Draft Environmental Assessment

US 80 and Spur 557, Dallas District

Project limits: US 80 (from FM 460 to Spur 557) and Spur 557 (from US 80 to IH 20)

CSJ Numbers: 0095-03-106, 0095-04-076, 0495-01-081

Kaufman County, Texas

December 2023

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 9, 2019, and executed by FHWA and TxDOT.

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TABLES

APPENDICES

Acronyms

AADT	Average annual daily traffic
AOI	Area of influence
APE	Area of potential effects
AST	Above-ground storage tank
BMP	Best management practices
CEQ	Council on Environmental Quality
CAFE	Corporate Average Fuel Economy
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMP	Congestion management process
CO	Carbon monoxide
CRIS	Crash Records Information System
CSJ	Control-section-job number
dB(A)	A-weighted decibels
DOT	Department of Transportation (US)
EA	Environmental Assessment
EJ	Environmental Justice
EMST	Ecological Mapping Systems of Texas
EO	Executive Order
EPA	Environmental Protection Agency
EPIC	Environmental permits, issues, and commitments
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Farm-to-Market Road
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
GHG	Greenhouse gas
GIS	Geographic Information Systems
IH	Interstate Highway
ISA	Initial Site Assessment
LEP	Limited English Proficiency
Leq	Equivalent Continuous Sound Level
LOS	Level of Service
LPST	Leaking Petroleum Storage Tank
LWCF	Land and Water Conservation Fund
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSAT	Mobile Source Air Toxics
MTP	Metropolitan Transportation Plan
NAAQs	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NBI	National Bridge Inventory

NCTCOG	North Central Texas Council of Governments
NEPA	National Environmental Policy Act
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
PCN	Pre-Construction Notification
PM	Particulate matter
PS&E	Plans, specifications and estimates
PWC	Parks and Wildlife Code
RCRA	Resource Conservation and Recovery Act
ROE	Right of entry
ROW	Right-of-way
RPST	Registered petroleum storage tank
RSA	Resource study area
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
STIP	Statewide Transportation Improvement Plan
SWP33	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TERP	Texas Emissions Reduction Plan
THC	Texas Historical Commission
TIP	Transportation Improvement Plan
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TxDOT	Texas Department of Transportation
US	United States Highway
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USCB	United States Census Bureau
USFWS	United States Fish and Wildlife Service
VMT	Vehicle miles traveled

1.0 Introduction

The Texas Department of Transportation (TxDOT) proposes to improve the existing United States Highway (US) 80 from Farm-to-Market Road (FM) 460 to Spur 557, and Spur 557 from US 80 to Interstate Highway (IH) 20 in Kaufman County, Texas (see **Appendix A**).

The purpose of this draft Environmental Assessment (EA) is to study the potential environmental consequences of the proposed project and determine if those consequences warrant preparation of an Environmental Impact Statement. This draft EA is prepared to comply with both TxDOT's environmental review rules and the National Environmental Policy Act (NEPA). The Draft EA will be made available for public review and TxDOT will consider any comments submitted. If TxDOT determines that there are no significant adverse effects, it will prepare and sign a FONSI, which will be made available to the public.

2.0 Project Description

2.1 Existing Facility

The existing US 80 facility (see **Appendix B**) from FM 460 to Spur 557, is a four-lane divided highway (two lanes in each direction) divided by a grassy median. US 80 also has one-way and two-way frontage roads at some locations, with one to three lanes in each direction and turn lanes at various cross-street intersections.

From US 80 to IH 20, Spur 557 consists of a four-lane divided highway (two lanes in each direction) divided by a grassy median. Spur 557 also has one-way discontinuous one to two-lane frontage roads.

The existing typical right-of-way (ROW) width varies from approximately 300 to 400 feet along US 80 and varies from 375 to 500 feet along Spur 557, with wider footprints to accommodate large cross-street interchanges.

2.2 Proposed Facility

The proposed project consists of reconstructing US 80, from FM 460 to Spur 557, and Spur 557, from US 80 to IH 20, from a four-lane divided highway to a six-lane divided highway. This project is approximately 12 miles in length. The proposed project would also require an interstate access justification request to be approved by FHWA.

The proposed improvements consist of three 12-foot-wide travel lanes with typical ten foot inside shoulders in each direction divided by a concrete barrier along the centerline. The proposed improvements would also include one-way continuous two-lane frontage roads in each direction with ramp improvements that connect frontage roads to mainlanes with an auxiliary lane. Pedestrian and bicycle accommodations are proposed to include 10-foot shared use paths on the outside of the frontage roads in each direction. The proposed

typical ROW width varies from 300 to 420 feet along US 80, with wider footprints to accommodate large cross-street interchanges.

From US 80 to IH 20, the proposed improvements consist of reconstructing Spur 557 from a four-lane divided to a six-lane divided highway with a concrete barrier along the centerline. The proposed project would also include one-way continuous two to three-lane frontage roads in each direction with ramping improvements, shared use paths and sidewalks. The proposed typical ROW width varies from 375 to 520 feet along Spur 557, with wider footprints to accommodate large cross-street interchanges.

Interchange improvements would occur at US 80 and Spur 557 and at Spur 557 and IH 20. The proposed improvements are shown in the schematic and typical sections included in **Appendix C** and **D**, respectively.

2.3 Logical Termini and Independent Utility

Federal regulations require that federally funded transportation projects have logical termini, 23 CFR 771.111(f)(1). Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. For the US 80 project, FM 460 was chosen as the western project limit because this is a major cross street generating approximately 18,000 vehicles per day north of US 80. In addition, FM 460 is a major arterial roadway and one of the main connections to the cities (Heath and Rockwall) north of the corridor. The eastern limit of the project along Spur 557 is IH 20 because it is a major thoroughfare and traffic generator. As determined by the traffic demand model for 2022 studies for this proposed project, IH 20 generates 60,000 vehicles per day east of the project limits.

Federal regulations require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area, 23 CFR 771.111(f)(2). This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. The proposed project can stand on its own without the implementation of other future traffic improvements because it cannot and does not irretrievably commit federal funds for other future transportation projects.

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements, 23 CFR 771.111(f)(3). This means that a project must not dictate or restrict any future roadway alternatives. The US 80 and Spur 557 Project would not limit consideration of any other planned improvements or alternatives for such improvements. Furthermore, project planning for this project has included design to accommodate for other ongoing separate projects that may traverse or meet with this corridor and does not preclude the planning and design of such projects.

2.4 Planning Consistency

The North Central Texas Council of Governments (NCTCOG) is the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth (DFW) region and responsible for developing Mobility 2045, the financially constrained Metropolitan Transportation Plan (MTP), adopted by the Regional Transportation Council on June 9, 2022. The proposed US 80 and Spur 557 Project is consistent with the description of the project in Mobility 2045, updated in 2022.

The NCTCOG adopted the regional 2023-2026 Transportation Improvement Plan (TIP) on June 9, 2022. The NCTCOG 2023-2026 TIP is reflected in TxDOT's 2023-2026 Statewide Transportation Improvement Program (STIP), which was approved by USDOT on November 18, 2022. The proposed project is consistent with the 2023-2026 TIP (as amended) and 2023-2026 STIP (as amended). A project level conformity determination was obtained from the Federal Highway Administration (FHWA) on October 24, 2023, as to its consistency with the USDOT-approved MTP and TIP/STIP (as amended).

3.0 Purpose and Need

3.1 Need

The proposed project is needed to improve safety, and to meet current and future travel demand from projected future population growth and traffic volumes.

3.2 Supporting Facts and/or Data

3.2.1 Safety Conditions

A safety and crash analysis study was conducted for the roadway facilities within the proposed project limits including the major interchanges at US 80/Spur 557 and Spur 557/IH 20. Data from the TxDOT Crash Records Information System (CRIS) database was used to perform the analysis and evaluation of safety conditions. The study identified total number of crashes, crash types and conditions. Over the five-year period from 2015 to 2019, there were a total of 1,854 crashes within the project area (Garver 2022). Within the five-year period, there were more than 300 crashes within the project area each year and Kaufman County reported approximately 2,000 crashes per year for the entire county. As shown in **Table 1**, approximately 20 percent of all crashes in Kaufman County occurred within the project area.

Table 1. Total Crashes by Year

	2015	2016	2017	2018	2019	Total
Total Crashes in Study Area	375	381	375	395	328	1,854
Total Crashes in Kaufman County	1,794	2,008	1,898	2,123	2,005	9,828
% of County's total crashes occurring within project area	21%	19%	20%	19%	16%	19%

Source: Safety and Operational Analysis Traffic Report, January 2023. * Note these numbers are approximations and are an average of the ADTs projected within the segments as listed.

Table 2 reflects statewide crash rates and project area crash rates per 100 million vehicle miles traveled (MVMT) for the five-year period from 2015 to 2019. The US 80 crash rate is higher than the statewide average for each year analyzed. Spur 557 has a lower crash rate than the statewide average for 2015, 2016, and 2019, which can be attributed to lower daily traffic on Spur 557.

Table 2. Statewide traffic crash rates per 100 MVMT for rural 4-lane divided highways (US 80 and Spur 557)

Year	Statewide	US 80 (Project Limits)	Spur 557 (Project Limits)
2015	62.29	114.18	49.05
2016	57.31	103.3	52.23
2017	57.65	96.84	67.59
2018	60.42	87.28	173.42
2019	57.04	92.95	53.43

Source: Safety and Operational Analysis Traffic Report, January 2023.

According to the safety analysis conducted for the proposed project, the proposed improvements are anticipated to reduce collisions by approximately 22 percent. The proposed project would help reduce the number of crashes and improve safety through wider shoulders to provide recovery space, interchange/intersection improvements to provide direct connections and designated turn lanes, auxiliary lanes between on and off ramps to reduce weaving movements, and ramp improvements to increase acceleration and deceleration lengths.

3.2.2 Travel Demand

Population Growth

According to Mobility 2045 MTP, the population for NCTCOG's 12-county planning area is projected to grow to over 11 million by 2045. Included in the 12-county area is Kaufman County. Population data for Kaufman County is shown in Table 3.

Table 3. Population Data

Geography	2020	2022	2045	Percent Increase from 2020 to 2045
Kaufman County	145,310	172,366	211,585	68%

Source: U.S. Census Bureau 2020 Census and County Quickfacts, and Texas Demographic Center Projection Data.

The county has an estimated population of 172,366 in 2022 according to the U.S. Census Bureau (USCB) Quickfacts county data. In the 2020 Census, the population was reported as 145,310 for Kaufman County. This is an 18.6 percent change from 2020 to 2022. This growth trend for Kaufman County is also anticipated to continue in the future. The Texas Demographic Center estimates a continued increase in population through 2045. Based on the 2020 Census population data, the Texas Demographic Center projected the population for Kaufman County in 2045 to be 211,585, a 68 percent increase from the 2020 census numbers. With the growth in population, Kaufman County would also experience an increasing demand for the movement of people and goods through the US 80 and Spur 557 corridors. Improvements to these facilities would address the need to improve mobility for the growing population and associated future travel demand.

Traffic Volumes

Current traffic volumes and future traffic projections were evaluated within the project limits. As shown in **Table 4**, the average daily traffic (ADT) in 2022 ranges from 30,570 to 59,113 within the project limits. The ADTs projected in 2048 range from 44,650 to 91,425 in the No-Build condition. These numbers are not substantially high; however, the 2048 numbers are an increase of generally 50 percent from the 2022 numbers.

Table 4. US 80 and Spur 557 Vehicles per Day

Project Segment	2022	2028	2048	Percent Increase from 2022 to 2048
US 80 from Clements Dr. to 548	59,113	66,225	91,425	55%
US 80 from FM 548 to Spur 557	49,514	56,288	78,313	58%
Spur 557 from US 80 to IH 20	30,570	33,125	44,650	46%

Note: The numbers provided are an average of the projected ADTs within the segments listed. Source: Safety and Operational Analysis Traffic Report, January 2023.

Level of Service (LOS) analysis was also conducted to assess traffic conditions along US 80 and Spur 557. LOS levels are used by the USDOT as a way to describe the level of congestion and travel time delay for roadway facilities. **Table 5** describes the general conditions for each LOS classification.

Table 5. Level of Service General Definitions

Level of Service (LOS)	General Operating Conditions
A	Free flow, with low volumes and high speeds.
B	Reasonably free flow, but speeds beginning to be restricted by traffic conditions.
C	Stable flow, but most drivers are restricted in the freedom to select their own speeds.
D	Approaching unstable flow; drivers have little freedom to select their own speeds.
E	Unstable flow; may be short stoppages.
F	Forced or breakdown flow; unacceptable congestion; stop-and-go.

Source: Adopted from the ASHTO Green Book and Flexibility in Highway Design

Within the project limits, ramp queue spillback onto main freeway lanes, and a LOS F was identified within several segments under existing conditions. A sharp degradation in operations throughout the study area would result in numerous segments of freeway mainlanes and ramps, as well as many intersections, anticipated to be operating at LOS E or F by 2048.

3.3 Purpose

The purpose of the project is to improve safety and mobility to accommodate future traffic volumes along US 80/Spur 557 within the project limits.

4.0 Alternatives

4.1 Build Alternative

The Build Alternative, as described in detail in **Section 2.2**, proposes a roadway facility with six mainlanes (three in each direction), one-way continuous two-to three-lane frontage roads in each direction, shared use paths and sidewalks, intersection improvements at side and cross streets and improvements to the US 80/Spur 557 and Spur 557/IH 20 interchanges. The Build Alternative extends approximately 12 miles and would acquire approximately 17 acres of ROW for transportation use and approximately 6 acres of permanent drainage easements.

This alternative meets the project's need and purpose by improving safety and meeting travel demands resulting from anticipated population growth and traffic volumes. The Build Alternative is also consistent with local and regional land use and transportation plans and policies. For these reasons, the Build Alternative is the recommended alternative.

4.2 No-Build Alternative

The No-Build Alternative would not result in any construction for the US 80 and Spur 557 corridors. This alternative does not improve mobility or safety and would not address future travel demands; therefore, the purpose and need would not be met by the No-Build Alternative and the Build Alternative would be considered the recommended alternative. The No-Build Alternative is evaluated throughout this EA for comparison purposes.

4.3 Preliminary Alternatives Considered but Eliminated from Further Consideration

Other Build Alternatives considered but eliminated from further consideration include realignment of US 80 and reconfiguration of the US 80 and Spur 557 roadway facilities. These other alternatives were eliminated from further consideration because of the potential for substantial impacts as well as location limitations constrained by the UPRR Railroad that extends parallel to the south of US 80. Furthermore, additional constraints such as established residential and commercial development would be substantially impacted by any potential realignment of the existing US 80 and Spur 557 facilities.

5.0 Affected Environment and Environmental Consequences

In support of this EA, the following technical documentation was prepared and may be inspected and copied upon request at the TxDOT Dallas District Office at 4777 East Highway 80, Mesquite, Texas 75150, Monday through Friday, from 9 a.m. to 5 p.m.:

- Community Impact Assessment Technical Report Form
- Congestion Management Process Summary
- Cumulative Impacts Technical Report
- Hazardous Materials Initial Site Assessment
- Historic Bridge Section 4(f) De Minimis Checklist and Documentation
- Historic Resources Survey Report
- Historical Studies Research Design
- Induced Growth Analysis Technical Report
- Mobile Source Air Toxics Qualitative Assessment Report
- Natural Resources Conservation Service (NRCS) – CPA-106 Form
- Project Coordination Request for Historical Studies Project
- Species Analysis Form and Spreadsheet
- Surface Water Analysis
- Traffic Noise Analysis Report
- Water Features Delineation Report

These reports and associated studies were conducted in support of the preparation of this EA. Information of the study findings and environmental consequences for the Build and No-Build Alternatives are described in the following sections by resource category. These

discussions include studies of direct and indirect effects, including encroachment-alteration effects if applicable resulting from the proposed improvements.

5.1 Right-of-Way/ Displacements

The proposed project would require acquisition of approximately 17 acres of additional ROW impacting 120 parcels, but no displacements are anticipated. See **Appendix C**, Schematics, to view where additional ROW is proposed for the project. TxDOT has and will continue to communicate with the affected property owners to provide just compensation for impacts to their properties. ROW acquisition and relocation assistance would be conducted in accordance with the TxDOT Right-of Way Acquisition and Relocation Assistance Program and the Federal Uniform Relocation and Real Property Acquisitions Policy Act of 1970.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no ROW acquisitions and no displacements would be anticipated.

5.2 Land Use

The existing land use of the project area generally consists of suburban residential and commercial land use with industrial, warehouse, and distribution centers located primarily along Spur 557. The area is a mix of well-established and new subdivision developments, and undeveloped, vacant land.

Additional developments and other transportation projects are planned in the area within the project limits. These developments would replace the vacant lands and convert to urban use. Although future growth and development is anticipated in the area, the land use would not be substantially altered by changes resulting from the proposed project. The proposed project would require additional ROW to accommodate the proposed improvements. As shown in **Appendix E**, the areas needed for additional ROW generally consist of disturbed land and are located immediately adjacent to the existing US 80 roadway that would be converted for transportation use. Additional information on the vegetation types and potential impacts is discussed in **Section 5.11**. Land use impacts related to induced growth are discussed in **Section 5.15**.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to land use would be anticipated.

5.3 Farmlands

As the project will require new ROW in non-urban land use areas, the Farmland Protection Policy Act (FPPA) applies. The proposed project area is identified as an urbanized area. According to the Natural Resources Conservation Service (NRCS), a total of 16.7 acres of

Prime and Unique Farmland and 0.1 acres of Statewide and Local Important Farmland would be directly converted by the Build Alternative. The results of the Farmland Conversion Impact Rating analysis indicated a site assessment score of less than 60 points, therefore no coordination with NRCS is required.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to farmlands would be anticipated.

5.4 Utility Relocation

It is reasonably foreseeable that utilities will have to be relocated as a result of this project. The impacts resulting from removal of any utilities from within existing highway ROW (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) have been considered as part of the overall project footprint impacts within this environmental assessment. It has not yet been determined whether the dislocated utilities will be re-installed within the highway ROW, or to a location outside the highway ROW. However, the potential impacts resulting from re-installation of the displaced utilities within the highway ROW have been considered as part of the overall project footprint impacts (e.g., construction noise, potential disturbance to archeological resources, and potential impacts to species habitat) within this environmental assessment. To the extent that the owner of any displaced utility determines to reinstall the displaced utility at a location outside of highway ROW, such location will be determined by the owner of the utility subject to the rules and policies governing the utility relocation process. Additionally, the owner of the utility will be responsible for acquiring any easements outside the highway ROW and ensuring that the design and construction meet all regulatory and environmental compliance requirements. See 43 Texas Administrative Code (TAC) 21.37(a)(9), (g)(1)), and (g)(4); 43 TAC 21.38(e)(2).

There are four natural gas transmission pipelines, two crude oil pipelines, and one highly volatile liquid (HVL) pipeline within the ROW. A complete subsurface utility engineering (SUE) survey, Quality Level B (QL-B) for the proposed project was completed to determine the horizontal locations of these lines. Known utility owners were contacted when possible to obtain available as-built information. Some of these lines will need to be relocated and would be determined during final design.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no utility relocations would be anticipated.

5.5 Bicycle and Pedestrian Facilities

The proposed project will comply with TxDOT's Bicycle Accommodation Design Guidance, which implements USDOT and FHWA policy regarding bicycle and pedestrian accommodations. A 10-foot shared use path is proposed along the outside of the frontage roads, one in each direction within the project limits. These improvements are shown in the design schematic included in **Appendix C**. No public transportation or transit services are available within the project limits and would not require connections.

No-Build Alternative

Under the No-Build Alternative, the No-Build Alternative would not construct bicycle and pedestrian facilities.

5.6 Community Impacts

The proposed project is located in a generally suburban setting within the cities of Forney and Terrell, Texas. These communities are generally commuter cities and suburbs within the overall Dallas-Fort Worth metroplex. The proposed study area consists of urban development intermixed with undeveloped open land. Developed lands include single and multi-family residences, places of worship, public facilities, and small and large commercial and industrial businesses including distribution and warehouse centers. Undeveloped lands are comprised of vacant (unimproved acreage) and some agriculture (ranch and pasture) land.

The proposed project would generally consist of adding one mainlane in each direction and providing a continuous frontage road system within the project limits for improved mobility and access.

No-Build Alternative

The No-Build Alternative would not result in construction improvements; therefore, no improvements to address mobility and safety would occur, and this alternative would not address the purpose and need for the project.

5.6.1 Displacements

The proposed project would not result in any displacements; therefore, a displacements analysis was not required. Although no displacements are anticipated, additional ROW of approximately 17 acres would be acquired at various locations within the project limits to accommodate for the proposed improvements. No further analysis was required.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no displacements and no ROW acquisitions would be anticipated.

5.6.2 Access and Travel Patterns

Ramping and intersection improvements are proposed within the project limits. Travel times are anticipated to shorten due to increased mobility, managed congestion and improved access through the continuous frontage roads and additional mainlanes. Vehicular transportation is the current mode generally used to access destinations in the study area with possible walking and cycling in residential areas. No public bus or mass transit is available within the study area. The proposed project would not substantially change existing travel patterns because of the existing facility; however, the project would benefit commuting travel times by reducing congestion and providing improved mobility through the project limits. Proposed improvements include continuous frontage roads, sidewalks, and ramping improvements. These proposed features are anticipated to improve accessibility and provide alternative modes to driving on the mainlanes. Ramp shifts would not eliminate or prohibit access to/from the main lanes and to any portion of the study area.

Emergency response times are also anticipated to be improved because of additional travel lanes and continuous frontage roads proposed within the project limits.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no access and travel pattern impacts would be anticipated.

5.6.3 Community Cohesion

The proposed project is not anticipated to result in adverse impacts to the cohesion of any neighborhood or subdivision within the project study area. The proposed project would not divide any existing communities or planned subdivisions. No feedback from the first public meeting was received to indicate any potential impact to community cohesion. The site visit observations did not identify potential impacts to communities because residential and commercial developments are built entirely north or south of the highway facility; therefore, these neighborhoods and developments are not currently divided, and no additional separation or division is anticipated from the proposed project to adversely impact community cohesion.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to community cohesion would be anticipated.

5.6.4 Environmental Justice and Limited English Proficiency

Environmental Justice (EJ)

In accordance with EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations), a community impact assessment was performed

to identify the presence of EJ populations and evaluate any potential impacts to such populations.

Within the study area, there are 24 census block groups and 709 census blocks. The study area has a 51 percent overall minority population and includes 286 census blocks with half or more of the population identified as minorities. For the entire study area, the minority population is comprised mostly of Black or African American (21 percent) and Hispanic and Latino (22 percent), followed by two or more races (4 percent) and Asian (3 percent). No census block groups have a median household income below the poverty level. The median household incomes range from $34,018 to $204,453 among the census block group geographies.

Based on the analysis, impacts to EJ populations are not disproportionately high and adverse when compared to impacts to non-EJ populations because no displacements, no community cohesion impacts, and no adverse access changes are anticipated by the proposed improvements.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to EJ populations would be anticipated.

Limited English Proficiency (LEP)

There is a presence of persons who speak English “less than very well” in 16 out of the 24 census block groups in the study area. The LEP population percentages range from 0.2 percent to 19.4 percent among census block groups. Five census block groups have a LEP population greater than 5 percent. The most common language LEP persons are likely to speak is Spanish. Specifically, in the study area, the languages spoken by the LEP population are Spanish (2.3 percent), Asian and Pacific Islander languages (0.7 percent), other Indo-European languages (0.5 percent), and other languages (0.3 percent).

Language assistance and other accommodations were made available for past outreach activities and will continue to be provided in future public involvement. Materials including the notice and comment card will be provided in both English and Spanish and will be published in English and Spanish newspapers. An opportunity to request language accommodation and other assistance services would be included in the public hearing notice and provided if requested.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to LEP populations would be anticipated.

5.7 Visual/Aesthetic Impacts

The proposed project would consist of adding a mainlane in each direction and continuous one-way frontage roads along US 80 and Spur 557 within the project limits. Intersection improvements are also proposed at cross streets and improvements to the US 80/Spur 557 and Spur 557/IH 20 interchanges. Direct connectors would be included at these interchanges resulting in vertical changes in the immediate area. Throughout the project limits, the viewshed is generally flat with little obstructions to views outward from the roadway facility.

The grassy median along the center of the US 80 and Spur 557 facilities would be eliminated and replaced by a concrete center barrier and pavement for the additional mainlane and shoulder in each direction. This would change the visual aesthetics of the roadway for users of the facility. However, landscaping and other possible aesthetic treatments could be installed depending on funding and coordination conducted with local governments. Lighting would also be determined during final design and dependent on studies and funding. Some bridge structures would be replaced within the project limits; however, visually, they would be indistinguishable from existing structures. Any aesthetic treatments would be coordinated with local governments and may provide more aesthetically pleasing treatments than current conditions for roadway users. Adjacent properties and view towards the facility would not substantially change from current conditions; however, the interchange improvements would result in obstructed views from the elevated direct connectors and ramps proposed for the US 80/Spur 557 and Spur 557/IH 20 interchanges. Due to the wide existing ROW footprint, the proposed ROW would not substantially add to the existing footprint and would not substantially alter the existing views for roadway users and for adjacent viewers of the corridor.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no visual and aesthetic impacts would be anticipated.

5.8 Cultural Resources

Evaluation of impacts to cultural resources has been conducted in accordance with TxDOT's Memorandum of Understanding (MOU) with the Texas Historical Commission (THC).

5.8.1 Archeology

An Archeological Background Study and Archeological Survey Report were prepared for the proposed project. Based on the Background research, 10 previous cultural resources surveys were identified within 0.6 mile of the area of potential effects (APE) including five that intersect the APE. Seven Protected Areas of the United States (PADUS lands), eight historical markers, and two cemeteries are within 0.6 mile of the proposed project APE. No

National Register of Historic Places (NRHP) properties or districts or State Antiquities Landmarks are within 0.6 mile of the proposed project APE.

An intensive survey of the proposed new ROW included excavating 5 backhoe trenches and 101 shovel tests within the APE. Based on the results of the survey, a finding of "no historic properties affected" was recommended and no further archaeological investigations are recommended within the 11 currently surveyed parcels. A reconnaissance of three inaccessible parcels revealed substantial disturbances and negligible potential for intact archeological deposits; therefore, no further work is recommended on these parcels. Five parcels that were inaccessible during the survey are recommended for further investigation once access is obtained based on the potential for buried deposits and Potential Archeological Liability Model data.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to archeological resources would be anticipated.

5.8.2 Historic Properties

A study was conducted to evaluate historic-age properties within the project limits based on the historic-age limit of 45 years from letting date. A Project Coordination Request, Research Design and Historical Resources Survey Report were prepared for the proposed project. These documents can be viewed and copied upon request at the TxDOT Dallas District.

TxDOT historians conducted a Historic Resources Survey and identified 32 properties in the APE with a finding of four historic properties present (two bridges, two farms).

TxDOT determined two bridges in the APE NRHP-eligible under the 1945-1965 bridge study. Located at CR 217 at US 80 (NBI No. 181300009504108) and Windmill Farms Blvd at US 80 (NBI No. 181300009504109), they carry traffic over the mainlanes of US 80. TxDOT marketed the bridges on its bridge adoption website for over 30 days ending in July 2023.

TxDOT determined Landmark Hill (007) NRHP-eligible under Criterion A and C at the local level for its association with agriculture in Kaufman County and its representation of a Colonial Revival farmstead. TxDOT determined the Pinson Farm (011) NRHP-eligible under Criterion A and C for its association with agriculture in Kaufman County, representing an intact farmstead, with a Craftsman style house.

Pinson Farm is located outside of the proposed project improvements; therefore, the project would result in no impacts to this property. The identified eligible property, Landmark Hill, is approximately 8.04 acres in size. The proposed project requires approximately 0.06 acre in new ROW within the southern boundary of this property along US 80. This results in a total impact of 0.7 percent (less than one percent). TxDOT determined this impact constitutes a *de minimis* use of the historic property. TxDOT determined that this minor change poses no adverse effect as the property would still possess its significance following completion of the

project. The proposed project would not adversely affect the property's integrity of location, setting, feeling, association, design, materials, or workmanship.

Concurrence by THC was received on September 16, 2023 for no adverse effect to historic properties. The agency coordination letter is included in **Appendix F**.

Indirect Effect

Project activities pose minimal potential to cause indirect effects. The widening of an existing highway would not affect or diminish the qualities and characteristics that contribute to the historic significance of Landmark Hill. Potential visual impacts were assessed and determined no visual effects would occur as the roadway will remain at grade at this location. Noise impacts will not be measured as the property is now in commercial use.

Cumulative Effect

Project activities pose no foreseeable cumulative adverse effects to the property. The property is currently abandoned and not in agricultural use and any future use by other owners is not the subject of this review.

The project would result in no effect on the Pinson Farm property. The property is located away from the new ROW impacts. For additional details, the Historical Resources Survey Report is available for viewing and copy requests can be made at the TxDOT Dallas District office.

TxDOT completed programmatic mitigation for the replacement of all bridges in Group II. Group II bridges are those that are significant when considered together as a group. The significance of the Group II bridges lies in their history, rather than their potential for preservation in place. This programmatic mitigation is a public-facing education campaign about these bridges, which includes videos, a webpage, glossaries, photographs, educational activities, and continued promotion of these materials. Per prior agreement, TxDOT does not need to complete additional mitigation on Group II bridges.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to historic properties and structures would be anticipated.

5.9 Protected Lands

Section 4(f) of the USDOT Act requires special consideration to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 6(f) of the Land and Water Conservation Fund (LWCF) Act protects parklands and recreational areas purchased or developed with federal LWCF funds from being converted to non-recreational uses. Chapter 26 of the Texas Parks and Wildlife Code

(PWC) protects any public land designated and used as a park, recreation area, scientific area, wildlife refuge, or historic area from acquisition or use for other purposes.

5.9.1 Section 4(f)

Within the project limits, the USDOT Section 4(f) protections applied to two eligible historic bridges and one recommended eligible historic property. No public parks, recreational areas, or wildlife and waterfowl refuges were identified within the project limits that would be impacted by the proposed project.

The two bridges would be replaced as part of the proposed project. A programmatic Section 4(f) checklist was prepared for each of these bridges and are included in **Appendix G**. In addition to the eligible bridges, the proposed project requires approximately 0.06 acre in new ROW within the southern boundary of the Landmark Hill property along US 80. The proposed ROW would not affect the integrity and character of this site and a *de minimis* Section 4(f) checklist was prepared for this property and included in **Appendix G**.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to Section 4(f) sites would occur.

5.9.2 Section 6(f)

There are no Section 6(f) properties present in the project area.

5.9.3 Chapter 26

There are no Chapter 26 properties present in the project area.

5.10 Water Resources

5.10.1 Clean Water Act Section 404

This project will involve regulated activity in jurisdictional waters and therefore will require authorization under Section 404. **Table 6** shows the water features that are anticipated to be jurisdictional waters in which regulated activity is anticipated to take place. It also indicates whether the impacts are anticipated to be authorized under Section 404 by a non-reporting nationwide permit (NWP) (i.e., no pre-construction notification required), or if it is anticipated that a nationwide permit with pre-construction notification, individual standard permit, letter of permission, or regional general permit will be required.

Table 6. Section 404 Waters

Name of Water Feature	Type of Water Feature	Location of water feature	Covered by non-reporting nationwide permit under Section 404?	Nationwide permit with pre-construction notification, individual standard permit, letter of permission, or regional general permit required under Section 404?
Stream 1 (Buffalo Creek)	Intermittent stream	32.7670138°N 96.4861093°W (App. E, Pg. 1)	Y	N
Stream 2	Perennial stream	32.7646593°N 96.4837355°W (App. E, Pg. 1)	Y	N
Stream 5	Intermittent stream	32.7511041°N 96.4608369°W (App. E, Pg. 4)	Y	N
Stream 6 (Mustang Creek)	Intermittent stream	32.7508546°N 96.4605845°W (App. E, Pg. 4)	Y	N
Stream 10	Intermittent stream	32.7397639°N 96.3908791°W (App. E, Pg. 10)	Y	N
Stream 13 (Big Brushy Creek)	Perennial stream	32.7393524°N 96.3754176°W (App. E, Pg. 12)	Y	N
Stream 14 (Terry Creek)	Intermittent stream	32.7355307°N 96.3508925°W (App. E, Pg. 14)	Y	N
Stream 15	Intermittent stream	32.7332702°N 96.3463723°W (App. E, Pg. 15)	Y	N

Source: Water Features Delineation Report, July 2023.

The water features listed above can be grouped into 4 single and complete crossings. The proposed project will permanently and/or temporarily impact intermittent streams 1, 5, 6, 10, 14, and 15, and perennial streams 2 and 13. One additional intermittent stream, eight ephemeral streams, and three wetlands were delineated along the corridor within the project limits; however, these streams and wetlands were either not potentially jurisdictional or not impacted by the proposed project. See **Appendix E** for locations of streams listed in **Table 6**. No wetland impacts are anticipated. Impacts at each single and complete crossing will be less than 0.10 acre and therefore will be covered by a non-reporting NWP 14 – Linear Transportation Projects. TxDOT will comply with the current Clean Water Act (CWA) rules, regulations, policies, and guidance in effect when the permit is requested or when construction begins.

The need for an individual standard permit under Section 404 is not anticipated. If it is later determined that an individual standard permit under Section 404 is needed, compliance with EPA's Section 404(b)(1) Guidelines will be confirmed prior to submittal of the individual standard permit application.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to jurisdictional waters would be anticipated.

5.10.2 Clean Water Act Section 401

For projects that require an NWP under Section 404 that is covered by TCEQ's blanket 401 water quality certification, regardless of whether the NWP is non-reporting, or requires the submission of a PCN, TxDOT complies with Section 401 of the Clean Water Act by implementing TCEQ conditions for NWPs. For projects that require authorization under an NWP under Section 404 that is not covered by TCEQ's blanket 401 water quality certification, or under an Individual Standard Permit, Letter of Permission, or Regional General Permit under Section 404, TxDOT will coordinate the Section 401 water quality certification with TCEQ. TCEQ will either approve or deny the Section 401 water quality certification or issue a waiver. The TCEQ Section 401 water quality certification decision must be submitted to the United States Army Corps of Engineers (USACE) before use of the NWP can be confirmed, or an Individual Standard Permit, Letter of Permission, or Regional General Permit decision can be made.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to water quality would be anticipated.

5.10.3 Executive Order 11990 Wetlands

Executive Order (EO) 11990, Protection of Wetlands (42 Federal Register 26961, 5/24/1977), prohibits new construction in wetlands unless there is no practicable alternative to such construction and the project includes all practicable measures to minimize harm to wetlands. Wetlands are present within the proposed project ROW. However, neither temporary nor permanent impacts to wetlands are anticipated resulting from the proposed project improvements.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to wetlands are anticipated.

5.10.4 Rivers and Harbors Act

The proposed project will not involve activities in a navigable waterway and therefore will not require authorization under Section 10 of the Rivers and Harbors Act. Furthermore, this project will not involve activities that alter, occupy, or use any USACE federally authorized civil works project. Therefore, Section 14 of the Rivers and Harbors Act (Section 408) does not apply for the Build and No-Build Alternatives.

5.10.5 Clean Water Act Section 303(d)

The proposed project is located within five linear miles of two impaired assessment units under Section 303(d) of the federal Clean Water Act according to the 2022 TCEQ 303(d) List (see **Table 7**).

Table 7. Section 303(d) Units

Watershed	Segment Name	Segment Number	Assessment Unit Number
Mustang Creek – East Fork Trinity River (120301060505)	East Fork Trinity River	0819	TX-0819_01
Headwaters Kings Creek (120301070105)	Kings Creek	0818C	TX-0818C_01

Source: SAS Form, July 2023.

To date, TCEQ has not identified (through either a total maximum daily load (TMDL) or the review of projects under the TCEQ MOU) a need to implement control measures beyond those required by the construction general permit (CGP) on road construction projects. Therefore, compliance with the project's CGP, along with coordination under the TCEQ MOU for certain transportation projects, collectively meets the need to address impaired waters during the environmental review process. As required by the CGP, the project and associated

activities will be implemented, operated, and maintained using best management practices to control the discharge of pollutants from the project site.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to impaired waters would be anticipated.

5.10.6 Clean Water Act Section 402

Since Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP) authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies and procedures that govern the design and construction phases of the project. The Project Development Process Manual and the Plans, Specifications, and Estimates (PS&E) Preparation Manual require a storm water pollution prevention plan (SWP3) be included in the plans of all projects that disturb one or more acres. The Construction Contract Administration Manual requires that the appropriate CGP authorization documents (notice of intent or site notice) be completed, posted, and submitted, when required by the CGP, to TCEQ and the municipal separate storm sewer system (MS4) operator. It also requires that projects be inspected to ensure compliance with the CGP.

The PS&E Preparation Manual requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the "Required Specification Checklists" require the current version of Special Provision 506 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SWP3, and to complete the appropriate authorization documents.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no ground disturbance would occur and compliance with the TPDES CGP would not be required.

5.10.7 Floodplains

The proposed project is located within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain. The study area intersects approximately 70 acres of Zone AE 100-year floodplain along Buffalo Creek, Mustang Creek, Big Brushy Creek, Terry Creek, and Bachelor Creek, and 12 acres of Zone A 100-year floodplain along Terry Creek and Unnamed Tributary to Big Brushy Creek (Stream 10). This project is federally funded and therefore is subject to Executive Order (EO) 11988, Floodplain Management. However, the project will not involve a significant encroachment in the floodplain.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, coordination with the local floodplain administrator would not be required.

5.10.8 Wild and Scenic Rivers

No wild and scenic rivers are in or near the project limits; therefore, the Wild and Scenic Rivers Act does not apply.

5.10.9 Coastal Barrier Resources

The Coastal Barrier Resources Act (CBRA) does not apply.

5.10.10 Coastal Zone Management

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

5.10.11 Edwards Aquifer

The TCEQ Edwards Aquifer Rules and the EPA Edwards Aquifer MOU do not apply.

5.10.12 International Boundary and Water Commission

This project does not cross or encroach upon the floodway of the International Boundary Water Commission (IBWC) ROW or an IBWC flood control project.

5.10.13 Drinking Water Systems

In accordance with TxDOT's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells), if discovered, any drinking water wells would need to be properly removed and disposed of during construction of the proposed project.

According to groundwater well data from the Texas Water Development Board (TWDB), no active drinking water wells are located within the vicinity of the project.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no impacts to drinking water systems would be anticipated.

5.11 Biological Resources

5.11.1 Impacts to Vegetation

The project area is located within the Southwestern Prairies Cotton and Forage Land Resource Region (LRR J) of the Great Plains and is more specifically located in Major Land Resource Area (MLRA) 86A (Texas Blackland Prairie). This area is characterized by fertile dark clay soils, gentle topography, deciduous trees (pecan, cedar elm, various oaks and

hackberry), and a diverse assortment of perennial and annual grasses. Watersheds and riparian zones of the Brazos and Trinity River and their associated tributaries support habitat for a variety of wildlife species.

Currently, the project area is located in an urban/suburban setting. Developed lands include single and multi-family residences, places of worship, public facilities, small and large businesses, industrial facilities, and distribution centers interspersed with mowed/maintained grasses and ornamental plants. Most of the project area is located on urbanized land. Undeveloped lands are comprised of deciduous woodland, floodplain, disturbed/tame grassland, barren ground, and cropland. There are multiple small stream and floodplain crossings within the project limits, with riparian and floodplain vegetation typically consisting of deciduous trees, shrubs, native grasses, herbs, and aquatic plants.

Dominant upland plant species include hackberry (*Celtis laevigata*), cedar elm (*Ulmus crassifolia*), American elm (*Ulmus americana*), eastern red cedar (*Juniperus virginiana*), ash (*Fraxinus spp.*), johnsongrass (*Sorghum halepense*), ragweed (*Ambrosia trifida*), bermuda grass (*Cynodon dactylon*), snow-on-the-prairie (*Euphorbia marginata*), sunflower (*Helianthus annuus*), poison ivy (*Toxicodendron radicans*), goldenrod (*Solidago sp.*), and greenbrier (*Smilax rotundifolia*). Dominant wetland plant species include balloon vine (*Cardiospermum halicacabum*), southern saltmarsh aster (*Symphyotrichum divaricatum*), cattail (*Typha sp.*), sedge (*Carex sp.*), rush (*Eleocharis sp.*) and black willow (*Salix nigra*). Soils in the project area vary but are dominated by clay soils with silty and sandy loams also present. Some clay soils exhibit hydric characteristics.

A Species Analysis Spreadsheet was prepared to identify the potential for rare, threatened and endangered species within the project area. There are no federally or state-listed plant species identified for the project. Potential habitats for Species of Greatest Conservation Need (SGCN) were also evaluated. Native species designated as SGCNs are generally those that are declining or rare and in need of attention to recover or to prevent the need to list under state or federal regulation.

See **Appendix B** for project photographs, and **Appendix E** to view exhibits showing the type and location of vegetative habitat in the existing and proposed ROW. Impacts to vegetation would be avoided or minimized by limiting disturbance to only that which is necessary to construct the proposed project. No unusual vegetation or special habitat features were observed within the proposed project area; the majority of impact will occur within acreage already converted to urban land use (742 ac). Impacts to other vegetation types include: native invasive deciduous woodland (16.3 ac), floodplain herbaceous vegetation (8.5 ac), barren land (4.2 ac), Blackland Prairie disturbed grassland (3.7 ac), floodplain hardwood forest (3.6 ac), and row crops (3.2 ac).

The following BMPs would be implemented for vegetation. Refer to **Section 8.0**, for detailed BMPs:

- Minimizing the amount of vegetation cleared and avoiding removal of native vegetation to the greatest extent practicable.
- Discouraging the use of non-native vegetation in landscaping and revegetation.
- Avoiding vegetation clearing activities during the general bird nesting season, March through September, to minimize adverse impacts to birds.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, the No-Build Alternative would have no impact on vegetation.

5.11.2 Executive Order 13112 on Invasive Species

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

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, compliance with EO 13112 on Invasive Species would not apply.

5.11.3 Executive Memorandum on Environmentally and Economically Beneficial Landscaping

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

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, beneficial landscaping would not apply.

5.11.4 Impacts to Wildlife

Wildlife habitat suitability is closely linked to the vegetation and soil profiles observed in the project area. Refer to **Section 5.11.1 – Impacts to Vegetation** for detail on dominant vegetation. Typical wildlife species that have the potential to occur in the habitat surrounding the project include a variety of small mammals, birds, reptiles, amphibians, small fish, mussels, and invertebrates.

A Species Analysis Spreadsheet was prepared to identify the potential for federally and state-listed threatened and endangered species as well as SGCNs within the project area. Habitat suitability and effect/impact determinations for these species as a result of the proposed project are discussed in **Section 5.11.10 – Threatened, Endangered, and Candidate Species**.

As the project activities involve widening and improving upon existing roadway, habitat fragmentation is not anticipated and therefore long-term impacts such as disruption of animal movement and gene-flow will be minimized. However, short-term impacts may occur in fringe areas containing suitable habitat. During construction, heavy machinery could kill small, low-mobility animals or could cause soil compaction, impacting animals that live underground. Proper use of BMPs used to protect rare, threatened, and endangered species will help minimize impacts to wildlife during construction. Refer to **Section 8.0** for a discussion on wildlife BMPs and the TPWD BMPs form included in **Appendix F**.

5.11.5 Migratory Bird Protections

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

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

Additional preemptive and preventative measures that may be applied, where appropriate and practicable, are described in TxDOT's Guidance – Avoiding Migratory Birds and Handling Potential Violations.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, impacts to migratory bird nests would not be anticipated.

5.11.6 Fish and Wildlife Coordination Act

The project is anticipated to require a nationwide permit issued by the USACE. Compliance with the Fish and Wildlife Coordination Act will be accomplished by complying with the terms and conditions of the nationwide permit.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, compliance with the Fish and Wildlife Coordination Act would not apply.

5.11.7 Bald and Golden Eagle Protection Act of 2007

This project is not within 660 feet of an active or inactive Bald or Golden Eagle nest. Therefore, no coordination with USFWS is required for either Build Alternative or the No-Build Alternative.

5.11.8 Magnuson-Stevens Fishery Conservation Management Act

The Essential Fish Habitat (EFH)/Magnuson-Stevens Fishery Conservation and Management Act (MSA) does not apply to either the Build Alternative or the No-Build Alternative.

5.11.9 Marine Mammal Protection Act

This project is not located within or over tidally influenced waters; therefore, the project area does not contain suitable habitat for marine mammals. The Marine Mammal Protection Act does not apply to either the Build Alternative or the No-Build Alternative.

5.11.10 Threatened, Endangered, and Candidate Species

The proposed project is within range of and has suitable habitat for the federal candidate monarch butterfly (*Danaus plexippus*) and the federally endangered Whooping Crane (*Grus americana*, endangered). The monarch butterfly is a candidate species, and no consultation with USFWS is required at this time. TxDOT is a partner in the Nationwide Candidate Conservation Agreement with Assurances/Candidate Conservation Agreement for Monarch Butterfly on Energy and Transportation Lands (Agreement). The Agreement authorizes incidental take for all activities included in the proposed project should the monarch butterfly be listed as endangered or threatened. Any presence of Whooping Cranes in the project area would be incidental and temporary; therefore, the project would have no effect on the species.

The proposed project is within range of and has suitable habitat for the state-threatened White-Faced Ibis (*Plegadis chihi*) and Wood Stork (*Mycteria americana*). The presence of these species in the project area would be incidental and temporary; therefore, the project would have no impact on these species.

Based on field investigations performed September 7-8, 2022, the project area includes two perennial streams, Big Brushy Creek and Buffalo Creek relief, which are ungrouped streams according to 2023 USFWS/TPWD Texas Freshwater Mussel Survey Protocol. Ungrouped streams would be studied similarly to Group 5. Group 5 consist of streams where no federally- or state-listed freshwater mussels occur, but mussels are known to occur; or perennial streams where it is anticipated that live freshwater mussels may occur, but presence or diversity have not been confirmed. For the proposed project, Freshwater Mussel BMPs, including survey/relocation of native mussel species applies in compliance with the USFWS-TPWD protocol. Any mussels found during the survey would be relocated following mussel relocation protocols established by TPWD and USFWS.

Potential habitats for SGCN were also evaluated. The proposed project is within range of, has suitable habitat for, and may impact the following SGCNs:

- Eastern tiger salamander (*Ambystoma tigrinum*),
- Woodhouse's toad (*Anaxyrus woodhousii*),
- Strecker's chorus frog (*Pseudacris streckeri*),
- Southern crawfish frog (*Lithobates areolatus areolatus*),
- Western burrowing owl (*Athene cunicularia hypugaea*),
- Sprague's pipit (*Anthus spragueii*),
- Chestnut-collared longspur (*Calcarius ornatus*),
- Swamp rabbit (*Sylvilagus aquaticus*),
- Muskrat (*Ondatra zibethicus*)
- Long-tailed weasel (*Mustela frenata*)
- Eastern spotted skunk (*Spilogale putorius*)
- Western chicken turtle (*Deirochelys reticularia miaria*)
- Eastern box turtle (*Terrapene carolina*)
- Western box turtle (*Terrapene ornata*)
- Slender glass lizard (*Ophisaurus attenuatus*)
- American bumblebee (*Bombus pensylvanicus*)

None of the species were observed during the site visits.

BMPs per the TxDOT-TPWD BMP Programmatic Agreement and TxDOT-TPWD coordination will be utilized to minimize or avoid impacts to state-listed threatened species. Specific BMPs are outlined in the TPWD BMPs form, in **Attachment F** and summarized in **Section 8.0**.

Coordination with TPWD was initiated on August 9, 2023.

No-Build Alternative

Under the No-Build Alternative, no impacts to federally- or state-listed threatened or endangered species or their habitats would be anticipated.

5.12 Air Quality

This project is located within an area that has been designated by EPA as a severe and moderate nonattainment area for the 2008 and 2015 ozone NAAQS, respectively; therefore, transportation conformity rules apply. Conformity for older standards is satisfied by conformity to the more stringent 2008 and 2015 ozone NAAQS, as applicable. The proposed action is consistent with the NCTCOG's financially constrained Mobility 2045 MTP and the 2023-2026 TIP, as amended, which were initially found to conform to the TCEQ State Implementation Plan (SIP) by FHWA and FTA on December 15, 2022, respectively. All projects in the NCTCOG TIP that are proposed for federal or state funds were initiated in a manner consistent with federal guidelines in Section 450, of Title 23 CFR and Section 613.200, Subpart B, of Title 49 CFR.

Carbon Monoxide Traffic Air Quality Analysis

Traffic data for the estimated time of completion (ETC) year (2028) and design year (2048) is 88,200 vehicles per day and 122,000 vehicles per day, respectively. A prior TxDOT modeling study and previous analyses of similar projects demonstrated that it is unlikely that the carbon monoxide standard would ever be exceeded as a result of any project with an average annual daily traffic (AADT) below 140,000. The AADT projections for the project do not exceed 140,000 vehicles per day; therefore, a Traffic Air Quality Analysis was not required.

Mobile Source Air Toxics (MSAT)

A quantitative MSAT analysis was not required since this added capacity project is not estimated to have an Annual Average Daily Traffic (AADT) greater than 140,000 vehicles per day, would not affect or be affected by an intermodal facility or another facility that may be a large generator of diesel traffic, and the public has not expressed air quality concerns specifically about this project. However, since this is an added-capacity project, is not a categorical exclusion or a project of the types listed in 40 CFR 93.126, a qualitative MSAT assessment is required.

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment conducted for the proposed project is derived in part from a study conducted by FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives (Claggett and Miller, 2011).

The vehicle miles traveled (VMT) estimated for the Build Alternative is slightly higher than that for the No-Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. The additional travel lanes contemplated as part of the Build Alternative will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No-Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built near intersections and interchanges, where vehicle acceleration and brake wear would increase emissions. However, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Congestion Management Process

The congestion management process is a systematic 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. The project was developed from the NCTCOG's CMP, which meets all requirements of 23 CFR 450.320 and 500.109, as applicable. The CMP was adopted by NCTCOG in August 2021.

The region commits to operational improvements and travel demand reduction strategies at two levels of implementation: program level and project level. Program level commitments are inventoried in the regional CMP, which was adopted by NCTCOG; they are included in the financially constrained MTP, and future resources are reserved for their implementation.

The CMP element of the plan carries an inventory of all project commitments (including those resulting from major investment studies) that details type of strategy, implementing responsibilities, schedules, and expected costs. At the project's programming stage, travel demand reduction strategies and commitments will be added to the regional TIP or included in the construction plans. The regional TIP provides for programming of these projects at the appropriate time with respect to the single occupancy vehicle (SOV) facility implementation and project-specific elements.

Committed congestion reduction strategies and operational improvements within the study boundary will consist of constructing an additional lane for one-way continuous frontage roads in each direction, adding a mainlane in each direction, including intersection improvements and a shared use path adjacent to the frontage roads with bicycle and pedestrian accommodations. Individual projects are listed in **Table 8**.

Table 8. Congestion Management Process Strategies

Operational Improvements in Travel Corridor		
Location	**Type**	**Implementation Date**
FM 429 from US 80 to north of US 80	Reconstruction, intersection improvement	2024
FM 429 from US 80 to south of US 80	Addition of lanes, reconstruction	2024
US 80 from on Moore Ave (US 80) west from Brookshires Drive to Bradshaw Street	Bike/pedestrian, intersection improvement, reconstruction	2025
Spur 557 at Las Lomas Parkway (CR 305)	Addition of Lanes	2028
FM 548 from US 80 to FM 1641	Addition of lanes, reconstruction	2045
SH 205 from south of FM 548 to US 80	Addition of lanes	2045
IH 20 from Spur 557 to east of CR 138 (Wilson Road)	New roadway	2045
FM 1641 from FM 548 to FM 148	Addition of lanes, reconstruction	2045

Note: Only projects with an implementation year of 2023 or later were included. Source: NCTCOG TIPINS Interactive Map and Query, found at https://rapts.dfwmaps.com/. Accessed 8/14/2023.

In an effort to reduce congestion and the need for SOV lanes in the region, TxDOT and NCTCOG will continue to promote appropriate congestion reduction strategies through the Congestion Mitigation and Air Quality Improvement (CMAQ) program, the CMP, and the MTP. The congestion reduction strategies considered for this project would help alleviate congestion in the SOV study boundary but would not eliminate it.

Therefore, the proposed project is justified. The CMP analysis for added SOV capacity projects in the TMA is on file and available for review at NCTCOG.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, there would be no improvements to reduce congestion nor possible air quality benefits.

5.13 Hazardous Materials

A Hazardous Materials Initial Site Assessment (ISA) was completed for the Build Alternative in accordance with TxDOT's Environmental Handbook for Hazardous Materials. The purpose of the ISA is to identify sites that might pose a potential for hazardous material impacts to the proposed project. The ISA, approved in February 2023, was completed for a construction western limit at FM 460. However, the construction west limits have been reduced from FM 460 to east of Buffalo Creek Relief as shown on the 100% Design Schematic. The reduced west limits has removed as a concern for this project one hazardous materials site that was identified on the February 2023 ISA. The approved ISA is maintained in the TxDOT Dallas District project files.

The evaluation of potential hazardous materials sites began with a review of sites identified in an environmental regulatory database search, followed by information gleaned from field observations, review of historical aerial photographs and topographic maps and additional online federal and state environmental database research. The evaluation reached conclusions regarding potential impacts for each concern identified during preparation of the ISA. Evaluation of regulatory database sites determined five sites to pose moderate environmental risks to the project. All other sites were determined to be low environmental risks or not environmental concerns to the project. The moderate risk sites are as follows:

ISA Map ID 9 – IHWCA: Hoffman Drum Forney, possible address location 10462 W US Highway 80 in Forney.

ISA Map ID 31 – LPST: Bingo Fuel Stop, former location currently addressed at 104-114 E US Highway 80 in Forney.

ISA Map ID 49 – LPST: Millers Truck Stop/Xpress Travel Center, addressed at 120 E US Highway 80 in Forney.

ISA Map ID 51 – LPST: Food Fast 67, addressed at 899 Pinson Rd in Forney.

ISA Map ID 54 – LPST: Shell/Motiva Enterprises, addressed at 101 W US Highway 80 in Forney.

ISA Map ID 66 – LPST: former Stuckey's Truck Stop, addressed at 594 W US Highway 80 in Forney.

Additional research was performed for these sites as a TCEQ Regulatory File Review Report, dated September 25, 2023. Based on TCEQ file information in conjunction with proposed project work, Hoffman Drum Forney and Food Fast 67 were determined to have a low potential to impact the project. However, Bingo Fuel Stop, Millers Truck Stop/Xpress Travel Center, the former Stuckey's Truck Stop, and Shell/Motiva Enterprises were determined to have the potential to impact proposed project construction and additional subsurface investigations have been recommended to evaluate potential impacts. Map ID 66 will be addressed under a separate project (CSJ:0095-03-100) as the west portion of the project, where this is located, has been removed from construction activities under the US 80 project (CSJ: 0095-03-106, etc.). The TCEQ Regulatory File Review Report is maintained in the TxDOT Dallas District project files.

The site visit disclosed several auto body shops, auto lube and service facilities, tire shops and construction/materials companies along the corridor adjacent to the proposed project that were not identified as the regulatory facilities. These sites were considered low environmental risks to the project. In addition, the site visit identified pole-mounted electrical transformers along various sections of US 80, but it was determined that these transformers do not pose an environmental concern for the project. No evidence of spills or releases were observed near areas of proposed construction within the highway corridor.

The proposed project includes the demolition of bridge and bridge class culvert structures. The structures may involve asbestos-containing materials or lead-containing paint. Asbestos-containing materials and lead-containing paint inspections, notification, abatement, and disposal, as applicable, would be addressed prior to demolition in accordance with regulatory requirements.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, there would be no potential to encounter hazardous materials related to construction or property acquisition.

5.14 Traffic Noise

A traffic noise analysis was prepared in accordance with TxDOT's (FHWA-approved) Traffic Noise Policy (2019). The Traffic Noise Analysis Report (2023), which includes details about the analysis, is available for public review at the TxDOT Dallas District office.

Existing and predicted traffic noise levels were modeled at representative land use activity areas (receptors) adjacent to the project that might be impacted by traffic noise and would potentially benefit from feasible and reasonable noise abatement (**Table 9**).

Table 9. Traffic Noise Levels dB(A) Leq

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2048	Change (+/-)	Noise Impact (yes/no)
R1 (Residential)	B	67	75	75	0	**Yes**
R2 (Residential)	B	67	72	73	1	**Yes**
R3 (Residential)	B	67	70	71	1	**Yes**
R4 (Residential)	B	67	69	70	1	**Yes**
R5 (Residential)	B	67	69	70	1	**Yes**
R6 (Residential)	B	67	64	65	1	No
R7 (Residential)	B	67	63	64	1	No
R8 (Residential)	B	67	62	64	2	No
R9 (Residential)	B	67	62	63	1	No
R10 (Residential)	B	67	73	73	0	**Yes**
R11 (Residential)	B	67	70	71	1	**Yes**
R12 (Residential)	B	67	68	69	1	**Yes**
R13 (Residential)	B	67	67	68	1	**Yes**
R14 (Residential)	B	67	65	66	1	**Yes**
R15 (Residential)	B	67	64	66	2	**Yes**
R16 (Residential)	B	67	62	64	2	No
R17 (Residential)	B	67	61	63	2	No
R18 (Residential)	B	67	60	62	2	No
R19 (Residential)	B	67	60	62	2	No
R20 (Residential)	B	67	59	62	3	No
R21 (Residential)	B	67	60	63	3	No
R22 (Residential)	B	67	60	63	3	No
R23 (Residential)	B	67	61	63	2	No
R24 (Residential)	B	67	60	63	3	No
R25 (Residential)	B	67	60	62	2	No
R26 (Residential)	B	67	60	63	3	No
R27 (Residential)	B	67	67	68	1	**Yes**
R28 (Residential)	B	67	69	70	1	**Yes**
R29 (Residential)	B	67	71	70	-1	**Yes**
R30 (Residential)	B	67	72	71	-1	**Yes**
R31 (Residential)	B	67	72	72	0	**Yes**

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2048	Change (+/-)	Noise Impact (yes/no)
R32 (Residential)	B	67	70	70	0	**Yes**
R33 (Residential)	B	67	63	64	1	No
R34 (Residential)	B	67	64	65	1	No
R35 (Residential)	B	67	60	62	2	No
R36 (Residential)	B	67	61	63	2	No
R37 (Residential)	B	67	61	63	2	No
R38 (Residential)	B	67	61	63	2	No
R39 (Residential)	B	67	63	63	0	No
R40 (Restaurant)	E	72	65	65	0	No
R41 (Residential)	B	67	61	61	0	No
R42 (Residential)	B	67	62	64	2	No
R43 (Residential)	B	67	64	67	3	**Yes**
R44 (Residential)	B	67	64	67	3	**Yes**
R45 (Residential)	B	67	64	67	3	**Yes**
R46 (Residential)	B	67	63	66	3	**Yes**
R47 (Residential)	B	67	63	66	3	**Yes**
R48 (Residential)	B	67	62	65	3	No
R49 (Residential)	B	67	62	64	2	No
R50 (Residential)	B	67	63	66	3	**Yes**
R51 (Residential)	B	67	63	65	2	No
R52 (Residential)	B	67	64	66	2	**Yes**
R53 (Residential)	B	67	64	67	3	**Yes**
R54 (Residential)	B	67	65	67	2	**Yes**
R55 (Residential)	B	67	64	67	3	**Yes**
R56 (Residential)	B	67	64	66	2	**Yes**
R57 (Residential)	B	67	63	66	3	**Yes**
R58 (Residential)	B	67	63	65	2	No
R59 (Residential)	B	67	62	65	3	No
R60 (Residential)	B	67	62	64	2	No
R61 (Residential)	B	67	62	64	2	No
R62 (Residential)	B	67	63	65	2	No
R63 (Residential)	B	67	64	66	2	**Yes**
R64 (Residential)	B	67	65	67	2	**Yes**
R65 (Residential)	B	67	66	68	2	**Yes**
R66 (Residential)	B	67	66	68	2	**Yes**

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2048	Change (+/-)	Noise Impact (yes/no)
R67 (Residential)	B	67	69	70	1	**Yes**
R68 (Residential)	B	67	69	69	0	**Yes**
R69 (Residential)	B	67	67	69	2	**Yes**
R70 (Residential)	B	67	67	69	2	**Yes**
R71 (Residential)	B	67	66	68	2	**Yes**
R72 (Residential)	B	67	65	66	1	**Yes**
R73 (Residential)	B	67	66	66	0	**Yes**
R74 (Residential)	B	67	65	66	1	**Yes**
R75 (Residential)	B	67	64	65	1	No
R76 (Residential)	B	67	65	65	0	No
R77 (Residential)	B	67	65	65	0	No
R78 (Residential)	B	67	64	65	1	No
R79 (Residential)	B	67	63	64	1	No
R80 (Residential)	B	67	62	63	1	No
R81 (Residential)	B	67	62	62	0	No
R82 (Residential)	B	67	62	63	1	No
R83 (Residential)	B	67	62	63	1	No
R84 (Residential)	B	67	63	64	1	No
R85 (Residential)	B	67	64	64	0	No
R86 (Residential)	B	67	63	65	2	No
R87 (Residential)	B	67	62	64	2	No
R88 (Residential)	B	67	62	63	1	No
R89 (Residential)	B	67	61	63	2	No
R90 (Residential)	B	67	61	63	2	No
R91 (Residential)	B	67	62	64	2	No
R92 (Residential)	B	67	62	64	2	No
R93 (Residential)	B	67	61	62	1	No
R94 (Residential)	B	67	62	63	1	No
R95 (Residential)	B	67	63	63	0	No
R96 (Residential)	B	67	61	62	1	No
R97 (Residential)	B	67	62	63	1	No
R98 (Residential)	B	67	66	65	-1	No
R99 (Residential)	B	67	65	65	0	No
R100 (Residential)	B	67	65	65	0	No
R101 (Residential)	B	67	63	64	1	No

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2048	Change (+/-)	Noise Impact (yes/no)
R102 (Residential)	B	67	62	63	1	No
R103 (Residential)	B	67	70	69	-1	**Yes**
R104 (Residential)	B	67	72	70	-2	**Yes**
R105 (Residential)	B	67	75	72	-3	**Yes**
R105A (Residential)	B	67	74	71	-3	**Yes**
R106 (Residential)	B	67	61	63	2	No
R107 (Residential)	B	67	61	63	2	No
R108 (Residential)	B	67	62	64	2	No
R109 (Residential)	B	67	63	64	1	No
R110 (Residential)	B	67	63	65	2	No
R111 (Residential)	B	67	63	65	2	No
R112 (Residential)	B	67	63	65	2	No
R113 (Residential)	B	67	63	65	2	No
R114 (Residential)	B	67	63	65	2	No
R115 (Residential)	B	67	63	65	2	No
R116 (Residential)	B	67	63	65	2	No
R117 (Residential)	B	67	63	64	1	No
R118 (Residential)	B	67	63	64	1	No
R119 (Residential)	B	67	63	64	1	No
R120 (Residential)	B	67	63	64	1	No
R121 (Residential)	B	67	63	64	1	No
R122 (Residential)	B	67	63	64	1	No
R123 (Residential)	B	67	63	65	2	No
R124 (Residential)	B	67	63	65	2	No
R125 (Residential)	B	67	63	65	2	No
R126 (Residential)	B	67	63	65	2	No
R127 (Residential)	B	67	63	65	2	No
R128 (Residential)	B	67	63	64	1	No
R129 (Residential)	B	67	63	65	2	No
R130 (Residential)	B	67	63	64	1	No
R131 (Residential)	B	67	62	65	3	No
R132 (Residential)	B	67	63	65	2	No
R133 (Residential)	B	67	62	64	2	No
R134 (Residential)	B	67	62	64	2	No
R135 (Residential)	B	67	62	64	2	No

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2048	Change (+/-)	Noise Impact (yes/no)
R136 (Residential)	B	67	62	64	2	No
R137 (Residential)	B	67	62	64	2	No
R138 (Residential)	B	67	60	62	2	No
R139A (Apartment 1st Floor)	B	67	65	68	3	**Yes**
R139B (Apartment 2nd Floor)	B	67	70	71	1	**Yes**
R140A (Apartment 1st Floor)	B	67	67	69	2	**Yes**
R140B (Apartment 2nd Floor)	B	67	71	72	1	**Yes**
R141A (Apartment 1st Floor)	B	67	68	70	2	**Yes**
R141B (Apartment 2nd Floor)	B	67	72	73	1	**Yes**
R142A (Apartment 1st Floor)	B	67	69	71	2	**Yes**
R142B (Apartment 2nd Floor)	B	67	72	74	2	**Yes**
R143A (Apartment 1st Floor)	B	67	70	72	2	**Yes**
R143B (Apartment 2nd Floor)	B	67	73	75	2	**Yes**
R144A (Apartment 1st Floor)	B	67	72	74	2	**Yes**
R144B (Apartment 2nd Floor)	B	67	75	77	2	**Yes**
R145A (Apartment 1st Floor)	B	67	73	75	2	**Yes**
R145B (Apartment 2nd Floor)	B	67	75	78	3	**Yes**
R146A (Apartment 1st Floor)	B	67	75	77	2	**Yes**
R146B (Apartment 2nd Floor)	B	67	77	79	2	**Yes**
R147A (Apartment 1st Floor)	B	67	68	71	3	**Yes**
R147B (Apartment 2nd Floor)	B	67	72	74	2	**Yes**
R148A (Apartment 1st Floor)	B	67	70	73	3	**Yes**
R148B (Apartment 2nd Floor)	B	67	74	76	2	**Yes**
R149A (Apartment 1st Floor)	B	67	70	73	3	**Yes**
R149B (Apartment 2nd Floor)	B	67	74	76	2	**Yes**
R150A (Apartment 1st Floor)	B	67	70	72	2	**Yes**
R150B (Apartment 2nd Floor)	B	67	74	76	2	**Yes**
R151A (Apartment 1st Floor)	B	67	70	72	2	**Yes**
R151B (Apartment 2nd Floor)	B	67	74	75	1	**Yes**
R152A (Apartment 1st Floor)	B	67	72	75	3	**Yes**
R152B (Apartment 2nd Floor)	B	67	75	78	3	**Yes**
R153A (Apartment 1st Floor)	B	67	72	75	3	**Yes**
R153B (Apartment 2nd Floor)	B	67	75	78	3	**Yes**
R154A (Apartment 1st Floor)	B	67	71	74	3	**Yes**
R154B (Apartment 2nd Floor)	B	67	75	77	2	**Yes**

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2048	Change (+/-)	Noise Impact (yes/no)
R155A (Apartment 1st Floor)	B	67	72	75	3	**Yes**
R155B (Apartment 2nd Floor)	B	67	75	77	2	**Yes**
R156 (Pool)	C	67	65	68	3	**Yes**
R157A (Apartment 1st Floor)	B	67	74	76	2	**Yes**
R157B (Apartment 2nd Floor)	B	67	76	79	3	**Yes**
R158A (Apartment 1st Floor)	B	67	70	73	3	**Yes**
R158B (Apartment 2nd Floor)	B	67	74	76	2	**Yes**
R159A (Apartment 1st Floor)	B	67	69	72	3	**Yes**
R159B (Apartment 2nd Floor)	B	67	73	74	1	**Yes**
R160A (Apartment 1st Floor)	B	67	67	70	3	**Yes**
R160B (Apartment 2nd Floor)	B	67	71	73	2	**Yes**
R161A (Apartment 1st Floor)	B	67	73	76	3	**Yes**
R161B (Apartment 2nd Floor)	B	67	76	78	2	**Yes**
R162A (Apartment 1st Floor)	B	67	70	73	3	**Yes**
R162B (Apartment 2nd Floor)	B	67	74	76	2	**Yes**
R163A (Apartment 1st Floor)	B	67	69	72	3	**Yes**
R163B (Apartment 2nd Floor)	B	67	73	75	2	**Yes**
R164A (Apartment 1st Floor)	B	67	67	70	3	**Yes**
R164B (Apartment 2nd Floor)	B	67	71	73	2	**Yes**
R165 (Park)	C	67	67	69	2	**Yes**
R166A (Apartment 1st Floor)	B	67	67	68	1	**Yes**
R166B (Apartment 2nd Floor)	B	67	71	72	1	**Yes**
R167A (Apartment 1st Floor)	B	67	66	68	2	**Yes**
R167B (Apartment 2nd Floor)	B	67	71	72	1	**Yes**
R168A (Apartment 1st Floor)	B	67	66	68	2	**Yes**
R168B (Apartment 2nd Floor)	B	67	70	72	2	**Yes**
R169A (Apartment 1st Floor)	B	67	66	68	2	**Yes**
R169B (Apartment 2nd Floor)	B	67	70	71	1	**Yes**
R170 (Hotel)	E	72	65	67	2	No
R171 (Hotel)	E	72	63	65	2	No
R172 (Hotel)	E	72	59	61	2	No
R173 (Hotel)	E	72	59	61	2	No
R174 (Residential)	B	67	64	65	1	No
R175 (Residential)	B	67	63	65	2	No
R176 (Residential)	B	67	63	64	1	No

Source: Project Team, Traffic Noise Analysis Technical Report, August 2023.

Modeled noise-sensitive locations were primarily residential, but also included apartment complexes, a community pool, a park, and hotels. The traffic noise analysis determined that out of 176 representative receptors, 105 were predicted to have noise levels that approach or exceed the FHWA noise abatement criteria or that substantially exceed the existing noise levels; therefore, the proposed project would result in traffic noise impacts (see **Appendix E**).

Noise abatement measures were considered and analyzed for each impacted receptor location. Abatement measures, typically noise barriers, must provide a minimum noise reduction, or benefit, at or above the threshold of 5 dB(A). A barrier is not acoustically feasible unless it reduces noise levels by at least 5 dB(A) at greater than 50 percent of first-row impacted receptors and benefits a minimum of two impacted receptors. To be reasonable, the barrier must not exceed the cost reasonableness allowance of 1,500 square feet per benefited receptor and must meet the noise reduction design goal of 7 dB(A) for at least one receptor.

One noise barrier was found to be both reasonable and feasible and is recommended for incorporation into the proposed project (**Table 10**). Noise barriers were not reasonable and feasible for the remaining impacted representative receivers, and abatement is not proposed for those locations. Additional details regarding the barrier analysis can be found in the Traffic Noise Analysis Report (2023).

A noise barrier is proposed for the following location: R139A through R 169B. As shown in **Appendix E**, these receivers represent 68 residences in Parc at Windmill Farms Apartment complex with first and second floor patios/decks that face the roadway. Twenty-seven of the first-row receptors have predicted traffic noise impacts. A continuous noise barrier would restrict access to these residences but gaps in the noise barrier would satisfy access requirements. Two noise barriers (NB3A and NB3B) with a total length of approximately 1,437 feet long and 16 feet in height, placed along the ROW would reduce noise levels by at least 5 dB(A) for 23 first-row impacted receptors and meet the noise reduction design goal of 7 dB(A) for one of those receptors. The barrier would also benefit 20 additional sites. With a total area of abatement of 22,992 square feet or 535 square feet per benefited receptor, the barrier would also be cost reasonable and below the 1,500 square feet per benefitted receptor.

Table 10. Noise Barrier Proposal (Preliminary)

Barrier	Representative Receivers	Total # Benefitted	Length (feet)	Height (Feet)	Total Square Footage	Sq. Ft. per Benefitted Receptor
NB3A and NB3B	R139A through R169B	43	1,437	16	22,992	535

Source: Project Team, Traffic Noise Analysis Technical Report, August 2023.

Any subsequent project design changes may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barrier will not be made until completion of the project design, utility evaluation, and polling of all benefited and adjacent property owners and residents.

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 (2048) noise impact contours (**Table 11**).

Table 11. Predicted Noise Impact Contours

Land Use	Impact Contour	Distance from Right of Way				
		Segment				
		FM 460 to Pinson Road (FM740)	Pinson Road to FM 548	FM 548 to Windmill Farms Blvd	Windmills Farms Blvd to Spur 557	Spur 557 to FM304
NAC Category B & C	66 dB(A)	225 feet (North Side)	325 feet (North side)	325 feet (North side)	350 feet (North side)	275 feet (North side)
		350 feet (South Side)	300 feet (South Side)	325 feet (South Side)	375 feet (South Side)	275 feet (South Side)
NAC Category E	71 dB(A)	75 feet (North Side)	150 feet (North Side)	150 feet (North Side)	125 feet (North Side)	75 feet (North Side)
		150 feet (South Side)	150 feet (South Side)	125 feet (South Side)	100 feet (South Side)	100 feet (South Side)

Source: Project Team, Traffic Noise Analysis Technical Report, August 2023.

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 receptors 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.

A copy of this traffic noise analysis will be available to local officials to assist in future land use planning. 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.

No-Build Alternative

Under the No-Build Alternative, the proposed project would not be constructed. If the No-Build Alternative were implemented, traffic noise levels would be expected to increase with an associated future increase in traffic volumes.

5.15 Induced Growth

The Council on Environmental Quality (CEQ) defines indirect effects as those "caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR Section 1508.8). For the Build Alternative, an analysis of indirect impacts followed the processes outlined in TxDOT's Guidance: Indirect Impacts Analysis (January 2019). The Indirect Impacts Analysis Technical Report provides a detailed discussion of the indirect effects analysis and is available for review at the TxDOT Dallas District office.

An Area of Influence (AOI), or study area, for the indirect impacts analysis includes the boundaries of the cities of Forney and Terrell and the unincorporated areas of Kaufman County in between. The AOI is approximately 38,501.4 acres. Temporal boundaries for the induced growth impacts analysis extend from the time of construction of the proposed project to 2045, the end of the current NCTCOG MTP planning cycle.

The analysis included a combination of Planning Judgment and Cartographic Technique (GIS-based) approaches. An indirect impacts questionnaire was completed by representatives of the cities of Forney and Terrell, and Kaufman County. The responses were used as a basis for the analysis and determinations of potential induced growth areas. Approximately 4,491.6 acres of potential induced growth areas were identified. These induced growth areas would potentially impact approximately 4,328 acres of non-urban land cover, including agriculture; disturbed prairie; Edwards plateau savannah, woodland, and shrubland; floodplain; post oak savannah; riparian; and tallgrass prairie, grassland. In addition, approximately 827.8 acres of prime farmland (4.5 percent of the total features within the AOI) and 1,923.7 acres of farmland of statewide importance (20.0 percent of the total features within the AOI) occur within the areas of potential induced growth.

Approximately 4.2 acres of NWI-mapped Freshwater Emergent Wetlands (4.5 percent of the total features within the AOI) and 1.9 acres of Freshwater Forested/Shrub Wetlands (0.4 percent of the total features within the AOI) are located within the areas of potential induced growth. Approximately 75,353.1 linear feet of National Hydrography Dataset (NHD) streams (8.1 percent of the total features within the AOI) are located within the potential induced growth area. It is anticipated that impacts to water features would likely be avoided or minimized as per local and federal regulations, but this analysis assumes a worst-case scenario where all features would be impacted.

Indirect impacts from the proposed project's induced growth are not anticipated to be substantial. Although some water resources, including wetlands, exist within the areas of induced growth, the potential impacts are anticipated to be less than the worst-case scenario presented here. Furthermore, it would be the responsibility of the owner or developer to follow applicable local, state, and federal regulations to minimize and mitigate potential impacts.

Impacts to prime farmland and farmland of statewide importance may be subject to FPPA for some projects but would not apply to private development. Since the induced growth impacts to prime farmlands represent 4.5 percent of the total features within the AOI, impacts to prime farmlands are not anticipated to be substantial.

Impacts to vegetation and wildlife habitat from project-induced growth impacts are subject primarily to regulation by city and county governments, which guide the type and location of new development. Based on the analysis, impacted habitat within the areas of induced growth total less than 12 percent of habitat within the AOI, and approximately a quarter of the induced growth areas consist of low-quality agriculture and disturbed prairie. Therefore, impacts to vegetation and wildlife habitat are not anticipated to be substantial.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no induced growth impacts are anticipated.

5.16 Cumulative Impacts

The 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 assess 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. In accordance with TxDOT's Cumulative Impacts Analysis Guidelines (January 2019), the cumulative impacts analysis for the Build Alternative evaluated past, present and reasonably foreseeable actions that would impact water resources and vegetation and wildlife habitat. These resources were evaluated in the cumulative impacts analysis because direct and induced-growth impacts are expected to affect vegetation and wildlife habitats and the proposed project would cause permanent impacts to several water features subject to Section 404 regulations of the CWA. This analysis is detailed in the Cumulative Impacts Analysis Technical Report and available for review at the TxDOT Dallas District office.

The cumulative impacts analysis considers both geographic and temporal study limits where applicable. A Resource Study Area (RSA) was determined using watershed characteristics to help analyze the water resources that could be potentially impacted by the proposed project.

Vegetation types are influenced by the watershed area in which they are located; therefore, the watershed boundary is used as the RSA for both water resources, and vegetation and wildlife habitat. The RSA includes the eight sub-watersheds of Anthony Branch-Buffalo Creek, Headwaters Kings Creek, High Point Creek, Little Brushy Creek-Kings Creek, Long Branch-Buffalo Creek, Middle Big Brushy Creek, Mustang Creek-East Fork Trinity River, and Upper Big Brushy Creek. The RSA is approximately 174,767.5 acres. The temporal boundaries for the cumulative impacts analysis extend from the 1950s until 2045. These years correspond to the year the US 80 facility was improved within the RSA and the project's design horizon year that correlates with the current MTP time frame.

A review of state, local, and regional project planning sources, including TxDOT Project Tracker, NCTCOG 2045 MTP and Recommended Project Listing, NCTCOG Development Monitoring Map, City of Terrell, City of Rockwall, and City of Mesquite resulted in 6,767.4 acres of reasonably foreseeable projects within the RSA. The overall effects of the proposed project combined with other actions are not considered substantial to either of the resources evaluated.

The combined cumulative impacts to wetlands total 5.3 acres of NWI-mapped Freshwater Emergent Wetland and 9.9 acres of Freshwater Forested/Shrub Wetland. Each of these total less than one percent of the total resource type within the RSA. The combined cumulative impacts to National Hydrography Dataset (NHD)-mapped streams total 213,612.6 feet, approximately 4.9 percent of total NHD streams within the RSA. It is likely that many of these wetland and stream features would likely be avoided on an individual project basis, in accordance with local, state, and federal regulations and permitting requirements. Therefore, it is not anticipated that the cumulative impacts would be substantial.

The combined cumulative impacts to nonurban MOU habitat types, representing vegetation and wildlife resources, total 10,524.4 acres, approximately 6.0 percent of total nonurban MOU habitat types within the RSA. The additional 1,516.8 acres of urban habitat type is highly developed and would not be considered suitable habitat for wildlife or conducive to vegetation. The cumulative impacts to vegetation and wildlife habitat are less than 9 percent for any MOU habitat type. Therefore, it is not anticipated that the cumulative impacts to vegetation and wildlife habitat would be substantial.

No-Build Alternative

Under the No-Build Alternative, construction activities would not occur; therefore, no cumulative impacts are anticipated.

5.17 Construction Phase Impacts

Temporary impacts may occur during construction activities associated with the proposed project. This includes light pollution; impacts associated with physical construction activity, temporary lane, road or bridge closures (including detours); and other disruptions.

Construction Noise

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 receptors 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.

Construction Emissions

During the construction phase of this project, temporary increases in particulate matter (PM) and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel particulate matter from diesel powered construction equipment and vehicles. The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found on TCEQ's TERP website (https://www.tceq.texas.gov/airquality/terp).

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

Light Pollution

Construction normally occurs during daylight hours; however, construction could occur during the night-time hours to minimize impacts to the traveling public during the daylight hours. Due to the close proximity of businesses and residents to the project, if construction were to occur during the night-time hours, it would be of short duration. Construction during the night-time hours would follow any local policies and ordinances established for construction activities, such as light limitations.

Construction Activity Impacts

Construction activities would be limited to the proposed project footprint. Excessive vibration from construction equipment is not anticipated. If excessive vibration were to result from construction equipment it would be of short duration.

Temporary Lane, Road, or Bridge Closures, Including Detours

During the construction phase, traffic would follow the existing traffic patterns. Traffic control plans would be prepared and implemented in coordination with the cities and the counties. Construction that would require cross-street closures would be scheduled so only one crossing in an area is affected at a time. Where detours are required, clear and visible signage for an alternative route would be displayed. Construction of the proposed project would not restrict access to any existing public or community services, businesses, commercial areas, or employment centers.

Work on US 80/Spur 557 would be phased in such a manner to allow the roadway to remain open during construction. Access to businesses and residences would be maintained at all times and no detours are anticipated. However, in the event that road closures or detours are required, county and local public safety officials would be notified of the proposed road closures or detours. Detour timing and necessary rerouting of emergency vehicles would be coordinated with the proper local agencies. Motorists would be inconvenienced during construction of the project due to lane and cross-street closures; however, these closures would be of short duration and alternate routes would be provided.

No-Build Alternative

Under the No-Build Alternative, construction would not occur and would not result in noise, dust or light pollution; impacts associated with physical construction activity, temporary lane, road closures; and other traffic disruptions associated with construction.

5.18 Greenhouse Gas Emissions and Climate Change

The Texas Department of Transportation (TxDOT) has prepared a Statewide On-Road Greenhouse Gas Analysis and Climate Change Assessment technical report (TxDOT 2021). The report discloses: 1) an analysis of available data regarding statewide greenhouse gas (GHG) emissions for on-road GHG emissions,[1] 2) TxDOT actions and funding that support reducing GHG emissions, 3) projected climate change effects for the state of Texas and 4) TxDOT's current strategies and plans for addressing the changing climate. A summary of key issues in this technical report is provided below. Please refer to the technical report for more details.

The Earth has gone through many natural changes in climate over time. However, since the industrial revolution began in the 1700s, atmospheric concentration of GHG emissions has

[1] Greenhouse gas (GHG) emissions consist of on-road tailpipe emissions and upstream fuel cycle emissions. Upstream fuel cycle emissions are the emissions generated by extracting, shipping, refining, and delivering fuels.

continued to climb, primarily due to humans burning fossil fuel (e.g., coal, natural gas, gasoline, oil and/or diesel) to generate electricity, heat and cool buildings, and power industrial processes, vehicles, and equipment. According to the Intergovernmental Panel on Climate Change (IPCC), this increase in GHG emissions is projected to contribute to future changes in climate (Solomon 2007, Stocker 2013).

5.18.1 Statewide On-road GHG

TxDOT prepared a GHG analysis for the statewide on-road transportation system and associated emissions generated by motor vehicle fuels processing called "fuel-cycle emissions." EPA's Motor Vehicle Emissions Simulator (MOVES2014 version) emissions model was used to estimate emissions. Texas on-road and fuel cycle GHG emissions are estimated to be 186 million metric tons (MMT) in 2050 and reach a minimum in 2032 at 161 MMT. Future on-road GHG emissions may be affected by changes that may alter where people live and work and how they use the transportation system, including but not limited to: 1) the results of federal policy including tailpipe and fuel controls, 2) market forces and economics, 3) individual choice decisions, 4) acts of nature (e.g. pandemic) or societal changes, and 5) other technological advancements. Such changes cannot be accurately predicted due to the inherent uncertainty in future projections related to demographics, social change, technology, and inability to accurately forecast where people work and live.[2]

5.18.2 Mitigation Measures

Strategies that reduce on-road GHG emissions fall under four major categories:

- Federal engine and fuel controls under the Clean Air Act implemented jointly by EPA and USDOT, which includes Corporate Average Fuel Economy (CAFE) standards;
- "Cash for clunker" programs which remove older, higher-emitting vehicles from roads;
- Traffic system management which improves the operational characteristics of the transportation network (e.g., traffic light timing, pre-staged wrecker service to clear accidents faster, or traveler information systems); and
- Travel demand management which provides reductions in VMT (e.g., transit, rideshare, and bicycle and pedestrian facilities) and requires personal choice decisions.

TxDOT has implemented programmatic strategies that reduce GHG emissions including: 1) travel demand management projects and funding to reduce VMT, such as bicycle and pedestrian facilities, 2) traffic system management projects and funding to improve the operation of the transportation system, 3) participation in the national alternative fuels

[2] Transportation Research Board Special Report 288 (2007) Metropolitan Travel Forecasting Current Practice and Future Direction.

corridor program, 4) clean construction activities, 5) clean fleet activities, 6) CMAQ funding, 7) transit funding, and 8) two statewide campaigns to reduce tailpipe emissions.

5.18.3 TxDOT and a Changing Climate

TxDOT has strategies that address a changing climate in accordance with TxDOT and FHWA design, asset management, maintenance, emergency response, and operational policies and guidance. The flexibility and elasticity in TxDOT transportation planning, design, emergency response, maintenance, asset management, and operation and maintenance of the transportation system are intended to consider any number of changing scenarios over time. Additional details are in the statewide technical report.

6.0 Agency Coordination

Coordination with TPWD was initiated on August 9, 2023. In accordance with the MOU between TxDOT and TPWD, TPWD has provided a set of recommended BMPs in a document titled, "Beneficial Management Practices – Avoiding, Minimizing, and Mitigating Impacts of Transportation Projects on State Natural Resources," which is available on TxDOT's Natural Resources Toolkit at https://www.txdot.gov/insidetxdot/division/environmental/compliance-toolkits/natural-resources.html. The MOU provides that application of specific BMPs to individual projects will be determined by TxDOT at its discretion. The TPWD-recommended BMPs that will be applied to this project are indicated in the Form – Documentation of Texas Parks and Wildlife Department Best Management Practices prepared for the project, which is included in **Appendix F**.

Coordination with TCEQ and the EPA would be completed during the notice of availability period for this draft EA and any feedback would be incorporated into the final EA.

TxDOT initiated project-specific consultation under Section 106 of the National Historic Preservation Act with federally recognized tribes on August 23, 2023. TxDOT sent a request for consultation to the following federally recognized tribes: Caddo Nation, Comanche Nation of Oklahoma, Delaware Nation, Jena Band of Choctaw Indians, Kiowa Tribe, Mescalero Apache Tribe, Shawnee Tribe, Tonkawa Tribe of Oklahoma, and Wichita and Affiliated Tribes. The Caddo Nation responded on August 25, 2023 and determined that the project does not affect known cultural, tradition or sacred sites of interest to the Caddo Nation. The Caddo Nation has no objection to the project. To date, no other tribe has responded with objections or any other response. TxDOT will continue coordination with these tribes after access to the remaining unsurveyed portions of the APE has been obtained and those studies have been completed.

Coordination in accordance with the Section 106 process was initiated with State Historic Preservation Officer (SHPO) and THC on July 27, 2023. Concurrence by the SHPO was received on August 16, 2023, that NRHP eligible properties are present with adverse effects

with mitigation for the two bridges, and no adverse effect to historic properties and no comments on the Section 4(f) evaluations associated with these properties. Additional coordination with the Advisory Council for Historic Preservation on the eligible historic bridges was also completed. TxDOT initiated project-specific consultation regarding archeological historic properties under Section 106 of the National Historic Preservation Act with SHPO/THC on August 30, 2023. On September 20, 2023, TxDOT received concurrence from SHPO/THC that the project would have no effect on archeological historic properties within the evaluated portions of the area of potential effects. TxDOT will continue coordination with SHPO/THC after access to the remaining unsurveyed portions of the APE has been obtained and those studies have been completed. For additional information, see correspondence included in **Appendix F**.

Coordination with staff from the City of Terrell, City of Forney and Kaufman County was conducted for the proposed project. As a result of these discussions, design modifications were incorporated into the proposed design to accommodate for other separate transportation projects and developments proposed by others along the project corridor. The proposed project would not preclude the construction of other projects as discussed with local entities.

7.0 Public Involvement

A virtual public meeting with an in-person option was held on July 28, 2022 for the proposed project. The in-person meeting was held from 5:30 to 7:30 p.m. at Brown Middle School (1050 Windmill Farms Boulevard, Forney, Texas 75126). The open house format allowed for the public to come and go at their convenience to view project materials, ask questions, and receive information from the project team members and TxDOT staff about the proposed project. The virtual meeting was held online at www.keepitmovingdallas.com/US80-Spur557, and made available from 5:30 p.m. on Thursday, July 28, 2022, through 11:59 p.m. on Friday, April 12, 2022. The virtual public meeting and in-person option were conducted in English; however, translation and interpreter services and other language accommodations were made available upon request. Fifty-five people were in attendance, including three elected officials, at the in-person public meeting. A total of 19 comments were received within the 15-day comment period ending on Friday, April 12, 2022. No comments opposing the proposed project were received and comments were generally positive and included questions related to access, ramping improvements, and proposed ROW impacts.

A public hearing will be held upon approval of this draft EA for public viewing. Similar to the public meeting, bilingual notices will be mailed and published in both Spanish and English language newspapers. Language translation services and other accommodations will also be provided upon request. Comments and responses are included in **Appendix H**.

A notice of pending construction of the added capacity improvements will be provided to owners of adjoining property and affected local governments and public officials. The notice may be provided via a sign or signs posted in the ROW, mailed notice, printed notice distributed by hand, notice via website when the recipient has previously been informed of the relevant website address, or other means. This notice will be provided after the environmental decision for the project, but before earthmoving or other activities requiring the use of heavy equipment.

8.0 Post-Environmental Clearance Activities and Design/Construction Commitments

8.1 Post-Environmental Clearance Activities

This section lists any unresolved environmental activities that could not be completed prior to environmental decision. These activities must be completed within short duration prior to commencement of construction activities and are listed as follows:

- Completion of presence/absence surveys of protected mussel species
- Sampling of bridges and bridge class culverts for presence of asbestos and lead prior to demolition.
- USACE 404 permit without PCN
- Proposed noise wall constructability review and conduct noise workshop for impacted adjacent property owners.
- Completion of archeological surveys in recommended areas specified in the Archeological Resource Survey Report when additional access might be granted during or after the ROW acquisition process.
- Sampling of soil and groundwater is proposed at sites that were identified in the Hazardous Materials ISA and TCEQ Regulatory File Review Report with the potential to impact the project (see Section 5.13).
- Formal utility location review and advance planning prior to construction.

8.2 Design/Construction Commitments

Based on the analysis performed for the proposed project, this section outlines project-specific avoidance measures or special instructions needed in the final design and construction of the project.

- 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.
- Comply with Executive Order 13112 on Invasive Species and the intent of the Executive Order Memorandum on Beneficial Landscapes for re-vegetating the project area. The proposed seed mixture (both grasses and forbs) would be in accordance

with Item 164, Seeding for Erosion Control in TxDOT's Standard Specifications for the construction of Highways, Streets, and Bridges.

- Should unanticipated hazardous materials/substances be encountered, the TxDOT Dallas District 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. During construction, appropriate measures would be taken to prevent, minimize, and control the spill of hazardous materials in the construction staging area. All construction materials used for this project would be removed as soon as the work schedules permit.
- If any species on the Kaufman County Threatened & Endangered List is sighted in the project area during construction, stop construction and notify the Area Engineer immediately.

As indicated above in **Section 6.0**, the TPWD-recommended BMPs that will be applied to this project are indicated in the Form – Documentation of Texas Parks and Wildlife Department Best Management Practices prepared for the project, which is included in **Appendix F**. These BMPs are summarized below:

- Minimize impacts to wetland habitats including isolated ephemeral pools
- Vegetation BMP
- Water Quality BMP
- Bird BMP (in addition to complying with the Migratory Bird Treaty Act (MBTA) and Chapter 64 of the Parks and Wildlife Code (PWC) regarding nongame bird protections)
- Freshwater Mussel BMP
- Aquatic Amphibian and Reptile BMP
- Terrestrial Amphibian and Reptile BMP
- Insect Pollinator BMP

9.0 Conclusion

Implementation of the proposed project would not result in a significant impact on the human or natural environment. Therefore, a finding of no significant impact is recommended.

