44	US 175	36.10.1	US 175	SH 310	Lake June Road	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	8 (Frwy), 4/6 (Frtg-D)	8 (Frwy), 4/6 (Frtg-D)	Cap/Main reconstruct & widen 6 to 8 lanes	$303,143,666
	US 175	36.10.2	US 175	Lake June Road	IH 20	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	6 (Frwy), 4 (Frtg-C)	Cap/Main reconstruct & safety improvements	
	US 175	36.20.2	US 175	IH 20	Loop 9	4 (Frwy), 4 (Frtg-C)	4 (Frwy), 4 (Frtg-C)	4 (Frwy), 4 (Frtg-C)	4 (Frwy), 4 (Frtg-C)	Cap/Main reconstruct & safety improvements	
45	US 287 (Ellis County)	1.110.6	US 287	SH 34	IH 45	2 (Art)	4 (Frwy), 4 (Frtg-D)	4 (Frwy), 4 (Frtg-D)	4 (Frwy), 4 (Frtg-D)	Upgrade 2-lane arterial to 4-lane freeway	$97,031,838
46	US 75 (North Collin County)	23.10.1	US 75	CR 375 (Grayson County line)	Melissa Road	4 (Frwy), 4 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	Widen 4 to 6 lanes	$186,034,091

(HOV/ExL-C) – Concurrent HOV/Express Lanes; (HOV-C) – Concurrent HOV Lanes; (HOV-R) – Reversible HOV Lanes; (ExL-C) – Concurrent Express Lanes; (ExL-R) – Reversible Express Lanes; (ML/T-C) – Concurrent Tolled Managed Lanes; (ML/T-R) – Reversible Tolled Managed Lanes; (Frwy) – Freeway; (Frtg-C/D) – Min/Max Lanes of Continuous or Discontinuous Frontage; (Art) – Arterial Road; CD – Collector Distributor; DC – Direct Connector; Cap/Main – A program to provide low-cost improvements which may include auxiliary lanes and ramp reconfiguration for bottleneck improvements, shoulder widening for increased capacity and frontage road improvements

*Auxiliary lanes and lane drops may exist in the corridor but are not included in this report.
**Number of lanes (in 2017) represent the available number of lanes in the peak-period only.

Mobility 2040
Freeway/Tollway Recommendations

DRAFT

Corridor ID	Corridor	MTP ID	Facility	From	To	2017 *	2027 *	2037 *	2040 *	Description	YOE Corridor Cost
42	Southern Gateway/ Horseshoe	FT1- 7.80.1 FT1- 28.50.6	IH 35E	IH 30 *(West)*	IH 30 *(East)*	11 (Frwy) +6 CD + 2 (HOV-R), 2 WB (Frtg-D)	11 (Frwy) +6 CD + 2 (ExL-R), 2 WB (Frtg-D)	11 (Frwy) +6 CD + 2 (ExL-R), 2 WB (Frtg-D)	11 (Frwy) +6 CD + 2 (ExL-R), 2 WB (Frtg-D)	Operational change to convert HOV lanes to Express Lanes	
	Southern Gateway/ Horseshoe	FT1- 7.80.2	IH 35E	IH 30 *(East)*	Colorado Blvd	7 (Frwy) + 9 CD + 2 (HOV-R)	7 (Frwy) + 9 CD + 2 (ExL-R)	7 (Frwy) + 9 CD + 2 (ExL-R)	7 (Frwy) + 9 CD + 2 (ExL-R)	Operational change to convert HOV lanes to Express Lanes	
	Southern Gateway	FT1- 7.80.3	IH 35E	Colorado Blvd	8th St	8 (Frwy) + 1 (HOV-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	Widen from 8 to 10 lanes & additional reversible Express Lanes	$705,500,000
	Southern Gateway	FT1- 7.80.4	IH 35E	8th St	Marsalis Ave	8 (Frwy) + 1 (HOV-R), 4 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ExL-R), 4/6 (Frtg-C)	Widen from 8 to 10 lanes & additional reversible Express Lanes	
	Southern Gateway	FT1- 7.80.5	IH 35E	Marsalis Ave	US 67	8 (Frwy) + 1 (HOV-R), 4/6 (Frtg-D)	10 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	10 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	10 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	Widen from 8 to 10 lanes & additional reversible Express Lanes	
	Southern Gateway	FT1- 7.90.1	IH 35E	US 67	Laureland Road	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy) + 1 (ExL-R), 4/6 (Frtg-D)	Reconstruct general purpose lanes and construct 1 reversible Express Lane	
	Southern Gateway	FT1- 7.90.2	IH 35E	Laureland Road	IH 20	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)	Reconstruct general purpose lanes	
	Southern Gateway	FT1- 38.10.1	US 67	IH 35E	IH20	4 (Frwy) + 2 (HOV-C), 4 (Frtg-D)	6 (Frwy) + 1 (ExL-R), 2/6 (Frtg-D)	6 (Frwy) + 1 (ExL-R), 2/6 (Frtg-D)	6 (Frwy) + 2 (ExL-R), 2/6 (Frtg-D)	Widen from 4 to 6 lanes	
	Southern Gateway	FT1- 38.20.1	US 67	IH 20	Belt Line Rd	4 (Frwy), 4 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	Widen from 4 to 6 lanes	

Modifications to March 2016 RTC aproved/2016 Transportation Conformity submittal

(HOV/ExL-C) - Concurrent HOV/Express Lanes

(HOV-C) - Concurrent HOV Lanes, (HOV-R) - Reversible HOV Lanes

(ExL-C) - Concurrent Express Lanes, (ExL-R) - Reversible Express Lanes

(ML/T-C) - Concurrent tolled Managed Lanes, (ML/T-R) - Reversible tolled Managed Lanes

(Frwy) - Freeway, (Frtg-C/D) - Min/Max Lanes of Continuous or Discontinuous Frontage, (Art) - Arterial road

CD - Collector Distributor, DC - Direct Connector

Cap/Main - A program to provide low cost improvements which may include; auxiliary lanes and ramp reconfiguration for bottleneck improvements, shoulder widening for increased capacity and frontage road improvements.

*** Auxiliary lanes and lane drops may exist in the corridor but are not included in this report.**

**** Number of lanes (in 2017) represent the available number of lanes in the peak-period only.**

Source: North Central Texas Council of Governments

2017-2020 STIP			07/2016 Revision: Pending Approval				
DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
DALLAS	DALLAS-FORT WORTH	DENTON	0918-46-288	VA	T	VARIOUS	$ 895,050

LIMITS FROM: REGIONAL VANPOOL PROGRAM
LIMITS TO:
PROJECT DESCR: OPERATE A VANPOOL SUBSIDY INITIATIVE FOR COMMUTERS TRAVELING LONG DISTANCES AND IN AREAS WITH LITTLE OR NO FIXED ROUTE SERVICE
REMARKS P7:
PROJECT HISTORY:
PROJECT SPONSOR: DCTA
REVISION DATE: 07/2016
MPO PROJ NUM: 11639
FUNDING CAT(S):

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 0
ROW PURCH	$ 0
CONSTR	$ 895,050
CONST ENG	$ 0
CONTING	$ 0
INDIRECT	$ 0
BOND FIN	$ 0
PT CHG ORD	$ 0
TOTAL CST	$ 895,050

COST OF APPROVED PHASES: $ 895,050

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
7	$ 313,267	$ 0	$ 0	$ 581,783	$ 0	$ 895,050
TOTAL	$ 313,267	$ 0	$ 0	$ 581,783	$ 0	$ 895,050

2017-2020 STIP			07/2016 Revision: Pending Approval				
DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
DALLAS	DALLAS-FORT WORTH	DALLAS	0261-03-030	US 67	C,E,ENG,R,ACQ,UTL	DALLAS	$ 98,987,794

LIMITS FROM: IH 20
LIMITS TO: IH 35E
PROJECT DESCR: WIDEN 4 TO 6 MAINLANES, RECONSTRUCT EXISTING 2 LANE CONCURRENT TO 1 REVERSIBLE E XPRESS LANE
REMARKS P7: SOUTHERN GATEWAY CORRIDOR; CMAQ FOR INTERSECTION IMPROVEMENTS, SIDEWALKS, BIKE LANES, & TEXAS UTURN BR IDGE; RTR121-DA1
PROJECT HISTORY: CLARIFIED FROM LIMIT AS IH 20 VS. SOUTH OF IH 20; RELATED TO TIP 54008/CSJ 0442-02-088
PROJECT SPONSOR: TXDOT-DALLAS
REVISION DATE: 07/2016
MPO PROJ NUM: 54085
FUNDING CAT(S):

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 12,911,451
ROW PURCH	$ 6,503,800
CONSTR	$ 79,572,543
CONST ENG	$ 2,644,249
CONTING	$ 110,690
INDIRECT	$ 3,529,765
BOND FIN	$ 0
PT CHG ORD	$ 0
TOTAL CST	$ 105,272,498

COST OF APPROVED PHASES: $ 98,987,794

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
2M	$ 8,000,000	$ 2,000,000	$ 0	$ 0	$ 0	$ 10,000,000
3RTR121	$ 0	$ 0	$ 19,580,000	$ 0	$ 0	$ 19,580,000
5	$ 4,550,662	$ 1,137,665	$ 0	$ 0	$ 0	$ 5,688,327
7	$ 30,775,574	$ 7,693,893	$ 0	$ 0	$ 0	$ 38,469,467
12	$ 20,200,000	$ 5,050,000	$ 0	$ 0	$ 0	$ 25,250,000
TOTAL	$ 63,526,236	$ 15,881,558	$ 19,580,000	$ 0	$ 0	$ 98,987,794

2017-2020 STIP			07/2016 Revision: Pending Approval				
DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
DALLAS	DALLAS-FORT WORTH	DALLAS	0196-03-269	IH 35E	C,E,ENG	DALLAS	$ 2,762,760

LIMITS FROM: IH 30
LIMITS TO: REUNION BLVD
PROJECT DESCR: CONVERT EXISTING 2 REVERSIBLE HOV LANES TO 2 REVERSIBLE EXPRESS LANES
REMARKS P7: SOUTHERN GATEWAY CORRIDOR
PROJECT HISTORY: CLARIFIED RECONSTRUCT TO CONVERT
PROJECT SPONSOR: TXDOT-DALLAS
REVISION DATE: 07/2016
MPO PROJ NUM: 55093
FUNDING CAT(S):

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 360,360
ROW PURCH	$ 0
CONSTR	$ 2,402,400
CONST ENG	$ 161,228
CONTING	$ 6,749
INDIRECT	$ 215,221
BOND FIN	$ 0
PT CHG ORD	$ 0
TOTAL CST	$ 3,145,958

COST OF APPROVED PHASES: $ 2,762,760

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
5	$ 249,600	$ 62,400	$ 0	$ 0	$ 0	$ 312,000
7	$ 1,960,608	$ 490,152	$ 0	$ 0	$ 0	$ 2,450,760
TOTAL	$ 2,210,208	$ 552,552	$ 0	$ 0	$ 0	$ 2,762,760

PHASE: C = CONSTRUCTION, E = ENGINEERING, R = ROW, T = TRANSFER

2017-2020 STIP — **07/2016 Revision: Pending Approval**

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
DALLAS	DALLAS-FORT WORTH	DALLAS	0442-02-088	IH 35E	C,E,ENG,R,ACQ,UTL	DALLAS	$ 562,237,446

LIMITS FROM: US 67
LIMITS TO: IH 30
PROJECT SPONSOR: TXDOT-DALLAS
REVISION DATE: 07/2016
MPO PROJ NUM: 54008
FUNDING CAT(S):

PROJECT DESCR: CONVT 2 REV HOV TO 2 EXP LN FROM IH 30 TO COLORADO; RECONST & WIDEN 8 TO 10 GP L N & RECONST 1 REV HOV TO 2 REV EXP LN FROM COLORADO TO US 67; RECONST 4/6 LN CON T FRTG RD FROM COLORADO TO MARSALIS; RECONST 4/6 TO 2/6 LN DIS FRTG RD FROM MARS ALIS TO US 67

REMARKS P7: CMAQ FOR SIDEWALKS, BIKE LANES, TEXAS U-TURN BRIDGE S, & INTERSECTION IMPROVEMENTS (5) ONLY; SOUTHERN G ATEWAY CORRIDOR; RTR121-DA1

PROJECT HISTORY

TOTAL PROJECT COST INFORMATION

PREL ENG	$	65,711,462	
ROW PURCH	$	49,816,475	COST OF APPROVED PHASES
CONSTR	$	446,709,509	$ 562,237,446
CONST ENG	$	14,847,301	
CONTING	$	621,514	
INDIRECT	$	19,819,420	
BOND FIN	$	0	
PT CHG ORD	$	0	
TOTAL CST	$	597,525,681	

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
2M	$ 32,000,000	$ 8,000,000	$ 0	$ 0	$ 0	$ 40,000,000
3RTR121	$ 0	$ 0	$ 20,000,000	$ 0	$ 0	$ 20,000,000
5	$ 38,647,738	$ 9,661,935	$ 0	$ 0	$ 0	$ 48,309,673
7	$ 10,551,818	$ 2,637,955	$ 0	$ 0	$ 0	$ 13,189,773
11	$ 208,000,000	$ 52,000,000	$ 0	$ 0	$ 0	$ 260,000,000
12	$ 112,590,400	$ 28,147,600	$ 0	$ 0	$ 0	$ 140,738,000
S102	$ 32,000,000	$ 4,000,000	$ 0	$ 4,000,000	$ 0	$ 40,000,000
TOTAL	$ 433,789,956	$ 104,447,490	$ 20,000,000	$ 4,000,000	$ 0	$ 562,237,446

2017-2020 STIP — **07/2016 Revision: Pending Approval**

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
DALLAS	DALLAS-FORT WORTH	DALLAS	0353-05-089	SP 244	E,ENG	DALLAS	$ 50,000

LIMITS FROM: ON NORTHWEST HIGHWAY (SPUR 244)
LIMITS TO: AT PLANO RD
PROJECT SPONSOR: TXDOT-DALLAS
REVISION DATE: 07/2016
MPO PROJ NUM: 537
FUNDING CAT(S):

PROJECT DESCR: TRAFFIC SIGNAL AND PEDESTRIAN IMPROVEMENTS

REMARKS P7:

PROJECT HISTORY

TOTAL PROJECT COST INFORMATION

PREL ENG	$	50,000	
ROW PURCH	$	0	COST OF APPROVED PHASES
CONSTR	$	522,500	$ 50,000
CONST ENG	$	100,593	
CONTING	$	117,358	
INDIRECT	$	66,056	
BOND FIN	$	0	
PT CHG ORD	$	0	
TOTAL CST	$	856,507	

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
SBPE	$ 0	$ 50,000	$ 0	$ 0	$ 0	$ 50,000
TOTAL	$ 0	$ 50,000	$ 0	$ 0	$ 0	$ 50,000

2017-2020 STIP — **07/2016 Revision: Pending Approval**

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
DALLAS	DALLAS-FORT WORTH	DENTON	0353-02-053	SH 114	R,ACQ	ROANOKE	$ 100,000

LIMITS FROM: AT UP RAILROAD UNDERPASS
LIMITS TO: IN ROANOKE DOT NO 795 342V
PROJECT SPONSOR: TXDOT-DALLAS
REVISION DATE: 07/2016
MPO PROJ NUM: 51060
FUNDING CAT(S):

PROJECT DESCR: REPLACE RAILROAD UNDERPASS

REMARKS P7: CAT 2M FUNDS ARE PROP 1 FUNDS

PROJECT HISTORY

TOTAL PROJECT COST INFORMATION

PREL ENG	$	400,000	
ROW PURCH	$	100,000	COST OF APPROVED PHASES
CONSTR	$	9,065,800	$ 100,000
CONST ENG	$	514,031	
CONTING	$	104,541	
INDIRECT	$	391,420	
BOND FIN	$	0	
PT CHG ORD	$	0	
TOTAL CST	$	10,575,792	

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
S102	$ 80,000	$ 20,000	$ 0	$ 0	$ 0	$ 100,000
TOTAL	$ 80,000	$ 20,000	$ 0	$ 0	$ 0	$ 100,000

APPENDIX G: TRAFFIC NOISE TECHNICAL REPORT

Traffic Noise Technical Report

I-35E/US 67 Project
Dallas District

I-35E from US 67 to I-30 and
US 67 from I-20 to I-35E
CSJ: 0442-02-088, 0196-03-269, 0261-03-030, 0918-47-965
Dallas County, Texas

Prepared by: HNTB Corporation
July 2016

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

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TABLES

ATTACHMENTS

1. Introduction

The Texas Department of Transportation (TxDOT) proposes improvements to Interstate Highway 35 East (I-35E) from U.S. Highway 67 (US 67) to Interstate Highway 30 (I-30) and along US 67 from Interstate Highway 20 (I-20) to I-35E a total of approximately 11 miles in Dallas County, Texas. The I-35E/US 67 project (proposed project) has been referred to in the past as the "Southern Gateway Managed Lanes Project" (see **Attachment A, Exhibit 1: Project Location Map**).

The proposed project is located within a predominantly urban area. Residential, commercial (restaurants, gas stations, auto service, motels, retail, etc.), recreational, and undeveloped properties are located adjacent to the proposed project. Along the west side of I-35E, land use is primarily commercial and office space, while the east side is primarily residential with some public buildings located north of 8th St. From Ewing Ave. to Clarendon St., the land use is generally retail/commercial. The Dallas Zoo and the 10th Historic District are located on the east side of I-35E. South of Clarendon St., I-35E crosses over the Dallas Area Rapid Transit (DART) rail line and Cedar Creek. Between Cedar Creek and the I-35E/US 67 split, the primary land use is residential, with scattered retail. Dallas Executive Airport is located on the west side of US 67. North of Red Bird Lane (Ln.), residential is the primary land use with some retail development. South of Red Bird Ln., vacant land and retail are the primary land uses, although there are some residential areas. Southwest Center Mall is located at the northwest corner of US 67 and I-20. In the section north of I-20, there are two parks located adjacent to US 67, Thurgood Marshall Recreation Center and Boulder Park. Five Mile Creek and Woody Branch cross US 67. Several places of worship are located within project limits. **Attachment C** includes representative photographs of the surrounding area.

A traffic noise analysis was prepared in accordance with the TxDOT's Federal Highway Administration (FHWA) approved 2011 *Guidelines for Analysis and Abatement of Roadway Traffic Noise* and to support the environmental document that evaluates the social, economic, and environmental impacts resulting from the proposed project.

1.1. Existing Facility

I-35E between Colorado Blvd. and Reunion Blvd. consists of 5 northbound and 4 southbound mainlanes that include an 11-foot (ft) wide reversible high occupancy vehicle (HOV) lane. This section is currently under construction and was approved as part of the Dallas Horseshoe Project (CSJ. 0196-03-205, etc.) which received A Finding of No Significant Impact on September 18, 2012. Once construction is complete (anticipated 2017), the I-35E northbound bridge will consist of 3 mainlanes; 2 reversible HOV lanes, 5 Collector-Distributor (CD) lanes, and a 6-ft sidewalk. The I-35E southbound bridge would consist of 4 mainlanes, 4 CD lanes; and 6-ft sidewalks along the outside of each CD road. The right-of-way (ROW) at the Dallas Floodway crossing is approximately 848 ft wide.

Along I-35E, the existing lane configuration from US 67 to Colorado Blvd. is 8 mainlanes, 4 in each direction; with one reversible HOV lane. I-35E between Fairshop Dr. (southern limits of construction along I-35E) and US 67 is 6 mainlanes (3 in each direction). South of Colorado Blvd., the existing ROW along I-35E varies from approximately 244 ft to 435 ft.

Along US 67 the existing lane configuration from I-20 to I-35E is 4 mainlanes, 2 in each direction, with 1 concurrent HOV lane. The existing ROW along US 67 varies from approximately 305 ft to 469 ft.

1.2. Proposed Facility

The proposed project would consist of improvements to I-35E between US 67 and I-30 and to US 67 between I-20 and I-35E. The improvements would include roadway reconstruction, conversion of the existing HOV lanes to reversible non-tolled express lanes, addition of reversible non-tolled express lanes and general purpose lanes (mainlanes), along with bicycle and pedestrian accommodations. TxDOT is also planning local enhancements consisting of a deck plaza along I-35E, near Ewing Avenue (Ave.). The enhancements would be funded by and maintained by the City of Dallas. Along I-35E, south of the I-35E/US 67 split, the proposed I-35E improvements would transition into the existing facility near Fairshop Dr. The proposed project is shown in **Attachment A, Exhibit 1: Project Location Map** and described below.

- I-35E between Colorado Blvd. and Reunion Blvd.: Convert 2 existing reversible HOV lanes to 2 reversible non-tolled express lanes.
- I-35E between the US 67 and Colorado Blvd.: Full reconstruction to include 2 reversible non-tolled express lanes, increasing the number of the mainlanes from 8 to 10, and increasing the number of frontage road lanes from 4 to 4/6.
- US 67 from I-20 to I-35E: Partial reconstruction to convert the existing concurrent HOV lane to one reversible non-tolled express lane within the existing median and increasing the number of mainlanes from 4 to 6 along with slip ramp modifications.

The existing and proposed typical sections are included in **Attachment A, Exhibit 2: Typical Sections.**

1.3. Modeling Assumptions

- Existing scenario year: 2017;
- Existing facility configuration;
- Existing posted speed:
    - 65 miles per hour (mph) for mainlanes;
    - 40 mph for frontage roads and ramps
- Proposed modeling year: 2037,
- Proposed project configuration;
- Proposed design speed:
    - 60 mph at mainlanes and express lanes;

  - 40 mph at frontage roads; and
  - 40 mph at ramps
- Draft traffic data, including average daily traffic (ADT), K factor, and vehicle distribution for cars, medium trucks and heavy trucks from the traffic projections approved by the Transportation Planning and Programming Division June 3, 2016, were utilized in the analysis. The traffic analysis for highway design sheets and traffic diagrams for the Build and No-Build scenarios can be found in **Attachment B: Traffic Data**. The following parameters were used in the analysis:
  - K factor of 7.5 percent for I-35E and 9.3 percent for US 67;
  - 96.2 percent cars, 1.3 percent medium trucks, and 2.5 percent heavy trucks for I-35E; and 97.2 percent cars, 1.0 percent medium trucks, and 1.8 percent heavy trucks for US 67.

2. Traffic Noise Background

Sound from highway traffic is generated primarily from a vehicle's tires, engine, and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dB(A)."

Also, because traffic sound levels are never constant due to the changing number, type, and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "Leq."

The traffic noise analysis typically includes the following elements:
- Identification of land use activity areas that might be impacted by traffic noise;
- Determination of existing noise levels;
- Prediction of future noise levels;
- Identification of possible noise impacts; and
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC) for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur (**Table 2-1**).

Table 2-1: Noise Abatement Criteria

Activity Category	FHWA dB(A) Leq	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential.
C	67 (exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.

A noise impact occurs when either the absolute or relative criterion is met:

Absolute criterion: the predicted noise level at a receiver approaches, equals, or exceeds the NAC. "Approach" is defined as 1 dB(A) below the FHWA NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

Relative criterion: the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. "Substantially exceeds" is defined as more than 10 dB(A). For example, a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A) [11 dB(A) increase].

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

2.1. Methodology

FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type, and speed of

vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Existing and predicted traffic noise levels were modeled at receiver locations (**Table 2-2** and **Attachment A, Exhibit 3: Traffic Noise Receiver Locations**) that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement.

Table 2-2: Traffic Noise Levels [dB(A) Leq]

Receiver	NAC Category	NAC dB(A) Leq	Existing	Predicted (2037)	Change (+/-)	Noise Impact
35R1 - Residential	B	67	69	69	0	Yes
35R2 - Residential	B	67	71	71	0	Yes
35R3 - Residential	B	67	71	71	0	Yes
35R4 – Overton Park Apartments	B	67	64	64	0	No
35R6 - Nolan Estes Educational Plaza - School	D	52	44	46	+2	No
35R7 - Nolan Estes Educational Plaza – Active Sport Area	C	67	65	67	+2	Yes
35R8 – 2nd Step Day Care	D	52	50	50	0	No
35R9 – Providence at Village Fair Apartments	B	67	64	64	0	No
35R10 – Faith Family Academy School	D	52	43	44	+1	No
35R11 – Faith Family Academy Playground	C	67	63	64	+1	No
35R12 – Christ for the Nations Institute	D	52	46	45	-1	No
35R13 – Residential	B	67	70	70	0	Yes
35R14 – Residential	B	67	70	72	+2	Yes
35R15 – Residential	B	67	73	74	+1	Yes
35R16 – Residential	B	67	73	70	-3	Yes
35R17 – Succeed in Life Center	D	52	44	41	-3	No
35R18 – Residential	B	67	72	70	-2	Yes
35R19 – Residential	B	67	73	75	+2	Yes
35R20 – Residential	B	67	73	74	+1	Yes
35R21 – Residential	B	67	72	67	-5	Yes
35R22 – Residential	B	67	74	73	-1	Yes
35R23 – Residential	B	67	73	72	-1	Yes
35R24 – Residential	B	67	68	70	+2	Yes
35R26 – Residential	B	67	72	70	-2	Yes
35R27 – Residential	B	67	73	67	-6	Yes
35R28 – Residential	B	67	73	71	-2	Yes
35R29 – Residential	B	67	72	73	+1	Yes
35R30 – Residential	B	67	71	67	-4	Yes
35R33 – Residential	B	67	72	69	-3	Yes
35R34 – Residential	B	67	71	75	+4	Yes
35R35 - Bryan's House Day Care Play Ground	C	67	66	71	+5	Yes
35R35A – Crescent Academy	D	52	50	55	+5	Yes
35R35C – Residential	B	67	64	69	+5	Yes
35R36 - Oak Cliff Christian Church	D	52	47	49	+2	No
35R36A – Oak Cliff Christian Church Outdoors (north)	C	67	69	73	+4	Yes
35R36B – Oak Cliff Christian Church Outdoors (east)	C	67	74	77	+3	Yes
35R37 – Residential	B	67	67	68	+1	Yes
35R38 – Iglesia Apostolica De La Fe En Cristo Church	D	52	53	49	-4	No

Receiver	NAC Category	NAC dB(A) Leq	Existing	Predicted (2037)	Change (+/-)	Noise Impact
35R39 – Residential	B	67	74	74	0	Yes
35R40 - Dallas Zoo	C	67	70	69	-1	Yes
35R41 - Residential	B	67	67	69	+2	Yes
35R42 – Medical Office	D	52	48	49	+1	No
35R43 – Residential	B	67	69	70	+1	Yes
35R45 – City Inn and Suites Motel	E	72	72	69	-3	No
35R46 – Residential	B	67	69	71	+2	Yes
35R47 – Residential	B	67	69	69	0	Yes
35R48 – American Care Academy Day Care	D	52	48	45	-3	No
35R49 – Residential	B	67	72	68	-4	Yes
35R50 – Residential	B	67	67	66	-1	Yes
35R51 – Residential	B	67	72	72	0	Yes
35R52 – Dallas County Courthouse	D	52	43	47	+4	No
35R53 – Kirby's Kreative Day Care	D	52	49	49	0	No
35R54 – Residential (Kovandovitch House)	B	67	70	71	+1	Yes
35R55 – Residential	B	67	70	74	+4	Yes
67R1 – Surrey Row Apartments	B	67	64	68	+4	Yes
67R2 – Delux Inn Motel	E	72	69	68	-1	No
67R3 – Residential	B	67	70	71	+1	Yes
67R4 – Residential	B	67	66	68	+2	Yes
67R5 – Boulder Park	C	67	67	65	-2	No
67R6 – The Way Apartments	B	67	69	70	+1	Yes
67R7 - Residential	B	67	69	69	0	Yes
67R8 – Residential	B	67	67	67	0	Yes
67R9 – Residential	B	67	72	73	+1	Yes
67R10 – Greater Providence Baptist Church	D	52	43	44	+1	No
67R11 – Residential	B	67	70	73	+3	Yes
67R12 – Residential	B	67	72	70	-2	Yes
67R13 – Residential	B	67	71	68	-3	Yes
67R14 – Kirkwood Temple CME Church	D	52	41	41	0	No
67R15 – Kirkwood Temple CME Church Active Sports Area	C	67	67	68	+1	Yes
67R16 – Residential	B	67	71	73	+2	Yes
67R17 – Residential	B	67	63	63	0	No
67R18 – Thurgood Marshall Park	C	67	67	69	+2	Yes
67R19 – Charisma Church of God in Christ	D	52	45	44	-1	No
67R20C – Residential	B	67	66	66	0	Yes
67R21 – Residential	B	67	61	63	+2	No
67R22 – Residential	B	67	61	63	+2	No
67R23 – Residential	B	67	68	67	-1	Yes
67R24 – Spring Ridge Apartments	B	67	69	70	+1	Yes
67R25 – Cornerstone Apartments	B	67	70	70	0	Yes
67R26 – Residential	B	67	67	67	0	Yes

Receiver	NAC Category	NAC dB(A) Leq	Existing	Predicted (2037)	Change (+/-)	Noise Impact
67R27 – Residential	B	67	63	65	+2	No
67R28 - Residential	B	67	70	69	-1	Yes
67R29 - Residential	B	67	69	66	-3	Yes

Source: Study Team (July 2016).

2.2. Conclusion

As indicated in **Table 2-2**, the proposed project would result in a traffic noise impact and the following noise abatement measures were considered: traffic management, alteration of horizontal and/or vertical alignments, acquisition of undeveloped property to act as a buffer zone, and the construction of traffic noise barriers.

Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50 percent of impacted, first row receivers by at least 5 dB(A); and to be "reasonable," it must 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 the abatement measure must be able to reduce the noise level of at least one impacted, first row receiver by at least 7 dB(A).

Traffic management: control devices could be used to reduce the speed of the traffic; however, the minor benefit of 1 dB(A) per 5 miles/hour reduction in speed does not outweigh the associated increase in congestion and air pollution. Other measures such as time or use restrictions for certain vehicles are prohibited on state highways.

Alteration of horizontal and/or vertical alignments: any alteration of the existing alignment would displace existing businesses and residences, require additional ROW, and not be cost effective/reasonable.

Buffer zone: the acquisition of undeveloped property to act as a buffer zone is designed to avoid rather than abate traffic noise impacts and, therefore, is not feasible.

Traffic Noise barriers: this is the most commonly used noise abatement measure. Traffic noise barriers were evaluated for each impacted receiver location with the following results:

35R35A: This receiver represents a daycare facility along Beckley Blvd., just north of Pembroke St. At this location, I-35E mainlanes, are depressed, and the daycare is located along the ROW facing the road, with direct access to Beckley Ave. A noise barrier placed along the inside of Beckley Blvd. (as an extension of proposed barrier No. 18B) was analyzed. Noise barriers up to 18 ft tall provide a reduction of 1 dB(A). Although the barrier would satisfy access requirements, it would not achieve the minimum, feasible reduction of 5 dB(A) or the noise reduction design goal of 7 dB(A).

R35R35C: This receiver represents the houses located along Rockwood St., south of Brooklyn Ave., approximately 180 ft from the east side of the I-35E northbound frontage road. The houses face city streets (Rockwood St.). A noise barrier placed along the inside of Beckley Blvd. (as an extension of proposed barrier No. 18B) and a noise barrier located along the ROW on the outside of the frontage road (as an extension of proposed noise barrier 19A) were analyzed to provide abatement at this receiver. Noise barriers up to 18 ft tall provide a reduction of 2 dB(A) at this receiver. The barriers would

not achieve the minimum, feasible reduction of 5 dB(A) or the noise reduction design goal of 7 dB(A).

35R41, 35R43, 35R46, 35R47, 35R54, 67R4, 67R23: These receivers represent separate, individual single-family residences along the southbound frontage road of either US 67 or I-35E for which access would be provided. Some of the houses are located behind existing structures proposed for relocation as part of the project (35R41 and 35R43). Traffic noise barriers placed along the ROW in front of each house would be relatively short in length, particularly where gaps for driveways would be required to satisfy access requirements and as a result would not achieve the minimum, feasible reduction of 5 dB(A) and the noise reduction design goal of 7 dB(A).

