



Draft Environmental Assessment

AllianceTexas/Haslet Accessibility Improvement Project

Project Limits: from approximately 3,500 feet west of FM 156 to I-35W

CSJ Numbers: 0902-90-020, 0902-90-021, and 0902-90-141
Tarrant County, Texas

July 2019

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

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MTP 2045

2019 – 2022 TIP

NCTCOG STIP Fiscal Year 2019

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List of Acronyms

A list of common acronyms used throughout this document and their definitions is provided below.

AADT	Average annual daily traffic
AOI	Area of Influence
BMP	Best management practice
BNSF	Burlington Northern Santa Fe
CFR	Code of Federal Regulations
CGP	Construction General Permit
City	City of Haslet
CMEC	Cox McLain Environmental Consulting, Inc.
CMP	Congestion Management Process
dB(A)	Decibels (A-weighted)
dbh	Diameter at breast height
EA	Environmental Assessment
EPA	Environmental Protection Agency
EO	Executive Order
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Farm-to-Market Road
FPPA	Farmland Protection Policy Act

List of Acronyms (continued)

I-	Interstate
ISA	Initial site assessment
LEP	Limited English proficiency
LPST	Leaking petroleum storage tank
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of understanding
MSAT	Mobile source air toxics
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NAC	Noise abatement criteria
NCTCOG	North Central Texas Council of Governments
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NOT	Notice of Termination
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
PCN	Preconstruction Notification
PM	Particulate matter
PS&E	Plans, Specification, and Estimates
PSL	Project-specific location
ROW	Right-of-way
RTC	Regional Transportation Council
SAL	State archeological landmark
SGCN	Species of greatest conservation need
SH	State Highway
SHPO	State Historic Preservation Office
STIP	Statewide Transportation Improvement Program
SW3P	Storm Water Pollution Prevention Plan
TCAP	Texas Conservation Action Plan
TCEQ	Texas Commission on Environmental Quality
TERP	Texas Emissions Reduction Plan
THC	Texas Historical Commission
TIP	Transportation Improvement Program
TPDES	Texas Pollutant Discharge Elimination System
TPP	Transportation Planning and Programming report
TPWD	Texas Parks and Wildlife Department
TSS	Total suspended solids
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
Uniform Act	Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970 as amended in the Surface Transportation and Uniform Relocation Assistance Act of 1987
US	U.S. Highway
U.S.	United States of America
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USIBWC	U.S. Section, International Boundary and Water Commission
VMT	Vehicle miles traveled

List of Acronyms (continued)

VPD	Vehicles Per Day
WOUS	Waters of the U.S.

1.0 Introduction

The City of Haslet (City) is partnering with the North Central Texas Council of Governments (NCTCOG) and the Texas Department of Transportation (TxDOT) to construct the AllianceTexas/Haslet Accessibility Improvement Project in the City of Haslet, Tarrant County, Texas.

The proposed project includes improvements to Avondale-Haslet Road and Intermodal Parkway and the construction of Haslet Parkway on new location. The proposed project includes two build alternatives, the “Preferred” and “Additional” Alternatives (referred to collectively as the Build Alternatives). The Build Alternatives would be constructed on partially new location roadways.

The proposed study limits would extend from Sendera Ranch Boulevard to I-35W. This Environmental Assessment (EA) has been prepared to comply with the requirements of TxDOT’s environmental review rules and the National Environmental Policy Act (NEPA) (42 U.S. Code [U.S.C.] Sections 4321–4375). This EA will be made available for public review and comments will be considered by TxDOT after the comment period closes. If TxDOT determines that the project will have no significant adverse effects, a Finding of No Significant Impact (FONSI) will be issued and will be made available to the public.

The analyses included in this EA represent a comprehensive evaluation of potential project-related effects on a broad range of resources. In order to ensure that these analyses were focused and relevant, the project team identified a spatially consistent “project area,” which covered the physical footprint of existing and proposed Right-of-Way (ROW), sidewalks, and bicycle lanes, and construction easements inclusive of both the Preferred and Additional Alternative alignments. For several resource categories, a broader “study area” was developed to support individual analyses that required a more comprehensive or wider-ranging discussion.

2.0 Project Description

2.1 Existing Facility

The existing Avondale-Haslet Road is an undivided two-lane asphalt roadway with one 12-foot westbound and one 12-foot eastbound lane. The existing roadway does not have sidewalks, bicycle lanes, or shoulders and drainage is conveyed via roadside ditches. The total ROW width is approximately 50 feet, expanding to 150 feet wide at the intersection of Avondale-Haslet Road and FM 156.

The existing FM 156 is an undivided two-lane asphalt roadway with one 14-foot northbound and one 14-foot southbound lane with 14-foot shoulders to the north and south of the intersection with Avondale-Haslet Road. The shoulders taper into left-hand turn lanes at the intersection with Avondale-Haslet Road. The existing roadway does not have sidewalks or bicycle lanes and drainage is conveyed via roadside ditches. The total ROW width is approximately 120 feet.

The existing Schoolhouse Road is an undivided two-lane asphalt roadway with one 12-foot northbound lane and one 14-foot southbound shared-use lane (intended for use by motorists and bicyclists) along with a 14-foot shoulder on the northbound side. A 12-foot wide shared-use path (intended for use by pedestrians and bicyclists) is currently in use within the project area. Approximately 550 feet of existing path is located on the west side of Schoolhouse Road, approximately 750 feet is located between Schoolhouse Road and FM 156, and approximately 400 feet is located along the east side of FM 156 to the north of the Avondale-Haslet intersection. Drainage is conveyed via roadside ditches, and the total ROW width is approximately 86 feet.

The existing Intermodal Parkway is a divided four-lane concrete roadway with two 12-foot wide southbound and northbound lanes. The existing roadway does not have sidewalks or bicycle lanes. Drainage is conveyed in a curb and gutter storm system. Intermodal Parkway currently terminates approximately 2,500 feet south of the existing Intermodal Parkway and Westport Parkway intersection.

The Project Location Maps, Project Area Photos, and Schematics are shown in **Appendix A, B, and C**, respectively.

2.2 Proposed Facility

Avondale-Haslet Road is an existing two-lane asphalt roadway. Approximately 0.75 mile of Avondale-Haslet Road will be reconstructed to a four-lane concrete roadway.

Avondale-Haslet Road will be a four-lane curb and gutter roadway with one 12-foot wide lane and one 14-foot wide shared-use lane with accommodations for bicycle use in the eastbound and westbound directions, a raised curb 43-foot wide grass median, and 5-foot wide sidewalks on the north and south sides of the roadway. The sidewalks will not cross the existing BNSF right-of-way, per BNSF regulations.

At the intersection with FM 156, the roadway will have one 12-foot wide left turn lane and one 14-foot wide right turn lane in each direction.

Intersection improvements along FM 156 will include acquiring an additional 50 feet of ROW (for a total ROW width of 170 feet). This ROW width will accommodate the construction of a four-lane facility with two 12-foot wide through lanes in each direction and 12-foot wide dedicated right and left turn lanes at the intersection with Avondale-Haslet Road. This segment of FM 156 will have a 20-foot wide raised curb concrete median and 5-foot wide sidewalks. A 12-foot wide shared-use path will be located along northbound FM 156, north of the intersection with Avondale-Haslet Road. The intersection improvements at FM 156, including two through lanes in each direction and turn lanes, that are part of this project as shown in **Appendix C** – Sheet A (inset in bottom-right corner) as the interim construction of FM 156 and Avondale-Haslet Road. FM 156 will ultimately be improved to six through lanes as part of a separate project, which is shown in **Appendix C** – Sheet A.

Haslet Parkway will be on new location. It will include a four-lane curb-and-gutter roadway that extends from FM 156 to I-35W with raised curb grass medians 43 feet in width, one 12-foot wide through lane, one 14-foot wide shared-use lane in both the eastbound and westbound directions, and 5-foot wide sidewalks on the north and south sides of the roadway. At the intersection of Haslet Parkway with Schoolhouse Road the roadway will have one 12-foot wide dedicated left turn lane and one 14-foot wide dedicated right turn lane. At the intersection of Haslet Parkway with Intermodal Parkway the roadway will have a 12-foot wide dedicated left turn lane from eastbound Haslet Parkway to northbound Intermodal Parkway and a 12-foot wide dedicated right turn lane from westbound Haslet Parkway to northbound Intermodal Parkway. At the intersection of Haslet Parkway with Harmon Road the roadway will have one 12-foot wide left turn lane in each direction. Haslet Parkway is proposed to extend approximately 14,000 feet connecting FM 156 to I-35W.

Intermodal Parkway will be extended from its current southern terminus to the proposed Haslet Parkway. Intermodal Parkway will ultimately include the construction of a six-lane curb and gutter roadway with a 19-foot wide grass median, two 12-foot wide lanes, 14-foot wide shared-use lanes in each direction, and 5-foot wide sidewalks on both the east and west sides of the roadway. Intermodal Parkway is expected to be constructed in phases, with the interim phase being constructed to 4 through lanes and the ultimate buildout being constructed to six lanes.

Due to the drainage needs of the project, the proposed roadway surface would be elevated and an embankment slope is needed as part of the drainage easement. Once the roadway is elevated, the offsite drainage will be conveyed to the toe of the embankment slope which will create a parallel ditch to the roadway, also within the easement.

At the box diamond interchange of I-35W and SH 170, all intersections are to be signalized where Haslet Parkway connects as the west leg of the existing I-35W and SH 170 interchange. Additionally, both the proposed Haslet Parkway/Schoolhouse Road and Haslet Parkway/Intermodal Parkway

intersections are anticipated to be signalized based on the TxDOT Transportation Planning and Programming Report (TPP) (TxDOT 2019I) projections.

As part of the Preferred Alternative, installation of a 12-inch water line and a 12-inch sanitary sewer line is proposed. These utility improvements will be located within the median of Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway from Schoolhouse Road to I-35W. The proposed project would be also designed according to relevant American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities as it applies to the proposed shared-use lanes and shared-use path. To accommodate the Preferred Alternative, it is anticipated that approximately 120-feet of additional new ROW will be needed for Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway. The proposed facility is shown in **Appendix A**, **Appendix C**, and **Appendix D**.

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. The logical termini for the project are the City of Haslet city limit and I-35W. The construction limits for the project are from approximately 3,500 feet west of FM 156 and I-35W **Appendix A**). The study limits of the project are extended to Sendera Ranch Boulevard to capture any anticipated environmental or traffic impacts. I-35W and FM 156 are major traffic generators in the project area. The logical termini are extended west of FM 156 (major traffic generator) to the city limit to extend the added lanes and transition intersection improvements past the BNSF Railway, over an unnamed tributary to Henrietta Creek, and to match the City's political jurisdiction. The transition back to two lanes would allow a safe distance from the intersection with FM 156. The added lanes between FM 156 and the city limit would not result in substantial traffic impacts, such as a bottleneck that would require additional highway expansion, as established in Section 5.6.5 of this EA. Additionally as established in this EA, there are no sensitive environmental resources located between the western logical termini and Sendera Ranch Boulevard that would prevent the future expansion of Avondale Haslet Road to Sendera Ranch Boulevard.

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 does 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 has independent utility and would not restrict other foreseeable transportation improvements within the project area. The project provides added traffic capacity between two major traffic generation points (I-35W and SH 170) by constructing a new roadway and extending added lanes through the City of Haslet. Because the project stands alone, it cannot and does not irretrievably commit future federal funds. 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. This project has independent utility and would not restrict the consideration of alternatives for other foreseeable transportation improvements.

2.4 *Anticipated Funding Sources*

The proposed project is anticipated to cost approximately \$50,610,000. Some ROW is to be donated by private landowners. Tarrant County is to contribute \$2,000,000 for construction and TxDOT is to provide a state match for on-system project components. The City is to pay for utility relocations. Cost overruns are to be funded with Regional Toll Revenue funds (the project cost estimate includes a 24 percent contingency of \$8,390,000).

2.5 *STIP and MTP Consistency*

The proposed project, planning, and funding are detailed in the TPP, Statewide Transportation Improvement Program (STIP), and the Metropolitan Transportation Plan (MTP), (**Appendix E**). The proposed project is currently consistent with the current MTP and will be consistent with the STIP prior to project approval (**Appendix E**).

3.0 Purpose and Need

3.1 Need

The proposed project is needed because A) the current east-west travel pattern along Avondale-Haslet Road to I-35W includes traversing an off-set intersection at FM 156 resulting in high traffic volumes in the Haslet Old Town Redevelopment Area, B) the current roadway network requires travel along I-35W to complete travel between the BNSF Railway Intermodal Facility and SH 170, and C) there is a lack of continuous east-west facilities in the surrounding area between SH 114 and U.S. Highway (US) 287 merge with I-35W.

3.2 Supporting Facts and Data

Population in the City of Haslet has grown from 262 persons in 1980 to 1,517 persons in 2010 with a projected population of 1,817 persons in 2020 and 2,303 persons in 2030 for an anticipated growth of 52 percent. Traffic must navigate through two off-set intersections approximately 2,000 feet apart on FM-156 between Avondale-Haslet Road and Westport Parkway in order to complete the most direct path from US 287/US 81 to I-35W. This results in a large volume of traffic traveling through the Haslet Old Town Redevelopment Area. According to NCTCOG's travel demand model, the 2028 average daily traffic (ADT) volume on Westport Parkway, between Intermodal Parkway and I-35W, will be 14,000 vehicles, while the 2045 ADT on Westport Parkway, between Intermodal Parkway and I-35W, will be 32,100 vehicles. This results in an approximately 129 percent increase in daily projected traffic volume. Texas statewide crash rates for two-way, two-lane urban roadways (such as Avondale-Haslet Roadway) indicate a 2013-2017 average rate of 236.19 crashes per 100 million vehicle miles travelled. An accident summary, provided by Kimley-Horn in June 2019, indicates a 2013-2017 average crash rate of 375 crashes per 100 million vehicle miles travelled for Avondale-Haslet Road from the City of Haslet municipal boundary to the FM 156 intersection. This segment of Avondale-Haslet Road experienced an approximately 59% higher crash rate from 2013-2017 than the statewide average.

The current Westport Parkway and SH-170 interchanges at I-35W are approximately 1 mile apart. This adds substantial local vehicular traffic onto both the I-35W general purpose lanes and frontage roads. Traffic congestion is projected to increase greatly over time. The BUILD grant travel demand model volume comparison map created by NCTCOG indicates that under the no-build scenario, daily traffic volumes (vehicle per day [VPD]) for the northbound I-35W general purpose lanes between the Westport Parkway and SH 170 interchanges are projected to increase from 40,900 VPD in 2028 to 71,500 VPD in 2045. This is an increase of approximately 75 percent.

There is a lack of continuous east-west facilities in the surrounding area between SH-114 and the US-287 merge with I-35W; a distance of over 10 miles. The existing Westport Parkway, from FM 156 to I-35W, is at its ultimate width of four lanes per the City's current Master Thoroughfare Plan, however it does not provide a direct east-west connection. Blue Mound Road currently connects from FM 156 to Harmon Road, however it is not a continuous east-west facility. There is an indirect route connecting

Blue Mound Road to I-35W via Harmon Road and Keller Hicks Road. The City's current Master Thoroughfare Plan shows Blue Mound Road ultimately connecting to I-35W. There is no identified funding mechanism for this connection.

Regional vehicular traffic currently utilizes Westport Parkway or Blue Mound Road as east-west connectors. However, these roadways do not serve the regional purpose of direct connectivity and efficient mobility to SH 170. Vehicles traveling along these roadways trying to access BUS 287 or SH 170 would have to go through several City intersections.

3.3 Purpose

The purpose of the project is to A) remove the need to traverse the off-set intersections at FM 156 in the Haslet Old Town Redevelopment Area, B) provide an alternative to traveling along I-35W to complete travel between the BNSF Railway Intermodal Facility and SH 170, and C) create a continuous east-west connection through the City of Haslet.

4.0 Alternatives

4.1 Build Alternatives

Preferred Alternative

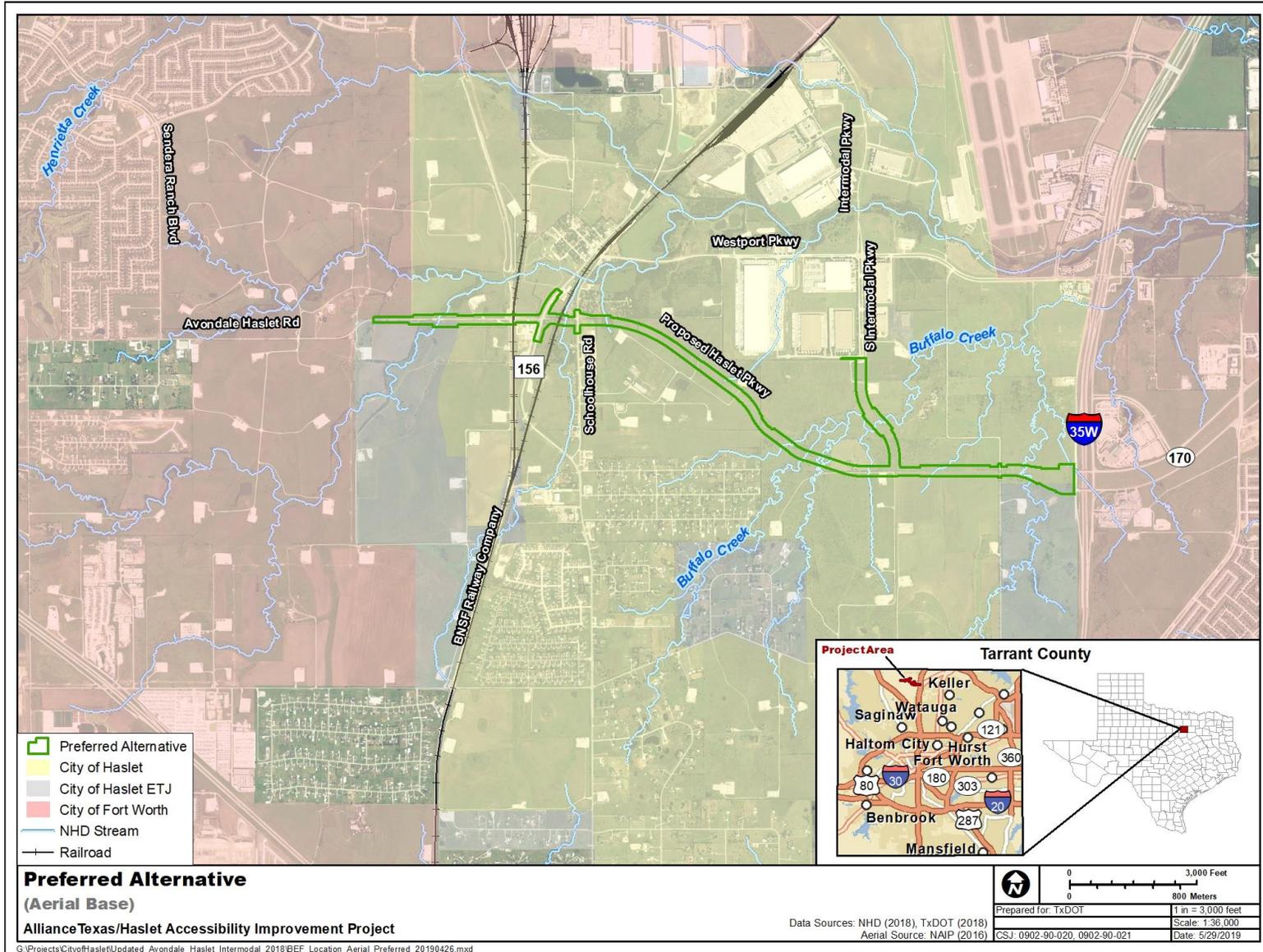
The proposed facility described in Section 2.2 is the Preferred Alternative, subject to public review and comment. The Preferred Alternative will meet the project's purpose and need by removing the need to traverse the off-set intersections at FM 156 in the Haslet Old Town Redevelopment Area, by providing an alternative to traveling along I-35W to complete travel between the BNSF Railway Intermodal Facility at FM 156, and by creating a continuous east-west connection through the city of Haslet, known as Haslet Parkway.

The Preferred Alternative is the preferred of the two build alternatives because the direct connection provided by this alternative would utilize a straight path on all new location roadway between Schoolhouse Road and I-35W. The Preferred Alternative also opens additional developable area which would aid in the funding of the construction of the roadway. **Table 1** provides a concise comparison between the Preferred, Additional, and No-Build Alternatives as they relate to potential environmental resource impacts resulting from the proposed project activities.

Table 1: Summary of Potential Environmental Resource Impacts

Potentially Impacted Resource	Preferred Alternative	Additional Alternative	No-Build Alternative
Proposed ROW (acres)	62.3	49.0	0
Proposed Easement (acres)	50.1	29.0	0
Displacements	0	0	0
Direct Farmland Conversion (acres)	91.5	51.8	0
Floodplains (acres)	23.3	15.1	0
Riparian Habitat Impacts (acres)	1.6	1.3	0
Number of Delineated Stream Crossings	8	7	0
Number of Delineated Wetlands	9	6	0
Number of Historical Sites	0	0	0
Number of Archaeological Sites	0	0	0

Exhibit A: Project Location: Preferred Alternative



Additional Alternative

The Additional Alternative entails widening Avondale-Haslet Road from an existing two-lane asphalt roadway to a four-lane concrete roadway for approximately 0.75 miles, extending Avondale-Haslet Road from FM 156 to Westport Parkway, and extending Intermodal Parkway southward and eastward to connect to I-35W and SH 170.

To the east of Schoolhouse Road to the connector at Westport Parkway, Avondale-Haslet Road would be a four-lane curb-and-gutter roadway with raised curb grass medians 19 to 23 feet in width, 12-foot wide eastbound and westbound center lanes, 14-foot wide eastbound and westbound outer shared-use lanes, and 5-foot wide sidewalks on the north and south sides of the roadway. Intermodal Parkway would ultimately be a new six-lane curb and gutter roadway with a 43-foot wide grass median, 12-foot wide southbound and northbound center lanes, 14-foot wide southbound and northbound outer shared-use lanes, and 5-foot wide sidewalks on the east and west sides of the roadway. The intersections of Avondale-Haslet Road/FM 156 and Avondale-Haslet Road/Schoolhouse Road would be constructed to a 4-lane through section with left and right turn lanes. The typical sections would include 5-foot wide sidewalks with a 14-foot wide shared-use lane with accommodation for bicycle use. As part of the Additional Alternative, installation of a 12-inch water line and a 12-inch sanitary sewer line is proposed. These utility improvements would be located within the median of Avondale-Haslet Road and Intermodal Parkway. The proposed median would be a curbed, raised, grass median with a varying width from 2 to 43 feet.

The Additional Alternative includes providing intersection improvements at FM 156 and Avondale-Haslet Road and providing an improved connection for mobility and transit from FM 156 to I-35W. As part of the new roadway extension, a new intersection would be constructed at Avondale-Haslet Road and Schoolhouse Road. Approximately 0.75 mile of the existing Avondale-Haslet Road would be expanded over the unnamed tributary to Henrietta Creek and the BNSF Railway to the City limits of Haslet and Fort Worth. In addition, Intermodal Parkway would be extended from its current southern terminus to the proposed Haslet Parkway. Portions of the Intermodal Parkway segment may have a phased construction with the interim phase being constructed to 4 lanes and the ultimate buildout being constructed to 6 lanes.

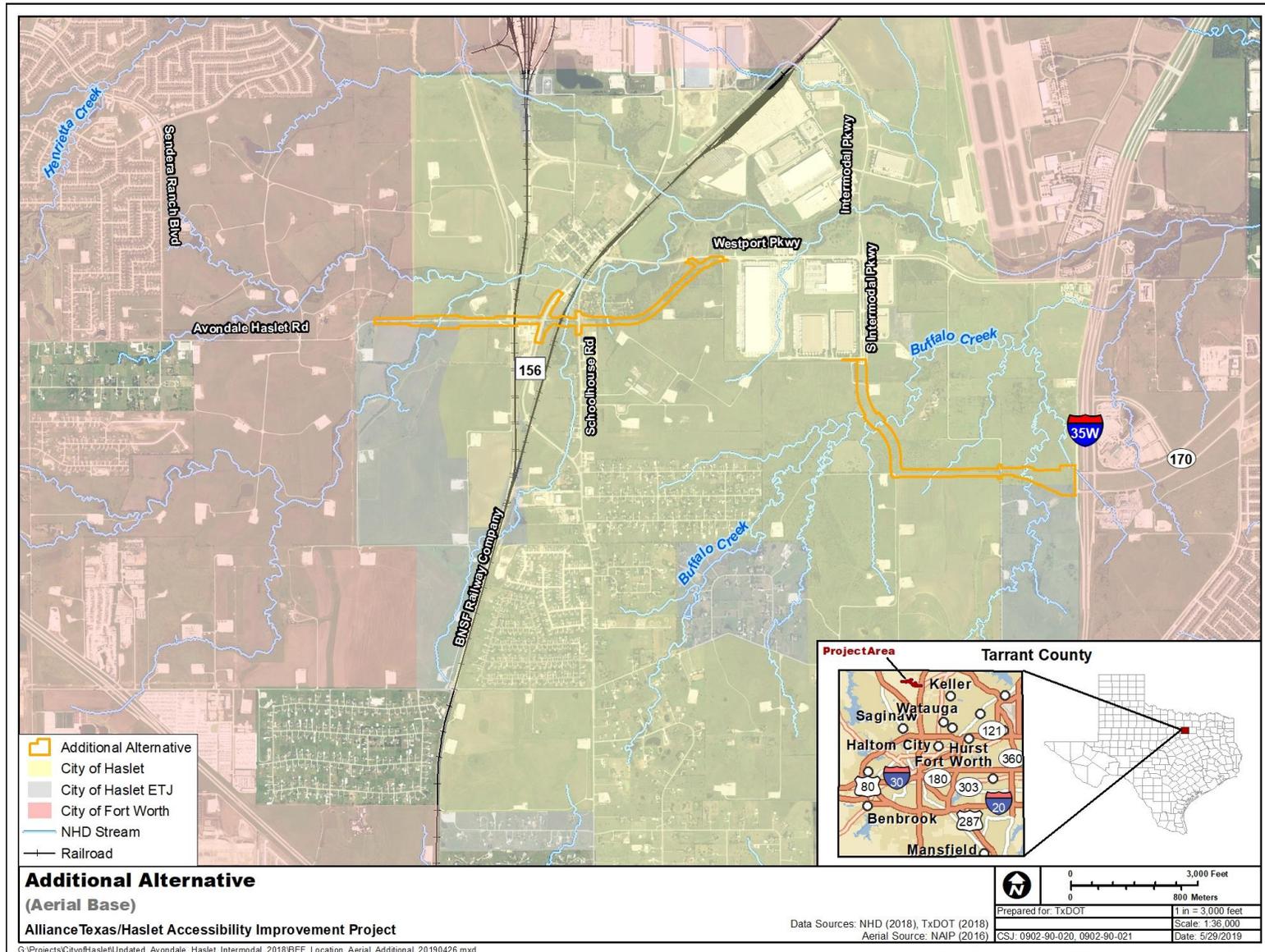
The proposed project would be designed according to relevant AASHTO Guide for the Development of Bicycle Facilities as it applies to the existing shared-use path.

To accommodate the Additional Alternative, it is anticipated that approximately 60-feet of new ROW would be needed to widen Avondale-Haslet Road. Approximately 120 feet of new ROW would be needed to construct the new alignments of Avondale-Haslet Road and Intermodal Parkway. The proposed facility for the Additional Alternative is shown in **Appendix A**, **Appendix C**, and **Appendix D**.

Exhibit B below depicts the location of the Additional Alternative.

The Additional Alternative is being carried forward throughout the document in conjunction with the Preferred Alternative as one of the two Build Alternatives. The Additional Alternative, although it partially meets the purpose and need of the proposed project by providing a direct east-west connection to I-35W and SH 170, it is not the preferred alternative because it also creates an additional off-set intersection at SH 170 and uses existing roadway at Westport Parkway via a shorter, and non-linear path from Schoolhouse Road to Intermodal Parkway before reaching I-35W. Therefore, the safety and efficiency of travel is decreased when compared to the Preferred Alternative.

Exhibit B: Project Location: Additional Alternative



4.2 ***No-Build Alternative***

The No-Build Alternative represents the alternative in which the proposed project would not be constructed. Other transportation improvements may or may not be constructed and would depend on project development and funding availability for each such improvement.

The No-Build Alternative would not meet the purpose and need of the proposed project. The No-Build Alternative is carried forward throughout the document as a baseline comparison to the Build Alternatives.

4.3 ***Preliminary Alternatives Considered but Eliminated from Further Consideration***

One alternative, considered but eliminated, was the potential SH 170 extension from I-35W to US 287/US 81 that would have provided a west-east connector for the City as shown in the MTP amended in December of 2009. This alternative was primarily located north of the Haslet Old Town Redevelopment Area, would have been a new location roadway with controlled access, and would not have resulted in the reconstruction of Avondale-Haslet Road. This alternative was eliminated as a result of public feedback.

5.0 Affected Environment and Environmental Consequences

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

- *Community Impacts Assessment Technical Report* (TxDOT 2019a)
- *Tier 1 Site Assessment Form* (TxDOT 2019b)
- *Biological Evaluation Form* (TxDOT 2019c)
- *Archeological Resources Intensive Survey Report* (TxDOT 2019d)
- *Historic Resources Survey Report* (TxDOT 2019e)
- *Air Quality Technical Report* (TxDOT 2019f)
- *Hazardous Materials Initial Site Assessment* (TxDOT 2019g)
- *Traffic Noise Technical Report* (**Appendix I**)
- *Indirect Impacts Technical Report* (TxDOT 2019h)
- *Public Meeting Documentation* (TxDOT 2019j)

The technical reports may be inspected and copied upon request at the TxDOT Fort Worth District Office.

5.1 *Right-of-Way/Displacements*

The proposed project would not require any commercial or residential displacements. See **Figures 1a-1b** in **Appendix F** for a map of Community Facilities. Approximately 62.3 acres of new ROW and 50.1 acres of proposed easements would be required for implementation of the Preferred Alternative. Approximately 49.0 acres of new ROW and 29.0 acres of proposed easements would be required for implementation of the Additional Alternative. Schematics of the proposed project can be found in **Appendix C**.

Both the U.S. and Texas Constitutions provide that no private land may be taken for public purposes without adequate compensation being paid thereof. TxDOT provides relocation resources to all displaced persons, without discrimination, in a manner consistent with U.S. Department of Transportation (USDOT) policy as mandated by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended in the Surface Transportation and Uniform Relocation Assistance Act of 1987 (the Uniform Act). All property owners from whom property is needed are entitled to receive just compensation for their land and property. Just compensation is based upon the

fair market value of the property. TxDOT also provides, through its Relocation Assistance Program, payment and services to aid in movement to a new location.

Under the No-Build Alternative, no ROW acquisition would be required, and no displacements would occur.

5.2 *Land Use*

Surrounding land use is mostly characterized by agricultural and industrial land use with some single-family residential, educational, and commercial land use primarily along FM 156. The Fort Worth Alliance Airport is located to the north of the Build Alternatives and the Amazon Fulfillment Center is located to the north of the Preferred Alternative and to the south of the Additional Alternative on Westport Parkway. Parcels with agricultural land use in the area commonly combine grazing and cropland with interspersed oil and gas drilling activities. The remaining land surrounding the proposed project area is currently undeveloped and/or vacant.

The residential communities in the area include rural single-family large-lot homes and low-density single-family suburban subdivisions. In addition to the Amazon Fulfillment Center, there is a Volkswagen Parts Distribution Center warehouse, Michaels Distribution Center, and other trucking and transport companies in the area. There are also many commercial businesses that offer a variety of goods and services; these range from typical highway-oriented establishments (e.g. gas stations, truck stops, restaurants, and retail establishments) to typical community-oriented service providers (e.g. medical facilities, a daycare facility, and a veterinary clinic).

The Preferred and Additional Alternatives would result in the conversion of approximately 90 and 55 acres, respectively, of existing land uses to transportation use (NCTCOG 2019a). The Preferred Alternative would result in the conversion of approximately 4 acres of commercial, 7 acres of residential, 2 acres of educational, 38 acres of undeveloped and/or vacant, and 39 acres of agricultural land to transportation use. The Additional Alternative would result in the conversion of approximately 6 acres of residential, 1 acre of educational, 18 acres of undeveloped and/or vacant, and 30 acres of agricultural land to transportation use.

Under the No-Build Alternative, no conversion of existing land use to transportation facilities would occur.

5.3 *Farmlands*

The Natural Resource Conservation Service (NRCS) is responsible for governing compliance with the Farmland Protection Policy Act (FPPA). In order to identify any potential compliance obligations with regard to the project, the NRCS-CPA-106 Farmland Conversion Impact Rating Form (for corridor type projects) was completed.

Based on U.S. Census Bureau data (2010), the project area occurs outside of a recognized Urbanized Area. Observed on-farm improvements in the project area included two-track access roads, barbed wire fencing, access gates, and limited supplemental water (i.e. stock tanks). Additionally, the environmental study limits include protected farmland (i.e. Farmland of Statewide Importance and All Areas are Prime Farmland). The NRCS-CPA-106 form was completed for the Build Alternatives and the resultant scores were less than 60 for each. Because the scores were less than 60, no additional coordination with the NRCS is required for the project. See the Biological Evaluation Form and its corresponding Supplemental Attachments on file at the TxDOT Fort Worth District office for more details on the NRCS form completed for this project.