10.0 References

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11.0 Names and Qualifications of Persons Preparing the EA or Conducting an Independent Evaluation of the EA

The following persons assisted in compiling this draft EA:

TxDOT Dallas District
Nelson Underwood, P.E. Transportation Engineer, Project Manager – 25 years
Mohammed Shaikh, District Environmental Coordinator – 20 years
Adam Fouts, Environmental Specialist, District Water Resources Specialist – 11 years
Deborah Nixon, Environmental Specialist, District Hazardous Materials Specialist – 20 years
Leslie Mirise, Environmental Specialist, District Biologist – 21 years
Manuel Trevino, Environmental Specialist, District Traffic Noise Specialist – 16 years
Jamila Murchison, Environmental Specialist, District Biologist – 2 years
Adelina Munoz, Environmental Specialist – 24 years

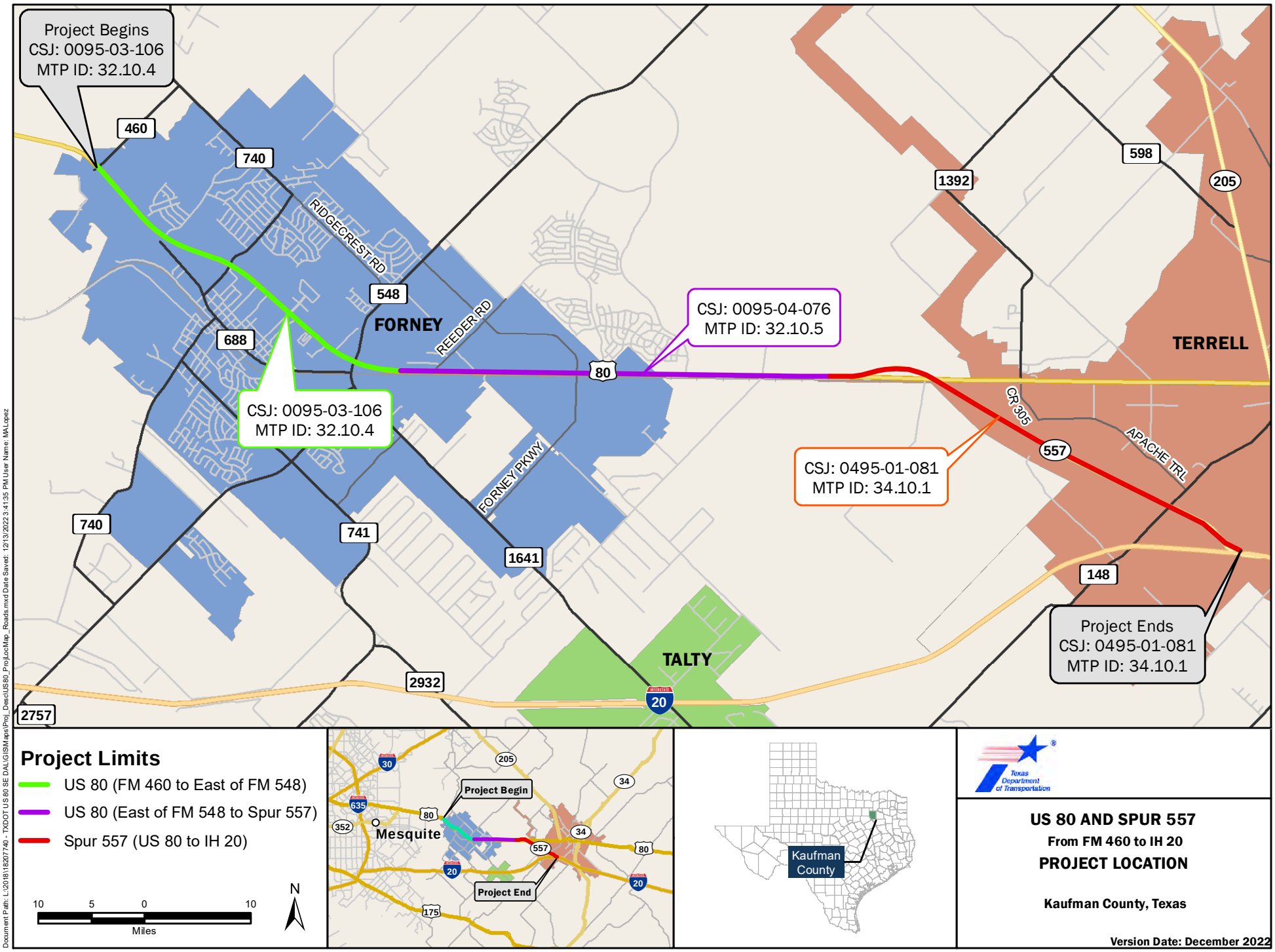
TxDOT Environmental Affairs Division
Michelle Lueck, Project Delivery Manager – 22 years
Ray Umscheid, Traffic Noise Specialist – 15 years
Susan M. Shuffield, Environmental Specialist, Water Team Lead – 24 years
Scott Pletka, Archeology Program Manager – 19 years
Renee Benn-Lee, Historic Resources Program Manager – 18 years
Spencer Ward, Community Impacts Specialist – 3 years
Glendora Lopez, Air Quality Specialist – 2 years

Garver, Inc.
Stephen Johnson, P.E., Project Manager – 19 years
Susan Chavez, Texas Program Leader – 25 years
Michele Lopez, Environmental Task Lead – 23 years
Tracy Michel, Senior Planner– 17 years
Rain Nox, Program Manager– 16 years
Leigh Mercer, Environmental Planner – 2 years

12.0 Appendices

Appendix A – Project Location Map
Appendix B – Project Photos
Appendix C – Schematics
Appendix D – Typical Sections
Appendix E – Resource Map
Appendix F – Resource Agency Coordination
Appendix G – Section 4(f) Documentation
Appendix H – Comment and Response Matrix from Hearing

Appendix A: Project Location Map



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Appendix B: Project Photos

Project Area Photographs
U.S. Highway 80 (from FM 460 to Spur 557) and Spur 557 (from US 80 to IH 20)
CSJs: 0095-03-106, 0095-04-076, 0495-01-081
Kaufman County, Texas

Photo 1: View from FM 460, facing east toward US 80 main lanes at project start. (1/19/23)

Photo 2: View facing north along US 80 westbound frontage road, toward typical undeveloped open land present in the study area with urban development in the background. (1/19/23)

Project Area Photographs
U.S. Highway 80 (from FM 460 to Spur 557) and Spur 557 (from US 80 to IH 20)
CSJs: 0095-03-106, 0095-04-076, 0495-01-081
Kaufman County, Texas

Photo 3: View facing south from the US 80 eastbound frontage road at Summer Haven Mobile Home and RV Park located at 655 Summer Haven, Forney. (9/8/22)

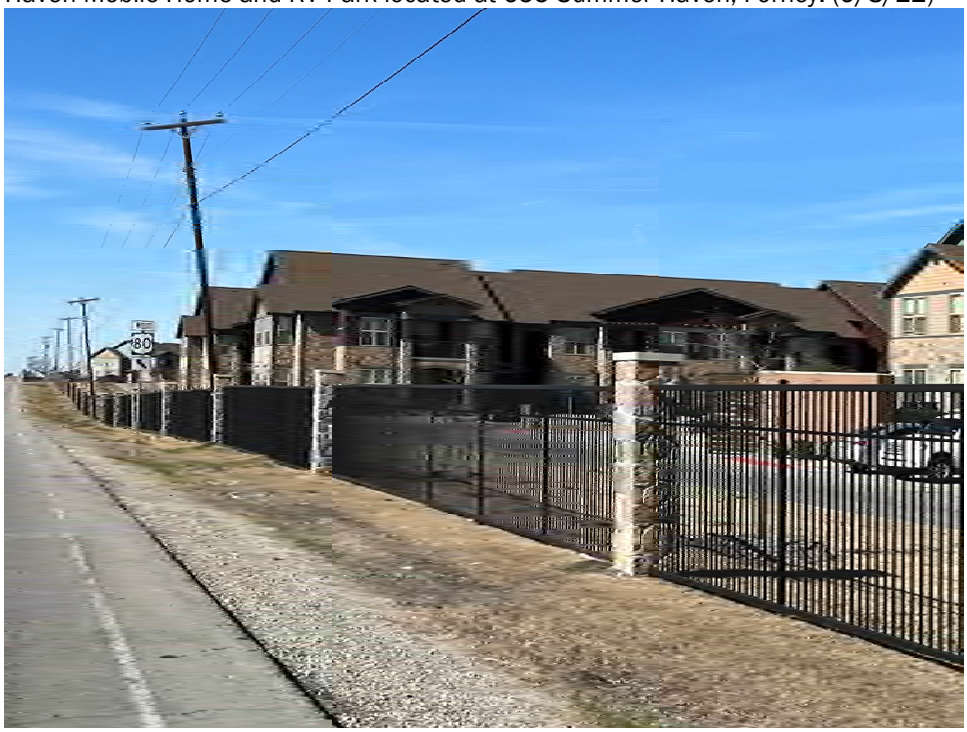


Photo 4: View facing west from the US 80 westbound frontage road toward the apartment complex west of Windmill Farms Boulevard. (1/19/23)

Photo 5: View facing southeast along US 80 westbound frontage road, toward eligible historic bridge at Reeder Road/CR 217 (NBI#181300009504108). (10/12/23)

Photo 6: View facing northwest along US 80 eastbound frontage road, toward eligible historic bridge at Windmill Farms Boulevard (NBI# 181300009504109). (10/12/23)

Photo 7: View facing northeast along US 80, toward Landmark Hill property (300 W. US 80, Forney), a recommended eligible historic property. (10/12/22)

Photo 8: View facing south toward typical industrial-type business within the project limits. The business shown is Smurfit Kappa located at 855 E. US 80, Forney. (1/19/23)

Project Area Photographs
U.S. Highway 80 (from FM 460 to Spur 557) and Spur 557 (from US 80 to IH 20)
CSJs: 0095-03-106, 0095-04-076, 0495-01-081
Kaufman County, Texas

Photo 9: View facing northwest along Spur 557, toward Walmart distribution typical of the large facilities found along Spur 557. (1/19/23)

Photo 10: View looking northwest along westbound frontage road southeast of FM 740. Xpress Travel Center (former Millers Truck Stop) is visible in center right of photo. The former Bingo Fuel Stop was located where Applebee's and the retail center are located, photo background. These sites are considered moderate environmental risks to the project. (1/19/23)

Photo 11: View facing east looking upstream of (Stream 2) tributary to Buffalo Creek as the stream crosses under the US 80 eastbound frontage road. (9/8/22)

Photo 12: View facing north looking upstream to (Stream 5) tributary to Mustang Creek. Culvert is located on the US 80 eastbound frontage road. (9/8/22)

Photo 13: View facing south along US 80 eastbound frontage road, looking downstream of Mustang Creek. (9/8/22)

Photo 14: View facing south along US 80 eastbound frontage road, looking downstream of Stream 7. This stream does not cross US 80. Pooling is shown before the stream narrows considerably as it flows south. (9/8/22)

Photo 15: View facing south along US 80 eastbound frontage road, looking downstream of Stream 8 as it crosses under the UPRR. (9/8/22)

Photo 16: View facing south along US 80 eastbound frontage road, looking downstream of Stream 9 as it crosses under the UPRR. (9/8/22)

Photo 17: View facing south along US 80 eastbound frontage road, looking downstream of Stream 11 as it crosses under UPRR. This stream does not fully cross US 80. (9/8/22)

Photo 18: View facing north along Spur 557 eastbound frontage road, looking upstream of (Stream 16) Little Brushy Creek. (9/8/22)

Photo 19: View of the southwest corner of FM 740 and US 80 eastbound frontage road showing former location of Shell gas station, at 101 W US Hwy 80 in Forney. The site has been redeveloped as a Dairy Queen. The site is considered a moderate environmental risk to the proposed project. (9/8/22)

Appendix C: Schematics

Texas Department of Transportation

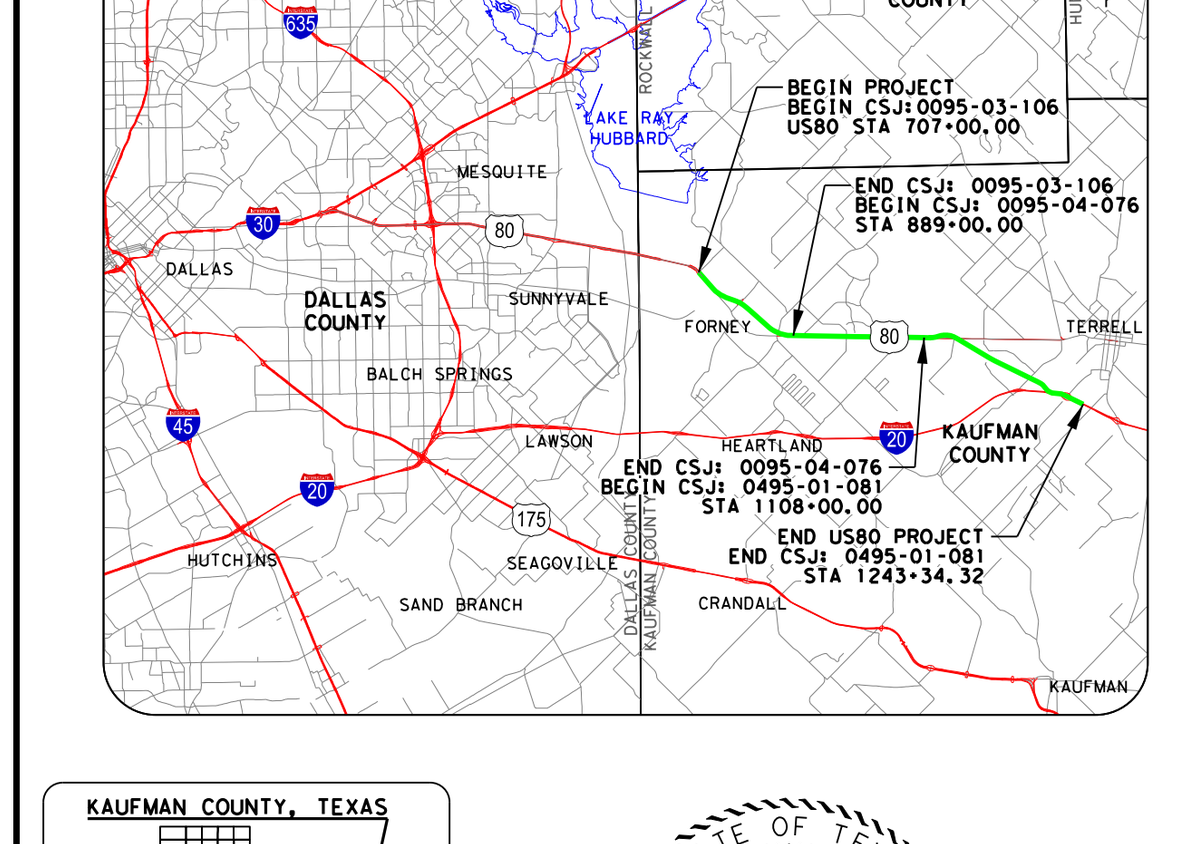
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

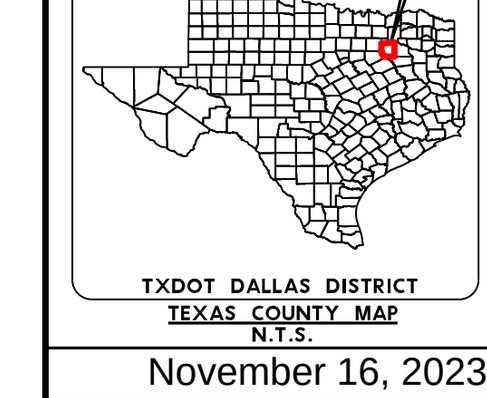
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 1/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CULVERT
EXISTING STORM SEWER
FEMA 100 YR FLOODPLAIN LIMITS
WETLANDS
PARK BOUNDARY
EXISTING PLANIMETRIC FEATURES
EXISTING CONTOURS (5-FT)
EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING ELECTRIC LINE
EXISTING SANITARY SEWER LINE
EXISTING GAS/PETROLEUM LINE
CITY/COUNTY LIMITS
PROPOSED CENTERLINE/BASELINE
PROPOSED ROW
PROPOSED ROW BY OTHERS
PROPOSED ACCESS DENIAL
PROPOSED DRAINAGE EASEMENT
PROPOSED EDGE OF PAVEMENT
PROPOSED CTB
PROPOSED BRIDGE
PROPOSED RETAINING WALL
POTENTIAL NOISE WALL
PROPOSED CULVERT
PAVEMENT/BRIDGE TO BE REMOVED
EXISTING BRIDGE TO REMAIN
PROPOSED CONCRETE BRIDGE
PROPOSED STEEL BRIDGE
PROPOSED MAIN LANES
PROPOSED RAMP
PROPOSED FRONTAGE ROAD/BYPASSES
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PROPOSED PROJECT BY OTHERS
POTENTIAL DISPLACEMENTS
PROPOSED RIP RAP
PERPENDICULAR CURB RAMP
PROPOSED GUARDRAIL
EXISTING TRAFFIC FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID

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8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
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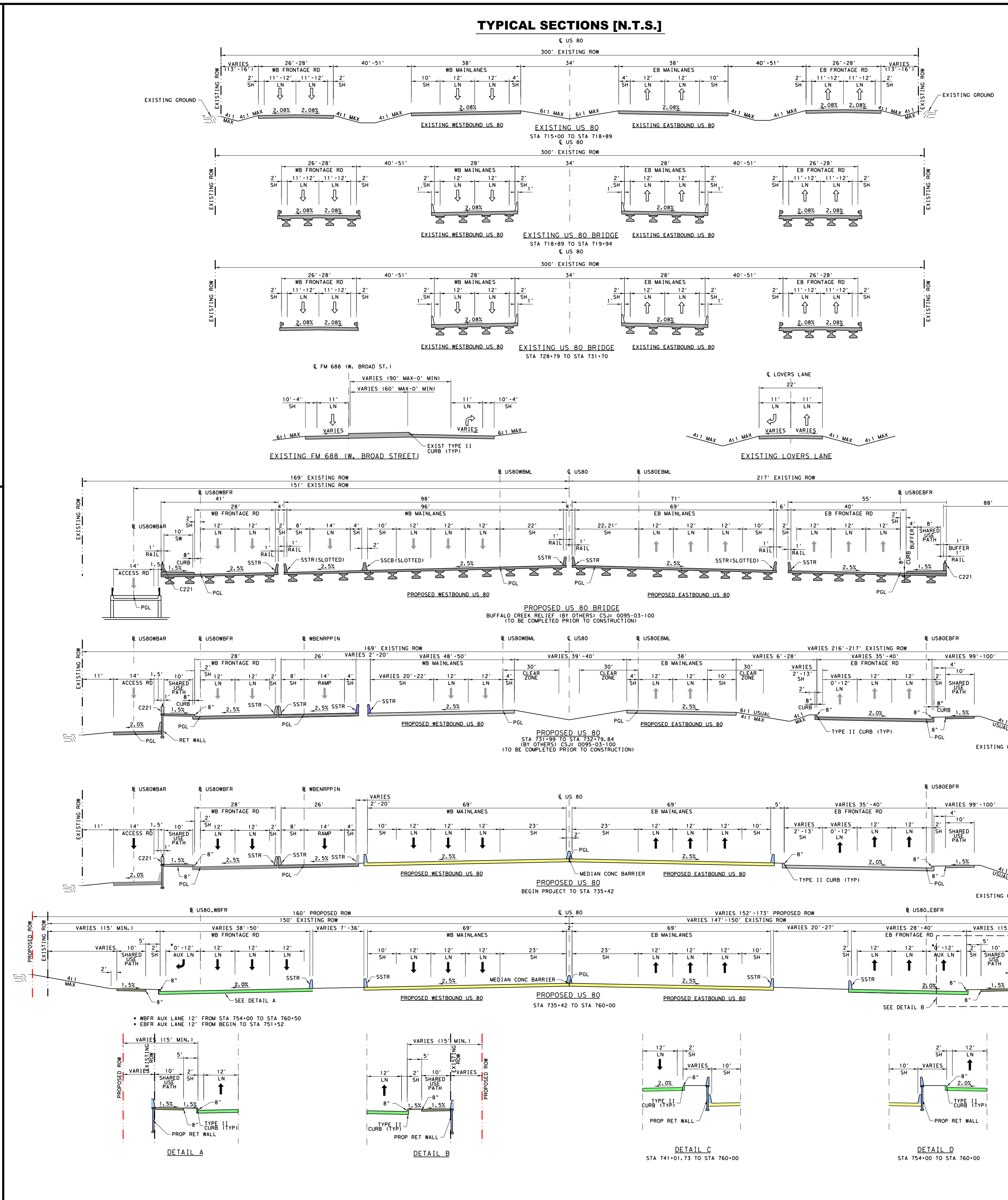
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]



PUS80 - PROP US80 MAIN LANES (60 MPH)

PROPERTY OWNERS

PARCEL NUMBER	OWNER NAME	PROPERTY ADDRESS
1	LITTLE FORNEY CROSSING LTD.	0 HWY. 80 FORNEY, TX
2	TRBP LIMITED	HWY. 80, FORNEY, TX
3	BEACON HILL BAPTIST CHURCH	594 W. HWY. 80, FORNEY, TX
4	TRBP LIMITED	W. HWY. 80 FORNEY, TX
5	TRBP LIMITED	14755 W. HWY. 80, FORNEY, TX
6	TRBP LIMITED	14755 W. HWY. 80, TX
7	WB FORNEY LAND LLC	3 LOVERS LN., FORNEY, TX
8	LA FRONTERA HOLDINGS, LLC	W. HWY. 80, FORNEY, TX
9	CITY OF CRANDALL & GASTONIA SCURRY WATER	W. HWY. 80 FORNEY, TX
10	SKYLINE ESTATES PHASE II	US HWY. 80, FORNEY, TX
11	BLUE LADDER HOLDINGS, LLC	W. HWY. 80 FORNEY, TX
12	FIERRO, TIMOTHY A. ET AL	100 KELLI DR., FORNEY, TX 75126
13	TAMEZ, JESSE J. & TRACY L.	101 KELLI DR., FORNEY, TX 75126
15	BROAD STREET GROUP, LLC	711 W. BROAD, FORNEY, TX
16	RESCA 709 W BROAD SERIES	709 W BROAD ST FORNEY, TX
17	YANDELL, JOANNE	3 LOVERS LN., FORNEY, TX
18	LOTHLORIEN PROPERTIES, LLC	707 W. HWY. 80, FORNEY, TX
19	DEEN PROPERTIES, LLC	705 W. HWY. 80, FORNEY, TX
20	DEEN PROPERTIES, LLC	703 W BROAD ST. FORNEY, TX
21	BARNES, K. L.	FM RD. 688, FORNEY, TX
22	MM FORNEY 69, LLC	HWY. 80, FORNEY, TX
23	CARR, RONALD J. & JOYCE	700 W. BROAD, FORNEY, TX
24	CHILDRESS, CAROL SUE	HWY. 80, FORNEY, TX 75126
25	JEFFERSON TRIANGLE MARINE, LP	HWY. 80, FORNEY, TX

SUPERELEVATION SIGN CONVENTION
(-) ℄ (+)
(+) (-)

BASELINE	ROADWAY	SUPERELEVATION BEGIN TRANSITION STATION	BEGIN TRANSITION e	END TRANSITION STATION	END TRANSITION e
US80CL	US80 WBML	735+80	2.50%	740+05	3.40%
		768+23	3.40%	773+58	2.50%
US80CL	US80 EBML	735+80	-2.50%	740+05	3.40%
		768+23	3.40%	773+58	-2.50%

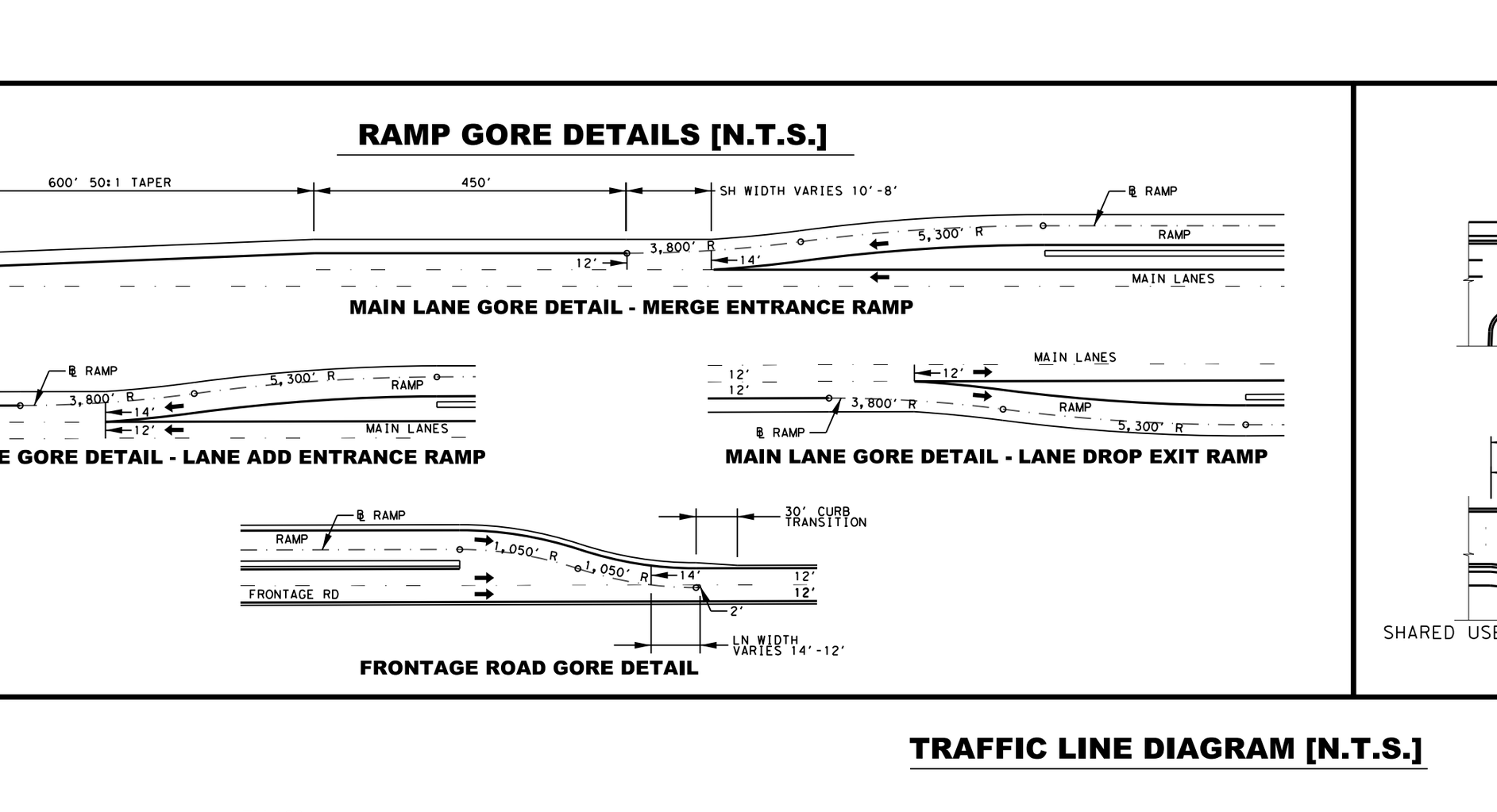
HORIZONTAL ALIGNMENT DATA

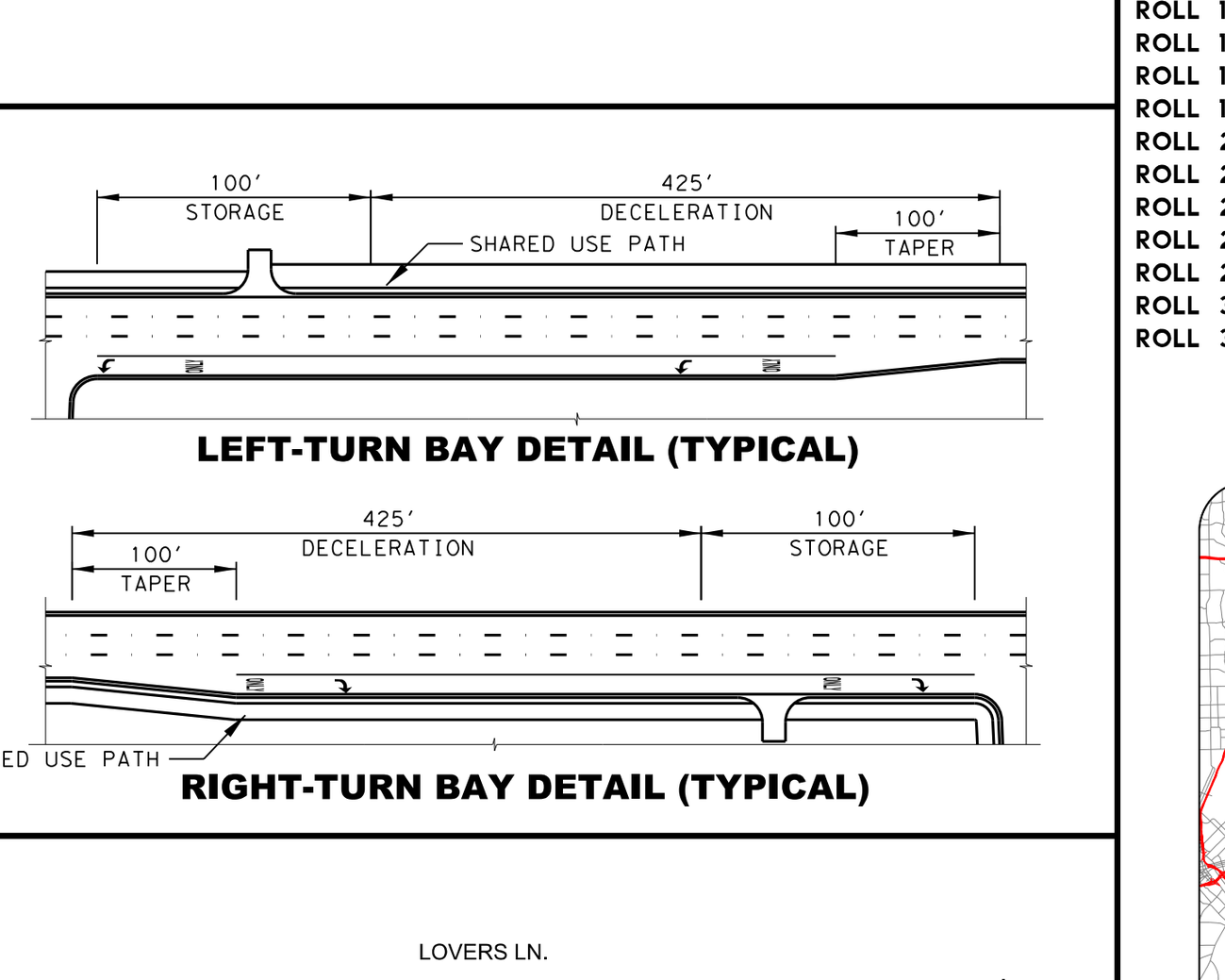
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80CL	US80CL_1	741+13.26	N 6,967,078.41	E 2,589,201.28	6° 05' 56.74" (LT)	8,450.00	450.17	899.50	736+63.09	745+62.58
US80CL	US80CL_3	757+50.50	N 6,965,969.21	E 2,590,406.68	23° 08' 58.65" (LT)	5,800.00	1,187.91	2,343.42	745+62.58	769+06.00
US80_WBFR1	US80_WBFR1_4	740+76.50	N 6,967,296.58	E 2,589,180.08	7° 53' 33.22" (LT)	1,050.00	72.43	144.64	740+04.07	741+48.71
US80_WBFR1	US80_WBFR1_5	742+07.18	N 6,967,211.00	E 2,589,279.13	6° 05' 08.32" (RT)	1,100.00	58.47	116.84	741+48.71	742+65.54
US80_WBFR1	US80_WBFR1_8	756+49.93	N 6,966,157.26	E 2,590,264.77	27° 26' 30.49" (LT)	5,670.00	1,384.39	2,715.65	742+65.54	769+81.19
US80_EBFR1	US80_EBFR1_4	735+71.01	N 6,967,385.74	E 2,588,794.56	4° 07' 28.26" (RT)	2,000.00	72.02	143.97	734+98.99	736+42.96
US80_EBFR1	US80_EBFR1_5	736+84.08	N 6,967,295.57	E 2,588,862.75	2° 24' 56.67" (LT)	1,950.00	41.11	82.22	736+42.96	737+25.18
US80_EBFR1	US80_EBFR1_6	738+13.61	N 6,967,195.71	E 2,588,945.27	1° 42' 31.59" (LT)	5,930.00	88.43	176.86	737+25.18	739+02.03
US80_EBFR1	US80_EBFR1_7	754+49.38	N 6,965,966.45	E 2,590,024.47	29° 14' 55.40" (LT)	5,930.00	1,547.34	3,027.18	739+02.03	769+29.22

RETAINING WALLS

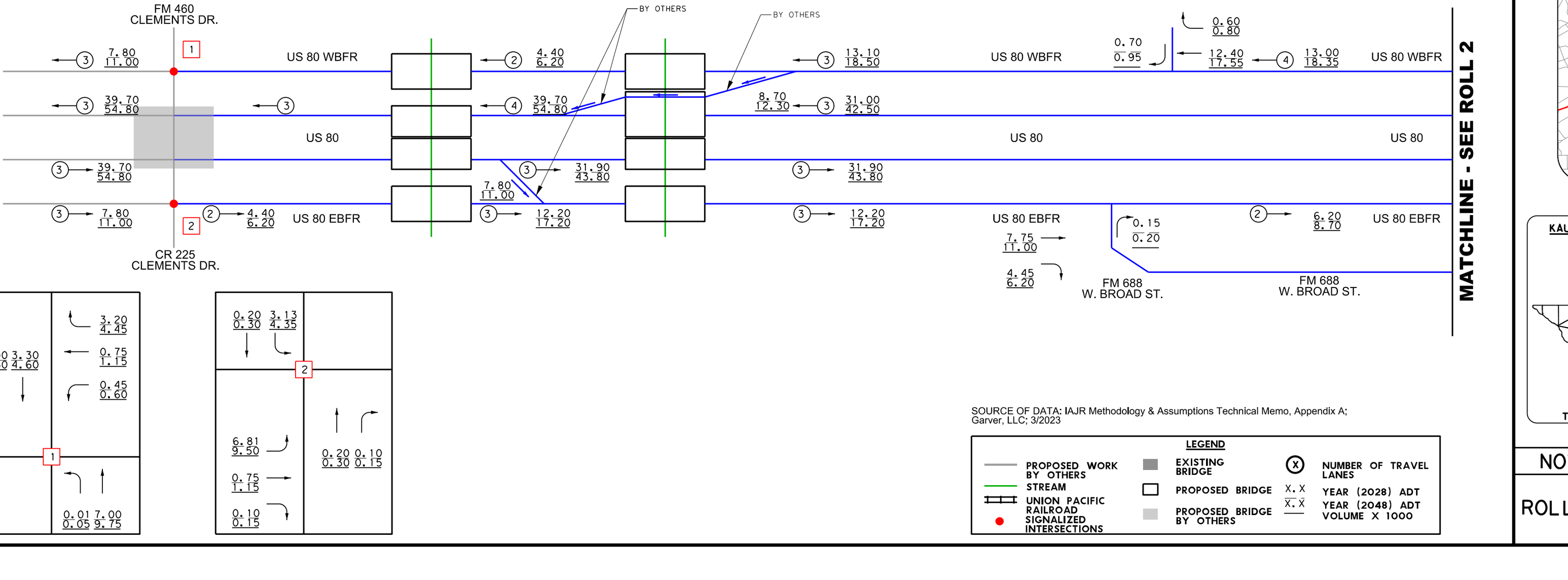
NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 1	US80 CL	739+60.00	71.00' LT	760+00.00	71.00' LT	2015.00
WALL 2	US80 CL	754+00.00	71.00' RT	760+00.00	71.00' RT	600.00
WALL 3	EBFR	756+75.00	18.00' RT	758+80.00	18.00' RT	205.00

RAMP GORE DETAILS [N.T.S.]

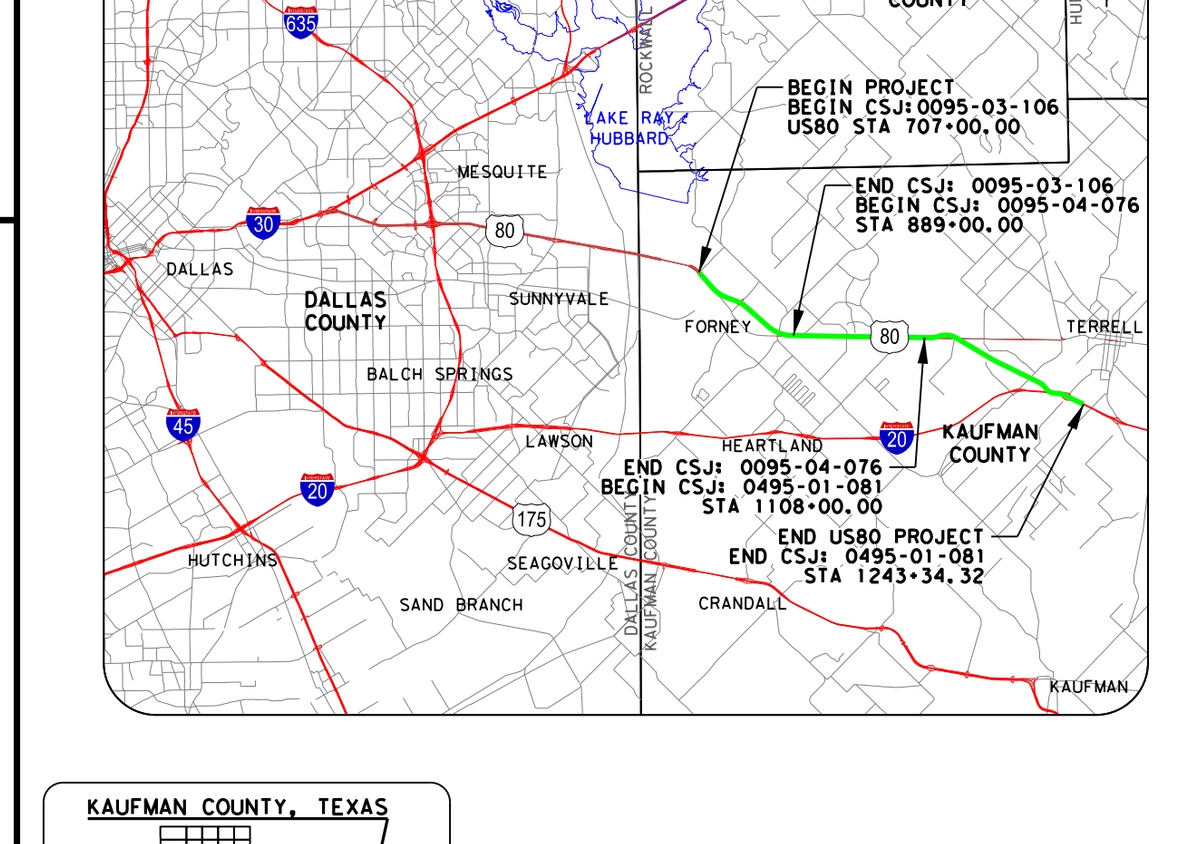




TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023



NOVEMBER 1, 2023

ROLL NUMBER 1/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

![Texas Department of Transportation]

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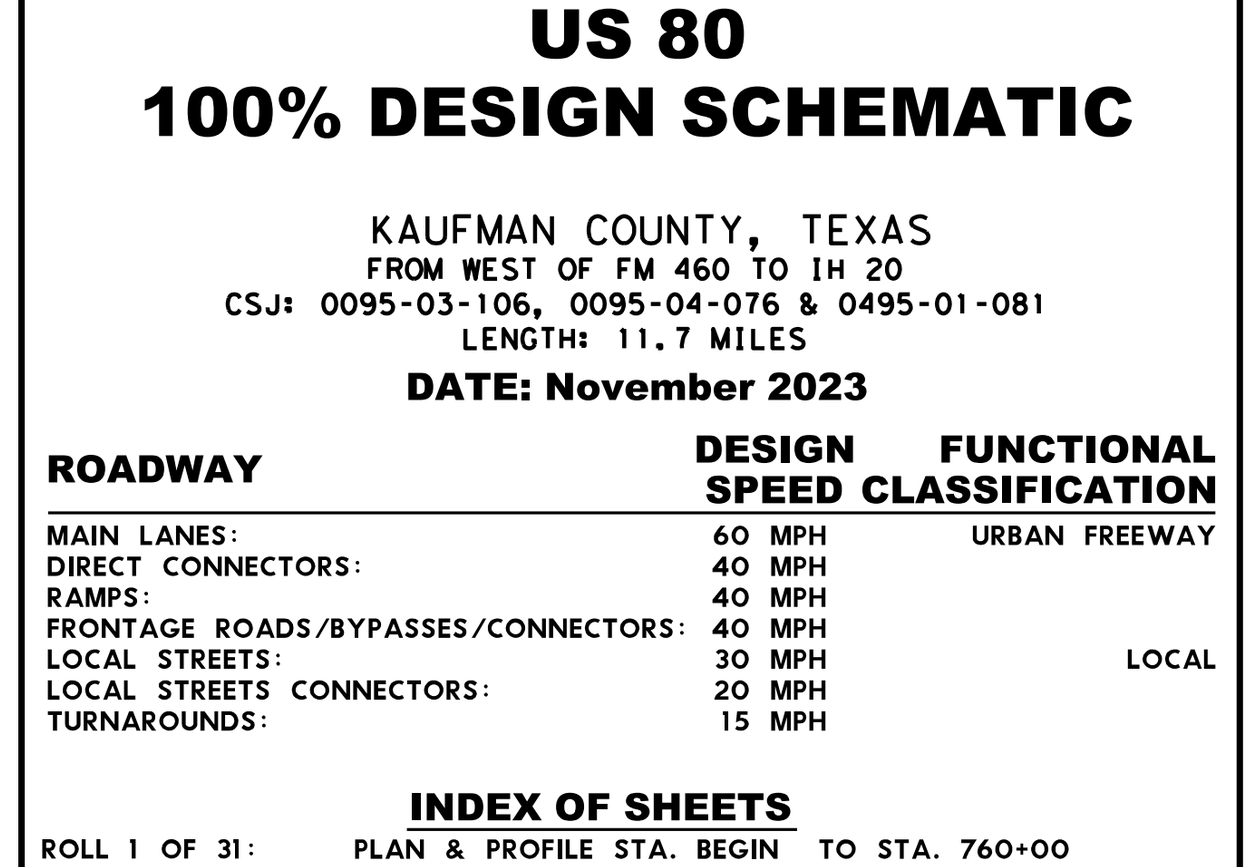
US 80
100% DESIGN SCHEMATIC

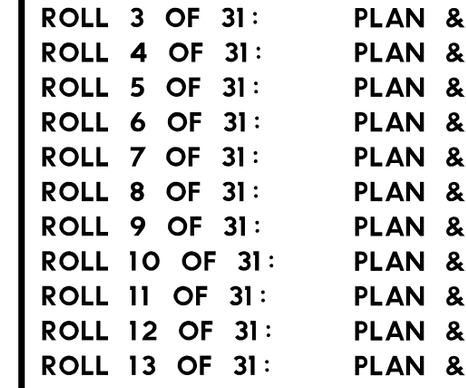
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

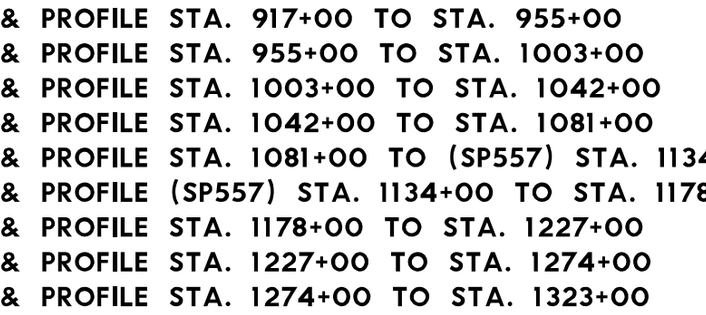
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS







November 16, 2023

ROLL NUMBER 2/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

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- EXISTING EASEMENT
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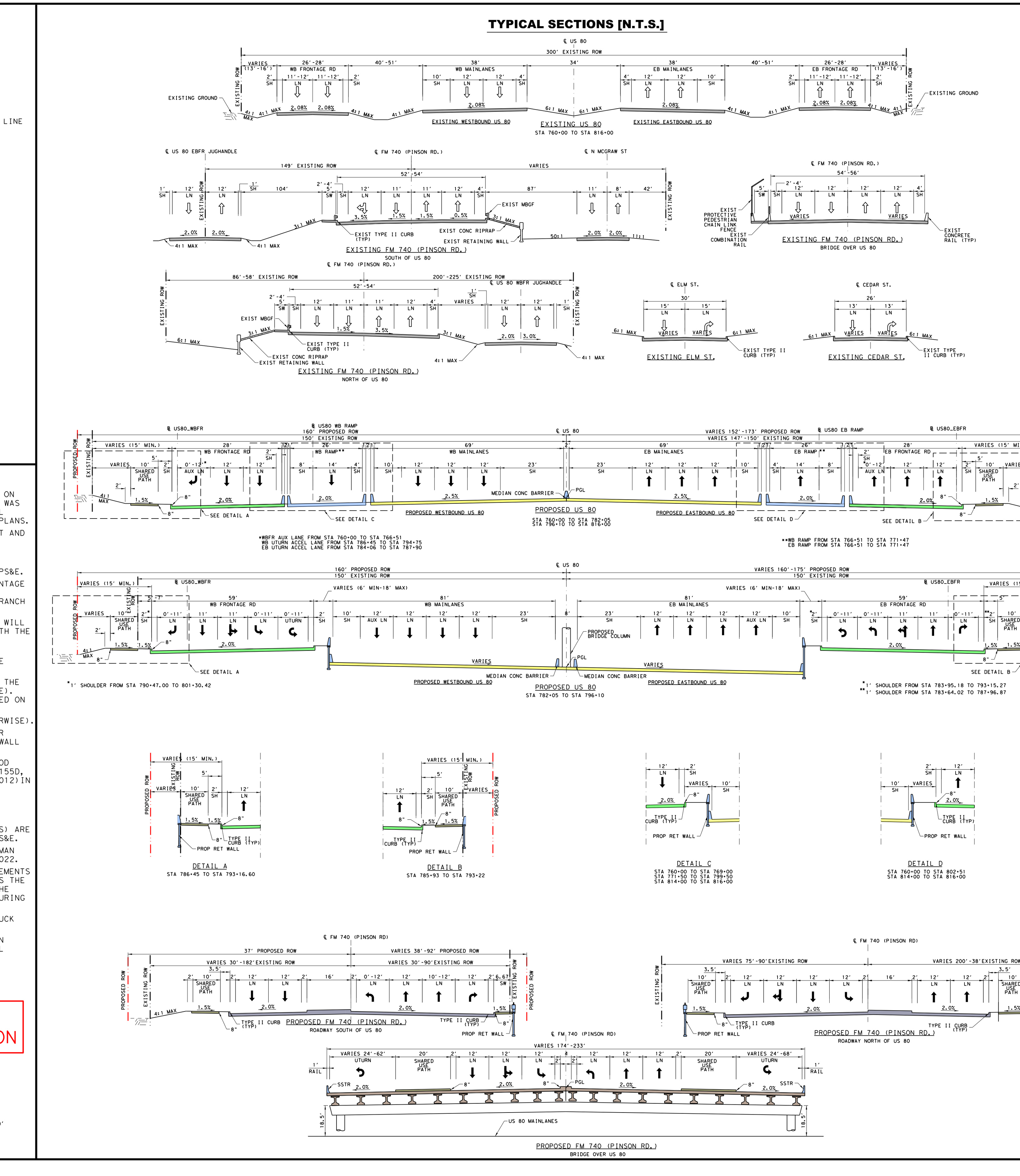


NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 1	US80 CL	760+00.00	71.00' LT	771+50.00	71.00' LT	1150.00
WALL 2	US80 CL	760+00.00	71.00' RT	770+60.00	71.00' RT	1060.00
WALL 3	EBFR	765+50.00	18.00' RT	767+50.00	18.00' RT	200.00
WALL 4	US 80 CL	766+40.00	73.00' LT	767+85.00	73.00' LT	145.00
WALL 5	US 80 CL	768+70.00	101.00' RT	802+10.00	83.00' RT	3310.04
WALL 7	WBFR	770+50.00	18.00' LT	773+75.00	18.00' LT	325.00
WALL 8	US80 CL	771+50.00	101.00' LT	803+15.00	83.00' LT	3197.29
WALL 9	EBFR	775+00.00	18.00' RT	779+00.00	18.00' RT	400.00
WALL 11	WBFR	787+35.00	18.00' LT	790+20.00	320.00' LT	501.76
WALL 12	EBFR	789+23.33	358.55' RT	791+10.00	18.00' RT	379.88
WALL 12	EBFR	789+23.33	358.55' RT	791+10.00	18.00' RT	379.88
WALL 12A	EBFR	791+13.25	18.30' RT	791+71.50	92.30' RT	74.51
WALL 12B	EBFR	791+39.25	18.30' RT	791+41.75	82.87' RT	65.18
WALL 13	EBFR	791+45.00	18.00' RT	793+90.00	18.00' RT	245.00
WALL 14	WBFR	793+40.00	30.00' LT	795+00.00	30.00' LT	160.00
WALL 15	WBFR	797+80.00	27.00' LT	798+60.00	27.00' LT	80.00
WALL 17	US80 CL	805+95.00	101.00' LT	813+40.00	101.00' LT	745.00
WALL 18	US80 CL	813+00.00	71.00' RT	816+00.00	71.00' RT	300.00
WALL 20	US80 CL	813+40.00	71.00' LT	816+00.00	71.00' LT	260.00
WALL 21	WBFR	815+60.00	18.00' LT	817+85.00	18.00' LT	225.00
WALL 23	EBFR	815+45.00	18.00' RT	816+42.95	18.00' RT	97.95

PRELIMINARY,
NOT FOR CONSTRUCTION

SUPERELEVATION SIGN CONVENTION
(-) ¦ (+)
(+) ¦ (-)

BASELINE	ROADWAY	BEGIN TRANSITION STATION	BEGIN TRANSITION e	END TRANSITION STATION	END TRANSITION e
US80CL	US80 WBML	735+80	2.50%	740+05	3.40%
		768+23	3.40%	773+58	2.50%
		776+60	2.50%	781+55	-2.80%
		801+95	-2.80%	806+90	2.50%
US80CL	US80 EBML	735+80	-2.50%	740+05	3.40%
		768+23	3.40%	773+58	-2.50%
		776+60	-2.50%	781+55	-2.80%
		801+95	-2.80%	806+90	-2.50%

PUS80 - PROP US80 MAIN LANES (60 MPH)

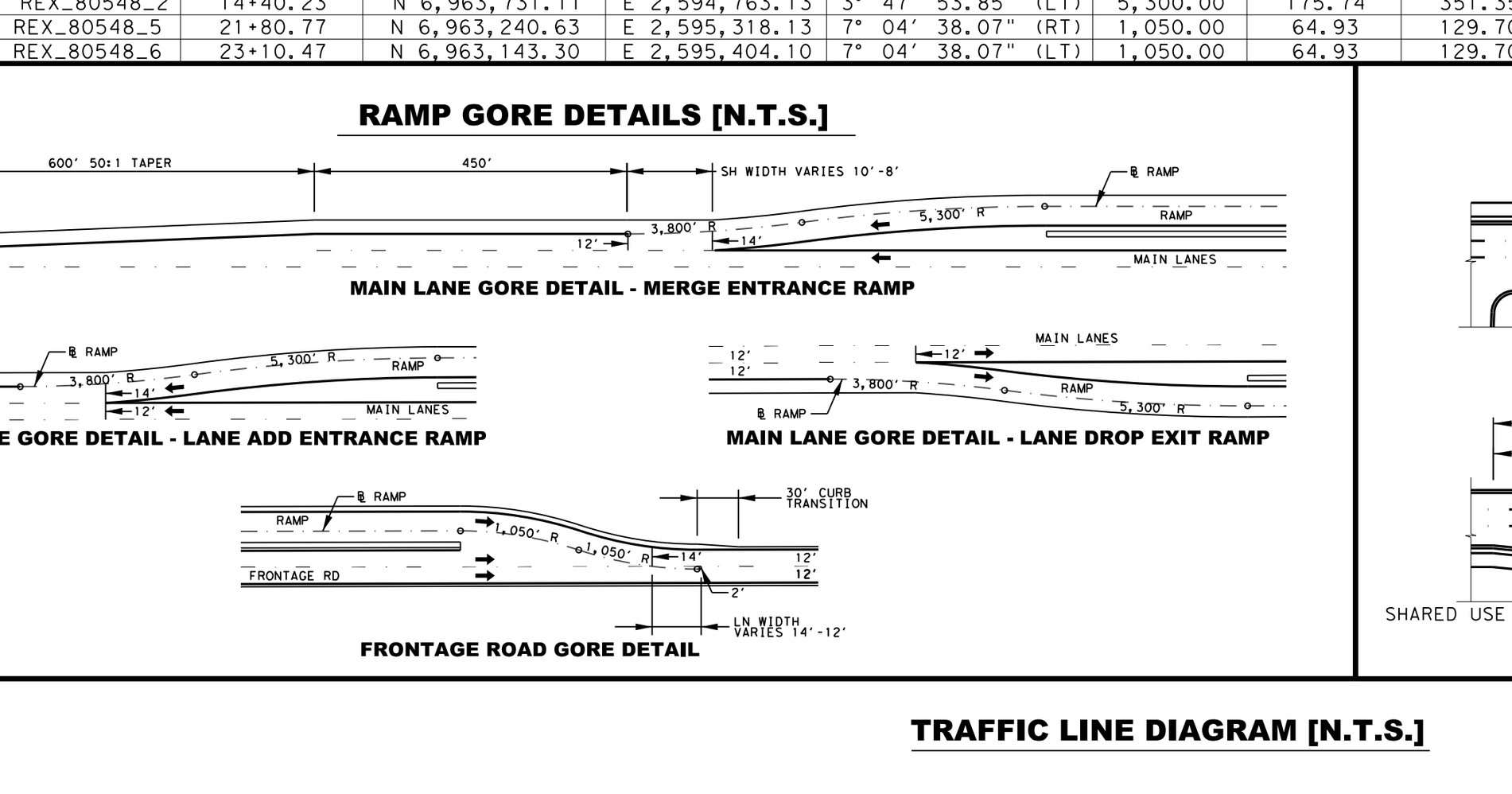
PROPERTY OWNERS

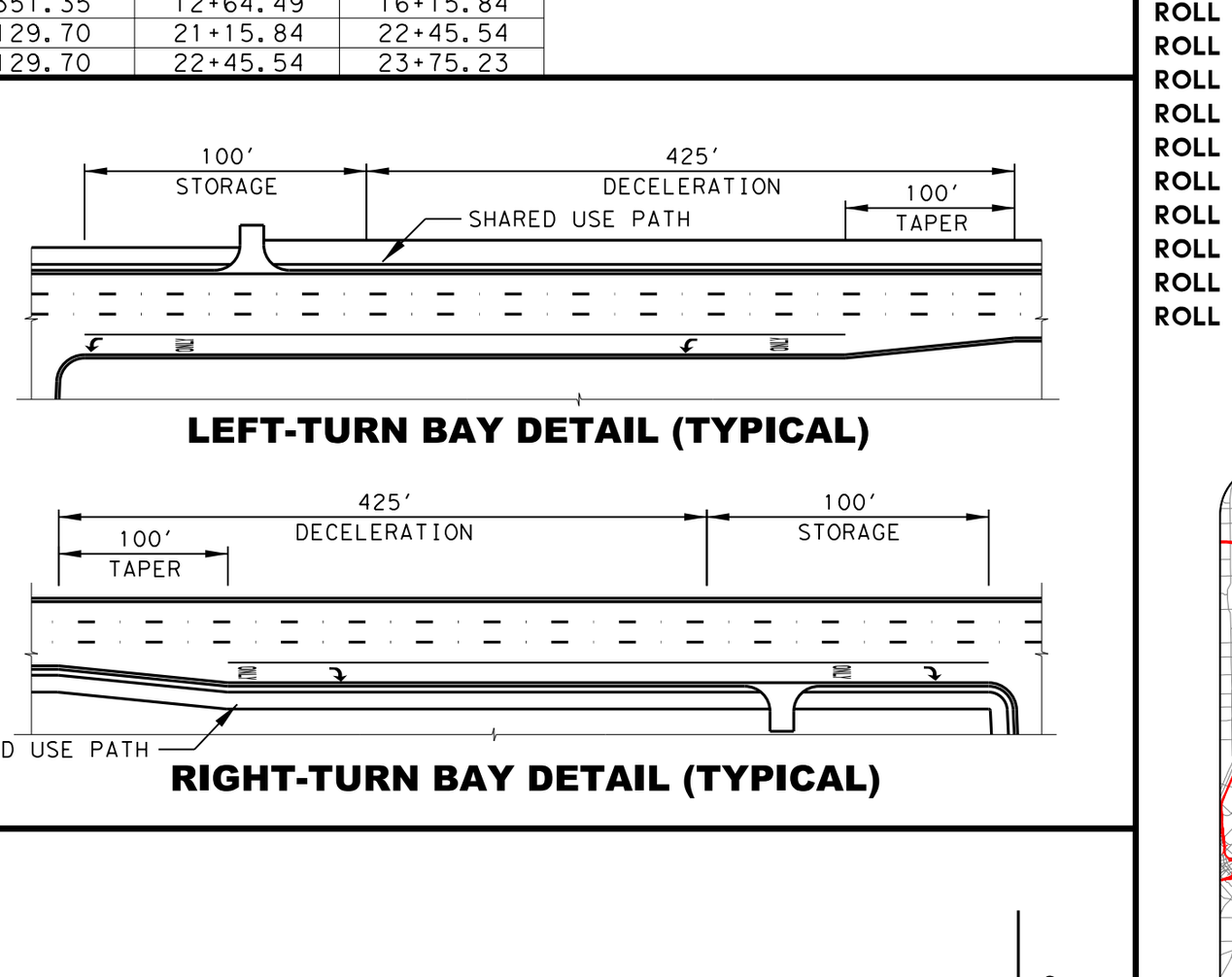
PARCEL NUMBER	OWNER NAME	PROPERTY ADDRESS
22	MM FORNEY 69, LLC	HWY. 80, FORNEY, TX
25	JEFFERSON TRIANGLE MARINE, LP	HWY. 80, FORNEY, TX
26	CRENSHAW, JOHN WESLEY & PATSY	HWY. 80, FORNEY, TX
27	CRENSHAW, JOHN WESLEY & PATSY	300 W. HWY. 80, FORNEY, TX
28	BEAM CAPITAL, LLC	0 PINSON RD., FORNEY, TX
29	FIRST UNITED METHODIST CHURCH	414 W. BROAD ST., FORNEY, TX 75126
30	FORNEY MISSIONARY BAPTIST CHURCH	417 PINSON RD., TX
31	INTERFIRST BANK FORNEY	100 W. HWY. 80 RD, FORNEY, TX
32	FORSTER, DARRELL & GILES, TERRY	105 E. HWY. 80, FORNEY, TX
33	FORSTER & GILES INVESTMENTS, GP	101 W. HWY. 80, FORNEY, TX
34	R BYRON ROACH TRUSTEE, LLC	100 HWY. 80 RD., FORNEY, TX
35	ANDREW WAYNE ENTERPRISE, INC.	101 E. HWY. 80, FORNEY, TX
36	RD PINSON, LLC	PINSON RD., FORNEY, TX
37	BROOKLYN LODGE #386	103 E. HWY. 80, FORNEY, TX
38	BEN MAR TRUST	102 E. HWY. 80, TX
39	MCGUIRE, JAMES C	107 E. HWY. 80, FORNEY, TX
40	J & J FORNEY RETAIL PLAZA, LLC	104 E. HWY. 80, FORNEY, TX
41	FORNEY HOSPITALITY, LLC	FORNEY, TX
42	WARREN, KAY L	109 E. HWY. 80, FORNEY, TX
43	J & J FORNEY RETAIL PLAZA, LLC	108 E. HWY. 80, FORNEY, TX
44	BHAVI HOSPITALITY, LLC	E. HWY. 80, FORNEY, TX
45	GUTIERREZ, JOSE ALFREDO & MARIA	111 E. HWY. 80, FORNEY, TX
46	CHILTON PROPERTIES, LLC	113 E. HWY. 80, FORNEY, TX
47	SD APPLE PROPERTIES I, LLC	114 E. HWY. 80, FORNEY, TX 75126
49	JUDGE CORPORATION	120 E. HWY. 80, FORNEY, TX
50	119 E HWY 80, LLC	HWY. 80, FORNEY, TX
51	121 E HWY 80, LLC	E. HWY. 80, FORNEY, TX
52	NORTHWEST BUTANE GAS CO.	122 HWY. 80, FORNEY, TX
53	CALDWELL, BARRY D. & JANET	124 E. HWY. 80, TX
54	BENTON LEASING, LLC	200 HWY. 80, FORNEY, TX
55	B & R KHODAPARAST, LLC	126 HWY. 80, FORNEY, TX
56	VCA REAL PROPERTY ACQUISITION CORPORATION	202 E. HWY. 80, FORNEY, TX
57	USA TIRES, INC.	203 HWY. 80, FORNEY, TX
58	P & S HOLDINGS CO., LLC	204 A E. HWY. 80, FORNEY, TX
59	FIVE TWO FARMS EXCHANGE HOLDINGS, LLC	205 E. HWY. 80, FORNEY, TX
60	KERIMORE LLC SERIES 1	207 E. HWY. 80, FORNEY, TX
61	INTERNATIONAL ARCHITECTURAL METALS	206 E. HWY. 80, FORNEY, TX
62	HOGAN EQUITIES, LLC	303 HWY. 80, FORNEY, TX
227	TAYLOR, JOHN L.	417 MC GRAW, FORNEY, TX
228	PHILLIPS, WILLIAM H. JR.	600 PINSON RD., FORNEY, TX
229	HALLETT NO. 1, LLC	590 PINSON RD., FORNEY, TX
230	NANDAN CORP DBA SCOTTIES FORNEY	431 PINSON RD., FORNEY, TX

HORIZONTAL ALIGNMENT DATA

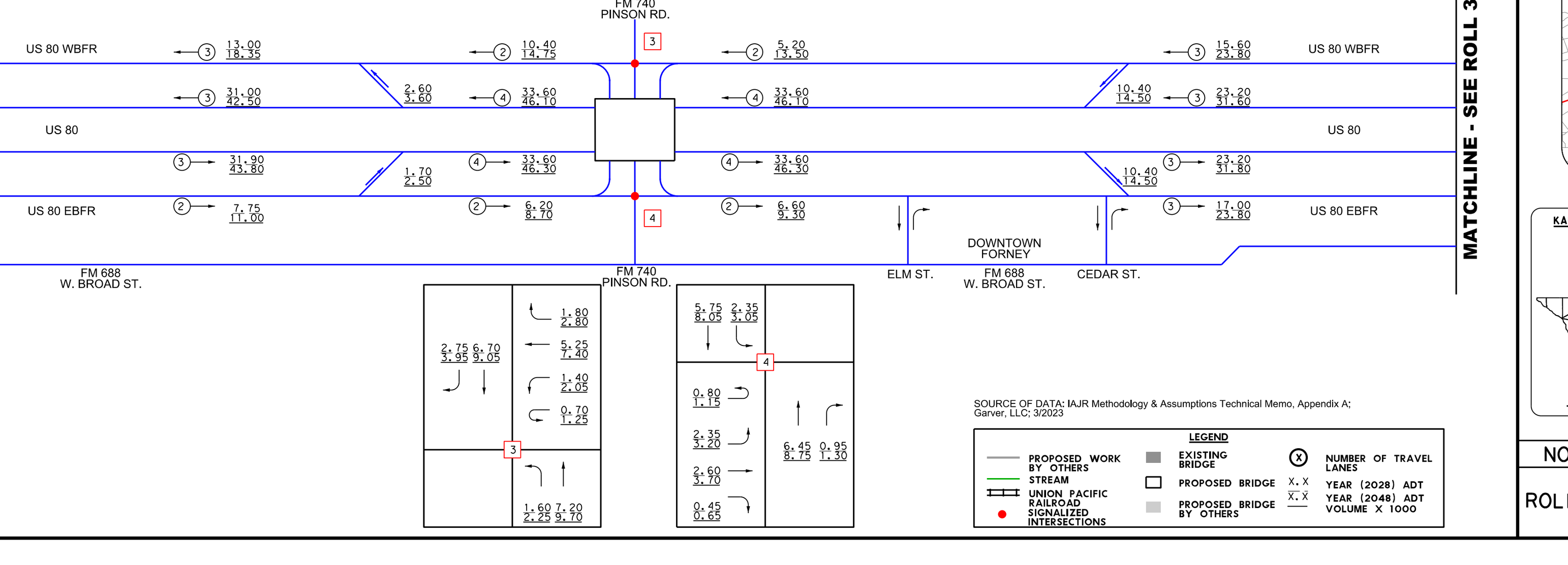
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80CL	US80CL_3	754+58.60	N 6,966,077.71	E 2,590,099.79	29° 14' 55.40" (LT)	5,800.00	1,513.42	2,960.82	739+45.18	769+06.00
US80CL	US80CL_6	791+88.26	N 6,964,812.51	E 2,593,678.40	21° 59' 52.30" (RT)	5,700.00	1,107.86	2,188.43	780+80.40	802+68.83
US80_WBFR1	US80_WBFR1_8	755+66.99	N 6,966,188.96	E 2,590,175.10	29° 14' 55.40" (LT)	5,670.00	1,479.50	2,894.46	740+87.49	769+81.95
US80_WBFR1	US80_WBFR1_11	782+98.22	N 6,965,257.07	E 2,592,810.99	4° 20' 07.94" (RT)	4,983.00	188.62	377.06	781+09.60	784+86.66
US80_WBFR1	US80_WBFR1_14	789+51.28	N 6,964,993.39	E 2,593,408.65	2° 44' 41.94" (RT)	2,962.00	70.97	141.89	788+80.31	790+22.22
US80_WBFR2	US80_WBFR2_1	791+75.03	N 6,964,928.13	E 2,593,539.25	1° 56' 07.76" (RT)	2,962.00	75.03	150.03	791+00.00	792+50.03
US80_WBFR2	US80_WBFR2_2	794+66.92	N 6,964,784.59	E 2,593,793.44	4° 15' 18.86" (RT)	5,837.99	216.89	433.58	792+50.03	796+83.61
US80_WBFR2	US80_WBFR2_5	800+20.30	N 6,964,477.37	E 2,594,253.95	7° 45' 35.78" (RT)	4,000.00	271.29	541.75	797+49.02	802+90.76
US80_EBFR1	US80_EBFR1_7	754+50.12	N 6,965,966.45	E 2,590,024.47	29° 14' 55.40" (LT)	5,930.00	1,547.34	3,027.18	739+02.78	769+29.97
US80_EBFR1	US80_EBFR1_10	780+80.12	N 6,965,067.31	E 2,592,567.71	2° 49' 54.79" (RT)	5,218.00	128.98	257.90	779+51.14	782+09.05
US80_EBFR1	US80_EBFR1_13	786+55.31	N 6,964,849.00	E 2,593,099.92	5° 38' 25.90" (RT)	5,562.00	274.00	547.56	783+81.32	789+28.87
US80_EBFR2	US80_EBFR2_3	797+15.39	N 6,964,379.00	E 2,593,972.63	13° 01' 26.79" (RT)	3,988.00	455.23	906.53	792+60.17	801+66.69
RWX_80LOV	RWX_80LOV_1	10+53.89	N 6,965,848.46	E 2,591,128.95	5° 52' 35.00" (RT)	1,050.00	53.89	107.69	10+00	11+07.69
RWX_80LOV	RWX_80LOV_2	11+85.92	N 6,965,781.22	E 2,591,242.69	8° 31' 19.13" (LT)	1,050.00	78.23	156.17	11+07.69	12+63.86
RWX_80LOV	RWX_80LOV_3	13+93.38	N 6,965,703.16	E 2,591,435.21	2° 35' 58.98" (LT)	5,708.00	129.52	258.99	12+63.86	15+22.86
RWX_80LOV	RWX_80LOV_6	19+39.65	N 6,965,521.06	E 2,591,950.29	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	17+63.8	21+15.31
RWX_80LOV	RWX_80LOV_7	22+41.35	N 6,965,401.81	E 2,592,227.56	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	21+15.31	23+67.30
REE_68880	REE_68880_1	11+02.95	N 6,965,647.85	E 2,591,017.63	11° 11' 59.62" (LT)	1,050.00	102.95	205.25	10+00.00	12+05.25
REE_68880	REE_68880_2	12+77.12	N 6,965,605.08	E 2,591,187.14	7° 49' 53.22" (RT)	1,050.00	71.87	143.52	12+05.25	13+48.77
REE_68880	REE_68880_3	14+78.28	N 6,965,529.68	E 2,591,373.88	2° 47' 06.71" (LT)	5,892.00	129.52	258.99	13+48.77	16+07.76
REE_68880	REE_68880_6	20+24.56	N 6,965,347.58	E 2,591,888.95	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	18+48.77	22+00.22
REE_68880	REE_68880_7	23+26.26	N 6,965,266.05	E 2,592,179.56	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	22+00.22	24+52.20
RWE_54880	RWE_54880_1	11+19.92	N 6,964,066.32	E 2,594,632.03	3° 36' 54.11" (RT)	3,800.00	119.92	239.76	10+00.00	12+39.76
RWE_54880	RWE_54880_2	14+15.78	N 6,963,885.49	E 2,594,866.29	3° 48' 15.59" (LT)	5,300.00	176.02	351.91	12+39.76	15+91.67
RWE_54880	RWE_54880_5	21+56.60	N 6,963,394.83	E 2,595,421.50	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	20+91.67	22+21.37
RWE_54880	RWE_54880_6	22+86.30	N 6,963,321.48	E 2,595,528.66	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	22+21.37	23+51.06
REX_80548	REX_80548_1	11+32.30	N 6,963,949.94	E 2,594,546.33	3° 59' 16.44" (RT)	3,800.00	132.30	264.49	10+00.00	12+64.49
REX_80548	REX_80548_2	14+40.23	N 6,963,731.11	E 2,594,763.13	3° 47' 53.85" (LT)	5,300.00	175.74	351.35	12+64.49	16+15.84
REX_80548	REX_80548_5	21+80.77	N 6,963,240.63	E 2,595,318.13	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	21+15.84	22+45.54
REX_80548	REX_80548_6	23+10.47	N 6,963,143.30	E 2,595,404.10	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	22+45.54	23+75.23

RAMP GORE DETAILS [N.T.S.]

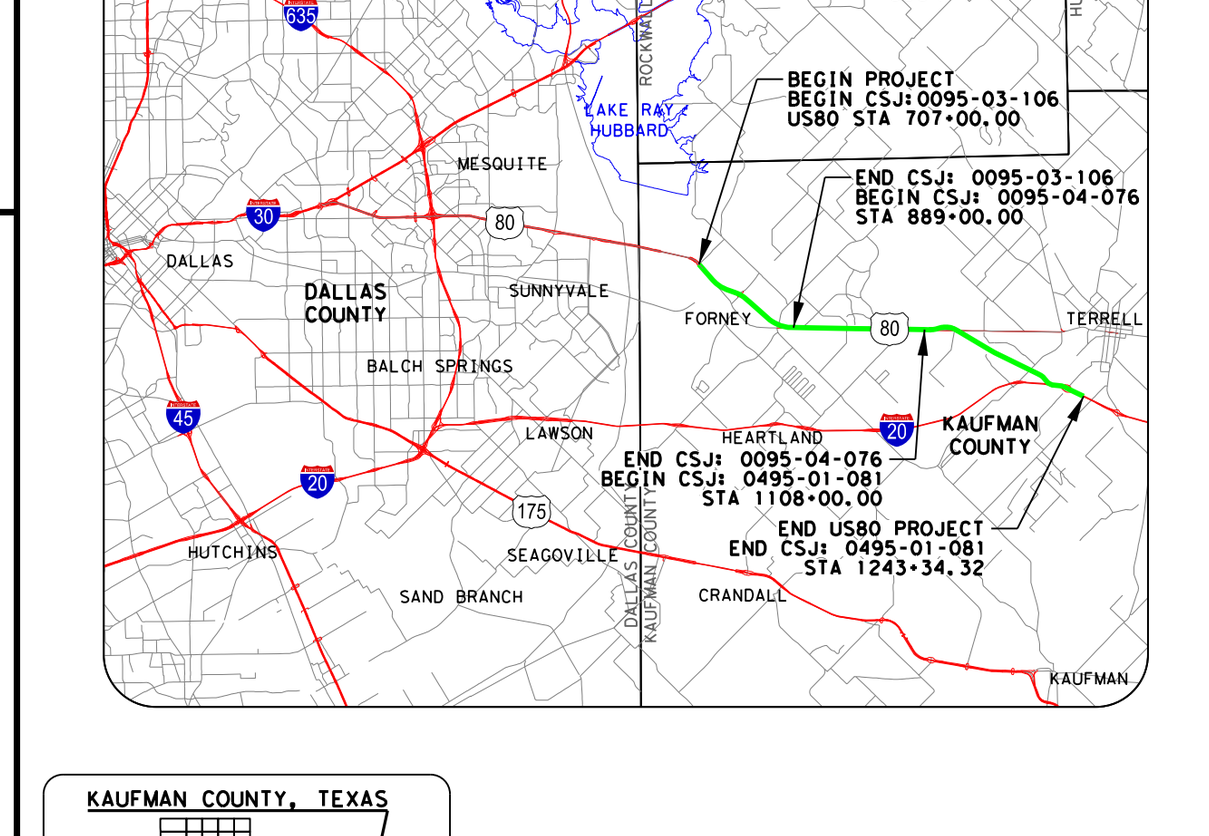




TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023
ROADWAY / DESIGN SPEED / FUNCTIONAL CLASSIFICATION
MAIN LANES: 60 MPH URBAN FREEWAY
DIRECT CONNECTORS: 40 MPH
RAMPS: 40 MPH
FRONTAGE ROADS/BYPASSES/CONNECTORS: 40 MPH
LOCAL STREETS: 30 MPH LOCAL
LOCAL STREETS CONNECTORS: 20 MPH
TURNAROUNDS: 15 MPH
INDEX OF SHEETS
ROLL 1 OF 31: PLAN & PROFILE STA. BEGIN TO STA. 760+00
ROLL 2 OF 31: PLAN & PROFILE STA. 760+00 TO STA. 816+00
ROLL 3 OF 31: PLAN & PROFILE STA. 816+00 TO STA. 872+00
ROLL 4 OF 31: PLAN & PROFILE STA. 872+00 TO STA. 917+00
ROLL 5 OF 31: PLAN & PROFILE STA. 917+00 TO STA. 955+00
ROLL 6 OF 31: PLAN & PROFILE STA. 955+00 TO STA. 1003+00
ROLL 7 OF 31: PLAN & PROFILE STA. 1003+00 TO STA. 1042+00
ROLL 8 OF 31: PLAN & PROFILE STA. 1042+00 TO STA. 1081+00
ROLL 9 OF 31: PLAN & PROFILE STA. 1081+00 TO (SP557) STA. 1134+00
ROLL 10 OF 31: PLAN & PROFILE (SP557) STA. 1134+00 TO STA. 1178+00
ROLL 11 OF 31: PLAN & PROFILE STA. 1178+00 TO STA. 1227+00
ROLL 12 OF 31: PLAN & PROFILE STA. 1227+00 TO STA. 1274+00
ROLL 13 OF 31: PLAN & PROFILE STA. 1274+00 TO STA. 1323+00
ROLL 14 OF 31: PLAN & PROFILE I-20 INTERCHANGE (1 OF 2)
ROLL 15 OF 31: PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)
ROLL 16-19 OF 31: PLAN & PROFILE EB FRONTAGE ROADS
ROLL 20-23 OF 31: PLAN & PROFILE WB FRONTAGE ROADS
ROLL 24 OF 31: PLAN & PROFILE EB AND WB US80 BUSINESS
ROLL 25 OF 31: PLAN & PROFILE US80 CROSS STREETS
ROLL 26 OF 31: PLAN & PROFILE SP557 CROSS STREETS
ROLL 27-29 OF 31: PLAN & PROFILE US80/SP557 RAMPS
ROLL 30 OF 31: PLAN & PROFILE U-TURNS/I-20 DIRECT CONNECTORS
ROLL 31 OF 31: PLAN & PROFILE I-20 FRONTAGE ROADS



NOVEMBER 1, 2023

ROLL NUMBER 2/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

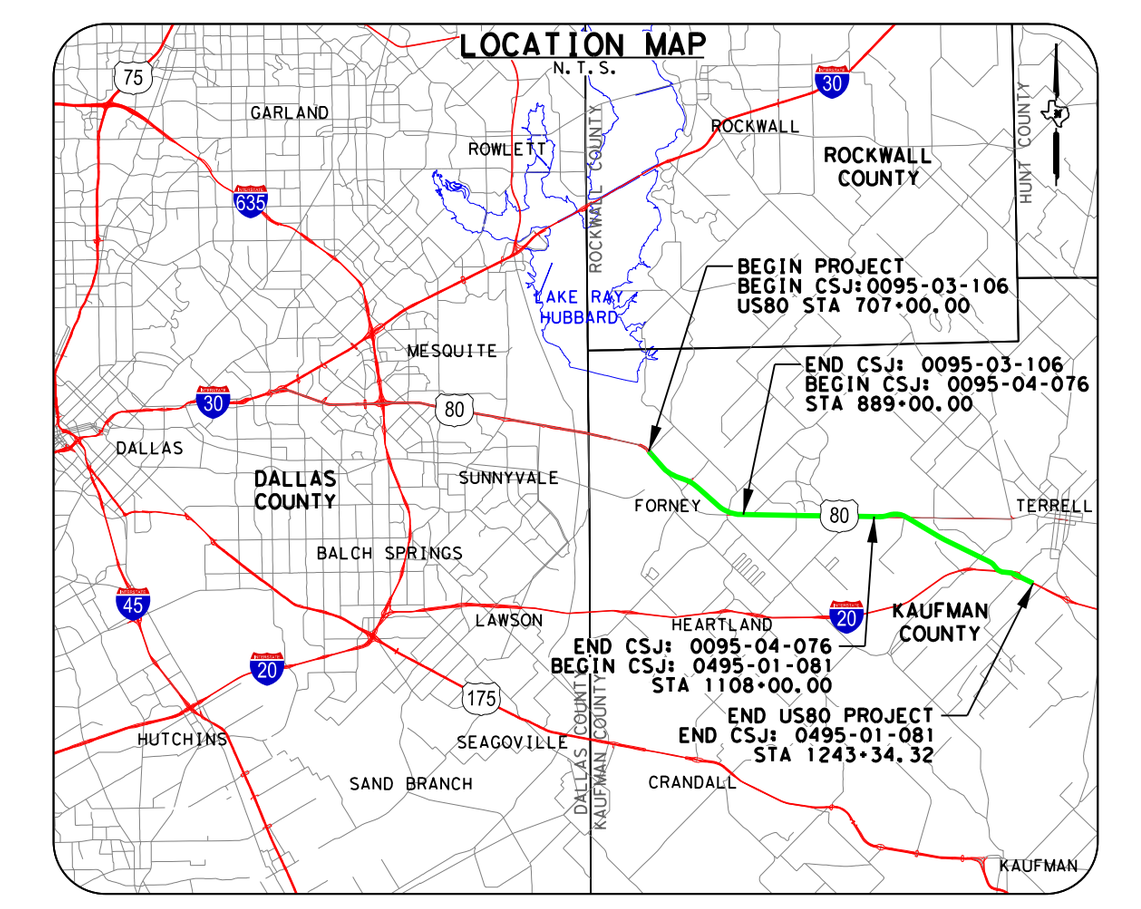
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

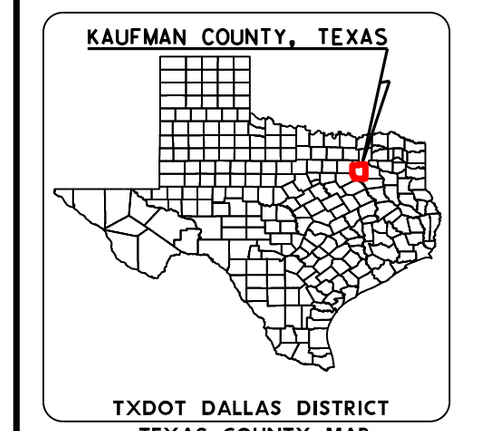
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





November 16, 2023

ROLL NUMBER 3/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

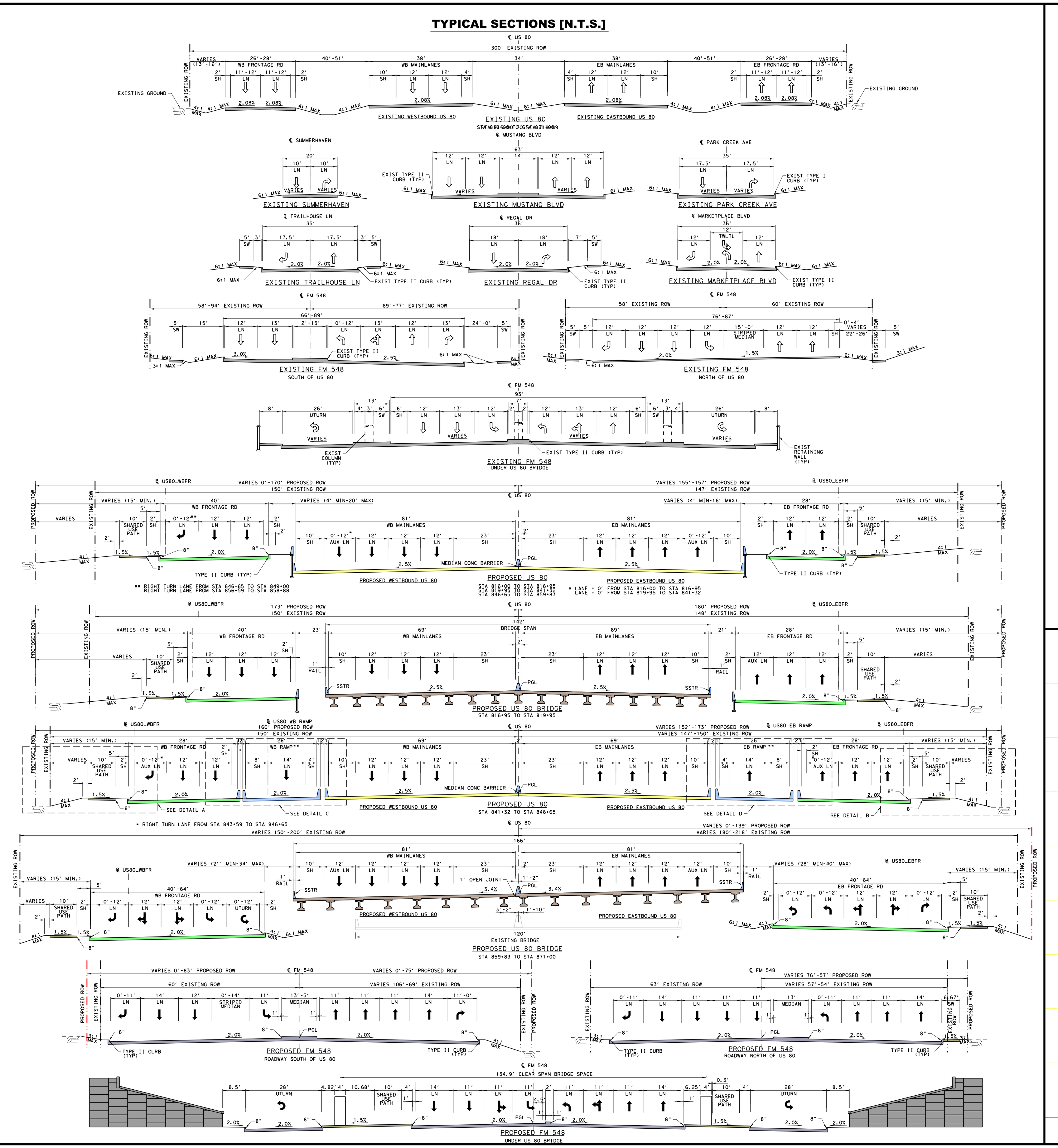
EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CULVERT
EXISTING STORM SEWER
FEMA 100 YR FLOODPLAIN LIMITS
WETLANDS
PARK BOUNDARY
EXISTING PLANIMETRIC FEATURES
EXISTING CONTOURS (5-FT)
EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING ELECTRIC LINE
EXISTING SANITARY SEWER LINE
EXISTING GAS/PETROLEUM LINE
CITY/COUNTY LIMITS
PROPOSED CENTERLINE/BASELINE
PROPOSED ROW
PROPOSED ROW BY OTHERS
PROPOSED ACCESS DENIAL
PROPOSED DRAINAGE EASEMENT
PROPOSED EDGE OF PAVEMENT
PROPOSED CTB
PROPOSED BRIDGE
PROPOSED RETAINING WALL
POTENTIAL NOISE WALL
PROPOSED CULVERT
PAVEMENT/BRIDGE TO BE REMOVED
EXISTING BRIDGE TO REMAIN
PROPOSED CONCRETE BRIDGE
PROPOSED STEEL BRIDGE
PROPOSED MAIN LANES
PROPOSED RAMP
PROPOSED FRONTAGE ROAD/BYPASSES
PROPOSED CROSS STREET
PROPOSED SHARED USE PATH
PROPOSED PROJECT BY OTHERS
POTENTIAL DISPLACEMENTS
PROPOSED RIP RAP
PERPENDICULAR CURB RAMP
PROPOSED GUARDRAIL
EXISTING TRAFFIC FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID

NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]



NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 18	US80 CL	816+00.00	71.00' RT	816+95.00	71.00' RT	95.00
WALL 20	US80 CL	816+00.00	71.00' LT	816+95.00	71.00' LT	95.00
WALL 23	EBFR	816+42.95	18.00' RT	817+70.00	18.00' RT	127.05
WALL 24	WBFR	818+15.00	18.00' LT	819+95.00	18.00' LT	180.00
WALL 26	US80 CL	816+95.00	91.00' LT	819+95.00	91.00' LT	300.00
WALL 27	EBFR	817+40.00	39.00' LT	820+40.00	39.00' LT	300.00
WALL 28	EBFR	818+10.00	18.00' RT	820+55.00	18.00' RT	245.00
WALL 29	WBFR	820+20.00	18.00' LT	825+10.00	18.00' LT	490.00
WALL 30	US80 CL	819+95.00	71.00' RT	824+00.00	71.00' RT	405.00
WALL 31	WBFR	825+50.00	18.00' LT	825+95.00	18.00' LT	45.00
WALL 32	US80 CL	823+95.00	71.00' LT	833+95.00	71.00' LT	1000.00
WALL 33	WBFR	826+30.00	18.00' LT	828+40.00	18.00' LT	210.00
WALL 34	WBFR	829+80.00	18.00' LT	830+90.00	18.00' LT	110.00
WALL 35	EBFR	828+50.00	18.00' RT	830+90.00	18.00' RT	240.00
WALL 35A	EBFR	831+35.00	18.00' RT	832+90.00	18.00' RT	155.00
WALL 35B	EBFR	833+45.00	18.00' RT	837+00.00	18.00' RT	355.00
WALL 35B	EBFR	833+45.00	18.00' RT	837+00.00	18.00' RT	355.00
WALL 36	WBFR	831+60.00	18.00' LT	836+20.00	18.00' LT	495.00
WALL 37	US80 CL	839+95.00	71.00' LT	841+30.00	71.00' LT	135.00
WALL 38	EBFR	844+00.00	29.00' LT	846+80.00	29.00' LT	280.00
WALL 39	EBFR	844+00.00	18.00' RT	845+30.00	18.00' RT	130.00
WALL 40	EBFR	845+80.00	18.00' RT	850+50.00	18.00' RT	470.00
WALL 41	US80 CL	846+30.00	101.00' LT	857+00.00	83.00' LT	1056.71
WALL 42	EBFR	847+10.00	29.00' LT	855+50.00	48.00' LT	836.18
WALL 43	EBFR	855+45.00	18.00' RT	858+35.00	18.00' RT	230.00
WALL 44	EBFR	855+50.00	36.00' LT	860+45.00	36.00' LT	495.00
WALL 45	WBFR	858+85.00	36.00' RT	861+60.00	36.00' RT	275.00
WALL 46	WBFR	858+90.00	28.00' LT	861+00.00	25.00' LT	208.79
WALL 47	EBFR	858+80.00	18.00' RT	862+85.00	30.00' RT	405.00
WALL 48	WBFR	863+60.00	39.00' RT	865+50.00	39.00' RT	190.00
WALL 49	EBFR	863+25.00	30.00' RT	866+60.00	30.00' RT	335.00
WALL 50	WBFR	873+00.00	30.00' LT	873+26.32	30.00' LT	26.32
WALL 51	US 80 CL	871+05.00	83.00' LT	872+00.00	83.00' LT	95.00
WALL 52	US 80 CL	871+05.00	83.00' RT	872+00.00	83.00' RT	95.00

PUS80 - PROP US80 MAIN LANES (60 MPH)

PARCEL NUMBER	OWNER NAME	PROPERTY ADDRESS
61	INTERNATIONAL ARCHITECTURAL METALS	206 E. HWY. 80, FORNEY, TX
62	HOGAN EQUITIES, LLC	303 HWY. 80, FORNEY, TX
63	FUCHSUN, LLC	214 E. HWY. 80, FORNEY, TX
64	AMERICAN LEGION POST 591, TRUSTEE FOR FORNEY B	305 E. HWY. 80, FORNEY, TX
65	NSA PROPERTY HOLDINGS, LLC	394 E. HWY. 80, FORNEY, TX
66	SUMMER HAVEN LAND, LLC	HWY. 80, FORNEY, TX
67	*SUMMER HAVEN MHP, LLC	655 SUMMERHAVEN, FORNEY, TX
68	PCC REAL ESTATE HOLDINGS, LP	400 E. HWY. 80, FORNEY, TX
69	PCC REAL ESTATE HOLDINGS, LP	HWY. 80, FORNEY, TX
71	MURILLO, CIPRIANO	807 PARK CREEK AVE., FORNEY, TX 75126
73	PETERMAN, ALYCE L.	808 PARK CREEK AVE., FORNEY, TX 75126
74	TRAILHOUSE PARK, LLC	502 E. HWY. 80, FORNEY, TX
75	FCM REALTY, LLC	401 E. HWY. 80, FORNEY, TX
75A	FCM REALTY, LLC	0 HWY. 80, FORNEY, TX
76	ANDERSON CLAYTON FUNERAL HOMES	HWY. 80, FORNEY, TX
77	TRAILHOUSE PARK, LLC	HWY. 80, FORNEY, TX
78	VALFAIR CONSTRUCTION, INC.	501 US HWY. 80, FORNEY, TX 75126
79	TRAILHOUSE PARK, LLC	HWY. 80, FORNEY, TX
80	FORNEY MARKET RETAIL LLC	HWY. 80 TX
80A-1	VICTORY AT FORNEY, LLC	US HWY. 80, FORNEY, TX 75126
80A	VICTORY AT FORNEY, LLC	HWY. 80, TX
80B	VICTORY AT FORNEY, LLC	HWY. 80, TX
81	N & H LEGACY PARTNERS, LLC	503 E. HWY. 80, FORNEY, TX
82	WILDCAT FORNEY, LLC	505 E. HWY. 80, FORNEY, TX
83	BERMUDA HOUSE APARTMENTS LLP	680 E HWY 80 FORNEY,TX,75126
83A	FORNEY MARKET RETAIL, LLC	HWY. 80, FORNEY, TX
83B	FORNEY MARKET RETAIL, LLC	HWY. 80, FORNEY, TX
83C	GOLDEN JUBILEE RETAIL, LLC	MARKET PLACE BLVD., TX
84	AMERICAN NATIONAL BANK OF TEXAS	104 REGAL DR., FORNEY, TX
85	SCSD FINNELL, LTD.	HWY. 80, FORNEY, TX
85A	SKW HOLDINGS, LTD	0 HWY. 80, FORNEY, TX
86	HRE MUSTANG CROSSING, LLC	E. HWY. 80, FORNEY, TX
87	MIAN REAL ESTATE HOLDINGS FUND I SERIES, LLC	725 E. US HWY. 80, TX
88	JACK IN THE BOX EASTERN DIVISION	769 E. HWY. 80, FORNEY, TX
89	CITY BANK	771 E. HWY. 80, FORNEY, TX
90	J EVANS FAMILY PARTNERSHIP KNOX, LTD.	351 FM RD. 548, TX
91	VERMEULEN RANCH CENTER, LLC ET AL	775 E. HWY. 80, TX
92	STATE OF TEXAS	HWY. 80 & FM 548, FORNEY, TX 75126
93	SC FORNEY PROPERTIES, LLC	101 N. FM RD. 548, FORNEY, TX
94	STATE OF TEXAS	HWY. 80 & FM 548, FORNEY, TX 75126
95	STATE OF TEXAS	HWY. 80 & FM 548, FORNEY, TX 75126
96	MURPHY OIL USA, INC.	802 E. HWY. 80, FORNEY, TX
97	WAL-MART REAL ESTATE BUSINESS TRUST	802 E. HWY. 80, FORNEY, TX
98	NFM 548 LLC	100 N FM RD 548 TX
99	STATE OF TEXAS	HWY. 80 & FM 548, FORNEY, TX 75126
100	LFQ FORNEY, LLC & MBQ FORNEY, LLC	824 E. HWY. 80, FORNEY, TX
101	80 FORNEY, LLC	HWY. 80, TX

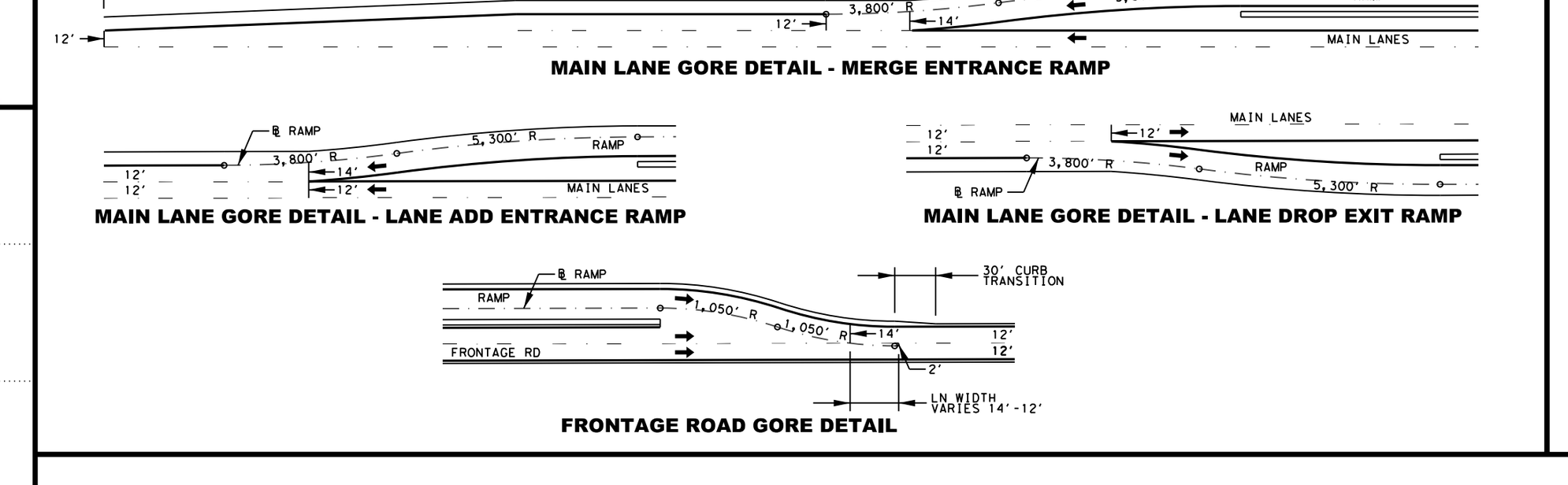
HORIZONTAL ALIGNMENT DATA

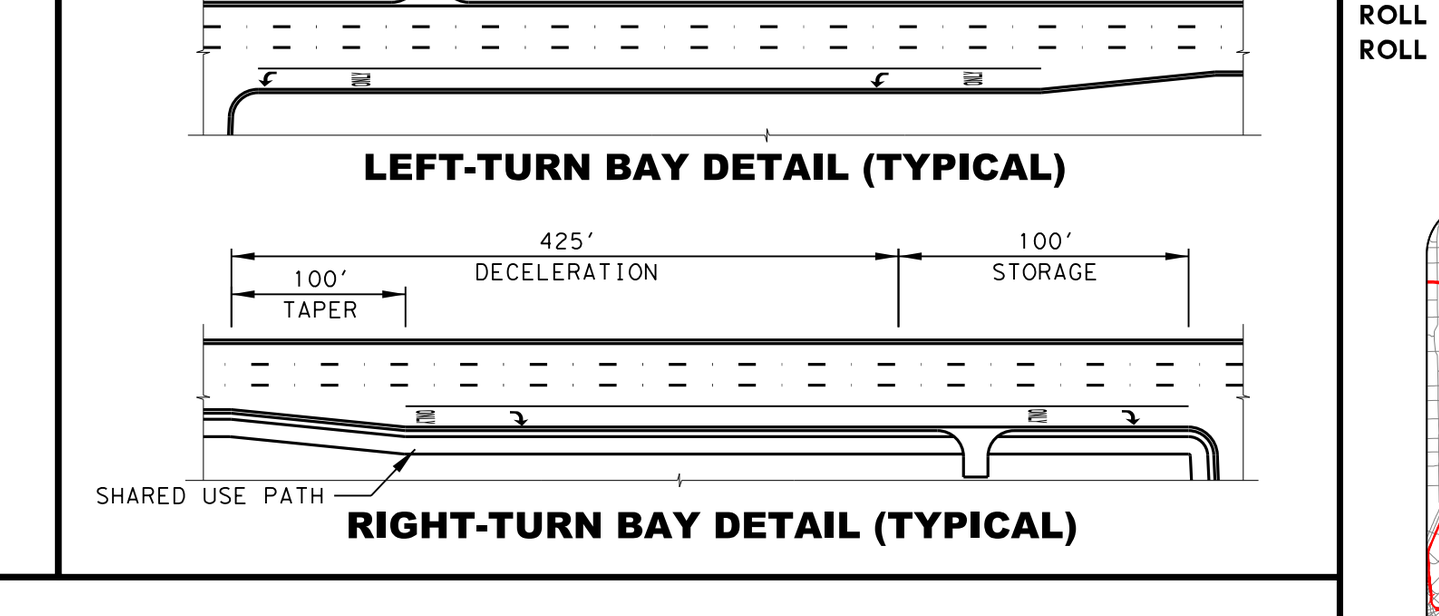
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80CL	US80CL_9	869+16.00	N 6,959,677.06	E 2,599,489.39	40° 33' 01.64" (LT)	5,750.00	4,069.50	2,124.16	847+91.84	888+61.34
US80_WBFR2	US80_WBFR2_10	858+28.38	N 6,960,630.65	E 2,598,606.68	18° 36' 03.47" (LT)	4,500.00	736.94	1,460.92	850+91.44	865+52.36
US80_WBFR3	US80_WBFR3_1	879+40.43	N 6,959,835.01	E 2,600,493.20	19° 30' 45.10" (LT)	4,250.00	730.76	1,447.37	872+09.67	886+57.04
US80_EBFR2	US80_EBFR2_6	851+45.66	N 6,960,780.43	E 2,598,044.57	6° 03' 10.10" (LT)	5,880.00	310.87	621.17	848+34.79	854+55.96
US80_EBFR2	US80_EBFR2_9	861+70.20	N 6,960,186.37	E 2,598,880.01	10° 45' 16.36" (LT)	4,202.00	395.52	788.72	857+74.67	865+63.40
US80_EBFR2	US80_EBFR2_10	866+62.00	N 6,959,980.20	E 2,599,329.06	1° 54' 41.63" (LT)	5,910.00	98.60	197.18	865+63.40	867+60.57
US80_EBFR3	US80_EBFR3_1	868+84.49	N 6,959,909.38	E 2,599,497.90	1° 40' 03.77" (LT)	5,804.95	84.49	168.97	868+00.00	869+68.97
US80_EBFR3	US80_EBFR3_4	879+35.12	N 6,959,531.20	E 2,600,478.12	20° 10' 4315" (LT)	4,202.00	747.68	1,479.88	871+87.44	886+67.31
RWX_80PIN	RWX_80PIN_1	10+64.93	N 6,961,730.06	E 2,597,329.43	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	10+00.00	11+29.70
RWX_80PIN	RWX_80PIN_2	11+94.63	N 6,961,632.73	E 2,597,415.40	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	11+29.70	12+59.39
RWX_80PIN	RWX_80PIN_5	18+68.51	N 6,961,186.37	E 2,597,920.47	2° 21' 31.90" (RT)	5,300.00	109.12	218.20	17+59.39	19+77.59
RWX_80PIN	RWX_80PIN_6	22+73.89	N 6,960,905.62	E 2,598,212.95	8° 55' 01.47" (LT)	3,800.00	296.30	591.40	19+77.59	25+69.00
REE_PIN80	REE_PIN80_1	10+64.93	N 6,961,546.34	E 2,597,211.13	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	10+00.00	11+29.70
REE_PIN80	REE_PIN80_2	11+94.63	N 6,961,472.99	E 2,597,318.29	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	11+29.70	12+59.39
REE_PIN80	REE_PIN80_5	21+18.05	N 6,960,861.39	E 2,598,010.35	7° 44' 33.59" (LT)	5,300.00	358.65	716.22	17+59.39	24+75.61
REE_PIN80	REE_PIN80_6	25+14.89	N 6,960,640.45	E 2,598,341.31	1° 11' 04.01" (RT)	3,800.00	39.28	78.56	24+75.61	25+54.17

SUPERELEVATION SIGN CONVENTION

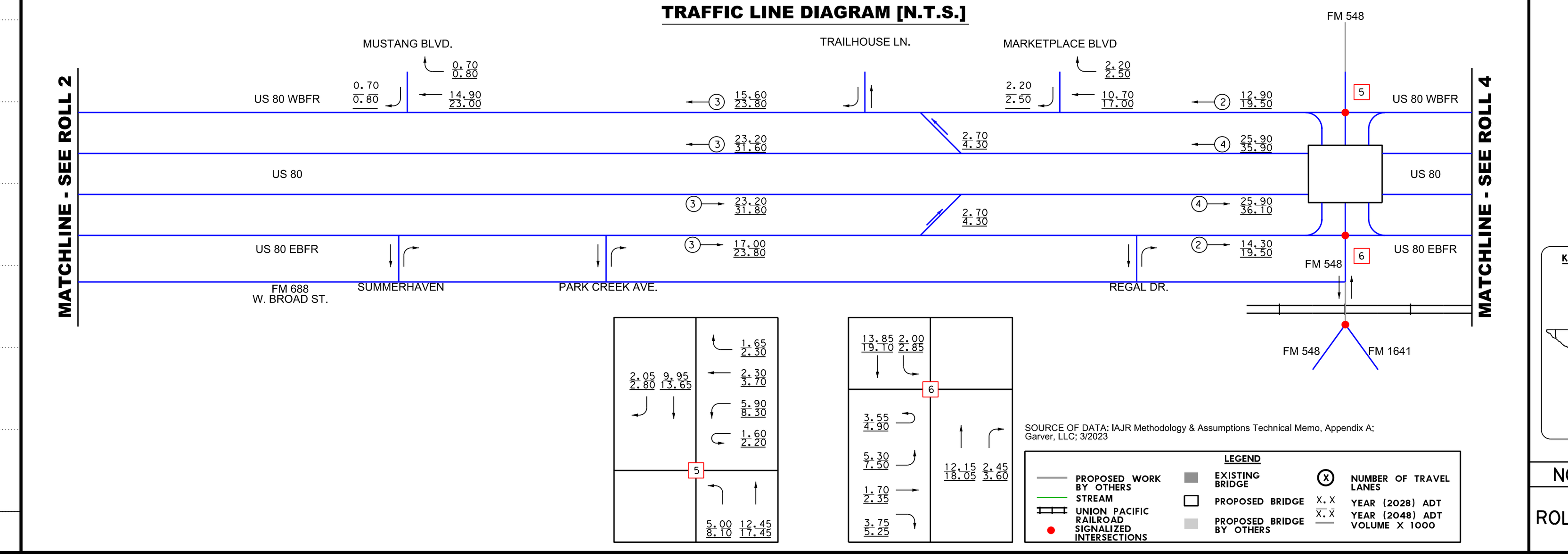
BASELINE	ROADWAY	BEGIN TRANSITION STATION	BEGIN TRANSITION e	END TRANSITION STATION	END TRANSITION e
US80CL	US80 WBML	842+65	2.50%	848+65	3.40%
		887+68	3.40%	893+88	2.50%
US80CL	US80 EBML	842+65	-2.50%	848+85	3.40%
		887+68	3.40%	893+88	-2.50%

RAMP GORE DETAILS [N.T.S.]





TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
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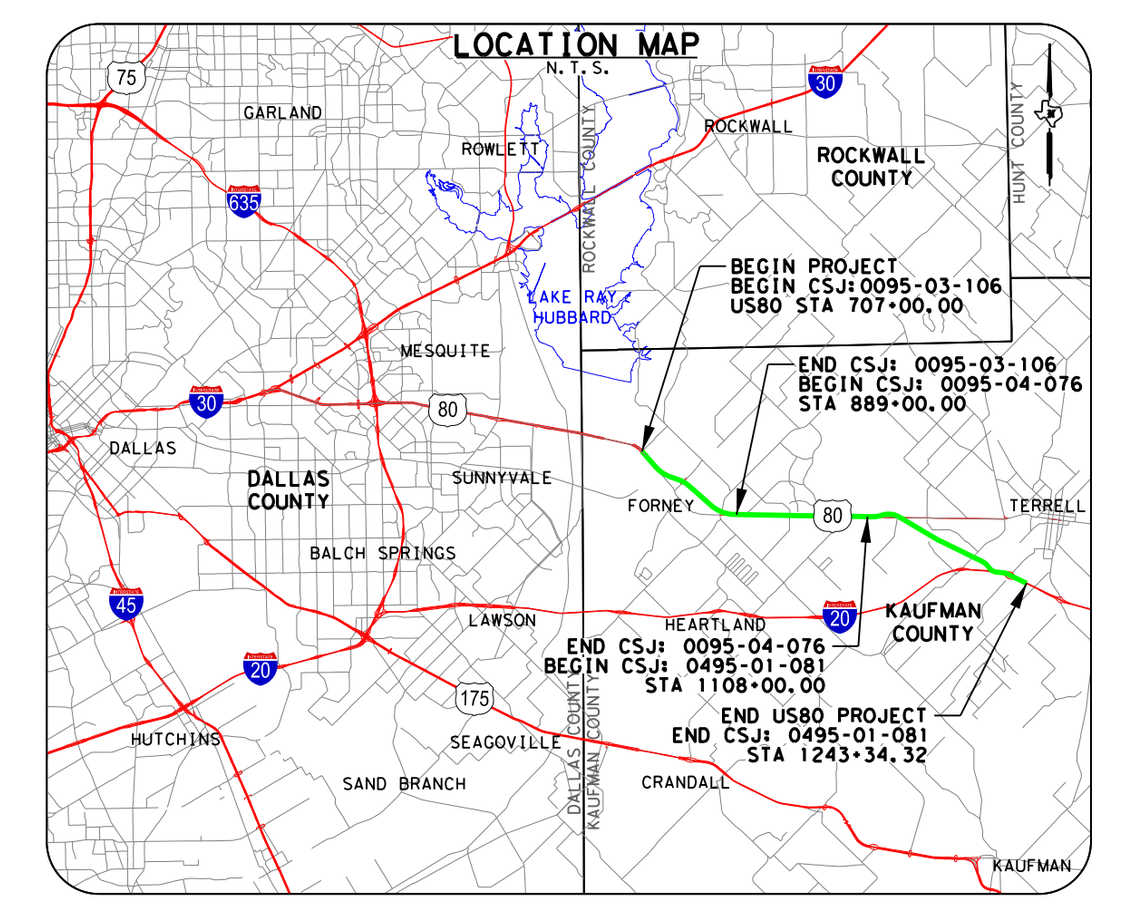
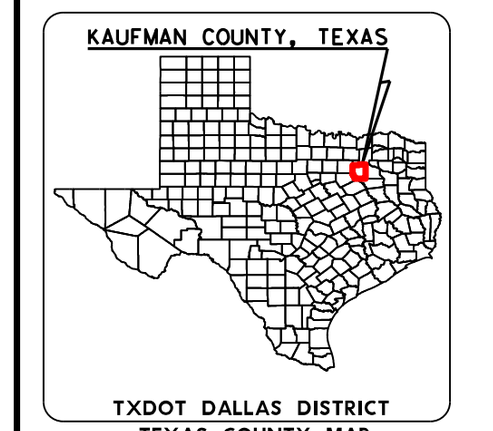
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023





NOVEMBER 1, 2023

ROLL NUMBER 3/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

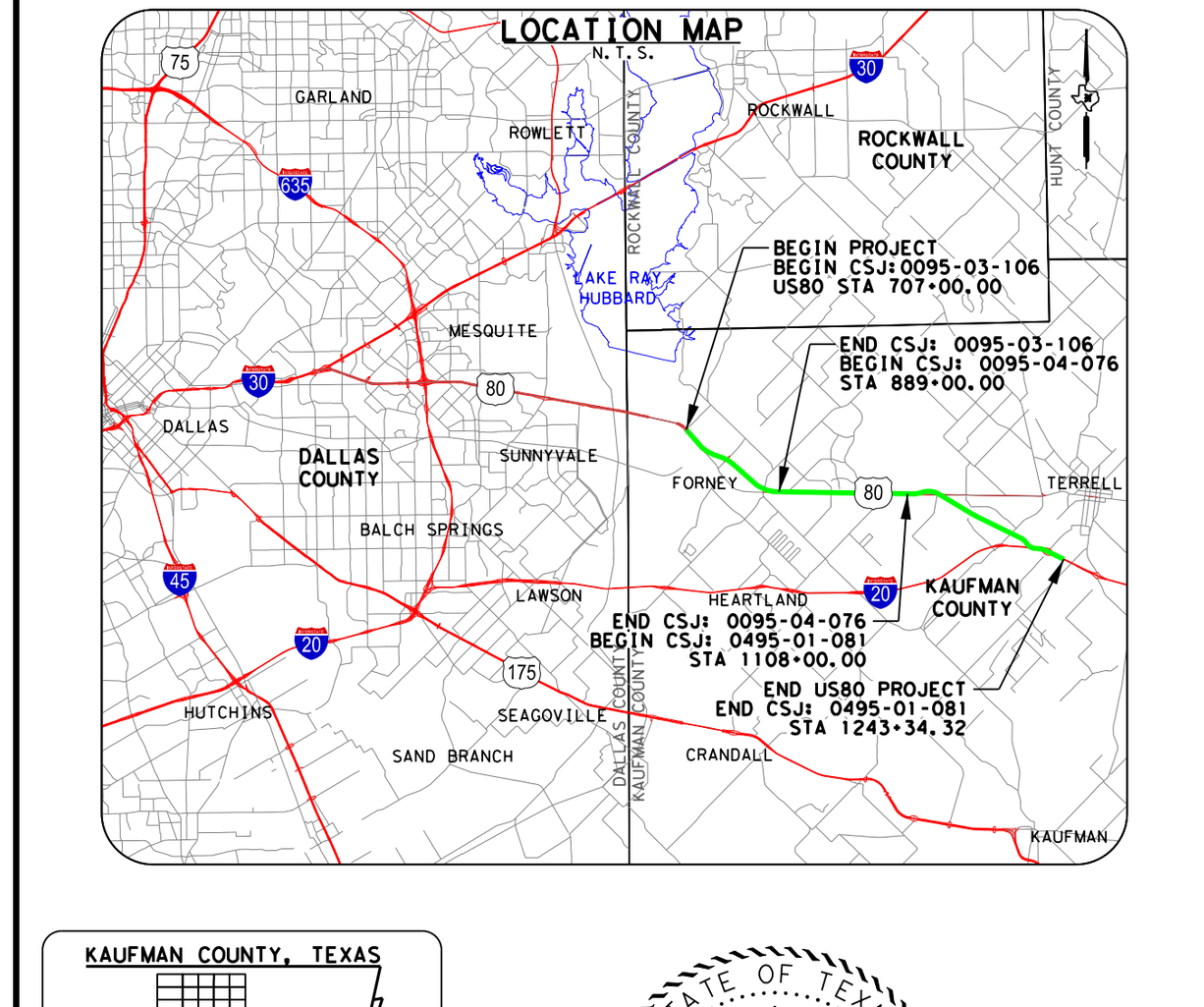
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS



STATE OF TEXAS
STEPHEN A JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 4/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

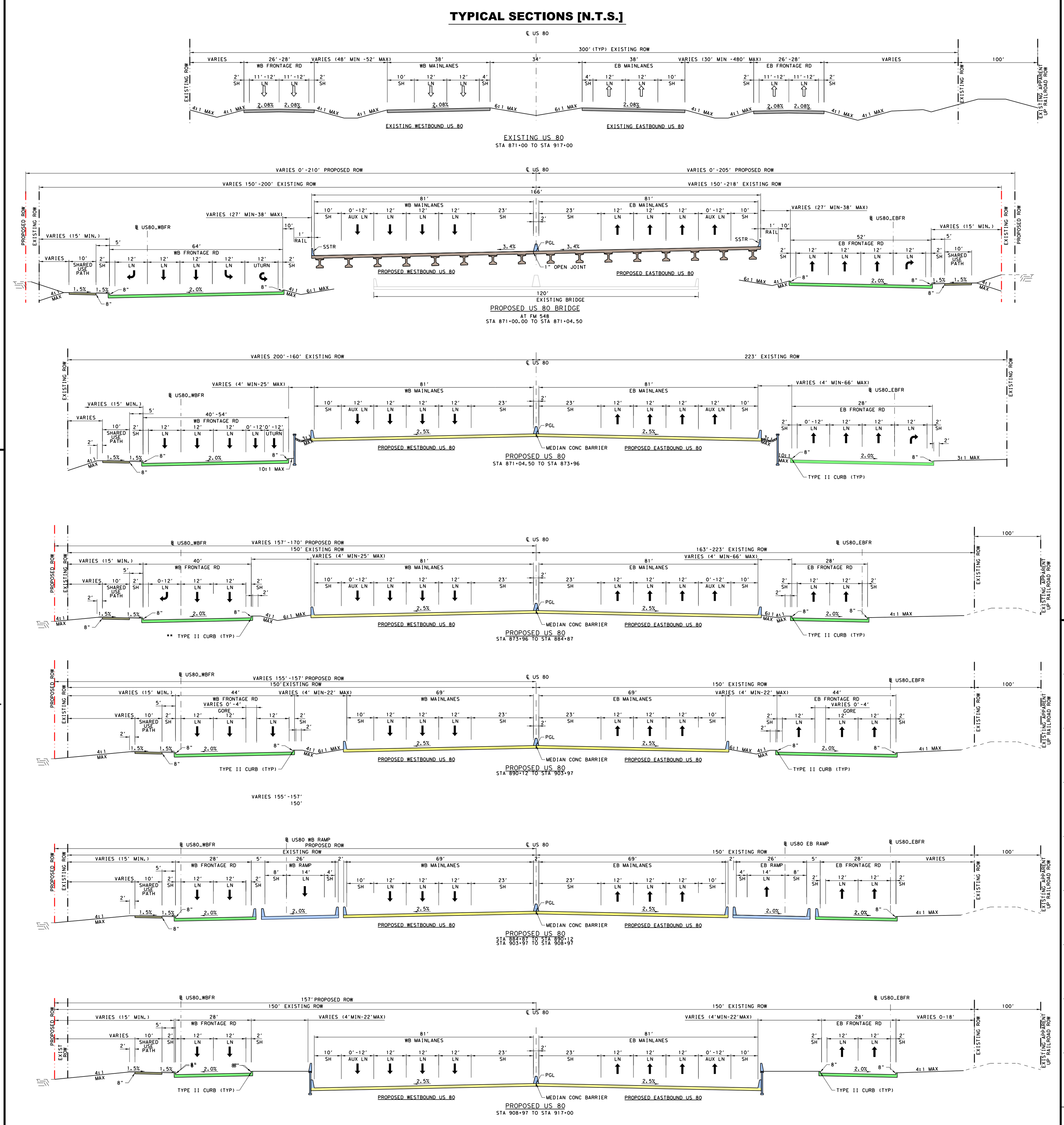
- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

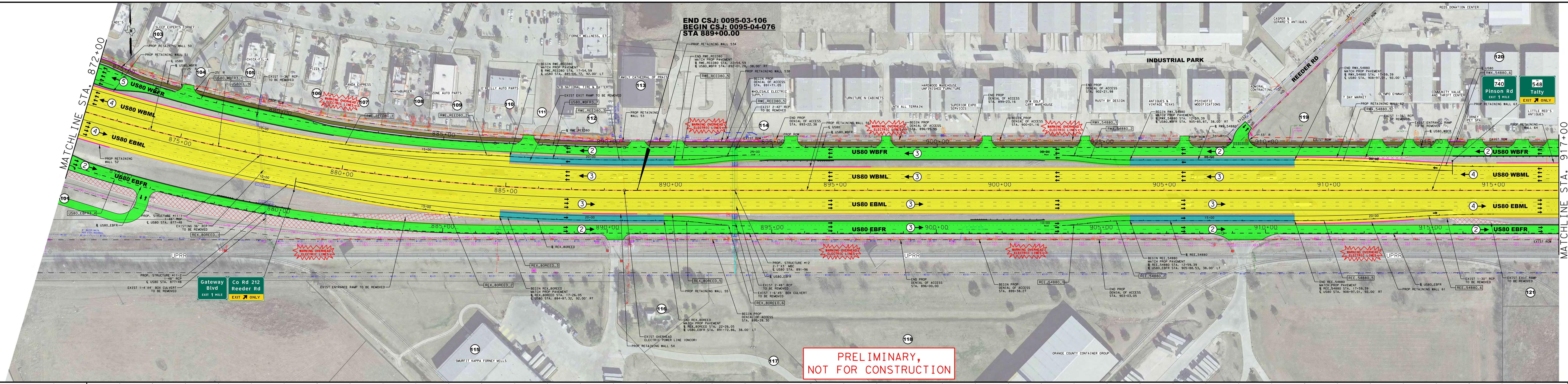
1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]



50' 0 50' 100' HORIZONTAL 1"=100'
5' 0 5' 10' VERTICAL 1"=10'
GRAPHIC SCALE IN FEET



PUS80 - PROP US80 MAIN LANES (60 MPH)

PARCEL NUMBER	OWNER NAME	PROPERTY ADDRESS
100	LFQ FORNEY, LLC & MBQ FORNEY, LLC	824 E. HWY. 80, FORNEY, TX
101	80 FORNEY, LLC	HWY. 80, TX
102	SASI HOLDINGS, LLC	850 E. HWY. 80, FORNEY, TX
103	EL MONTORTE	862 HWY. 80, TX
104	LOWES HOME CENTER, INC.	902 E. HWY. 80, FORNEY, TX 75126
105	CHICK-FIL-A, INC.	900 E. HWY. 80, TX
106	MARSHALL REALTY, LTD.	924 HWY. 80, FORNEY, TX
107	CFT NV DEVELOPMENTS, LLC	950 E. HWY. 80, FORNEY, TX
108	4 H RANCH, INC.	962 E. HWY. 80, TX
109	RKFS INVESTMENTS, LLC	972 E. HWY. 80, TX
110	O REILLY AUTO ENTERPRISES, LLC	982 E. HWY. 80, TX
111	TY COMMERCIAL GROUP	1012 E. HWY. 80, TX
112	MUFARREH PROPERTIES, LP	986 E. HWY. 80, FORNEY, TX
113	FAMILY CATHEDRAL OF PRAISE OF DALLAS	1032 E. HWY. 80, FORNEY, TX
114	FORNEY RG2 DEVELOPMENT PARTNERS, LP	W. HWY. 80, FORNEY, TX
115	SMURFIT KAPPA NORTH AMERICA, LLC	855 E. HWY. 80, TX
116	SMURFIT KAPPA NORTH AMERICA, LLC	855 E. HWY. 80, TX
117	SMURFIT KAPPA NORTH AMERICA, LLC	855 E. HWY. 80, TX
118	SMURFIT KAPPA NORTH AMERICA, LLC	855 E. HWY. 80, FORNEY, TX
119	FORNEY INDUSTRIAL PARK	10380 W. HWY. 80, FORNEY, TX
120	WHALEY INVESTMENTS, LTD.	12744 CO. RD. 217, FORNEY, TX
121	SMURFIT KAPPA NORTH AMERICA, LLC	0 HWY. 80, FORNEY, TX

SUPERELEVATION SIGN CONVENTION
(-) ℄ (+)
(+) ℄ (-)

BASELINE	ROADWAY	BEGIN TRANSITION STATION	BEGIN TRANSITION e	END TRANSITION STATION	END TRANSITION e
US80CL	US80 WBML	842+65	2.50%	848+85	3.40%
		887+68	3.40%	893+88	2.50%
US80CL	US80 EBML	842+65	-2.50%	848+85	3.40%
		887+68	3.40%	893+88	-2.50%

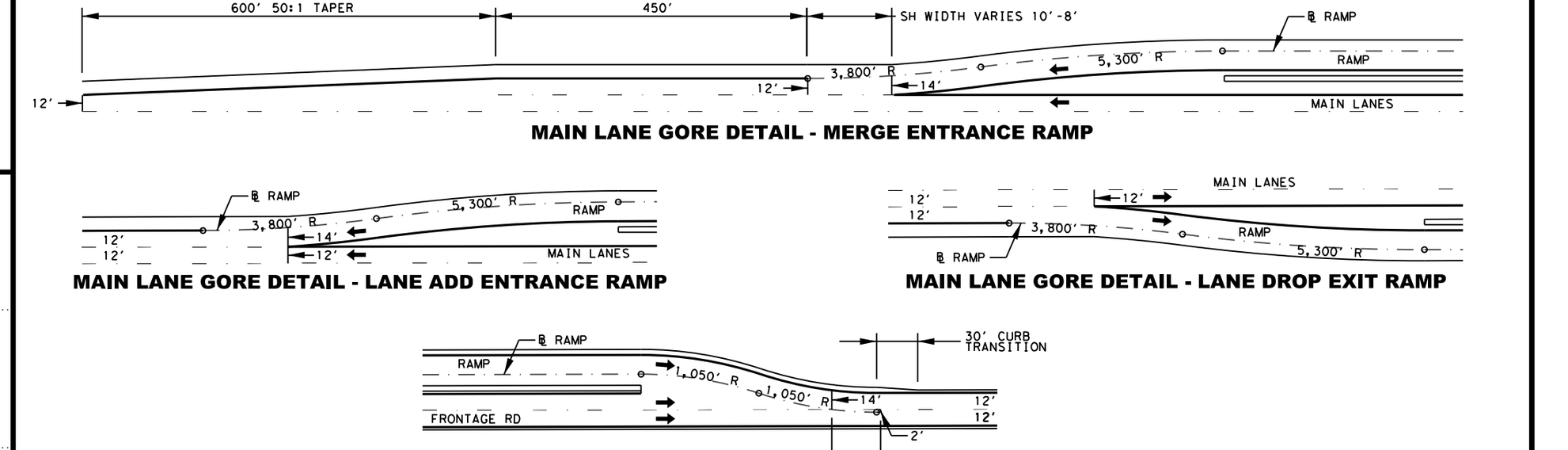
RETAINING WALLS

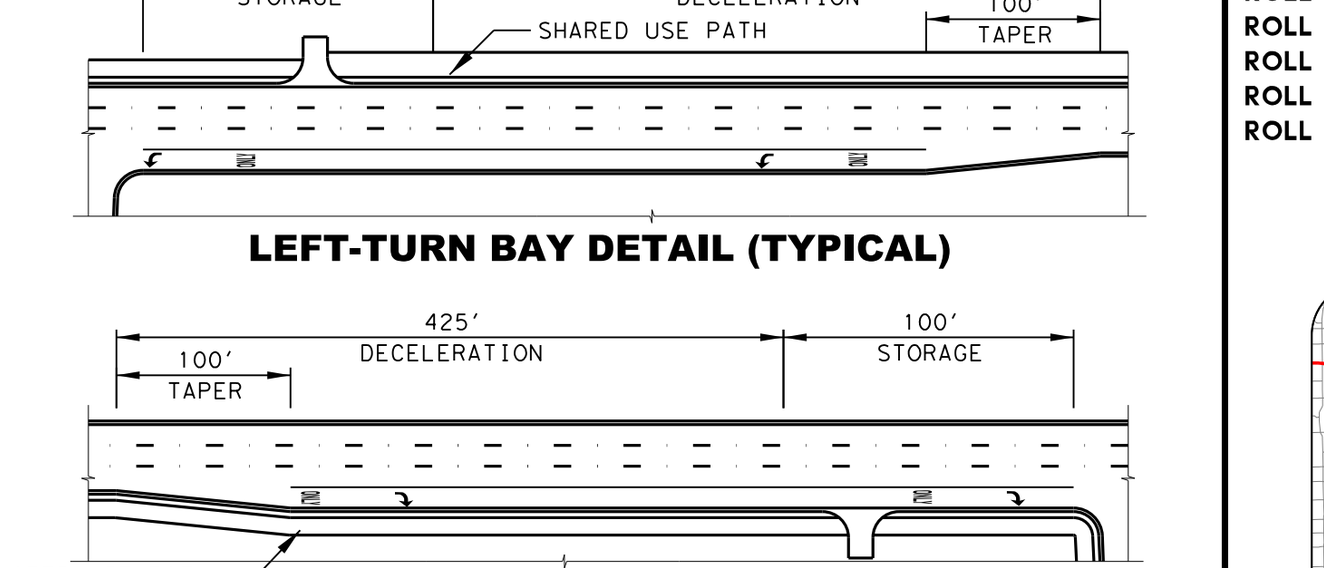
NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 50	WBFR	873+26.32	30.00' LT	875+50.00	19.00' LT	222.83
WALL 51	US 80 CL	872+00.00	83.00' LT	876+50.00	83.00' LT	450.00
WALL 52	US 80 CL	872+00.00	83.00' RT	873+00.00	83.00' RT	100.00
WALL 53	WBFR	888+50.00	18.00' LT	890+50.00	18.00' LT	199.45
WALL 53A	WBFR	891+20.00	18.00' LT	891+90.00	18.00' LT	70.00
WALL 53B	WBFR	892+30.00	18.00' LT	895+00.00	18.00' LT	270.00
WALL 54	US 80 CL	887+35.00	71.00' RT	889+00.00	71.00' RT	68.62
WALL 55	US80 CL	889+80.00	71.00' RT	892+05.00	71.00' RT	223.00
WALL 56	US80 CL	890+10.00	71.00' LT	896+10.00	71.00' LT	598.00
WALL 61	US 80 CL	909+00.00	101.00' RT	912+60.00	89.00' RT	678.63
WALL 62	US 80 CL	909+00.00	101.00' LT	913+75.00	83.00' LT	671.58
WALL 63	WBFR	915+55.00	18.00' LT	916+00.00	18.00' LT	45.00
WALL 64	US 80 CL	915+10.00	83.00' LT	917+00.00	83.00' LT	190.00

HORIZONTAL ALIGNMENT DATA

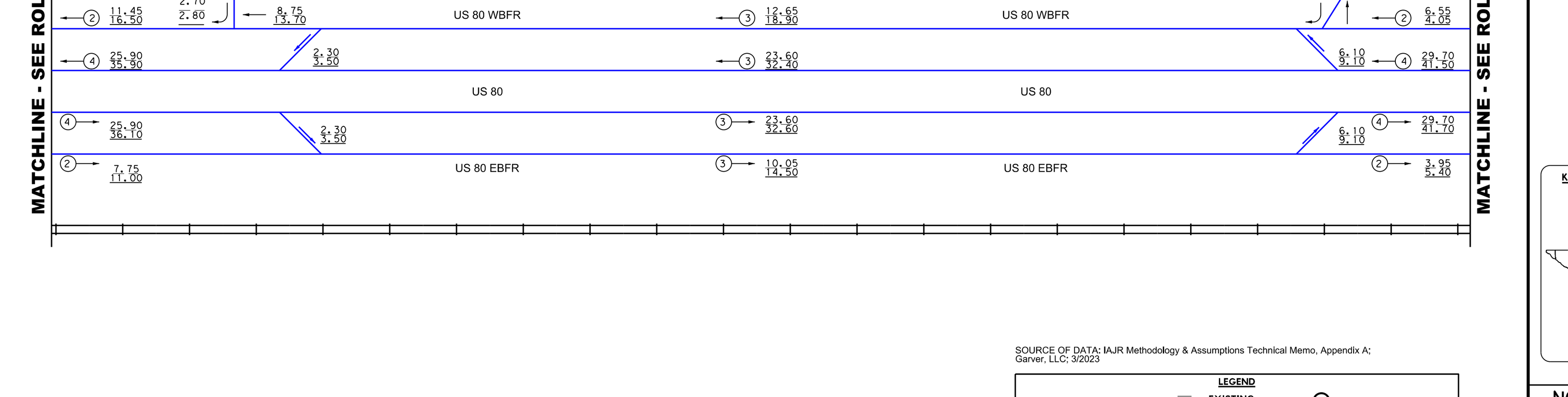
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80CL	US80CL_9	869+16.00	N 6,959,677.06	E 2,599,489.39	40° 33' 01.64" (LT)	5,750.00	4,069.50	2,124.16	847+91.84	868+61.34
US80_WBFR3	US80_WBFR3_1	879+40.43	N 6,959,835.01	E 2,600,493.20	19° 30' 45.10" (LT)	4,250.00	730.76	1,447.37	872+09.67	886+57.04
US80_WBFR3	US80_WBFR3_7	889+61.36	N 6,959,774.44	E 2,601,526.51	2° 26' 13.08" (LT)	4,178.00	88.86	177.70	888+72.50	890+50.02
US80_EBFR3	US80_EBFR3_4	879+35.12	N 6,959,531.20	E 2,600,478.12	20° 10' 43.15" (LT)	4,202.00	747.68	1,479.88	871+87.44	886+67.31
RWE_REED80	RWE_REED80_1	13+05.41	N 6,959,776.00	E 2,600,816.47	9° 11' 23.85" (LT)	3,800.00	305.41	609.50	10+00.00	16+09.50
RWE_REED80	RWE_REED80_2	16+82.05	N 6,959,756.99	E 2,601,193.94	1° 34' 06.39" (RT)	5,300.00	72.55	145.08	16+09.50	17+54.59
RWE_REED80	RWE_REED80_3	19+29.10	N 6,959,737.81	E 2,601,440.26	3° 32' 00.26" (RT)	5,658.00	174.52	348.93	17+54.59	21+03.51
RWE_REED80	RWE_REED80_6	23+19.52	N 6,959,731.56	E 2,601,830.74	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	22+54.59	23+84.28
RWE_REED80	RWE_REED80_7	24+49.21	N 6,959,745.49	E 2,601,959.85	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	23+84.28	25+13.98
REX_80REED	REX_80REED_1	10+63.35	N 6,959,679.81	E 2,600,579.67	1° 54' 36.98" (RT)	3,800.00	63.35	126.69	10+00.00	11+26.69
REX_80REED	REX_80REED_2	14+27.00	N 6,959,593.80	E 2,600,933.01	9° 02' 13.36" (LT)	3,800.00	300.30	599.36	11+26.69	17+26.05
REX_80REED	REX_80REED_3	19+16.12	N 6,959,554.09	E 2,601,421.77	3° 43' 36.77" (LT)	5,842.00	190.07	380.00	17+26.05	21+06.05
REX_80REED	REX_80REED_6	22+90.98	N 6,959,548.08	E 2,601,796.72	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	22+26.05	23+55.75
REX_80REED	REX_80REED_7	24+20.68	N 6,959,530.84	E 2,601,925.32	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	23+55.75	24+85.45
RWX_54880	RWX_54880_1	10+64.93	N 6,959,729.51	E 2,602,956.71	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	10+00.00	11+29.70
RWX_54880	RWX_54880_2	11+94.63	N 6,959,711.45	E 2,603,085.31	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	11+29.70	12+59.39
RWX_54880	RWX_54880_5	19+35.18	N 6,959,699.58	E 2,603,825.93	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	17+59.39	21+10.85
RWX_54880	RWX_54880_6	22+36.88	N 6,959,674.76	E 2,604,126.74	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	21+10.85	23+62.83
REE_54880	REE_54880_1	10+64.93	N 6,959,513.54	E 2,602,953.25	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	10+00.00	11+29.70
REE_54880	REE_54880_2	11+94.63	N 6,959,527.47	E 2,603,082.36	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	11+29.70	12+59.39
REE_54880	REE_54880_5	19+35.18	N 6,959,515.61	E 2,603,822.98	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	17+59.39	21+10.85
REE_54880	REE_54880_6	22+36.88	N 6,959,530.78	E 2,604,124.43	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	21+10.85	23+62.83

RAMP GORE DETAILS [N.T.S.]





TRAFFIC LINE DIAGRAM [N.T.S.]



SOURCE OF DATA: IAJR Methodology & Assumptions Technical Memo, Appendix A; Garver, LLC; 3/2023

LEGEND
- PROPOSED WORK BY OTHERS
- STREAM
- UNION PACIFIC RAILROAD
- SIGNALIZED INTERSECTIONS
- EXISTING BRIDGE
- PROPOSED BRIDGE
- PROPOSED BRIDGE BY OTHERS
- NUMBER OF TRAVEL LANES
- X.X YEAR (2028) ADT
- X.X YEAR (2048) ADT
- VOLUME X 1000

Texas Department of Transportation
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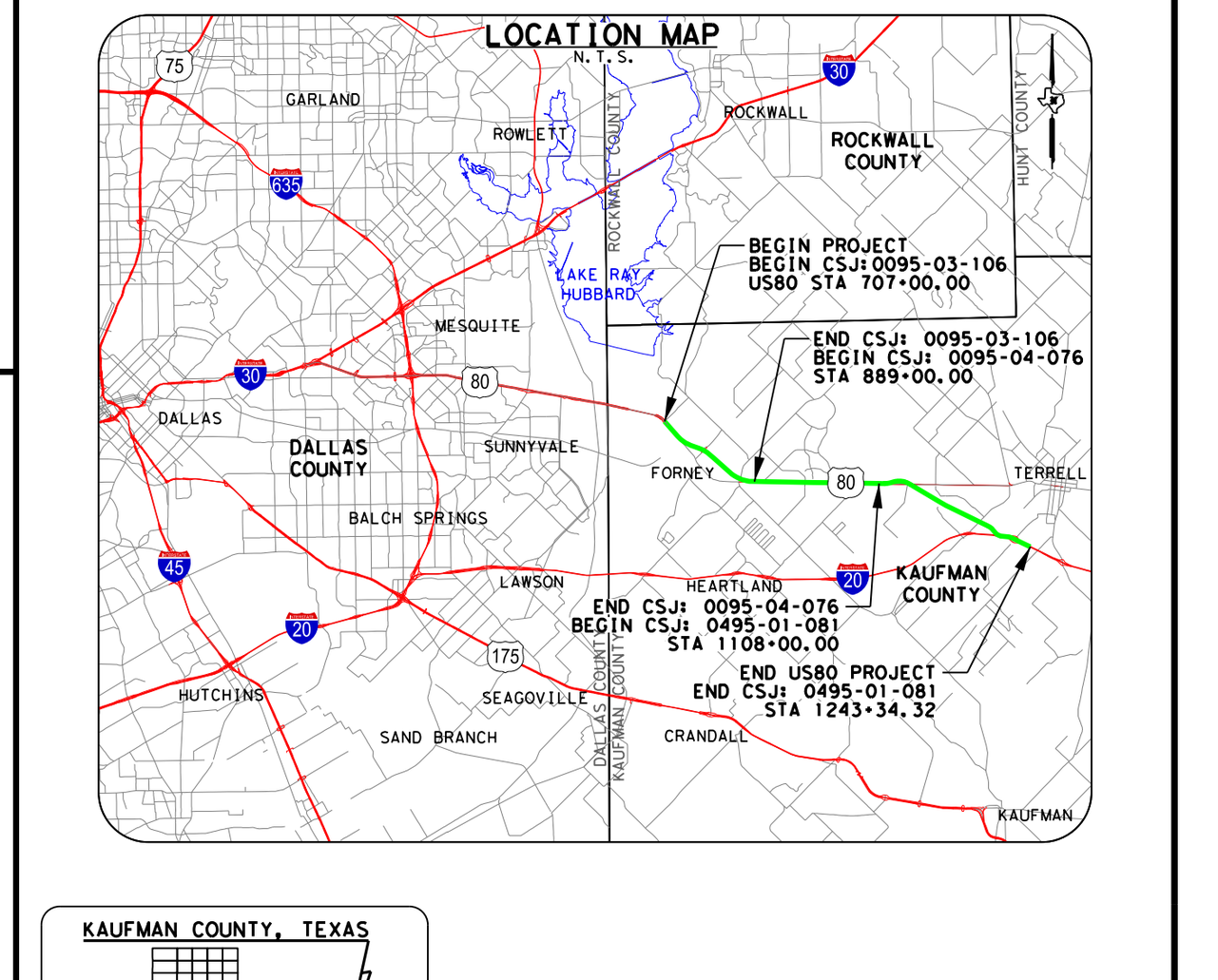

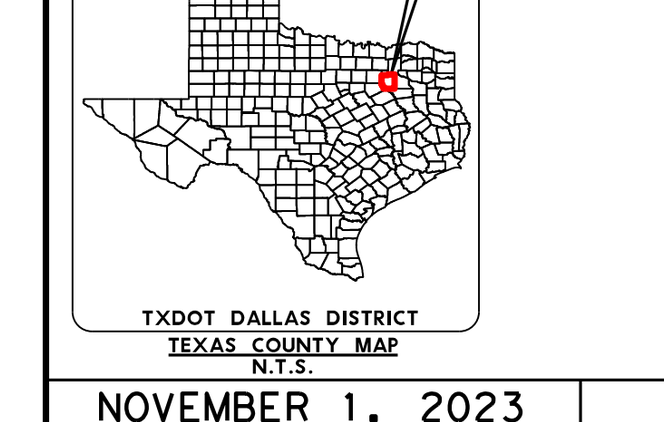

NOVEMBER 1, 2023

ROLL NUMBER 4/31

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DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

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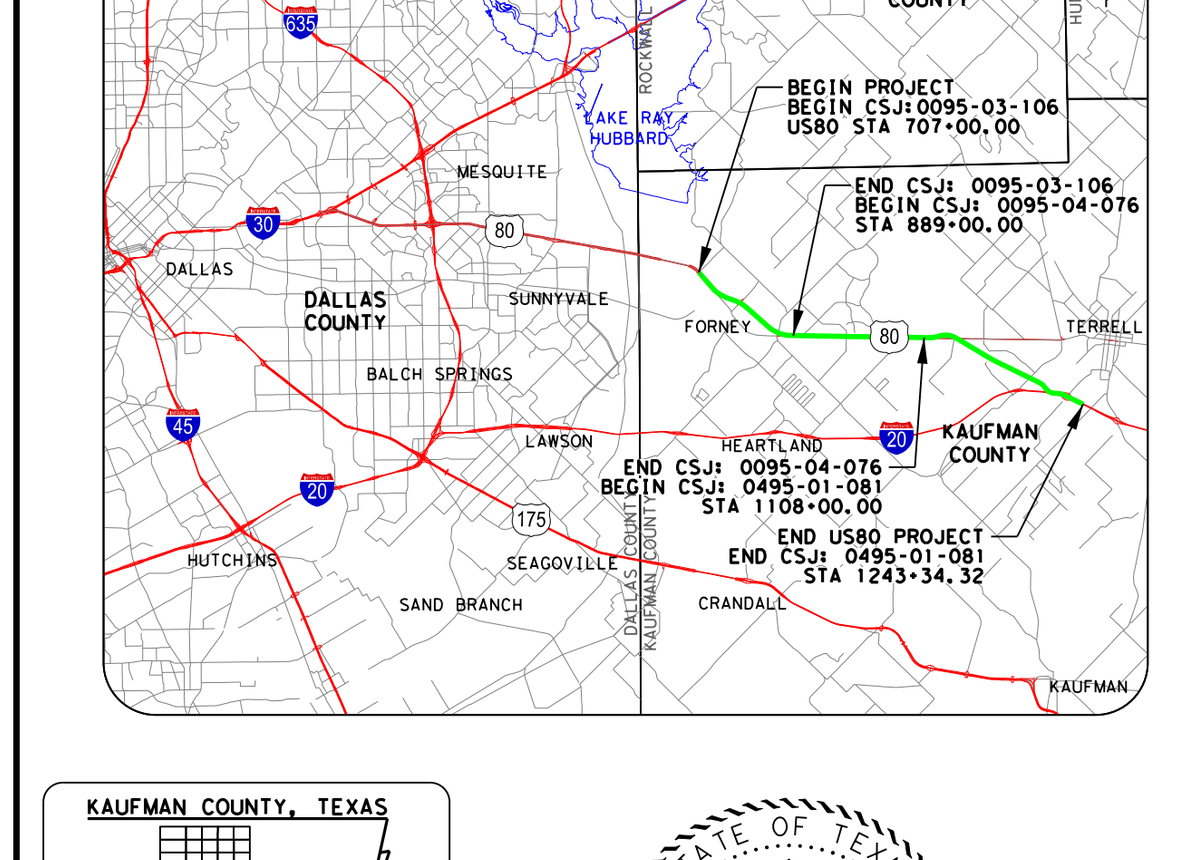
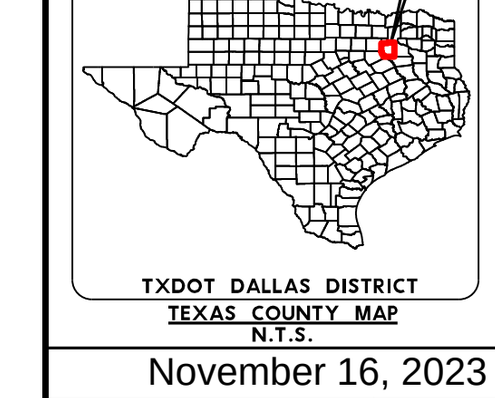
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 5/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
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- EXISTING BRIDGE TO REMAIN
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- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
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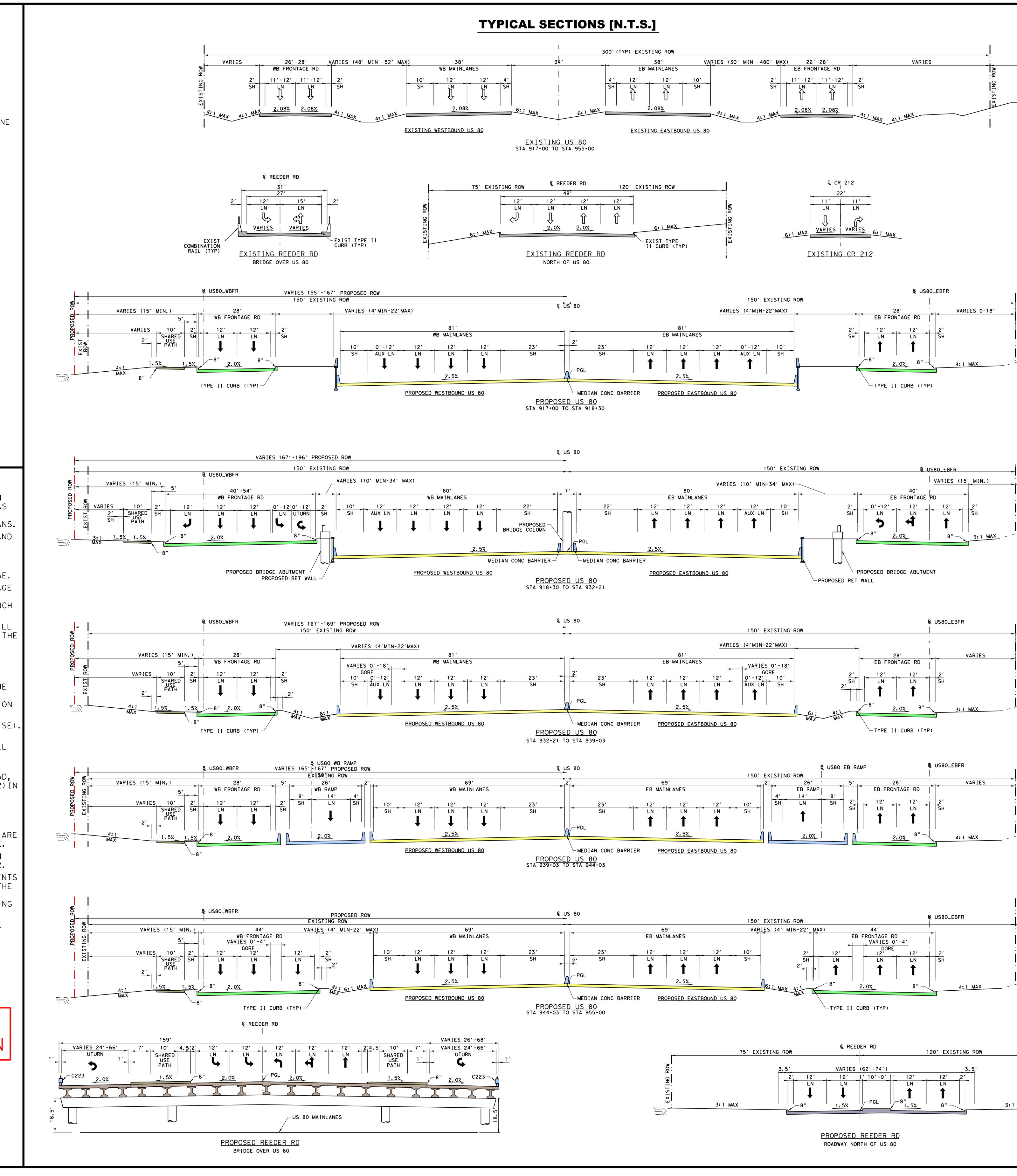
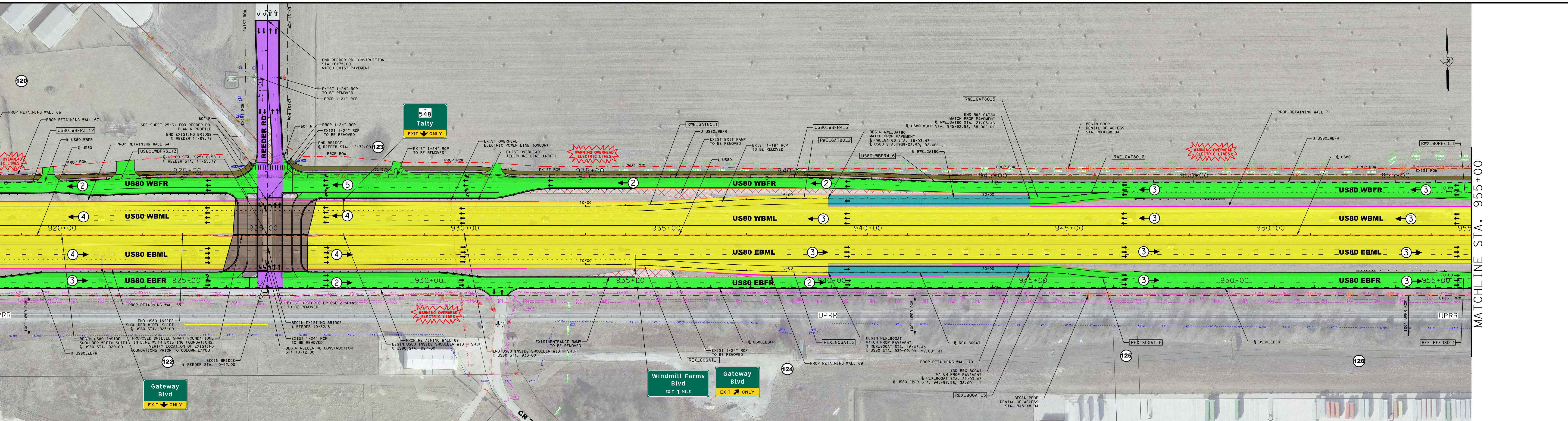
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]





PUS80 - PROP US80 MAIN LANES (60 MPH)

PROPERTY OWNERS		
PARCEL NUMBER	OWNER NAME	PROPERTY ADDRESS
120	WHALEY INVESTMENTS, LTD.	12744 CO. RD. 217, FORNEY, TX
121	SMURFIT KAPPA NORTH AMERICA, LLC	0 HWY. 80, FORNEY, TX
122	SMURFIT KAPPA NORTH AMERICA, LLC	11485 CO. RD. 212, FORNEY, TX
123	MEADOW RIDGE FARM, LP	NORTH GATEWAY BLVD., TX
124	TDG AEC FORNEY, LLC	0 HWY. 80, FORNEY, TX
125	TDG AEC FORNEY, LLC	CO RD 212 TX
126	NLP GOODYEARS BTS LLC	1500 ARKON WAY TX

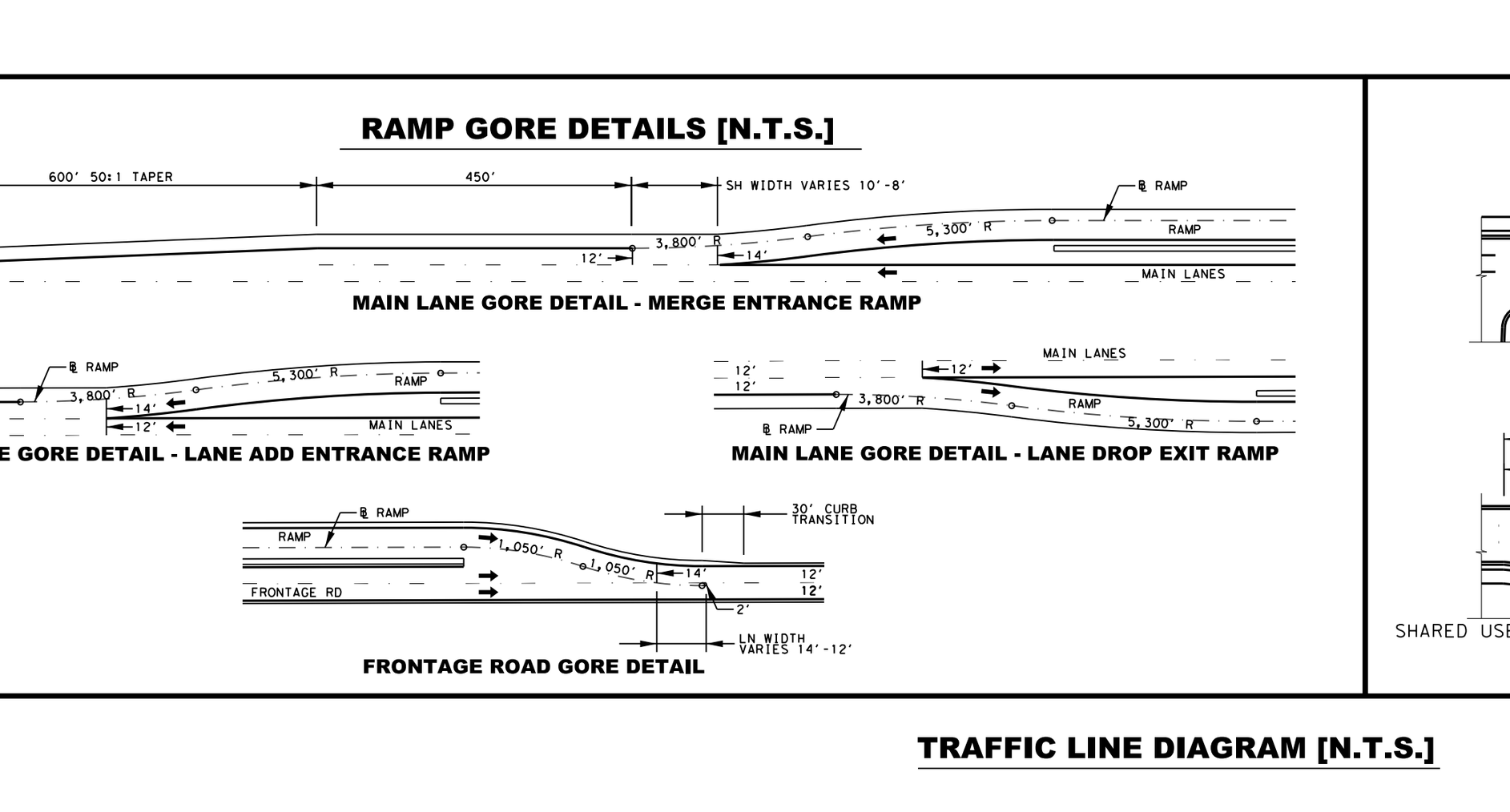
HORIZONTAL ALIGNMENT DATA

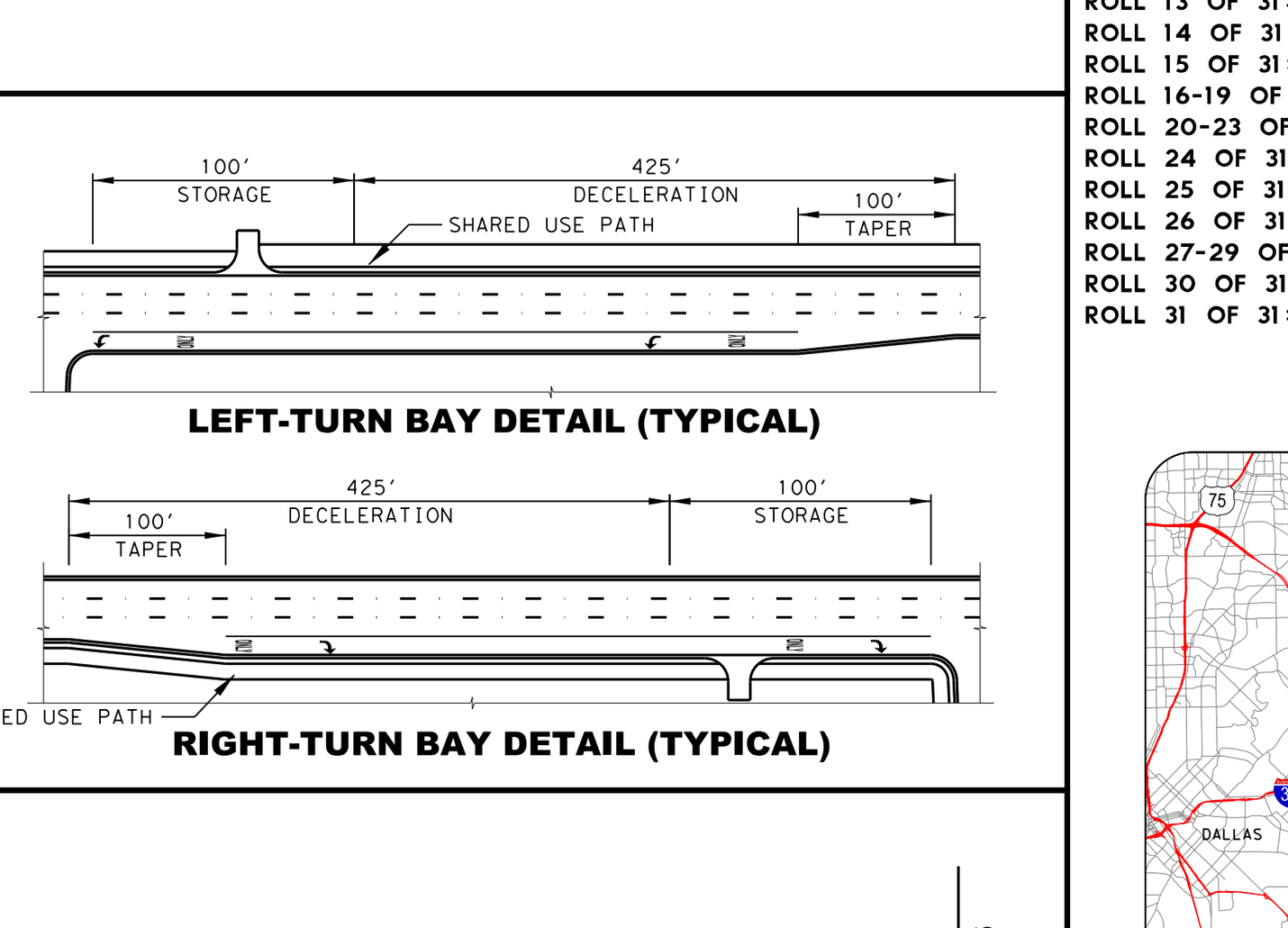
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80_WBFR3	US80_WBFR3_12	920+59.79	N 6,959,723.19	E 2,604,724.55	3° 08' 19.00" (RT)	4,000.00	109.59	219.12	920+50.20	922+69.32
US80_WBFR3	US80_WBFR3_13	923+78.91	N 6,959,731.68	E 2,604,943.56	3° 08' 19.00" (LT)	4,000.00	109.59	219.12	922+69.32	924+88.43
US80_WBFR4	US80_WBFR4_5	941+05.32	N 6,959,704.02	E 2,606,669.47	2° 24' 26.13" (RT)	7,896.00	165.90	331.75	939+39.42	942+71.17
US80_WBFR4	US80_WBFR4_6	943+90.97	N 6,959,687.45	E 2,606,954.69	2° 24' 26.13" (LT)	5,702.00	119.80	239.55	942+71.17	945+10.74
RWE_GAT80	RWE_GAT80_1	11+26.04	N 6,959,641.88	E 2,606,178.55	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	10+00.00	12+51.98
RWE_GAT80	RWE_GAT80_2	14+27.77	N 6,959,657.05	E 2,606,480.00	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	12+51.98	16+03.43
RWE_GAT80	RWE_GAT80_5	21+68.37	N 6,959,645.18	E 2,607,220.62	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	21+03.43	22+33.13
RWE_GAT80	RWE_GAT80_6	22+98.06	N 6,959,659.12	E 2,607,349.74	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	22+33.13	23+62.83
REX_80GAT	REX_80GAT_1	11+26.04	N 6,959,497.90	E 2,606,176.24	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	10+00.00	12+51.98
REX_80GAT	REX_80GAT_2	14+27.77	N 6,959,473.07	E 2,606,477.05	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	12+51.98	16+03.43
REX_80GAT	REX_80GAT_5	21+68.37	N 6,959,461.21	E 2,607,217.67	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	21+03.43	22+33.13
REX_80GAT	REX_80GAT_6	22+98.06	N 6,959,443.14	E 2,607,346.28	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	22+33.13	23+62.83
RWX_80REED	RWX_80REED_1	10+64.93	N 6,959,644.59	E 2,608,256.03	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	10+00.00	11+29.70
REE_REED80	REE_REED80_1	10+64.93	N 6,959,428.62	E 2,608,252.57	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	10+00.00	11+29.70

RETAINING WALLS

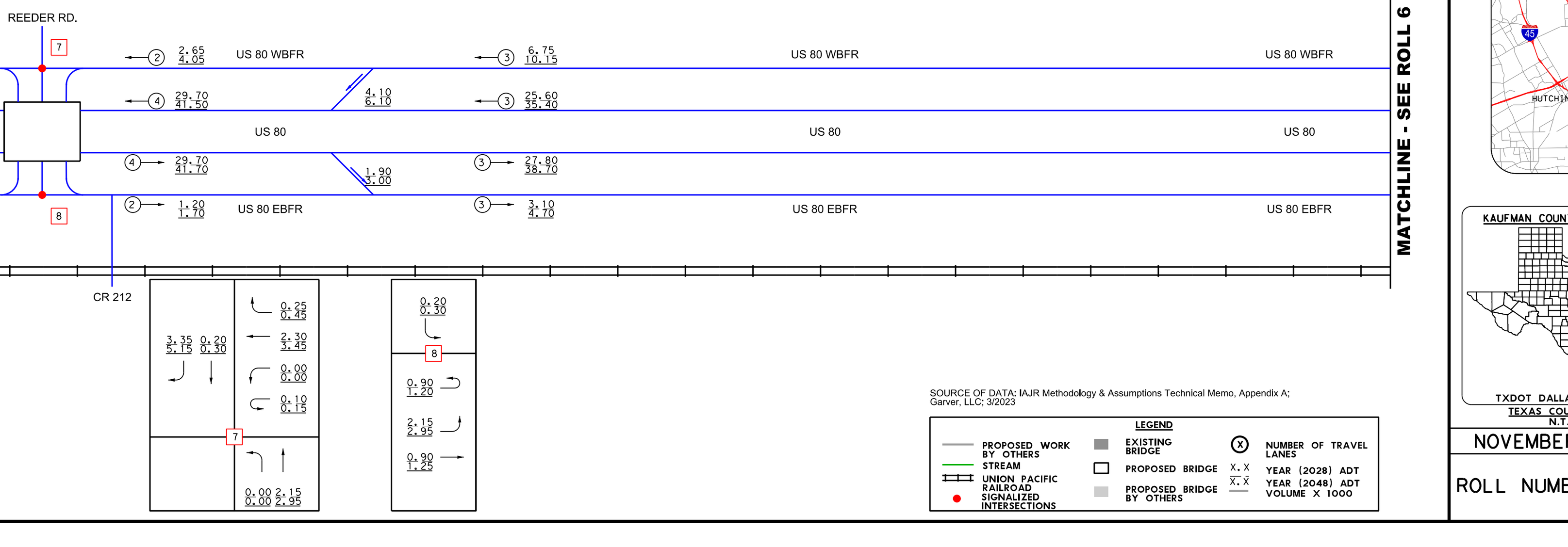
NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 64	US 80 CL	917+00.00	83.00' LT	931+85.00	83.00' LT	1485.00
WALL 65	US 80 CL	917+00.00	83.00' RT	931+55.00	83.00' RT	1455.00
WALL 66	WBFR	919+45.00	18.00' LT	919+65.00	18.00' LT	20.00
WALL 67	WBFR	920+15.00	18.00' LT	921+00.00	18.00' LT	84.79
WALL 68	EBFR	921+70.00	3.00' RT	930+35.00	3.00' RT	967.10
WALL 69	EBFR	936+90.00	32.00' LT	942+80.00	29.00' LT	590.00
WALL 70	US 80 CL	942+10.00	71.00' RT	944+03.16	71.00' RT	193.16
WALL 71	US 80 CL	944+05.00	71.00' LT	955+00.00	71.00' RT	1095.00

RAMP GORE DETAILS [N.T.S.]





TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
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FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
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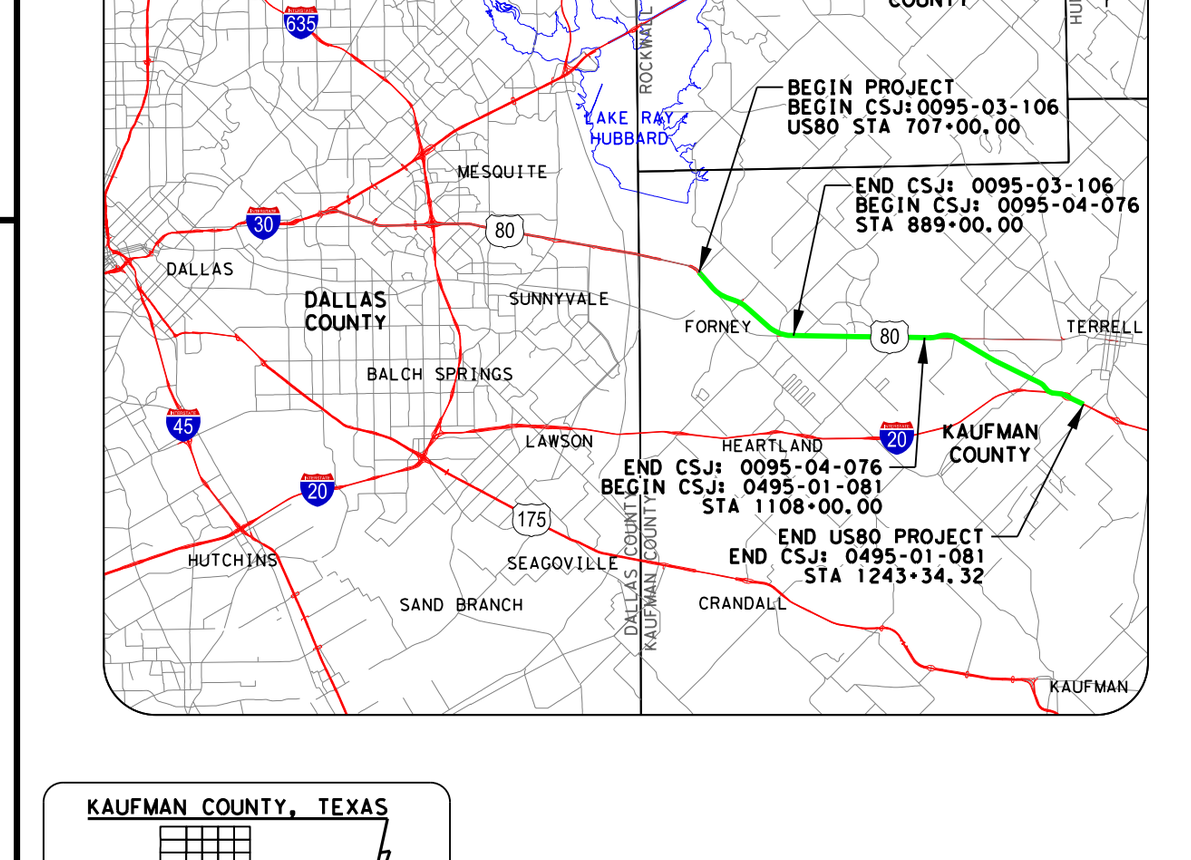

NOVEMBER 1, 2023

ROLL NUMBER 5/31

GARVER
3010 GAYLORD PARKWAY
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FIRM REGISTRATION NO. 5713

Texas Department of Transportation

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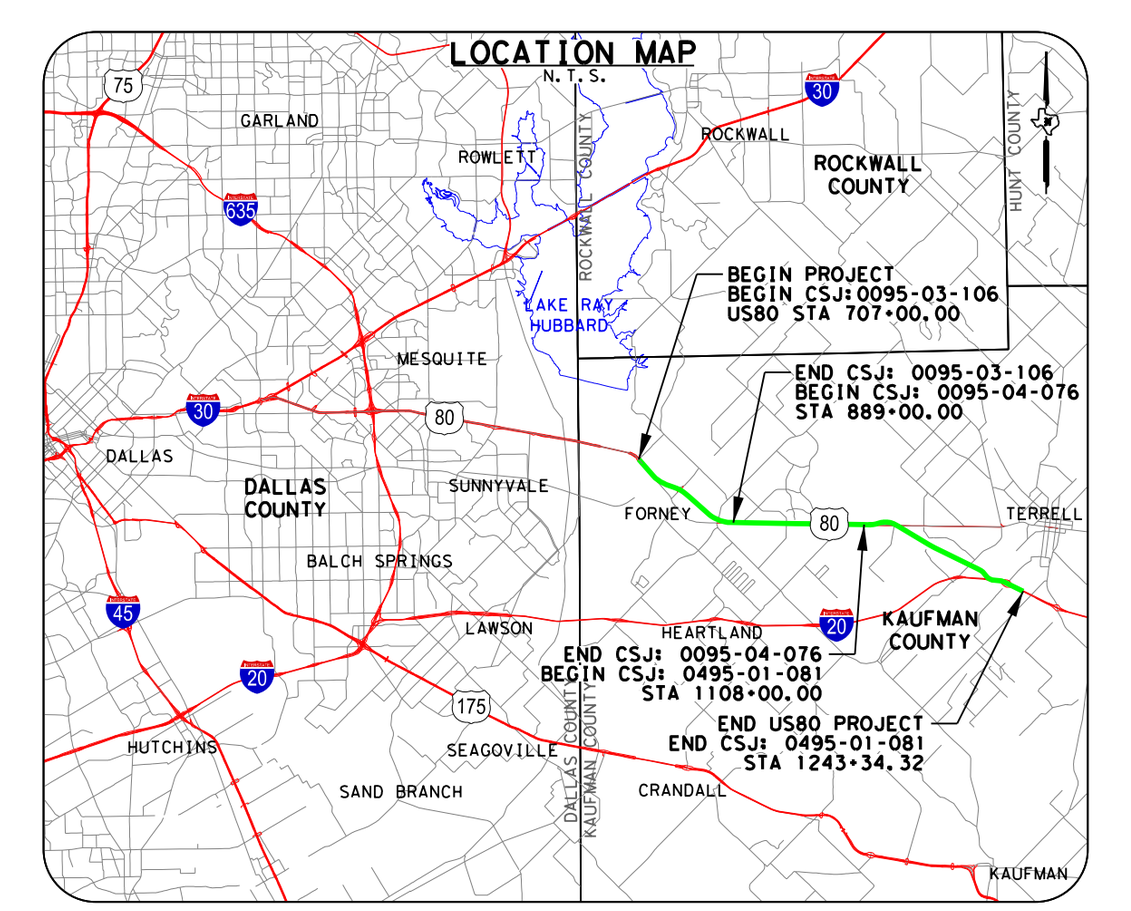

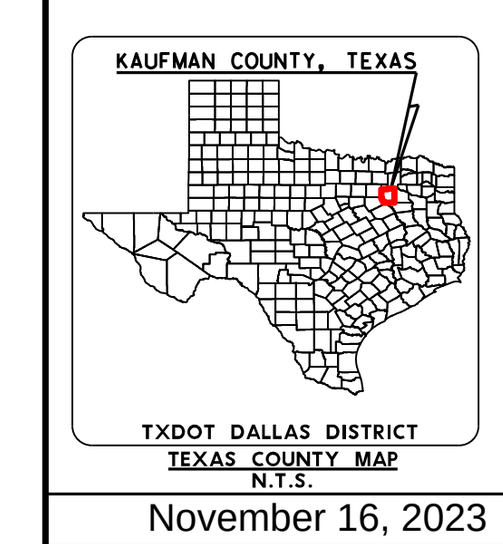

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STEPHEN A. JOHNSON
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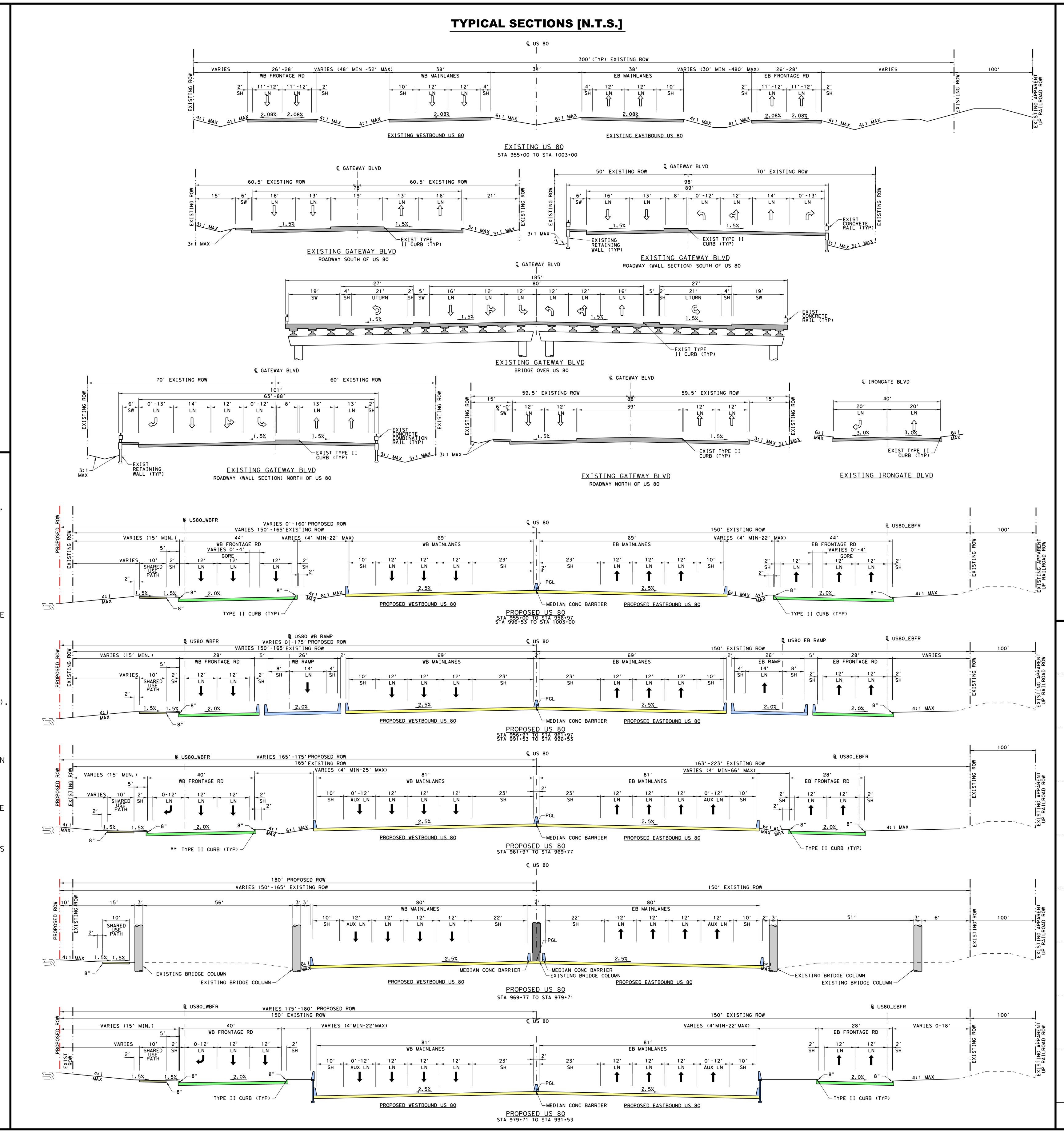
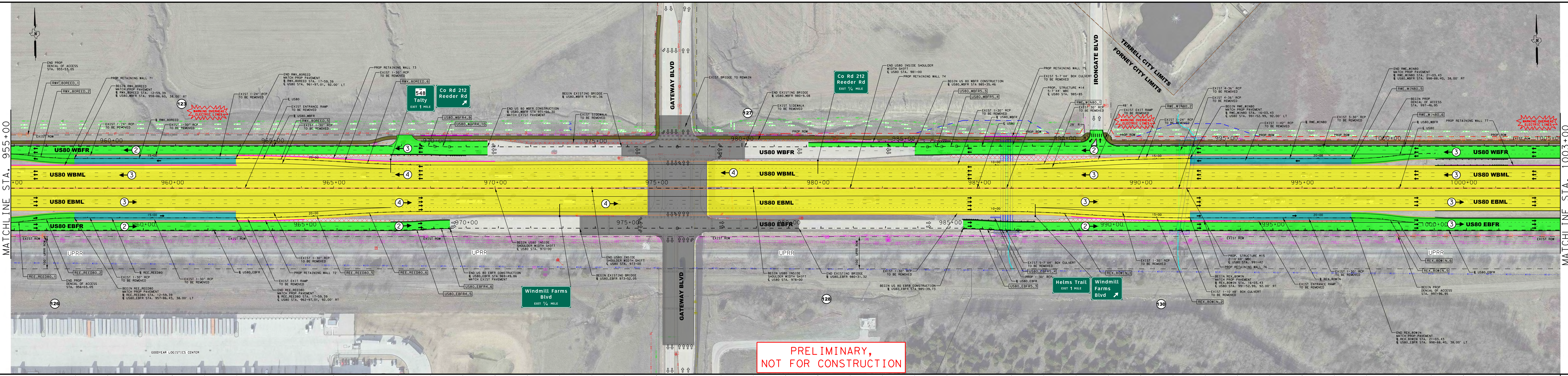




PUS80 - PROP US80 MAIN LANES (60 MPH)

PROPERTY OWNERS		
PARCEL NUMBER	OWNER	PROPERTY ADDRESS
123	MEADOW RIDGE FARM, LP	NORTH GATEWAY BLVD., TX
126	NLP GOODYEARS BTS LLC	1500 ARKON WAY TX
127	MEADOW RIDGE FARM, LP	HWY. 80 SERVICE RD., TX
128	DI FORNEY DISTRIBUTION CENTER LP	1075 S GATEWAY BLVD FORNEY, TX
130	SOUTH FORNEY, LLC	0 HWY. 80, FORNEY, TX

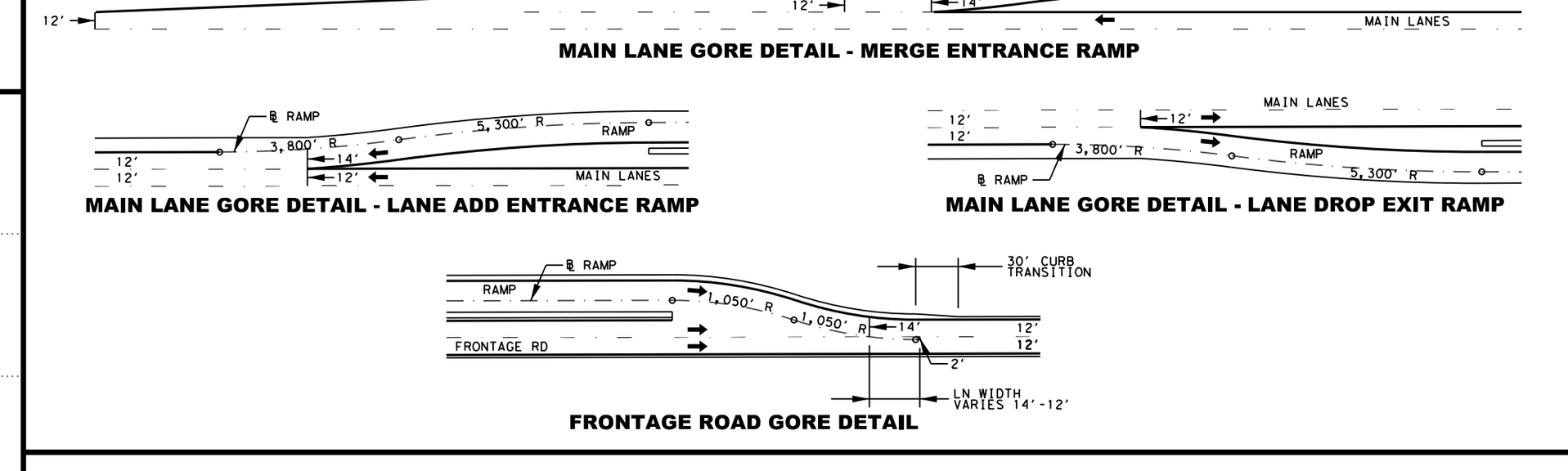
HORIZONTAL ALIGNMENT DATA

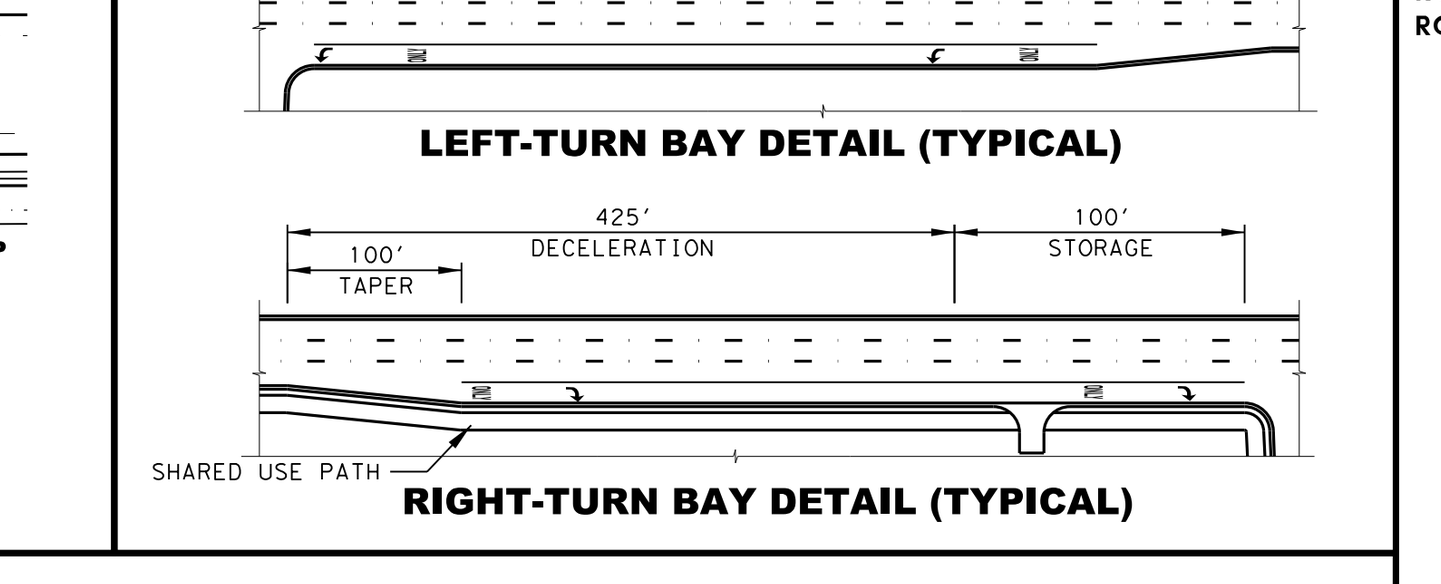
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80_WBFR4	US80_WBFR4_9	969+80.99	N 6,959,645.95	E 2,609,544.40	2° 09' 07.30" (RT)	1,212.00	22.76	45.52	969+58.22	970+03.74
US80_WBFR4	US80_WBFR4_10	970+26.06	N 6,959,643.53	E 2,609,589.42	2° 09' 07.30" (LT)	1,188.00	22.31	44.62	970+03.74	970+48.37
US80_WBFR5	US80_WBFR5_3	985+97.22	N 6,959,619.09	E 2,611,114.62	2° 09' 07.30" (LT)	1,188.00	22.31	44.62	985+74.91	986+19.53
US80_WBFR5	US80_WBFR5_4	986+42.29	N 6,959,620.06	E 2,611,159.69	2° 09' 07.30" (RT)	1,212.00	22.76	45.52	986+19.53	986+65.05
US80_EBFR4	US80_EBFR4_5	968+22.83	N 6,959,386.91	E 2,609,482.26	4° 03' 08.16" (LT)	1,212.00	42.88	85.72	967+79.95	968+65.67
US80_EBFR4	US80_EBFR4_6	969+07.70	N 6,959,391.55	E 2,609,567.04	4° 03' 08.16" (RT)	1,188.00	42.03	84.02	968+65.67	969+49.69
US80_EBFR5	US80_EBFR5_3	985+82.73	N 6,959,364.73	E 2,611,241.07	4° 02' 31.82" (RT)	1,200.00	42.35	84.66	985+40.38	986+25.04
US80_EBFR5	US80_EBFR5_4	986+67.81	N 6,959,357.37	E 2,611,325.87	4° 02' 31.82" (LT)	1,212.00	42.77	85.51	986+25.04	987+10.55
RWX_BOREED	RWX_BOREED_1	10+64.93	N 6,959,644.59	E 2,608,256.03	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	10+00.00	11+29.70
RWX_BOREED	RWX_BOREED_2	11+94.63	N 6,959,626.53	E 2,608,384.63	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	11+29.70	12+59.39
RWX_BOREED	RWX_BOREED_5	19+35.18	N 6,959,614.66	E 2,609,125.25	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	17+59.39	21+10.85
RWX_BOREED	RWX_BOREED_6	22+36.88	N 6,959,589.84	E 2,609,426.06	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	21+10.85	23+62.83
REE_REED80	REE_REED80_1	10+64.93	N 6,959,428.62	E 2,608,252.57	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	10+00.00	11+29.70
REE_REED80	REE_REED80_2	11+94.63	N 6,959,442.55	E 2,608,381.68	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	11+29.70	12+59.39
REE_REED80	REE_REED80_5	19+35.18	N 6,959,430.68	E 2,609,122.30	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	17+59.39	21+10.85
REE_REED80	REE_REED80_6	22+36.88	N 6,959,445.86	E 2,609,423.75	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	21+10.85	23+62.83
RWE_WIN80	RWE_WIN80_1	11+26.04	N 6,959,557.76	E 2,611,427.88	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	10+00.00	12+51.98
RWE_WIN80	RWE_WIN80_2	14+27.77	N 6,959,572.93	E 2,611,729.32	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	12+51.98	16+03.43
RWE_WIN80	RWE_WIN80_5	21+68.37	N 6,959,561.06	E 2,612,469.95	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	21+03.43	22+33.13
RWE_WIN80	RWE_WIN80_6	22+98.06	N 6,959,574.99	E 2,612,599.06	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	22+33.13	23+62.83
REX_80WIN	REX_80WIN_1	11+26.04	N 6,959,413.78	E 2,611,425.57	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	10+00.00	12+51.98
REX_80WIN	REX_80WIN_2	14+27.77	N 6,959,388.95	E 2,611,726.37	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	12+51.98	16+03.43
REX_80WIN	REX_80WIN_5	21+68.37	N 6,959,377.09	E 2,612,467.00	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	21+03.43	22+33.13
REX_80WIN	REX_80WIN_6	22+98.06	N 6,959,359.02	E 2,612,595.60	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	22+33.13	23+62.83

RETAINING WALLS

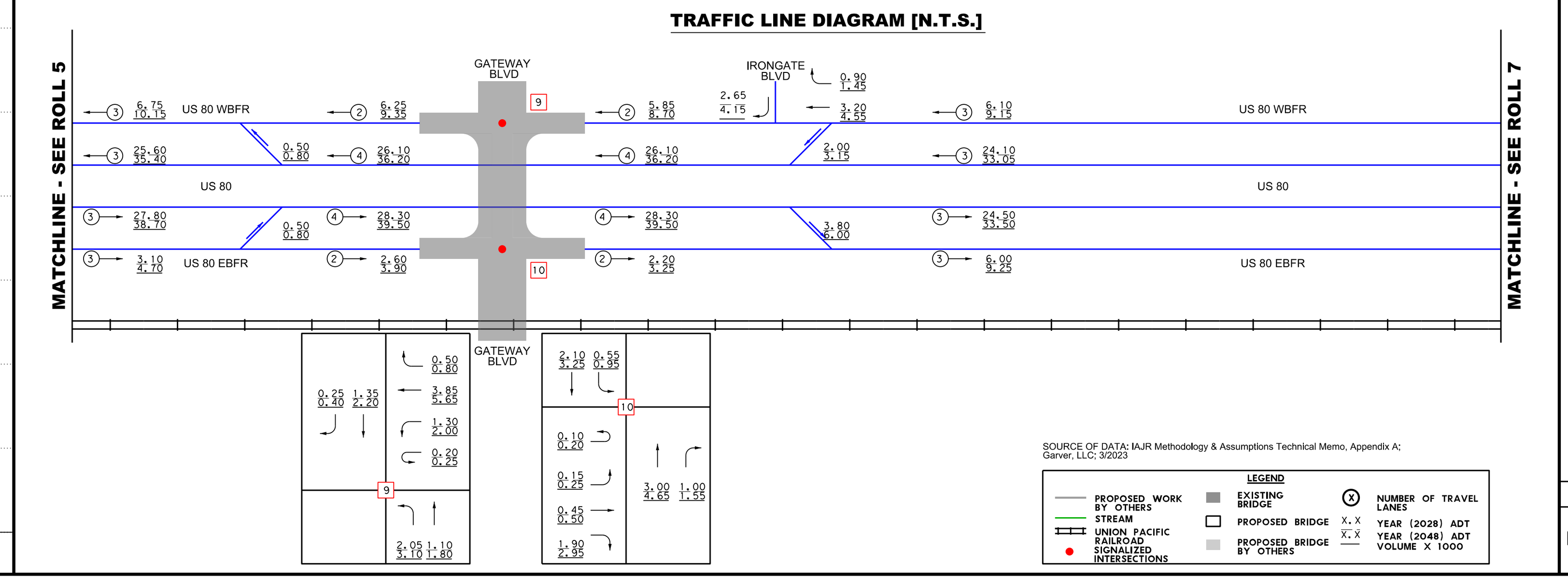
NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 71	US 80 CL	955+00.00	71.00' LT	962+00.00	71.00' LT	700.00
WALL 72	US 80 CL	962+00.00	101.00' RT	964+10.00	97.00' RT	210.63
WALL 73	US 80 CL	962+00.00	101.00' LT	970+00.00	83.00' LT	1036.93
WALL 74	WBFR	982+55.00	15.00' LT	985+35.00	15.00' LT	280.00
WALL 75	WBFR	987+50.00	30.00' LT	988+75.00	30.00' LT	125.00
WALL 76	US 80 CL	987+85.00	88.00' RT	992+80.00	101.00' RT	828.00
WALL 77	US 80 CL	999+40.00	71.00' LT	1003+00.00	71.00' LT	360.00

RAMP GORE DETAILS [N.T.S.]





TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023
INDEX OF SHEETS

NOVEMBER 1, 2023

ROLL NUMBER 6/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

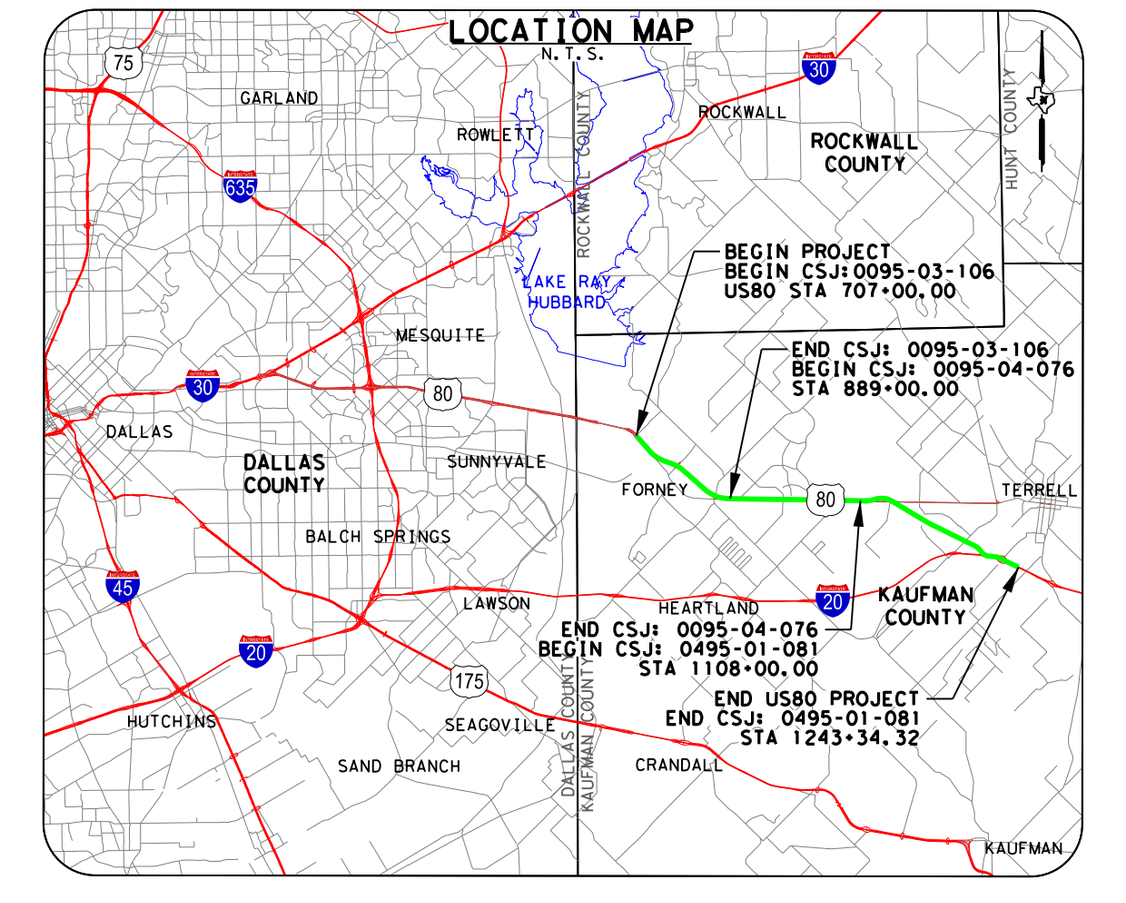
US 80
100% DESIGN SCHEMATIC

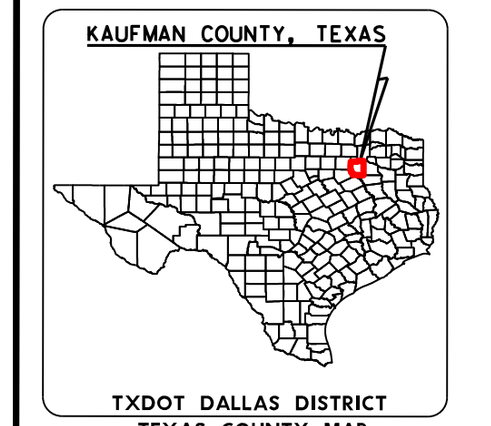
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

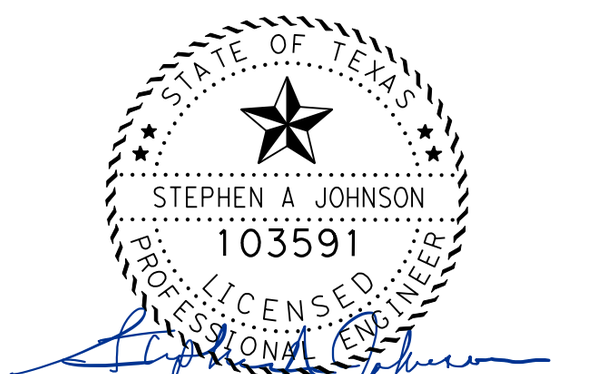
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS







November 16, 2023

ROLL NUMBER 7/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
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- PROPOSED STEEL BRIDGE
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- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

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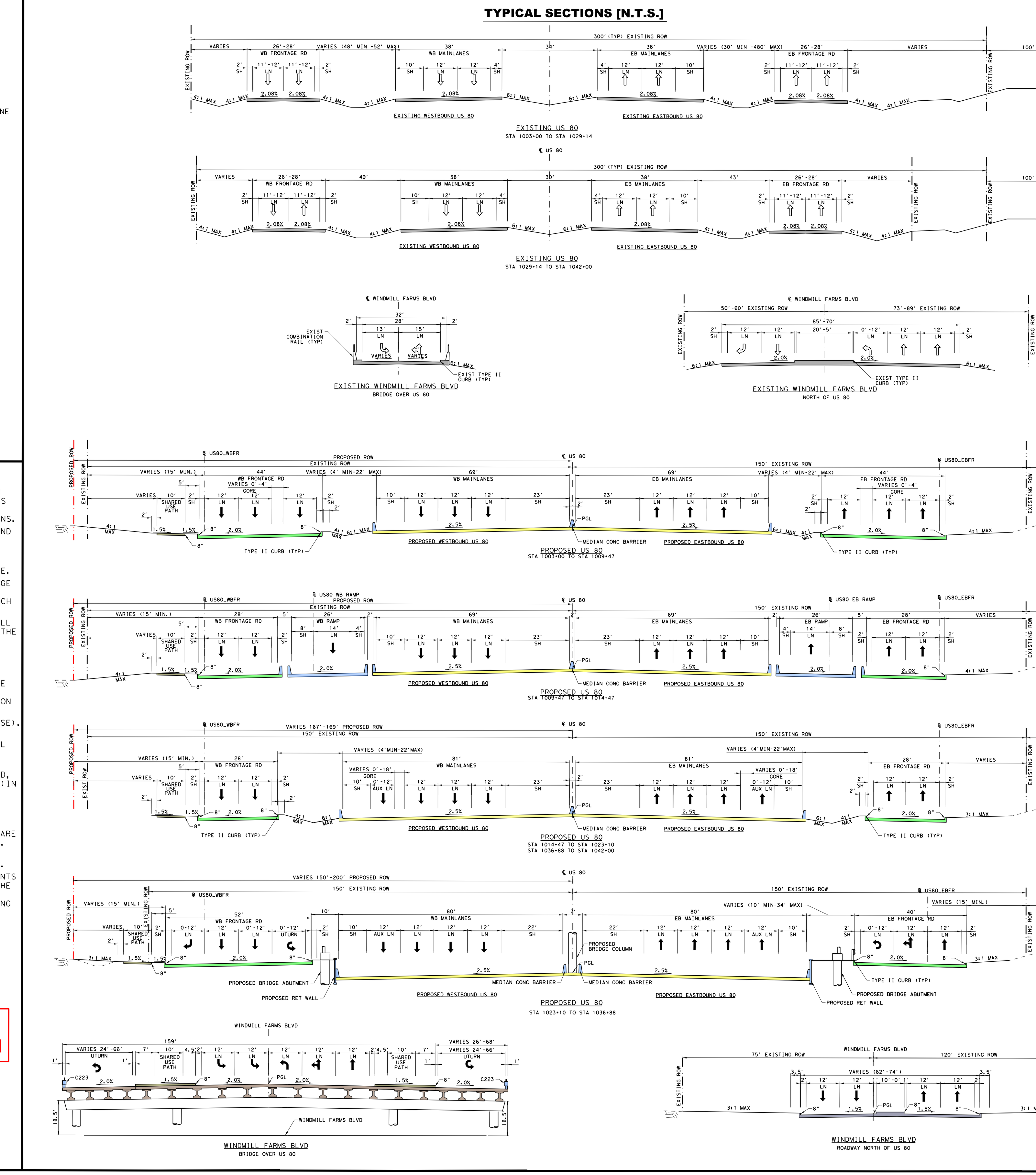
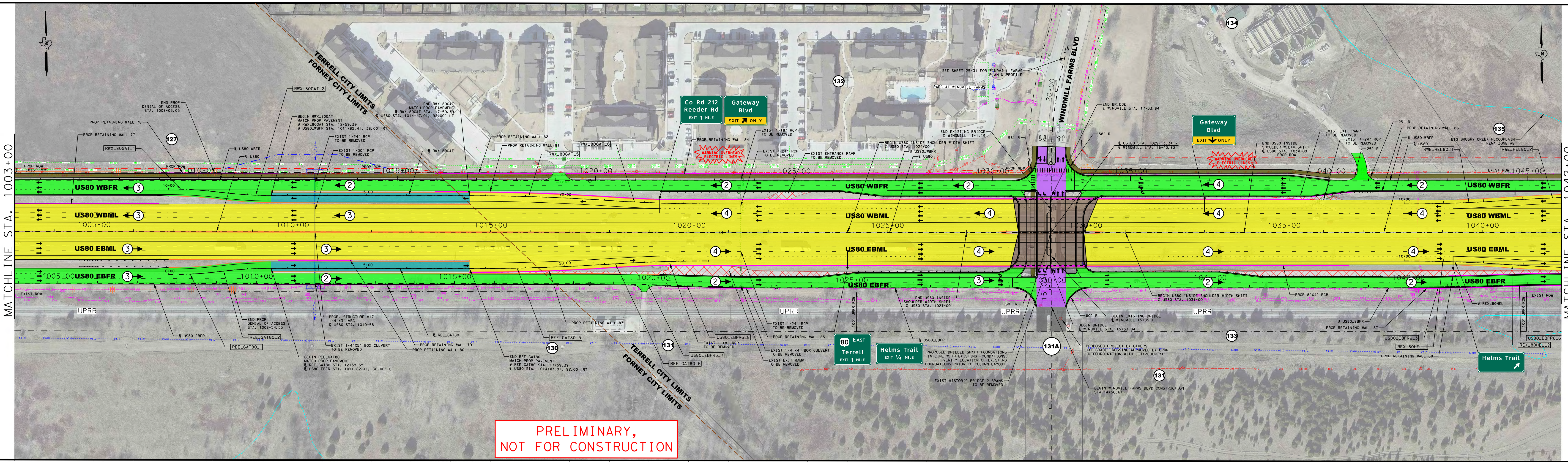
PRELIMINARY,
NOT FOR CONSTRUCTION

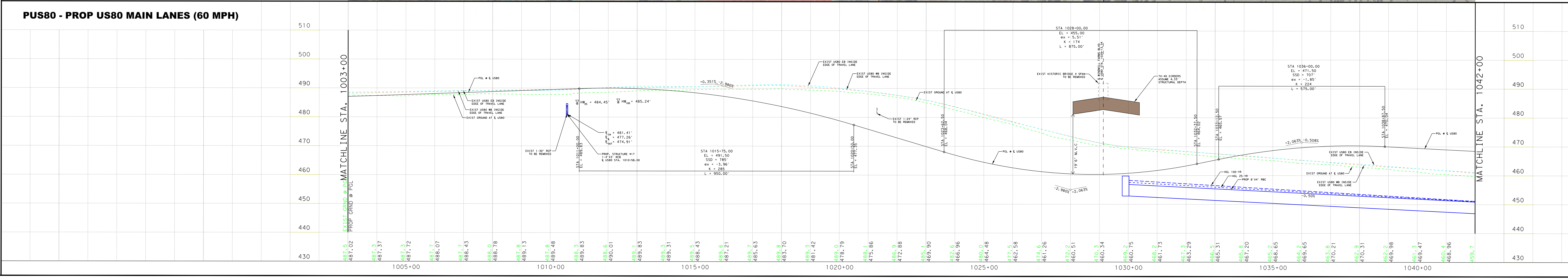
GRAPHIC SCALE IN FEET
HORIZONTAL 1"=100'
VERTICAL 1"=10'

TYPICAL SECTIONS [N.T.S.]





PUS80 - PROP US80 MAIN LANES (60 MPH)



PROPERTY OWNERS

PARCEL NUMBER	OWNER	PROPERTY ADDRESS
127	MEADOW RIDGE FARM, LP	HWY. 80 SERVICE RD., TX
130	SOUTH FORNEY, LLC	0 HWY. 80, FORNEY, TX
131	AP SUNDANCE, LLC	HWY. 80, TX
131A	LAS LOMAS MUNICIPAL	
132	D4FR, LLC	HWY. 80, TX
133	AP SUNDANCE, LLC	0 HWY. 80, TX
134	ABC LAND & DEVELOPMENT, INC.	
135	EQK BRIDGEVIEW PLAZA INC	

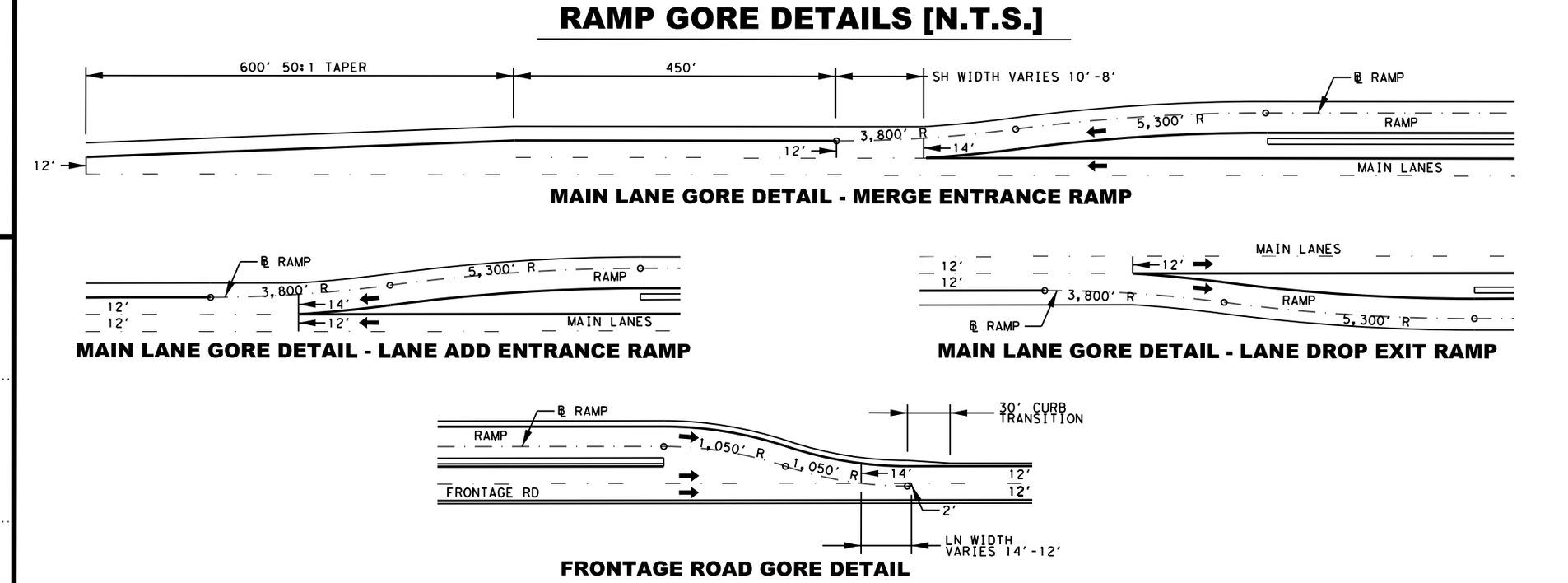
HORIZONTAL ALIGNMENT DATA

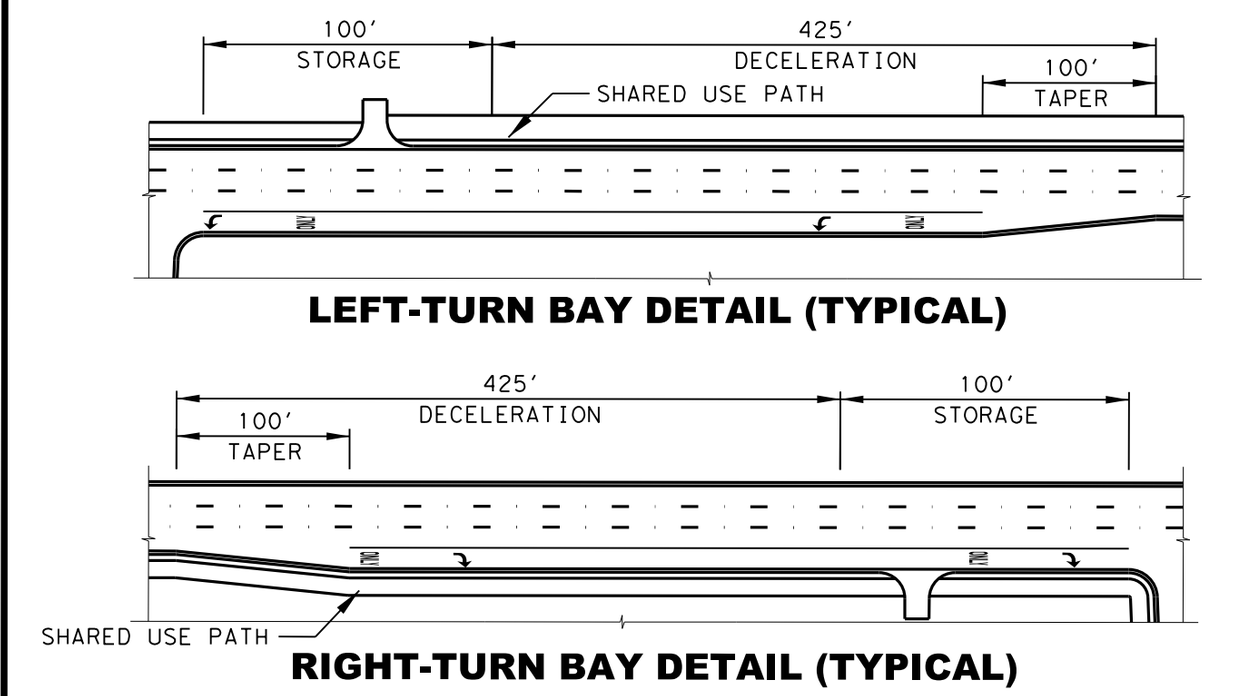
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80CL	N/A	1020+81.27	N 6,959,431.21	E 2,614,831.52						
US80_EBFR5	US80_EBFR5_7	1019+37.32	N 6,959,304.98	E 2,614,594.99	1° 56' 44.96" (RT)	5,700.00	96.80	193.58	1018+40.52	1020+34.10
US80_EBFR5	US80_EBFR5_8	1021+72.88	N 6,959,293.21	E 2,614,830.28	2° 00' 51.72" (LT)	7,894.00	138.78	277.53	1020+34.10	1023+11.63
US80_EBFR7	US80_EBFR7_3	1040+05.79	N 6,959,265.97	E 2,616,667.13	1° 57' 56.73" (LT)	7,894.00	135.43	270.83	1038+70.35	1041+41.19
US80_EBFR7	US80_EBFR7_6	1042+38.98	N 6,959,270.51	E 2,616,900.30	1° 57' 56.73" (RT)	5,700.00	97.79	190.56	1041+41.19	1043+36.75
RWX_80GAT	RWX_80GAT_1	10+64.93	N 6,959,560.47	E 2,613,505.35	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	10+00.00	11+29.70
RWX_80GAT	RWX_80GAT_2	11+94.63	N 6,959,542.41	E 2,613,633.95	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	11+29.70	12+59.39
RWX_80GAT	RWX_80GAT_5	19+35.18	N 6,959,530.54	E 2,614,374.58	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	17+59.39	21+10.85
RWX_80GAT	RWX_80GAT_6	22+36.88	N 6,959,505.72	E 2,614,675.38	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	21+10.85	23+62.83
REE_GAT80	REE_GAT80_1	10+64.93	N 6,959,344.50	E 2,613,501.89	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	10+00.00	11+29.70
REE_GAT80	REE_GAT80_2	11+94.63	N 6,959,358.43	E 2,613,631.00	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	11+29.70	12+59.39
REE_GAT80	REE_GAT80_5	19+35.18	N 6,959,346.56	E 2,614,371.63	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	17+59.39	21+10.85
REE_GAT80	REE_GAT80_6	22+36.88	N 6,959,361.74	E 2,614,673.08	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	21+10.85	23+62.83
RWE_HEL80	RWE_HEL80_1	11+26.04	N 6,959,475.80	E 2,616,680.22	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	10+00.00	12+51.98
RWE_HEL80	RWE_HEL80_2	14+27.77	N 6,959,491.33	E 2,616,981.65	3° 47' 57.73" (RT)	5,300.00	175.79	351.39	12+51.98	16+03.43
REX_80HEL	REX_80HEL_1	11+26.04	N 6,959,331.82	E 2,616,678.09	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	10+00.00	12+51.98
REX_80HEL	REX_80HEL_2	14+27.77	N 6,959,307.35	E 2,616,978.92	3° 47' 57.73" (LT)	5,300.00	175.79	351.39	12+51.98	16+03.43

RETAINING WALLS

NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 77	US 80 CL	1003+00.00	71.00' LT	1006+65.00	71.00' LT	365.00
WALL 78	WBFR	1009+00.00	18.00' LT	1012+00.00	18.00' LT	300.00
WALL 79	EBFR	1010+00.00	3.00' RT	1014+50.00	3.00' RT	450.00
WALL 80	US 80 CL	1009+65.00	71.00' RT	1011+50.00	71.00' RT	185.00
WALL 81	US 80 CL	1013+60.00	102.00' LT	1035+65.00	83.00' LT	2454.63
WALL 82	WBFR	1015+95.00	18.00' LT	1018+90.00	18.00' LT	295.00
WALL 83	US 80 CL	1014+45.00	101.00' RT	1036+65.00	83.00' RT	2481.11
WALL 84	WBFR	1019+25.00	18.00' LT	1029+50.00	18.00' LT	1025.00
WALL 85	EBFR	1021+50.00	3.00' RT	1022+50.00	3.00' RT	100.00
WALL 86	US 80 CL	1035+65.00	91.00' LT	1042+00.00	103.00' LT	612.82
WALL 87	EBFR	1040+00.00	3.00' RT	1043+86.56	3.00' RT	386.58
WALL 88	US 80 CL	1039+15.00	109.90' RT	1042+00.00	103.22' RT	285.09

RAMP GORE DETAILS [N.T.S.]

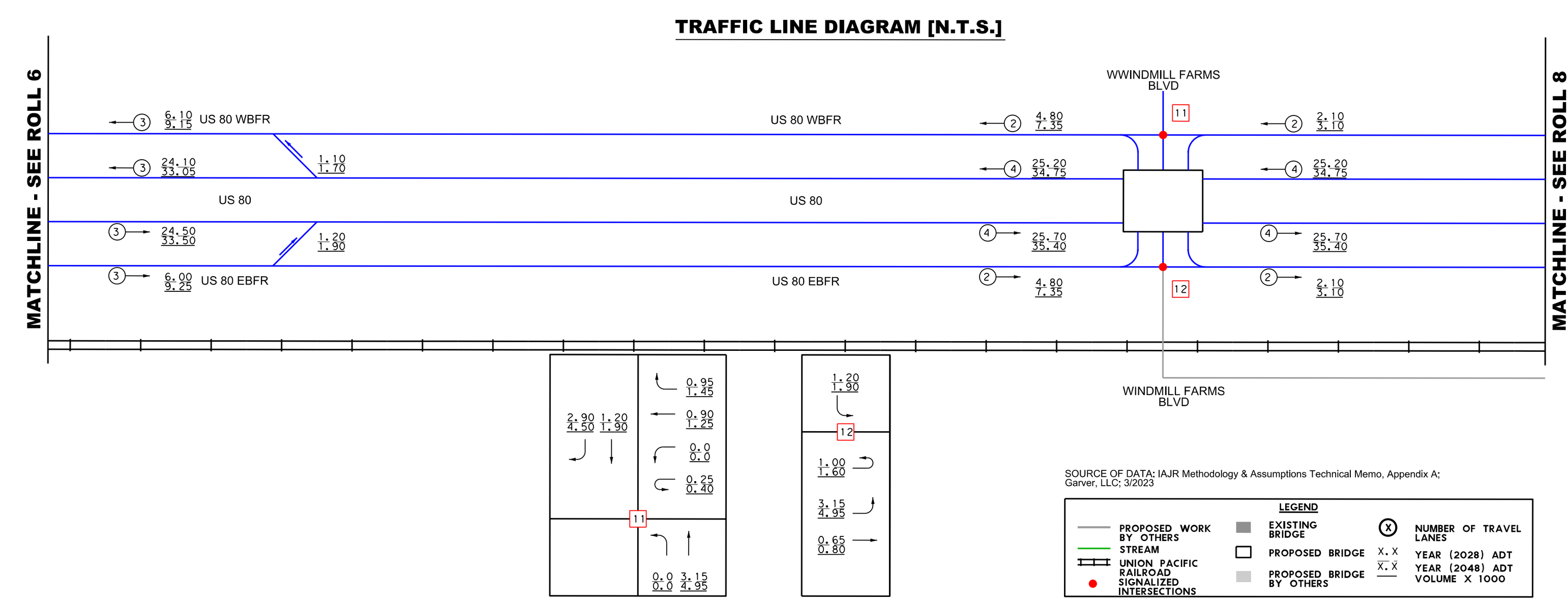




LEFT-TURN BAY DETAIL (TYPICAL)

RIGHT-TURN BAY DETAIL (TYPICAL)

TRAFFIC LINE DIAGRAM [N.T.S.]