35R55: This receiver represents eight single-family residences adjacent to the I-35E northbound frontage road where the roadway has been reconstructed as part of the Dallas Horseshoe Project. The houses are located at the same general elevation of the frontage roads and at lower elevation than the mainlanes, for which retaining walls have been constructed. Noise barriers along the mainlanes and along the inside of the frontage roads were analyzed in TNM. Results indicate that the mainlane noise barrier would achieve the minimum feasible reduction of 5 dB(A) but would not achieve the design goal of 7 dB(A). A scenario with noise barriers along the mainlanes and along the inside of the frontage road, up to 24 ft tall, would not achieve either the minimum feasible reduction of 5 dB(A) or the design goal of 7 dB(A).

67R3: This receiver represents three single-family residences along the northbound frontage road. The remaining lots in this neighborhood are oriented at a 45 degree angle from the highway and are separated by undeveloped land. A continuous noise barrier, up to 20 ft tall, located along the ROW would not achieve the minimum, feasible reduction of 5 dB(A) at greater than 50% of the impacted receivers.

67R6: This receiver represents multi-family residences (apartments) with some units facing the US 67 southbound frontage road, with driveways facing the roadway. Gaps in a traffic noise barrier placed along the ROW would satisfy access requirements but the resulting non-continuous barrier segments would not be sufficient to achieve the minimum, feasible reduction of 5 dB(A) or the noise reduction design goal of 7 dB(A). A continuous noise barrier 20 ft tall along the inside of the frontage road would achieve the minimum, feasible reduction of 5 dB(A) but would not achieve the noise reduction design goal of 7 dB(A).

67R24: This receiver represents multi-family residences (apartments) located partially along the US 67 southbound frontage road for which a driveway and local streets intersect the frontage road. Gaps in a noise barrier located along the ROW would satisfy access requirements but the resulting non-continuous barrier segments would not be sufficient to achieve the minimum, feasible reduction of 5 dB(A) or the noise reduction design goal of 7 dB(A).

However, 32 traffic noise barriers listed in **Table 2-3** and depicted in **Attachment A, Exhibit 3: Traffic Noise Receiver Locations** were determined to be both feasible and

reasonable along portions of the corridor and are proposed for incorporation into the project. The proposed traffic noise barriers were evaluated to determine if the barriers were cost effective stand alone or cumulatively.

Any subsequent project design changes may require a re-evaluation of this proposal. If a re-evaluation is required, a traffic noise analysis following the current TxDOT noise guidelines would be completed.

The final decision to construct the proposed traffic noise barriers would be made upon completion of the project design, utility evaluation, and the polling of adjacent property owners. Traffic noise workshop(s) would be conducted to discuss traffic noise impacts and abatement. During the meeting(s), benefitted property owners and residents would be surveyed to determine whether or not they desire noise abatement. However, per the TxDOT traffic noise guidelines, ballots cast by residents would only be considered for viewpoints. The ballots cast by property owners would count toward determining whether a traffic noise barrier is constructed or not. During this public involvement process, 15 days would be allowed for residents comments after each traffic noise workshop. TxDOT would oversee and/or conduct the traffic noise workshop(s) and provide full disclosure of changes to the traffic noise analysis and results after approval of the environmental document for the project.

Table 2-3: Noise Barrier Proposal (Preliminary)

Noise Barrier No.	Location/Limits	Representative Receivers	Length (ft)	Number of Benefited Receivers	Height (ft)	Total Cost[(1)]	Cost per Benefited Receiver	Ratio of Build to Reasonable Cost	Cumulative Estimated Build Cost per Cumulative Sum Benefited Receivers	Result Determination
1A, 1B	Along the US 67 NB ROW: between Cliff Creek Crossing Dr. and St. George Dr.	67R1	1,618	42	16	$465,984	$11,095	0.44	$11,095	Cost-effective Stand Alone
2	Along the US 67 NB ROW: 2,400 ft north of Camp Wisdom Rd. and 620 ft south of West Red Bird Ln.	67R7	1,088	13	10	$195,840	$15,065	0.60	$12,033	Cost-effective Stand Alone
5	Along US 67 SB ROW: between Ariel Dr. and Campfire Cir.	67R18	842	14	16	$242,496	$17,321	0.69	$13,106	Cost-effective Stand Alone
7A, 7B	Along US 67 NB ROW: between Sunny Glen Dr. and West Ledbetter Dr., with a gap at Wedgemere Dr.	67R16, 67R17	2,261	27	10	$406,980	$15,073	0.60	$13,659	Cost-effective Stand Alone
8A, 8B	Along US 67 NB ROW: 400 ft north of Fawn Ridge Dr. to Tribune Dr., with gap at the center driveway.	67R25	706	11	14	$177,912	$16,174	0.65	$13,918	Cost-effective Stand Alone
10	Along I-35E NB ROW: between Ann Arbor Ave. and 150 ft north of Huckleberry Cir.	35R1, 35R2, 35R3	1,870	22	10	$336,600	$15,300	0.61	$14,154	Cost-effective Stand Alone

Noise Barrier No.	Location/Limits	Representative Receivers	Length (ft)	Number of Benefited Receivers	Height (ft)	Total Cost[(1)]	Cost per Benefited Receiver	Ratio of Build to Reasonable Cost	Cumulative Estimated Build Cost per Cumulative Sum Benefited Receivers	Result Determination
12	Along I-35E NB ROW: 1,000 ft north of Overton St. and south of Kiest Blvd.	35R7	842	13	18	$272,808	$20,985	0.84	$14,779	Cost-effective Stand Alone
13	Along I-35E NB ROW: between Kiest Blvd. and Saner Ave	35R13, 35R14, 35R15, 35R16	2,840	23	10	$511,200	$22,226	0.89	$15,817	Cost-effective Stand Alone
18C	Along the top of the bank within TxDOT ROW	35R36A, 35R36B	514	9	16	$148,032	$16,448	0.66	$15,850	Cost-effective Stand Alone
19C	Along I-35E NB ROW: between Storey Rd. and Marsalis Ave	35R40	1,258	21	10	$226,440	$10,783	0.43	$15,304	Cost-effective Stand Alone
4, 4C	Along US 67 NB mainlanes and along the ROW	67R11, 67R12, 67R13, 67R15	2,420	24	8, 14, 16	$604,620	$25,193	1.01	$16,388	Cost Effective Cumulative
18A, 18B, 19A, 19B	Along I-35E NB mainlanes and the ROW, between W. Jerden Ln. and Storey St.	35R33, 35R34,35R35, 35R37, 35R38, 35R39	2,257	14	12	$487,512	$34,822	1.39	$17,495	Cost Effective Cumulative

Noise Barrier No.	Location/Limits	Representative Receivers	Length (ft)	Number of Benefited Receivers	Height (ft)	Total Cost[(1)]	Cost per Benefited Receiver	Ratio of Build to Reasonable Cost	Cumulative Estimated Build Cost per Cumulative Sum Benefited Receivers	Result Determination
9	Along I-35E SBFR between Saner Ave and Kiest Blvd.	67R26, 67R27, 67R28, 67R29	2,878	24	14	$725,256	$30,219	1.21	$18,684	Cost Effective Cumulative
15A, 15B	Along Toluca Ave.	35R21, 35R22, 35R23	2,229	12	12, 16	$517,446	$43,121	1.72	$19,774	Cost Effective Cumulative
6B, 6C	Along the US 67 SB ROW north of Ariel Dr.	67R20C	1,196	6	12, 14	$274,410	$45,735	1.83	$20,340	Cost Effective Cumulative
3	Along the inside of the US 67 SB frontage road: between Hampton Rd. and Shady Glen Ln.	67R8, 67R9	1,634	11	18	$529,416	$48,129	1.93	$21,409	Cost Effective Cumulative
17A, 17B	Along Goyens Dr. and SB mainlanes	35R27, 35R28, 35R29, 35R30	2,415	9	10	$434,700	$48,300	1.93	$22,229	Cost Effective Cumulative
16A, 16B	Along the I-35E SB ROW and SB frontage road	35R26	663	3	10, 11, 12, 14, 16	$147,438	$49,146	1.97	$22,500	Cost Effective Cumulative
14	Along I-35E ROW between Saner Ave. and Ohio Ave.	35R18, 35R19, 35R20	2,197	8	10	$395,460	$49,433	1.98	$23,204	Cost Effective Cumulative

Noise Barrier No.	Location/Limits	Representative Receivers	Length (ft)	Number of Benefited Receivers	Height (ft)	Total Cost[(1)]	Cost per Benefited Receiver	Ratio of Build to Reasonable Cost	Cumulative Estimated Build Cost per Cumulative Sum Benefited Receivers	Result Determination
20	Along I-35E NB mainlanes between Betterton Cir. and Chruch St.	35R49, 35R50, 35R51	918	4	12	$198,288	$49,572	1.98	$23,545	Cost Effective Cumulative
18	Along the I-35E NB mainlanes	35R24	823	3	8, 10, 11, 12	$149,490	$49,830	1.99	$23,797	Cost Effective Cumulative
Totals[(2)]				**313**		**$7,448,328**	**$23,797**			

Source: Study Team (July 2016).
NB= North Bound
SB=South Bound
[(1)]The cost was estimated using $18 per square foot in accordance with TxDOT's FHWA approved 2011 Guidelines for Analysis and Abatement of Roadway Traffic Noise.
[(2)]Includes proposed noise barriers that are cost effective stand alone and cumulative.

To avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs must ensure, to the maximum extent possible, that no new activities are planned or constructed along or within the following predicted (2037) noise impact contours shown in **Table 2-4**.

Table 2-4: Predicted Traffic Noise Contours

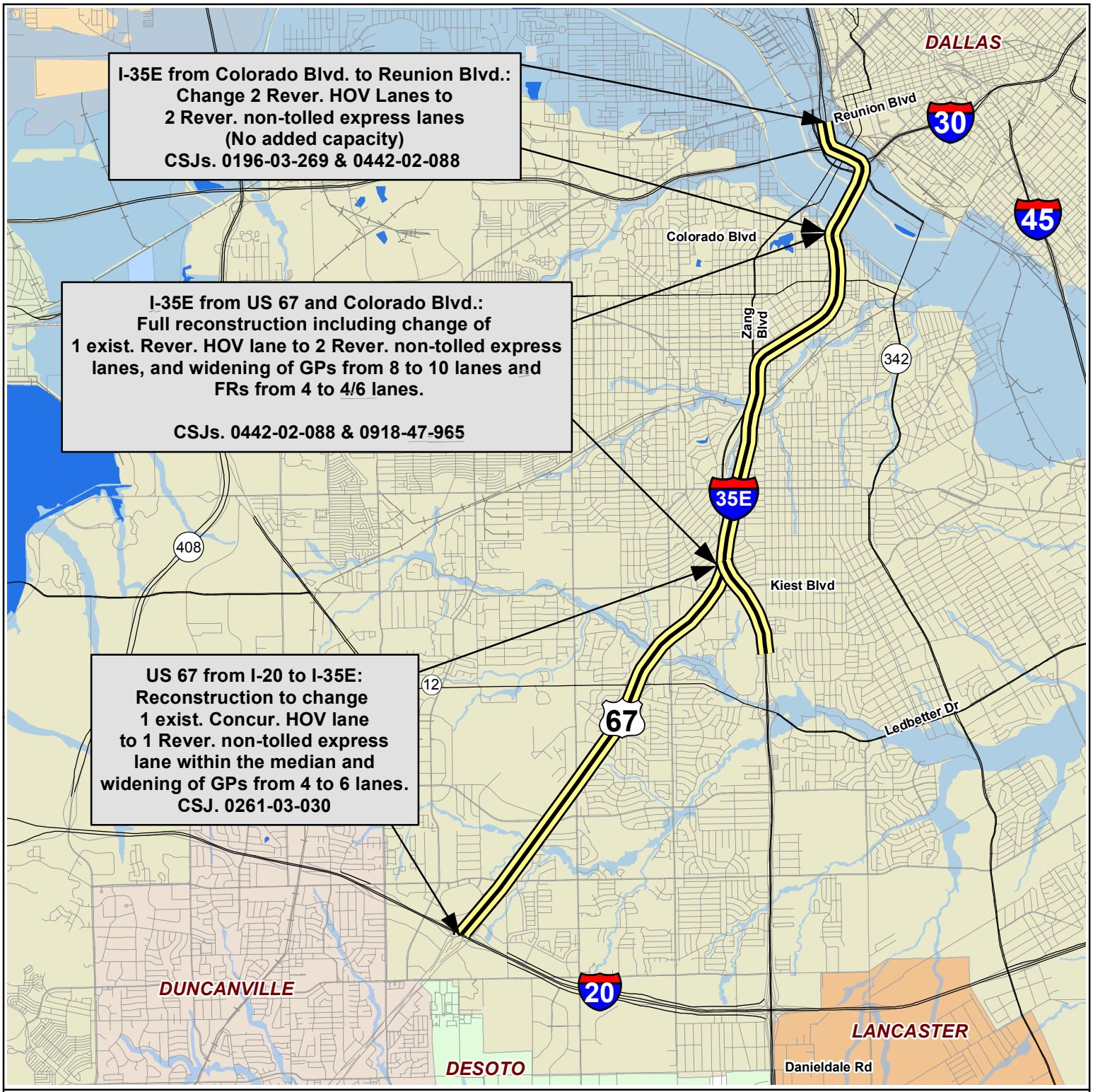
Location		Land Use	Impact Contour	Distance from ROW
West of I-35E	From Marsalis Ave. to S. Ewing Ave.	NAC Categories B&C	66	100 ft
		NAC Category E	71	0 ft
East of I-35E	From S. Marsalis Ave. to S. Lancaster Ave.	NAC Categories B&C	66	100 ft
		NAC Category E	71	0 ft
	From S. Beckley Ave. to Cumberland St.	NAC Categories B&C	66	300 ft
		NAC Category E	71	200 ft
	From Brookhaven Dr. to E. Clarendon Dr.	NAC Categories B&C	66	300 ft
		NAC Category E	71	150 ft
West of I-35E	From Brookhaven Dr. to W. Clarendon Dr.	NAC Categories B&C	66	300 ft
		NAC Category E	71	50 ft
	From W. Elmore Ave. to W. Ohio Ave.	NAC Categories B&C	66	150 ft
		NAC Category E	71	0 ft
	South of W. Overton Rd.	NAC Categories B&C	66	25 ft
		NAC Category E	71	0 ft
East of US 67	From Camp Wisdom Rd. to Red Bird Ln.	NAC Categories B&C	66	150 ft
		NAC Category E	71	25 ft
West of US 67	From W. Pentagon Pkwy. to Loop 12	NAC Categories B&C	66	50 ft
		NAC Category E	71	0 ft
	From Loop 12 to Swansee St.	NAC Categories B&C	66	150 ft
		NAC Category E	71	0 f.
	From Red Bird Ln. to Camp Wisdom Rd.	NAC Categories B&C	66	200 ft
		NAC Category E	71	50 ft

Source: Study Team (July 2016).

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. Although construction normally occurs during daylight hours when occasional loud noises are more tolerable, nighttime construction would be substantial for the proposed project because it involves a major interchange and two major highways. Nighttime construction would be utilized in order to help minimize disturbance to vehicular traffic. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls (i.e., reduced nighttime construction near residential areas) and proper maintenance of muffler systems.

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

ATTACHMENT A: EXHIBITS



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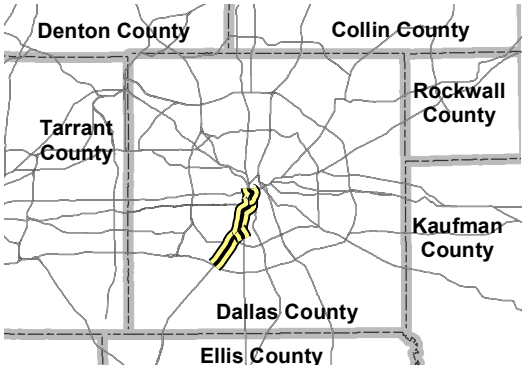
LEGEND

Proposed Project Limits



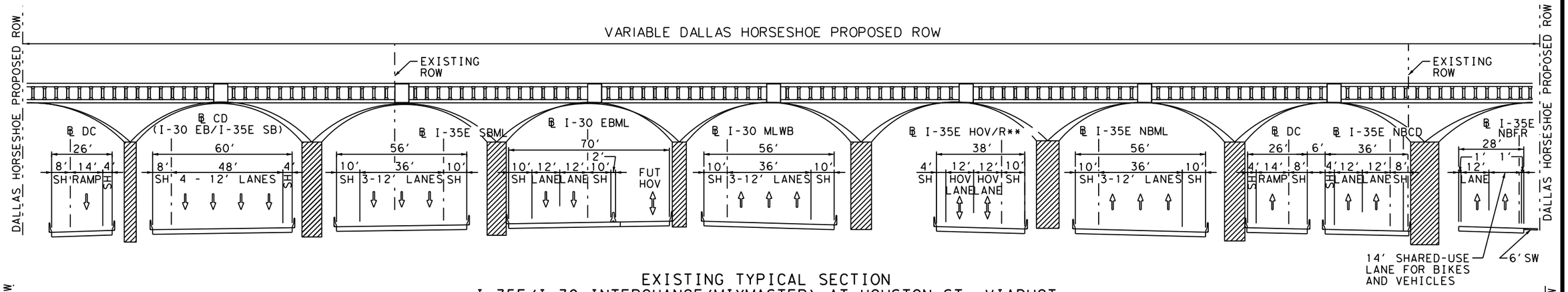
Sources: NCTCOG GIS Data - counties, cities, streets, rivers, and lakes

EXHIBIT 1
PROJECT LOCATION MAP

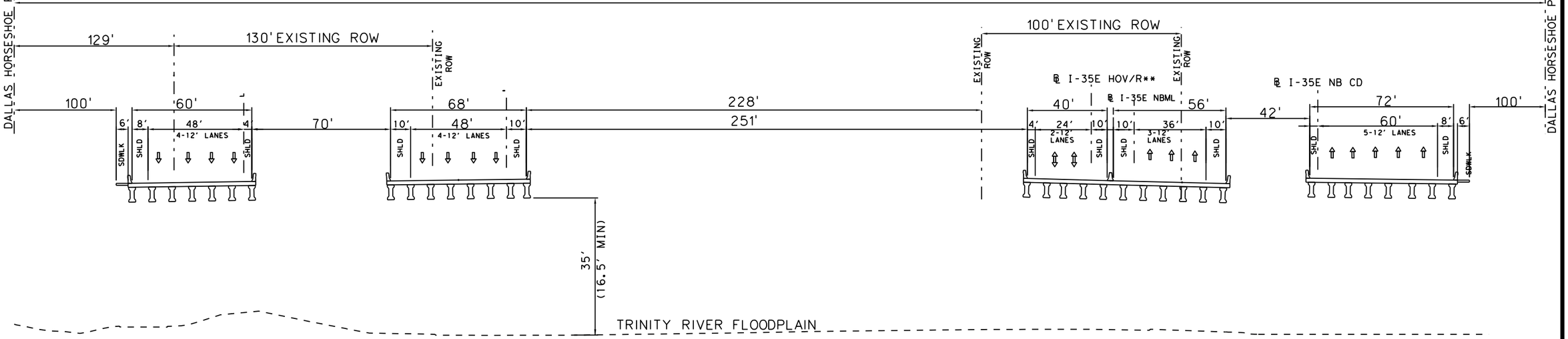
I-35E/ US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 to I-35E

TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS



EXISTING TYPICAL SECTION
I-35E/I-30 INTERCHANGE (MIXMASTER) AT HOUSTON ST. VIADUCT
(CURRENTLY UNDER CONSTRUCTION AS PART OF THE DALLAS HORSESHOE PROJECT)



EXISTING TYPICAL SECTION
I-35E FROM COLORADO BLVD. AND I-30 (AT THE DALLAS FLOODWAY)
(CURRENTLY UNDER CONSTRUCTION AS PART OF THE DALLAS HORSESHOE PROJECT)

Notes:
CD=Collector Distributor
NBML=Northbound Mainlane
SBML=Southbound Mainlane
NBFR=Northbound Frontage Road
SBFR=Southbound Frontage Road
SW=Sidewalk
SH=Shoulder
**HOV/R Proposed for conversion to reversible non-tolled express lanes

Texas Department of Transportation

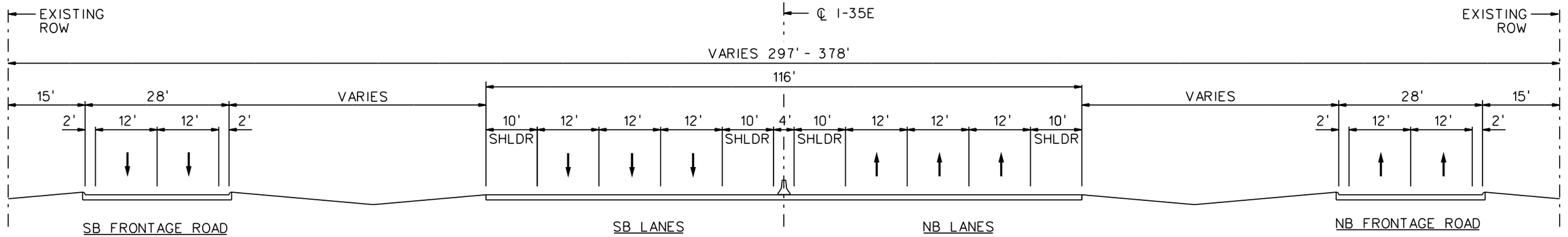
EXHIBIT 2

TYPICAL SECTIONS
SHEET 1 OF 3

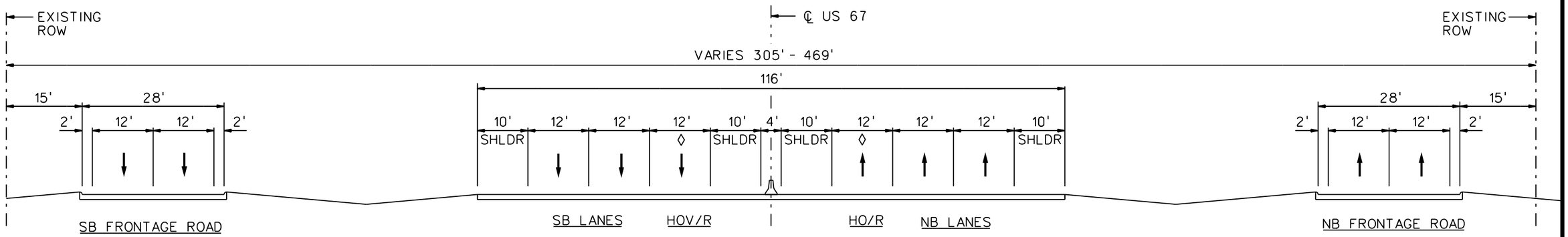
I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

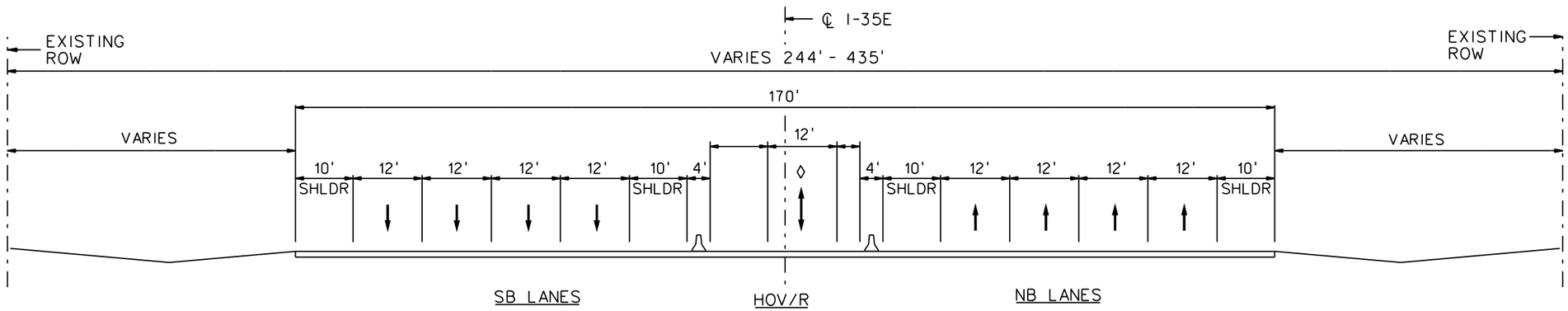
TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS



EXISTING TYPICAL SECTION
I-35E FROM FAIRSHOP RD. TO US 67



EXISTING TYPICAL SECTION
US 67 FROM I-20 TO I-35E



EXISTING TYPICAL SECTION
I-35E FROM US 67 TO COLORADO BLVD.

Notes:
NB=Northbound
SB=Southbound
HOV/R=Reversible high occupancy vehicles lane

Texas Department of Transportation

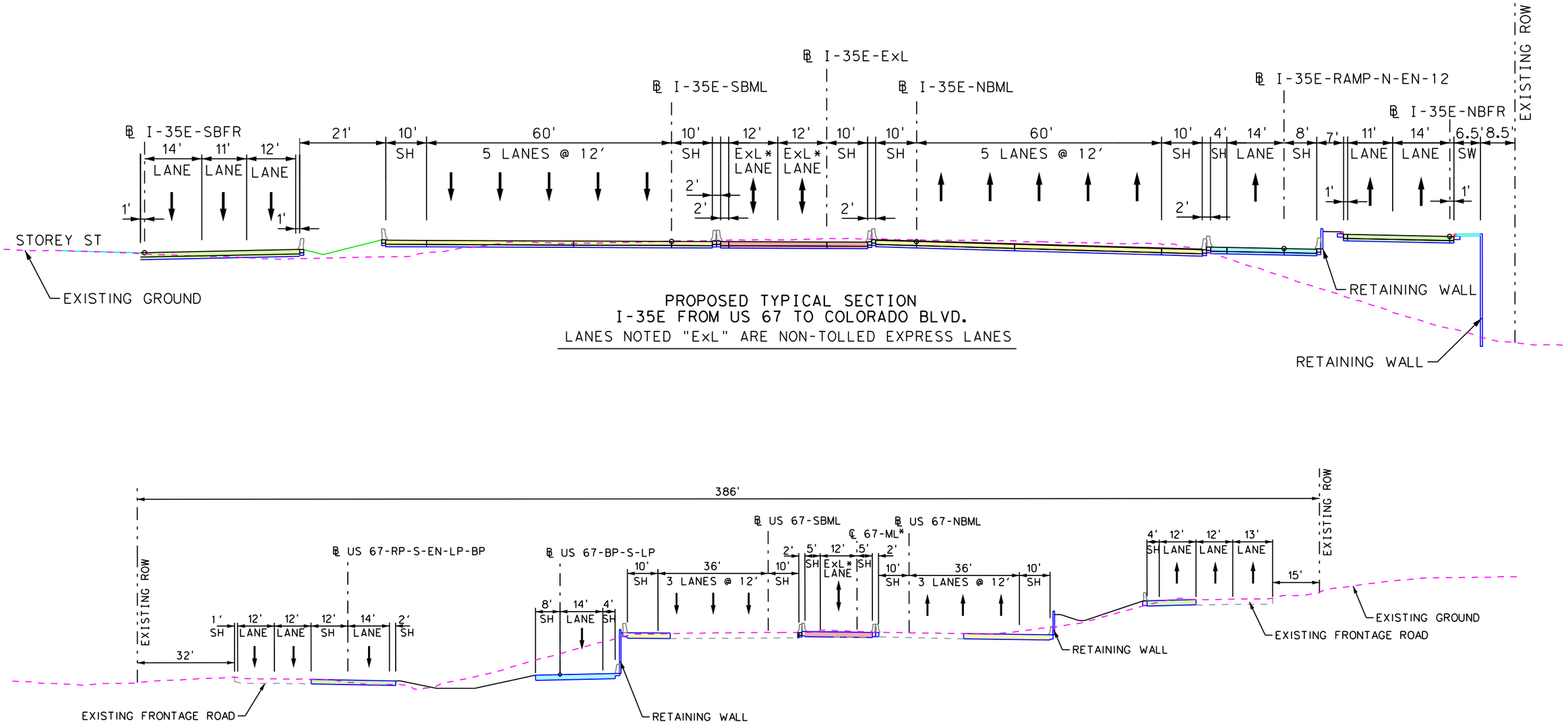
EXHIBIT 2

TYPICAL SECTIONS
SHEET 2 OF 3

I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS



PROPOSED TYPICAL SECTION
I-35E FROM US 67 TO COLORADO BLVD.
LANES NOTED "ExL" ARE NON-TOLLED EXPRESS LANES

PROPOSED TYPICAL SECTION
US 67 FROM I-20 TO I-35E
LANES NOTED "ExL" ARE NON-TOLLED EXPRESS LANES

Texas Department of Transportation

EXHIBIT 2

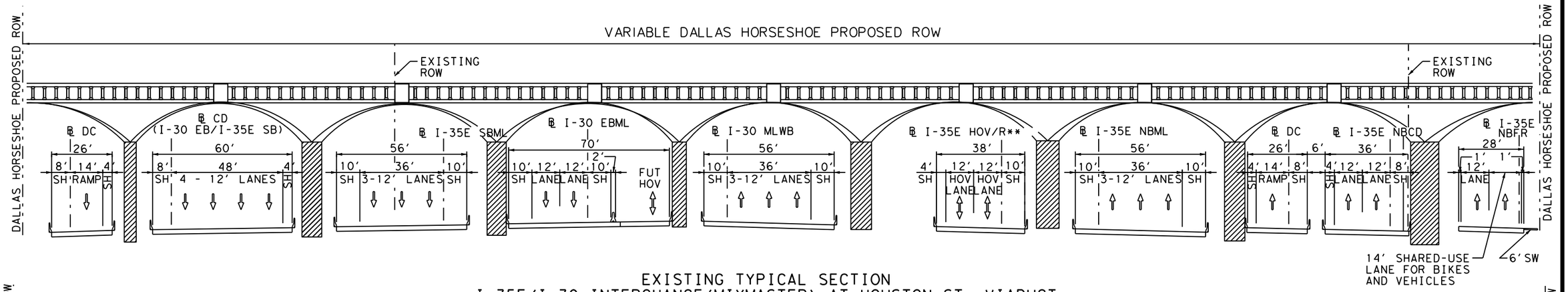
TYPICAL SECTIONS
SHEET 2 OF 3

I-35/US 67 PROJECT

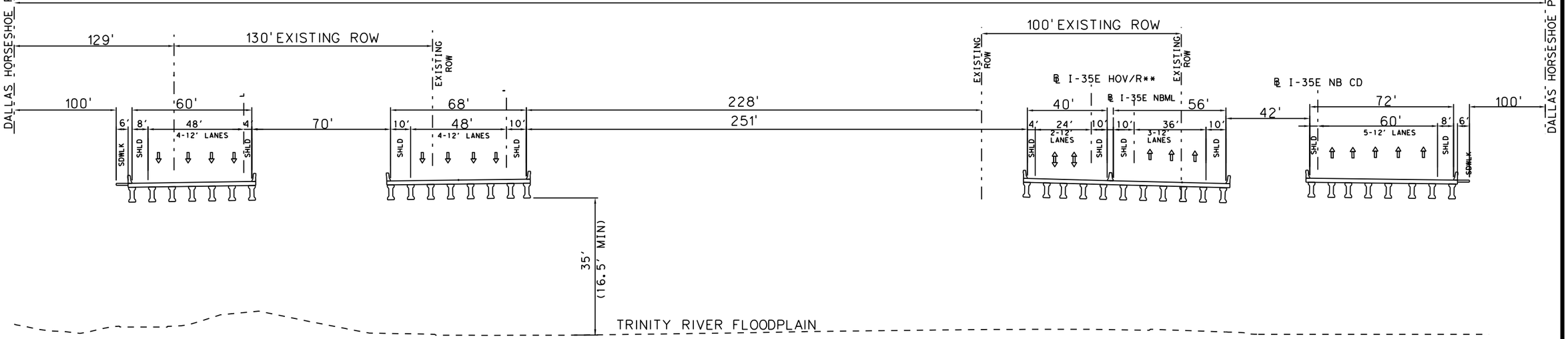
I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS

Notes:
CD=Collector Distributor
NBML=Northbound Mainlane
SBML=Southbound Mainlane
NBFR=Northbound Frontage Road
SBFR=Southbound Frontage Road
SW=Sidewalk
ExL=Non-tolled Express Lane
SH=Shoulder



EXISTING TYPICAL SECTION
I-35E/I-30 INTERCHANGE (MIXMASTER) AT HOUSTON ST. VIADUCT
(CURRENTLY UNDER CONSTRUCTION AS PART OF THE DALLAS HORSESHOE PROJECT)