Under the No-Build Alternative, no impacts to farmland would occur. Undeveloped lands used for agriculture would continue to be used as such.

5.4 Utilities/Emergency Services

Implementation of the Build Alternatives may require the relocation and adjustment of utilities such as water lines, sewer lines, gas lines, fiber optic lines, overhead electrical and telephone lines, and other subterranean and aerial utilities. The need for relocation and adjustment of any utilities would be determined during the detailed design phase and would be coordinated with the affected utility provider to ensure that no substantial interruption of service would take place.

The Tarrant County emergency medical services, Tarrant County Sheriff's Office, and Haslet Fire Department would be notified of the construction start dates and any potential detour routes. Both Build Alternatives would generally improve mobility and reduce travel time for emergency vehicles throughout the project area; however, emergency response time may be increased by approximately one to three minutes in certain locations due to the proposed medians along FM 156. Appropriate traffic preemption devices will be provided at both Schoolhouse Road and Intermodal Parkway along the proposed Haslet Parkway. Traffic preemption devices will allow for emergency dispatchers to control the operation of traffic signals and give right-of-way to approaching emergency vehicles, reducing emergency response time in the area.

The existing BNSF Railway west of the Avondale-Haslet Road/FM 156 intersection currently causes traffic to back up along the existing Avondale-Haslet Road resulting in periodic traffic delays. These traffic delays would not be alleviated under either Build Alternative.

Traffic control and lane closures are anticipated along the existing Avondale-Haslet Road and where the proposed Haslet Parkway ties into existing roadways at Intermodal Parkway and the SH 170/I-35W intersection. Lane closures will be phased with at least one through travel lane open at any given time. Existing roadways will be improved during construction in a manner that maintains all existing routes.

Under the No-Build Alternative, no impacts to utilities/emergency services would occur. Traffic patterns would remain unchanged and no detours would occur. Under the No-Build Alternative, no medians

would be constructed on FM 156; therefore response times to certain areas would not be affected, but without improved mobility from the Build Alternatives, other areas would not experience shorter response times.

5.5 ***Bicycle and Pedestrian Facilities***

Current bicycle and pedestrian facilities include a shared-use path and 5-foot wide sidewalks only along the east side of Schoolhouse Road. There are 5-foot sidewalks and a 12-foot wide shared-use path proposed under both Build Alternatives that would allow for increased mobility of pedestrians and cyclists within and between communities.

Approximately 550 feet of existing shared-use path is located on the west side of Schoolhouse Road, approximately 750 feet is located between Schoolhouse Road and FM 156, and approximately 400 feet is located along the east side of FM 156 to the north of the Avondale-Haslet intersection. There are currently no sidewalks along Avondale-Haslet Road. The proposed improvements will include 5-foot wide sidewalks on both sides of the roadway and removal and replacement of portions of the 12-foot wide shared-used path with accommodations for bicycle use.

The existing 12-foot wide shared-used path from Schoolhouse Road to FM 156 will be temporarily closed for approximately 12 months while construction is occurring for the Preferred Alternative or Additional Alternative. All proposed shared-use lanes along Avondale-Haslet Road will be controlled by pedestrian crossings at the traffic signals located at FM 156, Schoolhouse Road, and Intermodal Parkway.

The proposed project will be constructed in compliance with TxDOT's Policy for Bicycle and Pedestrian Accommodation and the USDOT's 2010 Policy Statement on Bicycle and Pedestrian Accommodation.

Under the No-Build Alternative, pedestrians and cyclists would continue to use the existing transportation network as it is currently configured.

5.6 ***Community Impacts***

A *Community Impacts Assessment Technical Report* (TxDOT 2019a) was completed in accordance with *TxDOT's Environmental Handbook for Community Impacts, Environmental Justice, Limited English Proficiency, and Title VI Compliance* (TxDOT 2015).

5.6.1 ***Community Cohesion***

The overall impact of the Build Alternatives is anticipated to result in mostly positive impacts to community cohesion. The proposed construction of new roadways (Haslet Parkway and the Intermodal Parkway extension) for both the Preferred and Additional Alternatives would increase access and mobility for the traveling public. The new roadways for both the Preferred and Additional Alternatives may slightly increase the separation between communities on either side of the new roadways, but the land use surrounding the new roadways is mostly undeveloped ranch land. Additionally, the

proposed connected sidewalks and shared-use lanes for both the Preferred and Additional Alternatives would allow for increased bicycle and pedestrian access throughout the community. The Build Alternatives would not significantly separate or isolate any distinct neighborhoods, ethnic groups, or other specific groups as the Build Alternatives exist among ranch land and undeveloped land uses.

The No-Build Alternative would have no impacts on community cohesion.

5.6.2 Access and Travel Patterns

Overall, the Build Alternatives are anticipated to result in both adverse and beneficial impacts to access and travel patterns for the immediate community in the City. The proposed construction of new roadways (Haslet Parkway and the Intermodal Parkway extension) for both the Preferred and Additional Alternatives would increase access and mobility for the traveling public. The addition of a median throughout the portions of the project area along the existing roadway of both the Preferred and Additional Alternatives would limit access to some properties for cars traveling in only one specific direction. The Build Alternatives would generally improve mobility and reduce travel time throughout the project area; however, some travel time may be increased by approximately one to three minutes in certain locations due to the proposed medians. It is generally expected that response times to emergencies by first responders would be reduced except in certain locations due to the proposed medians for both the Preferred and Additional Alternatives. Those living or working along FM 156 where the proposed median of both the Preferred and Additional Alternatives has eliminated a turn in front of their homes or places of work could experience a slight increase in travel times. Access to and from the large shipping and receiving facilities along Westport Parkway would be improved by both the Preferred and Additional Alternatives. The increased access to I-35W for these industrial facilities would increase safety and mobility for the community by directing the heavy truck traffic away from smaller City streets. Mobility and access would be enhanced for all users of the roadways, including emergency vehicles, cyclists, and pedestrians, due to addition of the proposed roadways and connected sidewalks and shared-use lanes.

The No-Build Alternative would not result in any improvements to access or mobility within the project area.

5.6.3 Environmental Justice

Environmental justice populations are present in the proposed project area. One census block in both the Preferred and Additional Alternative's study areas, Block 5078, has a minority population of over 50 percent, and it is expected to have permanent changes in access and travel patterns. See **Figures 2a-2b** (Census Geographies for the Preferred and Additional Alternatives) in **Appendix F** for the location of this block. There are no predominantly low-income census block groups in the study area. Pedestrian access would be improved with the proposed sidewalk network in the project area. No existing neighborhoods would be divided, but permanent disruptions to normal daily activities are expected due to the proposed new roadways and medians. Some properties would be accessible only when traveling in the direction on the side of the median that allows access. In some cases, travelers

would have to travel in the opposite direction and then complete a legal U-turn, or turnaround, in order to reach their destination. However, the proposed project is anticipated to increase mobility and access in the project area.

It is anticipated that neither the Preferred Alternative nor the Additional Alternative would result in disproportionately high and adverse impacts to minority and/or low-income populations. Therefore, the requirements of Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, are satisfied.

Under the No-Build Alternative no environmental justice impacts would occur. However, the beneficial impacts of the Build Alternatives (improved connectivity and mobility) would not be realized for the community living in the project area.

5.6.4 Limited English Proficiency

People who speak English “less than very well,” or Limited English Proficiency (LEP) populations, are present in the project area. Of the 6,095 people over five years of age living in the adjacent census block groups, approximately 1.6 percent speak English “less than very well.” The largest LEP population speaks Asian/Pacific Islander languages, and the next largest population speaks Spanish.

A public meeting was held on October 25, 2018, and LEP populations were afforded the opportunity to participate in the decision-making process (see Section 7.0). Notices for the public meetings were published in English and Spanish. The notices included information stating that a translator (for language or other special communication needs) would be provided upon request. No translation services were requested at the public meeting.

Notices for future events will be printed in English and other translation or communication services will continue to be offered upon request. A public hearing for the proposed project is anticipated to be held July 25, 2019. Reasonable steps will continue to be taken to ensure all persons have meaningful access to the programs, services, and information TxDOT provides. Therefore, the requirements of EO 13166 pertaining to LEP would be satisfied.

5.6.5 Traffic Operations

No adverse traffic operation impacts are anticipated as a result of the proposed project. Although the proposed 4-lane section of Avondale-Haslet Road between FM 156 and the western Haslet city limits decreases to a 2-lane section outside of the proposed project limits, little additional traffic generation outside of the project area will occur as a result of the project. Haslet Parkway and Avondale-Haslet Road will convey traffic generated from I-35W and SH 170 by providing a direct connector. The project in and of itself will not result in adverse traffic operation impacts.

According to data from the TxDOT TPP, the peak design hourly volumes (DHV) based on ADT volumes for the 2025 base letting year and the 2045 design year do not indicate that adverse traffic operation

impacts would be created west of FM 156 within the project area. The 2025 DHV along eastbound Avondale-Haslet Road approaching FM 156 shows a peak morning value of 756 vehicles per hour and a peak evening value of 444 vehicles per hour. Comparatively, the 2045 design year values at the same location show a peak morning value of 1056 vehicles per hour and a peak evening value of 621 vehicles per hour. The 2025 DHV along westbound Avondale-Haslet Road leaving FM 156 shows a peak morning value of 444 vehicles per hour and a peak evening value of 756 vehicles per hour. Comparatively, the 2045 design year values at the same location show a peak morning value of 621 vehicles per hour and a peak evening value of 1056 vehicles per hour. This comparison shows an increase in peak morning and evening DHV of approximately 40 percent.

The BUILD grant travel demand model volume comparison map created by NCTCOG indicates daily traffic volume projections for Avondale-Haslet Roadway for the 2028, 2037, and 2045 design year. These data are included in **Table 2**.

Table 2: Daily Traffic Volume Projections for Avondale-Haslet Road

Design Year	Build Alternative (Preferred Alternative)	No-Build Alternative
2028	14,500 VPD	8,950 VPD
2037	16,700 VPD	14,100 VPD
2045	19,800 VPD	16,300 VPD

These values show that by 2037, projected daily traffic volumes along Avondale-Haslet Road for the no-build scenario will exceed the capacity of a two-lane facility, based on general regional planning volume thresholds. These data show an increase of 3,500 VPD (approximately 21 percent) between the 2045 build scenario and no-build scenario. This increase is not enough to be considered a substantial traffic operations impact.

5.7 *Visual/Aesthetics Impacts*

Visual impacts are discussed in terms of the effects that new physical elements associated with the proposed project would have on landform quality (i.e., the existing natural or man-made landforms) and visual resources (i.e., the physical resources including native vegetation, introduced landscaping, and the built environment that make up the character of the area).

Federal and state regulations require that visual impacts be addressed for Section 106 and Section 4(f) properties. No specific federal or state visual regulatory requirements apply to parkland or to properties that are not designated historic or are not eligible for listing in the National Register of Historic Places (NRHP). Generally, the existing visual and aesthetic qualities of the study area include open pastures, farmland, and residential housing.

Characteristics of the Build Alternatives that could have a visual/aesthetic impact on the resource include elevated structures/bridges and other vertical elements such as signs and lights. Due to the length of the proposed project and the rural setting of the study area, both Build Alternatives would have some effect on the existing aesthetic quality of the surrounding area. Visual impacts along the Build Alternatives would vary by location. Views both from and of the facility would be greatest at grade-separated locations at water feature crossings. Based on current design (**Appendix C**), the Preferred Alternative would have greater impacts at grade-separated water crossings. The Build Alternatives would visually affect rural single-family homes located along the proposed ROW. Other than the grade-separated locations, potential views of the proposed facility would be limited due to the flatness of the terrain in the project area.

Where most practicable, mitigation measures could include creating naturally vegetated medians, doing minimum ROW clearing, incorporating design specifications to blend the project into the landscape, and promoting roadside native wildflower planting programs. For roadside revegetation, landscape radius planting, and revegetation of natural areas impacted by construction, the use of native plants would be considered to improve the visual aesthetics and to control the introduction of invasive species. Landscaping will be provided along a segment of the newly constructed Haslet Parkway (**Appendix C**) as part of the Preferred Alternative and is anticipated to include small and large trees and a landscaping berm. Hydromulch would be applied to the remaining unpaved portions of the proposed project with no planned landscaping.

Under the No-Build Alternative, the viewshed would not be altered by the introduction of a new transportation facility.

5.8 *Cultural Resources*

The evaluation of impacts to cultural resources has been conducted in accordance with the Programmatic Agreement between FHWA, TxDOT, the Texas State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings.

5.8.1 **Archeology**

In March 2019, an intensive survey was completed to inventory and evaluate archeological resources within the footprint of both Build Alternatives. The survey revealed disturbed contexts throughout the area, the majority from long-term agriculture or animal grazing that resulted in general erosion. Additional disturbances due to modern residential and commercial developments, oil and gas drilling, buried utility lines, and road construction and maintenance were present. No surface or subsurface archeological deposits or remains were identified during the survey and no new archeological sites were recorded. TxDOT archeologists determined the project required no further work on April 24, 2019, and SHPO concurred with that determination on April 26, 2019. The SHPO concurrence letter is in **Appendix G**.

Tribal coordination with representatives from Federally-recognized Tribes with interest in the project area was concluded on May 29, 2019 and can be found in **Appendix G**. Responses were received from the Kiowa Tribe of Oklahoma and Kickapoo Traditional Tribe of Texas on May 1 and May 3, 2019, respectively. The Kiowa confirmed that they anticipate the proposed project to have minimal adverse effect on tribal resources. The Kickapoo responded that they do not require a copy of the archeological survey conducted for the proposed project.

Under the No-Build Alternative, no impacts to archeological resources would occur.

5.8.2 Historic Properties

A reconnaissance survey for historic resources was conducted in May 2019. The Historical Resources Survey Report (TxDOT 2019e) is on file at the TxDOT Fort Worth District Office.

A wall and staircase constructed under the Works Progress Administration in 1935–1937 was identified adjacent to Schoolhouse Road (**Appendix B**). The wall and staircase were associated with a school and gymnasium. The school was demolished in the late 1960s, and the gymnasium was demolished in 2002. The wall and staircase currently remain immediately north of the present-day Haslet Elementary School. The wall is in the proposed ROW of both build alternatives, and the portion of the wall in the project area (approximately 520 feet) is proposed to be demolished. Because the original school and gymnasium no longer exist, the wall and staircase are not eligible for inclusion in the NHRP.

The survey identified a total of 33 historic-age resources, and none of the resources are recommended eligible for NRHP listing. TxDOT historians determined the proposed build alternatives would have no effect on historic properties and, through informal consultation, SHPO concurred. Individual project coordination with the SHPO is not required. TxDOT historians contacted Tarrant County Historical Commission with information about the project in June 2019. The Final EA will reflect any comments received.

Under the No-Build Alternative, no effects to historic resources would occur.

5.9 *Department of Transportation Act Section 4(f), Land and Water Conservation Fund Act Section 6(f), and Texas Parks and Wildlife Code Chapter 26*

Both the Preferred Alternative and the Additional Alternative would require the removal of portions of the Schoolhouse Road and FM 156 shared-use path. This concrete shared-use path provides an alternative off-road connection between public facilities such as the City Library, City Hall, community parks, and future planned retail development within the Haslet Old Town Redevelopment Area. While the shared-use path is publicly owned, the Official with Jurisdiction (City of Haslet) has indicated it is used primarily for transportation and not used primarily for recreation. Section 4(f) approval can be necessary for the use of a trail, path, bikeway, or sidewalk; however, TxDOT is expected to determine that the project meets exception (f)(4) of 23 CFR 774.13 for trails, paths, bikeways, and sidewalks

that are part of the local transportation system and which function primarily for transportation. Both Build Alternatives would replace the function of the removed portion of the shared-use path. The proposed project would construct new shared-use path segments of the same width as the shared-use path segments that are proposed for removal (12 feet wide), in order to maintain connection to the existing segments of the shared-use path that would not be affected by the proposed project (**Figure 3**).

There are no recreational resources created or improved with funds from the Land and Water Conservation Fund Act in the project area; therefore, no impacts to properties protected by Section 6(f) are anticipated to occur as a result of construction activities for the Preferred or Additional Alternative.

There are no public properties designated and used as a park, recreation area, scientific area, wildlife refuge, or historic site within the project area. Therefore, no impacts to properties protected by Chapter 26 of the Parks and Wildlife Code are anticipated to occur as a result of construction activities for the Preferred or Additional Alternative.

Under the No-Build Alternative, there would be no impacts to properties protected by Section 4(f), Section 6(f), or Chapter 26.

5.10 *Water Resources*

5.10.1 **Clean Water Act Section 404**

A formal water of the U.S. delineation (including wetlands) was conducted per the 1987 USACE Wetlands Delineation Manual to identify the aquatic features within the project area that may be considered potential waters of the U.S. (WOUS) and subject to the permitting process outlined in Section 404 of the Clean Water Act (CWA). Initial field work conducted in January 2019 was conducted under atypical climatic conditions as a result of excessive rainfall. At the time of the January 2019 field work, perennial streams, intermittent streams, ephemeral streams, emergent wetlands, and an open water body were identified within the project area. Supplemental field work was conducted in June 2019 to verify the jurisdictional limits and status of potential waters of the U.S. (including wetlands) within the project area. The project lies within the Trinity River Basin. Twenty aquatic features including 6 intermittent streams, 2 ephemeral streams, 9 emergent wetlands, 1 open water feature, 1 non-wetland swale, and 1 relic stream channel were identified within the project area. See **Figures 4 and 5a-5j** in **Appendix F** for maps of the water resources identified within the project area. The environmental study limits of the Build Alternatives include 11 single and complete crossings of identified aquatic features, 9 of which are single and complete crossings of waters of the U.S and two that are likely not waters of the U.S. **Tables 2 and 3** below include a summary of permanent impacts to potential WOUS resulting from the Preferred and Additional Alternatives. Impacts to potential WOUS were calculated using design shown in the current schematics (**Appendix C**) and are subject to change in the future.

Table 3: Impacts to Potentially Jurisdictional Waters of The U.S. – Preferred Alternative

Waterbody ID ¹	Location Description	Resource Type ²	Linear Feet in Alternative	Acres in Alternative	Nature of Impact	Permanent Fill		Anticipated Permit Type	Pre-Construction Notification	
						Linear Feet	Acres		Required	If Yes, Reason ³
Water 1	Crossing 1	IS	60	0.016	N/A	-	-	N/A	N	
Wetland 1	Crossing 2	NFW	-	0.018	6-10'x6'x118' Box Culvert	-	0.016	NWP 14	Y	B
Water 2	Crossing 2	IS	376	0.111	6-10'x6'x118' Box Culvert	166	0.053	NWP 14	N	
Water 3	Crossing 3	ES	123	0.012	4-8'x5'x114' Box Culvert	58	0.005	NWP 14	N	
Wetland 2	Crossing 3	NFW	-	0.147	4-8'x5'x114' Box Culvert	-	0.132	NWP 14	Y	A.B
Wetland 3	Crossing 3	NFW	-	0.056	N/A	-	0.000	NWP 14	N	
Water 4	Crossing 4	IS	246	0.067	7-10'x6'x126' Box Culverts	183	0.046	NWP 14	N	
Water 5	Crossing 5	ES	175	0.045	4-8'x4'x120 Box Culverts	144	0.041	NWP 14	N	
Wetland 4	Crossing 5	NFW	-	0.103	4-8'x4'x120 Box Culverts	-	0.086	NWP 14	Y	B
Wetland 5	Crossing 5	NFW	-	0.042	4-8'x4'x120 Box Culverts	-	0.050	NWP 14	Y	B
Wetland 6	Crossing 7	NFW	-	0.050	48" Reinforced Concrete Pipe	-	0.033	NWP 14	Y	B
Wetland 7	Crossing 7	NFW	-	0.026	Fill/Grading	-	0.023	NWP 14	Y	B
Water 7	Crossing 7	ES	279	0.013	48" Reinforced Concrete Pipe	182	0.009	NWP 14	N	
Wetland 8	Crossing 8	NFW	-	0.179	Span Bridge	-	0.000	N/A	N	
Water 8	Crossing 10	IS	564	0.160	Span Bridge	-	0.000	N/A	N	
Wetland 9	Crossing 10	NFW	-	0.008	Span Bridge	-	0.000	N/A	N	
Water 9	Crossing 11	IS	789	0.201	4-12'x6'x184' Box Culverts	660	0.170	NWP 14	Y	A

Waterbody ID ¹	Location Description	Resource Type ²	Linear Feet in Alternative	Acres in Alternative	Nature of Impact	Permanent Fill		Anticipated Permit Type	Pre-Construction Notification	
						Linear Feet	Acres		Required	If Yes, Reason ³
Total			2612	1.704		1393	0.664			

¹ Waterbody ID may be the name of a feature or an assigned label such as “W-1” for a wetland.
² Resource Types: NFW – Non-forested wetland, FW – Forested wetland, PS – Perennial Stream, IS – Intermittent Stream, ES – Ephemeral Stream, I – Impoundment
³ Reasons for PCN requirement:
 A – The loss of waters of the U.S. exceeds 1/10 acre
 B – There is a discharge in a special aquatic site (e.g., wetlands)
 C – Potential endangered species
 D – Potential historic properties
 E – Discharge into pitcher plant bog or bald cypress-tupelo swamp
 F – Discharge into the area of Caddo Lake within Texas that is designated as a “Wetland of International Importance” under the Ramsar Convention
 G – Required by Louisiana Regional Conditions
 H – Other

Table 4: Impacts to Potentially Jurisdictional Waters of The U.S. – Additional Alternative

Waterbody ID ¹	Location Description	Resource Type ²	Linear Feet in Alternative	Acres in Alternative	Nature of Impact	Permanent Fill		Anticipated Permit Type	Pre-Construction Notification	
						Linear Feet	Acres		Required	If Yes, Reason ³
Water 1	Crossing 1	IS	60	0.016	N/A	-	-	N/A	N	
Wetland 1	Crossing 2	NFW	-	0.018	6-10’x6’x118’ Box Culvert	-	0.016	NWP 14	Y	B
Water 2	Crossing 2	IS	376	0.111	6-10’x6’x118’ Box Culvert	166	0.053	NWP 14	N	
Water 3	Crossing 3	ES	123	0.012	4-8’x5’x114’ Box Culvert	58	0.005	NWP 14	N	
Wetland 2	Crossing 3	NFW	-	0.147	4-8’x5’x114’ Box Culvert	-	0.132	NWP 14	Y	A.B
Wetland 3	Crossing 3	NFW	-	0.056	N/A	-	0.000	NWP 14	N	
Water 4	Crossing 4	IS	246	0.067	7-10’x6’x126’ Box Culverts	183	0.046	NWP 14	N	

Waterbody ID ¹	Location Description	Resource Type ²	Linear Feet in Alternative	Acres in Alternative	Nature of Impact	Permanent Fill		Anticipated Permit Type	Pre-Construction Notification	
						Linear Feet	Acres		Required	If Yes, Reason ³
Water 5	Crossing 5	ES	175	0.045	4-8'x4'x120 Box Culverts	144	0.041	NWP 14	N	
Wetland 4	Crossing 5	NFW	-	0.103	4-8'x4'x120 Box Culverts	-	0.086	NWP 14	Y	B
Water 8	Crossing 10	IS	564	0.160	Span Bridge	-	0.000	N/A	N	
Wetland 9	Crossing 10	NFW	-	0.008	Span Bridge	-	0.000	N/A	N	
Water 9	Crossing 11	IS	789	0.201	4-12'x6'x184' Box Culverts	660	0.170	NWP 14	Y	A
Total			2333	0.944		1211	0.549			

¹ Waterbody ID may be the name of a feature or an assigned label such as "W-1" for a wetland.

² Resource Types: NFW – Non-forested wetland, FW – Forested wetland, PS – Perennial Stream, IS – Intermittent Stream, ES – Ephemeral Stream, I – Impoundment

³ Reasons for PCN requirement:

- A – The loss of waters of the U.S. exceeds 1/10 acre
- B – There is a discharge in a special aquatic site (e.g., wetlands)
- C – Potential endangered species
- D – Potential historic properties
- E – Discharge into pitcher plant bog or bald cypress-tupelo swamp
- F – Discharge into the area of Caddo Lake within Texas that is designated as a "Wetland of International Importance" under the Ramsar Convention
- G – Required by Louisiana Regional Conditions
- H – Other

Designs for this project are preliminary, and the designs for specific structures for the crossings have not been finalized.

According to current plans, the Preferred Alternative is anticipated to result in impacts to eight crossings of waters of the U.S. The Preferred Alternative is anticipated to be authorized under Nationwide Permit (NWP) 14 with a Pre-construction Notification (PCN) because impacts to potential WOUS are greater than 0.10 acres and the discharge of dredge or fill material into special aquatic sites, including wetlands.

According to current plans, the Additional Alternative is anticipated to result in impacts to six crossings of waters of the U.S. The Additional Alternative is anticipated to be authorized under NWP 14 with a PCN because impacts to potential WOUS are greater than 0.10 acres and the discharge of dredge or fill material into special aquatic sites, including wetlands.

USACE permitting would be completed prior to any portions of the proposed project construction that are anticipated to result in impacts to WOUS. Further WOUS delineations are not anticipated at this time to refine USACE permitting requirements.

Although Crossing 1 is located within the environmental study limits, it is not located within the construction limits of the Build Alternatives. According to current plans, no impacts to Crossing 1 are anticipated as a result of the Build Alternatives. Although Crossing 6 would be impacted by the Additional Alternative and Crossing 9 would be impacted by the Preferred Alternative, these crossings are likely not waters of the U.S.

Under the No-Build Alternative, no impacts to WOUS would occur, and no USACE permitting would be required.

5.10.2 **Clean Water Act Section 401**

The Build Alternatives would comply with the Texas Commission on Environmental Quality's (TCEQ) Section 401 Water Quality Certification Conditions for NWPs. The Build Alternatives would require Tier I Water Quality Certification because they would each affect less than 1,500 linear feet of stream.

As outlined in the TCEQ Section 401 Water Quality Certification Letter and Conditions for NWPs (TCEQ 2017), NWP general conditions 12 (Soil and Erosion Sediment Controls) and 25 (Water Quality) must be met for impacts that are permitted under NWP 14. To comply with these general conditions, at least one best management practice (BMP) from each of the following three categories of onsite water quality management practices must be used on the proposed project: erosion control, post-construction total suspended solids (TSS) control, and sedimentation control. The Section 401 certification requirements for NWP 14 would be met for the Build Alternatives by implementing approved BMPs for erosion, sediment, and post-construction TSS control from TCEQ's Section 401 Water Quality Certification Conditions for Nationwide Permits.

Under the No-Build Alternative, no impacts to WOUS would occur and no Section 401 certification would be required.

5.10.3 Executive Order 11990 Wetlands

According to current plans, the Build Alternatives are anticipated to result in impacts to likely jurisdictional wetlands at Crossing 2, Crossing 3, Crossing 5, and Crossing 7. EO 11990 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. Under the Section 404(b)(1) guidelines set forth in the CWA, the proposed project may proceed as multiple alternatives have been considered and eliminated from consideration as impractical. The proposed project will implement all necessary BMPs and take necessary mitigation measures to assure that impacts to wetlands are minimized to the extent practicable.

At Crossing 2, Wetland 1 is located north of the existing Avondale-Haslet Roadway. Avoidance of the wetland is not practicable because shifting the roadway to the south would require additional acquisition of right-of-way and introduce a jog in the existing roadway alignment.

At Crossing 3, Wetland 2 and Wetland 3 are located south of the existing Avondale-Haslet Roadway. Avoidance of the wetlands is not practicable because shifting the roadway to the north would require additional acquisition of right-of-way and introduce a jog in the existing roadway alignment which would not align with the existing at-grade railroad crossing.

At Crossing 5, Wetland 4 and Wetland 5 are located north and south of the proposed Haslet Roadway, respectively. Avoidance of the wetlands is not practicable because shifting the roadway in either direction would require additional acquisition of right-of-way, potential residential displacements, and result in greater impacts to off-site wetlands.

At Crossing 7, Wetland 6 and Wetland 7 are located within the approximate center of the proposed Haslet Roadway alignment. At Crossing 8, Wetland 8, the project includes a span bridge to avoid impacts. However, due to the cost of additional bridge structures and the geometric layout of the roadway alignment, additional spanning of Crossing 7, Wetland 6 and Wetland 7 is not practicable.

For further details, see **Sections 5.10** and **5.10.1** above.

Under the No-Build Alternative, no impacts to wetlands would occur; therefore, EO 11990 would not apply.

5.10.4 Rivers and Harbors Act

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.5 Clean Water Act Section 303(d)

The project area is located within the Denton Creek watershed (Hydrologic Unit Code 12030104) within the Trinity River Basin. Storm water runoff from the project eventually flows into Denton Creek above Grapevine Lake, which is listed as Segment ID 0826 on the 2014 Texas Integrated Report as a water impaired by pH (TCEQ 2014). This segment does not have a total maximum daily load approved by the Environmental Protection Agency (EPA). Since the Build Alternatives are approximately 10 stream miles upstream from the impaired water, they are not anticipated to contribute the constituent of concern to Grapevine Lake. Water Quality BMPs would be utilized per the TxDOT/TPWD BMP PA as part of the Build Alternatives to avoid and minimize potential impacts to water quality as a result of the proposed project.

Under the No-Build Alternative, no impacts to impaired water segments would occur.

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 Build Alternatives. The Project Development Process Manual and the Plans, Specifications, and Estimates (PS&E) Preparation Manual require a storm water pollution prevention plan (SW3P) be included in the plans of all projects that disturb one or more acres of land. The Preferred Alternative may disturb as much as 128.3 acres of land while the Additional Alternative may disturb as much as 93.9 acres of land. 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 Special Provision 506-003 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SW3P, and to complete the appropriate authorization documents.

5.10.7 Floodplains

The Build Alternatives have multiple water features that lie within the Federal Emergency Management Agency (FEMA)-designated 100-year floodplain (FEMA Flood Insurance Rate Map panels 48439C0055K and 48439C0060K) (**Appendix F, Figure 4**) (FEMA 2018). Approximately 23.3 acres of the Preferred Alternative and 15.1 acres of the Additional Alternative are within the FEMA-designated 100-year floodplain.

This project is subject to and will comply with Federal Executive Order 11988 on Floodplain Management. The department implements this EO on a programmatic basis through its Hydraulic

Design Manual. Design of this project will be conducted in accordance with the department's Hydraulic Design Manual. Adherence to the TxDOT Hydraulic Design Manual ensures that this project will not result in a "significant encroachment" as defined by FHWA's rules implementing EO 11988 at 23 CFR 650.105(q). The project's supporting hydrologic and hydraulic files will be provided to the local floodplain administrator.

Under the No-Build Alternative, no impacts to floodplains would occur.

5.10.8 **Wild and Scenic Rivers**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.9 **Coastal Barrier Resources**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.10 **Coastal Zone Management**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.11 **Edwards Aquifer**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.12 **International Boundary and Water Commission**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.10.13 **Drinking Water Systems**

Based on the Texas Water Development Board's (TWDB's) Groundwater Database and the Submitted Drillers Report Database, there are no water wells or other drinking water systems within 0.25 miles of the Build Alternatives (TWDB 2018). The Build Alternatives would have no impact on drinking water systems. Any drinking water wells unexpectedly encountered would need to be properly removed and disposed of during construction of the project in accordance with TxDOT's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells).

The No-Build Alternative would have no impact on drinking water systems.

5.11 **Biological Resources**

A summary of the biological resources within the study limits can be found in **Sections 5.11.1 – 5.11.11** below. For detailed information, see the *Tier 1 Site Assessment Form* (TxDOT 2019b),

Biological Evaluation Form (TxDOT 2019c), and their corresponding Supplemental Attachments located on file at the TxDOT Fort Worth District Office.

5.11.1 Texas Parks and Wildlife Coordination

A Tier 1 Site Assessment was completed for the proposed project to determine whether coordination with the Texas Parks and Wildlife Department (TPWD) would be required (TxDOT 2019b) per the 2013 MOU between TxDOT and TPWD (TxDOT and TPWD 2013). Within the Preferred Alternative, impacts to vegetation of five MOU habitat types would exceed the thresholds defined in the 2013 MOU, prompting coordination with TPWD, though impacts to vegetation proposed by the Preferred Alternative would be minimized to the greatest extent practicable (**Appendix F, Figure 6a-6e**). Within the Additional Alternative, impacts to vegetation of four MOU habitat types would exceed the thresholds defined in the 2013 MOU, prompting coordination with TPWD, though impacts to vegetation proposed by the Additional Alternative would be minimized to the greatest extent practicable (**Appendix F, Figure 6a-6e**). The proposed project is within range of and contains suitable habitat for several Species of Greatest Conservation Need (SGCN) that do not have designated BMPs. Coordination with TPWD was completed on May 14, 2019 (**Appendix G**).