SOURCE OF DATA: IAJR Methodology & Assumptions Technical Memo, Appendix A; Garver, LLC; 3/2023

LEGEND: PROPOSED WORK BY OTHERS; STREAM; UNION PACIFIC RAILROAD; SIGNALIZED INTERSECTIONS; EXISTING BRIDGE; PROPOSED BRIDGE; PROPOSED BRIDGE BY OTHERS; NUMBER OF TRAVEL LANES; YEAR (2028) ADT; YEAR (2048) ADT; VOLUME X 1000

Texas Department of Transportation
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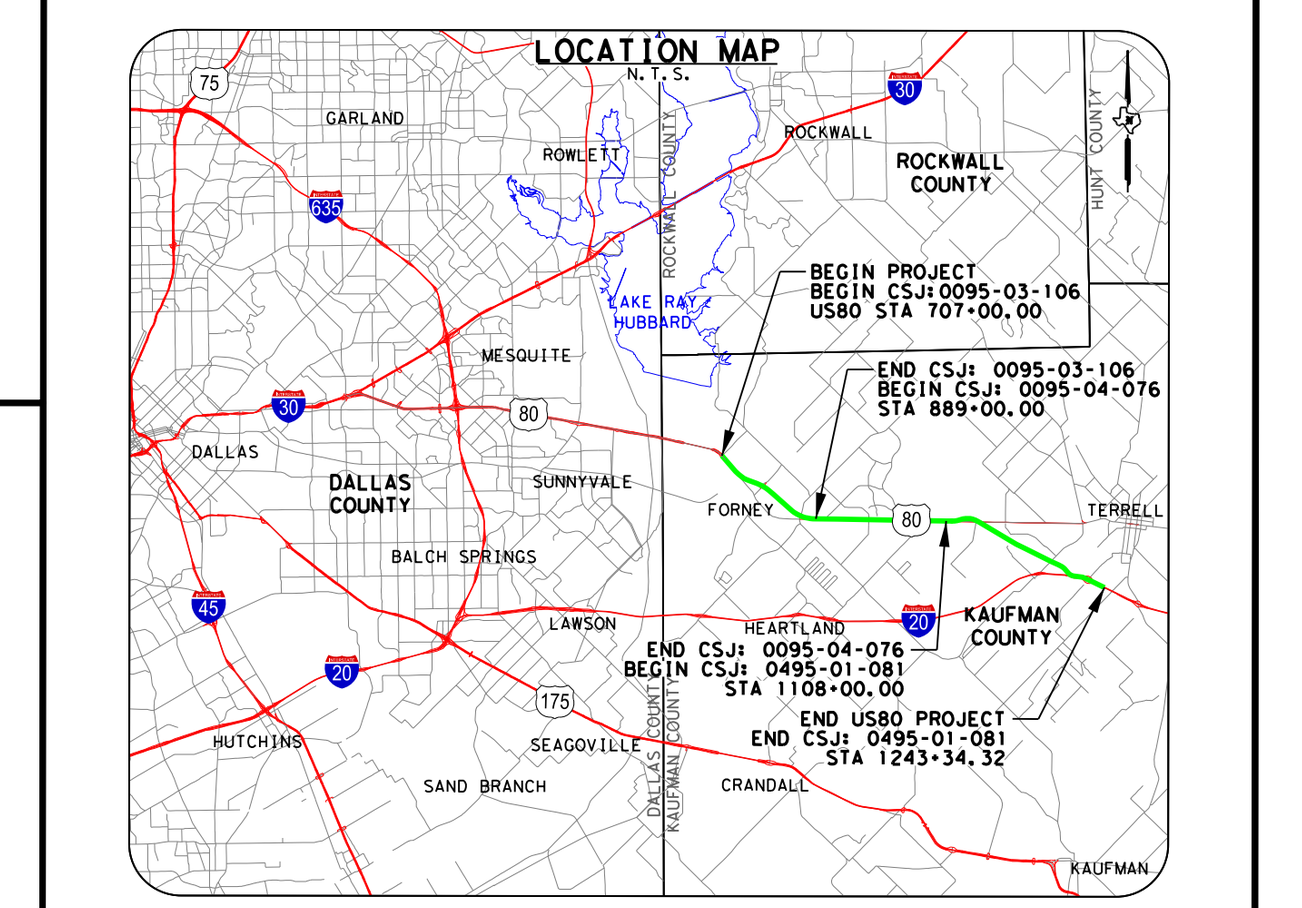

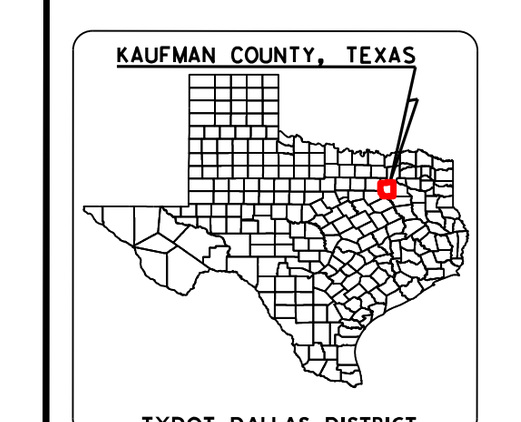

NOVEMBER 1, 2023

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3010 GAYLORD PARKWAY
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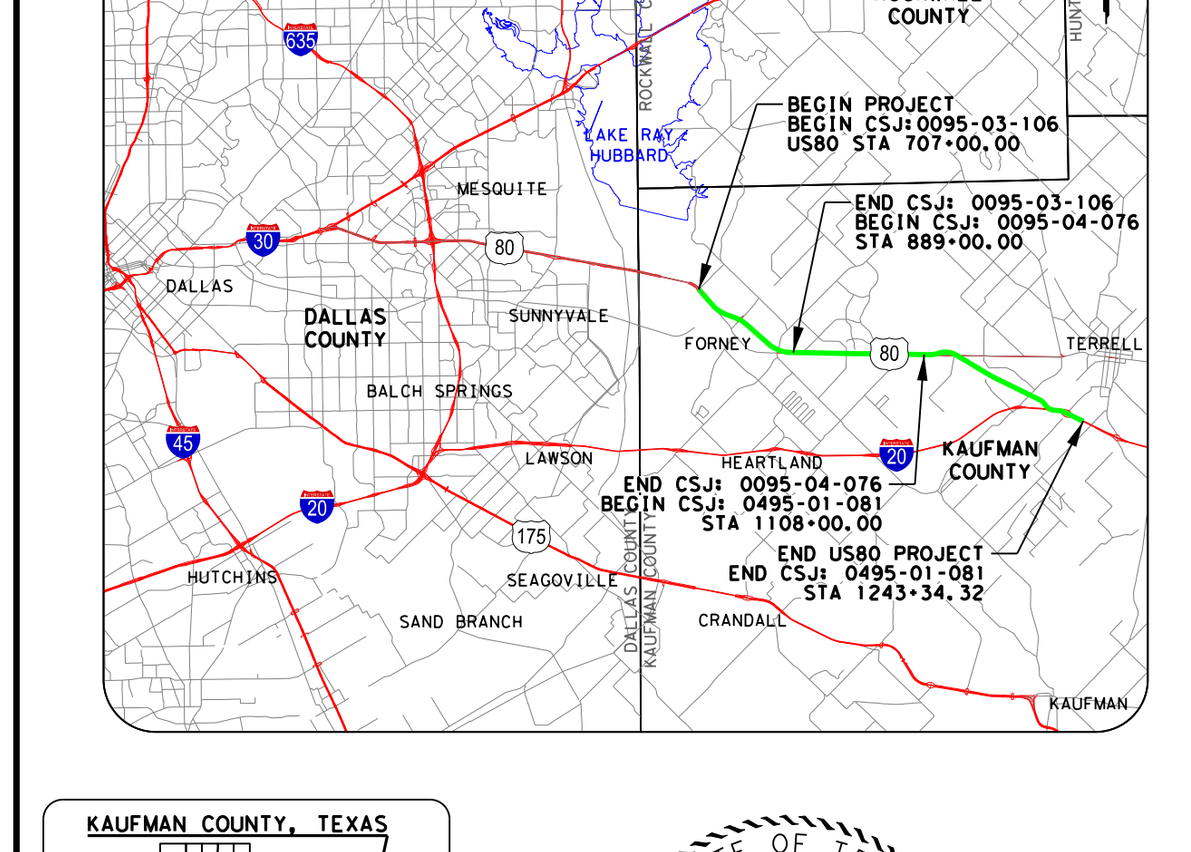

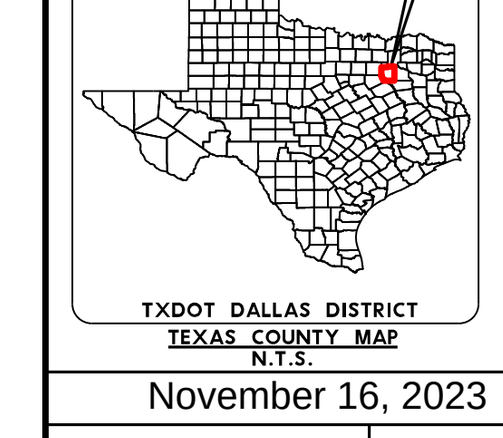

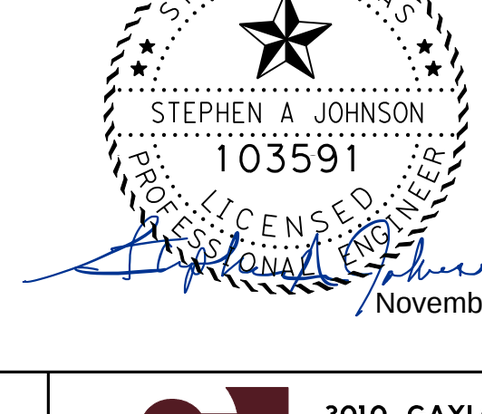

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ROLL NUMBER 8/31

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SUITE 190
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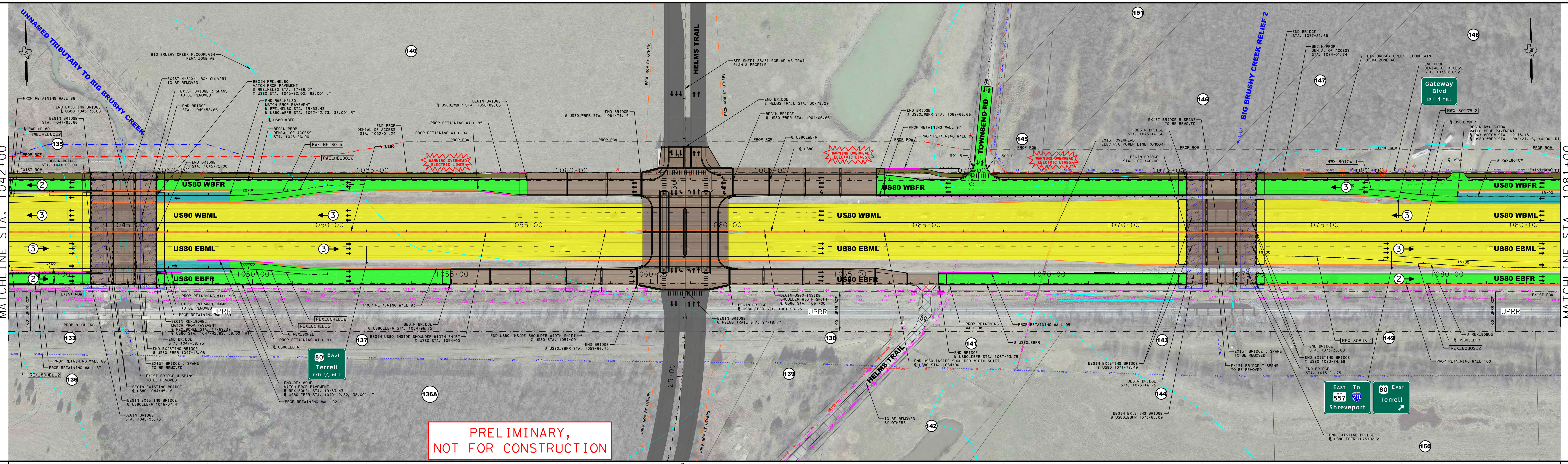
PRELIMINARY, NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]



PUS80 - PROP US80 MAIN LANES (60 MPH)

PROPERTY OWNERS

PARCEL NUMBER	OWNER	PROPERTY ADDRESS
133	AP SUNDANCE, LLC	O HWY. 80, TX
135	EQK BRIDGEVIEW PLAZA INC	
136	AP SUNDANCE, LLC	O HWY. 80, TX
136A	ORIGINS RESTORATION LLMB LLC	ST HWY 80 TX
137	ORIGINS RESTORATION LLMB LLC	ST HWY 80 TX
138	TALTY SPECIAL UTILITY DIST	
139	TALTY SPECIAL UTILITY DIST	
140	EQK BRIDGEVIEW PLAZA INC	
141	TALTY SPECIAL UTILITY DIST	
142	TALTY SPECIAL UTILITY DIST	
143	MCDONALD MATT ETAL	
144	MCDONALD MATT ETAL	US HWY 80 TX
145	EQK BRIDGEVIEW PLAZA, INC.	
146	EQK BRIDGEVIEW PLAZA, INC.	E. HWY. 80, TX
147	EQK WINDMILL FARMS, LLC ET AL	HWY. 80, TX
148	GENTRY, WESLEY H. & SAMMYE L.	E. HWY. 80, TX
149	SACK, STUART V. ET AL	
150	SACK, STUART V. ET AL	
151	EQK BRIDGEVIEW PLAZA INC.	HWY. 80, FORNEY, TX

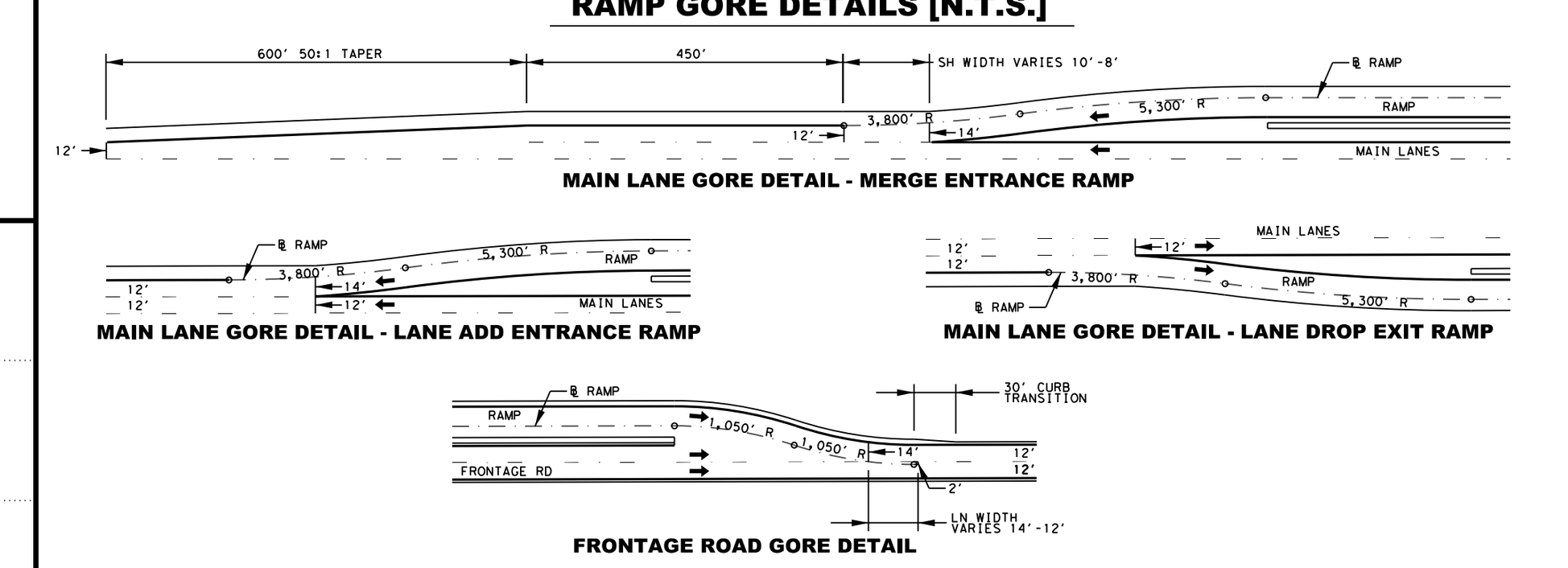
HORIZONTAL ALIGNMENT DATA

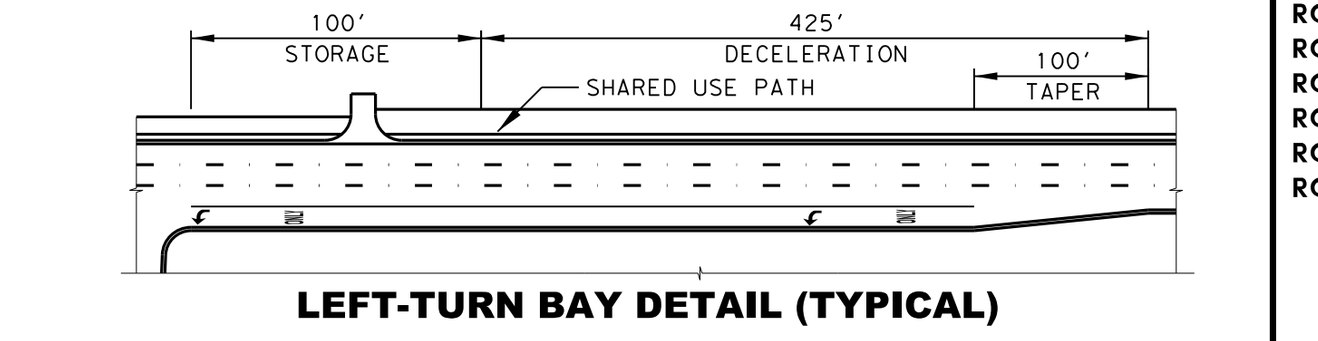
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
RWE_HEL80	RWE_HEL80_2	14+27.77	N 6,959,491.33	E 2,616,981.65	3° 47' 57.73" (RT)	5,300.00	175.79	351.39	12+51.98	16+03.43
RWE_HEL80	RWE_HEL80_4	20+18.37	N 6,959,298.59	E 2,617,569.58	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	19+53.43	20+83.13
RWE_HEL80	RWE_HEL80_5	21+48.06	N 6,959,280.69	E 2,617,698.20	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	20+83.13	22+12.83
REX_80HEL	REX_80HEL_2	14+27.77	N 6,959,307.35	E 2,616,978.92	3° 47' 57.73" (LT)	5,300.00	175.79	351.39	12+51.98	16+03.43
REX_80HEL	REX_80HEL_4	20+39.45	N 6,959,482.26	E 2,617,593.39	9° 22' 00.44" (LT)	1,050.00	86.02	171.66	19+53.43	21+25.09
REX_80HEL	REX_80HEL_5	22+11.11	N 6,959,507.74	E 2,617,763.54	9° 22' 00.44" (RT)	1,050.00	86.02	171.66	21+25.09	22+96.75
RWE_TOW80	RWE_TOW80_1	11+26.04	N 6,959,458.05	E 2,617,877.02	3° 47' 57.73" (LT)	3,800.00	126.04	251.98	10+00.00	12+51.98
RWE_TOW80	RWE_TOW80_2	14+27.77	N 6,959,473.59	E 2,618,178.45	3° 47' 57.73" (RT)	5,300.00	175.79	351.45	12+51.98	16+03.43
REX_80TOW	REX_80TOW_1	11+26.04	N 6,959,314.07	E 2,617,877.02	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	10+00.00	12+51.98
REX_80TOW	REX_80TOW_2	14+27.77	N 6,959,289.61	E 2,618,175.72	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	12+51.98	16+03.43

RETAINING WALLS

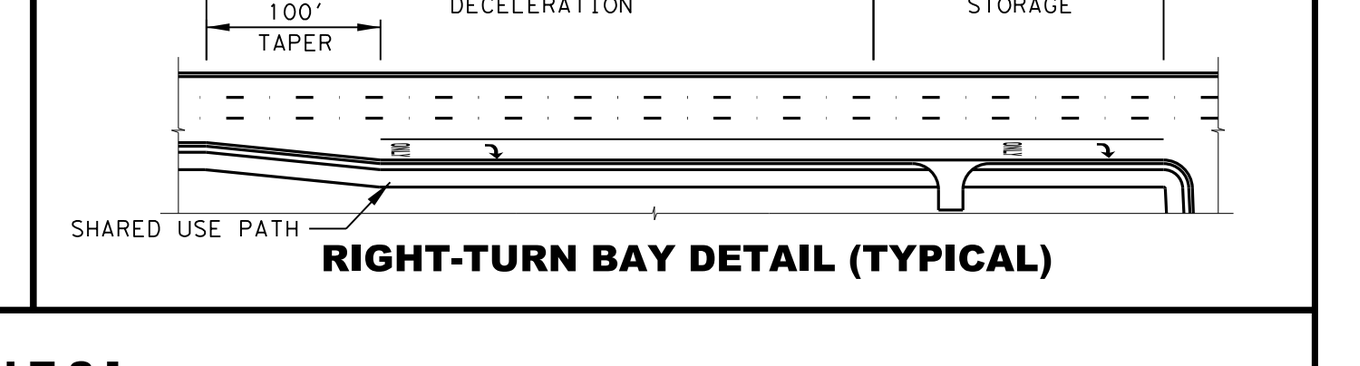
NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 86	US80 CL	1042+00.00	103.00' LT	1044+00.00	103.00' LT	200.00
WALL 87	EBFR	1043+86.56	3.00' RT	1045+90.00	3.00' RT	203.44
WALL 88	US80 CL	1042+00.00	103.22' RT	1044+05.00	103.00' RT	205.12
WALL 89	EBFR	1047+55.00	3.00' RT	1055+00.00	3.00' RT	745.00
WALL 90	US80 CL	1045+72.00	101.00' RT	1046+35.00	101.00' RT	63.00
WALL 91	US80 CL	1046+75.00	71.00' RT	1047+55.00	71.00' RT	80.00
WALL 92	US80 CL	1047+55.00	73.00' RT	1048+65.00	78.00' RT	145.00
WALL 93	US80 CL	1051+15.00	91.00' RT	1053+10.00	91.00' RT	195.00
WALL 94	US80 CL	1052+65.00	103.00' LT	1055+05.00	91.00' LT	240.67
WALL 95	WBFR	1058+00.00	18.00' LT	1058+90.00	18.00' LT	90.00
WALL 96	WBFR	1067+67.00	30.00' LT	1068+77.00	30.00' LT	110.00
WALL 97	US80 CL	1063+85.00	91.00' LT	1066+65.00	91.00' LT	280.00
WALL 98	EBFR	1067+25.00	3.00' RT	1073+45.00	3.00' RT	620.00
WALL 100	EBFR	1075+20.00	3.00' RT	1082+86.75	3.00' RT	766.75

RAMP GORE DETAILS [N.T.S.]



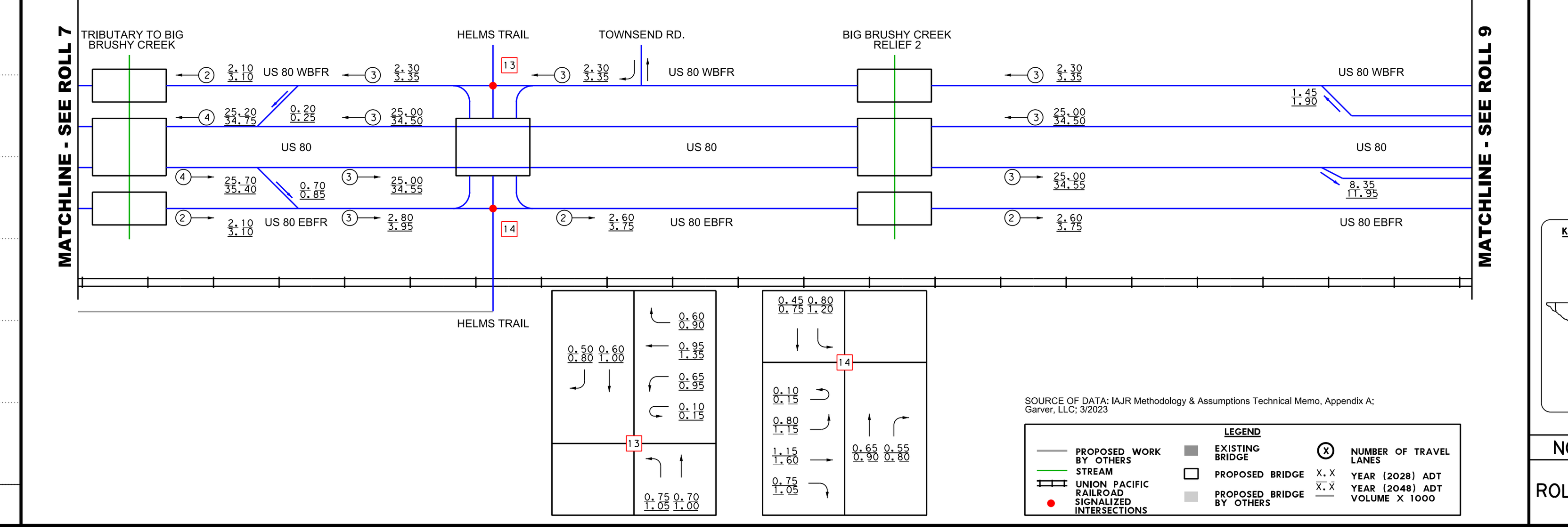


LEFT-TURN BAY DETAIL (TYPICAL)



RIGHT-TURN BAY DETAIL (TYPICAL)

TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
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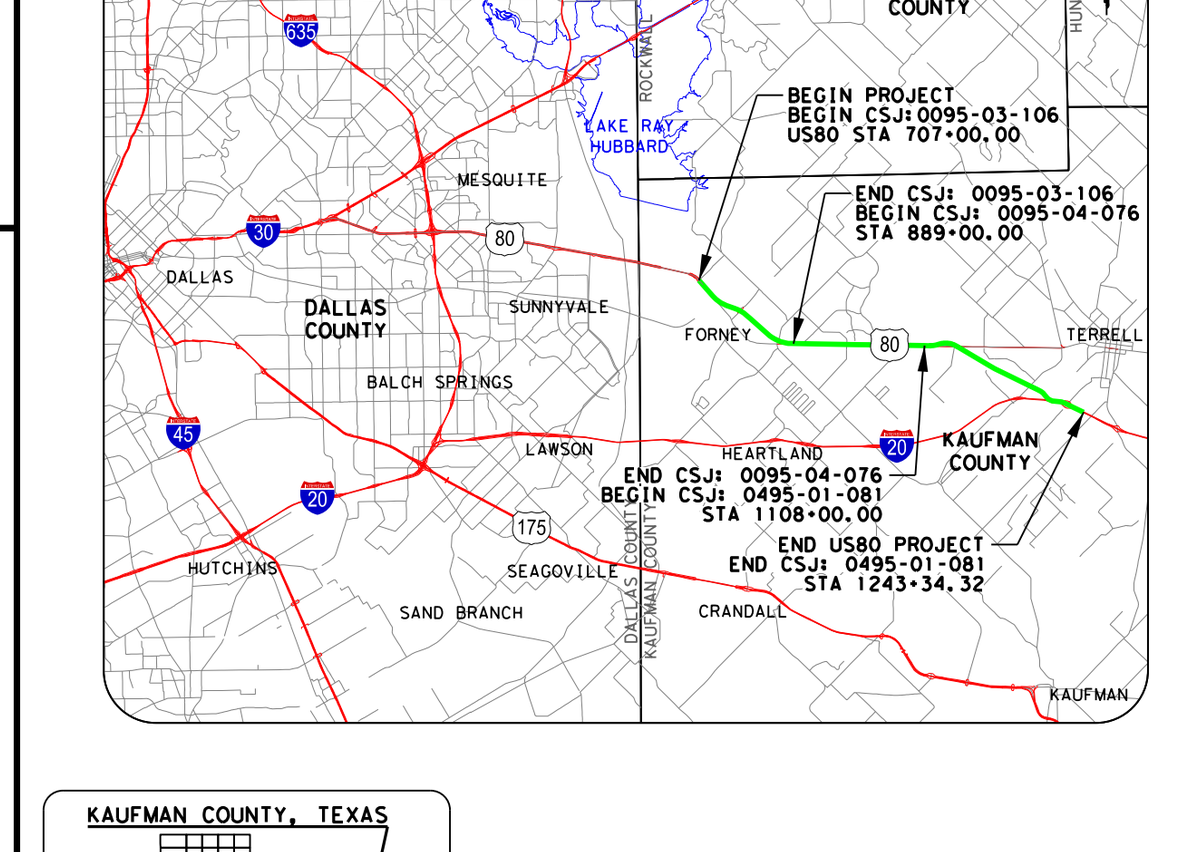
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023



NOVEMBER 1, 2023

ROLL NUMBER 8/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

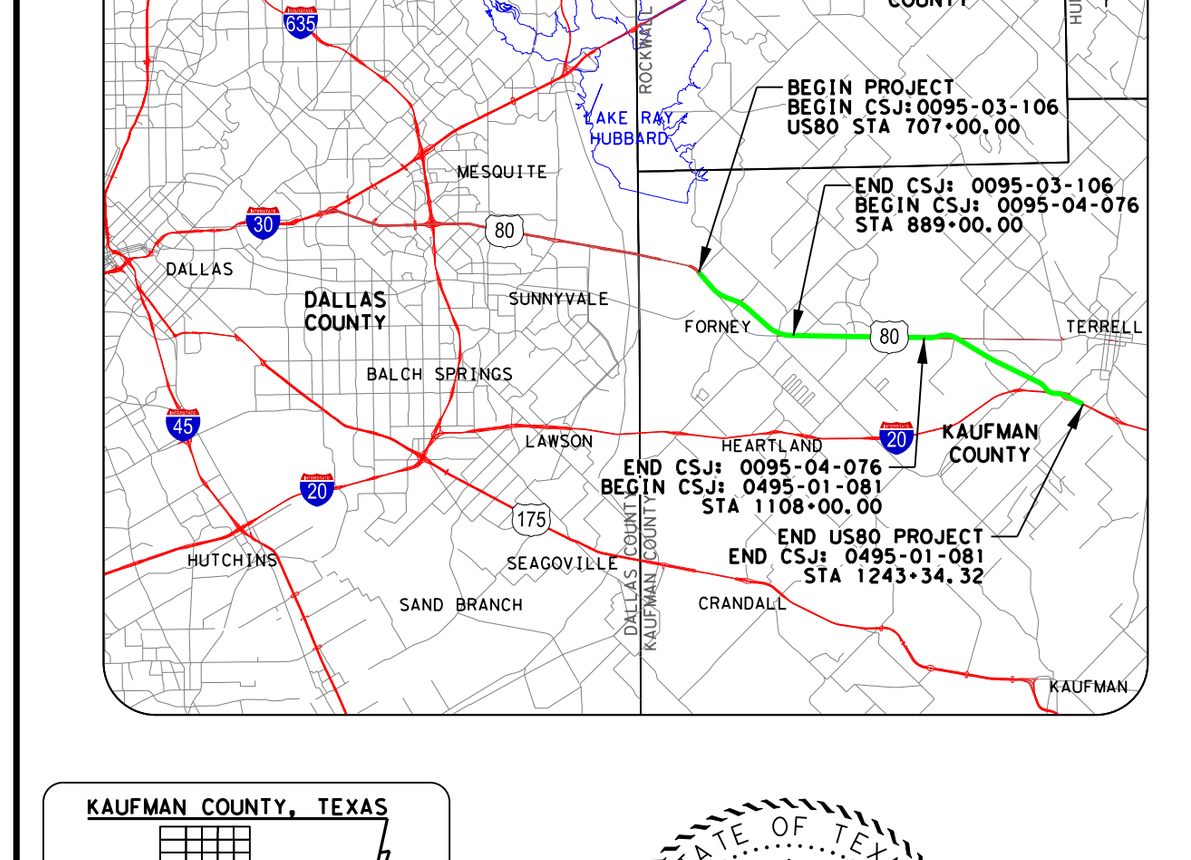
US 80
100% DESIGN SCHEMATIC

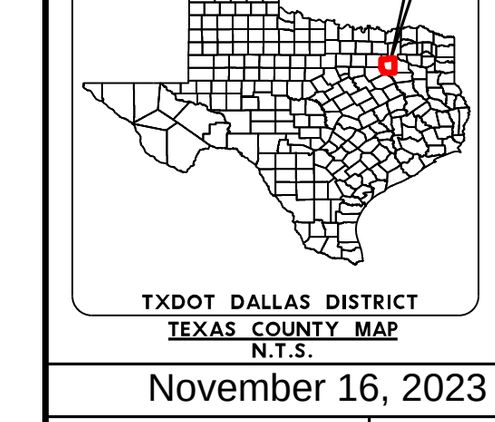
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 9/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

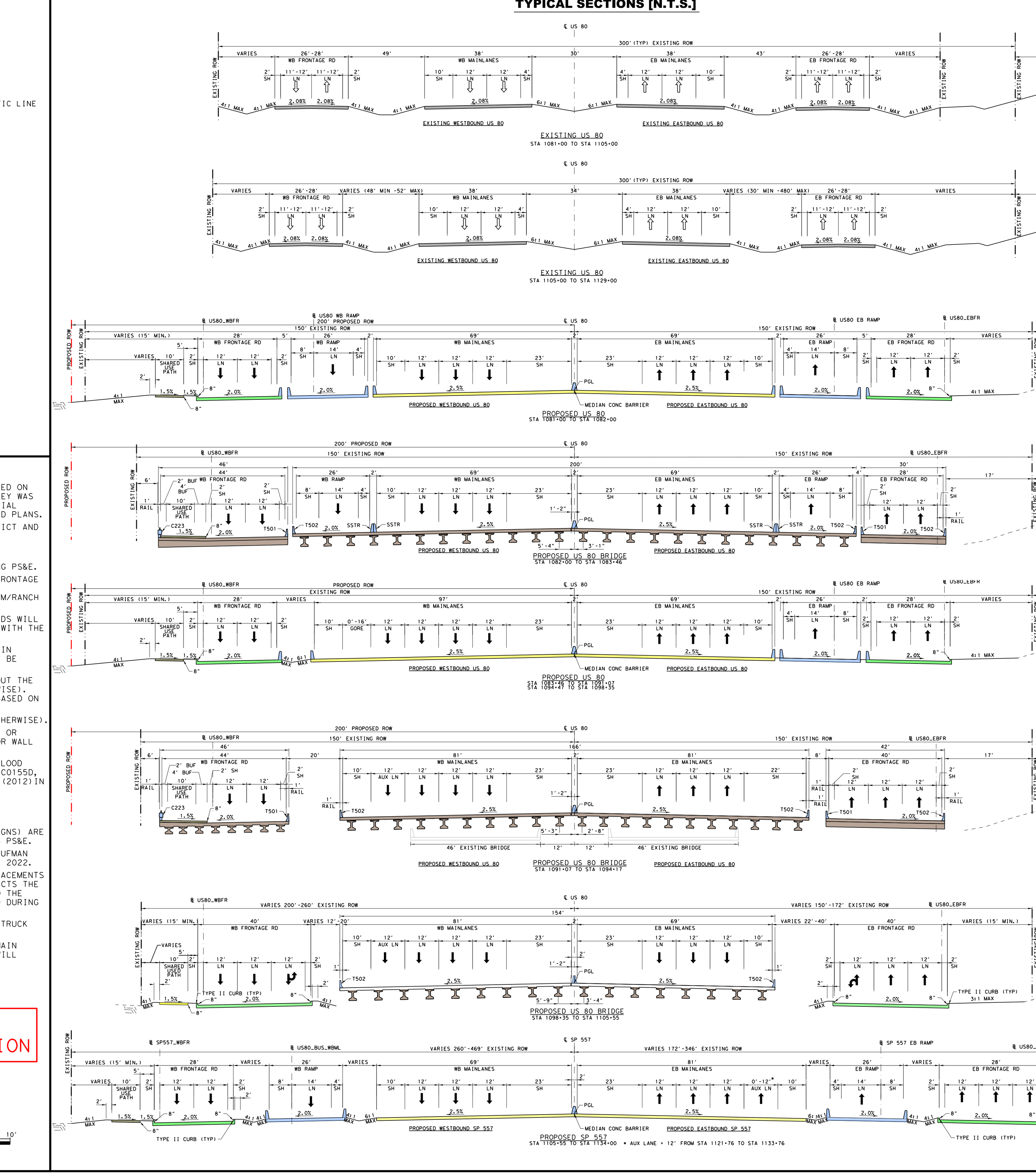
- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]



PUS80 - PROP US80 MAIN LANES (60 MPH)

PROPERTY OWNERS

PARCEL NUMBER	OWNER	PROPERTY ADDRESS
148	GENTRY WESLEY H & SAMMYE L	E. HWY 80, TX
150	SACK STUART V ETAL	
152	AP DUPONT LIMITED PARTNERSHIP	
153	FORNEY PARTNERSHIP LLC	E. HWY 80, TX
154	HIGH POINT RANCH OWNER, LP	W. HWY. 80, TX
155	LAND ADVISORS, LTD.	HWY. 80, TX
156	AP DUPONT LIMITED PARTNERSHIP	0 CO. RD. 305, TX
157	AP DUPONT LIMITED PARTNERSHIP	0 CO. RD. 238, TX
158	HIGH POINT RANCH OWNER, LP	W. HWY. 80, TX
159	HIGH POINT RANCH OWNER, LP	W. HWY. 80, TX
160	HIGH POINT RANCH OWNER, LP	W. HWY. 80, TX
161	SANDERS, BILLY V.	6160 W. HWY. 80, TX

HORIZONTAL ALIGNMENT DATA

BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
US80CL	US80CL_14	1106+09.31	N 6,959,304.76	E 2,623,358.62	4° 56' 23.69" (LT)	23,000.00	992.12	1,983.01	1096+17.20	1116+00.20
US80_BUS_WBML	US80_BUS_WBML_1	1110+92.31	N 6,959,416.77	E 2,623,853.19	6° 17' 23.74" (LT)	3,500.00	192.31	384.23	1109+00.00	1112+84.23
US80_BUS_WBML	US80_BUS_WBML_4	1125+13.11	N 6,959,631.08	E 2,625,258.13	4° 34' 58.06" (RT)	5,000.00	200.07	399.92	1123+13.04	1127+12.97
US80_WBFR6	US80_WBFR6_5	1102+05.73	N 6,959,446.46	E 2,622,570.40	5° 56' 28.25" (LT)	7,000.00	363.25	725.85	1098+42.48	1105+68.33
US80_WBFR6	US80_WBFR6_8	1118+14.54	N 6,959,589.30	E 2,624,173.50	6° 52' 29.62" (LT)	7,000.00	420.47	839.93	1113+94.07	1122+34.00
US80_WBFR6	US80_WBFR6_11	1132+37.36	N 6,959,884.52	E 2,625,566.40	15° 08' 51.68" (RT)	3,012.00	400.49	796.30	1128+36.88	1136+33.18
SP557_EBFR	SP557_EBFR_3	1127+45.92	N 6,959,160.76	E 2,625,385.55	15° 04' 44.29" (LT)	1,650.00	218.38	434.24	1125+27.54	1129+61.78
SP557_EBFR	SP557_EBFR_4	1131+08.16	N 6,959,250.42	E 2,625,739.12	10°08'20.60" (RT)	1,650.00	146.37	291.98	1129+61.78	1132+53.77
US80_EBFR7	US80_EBFR7_7	1118+69.25	N 6,959,157.38	E 2,624,529.75	2° 18' 44.14" (LT)	2,500.00	50.45	100.89	1118+18.79	1119+19.68
US80_EBFR7	US80_EBFR7_8	1119+70.14	N 6,959,159.96	E 2,624,630.62	2° 18' 44.14" (RT)	2,500.00	50.45	100.89	1119+19.68	1120+20.58
RWX_80TOW	RWX_80TOW_1	10+68.89	N 6,959,456.85	E 2,620,386.26	7° 30' 25.73" (RT)	1,050.00	68.89	137.58	10+00.00	11+37.58
RWX_80TOW	RWX_80TOW_2	12+06.46	N 6,959,436.83	E 2,620,522.57	7° 30' 25.73" (LT)	1,050.00	68.89	137.58	11+37.58	12+75.15
RWX_80TOW	RWX_80TOW_5	19+33.43	N 6,959,426.04	E 2,621,249.66	3° 25' 16.30" (RT)	5,300.00	158.28	316.47	17+75.15	20+91.62
RWX_80TOW	RWX_80TOW_6	22+34.97	N 6,959,403.58	E 2,621,550.45	3° 25' 16.30" (LT)	4,800.00	143.35	286.61	20+91.62	23+78.23
REX_80TOW	REX_80TOW_1	11+26.04	N 6,959,314.07	E 6,959,314.07	3° 47' 57.73" (RT)	3,800.00	126.04	251.98	10+00.00	12+51.98
REX_80TOW	REX_80TOW_2	14+27.77	N 6,959,289.61	E 2,618,175.72	3° 47' 57.73" (LT)	5,300.00	175.79	351.45	12+51.98	16+03.43
REX_80TOW	REX_80TOW_5	21+68.37	N 6,959,278.62	E 2,618,916.36	7° 04' 38.07" (LT)	1,050.00	64.93	129.70	21+03.43	22+33.13
REX_80TOW	REX_80TOW_6	22+98.06	N 6,959,260.71	E 2,619,044.98	7° 04' 38.07" (RT)	1,050.00	64.93	129.70	22+33.13	23+62.83
REX_80BUS	REX_80BUS_1	11+54.41	N 6,959,290.73	E 2,620,258.17	4° 39' 13.26" (RT)	3,800.00	154.41	308.64	10+00.00	13+08.64
REX_80BUS	REX_80BUS_2	15+24.00	N 6,959,255.27	E 2,620,626.23	4° 39' 13.26" (LT)	5,300.00	215.36	430.48	13+08.64	17+39.12
REX_80BUS	REX_80BUS_5	23+08.01	N 6,959,243.64	E 2,621,410.39	7° 30' 25.73" (LT)	1,050.00	68.89	137.58	22+39.12	23+76.70
REX_80BUS	REX_80BUS_6	24+45.58	N 6,959,223.62	E 2,621,546.70	7° 30' 25.73" (RT)	1,050.00	68.89	137.58	23+76.70	25+14.27
REE_BUS80	REE_BUS80_1	11+40.20	N 6,959,183.02	E 2,624,284.66	15° 12' 39.33" (LT)	1,050.00	140.20	278.75	10+00.00	12+78.75
REE_BUS80	REE_BUS80_4	17+86.25	N 6,959,343.67	E 2,624,912.12	10° 16' 15.64" (RT)	5,300.00	476.32	950.09	13+09.93	22+60.02

RETAINING WALLS

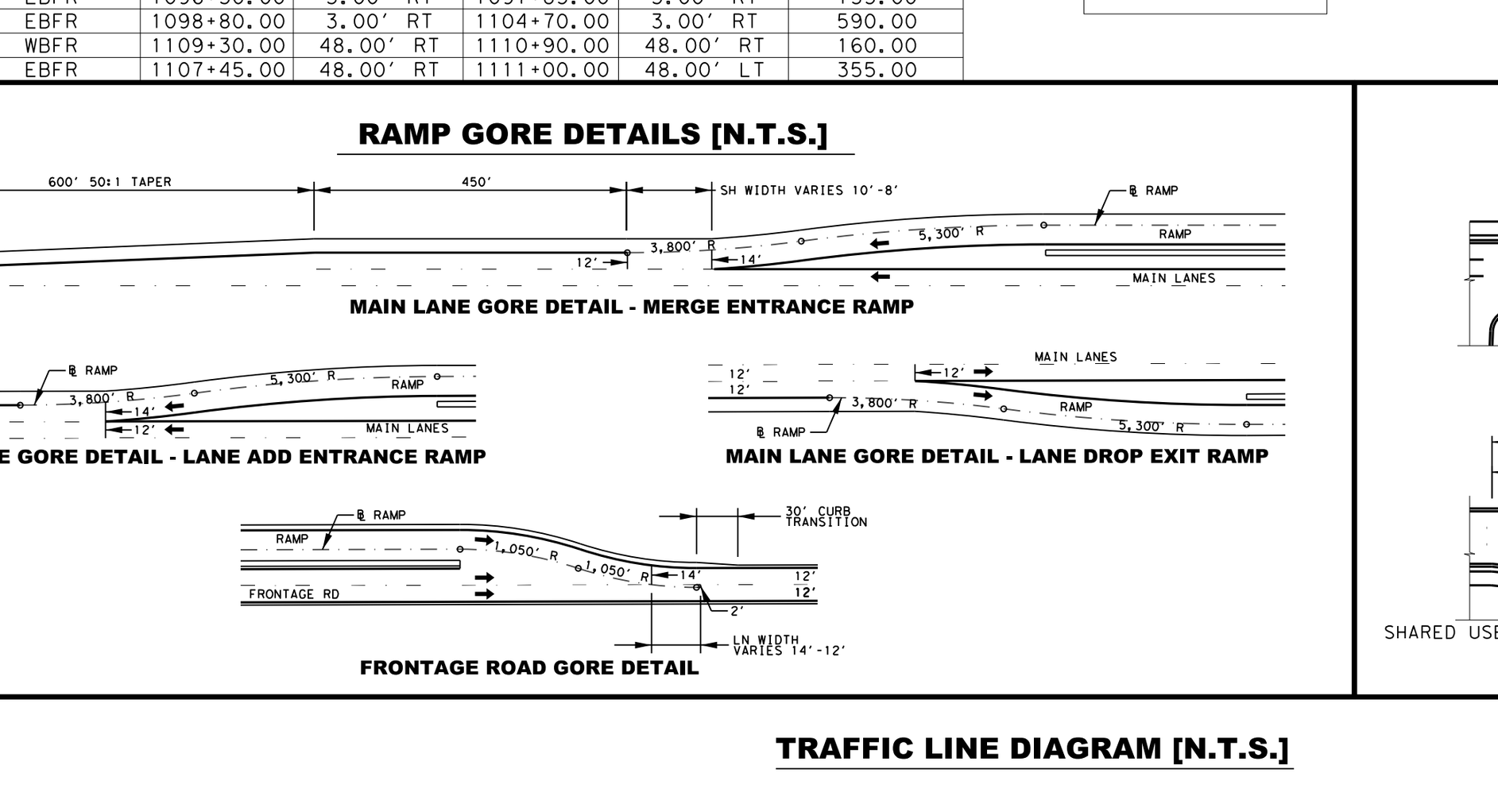
NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 100	EBFR	1082+86.75	3.00' RT	1083+85.00	3.00' RT	98.25
WALL 101	EBFR	1085+30.00	3.00' RT	1093+00.00	3.00' RT	770.00
WALL 102	US80 CL	1084+70.00	71.00' RT	1086+30.00	71.00' RT	160.00
WALL 103	US80 CL	1094+60.00	83.00' RT	1098+35.00	83.00' RT	375.00
WALL 104	US80 CL	1094+60.00	83.00' LT	1098+35.00	83.00' LT	375.00
WALL 105	EBFR	1096+30.00	3.00' RT	1097+85.00	3.00' RT	155.00
WALL 106	EBFR	1098+80.00	3.00' RT	1104+70.00	3.00' RT	590.00
WALL 107	WBFR	1109+30.00	48.00' RT	1110+90.00	48.00' RT	160.00
WALL 108	EBFR	1107+45.00	48.00' RT	1111+00.00	48.00' LT	355.00

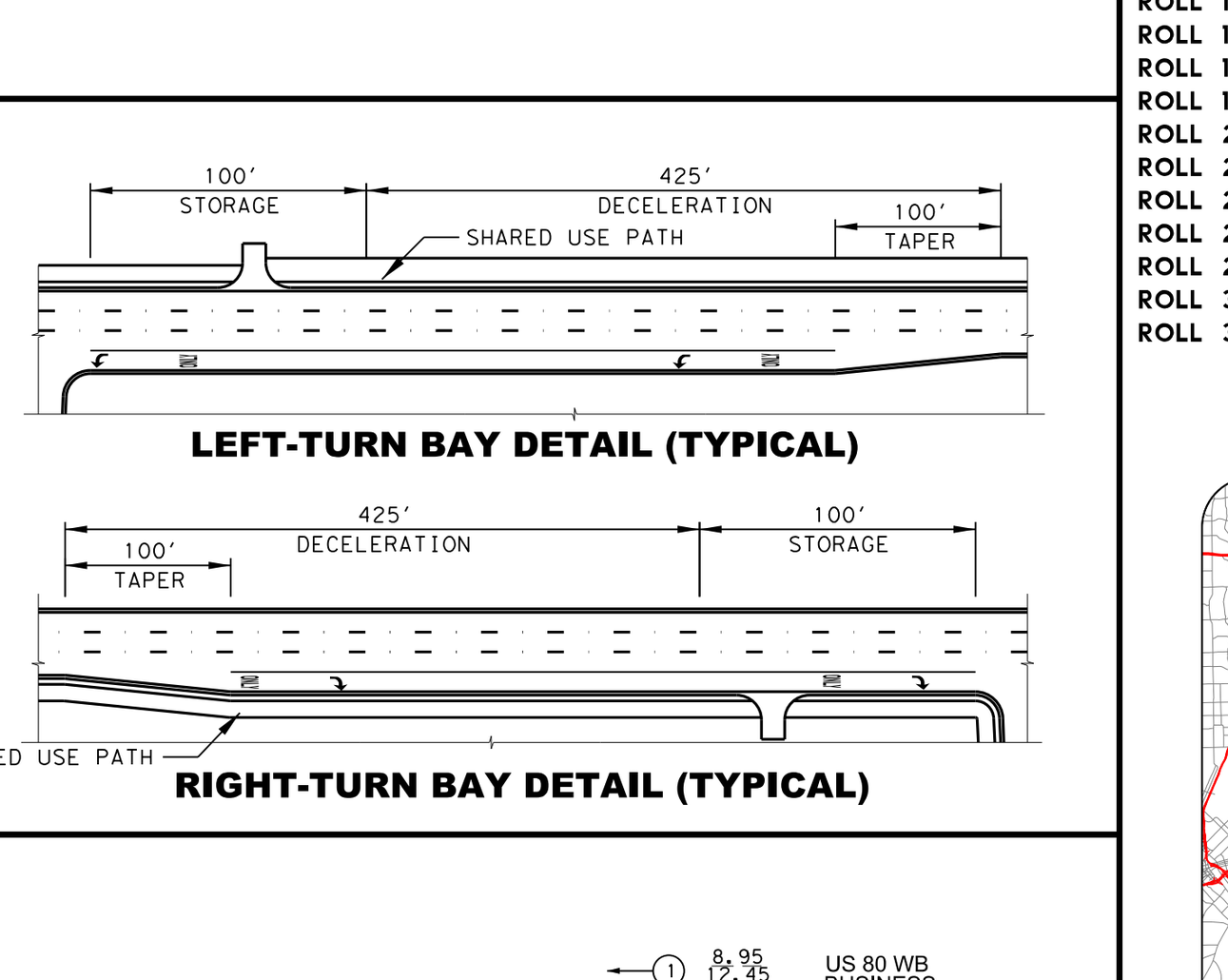
SUPERELEVATION SIGN CONVENTION
(-) | (+)
(+) | (-)

SUPERELEVATION

BASELINE	ROADWAY	BEGIN TRANSITION STATION	BEGIN TRANSITION e	END TRANSITION STATION	END TRANSITION e
SP557CL	SP557 WBML	1127+60	2.50%	1137+80	-6.00%
		1149+00	-6.00%	1159+20	2.50%
SP557CL	SP557 EBML	1127+60	-2.50%	1137+80	-6.00%
		1149+00	-6.00%	1159+20	-2.50%

RAMP GORE DETAILS [N.T.S.]

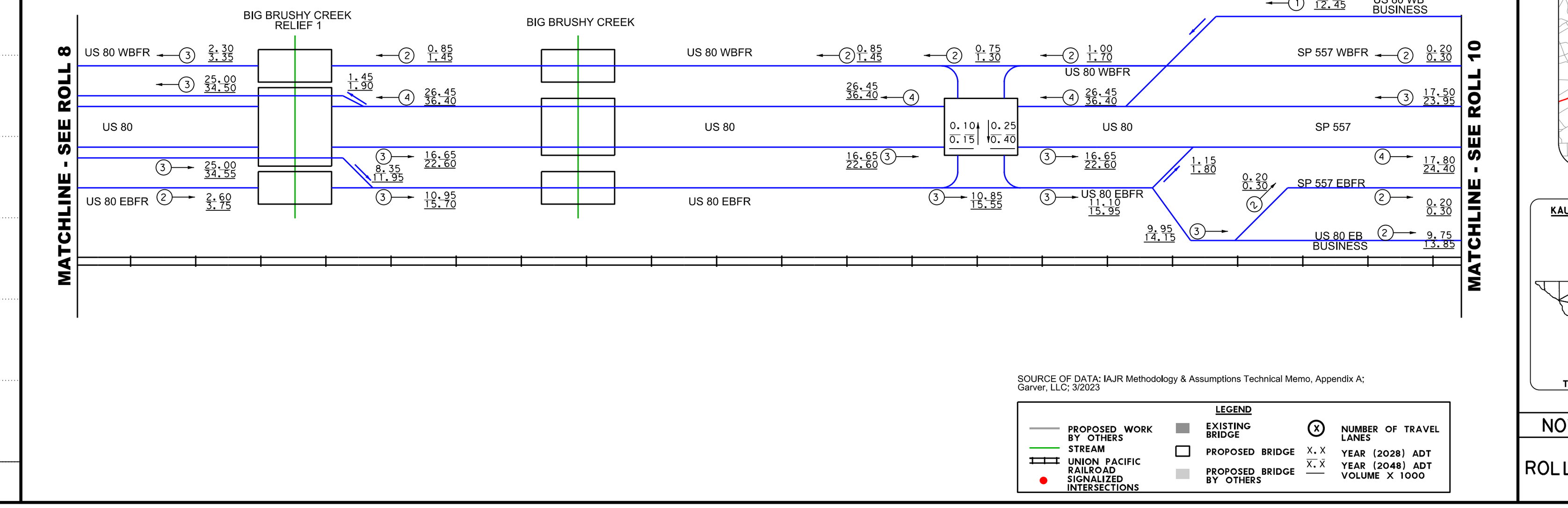




LEFT-TURN BAY DETAIL (TYPICAL)

RIGHT-TURN BAY DETAIL (TYPICAL)

TRAFFIC LINE DIAGRAM [N.T.S.]

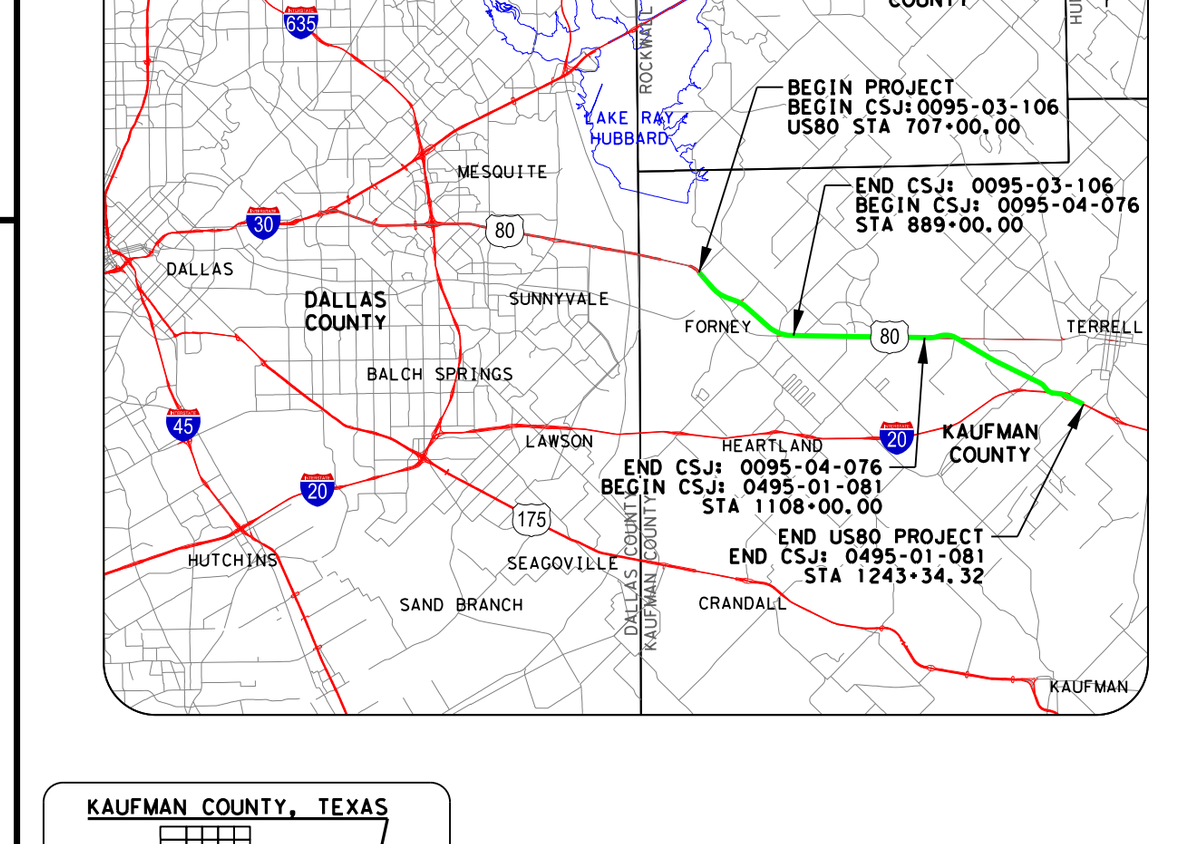


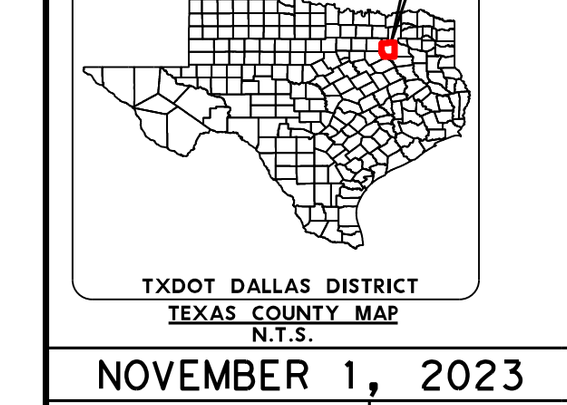
SOURCE OF DATA: IAJR Methodology & Assumptions Technical Memo, Appendix A; Garver, LLC; 3/2023

LEGEND: PROPOSED WORK BY OTHERS; STREAM; UNION PACIFIC RAILROAD; SIGNALIZED INTERSECTIONS; EXISTING BRIDGE; PROPOSED BRIDGE; PROPOSED BRIDGE BY OTHERS; (X) NUMBER OF TRAVEL LANES; X.X YEAR (2028) ADT; X.X YEAR (2048) ADT; VOLUME X 1000

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023





NOVEMBER 1, 2023

ROLL NUMBER 9/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

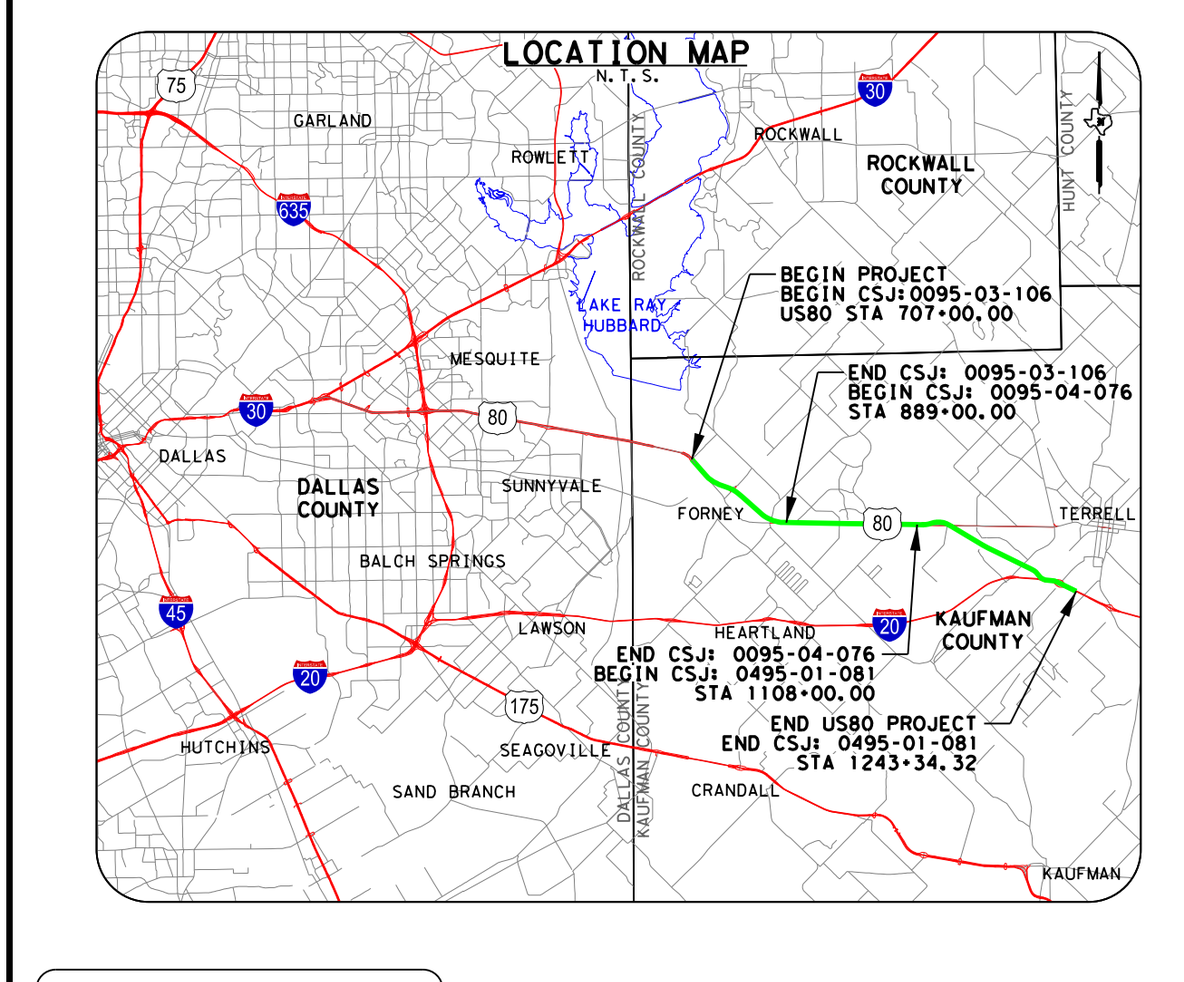
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

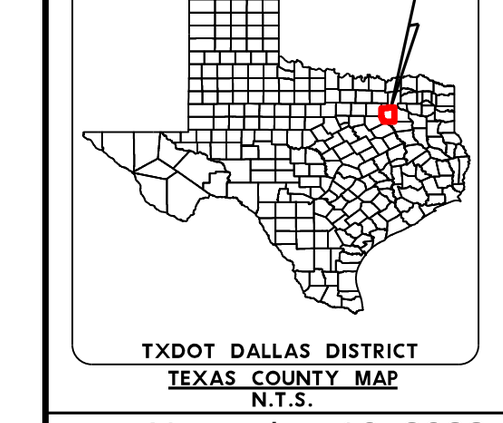
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023
ROLL NUMBER 10/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
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- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

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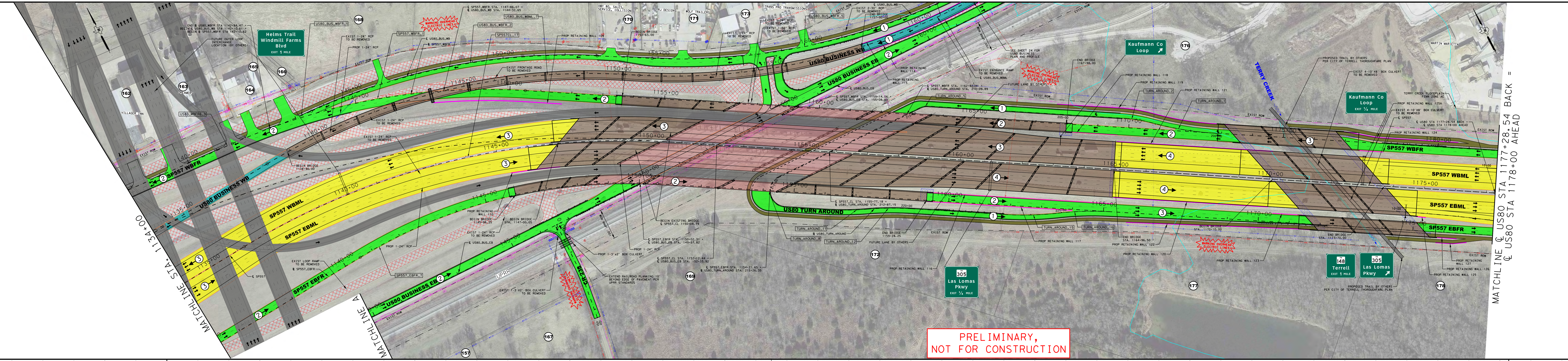
PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]



PROP SP 557 MAIN LANES (60 MPH)

PROPERTY OWNERS

PARCEL NUMBER	OWNER	PROPERTY ADDRESS
157	AP DUPONT LIMITED PARTNERSHIP	0 CO. RD. 238, TX
162	KPJ TERRELL, LLC	6108 W. HWY. 80, TX
163	SMITH, SHARON KAY TRUSTEE	6086 W. HWY. 80, TX
164	JS THREE STAR INVESTMENT, INC.	6070 W. HWY. 80, TX
165	JS THREE STAR INVESTMENT, INC.	W. HWY. 80, TX
166	HIGH POINT RANCH OWNER, LP	W. HWY. 80, TX
167	AP DUPONT LIMITED PARTNERSHIP	12238 CO. RD. 238, TX
168	HIGH POINT RANCH OWNER, LP	W. HWY. 80, TX
169	AP DUPONT LIMITED PARTNERSHIP	0 CO. RD. 238, TX
170	EVERETT, EVELYN R.	5878 W. HWY. 80, TERRELL, TX 75160
171	VILLALBA, DOMINGO M. & MORALES, TERESA B	5764 W. HWY. 80, TERRELL, TX 75160
172	AP DUPONT LIMITED PARTNERSHIP	0 W. HWY. 80, TERRELL, TX
173	JLN HOLDINGS, INC.	5702 W. HWY. 80, TX
174*	HIGH POINT RANCH OWNER, LP	0 W. HWY. 80, TX
175*	HIGH POINT RANCH OWNER, LP	5550 W. HWY. 80, TX
176	TERRELL MATERIALS, LLC	320 IRON HORSE DR., TERRELL, TX
177	AP DUPONT LIMITED PARTNERSHIP	0 HWY. 80, TERRELL, TX
178	AP EASTLAND PARK, LLC	0 I20, TERRELL, TX

*SEE US 80 BUSINESS SHEET (SHEET 24) FOR PARCEL LOCATIONS

RETAINING WALLS

NO.	ALIGNMENT	BEGIN STA.	BEGIN OFFSET	END STA	END OFFSET	WALL LENGTH
WALL 109	SP557 WBFR	1147+50.00	36.00' RT	1151+70.00	36.00' RT	420.00
WALL 110	US80 CL 3	1145+35.00	76.00' RT	1147+00.00	76.00' RT	165.00
WALL 114	US80 BUS WBML	1157+95.00	19.00' RT	1162+00.00	19.00' RT	410.00
WALL 115	US80 BUS WBML	1158+00.00	9.00' LT	1162+60.00	9.00' LT±	458.00
WALL 116	SP557 EBFR	1159+30.00	26.00' LT	1165+30.00	26.00' LT	600.00
WALL 117	SP557 EBFR	1159+30.00	3.00' RT	1164+00.00	3.00' RT	470.00
WALL 118	US80 CL	1163+35.00	112.00' LT	1165+00.00	112.00' LT	165.00
WALL 119	SP557 WBFR	1167+64.20	62.00' LT	1173+24.00	30.00' LT	562.00
WALL 120	US80 CL	1165+00.00	90.00' RT	1170+00.00	90.00' RT	500.00
WALL 121	US80 CL	1165+00.00	90.00' LT	1170+05.00	90.00' LT	505.00
WALL 122	SP557 EBFR	1165+75.00	30.00' RT	1171+75.00	18.00' RT	600.00
WALL 123	US80 CL	1170+15.00	112.00' RT	1171+20.00	112.00' RT	105.00
WALL 123A	US80 CL	1172+19.80	152.00' LT	1176+00.00	140.00' LT	380.85
WALL 124	US80 CL	1172+80.00	110.00' LT	1173+60.00	110.00' LT	80.00
WALL 125	US80 CL	1174+78.00	91.40' RT	1175+10.00	93.00' RT	32.00
WALL 125A	WBFR	1176+84.00	30.00' LT	1180+64.20	18.00' LT	380.86
WALL 126	SP557 EBFR	1175+50.00	18.00' RT	1176+35.00	18.00' RT	100.00
WALL 127	SP557 EBFR	1175+75.00	35.00' RT	1176+75.00	28.00' RT	100.00

HORIZONTAL ALIGNMENT DATA

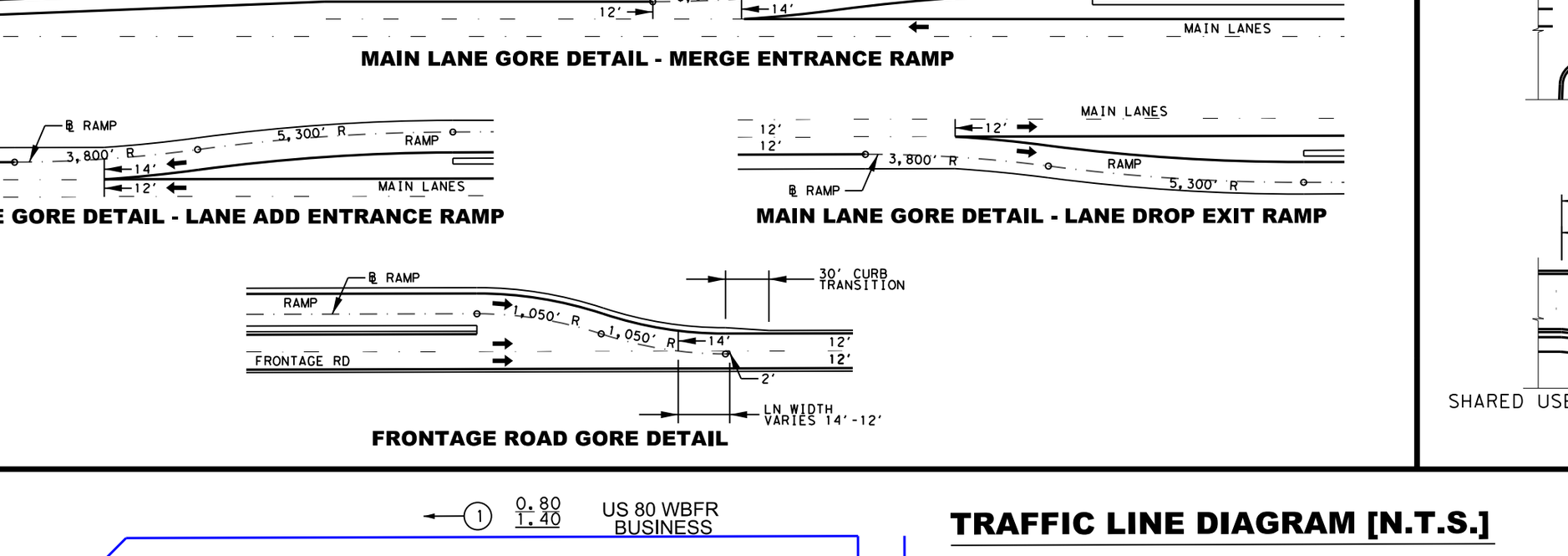
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
SP557CL	SP557CL_17	1143+63.02	N 6,959,572.60	E 2,627,104.00	34° 52' 26.98" (RT)	2,350.00	738.12	1,430.37	1136+24.91	1150+55.28
US80_BUS_WBML	US80_BUS_WBML_7	1144+34.73	N 6,959,768.17	E 2,627,175.07	34° 28' 30.19" (RT)	2,000.00	620.54	1,203.41	1138+14.19	1150+17.59
US80_BUS_WBML	US80_BUS_WBML_10	1156+77.97	N 6,959,120.27	E 2,628,280.05	33° 56' 32.76" (LT)	2,000.00	610.36	1,184.81	1150+67.61	1162+52.43
US80_BUS_WBML	US80_BUS_WBML_11	1163+27.98	N 6,959,162.84	E 2,628,964.64	4° 19' 36.69" (RT)	2,000.00	75.55	151.04	1162+52.43	1164+03.46
US80_WBFR6	US80_WBFR6_9	1141+45.50	N 6,959,829.77	E 2,626,551.55	3° 42' 35.46" (RT)	2,012.00	65.16	130.28	1140+80.34	1142+10.61
SP557_WBFR	SP557_WBFR_1	1146+36.31	N 6,959,770.87	E 2,627,038.86	23° 53' 34.02" (RT)	2,012.00	425.70	839.02	1142+10.61	1150+49.63
US80_BUS_WBFR	US80_BUS_WBFR_1	142+83.44	N 6,959,813.21	E 2,626,688.54	4° 10' 14.57" (LT)	2,000.00	72.82	145.59	142+10.61	143+56.20
US80_BUS_WBFR	US80_BUS_WBFR_2	148+38.90	N 6,959,786.85	E 2,627,243.44	27° 08' 16.33" (RT)	2,000.00	482.70	947.29	143+56.20	153+03.49
US80_BUS_WBFR	US80_BUS_WBFR_5	160+01.08	N 6,959,199.23	E 2,628,267.07	28° 51' 31.31" (LT)	2,020.00	519.75	1,017.43	154+81.33	164+98.76
SP557_EBFR	SP557_EBFR_7	1145+73.58	N 6,959,355.01	E 2,627,201.57	34° 52' 26.98" (RT)	1,650.00	518.25	1,004.30	1140+55.33	1150+59.63
SP557_EBFR	SP557_EBFR_8	1145+73.59	N 6,959,355.02	E 2,627,201.58	34° 52' 26.98" (RT)	1,650.00	518.25	1,004.30	1140+55.34	1150+59.64
TURN_AROUND	TURN_AROUND_1	201+04.57	N 6,958,462.72	E 2,629,233.52	11° 45' 18.67" (RT)	1,015.75	104.57	208.40	200+00.00	202+08.40
TURN_AROUND	TURN_AROUND_2	202+49.21	N 6,958,560.46	E 2,629,125.91	9° 19' 55.94" (LT)	500.00	40.81	81.44	202+08.40	202+89.84
TURN_AROUND	TURN_AROUND_5	209+49.65	N 6,958,920.51	E 2,628,524.91	29° 34' 29.25" (LT)	50.00	13.20	25.81	209+36.45	209+62.26
TURN_AROUND	TURN_AROUND_8	216+66.57	N 6,958,935.79	E 2,627,807.56	150° 26' 11.58" (LT)	52.00	197.07	136.53	214+69.51	216+06.04
TURN_AROUND	TURN_AROUND_11	218+02.44	N 6,958,734.42	E 2,628,145.59	8° 06' 34.61" (LT)	1,000.00	70.89	141.54	217+31.55	218+73.09
TURN_AROUND	TURN_AROUND_12	219+43.98	N 6,958,679.76	E 2,628,276.41	8° 06' 34.61" (RT)	1,000.00	70.89	141.54	218+73.09	220+14.63
TURN_AROUND	TURN_AROUND_15	224+01.56	N 6,958,445.45	E 2,628,669.72	9° 56' 10.92" (LT)	1,000.00	86.93	173.42	223+14.63	224+88.05
TURN_AROUND	TURN_AROUND_16	225+74.98	N 6,958,383.58	E 2,628,832.20	9° 56' 10.92" (RT)	1,000.00	86.93	173.42	224+88.05	226+61.48

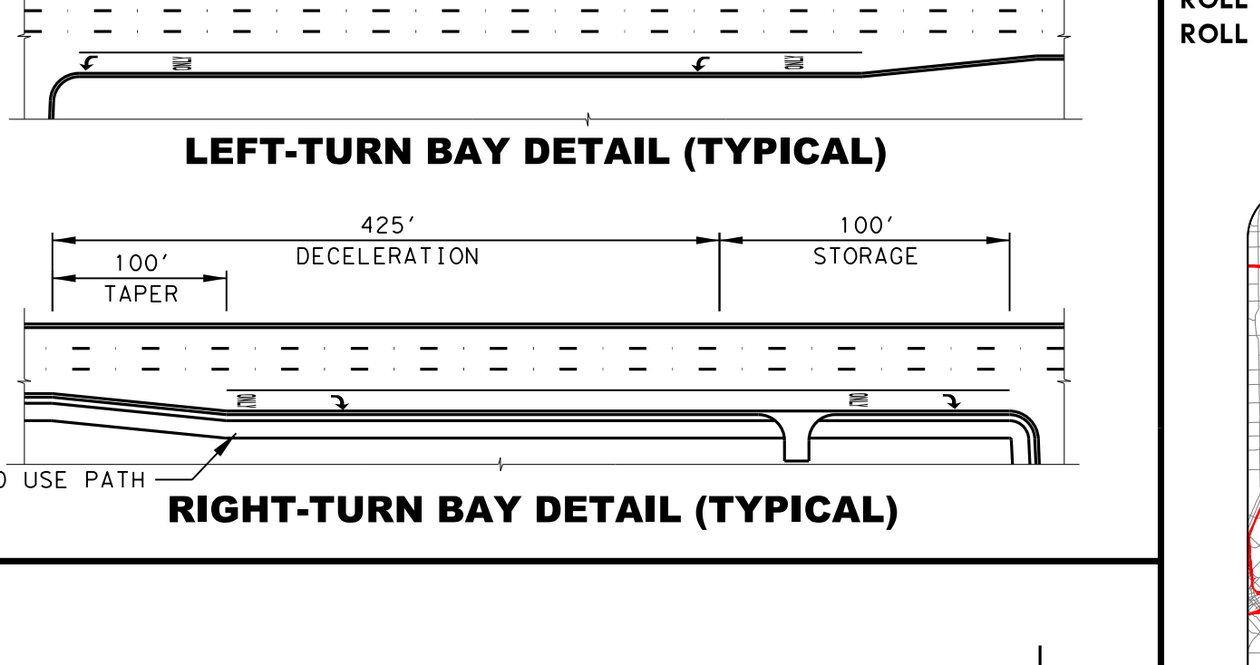
SUPERELEVATION SIGN CONVENTION
℄
(-) | (+)
(+) | (-)

SUPERELEVATION

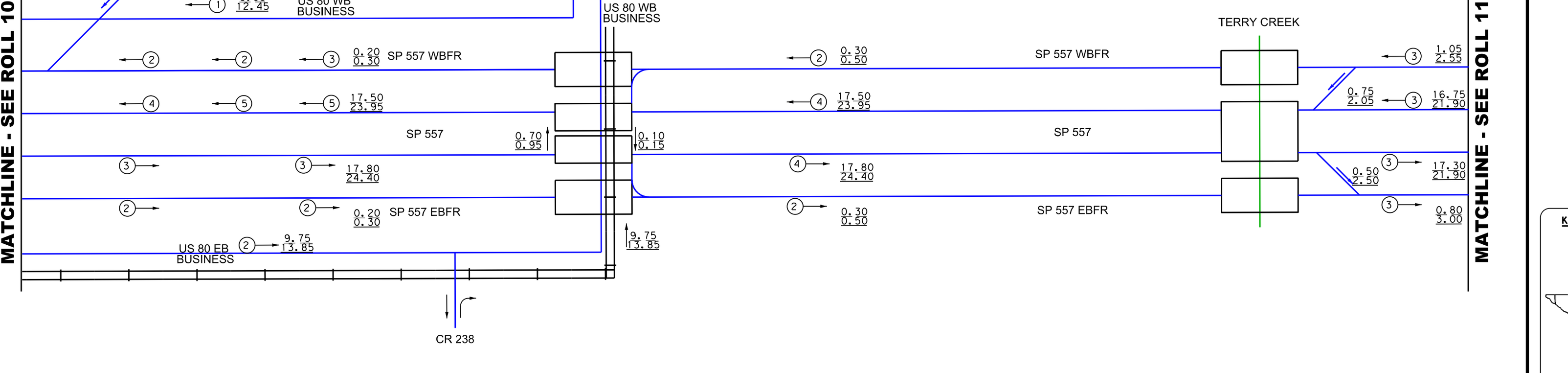
BASELINE	ROADWAY	BEGIN TRANSITION STATION	BEGIN TRANSITION e	END TRANSITION STATION	END TRANSITION e
SP557CL	SP557 WBML	1127+60	2.50%	1137+80	-6.00%
		1149+00	-6.00%	1159+20	2.50%
SP557CL	SP557 EBML	1127+60	-2.50%	1137+80	-6.00%
		1149+00	-6.00%	1159+20	-2.50%

RAMP GORE DETAILS [N.T.S.]





TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
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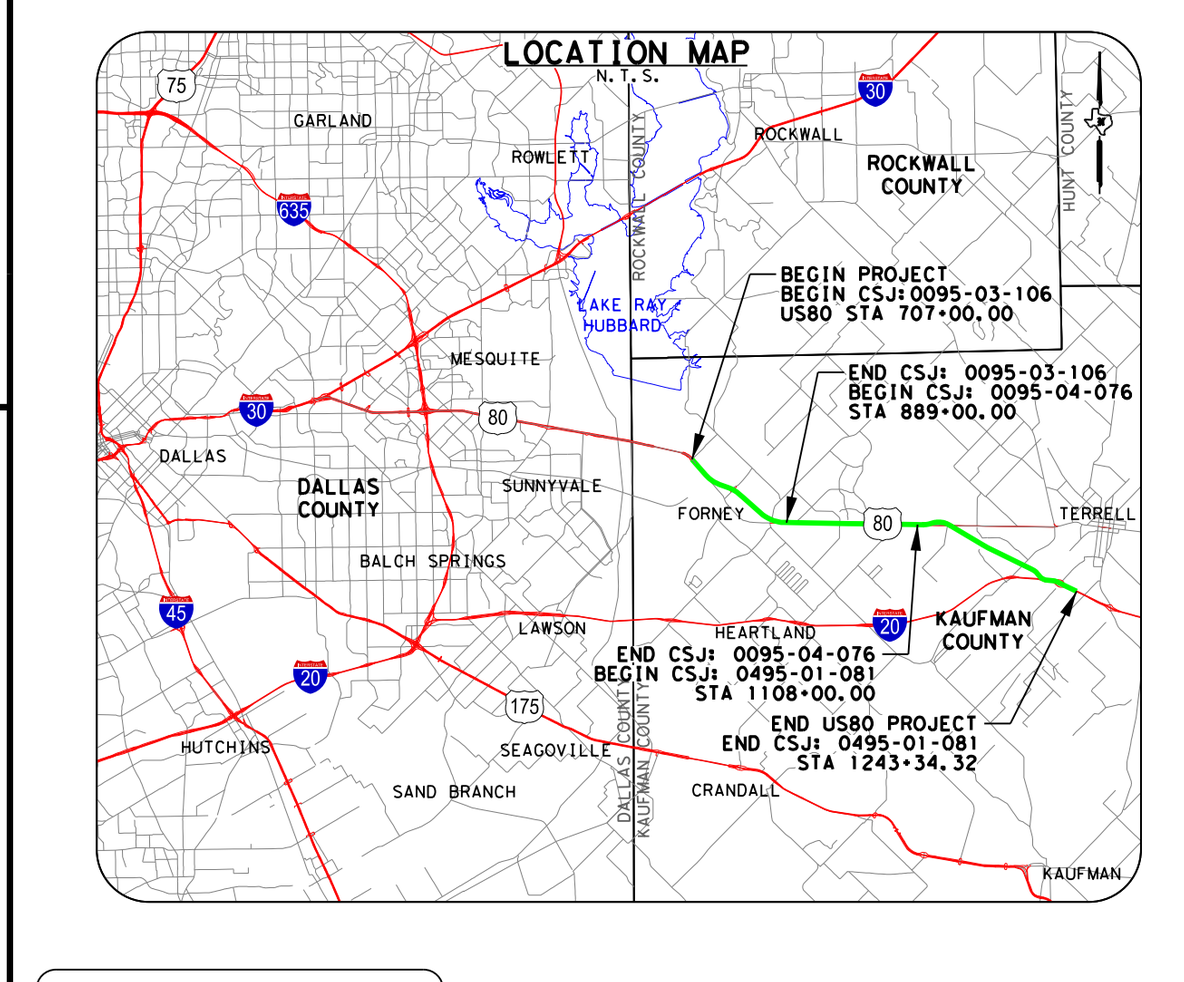

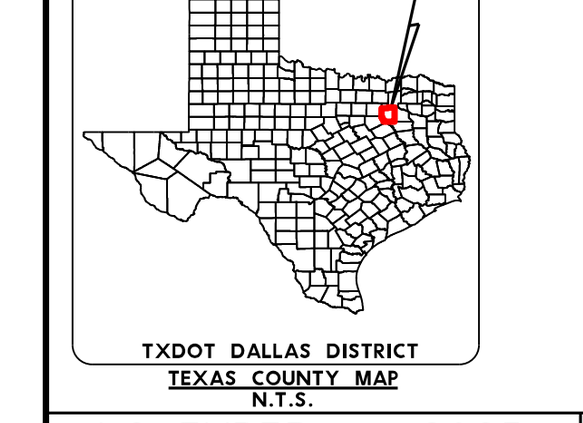

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GARVER
3010 GAYLORD PARKWAY SUITE 190 FRISCO, TX 75034
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DALLAS DISTRICT
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FROM WEST OF FM 460 TO IH 20
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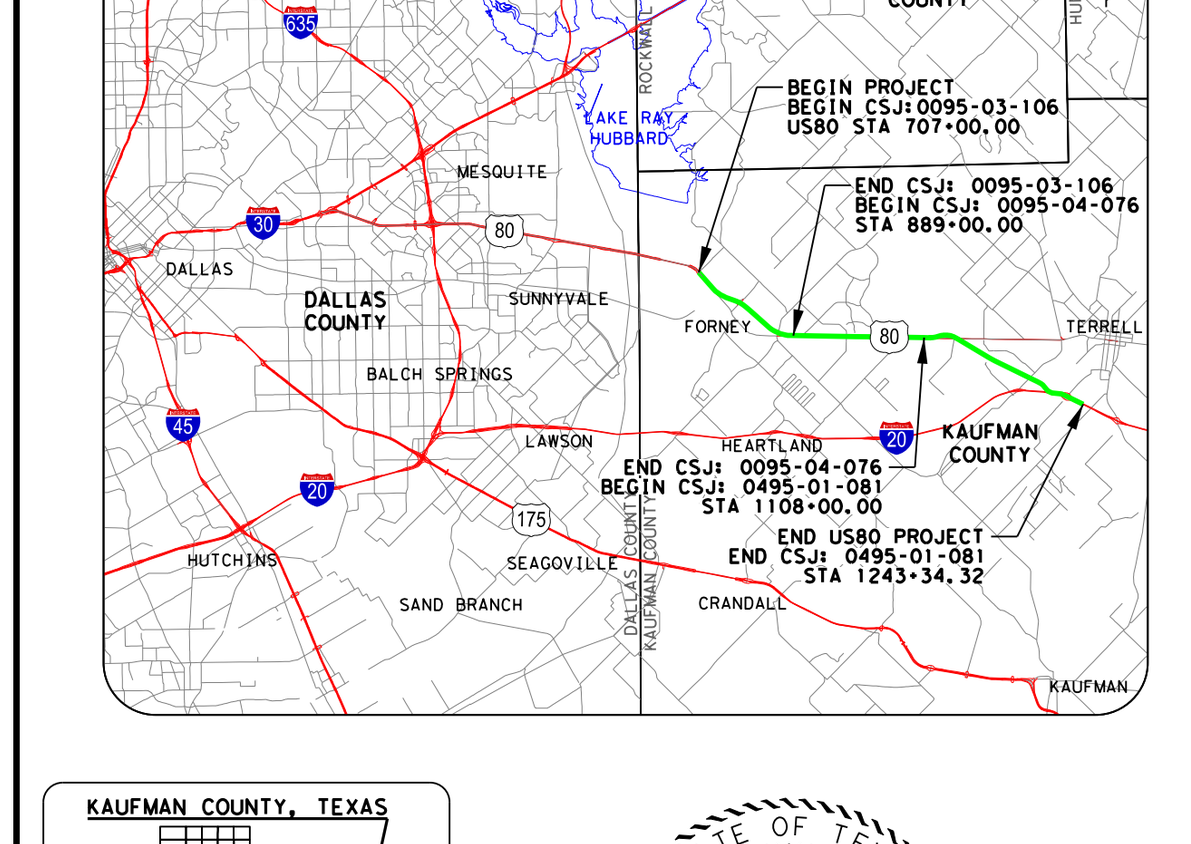

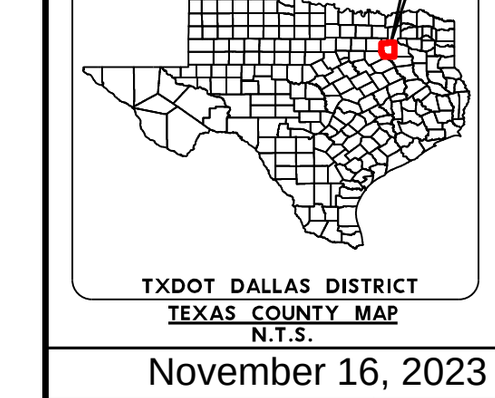

STATE OF TEXAS
PAUL R. HAHN III
107365
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 11/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

EXISTING ROW
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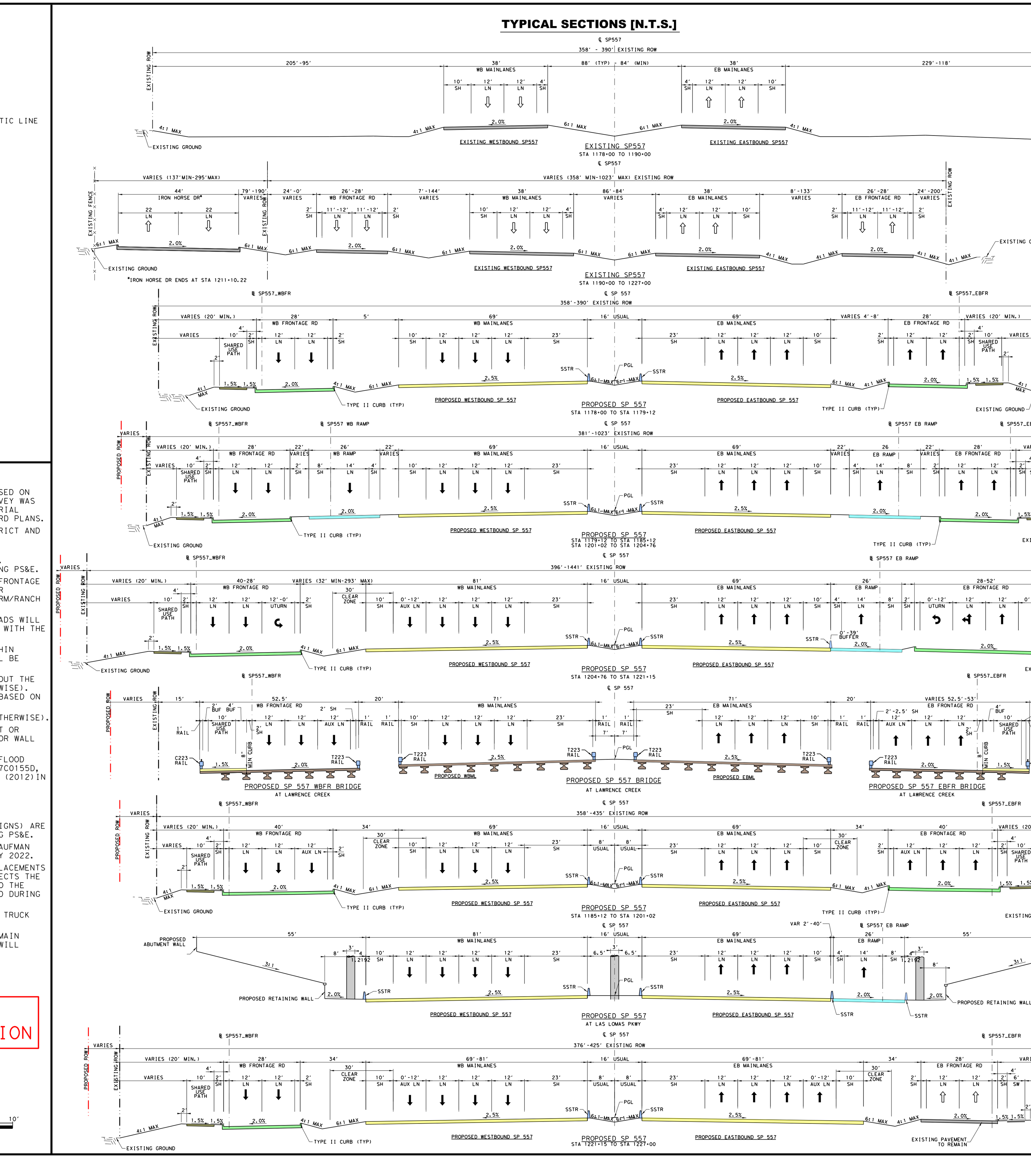


PRELIMINARY,
NOT FOR CONSTRUCTION

PSP557 - PROP SP 557 MAIN LANES (70 MPH)

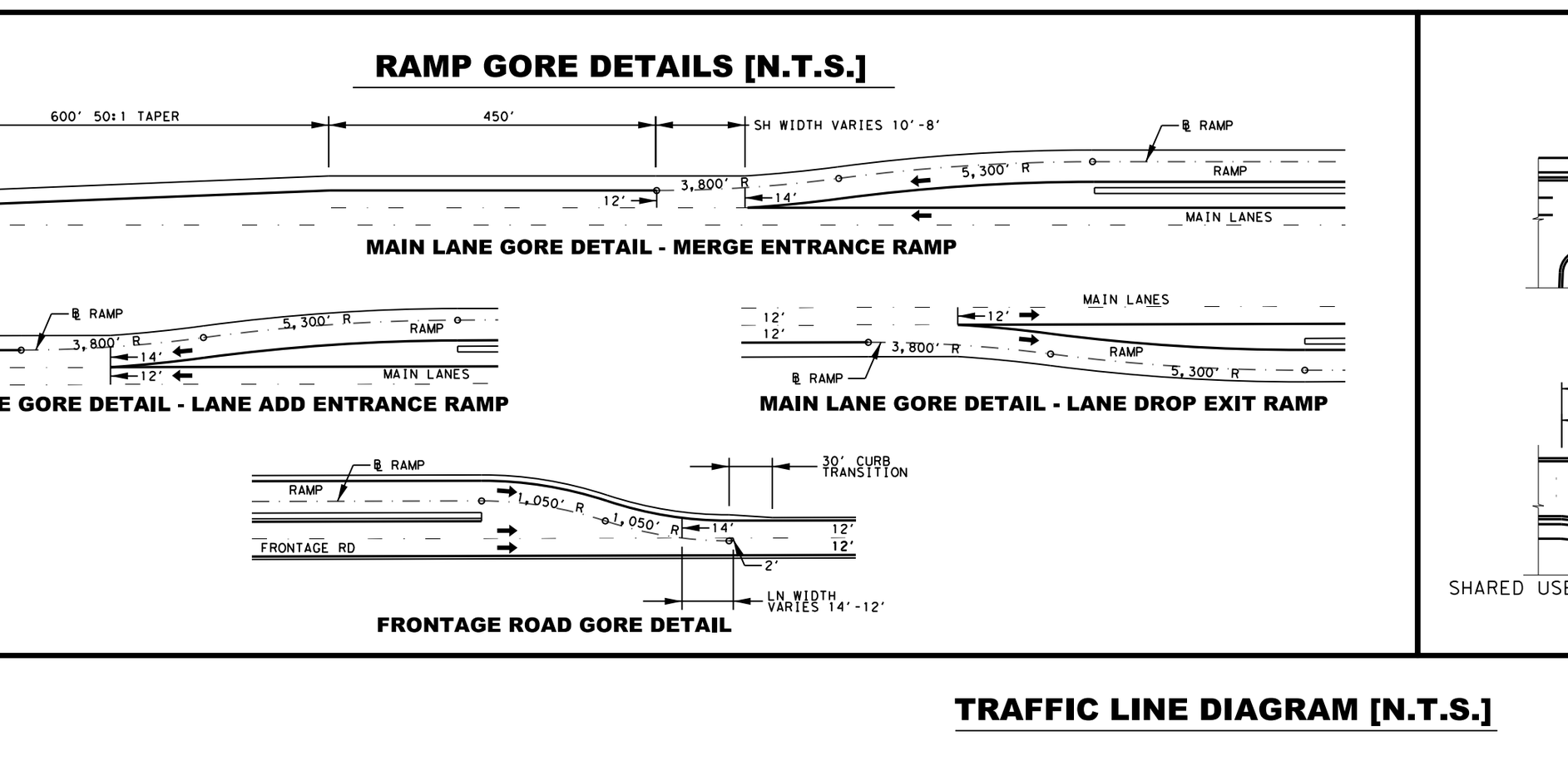
SUPERELEVATION SIGN CONVENTION
(-) ℄ (+)
(+) (-)

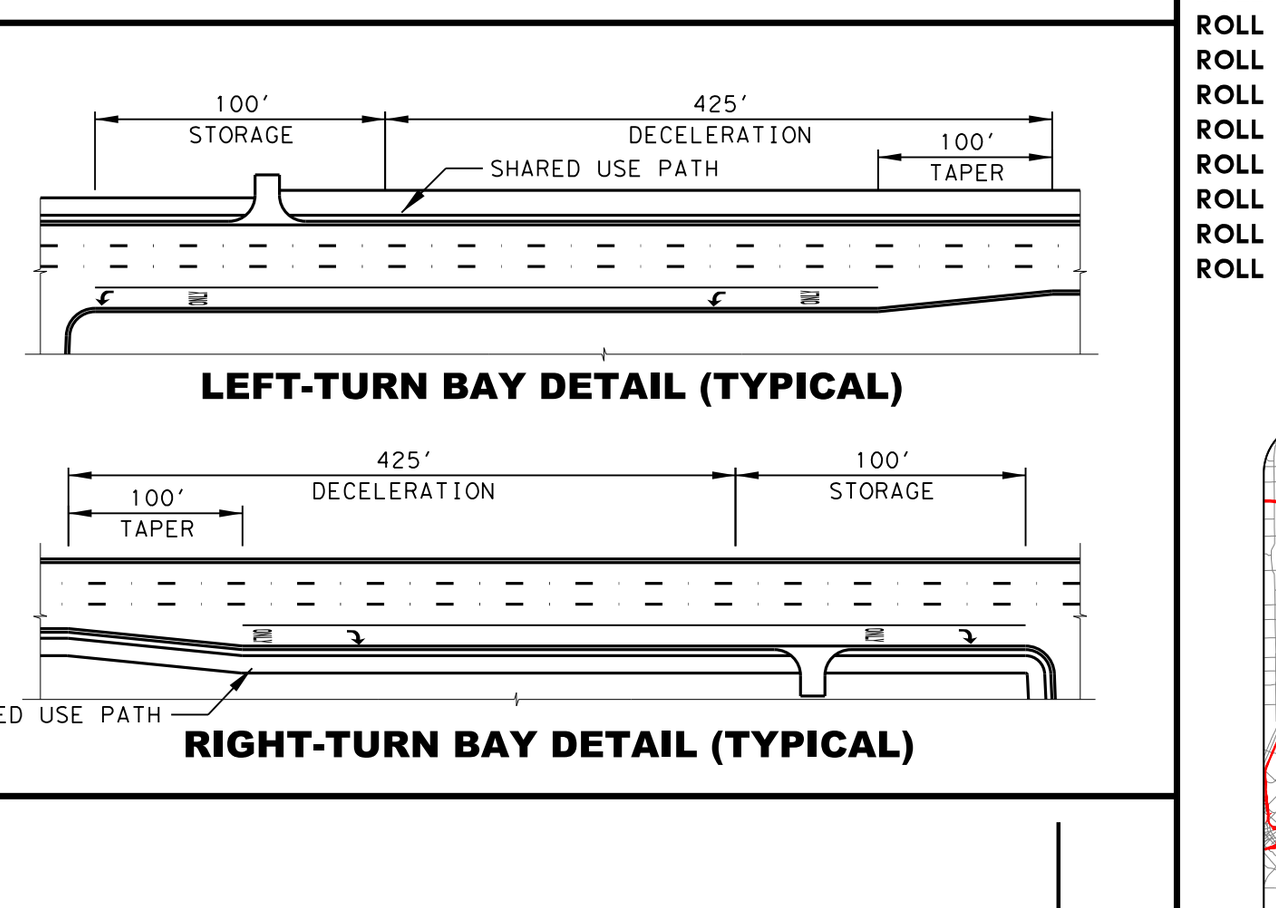
				RETAINING WALLS		
NO.	BEGIN STA.	BEGIN OFFSET	END STA.	END OFFSET	WALL LENGTH
WALL 101	1179+66.45	109' LT	1182+35.98	109' LT	270
WALL 102	1179+67.20	79' LT	1184+22.05	79' LT	455
WALL 103	1178+00.00	109' RT	1184+50.00	109' RT	650
WALL 104	1198+91.47	96.2' RT	1206+01.08	78.9' RT	710
WALL 105	1209+67.57	119' LT	1212+51.70	119' LT	284
WALL 106	1208+00.00	136.5' RT	1214+00.00	136.5' RT	600

HORIZONTAL ALI+A1:K27GNMENT DATA

BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
SP557	SP557_3	1218+40.37	N6,955,761.3283	E2,633,507.3312	3° 57' 19.4058" (LT)	14,100.00	486.89	973.39	1213+53.49	1223+26.87
SP557_WBFR	SP557_WBFR_1	1194+51.31	N6,956,730.5339	E2,632,142.3607	9° 34' 40.32" (LT)	3,770.00	315.84	630.21	1191+35.47	1197+65.68
SP557_WBFR	SP557_WBFR_2	1200+92.58	N6,956,498.0423	E2,632,741.5761	9° 54' 41.02" (RT)	3,770.00	326.9	652.16	1197+65.68	1204+17.84
SP557_WBFR	SP557_WBFR_3	1208+16.70	N6,956,122.9802	E2,633,362.8989	6° 27' 16.19" (RT)	3,770.00	212.57	424.7	1206+04.12	1210+28.82
SP557_WBFR	SP557_WBFR_4	1214+06.31	N6,955,763.1847	E2,633,830.5786	11° 26' 09.46" (LT)	3,770.00	377.49	752.47	1210+28.82	1217+81.30
SP557_EBFR	SP557_EBFR_1	1190+03.25	N6,956,539.2145	E2,631,928.1430	9° 34' 42.49" (RT)	3,770.00	315.86	630.25	1186+87.38	1193+17.64
SP557_EBFR	SP557_EBFR_2	1196+34.72	N6,956,129.3047	E2,632,410.4287	9° 36' 55.60" (LT)	3,770.00	317.09	632.69	1193+17.64	1199+50.32
SP557_EBFR	SP557_EBFR_3	1204+28.09	N6,955,722.9399	E2,633,093.5528	8° 36' 08.23" (LT)	3,770.00	283.54	566.02	1201+44.54	1207+10.56
SP557_EBFR	SP557_EBFR_4	1211+96.20	N6,955,433.0033	E2,633,805.9917	3° 56' 22.48" (RT)	4,000.00	137.57	275.03	1210+58.63	1213+33.66
CDE557	CDE557_1	12+14.80	N6,956,573.9310	E2,631,904.7950	3° 47' 49.8559" (LT)	6,480.00	214.80	429.37	10+00.00	14+29.45
CDE557	CDE557_2	16+28.13	N6,956,380.1578	E2,632,270.0664	2° 50' 17.6622" (RT) (RT)	8,020.00	198.68	397.28	14+29.45	18+26.73
CDE557	CDE557_3	25+61.88	N6,956,095.5929	E2,633,072.3219	2° 41' 09.5929" (RT)	7,600.00	179.58	359.09	23+82.30	27+41.39
CDE557	CDE557_4	31+62.88	N6,955,570.7390	E2,633,573.7170	7° 26' 34.7842" (LT)	6,480.00	421.48	841.78	27+41.39	35+83.18
RWX_55780	RWX_55780_1	11+13.83	N6,956,917.6590	E2,631,785.2679	2° 00' 45.6625" (RT)	6,480.00	113.83	227.63	10+00.00	12+27.63
RWX_55780	RWX_55780_2	13+41.46	N6,956,794.3495	E2,631,976.6326	2° 00' 45.6625" (LT)	6,480.00	113.83	227.63	12+27.63	14+55.26
RWX_55780	RWX_55780_3	17+01.73	N6,956,609.9515	E2,632,286.1622	3° 33' 41.6448" (RT) (RT)	6,480.00	201.47	402.80	15+00.26	19+03.06
RWX_55780	RWX_55780_4	21+52.39	N6,956,355.6206	E2,632,658.3640	3° 33' 40.8480" (LT) (LT)	8,020.00	249.33	498.50	19+03.06	24+01.56
RWE_LAS80	RWE_LAS80_1	11+26.04	N6,957,902.3742	E2,630,061.9906	3° 47' 56.29" (LT) (LT)	3,800.40	126.04	251.98	10+00.00	12+51.98
RWE_LAS80	RWE_LAS80_2	14+27.77	N6,957,765.4170	E2,630,330.9567	3° 47' 49.78" (RT) (RT)	5,303.08	175.79	351.45	12+51.98	16+03.43
RWE_LAS80	RWE_LAS80_5	19+18.37	N6,957,514.2689	E2,630,752.5391	7° 04' 38.07" (LT) (LT)	1,050.00	64.93	129.70	18+53.43	19+83.13
RWE_LAS80	RWE_LAS80_6	20+48.06	N6,957,462.0574	E2,630,871.4433	7° 04' 38.07" (RT) (RT)	1,050.00	64.93	129.61	19+83.13	21+12.83
REX_80LAS	REX_80LAS_1	11+51.11	N6,957,898.0160	E2,629,760.5909	3° 36' 22.73" (RT) (RT)	4,800.00	151.11	302.12	10+00.00	13+02.12
REX_80LAS	REX_80LAS_2	14+68.97	N6,957,718.4230	E2,629,885.2893	3° 36' 22.73" (LT) (LT)	5,300.00	166.85	333.59	13+02.12	16+35.71
REX_80LAS	REX_80LAS_5	19+53.88	N6,957,470.1883	E2,630,439.6627	7° 30' 25.73" (RT) (RT)	1,050.00	68.89	137.58	18+84.99	20+22.57
REX_80LAS	REX_80LAS_6	20+91.45	N6957,384.8167	E2,630,547.7970	7° 30' 25.73" (LT) (LT)	1,050.00	68.89	137.48	20+22.57	21+60.14

RAMP GORE DETAILS [N.T.S.]

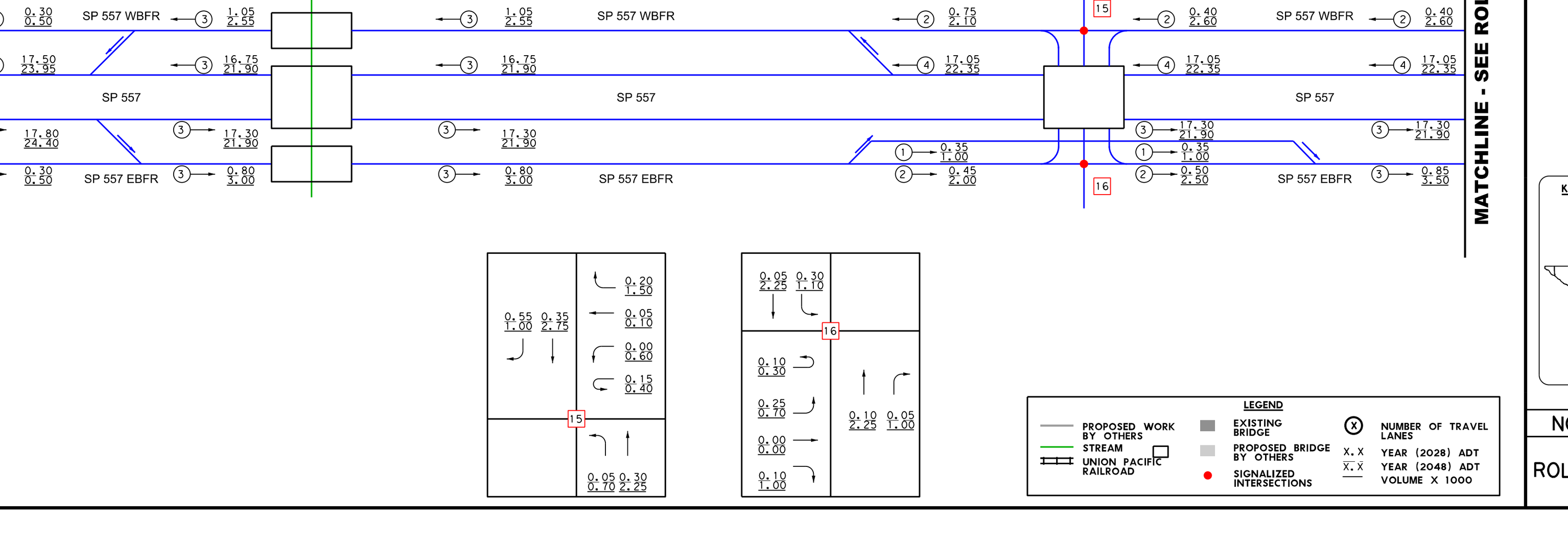




LEFT-TURN BAY DETAIL (TYPICAL)

RIGHT-TURN BAY DETAIL (TYPICAL)

TRAFFIC LINE DIAGRAM [N.T.S.]