EXISTING TYPICAL SECTION
I-35E FROM COLORADO BLVD. AND I-30 (AT THE DALLAS FLOODWAY)
(CURRENTLY UNDER CONSTRUCTION AS PART OF THE DALLAS HORSESHOE PROJECT)

Notes:
CD=Collector Distributor
NBML=Northbound Mainlane
SBML=Southbound Mainlane
NBFR=Northbound Frontage Road
SBFR=Southbound Frontage Road
SW=Sidewalk
SH=Shoulder
**HOV/R Proposed for conversion to reversible non-tolled express lanes

Texas Department of Transportation

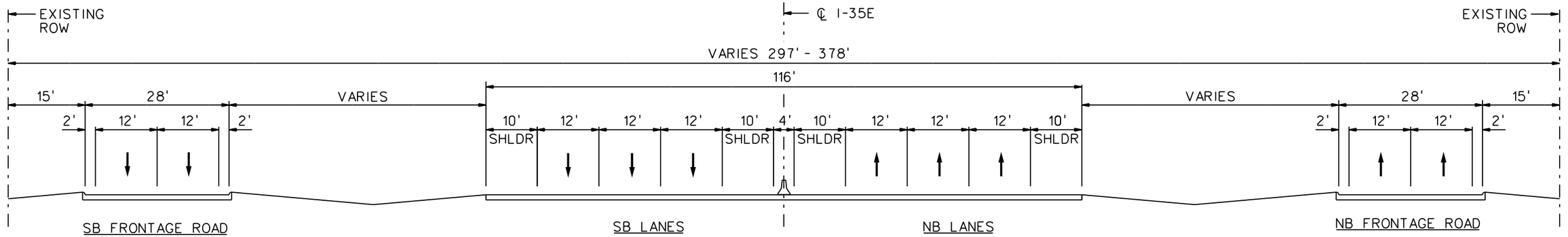
EXHIBIT 2

TYPICAL SECTIONS
SHEET 1 OF 3

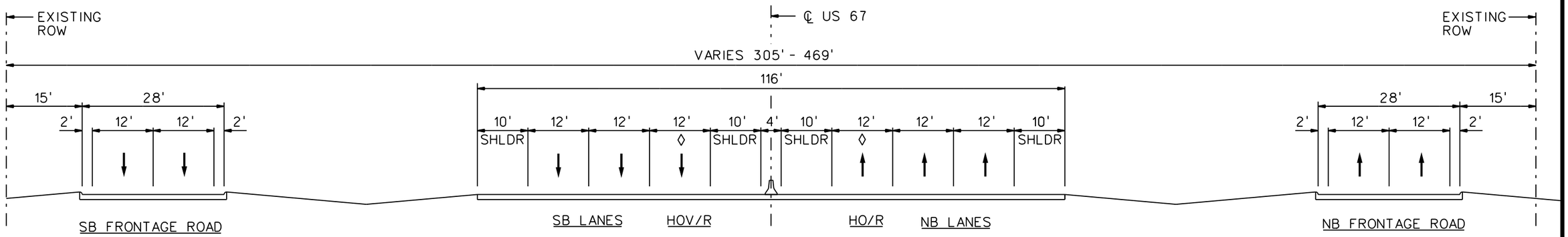
I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

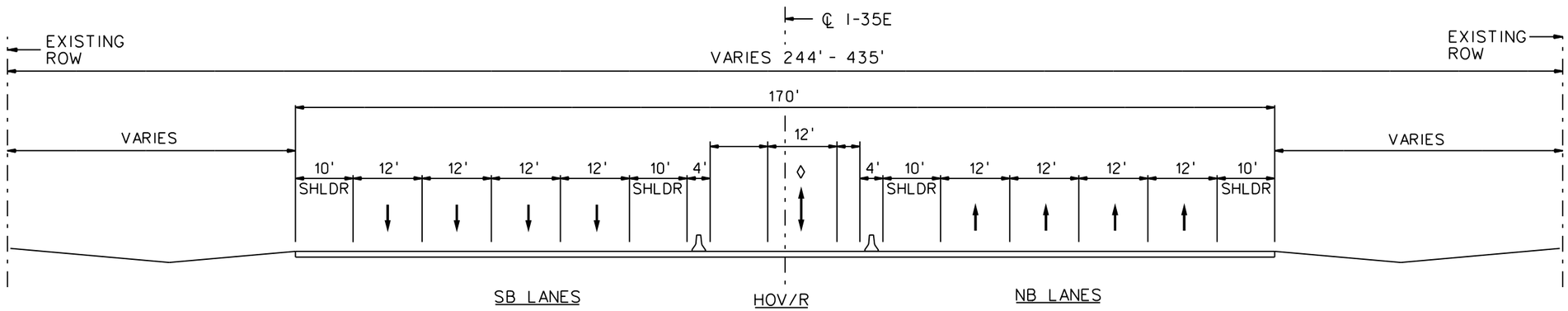
TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS



EXISTING TYPICAL SECTION
I-35E FROM FAIRSHOP RD. TO US 67



EXISTING TYPICAL SECTION
US 67 FROM I-20 TO I-35E



EXISTING TYPICAL SECTION
I-35E FROM US 67 TO COLORADO BLVD.

Notes:
NB=Northbound
SB=Southbound
HOV/R=Reversible high occupancy vehicles lane

Texas Department of Transportation

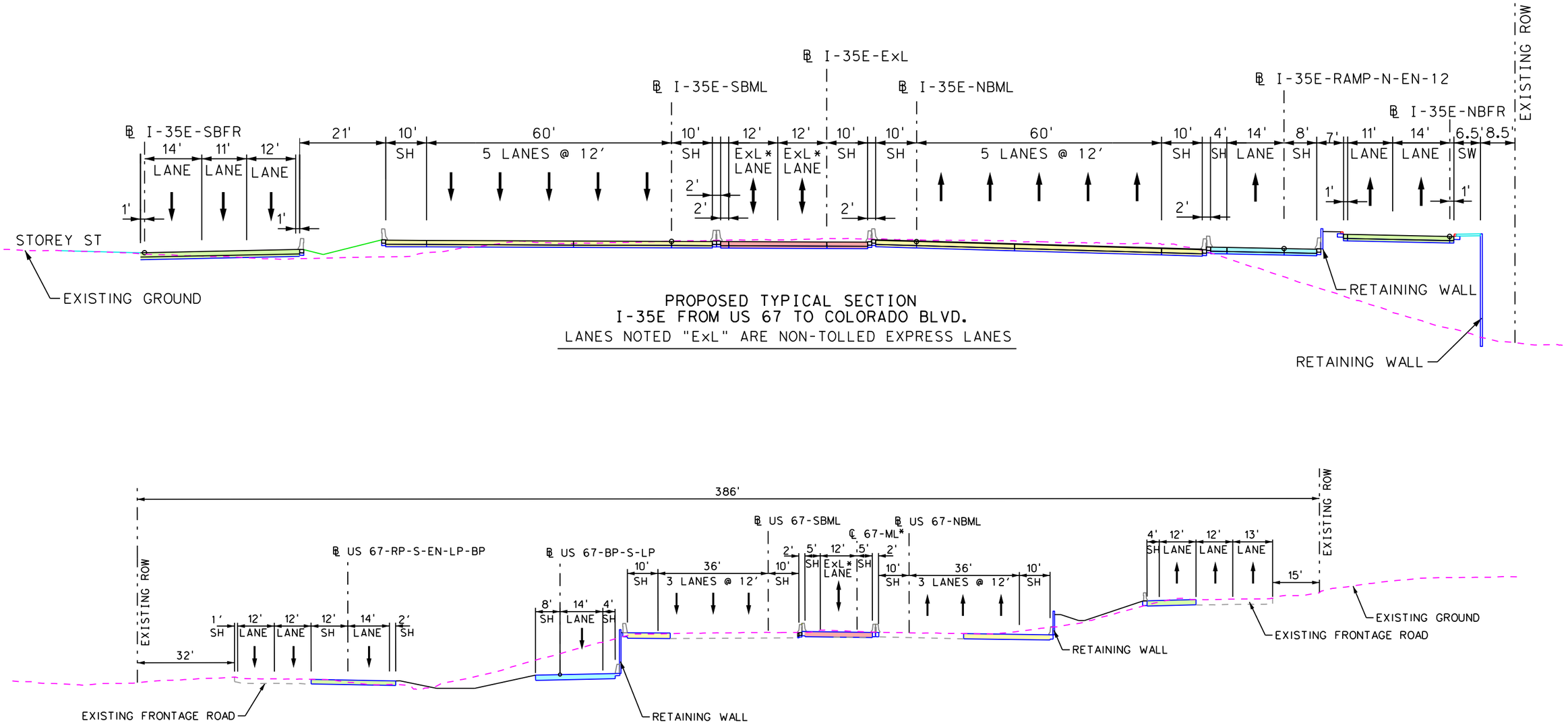
EXHIBIT 2

TYPICAL SECTIONS
SHEET 2 OF 3

I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS



PROPOSED TYPICAL SECTION
I-35E FROM US 67 TO COLORADO BLVD.
LANES NOTED "ExL" ARE NON-TOLLED EXPRESS LANES

PROPOSED TYPICAL SECTION
US 67 FROM I-20 TO I-35E
LANES NOTED "ExL" ARE NON-TOLLED EXPRESS LANES

Texas Department of Transportation

EXHIBIT 2

TYPICAL SECTIONS
SHEET 2 OF 3

I-35/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHNICAL REPORT
DALLAS COUNTY, TEXAS

Notes:
CD=Collector Distributor
NBML=Northbound Mainlane
SBML=Southbound Mainlane
NBFR=Northbound Frontage Road
SBFR=Southbound Frontage Road
SW=Sidewalk
ExL=Non-tolled Express Lane
SH=Shoulder

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

Sheet Index

**The extent of each sheet is highlighted below in* RED .

N

0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 1 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

Sheet Index

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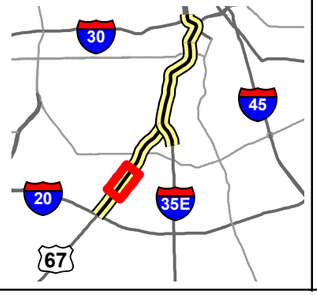

0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 2 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

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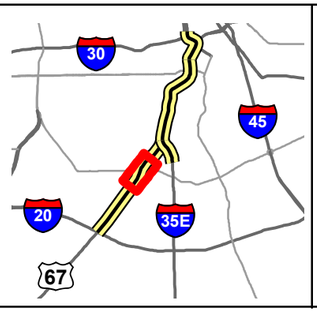

0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 3 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

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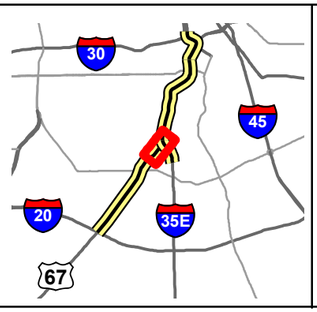

0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 4 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

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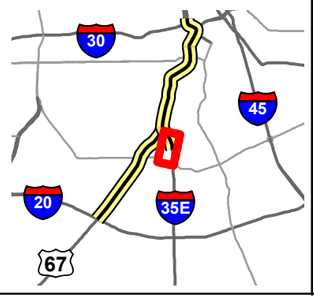

Z

0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 5 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

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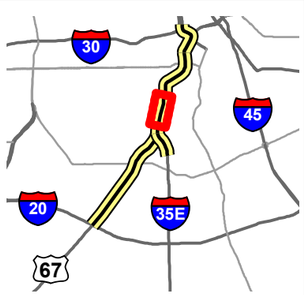

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0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 6 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

BARRIER 18C
35R36
35R36A
35R36B
35R33
35R34
35R35
35R35A
35R35C
35R37
BARRIER 18B
BARRIER18A
BARRIER 19A
35R38
35R39
BARRIER 19B
35R40
BARRIER 19C
35R41
35R42
35R43
35R45
35R46
35R47
JERDEN LN
SUFFOLK AVE
YARMOUTH ST
35E
CENTRE ST
SUNSET AVE
BECKLEY AVE
7TH ST
8TH ST
NEELY ST
CANTY ST
STEINMAN AVE
DENVER ST
LAKE CLIFF DR
9TH ST
12TH ST
CUMBERLAND ST
STOREY ST
CRAWFORD ST
PATTON AVE
10TH ST
STARR ST
LANSING ST
ROCKWOOD ST
PEMBROKE AVE
BROOKLYN AVE
PAGE AVE
FOSTER AVE
NORTH SHORE DR
HAVENDON CIR
CLARENDON DR
WINTERS ST
ARIZONA AVE
18TH ST
MICHIGAN AVE
ALASKA AVE
MARSALIS PKWY
15TH ST
NABORS ST
BLACK ST
MARSALIS AVE
OPERA ST
13TH ST
SHELTER PL
VIOLA ST
11TH ST
JEFFERSON BLVD
LANCASTER AVE
EWING AVE
BETTERTON CIR
TOSTON ST
JOY ST
CHURCH ST
R.L. THORNTON FWY

LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
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Source: TNRIS 2015 NAIP aerial imagery, roads

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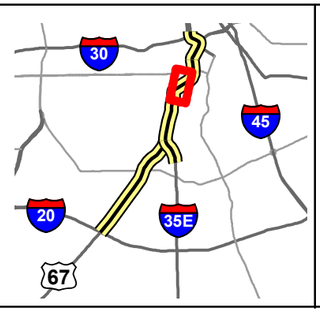

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0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

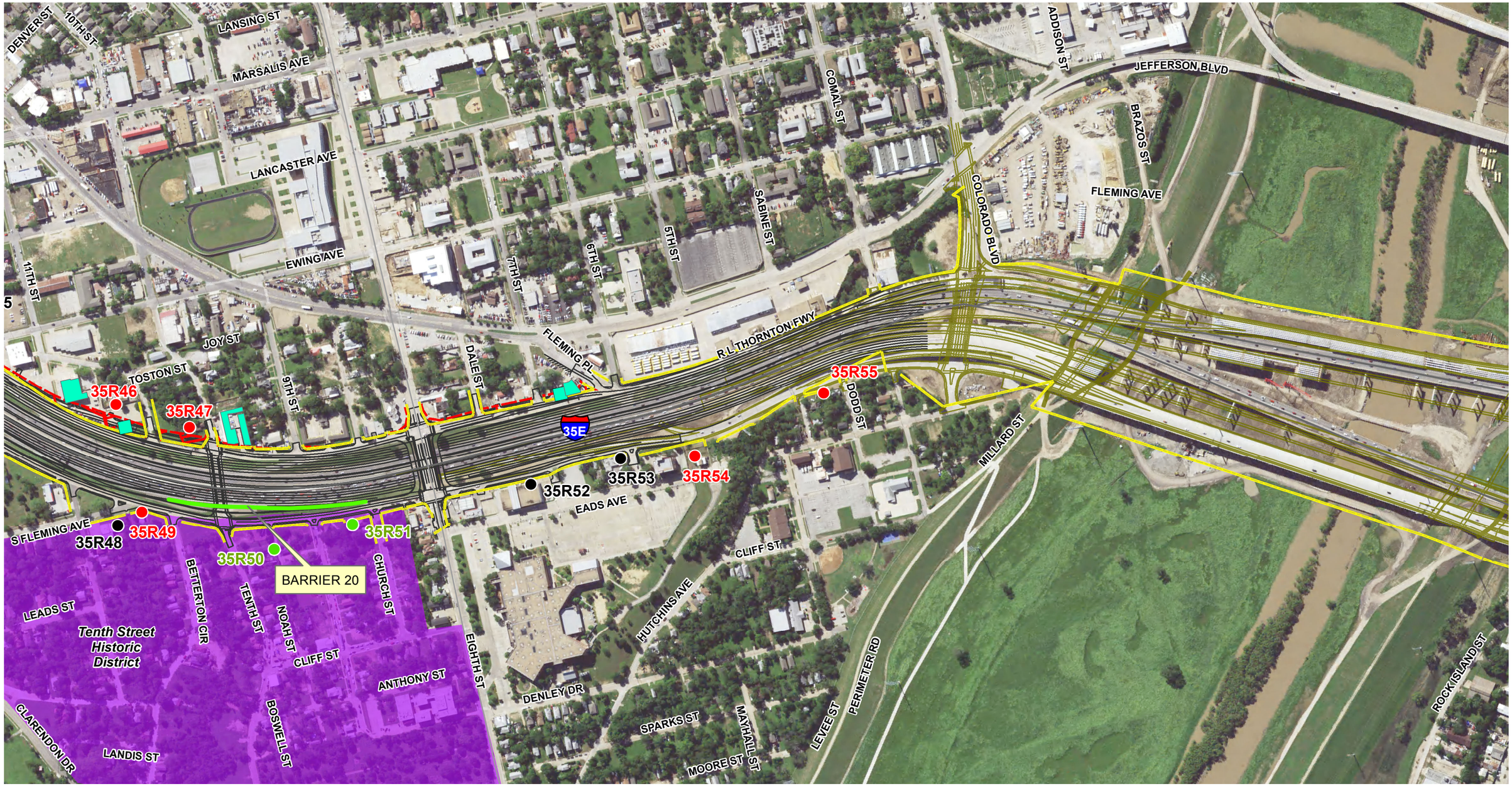
EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 7 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS



LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
- Benefitted Noise Receiver
- Proposed Noise Barrier
- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

Sheet Index

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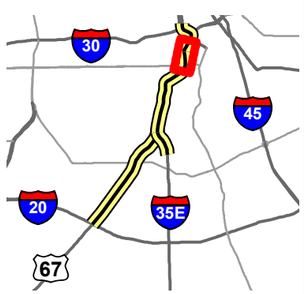


0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

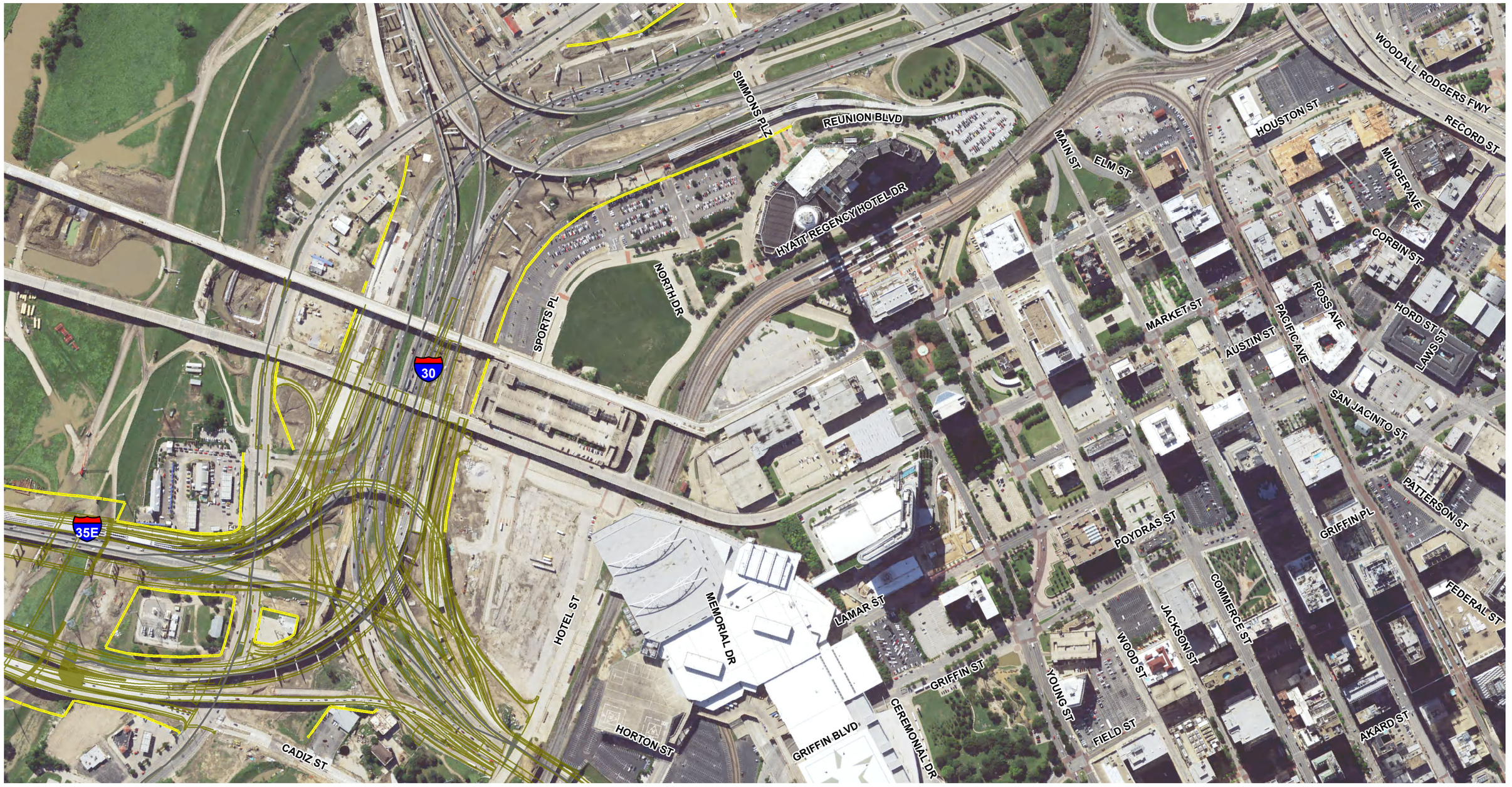
EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 8 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS



LEGEND

- Existing ROW
- Proposed ROW
- Proposed Drainage Easement
- Proposed Pavement
- Dallas Horseshoe Project Pavement under Construction
- Potential Relocation
- Impacted Noise Receiver
- Non-Impacted Noise Receiver
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- McAdams Cemetery
- NRHP Listed District

Source: TNRIS 2015 NAIP aerial imagery, roads

Sheet Index

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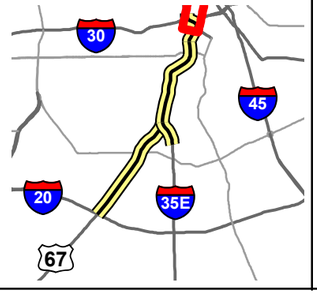

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0 250 500 1,000

Feet

Texas Department of Transportation

Note: Based on June 2016 Schematic Plans

EXHIBIT 3
TRAFFIC NOISE RECEIVER LOCATIONS

SHEET 9 OF 9

I-35E/US 67 PROJECT

I-35E: FROM US 67 TO I-30
US 67: FROM I-20 TO I-35E

TRAFFIC NOISE TECHICAL REPORT
DALLAS COUNTY, TEXAS

ATTACHMENT B: TRAFFIC DATA

The traffic data information is not included in this file, but can be found in the full Traffic Noise Technical Report available at the TxDOT Dallas District.

ATTACHMENT C: PROJECT PHOTOGRAPHS

PROJECT PHOTOGRAPHS

Looking north from 8th Street at the I-35E corridor.

Looking north from along the southbound frontage road south of Kiest Boulevard at the I-35E/Kiest Boulevard intersection.

Looking northeast along the southbound frontage road of I-35E south of Marsalis Avenue.

Looking northeast along the southbound frontage road of I-35E north of Storey Street.

Looking north along northbound I-35E south of Illinois Avenue.

Looking south onto Fleming Street from the northbound frontage road of I-35E south of 10th Street.

Looking south from north of Hampton Road along the southbound US 67 frontage road.

Looking south from north of Camp Wisdom Road along the southbound US 67 frontage road.

APPENDIX H: PROPOSED SCHEMATIC PLANS

TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT

JAMES K. SELMAN, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC

I-35E/US 67

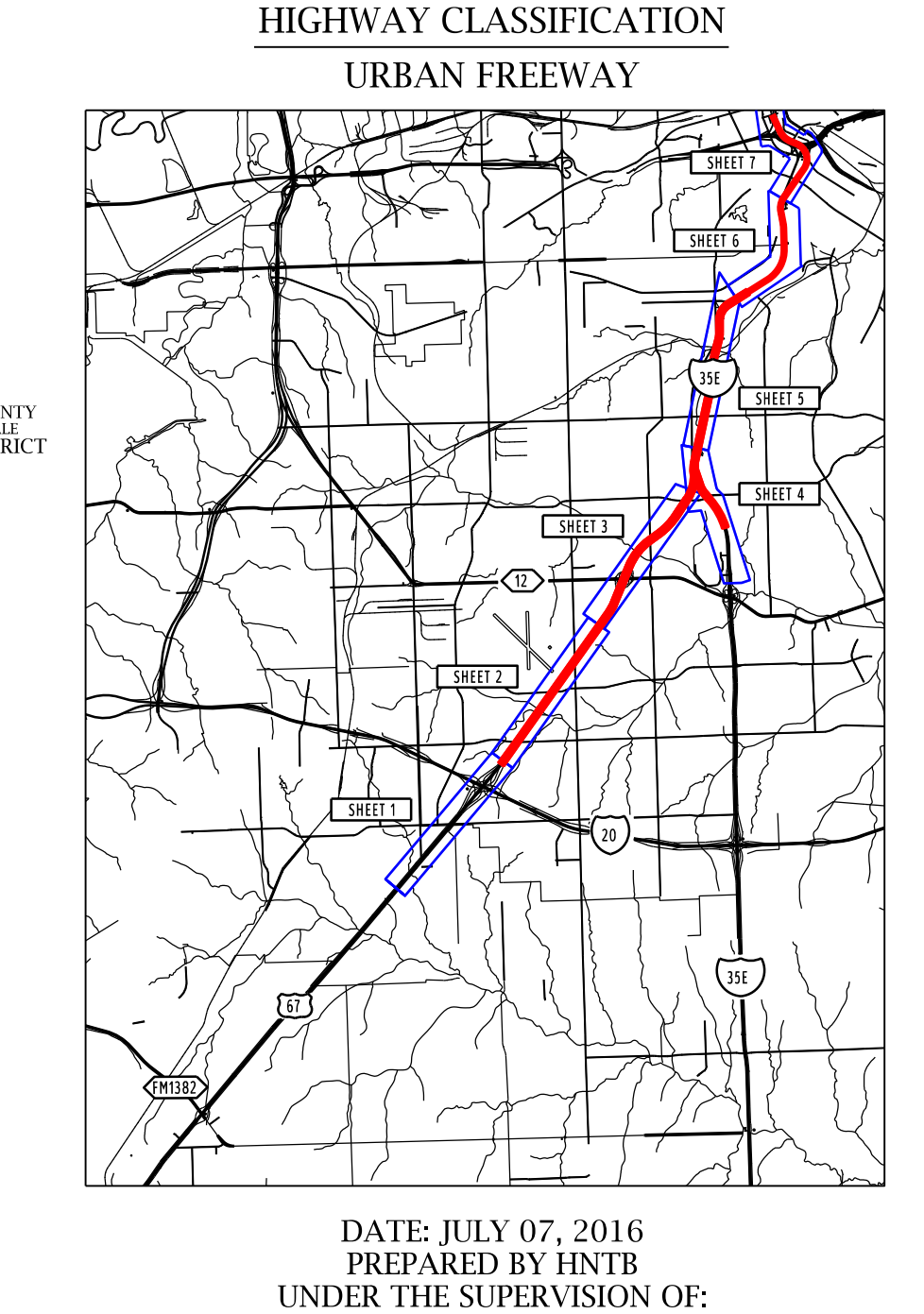
DALLAS COUNTY

US67: FROM I-20 TO I-35E
CSJ: 0261-03-030
I-35E: FROM US 67 TO I-30
CSJ: 0442-02-088
I-35E: FROM I-30 TO REUNION BLVD
CSJ: 0196-03-269
I-35E: LOCAL ENHANCEMENTS
(LOCATION OF LOCAL ENHANCEMENTS TO BE DETERMINED)
CSJ: 0918-47-965

PROJECT LENGTH - 11.0 MILES

ROADWAY TYPE	DESIGN SPEED
GENERAL PURPOSE LANES	60 MPH
GENERAL PURPOSE/BYPASS RAMPS	40 MPH
FRONTAGE ROADS	40 MPH
CROSS STREETS	30 MPH
MANAGED LANES/MANAGED LANE RAMPS	60 MPH
LOOP RAMPS	25 MPH

I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY



PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

DATE APPROVED

DATE SUBMITTED

DATE REVISED

DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.