5.11.2 Impacts to Vegetation

Based on mapping by the Texas Conservation Action Plan (TCAP), the Build Alternatives are located within the Cross Timbers Ecoregion of Texas (TPWD 2011). The Ecological Mapping Systems of Texas (EMST) identified several vegetation types within the Build Alternatives. Vegetation in the project area of the Build Alternatives was field verified by qualified biologists in January 2019. Vegetation observed within the project area of the Build Alternatives is consistent with that of an upland prairie environment. Six general categories of vegetation were observed within the project area of the Build Alternatives during field investigations: Edwards Plateau Savannah, Woodland, and Shrubland; Disturbed Prairie; Riparian; Tallgrass Prairie, Grassland; Urban; and Agriculture (**Appendix F, Figure 6a-6e**) (MoRAP 2013). **Table 4** below shows the vegetation types observed within the Build Alternatives.

Table 5: Vegetation Types Observed within the Build Alternatives

MOU Habitat Type	Vegetation Types Observed within Build Alternatives	
	Preferred Alternative (acres)	Additional Alternative (acres)
Edwards Plateau Savannah, Woodland, and Shrubland	73.9	51.9
Disturbed Prairie	13.0	7.2
Riparian	1.6	1.3
Tallgrass Prairie, Grassland	5.8	5.7
Urban	5.3	5.0
Agriculture	14.0	8.8
Total	113.6	79.9

These habitat types are not considered rare or important remnant vegetation as mapped by the TCAP. No remnant vegetation occurs in the project area of the Build Alternatives.

The No-Build Alternative would not impact vegetation.

5.11.3 Executive Order 13112 on Invasive Species

This project is subject to and will comply with Federal EO 13112 on Invasive Species. TxDOT implements this EO on a programmatic basis through its *Roadside Vegetation Management Manual* and *Landscape and Aesthetics Design Manual* (TxDOT 2018).

5.11.4 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* (TxDOT 2018).

5.11.5 Impacts to Wildlife

Some wildlife species could occur within undeveloped portions of the project area of the Build Alternatives. Required clearing or other construction-related activities may affect animals that reside on or adjacent to the project area of the Build Alternatives. Heavy machinery could kill small, low-mobility animals or could cause soil compaction, impacting animals that live underground. Larger, more-mobile species will typically avoid construction activities and move into adjacent areas.

Wildlife species observed throughout the environmental study limits during the January 2019 field investigations include: red-eared slider (*Trachemys scripta elegans*), Northern Mockingbird (*Mimus polyglottos*), Northern Cardinal (*Cardinalis cardinalis*), House Sparrow (*Passer domesticus*), Mourning Dove (*Zenaida macroura*), Turkey Vulture (*Cathartes aura*), feral hog (*Sus scrofa*), white-tailed deer (*Odocoileus virginianus*), and eastern cottontail (*Sylvilagus floridanus*). Species were observed primarily in the Urban and Riparian observed MOU habitat types. These species and others, however, have the potential to utilize all habitat types observed within the project area of the Build Alternatives.

With regard to impacts under the Preferred Alternative, the effects of removing wildlife habitat areas would not extend beyond the unmaintained vegetation and water features present within the project construction area. With regard to impacts under the Additional Alternative, the effects of removing wildlife habitat areas would not extend beyond the unmaintained vegetation and water features present within the project construction area. Accordingly, impacts to habitat would be limited to the area of direct impacts, and no encroachment impacts are expected.

Under the No-Build Alternative, no impacts to wildlife species or their habitats would occur.

5.11.6 Migratory Bird Protections

The environmental study limits were investigated for any structures containing migratory birds or indications of nesting migratory birds. No nesting migratory birds were observed during the January 2019 field investigations. This project will comply with applicable provisions of the Migratory Bird Treaty Act (MBTA) and Texas Parks and Wildlife Code 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 construction activities outside the typical nesting season.

The No-Build Alternative would not require or lead to any removal or disturbance of migratory birds, their nests, or their young and would have no impact on migratory birds.

5.11.7 Fish and Wildlife Coordination Act

The proposed project would not require an Individual Permit issued by the USACE; therefore, the Fish and Wildlife Coordination Act does not apply.

5.11.8 Bald and Golden Eagle Protection Act

Bald (*Haliaeetus leucocephalus*) and Golden Eagles (*Aquila chrysaetos*) are protected by the Bald and Golden Eagle Protection Act of 2007. No Bald or Golden Eagle habitat was observed within the environmental study limits. The Build Alternatives would have no impact on Bald or Golden Eagles.

The No-Build Alternative would have no impact on Bald or Golden Eagles or their habitat.

5.11.9 **Magnuson–Stevens Fishery Conservation Management Act**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.11.10 **Marine Mammal Protection Act**

Based on a project scoping analysis, it was determined that neither of the Build Alternatives nor the No-Build Alternative would have an impact on this resource category or subject matter.

5.11.11 **Threatened, Endangered, and Candidate Species**

The USFWS Information for Planning and Consultation (IPaC) system suggests that the project is within the ranges of the Least Tern (*Sterna antillarum*), Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), and Whooping Crane (*Grus americana*). No suitable habitat for federally listed threatened or endangered species is located within the project area of the Build Alternatives. No federally listed species were observed during field observations and a review of TPWD's Natural Diversity Database (TXNDD) did not indicate any federally listed species occurring within the project area. No critical habitat is mapped by the USFWS as occurring within the project area of the Build Alternatives. Therefore, the proposed project is not anticipated to have an effect on federally listed species.

State-Listed Species

The Preferred and Additional Alternatives are within range of or include suitable habitat for the following state-listed threatened species: Texas heelsplitter (*Potamilus amphichaenus*), Texas pigtoe (*Fusconaia askewi*), Texas horned lizard (*Phrynosoma cornutum*), and timber rattlesnake (*Crotalus horridus*) (TxDOT 2019b, 2019c).

SGCNs

The Preferred and Additional Alternatives are within the range of or include suitable habitat for the following SGCNs that are considered to be in poor or declining health: auriculate false foxglove (*Agalinis auriculate*), Texas milk vetch (*Astragalus reflexus*), Topeka purple-coneflower (*Echinacea atrorubens*), Texas garter snake (*Thamnophis sirtalis annectens*), Henslow's Sparrow (*Ammodramus henslowii*), Sprague's Pipit (*Anthus spragueii*), Western Burrowing Owl (*Athene cunicularia hypugaea*), and plains spotted skunk (*Spilogale putorius interrupta*) (TxDOT 2019b, 2019c).

Species specific BMPs, as outlined in the BMP PA between TxDOT and TPWD under the 2013 MOU (2017 revision), are provided for the Texas heelsplitter, Texas pigtoe, Texas garter snake, timber rattlesnake, Texas horned lizard, Henslow's Sparrow, Western Burrowing Owl, and plains spotted skunk. BMPs will be implemented to minimize or avoid impact to these species.

Both Build Alternatives may result in the removal of suitable rare species habitat or the temporary disturbance of state-listed species or SGCNs. TPWD coordination was completed on May 14, 2019 for the remaining SGCN species, the auriculate false foxglove, Texas milk vetch, Topeka purple-coneflower, Sprague's Pipit, that do not have established BMPs under the TxDOT/TPWD BMP PA. Coordination with TPWD by TxDOT was considered complete on May 14, 2019 for the proposed project based upon the species avoidance and mitigation efforts described in the Tier 1 Site Assessment and Biological Evaluation Form (TxDOT 2019b, 2019c). Therefore, the project is not anticipated to result in substantial direct or indirect impacts on any resource and the project would not impact a resource that is in poor or declining health.

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

5.12 *Air Quality*

This project is located within an area that has been designated by the EPA as a moderate nonattainment area for the 2008 ozone National Ambient Air Quality Standards (NAAQS); therefore, transportation conformity rules apply. Effective August 3, 2018, the EPA designated Tarrant County as marginal nonattainment for the 2015 ozone NAAQS. In accordance with 40 CFR 93.109(c), transportation conformity to this new standard is required by August 3, 2019 (one year after the effective date).

Both the MTP and the TIP were initially found to conform to the TCEQ State Implementation Plan (SIP) by FHWA and Federal Transit Administration (FTA) on November 23, 2018 and September 28, 2018, respectively; however, the proposed project is not consistent with this conformity determination, because the project is not listed in the 2019-2022 TIP. TxDOT will not take final action on this environmental document until coordination with TCEQ is complete and the proposed project is consistent with a currently conforming MTP and TIP.

Steps have been taken to ensure this project is compliant with local, state, and federal regulations. An application has been submitted to NCTCOG requesting this project be included in the amended 2019-2022 TIP. This modification is currently under review by NCTCOG, a decision is expected in the fall of 2019.

Copies of the MTP pages are included in **Appendix E**. 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.

The project is not located within a carbon monoxide or particulate matter (PM) nonattainment or maintenance area; therefore, a project-level hot-spot analysis is not required. Traffic data are provided in **Table 5** below.

Table 6: Traffic Data

	Preferred Alternative Section 1†	Preferred Alternative Section 2‡	Additional Alternative
Estimated Time of Completion Year 2025	7,800 vehicles per day	10,900 vehicles per day	6,900 vehicles per day
Design Year 2045	10,900 vehicles per day	15,200 vehicles per day	9,500 vehicles per day

Source: TxDOT (2019f)

† From Haslet city limits (west of FM 156) to Intermodal Parkway

‡ From Intermodal Parkway to SH 170

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.

5.12.1 Mobile Source Air Toxics

For the two Build Alternatives and the No-Build Alternative, the amount of Mobile Source Air Toxics (MSAT) emitted would be proportional to the vehicle miles traveled (VMT), assuming that other variables such as fleet mix are the same for each alternative. Because the VMT estimated for the No Build Alternative is higher than for either Build Alternative, lower levels of MSAT are expected from either Build Alternative compared to the No-Build Alternative. Also, regardless of the Alternative, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016 - http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm).

Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations. Under each Build Alternative, there may be localized areas where VMT would increase and other areas where VMT would decrease. Therefore, it is possible that localized increases and decreases in MSAT emissions may occur. The localized increases in MSAT emissions would likely be most pronounced along the new roadway sections that would be built between the City of Haslet city limits (west of FM 156) and SH 170. 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. However, even if these increases do occur, they too will be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations.

Under the Build Alternatives in the design year, reduced MSAT emissions are expected in the immediate area of the project, relative to the No-Build Alternative. This is based on the reduced VMT associated with more direct routing and due to EPA's MSAT reduction programs.

5.12.2 Congestion Management Process

The Congestion Management Process (CMP) 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 using 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 2007 and last amended in 2013.

Committed improvements within the project area will consist of the addition of new lanes, access management improvements (turn lanes), and bicycle and pedestrian facility improvements (sidewalks, shared-use lanes, and shared-use paths). Individual projects are listed in **Table 6**.

Table 7: Congestion Management Process Strategies Operational Improvements in the Travel Corridor

Location	Type	Implementation Date
SH 170 from I-35W to Denton city limits	Construct four-lane freeway between existing frontage roads	2018
Schoolhouse Road and FM 156 shared-use path from FM 156 and Hurley Street	Construct shared-use path	2019
Relocation of the BNSF Railway track to relocate FM 156 to the west of the current FM 156	Multimodal transportation improvements	2015

Source: TxDOT (2019f)

5.12.3 Air Quality Construction Emissions Reduction Strategies

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. The primary construction-related emissions of MSAT are diesel PM from diesel-powered construction equipment and vehicles.

The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. To minimize diesel

emissions, TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible during construction.

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. For further information, see the *Air Quality Technical Report* (TxDOT 2019f) on file at the TxDOT Fort Worth District Office. It contains the full qualitative MSAT analysis and an expanded discussion on the CMP.

5.13 *Hazardous Materials*

A *Hazardous Materials Initial Site Assessment* (ISA) (TxDOT 2019g) was completed for the Build Alternatives to identify known and possibly unknown hazardous material contamination that may impact the proposed project. No potential hazardous material sites were identified within the limits of the Build Alternatives. The only site of concern is a leaking petroleum storage tank (LPST) within one-quarter mile of the project area. The site is an active gas station called Pilot Travel Center 434, located at 2400 Alliance Gateway Freeway, Fort Worth, Texas. TxDOT determined that given the location of the LPST site (across the highway), and the distance to the proposed construction, no additional investigations are recommended. No impacts are anticipated.

Several oil and gas lines are within and adjacent to both of the Build Alternatives, all of which are depicted in the schematics (**Appendix C**). At this time, utility adjustment requirements have not been determined. Contamination could be encountered during utility adjustments. Coordination with utility companies concerning any such contamination would be addressed during the ROW acquisition stage of project development. It is anticipated that all utility adjustments or relocations would be completed prior to construction according to the terms of the BUILD Grant.

Any unanticipated hazardous materials or petroleum contamination encountered during construction would be handled according to applicable federal and state regulations per TxDOT Standard Specifications. No unresolved hazardous materials situations for which TxDOT would be responsible are anticipated with respect to the project. Any adjustments to pipelines or potential utilities would use standard techniques. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. The use of construction equipment within sensitive areas would be minimized or eliminated entirely. All construction materials used for this project would be removed as soon as work schedules permit.

Any buildings or structures being acquired through the acquisition process would be required to be assessed and mitigated for asbestos, although none are anticipated at this time.

Under the No-Build Alternative, no impacts to pipelines or disturbance to any potentially contaminated sites would occur.

5.14 Traffic Noise

A Traffic Noise Analysis was conducted for the proposed project in accordance with TxDOT's FHWA-approved *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT 2011).

Existing and predicted traffic noise levels were modeled at receiver locations that (1) represent the land use activity areas adjacent to the proposed project, (2) might be impacted by traffic noise, and (3) might potentially benefit from feasible and reasonable noise abatement. The model primarily considers the number, type, and speed of vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

This analysis indicates that neither the Preferred nor Additional Alternative would result in a traffic noise impact. Therefore, no abatement measures (i.e. noise barriers) are proposed for this project. To avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs should ensure, to the maximum extent practicable, that no new activities are planned or constructed along or within the following predicted (2045) noise impact contours (Table 7).

Table 8: Land Use Contours for Undeveloped Land

Land Use	Impact Contour	Distance from Right-of-way	
		Haslet Parkway	Intermodal Parkway
NAC Categories B and C	66 dB(A)	23 feet	Within right-of-way
NAC Category E	71 dB(A)	Within right-of-way	Within right-of-way

Source: AllianceTexas/Haslet Accessibility Improvement Project Traffic Noise Analysis (March 2019)

Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures, such as work-hour controls and proper maintenance of muffler systems. On the date of the environmental decision for the project (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project. For further information, see the *Traffic Noise Technical Report* included in **Appendix I**. The schematics for the Preferred and Additional Alternatives can be seen in **Appendix C**.

Under the No-Build Alternative, noise impacts would not occur because no facility would be constructed.

5.15 Induced Growth

An *Indirect Impacts Technical Report* (TxDOT 2019h) was prepared for the Build Alternatives in accordance with TxDOT's Indirect Impacts Analysis Guidance (TxDOT 2019i).

The Build Alternatives would provide increased accessibility to parcels that currently have little or no vehicle access. Considering land development constraints, the Preferred Alternative is expected to induce growth on approximately 371 acres and the Additional Alternative is expected to induce growth on approximately 225 acres, which are shown on **Figures 7a-7b** of **Appendix F**. Local/regional population and employment trends, as well as local and regional plans support the idea that new development will occur in the area. The induced growth from the project could impact streams, vegetation and wildlife habitat, soils, and archeological resources; however, none of those impacts are expected to be substantial based on existing regulations and land development requirements that would provide resource protection. Additionally, the induced growth resulting from the project would be consistent with the development goals of the City.

Under the No-Build Alternative, current development rates and patterns would remain constant, and no induced growth would occur.

5.16 *Cumulative Impacts*

Since the EA establishes the project would not result in substantial direct or indirect impacts on any resource and the project would not impact any resources in poor or declining health, no cumulative impacts analysis was conducted. This is consistent with TxDOT's Risk Assessment for Cumulative Impacts.

Under the No-Build Alternative, no cumulative impacts would be anticipated.

5.17 *Construction-Phase Impacts*

Access to parcels in the project vicinity would be maintained during all phases of construction. All practicable steps would be taken to minimize the inconvenience to drivers using the intersecting roadways during the construction phase. Temporary detours would also be required in the project area to assist with diverting traffic through surrounding areas while certain areas are under construction. The Tarrant County emergency medical services, Tarrant County Sheriff's Office, and Haslet Fire Department would be notified of the construction start dates and any potential detour routes. Both Build Alternatives would generally improve mobility and reduce travel time for emergency vehicles throughout the project area; however, emergency response time may be increased by approximately one to three minutes in certain locations due to the proposed medians along FM 156. Appropriate preemption will be provided at both Schoolhouse Road and Intermodal Parkway along the proposed Haslet Parkway.

People living and working in the immediate area of the proposed project may experience an increase in noise due to the construction activities. See **Section 5.14** for the discussion of construction-related noise impacts. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

During the construction phase of this project, temporary increases in fugitive dust and diesel emissions may occur from construction activities. See **Section 5.12** for the discussion of construction-related air emissions. The potential impacts of construction related dust will be minimized by using fugitive dust control measures contained in TxDOT Standard Specifications, as appropriate. In addition, TxDOT encourages construction contractors to use TERP and other local and federal incentive programs to the fullest extent possible to minimize emissions from vehicle and equipment.

Under the No-Build Alternative, construction activities would not occur; therefore, temporary construction-phase impacts would not occur.

6.0 Agency Coordination

TPWD

Potentially suitable habitat for four state-listed threatened species and eight SGCNs occurs within the environmental study limits. No BMPs are provided for auriculate false foxglove, Texas milk vetch, Topeka purple-coneflower, or Sprague's Pipit in the agreement between TXDOT and TPWD under the 2013 MOU (2017 Revision). Habitat impacts in excess of the MOU thresholds are anticipated to occur. A USACE NWP 14 with PCN would be required for the proposed project due to impacts to special aquatic sites (including wetlands). TPWD coordination was initiated on April 1, 2019 and was completed on May 14, 2019. TPWD did not provide any comments, feedback, or requests (**Appendix G**).

THC

TxDOT archeologists determined that no archeological deposits are expected to be impacted by the proposed project and that the project required no further work on April 24, 2019. SHPO concurred with that determination on April 26, 2019. The SHPO concurrence letter is in **Appendix G**.

Tribal Coordination

Tribal coordination with representatives of Federally-recognized Tribes with interest in the project area was concluded on May 29, 2019 and can be found in **Appendix G**. Responses were received from the Kiowa Tribe of Oklahoma and Kickapoo Traditional Tribe of Texas on May 1 and May 3, 2019, respectively. The Kiowa confirmed that they anticipate the proposed project to have minimal adverse effect on tribal resources. The Kickapoo responded that they do not require a copy of the archeological survey conducted for the proposed project.

TCEQ

In accordance with the TXDOT MOU with TCEQ (43 TAC §2.305), the TCEQ will be afforded opportunity to review and comment on the proposed project during the public hearing comment period.

7.0 Public Involvement

One public meeting was held on October 25, 2018, at Hampton Inn & Suites, N. Ft. Worth-Alliance Airport. An open house format with exhibit boards and schematics was used to present the proposed project, and public input was invited regarding the purpose and need for the project and suggested alternatives for the project. Comments received as a result of the public meeting concerned roadway connectivity, economic and residential growth, alignment preference, traffic noise, property values, traffic congestion, safety, ROW acquisition, and drainage and water conveyance (**Appendix H**).

The *Public Meeting Documentation* report (TxDOT 2019j) may be inspected and copied upon request at the TxDOT Fort Worth District Office.

A public hearing will be held July 25, 2019 following approval for further processing of this EA document.

Because the project involves construction of a roadway on new location, a notice of impending construction will be provided to owners of adjoining property, affected local governments, and public officials. The notice may be provided via signs posted in the ROW, mailed notice, printed notice distributed by hand, or notice via the City of Haslet and TxDOT website when the recipient has previously been informed of the relevant website address. This notice must be provided after the environmental decision (i.e., a finding of no significant impact or recommendation to prepare an environmental impact statement), but before earthmoving or other activities requiring the use of heavy equipment begin.

8.0 Post-Environmental Clearance Activities and Contractor Communications

8.1 *Post-Environmental Clearance Activities*

The project sponsor, the City of Haslet, will be responsible for several post-environmental clearance activities that will be unresolved at the time of environmental clearance. The following activities will be performed following environmental clearance:

1. USACE Section 404 Permit with PCN under NWP 14 will be initiated prior to construction.
2. A TCEQ Tier I Water Quality Certification would be obtained for the Preferred Alternative concurrently with the USACE NWP 14 authorization
3. Compensatory mitigation for any impacts to WOUS will be implemented prior to any portion of project construction that would impact jurisdictional WOUS.
4. The Tarrant County emergency medical services, Tarrant County Sheriff's Office, and Haslet Fire Department will be notified of the construction start dates and any potential detour routes.
5. The project's supporting hydrologic and hydraulic files will be provided to the local floodplain administrator during final design.

8.2 *Contractor Communications*

All project-specific commitments and conditions of approval, including resource agency permitting compliance and monitoring requirements, would be incorporated in the project plan for the proposed project. These commitments and conditions of approval may vary depending on the project's final design and construction.

This section lists the elements that constitute the Environmental Permits, Issues, and Commitments sheet. The permits, issues, and commitments relevant to the proposed project are as follows:

1. NWP 14
2. TPDES, which includes:
 - a. Construction General Permit
 - b. SW3P
 - c. Site Notice
 - d. Notice of Intent to MS4 operator and TCEQ
 - e. Implementation of erosion control, sedimentation control, and post-construction TSS control BMPs for the TCEQ's Section 401 Water Quality Certification Conditions for NWPs to prevent water quality impacts from occurring during and after construction
 - f. Notice of Termination (NOT) to MS4 operator and TCEQ
3. Implementation of the following BMPs for state-listed species and SGCNs will be implemented:
 - a. **Mussel BMPs (Texas heelsplitter and Texas pigtoe)**

- i. When work is in the water; survey project footprints for state listed species where appropriate habitat exists.
 - ii. When work is in the water and mussels are discovered during surveys; relocate state listed and SGCN mussels under TPWD authorization and implement Water Quality BMPs.
 - iii. When work is adjacent to the water; Water Quality BMPs implemented as part of the SWPPP for a construction general permit or any conditions of the 401 water quality certification for the project will be implemented. No TPWD Coordination required.
- b. **Terrestrial reptile BMPs (Texas garter snake and timber rattlesnake):**
- i. Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydromulching and/or hydroseeding are not feasible due to site conditions, utilize erosion control blankets or mats that contain no netting or contain loosely woven, natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.
 - ii. 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.
 - iii. Inform contractors that if reptiles are found on project site allow species to safely leave the project area.
 - iv. Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter where feasible.
 - v. Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
- c. **Texas horned lizard:**
- i. Avoid harvester ant mounds in the selection of Project Specific Locations (PSLs) where feasible.
 - ii. Apply Terrestrial Reptile BMPs.
- d. **Bird BMPs (Henslow's Sparrow and Western Burrowing Owl)**
- i. 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.
 - ii. Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season;
 - iii. Avoid removal of unoccupied, inactive nests, as practicable;
 - iv. Prevent establishment of active nests during the nesting season on TxDOT/City-owned and operated facilities and structures proposed for replacement of repair;

- v. Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.
- e. **Plains spotted skunk BMPs**
 - i. Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered, and to avoid unnecessary impacts to dens.
- 4. **Vegetation Disturbance:** During construction, efforts would be taken to avoid and minimizing disturbance of vegetation and soils. Areas within the existing ROW, but outside the limits of construction, would not be disturbed. Every effort would be made to preserve trees where they would neither compromise safety nor substantially interfere with the proposed projects.
- 5. **Migratory Bird Treaty Act (MBTA):** Between October 1 and February 15, the contractor would remove all old migratory bird nests from any structure that would be affected by the proposed project and complete any bridge work/demolition and /or vegetation clearing. In addition, the contractor would be prepared to prevent migratory birds from building nests by utilizing nest prevention methods, such as bird-deterrent netting and bird-repelling sprays and/or gels, between February 15 and October 1. In the event that migratory birds are encountered on-site during project construction, adverse impacts on protected birds, active nests, eggs, and/or young would be avoided.
- 6. **Streams and Riparian Areas:** In addition to BMPs required for a TCEQ Storm Water Pollution Prevention Plan and/or 401 water quality permit:
 - a. The use of equipment in streams and riparian areas during construction will be minimized to the extent necessary to complete the construction activities. When possible, equipment access would be from banks, bridge decks, or barges.
 - b. When temporary stream crossings are unavoidable, stream crossings would be removed stream crossings once they are no longer needed and stabilize banks and soils around the crossing.
 - c. When work will occur in the water:
 - i. The project footprints will be surveyed for stated listed species where appropriate habitat exists.
 - ii. State listed mussels and SGCN species discovered, would be relocated under a TPWD permit.
 - d. For all construction equipment and gear that comes in contact with any public waters:
 - i. Follow the “TPWD Clean/Drain/Dry Procedures and Zebra Mussel Decontamination Procedures for Contractors Working in Inland Public Waters” (https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/tols.phtml)

7. Vegetation BMPs:

- a. Minimize the amount of vegetation cleared. Removal of native vegetation, particularly mature native trees and shrubs should be avoided to the greatest extent practicable. Wherever practicable, impacted vegetation should be replaced with in-kind on-site replacement/restoration of native vegetation.
- b. 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.
- c. 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 the extent practicable either on-site or off-site. Trees less than 12 inches dbh should be replaced at a 1:1 ratio.
- d. Replacement trees should be of equal or better wildlife quality than those removed and be regionally adapted native species.
- e. When trees are planted, a maintenance plan that ensures at least 85 percent survival rate after three years should be developed for the replacement trees.
- f. The use of any non-native vegetation in landscaping and revegetation is discouraged. Locally adapted native species should be used.

8. EO 13112 on Invasive Species

This project is subject to and will comply with federal EO 13112 on Invasive Species. TxDOT implements this EO on a programmatic basis through its *Roadside Vegetation Management Manual* and *Landscape and Aesthetics Design Manual* (TxDOT 2018). The design and construction of this project will comply with this manual.

9. Executive Memorandum on 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* (TxDOT 2018). The design and construction of this project will comply with this manual.

Where reasonable and feasible, mitigation measures could include creating naturally vegetated medians, doing a minimum of ROW clearing, incorporating design specifications to blend the project into the landscape, and promoting roadside native wildflower planting programs. For roadside revegetation, landscape planting, and revegetation of natural areas impacted by construction, the use of native plants would be considered to improve the visual aesthetics and to control the introduction of

invasive species. Landscaping will be provided along a segment of the newly constructed Haslet Parkway (**Appendix C**) as part of the Preferred Alternative and is anticipated to include small and large trees and a landscaping berm. Hydromulch will be applied to the remaining unpaved portions of the proposed project with no planned landscaping.

10. 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.
11. Any unanticipated hazardous materials or petroleum contamination encountered during construction would be handled according to applicable federal and state regulations per TxDOT Standard Specifications.
12. Implementation of fugitive dust control measures contained in standard specifications and encouragement of TERP participation as discussed in **Section 5.12** of this EA.
13. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.
14. Any drinking water wells unexpectedly encountered would need to be properly removed and disposed of during construction of the project in accordance with TxDOT's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells).

9.0 Conclusion

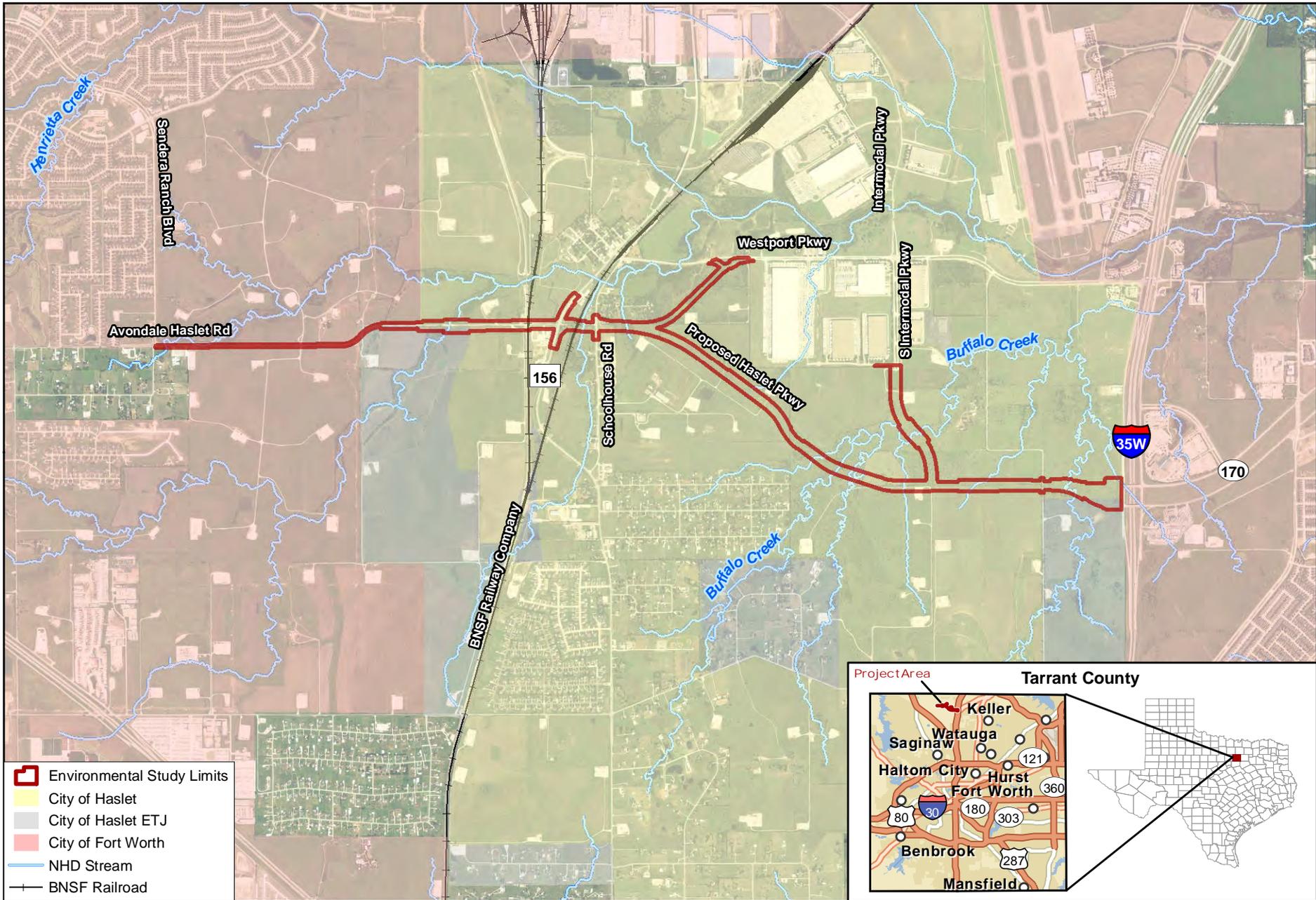
Implementation of the proposed project (Preferred Alternative) would not result in a significant impact on the human or natural environment. Therefore, a finding of no significant impact is recommended.