Texas Department of Transportation
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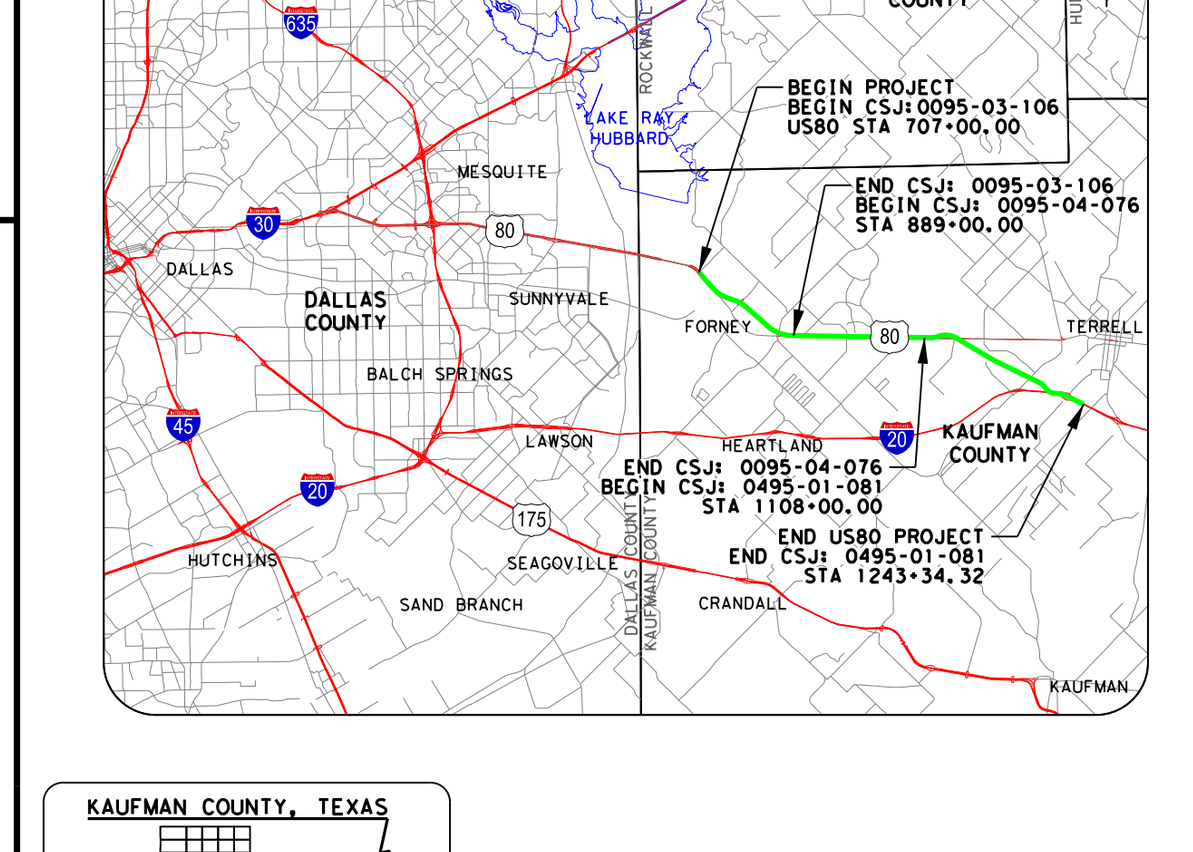
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023
ROADWAY / DESIGN SPEED / FUNCTIONAL CLASSIFICATION
MAIN LANES: 60 MPH URBAN FREEWAY
DIRECT CONNECTORS: 40 MPH
RAMPS: 40 MPH
FRONTAGE ROADS/BYPASSES/CONNECTORS: 40 MPH
LOCAL STREETS: 30 MPH LOCAL
LOCAL STREETS CONNECTORS: 20 MPH
TURNAROUNDS: 15 MPH
INDEX OF SHEETS
ROLL 1 OF 31 – ROLL 31 OF 31 (as above)



NOVEMBER 1, 2023

ROLL NUMBER 11/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO FM 20

CSJs 0095-03-126, 0095-04-074 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	40 MPH	
DIRECT CONNECTORS BYPASSES/CONNECTORS:	60 MPH	
LOCAL STREETS:	30 MPH	LOCAL
TURNAROUNDS/DIRECT CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS

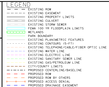
AGUIRRE & FIELDS

TEXAS REGISTERED ENGINEERING FIRM F-2578

November 15, 2023

ROLL NUMBER 12/31

LEGEND

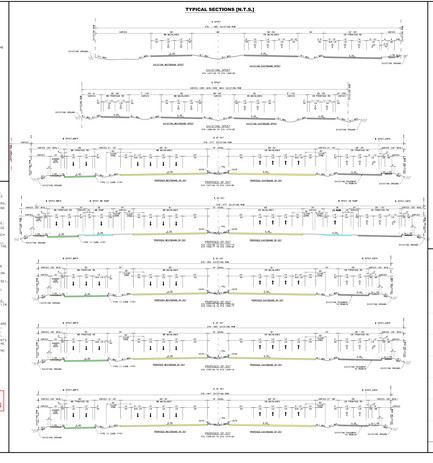


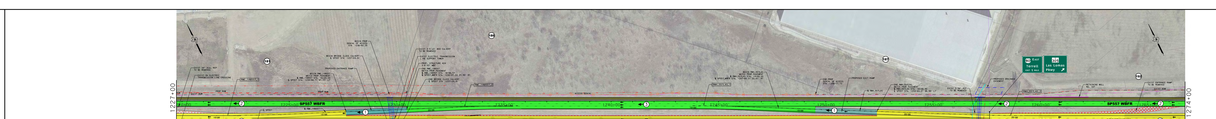
NOTES

1. EXISTING FEATURES AND EXISTING ROW BASED ON SURVEY BY AGUIRRE & FIELDS, INC. DATED JULY 2021 AND TOPO DATED FEBRUARY 1st, 2022 AND RECORD PLANS.
2. ALL PROPOSED ROW, EASEMENTS, AND PROPERTY ARE REVISED BY TRW ON 07/31/2023.
3. SHARED USE PATH AND RAMP LAYOUT SHOWN IS PRELIMINARY AND SUBJECT TO CHANGE. ADDITIONAL SHARED USE PATHS MAY BE CONSTRUCTED BY OTHERS.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY AND WILL BE FINALIZED DURING DETAIL DESIGN AND SITE PLAN REVIEW.
5. ALL EXISTING DRIVEWAYS AND CROSS STREETS WITHIN THE PROJECT LIMITS WILL BE RECONSTRUCTED.
6. ACCESS TO ALL PROPERTIES AFFECTED BY PROJECT CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES.
7. EXISTING PAVEMENT EXCEEDS LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED AND DISPOSED OF.
8. RECONSTRUCTION AND/OR ALTERATION TO DRAINAGE FACILITIES WILL BE DESIGNED TO MAINTAIN EXISTING SURVEILLANCE METHODS. METHODS CALCULATED BASED ON 10 YEAR FREQUENCY FOR MAIN LANES AND 4 YEAR FOR RAMPS.
9. ALL CURVES ARE TYPE II UNLESS NOTED OTHERWISE.
10. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR BACK OF CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE PERPENDICULAR.
11. TYPICAL SECTIONS SHOW CONSTRUCTION LIMITS FROM SLOPE, DRAINAGE, RETAINING WALLS, BARRIERS, ANTI-GLARE, NOISE WALLS, ETC. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED FOR THESE ITEMS.
12. PROFILE GRADE LEFT/RIGHT LOCATIONS, STATIONS AND ELEVATIONS OBTAINED FROM RECORD INFORMATION.
13. CONFLICTING ROADWAY SIGNAGE, SIGNALS, SIGNALS AND ILLUMINATION WILL BE REMOVED OR RELOCATED.
14. UNDERGROUND UTILITIES DETECTED FROM SURFACE APPURTENANCES AND MARKINGS BY OTHERS.
15. ALL PROPOSED ROW, EASEMENTS, AND PROPERTY ARE REVISED BY TRW ON 07/31/2023.
16. LIGHTING DESIGNED TO ACCOMMODATE 80-62 TRUCK TURNING MOVEMENTS.
17. RAMP CROSS SLOPE TRANSITIONS OCCUR BETWEEN MAIN LANES (2.0%) AND FRONTAGE ROADS (2%) WILL VARY FROM 2.0% TO 6.0%.

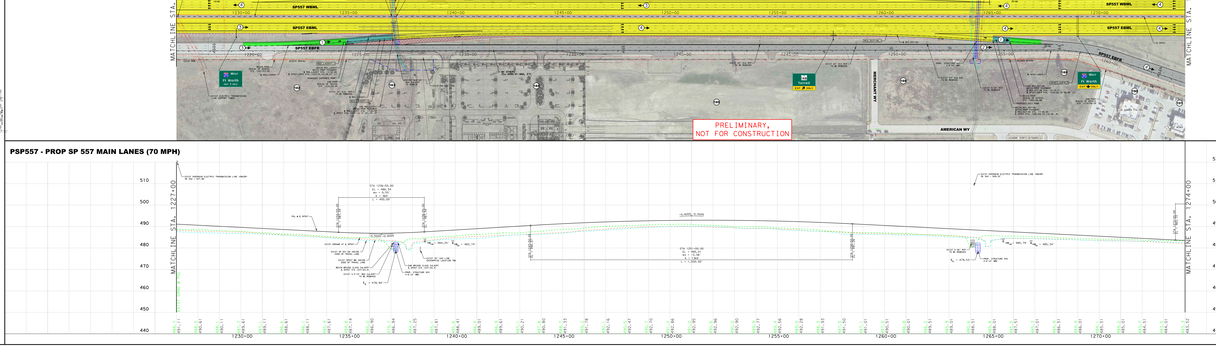
PRELIMINARY, NOT FOR CONSTRUCTION

TYPICAL SECTIONS [M.T.S.]





PSPS57 - PROP SP 557 MAIN LANES (70 MPH)



RELATIVE ROLLS

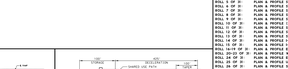
ML	BEGIN STA.	BEGIN REL.	END STA.	END REL.	REL. LENGTH
MAIN 1ST	1566+00.00	100 LT	1728+00.00	98 LT	162

HORIZONTAL ALIGNMENT DATA

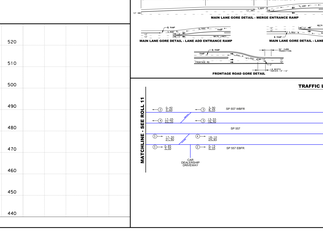
BASELINE	CURVE	P.I. STATION	P.I. STATION	P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH P.I. STATION	P.T. STATION
MAIN_1ST_WB	SPOST_EBFR_R_1	1568+90.16	16.95% 565.6797	1574+55.03	090° 00' 00"	4,500.00	564.78	1570+55.16	1574+55.03
MAIN_1ST_WB	MAIN_1ST_WB_1	1574+55.03	16.95% 565.6797	1576+55.03	000° 00' 00"	4,500.00	0.00	1574+55.03	1576+55.03
MAIN_1ST_WB	SPOST_EBFR_R_2	1576+55.03	16.95% 565.6797	1582+19.19	090° 00' 00"	4,500.00	564.16	1580+19.19	1584+19.19
MAIN_1ST_WB	SPOST_EBFR_R_3	1584+19.19	16.95% 565.6797	1586+19.19	000° 00' 00"	4,500.00	0.00	1584+19.19	1586+19.19
MAIN_1ST_WB	SPOST_EBFR_R_4	1586+19.19	16.95% 565.7661	1592+83.44	090° 00' 00"	4,500.00	564.25	1590+83.44	1594+83.44
MAIN_1ST_WB	MAIN_1ST_WB_2	1671+71.16	16.95% 565.7661	1674+71.16	000° 00' 00"	4,500.00	0.00	1673+71.16	1675+71.16
MAIN_1ST_WB	MAIN_1ST_WB_3	1677+71.16	16.95% 565.7661	1680+71.16	000° 00' 00"	4,500.00	0.00	1679+71.16	1681+71.16
MAIN_1ST_WB	MAIN_1ST_WB_4	1681+71.16	16.95% 565.7661	1683+71.16	000° 00' 00"	4,500.00	0.00	1682+71.16	1684+71.16
MAIN_1ST_WB	MAIN_1ST_WB_5	1684+71.16	16.95% 565.7661	1686+71.16	000° 00' 00"	4,500.00	0.00	1685+71.16	1687+71.16
MAIN_1ST_WB	MAIN_1ST_WB_6	1687+71.16	16.95% 565.7661	1689+71.16	000° 00' 00"	4,500.00	0.00	1688+71.16	1690+71.16
MAIN_1ST_WB	MAIN_1ST_WB_7	1690+71.16	16.95% 565.7661	1692+71.16	000° 00' 00"	4,500.00	0.00	1691+71.16	1693+71.16
MAIN_1ST_WB	MAIN_1ST_WB_8	1693+71.16	16.95% 565.7661	1695+71.16	000° 00' 00"	4,500.00	0.00	1694+71.16	1696+71.16
MAIN_1ST_WB	MAIN_1ST_WB_9	1696+71.16	16.95% 565.7661	1698+71.16	000° 00' 00"	4,500.00	0.00	1697+71.16	1699+71.16
MAIN_1ST_WB	MAIN_1ST_WB_10	1699+71.16	16.95% 565.7661	1701+71.16	000° 00' 00"	4,500.00	0.00	1700+71.16	1702+71.16
MAIN_1ST_WB	MAIN_1ST_WB_11	1702+71.16	16.95% 565.7661	1704+71.16	000° 00' 00"	4,500.00	0.00	1703+71.16	1705+71.16
MAIN_1ST_WB	MAIN_1ST_WB_12	1705+71.16	16.95% 565.7661	1707+71.16	000° 00' 00"	4,500.00	0.00	1706+71.16	1708+71.16
MAIN_1ST_WB	MAIN_1ST_WB_13	1708+71.16	16.95% 565.7661	1710+71.16	000° 00' 00"	4,500.00	0.00	1709+71.16	1711+71.16
MAIN_1ST_WB	MAIN_1ST_WB_14	1711+71.16	16.95% 565.7661	1713+71.16	000° 00' 00"	4,500.00	0.00	1712+71.16	1714+71.16
MAIN_1ST_WB	MAIN_1ST_WB_15	1714+71.16	16.95% 565.7661	1716+71.16	000° 00' 00"	4,500.00	0.00	1715+71.16	1717+71.16
MAIN_1ST_WB	MAIN_1ST_WB_16	1717+71.16	16.95% 565.7661	1719+71.16	000° 00' 00"	4,500.00	0.00	1718+71.16	1720+71.16
MAIN_1ST_WB	MAIN_1ST_WB_17	1720+71.16	16.95% 565.7661	1722+71.16	000° 00' 00"	4,500.00	0.00	1721+71.16	1723+71.16
MAIN_1ST_WB	MAIN_1ST_WB_18	1723+71.16	16.95% 565.7661	1725+71.16	000° 00' 00"	4,500.00	0.00	1724+71.16	1726+71.16
MAIN_1ST_WB	MAIN_1ST_WB_19	1726+71.16	16.95% 565.7661	1728+71.16	000° 00' 00"	4,500.00	0.00	1727+71.16	1729+71.16

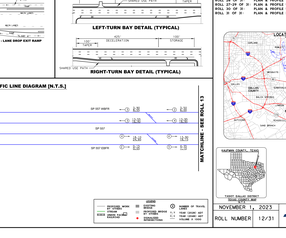
RAMP GORE DETAILS [M.T.S.]

LEFT-TURN BAY DETAIL (TYPICAL)



TRAFFIC LINE DIAGRAM [M.T.S.]





EXISTING ROW	PROPOSED ROW	NUMBER OF TRAFFIC LANES	
EXISTING EASEMENT	PROPOSED EASEMENT		
EXISTING PROPERTY LINE	PROPOSED PROPERTY LINE		
EXISTING CENTERLINE	PROPOSED CENTERLINE		

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO FM 20

CSJs 0095-03-126, 0095-04-074 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	40 MPH	
DIRECT CONNECTORS BYPASSES/CONNECTORS:	60 MPH	
LOCAL STREETS:	30 MPH	LOCAL
TURNAROUNDS/DIRECT CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS

ROLL 1 OF 3: PLAN & PROFILE STA. 85+00 TO STA. 760+00
ROLL 2 OF 3: PLAN & PROFILE STA. 760+00 TO STA. 854+00
ROLL 3 OF 3: PLAN & PROFILE STA. 854+00 TO STA. 947+00
ROLL 4 OF 3: PLAN & PROFILE STA. 947+00 TO STA. 1040+00
ROLL 5 OF 3: PLAN & PROFILE STA. 1040+00 TO STA. 1133+00
ROLL 6 OF 3: PLAN & PROFILE STA. 1133+00 TO STA. 1226+00
ROLL 7 OF 3: PLAN & PROFILE STA. 1226+00 TO STA. 1320+00
ROLL 8 OF 3: PLAN & PROFILE STA. 1320+00 TO STA. 1540+00
ROLL 9 OF 3: PLAN & PROFILE STA. 1540+00 TO STA. 1587+00
ROLL 10 OF 3: PLAN & PROFILE SPOT STA. 1587+00 TO STA. 1728+00
ROLL 11 OF 3: PLAN & PROFILE STA. 1587+00 TO STA. 1674+00
ROLL 12 OF 3: PLAN & PROFILE STA. 1674+00 TO STA. 1728+00
ROLL 13 OF 3: PLAN & PROFILE I-20 INTERCHANGE (1 OF 2)
ROLL 14 OF 3: PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)
ROLL 15 OF 3: PLAN & PROFILE I-20 INTERCHANGE (3 OF 3)
ROLL 16 OF 3: PLAN & PROFILE NB FRONTAGE ROADS
ROLL 17 OF 3: PLAN & PROFILE NB FRONTAGE ROADS
ROLL 18 OF 3: PLAN & PROFILE SB AND NB USRS BUSINESS
ROLL 19 OF 3: PLAN & PROFILE SB FRONTAGE ROADS
ROLL 20 OF 3: PLAN & PROFILE SPOT CROSS STREETS
ROLL 21 OF 3: PLAN & PROFILE CROSS/SPOT RAMPS
ROLL 22 OF 3: PLAN & PROFILE DIRECT CONNECTORS/CONNECTORS
ROLL 23 OF 3: PLAN & PROFILE I-20 FRONTAGE ROADS

AGUIRRE & FIELDS

TEXAS REGISTERED ENGINEERING FIRM F-2578

NOVEMBER 1, 2023

ROLL NUMBER 12/31

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

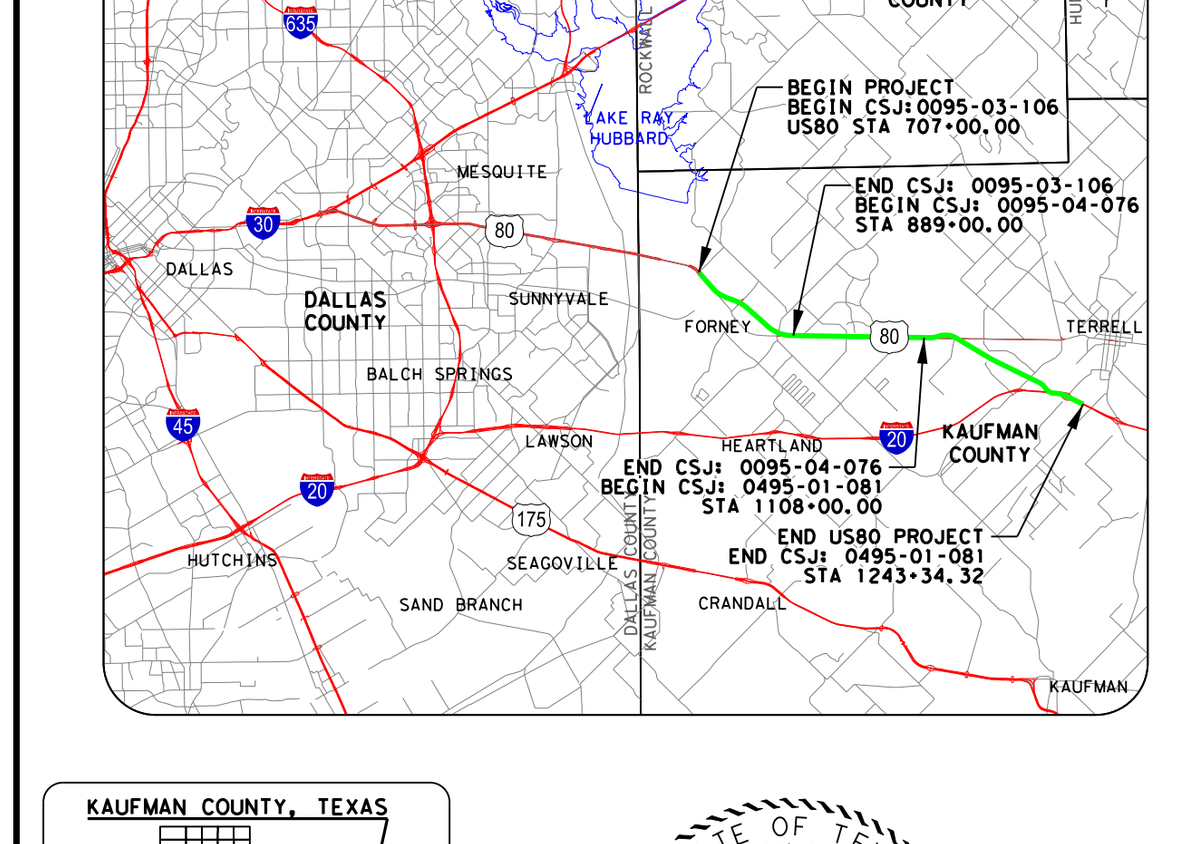
US 80
100% DESIGN SCHEMATIC

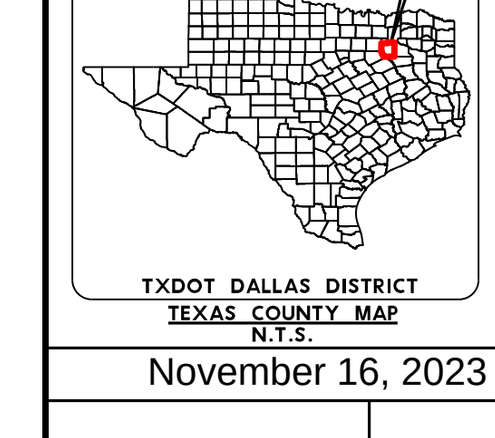
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
PAUL R. HAHN III
107365
LICENSED
PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 13/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

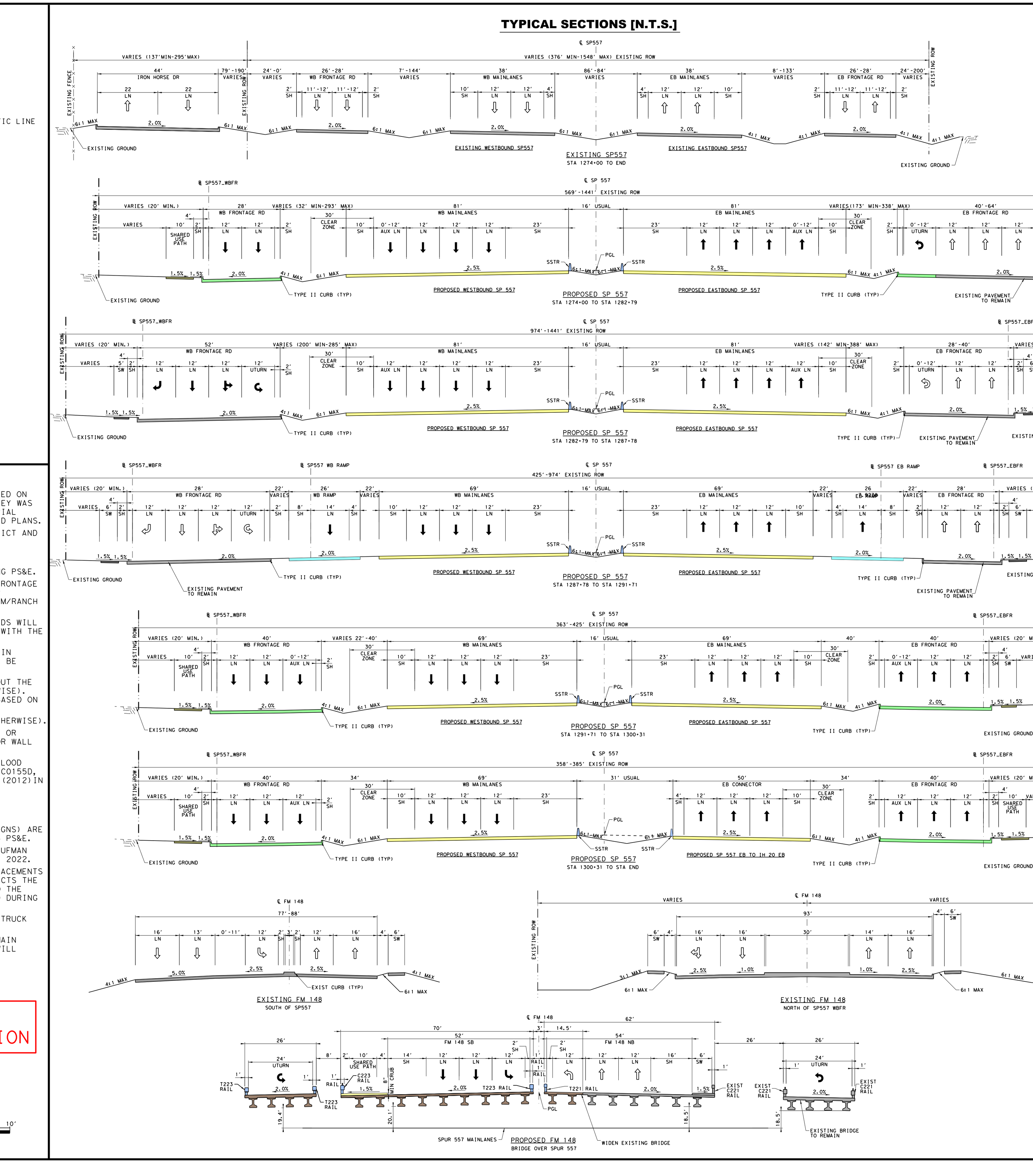
NOTES:

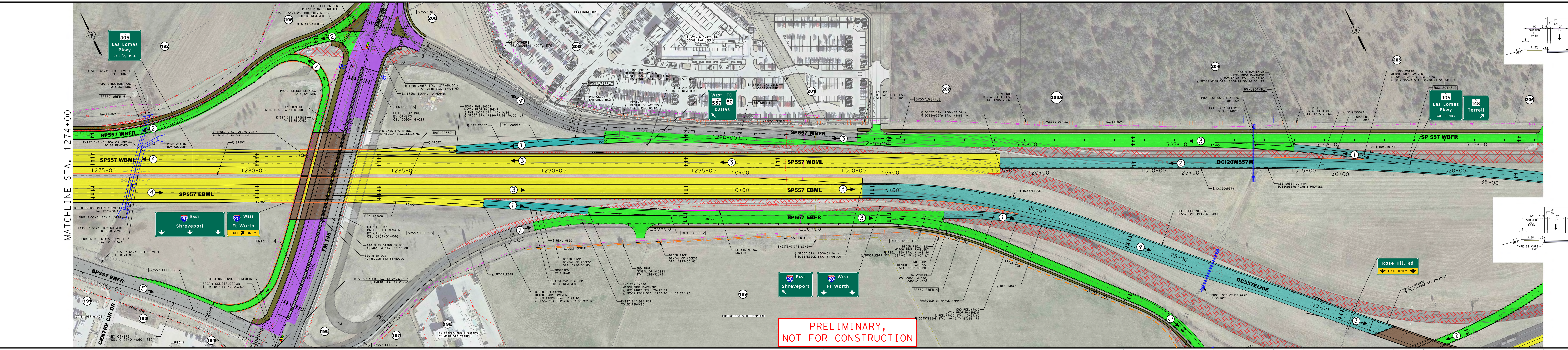
1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

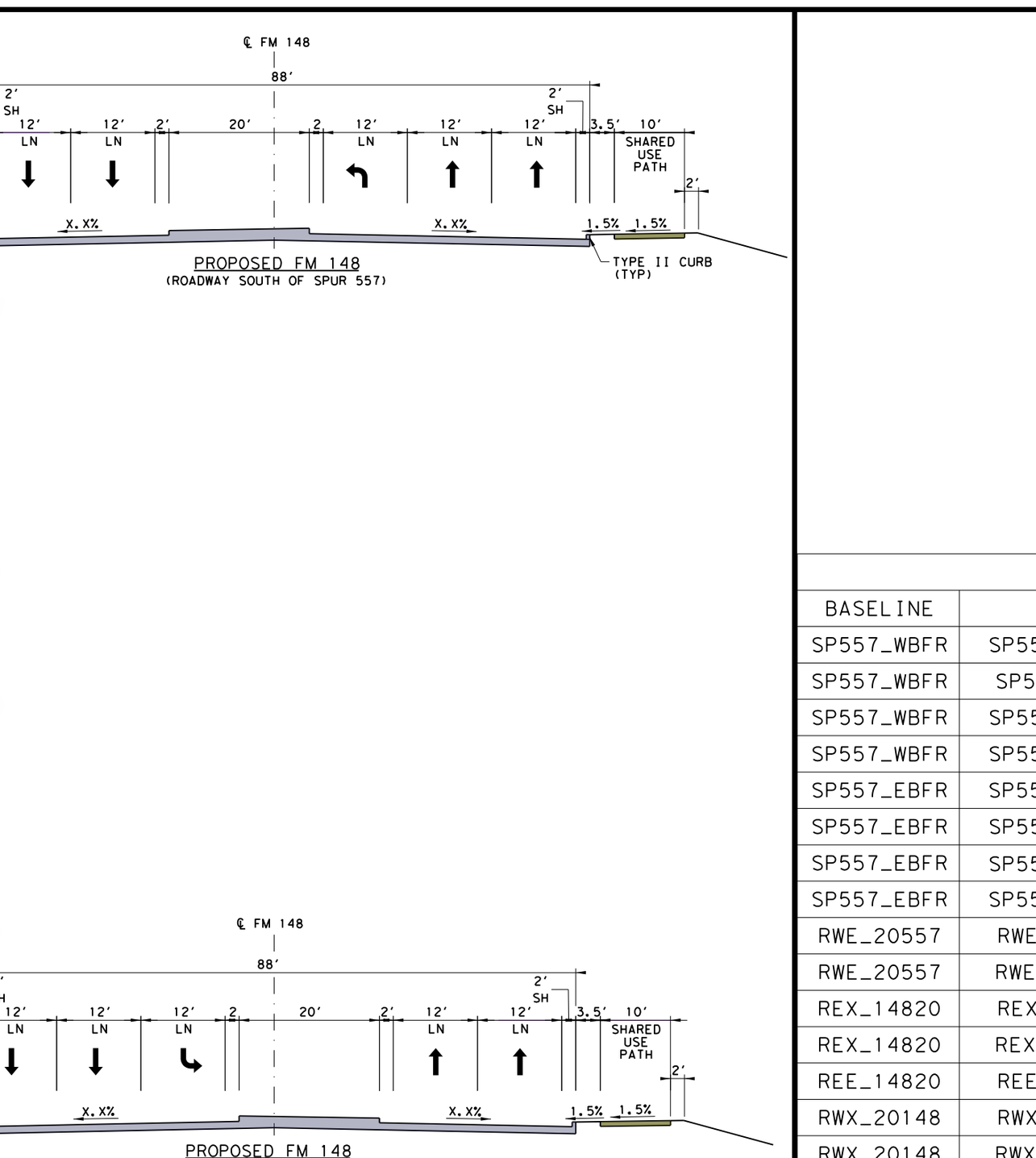
PRELIMINARY,
NOT FOR CONSTRUCTION

GRAPHIC SCALE IN FEET
HORIZONTAL 1"=100'
VERTICAL 1"=10'

TYPICAL SECTIONS [N.T.S.]







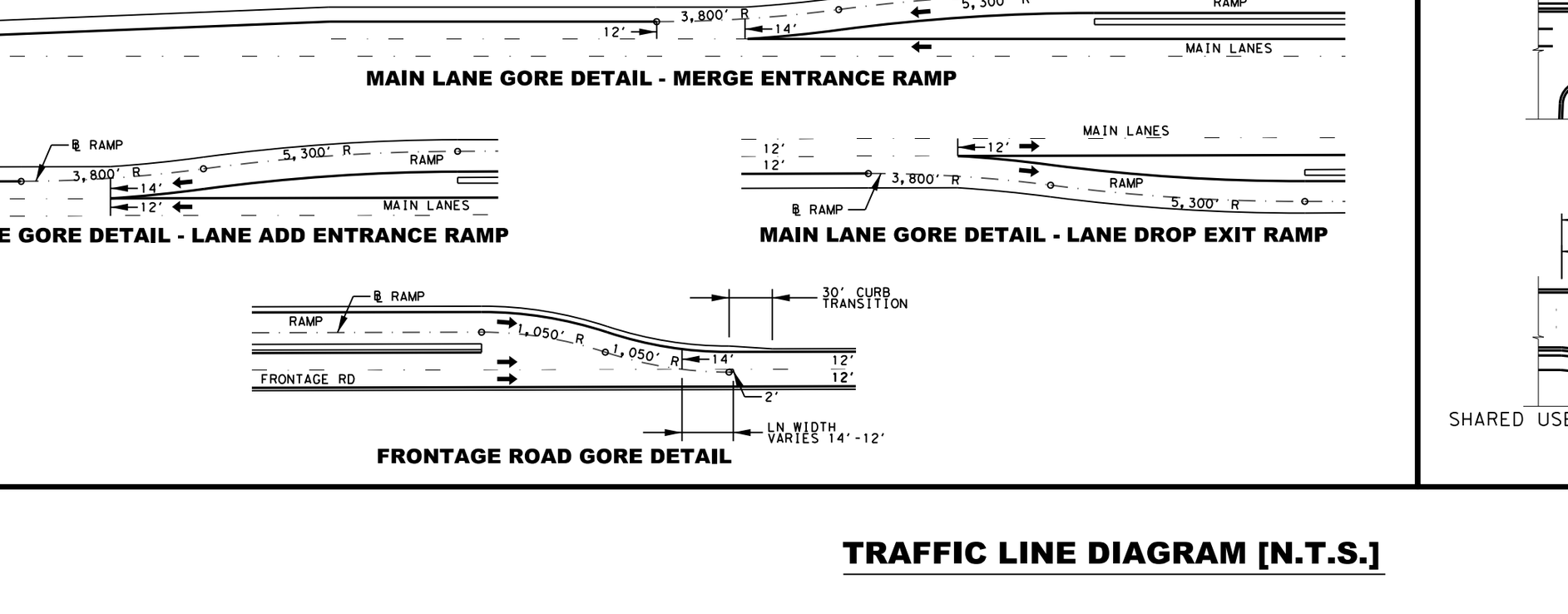
HORIZONTAL ALIGNMENT DATA										
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
SP557_WBFR	SP557_WBFR_5	1270+35.31	N6,953,282.50	E2,638,886.2709	41° 21' 28.67" (LT)	794.00	299.69	573.14	1267+35.61	1273+08.75
SP557_WBFR	SP557_WBFR_6	1276+98.55	N6,953,463.5384	E2,639,551.5795	70° 51' 00.73" (RT)	548.00	389.80	677.64	1273+08.75	1279+86.39
SP557_WBFR	SP557_WBFR_7	1284+76.88	N6,952,736.9467	E2,640,048.5641	27° 07' 32.26" (LT)	432.00	104.22	204.52	1283+72.67	1285+77.19
SP557_WBFR	SP557_WBFR_8	1295+62.70	N6,952,216.9359	E2,641,006.2064	2° 24' 15.90" (LT)	5,714.00	119.91	239.79	1294+42.78	1296+82.57
SP557_EBFR	SP557_EBFR_6	1267+87.01	N6,952,735.3134	E2,638,660.9982	6° 09' 42.35" (RT)	2,500.00	134.56	268.86	1266+52.45	1269+21.31
SP557_EBFR	SP557_EBFR_7	1273+00.85	N6,952,337.1989	E2,638,986.2760	69° 18' 57.23" (LT)	304.00	210.17	367.78	1270+90.68	1274+58.46
SP557_EBFR	SP557_EBFR_8	1279+59.66	N6,952,563.6991	E2,639,660.6194	44° 41' 04.63" (RT)	900.00	369.89	701.90	1275+89.76	1282+91.67
SP557_EBFR	SP557_EBFR_9	1294+34.06	N6,951,897.9512	E2,641,018.4805	22° 08' 02.73" (RT)	1,000.00	195.60	386.31	1292+38.46	1296+24.78
RWE_20557	RWE_20557_1	13+36.04	N6,952,892.8929	E2,639,521.3945	4° 47' 54.8609" (LT)	8,020.00	336.04	671.68	10+00.00	16+71.68
RWE_20557	RWE_20557_2	20+77.39	N6,952,623.0024	E2,640,212.2992	7° 09' 54.6662" (RT)	6,480.00	405.71	810.36	16+71.68	24+82.05
REX_14820	REX_14820_1	15+20.30	N6,952,736.5893	E2,639,490.3433	4° 13' 35.8468" (RT)	14,100.00	520.30	1,040.14	10+00.00	20+40.14
REX_14820	REX_14820_2	22+80.25	N6,952,352.2232	E2,640,146.4636	4° 14' 38.9601" (LT)	6,480.00	240.11	480.00	20+40.14	25+20.14
REE_14820	REE_14820_1	14+51.81	N6,951,778.5198	E2,641,316.5905	19° 21' 52.3680" (RT)	1,496.00	255.24	505.61	11+96.57	17+02.18
RWX_20148	RWX_20148_1	13+06.72	N6,951,591.8135	E2,642,235.8170	6° 41' 40.8631" (RT)	5,224.00	306.71	612.73	10+00.00	16+12.73
RWX_20148	RWX_20148_2	18+00.26	N6,951,312.7576	E2,642,643.7465	3° 17' 31.1448" (LT)	6,526.00	187.53	374.96	16+12.73	19+87.69

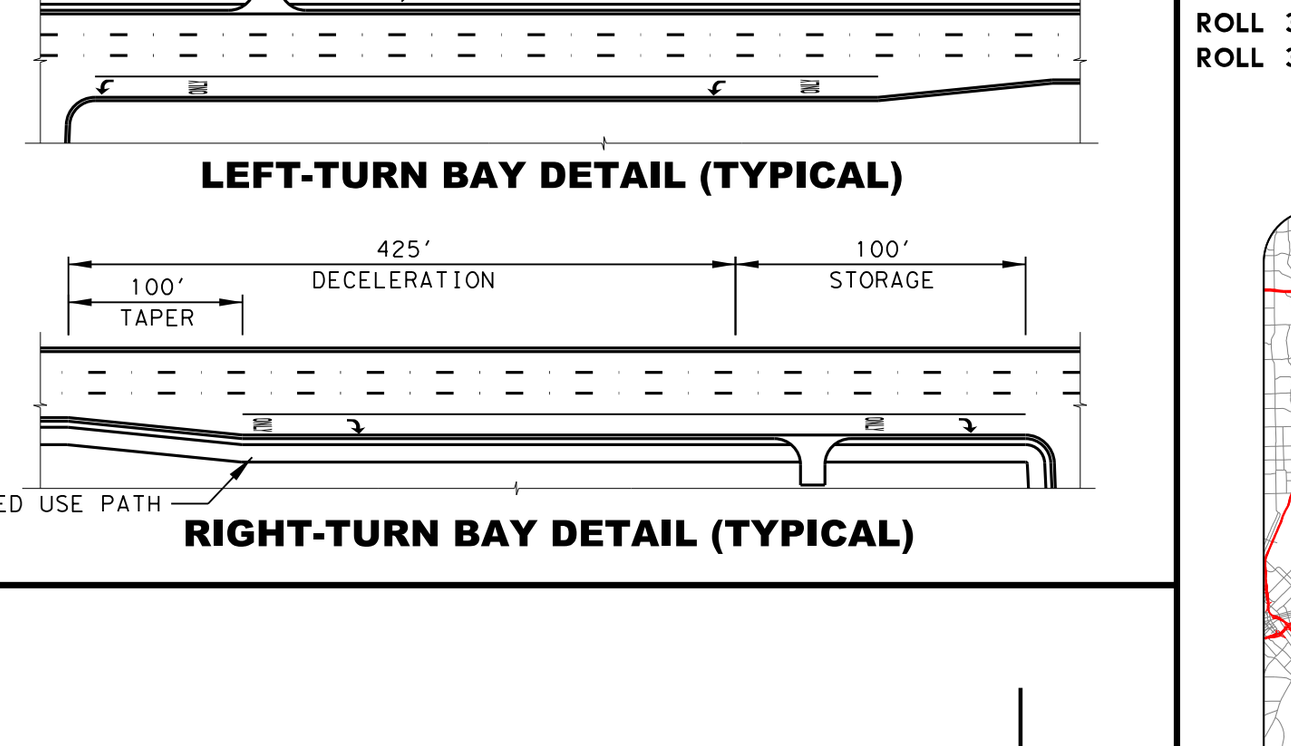
RETAINING WALLS						
NO.	BEGIN STA.	BEGIN OFFSET	END STA.	END OFFSET	WALL LENGTH	
WALL 108	1294+00.00	113.2' RT	1297+00.00	114.9' RT	300	

SUPERELEVATION SIGN CONVENTION
(-) | (+)
(+) | (-)

PSP557 - PROP SP 557 MAIN LANES (70 MPH)

RAMP GORE DETAILS [N.T.S.]

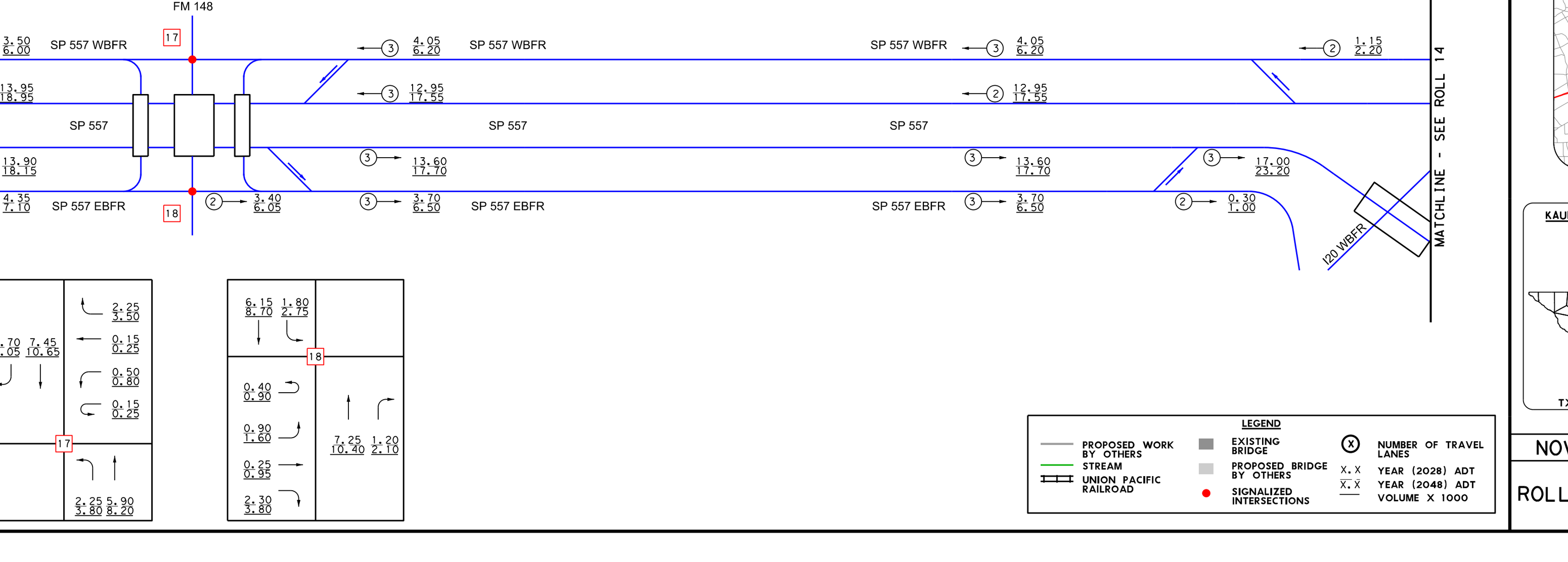




LEFT-TURN BAY DETAIL (TYPICAL)

RIGHT-TURN BAY DETAIL (TYPICAL)

TRAFFIC LINE DIAGRAM [N.T.S.]

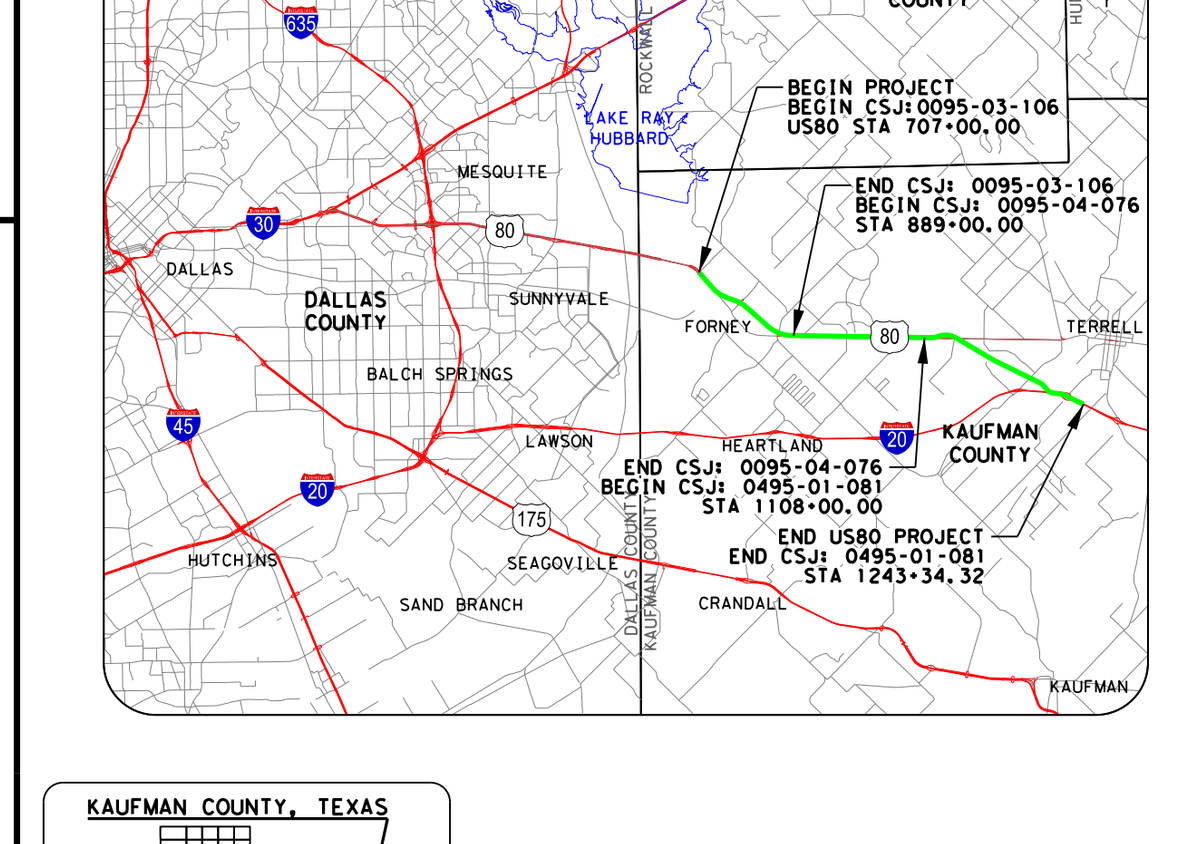


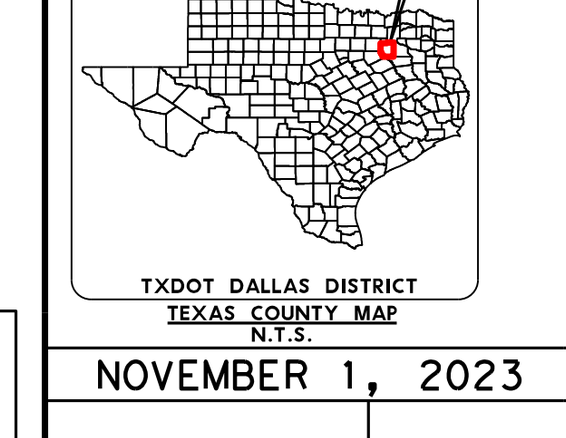
Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023





NOVEMBER 1, 2023

ROLL NUMBER 13/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

11/15/2023 5:38:41 PM

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	65 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	45 MPH	
CROSSING ROADS BYPASSES/CONNECTORS:	45 MPH	
LOCAL STREETS:	30 MPH	LOCAL
CROSSING ROADS - CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS

November 16, 2023

ROLL NUMBER: 1 OF 31

AGUIRRE & FIELDS
TBPE FIRM F-2566
TBPLS FIRM 10194450

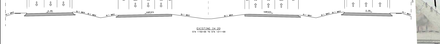
LEGEND

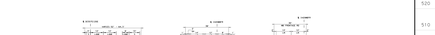
- EXISTING ROW
- EXISTING PAVEMENT
- EXISTING PROPERTY LINETS
- EXISTING EASEMENT
- EXISTING CURB & GUTTER
- EXISTING SIDEWALKS
- PAVE MARKINGS
- EXISTING GEOMETRIC FEATURES
- EXISTING CONTOURS (5'x1')
- EXISTING UTILITIES (INCLUDES FIBER OPTIC LINE)
- EXISTING WATER LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER LINE
- EXISTING DRAINAGE FLOW LINE
- EXISTING STRUCTURES
- PROPOSED CENTERLINE/RAILROAD
- PROPOSED ROW
- PROPOSED RAW BY OTHERS
- PROPOSED EASEMENT
- PROPOSED DRAINAGE EASEMENT
- PROPOSED PAVEMENT
- PROPOSED CURB
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED STORM SEWER
- PROPOSED DRAINAGE TO BE REMOVED
- PROPOSED CONCRETE PAVEMENT
- PROPOSED CONCRETE BRIDGE
- PROPOSED RIP RAP
- PROPOSED MAIN LANES
- PROPOSED RAMPS
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSSROADS
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- PROPOSED SIDEWALKS
- PROPOSED CURB RAMP
- PROPOSED CURB RAMP FLUME
- PROPOSED GUARDRAIL
- PROPOSED DRAINAGE FLOW
- PROPOSED TRAFFIC FLOW
- PHASE 1C

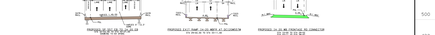
NOTES

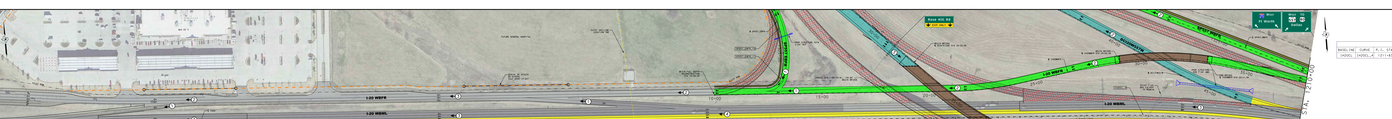
1. EXISTING FEATURES AND EXISTING ROW BASED ON USRC PHASE 1C SURVEY, IH 20 MAINLANES SURVEY BY TOPO DATED FEBRUARY 1st, 2022 AND RECORD PLANS.
2. PROPOSED ROW BASED ON USRC PHASE 1C AND EXISTING ROW TOLLED BY TTAP ON IH 20 CORRIDOR.
3. SHARED USE PATH AND RAMP LENGTH CHANGES.
4. ALL PROPOSED ROW, EASEMENTS, DRAINAGE EASEMENTS, PERMANENT CONSTRUCTION EASEMENTS, TEMPORARY CONSTRUCTION EASEMENTS, AND PRIVATE ROAD EASEMENT RETAIN SIZES AND ETC. FOR ENVIRONMENTAL, ROW, AND UTILITY COORDINATION.
5. ALL PROPOSED ROW, EASEMENTS, AND PRIVATE ROAD EASEMENT RETAIN SIZES AND ETC. FOR ENVIRONMENTAL, ROW, AND UTILITY COORDINATION.
6. EXISTING PAVEMENT CROSSES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE RECONSTRUCTED AS PART OF PROJECT.
7. SUPERELEVATION DATA OF ROTATION IS ABOUT THE PROFILE GRADE LINE UNLESS NOTED OTHERWISE. SUPERELEVATION RATES WERE CALCULATED BASED ON AASHTO GREEN BOOK 2018 AND TXDOT 2021.
8. ALL CURVE ARE TYPE II UNLESS NOTED OTHERWISE.
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE TO BE VERIFIED IN THE FIELD.
10. CONTROLLING ROADWAY CLEARANCE LIMITS FROM CLEAR ZONE, GUARDRAIL FACE WIDTH, SHOULDER, PROTECTION, ROADSIDE SLOPES, AND ROADSIDE DITCHES ARE CONSISTENT WITH TXDOT ROADWAY DESIGN MANUAL.
11. ALL PROPOSED LEFT-TURN LOCATIONS, STORAGE LENGTHS AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE, PANELS, SIGNALS, AND PAVEMENT MARKINGS ARE TO BE DESIGNED AND DETAILED BY OTHERS.
13. ALL PROPOSED UTILITY CONFLICTS FROM AUTHORITY OF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING UTILITY LINE, THE UTILITY LINE WILL BE RELOCATED AND PROTECT TO BE DETERMINED DURING DESIGN.
14. CLEARING DESIGNED TO ACCOMMODATE 80-FOOT TRUCK TURNING RADIUS.
15. RAMP CROSS SLOPE TRANSITIONS OCCUR BETWEEN MAIN LANE CS,TAN AND FRONTAGE ROADS TCEI ROLL CROSS SLOPE & BEYOND LIMITS.

PRELIMINARY, NOT FOR CONSTRUCTION



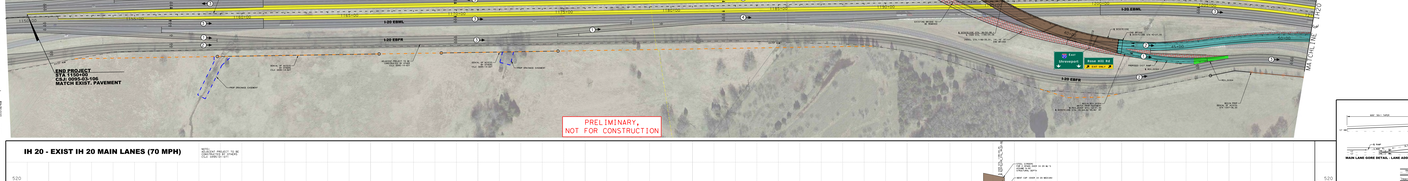


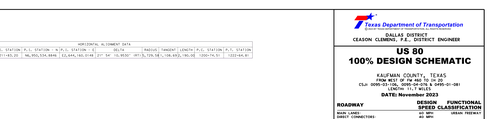


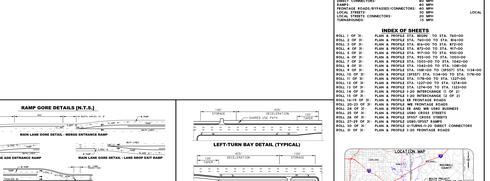


HORIZONTAL ALIGNMENT DATA

BASELINE	CURVE	P.I. STATION	P.I. STATION	N-TN	P.I. STATION	E-TN	RADIUS	TANGENT LENGTH	P.C. STATION	P.T. STATION
MODEL	1A0SOL_0	121+93.20	No_RSS_534.8846	33.64N, 165.51W	237 54' 15.95"E	0°13'5.72N, 1,106.69Q, 190.9E	1200+74.51	1203+46.81		







LEGEND

- EXISTING ROW
- PROPOSED ROW
- EXISTING MAIN LANES
- PROPOSED MAIN LANES
- EXISTING RAMPS
- PROPOSED RAMPS
- EXISTING FRONTAGE ROADS
- PROPOSED FRONTAGE ROADS

SCALE
- 1" = 100' FOR FULL SIZE PLOTS
- 1" = 200' FOR HALF SIZE PLOTS

NUMBER OF TRAVEL LANES
- 2 = 2 TRAVEL LANES
- 3 = 3 TRAVEL LANES
- 4 = 4 TRAVEL LANES

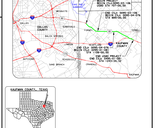
Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023



NOVEMBER 1, 2023

ROLL NUMBER: 1 OF 31

AGUIRRE & FIELDS
TBPE FIRM F-2566
TBPLS FIRM 10194450

Texas Department of Transportation

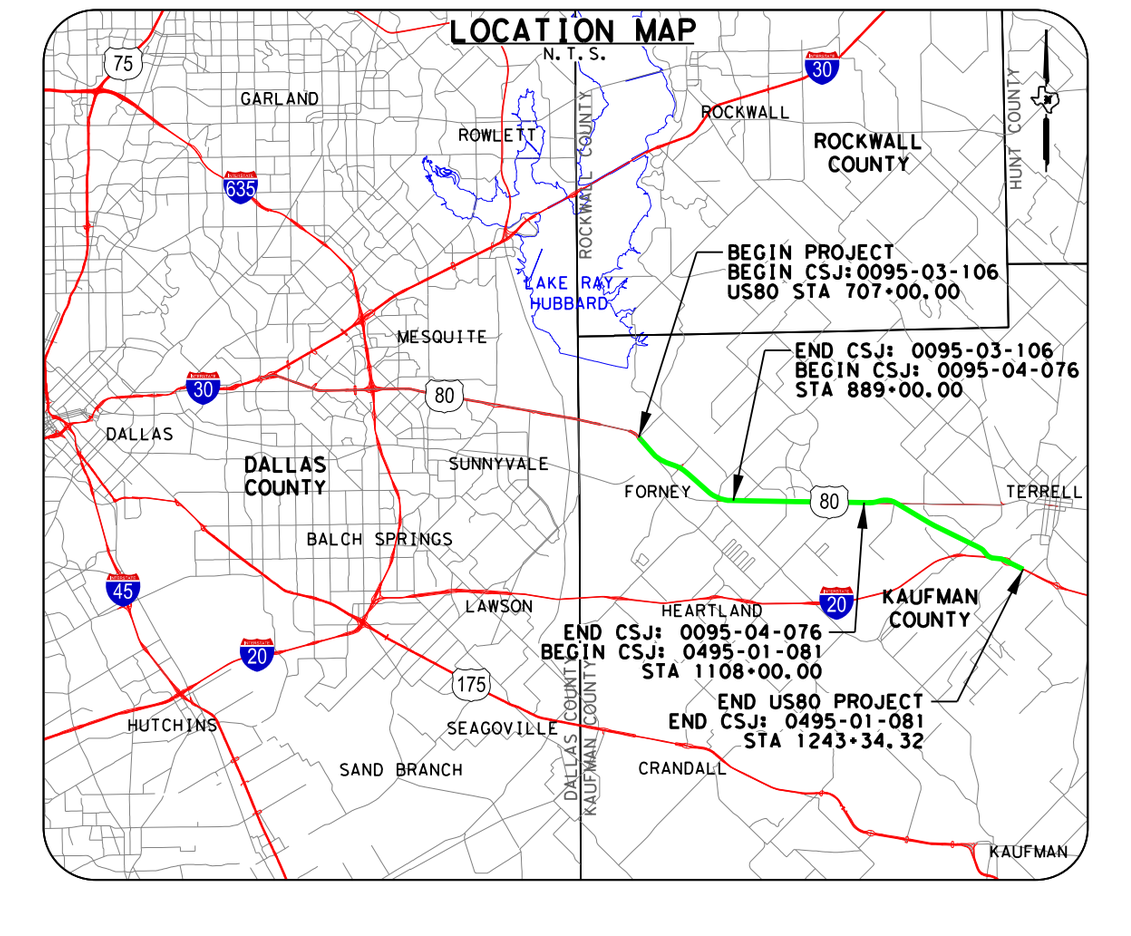
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

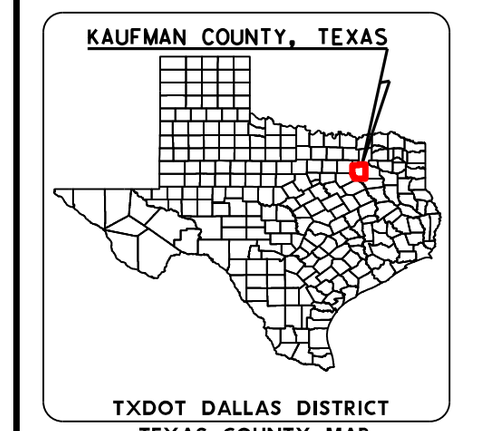
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





November 16, 2023

ROLL NUMBER 15/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CULVERT
EXISTING STORM SEWER
FEMA 100 YR FLOODPLAIN LIMITS
WETLANDS
PARK BOUNDARY
EXISTING PLANIMETRIC FEATURES
EXISTING CONTOURS (5-FT)
EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
EXISTING WATER LINE
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CITY/COUNTY LIMITS
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PAVEMENT/BRIDGE TO BE REMOVED
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PROPOSED CROSS STREET
PROPOSED SHARED USE PATH
PROPOSED PROJECT BY OTHERS
POTENTIAL DISPLACEMENTS
PROPOSED RIP RAP
PERPENDICULAR CURB RAMP
PROPOSED GUARDRAIL
EXISTING TRAFFIC FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID

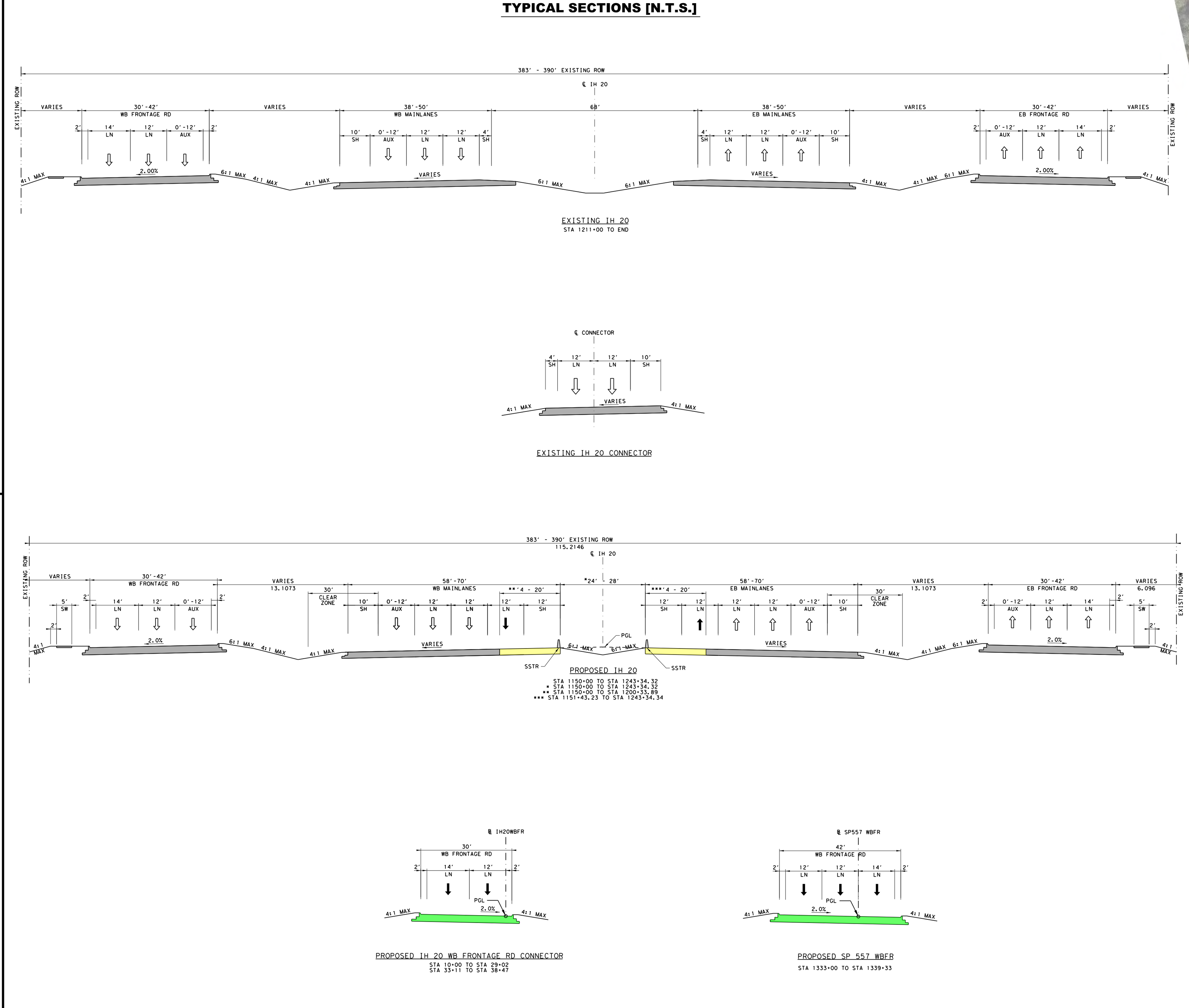
NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012) IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

GRAPHIC SCALE IN FEET
HORIZONTAL 1":100'
VERTICAL 1":10'

TYPICAL SECTIONS [N.T.S.]



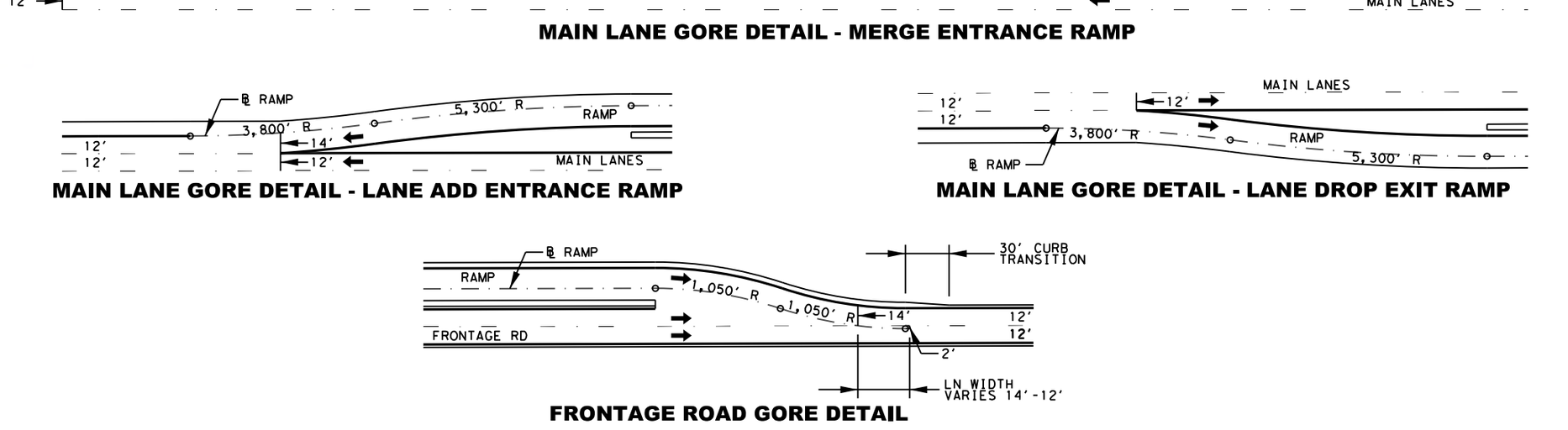
PRELIMINARY,
NOT FOR CONSTRUCTION

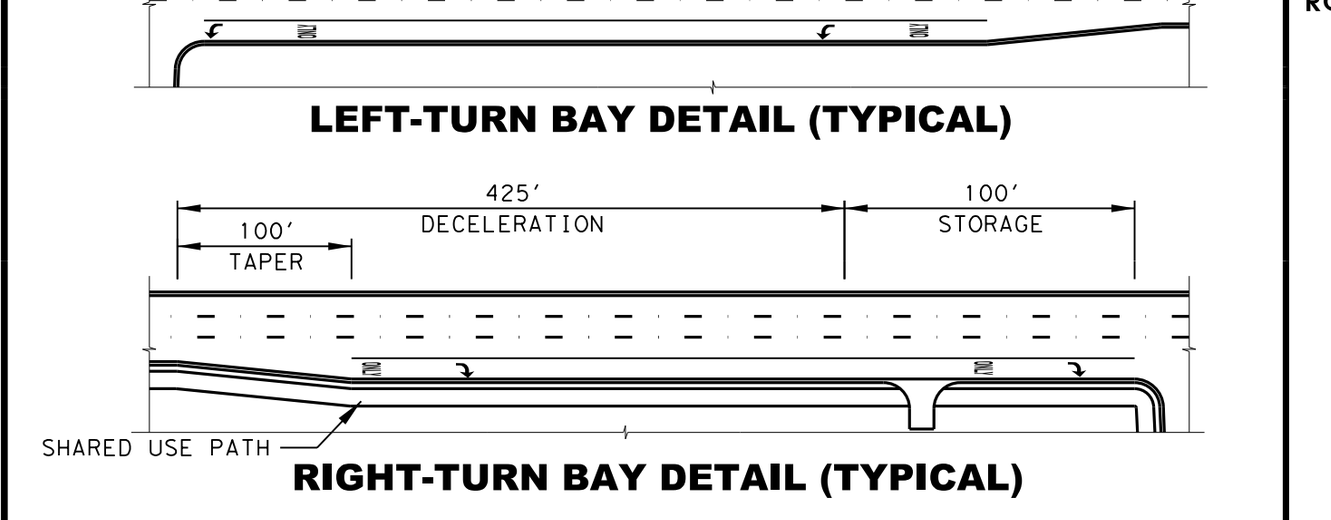
IH 20 - EXIST IH 20 MAIN LANES (70 MPH)

PROPERTY OWNERS							
PARCEL NUMBER	OWNER	PROPERTY ADDRESS	PARCEL NUMBER	OWNER	PROPERTY ADDRESS		
207	JDA FARM & RANCH, LLC	I 20, TERRELL, TX	222	ANDERSON ABBIE H	I 20 TERRELL, TX	336 FM RD 2578
209	SPUR557TERRELL	I 20, TERRELL, TX	223	WYNNE O R	FM RD 2578 TERRELL, TX	11237 FM RD 2578
210	COGBURN, JOHN & WALKER, BRUCE	I 20, TERRELL, TX	224	WYNNE O R	11237 FM RD 2578 TERRELL, TX	11237 FM RD 2578
211	SBLFT/OF 2016 LTD	I 20 TERRELL, TX	225	ARNOLD KENTON H & CARROL	505 FM RD 2578 TERRELL, TX	505 FM RD 2578
212	SEIBERT MARK HENRY	10727 CHEYENNE LN TERRELL, TX	226	SHRI GOPINATH CORP	336 W BRITISH FLYING SCHOOL BLVD TERRELL,	505 W MOORE
213	CASABLANCO LLC	I 20 TERRELL, TX				
214	ANDERSON ABBIE H	I 20 TERRELL, TX				
215	ANDERSON ABBIE H	I 20 TERRELL, TX				
216	ANDERSON ABBIE H	I 20 TERRELL, TX				
217	WOODLANDS TERRELL, LP	I 20 TERRELL, TX				
220	FAWCETT WILLIAM L ET AL	I 20 TERRELL, TX				
221	ANDERSON ABBIE H	336 FM RD 2578 TERRELL, TX				

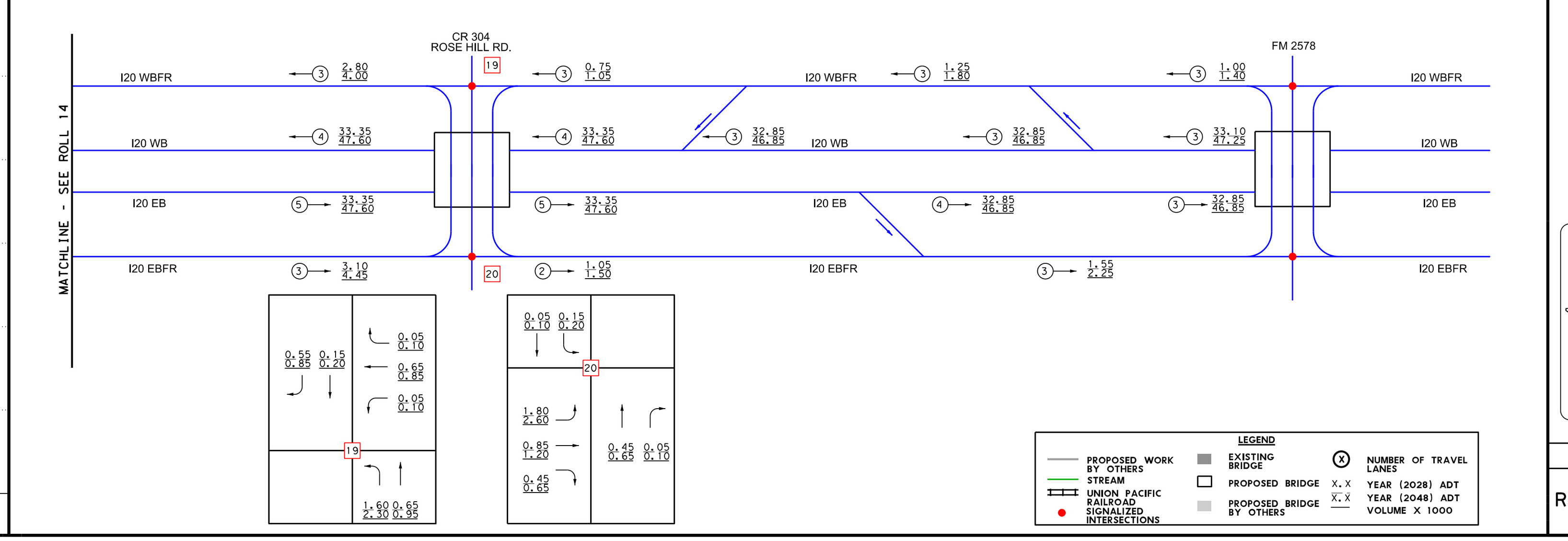
HORIZONTAL ALIGNMENT DATA										
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
SP557_WBFR	SP557_WBFR_9	1333+09.02	N6,950,568.8823	E2,644,370.5920	14° 40' 39.4381" (LT)	3,014.00	388.18	772.10	1329+20.84	1336+92.94
IH20CL	IH20CL_4	1211+83.20	N6,950,534.8846	E2,644,160.0148	21° 54' 10.9530" (RT)	5,729.58	1,108.69	2,190.00	1200+74.51	1222+64.81

RAMP GORE DETAILS [N.T.S.]





TRAFFIC LINE DIAGRAM [N.T.S.]

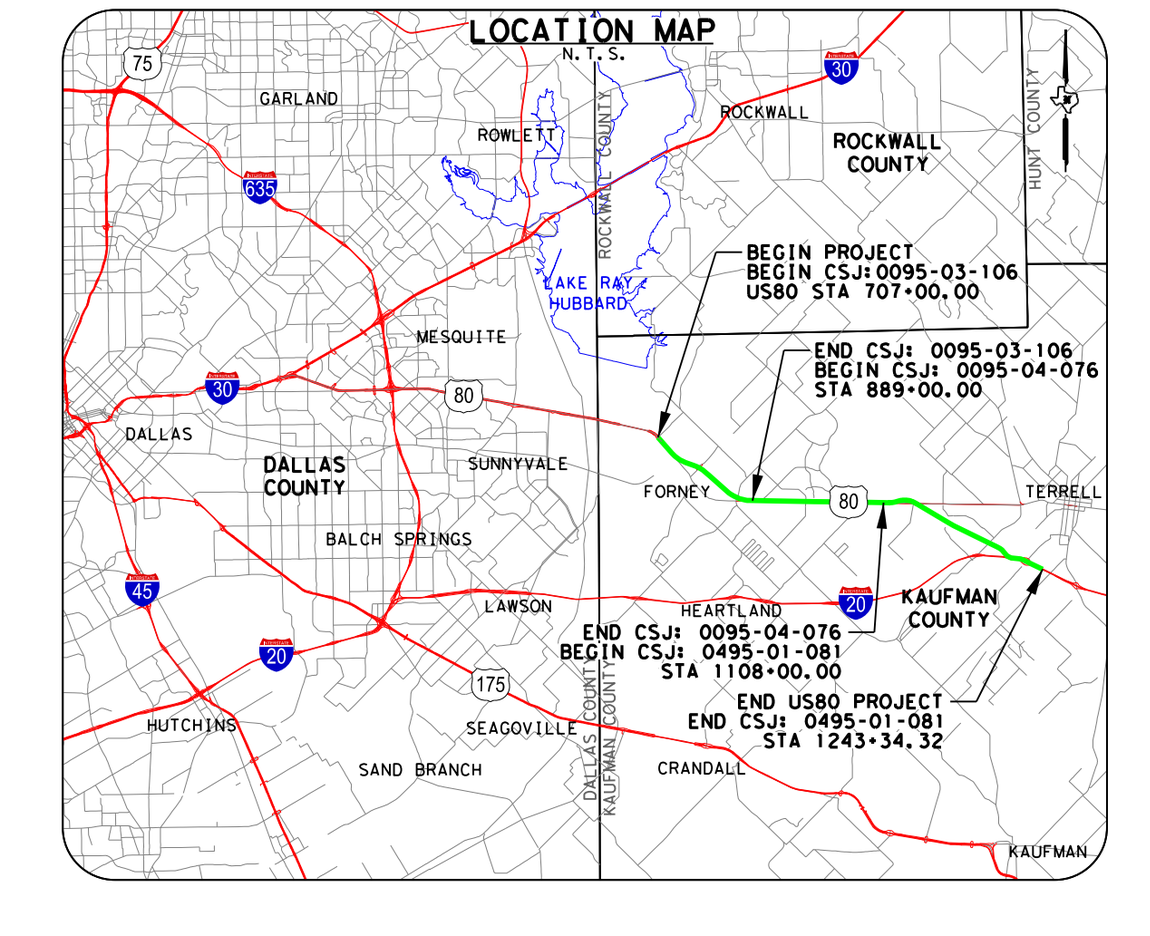
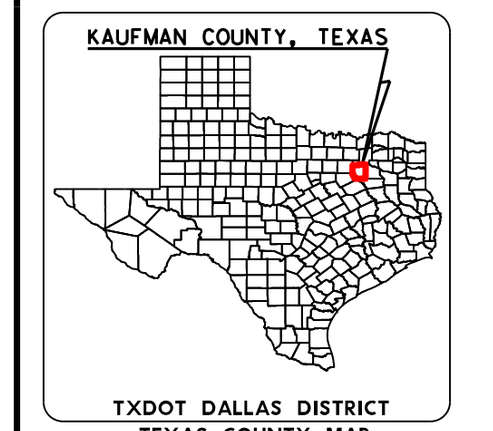


Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

NOVEMBER 1, 2023

ROLL NUMBER 15/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

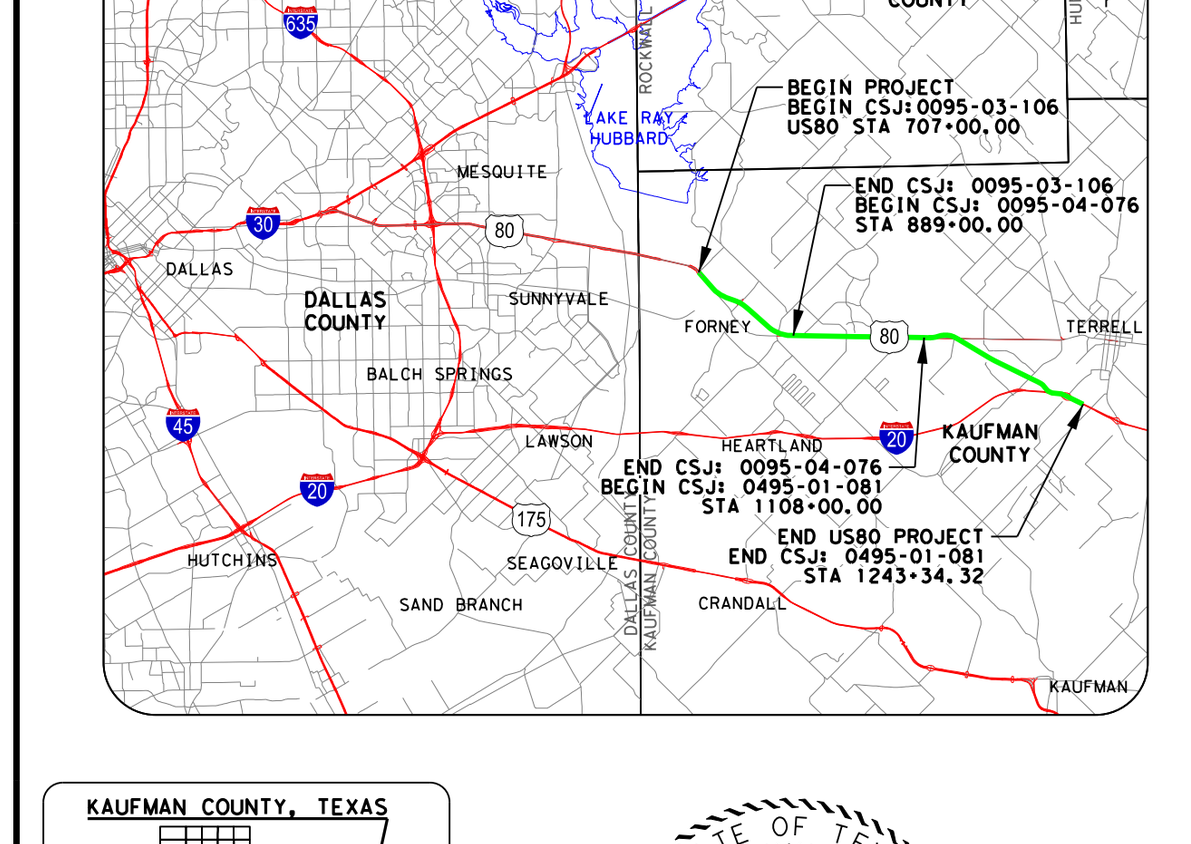
US 80
100% DESIGN SCHEMATIC

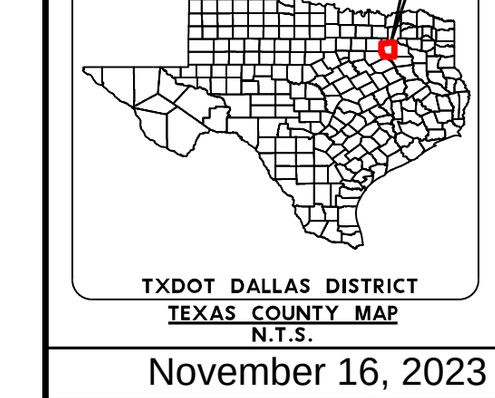
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 16/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

HORIZONTAL 1"=100'
VERTICAL 1"=10'
GRAPHIC SCALE IN FEET

LEGEND

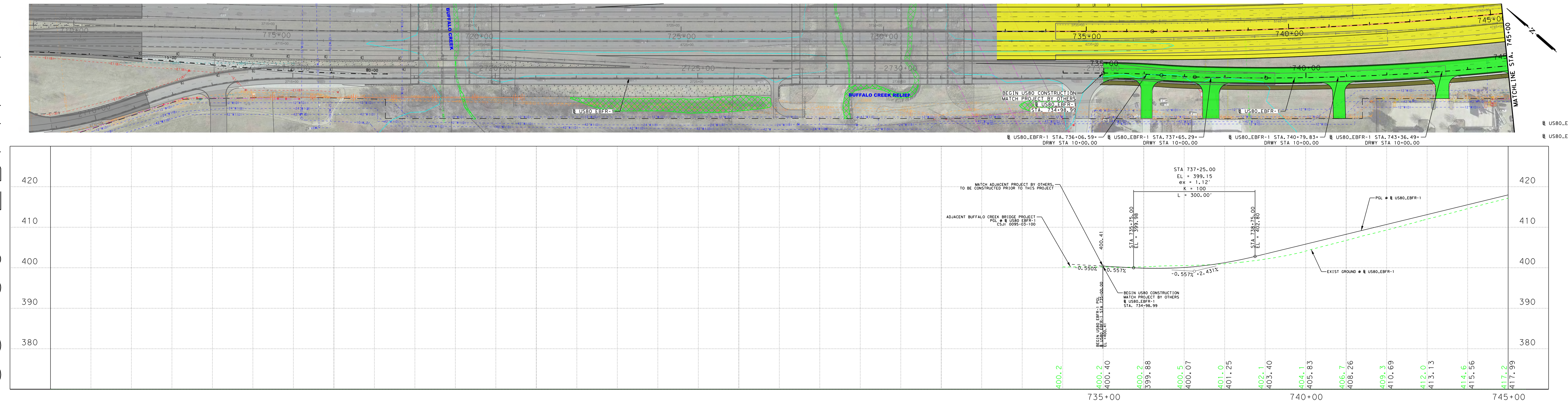
EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CULVERT
EXISTING STORM SEWER
FEMA 100 YR FLOODPLAIN LIMITS
WETLANDS
PARK BOUNDARY
EXISTING PLANIMETRIC FEATURES
EXISTING CONTOURS (5-FT)
EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING ELECTRIC LINE
EXISTING SANITARY SEWER LINE
EXISTING GAS/PETROLEUM LINE
CITY/COUNTY LIMITS
PROPOSED CENTERLINE/BASELINE
PROPOSED ROW
PROPOSED ROW BY OTHERS
PROPOSED ACCESS DENIAL
PROPOSED DRAINAGE EASEMENT
PROPOSED EDGE OF PAVEMENT
PROPOSED CTB
PROPOSED BRIDGE
PROPOSED RETAINING WALL
POTENTIAL NOISE WALL
PROPOSED CULVERT
PAVEMENT/BRIDGE TO BE REMOVED
EXISTING BRIDGE TO REMAIN
PROPOSED CONCRETE BRIDGE
PROPOSED STEEL BRIDGE
PROPOSED MAIN LANES
PROPOSED RAMP
PROPOSED FRONTAGE ROAD/BYPASSES
PROPOSED CROSS STREET
PROPOSED SHARED USE PATH
PROPOSED PROJECT BY OTHERS
POTENTIAL DISPLACEMENTS
PROPOSED RIP RAP
PERPENDICULAR CURB RAMP
PROPOSED GUARDRAIL
EXISTING TRAFFIC FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID

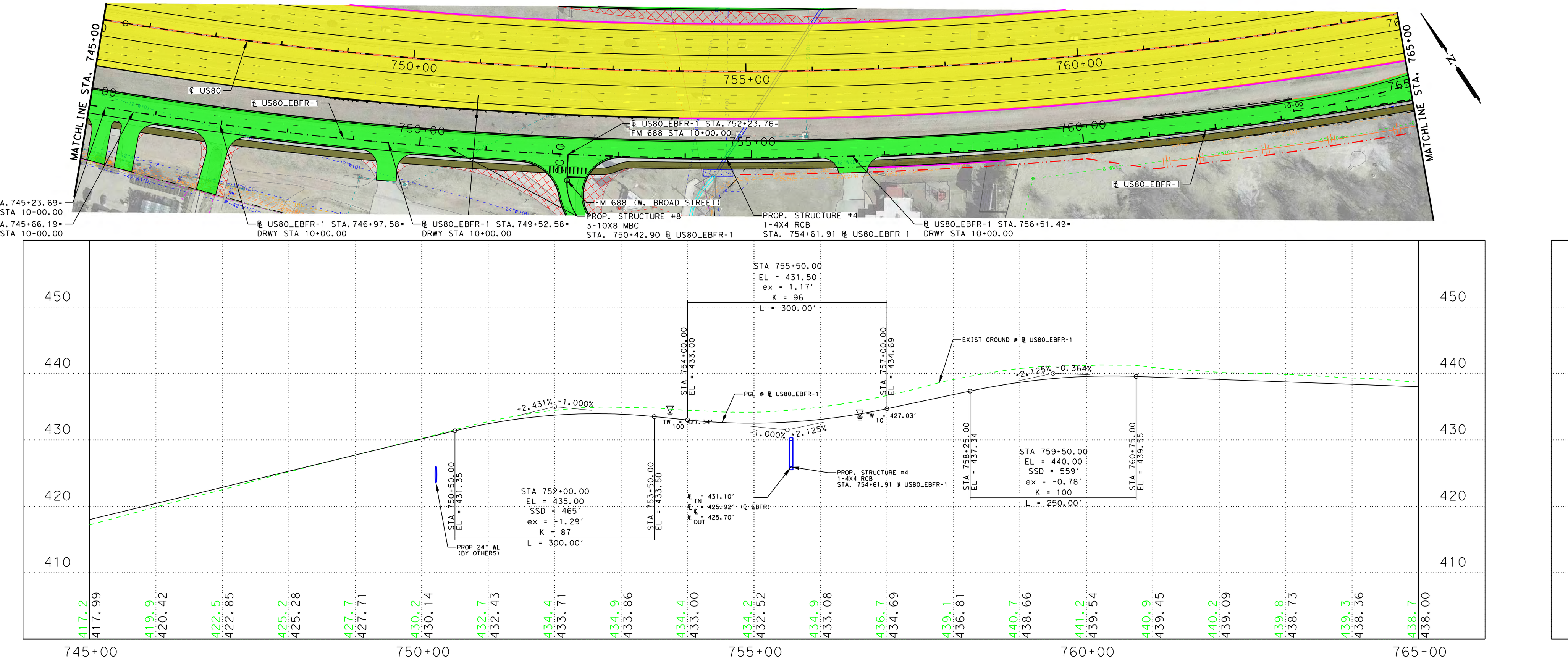
NOTES:

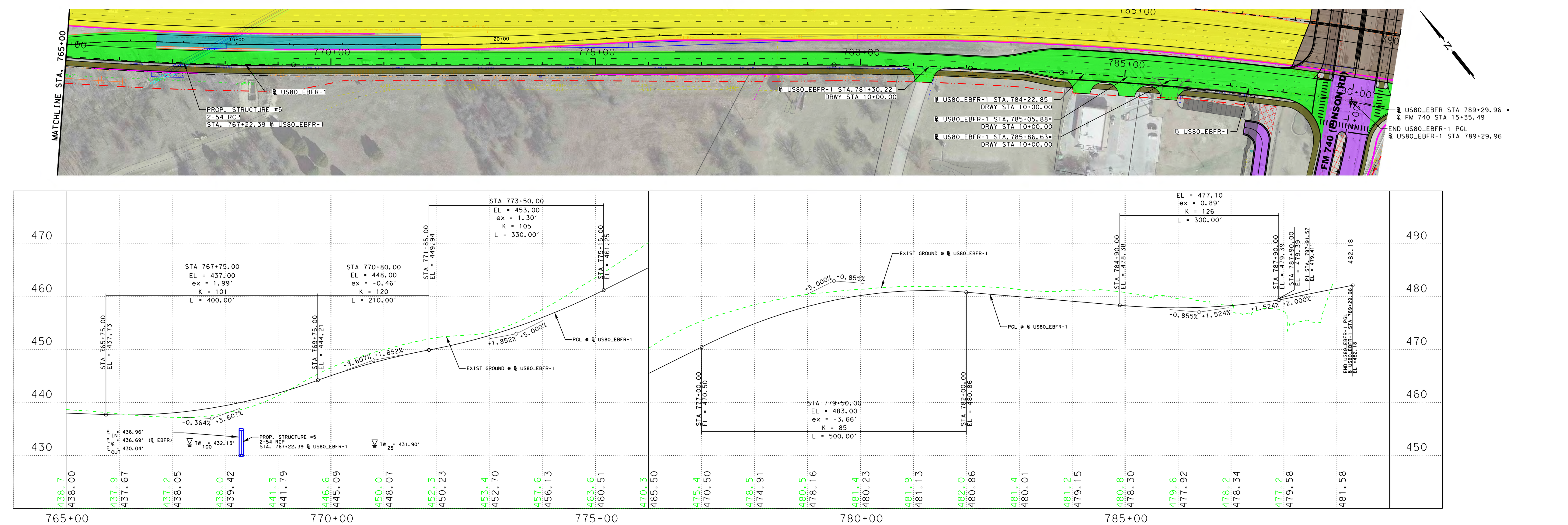
1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012) IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

US 80 EBFR-1







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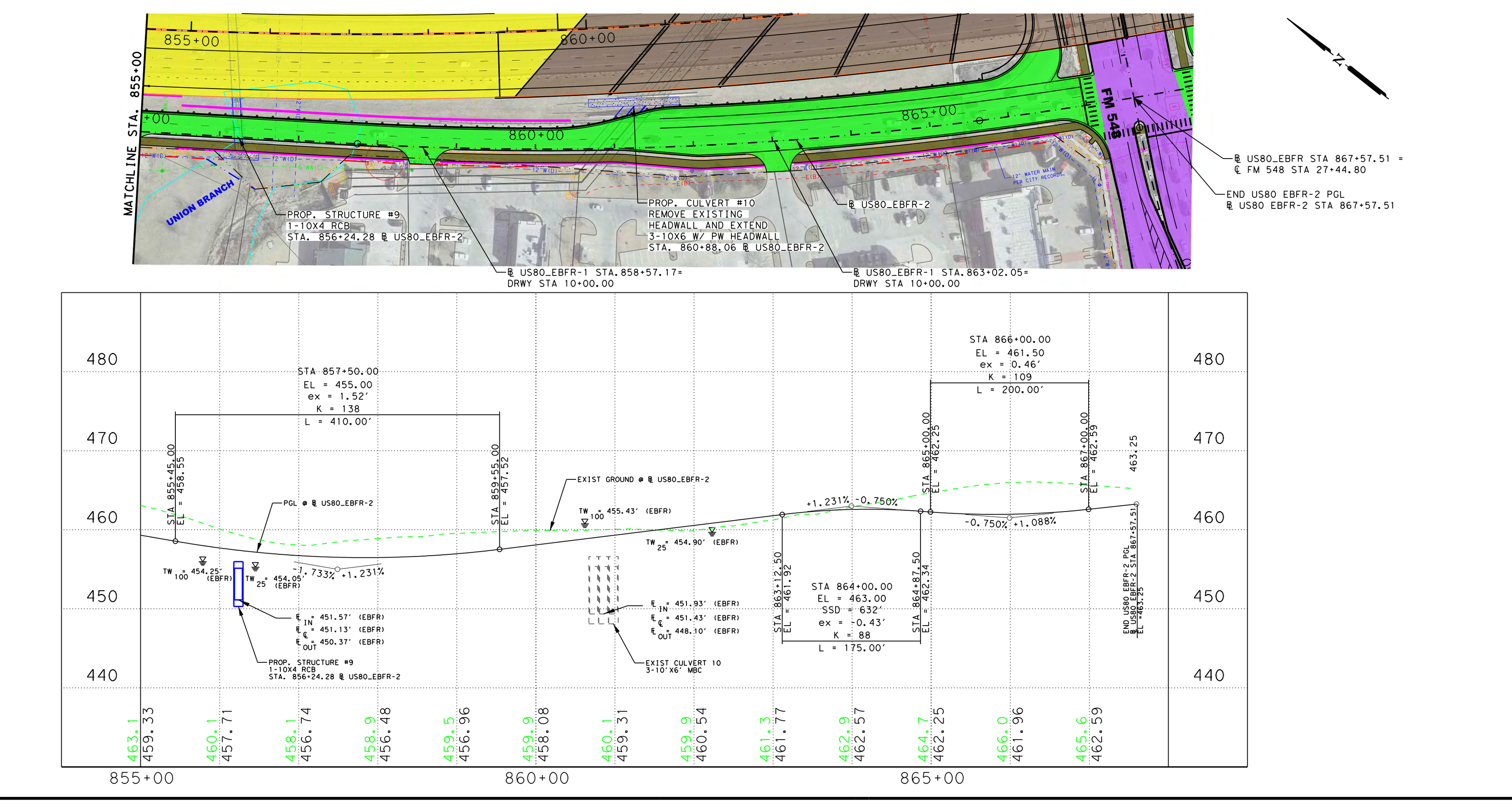

PRELIMINARY,
NOT FOR CONSTRUCTION

Texas Department of Transportation
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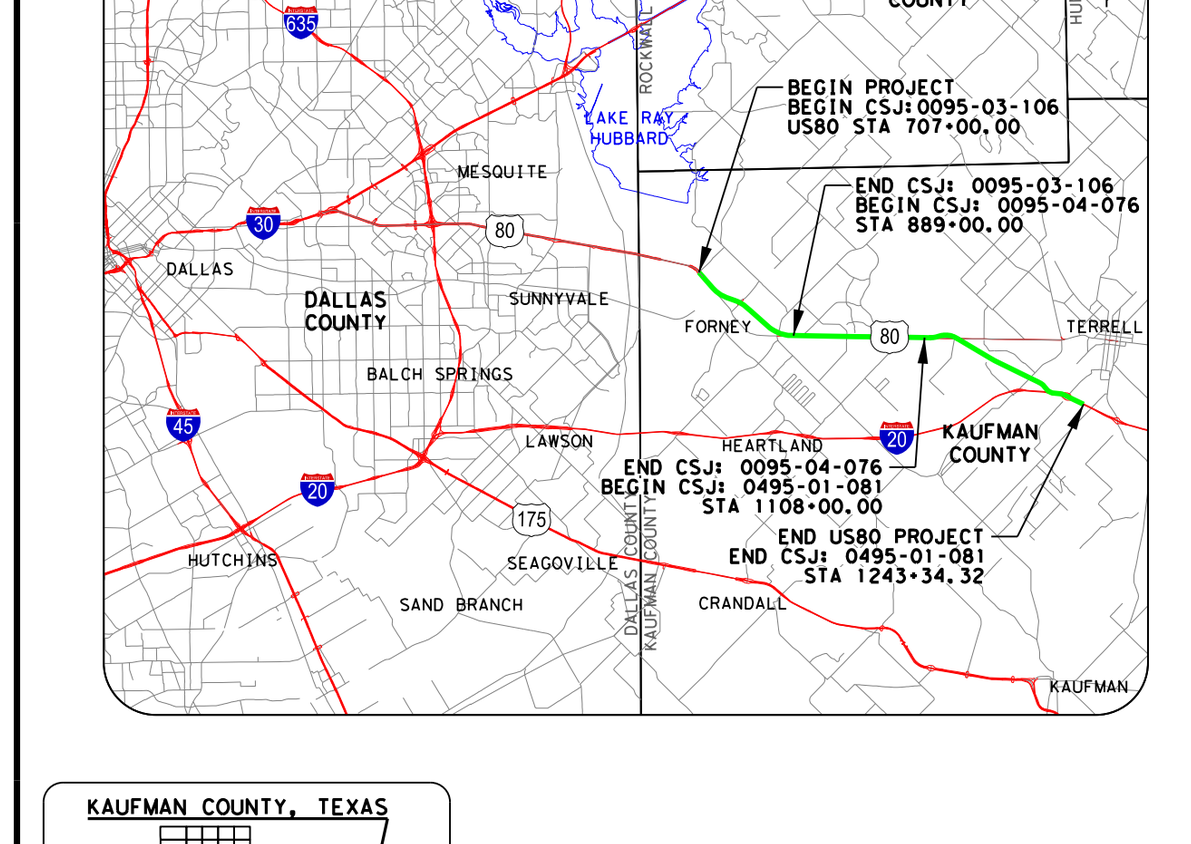
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023



NOVEMBER 1, 2023

ROLL NUMBER 16/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO IH 20

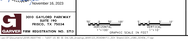
CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

PROJECT NO. 0095-04-075

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	40 MPH	
DIRECTIONAL RAMPS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
DIRECTIONAL CONNECTORS:	40 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS



November 16, 2023

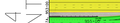
ROLL NUMBER 17/31

3000 GALLERIA PARKWAY
SUITE 700
PEARLAND, TX 77584
FIRM REGISTRATION NO. 5772

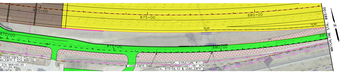
LEGEND

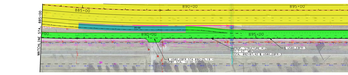
NOTES

1. EXISTING FEATURES AND EXISTING ROW BASED ON TOPOGRAPHIC SURVEY PERFORMED BY KIMLEY-HORN AND TOPO DATED FEBRUARY 14, 2023 AND RECORD PLANS.
2. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST TXDOT SPECIFICATIONS.
3. SHARED USE PATH AND RAMP LAYOUT:
   - SHARED USE PATH AND RAMP LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FUTURE PS&E DEVELOPMENT. ADDITIONAL SHARED USE PATHS AND RAMPS MAY BE REQUIRED DURING FUTURE PS&E AND TO COMPLY WITH ADA REQUIREMENTS. SHARED USE PATHS ARE CONSTRUCTED BY OTHERS UNLESS NOTED OTHERWISE.
4. PROPOSED DRAINAGE FACILITIES SHOWN ON PRINTED PLANS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT DRAINAGE MANUAL.
5. EXISTING PAVEMENT CROSSES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE RECONSTRUCTED AS PART OF THIS PROJECT.
6. PROPOSED SUPERELEVATION OF ROTATION IS DIRECTLY THE ROADWAY CROSS SLOPE. ALL CURVES ARE TRANSITIONED. SUPERELEVATION RATES WERE CALCULATED BASED ON AASHTO GREEN BOOK METHODOLOGY AND TXDOT.
7. ALL CURVES ARE TYPE II UNLESS NOTED OTHERWISE.
8. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE PERPENDICULAR UNLESS NOTED.
9. FINAL ROW AND EASEMENT LIMITS FROM TITLE INSURANCE RATE MAPS (NOT SHOWN). PROJECTIONS, ACQUISITIONS, AND RELOCATIONS WILL BE DETERMINED DURING PROGRESS.
10. ALL UTILITY LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD INFORMATION.
11. CONVENTIONAL PAVEMENT SCHEME (SMALL SIGNS) ARE SHOWN ON THE PLAN SHEETS UNLESS NOTED OTHERWISE.
12. OWNERSHIP OF/MAINTENANCE RESPONSIBILITIES FOR EXISTING AND PROPOSED DRAINAGE FACILITIES WILL BE DETERMINED DURING THE DETAILED DESIGN PHASE.
13. IF THE PROPOSED ROW PARTIALLY INTERSECTS THE EXISTING BUILDINGS, THE BUILDINGS WILL BE DEMOLISHED AND PROPERTY TO BE DETERMINED DURING ACQUISITION.
14. CLEARING DESIGNED TO ACCOMMODATE 48-62 TRUCK TRACTOR SEMI-TRAILER.
15. RAMP CROSS SLOPE TRANSITIONS OF BETWEEN MAIN LANE CLOSE AND FRONTAGE ROADS VERY WELL DESIGN SPOT'S LOCATED.