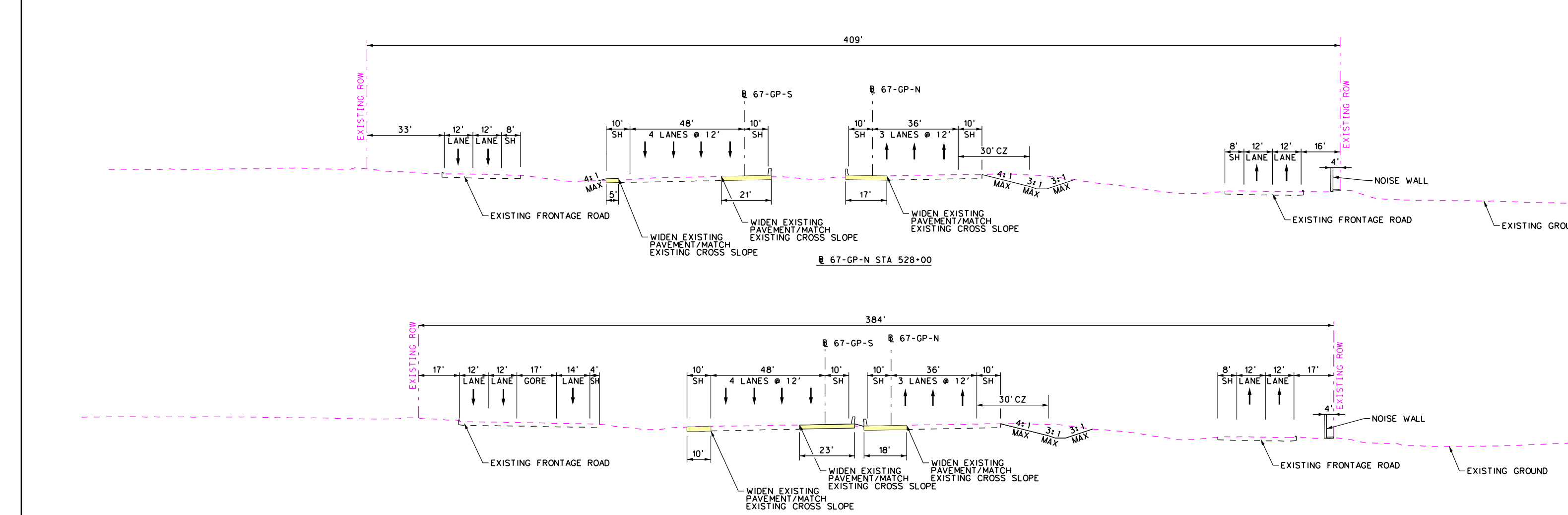
0 100 200 HORIZONTAL
0 20 40 VERTICAL

SERIAL NO. 91108

SHEET 1 OF 10

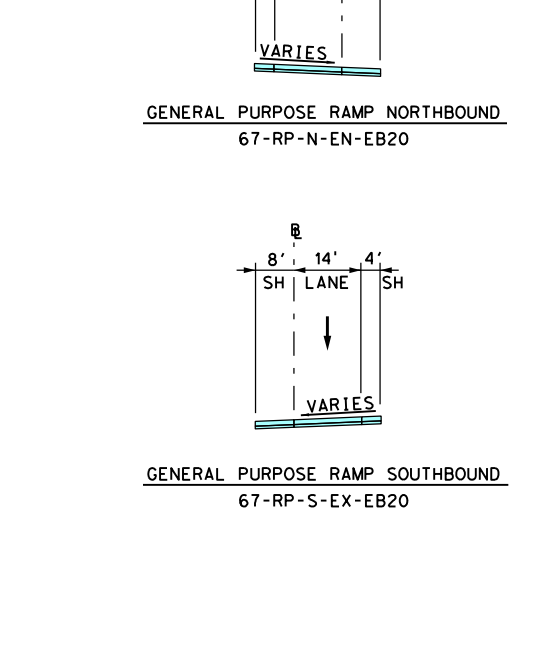
HNTB Corporation
The HNTB Companies
Engineers Architects Planners

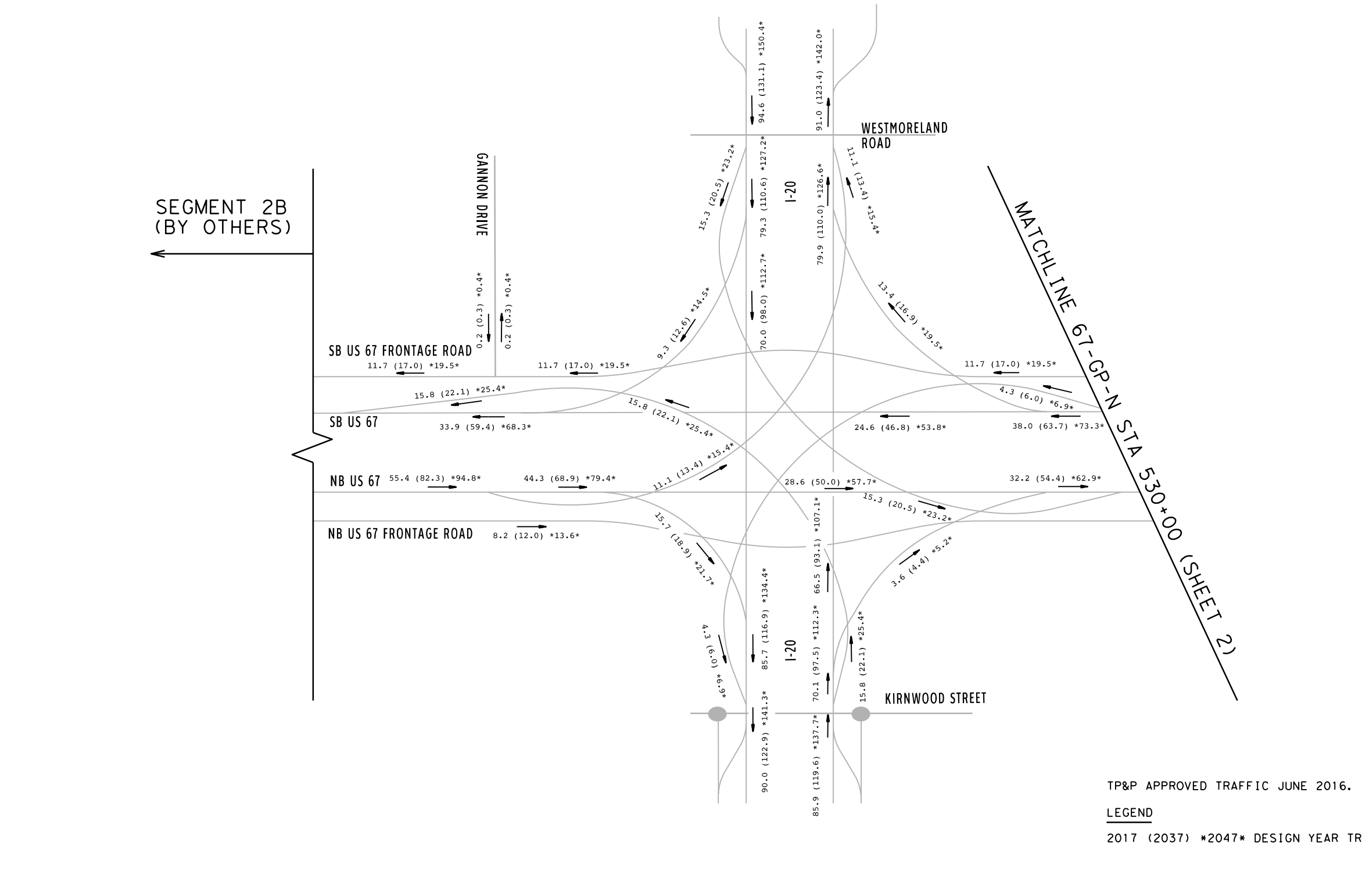
Texas Department of Transportation



CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
℄ 67-GP-N (DESIGN SPEED: 60 MPH)							
	P.C. 521+36.81	6926782.6852	2469035.2886	N 40°51'53.80" E			
67-GP-N-01	P.I. 525+92.80	6927127.5301	2469333.6335	4°42'17.30" LT	911.47	455.99	11100.00
	P.T. 530+48.28	6927495.6839	2469602.6882	N 36°09'36.50" E			
℄ 67-GP-S (DESIGN SPEED: 60 MPH)							
	P.C. 524+75.28	6927070.4748	2469223.6565	N 40°55'57.38" E			
67-GP-S-01	P.I. 528+27.36	6927336.4673	2469454.3315	4°46'18.82" LT	703.76	352.08	8450.00
	P.T. 531+79.04	6927620.7274	2469662.0793	N 36°09'38.56" E			
℄ 67-RP-S-EX-EB20 (DESIGN SPEED: 40 MPH)							
	P.C. 10+78.07	6926773.1537	2468793.2441	N 52°23'13.12" E			
67-RP-S-EX-EB20-01	P.I. 15+62.96	6927069.0976	2469177.3545	14°32'37.50" LT	964.58	484.90	3800.00
	P.T. 20+42.65	6927452.0159	2469474.8394	N 37°50'35.62" E			
℄ 67-RP-N-EN-EB20 (DESIGN SPEED: 40 MPH)							
	P.C. 10+53.30	6926043.2441	2468756.4145	N 46°14'08.92" E			
67-RP-N-EN-EB20-01	P.I. 11+53.93	6926112.8496	2468829.0894	22°45'31.84" LT	198.61	100.63	500.00
	P.T. 12+51.91	6926205.1503	2468869.1787	N 23°28'37.07" E			
	P.C. 12+89.30	6926239.4461	2468884.0746	N 23°28'37.07" E			
67-RP-N-EN-EB20-02	P.I. 19+17.49	6926815.6382	2469134.3346	13°41'54.14" RT	1250.40	628.19	5230.00
	P.T. 25+39.70	6927316.1768	2469513.9246	N 37°10'31.21" E			

SUPERELEVATION	STATION	LT	RT	DESCRIPTION
℄ 67-RP-N-EN-EB20	10+53.30	-6.00%	+6.00%	MATCH EXISTING/BEGIN TRANSITION
	10+65.00	-5.98%	+5.98%	END TRANSITION/BEGIN FULL SUPER
	12+10.00	-5.98%	+5.98%	END FULL SUPER/BEGIN TRANSITION
	15+00.00	+1.56%	-1.56%	END TRANSITION
	21+42.92	+1.56%	-1.56%	MATCH 67-GP-N
℄ 67-RP-S-EX-EB20	10+78.07	-2.16%	+2.16%	MATCH EXISTING/BEGIN TRANSITION
	10+90.00	-2.00%	+2.00%	END TRANSITION
	14+95.00	-2.00%	+2.00%	BEGIN TRANSITION
	15+19.00	-1.56%	+1.56%	END TRANSITION/MATCH 67-GP-S





TP&P APPROVED TRAFFIC JUNE 2016.

LEGEND

2017 (2037) *2047* DESIGN YEAR TRAFFIC VOLUMES (X1000)

LEGEND

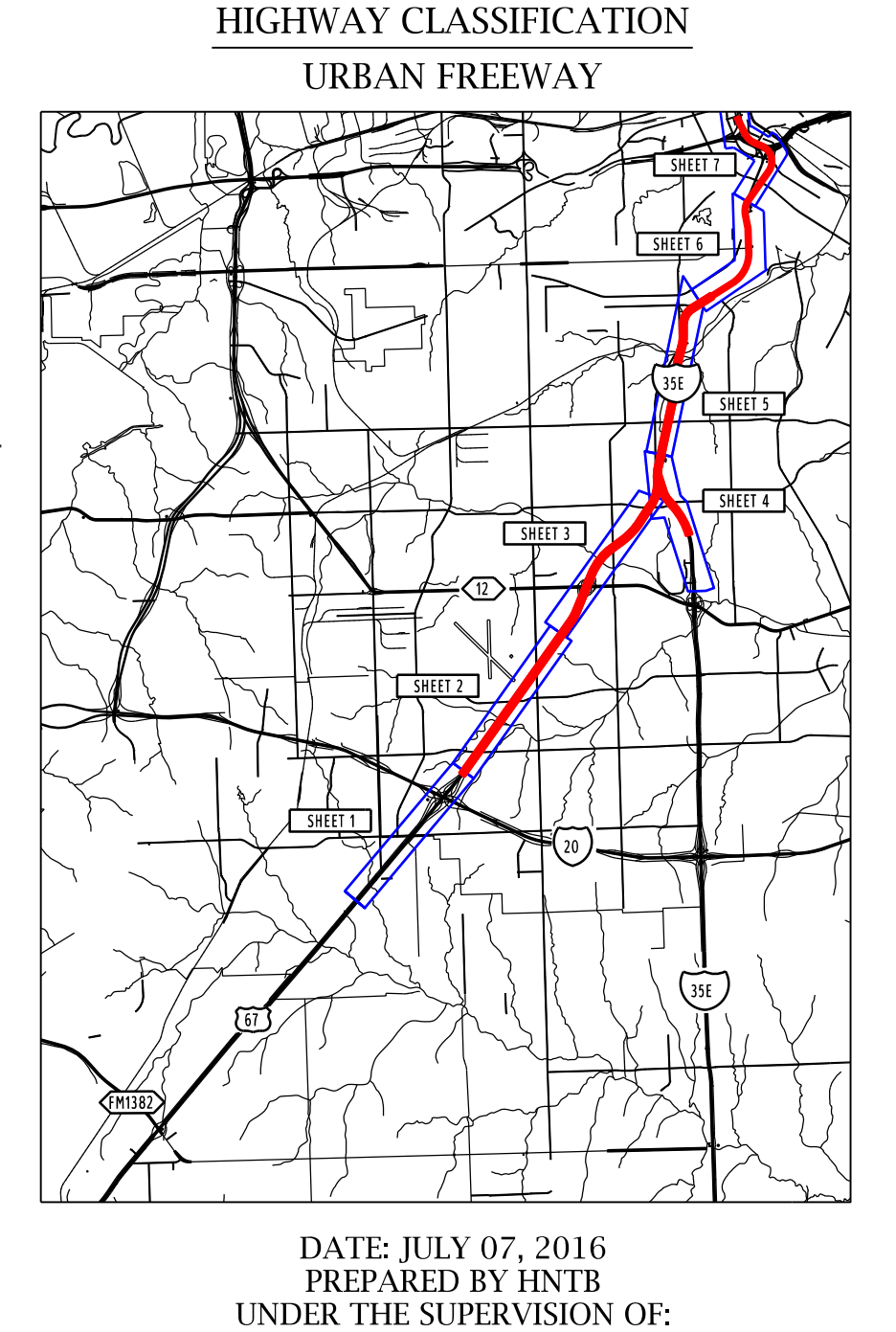
- General Purpose Lane
- Managed Lane - Express
- Frontage Road / Cross-Streets
- Ramp / Direct Connector
- Bridge Structure
- Bridge Substructure
- Existing Storm Drain
- Proposed Storm Drain
- Bicycle / Pedestrian
- Driveway / Cul-De-Sac
- Displacement
- Zone A/AE Floodplain
- Zone X Floodplain
- Zone AE Floodway
- Existing STATE ROW
- Existing CITY/COUNTY ROW
- Existing STATE Easement
- Proposed ROW
- Proposed Centerline / Baseline
- Proposed Retaining Wall
- Noise Wall
- Noise Wall on Retaining Wall
- Horseshoe Project (11/02/15)
- Drainage Easement
- Property Line
- Removal

PROFILE INTENTIONALLY LEFT BLANK
SEGMENT 2B (BY OTHERS)

PROFILE INTENTIONALLY LEFT BLANK
NO PROPOSED GENERAL PURPOSE OR MANAGED LANE RECONSTRUCTION
PROPOSED WORK CONSISTS OF RESTRIPING AND WIDENING OF EXISTING PAVEMENT

NOTES:
1. SEE ROLL 8 FOR RAMP PROFILES.
2. SEE SEPARATE LARGE SIGN SCHEMATIC FOR SIGN DETAILS.
3. CONTINUOUS LIGHTING WILL BE PROVIDED FOR THE PROJECT. TxDOT WILL MAINTAIN AND OPERATE THE LIGHTING SYSTEM.
4. GRADE DIFFERENCES LESS THAN 4' WILL BE RETAINED WITH BARRIER.
5. CROSS SECTIONS ARE NOT TO SCALE.
6. DATE OF TOPO (LIDAR): JULY 9, 2013 AND DATE OF ROW (GROUND SURVEY CONTROL): MAY 12, 2014.
7. CONTROL OF ACCESS TO BE DETERMINED THROUGH PERMIT PROCESS.
8. PROPOSED NOISE WALLS ARE SHOWN PER TxDOT'S 2011 GUIDELINES FOR ABATEMENT OF ROADWAY TRAFFIC NOISE, APPROVED TP&P TRAFFIC DATA, AND PROPOSED DESIGN CONFIGURATION.
9. WHERE POSSIBLE, NEW AND REVISED EXIT AND ENTRANCE RAMPS ARE DESIGNED TO MEET THE DESIRABLE SPACING BETWEEN RAMPS AND DRIVEWAYS, SIDESTREETS OR CROSS STREETS. WHEN THE DESIRABLE SPACING CAN NOT BE ACHIEVED, CHANNELIZATION METHODS WILL BE IMPLEMENTED IN FINAL DESIGN.

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E. - DISTRICT ENGINEER
DESIGN SCHEMATIC
I-35E/US 67
DALLAS COUNTY
US67: FROM I-20 TO I-35E
CSJ: 0261-03-030
I-35E: FROM US 67 TO I-30
CSJ: 0442-02-088
I-35E: FROM I-30 TO REUNION BLVD
CSJ: 0196-03-269
I-35E: LOCAL ENHANCEMENTS
(LOCATION OF LOCAL ENHANCEMENTS TO BE DETERMINED)
CSJ: 0918-47-965
PROJECT LENGTH - 11.0 MILES
ROADWAY TYPE / DESIGN SPEED
GENERAL PURPOSE LANES 60 MPH
GENERAL PURPOSE/BYPASS RAMPS 40 MPH
FRONTAGE ROADS 40 MPH
CROSS STREETS 30 MPH
MANAGED LANES/MANAGED LANE RAMPS 60 MPH
LOOP RAMPS 25 MPH
I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY



PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
DATE APPROVED
DATE SUBMITTED
DATE REVISED
DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.
TABLE OF CONTENTS: ROLL
PLAN/PROFILE 1-7
PROFILES 8-10
SERIAL NO. 91108
SHEET 1 OF 10
HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Texas Department of Transportation
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TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT

JAMES K. SELMAN, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC

I-35E/US 67
DALLAS COUNTY

US67: FROM I-20 TO I-35E
CSJ: 0261-03-030
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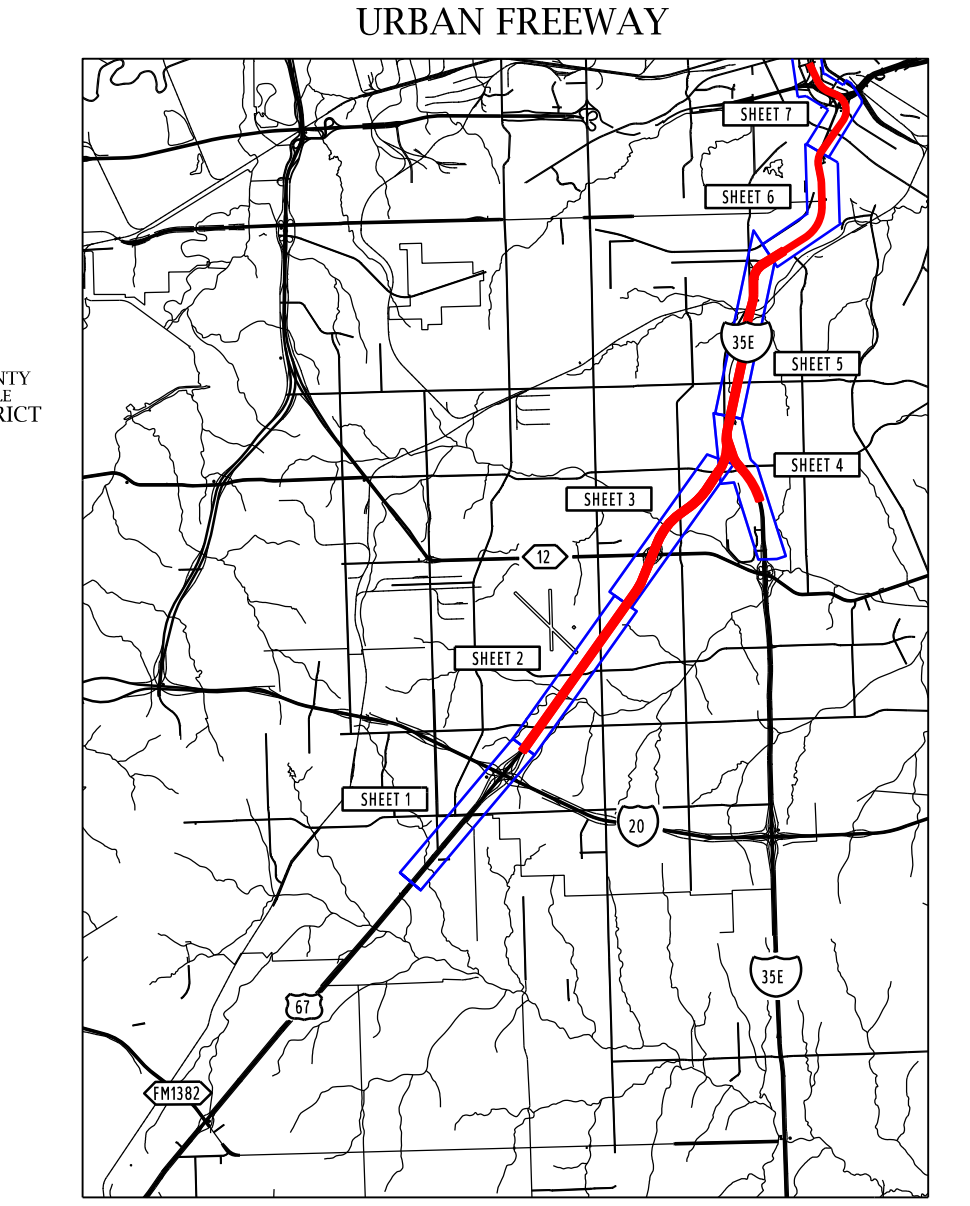
PROJECT LENGTH - 11.0 MILES

ROADWAY TYPE	DESIGN SPEED
GENERAL PURPOSE LANES	60 MPH
GENERAL PURPOSE/BYPASS RAMPS	40 MPH
FRONTAGE ROADS	40 MPH
CROSS STREETS	30 MPH
MANAGED LANES/MANAGED LANE RAMPS	60 MPH
LOOP RAMPS	25 MPH

I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY



PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

DATE APPROVED

DATE SUBMITTED

DATE REVISED

0 100 200 HORIZONTAL
0 20 40 VERTICAL

DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.

SERIAL NO. 91108

TABLE OF CONTENTS:

SHEET 2 OF 10

HNTB Corporation
The HNTB Companies
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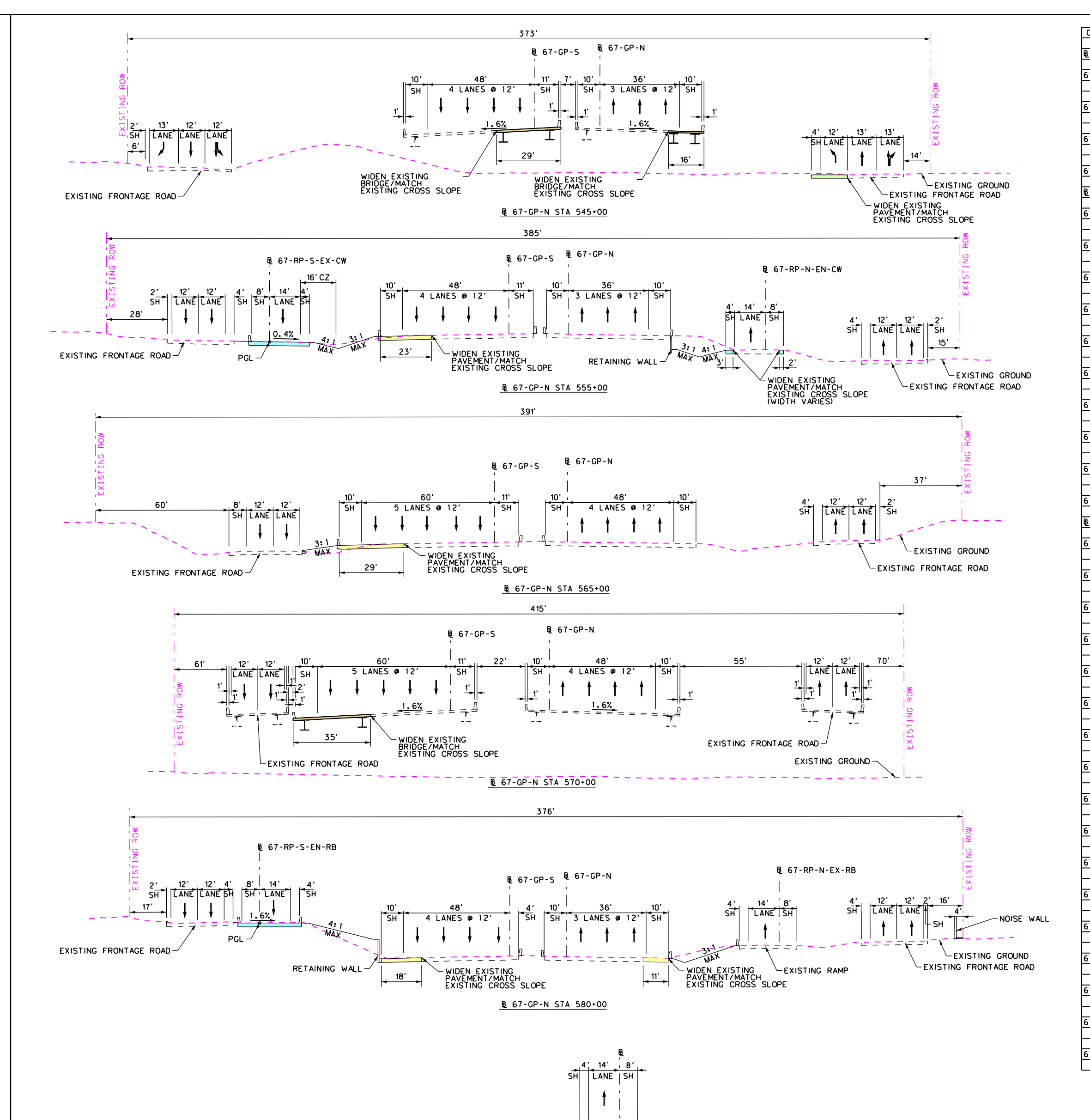
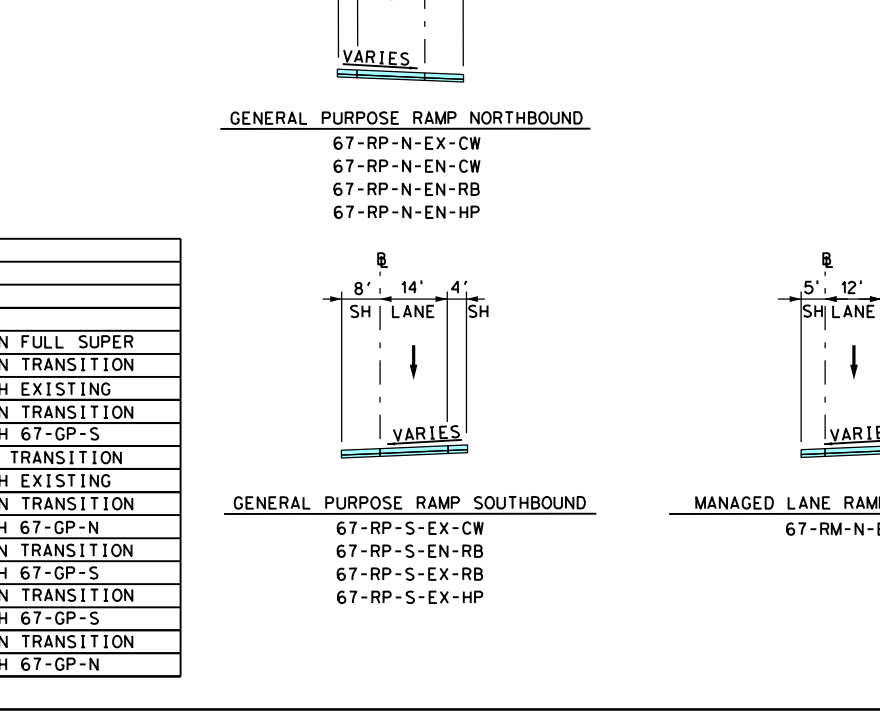
Texas Department of Transportation



SUPERELEVATION			
STATION	LT	RT	DESCRIPTION
℄ 67-RP-N-EX-CW 14+53.16	-1.56%	-1.56%	MATCH 67-GP-N
15+20.00	-1.56%	-1.56%	BEGIN TRANSITION
16+20.00	-2.42%	+2.42%	END TRANSITION/BEGIN FULL SUPER
18+75.00	-2.42%	+2.42%	END FULL SUPER/BEGIN TRANSITION
19+05.34	-1.56%	-1.56%	END TRANSITION/MATCH EXISTING
℄ 67-RP-S-EX-CW 13+74.25	-1.56%	-1.56%	MATCH EXISTING/BEGIN TRANSITION
15+00.00	-1.56%	-1.56%	END TRANSITION/MATCH 67-GP-S
℄ 67-RP-S-EN-RB 13+31.05	-1.56%	-1.56%	MATCH 67-GP-S/BEGIN TRANSITION
17+82.55	-1.56%	-1.56%	END TRANSITION/MATCH EXISTING
℄ 67-RP-N-EN-RB 15+20.99	-1.56%	-1.56%	MATCH EXISTING/BEGIN TRANSITION
20+20.21	-1.56%	-1.56%	END TRANSITION/MATCH 67-GP-N
℄ 67-RP-S-EX-RB 14+26.75	-1.56%	-1.56%	MATCH EXISTING/BEGIN TRANSITION
17+93.75	-1.56%	-1.56%	END TRANSITION/MATCH 67-GP-S
℄ 67-RP-S-EX-HP 14+08.52	-1.56%	-1.56%	MATCH EXISTING/BEGIN TRANSITION
18+16.02	-1.56%	-1.56%	END TRANSITION/MATCH 67-GP-S
℄ 67-RP-N-EN-HP 14+52.45	-1.56%	-1.56%	MATCH EXISTING/BEGIN TRANSITION
18+52.36	-1.56%	-1.56%	END TRANSITION/MATCH 67-GP-N



CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
℄ 67-ML (DESIGN SPEED: 60 MPH)							
	P.C. 597+05.05	6932886.9234	2473517.0015	N 36°15'09.15" E			
67-ML-01	P.I. 599+09.72	6933051.9703	2473638.0302	2°06'45.53" RT	409.29	204.67	11100.00
	P.R.C. 601+14.34	6933212.4433	2473765.0609	N 38°21'54.68" E			
	P.R.C. 601+14.34	6933212.4433	2473765.0609	N 38°21'54.68" E			
67-ML-02	P.I. 603+26.32	6933378.6557	2473896.6348	2°11'17.48" LT	423.92	211.99	11100.00
	P.T. 605+38.26	6933549.7706	2474021.7666	N 36°10'37.20" E			
	P.C. 611+99.10	6934083.2004	2474411.8494	N 36°10'37.20" E			
67-ML-03	P.I. 613+08.51	6934171.5161	2474476.4323	0°53'16.92" RT	218.82	109.41	14118.00
	P.R.C. 614+17.92	6934258.8203	2474542.3762	N 37°03'54.12" E			
	P.R.C. 614+17.92	6934258.8203	2474542.3762	N 37°03'54.12" E			
67-ML-04	P.I. 615+73.70	6934343.2271	2474606.1317	0°51'38.73" LT	211.55	105.78	14082.00
	P.T. 616+29.43	6934428.5822	2474668.6119	N 36°12'15.39" E			
℄ 67-GP-N (DESIGN SPEED: 60 MPH)							
	P.C. 521+36.81	6926782.6852	2469035.2886	N 40°51'53.80" E			
67-GP-N-01	P.I. 525+92.80	6927127.5301	2469333.6335	4°42'17.30" LT	911.47	455.99	11100.00
	P.T. 530+48.28	6927495.6839	2469602.6882	N 36°09'36.50" E			
	P.C. 535+39.07	6927891.9306	2469892.2738	N 36°09'36.50" E			
67-GP-N-02	P.I. 537+04.60	6928025.5810	2469989.9484	2°14'40.54" RT	331.03	165.54	8450.00
	P.R.C. 538+70.10	6928155.3034	2470092.7826	N 38°24'17.04" E			
	P.R.C. 538+70.10	6928155.3034	2470092.7826	N 38°24'17.04" E			
67-GP-N-03	P.I. 540+87.55	6928325.7080	2470227.8665	2°14'40.54" LT	434.85	217.45	11100.00
	P.T. 543+04.95	6928501.2725	2470356.1728	N 36°09'36.50" E			
	P.C. 546+70.24	6928796.1990	2470571.7115	N 36°09'36.50" E			
67-GP-N-04	P.I. 548+72.67	6928959.6365	2470691.1551	2°05'22.51" LT	404.82	202.43	11100.00
	P.R.C. 550+75.06	6929127.3204	2470804.5600	N 34°04'13.99" E			
	P.R.C. 550+75.06	6929127.3204	2470804.5600	N 34°04'13.99" E			
67-GP-N-05	P.I. 552+29.16	6929254.9717	2470890.8908	2°05'22.51" RT	308.17	154.10	8450.00
	P.T. 553+83.23	6929379.3904	2470981.8186	N 36°09'36.50" E			
	P.C. 589+75.15	6932279.3983	2473101.2068	N 36°09'36.50" E			
67-GP-N-06	P.I. 592+27.90	6932483.4685	2473250.3458	3°25'36.03" RT	505.37	252.76	8450.00
	P.R.C. 594+80.51	6932678.2597	2473411.4156	N 39°35'12.53" E			
	P.R.C. 594+80.51	6932678.2597	2473411.4156	N 39°35'12.53" E			
67-GP-N-07	P.I. 600+83.05	6933142.6125	2473795.3816	6°12'51.31" LT	1203.90	602.54	11100.00
	P.R.C. 606+84.41	6933645.7998	2474126.8269	N 33°22'21.22" E			
	P.R.C. 606+84.41	6933645.7998	2474126.8269	N 33°22'21.22" E			
67-GP-N-08	P.I. 608+91.25	6933818.5351	2474240.6062	2°48'15.98" RT	413.60	206.84	8450.00
	P.T. 610+98.01	6933985.4967	2474362.7007	N 36°10'37.20" E			
	P.C. 612+05.89	6934072.5753	2474426.3790	N 36°10'37.20" E			
67-GP-N-09	P.I. 613+15.16	6934160.7784	2474490.8795	0°53'16.92" RT	218.54	109.27	14100.00
	P.R.C. 614+24.42	6934247.9713	2474556.7394	N 37°03'54.12" E			
	P.R.C. 614+24.42	6934247.9713	2474556.7393	N 37°03'54.12" E			
67-GP-N-10	P.I. 615+30.34	6934332.4860	2474620.5763	0°51'38.73" LT	211.83	105.91	14100.00
	P.T. 616+36.25	6934417.9502	2474683.1364	N 36°12'15.39" E			
℄ 67-GP-S (DESIGN SPEED: 60 MPH)							
	P.C. 524+75.28	6927070.4748	2469223.6565	N 40°55'57.38" E			
67-GP-S-01	P.I. 528+27.36	6927336.4673	2469454.3315	4°46'18.82" LT	703.76	352.08	8450.00
	P.T. 531+79.04	6927620.7274	2469662.0983	N 36°09'38.56" E			
	P.C. 536+47.99	6927999.3430	2469938.7855	N 36°09'38.56" E			
67-GP-S-02	P.I. 538+34.20	6928149.6786	2470048.6564	1°55'19.64" RT	372.38	186.21	11100.00
	P.R.C. 540+20.37	6928296.2445	2470163.5078	N 38°04'58.20" E			
	P.R.C. 540+20.37	6928296.2445	2470163.5078	N 38°04'58.20" E			
67-GP-S-03	P.I. 541+62.12	6928407.8195	2470250.9398	1°55'19.64" LT	283.48	141.75	8450.00
	P.T. 543+03.84	6928522.2642	2470334.5802	N 36°09'38.56" E			
	P.C. 546+60.72	6928810.3949	2470545.1567	N 36°09'38.56" E			
67-GP-S-04	P.I. 548+02.47	6928924.8396	2470628.7972	1°55'19.64" LT	283.48	141.75	8450.00
	P.R.C. 549+44.20	6929042.0253	2470708.5519	N 34°14'18.92" E			
	P.R.C. 549+44.20	6929042.0253	2470708.5519	N 34°14'18.92" E			
67-GP-S-05	P.I. 551+30.40	6929195.9616	2470813.3185	1°55'19.64" RT	372.38	186.21	11100.00
	P.T. 553+16.57	6929346.2973	2470923.1894	N 36°09'38.56" E			
	P.C. 561+30.67	6930003.5735	2471403.5511	N 36°09'38.56" E			
67-GP-S-06	P.I. 562+90.27	6930132.4252	2471497.7207	1°38'45.59" LT	319.17	159.60	11110.00
	P.T. 564+49.84	6930263.9287	2471588.1502	N 34°30'52.97" E			
	P.C. 567+59.77	6930519.3025	2471763.7604	N 34°30'52.97" E			
67-GP-S-07	P.I. 569+30.32	6930659.8346	2471860.3986	1°45'32.36" RT	341.08	170.55	11110.00
	P.T. 571+00.85	6930797.3342	2471961.3049	N 36°16'25.33" E			
	P.C. 571+86.89	6930866.7031	2472012.2125	N 36°16'25.33" E			
67-GP-S-08	P.I. 574+63.02	6931089.3217	2472175.5849	2°51'00.33" RT	552.15	276.13	11100.00
	P.R.C. 577+39.04	6931303.5416	2472349.8244	N 39°07'25.66" E			
	P.R.C. 577+39.04	6931303.5416	2472349.8244	N 39°07'25.66" E			
67-GP-S-09	P.I. 580+26.18	6931526.3011	2472531.0098	2°57'49.16" LT	574.15	287.14	11100.00
	P.T. 583+13.20	6931758.1303	2472700.4356	N 36°09'36.50" E			
	P.C. 588+32.42	6932177.3331	2473006.7980	N 36°09'36.50" E			
67-GP-S-10	P.I. 589+74.23	6932291.8316	2473090.4759	1°27'50.30" LT	283.62	141.82	11100.00
	P.R.C. 591+16.03	6932408.4305	2473171.2013	N 34°41'46.20" E			
	P.R.C. 591+16.03	6932408.4305	2473171.2013	N 34°41'46.20" E			
67-GP-S-11	P.I. 592+66.80	6932532.3898	2473257.0226	1°33'22.95" RT	301.52	150.77	11100.00
	P.T. 594+17.55	6932653.9724	2473346.1789	N 36°15'09.15" E			
	P.C. 598+95.26	6933046.3052	2473618.9954	N 36°15'09.15" E			
67-GP-S-12	P.I. 600+21.41	6933148.0315	2473693.5911	1°42'37.99" LT	252.27	126.15	8450.00
	P.R.C. 601+47.53	6933251.9392	2473765.1171	N 34°32'31.16" E			
	P.R.C. 601+47.53	6933251.9392	2473765.1171	N 34°32'31.16" E			
67-GP-S-13	P.I. 604+30.00	6933484.6098	2473925.2783	2°54'55.55" RT	564.81	282.47	11100.00
	P.R.C. 607+12.35	6933708.8331	2474097.0663	N 37°27'26.71" E			
	P.R.C. 607+12.35	6933708.8331	2474097.0663	N 37°27'26.71" E			
67-GP-S-14	P.I. 608+06.77	6933783.7861	2474154.4913	1°16'49.51" LT	188.84	94.42	8450.00
	P.T. 609+01.18	6933860.0035	2474210.2271	N 36°10'37.20" E			
	P.C. 613+14.53	6934193.6536	2474454.2164	N 36°10'37.20" E			
67-GP-S-15	P.I. 614+32.71	6934289.0529	2474523.9793	1°13'12.19" RT	236.36	118.19	11100.00
	P.R.C. 615+50.89	6934382.9452	2474595.7578	N 37°23'49.39" E			
	P.R.C. 615+50.89	6934382.9452	2474595.7578	N 37°23'49.39" E			
67-GP-S-16	P.I. 616+38.85	6934452.8238	2474649.1783	1°11'34.00" LT	175.91	87.96	8450.00
	P.T. 617+26.80	6934523.7992	2474701.1326	N 36°12'15.39" E			
	P.C. 638+32.03	6936222.5441	2475944.6206	N 36°12'15.39" E			
67-GP-S-17	P.I. 639+89.53	6936349.6289	2476037.6471	1°37'32.86" LT	314.97	157.49	11100.00
	P.R.C. 641+47.00	6936479.3018	2476127.0306	N 34°34'42.53" E			

CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
℄ 67-RP-N-EX-CW (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6927480.2901	2469636.0272	N 36°09'36.50" E			
67-RP-N-EX-CW-01	P.I. 12+28.17	6927664.5077	2469770.6574	8°41'55.29" RT	455.46	228.17	3000.00
	P.T. 14+55.46	6927826.2450	2469931.5997	N 44°51'31.79" E			
	P.C. 16+04.13	6927931.6258	2470036.4625	N 44°51'31.79" E			
67-RP-N-EX-CW-02	P.I. 17+54.86	6928038.4706	2470142.7821	5°45'09.51" LT	301.21	150.73	3000.00
	P.R.C. 19+05.34	6928155.4342	2470237.8567	N 39°06'22.28" E			
	P.R.C. 19+05.34	6928155.4342	2470237.8567	N 39°06'22.28" E			
67-RP-N-EX-CW-03	P.I. 19+70.46	6928205.9711	2470278.9361	4°39'42.43" RT	130.18	65.13	1600.00
	P.R.C. 20+35.52	6928253.0022	2470323.9868	N 43°46'04.71" E			
	P.R.C. 20+35.52	6928253.0022	2470323.9868	N 43°46'04.71" E			
67-RP-N-EX-CW-04	P.I. 21+41.77	6928329.7344	2470397.4881	7°35'55.83" LT	212.20	106.26	1600.00
	P.T. 22+47.72	6928415.5123	2470460.1971	N 36°10'08.88" E			
℄ 67-RP-N-EN-CW (DESIGN SPEED: 40 MPH)							
	P.C. 10+55.30	6928996.3936	2470884.5582	N 36°23'46.35" E			
67-RP-N-EN-CW-01	P.I. 11+11.58	6929041.6946	2470917.9524	8°02'53.36" LT	112.37	56.28	800.00
	P.T. 11+67.68	6929091.2249	2470944.6753	N 28°20'52.99" E			
	P.C. 14+71.39	6929358.5195	2471088.8879	N 28°20'52.99" E			
67-RP-N-EN-CW-02	P.I. 15+98.16	6929470.0798	2471149.0777	3°32'30.31" RT	253.44	126.76	4100.00
	P.T. 17+24.84	6929577.7088	2471216.0443	N 31°53'23.30" E			
	P.C. 18+06.02	6929646.6407	2471258.9336	N 31°53'23.30" E			
67-RP-N-EN-CW-03	P.I. 20+48.36	6929852.4025	2471386.9583	4°16'13.20" RT	484.45	242.34	6500.00
	P.T. 22+90.48	6930048.0601	2471529.9490	N 36°09'36.50" E			
℄ 67-RP-S-EX-CW (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6929236.7608	2470666.7892	N 36°11'42.15" E			
67-RP-S-EX-CW-01	P.I. 11+50.47	6929358.1927	2470755.6478	7°10'30.28" RT	300.55	150.47	2400.00
	P.T. 13+00.55	6929467.5751	2470858.9776	N 43°22'12.43" E			
	P.C. 15+01.91	6929613.9478	2470997.2508	N 43°22'12.43" E			
67-RP-S-EX-CW-02	P.I. 18+22.83	6929847.2380	2471217.6321	7°39'00.40" LT	640.89	320.92	4800.00
	P.T. 21+42.80	6930107.7897	2471404.9955	N 35°43'12.03" E			
℄ 67-RP-S-EN-RB (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6930921.4264	2471977.9488	N 36°16'25.33" E			
67-RP-S-EN-RB-01	P.I. 11+10.87	6931010.8069	2472043.5422	3°31'40.35" LT	221.66	110.87	3600.00
	P.R.C. 12+21.66	6931104.0544	2472103.5114	N 32°44'44.98" E			
	P.R.C. 12+21.66	6931104.0544	2472103.5114	N 32°44'44.98" E			
67-RP-S-EN-RB-02	P.I. 13+88.72	6931244.5643	2472193.8759	3°39'32.74" RT	334.00	167.06	5230.00
	P.T. 15+55.67	6931379.0207	2472293.0236	N 36°24'17.72" E			
	P.C. 15+95.40	6931410.9969	2472316.6027	N 36°24'17.72" E			
67-RP-S-EN-RB-03	P.I. 17+25.36	6931515.5950	2472393.7330	9°17'14.57" LT	259.35	129.96	1200.00
	P.R.C. 18+54.75	6931631.2698	2472452.9715	N 27°07'03.15" E			
	P.R.C. 18+54.75	6931631.2698	2472452.9715	N 27°07'03.15" E			
67-RP-S-EN-RB-04	P.I. 19+82.28	6931744.7772	2472511.1000	9°06'50.76" RT	254.51	127.53	1200.00
	P.T. 21+09.26	6931847.6439	2472586.4743	N 36°13'53.91" E			
℄ 67-RP-S-EX-RB (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6932809.6312	2473291.5954	N 36°16'31.27" E			
67-RP-S-EX-RB-01	P.I. 11+29.00	6932913.6274	2473367.9194	6°09'11.86" RT	257.75	129.00	2400.00
	P.R.C. 12+57.75	6933008.8434	2473454.9509	N 42°25'43.13" E			
	P.R.C. 12+57.75	6933008.8434	2473454.9509	N 42°25'43.13" E			
67-RP-S-EX-RB-02	P.I. 13+40.77	6933070.1260	2473510.9658	2°38'32.33" LT	166.02	83.03	3600.00
	P.T. 14+23.77	6933133.9257	2473564.0959	N 39°47'10.80" E			
	P.C. 21+77.41	6933713.0508	2474046.3707	N 39°47'10.80" E			
67-RP-S-EX-RB-03	P.I. 23+28.65	6933829.2671	2474143.1516	3°36'33.60" LT	302.37	151.24	4800.00
	P.T. 24+79.79	6933951.3455	2474232.4242	N 36°10'37.20" E			
℄ 67-RM-N-EN-RB (DESIGN SPEED: 60 MPH)							
	P.C. 10+00.00	6932487.4447	2473273.4507	N 37°59'27.98" E			
67-RM-N-EN-RB-01	P.I. 13+07.28	6932729.6138	2473462.5934	3°09'25.91" LT	614.40	307.28	11150.00
	P.R.C. 16+14.40	6932981.8326	2473638.1114	N 34°50'02.06" E			
	P.R.C. 16+14.40	6932981.8326	2473638.1114	N 34°50'02.06" E			
67-RM-N-EN-RB-02	P.I. 17+31.47	6933077.9182	2473704.9771	1°35'14.60" RT	234.11	117.06	8450.00
	P.R.C. 18+48.51	6933172.1147	2473774.4787	N 36°25'16.66" E			
	P.R.C. 18+48.51	6933172.1147	2473774.4787	N 36°25'16.66" E			
67-RM-N-EN-RB-03	P.I. 21+43.42	6933409.4197	2473949.5713	3°02'55.44" LT	589.68	294.91	11082.00
	P.R.C. 24+38.19	6933655.7013	2474111.7949	N 33°22'21.22" E			
	P.R.C. 24+38.19	6933655.7013	2474111.7949	N 33°22'21.22" E			
67-RM-N-EN-RB-04	P.I. 26+45.47	6933828.8045	2474225.8166	2°48'15.98" RT	414.48	207.28	8468.00
	P.T. 28+52.67	6933996.1217	2474348.1711	N 36°10'37.20" E			
℄ 67-RP-N-EN-RB (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6932373.6420	2473365.4013	N 36°19'04.28" E			
67-RP-N-EN-RB-01	P.I. 11+82.59	6932520.7630	2473473.5431	5°48'25.40" LT	364.87	182.59	3600.00
	P.R.C. 13+64.87	6932678.0708	2473566.2443	N 30°30'38.88" E			
	P.R.C. 13+64.87	6932678.0708	2473566.2443	N 30°30'38.88" E			
67-RP-N-EN-RB-02	P.I. 14+42.94	6932745.3345	2473605.8828	2°29'05.27" RT	156.12	78.07	3600.00
	P.T. 15+20.99	6932810.8166	2473648.4002	N 32°59'44.15" E			
	P.C. 20+17.87	6933227.5527	2473918.9863	N 32°59'44.15" E			
67-RP-N-EN-RB-03	P.I. 21+10.24	6933305.0272	2473969.2903	2°01'25.41" LT	184.73	92.37	5230.00
	P.R.C. 22+02.60	6933384.2297	2474016.8271	N 30°58'18.74" E			
	P.R.C. 22+02.60	6933384.2297	2474016.8271	N 30°58'18.74" E			
67-RP-N-EN-RB-04	P.I. 23+14.90	6933480.5194	2474074.6195	2°40'49.86" RT	224.56	112.30	4800.00
	P.T. 24+27.16	6933574.0010	2474136.8517	N 33°39'08.60" E			
℄ 67-RP-S-EX-HP (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6935012.4446	2474895.7762	N 35°49'59.40" E			
67-RP-S-EX-HP-01	P.I. 11+14.45	6935105.2324	2474962.7785	5°27'37.67" RT	228.73	114.45	2400.00
	P.T. 12+28.73	6935191.2232	2475038.3064	N 41°17'37.07" E			
	P.C. 19+31.32	6935719.1056	2475501.9584	N 41°17'37.07" E			
67-RP-S-EX-HP-02	P.I. 20+64.64	6935819.2789	2475589.9431	5°05'21.68" LT	266.48	133.33	3000.00
	P.T. 21+97.80	6935926.8624	2475668.6946	N 36°12'15.39" E			
℄ 67-RP-N-EN-HP (DESIGN SPEED: 40 MPH)							
	P.C. 10+00.00	6934961.6780	2475212.5939	N 36°04'54.06" E			
67-RP-N-EN-HP-01	P.I. 11+23.57	6935061.5476	2475285.3712	7°04'16.56" LT	246.83	123.57	2000.00
	P.R.C. 12+46.83	6935169.6168	2475345.3006	N 29°00'37.50" E			
	P.R.C. 12+46.83	6935169.6168	2475345.3006	N 29°00'37.50" E			
67-RP-N-EN-HP-02	P.I. 13+49.73	6935259.6029	2475395.2021	5°53'25.21" RT	205.61	102.90	2000.00
	P.T. 14+52.45	6935343.9929	2475454.0750	N 34°54'02.71" E			
	P.C. 18+25.69	6935650.1051	2475667.6278	N 34°54'02.71" E			
67-RP-N-EN-HP-03	P.I. 19+48.39	6935750.7427	2475737.8356	2°41'17.07" LT	245.37	122.71	5230.00
	P.R.C. 20+71.06	6935854.5622	2475803.2463	N 32°12'45.65" E			
	P.R.C. 20+71.06	6935854.5622	2475803.2463	N 32°12'45.65" E			
67-RP-N-EN-HP-04	P.I. 21+75.60	6935943.0126	2475858.9738	3°59'29.74" RT	209.00	104.54	3000.00
	P.T. 22+80.06	6936027.3692	2475920.7232	N 36°12'15.39" E			

LEGEND
- General Purpose Lane
- Managed Lane - Express
- Frontage Road / Cross-Streets
- Ramp / Direct Connector
- Bridge Structure
- Bridge Substructure
- Existing Storm Drain
- Proposed Storm Drain
- Bicycle / Pedestrian
- Driveway / Cul-De-Sac
- Displacement
- Zone A/AE Floodplain
- Zone X Floodplain
- Zone AE Floodway
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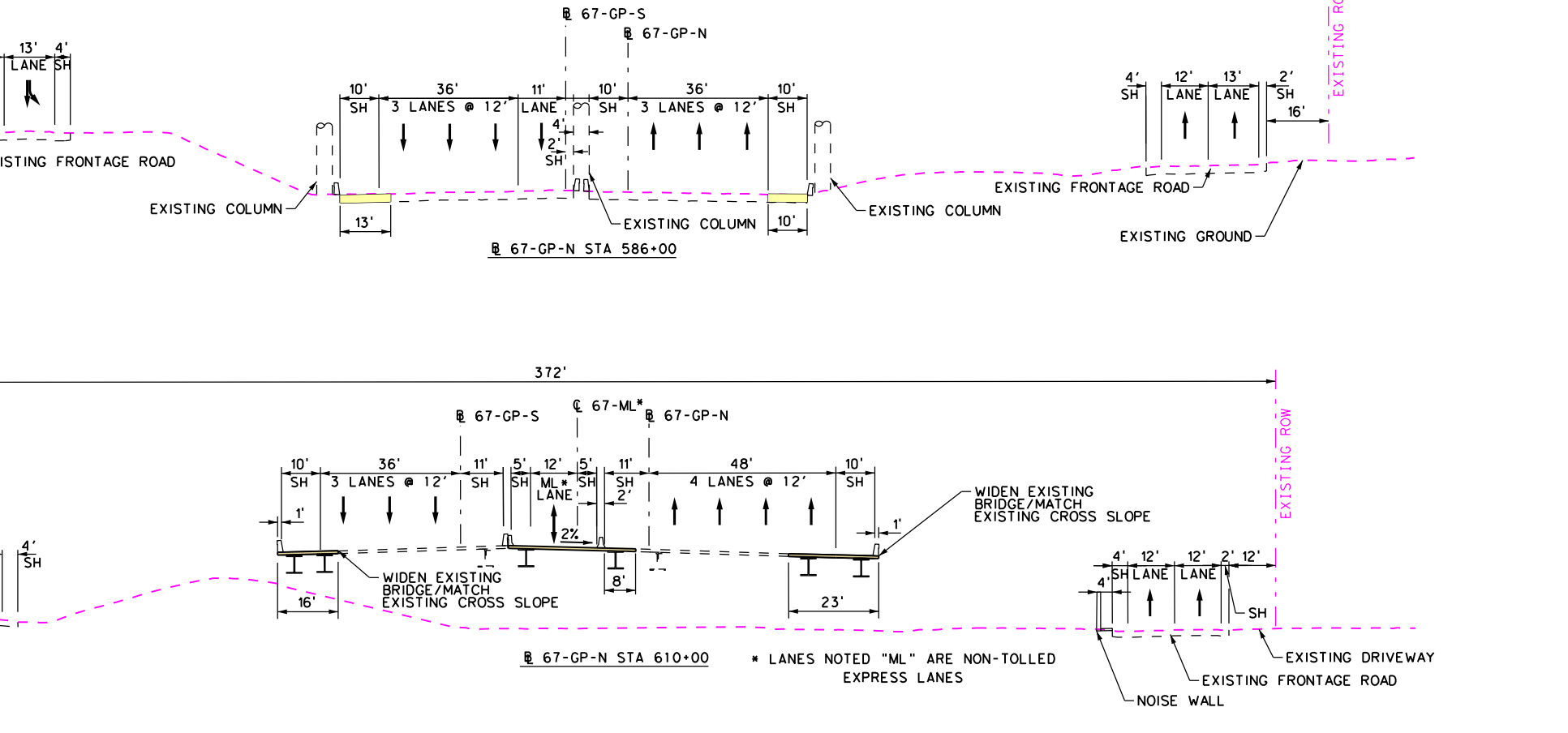
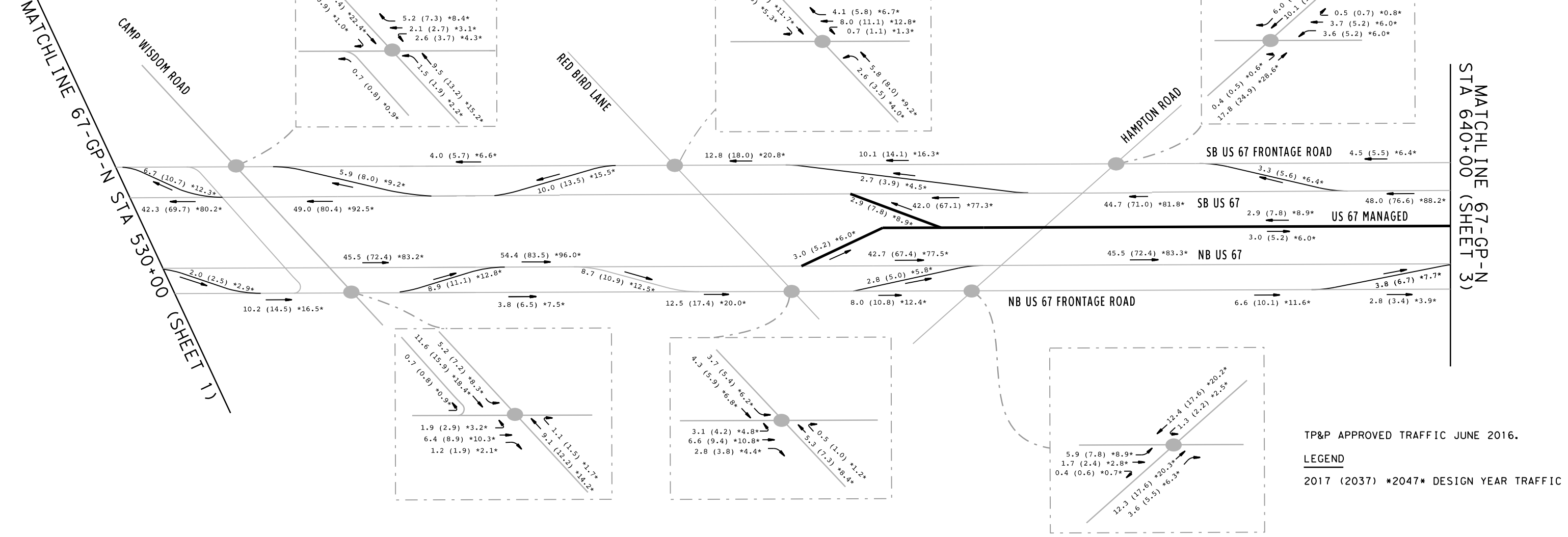
- Proposed ROW
- Proposed Centerline / Baseline
- Proposed Retaining Wall
- Noise Wall
- Noise Wall on Retaining Wall
- Horseshoe Project (11/02/15)
- Drainage Easement
- Property Line
- Removal

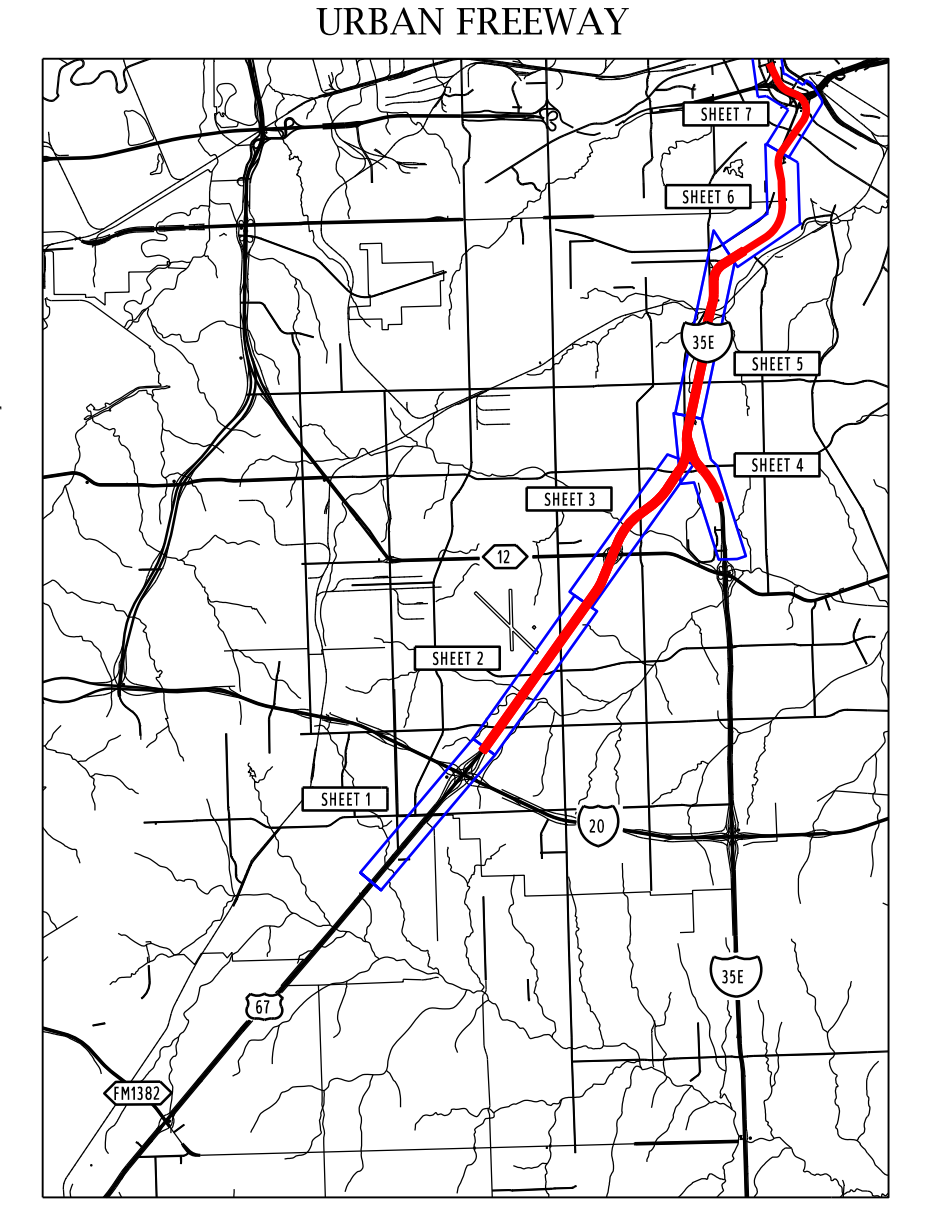




PROFILE INTENTIONALLY LEFT BLANK
NO PROPOSED GENERAL PURPOSE OR MANAGED LANE RECONSTRUCTION
PROPOSED WORK CONSISTS OF RESTRIPING AND WIDENING OF EXISTING PAVEMENT

NOTES:
1. SEE ROLL 8 FOR RAMP PROFILES.
2. SEE SEPARATE LARGE SIGN SCHEMATIC FOR SIGN DETAILS.
3. CONTINUOUS LIGHTING WILL BE PROVIDED FOR THE PROJECT. TxDOT WILL MAINTAIN AND OPERATE THE LIGHTING SYSTEM.
4. GRADE DIFFERENCES LESS THAN 4' WILL BE RETAINED WITH BARRIER.
5. CROSS SECTIONS ARE NOT TO SCALE.
6. DATE OF TOPO (LIDAR): JULY 9, 2013 AND DATE OF ROW (GROUND SURVEY CONTROL): MAY 12, 2014.
7. CONTROL OF ACCESS TO BE DETERMINED THROUGH PERMIT PROCESS.
8. PROPOSED NOISE WALLS ARE SHOWN PER TxDOT'S 2011 GUIDELINES FOR ABATEMENT OF ROADWAY TRAFFIC NOISE, APPROVED TP&P TRAFFIC DATA, AND PROPOSED DESIGN CONFIGURATION.
9. MANAGED LANES AND 35-RM-N-EN-EB ARE A PROJECTION OF NORTHBOUND CROSS SLOPE AND CONTROLLED BY THE EXISTING NORTHBOUND EDGE OF PAVEMENT.
10. WHERE POSSIBLE, NEW AND REVISED EXIT AND ENTRANCE RAMPS ARE DESIGNED TO MEET THE DESIRABLE SPACING BETWEEN RAMPS AND DRIVEWAYS, SIDESTREETS OR CROSS STREETS. WHEN THE DESIRABLE SPACING CAN NOT BE ACHIEVED, CHANNELIZATION METHODS WILL BE IMPLEMENTED IN FINAL DESIGN.