10.0 References

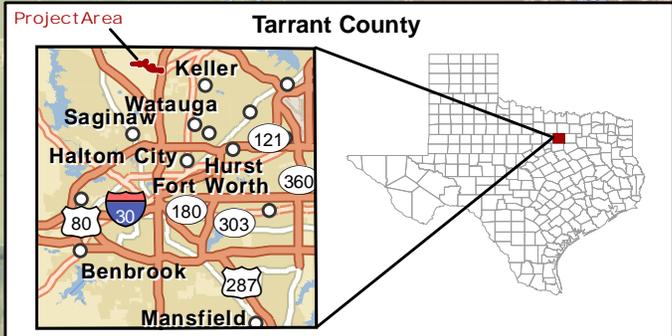
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Appendix A—Project Location Maps



- Environmental Study Limits
- City of Haslet
- City of Haslet ETJ
- City of Fort Worth
- NHD Stream
- BNSF Railroad

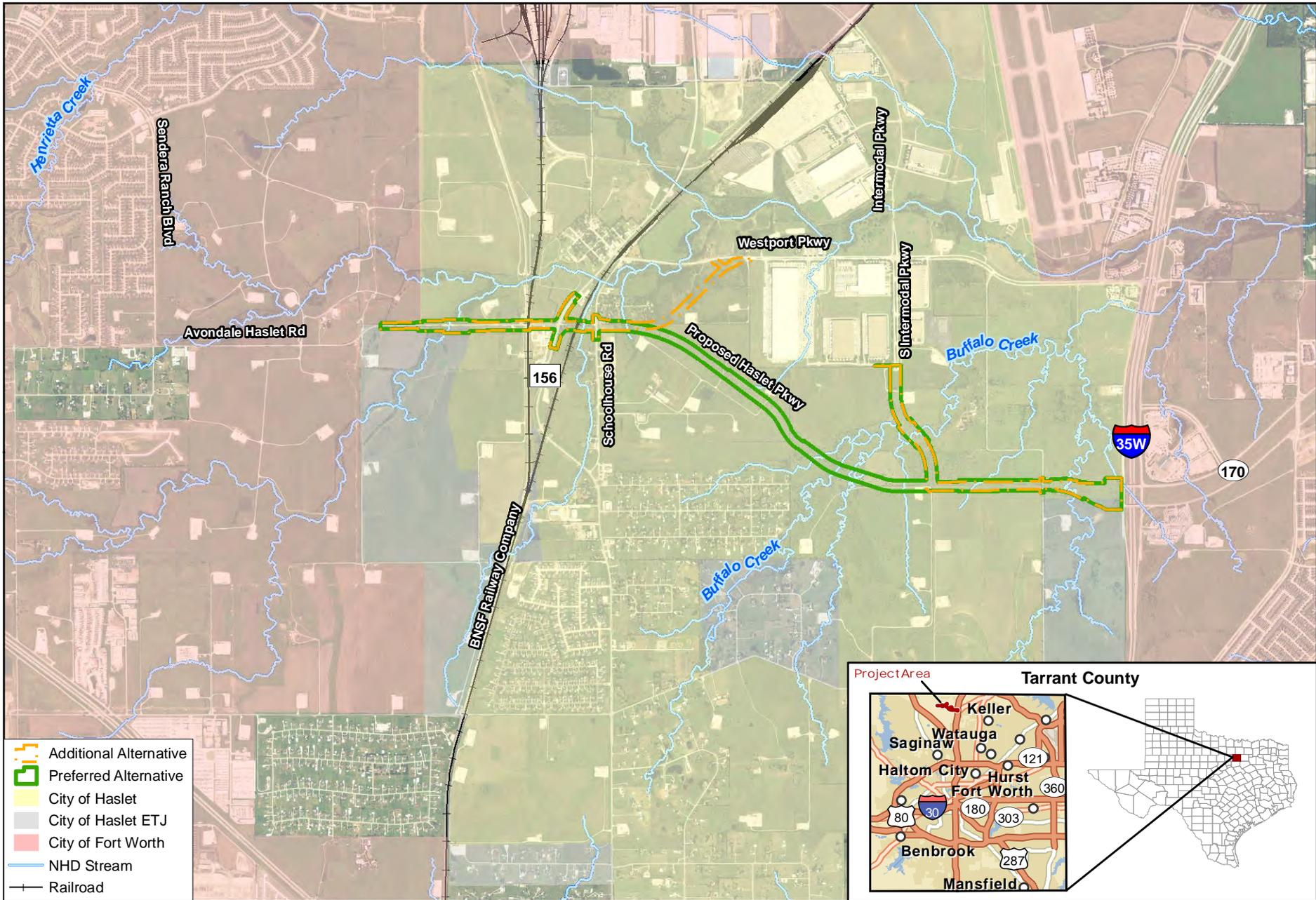


Project Location
(Aerial Base)

AllianceTexas/Haslet Accessibility Improvement Project

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	1 in = 3,000 feet Scale: 1:36,000 Date: 5/22/2019
Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021, and 0902-90-141	
Data Sources: NHD (2018), TxDOT (2018) Aerial Source: NAIP (2016)	

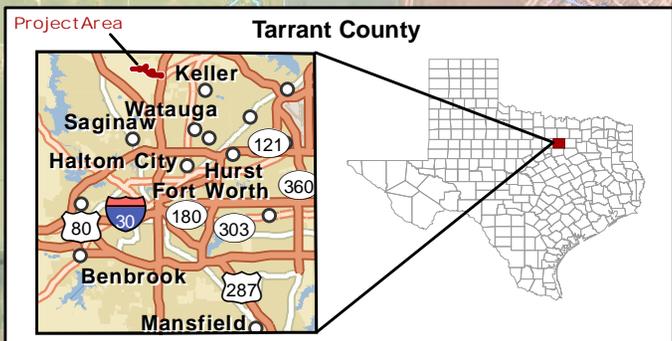


Build Alternatives
(Aerial Base)

AllianceTexas/Haslet Accessibility Improvement Project

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-  Additional Alternative
-  Preferred Alternative
-  City of Haslet
-  City of Haslet ETJ
-  City of Fort Worth
-  NHD Stream
-  Railroad



Data Sources: NHD (2018), TxDOT (2018)		Prepared for: TxDOT
Aerial Source: NAIP (2016)		CSJ: 0902-90-020, 0902-90-021, and 0902-90-141
Scale: 1:36,000		Date: 5/22/2019

Appendix B—Project Photos



Photo 1 – View of intersection of Avondale-Haslet Road and Sendera Ranch Boulevard, facing north.



Photo 2 – View of project construction begin on Avondale-Haslet Road, facing east.



Photo 3 – View of FM 156 from intersection with Avondale-Haslet Road, facing north.



Photo 4 – View of Westport Parkway, facing west.



Photo 5: View of WPA wall on Schoolhouse Road north of Haslet Elementary School, facing east.



Photo 6: View of WPA wall on Schoolhouse Road north of Haslet Elementary School, facing north.



Photo 7 – View of location of proposed Haslet Parkway, facing west.



Photo 8 – View of location of proposed extension of Intermodal Parkway, facing south.

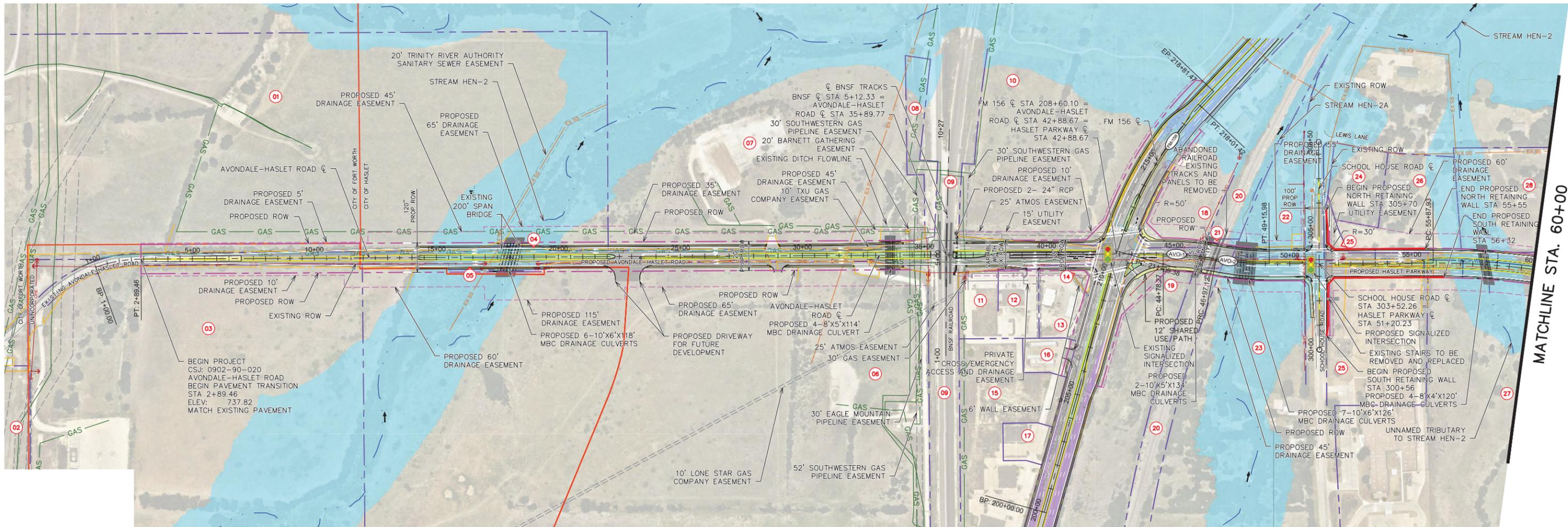
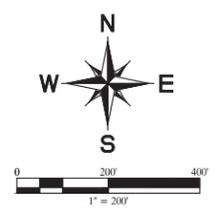


Photo 9 – View of I-35W near project end, facing east.



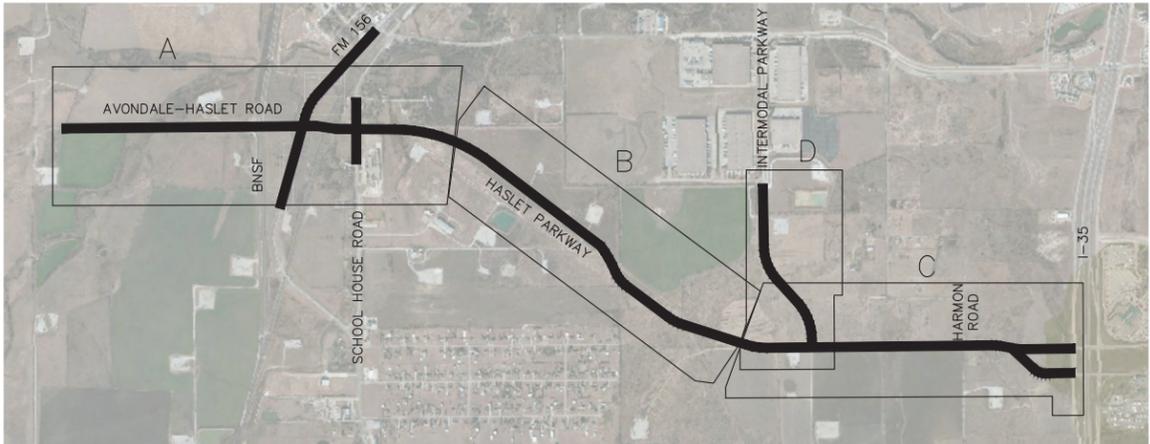
Photo 10 – View of location of proposed Haslet Parkway near eastern project end, facing west.

Appendix C—Schematics



LEGEND

- EXISTING CITY LIMITS
- PROPOSED RIGHT OF WAY
- PROPOSED PERMANENT EASEMENT
- EXISTING RIGHT OF WAY / PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF PAVEMENT
- PROPOSED FACE OF CURB
- EX WL — EXISTING WATER LINE
- PROP WL — PROPOSED WATER LINE
- EX SS — EXISTING SANITARY SEWER LINE
- PROP SS — PROPOSED SANITARY SEWER LINE
- GAS — EXISTING GAS LINE
- OHE — EXISTING CREEK UTILITY
- CBL — EXISTING OVERHEAD UTILITY
- X — EXISTING UNDERGROUND CABLE
- EXISTING FENCE
- PROPOSED ROADWAY CENTERLINE / BASELINE
- PROPOSED RETAINING WALL
- FUTURE ROADWAY
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- 100-YEAR FLOODPLAIN LIMITS
- EXISTING GRAVEL DRIVEWAY
- REMOVALS
- TRAFFIC SIGNAL
- PARCEL NUMBER
- FLOW DIRECTION

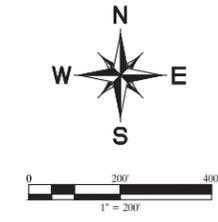
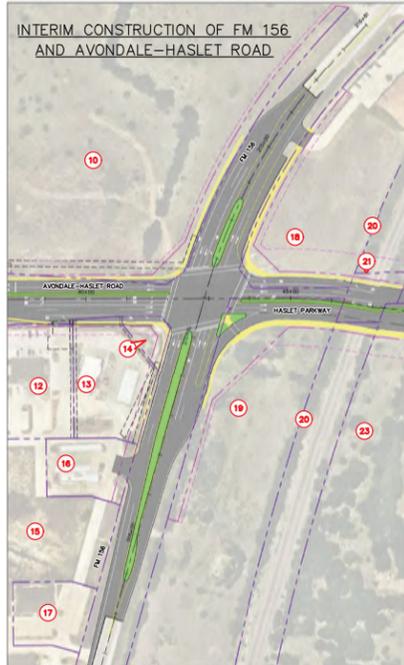


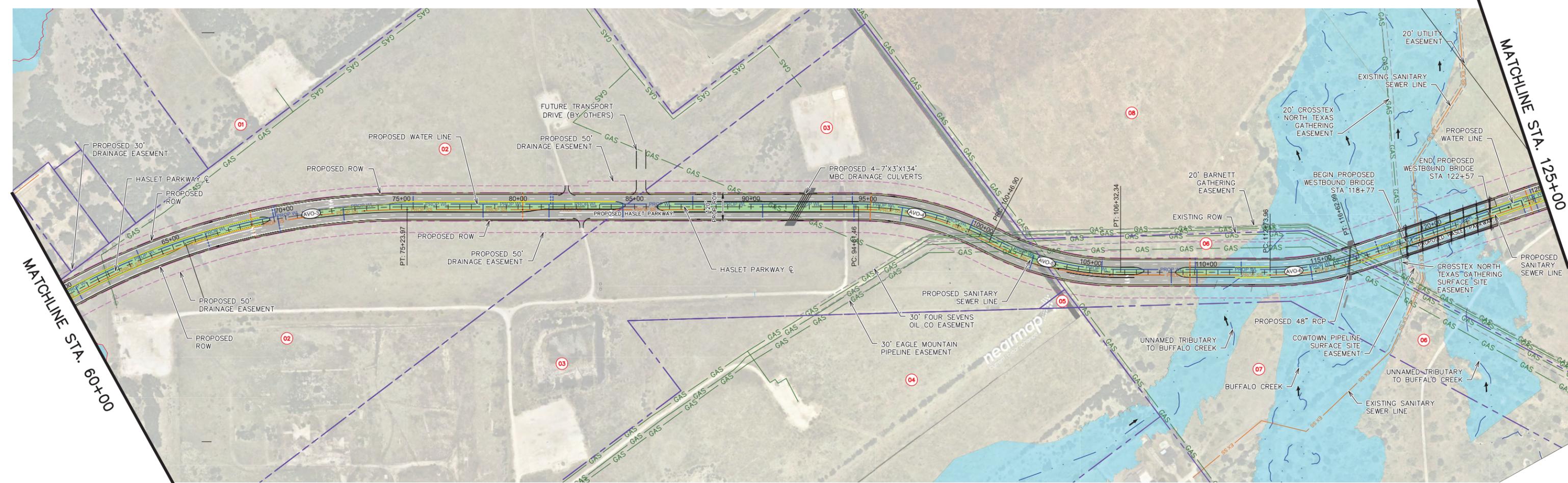
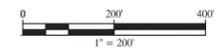
AFFECTED PROPERTY OWNERS

PARCEL NUMBER	OWNER NAME
01	HALL-NANCE RANCHES LTD
02	HALL-NANCE RANCHES LTD
03	TRIPLE T FARMS LTD
04	STATE OF TEXAS
05	TARRANT COUNTY
06	TRIPLE T FARMS LTD
07	HALL-NANCE RANCHES LTD
08	BNSF RAILWAY CO
09	BNSF RAILWAY CO
10	ADL DEVELOPMENT LP
11	LETARA VILLAGE
12	LETARA VILLAGE
13	LETARA VILLAGE
14	LETARA VILLAGE
15	TRIPLE T FARMS LTD
16	LETARA VILLAGE

AFFECTED PROPERTY OWNERS

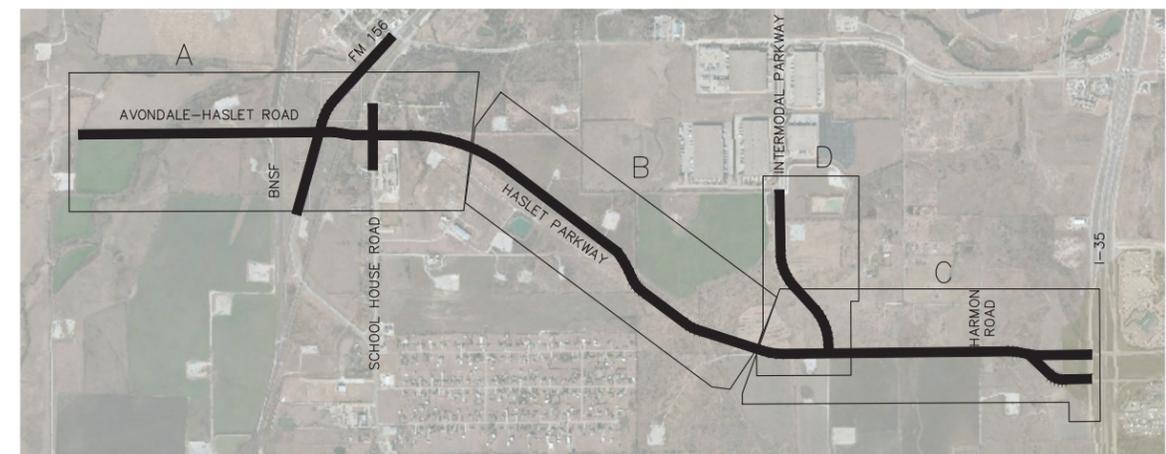
PARCEL NUMBER	OWNER NAME
17	LETARA VILLAGE
18	OAKMONT REALTY LTD
19	FLAT TRACKS LP
20	BNSF RAILWAY CO
21	HASLET CITY OF
22	HASLET CITY OF
23	LIFEGATE CHURCH INC
24	WESLEY VERNON
25	HASLET ELEMENTARY SITE
26	YOUNG ADDITION
27	ELECTRIC POWER RESEARCH INSTITUTE
28	RIVERSONG CORPORATION





LEGEND

- EXISTING CITY LIMITS
- - - PROPOSED RIGHT OF WAY
- - - PROPOSED PERMANENT EASEMENT
- - - EXISTING RIGHT OF WAY/PROPERTY LINE
- - - EXISTING EASEMENT
- - - EXISTING EDGE OF PAVEMENT
- - - PROPOSED FACE OF CURB
- EX WL EXISTING WATER LINE
- PROP WL PROPOSED WATER LINE
- EX SS EXISTING SANITARY SEWER LINE
- PROP SS PROPOSED SANITARY SEWER LINE
- GAS EXISTING GAS LINE
- GAS EXISTING CREEK CENTERLINE
- OHE EXISTING OVERHEAD UTILITY
- CBL EXISTING UNDERGROUND CABLE
- X EXISTING FENCE
- PROPOSED ROADWAY CENTERLINE / BASELINE
- PROPOSED RETAINING WALL
- FUTURE ROADWAY
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- 100-YEAR FLOODPLAIN LIMITS
- EXISTING GRAVEL DRIVEWAY
- REMOVALS
- TRAFFIC SIGNAL
- 01 PARCEL NUMBER
- FLOW DIRECTION

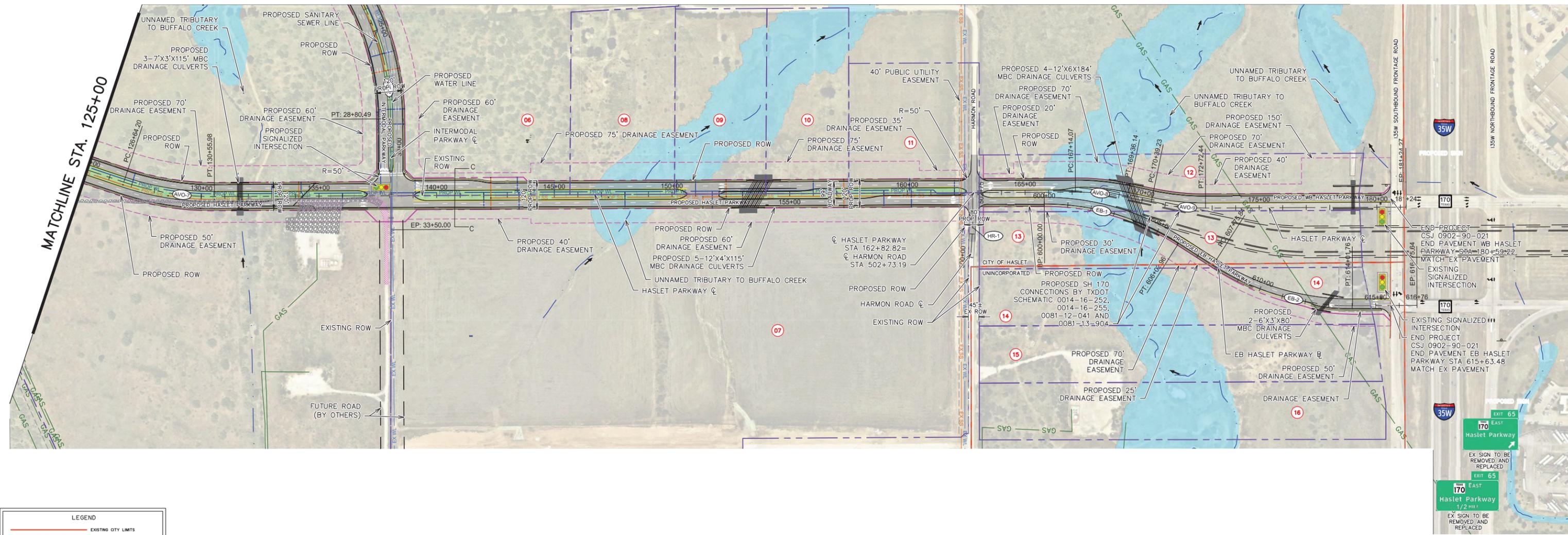
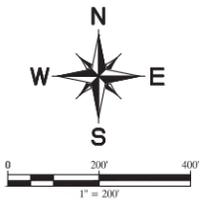


AFFECTED PROPERTY OWNERS

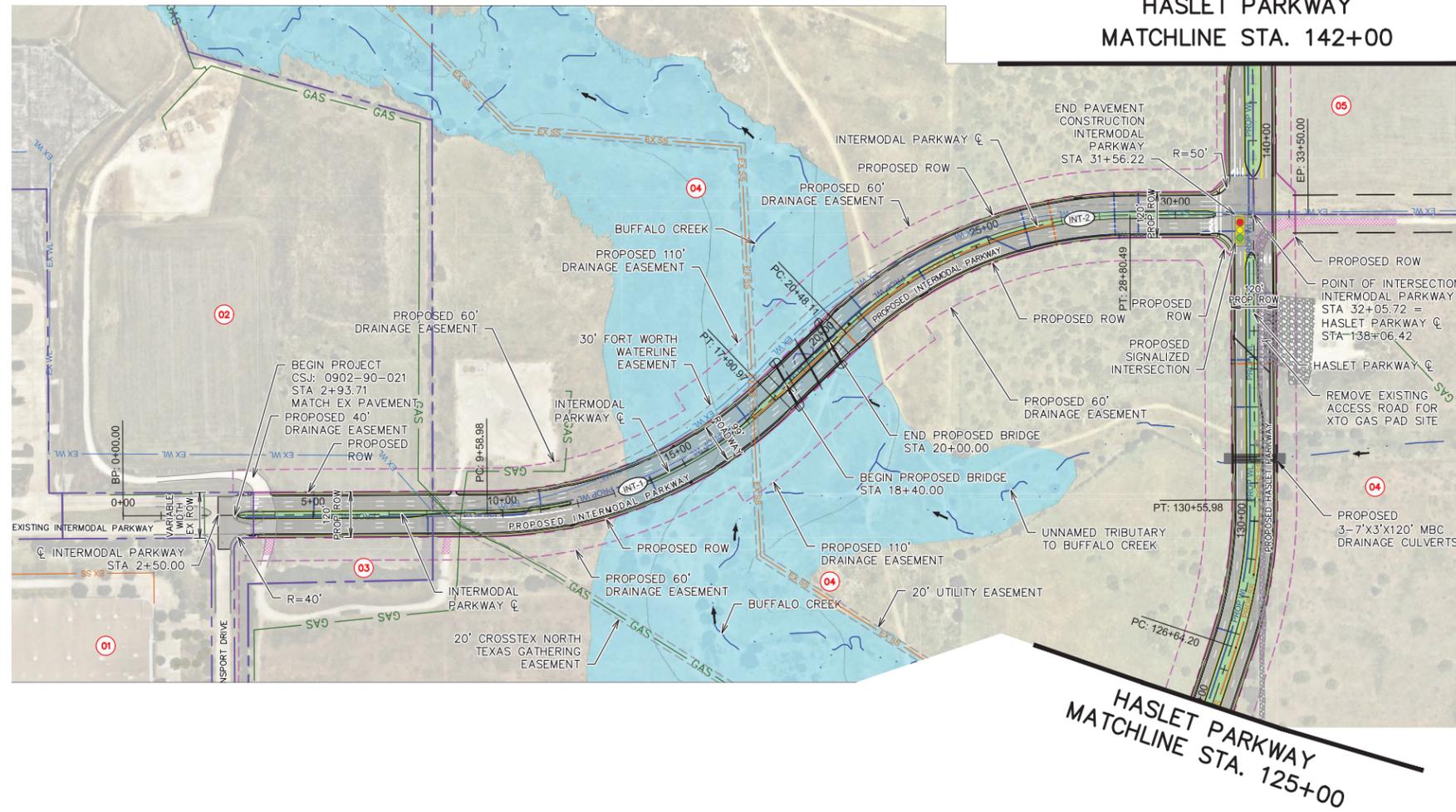
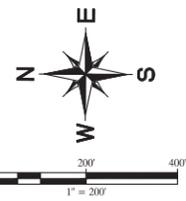
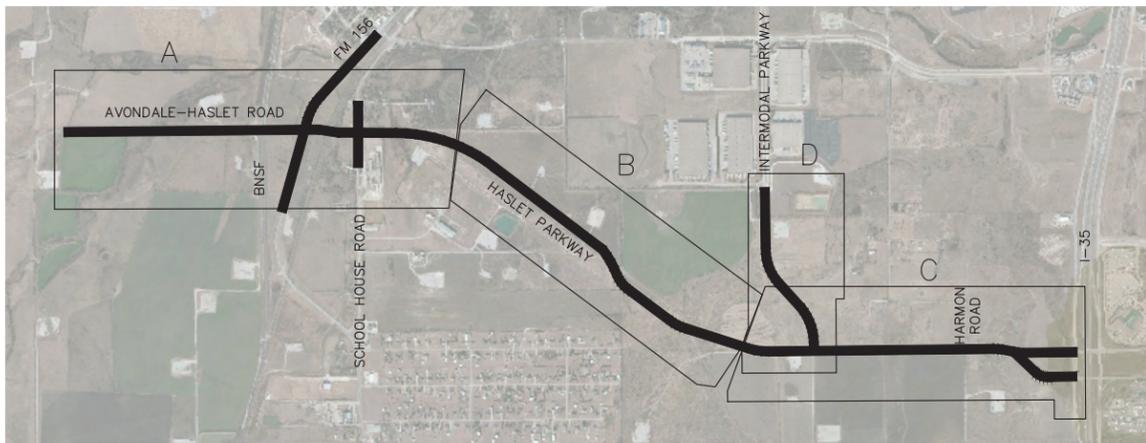
PARCEL NUMBER	OWNER NAME
01	MADISON HASLET LLC
02	ELECTRIC POWER RESEARCH INSTITUTE
03	ELECTRIC POWER RESEARCH INSTITUTE
04	HASLET-78 LTD
05	ELECTRIC POWER RESEARCH INSTITUTE
06	ELECTRIC POWER RESEARCH INSTITUTE
07	FORT WORTH RAILROAD SALVAGE INC
08	FORT WORTH RAILROAD SALVAGE INC



AFFECTED PROPERTY OWNERS	
PARCEL NUMBER	OWNER NAME
06	FORT WORTH RAILROAD SALVAGE INC
07	CARAWAY REI LP
08	FORT WORTH CITY OF
09	FORT WORTH CITY OF
10	FORT WORTH CITY OF
11	GERALD WAYNE WOOTEN
12	FORT WORTH CITY OF
13	FORT WORTH CITY OF
14	JMMP MANAGEMNT COMPANY LLC
15	J.R. DEAVERS JR.
16	J.R. DEAVERS JR.



LEGEND	
[Red line]	EXISTING CITY LIMITS
[Dashed red line]	PROPOSED RIGHT OF WAY
[Dashed blue line]	PROPOSED PERMANENT EASEMENT
[Dashed purple line]	EXISTING RIGHT OF WAY / PROPERTY LINE
[Dashed green line]	EXISTING EASEMENT
[Dashed yellow line]	EXISTING EDGE OF PAVEMENT
[Dashed orange line]	PROPOSED FACE OF CURB
[Blue line]	EXISTING WATER LINE
[Red line]	PROPOSED WATER LINE
[Green line]	EXISTING SANITARY SEWER LINE
[Orange line]	PROPOSED SANITARY SEWER LINE
[Purple line]	EXISTING GAS LINE
[Yellow line]	PROPOSED GAS LINE
[Blue line]	EXISTING CREEK CENTERLINE
[Red line]	EXISTING OVERHEAD UTILITY
[Green line]	EXISTING UNDERGROUND CABLE
[Black line]	EXISTING FENCE
[Red line]	PROPOSED ROADWAY CENTERLINE / BASELINE
[Red line]	PROPOSED RETAINING WALL
[Red line]	FUTURE ROADWAY
[Grey area]	PROPOSED PAVEMENT
[Yellow area]	PROPOSED SIDEWALK
[Green area]	PROPOSED MEDIAN
[Blue area]	100-YEAR FLOODPLAIN LIMITS
[Dotted area]	EXISTING GRAVEL DRIVEWAY
[Cross-hatched area]	REMOVALS
[Traffic signal icon]	TRAFFIC SIGNAL
[Parcel number icon]	PARCEL NUMBER
[Arrow icon]	FLOW DIRECTION

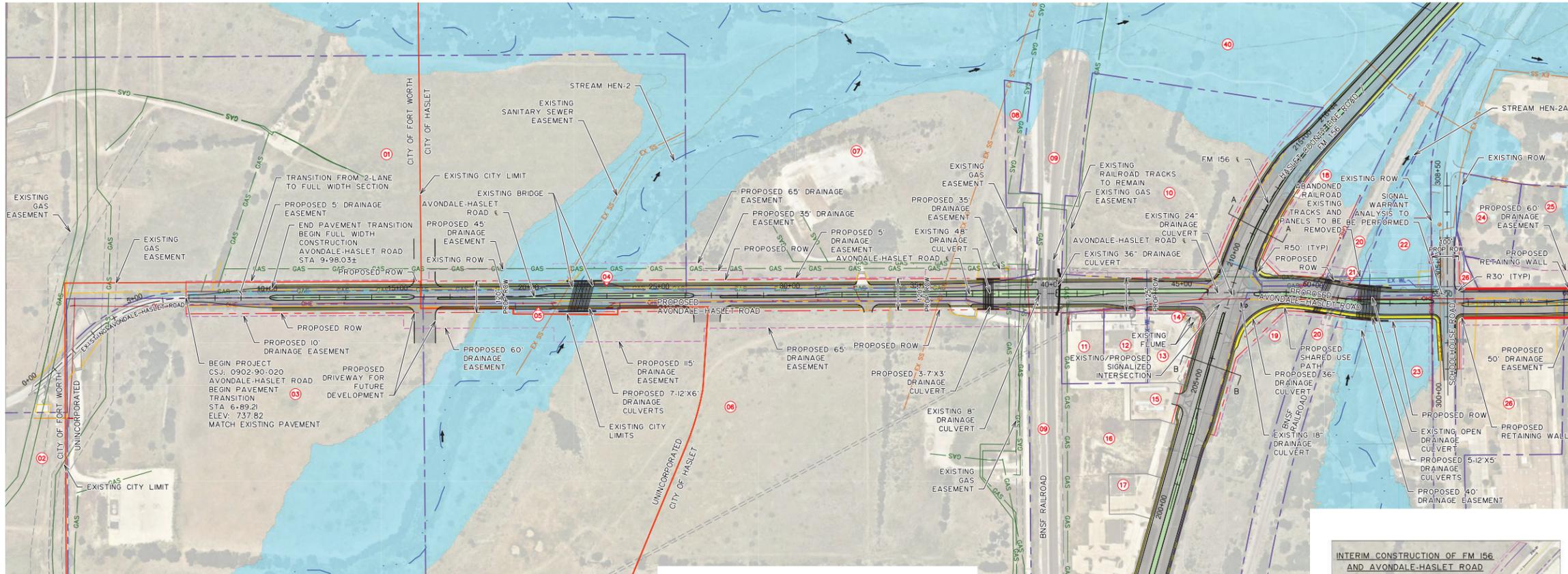
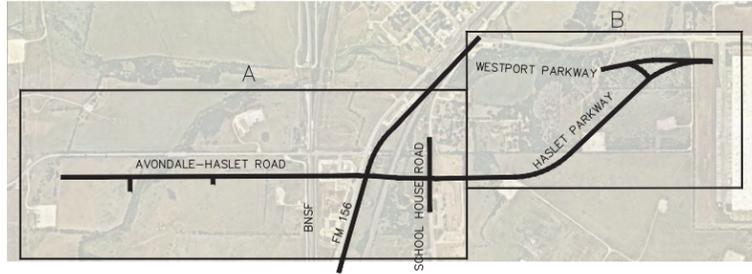


LEGEND

	EXISTING CITY LIMITS
	PROPOSED RIGHT OF WAY
	PROPOSED PERMANENT EASEMENT
	EXISTING RIGHT OF WAY/PROPERTY LINE
	EXISTING EASEMENT
	EXISTING EDGE OF PAVEMENT
	PROPOSED FACE OF CURB
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER LINE
	PROPOSED SANITARY SEWER LINE
	EXISTING GAS LINE
	PROPOSED GAS LINE
	EXISTING OVERHEAD UTILITY
	EXISTING UNDERGROUND CABLE
	EXISTING FENCE
	PROPOSED ROADWAY CENTERLINE / BASELINE
	PROPOSED RETAINING WALL
	FUTURE ROADWAY
	PROPOSED PAVEMENT
	PROPOSED SIDEWALK
	PROPOSED MEDIAN
	100-YEAR FLOODPLAIN LIMITS
	EXISTING GRAVEL DRIVEWAY
	REMOVALS
	TRAFFIC SIGNAL
	PARCEL NUMBER
	FLOW DIRECTION