US 80 EBFR-3





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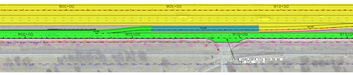
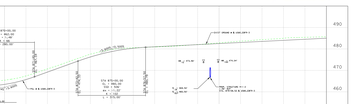
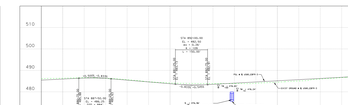


US 80 EBFR-3





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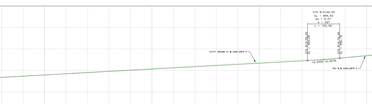

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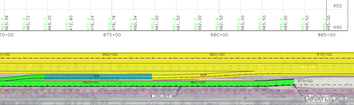

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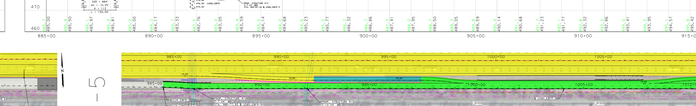

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

PROJECT NO. 0095-04-075

DATE: November 2023

ROADWAY — DESIGN SPEED — FUNCTIONAL CLASSIFICATION

MAIN LANES: 60 MPH URBAN FREEWAY
FRONTAGE ROADS: 40 MPH
RAMPS: 40 MPH
DIRECTIONAL RAMPS/BYPASSES/CONNECTORS: 40 MPH
LOCAL STREETS: 30 MPH LOCAL
DIRECTIONAL CONNECTORS: 40 MPH
TURNAROUNDS: 15 MPH

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ROLL 2 OF 3: PLAN & PROFILE STA. 760+00 TO STA. 854+00
ROLL 3 OF 3: PLAN & PROFILE STA. 854+00 TO STA. 947+00
ROLL 4 OF 3: PLAN & PROFILE STA. 851+00 TO STA. 947+00
ROLL 5 OF 3: PLAN & PROFILE STA. 947+00 TO STA. 900+00
ROLL 6 OF 3: PLAN & PROFILE STA. 900+00 TO STA. 1042+00
ROLL 7 OF 3: PLAN & PROFILE STA. 1042+00 TO STA. 1042+00
ROLL 8 OF 3: PLAN & PROFILE STA. 1042+00 TO STA. 1041+00
ROLL 9 OF 3: PLAN & PROFILE STA. 1041+00 TO STA. 1274+00
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ROLL 13 OF 3: PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)
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ROLL 16 OF 3: PLAN & PROFILE SH 243 AND MS USRC BUSINESS
ROLL 17 OF 3: PLAN & PROFILE SH 243 AND MS USRC BUSINESS
ROLL 18 OF 3: PLAN & PROFILE GROUT CREEK STRUCTS
ROLL 19 OF 3: PLAN & PROFILE GRAVEYARD STRUCTS
ROLL 20 OF 3: PLAN & PROFILE SH 205 AND FRONTAGE CONNECTORS
ROLL 21 OF 3: PLAN & PROFILE I-20 FRONTAGE ROADS

NOVEMBER 1, 2023

ROLL NUMBER 17/31

3000 GALLERIA PARKWAY
SUITE 700
PEARLAND, TX 77584
FIRM REGISTRATION NO. 5772

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
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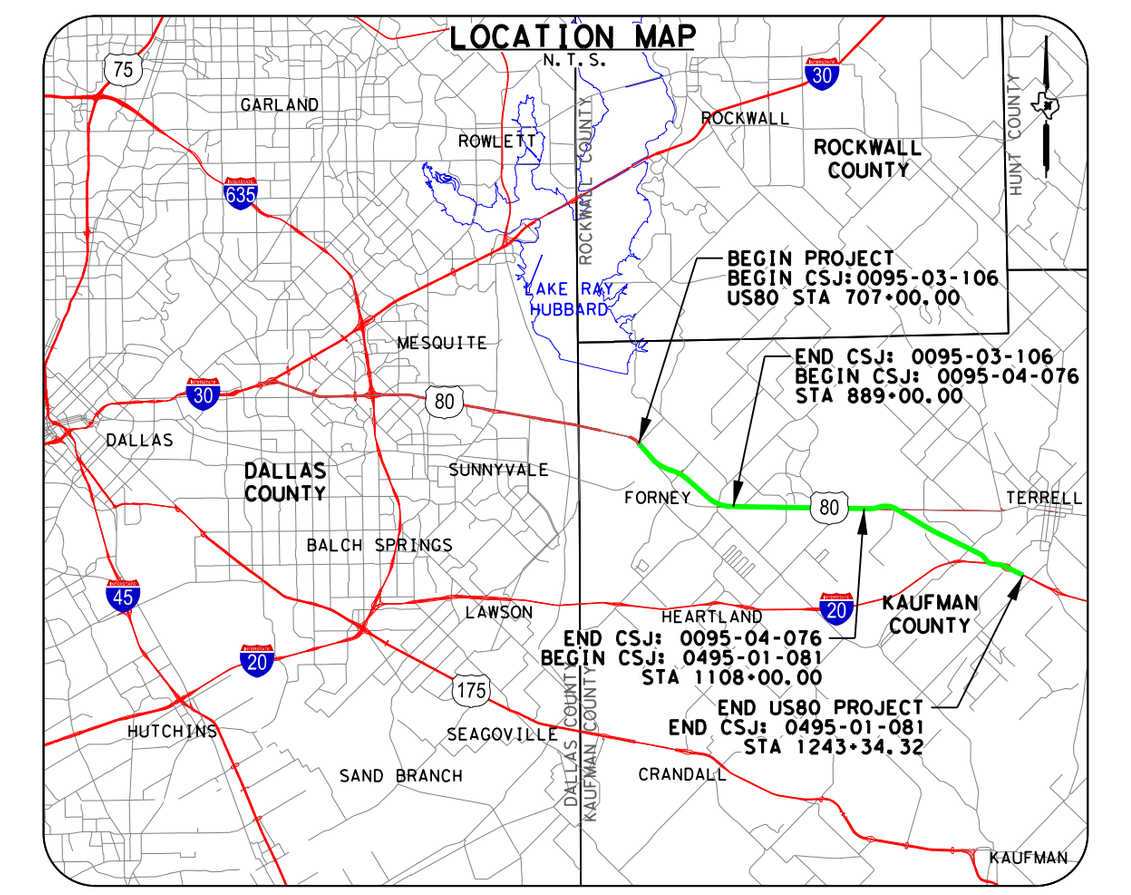
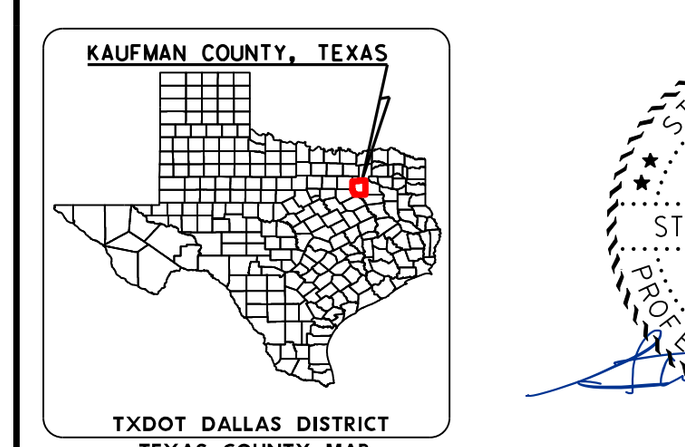
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





TXDOT DALLAS DISTRICT
TEXAS COUNTY MAP
N.T.S.

STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 18/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012) IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

GRAPHIC SCALE IN FEET
HORIZONTAL 1"=100'
VERTICAL 1"=10'

US 80 EBFR-6

SP557 EBFR-1

PRELIMINARY,
NOT FOR CONSTRUCTION

Texas Department of Transportation
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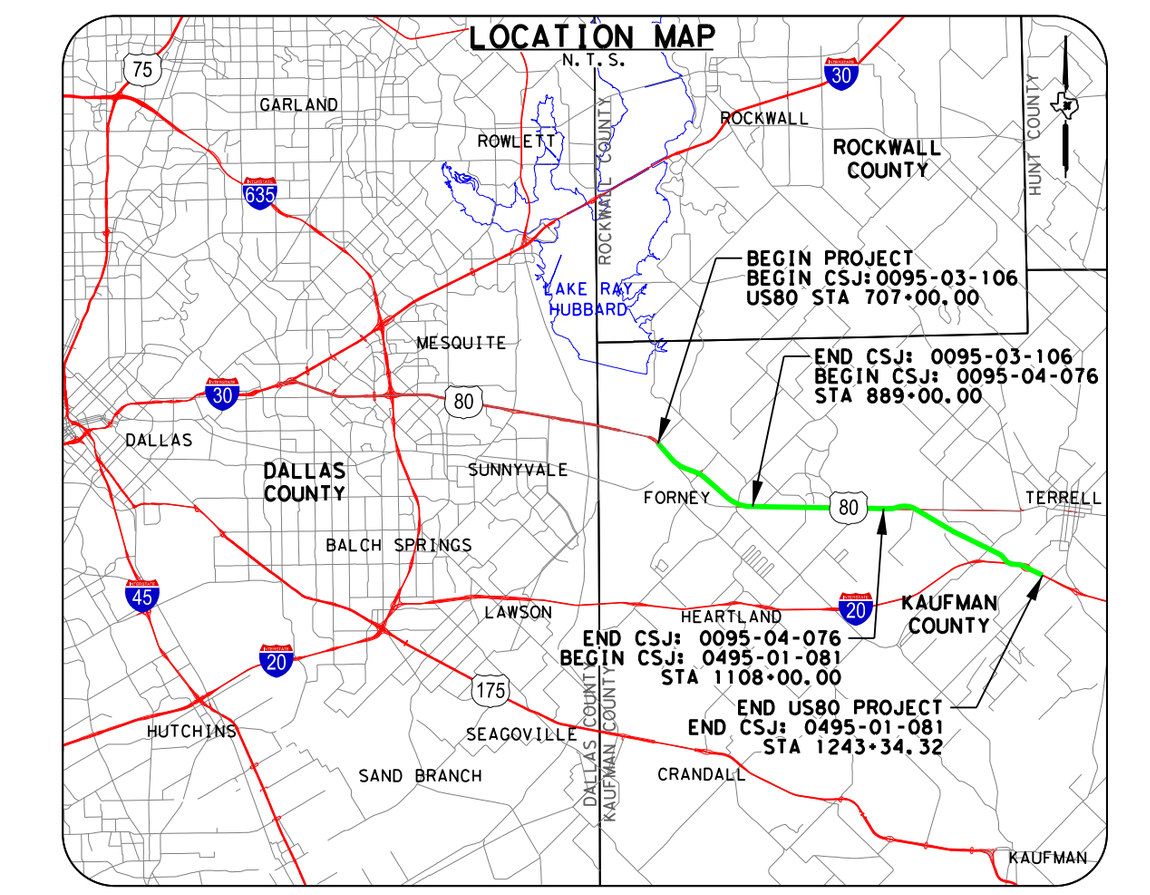
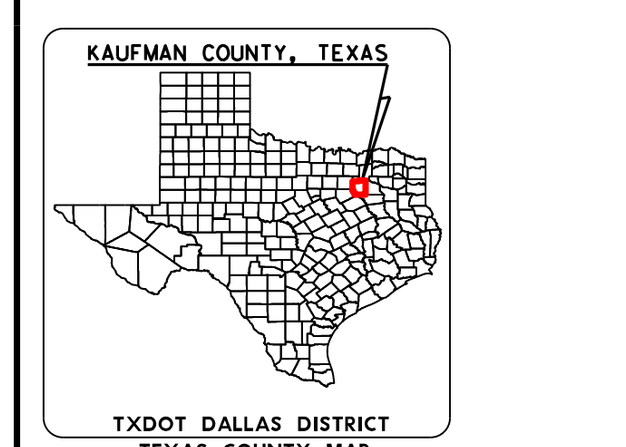
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023





TXDOT DALLAS DISTRICT
TEXAS COUNTY MAP
N.T.S.

NOVEMBER 1, 2023

ROLL NUMBER 18/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

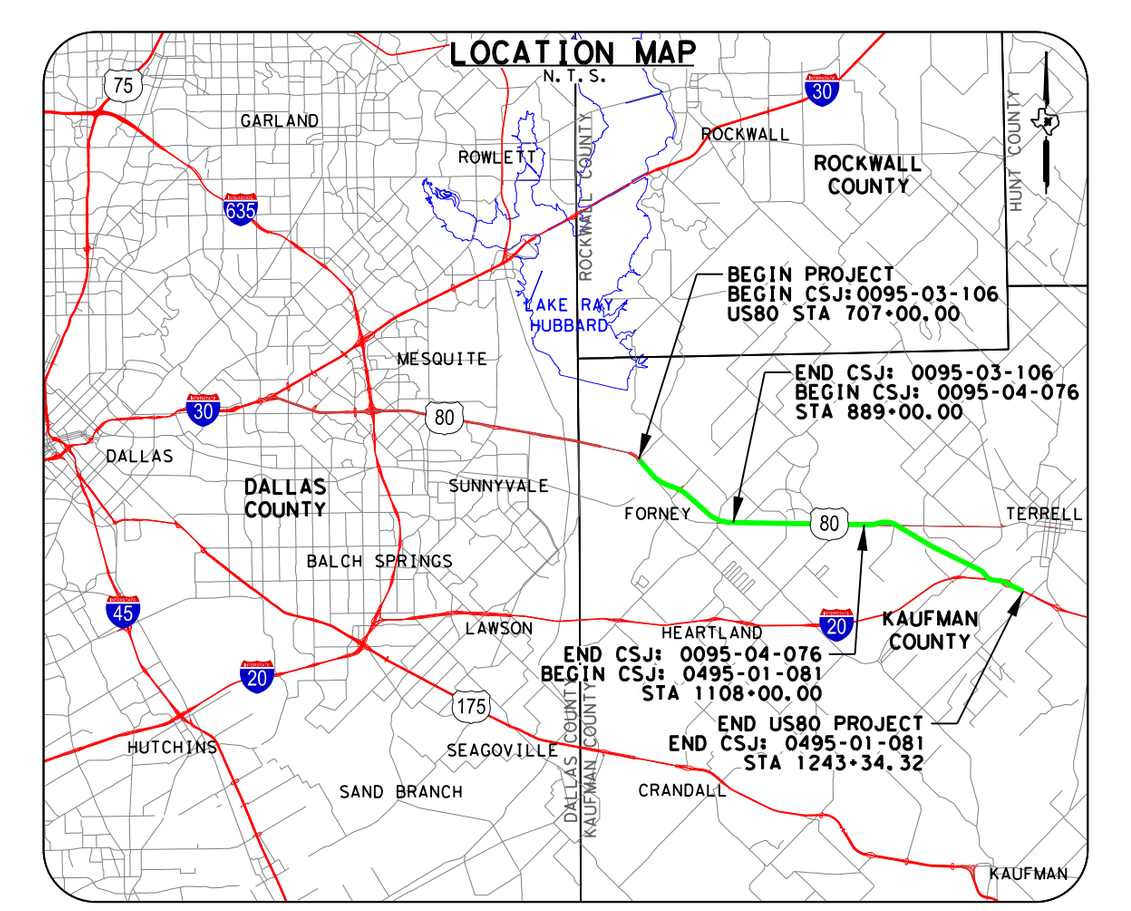
US 80
100% DESIGN SCHEMATIC

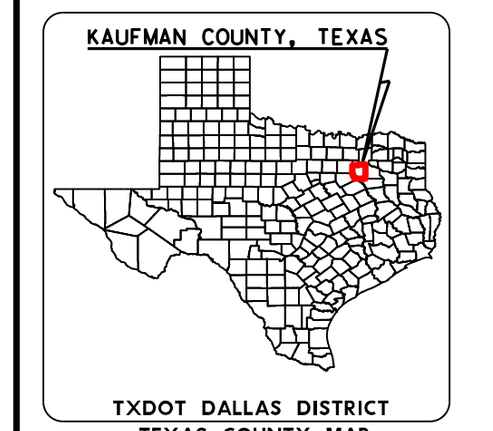
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
PAUL R. HAHN III
107365
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 19/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
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- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

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2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
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15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

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GRAPHIC SCALE IN FEET
HORIZONTAL 1"=100'
VERTICAL 1"=10'

SUPERELEVATION				
BASELINE	BEGIN TRANSITION		END TRANSITION	
	STATION	e	STATION	e
SP557EBFR	1186+71.00	2.00%	1186+89.00	2.40%
SP557EBFR	1191+98.00	2.40%	1194+12.00	-2.40%
SP557EBFR	1206+95.00	-2.40%	1208+51.00	2.30%
SP557EBFR	1213+32.00	2.30%	1213+45.00	2.00%
SP557EBFR	1256+21.00	2.00%	1257+37.00	5.50%
SP557EBFR	1260+33.00	5.50%	1262+31.00	2.00%
SP557EBFR	1280+93.00	8.20%	1281+79.00	5.60%
SP557EBFR	1282+76.00	5.60%	1284+37.00	2.00%
SP557EBFR	1291+37.00	2.00%	1292+50.00	5.40%
SP557EBFR	1296+13.00	5.40%	1297+26.00	2.00%
SP557EBFR	1299+67.00	2.00%	1301+67.00	8.00%

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Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
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FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
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LOCAL STREETS CONNECTORS:	20 MPH	
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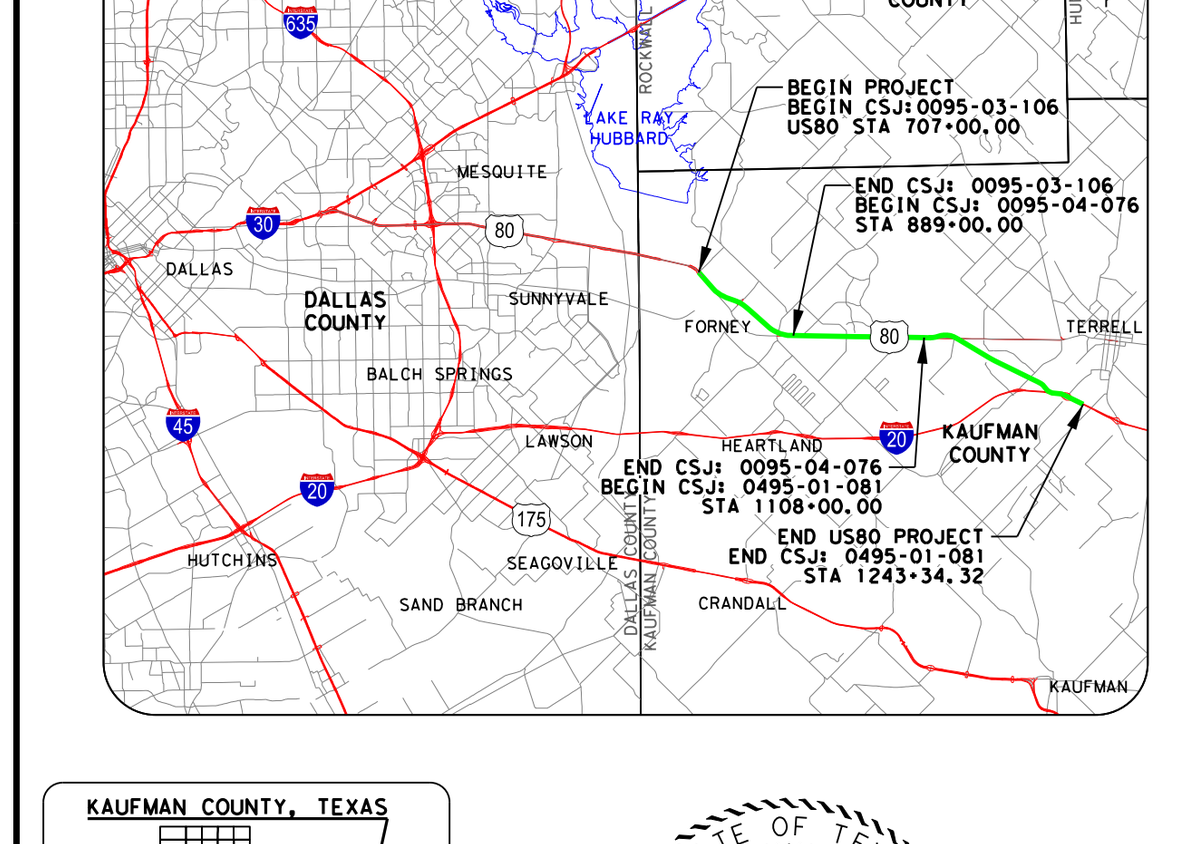
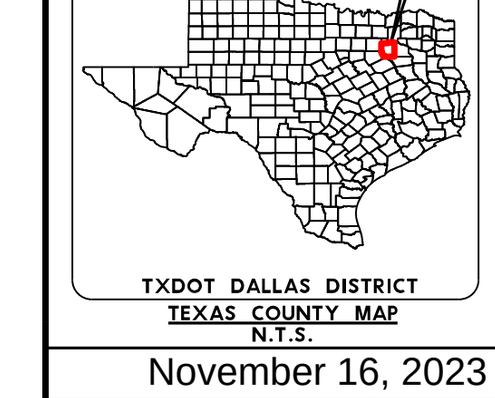
INDEX OF SHEETS

LOCATION MAP


KAUFMAN COUNTY, TEXAS

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PRELIMINARY,
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GRAPHIC SCALE IN FEET
HORIZONTAL 1"=100'
VERTICAL 1"=10'

US 80 WBFR-1

US 80 WBFR-2

PRELIMINARY,
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Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
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KAUFMAN COUNTY, TEXAS
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Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

PROJECT NO. 0095-03-126

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES	65 MPH	URBAN FREEWAY
FRONTAGE ROADS	40 MPH	
RAMPS	45 MPH	
CONNECTORS: ROADS W/STOPPED CONDITIONS	40 MPH	
LOCAL STREETS	30 MPH	LOCAL
CONNECTORS: CONNECTORS	15 MPH	
TURNAROUNDS	15 MPH	

INDEX OF SHEETS

November 16, 2023

ROLL NUMBER: 21/31

3000 GALLERIA PARKWAY
SUITE 700
PLANO, TX 75024

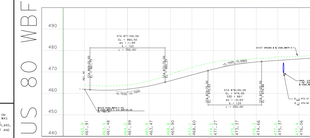
TBPE REGISTRATION NO. 5772

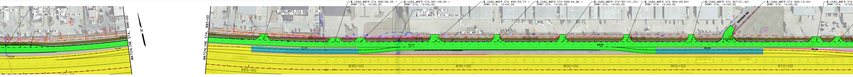
LEGEND

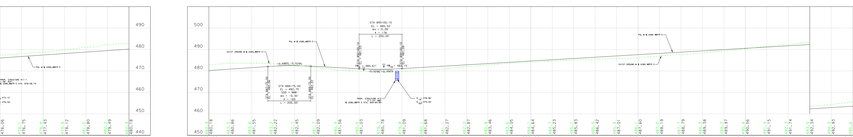
NOTES

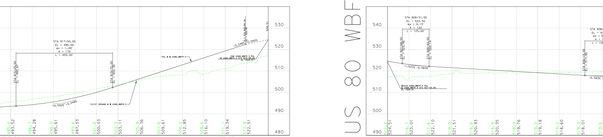
1. EXISTING FEATURES AND EXISTING ROW BASED ON TOPOGRAPHIC SURVEY PERFORMED BY ESPEY AND TOPO DATED FEBRUARY 1st, 2022 AND RECORD PLANS.
2. ALL DIMENSIONS ARE TO BE VERIFIED IN THE DISTRICT AND REVISED AS THE CONSTRUCTION DOCUMENTS DEVELOP.
3. SHARED USE PATH AND RAMP LAYOUT:
   a. SHARED USE PATH AND RAMP LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN. SHARED USE PATH ALIGNMENT AND RAMP LOCATIONS ARE SUBJECT TO CHANGE BASED ON FUTURE FRONTAGE ROAD DRIVEWAY RETURN RADII AND TIE-IN.
   b. SHARED USE PATH TO BE CONSTRUCTED CONTINUOUS WITH DRIVEWAYS.
4. ALL CONSTRUCTION WITHIN THE FEMA/USACE FLOOD WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE NATIONWIDE PERMIT PROGRAM.
5. EXISTING PAVEMENT CROSSES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED AND REPLACED AS NEEDED.
6. ALL CONSTRUCTION AT OR WITHIN 15 FEET OF THE EDGE OF THE TRAVELED WAY SHALL BE PERFORMED UNDER SUPERVISION WITH WORK ZONES CALCULATED BASED ON POSTED SPEED AS SHOWN IN TABLE 6H-4 OF THE TMUTCD.
7. ALL CURVES ARE TYPE II-2 UNLESS NOTED OTHERWISE.
8. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB UNLESS NOTED OTHERWISE. ALL CURB RADII ARE 30' UNLESS NOTED OTHERWISE.
9. FINAL CLEARING AND GRUBBING LIMITS FROM SLOPE, DRAINAGE, RATE BARS AND CHANNEL PROTECTION, RETAINING WALLS, AND ENVIRONMENTAL CONSIDERATIONS PENDING.
10. ALL RIGHT-OF-WAY LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD INFORMATION.
11. CONVENTIONAL PAVEMENT SCHEME (SMALL SIGNS) ARE SHOWN ON THE PLAN AND PROFILE SHEETS FOR REFERENCE.
12. OWNERSHIP UNKNOWN (OU) OBTAINED FROM AERIAL PHOTOGRAPHY AND FIELD VISITS BY ESPEY CONSULTANTS.
13. ALL PROPOSED ROW CONTROLLING POINTS ARE SHOWN AT THE PROPOSED ROW PHYSICALLY DEFINED BY THE INTERSECTION OF THE PROPOSED ROW LINE AND EXISTING OR PROPOSED FACILITIES DETERMINED DURING DESIGN.
14. CLIMBING DESIGNED TO ACCOMMODATE 80-KIP TRUCK AT CRAWL SPEED.
15. RAMP CROSS SLOPE TRANSITIONS OCCUR BETWEEN MAIN LANE CL'S/ EOP AND FRONTAGE ROADS. TEXT WILL BE ADDED ONCE R/W IS FINALIZED.

PRELIMINARY, NOT FOR CONSTRUCTION









PRELIMINARY, NOT FOR CONSTRUCTION

Texas Department of Transportation

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CEASON CLEMENS, P.E., DISTRICT ENGINEER

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100% DESIGN SCHEMATIC

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FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

PROJECT NO. 0095-03-126

DATE: November 2023

ROADWAY — DESIGN SPEED — FUNCTIONAL CLASSIFICATION

MAIN LANES — 65 MPH — URBAN FREEWAY
FRONTAGE ROADS — 40 MPH
RAMPS — 45 MPH
CONNECTORS: ROADS W/STOPPED CONDITIONS — 40 MPH
LOCAL STREETS — 30 MPH — LOCAL
CONNECTORS: CONNECTORS — 15 MPH
TURNAROUNDS — 15 MPH

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ROLL 1 OF 31 : PLAN & PROFILE STA. 853+00 TO STA. 760+00
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ROLL 4 OF 31 : PLAN & PROFILE STA. 837+00 TO STA. 917+00
ROLL 5 OF 31 : PLAN & PROFILE STA. 917+00 TO STA. 900+00
ROLL 6 OF 31 : PLAN & PROFILE STA. 900+00 TO STA. 1042+00
ROLL 7 OF 31 : PLAN & PROFILE STA. 1042+00 TO STA. 1064+00
ROLL 8 OF 31 : PLAN & PROFILE STA. 1064+00 TO STA. 1081+00
ROLL 9 OF 31 : PLAN & PROFILE STA. 1081+00 TO STA. 1174+00
ROLL 10 OF 31 : PLAN & PROFILE STA. 1174+00 TO STA. 1227+00
ROLL 11 OF 31 : PLAN & PROFILE STA. 1227+00 TO STA. 1274+00
ROLL 12 OF 31 : PLAN & PROFILE STA. 1274+00 TO STA. 1320+00
ROLL 13 OF 31 : PLAN & PROFILE I-20 INTERCHANGE 1 OF 2
ROLL 14 OF 31 : PLAN & PROFILE I-20 INTERCHANGE 2 OF 2
ROLL 15 OF 31 : PLAN & PROFILE I-20 INTERCHANGE 3 OF 3
ROLL 23 OF 31 : PLAN & PROFILE NB FRONTAGE ROADS
ROLL 24 OF 31 : PLAN & PROFILE SB AND NB USRS BUSINESS
ROLL 25 OF 31 : PLAN & PROFILE SB FRONTAGE ROADS
ROLL 26 OF 31 : PLAN & PROFILE GRANT CREEK STREETS
ROLL 27 OF 31 : PLAN & PROFILE CONNECTOR RAMPS
ROLL 28 OF 31 : PLAN & PROFILE CONNECTOR/STOPPED CONNECTORS
ROLL 29 OF 31 : PLAN & PROFILE I-20 FRONTAGE ROADS

NOVEMBER 1, 2023

ROLL NUMBER: 21/31

3000 GALLERIA PARKWAY
SUITE 700
PLANO, TX 75024

TBPE REGISTRATION NO. 5772

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0095-01-081

DATE: November 2023

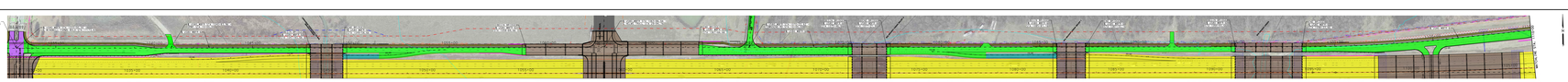
ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	65 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	45 MPH	
DIRECT CONNECTS BYPASSES/CONNECTORS:	45 MPH	
LOCAL STREETS:	30 MPH	LOCAL
TURNAROUNDS/CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

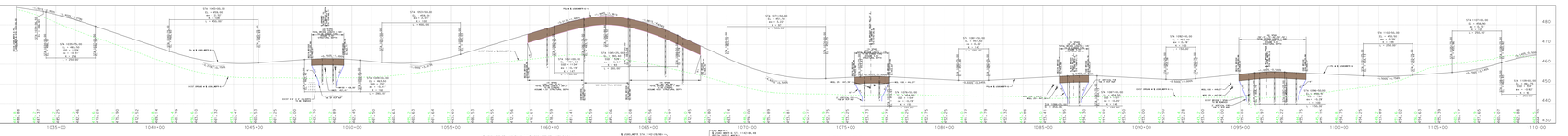
INDEX OF SHEETS

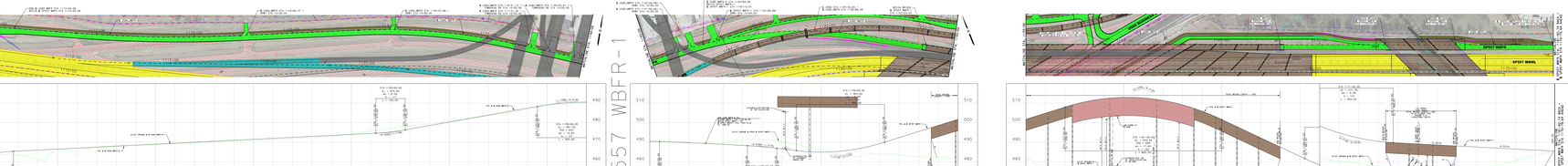
November 16, 2023	3000 GALLERIA PARKWAY SUITE 100 PLANO, TX 75024
ROLL NUMBER 22/31	TBPE REGISTRATION NO. 5996


LEGEND
EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CLEARED
EXISTING TREE LINE
TOBE - 100 YR FLOODPLAIN LIMITS
PARK BOUNDARY
EXISTING GEOMETRIC FEATURES
EXISTING CONTOURS (0.5FT)
EXISTING UNDERGROUND UTILITY/FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING GAS LINE
EXISTING SANITARY SEWER LINE
EXISTING OIL/PETROLEUM LINE
EXISTING POWER LINE
PROPOSED CENTERLINE/BASELINE
PROPOSED ROW
PROPOSED ROW BY OTHERS
PROPOSED EASEMENT
PROPOSED DRAINAGE EASEMENT
PROPOSED PROPERTY
PROPOSED CURB
PROPOSED RETAINING WALL
POTENTIAL NOISE WALL
PROPOSED BRIDGE
PROPOSED CONCRETE TO BE REMOVED
PROPOSED CONCRETE PAVEMENT
PROPOSED CONCRETE BRIDGE
PROPOSED ASPHALT
PROPOSED MAIN LANES
PROPOSED RAMPS
PROPOSED FRONTAGE ROAD/DRIVEWAYS
PROPOSED SIDEWALK
PROPOSED SHARED USE PATH
PROPOSED PROJECT BY OTHERS
PROPOSED TRAFFIC SIGNAL
PROPOSED SLOPE CURB PAVE
PROPOSED GUARDRAIL
PROPOSED PEDESTRIAN FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID
NOTES
1. EXISTING FEATURES AND EXISTING ROW BASED ON SURVEY PERFORMED BY KIMLEY-HORN IN NOVEMBER 2021 AND DFW LIDAR COLLECTED BY NAIP IN 2022.
2. TOPO DATED FEBRUARY 14, 2023 AND RECORD PLANS.
3. SHARED USE PATH AND RAMP LAYOUT SHOWN IS CONCEPTUAL AND SUBJECT TO CHANGE.
4. SHARED USE PATH AND RAMP LAYOUT SHOWN IS CONCEPTUAL AND SUBJECT TO CHANGE. ADDITIONAL RIGHT-OF-WAY AND/OR EASEMENT MAY BE REQUIRED. RETAINING WALLS ARE TO BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TEXAS ADMINISTRATIVE CODE.
5. EXISTING PAVEMENT/CROSS SLOPES WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED AND REPLACED AS NEEDED.
6. ALL PROPOSED CURB RETURNS TO BE 30' RADIUS UNLESS OTHERWISE NOTED. ALL PROPOSED SUPERELEVATION WILL BE CALCULATED BASED ON DESIGN SPEED AND CURVATURE OF ROADWAY.
7. ALL CURVES ARE TYPE II UNLESS NOTED OTHERWISE.
8. DIMENSIONS ARE TO THE FACE OF PAVEMENT OR BACK OF CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE SUBJECT TO CHANGE.
9. FINAL ROW AND EASEMENT LIMITS FROM TITLE INSURANCE RATE MAPS (NOT SHOWN), PROTECTION, DRAINAGE, UTILITY, AND ACCESS EASEMENTS TO BE DETERMINED.
10. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES AND ELEVATIONS DEPICTED FROM RECORD INFORMATION.
11. CONVENTIONAL ROADWAY SIGNAGE, SMALL SIGNS AND PAVEMENT MARKINGS ARE NOT SHOWN ON THESE PLANS.
12. UNDERGROUND UTILITIES DEPICTED FROM RECORDS ARE APPROXIMATE AND MAY NOT BE COMPLETE.
13. EXISTING UTILITIES SHALL BE ADJUSTED AS NECESSARY IF THE PROPOSED ROW PARTIALLY ENTERS/EXITS THE EXISTING ROW. THE EXTENT OF THE UTILITY ADJUSTING AND PAYMENT TO BE DETERMINED DURING THE UTILITY PHASE.
14. TURNS DESIGNED TO ACCOMMODATE 48-62 TRUCK TURNING TEMPLATE.
15. RAMP CROSS SLOPE TRANSITIONS OF BETWEEN MAIN LANE CS/RP AND FRONTAGE ROAD CS/I WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY, NOT FOR CONSTRUCTION







PRELIMINARY, NOT FOR CONSTRUCTION

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0095-01-081

DATE: November 2023

ROADWAY — DESIGN SPEED — FUNCTIONAL CLASSIFICATION

MAIN LANES: 65 MPH URBAN FREEWAY

FRONTAGE ROADS: 40 MPH

RAMPS: 45 MPH

DIRECT CONNECTS BYPASSES/CONNECTORS: 45 MPH

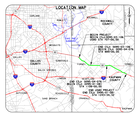
LOCAL STREETS: 30 MPH LOCAL

TURNAROUNDS/CONNECTORS: 30 MPH

TURNAROUNDS: 15 MPH

INDEX OF SHEETS

ROLL 1 OF 31:	PLAN & PROFILE STA. 85+00 TO STA. 760+00
ROLL 2 OF 31:	PLAN & PROFILE STA. 760+00 TO STA. 836+00
ROLL 3 OF 31:	PLAN & PROFILE STA. 836+00 TO STA. 911+00
ROLL 4 OF 31:	PLAN & PROFILE STA. 835+00 TO STA. 987+00
ROLL 5 OF 31:	PLAN & PROFILE STA. 987+00 TO STA. 1063+00
ROLL 6 OF 31:	PLAN & PROFILE STA. 1063+00 TO STA. 1139+00
ROLL 7 OF 31:	PLAN & PROFILE STA. 1052+00 TO STA. 1366+00
ROLL 8 OF 31:	PLAN & PROFILE STA. 1363+00 TO STA. 1581+00
ROLL 9 OF 31:	PLAN & PROFILE STA. 1581+00 TO STA. 1798+00
ROLL 10 OF 31:	PLAN & PROFILE SPRUIT STA. 1104+00 TO STA. 1378+00
ROLL 11 OF 31:	PLAN & PROFILE STA. 1377+00 TO STA. 1674+00
ROLL 12 OF 31:	PLAN & PROFILE STA. 1674+00 TO STA. 1971+00
ROLL 13 OF 31:	PLAN & PROFILE I-20 INTERCHANGE (1 OF 2)
ROLL 14 OF 31:	PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)
ROLL 15 OF 31:	PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)
ROLL 16 OF 31:	PLAN & PROFILE NB FRONTAGE ROADS
ROLL 17 OF 31:	PLAN & PROFILE NB FRONTAGE ROADS
ROLL 18 OF 31:	PLAN & PROFILE SB AND WB US80 BUSINESS
ROLL 19 OF 31:	PLAN & PROFILE SB FRONTAGE ROADS
ROLL 20 OF 31:	PLAN & PROFILE SPRUIT CROSS STREETS
ROLL 21 OF 31:	PLAN & PROFILE LOWD/SPRUIT RAMPS
ROLL 22 OF 31:	PLAN & PROFILE DIRECT CONNECTS/CONNECTORS
ROLL 23 OF 31:	PLAN & PROFILE I-20 FRONTAGE ROADS



NOVEMBER 1, 2023	3000 GALLERIA PARKWAY SUITE 100 PLANO, TX 75024
ROLL NUMBER 22/31	TBPE REGISTRATION NO. 5996

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

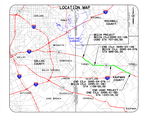
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM W/ST OF FM 460 TO JCT 20
CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	45 MPH	
CROSS ST. BRIDGES BYPASSES/CONNECTORS:	45 MPH	
LOCAL STREETS:	30 MPH	LOCAL
RAMP/FRONTAGE CONNECTORS:	40 MPH	
TURNAROUNDS:	30 MPH	

INDEX OF SHEETS



November 16, 2023

ROLL NUMBER 23/31

AGUIRRE & FIELDS
TBPE FIRM NO. F-2566
TBPLS FIRM NO. 10029600

PRELIMINARY, NOT FOR CONSTRUCTION

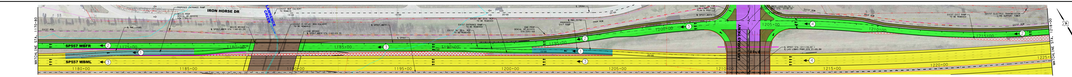
LEGEND

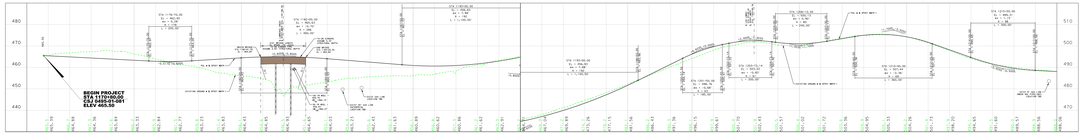
GENERAL NOTES

1. EXISTING FEATURES AND EXISTING ROW BASED ON TXDOT ROADWAY INVENTORY DATA, AERIAL PHOTOGRAPHY AND FIELD SURVEY DATA DATED FEBRUARY 14, 2020 AND RECORD PLANS.
2. PROPOSED ROW, EASEMENTS AND CONTROL OF ACCESS ARE REVISED BY TXDOT ON 07/31/2023.
3. SHARED USE PATH AND RAMP LAYOUT:
   a. SHARED USE PATH AND RAMP LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.
   b. FINAL LOCATIONS OF SHARED USE PATH AND RAMPS MAY REQUIRE RETAINING WALLS AND FIT, FINISH AND GRADE (FFG) OF THE ADJACENT ROADWAY/PATH CONSTRUCTION.
   c. CONSTRUCTION OF SHARED USE PATH AND RAMPS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
4. EXISTING PAVEMENT SHOWN WITHIN ACTIVE LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED AND REPLACED.
5. SUPERELEVATION IS DESIGNED IN ACCORDANCE WITH THE AASHTO GREEN BOOK. MAXIMUM ALLOWABLE SUPERELEVATION RATES WERE CALCULATED BASED ON DESIGN SPEED AND CURVATURE OF THE ROAD.
6. ALL CURVES ARE TYPE 2 UNLESS NOTED OTHERWISE.
7. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE HORIZONTAL UNLESS NOTED OTHERWISE.
8. FINAL CLEARANCE (CONTROL LIMITS FROM FLOOD, DRAINAGE, RATE MAPS, HIGHWAYS, RAILROADS, UTILITIES, ETC.) WILL BE DETERMINED DURING FINAL DESIGN ENGINEERING.
9. ALL UTILITY ADJUSTMENT LOCATIONS, FUNCTIONS AND ELEVATIONS OBTAINED FROM RECORD INFORMATION.
10. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN ON THE PLANS. SIGNAGE WILL BE DESIGNED AT THE UNDERSIGHT ENGINEERING DISTRICTS FROM RAILROAD, UTILITY AND ROADWAY CROSSINGS.
11. EXISTING ROADWAY SIGNAGE WILL BE REMOVED UNLESS IT IS THE PROPOSED NEW PHYSICALLY SATISFACTORY THE EXISTING SIGNAGE WILL BE REMOVED AND NEW SIGNAGE AND PAVEMENT MARKINGS TO BE DETERMINED DURING FINAL DESIGN.
12. TURNING RADIUSES TO ACCOMMODATE 48'-0" TRUCK TRACTOR SEMI-TRAILER.
13. RAMP CROSS SLOPE TRANSITIONS AT POINTS WHERE LANE LINES AND PAVEMENT MARKS TOUCH WILL NOT EXCEED A 50:1% SLOPE.

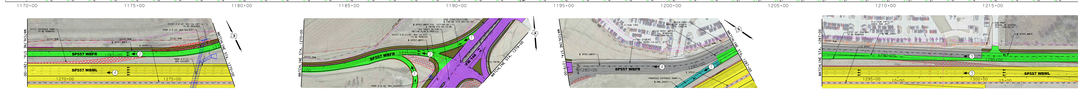
GRAPHIC SCALE IN FEET

SP557 WBFR-1 (CONT.)





SP557 WBFR-1 (CONT.)



PRELIMINARY, NOT FOR CONSTRUCTION

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM W/ST OF FM 460 TO JCT 20
CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY DESIGN SPEED: MAIN LANES: 60 MPH; FRONTAGE ROADS: 40 MPH; RAMPS: 45 MPH; CROSS ST. BRIDGES BYPASSES/CONNECTORS: 45 MPH; LOCAL STREETS: 30 MPH; RAMP/FRONTAGE CONNECTORS: 40 MPH; TURNAROUNDS: 30 MPH

FUNCTIONAL CLASSIFICATION: URBAN FREEWAY; LOCAL

November 1, 2023

ROLL NUMBER 23/31

AGUIRRE & FIELDS
TBPE FIRM NO. F-2566
TBPLS FIRM NO. 10029600

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

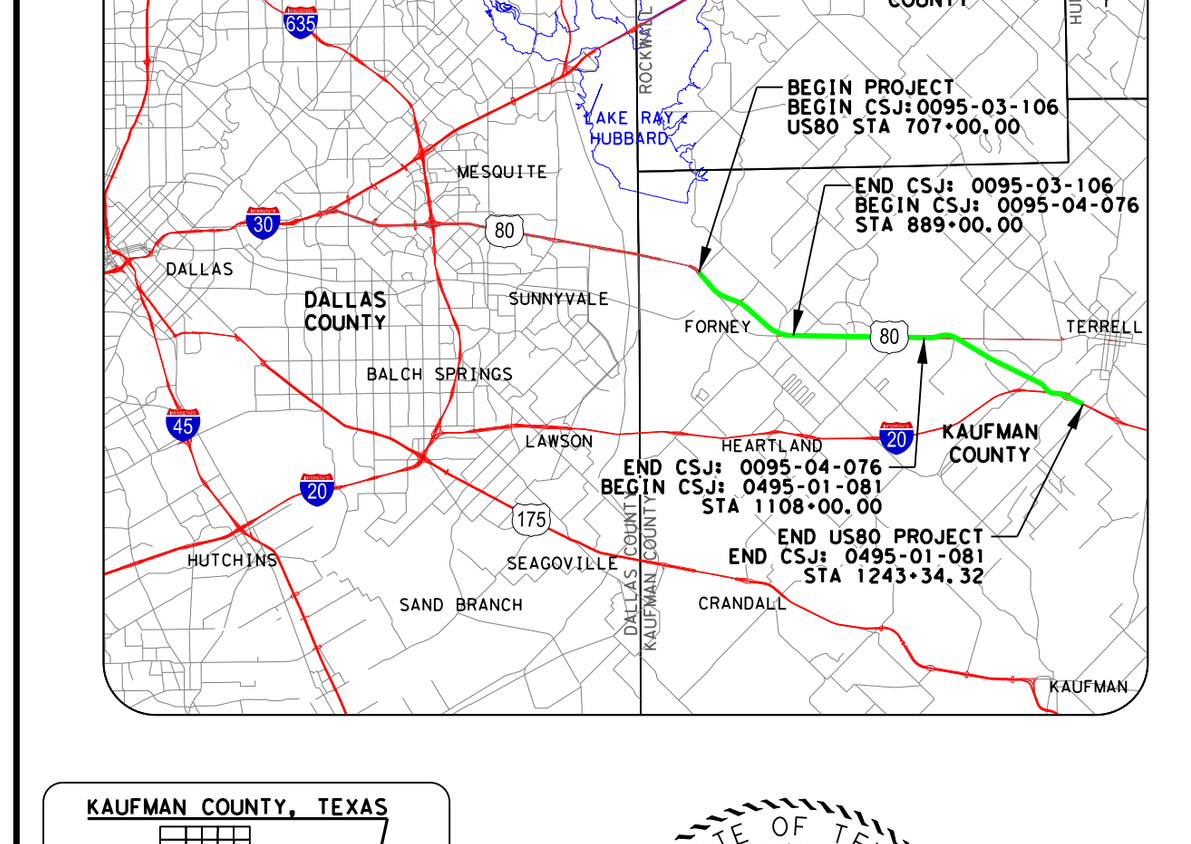
US 80
100% DESIGN SCHEMATIC

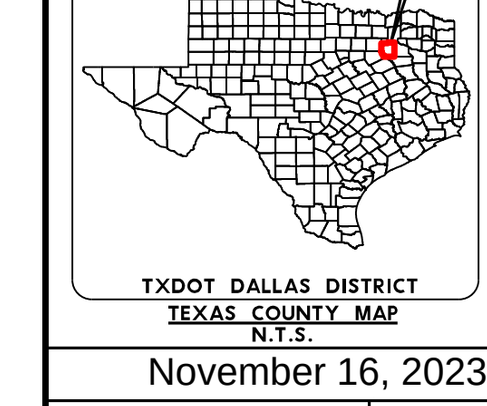
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 24/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

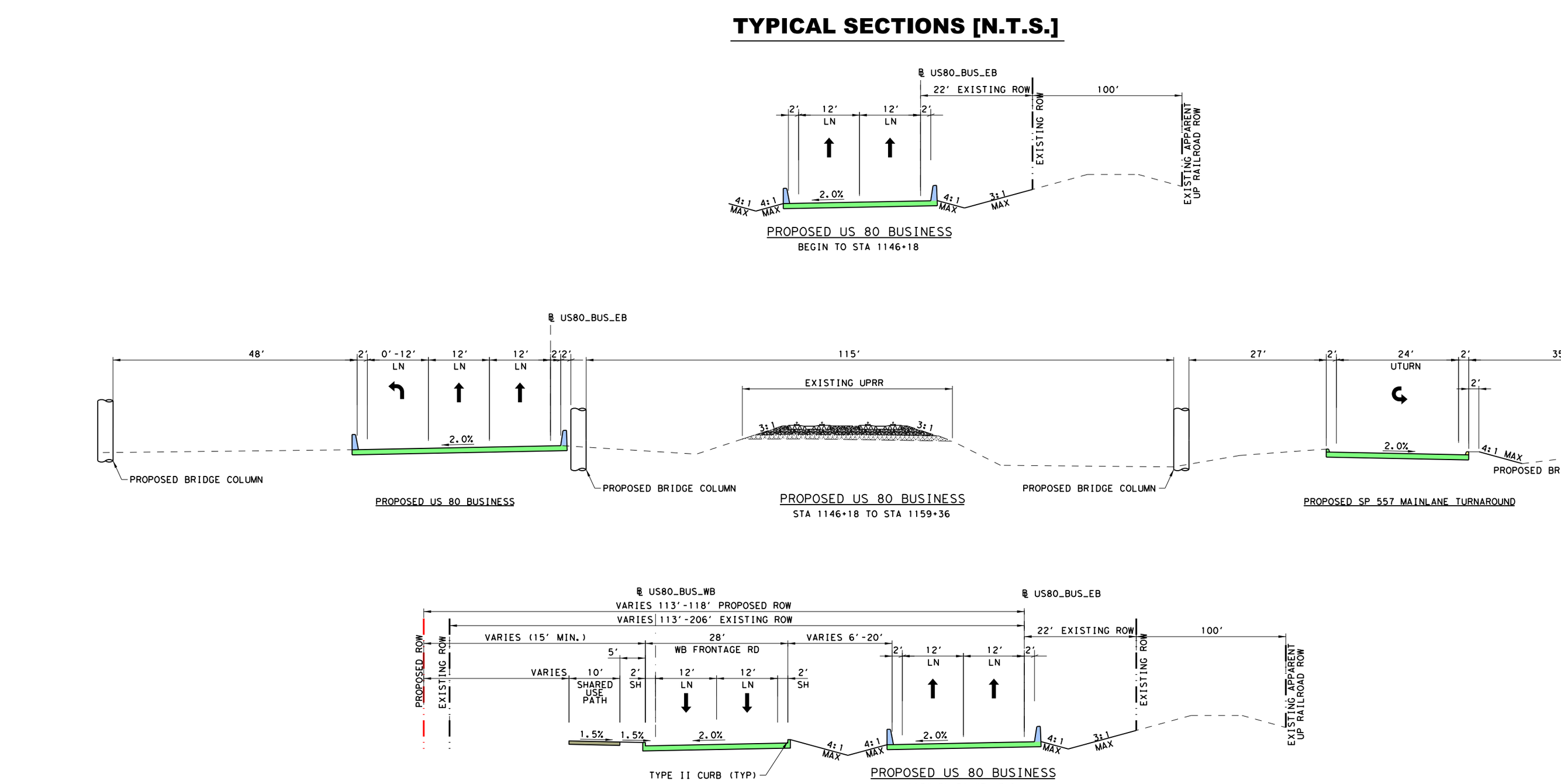
EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CULVERT
EXISTING STORM SEWER
FEMA 100 YR FLOODPLAIN LIMITS
WETLANDS
PARK BOUNDARY
EXISTING PLANIMETRIC FEATURES
EXISTING CONTOURS (5-FT)
EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING ELECTRIC LINE
EXISTING SANITARY SEWER LINE
EXISTING GAS/PETROLEUM LINE
CITY/COUNTY LIMITS
PROPOSED CENTERLINE/BASELINE
PROPOSED ROW
PROPOSED ROW BY OTHERS
PROPOSED ACCESS DENIAL
PROPOSED DRAINAGE EASEMENT
PROPOSED EDGE OF PAVEMENT
PROPOSED CTB
PROPOSED BRIDGE
PROPOSED RETAINING WALL
POTENTIAL NOISE WALL
PROPOSED CULVERT
PAVEMENT/BRIDGE TO BE REMOVED
EXISTING BRIDGE TO REMAIN
PROPOSED CONCRETE BRIDGE
PROPOSED STEEL BRIDGE
PROPOSED MAIN LANES
PROPOSED RAMP
PROPOSED FRONTAGE ROAD/BYPASSES
PROPOSED CROSS STREET
PROPOSED SHARED USE PATH
PROPOSED PROJECT BY OTHERS
POTENTIAL DISPLACEMENTS
PROPOSED RIP RAP
PERPENDICULAR CURB RAMP
PROPOSED GUARDRAIL
EXISTING TRAFFIC FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID

NOTES:

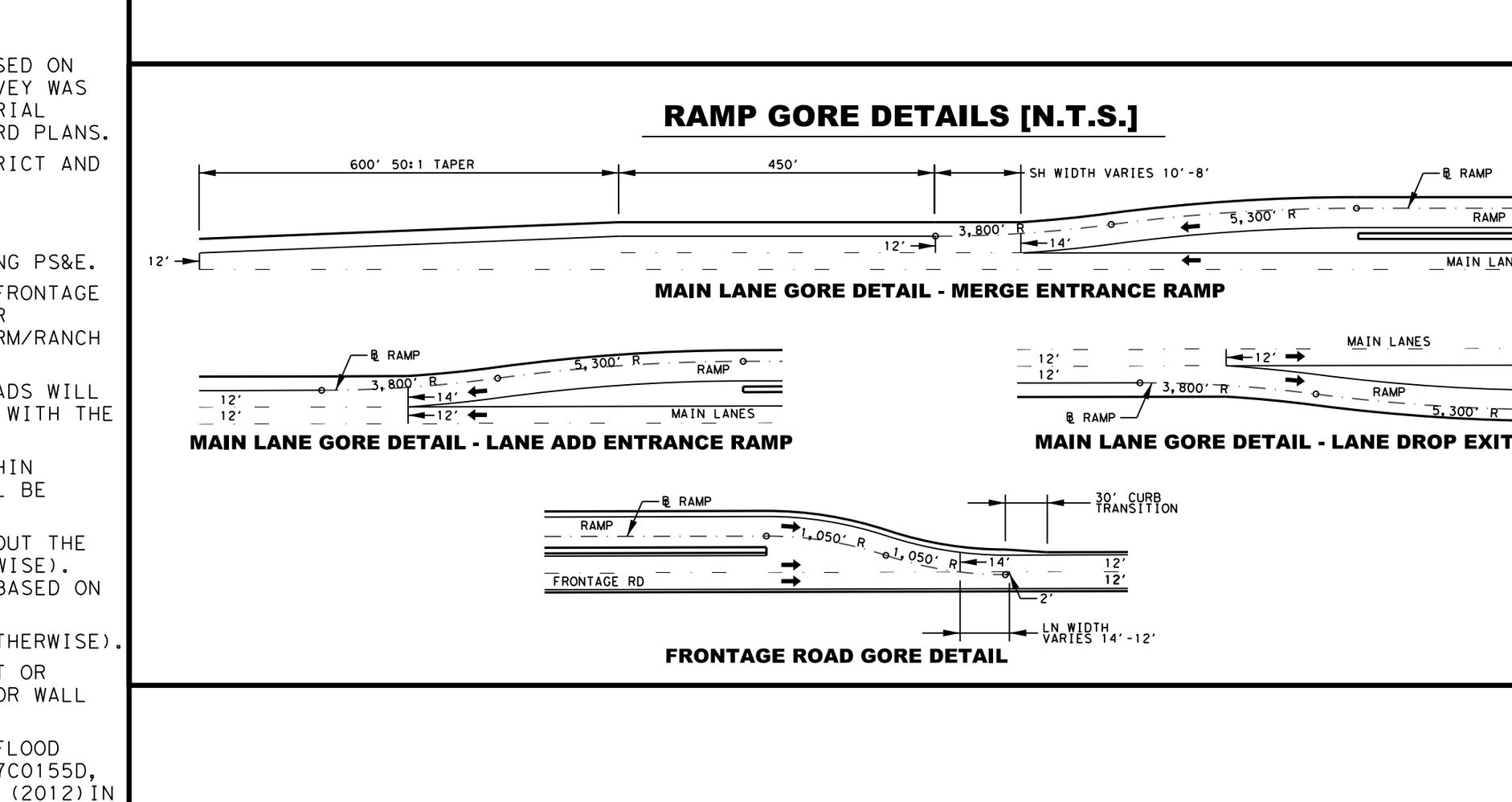
1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012) IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

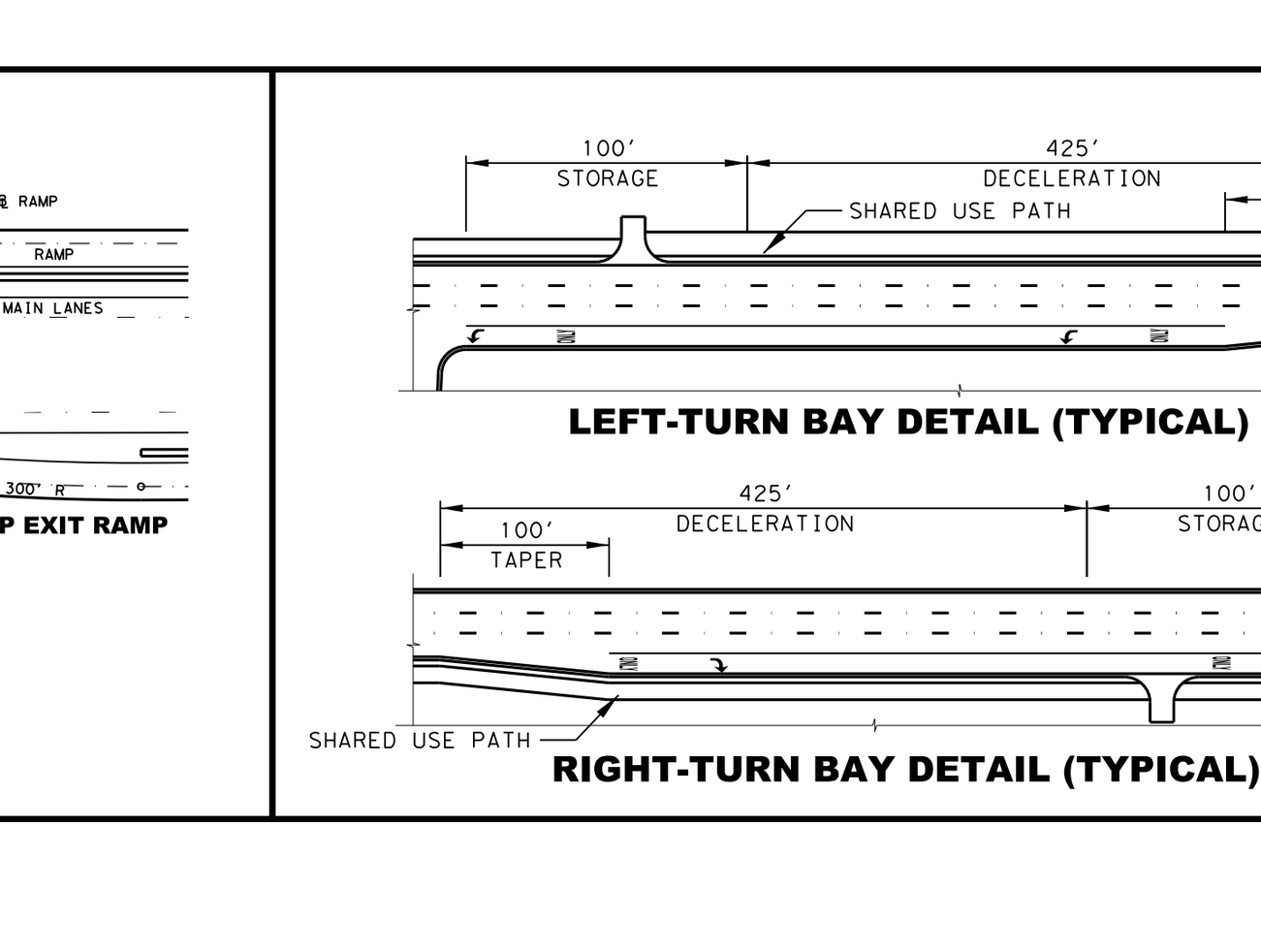
PRELIMINARY,
NOT FOR CONSTRUCTION

TYPICAL SECTIONS [N.T.S.]

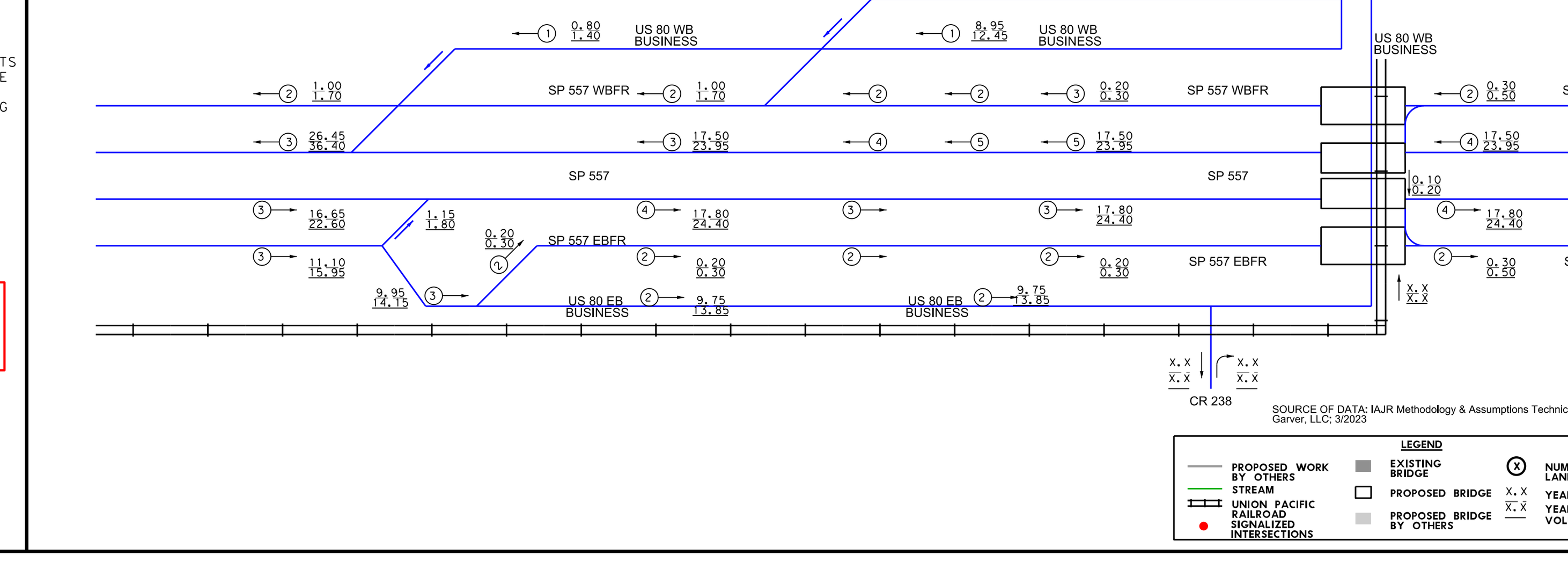


RAMP GORE DETAILS [N.T.S.]



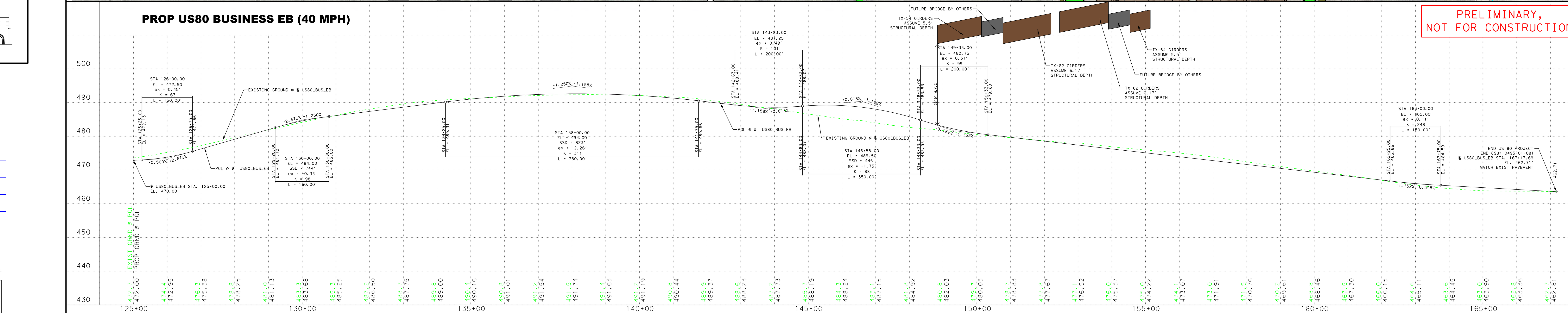


TRAFFIC LINE DIAGRAM [N.T.S.]



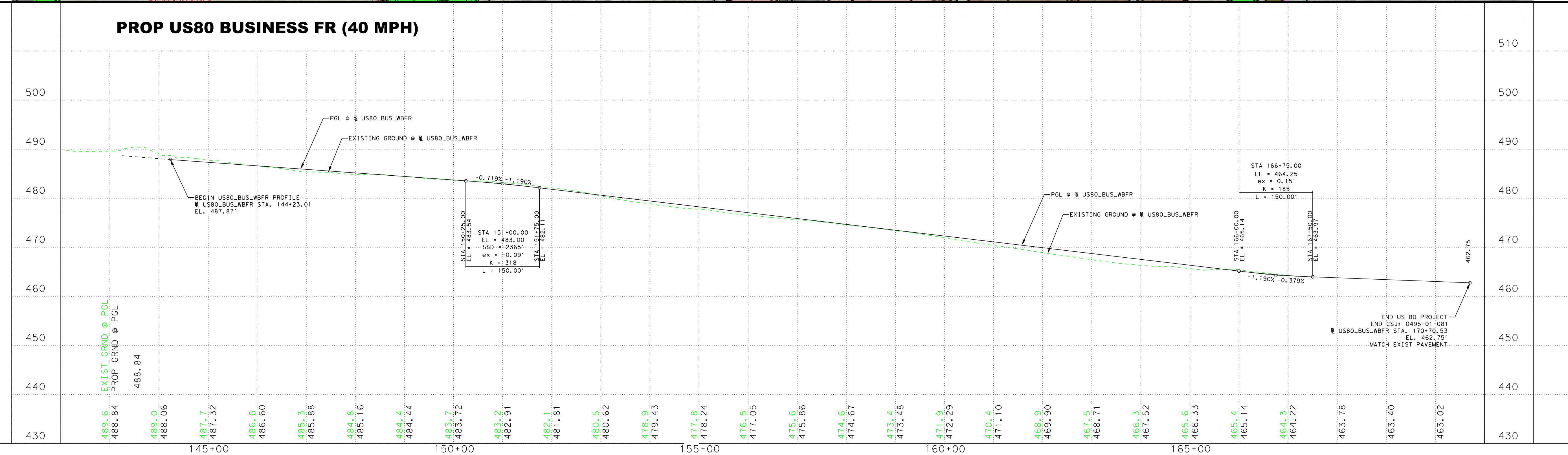
GRAPHIC SCALE IN FEET
HORIZONTAL 1"=100'
VERTICAL 1"=10'

PROP US80 BUSINESS EB (40 MPH)



PRELIMINARY,
NOT FOR CONSTRUCTION

PROP US80 BUSINESS FR (40 MPH)



Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

NOVEMBER 1, 2023
ROLL NUMBER 24/31
GARVER
3010 GAYLORD PARKWAY SUITE 190 FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

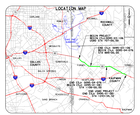
US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJs 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES	40 MPH	URBAN FREEWAY
FRONTAGE ROADS	40 MPH	
RAMPS	40 MPH	
CROSSROADS BYPASSES/CONNECTIONS	40 MPH	LOCAL
LOCAL STREETS	30 MPH	
DRIVEWAYS/CONNECTORS	30 MPH	
TURNAROUNDS	15 MPH	

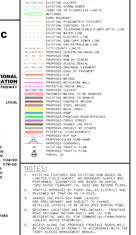
INDEX OF SHEETS



November 16, 2023

ROLL NUMBER: 25/31

LEGEND



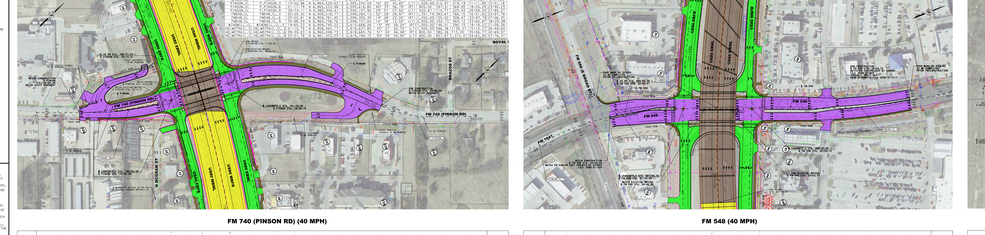
NOTES

1. EXISTING FEATURES AND EXISTING ROW BASED ON AERIAL SURVEY COMPLETED BY MCKIMM & CONRAD IN MAY, 2021 AND FIELD SURVEY COMPLETED BY TOPO DATED FEBRUARY 14, 2023 AND RECORD PLANS.
2. ALL PROPOSED ROW AND EASEMENTS ARE PRELIMINARY AND SUBJECT TO REVISION DURING THE ACQUISITION PROCESS.
3. SHARED USE PATH AND RAMP LAYOUT:
   a. SHARED USE PATH AND RAMP LAYOUT SHOWN ON THESE PLANS ARE PRELIMINARY AND SUBJECT TO CHANGE DURING DETAILED DESIGN. SHARED USE PATH AND RAMP LAYOUT MAY REQUIRE DRIVEWAY/ROAD RETURN RADII AND TIE-TYPE MODIFICATIONS. SEE TYPICAL SECTIONS FOR CONSTRUCTION UNLESS NOTED OTHERWISE.
   b. EXISTING PAVEMENT/DRIVEWAYS LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE RECONSTRUCTED AS PART OF THIS PROJECT.
   c. EXISTING PAVEMENT/DRIVEWAYS LOCATED IN AREAS OF PROPOSED RESURFACING, RESTORATION OR SUPERELEVATION WILL BE RESURFACED BASED ON EXISTING CONDITIONS AT THE TIME OF CONSTRUCTION.
4. ALL CURVE AND TYPICAL SECTION DATA NOTED REFERENCE THE MAIN LANES.
5. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB, UNLESS NOTED OTHERWISE. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
6. CONSTRUCTION AND RIGHT-OF-WAY LIMITS FROM CLEAR ZONE, DRAINAGE, RAIL GRADE CROSSINGS, UTILITY CONFLICTS, ENVIRONMENTAL MITIGATION, AESTHETICS, RIGHT-OF-WAY AVAILABILITY AND OTHER CONSIDERATIONS.
7. OWNERSHIP OF UTILITIES TO BE DETERMINED FROM SURVEYS AND UTILITY COMPANY RECORDS.
8. ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE PROPOSED RAW PARCELS'S RESPONSIBILITY TO LOCATE AND PROTECT ALL UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT. THE LOCATIONS SHOWN ARE DETERMINED USING THE BEST AVAILABLE INFORMATION.
9. CLIMBING DESIGNED TO ACCOMMODATE 80-KIP TRUCK AT CRAWL SPEED.
10. RAMP CROSS SLOPE TURNS OUT BETWEEN MAIN LANES CS/SH AND FRONTAGE ROADS TOO WELL UNDER 2000'S BETTER LANES.

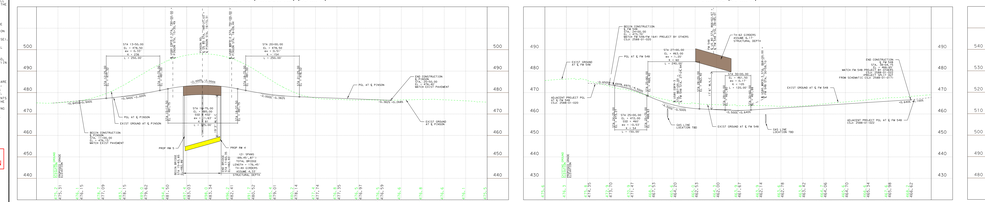
PRELIMINARY,
NOT FOR CONSTRUCTION

3000 GALLERIA PARKWAY
SUITE 100
PEARLAND, TX 77584
TBPE REGISTRATION NO. 9791

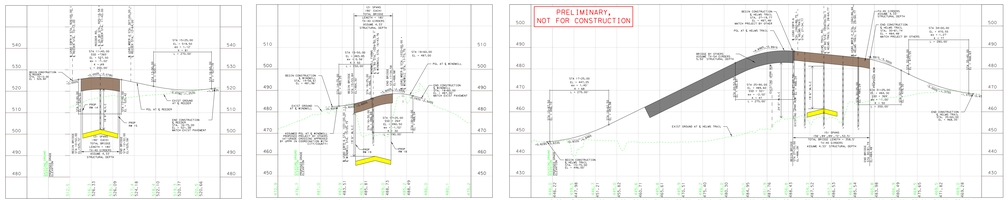
GRAPHIC SCALE IN FEET



FM 740 (PINSON RD) (40 MPH)



FM 548 (40 MPH)



REEDER RD (40 MPH)

WINDMILL FARMS BLVD (35 MPH)

HELMS TRAIL (40 MPH)

TOWNSEND RD (35 MPH)

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJs 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

November 1, 2023

ROLL NUMBER: 25/31

3000 GALLERIA PARKWAY
SUITE 100
PEARLAND, TX 77584
TBPE REGISTRATION NO. 9791

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

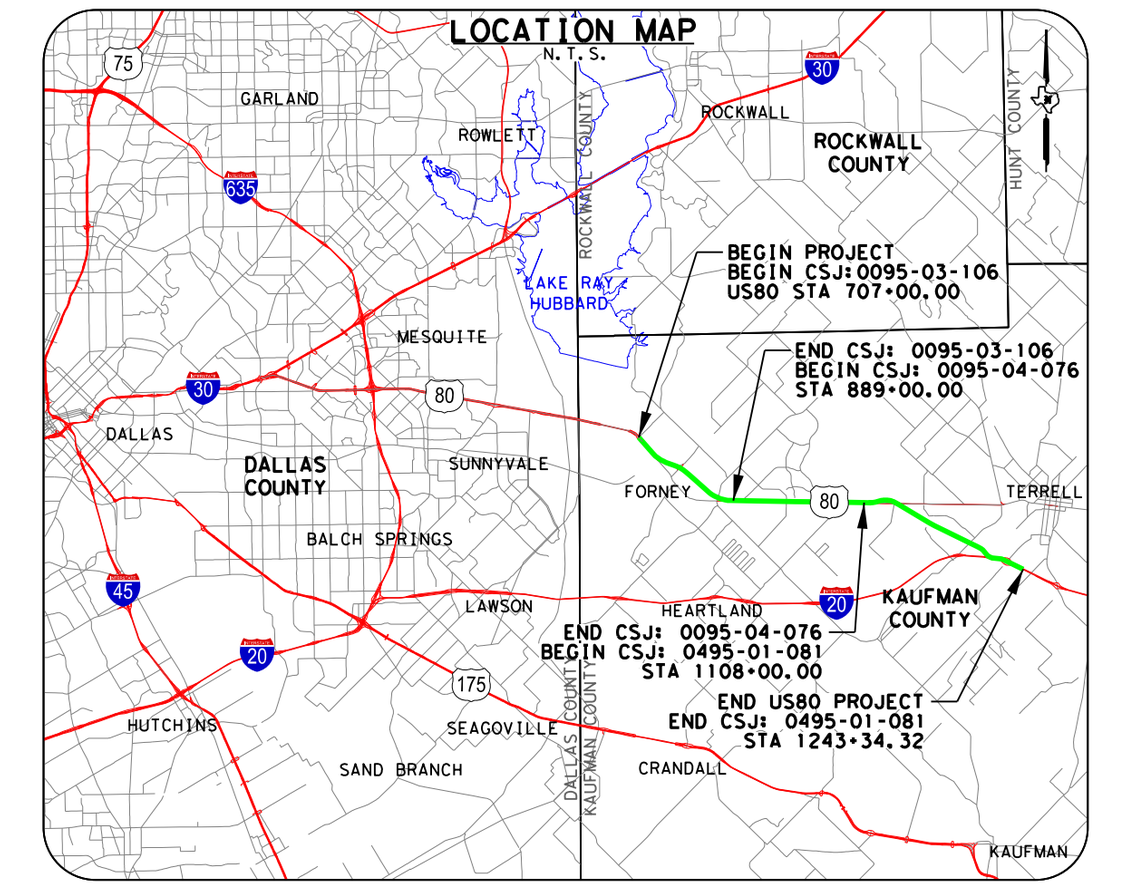
US 80
100% DESIGN SCHEMATIC

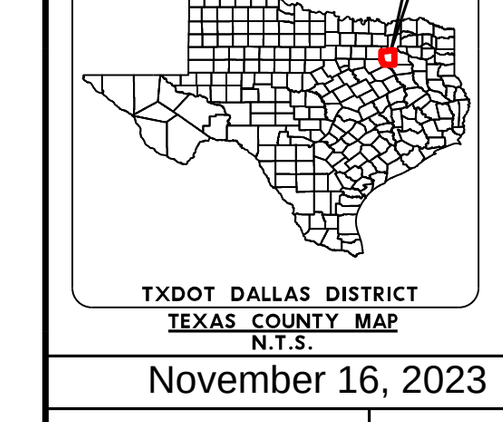
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

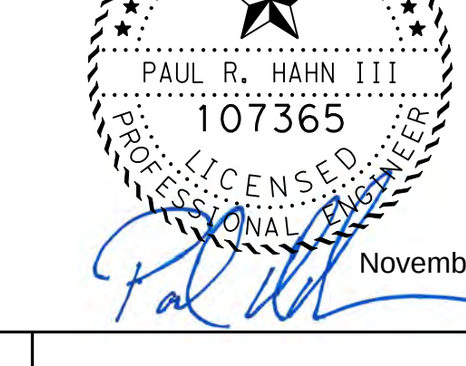
DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS







November 16, 2023

ROLL NUMBER 26/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

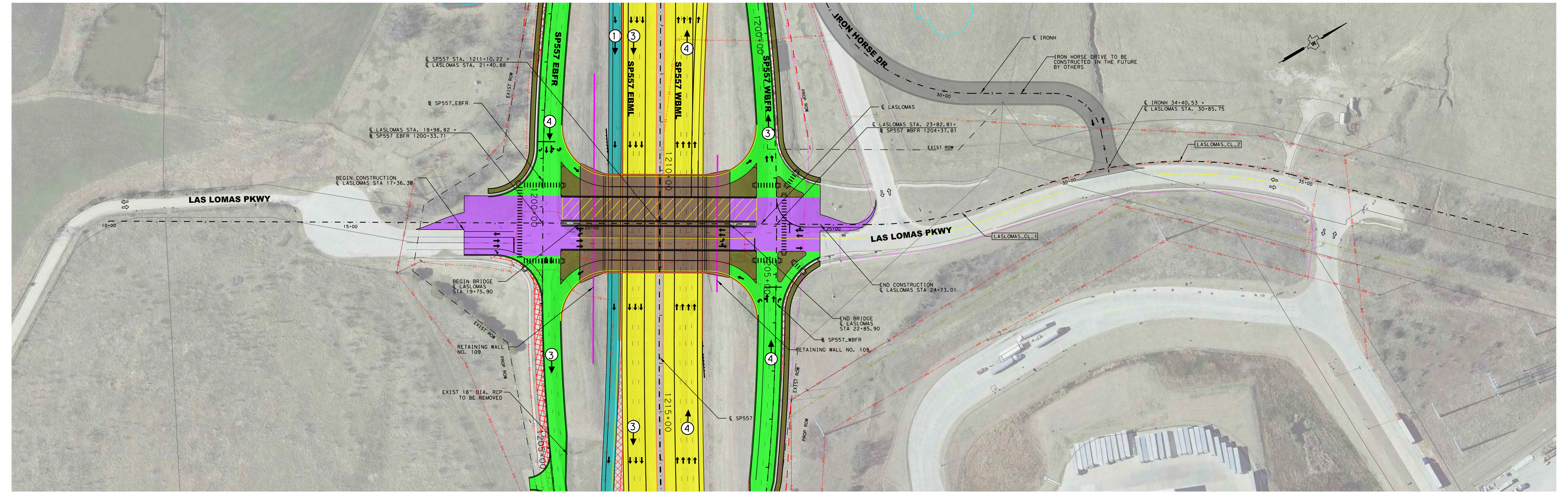
- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

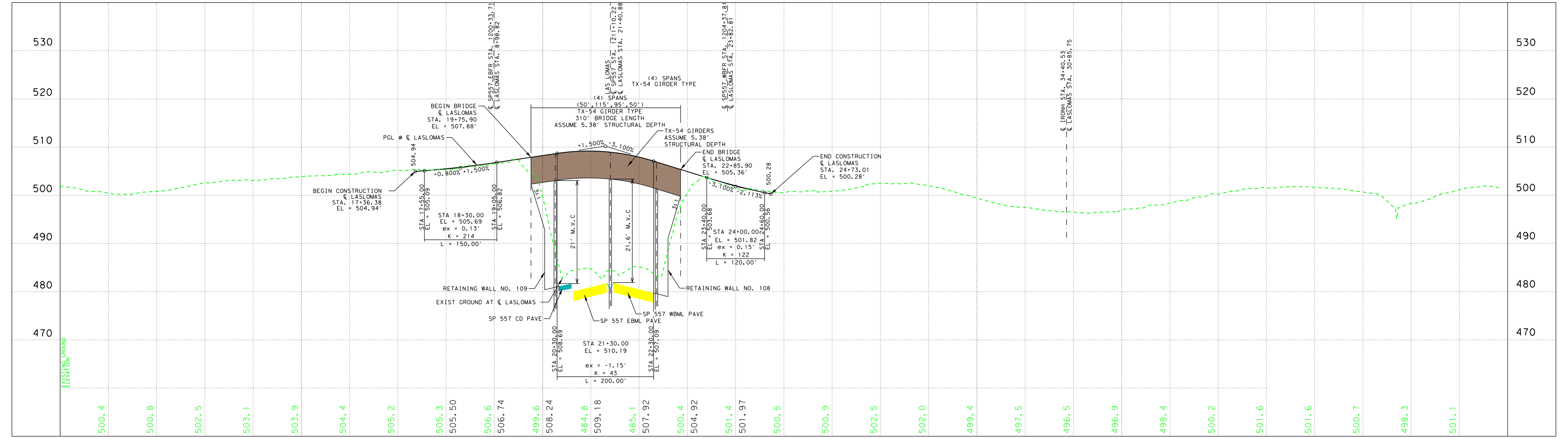
1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

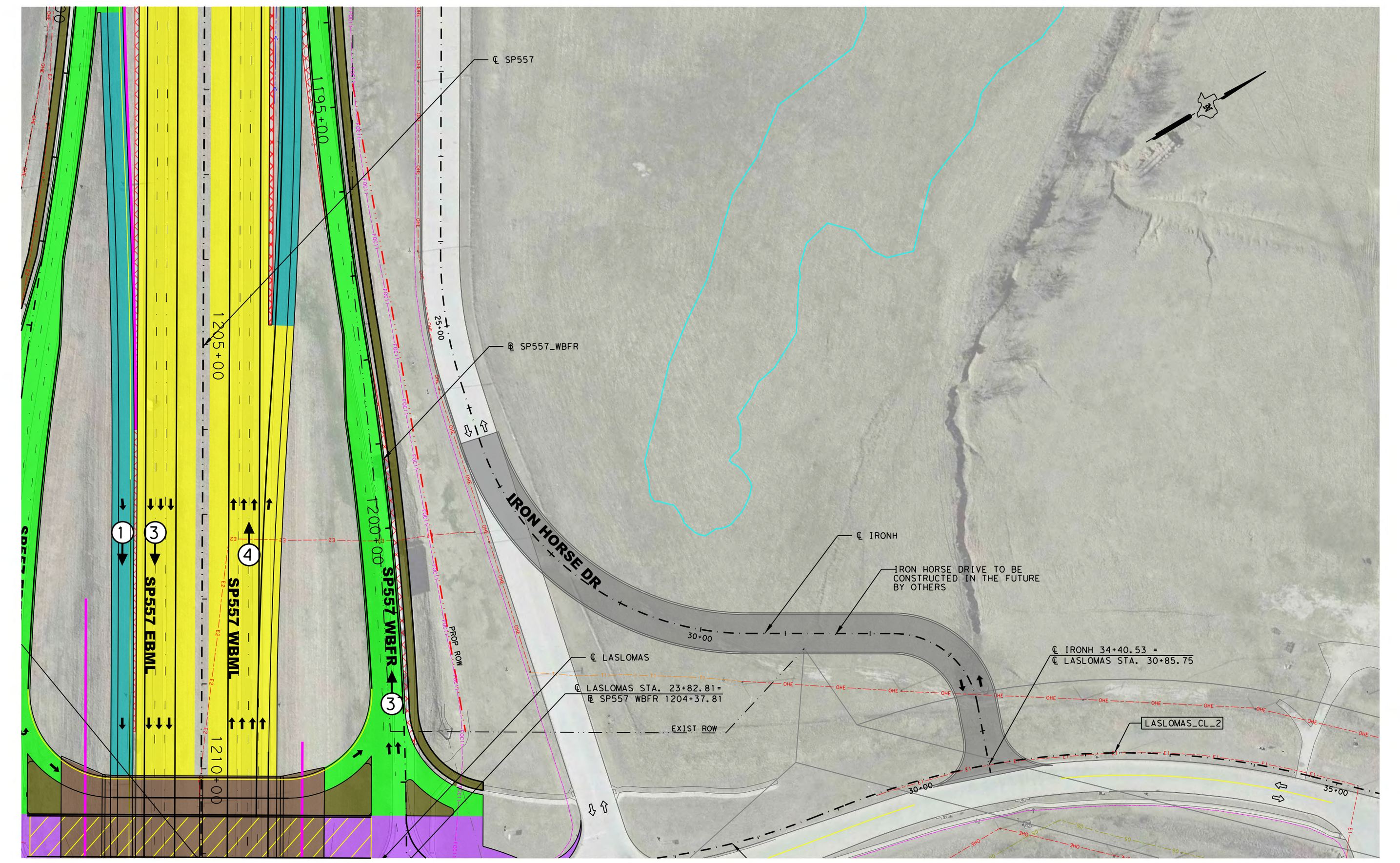
PRELIMINARY,
NOT FOR CONSTRUCTION

HORIZONTAL 1":100' — VERTICAL 1":10'
GRAPHIC SCALE IN FEET

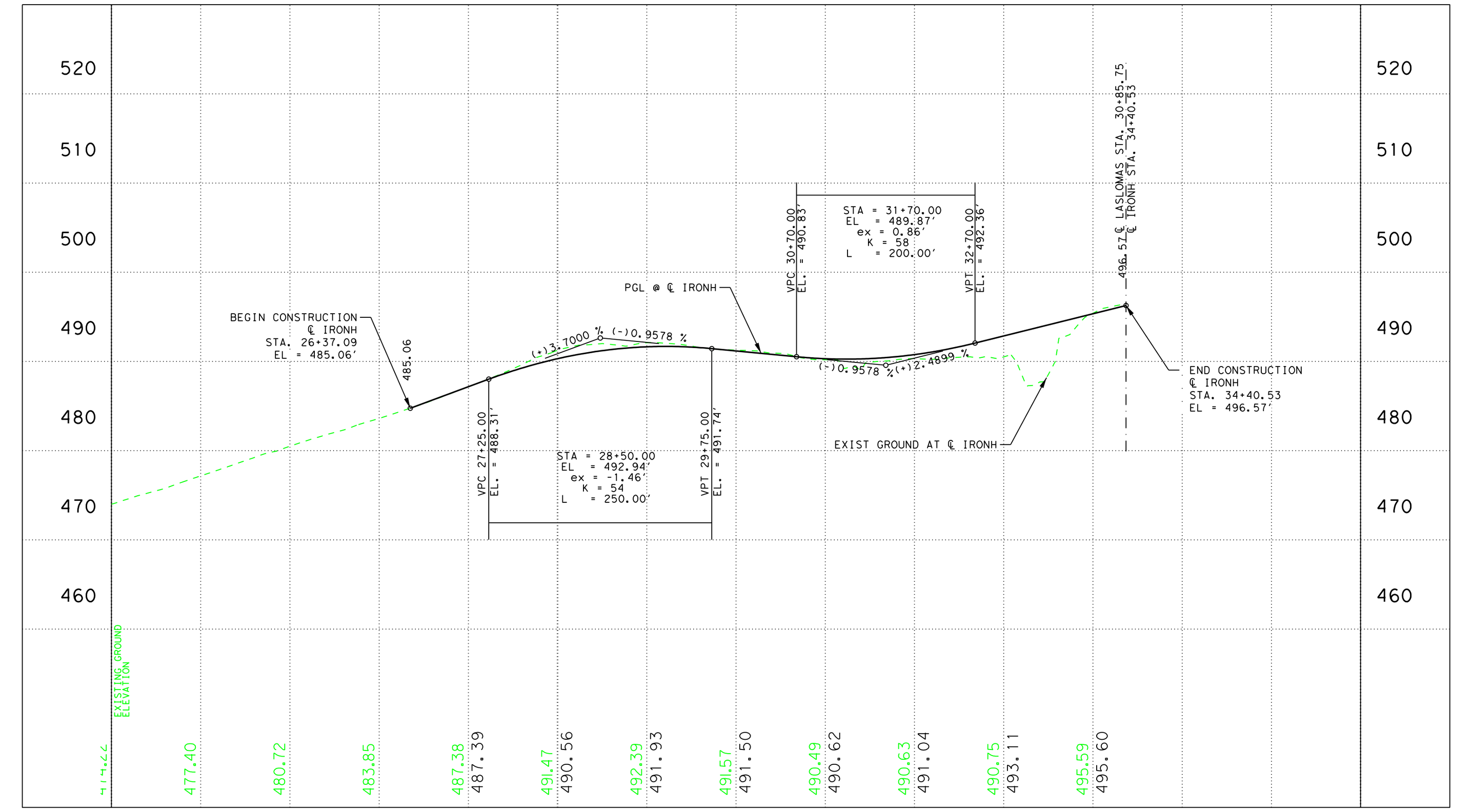


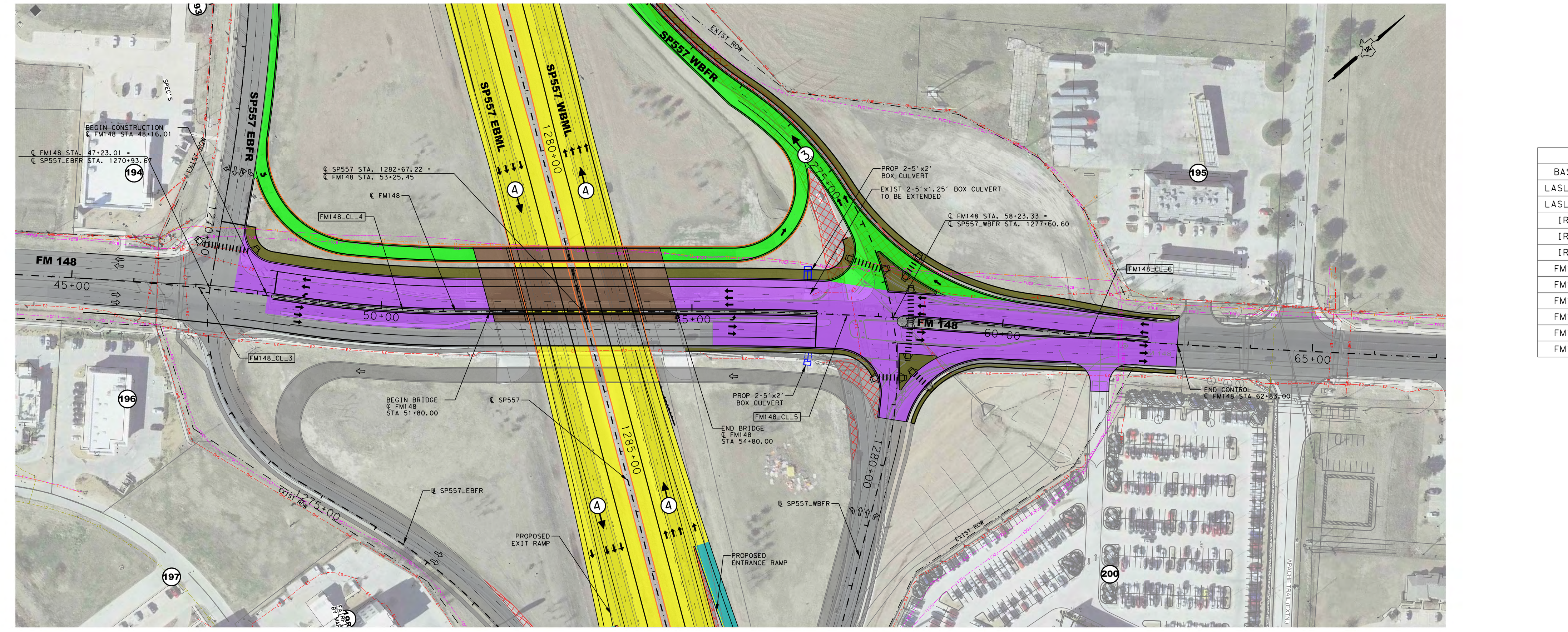
LAS LOMAS PKWY (30 MPH)



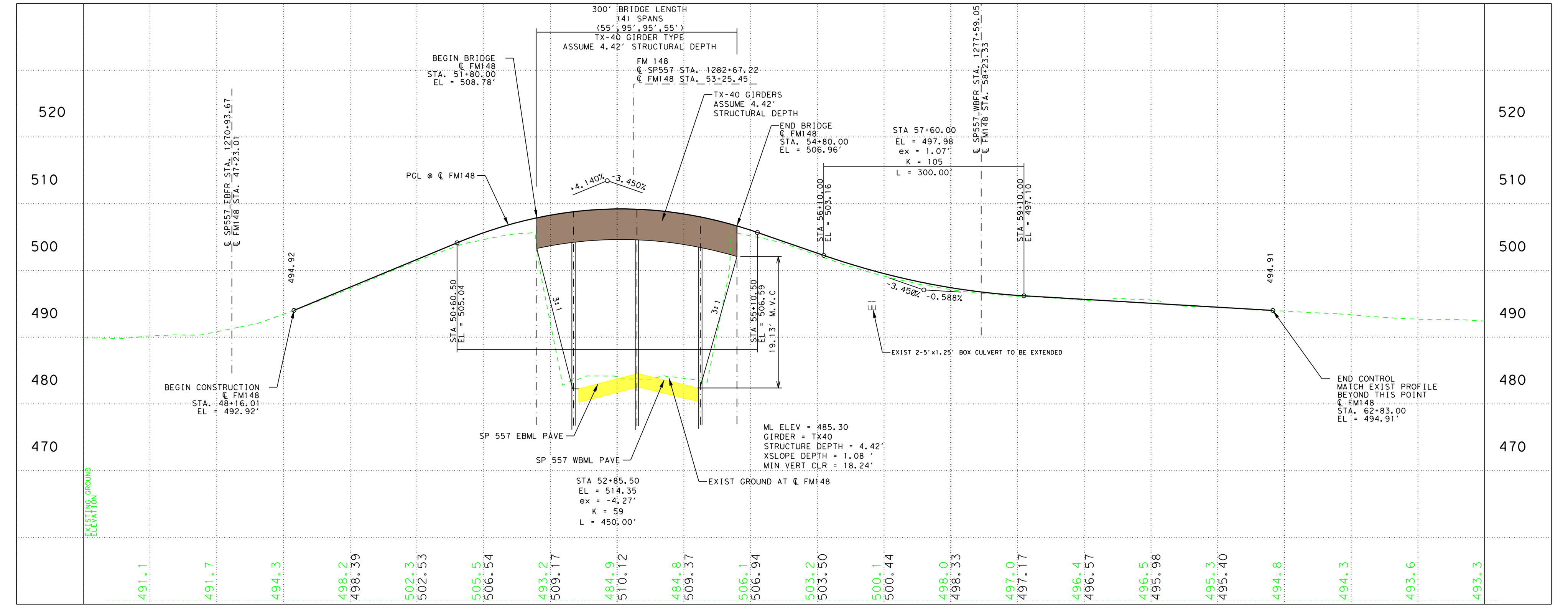


IRON HORSE DR (35 MPH)





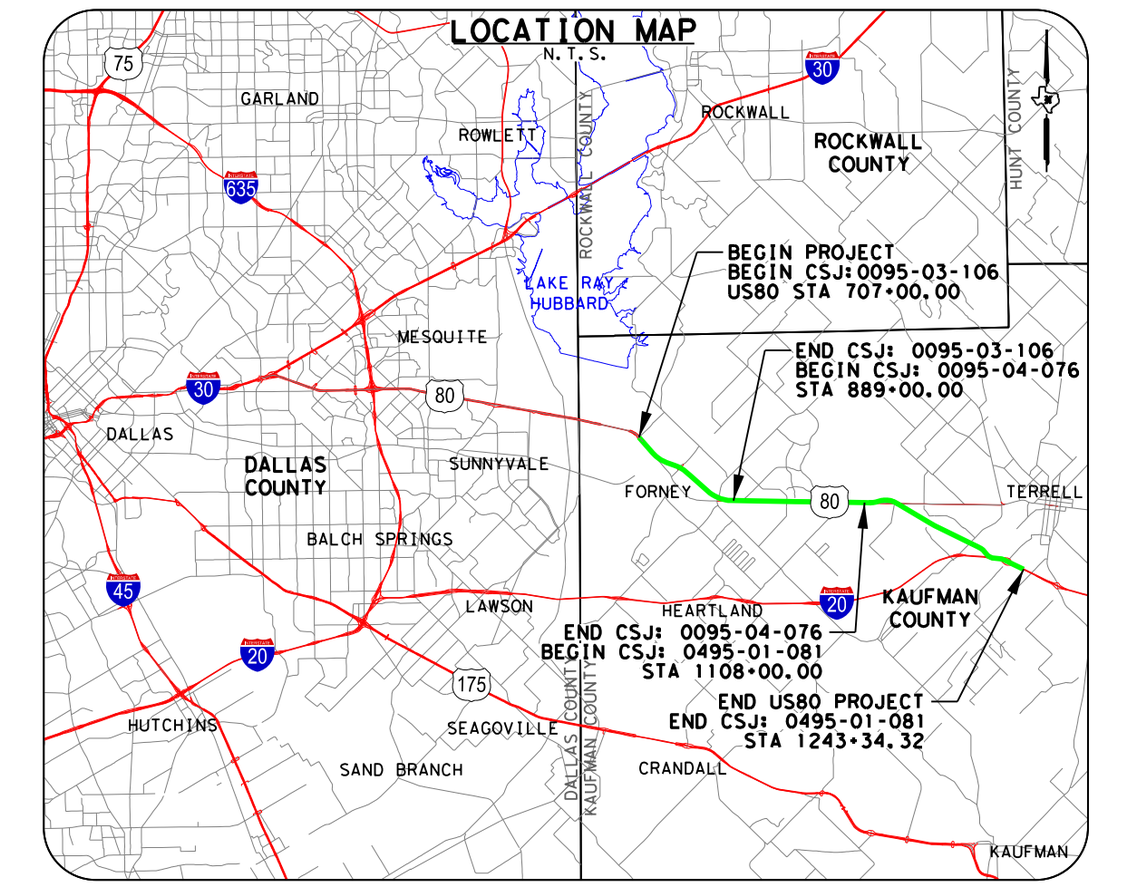
FM 148 (40 MPH)



HORIZONTAL ALIGNMENT DATA										
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
LASLOMAS_CL	LASLOMAS_CL_1	27+20.58	N6,956,630.4367	E2,633,175.3701	21° 35' 57.4362" (LT)	800.00	152.60	301.58	25+67.98	28+69.56
LASLOMAS_CL	LASLOMAS_CL_2	31+98.09	N6,957,105.38	E2,633,252.2863	35° 34' 13.6317" (RT)	900.00	288.70	558.74	29+09.39	34+68.13
IRONHDR	IRONHDR_1	24+91.42	N6,956,700.6861	E2,632,470.7327	18° 07' 10.8964" (LT)	500.00	79.73	158.12	24+11.70	25+69.82
IRONHDR	IRONHDR_2	28+79.04	N6,956,615.9348	E2,632,850.3390	72° 00' 12.0945" (LT)	333.00	241.95	418.48	26+37.09	30.55+57
IRONHDR	IRONHDR_3	33+10.37	N6,957,043.5899	E2,633,103.0738	79° 06' 11.7052" (RT)	100.00	82.89	138.06	32+27.79	33+65.85
FM148_CL	FM148_CL_1	12+47.81	N6,950,173.2818	E2,636,304.1706	19° 37' 50.8304" (RT)	1,432.39	247.81	490.77	10+00.00	14+90.77
FM148_CL	FM148_CL_2	19+79.99	N6,950,506.06	E2,636,961.8002	20° 05' 06.5568" (LT)	1,432.39	253.67	502.13	17+26.32	22+28.45
FM148_CL	FM148_CL_3	46+90.48	N6,952,477.9003	E2,638,828.9611	4° 50' 15.7795" (RT)	4,000.00	168.97	337.74	45+21.51	48+59.25
FM148_CL	FM148_CL_4	50+01.36	N6,952,682.0383	E2,639,063.6867	8° 07' 42.6316" (LT)	2,000.00	142.10	283.74	48+59.25	51+42.99
FM148_CL	FM148_CL_5	58+16.07	N6,953,298.5884	E2,639,596.9764	7° 11' 14.5757" (RT)	4,500.00	282.62	564.50	55+33.45	60+97.95
FM148_CL	FM148_CL_6	62+10.34	N6,953,562.6690	E2,639,890.7395	4° 17' 28.1327" (LT)	3,000.00	112.39	224.68	60+97.95	63+22.63

PRELIMINARY,
NOT FOR CONSTRUCTION

Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023



NOVEMBER 1, 2023

ROLL NUMBER 26/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS

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Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO CR 20
CSJs 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
RAMPS & CONNECTORS:	40 MPH	
RAMPS:	30 MPH	
SERVICE ROADS INTERSECTIONS/CONNECTORS:	30 MPH	LOCAL
LOCAL STREETS:	30 MPH	LOCAL
SERVICE ROADS / CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS

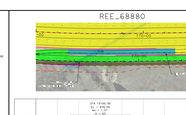
PRELIMINARY, NOT FOR CONSTRUCTION

November 16, 2023

ROLL NUMBER 27/31

1000 GAILORD RAILWAY
DENTON, TEXAS 76201
PHONE 940.591.7900
FIRM REGISTRATION NO. 5772

LEGEND

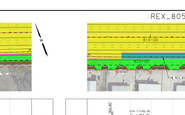


NOTES

1. EXISTING FEATURES AND EXISTING ROW BASED ON SURVEY PERFORMED BY TEXAS DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 14, 2020 AND RECORD PLANS.
2. ALL DIMENSIONS ARE PERPENDICULAR TO CENTERLINE UNLESS OTHERWISE NOTED.
3. SHARED USE PATH AND RAMP LAYOUT:
   a. ALL SHARED USE PATHS AND RAMPS SHOWN ARE CONCEPTUAL AND SUBJECT TO CHANGE DURING FINAL DESIGN.
   b. ALL SHARED USE PATHS AND RAMPS SHALL MEET ROAD DESIGNER RETURN RULES AND TIC 7100.
   c. SHARED USE PATH AND RAMP LOCATIONS SUBJECT TO CHANGE DURING FINAL DESIGN.
4. a. EXISTING PAVEMENT DESIGNED, LOCATION AND LIMITS OF PROPOSED RECONSTRUCTION WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH TAC 43.131 AND ACCESS MANAGEMENT.
   b. EXISTING PAVEMENT DESIGNED, LOCATION WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH TAC 43.131 AND ACCESS MANAGEMENT.
   c. SUPERELEVATION RATES WERE CALCULATED BASED ON AASHTO GREEN BOOK 2018 AND TIC 7100.
5. ALL CURVES ARE TYPE 1-S UNLESS NOTED OTHERWISE.
6. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB UNLESS NOTED OTHERWISE. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
7. ROW AND CONTROLLING LIMITS FROM TITLE INSURANCE RATE MAPS (NATIONWIDE), PROTECTIONS, AND/OR ENVIRONMENTAL DOCUMENTS AS APPLICABLE IF PROVIDED.
8. ALL UTILITY LOCATIONS, FEATURES AND ELEVATIONS OBTAINED FROM RECORD INFORMATION.
9. CONVENTIONAL ROADWAY SIGNAGE, SMALL SIGNS AND PAVEMENT MARKINGS ARE NOT SHOWN FOR CLARITY.
10. UNDERPASS UNDERWATER CLEARANCES OBTAINED FROM AVAILABLE RECORDS AND FIELD MEASUREMENTS.
11. ENTRANCE RAMPS WILL BE CONSTRUCTED WITH PAVEMENT AT THE PROPOSED RW PARTIALLY SATISFACTO THE CONTRACTOR'S OPTION. THE CONTRACTOR IS RESPONSIBLE AND PROTECTED TO DO SAFELY AND EFFICIENTLY.
12. CLIMBING DESIGNED TO ACCOMMODATE 80-KIP TRUCK AT 1 MPH MINIMUM SPEED.
13. RAMP TURNS SLOPE TRANSITIONED TO MEET MAIN LANE CS/SUP AND PARKING ROAD. SEE ROLL PLANS SHEETS FOR DETAILS.