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E. - DISTRICT ENGINEER
DESIGN SCHEMATIC
I-35E/US 67
DALLAS COUNTY
US67: FROM I-20 TO I-35E
CSJ: 0261-03-030
I-35E: FROM US 67 TO I-30
CSJ: 0442-02-088
I-35E: FROM I-30 TO REUNION BLVD
CSJ: 0196-03-269
I-35E: LOCAL ENHANCEMENTS
(LOCATION OF LOCAL ENHANCEMENTS TO BE DETERMINED)
CSJ: 0918-47-965
PROJECT LENGTH - 11.0 MILES
GENERAL PURPOSE LANES 60 MPH
GENERAL PURPOSE/BYPASS RAMPS 40 MPH
FRONTAGE ROADS 40 MPH
CROSS STREETS 30 MPH
MANAGED LANES/MANAGED LANE RAMPS 60 MPH
LOOP RAMPS 25 MPH
I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY



PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
DATE APPROVED
DATE SUBMITTED
DATE REVISED
DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.
SERIAL NO. 91108
TABLE OF CONTENTS:
ROLL
PLAN/PROFILE 1-7
PROFILES 8-10
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HNTB Corporation
The HNTB Companies
Engineers Architects Planners
Texas Department of Transportation
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TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT

JAMES K. SELMAN, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC

I-35E/US 67
DALLAS COUNTY

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ROADWAY TYPE	DESIGN SPEED
GENERAL PURPOSE LANES	60 MPH
GENERAL PURPOSE/BYPASS RAMPS	40 MPH
FRONTAGE ROADS	40 MPH
CROSS STREETS	30 MPH
MANAGED LANES/MANAGED LANE RAMPS	60 MPH
LOOP RAMPS	25 MPH

I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY

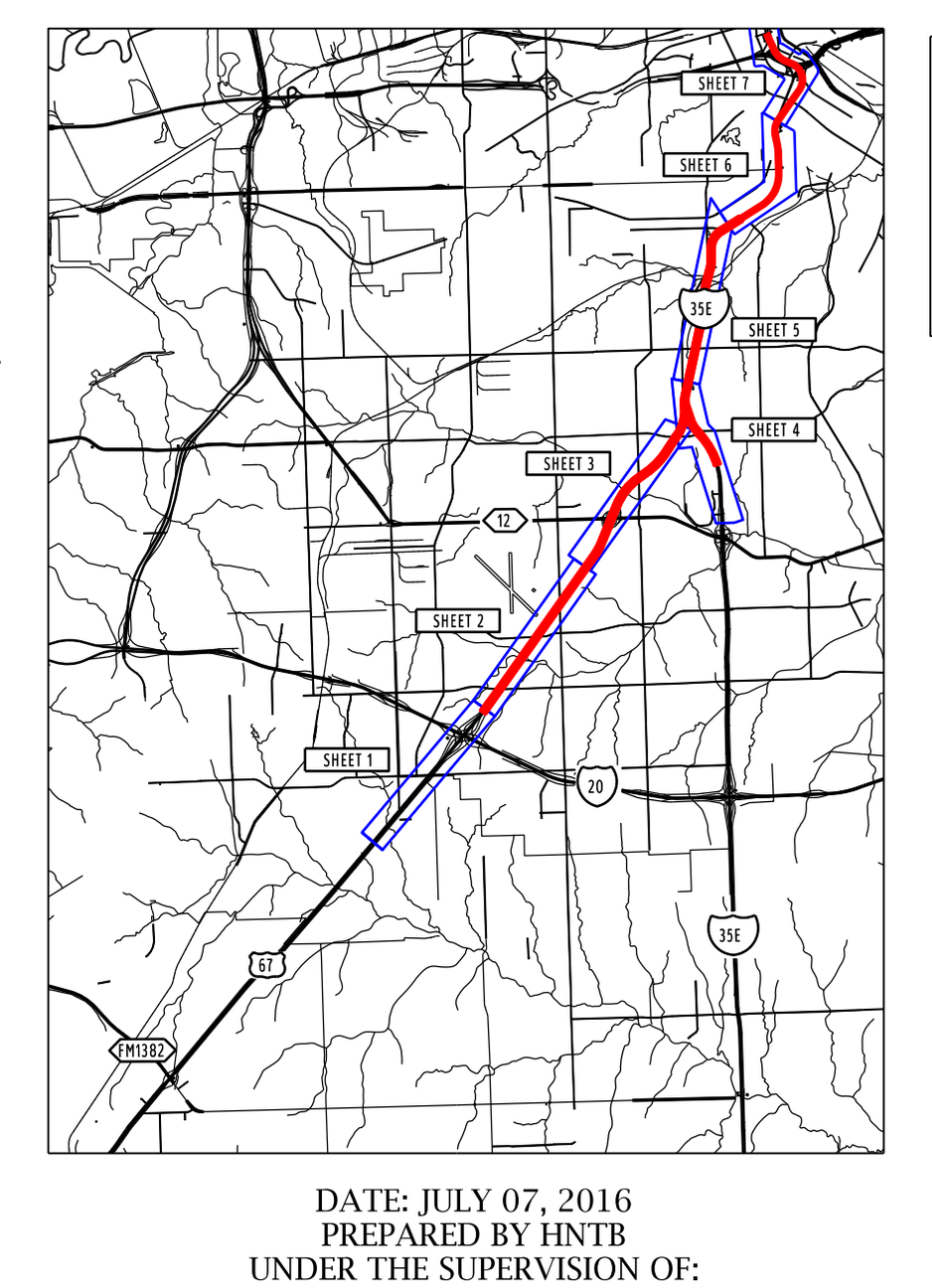

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TABLE OF CONTENTS:

SHEET 3 OF 10

HNTB Corporation
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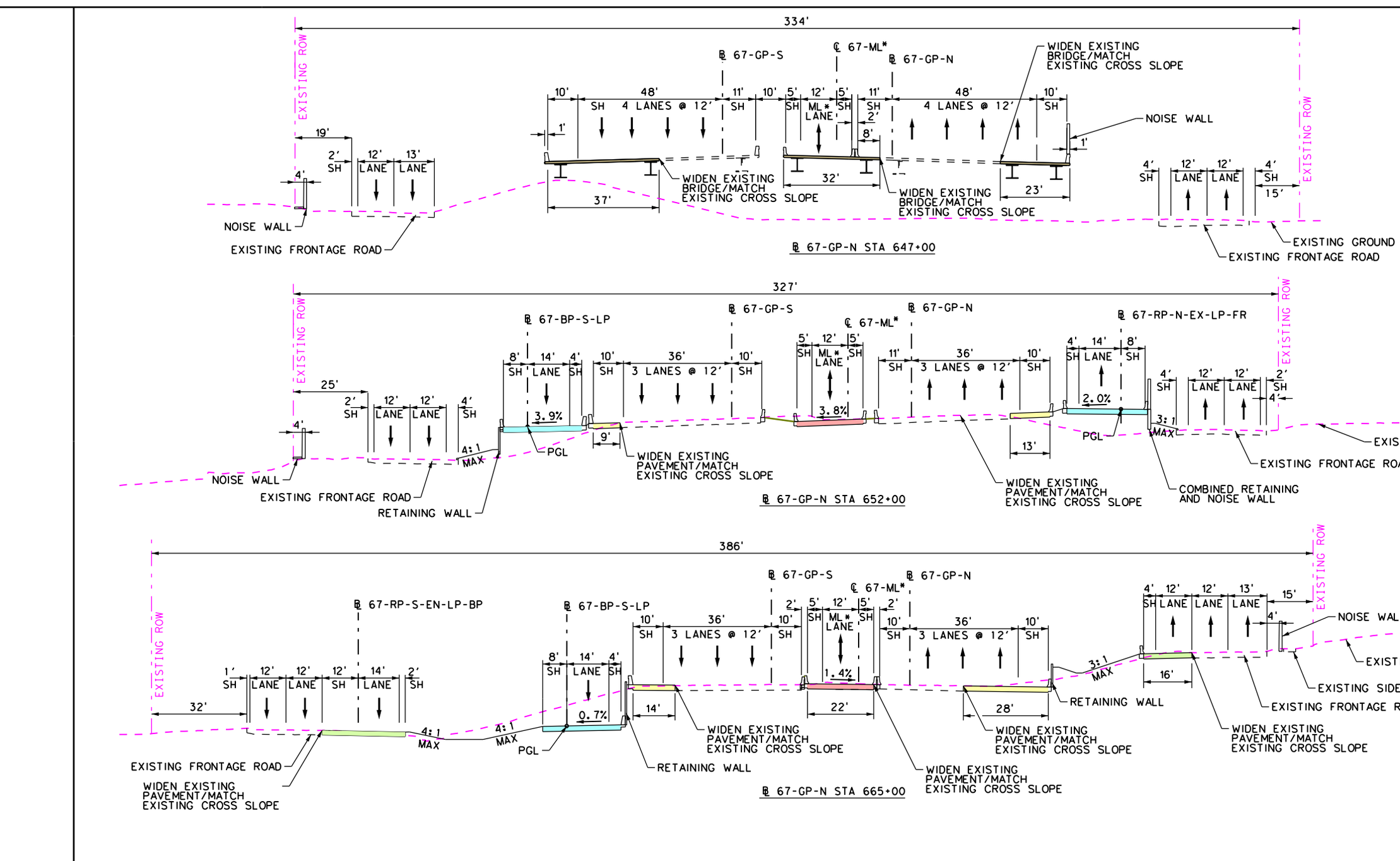
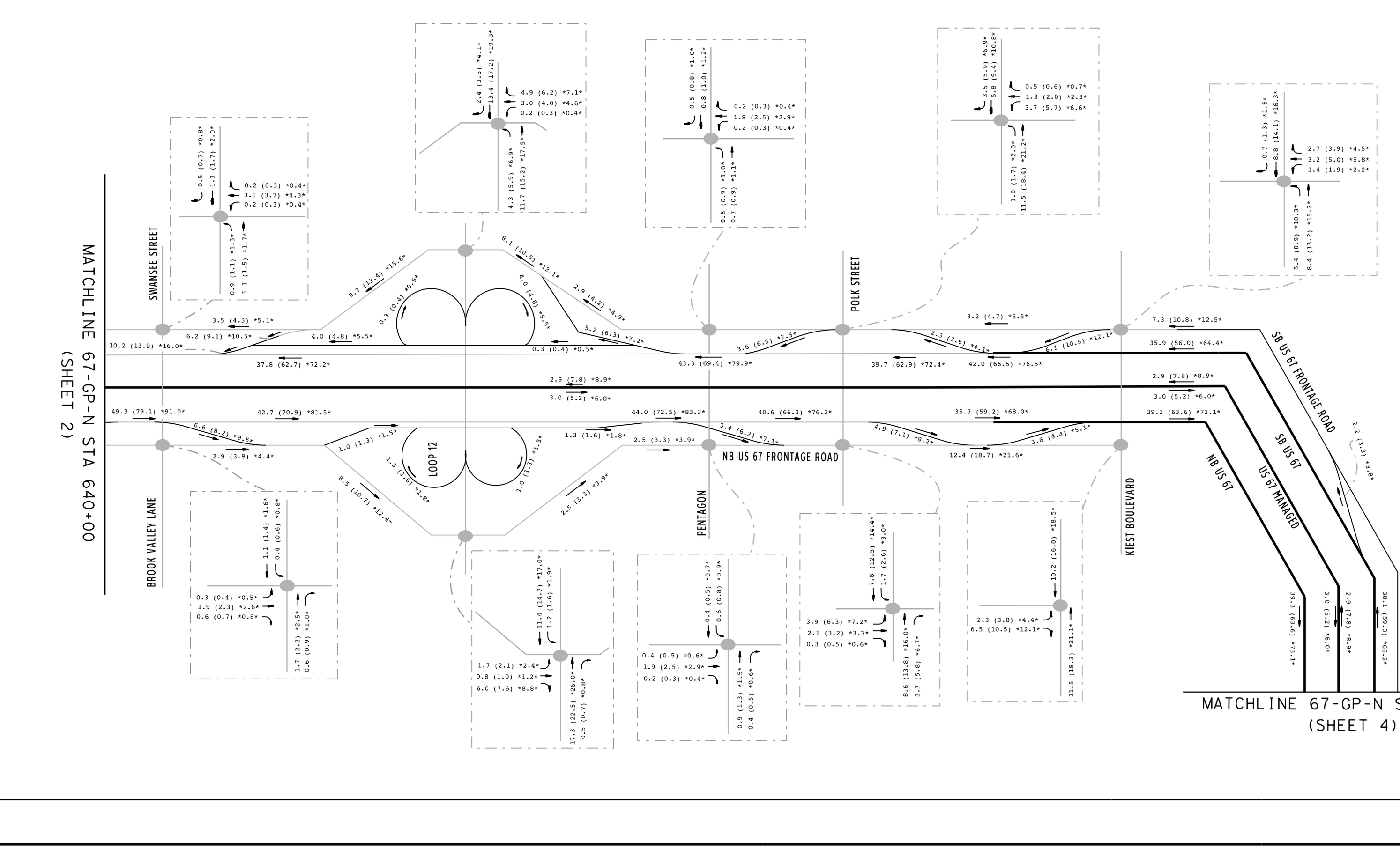
Texas Department of Transportation





TP&P APPROVED TRAFFIC JUNE 2016.

LEGEND

2017 (2037) *2047* DESIGN YEAR TRAFFIC VOLUMES (X1000)

SUPERELEVATION STATION	LT	RT	DESCRIPTION
[illegible]	[illegible]	[illegible]	[illegible]

CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LEGEND

- General Purpose Lane
- Managed Lane - Express
- Frontage Road / Cross-Streets
- Ramp / Direct Connector
- Bridge Structure
- Bridge Substructure
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- Proposed Storm Drain
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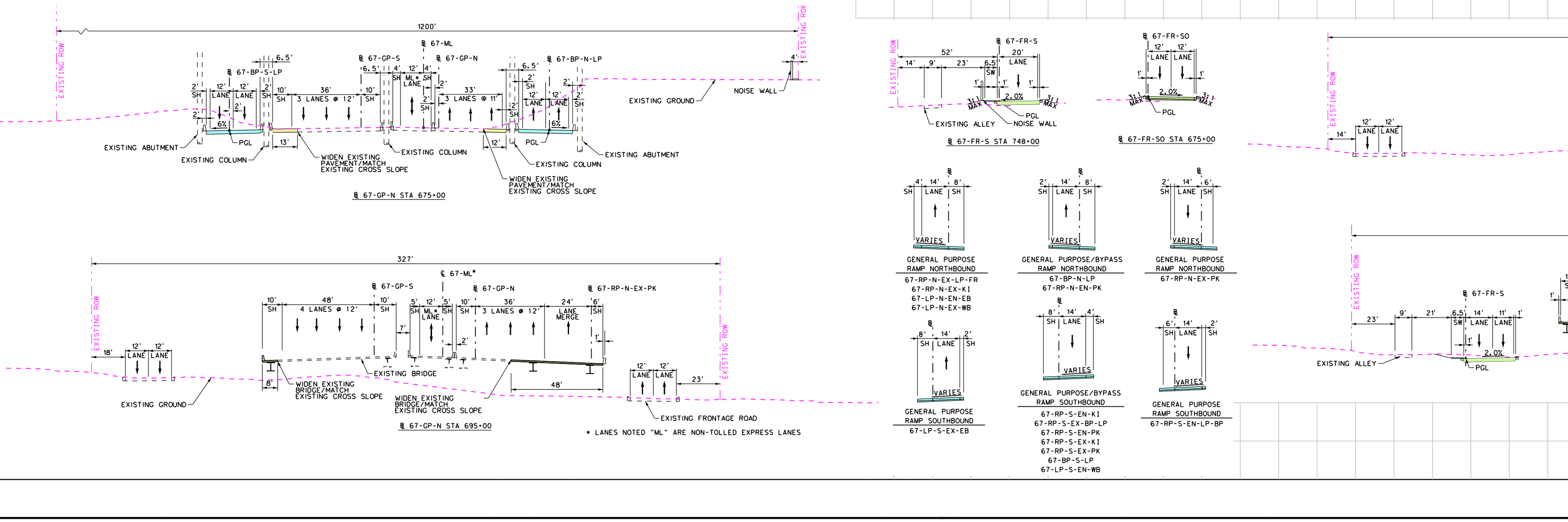

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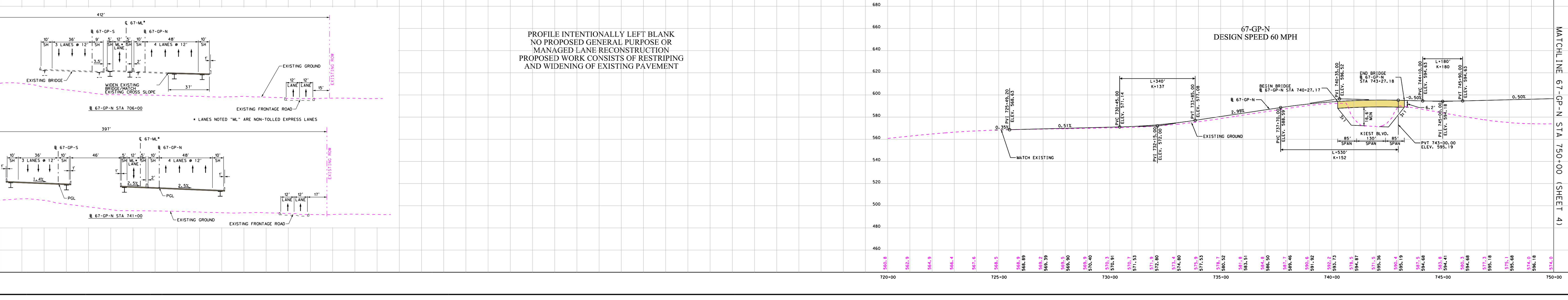
PROPOSED WORK CONSISTS OF RESTRIPING AND WIDENING OF EXISTING PAVEMENT



NOTES:

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I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY
PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.
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DATE: JULY 07, 2016
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RUSSELL K. OZMER, P.E.
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SHEET 3 OF 10
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The HNTB Companies
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Texas Department of Transportation
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TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT

JAMES K. SELMAN, P.E. - DISTRICT ENGINEER

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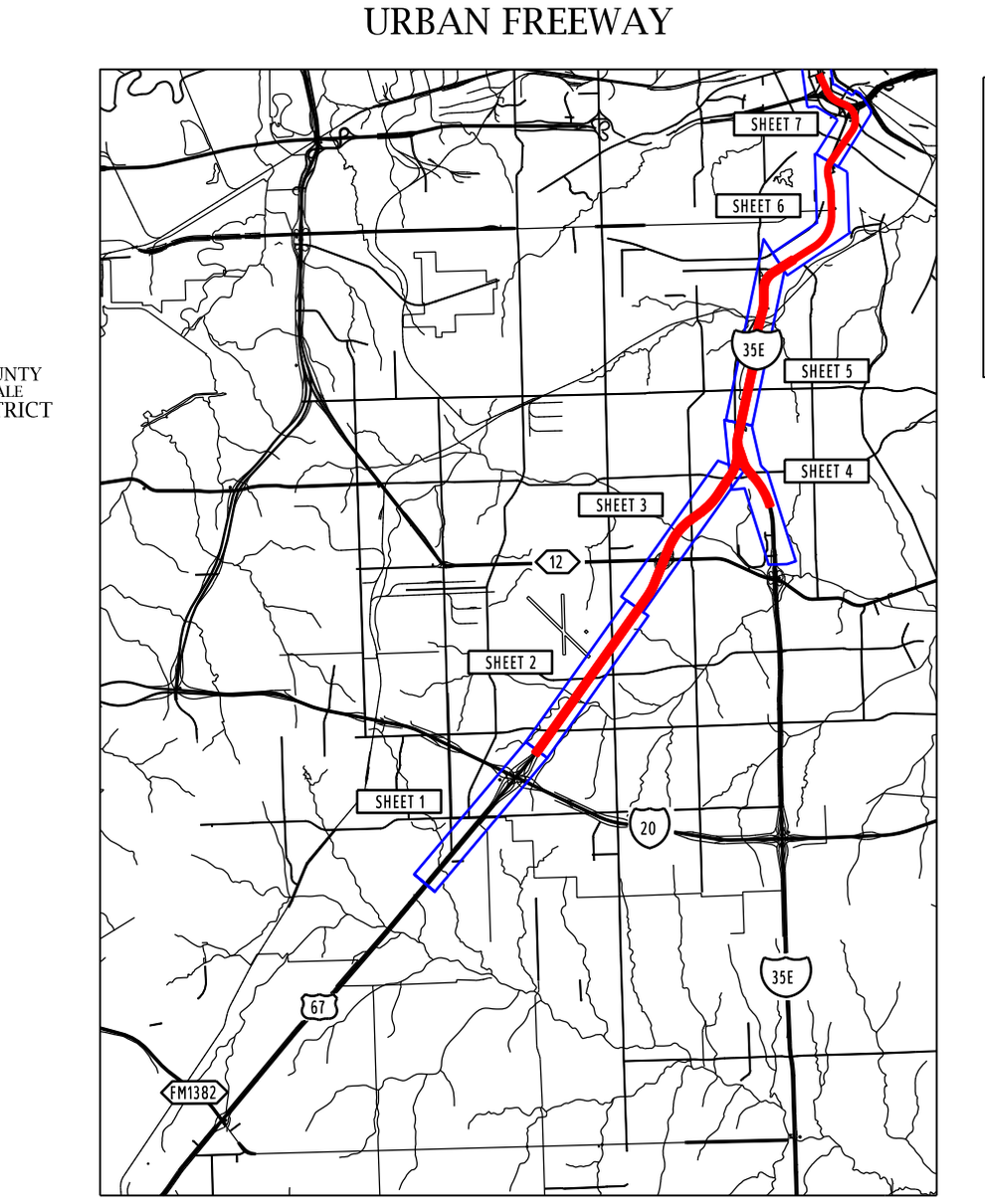
CROSS STREETS	30 MPH
MANAGED LANES/MANAGED LANE RAMPS	60 MPH
LOOP RAMPS	25 MPH

I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY



PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.

DALLAS COUNTY NOT TO SCALE DALLAS DISTRICT

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

DATE APPROVED

DATE SUBMITTED

DATE REVISED

HORIZONTAL

VERTICAL

DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.

SERIAL NO. 91108

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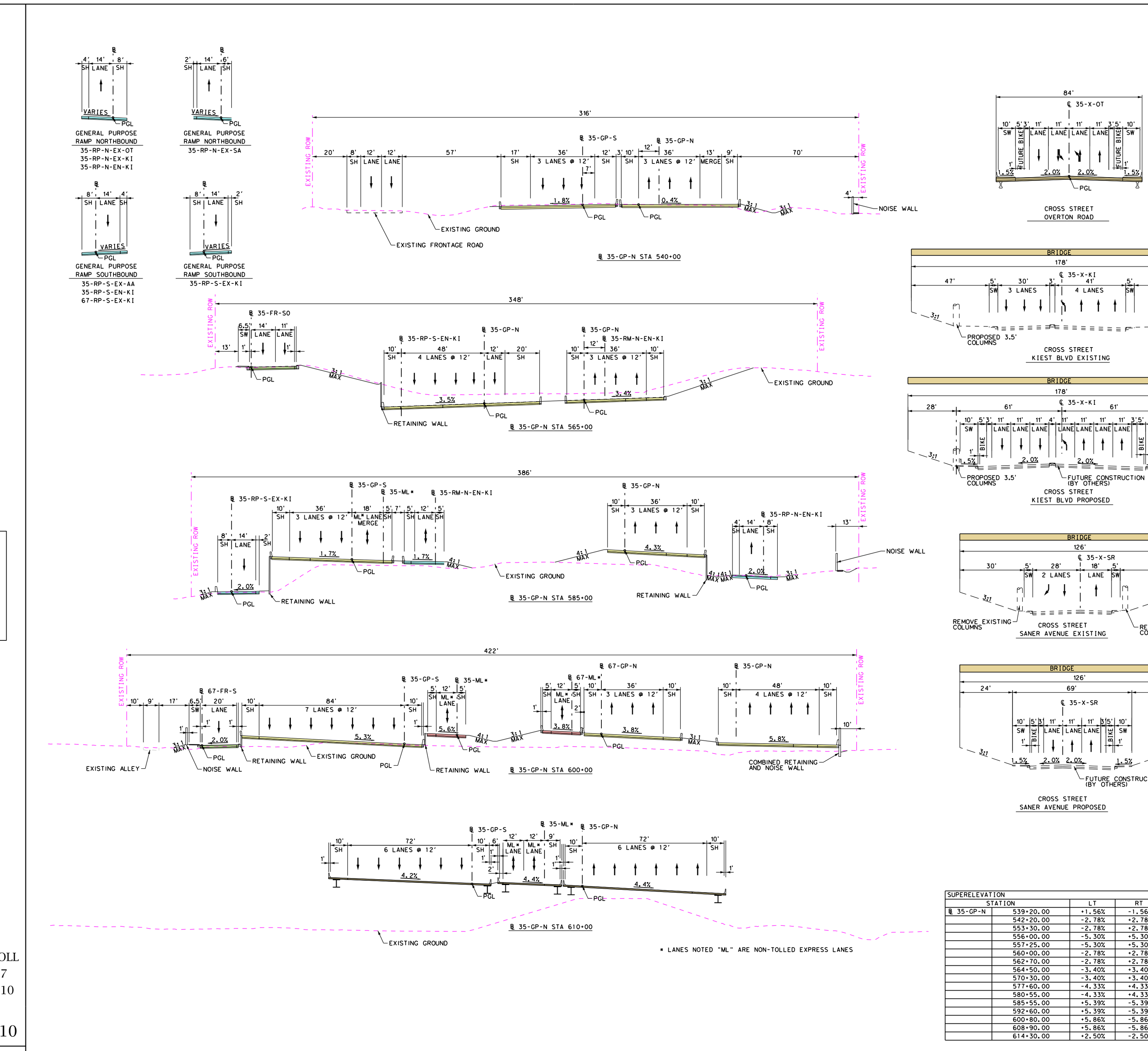
HNTB Corporation
The HNTB Companies
Engineers Architects Planners

Texas Department of Transportation

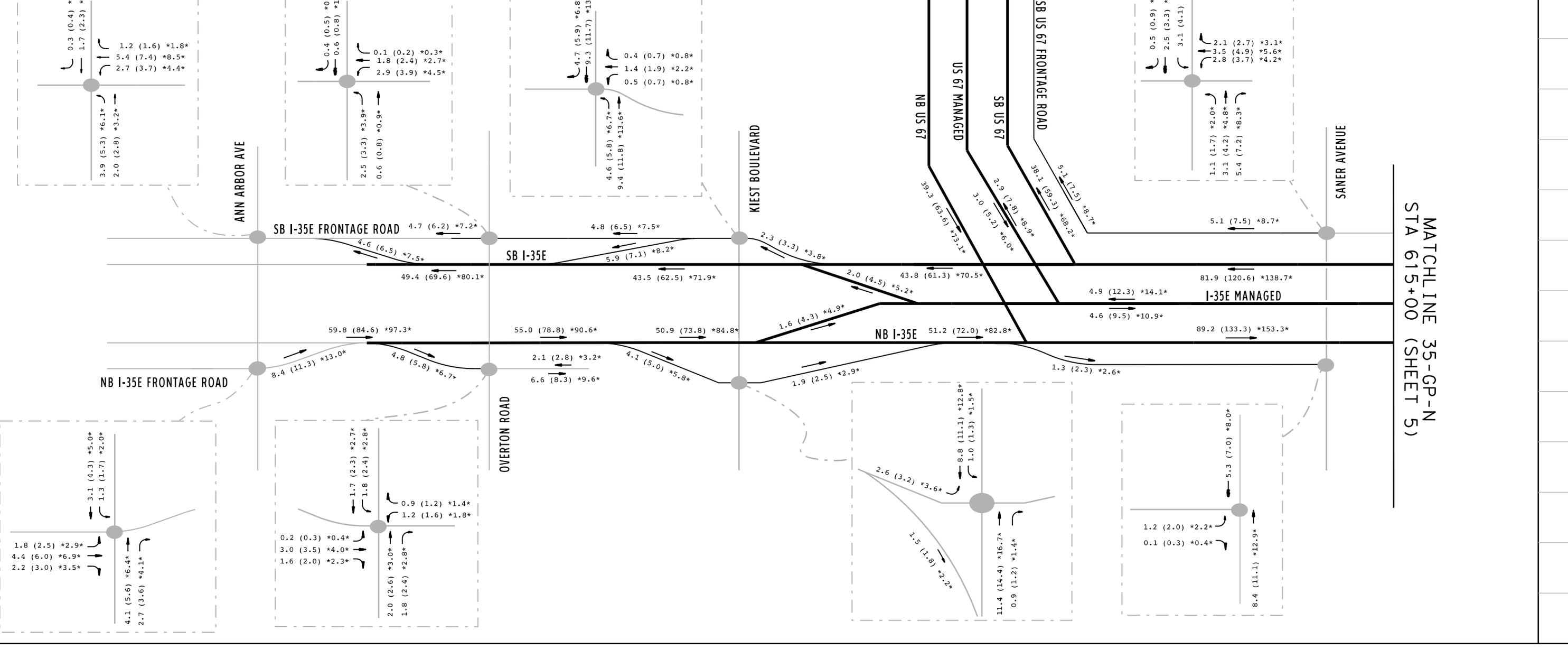


* LANES NOTED "ML" ARE NON-TOLLED EXPRESS LANES

TP&P APPROVED TRAFFIC JUNE 2016.

LEGEND

2017 (2037) *2047* DESIGN YEAR TRAFFIC VOLUMES (X1000)



NOTES:

1. SEE ROLL 8 (US 67) AND ROLL 9-10 (I-35E) FOR SB GENERAL PURPOSE, RAMP, AND CROSS STREET PROFILES.
2. SEE SEPARATE LARGE SIGN SCHEMATIC FOR SIGN DETAILS.
3. CONTINUOUS LIGHTING WILL BE PROVIDED FOR THE PROJECT. TxDOT WILL MAINTAIN AND OPERATE THE LIGHTING SYSTEM.
4. GRADE DIFFERENCES LESS THAN 4' WILL BE RETAINED WITH BARRIER.
5. CROSS SECTIONS ARE NOT TO SCALE.
6. DATE OF TOPO (LIDAR): JULY 9, 2013 AND DATE OF ROW (GROUND SURVEY CONTROL): MAY 12, 2014.
7. CONTROL OF ACCESS TO BE DETERMINED THROUGH PERMIT PROCESS.
8. PROPOSED NOISE WALLS ARE SHOWN PER TxDOT'S 2011 GUIDELINES FOR ABATEMENT OF ROADWAY TRAFFIC NOISE, APPROVED TP&P TRAFFIC DATA, AND PROPOSED DESIGN CONFIGURATION.
9. THE I-35E MANAGED LANES ARE A PROJECTION OF SOUTHBOUND CROSS SLOPE AND CONTROLLED BY THE SOUTHBOUND PROFILE FROM 35-ML STA 586+57.91 TO 595+00.50. FROM 35-ML STA 595+00.50 TO 603+34.96, SEE SUPER TABLE AND SHEET 9 FOR PROFILE INFORMATION. FROM 35-ML STA 603+34.96 TO 623+00.00, THE MANAGED LANES ARE A PROJECTION OF NORTHBOUND CROSS SLOPE AND CONTROLLED BY THE NORTHBOUND PROFILE.
10. WHERE POSSIBLE, NEW AND REVISED EXIT AND ENTRANCE RAMPS ARE DESIGNED TO MEET THE DESIRABLE SPACING BETWEEN RAMPS AND DRIVEWAYS, SIDESTREETS OR CROSS STREETS. WHEN THE DESIRABLE SPACING CAN NOT BE ACHIEVED, CHANNELIZATION METHODS WILL BE IMPLEMENTED IN FINAL DESIGN.