AFFECTED PROPERTY OWNERS

PARCEL NUMBER	OWNER NAME
01	AIL INVESTMENT LP
02	AIL INVESTMENT LP
03	AIL INVESTMENT LP
04	FORT WORTH RAILROAD SALVAGE INC
05	CARAWAY REI LP



MATCHLINE STA. 60+00

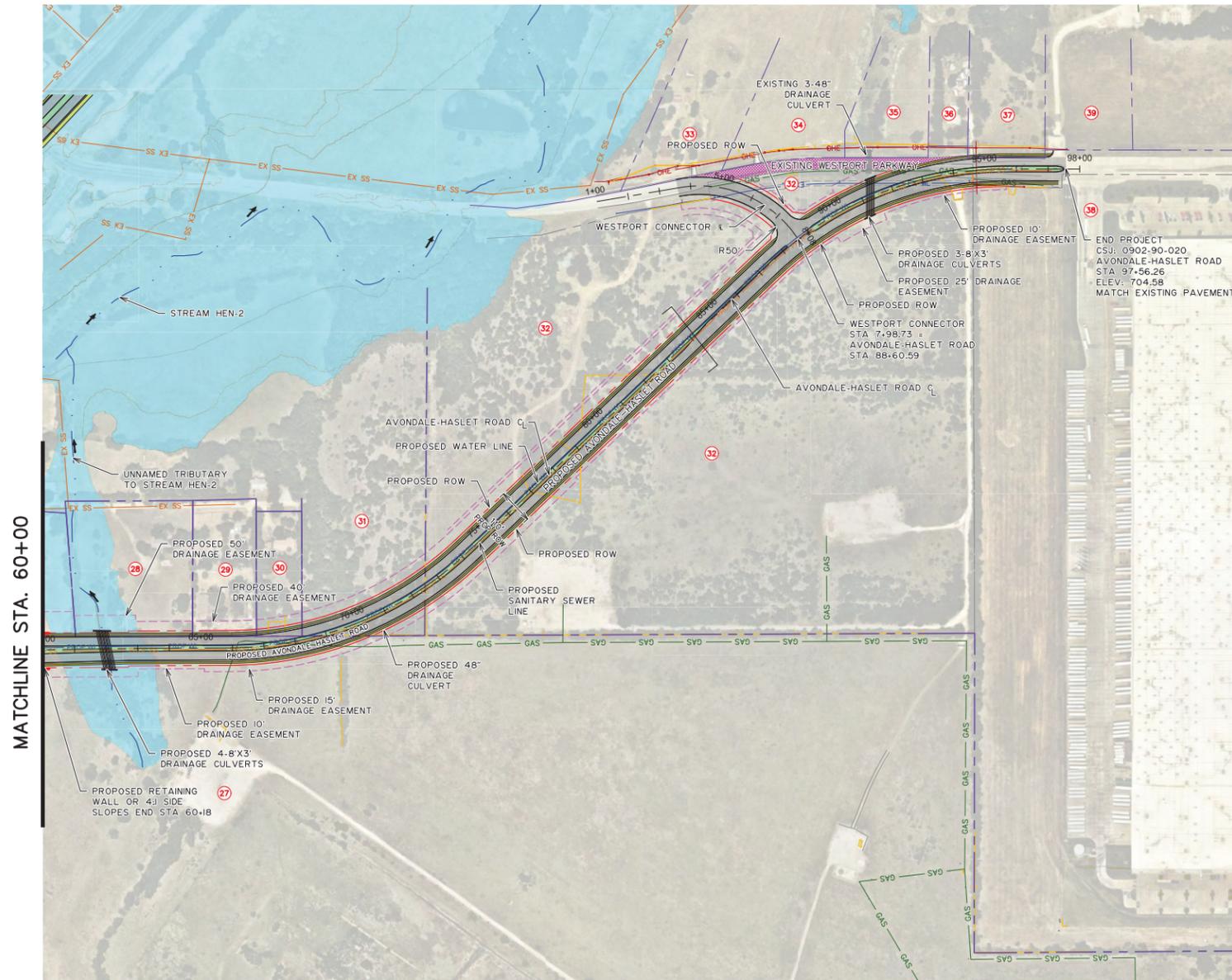
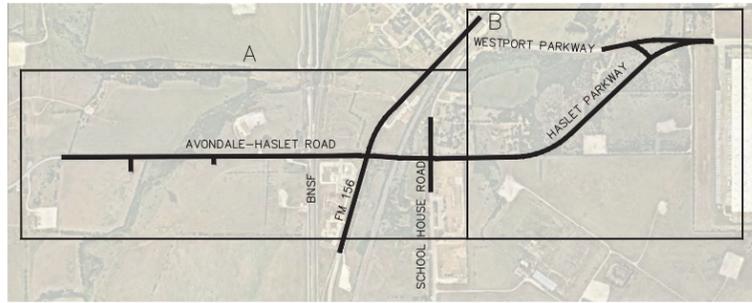
LEGEND

- EXISTING CITY LIMITS
- - - PROPOSED RIGHT OF WAY
- - - PROPOSED PERMANENT EASEMENT
- - - EXISTING RIGHT OF WAY/PROPERTY LINE
- - - EXISTING EASEMENT
- - - EXISTING EDGE OF PAVEMENT
- - - PROPOSED FACE OF CURB
- EX WL EXISTING WATER LINE
- PROP WL PROPOSED WATER LINE
- EX SS EXISTING SANITARY SEWER LINE
- PROP SS PROPOSED SANITARY SEWER LINE
- GAS EXISTING GAS LINE
- ONE EXISTING CREEK CENTERLINE
- CBL EXISTING OVERHEAD UTILITY
- X EXISTING UNDERGROUND CABLE
- X EXISTING FENCE
- - - PROPOSED ROADWAY CENTERLINE / BASELINE
- - - PROPOSED RETAINING WALL
- - - FUTURE ROADWAY
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- 100-YEAR FLOODPLAIN LIMITS
- EXISTING GRAVEL DRIVEWAY
- REMOVALS
- TRAFFIC SIGNAL
- PARCEL NUMBER
- FLOW DIRECTION

AFFECTED PROPERTY OWNERS		AFFECTED PROPERTY OWNERS	
PARCEL NUMBER	OWNER NAME	PARCEL NUMBER	OWNER NAME
01	HALL NANCES-RANCHES LTD	21	HASLET CITY OF
02	HALL NANCES-RANCHES LTD	22	HASLET CITY OF
03	TRIPLE T FARMS LTD	23	LIFE GATE CHURCH INC
04	TEXAS STATE OF	24	WESLEY VERNON
05	TARRANT COUNTY	25	YOUNG ADDITION
06	TRIPLE T FARMS LTD		
07	HALL NANCES-RANCHES LTD		
08	TRIPLE T FARMS CO		
09	BNSF RAILWAY CO		
10	ADL DEVELOPMENT LP		
11	LETARA VILLAGE		
12	LETARA VILLAGE		
13	LETARA VILLAGE		
14	LETARA VILLAGE		
15	LETARA VILLAGE		
16	TRIPLE T FARMS LTD		
17	LETARA VILLAGE		
18	OAKMONT REALTY LTD		
19	FLAT TRACKS LP		
20	BNSF RAILWAY CO		

INTERIM CONSTRUCTION OF FM 156 AND AVONDALE-HASLET ROAD



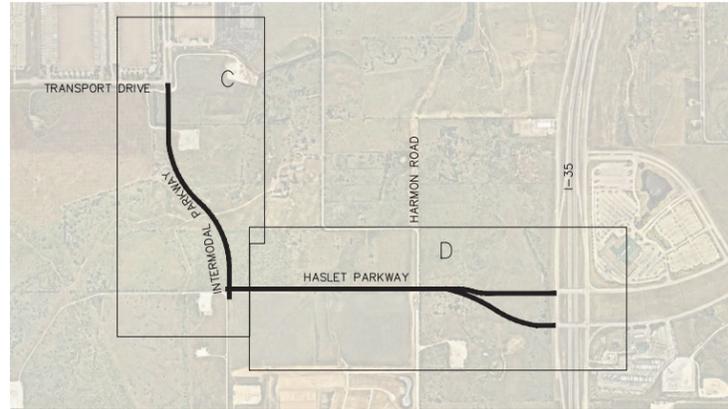


LEGEND

- EXISTING CITY LIMITS
- PROPOSED RIGHT OF WAY
- PROPOSED PERMANENT EASEMENT
- EXISTING RIGHT OF WAY / PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF PAVEMENT
- PROPOSED FACE OF CURB
- EX. WL. EXISTING WATER LINE
- PROP. WL. PROPOSED WATER LINE
- EX. SS. EXISTING SANITARY SEWER LINE
- PROP. SS. PROPOSED SANITARY SEWER LINE
- EX. GAS LINE EXISTING GAS LINE
- PROP. GAS LINE PROPOSED GAS LINE
- EX. O.C. EXISTING CREEK CENTERLINE
- O.H.E. EXISTING OVERHEAD UTILITY
- C.B.L. EXISTING UNDERGROUND CABLE
- EXISTING FENCE
- PROPOSED ROADWAY CENTERLINE / BASELINE
- PROPOSED RETAINING WALL
- FUTURE ROADWAY
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- 100-YEAR FLOODPLAIN LIMITS
- EXISTING GRAVEL DRIVEWAY
- REMOVALS

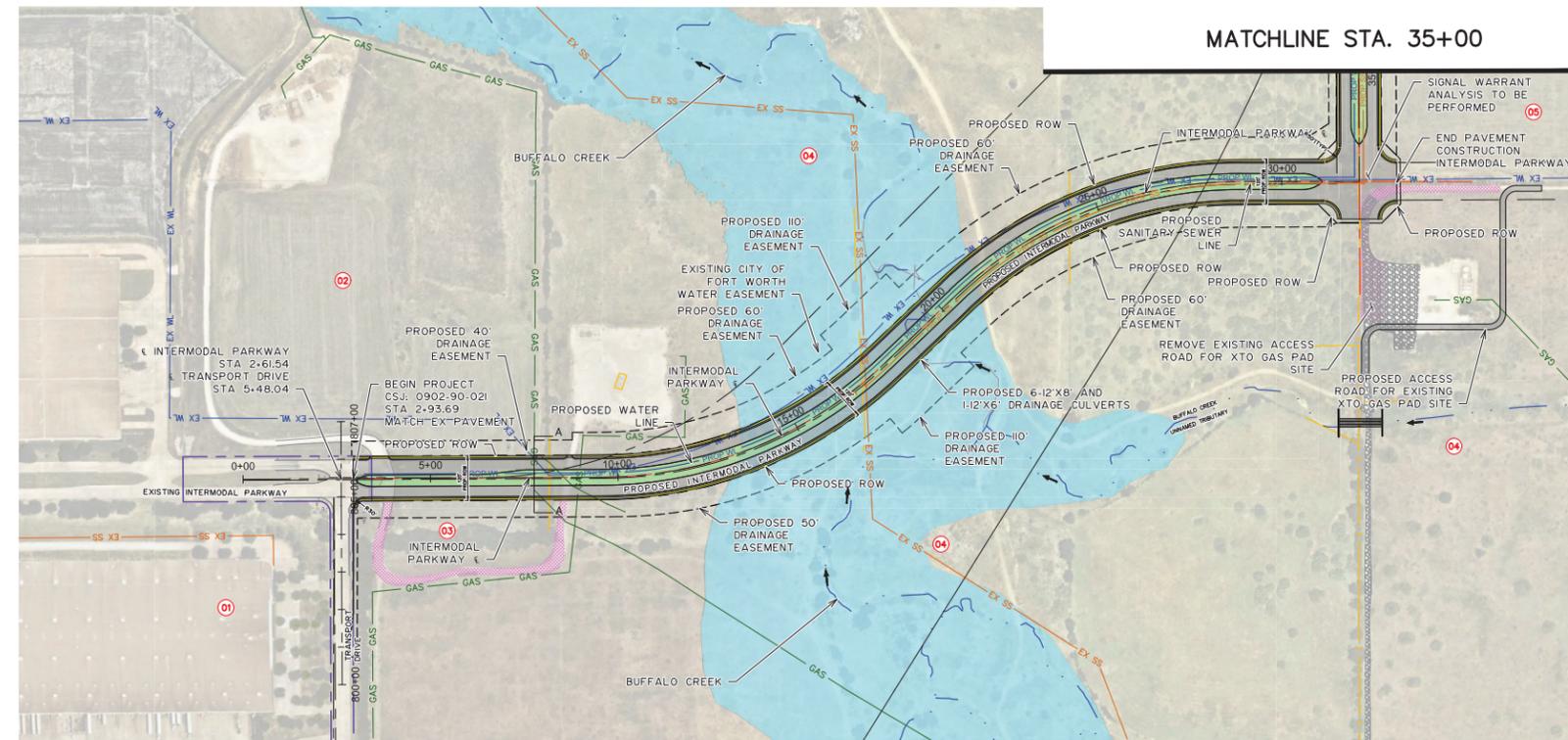
TRAFFIC SIGNAL
 PARCEL NUMBER
 FLOW DIRECTION

27	ELECTRIC POWER RESEARCH INSTITUTE
28	RIVERSONG CORPORATION
29	ELVIS NEAL LEWIS
30	GAYLE S LACY JR
31	WON CHANG INC
32	MADISON HASLET LLC
33	120 LAND CORP
34	121 LAND CORP
35	122 LAND CORP
36	WOODS DONALD J
37	120 LAND CORP
38	AII INVESTMENT LP
39	ADL DEVELOPMENT LP



LEGEND

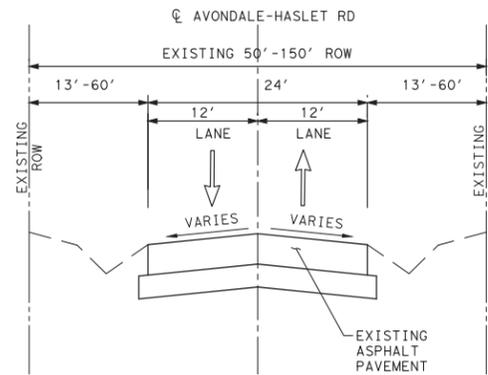
- EXISTING CITY LIMITS
- PROPOSED RIGHT OF WAY
- PROPOSED PERMANENT EASEMENT
- EXISTING RIGHT OF WAY / PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF PAVEMENT
- PROPOSED FACE OF CURB
- EXISTING WATER LINE
- EXISTING WATER LINE
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS LINE
- EXISTING GAS LINE
- EXISTING GAS LINE
- EXISTING CREEK CENTERLINE
- EXISTING OVERHEAD UTILITY
- EXISTING UNDERGROUND CABLE
- EXISTING FENCE
- PROPOSED ROADWAY CENTERLINE / BASELINE
- PROPOSED RETAINING WALL
- FUTURE ROADWAY
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- 100-YEAR FLOODPLAIN LIMITS
- EXISTING GRAVEL DRIVEWAY
- REMOVALS
- TRAFFIC SIGNAL
- ⓪ PARCEL NUMBER
- FLOW DIRECTION



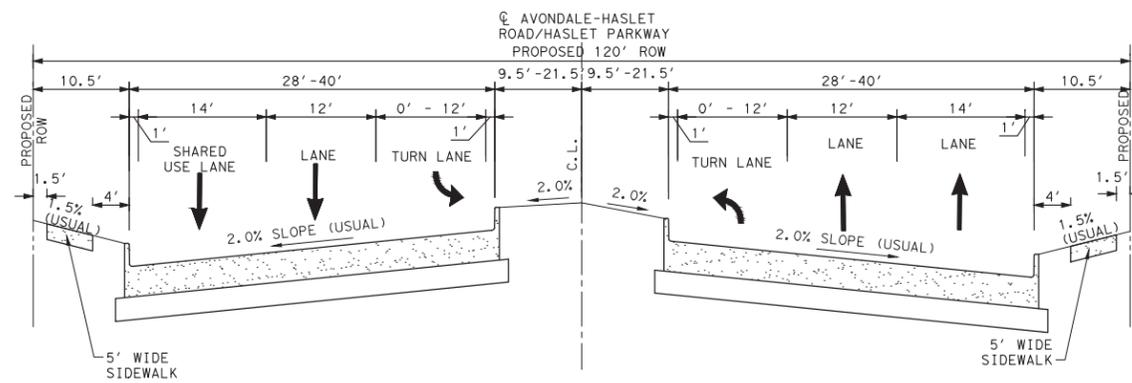
AFFECTED PROPERTY OWNERS

PARCEL NUMBER	OWNER NAME
⓪1	AIL INVESTMENT LP
⓪2	AIL INVESTMENT LP
⓪3	AIL INVESTMENT LP
⓪4	FORT WORTH RAILROAD SALVAGE INC
⓪5	CARAWAY REI LP

Appendix D—Typical Sections

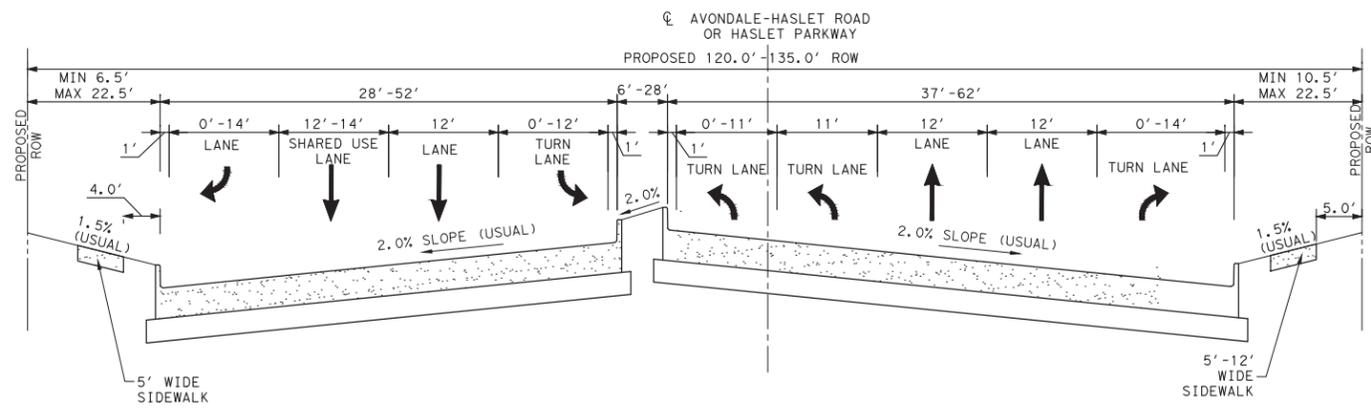


AVONDALE HASLET ROAD
EXISTING TYPICAL SECTION - 2 LANE ASPHALT (UNDIVIDED)

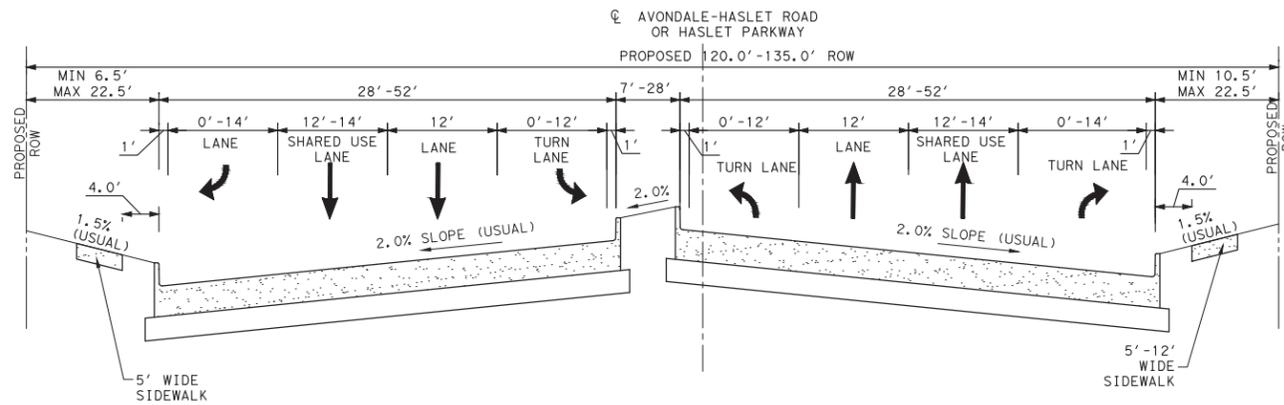


AVONDALE-HASLET ROAD/HASLET PARKWAY
PROPOSED TYPICAL SECTION - 4 LANE (DIVIDED)

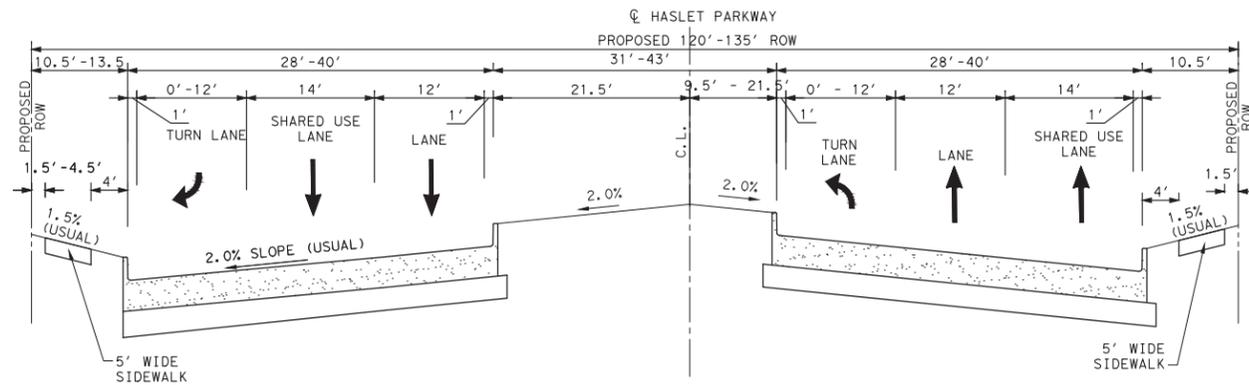




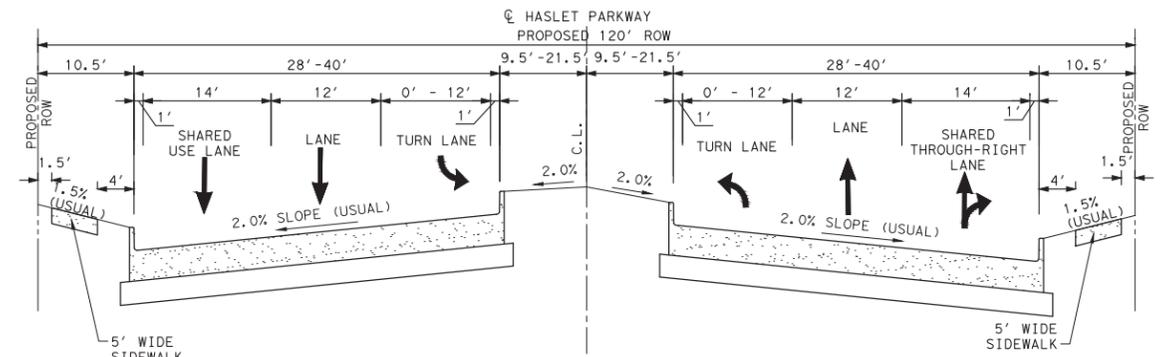
AVONDALE-HASLET ROAD OR HASLET PARKWAY
 PROPOSED WESTBOUND AND EASTBOUND LEFT AND RIGHT TURNS TYPICAL SECTION