REE_68880

REX_80S48



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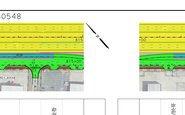

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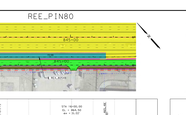

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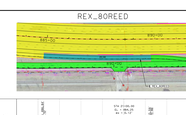

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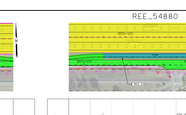

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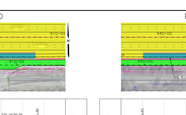

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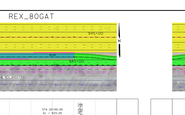
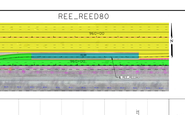
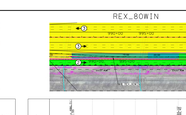
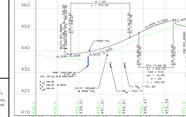


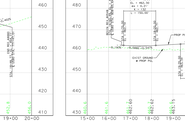
EB-WB UTURN

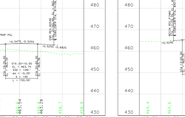


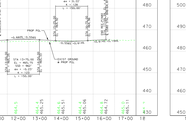
WB-EB UTURN

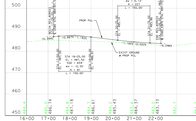


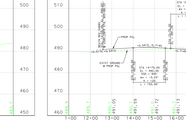


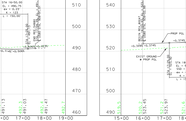


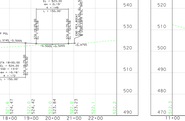


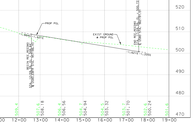


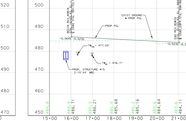












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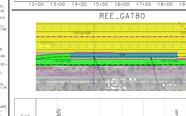

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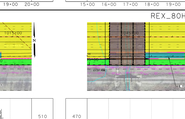

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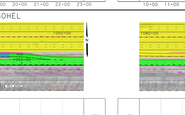

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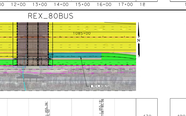

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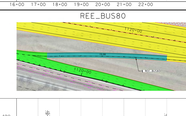
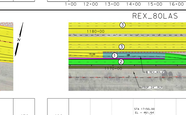
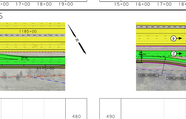


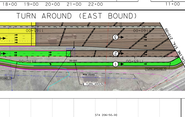
TURN AROUND (EAST BOUND)

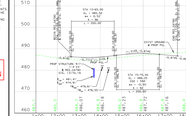


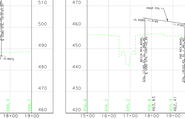
TURN AROUND (UNDER US 80)

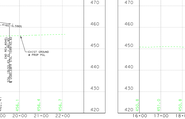


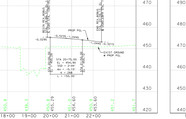
TURN AROUND (WEST BOUND)

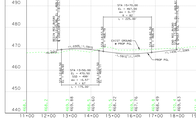


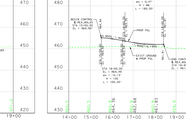


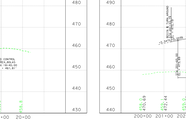


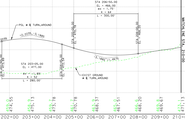












Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO CR 20
CSJs 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY — DESIGN SPEED — FUNCTIONAL CLASSIFICATION
MAIN LANES: 60 MPH URBAN FREEWAY
RAMPS & CONNECTORS: 40 MPH
RAMPS: 30 MPH
SERVICE ROADS INTERSECTIONS/CONNECTORS: 30 MPH LOCAL
LOCAL STREETS: 30 MPH LOCAL
SERVICE ROADS / CONNECTORS: 30 MPH
TURNAROUNDS: 15 MPH

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ROLL 1 OF 31 - PLAN & PROFILE STA. 85+00. TO STA. 760+00
ROLL 2 OF 31 - PLAN & PROFILE STA. 760+00 TO STA. 854+00
ROLL 3 OF 31 - PLAN & PROFILE STA. 854+00 TO STA. 947+00
ROLL 4 OF 31 - PLAN & PROFILE STA. 947+00 TO STA. 1041+00
ROLL 5 OF 31 - PLAN & PROFILE STA. 1041+00 TO STA. 1135+00
ROLL 6 OF 31 - PLAN & PROFILE STA. 1135+00 TO STA. 1228+00
ROLL 7 OF 31 - PLAN & PROFILE STA. 1228+00 TO STA. 1322+00
ROLL 8 OF 31 - PLAN & PROFILE STA. 1322+00 TO STA. 1416+00
ROLL 9 OF 31 - PLAN & PROFILE STA. 1416+00 TO STA. 1509+00
ROLL 10 OF 31 - PLAN & PROFILE STA. 1509+00 TO STA. 1603+00
ROLL 11 OF 31 - PLAN & PROFILE STA. 1603+00 TO STA. 1697+00
ROLL 12 OF 31 - PLAN & PROFILE STA. 1697+00 TO STA. 1790+00
ROLL 13 OF 31 - PLAN & PROFILE STA. 1790+00 TO STA. 1884+00
ROLL 14 OF 31 - PLAN & PROFILE STA. 1884+00 TO STA. 1978+00
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ROLL 16 OF 31 - PLAN & PROFILE STA. 2071+00 TO STA. 2165+00
ROLL 17 OF 31 - PLAN & PROFILE STA. 2165+00 TO STA. 2259+00
ROLL 18 OF 31 - PLAN & PROFILE STA. 2259+00 TO STA. 2352+00
ROLL 19 OF 31 - PLAN & PROFILE STA. 2352+00 TO STA. 2446+00
ROLL 20 OF 31 - PLAN & PROFILE STA. 2446+00 TO STA. 2540+00
ROLL 21 OF 31 - PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)
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ROLL 26 OF 31 - PLAN & PROFILE GROUT CREEK STREETS
ROLL 27 OF 31 - PLAN & PROFILE CONSTRUCTION EASEMENTS
ROLL 28 OF 31 - PLAN & PROFILE SERVICE ROADS / CONNECTORS
ROLL 29 OF 31 - PLAN & PROFILE I-20 FRONTAGE ROADS

PRELIMINARY, NOT FOR CONSTRUCTION

November 1, 2023

ROLL NUMBER 27/31

1000 GAILORD RAILWAY
DENTON, TEXAS 76201
PHONE 940.591.7900
FIRM REGISTRATION NO. 5772

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

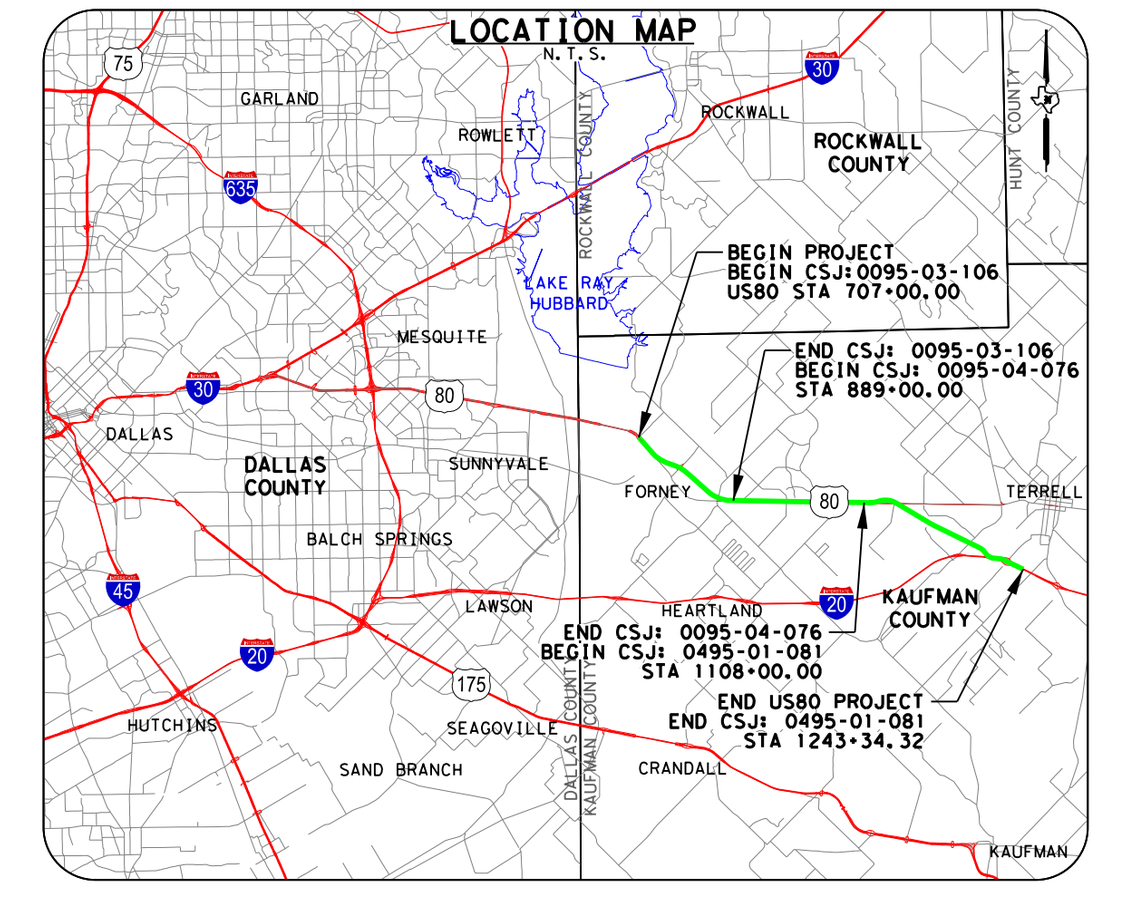
US 80
100% DESIGN SCHEMATIC

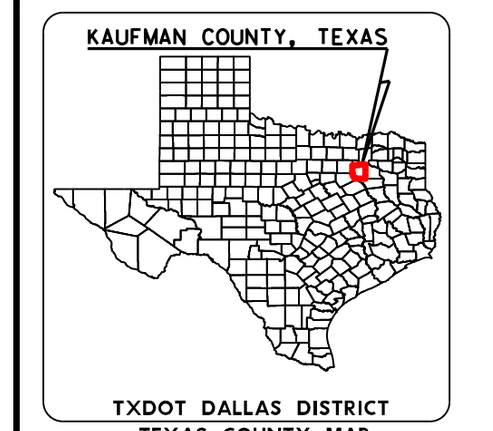
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS





STATE OF TEXAS
STEPHEN A. JOHNSON
103591
LICENSED PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 28/31

GARVER
3010 GAYLORD PARKWAY
SUITE 190
FRISCO, TX 75034
FIRM REGISTRATION NO. 5713

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
- EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS/PETROLEUM LINE
- CITY/COUNTY LIMITS
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW BY OTHERS
- PROPOSED ACCESS DENIAL
- PROPOSED DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CTB
- PROPOSED BRIDGE
- PROPOSED RETAINING WALL
- POTENTIAL NOISE WALL
- PROPOSED CULVERT
- PAVEMENT/BRIDGE TO BE REMOVED
- EXISTING BRIDGE TO REMAIN
- PROPOSED CONCRETE BRIDGE
- PROPOSED STEEL BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROAD/BYPASSES
- PROPOSED CROSS STREET
- PROPOSED SHARED USE PATH
- PROPOSED PROJECT BY OTHERS
- POTENTIAL DISPLACEMENTS
- PROPOSED RIP RAP
- PERPENDICULAR CURB RAMP
- PROPOSED GUARDRAIL
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- PARCEL ID

NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
3. SHARED USE PATH ADA RAMP LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE. DETAILED LAYOUTS TO BE DEVELOPED DURING PS&E.
4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012)IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
13. OWNERSHIP INFORMATION OBTAINED FROM KAUFMAN CENTRAL APPRAISAL DISTRICT IN FEBRUARY 2022.
14. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENTS IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING STRUCTURE. ACTUAL DAMAGES TO THE BUILDING AND PROPERTY TO BE DETERMINED DURING ROW ACQUISITION.
15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

GRAPHIC SCALE IN FEET
HORIZONTAL 1":100'
VERTICAL 1":10'

Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
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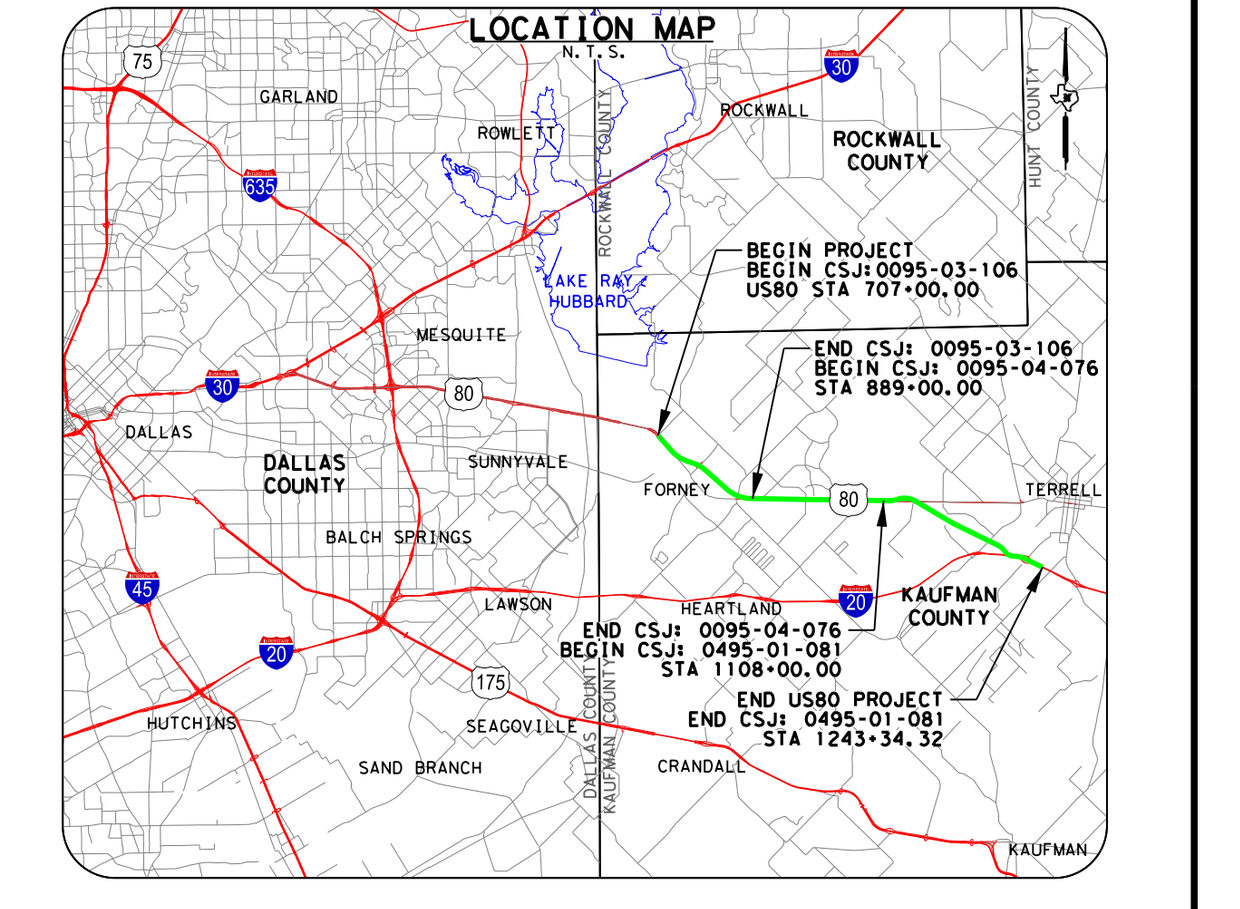
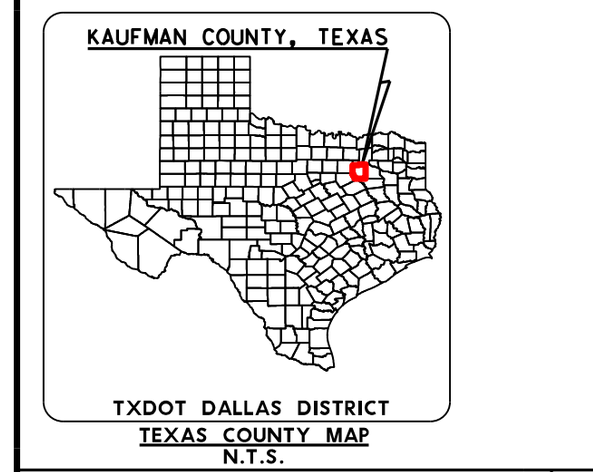




NOVEMBER 1, 2023

ROLL NUMBER 28/31
GARVER 3010 GAYLORD PARKWAY SUITE 190 FRISCO, TX 75034 FIRM REGISTRATION NO. 5713

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

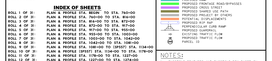
FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	40 MPH	
CROSSROADS, ROADS BYPASSED/CONNECTIONS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
DRIVEWAYS/SIDE CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS



November 16, 2023

ROLL NUMBER 29/31

AGUIRRE & FIELDS

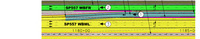
TBPE FIRM NO. F-2566

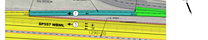
TBPLS FIRM NO. 10029600

NOTES

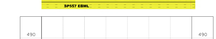
1. EXISTING FEATURES AND EXISTING ROW BASED ON SURVEY BY AGUIRRE & FIELDS, TBPLS FIRM NO. 10029600, AND TXDOT RIGHT OF WAY MAPS.
2. TOPO DATED FEBRUARY 1st, 2022 AND RECORD PLANS.
3. SHARED USE PATH AND RAMP LAYOUT:
   a. SHARED USE PATH AND RAMP LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN. ACTUAL LAYOUT MAY VARY DEPENDING ON FIELD CONDITIONS. REFER TO TXDOT PEDESTRIAN FACILITIES ON STATE HIGHWAYS, STREETS AND ROAD DESIGNER MANUAL (RDM) SEC 11, FOR ADDITIONAL INFORMATION.
   b. SHARED USE PATH AND RAMP LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN. ACTUAL LAYOUT MAY VARY DEPENDING ON FIELD CONDITIONS. REFER TO TXDOT PEDESTRIAN FACILITIES ON STATE HIGHWAYS, STREETS AND ROAD DESIGNER MANUAL (RDM) SEC 11, FOR ADDITIONAL INFORMATION.
4. EXISTING PAVEMENT/CROSS SLOPES WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED AND REPLACED AS NEEDED.
5. EXISTING SUPERELEVATION AT MILLING TO REMAIN THE SAME AS EXISTING. WHERE NEW SUPERELEVATION IS NEEDED, SUPERELEVATION WILL BE CALCULATED BASED ON DESIGN SPEED AND CURVATURE.
6. ALL CURVES ARE TYPE II UNLESS NOTED OTHERWISE.
7. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR CURB UNLESS NOTED OTHERWISE.
8. CONSTRUCTION, MAINTENANCE, AND UTILITY WORK ZONE TO BE CONFINED TO TEMPORARY LIMITS FROM TCEQ, TXDOT, INSURANCE RATE MAPS (NOTE FLOODWAYS, PROJECTIONS, ETC.), AND ENVIRONMENTAL CLEARANCE DOCUMENTS (SEE ENVIRONMENTAL).
9. ALL UTILITY ADJUSTMENTS, LOCATIONS, ELEVATIONS AND CLEARANCES OBTAINED FROM RECORD INFORMATION.
10. CONVENTIONAL PAVEMENT DESIGNS, SMALL SIGNS, AND LIGHTING SUPPORTS ARE TO BE USED WHERE FEASIBLE.
11. UNDERSHOT UNDERPASS CLEARANCES ARE MEASURED FROM EXISTING GROUND TO BOTTOM OF STRUCTURE.
12. ALL PROPOSED ROW MONUMENTS SHALL BE PLACED AT THE PROPOSED ROW PERPENDICULAR INTERSECTS THE EXISTING ROW, AT ALL ANGLE POINTS, AND AT THE BEGINNING AND ENDING POINTS TO BE DETERMINED DURING DESIGN.
13. TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK TURNING MOVEMENTS.
14. RAMP CROSS SLOPE TRANSITIONS OF BETWEEN MAIN LANE CS NO. AND FRONTAGE ROAD CS(+ ROLL OVER) SHOULD BE 50 FT. LONG.

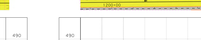
PRELIMINARY, NOT FOR CONSTRUCTION

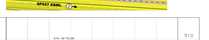




SUPERELEVATION				
BASELINE	BEGIN TRANSITION		END TRANSITION	
	STATION	e	STATION	e
RWE_LA580	114+98.50	-5.50%	114+98.50	-5.50%
RWX_55780	114+98.50	-5.50%	114+98.50	-5.50%
RWE_148557	115+73.50	-5.50%	115+73.50	-5.50%
RWE_20557	115+73.50	-5.50%	115+73.50	-5.50%
RWX_20148	114+65.50	-5.50%	114+65.50	-5.50%
RWX_557LAS	114+65.50	-5.50%	114+65.50	-5.50%
RCE_55780	117+45.50	-5.50%	117+45.50	-5.50%
RCE_148557	117+45.50	-5.50%	117+45.50	-5.50%
RCE_20557	116+97.50	-5.50%	116+97.50	-5.50%
RCE_20148	116+94.50	-5.50%	116+94.50	-5.50%







PRELIMINARY, NOT FOR CONSTRUCTION

Texas Department of Transportation

DALLAS DISTRICT

CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80

100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS

FROM WEST OF FM 460 TO IH 20

CSJs: 0095-03-126, 0095-04-075 & 0495-01-081

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
FRONTAGE ROADS:	40 MPH	
RAMPS:	40 MPH	
CROSSROADS, ROADS BYPASSED/CONNECTIONS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
DRIVEWAYS/SIDE CONNECTORS:	30 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS

ROLL 1 OF 3: PLAN & PROFILE STA. 85+00 TO STA. 760+00

ROLL 2 OF 3: PLAN & PROFILE STA. 760+00 TO STA. 836+00

ROLL 2 OF 3: PLAN & PROFILE STA. 836+00 TO STA. 837+00

ROLL 3 OF 3: PLAN & PROFILE STA. 837+00 TO STA. 927+00

ROLL 3 OF 3: PLAN & PROFILE STA. 927+00 TO STA. 950+00

ROLL 4 OF 3: PLAN & PROFILE STA. 950+00 TO STA. 1042+00

ROLL 7 OF 3: PLAN & PROFILE STA. 1042+00 TO STA. 1342+00

ROLL 8 OF 3: PLAN & PROFILE STA. 1342+00 TO STA. 1581+00

ROLL 9 OF 3: PLAN & PROFILE STA. 1581+00 TO STA. 1597+00

ROLL 10 OF 3: PLAN & PROFILE 18931 STA. 1597+00 TO STA. 1676+00

ROLL 11 OF 3: PLAN & PROFILE STA. 1676+00 TO STA. 1727+00

ROLL 12 OF 3: PLAN & PROFILE STA. 1727+00 TO STA. 1774+00

ROLL 13 OF 3: PLAN & PROFILE STA. 1774+00 TO STA. 1815+00

ROLL 14 OF 3: PLAN & PROFILE I-20 INTERCHANGE (1 OF 2)

ROLL 15 OF 3: PLAN & PROFILE I-20 INTERCHANGE (2 OF 2)

ROLL 16 OF 3: PLAN & PROFILE NB FRONTAGE ROADS

ROLL 17 OF 3: PLAN & PROFILE NB FRONTAGE ROADS

ROLL 24 OF 3: PLAN & PROFILE SB AND WB USRS BUSINESS

ROLL 25 OF 3: PLAN & PROFILE SB FRONTAGE ROADS

ROLL 26 OF 3: PLAN & PROFILE SPOOT CEASON STREETS

ROLL 27 OF 3: PLAN & PROFILE USRS/SPOOT RAMPS

ROLL 28 OF 3: PLAN & PROFILE CROSSROADS/SIDE CONNECTORS

ROLL 29 OF 3: PLAN & PROFILE I-20 FRONTAGE ROADS

NOVEMBER 1, 2023

ROLL NUMBER 29/31

AGUIRRE & FIELDS

TBPE FIRM NO. F-2566

TBPLS FIRM NO. 10029600

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES

DATE: November 2023

ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
MAIN LANES:	60 MPH	URBAN FREEWAY
DIRECT CONNECTORS:	40 MPH	
RAMPS:	40 MPH	
FRONTAGE ROADS/BYPASSES/CONNECTORS:	40 MPH	
LOCAL STREETS:	30 MPH	LOCAL
LOCAL STREETS CONNECTORS:	20 MPH	
TURNAROUNDS:	15 MPH	

INDEX OF SHEETS

LOCATION MAP

KAUFMAN COUNTY, TEXAS
TXDOT DALLAS DISTRICT
TEXAS COUNTY MAP
N.T.S.

STATE OF TEXAS
PAUL R. HAHN III
107365
LICENSED
PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 30/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

EXISTING ROW
EXISTING EASEMENT
EXISTING PROPERTY LIMITS
EXISTING CULVERT
EXISTING STORM SEWER
FEMA 100 YR FLOODPLAIN LIMITS
WETLANDS
PARK BOUNDARY
EXISTING PLANIMETRIC FEATURES
EXISTING CONTOURS (5-FT)
EXISTING TELEPHONE/CABLE/FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING ELECTRIC LINE
EXISTING SANITARY SEWER LINE
EXISTING GAS/PETROLEUM LINE
CITY/COUNTY LIMITS
PROPOSED CENTERLINE/BASELINE
PROPOSED ROW
PROPOSED ROW BY OTHERS
PROPOSED ACCESS DENIAL
PROPOSED DRAINAGE EASEMENT
PROPOSED EDGE OF PAVEMENT
PROPOSED CTB
PROPOSED BRIDGE
PROPOSED RETAINING WALL
POTENTIAL NOISE WALL
PROPOSED CULVERT
PAVEMENT/BRIDGE TO BE REMOVED
EXISTING BRIDGE TO REMAIN
PROPOSED CONCRETE BRIDGE
PROPOSED STEEL BRIDGE
PROPOSED MAIN LANES
PROPOSED RAMP
PROPOSED FRONTAGE ROAD/BYPASSES
PROPOSED CROSS STREET
PROPOSED SHARED USE PATH
PROPOSED PROJECT BY OTHERS
POTENTIAL DISPLACEMENTS
PROPOSED RIP RAP
PERPENDICULAR CURB RAMP
PROPOSED GUARDRAIL
EXISTING TRAFFIC FLOW
PROPOSED TRAFFIC FLOW
PARCEL ID

NOTES:

1. EXISTING FEATURES AND EXISTING ROW BASED ON LIMITED FIELD SURVEY. NO BOUNDARY SURVEY WAS PERFORMED. SCHEMATICS ARE BASED ON AERIAL TOPO DATED FEBRUARY 14, 2022 AND RECORD PLANS.
2. TRAFFIC APPROVED BY TXDOT DALLAS DISTRICT AND REVIEWED BY TP&P ON 05-15-2023.
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4. DRIVEWAY LOCATIONS ARE PRELIMINARY. FRONTAGE ROAD DRIVEWAY RETURN RADII ARE 15' FOR RESIDENTIAL AND 25' FOR COMMERCIAL/FARM/RANCH (UNLESS NOTED OTHERWISE).
5. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
6. EXISTING PAVEMENT/BRIDGES LOCATED WITHIN LIMITS OF PROPOSED RECONSTRUCTION WILL BE REMOVED (UNLESS NOTED OTHERWISE).
7. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL AND IS LINEAR (UNLESS NOTED OTHERWISE). SUPERELEVATION RATES WERE CALCULATED BASED ON A MAXIMUM SUPER ELEVATION RATE OF 6%.
8. ALL CURBS ARE TYPE II (UNLESS NOTED OTHERWISE).
9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS NOTED OTHERWISE).
10. FEMA 100 YEAR FLOODPLAIN LIMITS FROM FLOOD INSURANCE RATE MAPS 48257C0040D, 48257C0155D, 48257C0175D, 48257C0200D, 48257C0185D (2012) IN PROGRESS.
11. EXISTING CULVERT LOCATIONS, SIZES, AND ELEVATIONS OBTAINED FROM RECORD DRAWINGS.
12. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
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15. U-TURNS DESIGNED TO ACCOMMODATE WB-62 TRUCK PATHING REQUIREMENTS.
16. RAMP CROSS SLOPE TRANSITIONS BETWEEN MAIN LANES (2.5%) AND FRONTAGE ROADS (2%) WILL OCCUR OVER A 50 FT. LENGTH.

PRELIMINARY,
NOT FOR CONSTRUCTION

HORIZONTAL 1":100'
VERTICAL 1":10'
GRAPHIC SCALE IN FEET

SUPERELEVATION				
BASELINE	BEGIN TRANSITION		END TRANSITION	
	STATION	e	STATION	e
DCI20W557W	41+82.00	-2.50%	42+36.00	-4.00%
DCI20W557W	50+05.00	-4.00%	50+41.00	-2.98%

SUPERELEVATION				
BASELINE	BEGIN TRANSITION		END TRANSITION	
	STATION	e	STATION	e
DC557EI20E	14+08.00	2.50%	15+00.00	4.40%
DC557EI20E	21+49.00	4.40%	22+41.00	2.50%
DC557EI20E	30+63.00	2.50%	34+25.00	-5.00%
DC557EI20E	43+29.00	-5.00%	46+31.00	3.40%
DC557EI20E	58+38.00	3.40%	58+69.96	2.50%

HORIZONTAL ALIGNMENT DATA										
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
DC557EI20E	DC557EI20E_1	18+27.85	N6,951,940.8492	E2,641,224.2918	19° 23' 05.3481" (RT)	2,000.00	241.54	676.66	14+86.26	21+62.91
DC557EI20E	DC557EI20E_2	40+40.93	N6,950,358.1805	E2,642,780.5064	48° 09' 02.0834" (LT)	1,500.00	670.21	1,260.58	33+70.72	46+31.30
DC557EI20E	DC557EI20E_3	52+59.58	N6,950,418.6167	E2,644,077.5903	23° 39' 24.5588" (RT)	3,000.00	628.28	1,238.61	46+31.30	58+69.91
DCI20W557W	DCI20W557W_1	34+61.21	N6,951,274.4388	E2,642,716.5673	8° 45' 58.59" (RT)	10,000.00	766.50	1,530.00	26+94.71	42+24.72
DCI20W557W	DCI20W557W_2	46+37.33	N6,950,600.4162	E2,643,684.0393	20° 20' 28.1119" (LT)	2,300.00	412.62	816.55	42+24.72	50+41.26
TAEW148	TAEW148_1	11+55.75	N6,952,610.4914	E2,638,832.4282	92° 09' 15.4821" (LT)	150.00	155.75	241.26	10+00.00	12+41.26
TAEW148	TAEW148_2	13+37.79	N6,952,783.5640	E2,639,015.9790	5° 49' 28.4126" (LT)	1,897.50	96.53	192.90	12+41.26	14+34.15
TAEW148	TAEW148_3	18+41.05	N6,953,164.3195	E2,639,345.3164	0° 24' 32.9317" (RT)	4,602.50	16.43	32.87	18+24.62	18+57.48
TAEW148	TAEW148_4	21+08.82	N6,953,365.5859	E2,639,521.9314	136° 36' 27.2184" (LT)	100.00	251.34	238.42	18+57.48	20+95.91
TAEWLAS	TAEWLAS_1	11+05.23	N6,956,004.3389	E2,632,688.0761	91° 47' 10.9407" (LT)	102.00	105.23	163.4	10+00.00	11+63.40
TAEWLAS	TAEWLAS_2	14+72.12	N6,956,359.9135	E2,632,900.0271	93° 10' 24.8946" (LT)	102.00	107.81	165.87	13+64.31	15+30.18
TAWELAS	TAWELAS_1	11+02.36	N6,956,258.7460	E2,633,067.9021	90° 11' 58.4237" (LT)	102.00	102.36	160.58	10+00.00	11+60.58
TAWELAS	TAWELAS_2	14+71.04	N6,955,904.1436	E2,632,856.5306	91° 27' 37.0116" (LT)	102.00	104.63	162.82	13+66.41	15+29.23

PRELIMINARY,
NOT FOR CONSTRUCTION

Texas Department of Transportation
DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER
US 80
100% DESIGN SCHEMATIC
KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
LENGTH: 11.7 MILES
DATE: November 2023

NOVEMBER 1, 2023

ROLL NUMBER 30/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS

Texas Department of Transportation

DALLAS DISTRICT
CEASON CLEMENS, P.E., DISTRICT ENGINEER

US 80
100% DESIGN SCHEMATIC

KAUFMAN COUNTY, TEXAS
FROM WEST OF FM 460 TO IH 20
CSJ: 0095-03-106, 0095-04-076 & 0495-01-081
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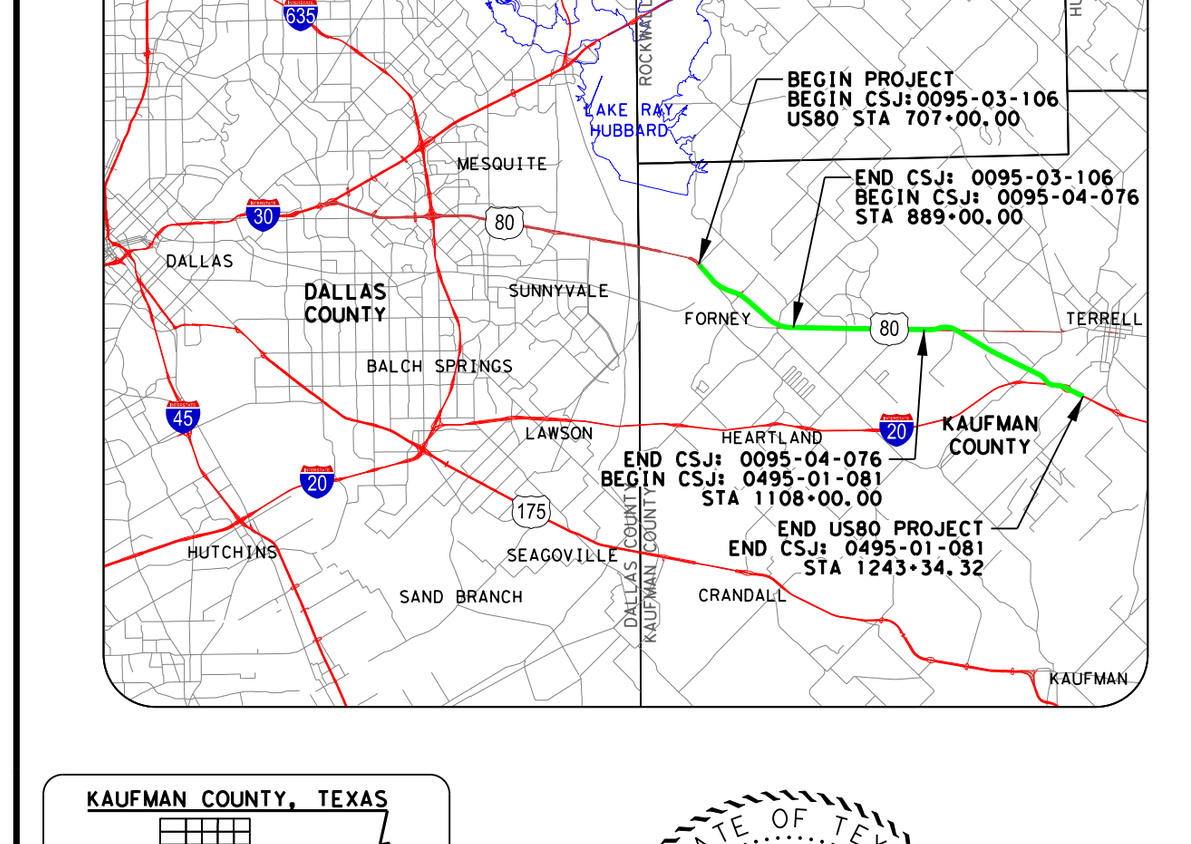
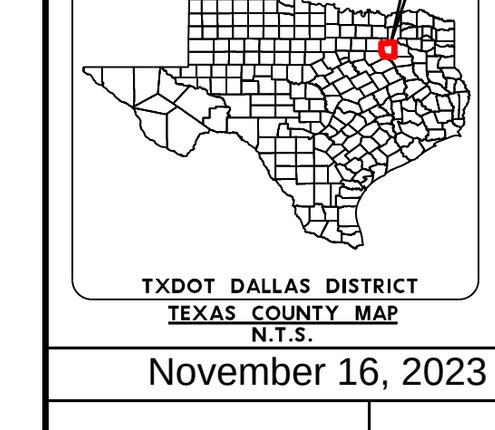
INDEX OF SHEETS





STATE OF TEXAS
PAUL R. HAHN III
107365
LICENSED
PROFESSIONAL ENGINEER
November 16, 2023

November 16, 2023

ROLL NUMBER 31/31

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

LEGEND

- EXISTING ROW
- EXISTING EASEMENT
- EXISTING PROPERTY LIMITS
- EXISTING CULVERT
- EXISTING STORM SEWER
- FEMA 100 YR FLOODPLAIN LIMITS
- WETLANDS
- PARK BOUNDARY
- EXISTING PLANIMETRIC FEATURES
- EXISTING CONTOURS (5-FT)
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- PROPOSED CENTERLINE/BASELINE
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NOT FOR CONSTRUCTION

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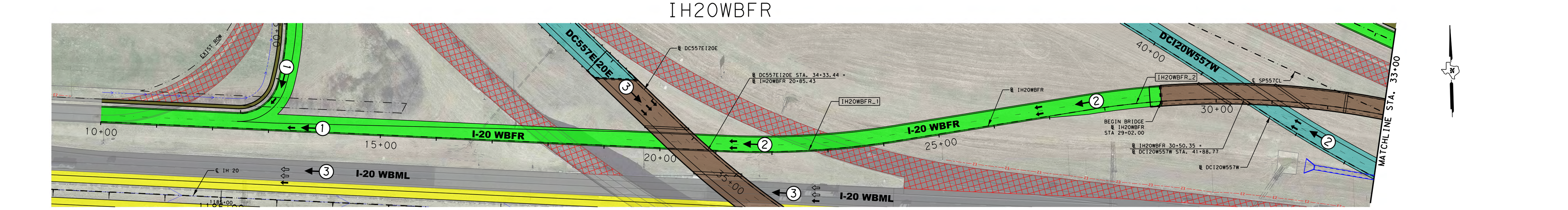
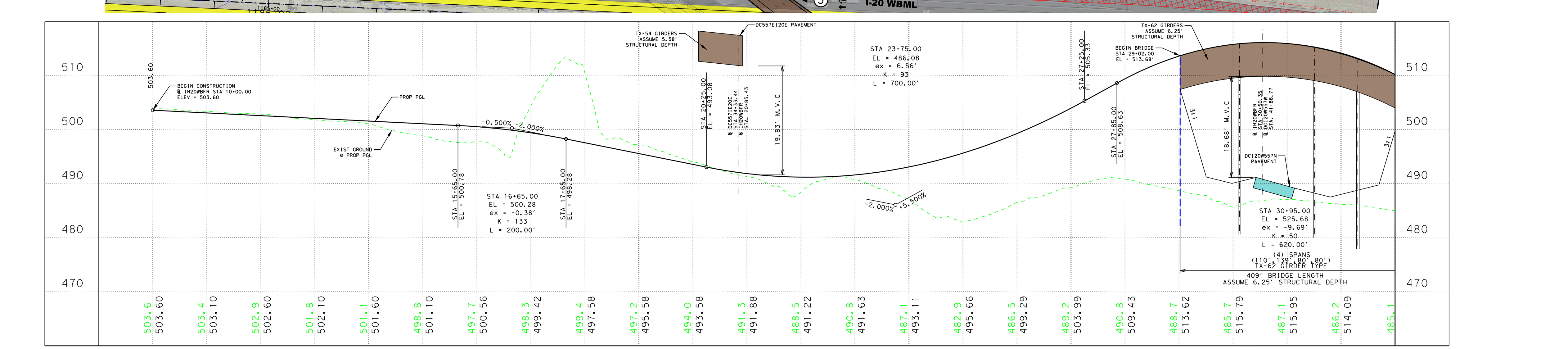
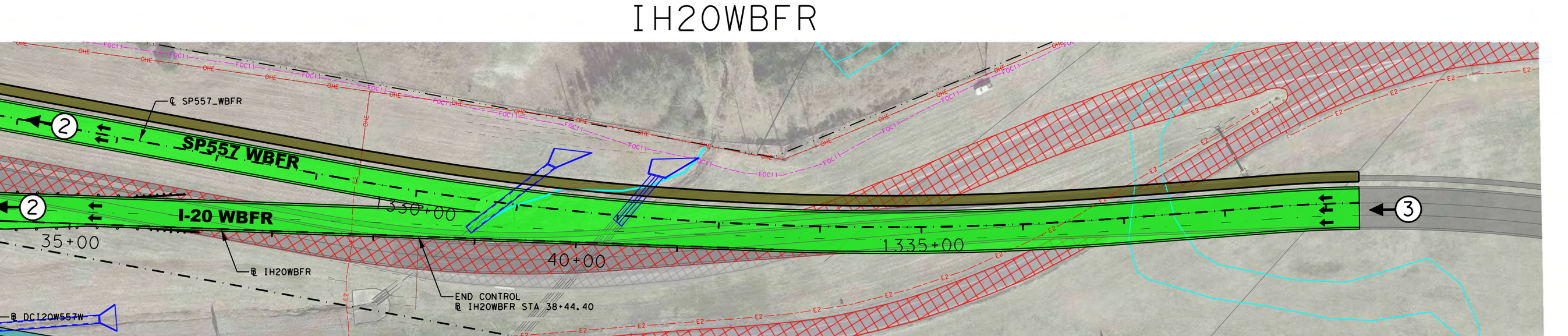
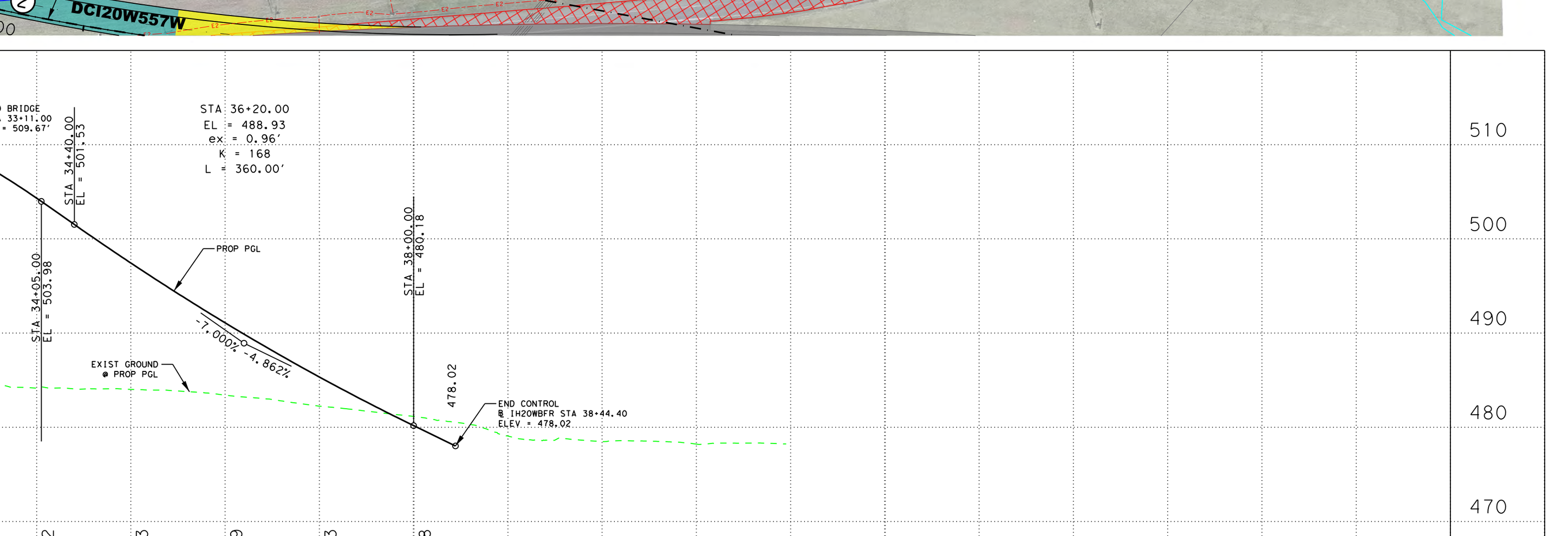
VERTICAL 1"=10'
GRAPHIC SCALE IN FEET

IH20WBFR









HORIZONTAL ALIGNMENT DATA										
BASELINE	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	P.C. STATION	P.T. STATION
IH20WBFR	IH20WBFR_3	22+68.52	N6,950,778.7980	E2,642,538.1027	11° 51' 29.2708" (LT)	1,500.00	155.78	310.45	21+12.74	24+23.19
IH20WBFR	IH20WBFR_6	31+09.30	N6,950,890.6945	E2,643,372.5243	25° 28' 52.81" (RT)	1,500.00	339.16	667.10	27+70.14	34+37.24

SUPERELEVATION				
BASELINE	BEGIN TRANSITION		END TRANSITION	
	STATION	e	STATION	e
IH20WBFR	20+35.00	-2.00%	21+21.00	-4.60%
IH20WBFR	24+15.00	-4.60%	25+01.00	-2.00%
IH20WBFR	25+72.00	-2.00%	27+92.00	4.60%
IH20WBFR	34+12.00	4.60%	36+62.00	-2.90%

PRELIMINARY,
NOT FOR CONSTRUCTION

Texas Department of Transportation
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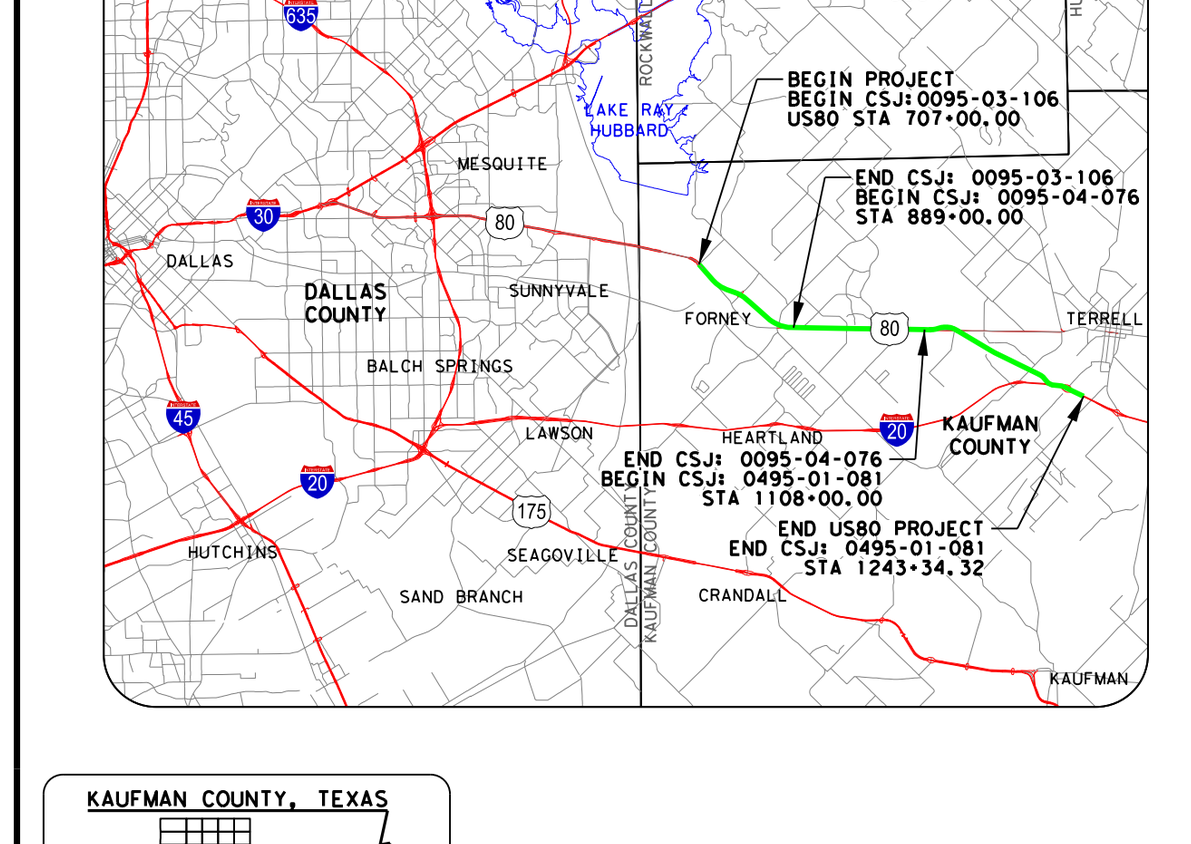
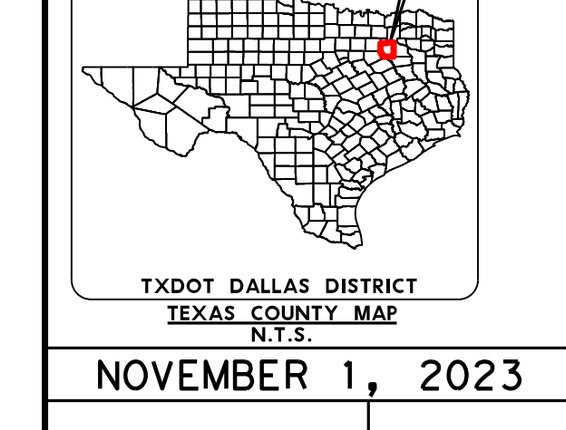
DATE: November 2023





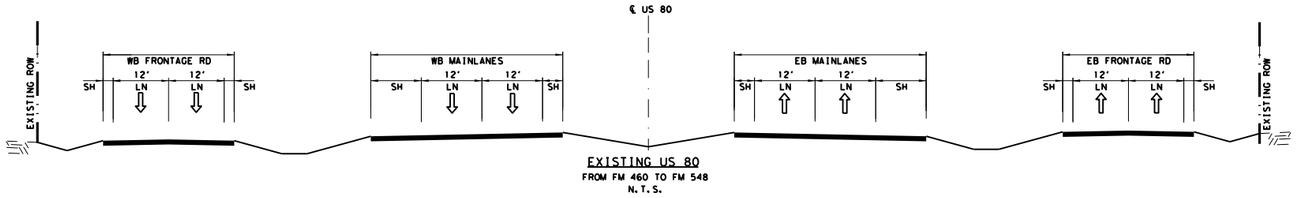
NOVEMBER 1, 2023

ROLL NUMBER 31/31

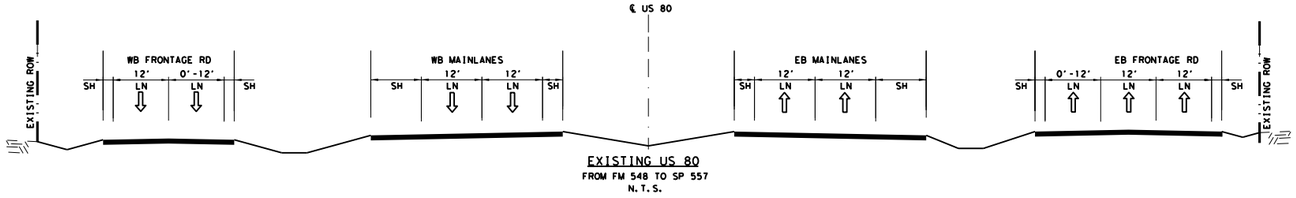
AGUIRRE & FIELDS
ENGINEERING INNOVATORS
FIRM REGISTRATION #739

Appendix D: Typical Sections

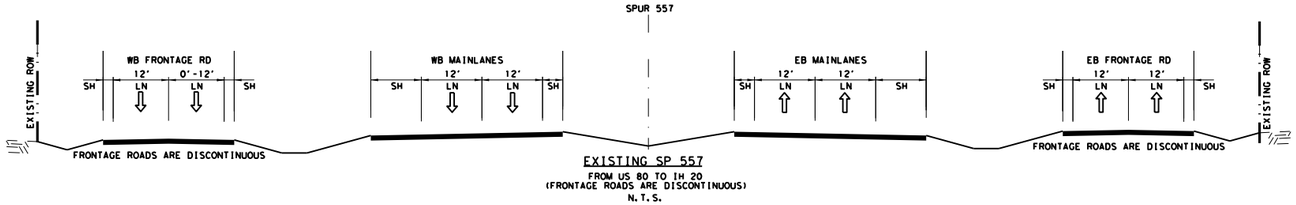
NOTE: GRAPHICS ARE NOT TO SCALE.



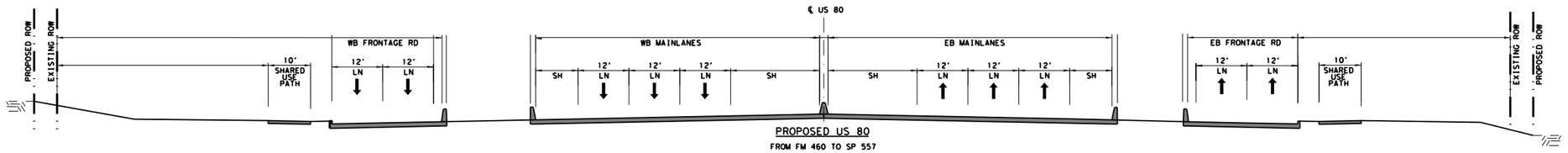
EXISTING US 80
FROM FM 460 TO FM 548
N. T. S.



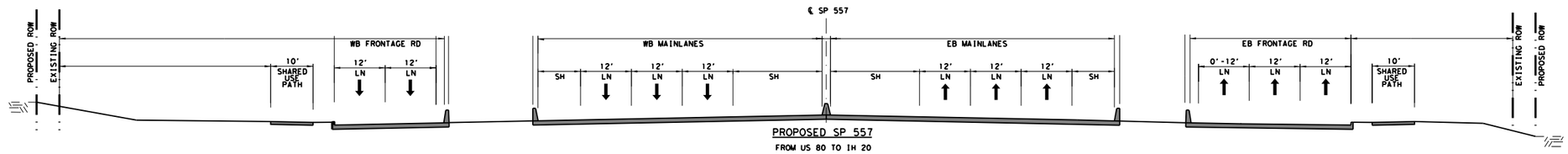
EXISTING US 80
FROM FM 548 TO SP 557
N. T. S.



EXISTING SP 557
FROM US 80 TO IH 20
(FRONTAGE ROADS ARE DISCONTINUOUS)
N. T. S.



PROPOSED US 80
FROM FM 460 TO SP 557
N. T. S.



PROPOSED SP 557
FROM US 80 TO IH 20
N. T. S.

REPRESENTATIVE TYPICAL SECTIONS

US 80 (FROM FM 460 TO SPUR 557)
AND SPUR 557 (FROM US 80 TO IH 20)
KAUFMAN COUNTY, TEXAS
CSJs: 0095-03-106, 0095-04-076, 0495-01-081

Appendix E: Resource Map

Construction Under 0095-03-100, etc.

460

66

Project Begin

80

Stream 1 (Buffalo Creek) - Int.

Stream 2 - Per.

Begin Construction

Existing ROW

City Limits

Delineated Water Feature

Perennial stream

Intermittent stream

Stream OHWM

EMST Observed Common Name Habitat

Central Texas: Floodplain Herbaceous Vegetation

Native Invasive: Deciduous Woodland

Open Water

Urban Low Intensity

Hazmat Site Location

Possible Project Impacts

0 100 200

Feet

Project Location

Forney

80

Terrell

Talty

20

Kaufman County

Texas Department of Transportation

US 80 AND SPUR 557

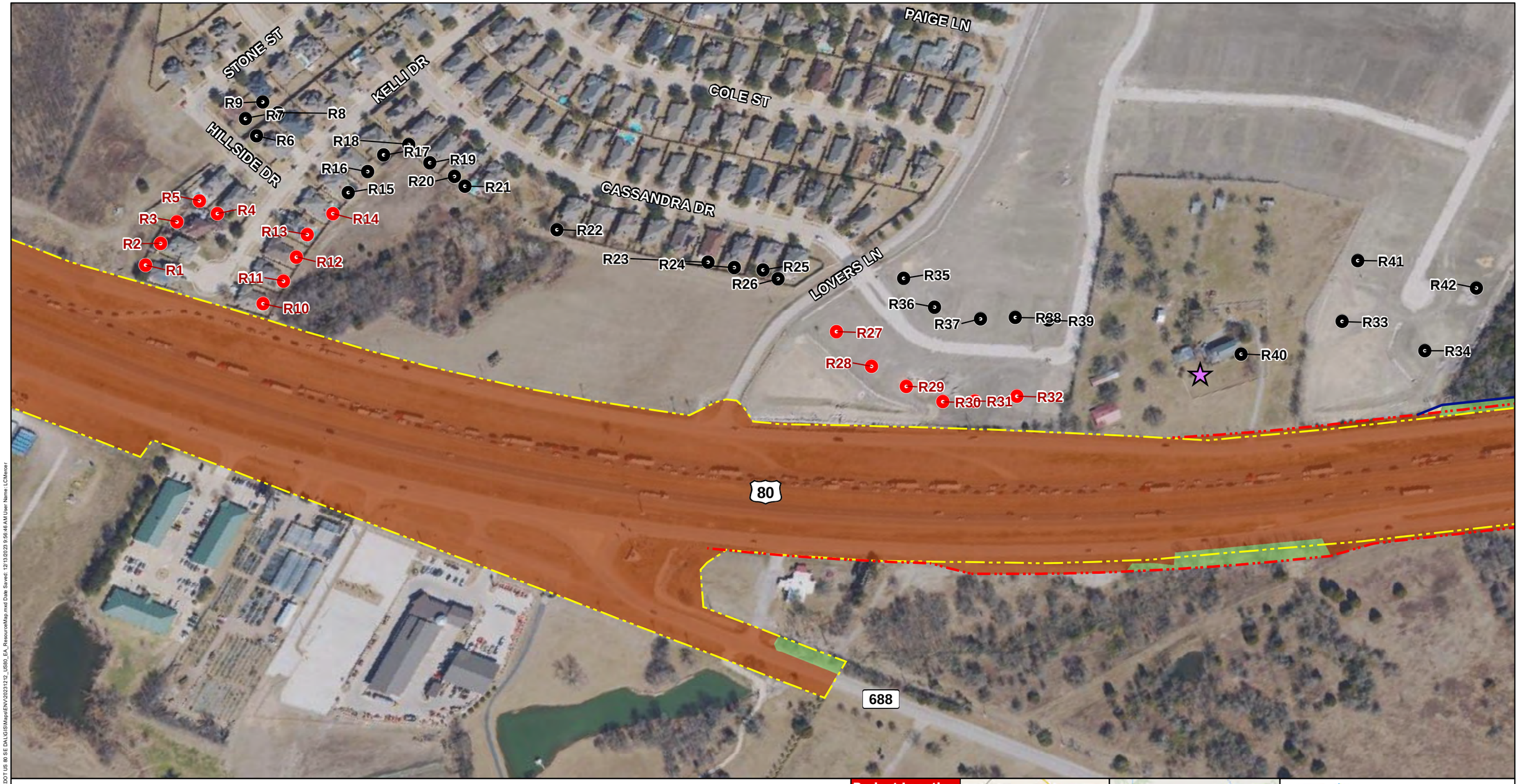
From FM 460 to IH 20

RESOURCE MAP

PAGE 1 / 20

Kaufman County, Texas

CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



Existing ROW
Proposed ROW
Proposed Easement
City Limits
Eligible Historic Site

EMST Observed Common Name Habitat
Barren
Native Invasive: Deciduous Woodland

Urban Low Intensity

TNM Noise Analysis Receivers
Noise Receiver (Not Impacted)
Noise Receiver (Impacted)

N
0 100 200
Feet

Project Location

Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 2 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

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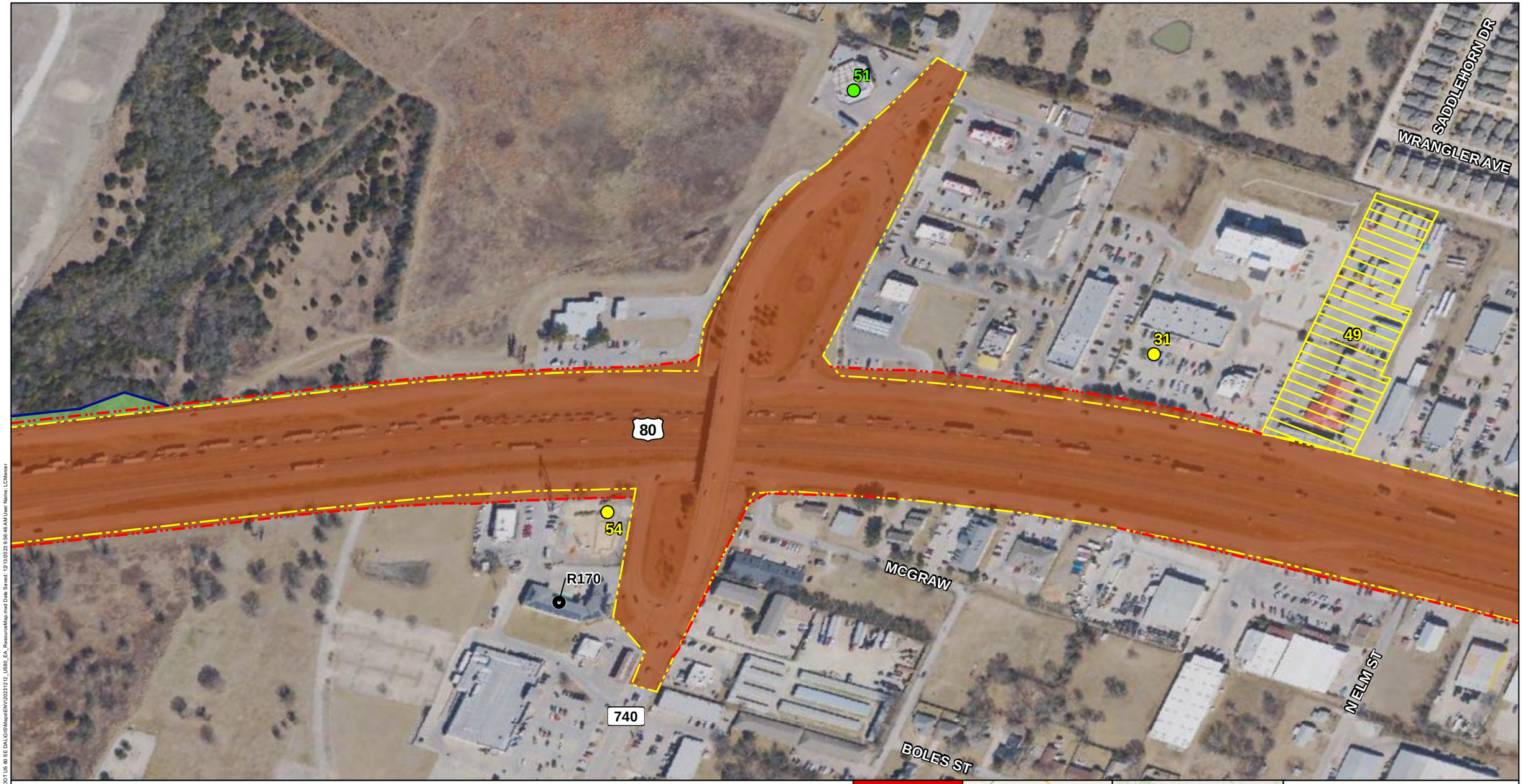


Existing ROW
Proposed ROW
Proposed Easement
City Limits

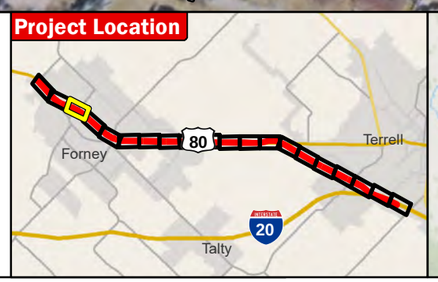
EMST Observed Common Name Habitat
Native Invasive: Deciduous Woodland
Urban Low Intensity

TNM Noise Analysis Receivers
Noise Receiver (Not Impacted)

Hazmat Site Location
Low or No Potential for Project Impacts
Possible Project Impacts
Possible Project Impacts

N
0 100 200
Feet

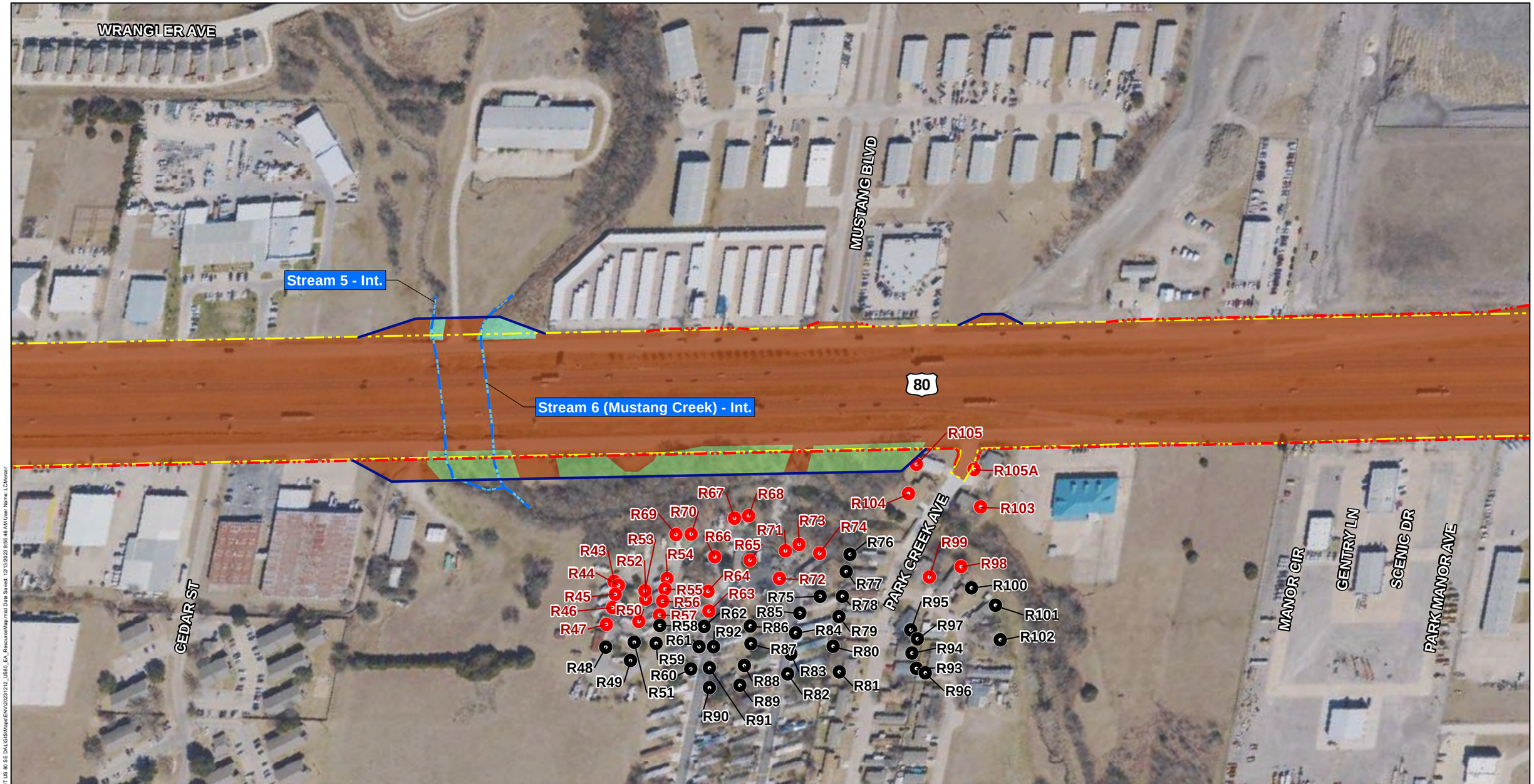
Project Location



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 3 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



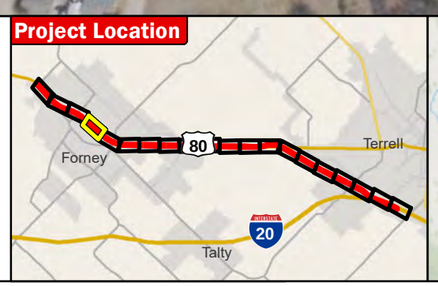
Existing ROW
Proposed ROW
Proposed Easement
City Limits

Delineated Water Feature
Intermittent stream
Stream OHWM

EMST Observed Common Name Habitat
Central Texas: Floodplain Herbaceous Vegetation
Native Invasive: Deciduous Woodland
Urban Low Intensity

TNM Noise Analysis Receivers
Noise Receiver (Not Impacted)
Noise Receiver (Impacted)

0 100 200
Feet



Texas Department of Transportation

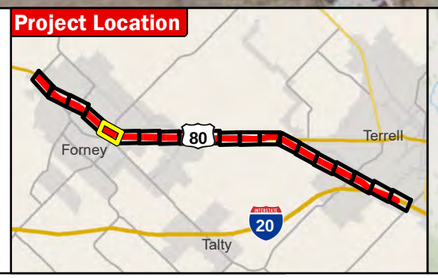
US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 4 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW
Proposed ROW
Proposed Easement
Railroad
City Limits

EMST Observed Common Name Habitat
Urban Low Intensity

N
0 100 200
Feet



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 5 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

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INDUSTRIAL WAY

INDUSTRIAL PARK WAY

9

REEDER RD

80

Union Pacific Railroad Company

Existing ROW
Proposed ROW
Proposed Easement
Railroad
City Limits

EMST Observed Common Name Habitat
Urban Low Intensity

Hazmat Site Location
Low or No Potential for Project Impacts

N

0 100 200
Feet

Project Location

Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 6 / 20

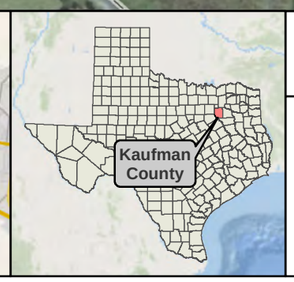
Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW
Proposed ROW
Railroad
City Limits
Eligible Historic Bridge

EMST Observed Common Name Habitat
Row Crops
Urban Low Intensity

N

0 100 200
Feet



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
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Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

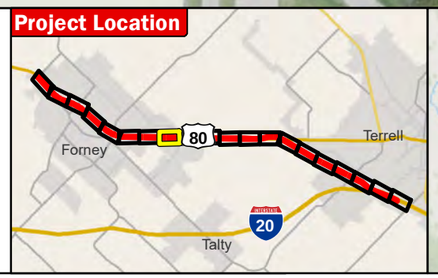
Existing ROW
Proposed ROW
Railroad
City Limits

EMST Observed Common Name Habitat
Native Invasive: Deciduous Woodland
Urban Low Intensity

N

0 100 200
Feet

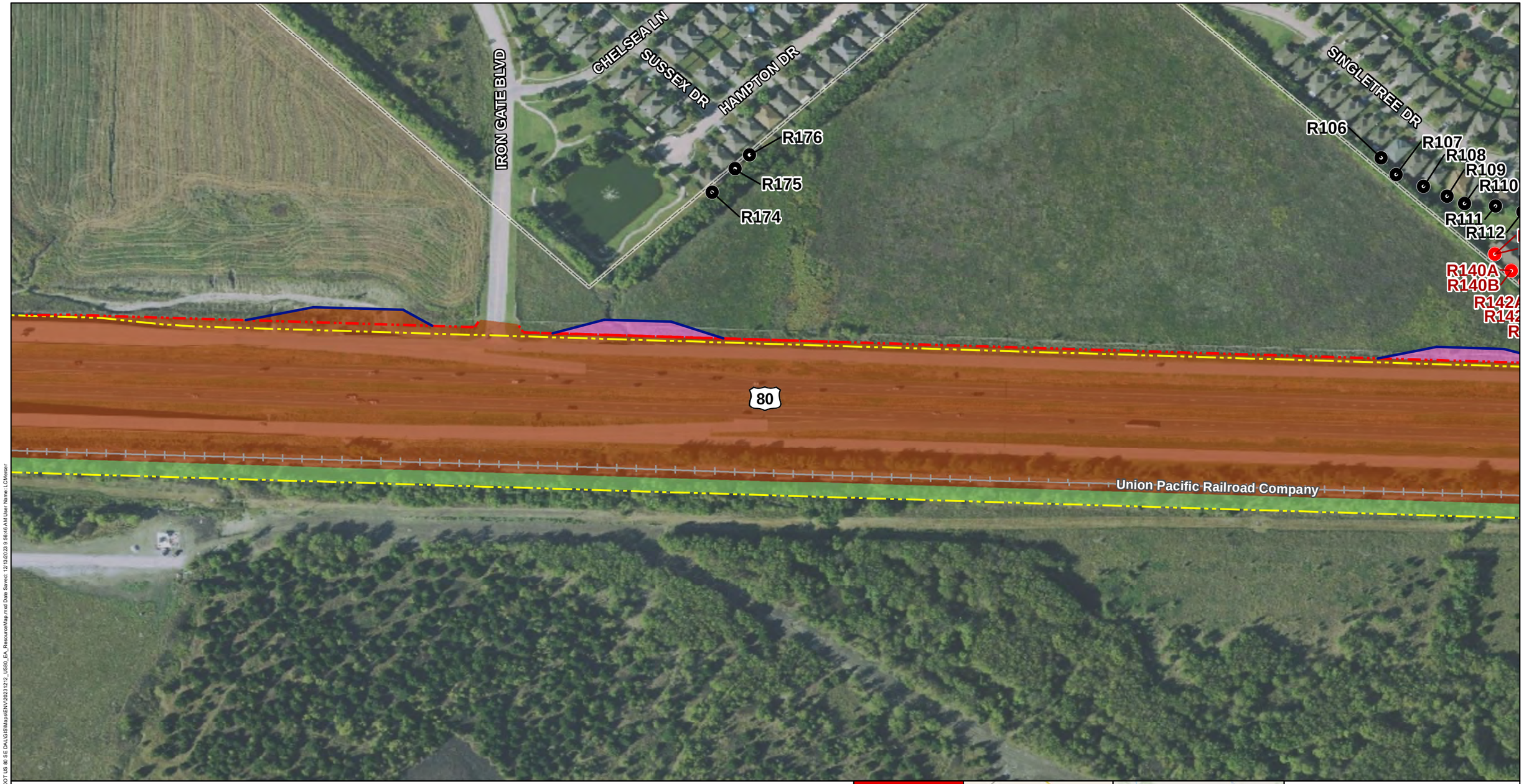
Project Location



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 8 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



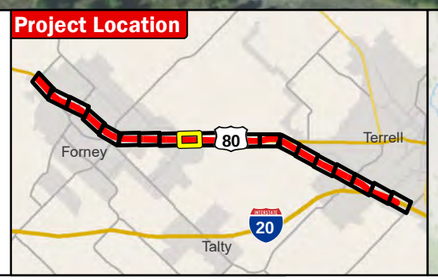
Existing ROW
Proposed ROW
Proposed Easement
Railroad
City Limits

EMST Observed Common Name Habitat
Blackland Prairie: Disturbance or Tame Grassland
Native Invasive: Deciduous Woodland

Urban Low Intensity

TNM Noise Analysis Receivers
Noise Receiver (Not Impacted)
Noise Receiver (Impacted)

N
0 100 200
Feet



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 9 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW
Proposed ROW
Proposed Easement
Railroad
City Limits
Eligible Historic Bridge

Delineated Water Feature

Intermittent stream
Stream OHWM

EMST Observed Common Name Habitat

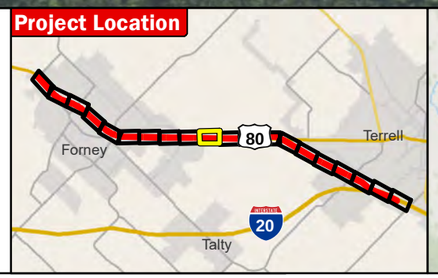
Blackland Prairie: Disturbance or Tame Grassland
Central Texas: Floodplain Hardwood Forest
Central Texas: Floodplain Herbaceous Vegetation
Native Invasive: Deciduous Woodland
Urban Low Intensity

TNM Noise Analysis Receivers

Noise Receiver (Not Impacted)
Noise Receiver (Impacted)
Noise Receiver (Benefitted)
Proposed Noise Barrier

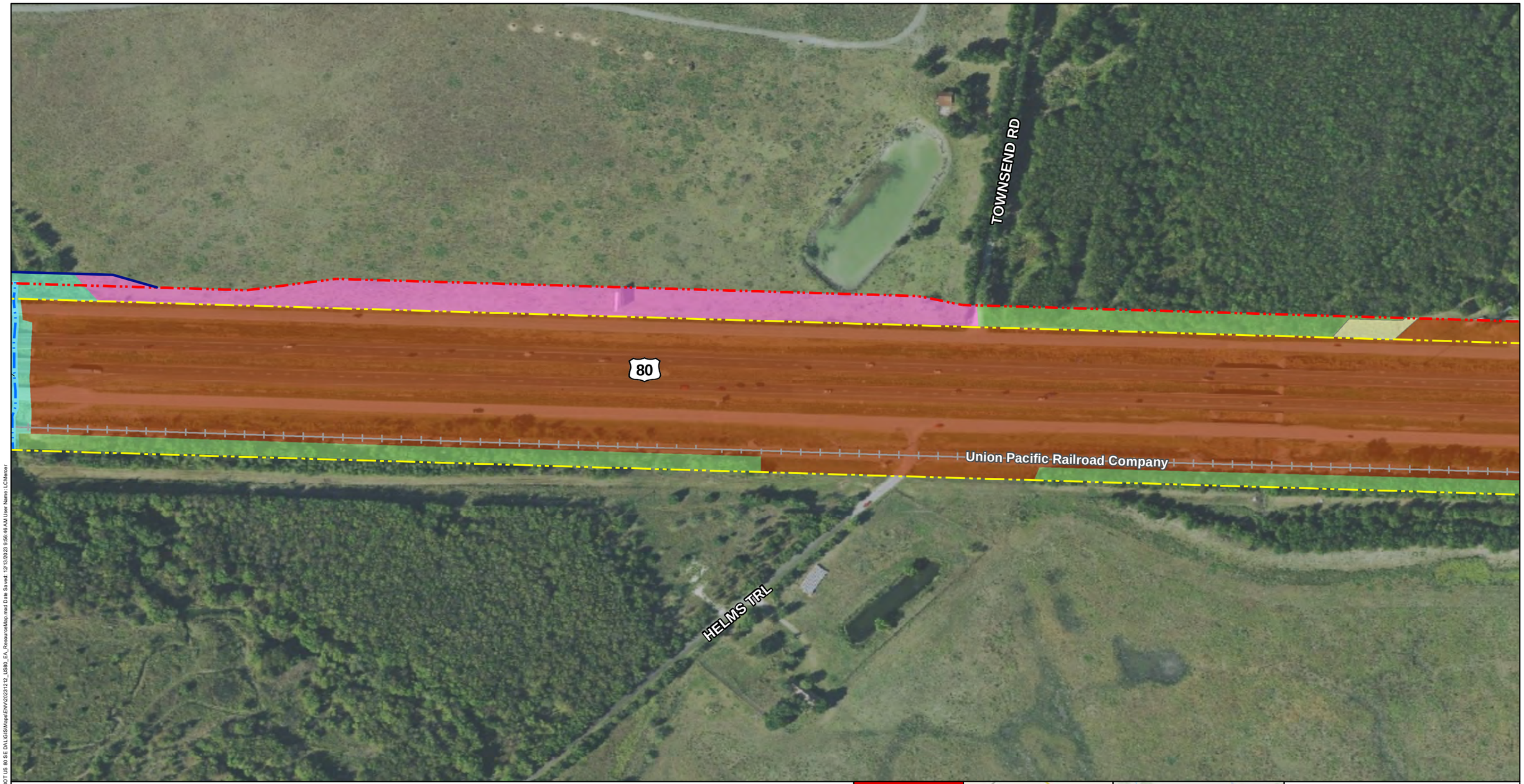
N
0 100 200
Feet

Project Location



US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 10 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



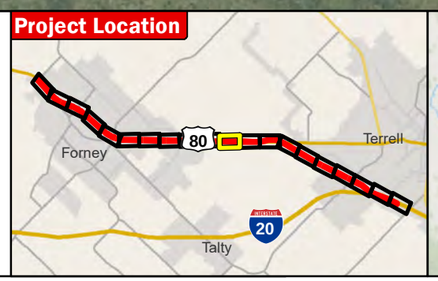
Existing ROW
Proposed ROW
Proposed Easement
Railroad

Delineated Water Feature
Intermittent stream
Stream OHWM

EMST Observed Common Name Habitat
Barren
Blackland Prairie: Disturbance or Tame Grassland
Central Texas: Floodplain Herbaceous Vegetation
Native Invasive: Deciduous Woodland
Urban Low Intensity

N
0 100 200
Feet

Project Location



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
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Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

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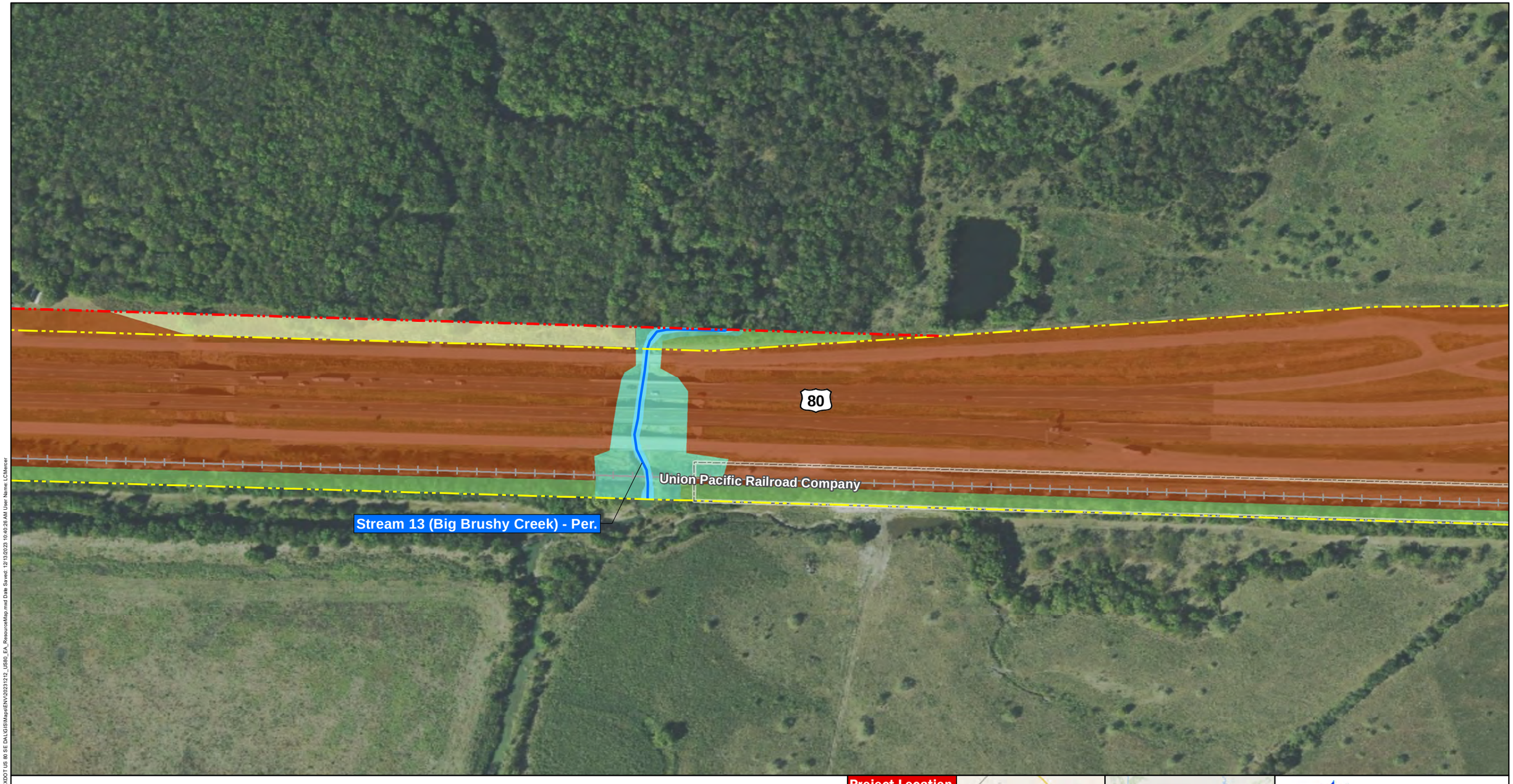


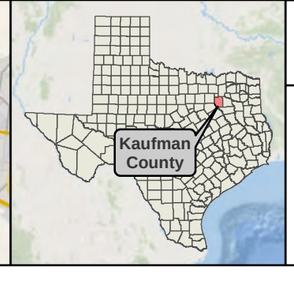
Existing ROW
Proposed ROW
Railroad
City Limits

Delineated Water Feature
Perennial stream
Stream OHWM

EMST Observed Common Name Habitat
Barren
Central Texas: Floodplain Herbaceous Vegetation
Native Invasive: Deciduous Woodland
Urban Low Intensity

N
0 100 200
Feet

Project Location



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 12 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW
Railroad
City Limits

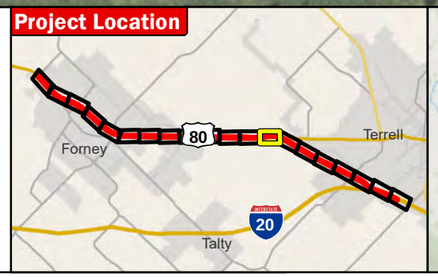
EMST Observed Common Name Habitat

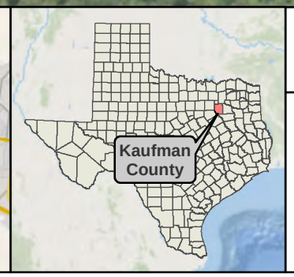
Native Invasive: Deciduous Woodland
Urban Low Intensity

N

0 100 200
Feet

Project Location





Texas Department of Transportation

US 80 AND SPUR 557

From FM 460 to IH 20

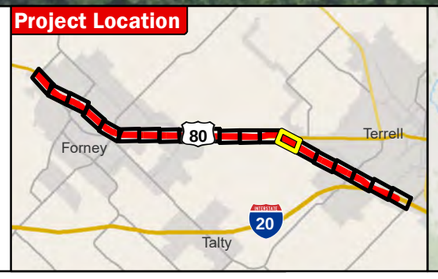
RESOURCE MAP

PAGE 13 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW
Railroad
City Limits
Delineated Water Feature
Intermittent stream
Stream OHWM
EMST Observed Common Name Habitat
Central Texas: Floodplain Herbaceous Vegetation
Urban Low Intensity

N
0 100 200
Feet



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 14 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

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Existing ROW
Proposed ROW
City Limits

Delineated Water Feature
Intermittent stream
Stream OHWM

EMST Observed Common Name Habitat
Blackland Prairie: Disturbance or Tame Grassland
Central Texas: Floodplain Hardwood Forest
Central Texas: Floodplain Herbaceous Vegetation
Row Crops
Urban Low Intensity

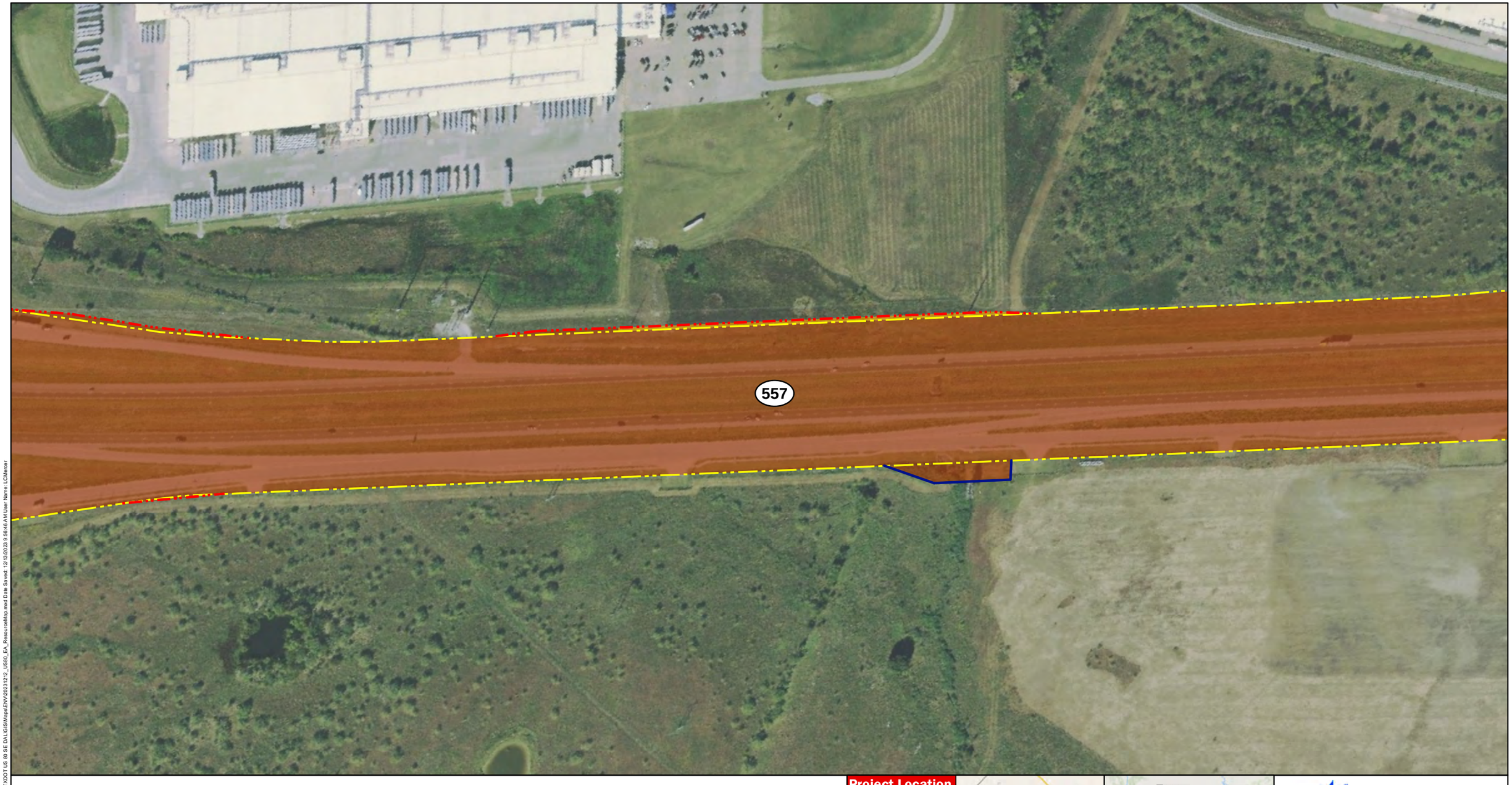
N
0 100 200
Feet

Project Location

Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 15 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



Existing ROW
Proposed ROW
Proposed Easement
City Limits

EMST Observed Common Name Habitat

Row Crops
Urban Low Intensity

N

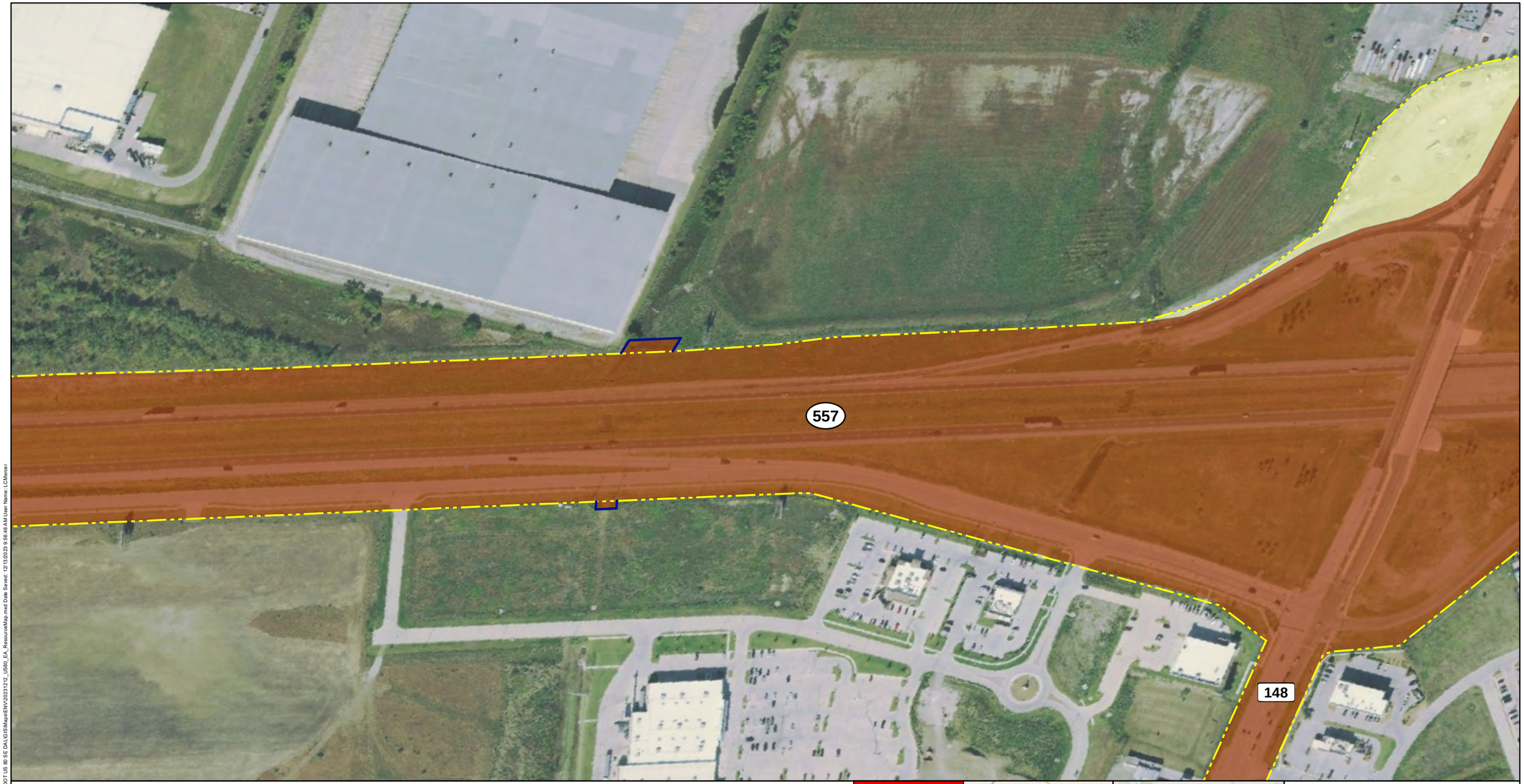
0 100 200
Feet

Project Location

Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 16 / 20

Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



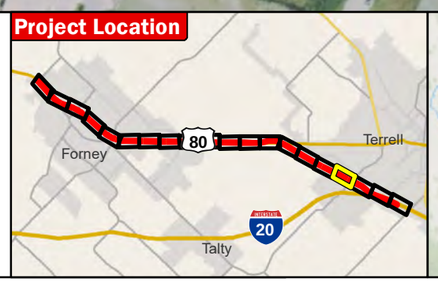
Existing ROW
Proposed Easement
City Limits

EMST Observed Common Name Habitat
Barren
Urban Low Intensity

N

0 100 200
Feet

Project Location



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
PAGE 17 / 20

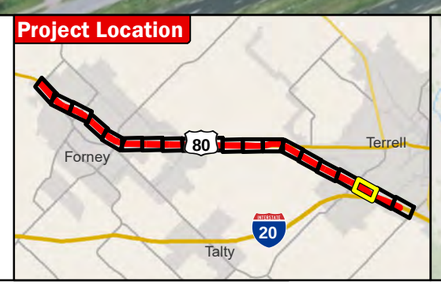
Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW
Proposed Easement
City Limits

EMST Observed Common Name Habitat
Barren
Native Invasive: Deciduous Woodland
Row Crops
Urban Low Intensity

TNM Noise Analysis Receivers
Noise Receiver (Not Impacted)

N
0 100 200
Feet



Texas Department of Transportation

US 80 AND SPUR 557
From FM 460 to IH 20
RESOURCE MAP
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Kaufman County, Texas
CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Existing ROW

City Limits

EMST Observed Common Name Habitat

Central Texas: Floodplain Hardwood Forest

Central Texas: Floodplain Herbaceous Vegetation

Open Water

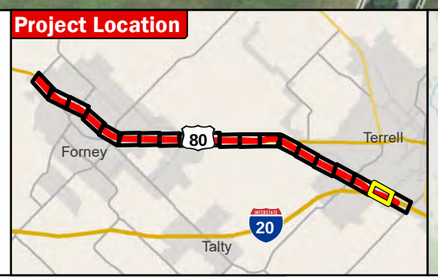
Urban Low Intensity

N

0 100 200

Feet

Project Location



Texas Department of Transportation

US 80 AND SPUR 557

From FM 460 to IH 20

RESOURCE MAP

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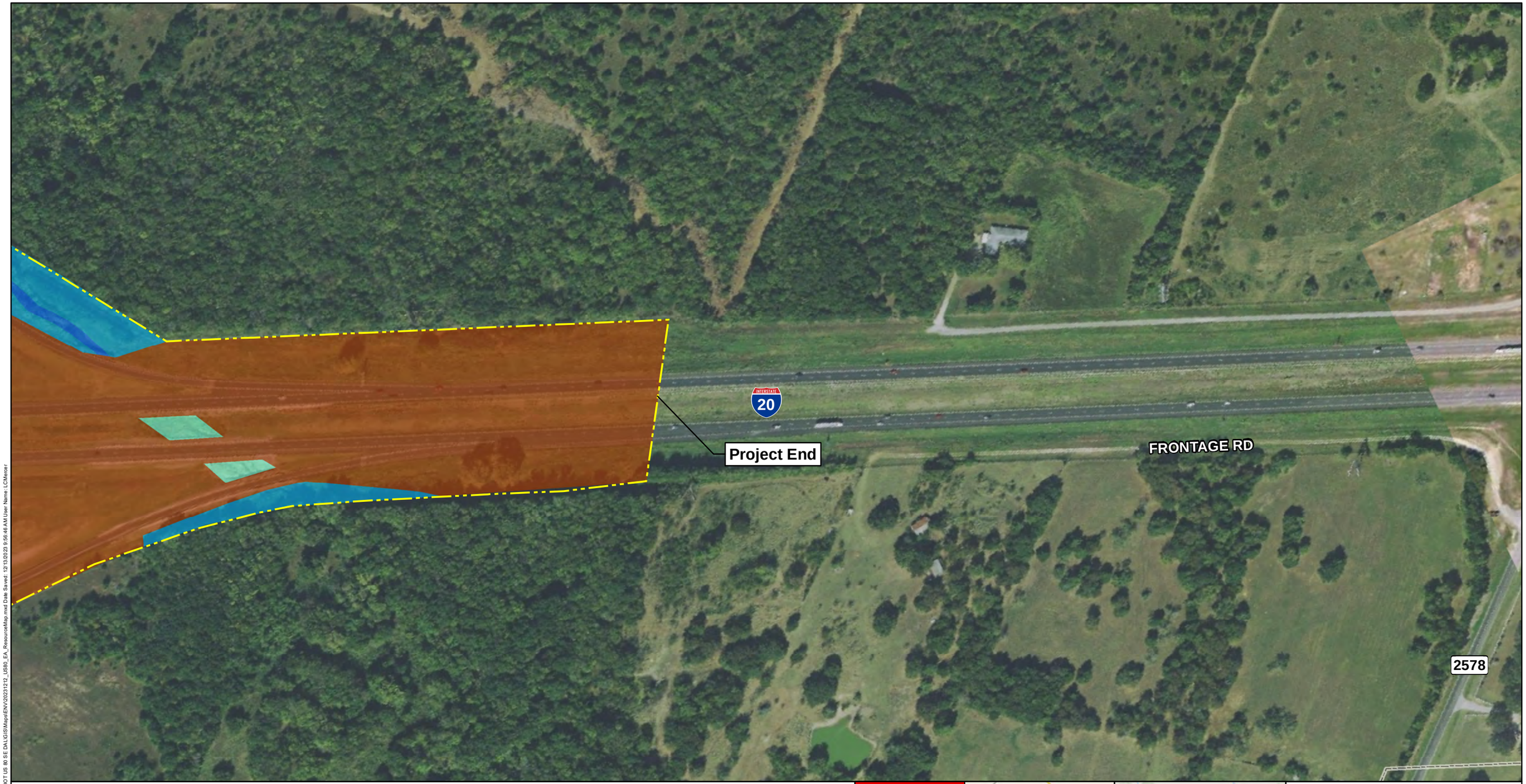
Kaufman County, Texas

CSJs: 0095-03-106, 0095-04-076 & 0495-01-081



Existing ROW

City Limits

EMST Observed Common Name Habitat

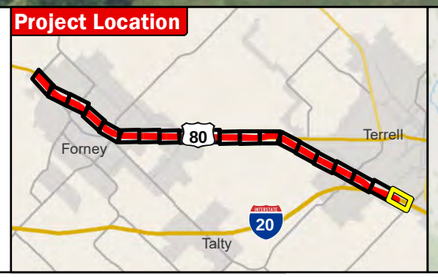
- Central Texas: Floodplain Hardwood Forest
- Central Texas: Floodplain Herbaceous Vegetation
- Open Water
- Urban Low Intensity

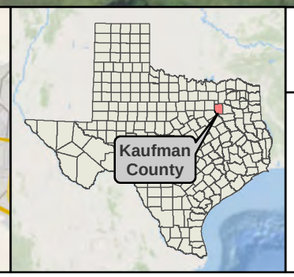
N

0 100 200

Feet

Project Location





Texas Department of Transportation

US 80 AND SPUR 557

From FM 460 to IH 20

RESOURCE MAP

PAGE 20 / 20

Kaufman County, Texas

CSJs: 0095-03-106, 0095-04-076 & 0495-01-081

Appendix F: Resource Agency Coordination

Texas Department of Transportation

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

July 27, 2023

SECTION 106 REVIEW: DETERMINATION OF NRHP ELIGIBILITY AND ADVERSE EFFECT
SECTION 4(f) REVIEW: COMMENT AS OFFICIAL WITH JURISDICTION-PROGRAMMATIC BRIDGE AND DE MINIMIS
Kaufman County / Dallas District
US 80 (from FM 460 to Spur 557), and Spur 557 (US 80 to IH 20)
CSJ: 0095-03-106

Mr. Justin Kockritz
History Programs
Texas Historical Commission
Austin, TX 78711

Dear Mr. Kockritz:

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 9, 2019, and executed by FHWA and TxDOT. In accordance with 36 CFR 800 and our Section 106 Programmatic Agreement, this letter initiates Section 106 consultation on the effect the proposed undertaking poses for a historic property located within the project's area of potential effects (APE). As a consequence of these agreements, TxDOT's regulatory role for this project is that of the Federal action agency.

Project Description

See HRSR page 26-33 for screenshots from TxDOT's Environmental Compliance Oversight System (ECOS) that describe the project, setting, and amount of right-of-way (ROW) and easements necessary for the project.

Determinations of Eligibility

TxDOT historians determined that the APE extends 150' in each direction from the proposed and existing ROW and easements. TxDOT historians identified two historic properties previously documented within the APE by consulting inventories for the National Register of Historic Places (NRHP), State Antiquities Landmarks (SAL), and Recorded Texas Historic Landmarks (RTHL) maintained by your agency.

The two previously identified historic properties are bridges constructed in 1958 over US 80 mainlanes. TxDOT completed an inventory of all bridges built between 1945 and 1965 in 2010, and these bridges are classified into Group II of III. The bridges are significant as an example of a concrete rigid frame, an uncommon bridge type during the 1945 to 1965 period.

TxDOT historians conducted a Historic Resources Survey Report (HRSR) and identified 32 properties in the APE with a finding of four historic properties present (two bridges, two farms).

TxDOT determined **Landmark Hill (007) NRHP-eligible** under Criterion A and C at the local level for its association with agriculture in Kaufman County and its representation of a Colonial Revival farmstead. Most recently used as an event space, 007 is a former agricultural property that is now vacant. County parcel data indicates the main dwelling (007a), and the detached garage (007b) were constructed in 1926. While parcel data does not state when the other buildings on the property were constructed, all the extant buildings are visible in a 1956 historic aerial. The extant buildings include the main dwelling and detached garage (007a and 007b), three barns (007c, 007d, 007e), another detached garage (007f), and two other outbuildings. The last two outbuildings were not visible from ROW (007f and 007g). For purposes of this project, due to lack of access and vegetation hindering views, all resources on the property are contributing.

The entire property is enclosed by a fence. The majority of the fence is an 8-foot tall, modern chain link fence, but there is a section of the fence at the driveway access that is historic-age wrought iron. While there is a historic-age section, the fence overall has lost significant integrity with most of it being replaced with a chain link fence, and so the fence is not a contributing resource to the property.

The property is representative of a large farmstead in Kaufman County. The Pinson family, which owned large tracts of land in Forney, developed the farmstead during the POS for agriculture in Kaufman County. The family owned the property until the 1970s. Along with many extant historic-age agricultural buildings, the property retains the original 1926 dwelling and garage. While the property no longer functions as a farm, it is still able to convey its agricultural history.

The boundaries of the eligible resource are defined as the existing parcel boundaries of the two properties associated with Landmark Hill containing the house and outbuildings with some land. The majority of the agricultural land surrounding the property is lost due to housing development. For additional information see pages 66-79 of the HRSR.

TxDOT determined the **Pinson Farm (011) NRHP-eligible** under Criterion A and C for its association with agriculture in Kaufman County, representing an intact farmstead, with a Craftsman style house. Four extant buildings include the main dwelling (011a), a detached garage (011b), a metal barn (011c), and a wood barn (011d), all contribute to the property. A barbed wire fence along the property line encloses the outbuildings of the property. The fence is not original to the property and does not contribute.