LEGEND

- General Purpose Lane
- Managed Lane - Express
- Frontage Road / Cross-Streets
- Ramp / Direct Connector
- Bridge Structure
- Bridge Substructure
- Existing Storm Drain
- Proposed Storm Drain
- Bicycle / Pedestrian
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- Noise Wall on Retaining Wall
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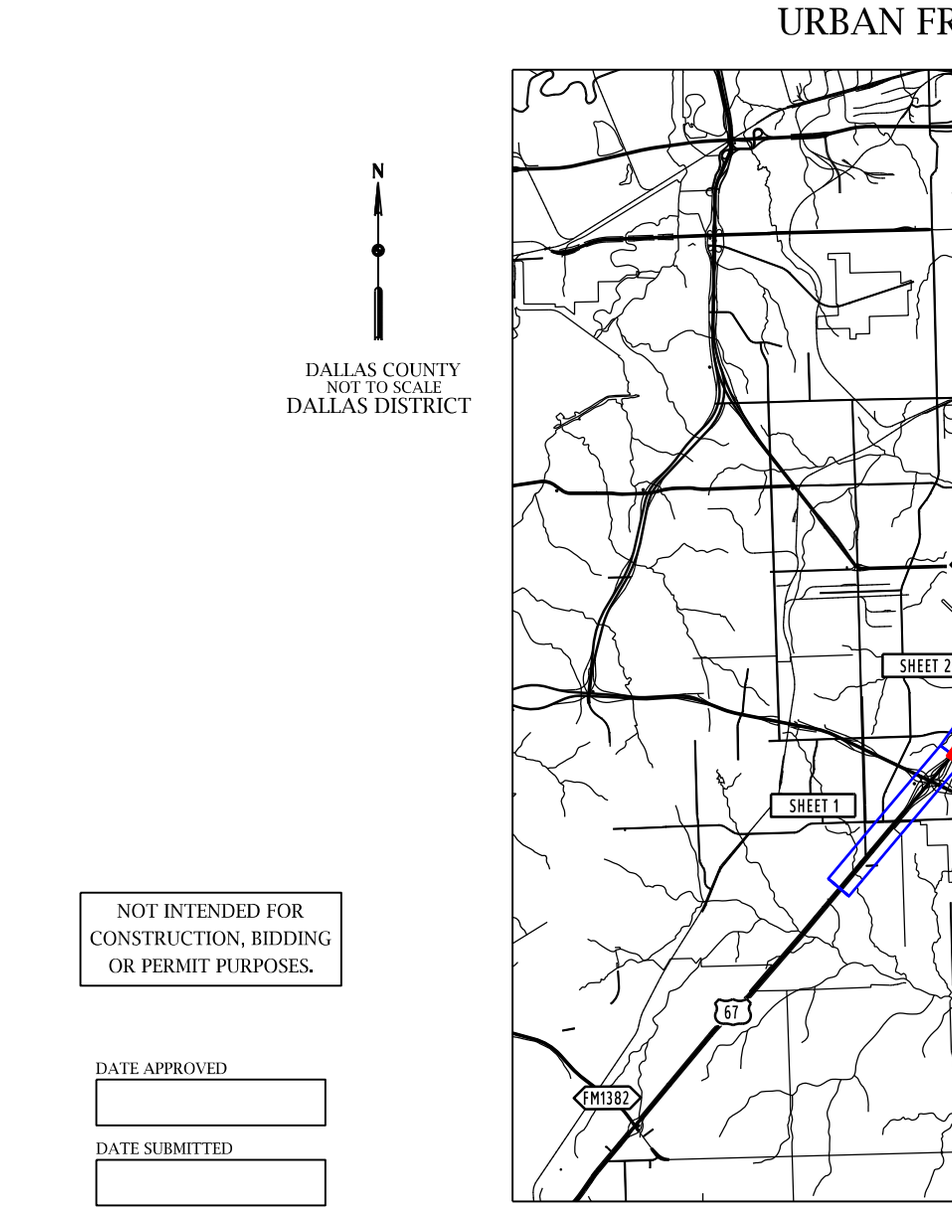
- Property Line
- Removal

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E. - DISTRICT ENGINEER
DESIGN SCHEMATIC
I-35E/US 67
DALLAS COUNTY
US67: FROM I-20 TO I-35E
CSJ: 0261-03-030
I-35E: FROM US 67 TO I-30
CSJ: 0442-02-088
I-35E: FROM I-30 TO REUNION BLVD
CSJ: 0196-03-269
I-35E: LOCAL ENHANCEMENTS
(LOCATION OF LOCAL ENHANCEMENTS TO BE DETERMINED)
CSJ: 0918-47-965
PROJECT LENGTH - 11.0 MILES



PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.
DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.
SERIAL NO. 91108
SHEET 4 OF 10
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TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC
I-35E/US 67
DALLAS COUNTY

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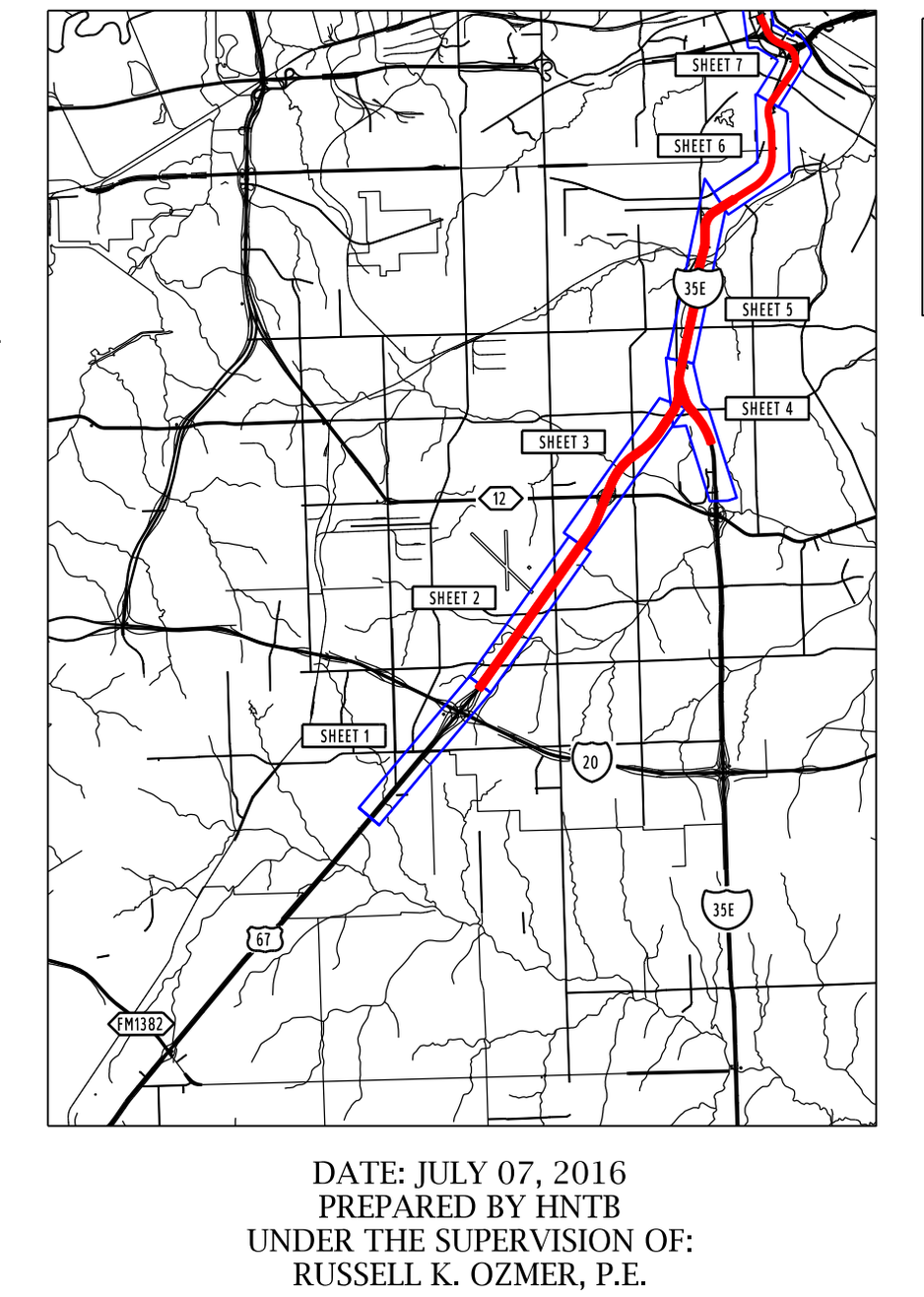
ROADWAY TYPE	DESIGN SPEED
GENERAL PURPOSE LANES	60 MPH
GENERAL PURPOSE/BYPASS RAMPS	40 MPH
FRONTAGE ROADS	40 MPH
CROSS STREETS	30 MPH
MANAGED LANES/MANAGED LANE RAMPS	60 MPH
LOOP RAMPS	25 MPH

I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY



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DATE APPROVED
DATE SUBMITTED
DATE REVISED

HORIZONTAL 0 100 200
VERTICAL 0 20 40

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PROFILES	8-10

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HNTB Corporation
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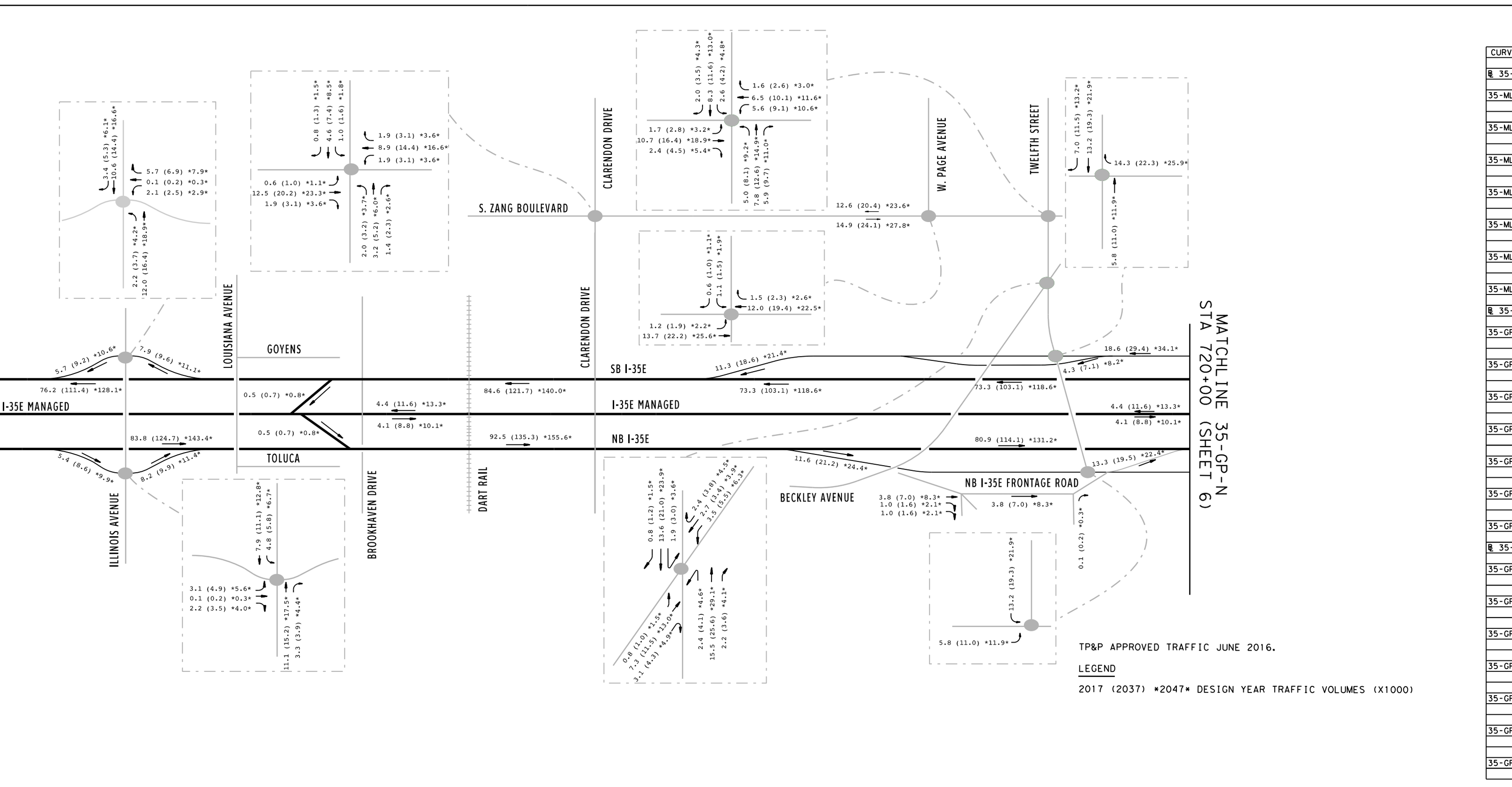
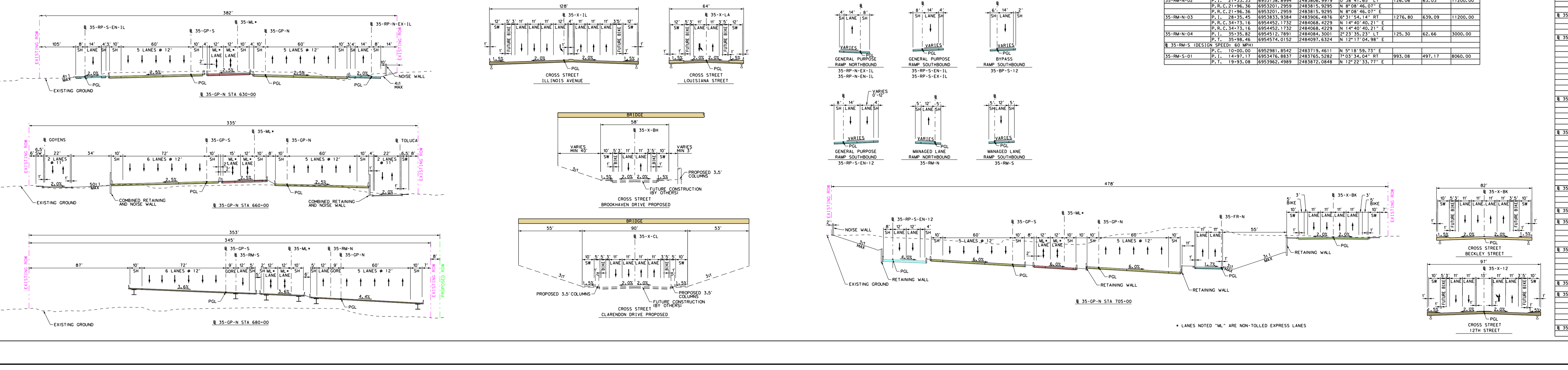
Engineers Architects Planners

Texas Department of Transportation





SUPERELEVATION

STATION	LT	RT	DESCRIPTION
℄ 35-GP-N			
681+20.00	+2.50%	-2.50%	BEGIN TRANSITION
689+20.00	-5.27%	+5.27%	END TRANSITION/BEGIN FULL SUPER
691+40.00	-5.27%	+5.27%	END FULL SUPER/BEGIN TRANSITION
701+05.00	-6.00%	+6.00%	END FULL SUPER/BEGIN FULL SUPER
713+20.00	-6.00%	+6.00%	END FULL SUPER/BEGIN TRANSITION
719+60.00	-5.27%	+5.27%	END TRANSITION/BEGIN FULL SUPER
℄ 35-ML	MATCH CROSS SLOPE AND SUPER OF ℄ 35-GP-N FROM STA 603+34.96 TO 623+00.00		
623+00.00	+2.50%	-2.50%	MATCH 35-GP-N/BEGIN TRANSITION
628+00.00	-2.50%	-2.50%	END TRANSITION/MATCH 35-GP-S
	MATCH CROSS SLOPE AND SUPER OF ℄ 35-GP-S FROM STA 628+00.00 TO 780+00.00		
℄ 35-GP-S			
621+10.00	-2.50%	+2.50%	END TRANSITION
664+90.00	-2.50%	+2.50%	BEGIN TRANSITION
671+20.00	+3.56%	-3.56%	END TRANSITION/BEGIN FULL SUPER
675+30.00	+3.56%	-3.56%	END FULL SUPER/BEGIN TRANSITION
681+60.00	-2.50%	+2.50%	END TRANSITION
684+70.00	-2.50%	+2.50%	BEGIN TRANSITION
687+00.00	-4.71%	+4.71%	END TRANSITION/BEGIN FULL SUPER
692+80.00	-4.71%	+4.71%	END FULL SUPER/BEGIN FULL SUPER
702+00.00	-6.00%	+6.00%	END FULL SUPER/BEGIN FULL SUPER
713+50.00	-6.00%	+6.00%	END FULL SUPER/BEGIN TRANSITION
719+50.00	-5.20%	+5.20%	END TRANSITION/BEGIN FULL SUPER
℄ 35-FR-N			
695+25.93	+0.78%	-0.78%	MATCH 35-GP-N/BEGIN TRANSITION
697+00.00	+2.00%	-2.00%	END TRANSITION
740+95.00	+2.00%	-2.00%	BEGIN TRANSITION
742+20.00	+4.83%	-4.83%	END TRANSITION/BEGIN FULL SUPER
743+80.00	+4.83%	-4.83%	END FULL SUPER/BEGIN TRANSITION
745+05.00	+2.00%	-2.00%	END TRANSITION
℄ 35-FR-S			
713+48.46	-0.38%	+0.38%	MATCH 35-X-12/BEGIN TRANSITION
714+20.00	-2.00%	+2.00%	END TRANSITION
735+30.00	-2.00%	+2.00%	BEGIN TRANSITION
735+40.00	-2.06%	+2.06%	END TRANSITION/BEGIN FULL SUPER
737+00.00	-2.06%	+2.06%	END FULL SUPER/BEGIN TRANSITION
737+10.00	-2.00%	+2.00%	END TRANSITION
745+10.00	-2.00%	+2.00%	BEGIN TRANSITION
745+70.00	-3.25%	+3.25%	END TRANSITION/BEGIN FULL SUPER
747+00.00	-3.25%	+3.25%	END FULL SUPER/BEGIN TRANSITION
747+60.00	-2.00%	+2.00%	END TRANSITION
℄ 35-RP-S-EN-IL			
20+30.00	+2.50%	-2.50%	BEGIN TRANSITION
20+40.00	-2.56%	+2.56%	END TRANSITION/BEGIN FULL SUPER
21+10.00	-2.56%	+2.56%	END FULL SUPER/BEGIN TRANSITION
22+00.00	+4.00%	-4.00%	END TRANSITION/MATCH 35-X-IL
℄ 35-RP-S-EX-IL			
15+44.41	-2.50%	+2.50%	MATCH 35-GP-N/BEGIN TRANSITION
16+00.00	+2.00%	-2.00%	END TRANSITION
℄ 35-RP-S-EX-IL			
10+00.00	+4.00%	-4.00%	END TRANSITION/BEGIN FULL SUPER
11+00.00	+4.00%	-4.00%	END FULL SUPER/BEGIN TRANSITION
12+00.00	-2.00%	+2.00%	END TRANSITION
20+00.00	-2.00%	+2.00%	BEGIN TRANSITION
21+00.00	+2.00%	-2.00%	END TRANSITION
℄ 35-RP-N-EN-IL			
10+00.00	-1.16%	+1.16%	MATCH 35-X-IL/BEGIN TRANSITION
12+00.00	-2.00%	+2.00%	END TRANSITION
14+50.00	+2.00%	-2.00%	BEGIN TRANSITION
15+10.00	-4.38%	+4.38%	END TRANSITION/BEGIN FULL SUPER
16+50.00	-4.38%	+4.38%	END FULL SUPER/BEGIN TRANSITION
17+00.00	-2.00%	+2.00%	END TRANSITION
℄ 35-RM-N			
20+45.82	-0.92%	+0.92%	MATCH 35-GP-S/BEGIN TRANSITION
22+00.00	+2.50%	-2.50%	END TRANSITION
℄ 35-RP-S-EN-12			
14+71.31	-4.90%	+4.90%	MATCH 35-GP-S/BEGIN TRANSITION
18+50.00	-4.01%	+4.01%	END TRANSITION/BEGIN FULL SUPER
28+40.00	-4.01%	+4.01%	END TRANSITION/BEGIN FULL SUPER
30+50.00	-5.37%	+5.37%	END TRANSITION/BEGIN FULL SUPER
31+90.00	-5.37%	+5.37%	END FULL SUPER/BEGIN TRANSITION
34+30.00	-0.73%	+0.73%	END TRANSITION/MATCH 35-X-12
℄ 35-BP-S-12			
11+49.72	-5.37%	+5.37%	MATCH 35-RP-S-EN-12/BEGIN TRANSITION
14+60.00	-2.00%	+2.00%	END TRANSITION/MATCH 35-FR-S

LEGEND
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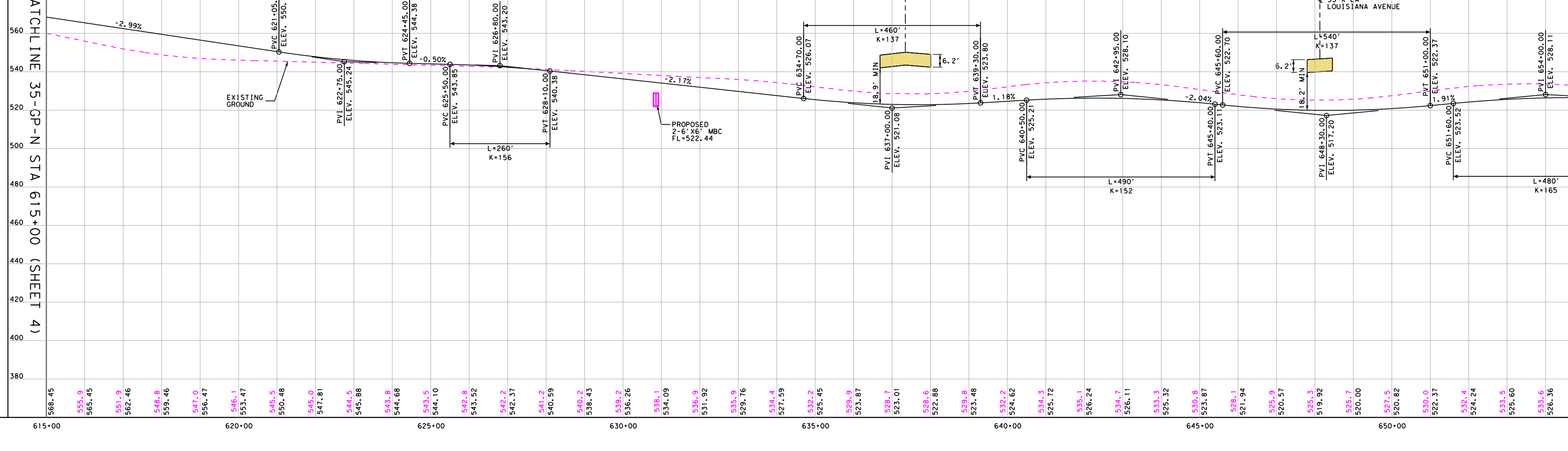

NOTES:
1. SEE ROLL 9-10 FOR SB GENERAL PURPOSE, RAMP, AND CROSS STREET PROFILES.
2. SEE SEPARATE LARGE SIGN SCHEMATIC FOR SIGN DETAILS.
3. CONTINUOUS LIGHTING WILL BE PROVIDED FOR THE PROJECT. TxDOT WILL MAINTAIN AND OPERATE THE LIGHTING SYSTEM.
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JAMES K. SELMAN, P.E. - DISTRICT ENGINEER
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I-35E/US 67
DALLAS COUNTY
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TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT

JAMES K. SELMAN, P.E. - DISTRICT ENGINEER

DESIGN SCHEMATIC

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DALLAS COUNTY

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I-35E / US 67 PROJECT
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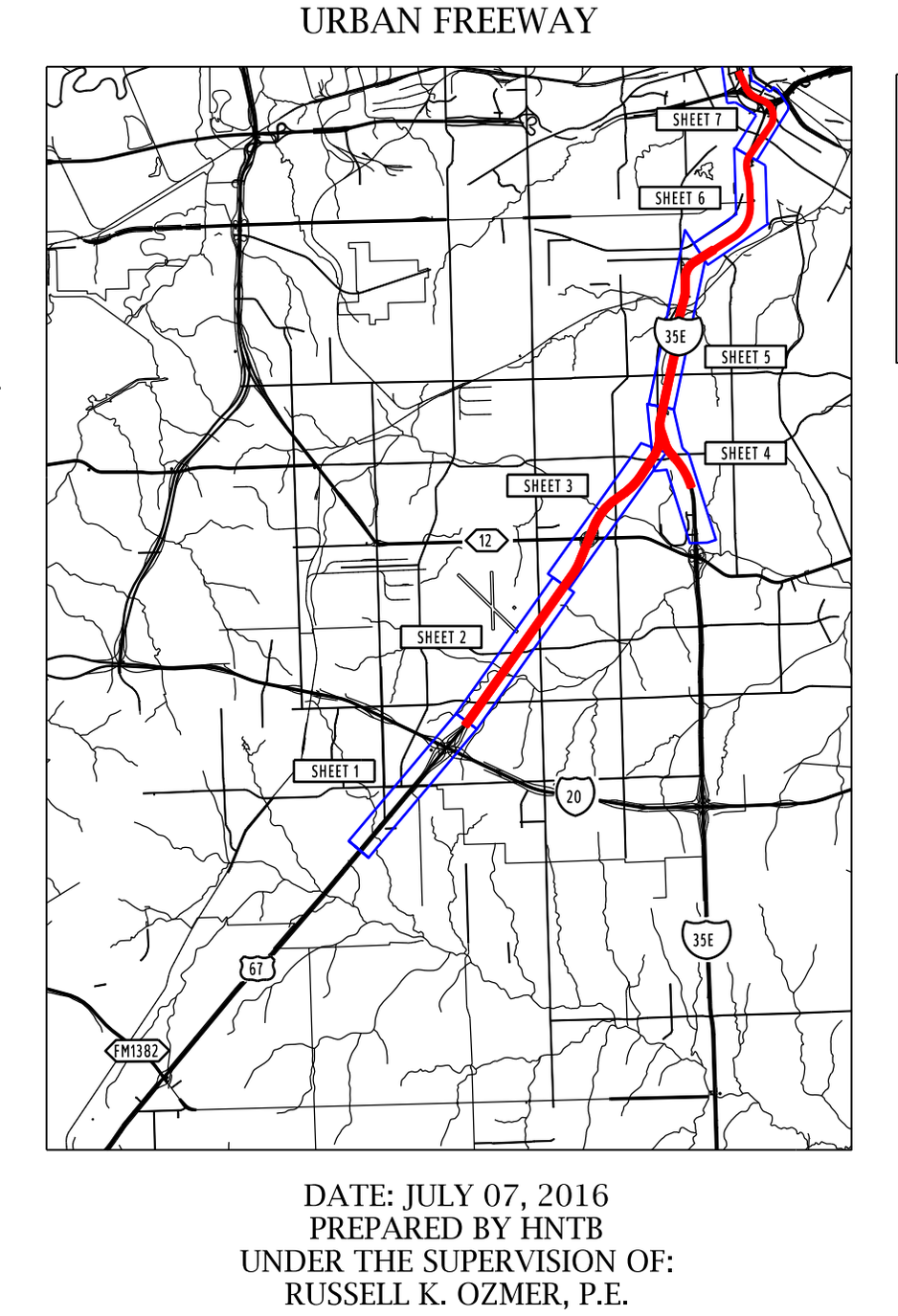

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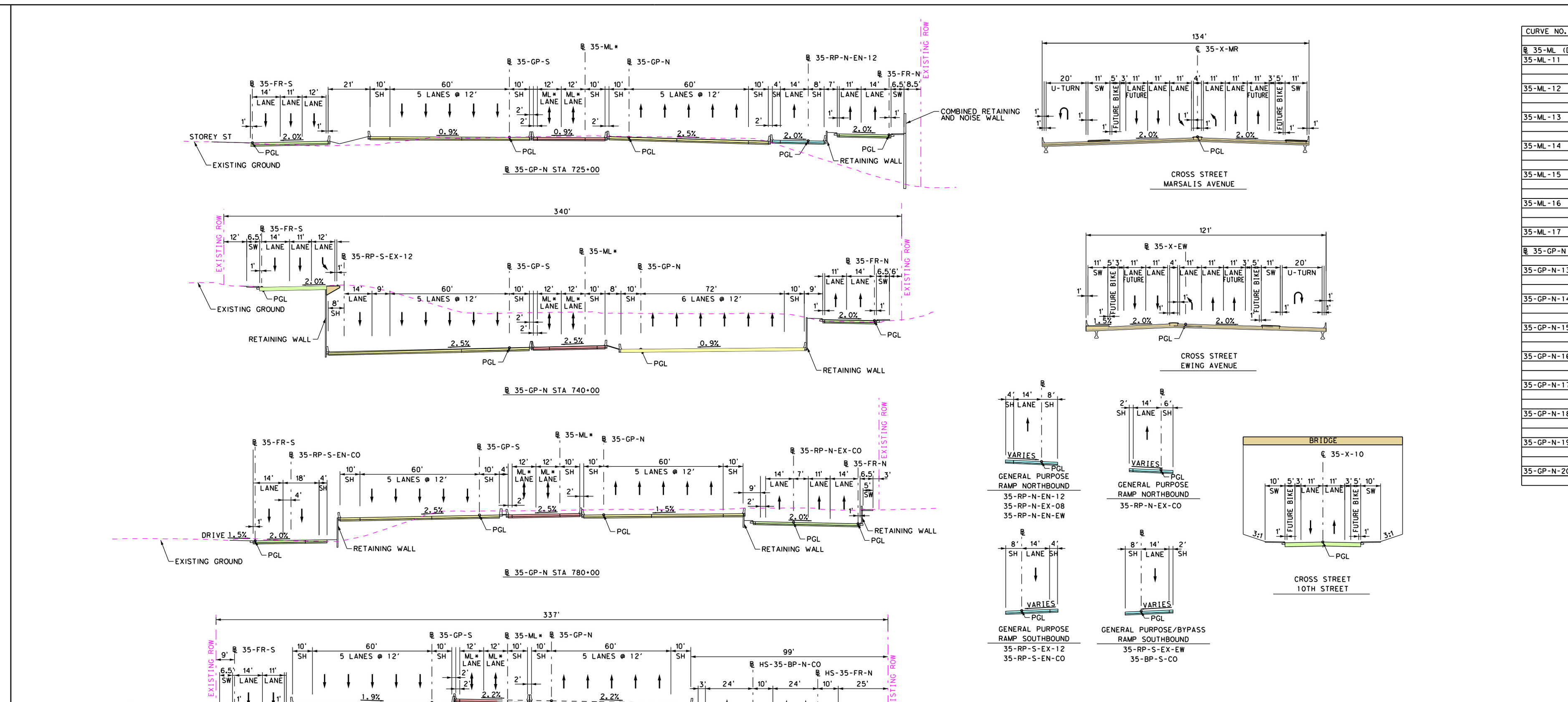
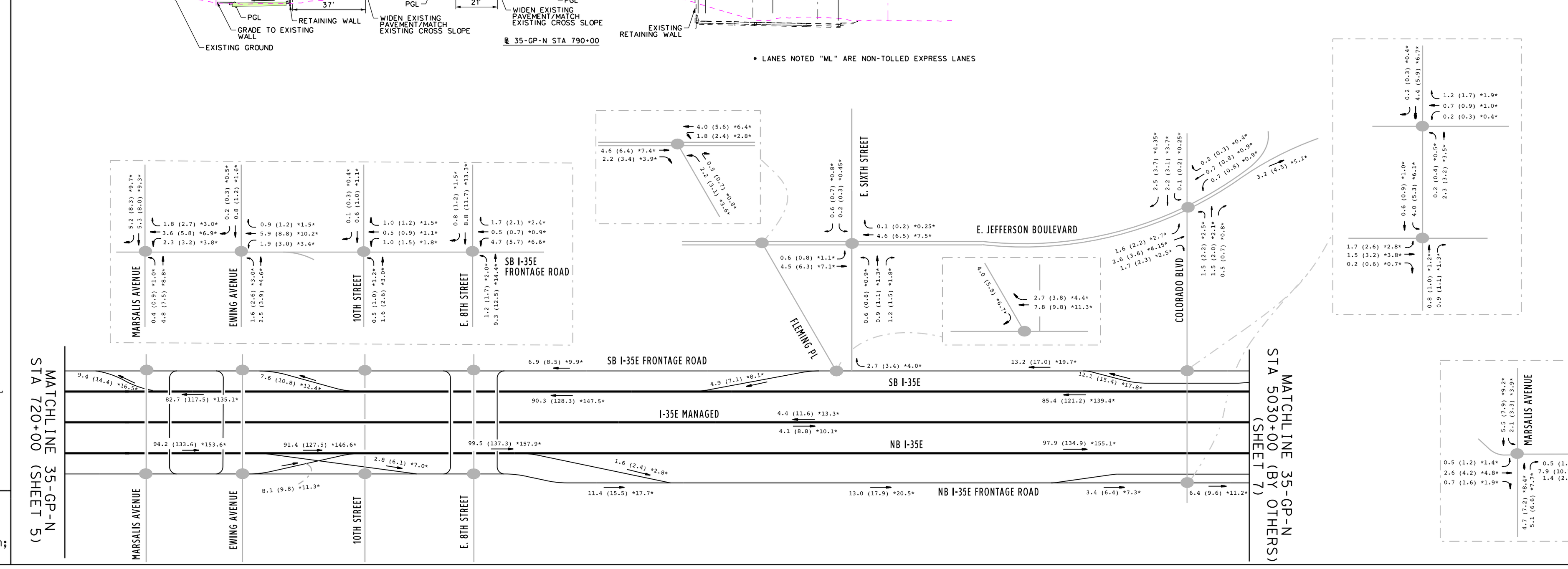