HASLET PARKWAY AT SCHOOL HOUSE ROAD
 PROPOSED WESTBOUND AND EASTBOUND LEFT AND RIGHT TURNS TYPICAL SECTION

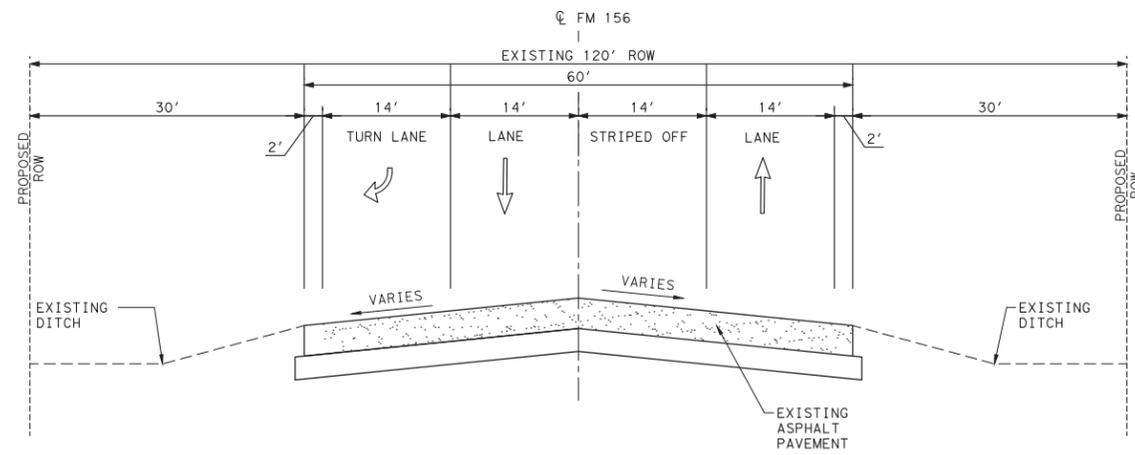


HASLET PARKWAY AT INTERMODAL PARKWAY
 PROPOSED WESTBOUND AND EASTBOUND TURN LANE TYPICAL SECTION

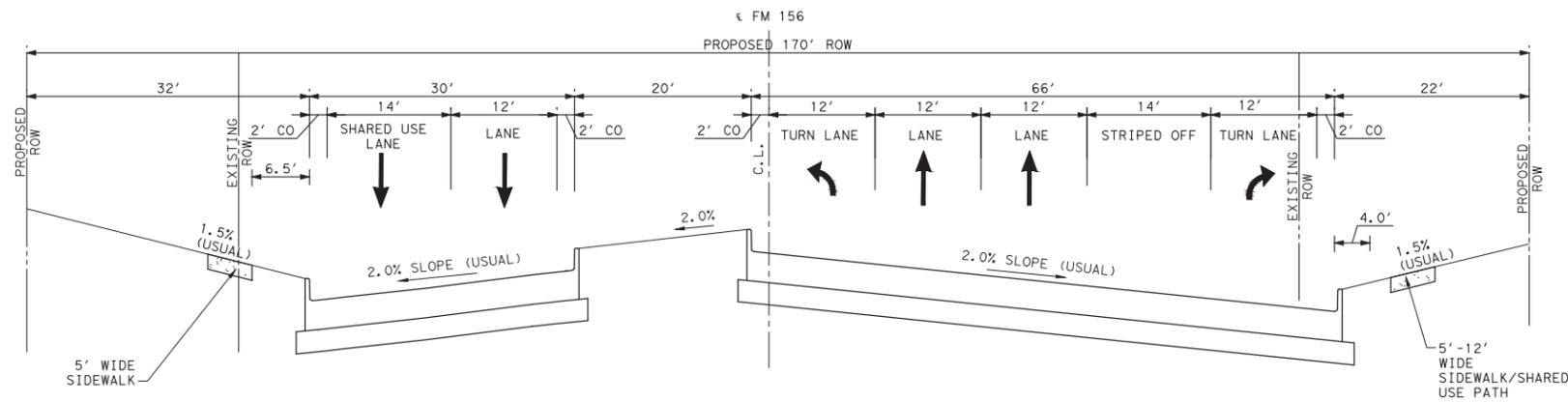


HASLET PARKWAY AT HARMON ROAD
 PROPOSED LEFT AND RIGHT TURNS TYPICAL SECTION

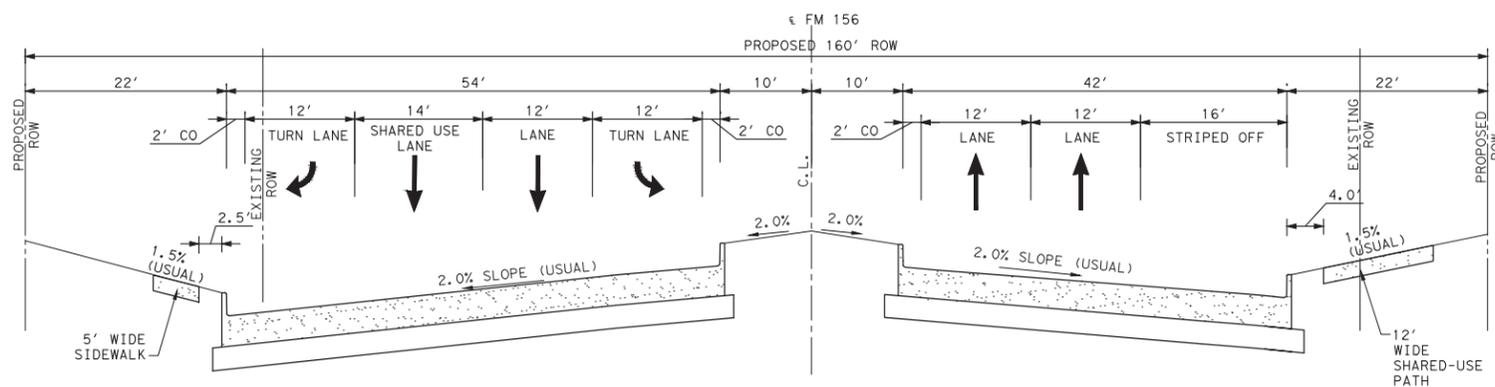




FM 156 AT AVONDALE HASLET ROAD
EXISTING SOUTHBOUND TYPICAL SECTION

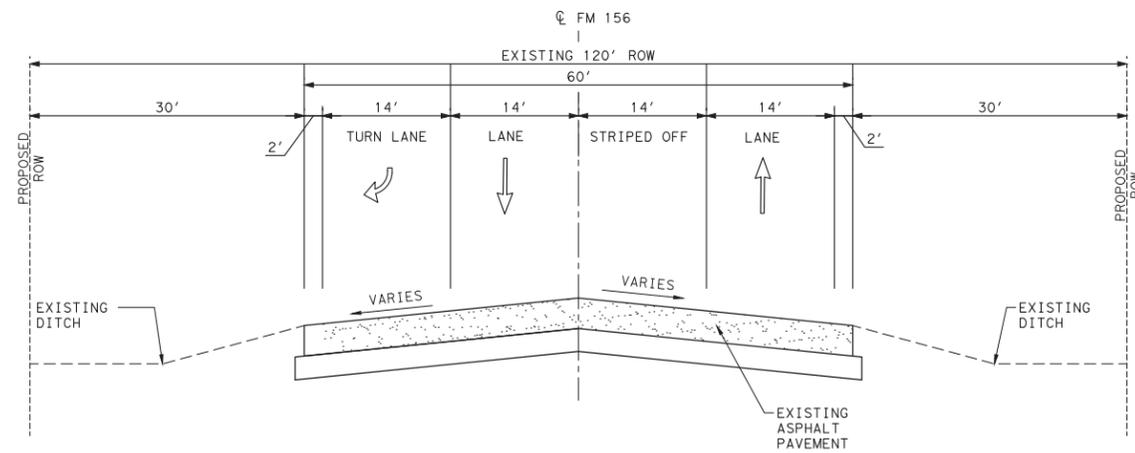


FM 156
PROPOSED NORTHBOUND RIGHT AND
LEFT TURNS TYPICAL SECTION

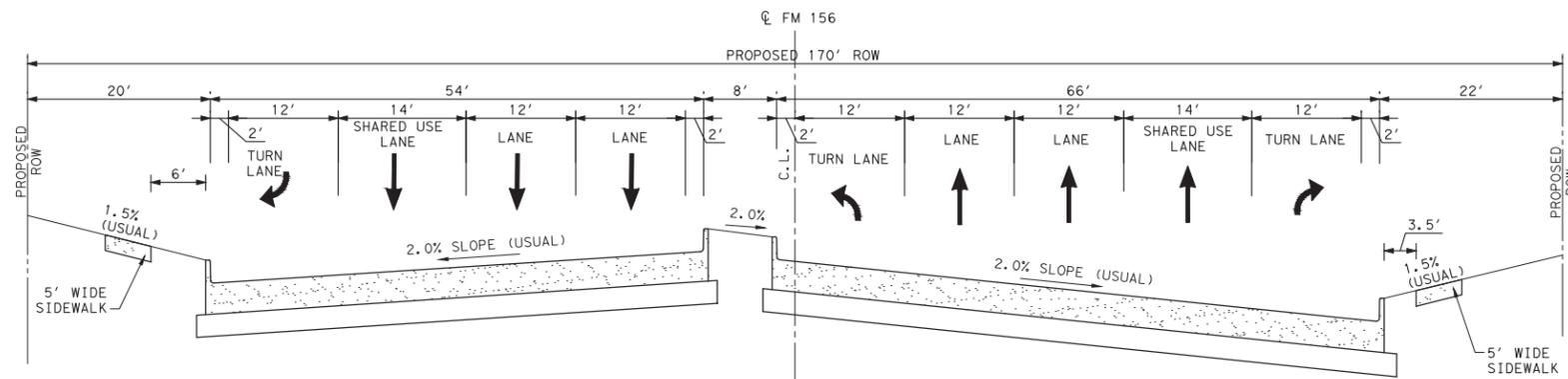


FM 156
PROPOSED SOUTHBOUND RIGHT AND
LEFT TURNS TYPICAL SECTION

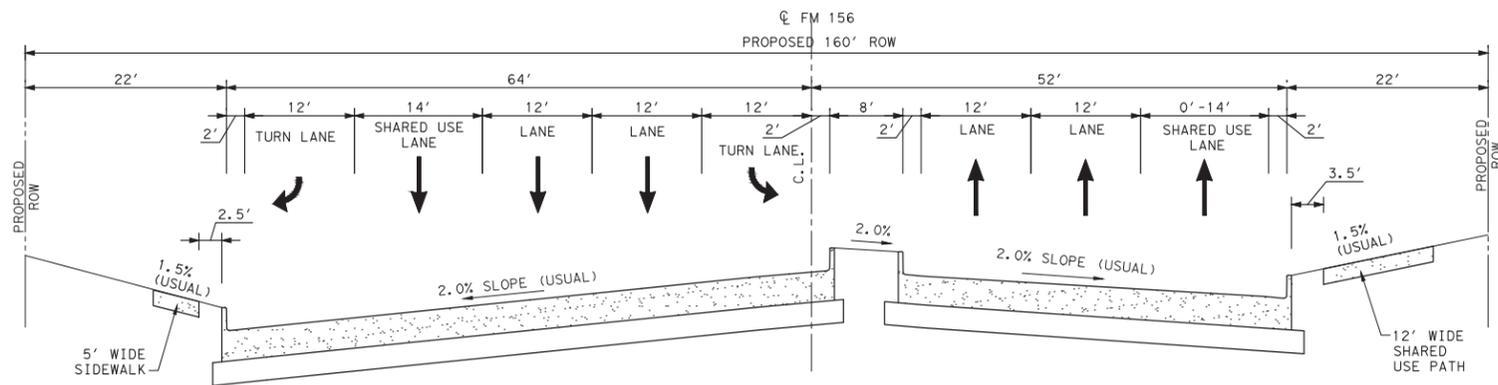




FM 156 AT AVONDALE HASLET ROAD
EXISTING SOUTHBOUND TYPICAL SECTION



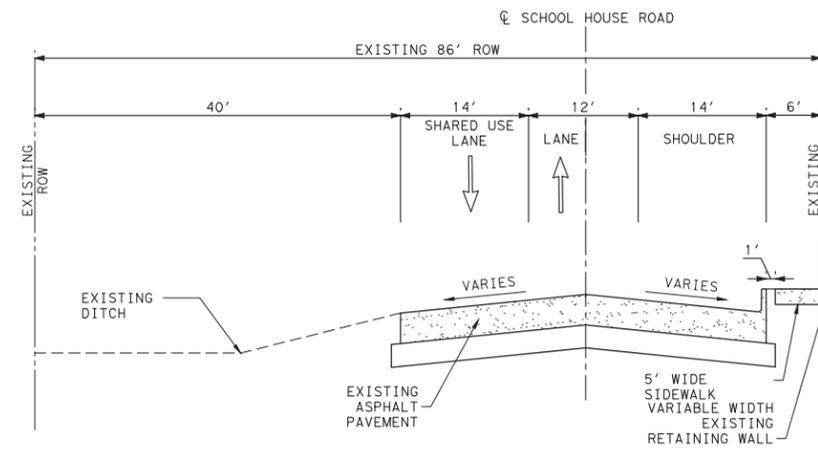
FM 156
ULTIMATE PROPOSED NORTHBOUND RIGHT
AND LEFT TURNS TYPICAL SECTION



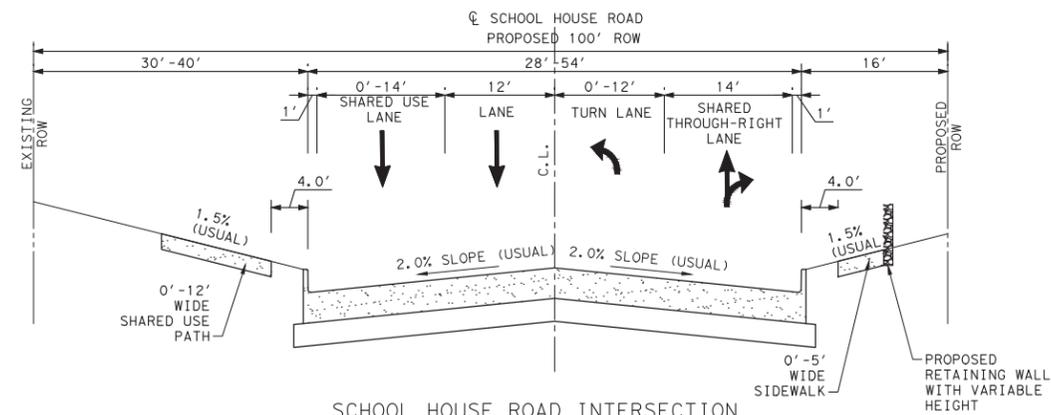
FM 156
ULTIMATE PROPOSED SOUTHBOUND RIGHT
AND LEFT TURNS TYPICAL SECTION

NOTE:
EXISTING ROW VARIES. SOME
LOCATIONS DO NOT HAVE
EXISTING ROW



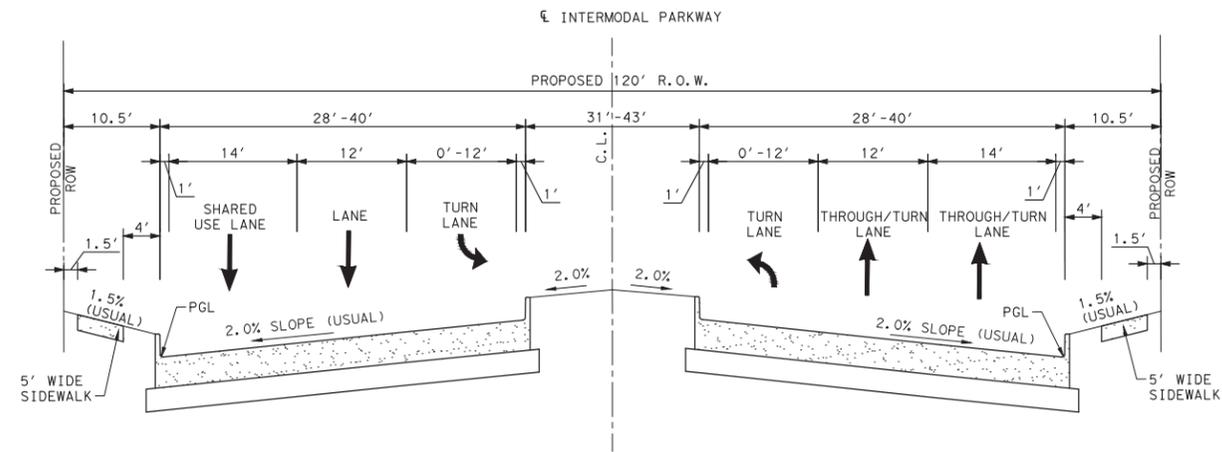


SCHOOL HOUSE ROAD AT HASLET PARKWAY
EXISTING NORTHBOUND AND SOUTHBOUND TYPICAL SECTION

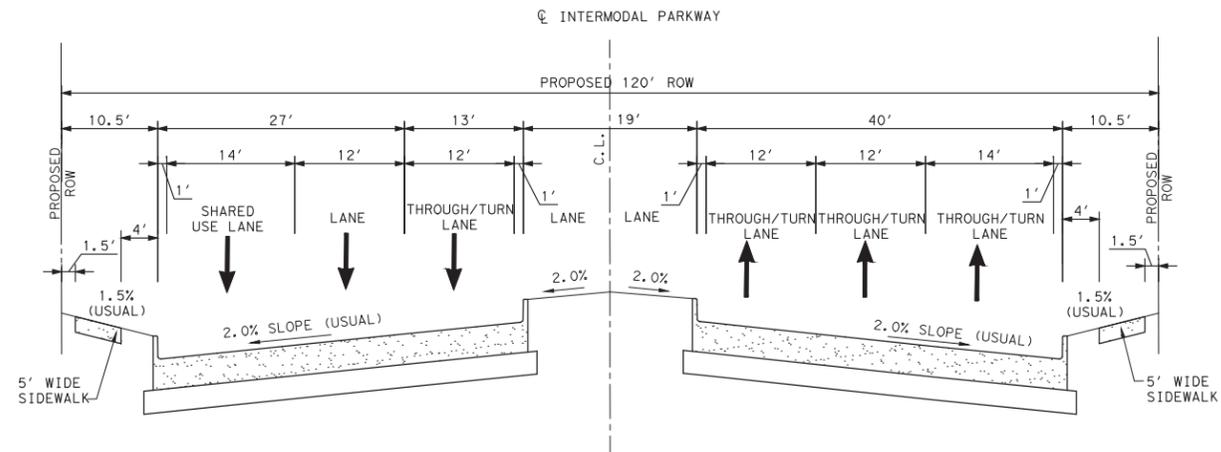


SCHOOL HOUSE ROAD INTERSECTION
PROPOSED TYPICAL SECTION - 4 LANE (UNDIVIDED)



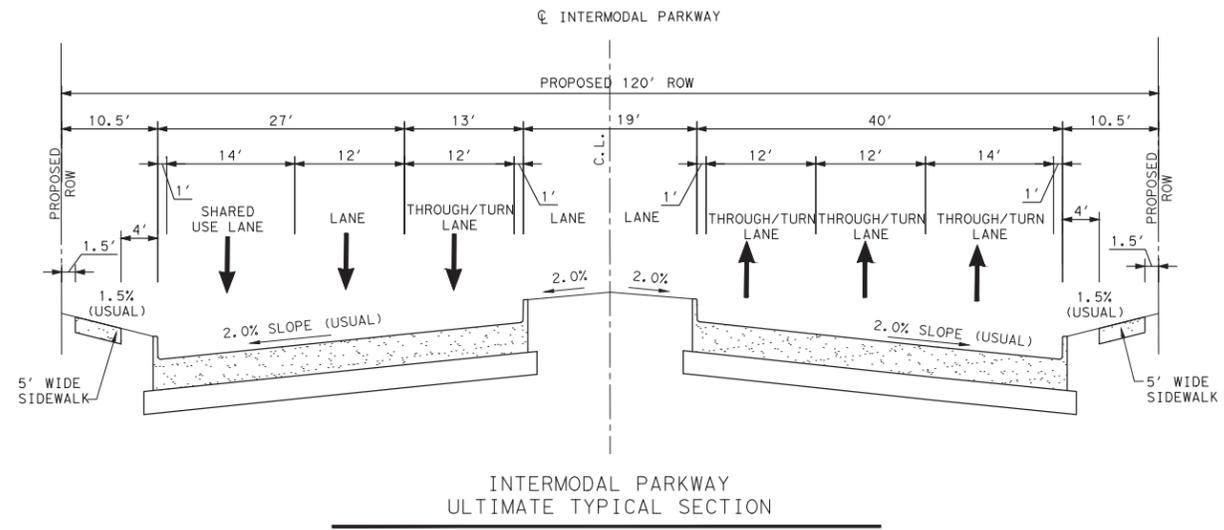


INTERMODAL PARKWAY
PROPOSED TYPICAL SECTION



INTERMODAL PARKWAY
ULTIMATE TYPICAL SECTION





Appendix E—Plan and Program Excerpts

MTP 2045

2019 - 2022 TIP

NCTCOG STIP Fiscal Year 2019

RTC - 2017-2018 CMAQ / STBG Funding Program: Assessment Policy

Non-Regionally Significant Arterials

MTP ID	District	TIP Code	Project Type	CSJ	Facility	From	To	Description	YOE Total Project Cost	FFCS
NRSA1-FTW- 68	TxDOT Fort Worth	13041	Addition of lanes, Bridge, Rail Transit, Reconstruction	0747-05-042	FM 157	US 67	8th Street	Realign roadway 2 lane rural to 2 lane urban with sidewalks and turn lanes	\$9,928,344	Minor Arterial
NRSA1-FTW- 69	TxDOT Fort Worth	14039	Reconstruct	0000-02-019	Glade Road	NB SH 360 Frtg	West Airfield Drive	Reconstruct from 2 to 2 lanes (add center turn lane and shoulders)	\$5,942,036	Minor Arterial
NRSA1-FTW- 71	TxDOT Fort Worth	11898.1	New Roadway; Reconstruct	0902-90-020	Avondale-Haslet	Intermodal Parkway	West of Haslet County Line Road	Construct new 0 to 4 lane and reconstruct existing 2 lane to 4 lane divided urban roadway	\$26,479,000	Major Collector
NRSA1-FTW- 72	TxDOT Fort Worth	55246	Addition of lanes	1605-02-024	FM 1886	SH 199	Parker County Line	Widen 2 lane rural to 6 lane urban divided	\$95,065,116	Minor Arterial/ Major Collector
NRSA1-FTW- 73	TxDOT Fort Worth	55247	Addition of lanes	1605-01-015	FM 1886	FM 3325	Tarrant County Line	Widen 2 lane rural to 4 lane urban divided (Ultimate 6 lanes)	\$71,323,836	Major Collector
NRSA1-FTW- 74	TxDOT Fort Worth	13004.3	New Roadway	0013-09-012	BU 81-D	CR 1160 - Realigned FM 1810 Intersection	North of CR 2090	Realignment of BU 81-D at realigned intersection of US 81/287 & FM 1810/BU 81-D	\$977,698	Major Collector
NRSA1-PAR- 4	TxDOT Paris	54112	New roadway	2659-02-001	SS 1570	SH 66	US 380	Construct 2 lanes (4 lane ultimate) divided highway on new location	\$11,904,439	Major Collector
NRSA1-PAR- 6	TxDOT Paris	13039	Widening	2658-01-013	FM 2642	FM 35	SH 66	Widen 2 lane to 4 lane divided urban with sidewalks	\$23,728,088	Major Collector
NRSA1-PAR- 7	TxDOT Paris	13052	Widening	2659-01-010	FM 1570	IH 30	SH 66	Construct 2 lane to 4 lane divided with shoulders (HMAC Pavement and RR crossing) North Project	\$23,507,081	Major Collector

**Mobility 2045
RSA Improvements Table**

Revised February 5, 2019

RSA ID	Agency	County	Facility	From	To	2018*	2020*	2028	2037	2045	YOE Cost
1.330.250	TxDOT Fort Worth	Tarrant	FM 1220 Boat Club Road	Bailey Boswell Road	Azle Avenue	4	4	4	6	6	\$32,884,400
1.350.200	TxDOT Fort Worth	Tarrant	FM 156	Intermodal Parkway	Avondale Haslet Rd	2	2	4	4	4	\$15,610,000
1.350.225	TxDOT Fort Worth	Tarrant	FM 156	Avondale Haslet Rd	US 81/US 287	2	2	4	4	6	\$66,110,000
1.470.200	TxDOT Fort Worth	Tarrant	FM 157 Industrial Blvd	Mid Cities Blvd	Midway Drive	4	4	6	6	6	\$1,100,000
1.470.225	TxDOT Fort Worth	Tarrant	FM 157 Industrial Blvd	Midway Drive	SH 183	4	4	6	6	6	\$1,100,000
1.440.250	TxDOT Fort Worth	Tarrant	FM 1938 Davis Blvd	Dove Road	Randol Mill Avenue	4	4	4	4	6	\$4,262,100
1.440.275	TxDOT Fort Worth	Tarrant	FM 1938 Davis Blvd	Randol Mill Avenue	FM 1709 Southlake Blvd	2	4	4	6	6	\$34,342,000
1.280.275	TxDOT Fort Worth	Tarrant	FM 730	Briar Road	FM 1542 Reno Road	2	2	2	2	4	\$13,968,907
1.280.300	TxDOT Fort Worth	Tarrant	FM 730	FM 1542 Reno Road	SH 199	4	4	4	4	6	\$8,863,485
1.370.225	TxDOT Fort Worth	Tarrant	FM 731 Crowley Road	Sycamore School Road	Main Street	4	4	4	6	6	\$1,100,000
2.350.225	TxDOT Fort Worth	Tarrant	Golden Triangle Blvd	Harmon Road	IH 35W	4	4	4	4	6	\$1,372,798
2.350.250	TxDOT Fort Worth	Tarrant	Golden Triangle Blvd	IH 35W	FM 1709 Keller Parkway	4	4	4	6	6	\$25,991,600
2.360.300	TxDOT Fort Worth	Tarrant	Golden Triangle Blvd	South of Golden Heights Road	Golden Heights Road	2	2	2	4	4	\$2,584,800
2.360.310	TxDOT Fort Worth	Tarrant	Harmon Road	Golden Triangle Blvd	Golden Heights Road	2	2	4	4	4	\$1,148,800
2.325.170	TxDOT Fort Worth	Tarrant	Haslet Parkway	Avondale Haslet Rd	Intermodal Parkway	0	0	4	4	4	\$11,220,210
2.325.180	TxDOT Fort Worth	Tarrant	Haslet Parkway	Intermodal Parkway	West Of IH 35W	0	0	4	4	4	\$15,293,400
2.325.190	TxDOT Fort Worth	Tarrant	Haslet Parkway	West Of IH 35W	IH 35W	0	0	2/2	2/2	2/2	\$2,584,800
1.380.190	TxDOT Fort Worth	Tarrant	Hemphill Street	Lancaster Ave	Vickery Blvd	0	4	4	4	4	\$40,610,000
1.384.200	TxDOT Fort Worth	Tarrant	Intermodal Pkwy	FM 156	Westport Parkway	2	2	2	6	6	\$25,420,000
1.384.225	TxDOT Fort Worth	Tarrant	Intermodal Pkwy	Westport Parkway	SH 170 Extension	0	0	4	4	6	\$21,540,000
2.520.325	TxDOT Fort Worth	Tarrant	Lancaster Avenue	IH 30	US 287	2/2	2/2	2/2	2/2	2/2	\$7,840,277
2.520.350	TxDOT Fort Worth	Tarrant	Lancaster Avenue	US 287	Riverside Drive	3/3	3/3	3/3	3/3	3/3	\$6,329,514
2.520.375	TxDOT Fort Worth	Tarrant	Lancaster Avenue	Riverside Drive	IH 820	6	6	6	6	6	\$107,000,000
1.465.325	TxDOT Fort Worth	Tarrant	Main Street	Dallas Street	Heritage Parkway	2	2	2	4	4	\$3,960,474
2.415.250	TxDOT Fort Worth	Tarrant	Mcleroy Blvd	BU 287 Saginaw Blvd	Western Center Blvd	4	4	6	6	6	\$10,052,000
2.462.250	TxDOT Fort Worth	Tarrant	Midway Road	US 377 Belknap Street	SH 121	2	2	4	4	4	\$13,857,400
1.330.200	TxDOT Fort Worth	Tarrant	Morris Dido Newark Road	Bonds Ranch Road	Heritage Trace Parkway	2	2	2	6	6	\$57,870,800
1.330.210	TxDOT Fort Worth	Tarrant	Morris Dido Newark Road	Heritage Trace Parkway	Bailey Boswell Road	0	0	4	6	6	\$16,585,800
2.390.275	TxDOT Fort Worth	Tarrant	North Tarrant Parkway	IH 35W	US 377 Denton Hwy	4	4	6	6	6	\$24,699,200
2.390.290	TxDOT Fort Worth	Tarrant	North Tarrant Parkway	Lakewood Hill Drive	US 377 Denton Hwy	4	4	4	6	6	\$1,507,800
2.390.350	TxDOT Fort Worth	Tarrant	North Tarrant Parkway	East of Rufe Snow Drive	West of Keller Smithfield Road	4	4	4	6	6	\$3,231,000
1.435.275	TxDOT Fort Worth	Tarrant	Precinct Line Road	SH 10 Hurst Blvd	South of Trinity Blvd	2	2	4	4	4	\$8,975,000
1.435.300	TxDOT Fort Worth	Tarrant	Precinct Line Road	South of Trinity Blvd	Randol Mill Road	2	2	2	4	4	\$7,180,000
2.535.425	TxDOT Fort Worth	Tarrant	Randol Mill Road	Oakland Blvd	Woodhaven Blvd	2	2	4	4	4	\$7,395,400
2.535.475	TxDOT Fort Worth	Tarrant	Randol Mill Road	IH 820	Precinct Line Road	2	2	2	4	4	\$2,496,000
2.535.490	TxDOT Fort Worth	Tarrant	Randol Mill Road	N John T White Road	Racquet Club Drive	2	2	4	4	4	\$1,193,406
1.335.250	TxDOT Fort Worth	Tarrant	Rm 2871 Academy Blvd	IH 30	US 377	2	2	4	4	4	\$52,000,000
1.425.240	TxDOT Fort Worth	Tarrant	Rufe Snow Drive	Ridgetop Street	Ridgetop Road	4	4	6	6	6	\$1,364,200
1.425.250	TxDOT Fort Worth	Tarrant	Rufe Snow Drive	Ridgetop Road	Mid Cities Blvd	4	4	6	6	6	\$7,108,200
2.325.200	TxDOT Fort Worth	Tarrant	SH 170 **	IH 35W	US 377	3/3	3/3	N/A	N/A	N/A	
2.565.300	TxDOT Fort Worth	Tarrant	SH 183 Alta Mere Drive	US 377	IH 30	6	6	6	6	6	\$7,000,000
2.565.325	TxDOT Fort Worth	Tarrant	SH 183 Alta Mere Drive	IH 30	Green Oaks Blvd	2/2	2/2	3/3	3/3	3/3	\$5,000,000
2.565.350	TxDOT Fort Worth	Tarrant	SH 183 Alta Mere Drive	Green Oaks Blvd	Pumphrey Drive	4	4	6	6	6	\$3,000,000
2.565.500	TxDOT Fort Worth	Tarrant	SH 183 Baker Blvd	SH 183, SH 26	SH 10 Baker Blvd	4	4	4	4	4	\$6,000,000
2.565.410	TxDOT Fort Worth	Tarrant	SH 183 NE 28th Street	Deen Road	IH 35W Frontage SB	5	5	5	5	5	\$920,000
2.565.400	TxDOT Fort Worth	Tarrant	SH 183 River Oaks Blvd	Sam Calloway Road	Deen Road	4	4	4	4	4	\$46,000,000
2.565.275	TxDOT Fort Worth	Tarrant	SH 183 Southwest Blvd	Overhill Road	US 377	6	6	6	6	6	\$4,000,000
2.565.225	TxDOT Fort Worth	Tarrant	SH 183	Vickery Blvd	North of Vickery Blvd	2/2	2/2	2/2	2/2	2/2	\$3,000,000
2.565.375	TxDOT Fort Worth	Tarrant	SH 183	Pumphrey Drive	Sam Calloway Road	2/2	2/2	2/2	2/2	2/2	\$2,000,000
2.280.480	TxDOT Fort Worth	Tarrant	SH 199 **	Western Center Blvd	North Of Hanger Cut Off Road	2/3	N/A	N/A	N/A	N/A	
2.280.490	TxDOT Fort Worth	Tarrant	SH 199 **	North of Hanger Cut Off Road	Hanger Cut Off Road	3/3	N/A	N/A	N/A	N/A	
2.280.500	TxDOT Fort Worth	Tarrant	SH 199 **	Hanger Cut Off Road	South Of Hanger Cut Off Road	3/3	N/A	N/A	N/A	N/A	
2.280.525	TxDOT Fort Worth	Tarrant	SH 199 **	South of Hanger Cut Off Road	North Of Nine Mile Bridge Road	2/2	N/A	N/A	N/A	N/A	
2.280.540	TxDOT Fort Worth	Tarrant	SH 199 **	North of Nine Mile Bridge Road	Nine Mile Bridge Road	3/3	N/A	N/A	N/A	N/A	
2.280.550	TxDOT Fort Worth	Tarrant	SH 199 **	Nine Mile Bridge Road	South Of Nine Mile Bridge Road	3/3	N/A	N/A	N/A	N/A	
2.280.560	TxDOT Fort Worth	Tarrant	SH 199 **	South of Nine Mile Bridge Road	North of FM 1886	2/2	N/A	N/A	N/A	N/A	
2.280.570	TxDOT Fort Worth	Tarrant	SH 199 **	North of FM 1886	South of FM 1886	2/2	2/2	N/A	N/A	N/A	
2.280.575	TxDOT Fort Worth	Tarrant	SH 199 **	Rankin Road	East of Rankin Road	2/2	2/2	N/A	N/A	N/A	
2.280.600	TxDOT Fort Worth	Tarrant	SH 199 Jacksboro Hwy **	East of Rankin Road	Begin Frontage Couplet	4	4	N/A	N/A	N/A	
2.280.725	TxDOT Fort Worth	Tarrant	SH 199 Jacksboro Hwy	IH 820	Roberts Cut Off Road	6	6	6	6	6	\$17,859,578
2.280.740	TxDOT Fort Worth	Tarrant	SH 199 Jacksboro Hwy	Roberts Cut Off Road	University Boulevard/Northside Drive	4	4	6	6	6	\$3,733,600
2.280.750	TxDOT Fort Worth	Tarrant	SH 199 Jacksboro Hwy	University Boulevard/Northside Drive	Belknap Street	4	4	4	6	6	\$110,000,000
2.280.625	TxDOT Fort Worth	Tarrant	SH 199 Lake Worth Blvd **	Begin Frontage Couplet	West of Hodgkins Road	2/2	2/2	N/A	N/A	N/A	
2.280.650	TxDOT Fort Worth	Tarrant	SH 199 Lake Worth Blvd **	West of Hodgkins Road	Northwest Centre Drive	3/3	3/3	N/A	N/A	N/A	

* Attainment Years

**Stage facilities reported as 'N/A' indicate project is no longer classified as an arterial and will be reported in Freeway/Tollway Recommendations listing instead.

Note: '2/2' indicates facility operates as couplet.

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR
FORT WORTH	VARIOUS	0902-00-946	VA	C	VARIOUS	NCTCOG
LIMITS FROM:	REGION WIDE PROJECT TO ASSIST LOCAL PARTNERS AS THEY IMPLEMENT AV DEPLOYMENTS BY PROVIDING FUNDING FOR COSTS RELATED					REV DATE: 02/2019
LIMITS TO:	TO DEPLOYMENTS AND SUPPORTING COSTS OF ACTIVE AUTOMATED VEHICLE DEPLOYMENTS IN PARTNERSHIP WITH THE PRIVATE SECTOR;					MPO PROJECT ID: 11684
TIP DESCRIPTION:	INCLUDES LOCAL GOVERNMENT STAFF & CONSULTANT TIME, INFRASTRUCTURE UPGRADES (EX: SIGNAL, STRIPING, DSRC & 5G CONNECTIVITY), LEGAL SERVICES, PUBLIC ED, SAFETY (EX: COORD W/ FIRST RESPONDERS); SOFTWARE & TECH EXPERTISE; NCTCOG ADMINISTRATION					MTP REFERENCE: TT3-005, TT3-006, TT3-007, TT3-010
REMARKS:	ADD PROJECT TO APPENDIX D OF THE 2019-2022 TIP/STIP					

PENDING FHWA APPROVAL

Project History:

FORT WORTH	VARIOUS	0902-00-947	VA	C	VARIOUS	NCTCOG
LIMITS FROM:	REGION WIDE PROJECT TO ASSIST LOCAL PARTNERS AS THEY IMPLEMENT AV DEPLOYMENTS BY PROVIDING FUNDING FOR COSTS RELATED					REV DATE: 02/2019
LIMITS TO:	TO DEPLOYMENTS AND SUPPORTING COSTS OF ACTIVE AUTOMATED VEHICLE DEPLOYMENTS IN PARTNERSHIP WITH THE PRIVATE SECTOR;					MPO PROJECT ID: 11684
TIP DESCRIPTION:	INCLUDES LOCAL GOVERNMENT STAFF & CONSULTANT TIME, INFRASTRUCTURE UPGRADES (EX: SIGNAL, STRIPING, DSRC & 5G CONNECTIVITY), LEGAL SERVICES, PUBLIC ED, SAFETY (EX: COORD W/ FIRST RESPONDERS); SOFTWARE & TECH EXPERTISE; NCTCOG ADMINISTRATION					MTP REFERENCE: TT3-005, TT3-006, TT3-007, TT3-010
REMARKS:	ADD PROJECT TO APPENDIX D OF THE 2019-2022 TIP/STIP					

PENDING FHWA APPROVAL

Project History:

FORT WORTH	TARRANT	0902-90-021	CS	E	HASLET	HASLET
LIMITS FROM:	HASLET PARKWAY/INTERMODAL PARKWAY CONNECTOR FROM IH 35W/SH 170					REV DATE: 07/2018
LIMITS TO:	TRANSPORT DRIVE					MPO PROJECT ID: 11898.2
TIP DESCRIPTION:	CONSTRUCT 0 TO 4 LANE DIVIDED URBAN					MTP REFERENCE: RSA1-RSA1-2.325.170, RSA1-2.325.180, RSA1-2.325.190
REMARKS:						

Project History:

FORT WORTH	TARRANT	1068-01-213	IH 30	C	FORT WORTH	TXDOT-FORT WORTH
LIMITS FROM:	IH 820					REV DATE: 07/2018
LIMITS TO:	CAMP BOWIE BLVD					MPO PROJECT ID: 13002
TIP DESCRIPTION:	RECONSTRUCT FROM 6 TO 8 MAIN LANES; RECONSTRUCT 2/8 LANE TO 2/8 LANE DISCONTINUOUS FRONTAGE ROADS AND CONVERT 2 WAY FRONTAGE ROAD SECTIONS TO 1 WAY EB AND WB (1 LANE TO 2 LANE DISCONTINUOUS)					MTP REFERENCE: FT1-28.20.1
REMARKS:						

Project History: 10 YEAR PLAN PROJECT

FORT WORTH	TARRANT	1068-01-214	IH 30	C	FORT WORTH	TXDOT-FORT WORTH
LIMITS FROM:	SS 580 (E OF LINKCREST DR)					REV DATE: 02/2019
LIMITS TO:	IH 820					MPO PROJECT ID: 13003
TIP DESCRIPTION:	RECONSTRUCT 4 TO 6 MAIN LANES; RECONSTRUCT 4 LANE DISCONTINUOUS FRONTAGE ROADS TO 4/6 LANE CONTINUOUS FRONTAGE ROADS; RECONSTRUCT SS 580 INTERCHANGE					MTP REFERENCE: FT1-28.10.3, IN1-28.515.1
REMARKS:						

Project History: 10 YEAR PLAN PROJECT

FORT WORTH	TARRANT	1068-02-127	IH 30	C,E	ARLINGTON	TXDOT-FORT WORTH
LIMITS FROM:	COOPER ST					REV DATE: 07/2018
LIMITS TO:	DALLAS COUNTY LINE					MPO PROJECT ID: 55097
TIP DESCRIPTION:	WIDEN 6 TO 8 GENERAL PURPOSE LANES, CONVERT 2 CONCURRENT EXPRESS LANES TO 3 CONCURRENT EXPRESS LANES, MODIFICATIONS TO SH 360 CONNECTIONS AND RAMP MODIFICATIONS					MTP REFERENCE: FT1-28.40.3
REMARKS:						

Project History:

FORT WORTH	TARRANT	1068-02-147	IH 30	C	ARLINGTON	TXDOT-FORT WORTH
LIMITS FROM:	SIX FLAGS DRIVE					REV DATE: 07/2018
LIMITS TO:	DALLAS COUNTY LINE					MPO PROJECT ID: 13001
TIP DESCRIPTION:	RECONSTRUCT AND WIDEN 6 TO 8 GENERAL PURPOSE LANES, 2 CONCURRENT EXPRESS LANES AND CONSTRUCT 0 TO 4 CONTINUOUS FRONTAGE ROAD LANES					MTP REFERENCE: FT1-28.40.3
REMARKS:						

PENDING FHWA APPROVAL

Project History: 10 YEAR PLAN PROJECT



Logged in as Tim Wood [Log Out](#)

[Project Management](#) | [Reports](#) | [Support](#)

Project Management > [Area List](#) > [STIPs \(M-NCTCOG\)](#) > [Revisions \(\)](#) > [TIP Instances \(Unassigned\)](#) > [Highway Projects \(Unassigned\)](#) > Project Details

Color Key: - Business rule violation - Value changed in current session - Different from DCIS or latest approved copy [Data](#)

Statewide TIP Revision Phase Construction
 District County Engineering
 MPO Highway Environmental
 CSJ - - TIP FY Engineering
 Right-of-Way
 Acquisition
 Utilities
 Transfer

Total Project Cost Information

Prelim Engineering	\$2,175,000	<input type="checkbox"/>
ROW Purchase	\$11,966,000	<input type="checkbox"/>
Construction Cost	\$12,338,000	<input type="checkbox"/>
Const Engineering	\$0	<input type="checkbox"/>
Contingencies	\$0	<input type="checkbox"/>
Indirect Costs	\$0	<input type="checkbox"/>
Bond Financing	\$0	<input type="checkbox"/>
Potential Chg Ord	\$0	<input type="checkbox"/>

Revision Date NOX (Kg /D):
 Project Sponsor VOC (Kg /D):
 MPO Proj Number PM10 (Kg /D):
 MTP Reference PM2.5 (Kg /D):
 City CO (Lbs /D):