William Henry Harrison Pinson established a farm on the property in 1878. At the time, Pinson owned 224 acres of land and farmed cotton, feed grains, and had domestic

livestock. He left the property to his wife, who in turn left the property to their son, Clem Pinson. Clem Pinson's cousin, Jim Perry Pinson, constructed the farmstead known as Landmark Hill in 1926 (Property 007).

The family continued its agricultural operations on Property 011 and the State of Texas recognized it as a Family Land Heritage Farm (FLH) in 1991. This honor does not automatically convey NRHP-eligibility to a property. The property must still satisfy the criteria to be NRHP eligible.

The Pinson family established the farm during the Period of Significance (POS) for Agriculture (1850-1930) in Kaufman County, at a time when the primary industry was agriculture. According to the FLH listing, the property size is now only 16 acres, but the feeling and representation of its agricultural significance are still visible. TxDOT determined the Pinson Farm **NRHP-eligible** for listing under Criterion A for Agriculture at the local level. In addition, the Craftsman style house retains enough integrity for **NRHP-eligibility** under Criterion C for architecture at the local level.

The NRHP boundary is the current parcel with house and outbuildings. For additional information see pages 97-110 of the HRSR.

While both properties were historically associated with the same family, due to distance and new housing and commercial development in between them, the area no longer contains integrity to constitute a rural historic landscape.

TxDOT determined two bridges in the APE **NRHP-eligible** under the 1945-1965 bridge study. Located at CR 217 @ US 80, (NBI No. 181300009504108) and Windmill Farms Blvd @ US 80, (NBI No. 181300009504109), they carry traffic over the mainlanes of US 80. TxDOT marketed the bridges on its bridge adoption website for over 30 days in June/July 2023.

The bridges are significant as an example of a concrete rigid frame, an uncommon bridge type during the 1945 to 1965 period. Rigid frame bridges, in which the superstructure and substructure are a continuous form poured monolithically in one mold, were used for a variety of roadway types from the 1920s through 1940s. However, their use following World War II was uncommon and generally limited to grade separation structures in urban locations where logistics, setting, and/or cost prevented the construction of a substantial foundation. The rigid frame form also provided an attractive, slightly arched form suitable for use on urban roadways.

The bridges are also significant as an important work of a master engineer, designer, fabricator, or builder. The bridges were designed by Farland C. Bundy, recognized as an innovative Texas bridge designer of the period. Bundy worked as an engineer in the Texas Highway Department's Bridge Division from 1948 to 1984 and was responsible for several award-winning designs and innovative practices. The bridges do not exhibit physical alterations and retain historic integrity of location, design, materials, workmanship, setting,

feeling, and association. The bridges are **eligible** for listing in the National Register of Historic Places under Criterion C in the area of Engineering at the state level of significance.

TxDOT historians determined the remaining properties in the APE consisting of domestic, commercial, transportation and agricultural (among other types) are common designs that lack architectural merit, are not works of a master, and have no known historic associations with important events or persons, and are therefore **not eligible** for NRHP listing under Criterion A, B, or C.

Consultation with Other Parties

TxDOT contacted the Kaufman County Historical Commission (CHC) regarding the proposed project in November 2022 via email. As of July 2023, Kaufman CHC had not responded.

Determinations of Effect

Property 07 Landmark Hill. The identified eligible property is approximately 8.04 acre in size. The proposed project requires approximately 0.076 acres in new right of way within the southern boundary of the property along US 80 (see page 245 of HRSR for map). This results in a total impact of 0.94% (less than 1%). TxDOT determined this constitutes a *de minimis* use of the historic property. TxDOT determined that this minor change poses **no adverse effect** as the property would still possess its significance following completion of the project. The proposed project would not adversely affect the property's integrity of location, setting, feeling, association, design, materials or workmanship.

Indirect Effect: Project activities pose minimal potential to cause indirect effects. The widening of an existing highway would not affect or diminish the qualities and characteristics that contribute to the historic significance of Landmark Hill. Potential visual impacts: none as roadway will remain at grade at this location. Noise impacts: will not be measured as the property is now in commercial use.

Cumulative Effect: Project activities pose no foreseeable cumulative adverse effects to the property. The property is currently abandoned and not in agricultural use and any future use by other owners is not subject of this review.

Property 11 Pinson Farm

The project would result in **no effect** to the property. The property is well away from the new ROW impacts. See map on page 246 of HRSR.

Bridges-

TxDOT examined multiple alternatives to improve the bridge crossings. The alternatives analysis indicates that replacement of the historic bridge is necessary. TxDOT's proposed replacement of the existing historic bridges with a new bridge constitutes an **adverse effect**. TxDOT considered measures to avoid or minimize the adverse effect, such as rehabilitating the bridges for continued use, constructing a parallel bridge and rehabilitating the bridges

for one-way traffic, or leaving the bridges in place as a monument. Detailed analysis of these options determined that costs are prohibitive for the rehabilitation, while leaving the historic bridges in place may result in safety issues and geometric issues (TxDOT cannot widen US 80 mainlanes with the current bridge piers at their current locations as there is not enough space between piers to do so. Additionally, the current bridges do not meet height requirements for a US highway). See the attached checklist and alternatives analysis chart for discussions of planning efforts to avoid and minimize the adverse effects to the bridges.

Mitigation

TxDOT completed programmatic mitigation for the replacement of all bridges in Group II. This programmatic mitigation is a public-facing education campaign about these bridges, which includes videos, a webpage, glossaries, photographs, educational activities, and continued promotion of these materials. Per prior agreement, TxDOT does not need to complete additional mitigation on Group II bridges.

Conclusion

TxDOT hereby requests your signed concurrence with our determinations of **eligibility** and **effects**.

We additionally notify you that SHPO is the designated Official with Jurisdiction (OWJ) over Section 4(f) resources protected under the provisions of 23 CFR 774 and that your comments on our Section 106 findings will be integrated into decision-making regarding prudent and feasible alternatives for purposes of Section 4(f) evaluations. Final determinations for the Section 4(f) process will be rendered by TxDOT pursuant to 23 U.S.C. 327 and the afore-mentioned MOU dated 12-9-19. TxDOT intends to render a de minimis finding on 007 Landmark Hill and a programmatic finding on the two historic bridges over US 80.

We look forward to further consultation with your staff and hope to maintain a partnership that will foster effective and responsible solutions for improving transportation, safety and mobility in the state of Texas. Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please call me at (409) 673-0787 or renee.benn@txdot.gov.

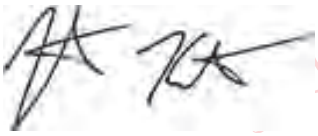
Sincerely,

DocuSigned by:
Renee Benn
7F4A35F3350848D...

Renee Benn
Environmental Protection Specialist
Historical Studies Branch
Environmental Affairs Division

cc: Linda Henderson, HIST Program Manager Lead: DS LCH

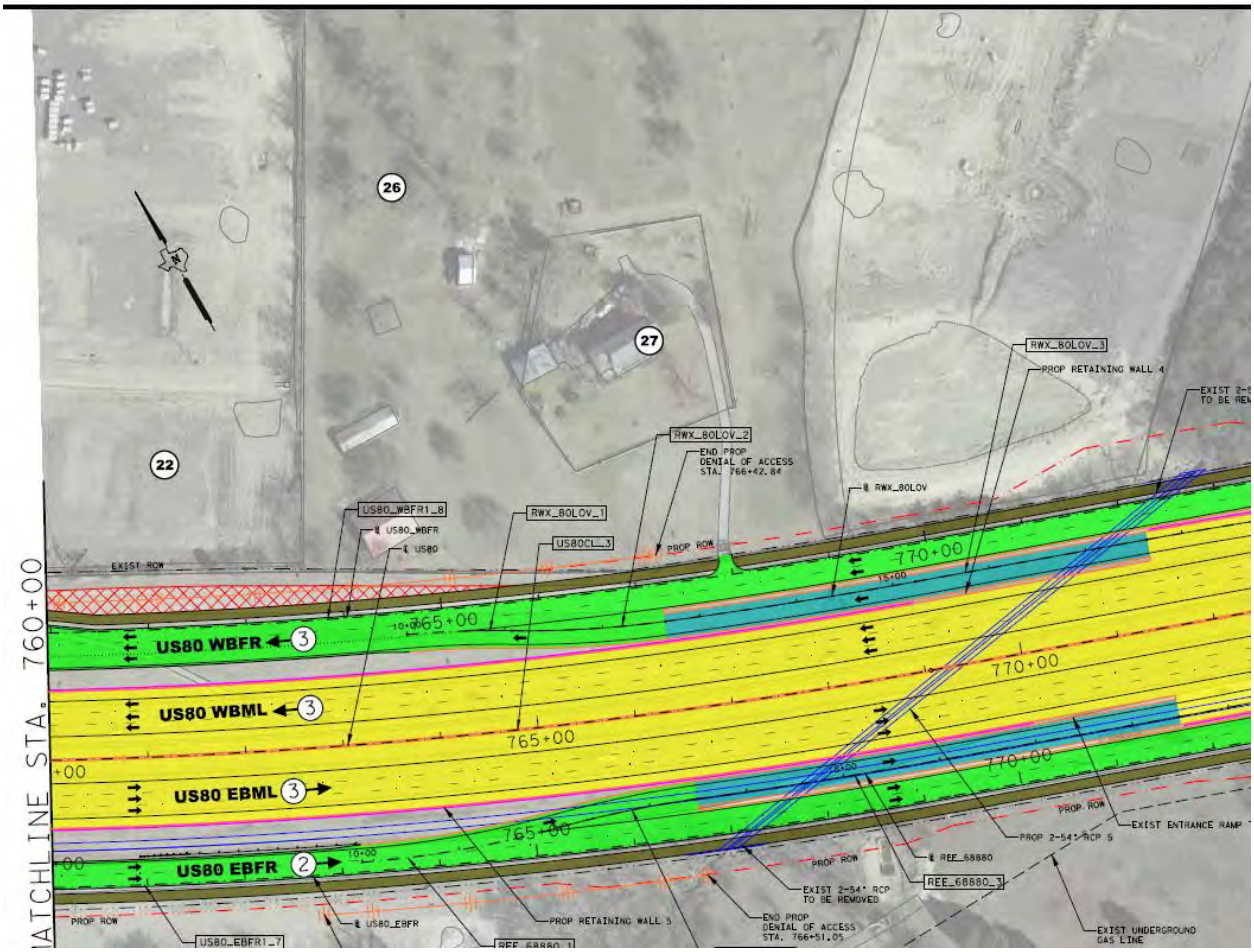
CONCUR-NRHP ELIGIBLE PROPERTIES PRESENT
ADVERSE EFFECTS WITH MITIGATION (TWO BRIDGES)
NO ADVERSE EFFECT TO HISTORIC PROPERTIES (07 and 11)
NO COMMENTS ON SECTION 4(f) EVALUATIONS



NAME: _____ DATE:_____

for Mark Wolfe, State Historic Preservation Officer

Image from schematic showing ROW take at property 007 (#27 on this map):



Proposed ROW line is dashed red. Hashed red is removal of pavement. Note frontage road lanes moving away from property due to pavement removal.

Lopez, Michele A.

From: Mohammed Shaikh <Mohammed.Shaikh@txdot.gov>
Sent: Wednesday, August 16, 2023 1:29 PM
To: Lopez, Michele A.
Cc: Dan Perge
Subject: FW: CSJ 0095-03-106, ETC US 80 Widening - Request for Collaborative Review

Hi Michele,

Please see below for TPWD coordination.

Thanks,
Mohammed

From: Jamila Murchison <Jamila.Murchison@txdot.gov>
Sent: Wednesday, August 09, 2023 4:03 PM
To: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Cc: Dan Perge <Dan.Perge@txdot.gov>; Christine Polito <Christine.Polito@txdot.gov>; Mohammed Shaikh <Mohammed.Shaikh@txdot.gov>
Subject: CSJ 0095-03-106, ETC US 80 Widening - Request for Collaborative Review

Hello,

TxDOT requests initial collaborative review for the US 80 project in Kaufman County, Texas. The project proposes the widening of US 80 from FM 460 to East of FM 548. Please see ECOS for a more detailed project description. This project is categorized as an EA. The following file names for relevant documents are available in ECOS:

1. Species analysis spreadsheet: 5. Approved Updated 0095-03-106, ETC. US 80_SAS_08.2023
2. Species analysis form: 3. Approved 0095-03-106, ETC. US 80 Roadway Widening_Species Analysis Form_08.2023
3. BMP form: 1. Approved 0095-03-106, ETC_US 80 Roadway Widening_BMP Form_08.2023
4. RTEST Species List: CSJ 0095-03-106, ETC._US 80_TPWD RTEST Species List_20230501
5. IPaC Species List: CSJ 0095-03-106, ETC._US 80_USFWS Official Species List_20230501
6. NDD: 6. 0095-03-106, ETC. US 80_NDD_08.2023
7. EMST Map: 7. Approved 0095-03-106, ETC. US 80_EMST_08.2023
8. EMST Spreadsheet: 8. Approved 0095-03-106, ETC. US 80_EMST Spreadsheet_08.2023
9. NRCS Soil Report: 9. Approved 0095-03-106, ETC. US 80_NRCS Soils Report_08.2023
10. Photo Log: 2. Approved 0095-03-106, ETC. US 80 Roadway Widening_Photo Log_08.2023
11. CPA Form: Approved 0095-03-106, ETC US 80 Roadway Widening_FPPA Coordination CPA 106 Form_08.2023

These documents, along with other project-related information, are available in ECOS under the CSJ: 0095-03-106, ETC. The public hearing and draft EA is anticipated by December 2023. Feel free to contact me with any questions or if you need any additional information.

Jamila Murchison / Jamila.Murchison@txdot.gov / (214) 320-4463

My Best,

Jamila Murchison
Environmental Specialist
Texas Department of Transportation
4777 East Highway 80
Mesquite, Texas 75150

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arlington Ecological Services Field Office
501 West Felix Street
Suite 1105
Fort Worth, TX 76115-3410
Phone: (817) 277-1100 Fax: (817) 277-1129
Email Address: arles@fws.gov

In Reply Refer To:
Project Code: 2022-0076721
Project Name: US 80 and Spur 557

May 01, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, which may occur within the boundary of your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under section 7(a)(1) of the Act, Federal agencies are directed to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Under and 7(a)(2) and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether their actions may affect threatened and endangered species and/or designated critical habitat. A Federal action is an activity or program authorized, funded, or carried out, in whole or in part, by a Federal agency (50 CFR 402.02).

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For Federal actions other than major construction activities, the Service suggests that a biological evaluation (similar to a Biological Assessment) be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

After evaluating the potential effects of a proposed action on federally listed species, one of the following determinations should be made by the Federal agency:

1. *No effect* - the appropriate determination when a project, as proposed, is anticipated to have no effects to listed species or critical habitat. A "no effect" determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, the action agency should maintain a complete record of their evaluation, including the steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information.
2. *May affect, but is not likely to adversely affect* - the appropriate determination when a proposed action's anticipated effects to listed species or critical habitat are insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur. This determination requires written concurrence from the Service. A biological evaluation or other supporting information justifying this determination should be submitted with a request for written concurrence.
3. *May affect, is likely to adversely affect* - the appropriate determination if any adverse effect to listed species or critical habitat may occur as a consequence of the proposed action, and the effect is not discountable or insignificant. This determination requires formal section 7 consultation.

The Service has performed up-front analysis for certain project types and species in your project area. These analyses have been compiled into *determination keys*, which allows an action agency, or its designated non-federal representative, to initiate a streamlined process for determining a proposed project's potential effects on federally listed species. The determination keys can be accessed through IPaC.

The Service recommends that candidate species, proposed species, and proposed critical habitat be addressed should consultation be necessary. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at: https://www.fws.gov/service/section-7-consultations

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (https://www.fws.gov/library/collections/bald-and-golden-eagle-management). Additionally, wind energy projects should follow the wind energy guidelines (https://www.fws.gov/media/land-based-wind-energy-guidelines) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation. The Federal Aviation Administration (FAA) released specifications for and made mandatory flashing L-810 lights on new towers 150-350 feet AGL, and the elimination of L-810 steady-burning side lights on towers above 350 feet AGL. While the FAA made these changes to reduce the number of migratory bird collisions (by as much as 70%), extinguishing steady-burning side lights also reduces maintenance costs to tower owners. For additional information concerning migratory birds and eagle conservation plans, please contact the Service's Migratory Bird Office at 505-248-7882.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

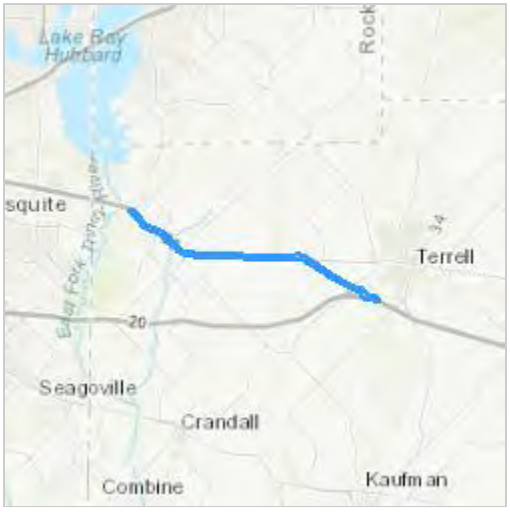
This species list is provided by:

Arlington Ecological Services Field Office
501 West Felix Street
Suite 1105
Fort Worth, TX 76115-3410
(817) 277-1100

PROJECT SUMMARY

Project Code: 2022-0076721
Project Name: US 80 and Spur 557
Project Type: Road/Hwy - Maintenance/Modification
Project Description: Road reconstruction on US 80 from FM 460 to Spur 557 and Spur 557 from US 80 to IH 20
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.741048,-96.41664573100064,14z



Counties: Kaufman County, Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. This species only needs to be considered under the following conditions: ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane *Grus americana* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

REPTILES

NAME	STATUS
Alligator Snapping Turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658	Proposed Threatened

CLAMS

NAME	STATUS
Texas Fawnsfoot *Truncilla macrodon* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8965	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25

NAME	BREEDING SEASON
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Little Blue Heron *Egretta caerulea* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 10 to Oct 15

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

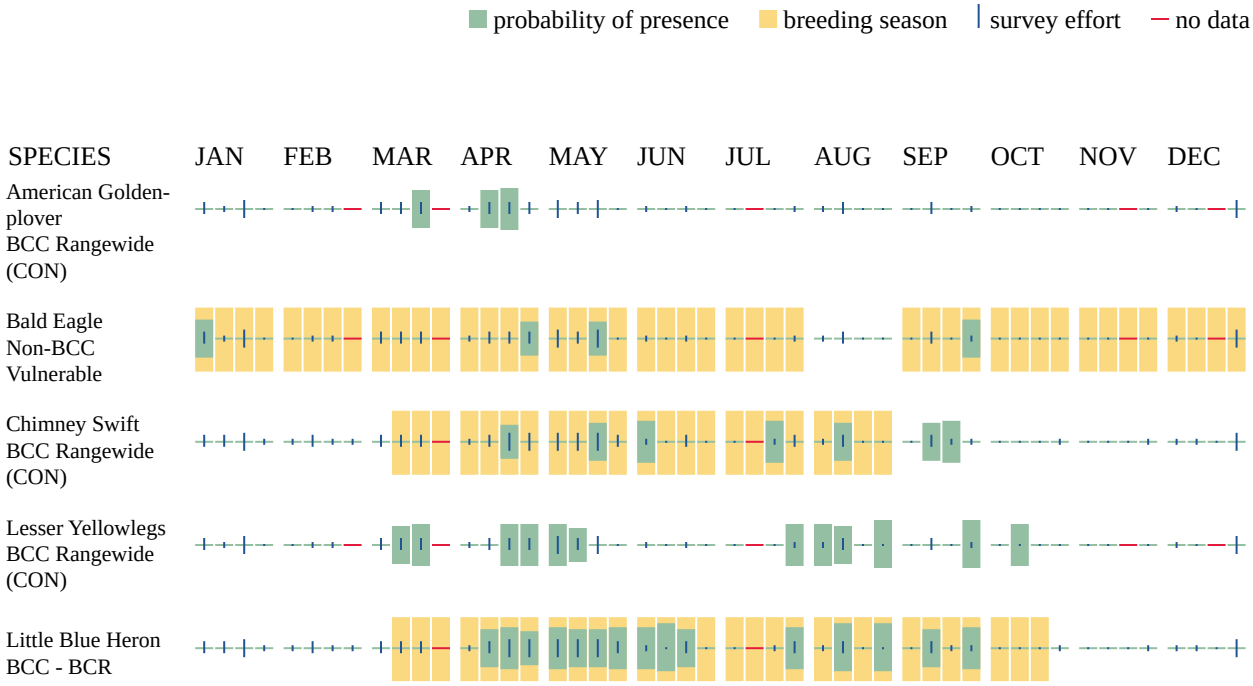
Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R5UBH
- R4SBC

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1C
- PSS1C
- PFO1A

FRESHWATER POND

- PUBH
- PUBHx
- PUBHh

FRESHWATER EMERGENT WETLAND

- PEM1Cx
- PEM1C
- PEM1A

IPAC USER CONTACT INFORMATION

Agency: Garver LLC
Name: Leigh Mercer
Address: 3755 S Capital of Texas Hwy
Address Line 2: Ste 325
City: Austin
State: TX
Zip: 78704
Email lcmercer@garverusa.com
Phone: 5125391966

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Form

Documentation of Texas Parks and Wildlife Department Best Management Practices

Project Name: **US 80 from FM 460 to Spur 557 and Spur 557 from US 80 to IH 20**

CSJ(s): **0095-03-106, 0095-04-076, 0495-01-081**

County(ies): **Kaufman**

Date Form Completed: **11/16/2023**

Prepared by: **Leigh C Mercer - Garver**

Information on state-listed species, SGCN, water resources, and other natural resources can be found in the ECOS documents tab under the filenames specified in the e-mail sent to WHAB_TXDOT@tpwd.texas.gov.

1. Does the project impact any state parks, wildlife management areas, wildlife refuges, or other designated protected areas?

   ☒ No

   ☐ Yes

2. Does TxDOT need TPWD assistance in identifying and locating Section 404 mitigation opportunities for this project?

   ☒ No / N/A / Not yet determined

   ☐ Yes

3. Is there a species or resource challenge that TPWD can assist with additional guidance? If so, describe below:

   No species or resource challenges identified for the project.

4. List all BMP that will be applied to this project per the document *Beneficial Management Practices: Avoiding, Minimizing, and Mitigating Impacts of Transportation Projects on State Natural Resources*.

   ***Note, these are BMP that TxDOT commits to implement at the time this form is completed. This list may change prior to or during construction based on changes to project impacts, design, etc.**

BMP to be Implemented:

Minimize impacts to wetland habitats including isolated ephemeral pools.

Vegetation BMP:

- Minimize the amount of vegetation cleared. Removal of native vegetation, particularly mature native trees and shrubs should be avoided. Impacted vegetation should be replaced with in-kind onsite replacement/restoration of native vegetation.

- To minimize adverse effects, activities should be planned to preserve mature trees, particularly acorn, nut or berry producing varieties. These types of vegetation have high value to wildlife as food and cover.
- It is strongly recommended that trees greater than 12 inches in diameter at breast height (DBH) that are removed be replaced. TPWD's experience indicates that for ecologically effective replacement, a ratio of three trees for every one (3:1) lost should be provided to either on-site or off-site. Trees less than 12 inches DBH should be replaced at a 1:1 ratio.
- Replacement trees should be of equal or better wildlife quality than those removed and be regionally adapted native species.
- When trees are planted, a maintenance plan that ensures at least an 85 percent survival rate after three years should be developed for the replacement trees.
- The use of any non-native vegetation in landscaping and revegetation is discouraged. Locally adapted native species should be used.
- The use of seed mix that contains seeds from only regional ecotype native species is recommended.

Water Quality BMP:

- Minimize the use of equipment in streams and riparian areas during construction. When possible, equipment access should be from banks, bridge decks, or barges.
- When temporary stream crossings are unavoidable, remove stream crossings once they are no longer needed and stabilize banks and soils around the crossing.
- Wet-Bottomed detention ponds are recommended to benefit wildlife and downstream water quality. Consider potential wildlife-vehicle interactions when siting detention ponds.
- Rubbish found near bridges on TxDOT ROW should be removed and disposed of properly to minimize the risk of pollution. Rubbish does not include brush piles or snags.

Bird BMP (in addition to complying with the Migratory Bird Treaty Act (MBTA) and Chapter 64 of the Parks and Wildlife Code (PWC) regarding nongame bird protections):

- Avoid vegetation clearing activities during the general bird nesting season, March through August, to minimize adverse impacts to birds.
- Prior to construction, perform daytime surveys for nests including under bridges and in culverts to determine if they are active before removal. Nests that are active should not be disturbed. If active nests are observed during surveys, TPWD recommends a 150-foot buffer of vegetation remain around the nests until the young have fledged or the nest is abandoned.
- Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season.
- If unoccupied, inactive nests will be removed, ensure that nests are not protected under the Endangered Species Act (ESA), MBTA, or BGEPA.
- Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair.
- Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.
- Minimize extended human presence near nesting birds during construction and maintenance activities. Protect sensitive habitat areas with temporary barriers or fencing to limit human foot traffic and off-road vehicle use to alert and discourage contractors from causing any unintentional impacts.
- Minimize construction noise above ambient levels during general bird nesting season to minimize adverse impacts on birds.
- Minimize construction lighting during the general bird nesting season by scheduling work activities between dawn and dusk.

Freshwater Mussel BMP:

- In addition to Water Quality and Stream Crossing BMP, follow the most recent, "TPWD–TxDOT Annual Work Plan for Pre-Construction Surveys, Aquatic Resources Relocations, and Other

Best Management Practices to Avoid, Minimize, and Mitigate Impacts to Freshwater Resources."

- When work is adjacent to the water: Water Quality BMP implemented as part of the Texas Commission on Environmental Quality (TCEQ) Stormwater Pollution Prevention Plan (SWPPP) for a construction general permit or any conditions of the 401 Water Quality Certification for the project will be implemented.

Insect Pollinator BMP:

- Mowing should only be applied to 30% or less of a site in a given year when practical. In general, mowing is inadequate for management of native insect pollinator habitat in the long term, except to remove annual non-native plants during establishment (i.e., high-mowing before they flower) or to facilitate a light disking. When conducted it should be done post bloom or when host plants have gone dormant for the growing season. This can also be done by leaving strips of habitat farthest from road or highway corridors un-mowed when practical.
- If mowing is required during period of active bloom or high pollinator activity it should be implemented during the heat of the day and with a high mower deck to allow for pollinators to escape and to give late season blooming species a chance to recover and bloom.
- Deep soil disturbances, such as, tilling or deep disking in areas that host aggregations of groundnesting bees should be avoided. Tilling and disking also may promote the invasion or germination of non-native plants. Different species of native ground-nesting bees prefer different soil conditions, although research suggests that many ground nesting bees prefer sandy, loamy sand or sandy loam soils. In areas with these soil types consider leaving open patches of soil.
- Allow dead trees to stand (so long as they do not pose a risk to property or people) and protect shrubs and herbaceous plants with pithy or hollow stems (e.g., cane fruits, sumac, elderberry), as these provide nesting habitat for tunnel-nesting native bees.
- Retain dead or dying branches whenever it is safe and practical at the edges of the ROW. Woodboring beetle larvae often fill dead trees and branches with narrow tunnels into which tunnelnesting bees will establish nests. Additionally, bumble bees may choose to nest in wood piles.
- Retain rotting logs at edges of the ROW where some bee species may burrow tunnels in which to nest.
- Protect sloped or well-drained ground sites where plants are sparse and direct access to soil is available. These are the areas where ground-nesting bees may dig nests. Turning the soil destroys all ground nests that are present at that depth and hinders the emergence of bees that are nesting deeper in the ground.
- Protect grassy thickets, or other areas of dense, low cover from mowing or other disturbance. These are the sites where bumble bees might find the nest cavities they need, as well as annual and perennial wildflowers that can provide important food resources.
- Where available and economical, native plants and seed should be procured from local eco-type providers. Seed mixes should be diverse and include as many ecoregion natives as possible ensuring full season floral resources. Species by Texas ecoregion can be found in the Texas Management Recommendations for Native Insect Pollinators in Texas document: https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_1813.pdf.
- Planting at least three different native flowering plants within each of three blooming periods are recommended (spring, summer, early fall) in high rainfall regions of Texas. In drier regions of the state, a target of three native flowering plants within each of two blooming periods can be used.
- In areas along the I-35 corridor of central Texas consider increasing fall blooming nectar resources as this is a critical time period of monarch butterflies (Danaus plexippus) and nesting bees and has been identified as a critical need for these species in Texas.
- Habitat enhancements for native pollinators should include at least one native bunchgrass adapted to the site.
- Utilize an Integrated Pest Management Strategy (IPM) strategy for controlling weedy or invasive plants by minimizing broad use of certain herbicides and surfactants in close proximity

to intact habitats utilized by native pollinators. Reduce application timing to periods of low pollinator activity and not during peak bloom season.

Aquatic Amphibian and Reptile BMP:

- For projects within existing right-of-way (ROW) when work is in water or will permanently impact a water feature and potential habitat exists for the target species complete the following:
    - Minimize impacts to wetlands, temporary and permanent open water features, including depressions, and riverine habitats.
    - Maintain the existing hydrologic regime and any connections between wetlands and other aquatic features.
    - Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.
    - Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas. If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.
    - Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.
    - When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and refugia/overwinter sites (e.g., brush and debris piles, crayfish burrows, aquatic logjams, and leaf packs).
    - If gutters and curbs are part of the roadway design, install gutters that do not include the side box inlet and include sloped (i.e., mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.
- For projects that require acquisition of additional ROW and work within that new ROW is in water or will permanently impact a water feature, implement BMP for projects within existing ROW above plus those below:
    - For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two.
    - For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.
    - When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.

Terrestrial Amphibian and Reptile BMP:

- For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling
- Avoid or minimize disturbing or removing cover objects, such as downed trees, rotting stumps, brush piles, and leaf litter. If avoidance or minimization is not practicable, consider removing cover objects prior to the start of the project and replace them at project completion.
- Examine heavy equipment stored on site before use, particularly after rain events when reptile and amphibian movements occur more often, to ensure use will not harm individuals that might be seeking temporary refuge.

- Due to increased activity (mating) of reptiles and amphibian during the spring, construction activities like clearing or grading should attempt to be scheduled outside of the spring (March-May) season. Also, timing ground disturbing activities before October when reptiles and amphibians become less active and may be using burrows in the project area is also encouraged.
- When designing roads with curbs, consider using Type I or Type III curbs to provide a gentle slope to enable turtles and small animals to get out of roadways.
- If Texas tortoises (Gopherus berlandieri) or box turtles (Terrepene spp.) are present in a project area, they should be removed from the area and relocated between 100 and 200 meters from the project area. After removal of the individuals, the area that will be disturbed during active construction and project specific locations should be fenced off to exclude reentry by turtles, tortoises, and other reptiles. The exclusion fence should be constructed and maintained as follows:
    - The exclusion fence should be constructed with metal flashing or drift fence material.
    - Rolled erosion control mesh material should not be used.
    - The exclusion fence should be buried at least 6 inches deep and be at least 24 inches high.
    - The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed site has been revegetated.
- After project is complete, revegetate disturbed areas with an appropriate locally sourced native seed mix. If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.

5. List all TxDOT species protection specifications that will be applied to this project (e.g., Amphibian and Reptile Exclusion Fence, Bat Houses, etc.)

Species protection specifications to be Implemented:

Appendix G: Section 4(f) Documentation

Checklist
Section 4(f) Programmatic Evaluation of Historic Bridge Projects

Bridge Name: CR 217 Bridge

Bridge Location: CR 217 at US 80

County: Kaufman

District: Dallas

Control Section Job Number (CSJ): 0095-03-106

Highway/Facility: CR 217

Bridge Type: Cast-in-place concrete rigid frame unit

NB #: 181300009504108

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 9, 2019, and executed by FHWA and TxDOT.

I. Description of Section 4(f) Property, Project Scope, and Need and Purpose Statement

The purpose of the proposed project is to reconstruct US 80 to meet current roadway corridor standards, reduce traffic congestion, improve mobility, and increase safety within this major east/west thoroughfare connecting the Dallas/Fort Worth Metroplex and East Texas.

The proposed project is needed because US 80 (from FM 460 to Spur 557) does not meet current and future traffic demand volumes with the appropriate Level of Service. The current ROW configuration and bridge column locations do not have sufficient width to add the number of lanes needed using current design standards for lane and shoulder width. The CR 217 Bridge has lower vertical clearance than the current design standard and is significantly lower than the standards being implemented for freight corridors.

II. Determination of Applicability

All must result in a Yes answer for this checklist to be used.

Yes	No	
☒	☐	The project requires the use of a bridge defined as historic per Section 106 regulations. (36 CFR 800)
☒	☐	The historic bridge is not a designated National Historic Landmark (NHL).
		The project results in:
☒	☐	Section 4(f) use of a historic bridge, AND
☒	☐	Additional impacts to protected Section 4(f) properties are limited to *de minimis* or exception categories as specified in the Scope of Work.

III. Identify additional Section 4(f) properties in the project area

Either exception, de minimis, or another programmatic

Windmill Farms Boulevard Bridge Programmatic Evaluation
Landmark Hill Section 4(f) de minimis

Comments: The Windmill Farms Boulevard Bridge is similar in design to the CR 217 Bridge. The Landmark Hill Section 4(f) de minimis is addressed under separate cover.

IV. Alternatives Considered/Findings

No Build *(Indicate all that apply.)*

☐ **Structural Deficiencies**

The No Build alternative does not correct the situation that causes the bridge to be considered structurally deficient or significantly deteriorated. These deficiencies can lead to eventual structural failure/collapse. Normal maintenance is not considered adequate to address these deficiencies.

☒ **Functional/Geometric Deficiencies**

The No Build alternative does not correct the situation that causes the bridge to be considered functionally/geometrically deficient. These deficiencies can lead to safety hazards to the traveling public or place unacceptable restrictions on transport and travel.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

The current bridge is not wide enough to meet current and projected traffic volumes. Similarly, the present 14'-6"-ft vertical clearance for eastbound traffic and 16'-1"-ft vertical clearance for westbound traffic does not meet the 18'-6"-ft standard for a freight corridor such as US 80. Industrial warehouses and recent commercial and industrial development along US 80 demonstrate the relevance of the project need. Overheight trucks are currently forced to exit and re-enter the highway to avoid impacts with the bridge structure. The width of the bridge is not sufficient to handle the increased amount of traffic projected along the existing US 80 frontage roads. The low inventory rating would require substantial strengthening to achieve HS 20 Inventory rating. The No Build alternative is not prudent as it does not meet the project's purpose and need.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative fails the Section 4(f) prudent and feasible standard and is not recommended.

Alternative: Build on New Location (conversion to one-way pair/parallel construction with monument)

☐ **Structural Deficiencies**

The New Location alternative does not correct the situation that causes the bridge to be considered structurally deficient or significantly deteriorated. These deficiencies can lead to eventual structural failure/collapse. Normal maintenance is not considered adequate to address these deficiencies.

☒ **Functional/Geometric Deficiencies**

The New Location alternative does not correct the situation that causes the bridge to be considered functionally/geometrically deficient. These deficiencies can lead to safety hazards to the traveling public or place unacceptable restrictions on transport and travel.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

Conversion of the bridge to a one-way pair or parallel construction does not resolve the vertical clearance issues mentioned under the No Build option. Widening US 80 is not possible if any part of the bridge remains in place due to its construction method. The cast-in-place rigid frame cannot be lengthened to span the proposed roadway cross section, nor can it be raised to meet vertical clearance requirements. The structure already has a low vertical clearance and widening the existing structure would only further reduce this clearance due to the cross slope. Additionally, the low inventory rating of the bridge would require substantial strengthening to achieve HS 20 inventory rating. This alternative does not meet the purpose and need of the project because it does not resolve the vertical clearance issue. It is not feasible as the additional US 80 lanes cannot be constructed between the existing bridge piers as a matter of sound engineering.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative fails the Section 4(f) prudent and feasible standard and is not recommended.

Alternative: Rehabilitation of Historic Bridge (two-way vehicular/pedestrian in situ or relocated)

☐ **Structural Deficiencies**

The Rehabilitation alternative does not correct the situation that causes the bridge to be considered structurally deficient or significantly deteriorated. These deficiencies can lead to eventual structural failure/collapse. Normal maintenance is not considered adequate to address these deficiencies.

☒ **Functional/Geometric Deficiencies**

The Rehabilitation alternative does not correct the situation that causes the bridge to be considered functionally/geometrically deficient. These deficiencies can lead to safety hazards to the traveling public or place unacceptable restrictions on transport and travel.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

Rehabilitation of the CR 271 Bridge for continued use according to the Secretary of the Interior's Standards would not resolve the vertical clearance or capacity issues mentioned in the No Build alternative discussion. Raising the bridge is not possible due to its cast-in-place ridgid frame construction. While US 80 could be lowered to correct the vertical clearance deficiency, the required additional US 80 lanes cannot be constructed between the existing piers. The bridge cannot be removed and relocated due to its construction. This alternative does not meet the purpose and need of the project because it does not resolve the vertical clearance issue. It is not feasible as the additional US 80 lanes cannot be constructed between the existing bridge piers as a matter of sound engineering.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative fails the Section 4(f) prudent and feasible standard and is not recommended.

Alternative: Replacement on Current Alignment

☐ **Structural Deficiencies**

The Replacement alternative corrects the situation that causes the bridge to be considered structurally deficient or significantly deteriorated.

☒ **Functional/Geometric Deficiencies**

The Replacement alternative corrects the situation that causes the bridge to be considered functionally/geometrically deficient.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

TxDOT engineers propose replacing the CR 271 Bridge with a new multi-lane bridge with separate turn-arounds for frontage road traffic. The new bridge would meet current and future geometric requirements. This alternative is both feasible and prudent and is the preferred alternative.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative meets the Section 4(f) prudent and feasible standard and is recommended**.**

V. Measures to Minimize Harm

Indicate all that apply, but a minimum of one must be selected. Verify that the project includes all possible planning to minimize harm.

☐ Measures taken to preserve historic integrity per preservation standards

☒ Measures taken to market historic bridge for alternative use

☐ Alternative design measures taken to address deficiencies that complies with codes

☐ Other measures taken to address deficiencies that complies with codes

VI. Mitigation Commitment

Describe mitigation agreed to in consultation with SHPO and other consulting parties.

☒	Programmatic	The CR 271 Bridge is categorized in the "Programmatic Agreement Among the Texas Department of Transportation, the Texas State Historic Preservation Office, and the Advisory Council on Historic Preservation Regarding the Treatment of Historic Bridges Constructed Between 1945 and 1965" (hereinafter referred to as "PA") as a mitigated eligible bridge. The PA states, "Mitigated eligible bridges are those post-1945 bridges that are significant primarily for their technological innovations. The significance lies in the physical representation of those innovations, rather than their potential for preservation in place." Programmatic mitigation entailed a public involvement campaign to share eligibility recommendations regarding the whole class of bridges covered by the PA, to inform the public of the provisions of the PA and its implications, and to consider comments received in finalizing the treatment protocols outlined in the PA. It also entailed training for consulting parties on how to respond to formal requests for comment on TxDOT bridge projects. The MOA was executed March 7, 2017 and TxDOT has completed its obligations under the MOA for the class of bridges that includes the CR 271 at US 80 Bridge.
☐	Customized	N/A

VII. Summary and Approval

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 12-9-19 and executed by FHWA and TxDOT.

The proposed project meets all the applicability criteria set forth by the Federal Highway Administration's (FHWA) guidance for Programmatic Bridge Section 4(f) Evaluation. TxDOT fully evaluated all alternatives set forth in the subject programmatic and the findings made are clearly applicable to this project. There are **no feasible and prudent alternatives** to the use of the historic bridge.

The project includes all possible planning to minimize harm. The Texas Department of Transportation (TxDOT) will include the measures to minimize harm as environmental commitments in the applicable National Environmental Policy Act (NEPA) document and Environmental Compliance Oversight System (ECOS) for the proposed project.

The following **MUST** be attached to this checklist to ensure proper documentation of the Historic Bridge Programmatic Section 4(f):

1. Concurrence letter with the Official with Jurisdiction
2. Proof of Historic Bridge Marketing
3. Historic Bridge Team Report
4. Detour Map
5. Photographs of the bridge detailing conditions cited in alternatives analyses

6. Comparative alternatives analysis chart

Texas Department of Transportation

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July 27, 2023

SECTION 106 REVIEW: DETERMINATION OF NRHP ELIGIBILITY AND ADVERSE EFFECT
SECTION 4(f) REVIEW: COMMENT AS OFFICIAL WITH JURISDICTION-PROGRAMMATIC BRIDGE AND DE MINIMIS
Kaufman County / Dallas District
US 80 (from FM 460 to Spur 557), and Spur 557 (US 80 to IH 20)
CSJ: 0095-03-106

Mr. Justin Kockritz
History Programs
Texas Historical Commission
Austin, TX 78711

Dear Mr. Kockritz:

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 9, 2019, and executed by FHWA and TxDOT. In accordance with 36 CFR 800 and our Section 106 Programmatic Agreement, this letter initiates Section 106 consultation on the effect the proposed undertaking poses for a historic property located within the project's area of potential effects (APE). As a consequence of these agreements, TxDOT's regulatory role for this project is that of the Federal action agency.

Project Description

See HRSR page 26-33 for screenshots from TxDOT's Environmental Compliance Oversight System (ECOS) that describe the project, setting, and amount of right-of-way (ROW) and easements necessary for the project.

Determinations of Eligibility

TxDOT historians determined that the APE extends 150' in each direction from the proposed and existing ROW and easements. TxDOT historians identified two historic properties previously documented within the APE by consulting inventories for the National Register of Historic Places (NRHP), State Antiquities Landmarks (SAL), and Recorded Texas Historic Landmarks (RTHL) maintained by your agency.

The two previously identified historic properties are bridges constructed in 1958 over US 80 mainlanes. TxDOT completed an inventory of all bridges built between 1945 and 1965 in 2010, and these bridges are classified into Group II of III. The bridges are significant as an example of a concrete rigid frame, an uncommon bridge type during the 1945 to 1965 period.

TxDOT historians conducted a Historic Resources Survey Report (HRSR) and identified 32 properties in the APE with a finding of four historic properties present (two bridges, two farms).

TxDOT determined **Landmark Hill (007) NRHP-eligible** under Criterion A and C at the local level for its association with agriculture in Kaufman County and its representation of a Colonial Revival farmstead. Most recently used as an event space, 007 is a former agricultural property that is now vacant. County parcel data indicates the main dwelling (007a), and the detached garage (007b) were constructed in 1926. While parcel data does not state when the other buildings on the property were constructed, all the extant buildings are visible in a 1956 historic aerial. The extant buildings include the main dwelling and detached garage (007a and 007b), three barns (007c, 007d, 007e), another detached garage (007f), and two other outbuildings. The last two outbuildings were not visible from ROW (007f and 007g). For purposes of this project, due to lack of access and vegetation hindering views, all resources on the property are contributing.

The entire property is enclosed by a fence. The majority of the fence is an 8-foot tall, modern chain link fence, but there is a section of the fence at the driveway access that is historic-age wrought iron. While there is a historic-age section, the fence overall has lost significant integrity with most of it being replaced with a chain link fence, and so the fence is not a contributing resource to the property.

The property is representative of a large farmstead in Kaufman County. The Pinson family, which owned large tracts of land in Forney, developed the farmstead during the POS for agriculture in Kaufman County. The family owned the property until the 1970s. Along with many extant historic-age agricultural buildings, the property retains the original 1926 dwelling and garage. While the property no longer functions as a farm, it is still able to convey its agricultural history.

The boundaries of the eligible resource are defined as the existing parcel boundaries of the two properties associated with Landmark Hill containing the house and outbuildings with some land. The majority of the agricultural land surrounding the property is lost due to housing development. For additional information see pages 66-79 of the HRSR.

TxDOT determined the **Pinson Farm (011) NRHP-eligible** under Criterion A and C for its association with agriculture in Kaufman County, representing an intact farmstead, with a Craftsman style house. Four extant buildings include the main dwelling (011a), a detached garage (011b), a metal barn (011c), and a wood barn (011d), all contribute to the property. A barbed wire fence along the property line encloses the outbuildings of the property. The fence is not original to the property and does not contribute.

William Henry Harrison Pinson established a farm on the property in 1878. At the time, Pinson owned 224 acres of land and farmed cotton, feed grains, and had domestic

livestock. He left the property to his wife, who in turn left the property to their son, Clem Pinson. Clem Pinson's cousin, Jim Perry Pinson, constructed the farmstead known as Landmark Hill in 1926 (Property 007).

The family continued its agricultural operations on Property 011 and the State of Texas recognized it as a Family Land Heritage Farm (FLH) in 1991. This honor does not automatically convey NRHP-eligibility to a property. The property must still satisfy the criteria to be NRHP eligible.

The Pinson family established the farm during the Period of Significance (POS) for Agriculture (1850-1930) in Kaufman County, at a time when the primary industry was agriculture. According to the FLH listing, the property size is now only 16 acres, but the feeling and representation of its agricultural significance are still visible. TxDOT determined the Pinson Farm **NRHP-eligible** for listing under Criterion A for Agriculture at the local level. In addition, the Craftsman style house retains enough integrity for **NRHP-eligibility** under Criterion C for architecture at the local level.

The NRHP boundary is the current parcel with house and outbuildings. For additional information see pages 97-110 of the HRSR.

While both properties were historically associated with the same family, due to distance and new housing and commercial development in between them, the area no longer contains integrity to constitute a rural historic landscape.

TxDOT determined two bridges in the APE **NRHP-eligible** under the 1945-1965 bridge study. Located at CR 217 @ US 80, (NBI No. 181300009504108) and Windmill Farms Blvd @ US 80, (NBI No. 181300009504109), they carry traffic over the mainlanes of US 80. TxDOT marketed the bridges on its bridge adoption website for over 30 days in June/July 2023.

The bridges are significant as an example of a concrete rigid frame, an uncommon bridge type during the 1945 to 1965 period. Rigid frame bridges, in which the superstructure and substructure are a continuous form poured monolithically in one mold, were used for a variety of roadway types from the 1920s through 1940s. However, their use following World War II was uncommon and generally limited to grade separation structures in urban locations where logistics, setting, and/or cost prevented the construction of a substantial foundation. The rigid frame form also provided an attractive, slightly arched form suitable for use on urban roadways.

The bridges are also significant as an important work of a master engineer, designer, fabricator, or builder. The bridges were designed by Farland C. Bundy, recognized as an innovative Texas bridge designer of the period. Bundy worked as an engineer in the Texas Highway Department's Bridge Division from 1948 to 1984 and was responsible for several award-winning designs and innovative practices. The bridges do not exhibit physical alterations and retain historic integrity of location, design, materials, workmanship, setting,

feeling, and association. The bridges are **eligible** for listing in the National Register of Historic Places under Criterion C in the area of Engineering at the state level of significance.

TxDOT historians determined the remaining properties in the APE consisting of domestic, commercial, transportation and agricultural (among other types) are common designs that lack architectural merit, are not works of a master, and have no known historic associations with important events or persons, and are therefore **not eligible** for NRHP listing under Criterion A, B, or C.

Consultation with Other Parties

TxDOT contacted the Kaufman County Historical Commission (CHC) regarding the proposed project in November 2022 via email. As of July 2023, Kaufman CHC had not responded.

Determinations of Effect

Property 07 Landmark Hill. The identified eligible property is approximately 8.04 acre in size. The proposed project requires approximately 0.076 acres in new right of way within the southern boundary of the property along US 80 (see page 245 of HRSR for map). This results in a total impact of 0.94% (less than 1%). TxDOT determined this constitutes a *de minimis* use of the historic property. TxDOT determined that this minor change poses **no adverse effect** as the property would still possess its significance following completion of the project. The proposed project would not adversely affect the property's integrity of location, setting, feeling, association, design, materials or workmanship.

Indirect Effect: Project activities pose minimal potential to cause indirect effects. The widening of an existing highway would not affect or diminish the qualities and characteristics that contribute to the historic significance of Landmark Hill. Potential visual impacts: none as roadway will remain at grade at this location. Noise impacts: will not be measured as the property is now in commercial use.

Cumulative Effect: Project activities pose no foreseeable cumulative adverse effects to the property. The property is currently abandoned and not in agricultural use and any future use by other owners is not subject of this review.

Property 11 Pinson Farm

The project would result in **no effect** to the property. The property is well away from the new ROW impacts. See map on page 246 of HRSR.

Bridges-

TxDOT examined multiple alternatives to improve the bridge crossings. The alternatives analysis indicates that replacement of the historic bridge is necessary. TxDOT's proposed replacement of the existing historic bridges with a new bridge constitutes an **adverse effect**. TxDOT considered measures to avoid or minimize the adverse effect, such as rehabilitating the bridges for continued use, constructing a parallel bridge and rehabilitating the bridges

for one-way traffic, or leaving the bridges in place as a monument. Detailed analysis of these options determined that costs are prohibitive for the rehabilitation, while leaving the historic bridges in place may result in safety issues and geometric issues (TxDOT cannot widen US 80 mainlanes with the current bridge piers at their current locations as there is not enough space between piers to do so. Additionally, the current bridges do not meet height requirements for a US highway). See the attached checklist and alternatives analysis chart for discussions of planning efforts to avoid and minimize the adverse effects to the bridges.

Mitigation

TxDOT completed programmatic mitigation for the replacement of all bridges in Group II. This programmatic mitigation is a public-facing education campaign about these bridges, which includes videos, a webpage, glossaries, photographs, educational activities, and continued promotion of these materials. Per prior agreement, TxDOT does not need to complete additional mitigation on Group II bridges.

Conclusion

TxDOT hereby requests your signed concurrence with our determinations of **eligibility** and **effects**.

We additionally notify you that SHPO is the designated Official with Jurisdiction (OWJ) over Section 4(f) resources protected under the provisions of 23 CFR 774 and that your comments on our Section 106 findings will be integrated into decision-making regarding prudent and feasible alternatives for purposes of Section 4(f) evaluations. Final determinations for the Section 4(f) process will be rendered by TxDOT pursuant to 23 U.S.C. 327 and the afore-mentioned MOU dated 12-9-19. TxDOT intends to render a de minimis finding on 007 Landmark Hill and a programmatic finding on the two historic bridges over US 80.

We look forward to further consultation with your staff and hope to maintain a partnership that will foster effective and responsible solutions for improving transportation, safety and mobility in the state of Texas. Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please call me at (409) 673-0787 or renee.benn@txdot.gov.

Sincerely,

DocuSigned by:
Renee Benn
7F4A35F3350848D...

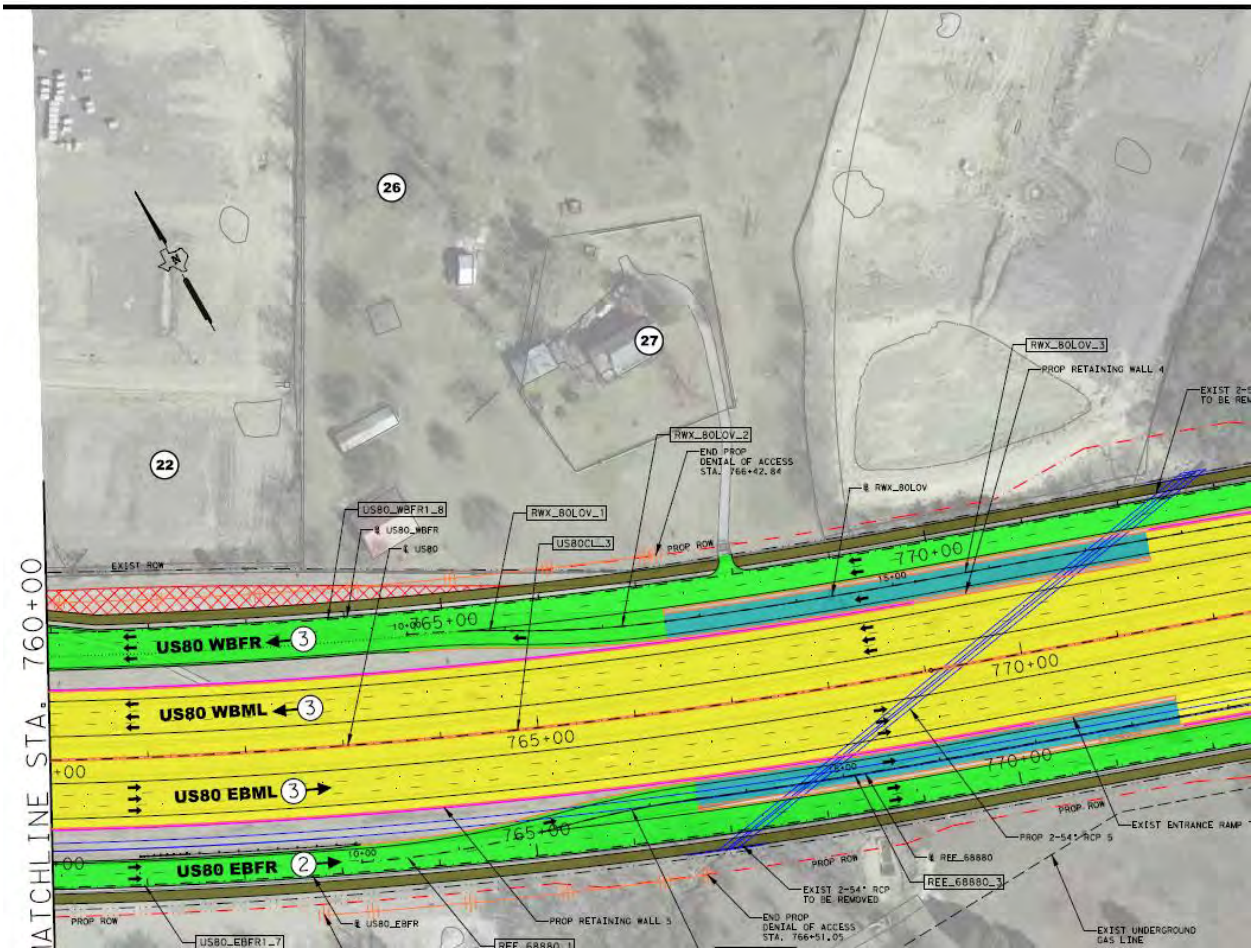
Renee Benn
Environmental Protection Specialist
Historical Studies Branch
Environmental Affairs Division

cc: Linda Henderson, HIST Program Manager Lead: DS LCH

CONCUR-NRHP ELIGIBLE PROPERTIES PRESENT
ADVERSE EFFECTS WITH MITIGATION (TWO BRIDGES)
NO ADVERSE EFFECT TO HISTORIC PROPERTIES (07 and 11)
NO COMMENTS ON SECTION 4(f) EVALUATIONS

NAME: _____ DATE:_____
for Mark Wolfe, State Historic Preservation Officer

Image from schematic showing ROW take at property 007 (#27 on this map):



Proposed ROW line is dashed red. Hashed red is removal of pavement. Note frontage road lanes moving away from property due to pavement removal.

Historic Bridge Adoption Information Packet

Kaufman County

0095-03-106

CR 217 at US 80

June 2023

Table of Contents

Announcement

The Texas Department of Transportation (TxDOT) seeks adopters for the historic bridge detailed below for reuse according to federal transportation and historic preservation laws. The bridge is located in Kaufman County, on CR 217 crossing US 80.

Letters of interest and/or reuse proposals will be accepted until 5 p.m. on July 13, 2023. TxDOT is currently undergoing alternatives analysis for this project. The outcome of the analysis may impact the availability of this bridge. Priority for assistance will be given to public entities seeking to reuse the bridge in a public or publicly visible space. Bridges available through this program are not suitable for vehicular service. All rehabilitation work must conform to the Secretary of the Interior's *Standards for Rehabilitation* in consultation with the Texas Historical Commission (THC).

Interested parties may request additional information, indicate an interest, or submit a reuse proposal by contacting:

Mohammed Shaikh, Environmental Specialist
TxDOT Dallas District
4777 E. Highway 80, Mesquite, TX 75150-6643
Phone Number: (214) 320-6148
Email address: Mohammed.Shaikh@txdot.gov

Bridge Location

- **County:** Kaufman
- **Highway or Facility:** CR 217
- **Feature Crossed:** US 80
- **GIS Locational Information**
  1. https://arcg.is/1zKCvD
  2. 32.741019, -96.429808

Bridge Information

- **Bridge Owner** Texas Department of Transportation – Dallas District
- **Main-span Type:** Cast-in-place concrete rigid frame unit
- **Main-span Length** 120 feet
- **Roadway Width** 28 feet
- **Year Built** 1958
- **Builder** Texas Highway Department

Bridge Condition and Load Rating

Based on a 2022 condition assessment, the bridge is in fair condition but exhibits widespread moderate spalling, map cracking, and scaling with overheight impact related spalling at the deck edges. A large area of the deck surface has been patched with asphalt. The superstructure exhibits cracking and spalling at the interface between the abutment walls and the retaining walls. The bridge has its original rails which are neither MASH nor NCHRP 350 compliant. The bridge is load rated at HS 15.9 (IR) and HS 26.6 (OR).

Historic Significance of the Bridge

The bridge was determined eligible in 2009 as an example of a concrete rigid frame, an uncommon bridge type built between 1945 and 1965. The bridge is also significant as an important work of a master engineer, in this case THD (TxDOT) engineer Farland C. Bundy, who worked in the Bridge Division from 1948 to 1984. The CR 271 Bridge is eligible under Criterion C in the area of Engineering at the state level of significance. The bridge does not exhibit physical alterations and retains its integrity of location, design, setting, materials, workmanship, feeling, and association.

TxDOT Estimated Work Items and Costs

Costs to rehabilitate and relocate the bridge for pedestrian use are estimated by TxDOT bridge engineers based on TxDOT expenditures for similar items on other bridges. All prospective owners should have access to a structural engineer to assist in determining the appropriate work to be completed as well as appropriate estimates. Costs may vary outside the TxDOT system.

Due to the nature of the bridge's construction method and materials, moving the bridge is not possible nor feasible. A cost estimate for moving the bridge is thus not available. Leaving the bridge in place for adaptive re-use is likewise not feasible given the proposed project activities requiring this course of action.

Bridge Photographs


STOP

A Historic Bridge Team Report (HBT) and Detour Map were not prepared for the US 80 bridges in this project. An HBT report was not needed to demonstrate the bridges' historical significance, the project's Need and Purpose, or to complete the Section 4(f) Programmatic Evaluation of Historic Bridge Projects checklist. A Detour Map was not needed, given the current bridges will remain open to traffic while new ones are constructed alongside.

Decision Matrix: CR 271 Bridge
NBI 181300009504108
CSJ: 0095-03-106

Alternative	Addresses Structural Deficiency	Addresses Functional Deficiency	Requires New ROW	Construction A: Feasibility B: Prudent C: Major Budget Line Items	Notes / Other Environmental Impacts
1. No Build	N/A	No	No	A: Yes B: No, geometric issues not resolved C: Strengthening to achieve HS 20 inventory rating	Not feasible or prudent. Does not address project purpose and need: bridge vertical clearance and US 80 geometries would remain unresolved.
2. Rehab for Paired Two-Way Traffic	N/A	No	No	A: No B: No, geometric issues not resolved C: Strengthening to achieve HS 20 inventory rating	Not feasible or prudent. Does not address project purpose and need: geometries of both the bridge and US 80.
3. Bypass Existing Bridge	N/A	No	Yes	A: No B: No, geometric issues not resolved C: Reconstruction of US 80 to bypass CR 271 Bridge	Not feasible or prudent. Does not address project purpose and need: bridge geometry, and exorbitant cost and magnitude to bypass including multiple displacements.
4. New Structure (Preferred)	N/A	Yes	No	A: Yes B: Yes C: Full bridge replacement	Meets purpose and need: replacing the bridge would resolve all geometric issues.

Checklist
Section 4(f) Programmatic Evaluation of Historic Bridge Projects

Bridge Name: Windmill Farms Boulevard Bridge

Bridge Location: Windmill Farms Blvd. at US 80

County: Kaufman

District: Dallas

Control Section Job Number (CSJ): 0095-03-0106

Highway/Facility: Windmill Farms Blvd (US 80 Frontage)

Bridge Type: Cast-in-place concrete rigid frame unit

NB #: 181300009504109

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 9, 2019, and executed by FHWA and TxDOT.

I. Description of Section 4(f) Property, Project Scope, and Need and Purpose Statement

The purpose of the proposed project is to reconstruct US 80 to meet current roadway corridor standards, reduce traffic congestion, improve mobility, and increase safety within this major east/west thoroughfare connecting the Dallas/Fort Worth Metroplex and East Texas.

The proposed project is needed because US 80 (from FM 460 to Spur 557) does not meet current and future traffic demand volumes with the appropriate Level of Service. The current ROW configuration and bridge column locations do not have sufficient width to add the number of lanes needed using current design standards for lane and shoulder width. The Windmill Farms Boulevard Bridge has lower vertical clearance than the current design standard and is significantly lower than the standards being implemented for freight corridors.

II. Determination of Applicability

All must result in a Yes answer for this checklist to be used.

Yes	No	
☒	☐	The project requires the use of a bridge defined as historic per Section 106 regulations. (36 CFR 800)
☒	☐	The historic bridge is not a designated National Historic Landmark (NHL).
		The project results in:
☒	☐	Section 4(f) use of a historic bridge, AND
☒	☐	Additional impacts to protected Section 4(f) properties are limited to *de minimis* or exception categories as specified in the Scope of Work.

III. Identify additional Section 4(f) properties in the project area

Either exception, de minimis, or another programmatic

CR 217 Bridge Programmatic Evaluation
Landmark Hill Section 4(f) de minimis

Comments: The CR 217 Bridge is similar in design to the Windmill Farms Boulevard Bridge. The Landmark Hill Section 4(f) de minimis is addressed under separate cover.

IV. Alternatives Considered/Findings

No Build *(Indicate all that apply.)*

☐ **Structural Deficiencies**

The No Build alternative does not correct the situation that causes the bridge to be considered structurally deficient or significantly deteriorated. These deficiencies can lead to eventual structural failure/collapse. Normal maintenance is not considered adequate to address these deficiencies.

☒ **Functional/Geometric Deficiencies**

The No Build alternative does not correct the situation that causes the bridge to be considered functionally/geometrically deficient. These deficiencies can lead to safety hazards to the traveling public or place unacceptable restrictions on transport and travel.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

The current bridge is not wide enough to meet current and projected traffic volumes. Similarly, the present 14'-9"-ft vertical clearance for eastbound traffic and 16'-4"-ft vertical clearance for westbound traffic does not meet the 18'-6"-ft standard for a freight corridor such as US 80. Industrial warehouses and recent commercial and industrial development along US 80 demonstrate the relevance of the project need. Overheight trucks are currently forced to exit and re-enter the highway to avoid impacts with the bridge structure. The width of the bridge is not sufficient to handle the increased amount of traffic projected along the existing US 80 frontage roads. The low inventory rating would require substantial strengthening to achieve HS 20 Inventory rating. The No Build alternative is not prudent as it does not meet the project's purpose and need.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative fails the Section 4(f) prudent and feasible standard and is not recommended.

Alternative: Build on New Location (conversion to one-way pair/parallel construction with monument)

☐ **Structural Deficiencies**

The New Location alternative does not correct the situation that causes the bridge to be considered structurally deficient or significantly deteriorated. These deficiencies can lead to eventual structural failure/collapse. Normal maintenance is not considered adequate to address these deficiencies.

☒ **Functional/Geometric Deficiencies**

The New Location alternative does not correct the situation that causes the bridge to be considered functionally/geometrically deficient. These deficiencies can lead to safety hazards to the traveling public or place unacceptable restrictions on transport and travel.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

Conversion of the bridge to a one-way pair or parallel construction does not resolve the vertical clearance issues mentioned under the No Build option. Widening US 80 is not possible if any part of the bridge remains in place due to its construction method. The cast-in-place rigid frame cannot be lengthened to span the proposed roadway cross section, nor can it be raised to meet vertical clearance requirements. The structure already has a low vertical clearance and widening the existing structure would only further reduce this clearance due to the cross slope. Additionally, the low inventory rating of the bridge would require substantial strengthening to achieve HS 20 inventory rating. This alternative does not meet the purpose and need of the project because it does not resolve the vertical clearance issue. It is not feasible as the additional US 80 lanes cannot be constructed between the existing bridge piers as a matter of sound engineering.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative fails the Section 4(f) prudent and feasible standard and is not recommended.

Alternative: Rehabilitation of Historic Bridge (two-way vehicular/pedestrian in situ or relocated)

☐ **Structural Deficiencies**

The Rehabilitation alternative does not correct the situation that causes the bridge to be considered structurally deficient or significantly deteriorated. These deficiencies can lead to eventual structural failure/collapse. Normal maintenance is not considered adequate to address these deficiencies.

☒ **Functional/Geometric Deficiencies**

The Rehabilitation alternative does not correct the situation that causes the bridge to be considered functionally/geometrically deficient. These deficiencies can lead to safety hazards to the traveling public or place unacceptable restrictions on transport and travel.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

Rehabilitation of the Windmill Farms Boulevard Bridge for continued use according to the Secretary of the Interior's Standards would not resolve the vertical clearance or capacity issues mentioned in the No Build alternative discussion. Raising the bridge is not possible due to its cast-in-place ridgid frame construction. While US 80 could be lowered to correct the vertical clearance deficiency, the required additional US 80 lanes cannot be constructed between the existing piers. The bridge cannot be removed and relocated due to its construction. This alternative does not meet the purpose and need of the project because it does not resolve the vertical clearance issue. It is not feasible as the additional US 80 lanes cannot be constructed between the existing bridge piers as a matter of sound engineering.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative fails the Section 4(f) prudent and feasible standard and is not recommended.

Alternative: Replacement on Current Alignment

☐ **Structural Deficiencies**

The Replacement alternative corrects the situation that causes the bridge to be considered structurally deficient or significantly deteriorated.

☒ **Functional/Geometric Deficiencies**

The Replacement alternative corrects the situation that causes the bridge to be considered functionally/geometrically deficient.

☒ **Justification** *(Summary describing constraints posed by terrain; adverse social, economic, or environmental effects, engineering and economic considerations, and preservation standards)*

TxDOT engineers propose replacing the Windmill Farms Boulevard Bridge with a new multi-lane bridge with separate turn-arounds for frontage road traffic. The new bridge would meet current and future geometric requirements. This alternative is both feasible and prudent and is the preferred alternative.

☒ **Recommendation (Mandatory)**

TxDOT determined this alternative meets the Section 4(f) prudent and feasible standard and is recommended**.**

V. Measures to Minimize Harm

Indicate all that apply, but a minimum of one must be selected. Verify that the project includes all possible planning to minimize harm.

☐ Measures taken to preserve historic integrity per preservation standards

☒ Measures taken to market historic bridge for alternative use

☐ Alternative design measures taken to address deficiencies that complies with codes

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VI. Mitigation Commitment

Describe mitigation agreed to in consultation with SHPO and other consulting parties.

☒	Programmatic	The Windmill Farms Boulevard Bridge is categorized in the "Programmatic Agreement Among the Texas Department of Transportation, the Texas State Historic Preservation Office, and the Advisory Council on Historic Preservation Regarding the Treatment of Historic Bridges Constructed Between 1945 and 1965" (hereinafter referred to as "PA") as a mitigated eligible bridge. The PA states, "Mitigated eligible bridges are those post-1945 bridges that are significant primarily for their technological innovations. The significance lies in the physical representation of those innovations, rather than their potential for preservation in place." Programmatic mitigation entailed a public involvement campaign to share eligibility recommendations regarding the whole class of bridges covered by the PA, to inform the public of the provisions of the PA and its implications, and to consider comments received in finalizing the treatment protocols outlined in the PA. It also entailed training for consulting parties on how to respond to formal requests for comment on TxDOT bridge projects. The MOA was executed March 7, 2017 and TxDOT has completed its obligations under the MOA for the class of bridges that includes the Windmill Farms Boulevard at US 80 Bridge.
☐	Customized	N/A

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The proposed project meets all the applicability criteria set forth by the Federal Highway Administration's (FHWA) guidance for Programmatic Bridge Section 4(f) Evaluation. TxDOT fully evaluated all alternatives set forth in the subject programmatic and the findings made are clearly applicable to this project. There are **no feasible and prudent alternatives** to the use of the historic bridge.

The project includes all possible planning to minimize harm. The Texas Department of Transportation (TxDOT) will include the measures to minimize harm as environmental commitments in the applicable National Environmental Policy Act (NEPA) document and Environmental Compliance Oversight System (ECOS) for the proposed project.

The following **MUST** be attached to this checklist to ensure proper documentation of the Historic Bridge Programmatic Section 4(f):

1. Concurrence letter with the Official with Jurisdiction
2. Proof of Historic Bridge Marketing
3. Historic Bridge Team Report
4. Detour Map
5. Photographs of the bridge detailing conditions cited in alternatives analyses

6. Comparative alternatives analysis chart

Texas Department of Transportation

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

July 27, 2023

SECTION 106 REVIEW: DETERMINATION OF NRHP ELIGIBILITY AND ADVERSE EFFECT
SECTION 4(f) REVIEW: COMMENT AS OFFICIAL WITH JURISDICTION-PROGRAMMATIC BRIDGE AND DE MINIMIS
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US 80 (from FM 460 to Spur 557), and Spur 557 (US 80 to IH 20)
CSJ: 0095-03-106

Mr. Justin Kockritz
History Programs
Texas Historical Commission
Austin, TX 78711

Dear Mr. Kockritz:

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 9, 2019, and executed by FHWA and TxDOT. In accordance with 36 CFR 800 and our Section 106 Programmatic Agreement, this letter initiates Section 106 consultation on the effect the proposed undertaking poses for a historic property located within the project's area of potential effects (APE). As a consequence of these agreements, TxDOT's regulatory role for this project is that of the Federal action agency.

Project Description

See HRSR page 26-33 for screenshots from TxDOT's Environmental Compliance Oversight System (ECOS) that describe the project, setting, and amount of right-of-way (ROW) and easements necessary for the project.

Determinations of Eligibility

TxDOT historians determined that the APE extends 150' in each direction from the proposed and existing ROW and easements. TxDOT historians identified two historic properties previously documented within the APE by consulting inventories for the National Register of Historic Places (NRHP), State Antiquities Landmarks (SAL), and Recorded Texas Historic Landmarks (RTHL) maintained by your agency.

The two previously identified historic properties are bridges constructed in 1958 over US 80 mainlanes. TxDOT completed an inventory of all bridges built between 1945 and 1965 in 2010, and these bridges are classified into Group II of III. The bridges are significant as an example of a concrete rigid frame, an uncommon bridge type during the 1945 to 1965 period.

TxDOT historians conducted a Historic Resources Survey Report (HRSR) and identified 32 properties in the APE with a finding of four historic properties present (two bridges, two farms).

TxDOT determined **Landmark Hill (007) NRHP-eligible** under Criterion A and C at the local level for its association with agriculture in Kaufman County and its representation of a Colonial Revival farmstead. Most recently used as an event space, 007 is a former agricultural property that is now vacant. County parcel data indicates the main dwelling (007a), and the detached garage (007b) were constructed in 1926. While parcel data does not state when the other buildings on the property were constructed, all the extant buildings are visible in a 1956 historic aerial. The extant buildings include the main dwelling and detached garage (007a and 007b), three barns (007c, 007d, 007e), another detached garage (007f), and two other outbuildings. The last two outbuildings were not visible from ROW (007f and 007g). For purposes of this project, due to lack of access and vegetation hindering views, all resources on the property are contributing.

The entire property is enclosed by a fence. The majority of the fence is an 8-foot tall, modern chain link fence, but there is a section of the fence at the driveway access that is historic-age wrought iron. While there is a historic-age section, the fence overall has lost significant integrity with most of it being replaced with a chain link fence, and so the fence is not a contributing resource to the property.

The property is representative of a large farmstead in Kaufman County. The Pinson family, which owned large tracts of land in Forney, developed the farmstead during the POS for agriculture in Kaufman County. The family owned the property until the 1970s. Along with many extant historic-age agricultural buildings, the property retains the original 1926 dwelling and garage. While the property no longer functions as a farm, it is still able to convey its agricultural history.

The boundaries of the eligible resource are defined as the existing parcel boundaries of the two properties associated with Landmark Hill containing the house and outbuildings with some land. The majority of the agricultural land surrounding the property is lost due to housing development. For additional information see pages 66-79 of the HRSR.

TxDOT determined the **Pinson Farm (011) NRHP-eligible** under Criterion A and C for its association with agriculture in Kaufman County, representing an intact farmstead, with a Craftsman style house. Four extant buildings include the main dwelling (011a), a detached garage (011b), a metal barn (011c), and a wood barn (011d), all contribute to the property. A barbed wire fence along the property line encloses the outbuildings of the property. The fence is not original to the property and does not contribute.

William Henry Harrison Pinson established a farm on the property in 1878. At the time, Pinson owned 224 acres of land and farmed cotton, feed grains, and had domestic

livestock. He left the property to his wife, who in turn left the property to their son, Clem Pinson. Clem Pinson's cousin, Jim Perry Pinson, constructed the farmstead known as Landmark Hill in 1926 (Property 007).

The family continued its agricultural operations on Property 011 and the State of Texas recognized it as a Family Land Heritage Farm (FLH) in 1991. This honor does not automatically convey NRHP-eligibility to a property. The property must still satisfy the criteria to be NRHP eligible.

The Pinson family established the farm during the Period of Significance (POS) for Agriculture (1850-1930) in Kaufman County, at a time when the primary industry was agriculture. According to the FLH listing, the property size is now only 16 acres, but the feeling and representation of its agricultural significance are still visible. TxDOT determined the Pinson Farm **NRHP-eligible** for listing under Criterion A for Agriculture at the local level. In addition, the Craftsman style house retains enough integrity for **NRHP-eligibility** under Criterion C for architecture at the local level.

The NRHP boundary is the current parcel with house and outbuildings. For additional information see pages 97-110 of the HRSR.

While both properties were historically associated with the same family, due to distance and new housing and commercial development in between them, the area no longer contains integrity to constitute a rural historic landscape.

TxDOT determined two bridges in the APE **NRHP-eligible** under the 1945-1965 bridge study. Located at CR 217 @ US 80, (NBI No. 181300009504108) and Windmill Farms Blvd @ US 80, (NBI No. 181300009504109), they carry traffic over the mainlanes of US 80. TxDOT marketed the bridges on its bridge adoption website for over 30 days in June/July 2023.

The bridges are significant as an example of a concrete rigid frame, an uncommon bridge type during the 1945 to 1965 period. Rigid frame bridges, in which the superstructure and substructure are a continuous form poured monolithically in one mold, were used for a variety of roadway types from the 1920s through 1940s. However, their use following World War II was uncommon and generally limited to grade separation structures in urban locations where logistics, setting, and/or cost prevented the construction of a substantial foundation. The rigid frame form also provided an attractive, slightly arched form suitable for use on urban roadways.

The bridges are also significant as an important work of a master engineer, designer, fabricator, or builder. The bridges were designed by Farland C. Bundy, recognized as an innovative Texas bridge designer of the period. Bundy worked as an engineer in the Texas Highway Department's Bridge Division from 1948 to 1984 and was responsible for several award-winning designs and innovative practices. The bridges do not exhibit physical alterations and retain historic integrity of location, design, materials, workmanship, setting,

feeling, and association. The bridges are **eligible** for listing in the National Register of Historic Places under Criterion C in the area of Engineering at the state level of significance.

TxDOT historians determined the remaining properties in the APE consisting of domestic, commercial, transportation and agricultural (among other types) are common designs that lack architectural merit, are not works of a master, and have no known historic associations with important events or persons, and are therefore **not eligible** for NRHP listing under Criterion A, B, or C.

Consultation with Other Parties

TxDOT contacted the Kaufman County Historical Commission (CHC) regarding the proposed project in November 2022 via email. As of July 2023, Kaufman CHC had not responded.

Determinations of Effect

Property 07 Landmark Hill. The identified eligible property is approximately 8.04 acre in size. The proposed project requires approximately 0.076 acres in new right of way within the southern boundary of the property along US 80 (see page 245 of HRSR for map). This results in a total impact of 0.94% (less than 1%). TxDOT determined this constitutes a *de minimis* use of the historic property. TxDOT determined that this minor change poses **no adverse effect** as the property would still possess its significance following completion of the project. The proposed project would not adversely affect the property's integrity of location, setting, feeling, association, design, materials or workmanship.

Indirect Effect: Project activities pose minimal potential to cause indirect effects. The widening of an existing highway would not affect or diminish the qualities and characteristics that contribute to the historic significance of Landmark Hill. Potential visual impacts: none as roadway will remain at grade at this location. Noise impacts: will not be measured as the property is now in commercial use.

Cumulative Effect: Project activities pose no foreseeable cumulative adverse effects to the property. The property is currently abandoned and not in agricultural use and any future use by other owners is not subject of this review.

Property 11 Pinson Farm

The project would result in **no effect** to the property. The property is well away from the new ROW impacts. See map on page 246 of HRSR.

Bridges-

TxDOT examined multiple alternatives to improve the bridge crossings. The alternatives analysis indicates that replacement of the historic bridge is necessary. TxDOT's proposed replacement of the existing historic bridges with a new bridge constitutes an **adverse effect**. TxDOT considered measures to avoid or minimize the adverse effect, such as rehabilitating the bridges for continued use, constructing a parallel bridge and rehabilitating the bridges

for one-way traffic, or leaving the bridges in place as a monument. Detailed analysis of these options determined that costs are prohibitive for the rehabilitation, while leaving the historic bridges in place may result in safety issues and geometric issues (TxDOT cannot widen US 80 mainlanes with the current bridge piers at their current locations as there is not enough space between piers to do so. Additionally, the current bridges do not meet height requirements for a US highway). See the attached checklist and alternatives analysis chart for discussions of planning efforts to avoid and minimize the adverse effects to the bridges.

Mitigation

TxDOT completed programmatic mitigation for the replacement of all bridges in Group II. This programmatic mitigation is a public-facing education campaign about these bridges, which includes videos, a webpage, glossaries, photographs, educational activities, and continued promotion of these materials. Per prior agreement, TxDOT does not need to complete additional mitigation on Group II bridges.

Conclusion

TxDOT hereby requests your signed concurrence with our determinations of **eligibility** and **effects**.

We additionally notify you that SHPO is the designated Official with Jurisdiction (OWJ) over Section 4(f) resources protected under the provisions of 23 CFR 774 and that your comments on our Section 106 findings will be integrated into decision-making regarding prudent and feasible alternatives for purposes of Section 4(f) evaluations. Final determinations for the Section 4(f) process will be rendered by TxDOT pursuant to 23 U.S.C. 327 and the afore-mentioned MOU dated 12-9-19. TxDOT intends to render a de minimis finding on 007 Landmark Hill and a programmatic finding on the two historic bridges over US 80.

We look forward to further consultation with your staff and hope to maintain a partnership that will foster effective and responsible solutions for improving transportation, safety and mobility in the state of Texas. Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please call me at (409) 673-0787 or renee.benn@txdot.gov.

Sincerely,

DocuSigned by:
Renee Benn
7F4A35F3350848D...

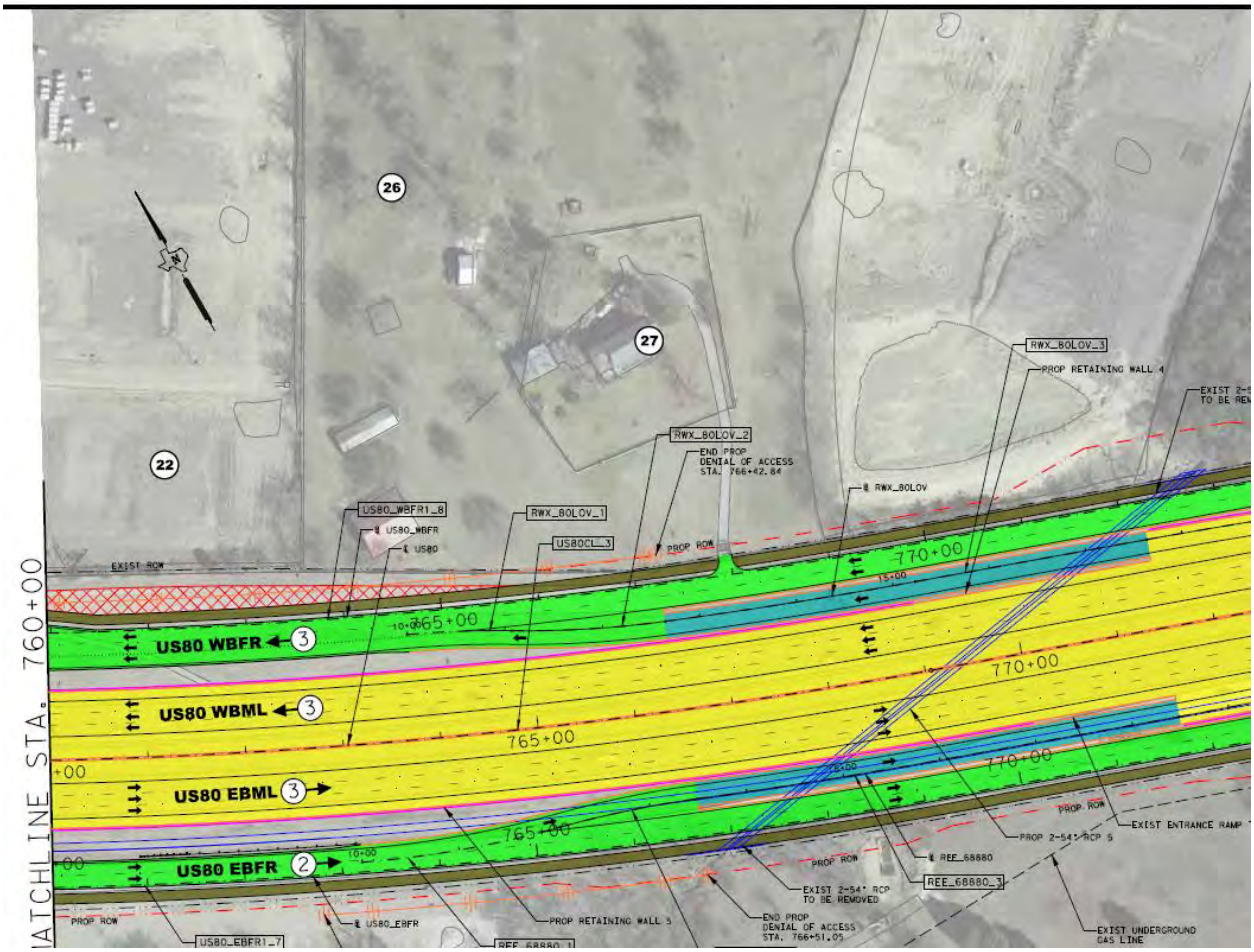
Renee Benn
Environmental Protection Specialist
Historical Studies Branch
Environmental Affairs Division

cc: Linda Henderson, HIST Program Manager Lead: DS LCH

CONCUR-NRHP ELIGIBLE PROPERTIES PRESENT
ADVERSE EFFECTS WITH MITIGATION (TWO BRIDGES)
NO ADVERSE EFFECT TO HISTORIC PROPERTIES (07 and 11)
NO COMMENTS ON SECTION 4(f) EVALUATIONS

NAME: _____ DATE:_____
for Mark Wolfe, State Historic Preservation Officer

Image from schematic showing ROW take at property 007 (#27 on this map):



Proposed ROW line is dashed red. Hashed red is removal of pavement. Note frontage road lanes moving away from property due to pavement removal.

Historic Bridge Adoption Information Packet

Kaufman County

0095-03-106

Windmill Farms Boulevard at US 80

June 2023

Table of Contents

Announcement

The Texas Department of Transportation (TxDOT) seeks adopters for the historic bridge detailed below for reuse according to federal transportation and historic preservation laws. The bridge is located in Kaufman County, on Windmill Farms Boulevard crossing US 80.

Letters of interest and/or reuse proposals will be accepted until 5 p.m. on July 13, 2023. TxDOT is currently undergoing alternatives analysis for this project. The outcome of the analysis may impact the availability of this bridge. Priority for assistance will be given to public entities seeking to reuse the bridge in a public or publicly visible space. Bridges available through this program are not suitable for vehicular service. All rehabilitation work must conform to the Secretary of the Interior's *Standards for Rehabilitation* in consultation with the Texas Historical Commission (THC).

Interested parties may request additional information, indicate an interest, or submit a reuse proposal by contacting:

Mohammed Shaikh, Environmental Specialist
TxDOT Dallas District
4777 E. Highway 80, Mesquite, TX 75150-6643
Phone Number: (214) 320-6148
Email address: Mohammed.Shaikh@txdot.gov

Bridge Location

- **County:** Kaufman
- **Highway or Facility:** Windmill Farms Boulevard
- **Feature Crossed:** US 80
- **GIS Locational Information**
  1. https://arcg.is/K1PCn
  2. 32.739982, -96.396015

Bridge Information

- **Bridge Owner** Texas Department of Transportation – Dallas District
- **Main-span Type:** Cast-in-place concrete rigid frame unit
- **Main-span Length** 120 feet
- **Roadway Width** 28 feet
- **Year Built** 1958
- **Builder** Texas Highway Department

Bridge Condition and Load Rating

Based on a 2022 condition assessment, the bridge is in fair condition but exhibits widespread moderate spalling, map cracking, and scaling with overheight impact related spalling at the deck edges. A large area of the deck surface has been patched with asphalt. The superstructure exhibits cracking and spalling at the interface between the abutment walls and the retaining walls. The bridge has its original rails which are neither MASH nor NCHRP 350 compliant. The bridge is load rated at HS 15.9 (IR) and HS 26.6 (OR).

Historic Significance of the Bridge

The bridge was determined eligible in 2009 as an example of a concrete rigid frame, an uncommon bridge type built between 1945 and 1965. The bridge is also significant as an important work of a master engineer, in this case THD (TxDOT) engineer Farland C. Bundy, who worked in the Bridge Division from 1948 to 1984. The Windmill Farms Boulevard Bridge (originally constructed as a frontage road crossing and turnaround) is eligible under Criterion C in the area of Engineering at the state level of significance. The bridge does not exhibit physical alterations and retains its integrity of location, design, setting, materials, workmanship, feeling, and association.

TxDOT Estimated Work Items and Costs

Costs to rehabilitate and relocate the bridge for pedestrian use are estimated by TxDOT bridge engineers based on TxDOT expenditures for similar items on other bridges. All prospective owners should have access to a structural engineer to assist in determining the appropriate work to be completed as well as appropriate estimates. Costs may vary outside the TxDOT system.

Due to the nature of the bridge's construction method and materials, moving the bridge is not possible nor feasible. A cost estimate for moving the bridge is thus not available. Leaving the bridge in place for adaptive re-use is likewise not feasible given the proposed project activities requiring this course of action.

Bridge Photographs


ONE
WAY

A Historic Bridge Team Report (HBT) and Detour Map were not prepared for the US 80 bridges in this project. An HBT report was not needed to demonstrate the bridges' historical significance, the project's Need and Purpose, or to complete the Section 4(f) Programmatic Evaluation of Historic Bridge Projects checklist. A Detour Map was not needed, given the current bridges will remain open to traffic while new ones are constructed alongside.

Decision Matrix: Windmill Farms Boulevard Bridge

NBI 181300009504109

CSJ: 0095-03-106

Alternative	Addresses Structural Deficiency	Addresses Functional Deficiency	Requires New ROW	Construction A: Feasibility B: Prudent C: Major Budget Line Items	Notes / Other Environmental Impacts
1. No Build	N/A	No	No	A: Yes B: No, geometric issues not resolved C: Strengthening to achieve HS 20 inventory rating	Not feasible or prudent. Does not address project purpose and need: bridge vertical clearance and US 80 geometries would remain unresolved.
2. Rehab for Paired Two-Way Traffic	N/A	No	No	A: No B: No, geometric issues not resolved C: Strengthening to achieve HS 20 inventory rating	Not feasible or prudent. Does not address project purpose and need: geometries of both the bridge and US 80.
3. Bypass Existing Bridge	N/A	No	Yes	A: No B: No, geometric issues not resolved C: Reconstruction of US 80 to bypass CR 271 Bridge	Not feasible or prudent. Does not address project purpose and need: bridge geometry, and exorbitant cost and magnitude to bypass including multiple displacements.
4. New Structure (Preferred)	N/A	Yes	No	A: Yes B: Yes C: Full bridge replacement	Meets purpose and need: replacing the bridge would resolve all geometric issues.

Checklist for Section 4(f) *De Minimis* for Public Parks, Recreation Lands, Wildlife & Waterfowl Refuges, and Historic Properties

Main CSJ: 0095-03-106
District(s): Dallas
County(ies): Kaufman
Property ID: 007
Property Name: Landmark Hill

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 9, 2019, and executed by FHWA and TxDOT.

The following checklist was developed as a tool to assist in streamlining the Section 4(f) *De Minimis* process and to ensure that all necessary information is documented in the File of Record (ECOS).

What Type of Property is Being Evaluated?

- ☐ A park, recreation land, or wildlife/waterfowl refuge
- ☒ A historic property

Section 4(f) Defining Criteria for Historic Properties

1. Yes — Is the property listed or eligible for the NRHP or NHL?

Establishing Section 4(f) Use of the Property

1. Yes — Does the project require a use (i.e., new right of way, new easement(s), etc.)?

Establishing Section 4(f) *De Minimis* Eligibility

1. Yes — Was it determined that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection?

2. Yes — Did the Official with Jurisdiction concur that the project will not adversely affect the features or attributes that make the property eligible for Section 4(f) protection?

Section 4(f) Use:

TxDOT determined Landmark Hill (007) NRHP-eligible under Criterion A and C at the local level for its association with agriculture in Kaufman County and its representation of a Colonial Revival farmstead. Most recently used as an event space, 007 is a former agricultural property that is now vacant. County parcel data indicates the main dwelling (007a), and the detached garage (007b) were constructed in 1926. While parcel data does not state when the other buildings on the property were constructed, all the extant buildings are visible in a 1956 historic aerial. The extant buildings include the main dwelling and detached garage (007a and 007b), three barns (007c, 007d, 007e), another detached garage (007f), and

two other outbuildings. The last two outbuildings were not visible from ROW (007f and 007g). For purposes of this project, due to lack of access and vegetation hindering views, all resources on the property are contributing.

The property is representative of a large farmstead in Kaufman County. The Pinson family, which owned large tracts of land in Forney, developed the farmstead during the POS for agriculture in Kaufman County. The family owned the property until the 1970s. Along with many extant historic-age agricultural buildings, the property retains the original 1926 dwelling and garage. While the property no longer functions as a farm, it is still able to convey its agricultural history.

The boundaries of the eligible resource are defined as the existing parcel boundaries of the two properties associated with Landmark Hill containing the house and outbuildings with some land. The majority of the agricultural land surrounding the property is lost due to housing development. For additional information see pages 66-79 of the HRSR.

The identified eligible property is approximately 8.04 acre in size. The proposed project requires approximately 0.076 acres in new right of way within the southern boundary of the property along US 80 (see page 245 of HRSR for map). This results in a total impact of 0.94% (less than 1%). TxDOT determined this constitutes a de minimis use of the historic property. TxDOT determined that this minor change poses no adverse effect as the property would still possess its significance following completion of the project. The proposed project would not adversely affect the property's integrity of location, setting, feeling, association, design, materials or workmanship.

Documentation

The following **MUST** be attached to this checklist to ensure proper documentation of the Section 4(f) *De Minimis*:

- ☑ A detailed map of the Section 4(f) Property including current and proposed ROW; property boundaries; access points for pedestrians and vehicles and existing and planned facilities.
- ☑ Street level photograph of the property
- ☑ Concurrence letter from Official with Jurisdiction
- ☑ Copy of WPD I Screen from ECOS.

Texas Department of Transportation

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

July 27, 2023

SECTION 106 REVIEW: DETERMINATION OF NRHP ELIGIBILITY AND ADVERSE EFFECT
SECTION 4(f) REVIEW: COMMENT AS OFFICIAL WITH JURISDICTION-PROGRAMMATIC BRIDGE AND DE MINIMIS
Kaufman County / Dallas District
US 80 (from FM 460 to Spur 557), and Spur 557 (US 80 to IH 20)
CSJ: 0095-03-106

Mr. Justin Kockritz
History Programs
Texas Historical Commission
Austin, TX 78711

Dear Mr. Kockritz:

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 9, 2019, and executed by FHWA and TxDOT. In accordance with 36 CFR 800 and our Section 106 Programmatic Agreement, this letter initiates Section 106 consultation on the effect the proposed undertaking poses for a historic property located within the project's area of potential effects (APE). As a consequence of these agreements, TxDOT's regulatory role for this project is that of the Federal action agency.

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Indirect Effect: Project activities pose minimal potential to cause indirect effects. The widening of an existing highway would not affect or diminish the qualities and characteristics that contribute to the historic significance of Landmark Hill. Potential visual impacts: none as roadway will remain at grade at this location. Noise impacts: will not be measured as the property is now in commercial use.

Cumulative Effect: Project activities pose no foreseeable cumulative adverse effects to the property. The property is currently abandoned and not in agricultural use and any future use by other owners is not subject of this review.

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The project would result in **no effect** to the property. The property is well away from the new ROW impacts. See map on page 246 of HRSR.

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TxDOT hereby requests your signed concurrence with our determinations of **eligibility** and **effects**.

We additionally notify you that SHPO is the designated Official with Jurisdiction (OWJ) over Section 4(f) resources protected under the provisions of 23 CFR 774 and that your comments on our Section 106 findings will be integrated into decision-making regarding prudent and feasible alternatives for purposes of Section 4(f) evaluations. Final determinations for the Section 4(f) process will be rendered by TxDOT pursuant to 23 U.S.C. 327 and the afore-mentioned MOU dated 12-9-19. TxDOT intends to render a de minimis finding on 007 Landmark Hill and a programmatic finding on the two historic bridges over US 80.

We look forward to further consultation with your staff and hope to maintain a partnership that will foster effective and responsible solutions for improving transportation, safety and mobility in the state of Texas. Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please call me at (409) 673-0787 or renee.benn@txdot.gov.

Sincerely,

DocuSigned by:
Renee Benn
7F4A35F3350848D...

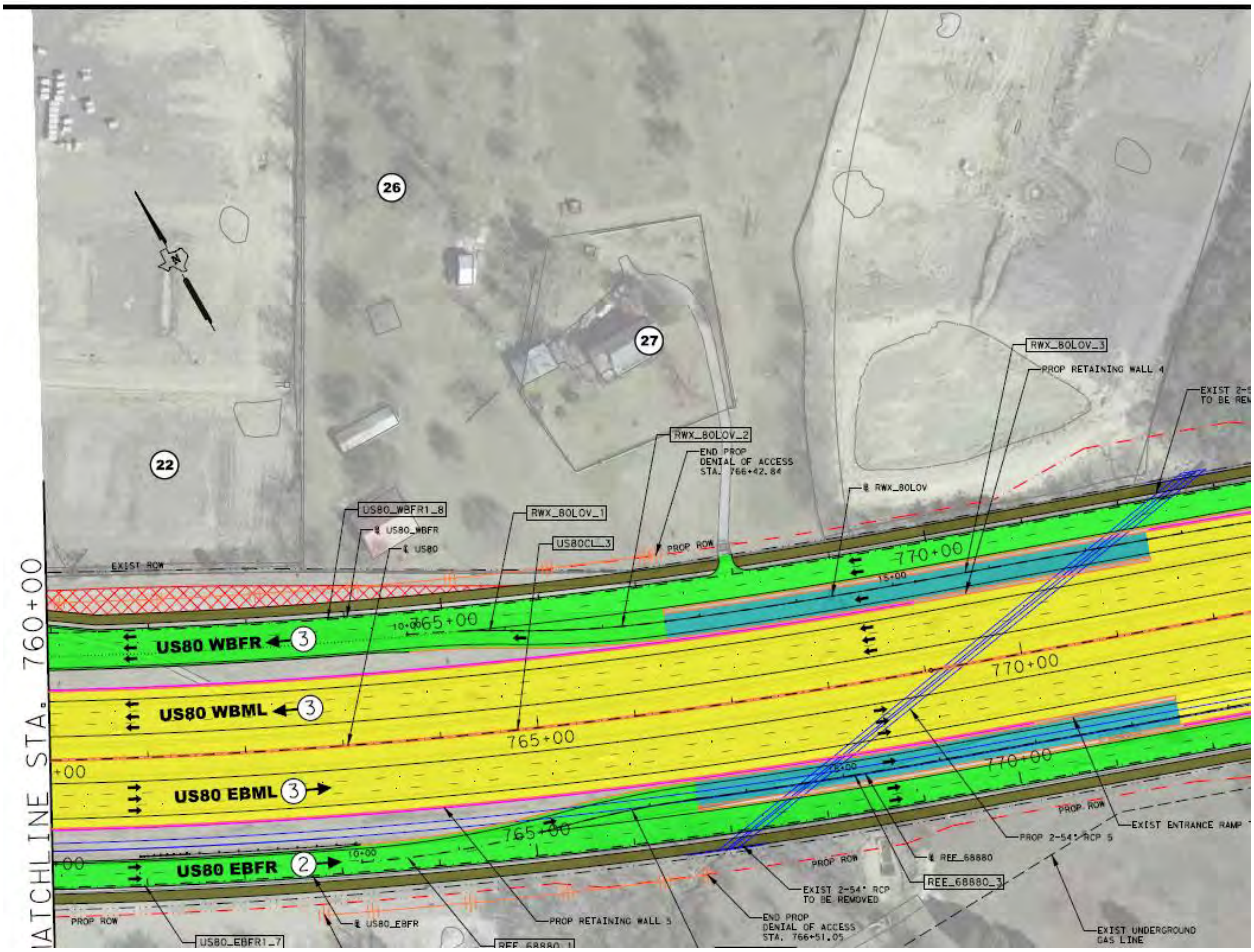
Renee Benn
Environmental Protection Specialist
Historical Studies Branch
Environmental Affairs Division

cc: Linda Henderson, HIST Program Manager Lead: DS LCH

CONCUR-NRHP ELIGIBLE PROPERTIES PRESENT
ADVERSE EFFECTS WITH MITIGATION (TWO BRIDGES)
NO ADVERSE EFFECT TO HISTORIC PROPERTIES (07 and 11)
NO COMMENTS ON SECTION 4(f) EVALUATIONS

NAME: _____ DATE:_____
for Mark Wolfe, State Historic Preservation Officer

Image from schematic showing ROW take at property 007 (#27 on this map):



Proposed ROW line is dashed red. Hashed red is removal of pavement. Note frontage road lanes moving away from property due to pavement removal.

Who is the lead agency responsible for the approval of the entire project?

☑ FHWA - Assigned to TxDOT ☐ TxDOT - No Federal Funding ☐ FHWA - Not Assigned to TxDOT

TXDOT — Who is the project sponsor as defined by 43 TAC 2.7?

No — Is a local government's or a private developer's own staff or consultant preparing the CE documentation, EA or EIS?

Yes — Does the project require any federal permit, license, or approval?

☑ USACE ☐ IBWC ☐ USCG ☐ NPS ☐ IAJR ☐ Other

No — Does the project occur, in part or in total, on federal or tribal lands?

Environmental Clearance Project Description

Project Area

Typical Depth of Impacts: 2 (Feet) Maximum Depth of Impacts: 30 (Feet)

New ROW Required: 56 (Acres)

New Perm. Easement Required: 0 (Acres) New Temp. Easement Required: 0 (Acres)

Project Description

Describe Limits of All Activities: Spell

The proposed improvements consist of reconstructing US 80 from FM 460 in the City of Forney to Spur 557, and Spur 557 from US 80 to IH 20 in the City of Terrell, within Kaufman County. The proposed project would include an additional main lane in each direction and one-way continuous frontage roads in each direction with ramping improvements. The US 80/Spur 557 and Spur 557/IH 20 interchanges would be reconfigured with ramping and direct connector improvements.

Cross street intersection improvements are also included at FM 740/Pinson Road for approx. 2,000 feet, FM 548 for approx. 1,200 feet, Reeder Road for approx. 675 feet, Windmill Farms Boulevard for approx. 1,000 feet, FM 305 (Las Lomas Parkway) for approx. 1,800 feet, and FM 148 for approx. 1,300 feet.

Proposed improvements include tie-ins to side streets to the westbound side of US 80 at Lovers Lane, Mustang Boulevard, Trailhouse Lane, Marketplace Boulevard, Reeder Road, Irongate Boulevard, and Townsend Road; and to the eastbound side of US 80 to W. Broad Street, Elm Street, Cedar Street, Summerhaven, Regal Drive, FM 212, and Helms Trail.

The project would also construct a cul-de-sac at North McGraw Street to remove access to eastbound US 80 frontage road just east of Pinson Road.

Describe Project Setting: Spell

The project is located in an urban/suburban setting. Developed and undeveloped lands are present within the proposed project area. Developed lands include single and multi-family residences, places of worship, public facilities, small and large businesses including distribution centers. Undeveloped lands are comprised of vacant (not utilized) and some agriculture (ranch and pasture) land. Major Traffic Generators include the business areas and subdivisions of the cities of Forney and Terrell, IH 20, and Spur 557.

There are multiple stream crossings within the project limits, including 16 crossings within regulatory floodplains. The affected floodplains are Buffalo Creek, Mustang Creek, Union Branch, Big Brushy Creek and an unnamed tributary, Terry Creek and an unnamed tributary, and Bachelor Creek. Vegetation in the project vicinity consists primarily of maintained urban grasses, landscaping, and seasonal agriculture (crops). Some woodland and mixed shrub areas are also present nearby. There are no cemeteries or parks within the immediately adjacent to the project area. However 2 bridges (NBI #'s 181300009504108 & 181300009504109) are NRHP eligible under criterion C.

Describe Existing Facility: Spell

From FM 460 to Spur 557, US 80 is a four-lane divided highway (two lanes on each direction) divided by a grassy median. US 80 frontage roads are one-way continuous 1 to 2 lane frontage roads in each direction. Frontage roads widen by one to two lanes at some cross street intersections for turn lanes. An existing Union Pacific railroad track runs parallel to the existing US 80 eastbound frontage road to the south, from FM 548 to the US 80 / Spur 557 interchange.

From US 80 to IH 20, Spur 557 consists of a four-lane divided highway (two lanes on each direction) divided by a grassy median. Spur 557 frontage roads are one-way discontinuous one to two- lane frontage roads.

The existing typical right-of-way width varies from approximately 300 to 400-feet along US 80 and varies from 375 to 500 feet along Spur 557, with wider footprints to accommodate large cross-street interchanges.

Describe Proposed Facility: Spell

From FM 460 to Spur 557, proposed improvements consist of reconstructing US 80 from a four-lane divided to a six-lane divided highway with a concrete barrier along the centerline. The proposed improvements would also include one-way continuous two to three-lane frontage roads in each direction with ramping improvements, shared use path and sidewalks. The proposed typical right-of-way width varies from 300 to 420 feet along US 80, with wider footprints to accommodate large cross-street interchanges.

From US 80 to IH 20, the proposed improvements consist of reconstructing Spur 557 from a four-lane divided to a six-lane divided highway with a concrete barrier along the centerline. The proposed project would also include one-way continuous two to three-lane frontage roads in each direction with ramping improvements, shared use path and sidewalks. The proposed typical right-of-way width varies from 375 to 520 feet along Spur 557, with wider footprints to accommodate large cross-street interchanges.

Interchange improvements would occur at US 80 and Spur 557 and at Spur 557 and IH 20. The project could potentially displace 2 residences, 1 business, and 2 non-residential structures (billboards).

Photograph 1: View of the Landmark Hill residence (007a), south elevation, facing northeast.

Photograph 2: View of the Landmark Hill residence (007a), south elevation and front gate, facing northeast.

Photograph 3: View of Resource 007b, located on the west side of primary dwelling, facing north.

Photograph 4: Secondary view of Resource 007b (south elevation), facing north.

Photograph 5: View of barn (Resource 007c) on property, northwest. Resource 007d is visible in the background at right.

Photograph 6: View of Resource 007c, facing northeast. Resource 007d is shown in the background, at left.

Photograph 7: View of Resource 007d, facing southeast from Aria Court.

Photograph 8: View of Resource 007e, facing southeast from Aria Court (007b in background).

Photograph 9: View of Resource 007f with 007e in foreground, facing east-southeast from Aria Court.

Photograph 10: Overall view of the NRHP boundaries for Landmark Hill Resource.

Photograph 11: Resource location map.

Appendix H: Comment and Response Matrix from Hearing

(PENDING)