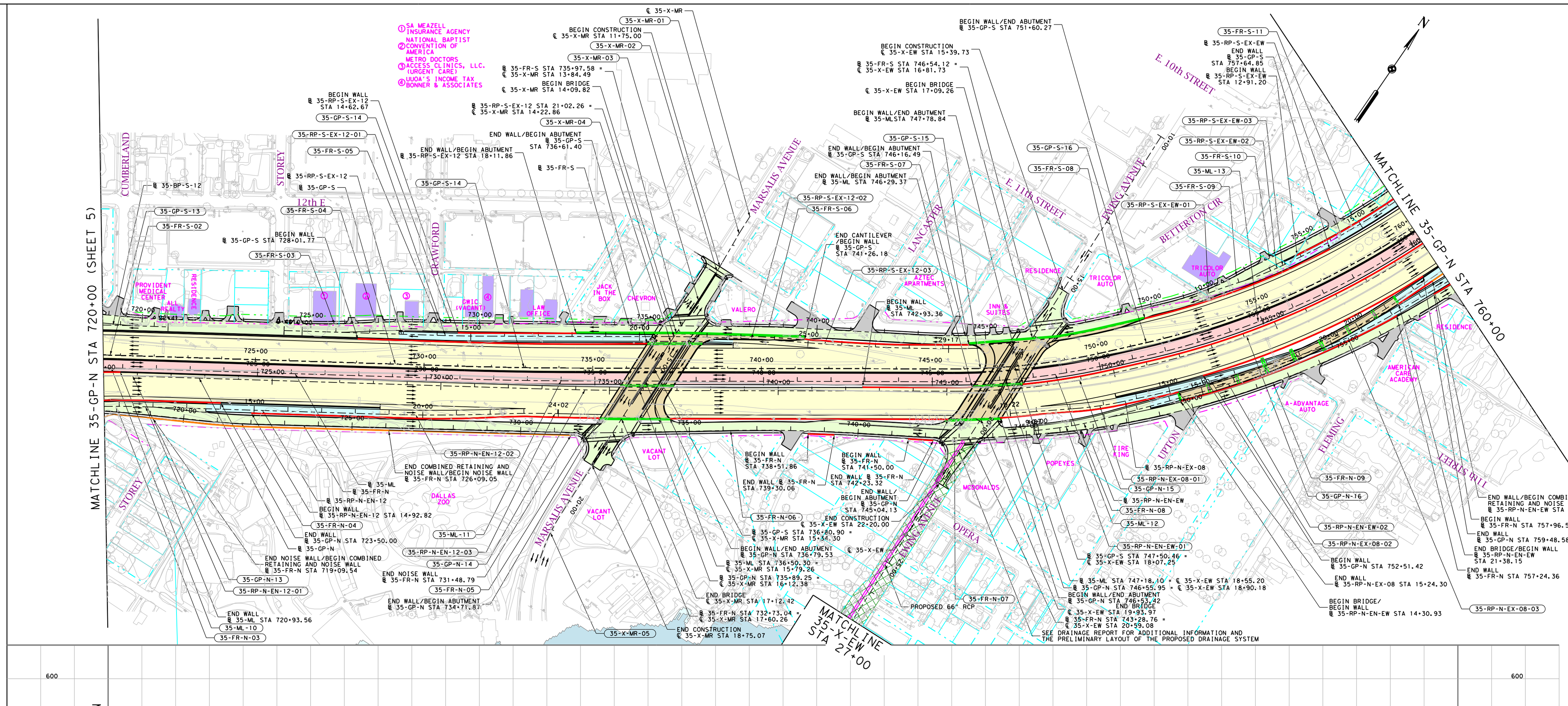


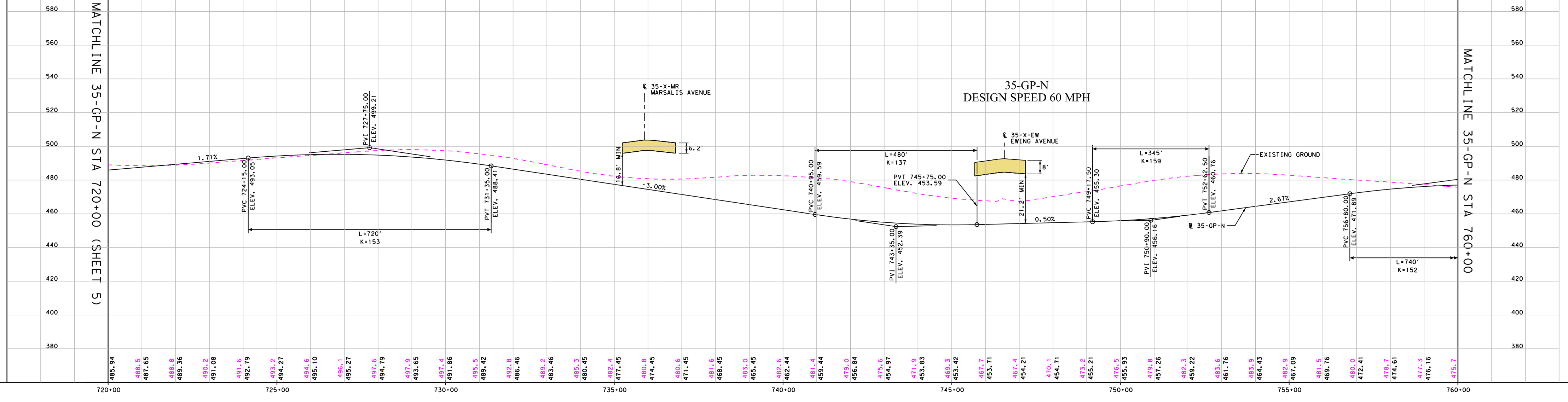
CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
℄ 35-ML (DESIGN SPEED: 60 MPH)							
35-ML-11	P.I. 732+77.63	6958432.3018	2486372.1625	1°40'46.38" LT	328.31	164.17	11200.00
	P.T. 734+41.77	6958522.4511	2486509.3643	N 56°41'34.19" E			
	P.C. 745+64.63	6959139.0411	2487447.7769	N 56°41'34.19" E			
35-ML-12	P.I. 747+98.41	6959267.4183	2487643.1591	13°04'30.52" LT	465.54	233.78	2040.00
	P.T. 750+30.17	6959436.6682	2487804.4333	N 43°37'03.67" E			
	P.C. 751+46.50	6959520.8884	2487884.6647	N 43°37'03.67" E			
35-ML-13	P.I. 761+36.07	6960237.2978	2488567.3340	44°07'06.76" LT	1880.37	989.57	2442.00
	P.T. 770+26.87	6961226.8319	2488558.6837	N 0°30'03.08" W			
	P.C. 773+00.36	6961500.3084	2488556.2930	N 0°30'03.08" W			
35-ML-14	P.I. 775+11.77	6961711.7137	2488554.4450	2°09'46.07" LT	422.78	211.41	11200.00

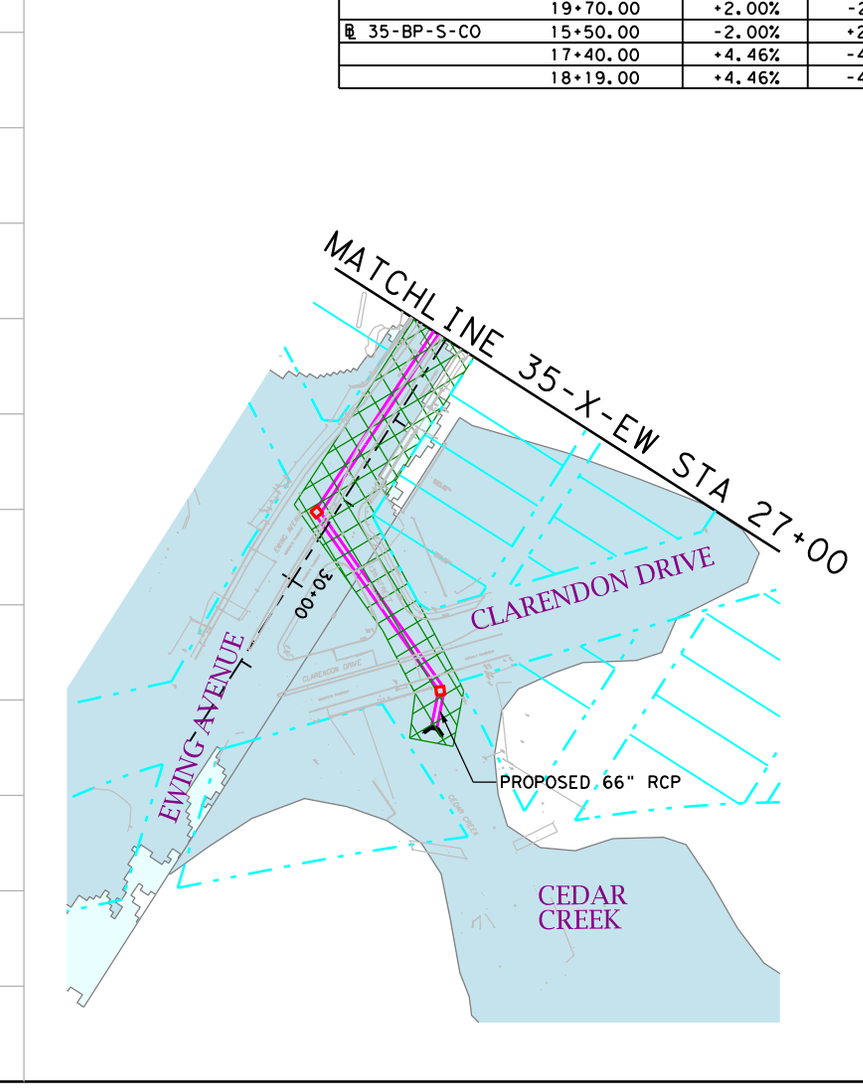
CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
℄ 35-GP-S (DESIGN SPEED: 60 MPH)							
℄ 35-FR-N (DESIGN SPEED: 40 MPH)							
℄ 35-FR-S (DESIGN SPEED: 40 MPH)							

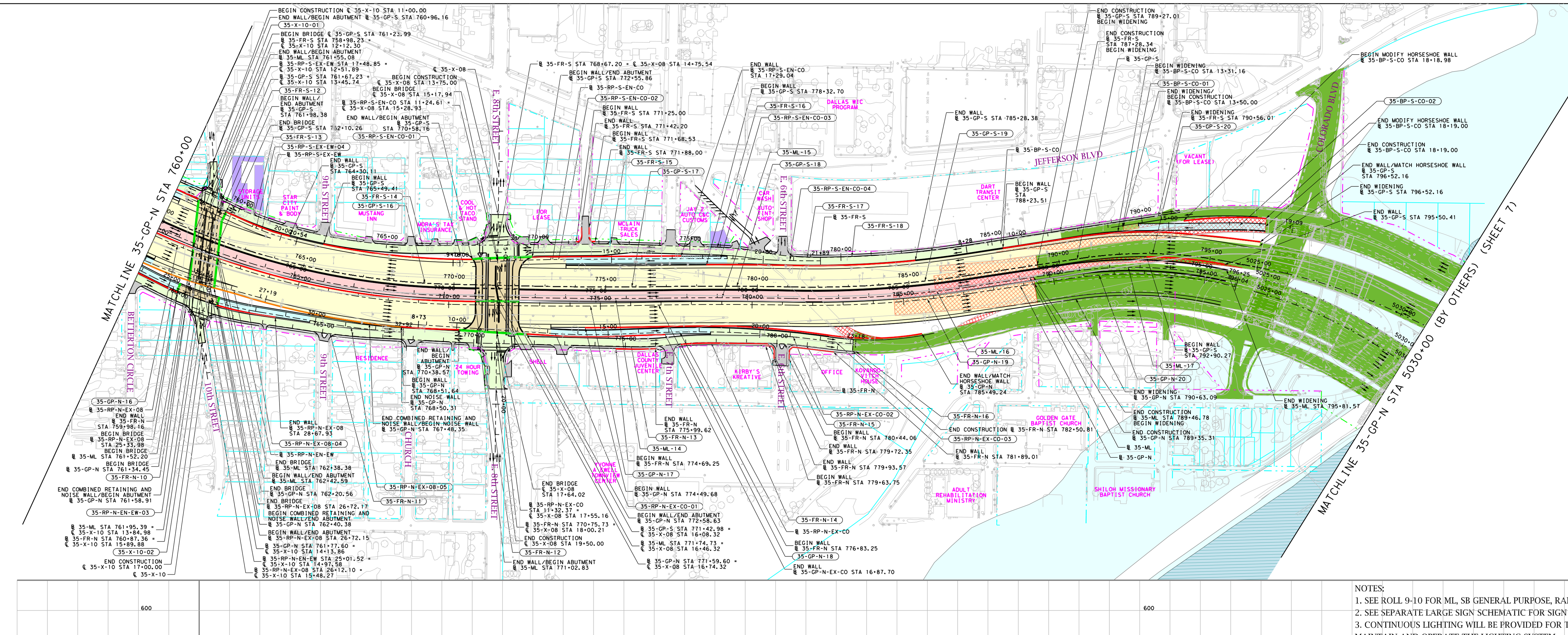
CURVE NO.	STATION	COORDINATE N	COORDINATE E	BEARING/DELTA	LENGTH (FT)	TANGENT (FT)	RADIUS (FT)
℄ 35-X-10 (DESIGN SPEED: 30 MPH)							
℄ 35-BP-S-CO (DESIGN SPEED: 40 MPH)							
℄ 35-BP-S-12 (DESIGN SPEED: 40 MPH)							
℄ 35-RP-N-EN (DESIGN SPEED: 40 MPH)							
℄ 35-X-MR (DESIGN SPEED: 30 MPH)							

SUPERELEVATION STATION	LT	RT	DESCRIPTION
℄ 35-GP-N			
℄ 35-ML			
℄ 35-GP-S			
℄ 35-FR-N			
℄ 35-FR-S			









LEGEND

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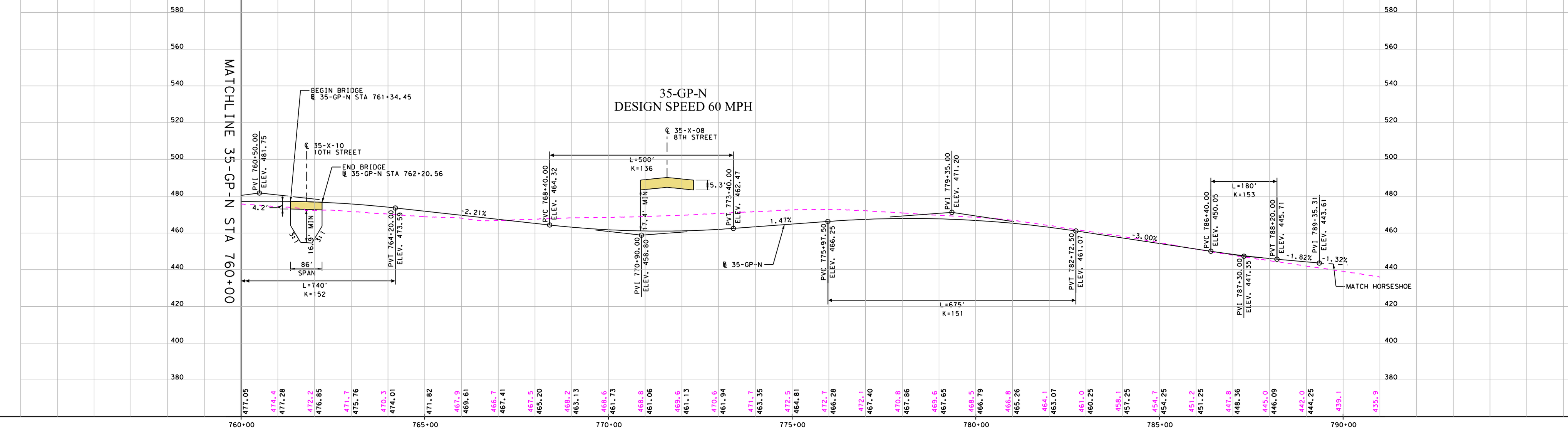

NOTES:
1. SEE ROLL 9-10 FOR ML, SB GENERAL PURPOSE, RAMP, AND CROSS STREET PROFILES.
2. SEE SEPARATE LARGE SIGN SCHEMATIC FOR SIGN DETAILS.
3. CONTINUOUS LIGHTING WILL BE PROVIDED FOR THE PROJECT. TxDOT WILL MAINTAIN AND OPERATE THE LIGHTING SYSTEM.
4. GRADE DIFFERENCES LESS THAN 4' WILL BE RETAINED WITH BARRIER.
5. CROSS SECTIONS ARE NOT TO SCALE.
6. DATE OF TOPO (LIDAR): JULY 9, 2013 AND DATE OF ROW (GROUND SURVEY CONTROL): MAY 12, 2014.
7. CONTROL OF ACCESS TO BE DETERMINED THROUGH PERMIT PROCESS.
8. PROPOSED NOISE WALLS ARE SHOWN PER TxDOT'S 2011 GUIDELINES FOR ABATEMENT OF ROADWAY TRAFFIC NOISE, APPROVED TP&P TRAFFIC DATA, AND PROPOSED DESIGN CONFIGURATION.
9. THE MANAGED LANES ARE A PROJECTION OF SOUTHBOUND CROSS SLOPE AND CONTROLLED BY THE SOUTHBOUND PROFILE FROM 35-ML STA 628+00 TO 780+00. FROM 35-ML STA 780+00 TO 789+46.78, SEE SUPER TABLE AND SHEET 9 FOR PROFILE INFORMATION. FROM STA 789+46.78, THE CROSS SLOPE AND PROFILE IS CONTROLLED BY THE HORSESHOE (NB).
10. WHERE POSSIBLE, NEW AND RELOCATED EXIT AND ENTRANCE RAMPS ARE DESIGNED TO MEET THE DESIRABLE SPACING BETWEEN RAMPS AND DRIVEWAYS, SIDESTREETS OR CROSS STREETS. WHEN THE DESIRABLE SPACING CAN NOT BE ACHIEVED, CHANNELIZATION METHODS WILL BE IMPLEMENTED IN FINAL DESIGN.

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
JAMES K. SELMAN, P.E. - DISTRICT ENGINEER
DESIGN SCHEMATIC
I-35E/US 67
DALLAS COUNTY
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I-35E: FROM US 67 TO I-30
CSJ: 0442-02-088
I-35E: FROM I-30 TO REUNION BLVD
CSJ: 0196-03-269
I-35E: LOCAL ENHANCEMENTS
(LOCATION OF LOCAL ENHANCEMENTS TO BE DETERMINED)
CSJ: 0918-47-965
PROJECT LENGTH - 11.0 MILES
I-35E / US 67 PROJECT
HIGHWAY CLASSIFICATION
URBAN FREEWAY
PRELIMINARY SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENTS RESULTING FROM PUBLIC INPUT AND TECHNICAL REVIEW.
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
DATE: JULY 07, 2016
PREPARED BY HNTB
UNDER THE SUPERVISION OF:
RUSSELL K. OZMER, P.E.
SERIAL NO. 91108
SHEET 6 OF 10
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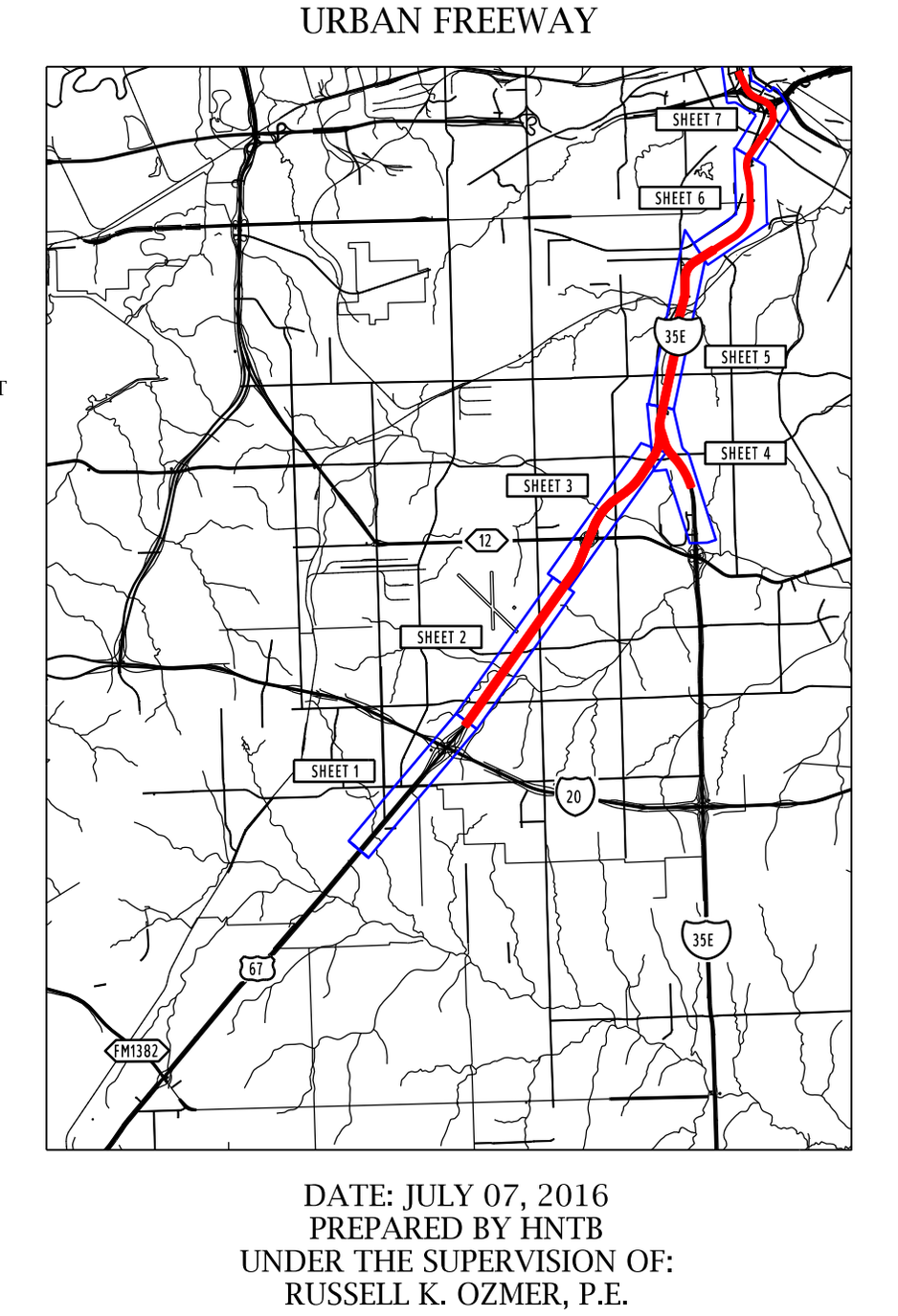

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ROADWAY TYPE	STRAIGHT SPEED
GENERAL PURPOSE LANES	60 MPH
GENERAL PURPOSE REPAIRS & RAMPS	40 MPH
FRONTAGE ROADS	40 MPH
CROSS STREETS	30 MPH
MANAGED LANES, MANAGED LANE RAMPS	60 MPH
LOOP RAMPS	25 MPH

I-35E / US 67 PROJECT
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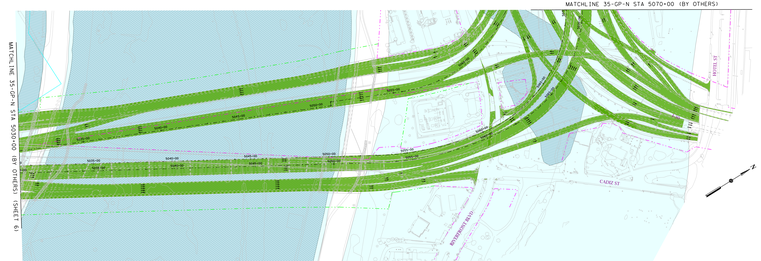
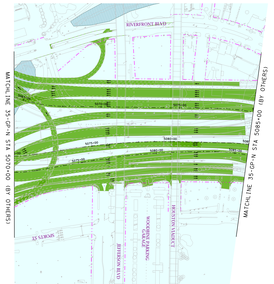
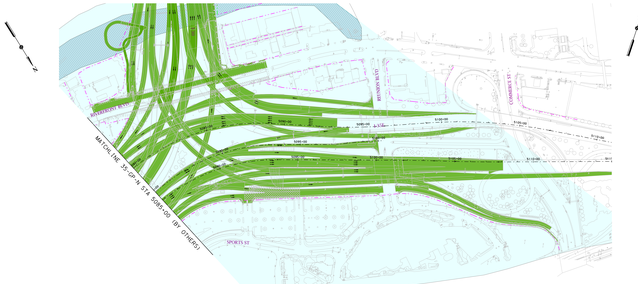


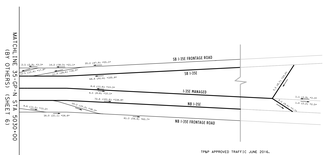




NOTES:
1. SEE SEPARATE LARGE SIGN SCHEMATIC FOR SIGN DETAILS.

LEGEND

- General Purpose Lane
- Managed Lane - Express
- Frontage Road / Cross-Streets
- Ramp / Direct Connector
- Bridge Structure
- Bridge Substructure
- Existing Storm Drain
- Proposed Storm Drain
- Bicycle / Pedestrian
- Driveway / Cul-De-Sac
- Displacement
- Zone A/AE Floodplain
- Zone X Floodplain
- Zone AE Floodway
- Existing STATE ROW
- Existing CITY/COUNTY ROW
- Existing STATE Easement
- Proposed ROW
- Proposed Centerline / Baseline
- Proposed Retaining Wall
- Noise Wall
- Noise Wall on Retaining Wall
- Horseshoe Project (11/02/15)
- Drainage Easement
- Property Line
- Removal



TMAP APPROVED TRAFFIC JUNE 2016.

LEGEND
2017 (2027) +2047+ DESIGN YEAR TRAFFIC VOLUMES (X1000)

PROFILE INTENTIONALLY LEFT BLANK
(BY OTHERS)

TEXAS DEPARTMENT OF TRANSPORTATION

DALLAS DISTRICT

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DESIGN SCHEMATIC

I-35E/US 67

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PROJECT LENGTH - 11.0 MILES

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I-35E / US 67 PROJECT
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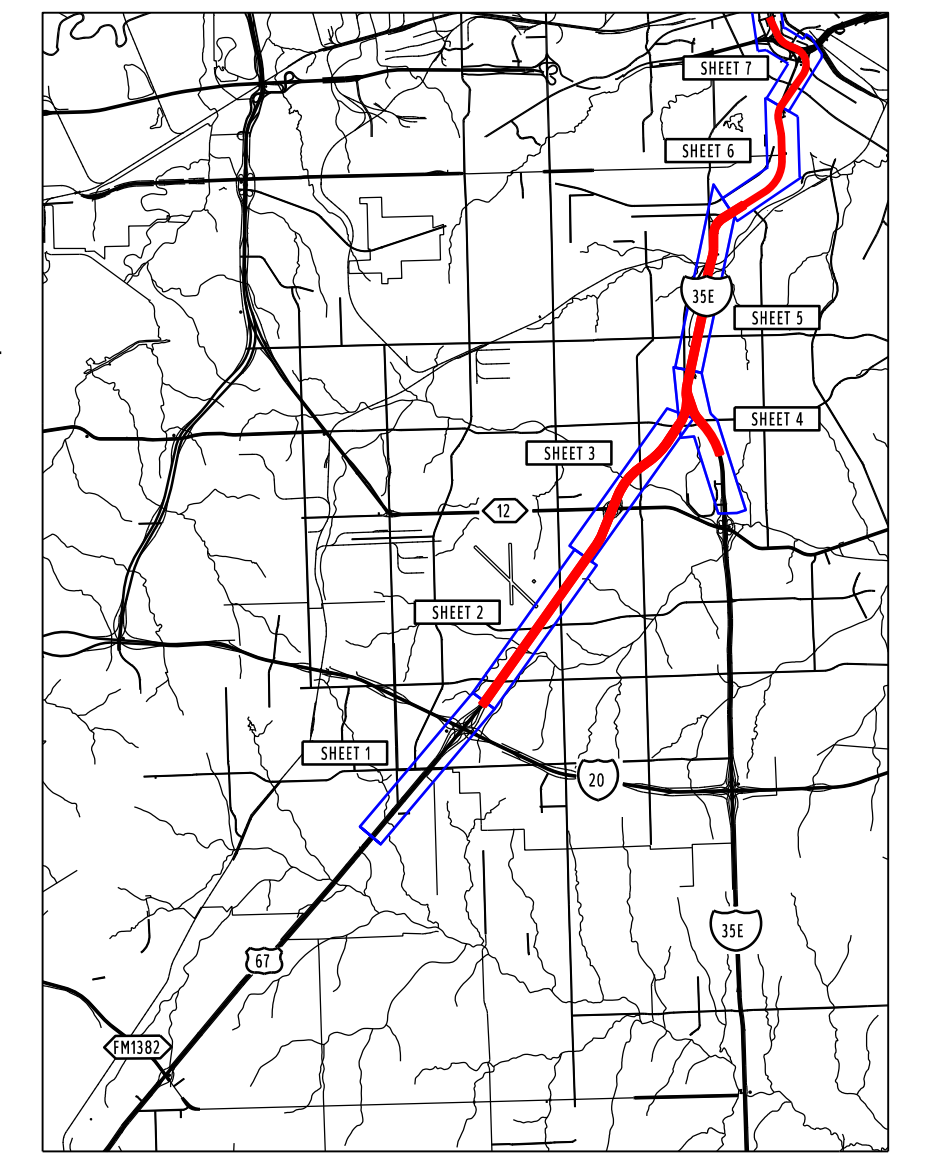

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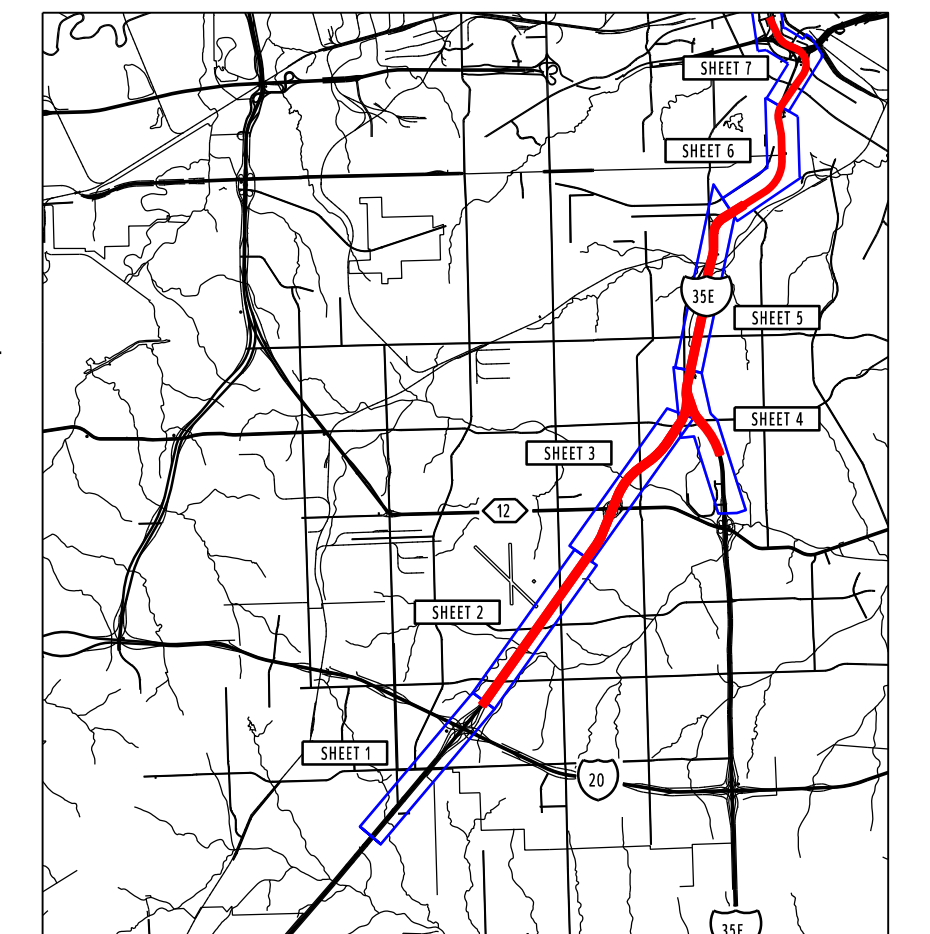

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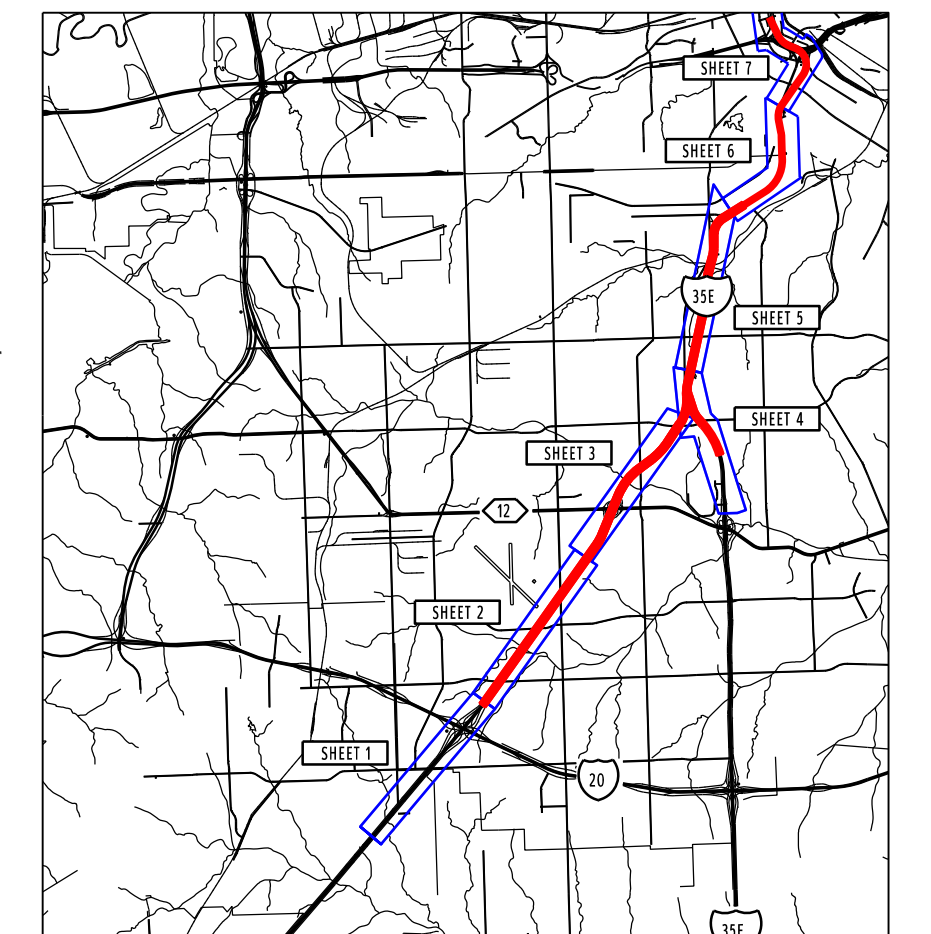

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