Total Project Cost \$26,479,000

YOE Cost

Toll

TCM

Limits From

Limits To

Project Description

P7 Remarks

Project History

Authorized Funding by Category/Share

Category	Federal	State	Regional	Local	Local Contributions	Total
7	\$380,000	\$0	\$0	\$95,000	\$0	\$475,000
Total	\$380,000	\$0.00	\$0.00	\$95,000	\$0.00	\$475,000

DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
FORT WORTH	NCTCOG	TARRANT	0902-90-020	2019	CS	E,ENG	HASLET	\$ 475,000	
LIMITS FROM: ON AVONDALE-HASLET FROM INTERMODAL PARKWAY				PROJECT SPONSOR: HASLET					
LIMITS TO: WEST OF HASLET COUNTY LINE ROAD				REVISION DATE: 11/2018					
PROJECT DESCR: CONSTRUCT NEW 0 TO 4 LANE AND RECONSTRUCT EXISTING 2 LANE TO 4 LANE DIVIDED URBAN ROADWAY				MPO PROJ NUM: 11898.1					
DESCR: ROADWAY				FUNDING CAT(S): 7					
REMARKS P7: ADD PROJECT TO THE 2019-2022 TIP/STIP				PROJECT \$1,700,000 CAT 7 FUNDING PROGRAMMED FOR HISTORY: ENGINEERING IN FY2015					
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE						
PRELIM ENG: \$	2,175,000	COST OF APPROVED PHASES \$ 475,000	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH: \$	11,966,000		7	\$ 380,000	\$ 0	\$ 0	\$ 95,000	\$ 0	\$ 475,000
CONST COST: \$	12,338,000		TOTAL	\$ 380,000	\$ 0	\$ 0	\$ 95,000	\$ 0	\$ 475,000
CONST ENG: \$	0								
CONTING: \$	0								
INDIRECT: \$	0								
BOND FIN: \$	0								
POT CHG ORD: \$	0								
TOTAL COST: \$	26,479,000								

TIP History

2019-2022 STIP		11/2018 Revision: Approved 12/19/2018							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOY COST	
FORT WORTH	NCTCOG	TARRANT	0902-90-020	2019	CS	E,ENG	HASLET	\$ 475,000	
LIMITS FROM: ON AVONDALE-HASLET FROM INTERMODAL PARKWAY		PROJECT SPONSOR: HASLET							
LIMITS TO: WEST OF HASLET COUNTY LINE ROAD		REVISION DATE: 11/2018							
PROJECT DESCR: ROADWAY		MPO PROJ NUM: 11898.1							
DESCR: ROADWAY		FUNDING CAT(S): 7							
REMARKS P7: ADD PROJECT TO THE 2019-2022 TIP/STIP				PROJECT \$1,700,000 CAT 7 FUNDING PROGRAMMED FOR HISTORY: ENGINEERING IN FY2015					
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE						
PRELIM ENG: \$	2,175,000	COST OF APPROVED PHASES \$ 475,000	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH: \$	11,966,000		7	\$ 380,000	\$ 0	\$ 0	\$ 95,000	\$ 0	\$ 475,000
CONST COST: \$	12,338,000		TOTAL	\$ 380,000	\$ 0	\$ 0	\$ 95,000	\$ 0	\$ 475,000
CONST ENG: \$	0								
CONTING: \$	0								
INDIRECT: \$	0								
BOND FIN: \$	0								
POT CHG ORD: \$	0								
TOTAL COST: \$	26,479,000								

Comment History

Time	User	Comment	Related Approval
2018/11/21 08:48:54	Barbara Maley		11/2018: Approved

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM
NCTCOG MPO - HIGHWAY PROJECTS
FY 2019

2019-2022 STIP		11/2018 Revision: Approved 12/19/2018							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
FORT WORTH	NCTCOG	TARRANT	0902-90-020	2019	CS	E,ENG	HASLET	\$ 475,000	
LIMITS FROM		ON AVONDALE-HASLET FROM INTERMODAL PARKWAY			PROJECT SPONSOR HASLET				
LIMITS TO		WEST OF HASLET COUNTY LINE ROAD			REVISION DATE 11/2018				
PROJECT		CONSTRUCT NEW 0 TO 4 LANE AND RECONSTRUCT EXISTING 2 LANE TO 4 LANE DIVIDED URBA			MPO PROJ NUM 11898.1				
DESCR		N ROADWAY			FUNDING CAT(S) 7				
REMARKS ADD PROJECT TO THE 2019-2022 TIP/STIP				PROJECT \$1,700,000 CAT 7 FUNDING PROGRAMMED FOR ENGINEERING IN FY					
P7				HISTORY 2015					
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE						
PREL ENG \$	2,175,000	COST OF APPROVED PHASES	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH \$	11,966,000		7	\$ 380,000	\$ 0	\$ 0	\$ 95,000	\$ 0	\$ 475,000
CONSTR \$	12,338,000		TOTAL	\$ 380,000	\$ 0	\$ 0	\$ 95,000	\$ 0	\$ 475,000
CONST ENG \$	0								
CONTING \$	0								
INDIRECT \$	0								
BOND FIN \$	0								
PT CHG ORD \$	0								
TOTAL CST \$	26,479,000								

2019-2022 STIP		11/2018 Revision: Approved 12/19/2018							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
FORT WORTH	NCTCOG	Various	0902-00-217	2019	VA	C	VARIOUS	\$ 1,250,000	
LIMITS FROM		REG MIN INTERSECTION EQUIP PROG-REPLACE			PROJECT SPONSOR NCTCOG				
LIMITS TO		TO IMPROV SIGNAL COORD & TIMING; BATT BACKUP			REVISION DATE 11/2018				
PROJECT		GPS TO SYNC TRAFFIC SIGNALS; FLASHING YELLOW ARROW CONVERSIONS & RESTRIPING FOR			MPO PROJ NUM 11652				
DESCR		IMPROVED TRAFFIC FLOW; VEHICLE DETECTION TO LIMIT IDLING OF VEHICLES AT TRAFFIC			FUNDING CAT(S) 5				
REMARKS		ADD PROJECT TO THE 2019-2022 TIP/STIP			PROJECT RELATED TO OFF SYSTEM CSJ 0902-00-172				
P7		HISTORY							
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE						
PREL ENG \$	0	COST OF APPROVED PHASES	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH \$	0		5	\$ 1,000,000	\$ 250,000	\$ 0	\$ 0	\$ 0	\$ 1,250,000
CONSTR \$	1,250,000		TOTAL	\$ 1,000,000	\$ 250,000	\$ 0	\$ 0	\$ 0	\$ 1,250,000
CONST ENG \$	0								
CONTING \$	0								
INDIRECT \$	0								
BOND FIN \$	0								
PT CHG ORD \$	0								
TOTAL CST \$	1,250,000								

2019-2022 STIP		11/2018 Revision: Approved 12/19/2018							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
FORT WORTH	NCTCOG	TARRANT	0902-90-941	2019	VA	E,ENG	FORT WORTH	\$ 200,000	
LIMITS FROM		ALONG US 377 FROM DESERT RIDGE DR TO EAST OF FLOYD DR, ALONG FLOYD DR FROM			PROJECT SPONSOR TXDOT-FORT WORTH				
LIMITS TO		US 377 TO W CLAYTON RD			REVISION DATE 11/2018				
PROJECT		SAFE ROUTES TO SCHOOL; CONSTRUCT PEDESTRIAN IMPROVEMENTS INCLUDING SIDEWALKS AND			MPO PROJ NUM 11651.4				
DESCR		CROSSWALKS IN PROXIMITY TO THE APPLIED LEARNING ACADEMY			FUNDING CAT(S) 5				
REMARKS LOCAL MATCH PAID BY CITY OF FORT WORTH; ADD PROJECT				PROJECT					
P7 TO THE 2019-2022 TIP/STIP				HISTORY					
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE						
PREL ENG \$	200,000	COST OF APPROVED PHASES	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH \$	0		5	\$ 160,000	\$ 0	\$ 0	\$ 40,000	\$ 0	\$ 200,000
CONSTR \$	410,508		TOTAL	\$ 160,000	\$ 0	\$ 0	\$ 40,000	\$ 0	\$ 200,000
CONST ENG \$	20,876								
CONTING \$	4,824								
INDIRECT \$	0								
BOND FIN \$	0								
PT CHG ORD \$	0								
TOTAL CST \$	636,208								

2017-2018 CMAQ/STBG Funding Program: Assessment Policy
Draft Recommendations

Implementing Agency	Project/Facility	Limits	Project Scope	Fiscal Year	Phase	Proposed Funding						Comments	
						Federal CMAQ (CAT 5)	Federal STBG (CAT 7)	BUILD Grant	State	Local	Private		Total Proposed Funding
City of Anna	Ferguson Pkwy	From Collin County Outer Loop to Elm Street	Construct 0/2 to 4 lane urban divided (6 lanes ultimate), including new sidewalks and 0 to 6 lane bridge over Slayter Creek	2020	ENG	\$0	\$1,072,481	\$0	\$0	\$268,120	\$0	\$1,340,601	Staff is proposing to fund the engineering phase and bring a proposal back at a later date to fund the rest of the project, which will have a repayment component
Subtotal						\$0	\$1,072,481	\$0	\$0	\$268,120	\$0	\$1,340,601	
TxDOT Fort Worth	SH 360	From Trinity River to Post and Paddock	Construct 0 to 2 lane southbound frontage road, bridge over Riverside Parkway, and new sidewalks	2020	ENG	\$0	\$0	\$0	\$0	\$2,345,974	\$0	\$2,345,974	Engineering phase to be funded by the City of Grand Prairie and/or a private developer; Half of the RTC's contribution to the construction phase will be repaid over a 10-year period
				2023	CON	\$81,677	\$10,110,749	\$0	\$1,274,053	\$1,274,053	\$0	\$12,740,532	
Subtotal						\$81,677	\$10,110,749	\$0	\$1,274,053	\$3,620,027	\$0	\$15,086,506	
TxDOT Fort Worth	Avondale-Haslet Road/Haslet Parkway/Intermodal Parkway	On Avondale-Haslet from Intermodal Parkway to West of Haslet County Line Road; Haslet Parkway/Intermodal Parkway Connector from IH 35W/SH 170 to Transport Drive	On Avondale-Haslet: Construct new 0 to 4 lane and reconstruct existing 2 lane to 4 lane divided urban roadway including intersection improvements at FM 156 and new sidewalks; On Haslet Parkway/Intermodal Parkway: Construct 0 to 4 lane divided urban with new sidewalks	2019	ENG	\$0	\$2,968,000	\$0	\$0	\$742,000	\$0	\$3,710,000	Engineering funding was previously approved by the RTC; Some right-of-way to be donated by private landowners; The RTC will be paid back \$6,900,000 over a 20-year period; Tarrant County to contribute \$2,000,000 for construction; TxDOT to provide state match for on-system project components; City of Haslet to pay for utility relocations; Cost overruns to be funded with Regional Toll Revenue (RTR) funds (Project includes 24% contingency of \$8,390,000)
				2020	ROW	\$0	\$0	\$0	\$0	\$3,947,000	\$5,053,000	\$9,000,000	
				2020	UTIL	\$0	\$0	\$0	\$0	\$2,966,000	\$0	\$2,966,000	
				2020	CON	\$4,633,760	\$3,313,440	\$20,000,000	\$1,312,800	\$2,974,000	\$2,700,000	\$34,934,000	
Subtotal						\$4,633,760	\$6,281,440	\$20,000,000	\$1,312,800	\$10,629,000	\$7,753,000	\$50,610,000	
City of Fort Worth	Butler Housing Project	TBD	TBD	TBD	ENG	\$0	\$2,000,000	\$0	\$0	\$500,000	\$0	\$2,500,000	Staff proposes to only fund engineering and right-of-way at this time; Tax Increment Financing (TIF) District is being created; Staff to bring a proposal back at a later date for construction funding, which will have a payback component; Federal funding to be matched with RTC/Local funds, TxDOT funds, or Transportation Development Credits
				TBD	ROW	\$0	\$1,000,000	\$0	\$0	\$250,000	\$0	\$1,250,000	
Subtotal						\$0	\$3,000,000	\$0	\$0	\$750,000	\$0	\$3,750,000	
City of Dallas	Dallas Central Business District (High-Speed Rail Station Area)/Oak Farms Project (Street Car, Roadway, Bike/Ped.)	TBD	TBD	TBD	ENG	\$0	\$7,400,000	\$0	\$0	\$0	\$1,850,000	\$9,250,000	Staff proposes to only fund engineering at this time; Staff to bring a proposal back at a later date for construction funding, which will have a payback component; Funding will be divided among the Dallas Central Business District (High-Speed Rail Station Area) and Oak Farms projects; Federal funding to be matched with private sector contributions or Transportation Development Credits
Subtotal						\$0	\$7,400,000	\$0	\$0	\$0	\$1,850,000	\$9,250,000	
City of Dallas	Lake Highlands DART Station Landbanking	West of Station, North of Walnut Hill	Phase 2 Landbanking Partnership	2020	IMP	\$0	\$0	\$0	\$0	\$5,000,000	\$0	\$5,000,000	Staff proposes to use RTR funding and will seek additional funding from public and private sector sources; RTC contribution to be repaid over time using TIF revenues
Subtotal						\$0	\$0	\$0	\$0	\$5,000,000	\$0	\$5,000,000	
Grand Total						\$4,715,437	\$27,864,670	\$20,000,000	\$2,586,853	\$20,267,147	\$9,603,000	\$85,037,107	

Blue text indicates changes since the March 2019 RTC and STTC meetings.

Appendix F—Resource-Specific Maps

Figure 1a-1b: Community Facilities (Preferred and Additional Alternatives)

Figure 2a-2b: Census Geographies (Preferred and Additional Alternatives)

Figure 3: Shared-Use Path Removal Exhibit

Figure 4: Water Resources

Figure 5a-5j: Potential Waters of the U.S

Figure 6a-6e: Observed EMST Vegetation Types

Figure 7a-7b: Area of Induced Growth (Preferred and Additional Alternatives)

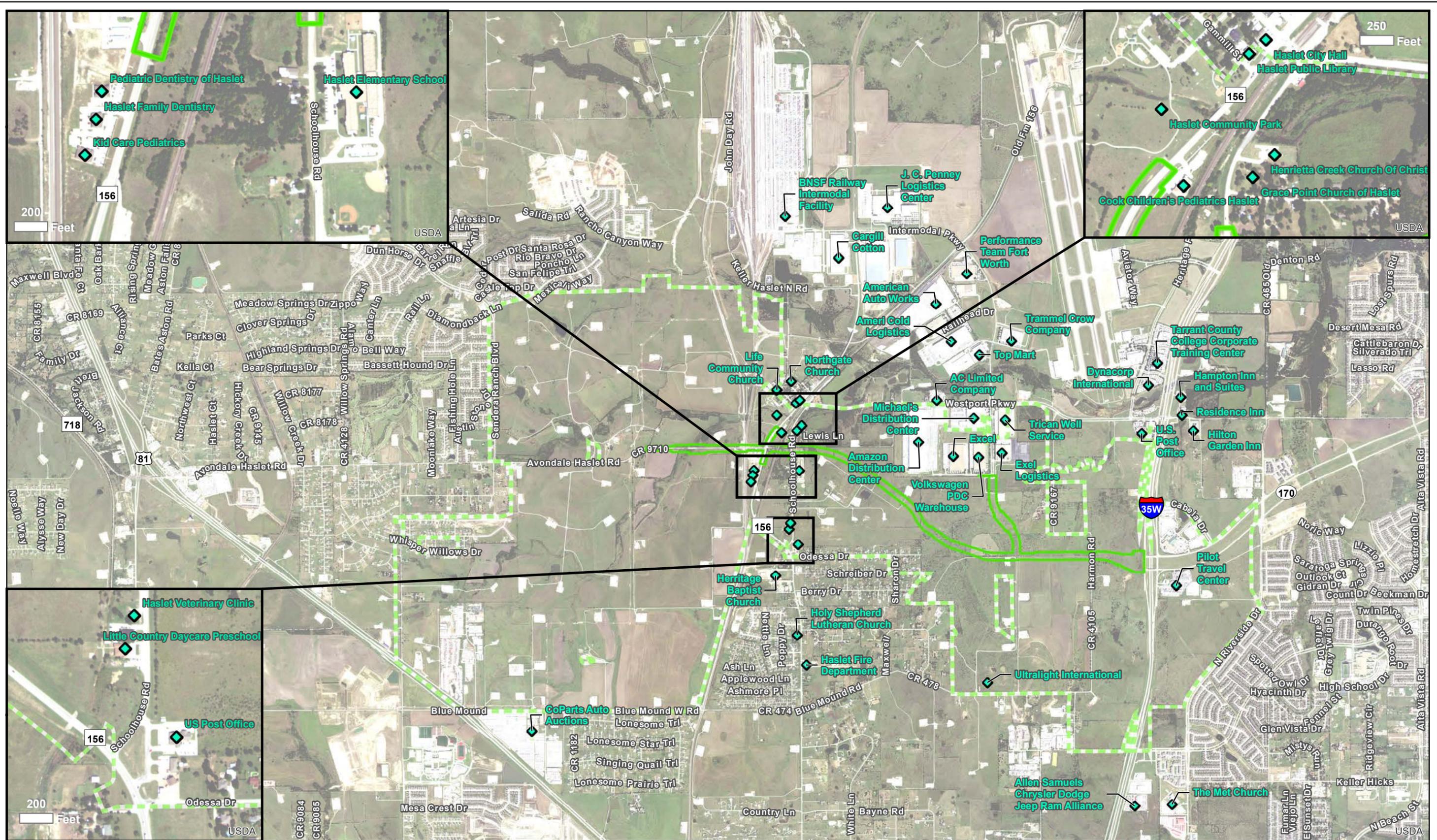


Figure 1a
Community Facilities (Preferred Alternative)
 AllianceTexas/Haslet Accessibility Improvements

▭ Preferred Alternative Project Area
 ▭ Community Study Area (Pref Alt)
 ◆ Community Facility

	1 in = 3,000 feet Scale: 1:36,000	
Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021 0902-90-141		Date: 6/25/2019

Data Source: CMEC (2018)
 Aerial Source: NAIP (2016)

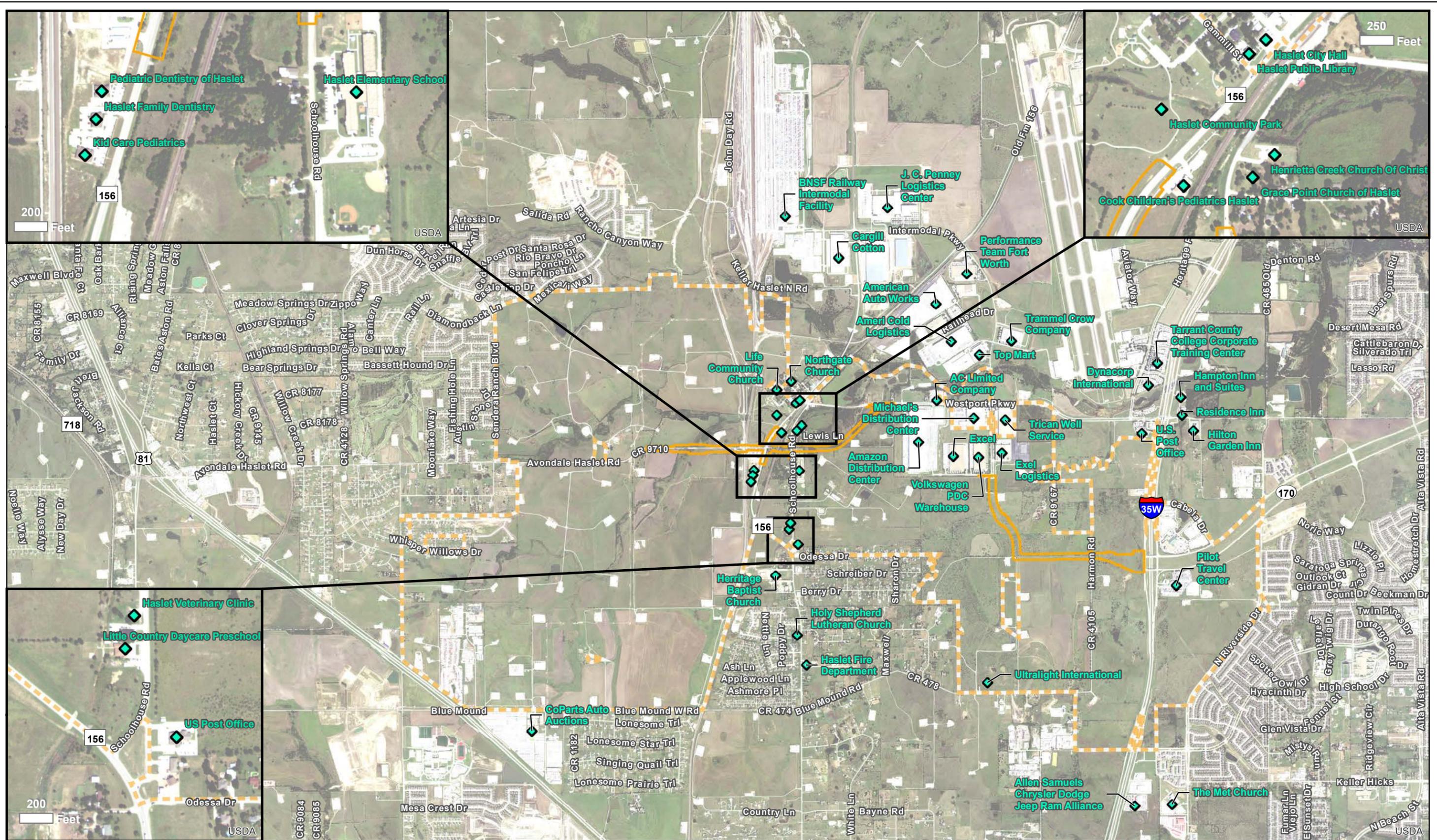


Figure 1b
Community Facilities (Additional Alternative)
 AllianceTexas/Haslet Accessibility Improvements

Additional Alternative Project Area
 Community Study Area (Addl Alt)
 ◆ Community Facility

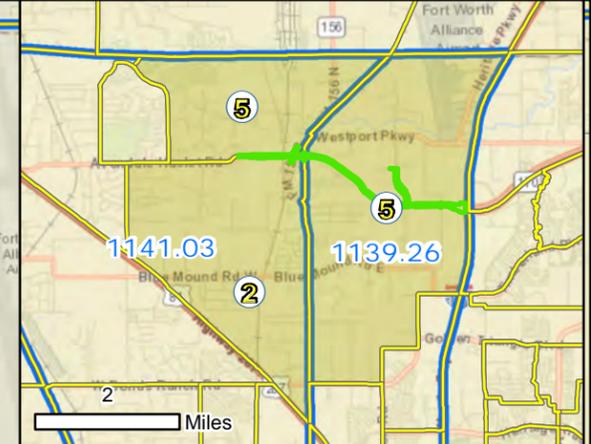
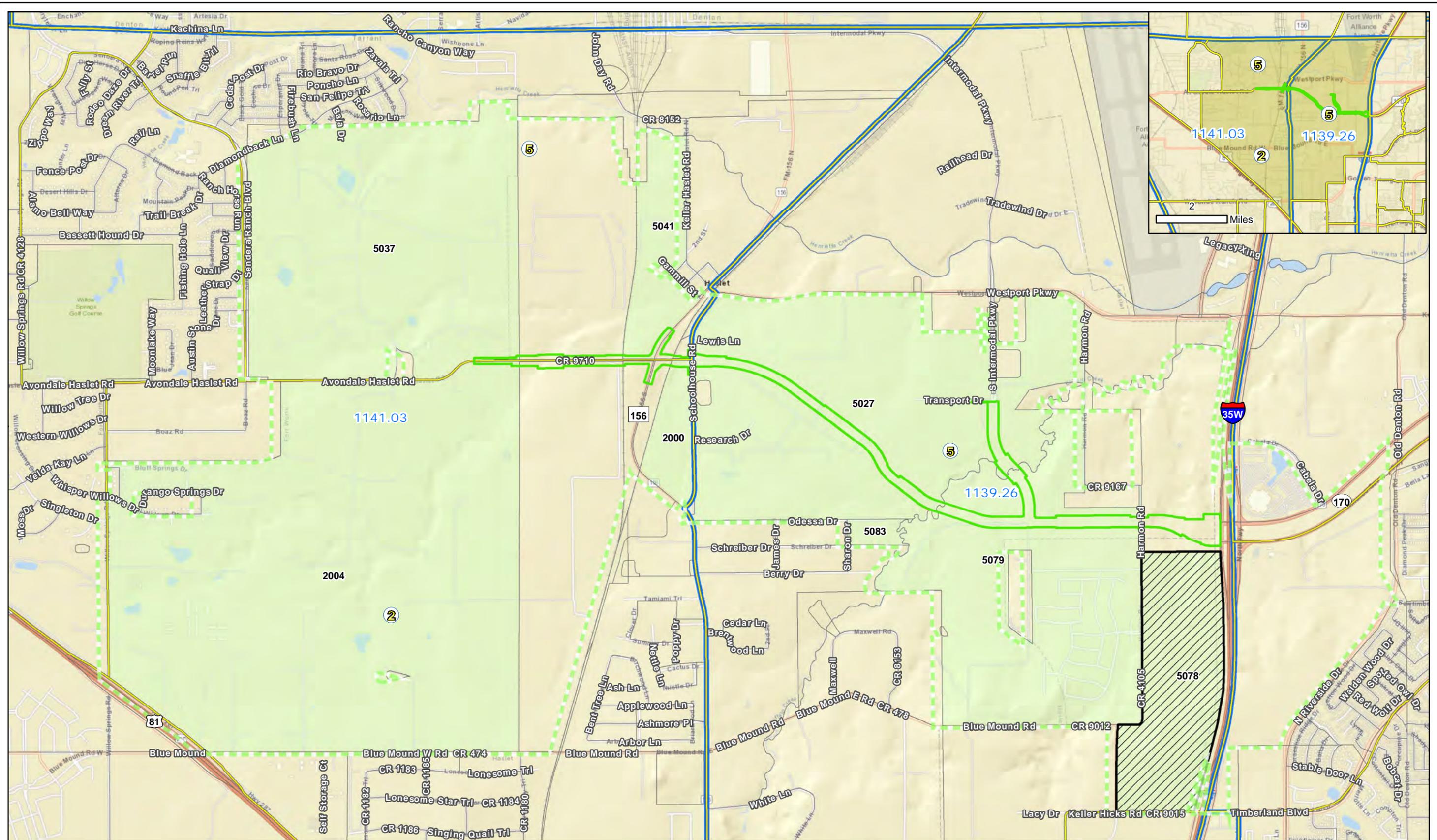


Figure 2a
Census Geographies (Preferred Alternative)
AllianceTexas/Haslet Accessibility Improvements

- ▬ Preferred Alternative Project Area
- ▬ 2010 Census Tract
- ▬ Preferred Alternative Populated Blocks
- Minority Population >50%
- - - Community Study Area (Pref Alt)
- 2010 Census Block Group
- 2010 Census Blocks

0 2,000 Feet
0 600 Meters
 Prepared for: TxDOT 1 in = 2,000 feet
 CSJ: 0902-90-020, 0902-90-021, and Scale: 1:24,000
 Basemap Source: ESRI (2018) Date: 5/29/2019
 0902-90-141

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\jws EA Figure 2a Census Geographies_20190417.mxd

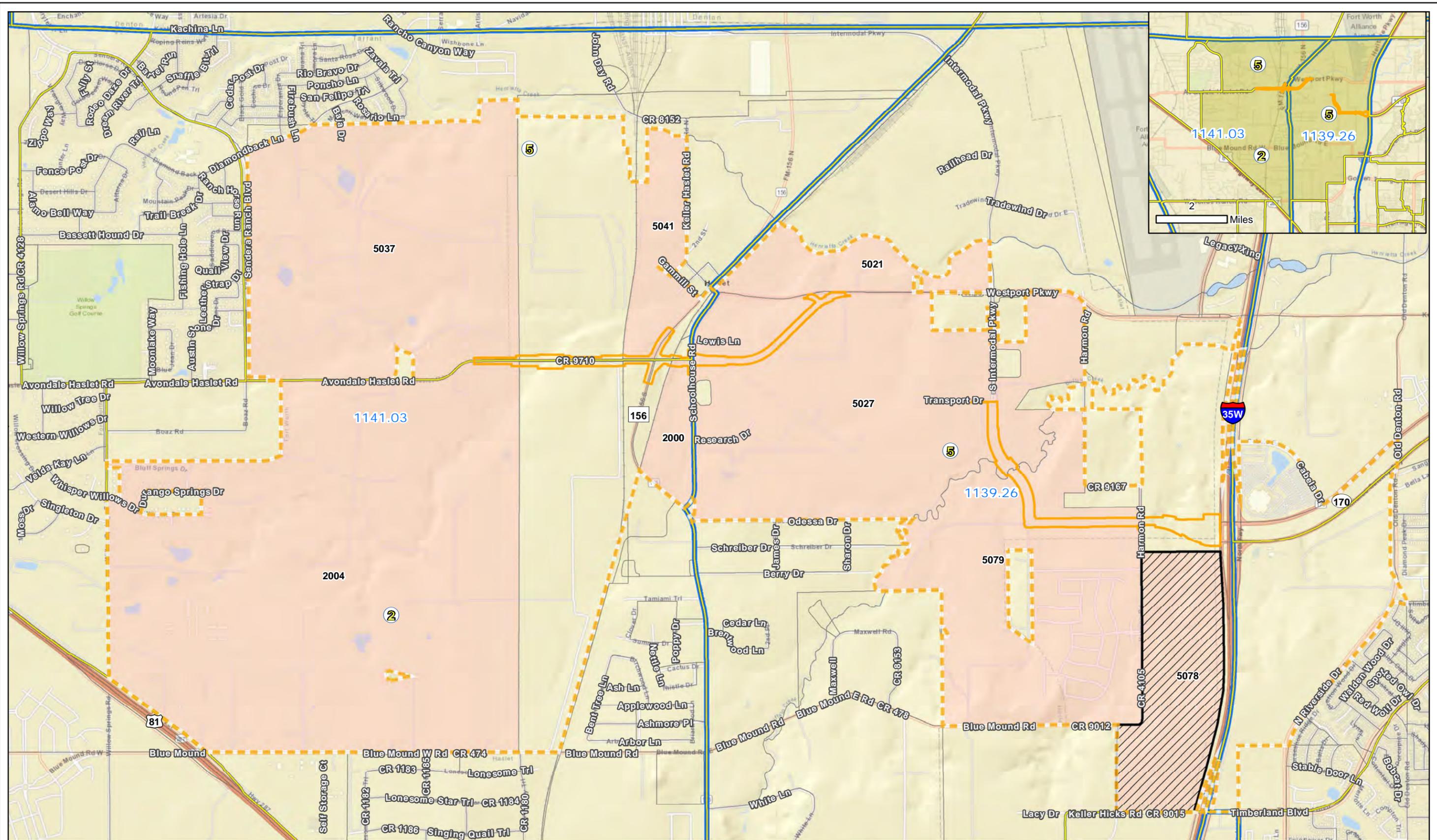


Figure 2b
Census Geographies (Alternative Alternative)

Alliance Texas/Avondale Haslet Intermodal

- Additional Alternative Project Area
- 2010 Census Tract
- Additional Alternative Populated Blocks
- Minority Population >50%
- Community Study Area (Addl Alt)
- 2010 Census Block Group
- 2010 Census Blocks

0 2,000 Feet
 0 600 Meters
 Prepared for: TxDOT
 CSJ: 0902-90-020, 0902-90-021, and 0902-90-141
 1 in = 2,000 feet
 Scale: 1:24,000
 Date: 5/29/2019

Data Source: US Census Bureau (2010)
Basemap Source: ESRI (2018)

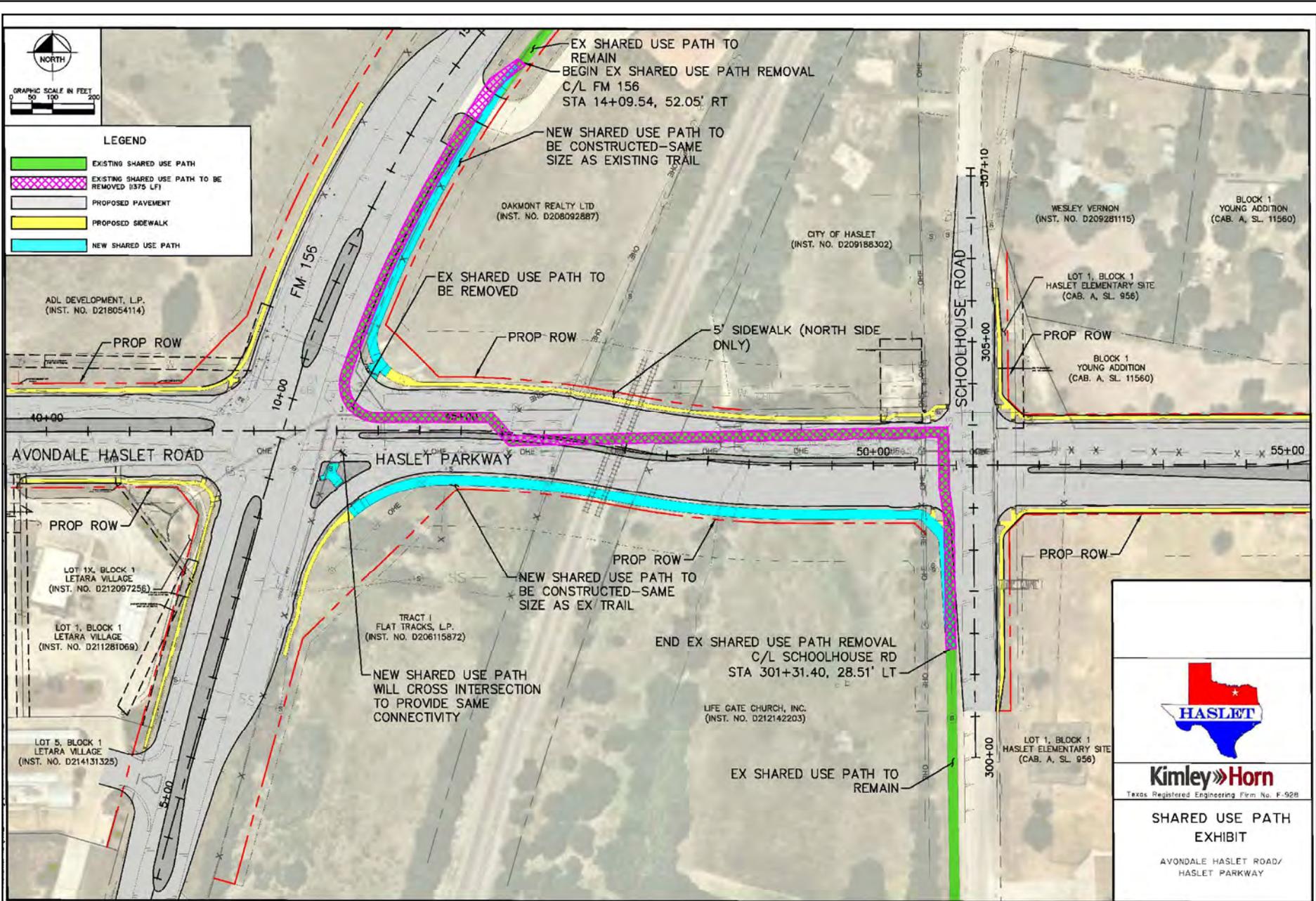


Figure 3

Shared Use Path Removal Exhibit

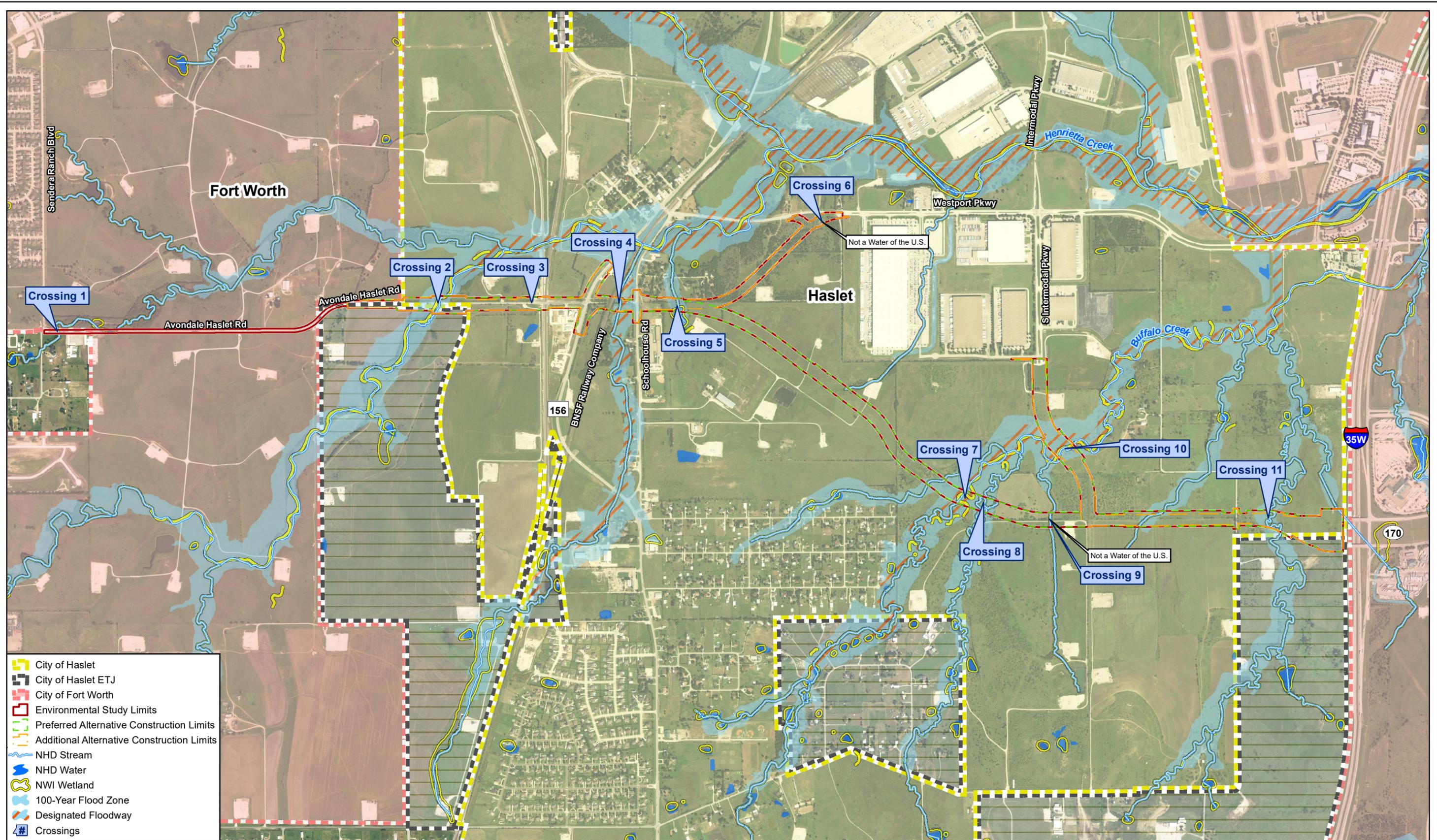
AllianceTexas/Haslet Accessibility Improvement Project



Prepared for: TxDOT

CSJ: 0902-90-020, 0902-90-021, and 0902-90-141

Date: 5/29/2019



- City of Haslet
- City of Haslet ETJ
- City of Fort Worth
- Environmental Study Limits
- Preferred Alternative Construction Limits
- Additional Alternative Construction Limits
- NHD Stream
- NHD Water
- NWI Wetland
- 100-Year Flood Zone
- Designated Floodway
- Crossings

Figure 4
Water Resources
 AllianceTexas/Haslet Accessibility Improvement Project

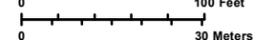
G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 4 Water Resources_20190619.mxd

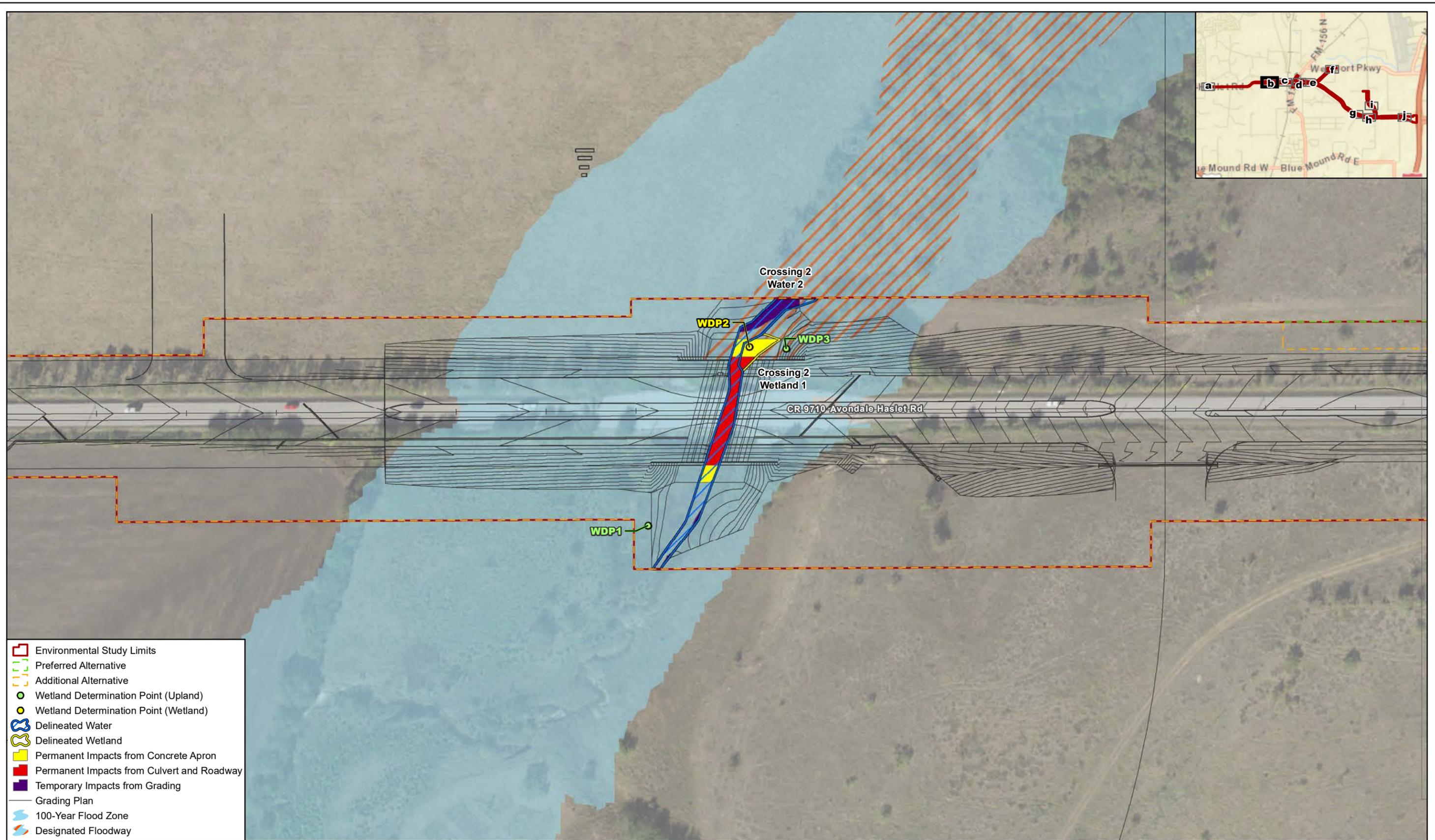
	0	1,500 Feet
	0	400 Meters
Data Sources: NHD (2018), NWI (2018), FEMA NFHL (2018), CMEC (2019)	Prepared for: TxDOT	1 in = 1,500 feet
Aerial Source: NAIP (2016)	CSJ: 0902-90-020, 0902-90-021	Scale: 1:18,000
		Date: 6/20/2019



Figure 5a
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd

		1 in = 100 feet
	Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019) Aerial Source: Esri (2015)	Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021 0902-90-141



- ▭ Environmental Study Limits
- ▭ Preferred Alternative
- ▭ Additional Alternative
- Wetland Determination Point (Upland)
- Wetland Determination Point (Wetland)
- ▭ Delineated Water
- ▭ Delineated Wetland
- ▭ Permanent Impacts from Concrete Apron
- ▭ Permanent Impacts from Culvert and Roadway
- ▭ Temporary Impacts from Grading
- Grading Plan
- ▭ 100-Year Flood Zone
- ▭ Designated Floodway

Figure 5b
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

	Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021 0902-90-141	1 in = 100 feet Scale: 1:1,200 Date: 6/20/2019

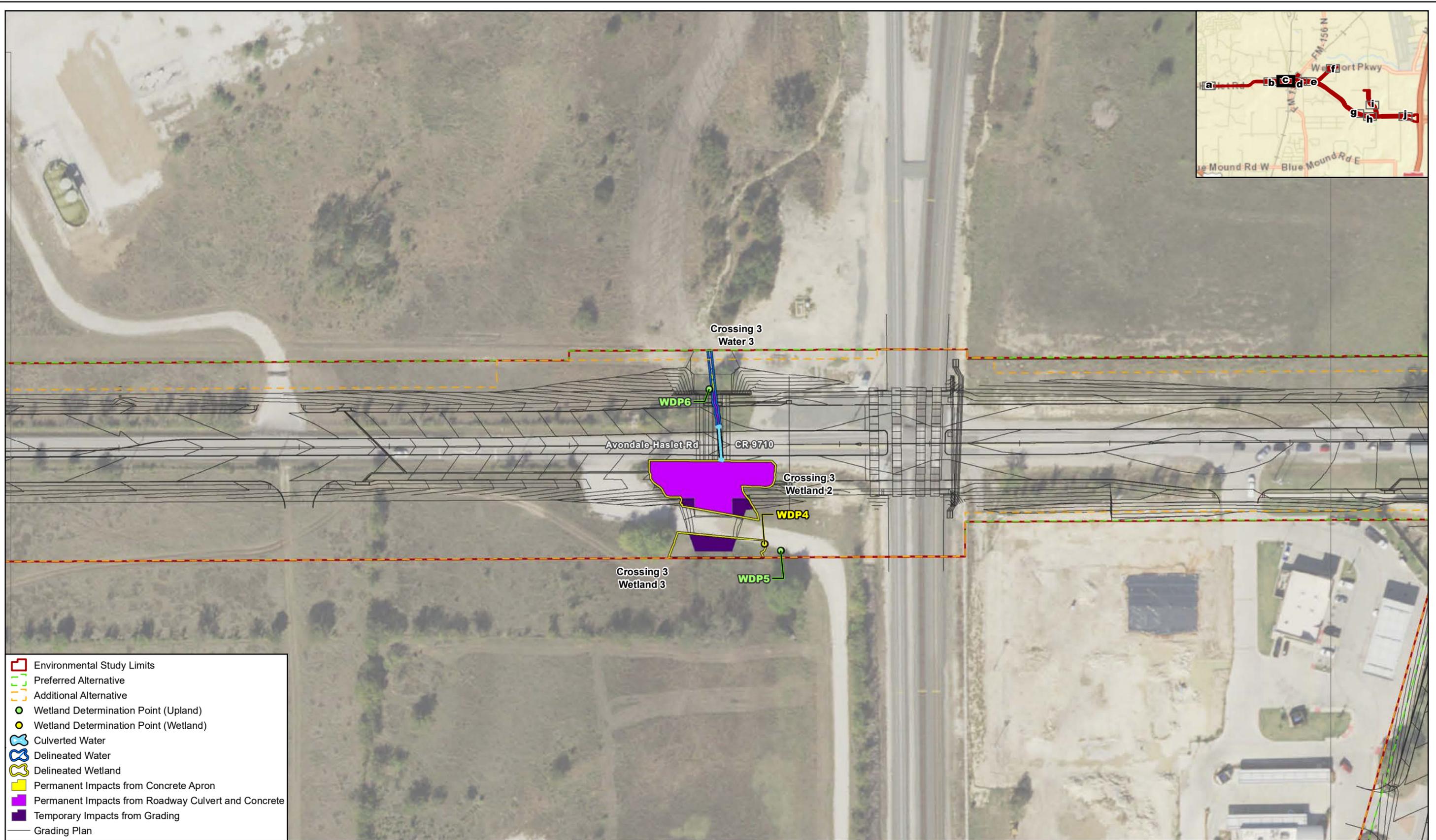


Figure 5c
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd

Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019) Aerial Source: Esri (2015)	Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021 0902-90-141	1 in = 100 feet Scale: 1:1,200 Date: 6/20/2019
	0 100 Feet 0 30 Meters	

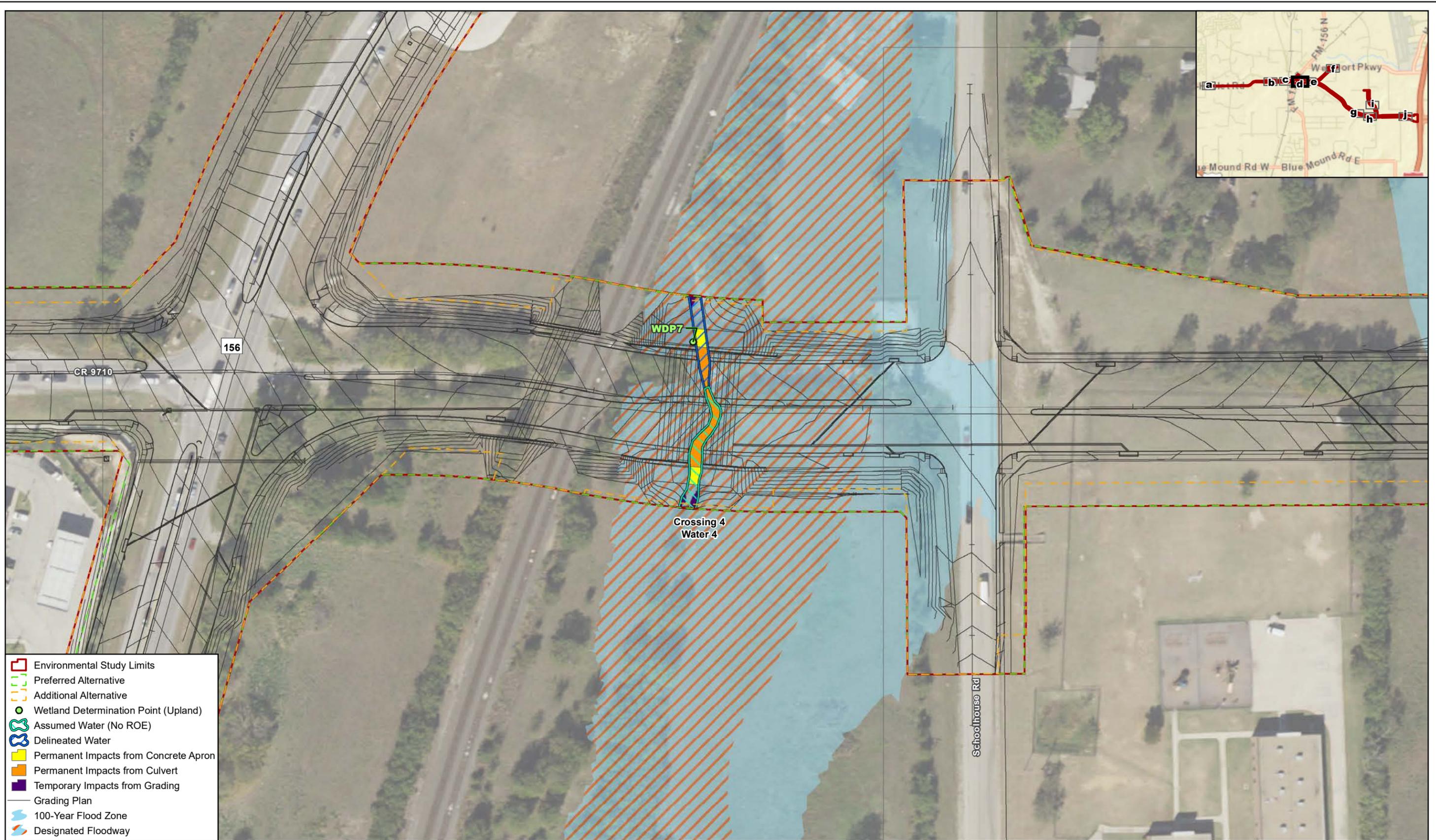
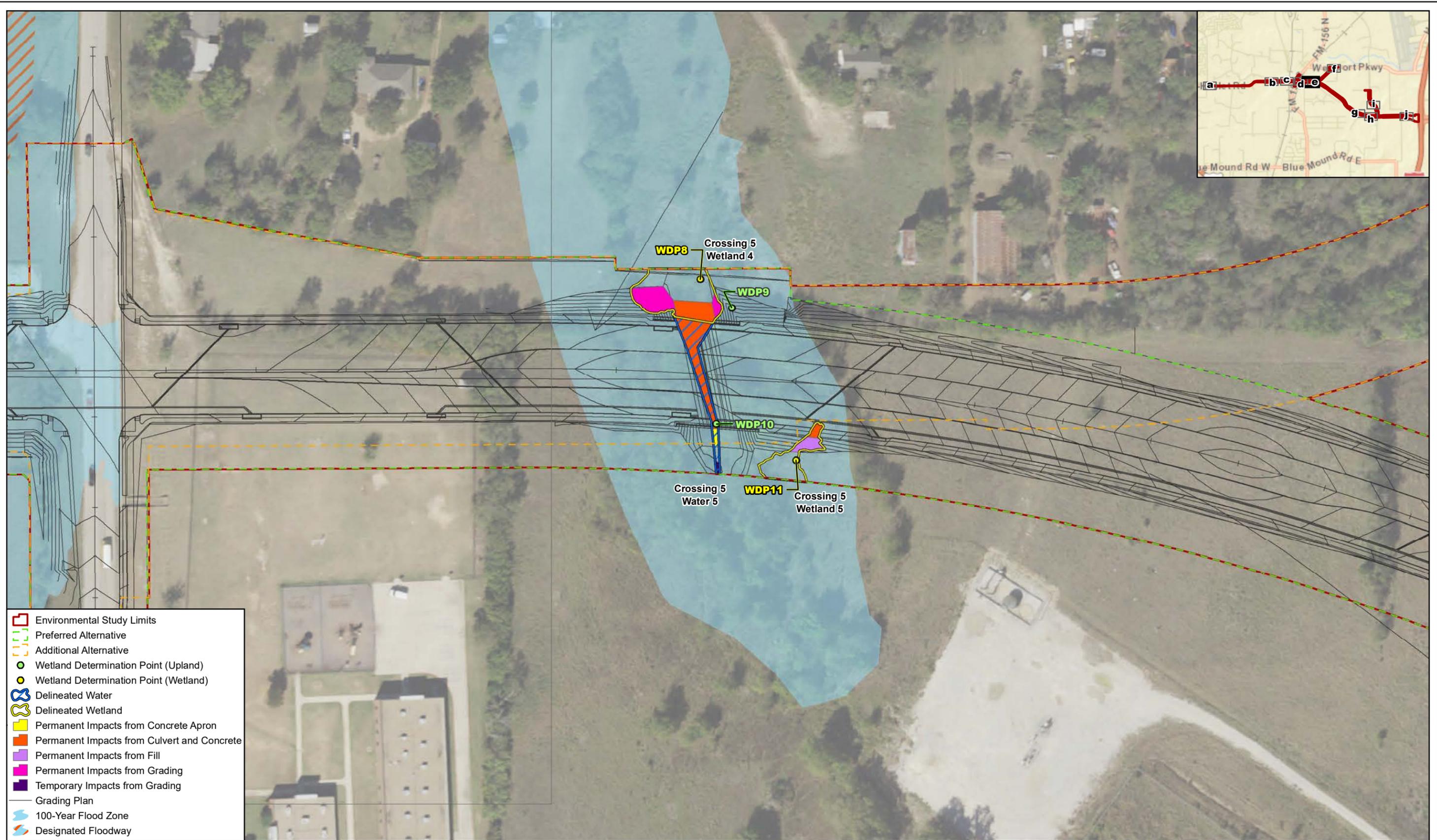


Figure 5d
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd

	0	100 Feet
	0	30 Meters
Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019) Aerial Source: Esri (2015)	Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021 0902-90-141	1 in = 100 feet Scale: 1:1,200 Date: 6/20/2019



- ▭ Environmental Study Limits
- ▭ Preferred Alternative
- ▭ Additional Alternative
- Wetland Determination Point (Upland)
- Wetland Determination Point (Wetland)
- ▭ Delineated Water
- ▭ Delineated Wetland
- ▭ Permanent Impacts from Concrete Apron
- ▭ Permanent Impacts from Culvert and Concrete
- ▭ Permanent Impacts from Fill
- ▭ Permanent Impacts from Grading
- ▭ Temporary Impacts from Grading
- Grading Plan
- ▭ 100-Year Flood Zone
- ▭ Designated Floodway

Figure 5e
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

 0 100 Feet 0 30 Meters	Prepared for: TxDOT	1 in = 100 feet
	CSJ: 0902-90-020, 0902-90-021	Scale: 1:1,200
	0902-90-141	Date: 6/20/2019

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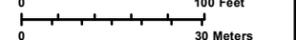
Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019), Aerial Source: Esri (2015)



-  Environmental Study Limits
-  Additional Alternative
-  Assumed Water (No ROE)
-  Grading Plan
-  100-Year Flood Zone

Figure 5f
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd

 	Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019), Aerial Source: Esri (2015)	Prepared for: TxDOT	1 in = 100 feet
	CSJ: 0902-90-020, 0902-90-021	0902-90-141	Scale: 1:1,200
		Date: 6/20/2019	

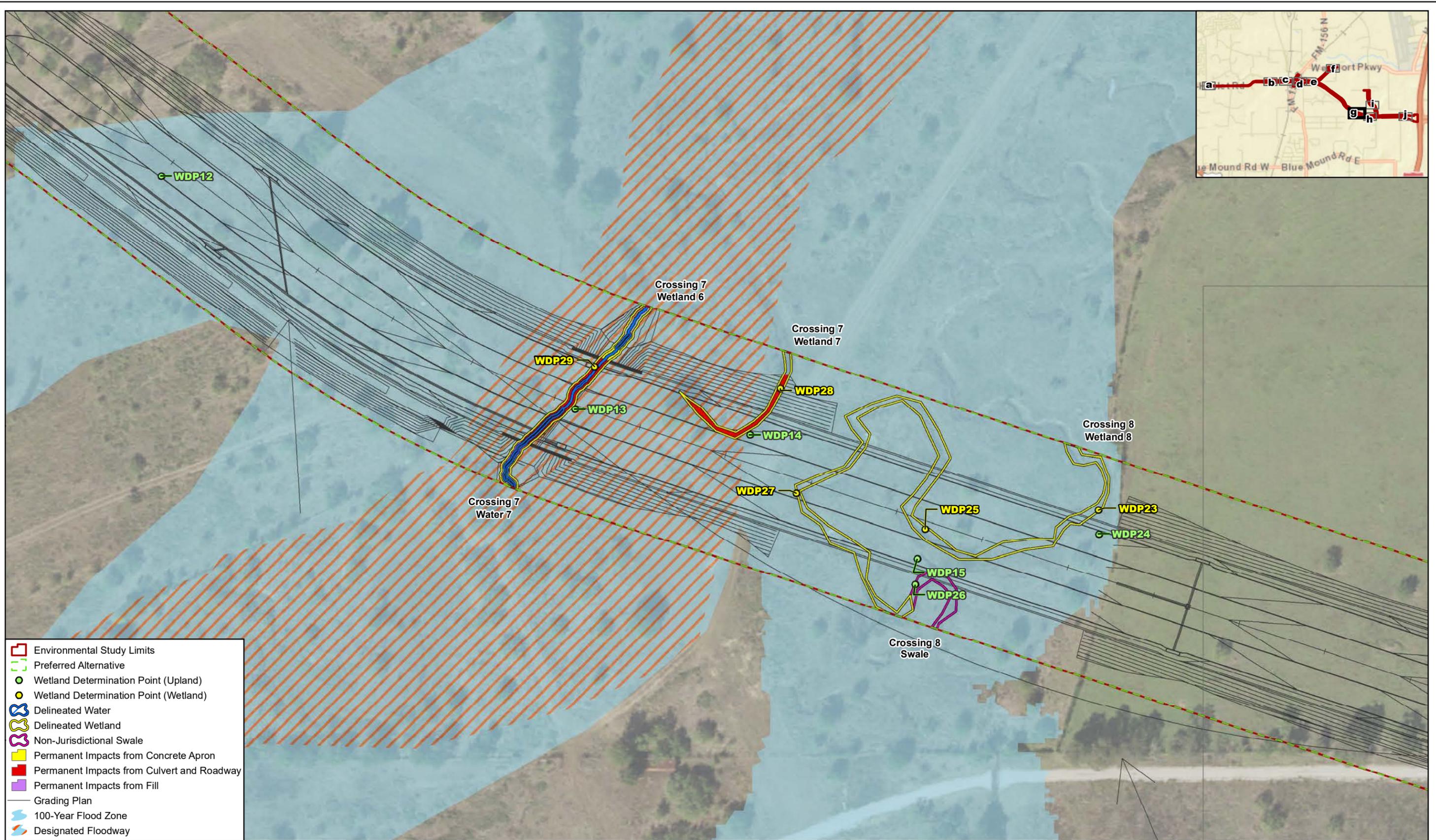


Figure 5g
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd

Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019), Aerial Source: Esri (2015)
 Prepared for: TxDOT
 CSJ: 0902-90-020, 0902-90-021
 0902-90-141
 1 in = 100 feet
 Scale: 1:1,200
 Date: 6/20/2019



- ┌ Environmental Study Limits
- - - Preferred Alternative
- - - Additional Alternative
- Wetland Determination Point (Upland)
- ~ Non-Jurisdictional Relic Stream
- Grading Plan
- 100-Year Flood Zone

Figure 5h
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

 0 100 Feet 0 30 Meters	Prepared for: TxDOT	1 in = 100 feet
	CSJ: 0902-90-020, 0902-90-021	Scale: 1:1,200
	0902-90-141	Date: 6/20/2019

Data Sources: NHD (2018),
 FEMA NFHL (2018), CMEC (2019)
 Aerial Source: Esri (2015)

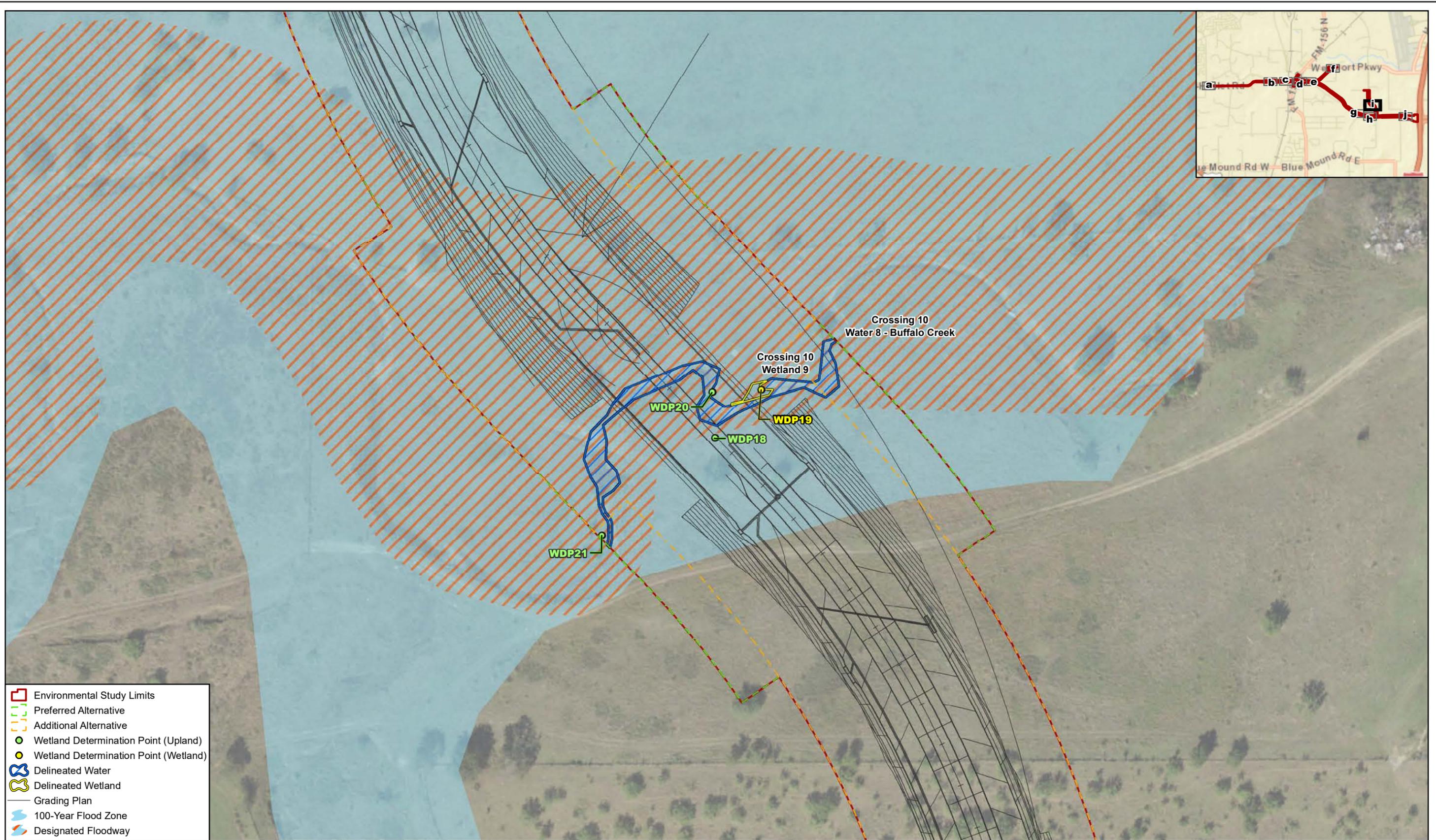
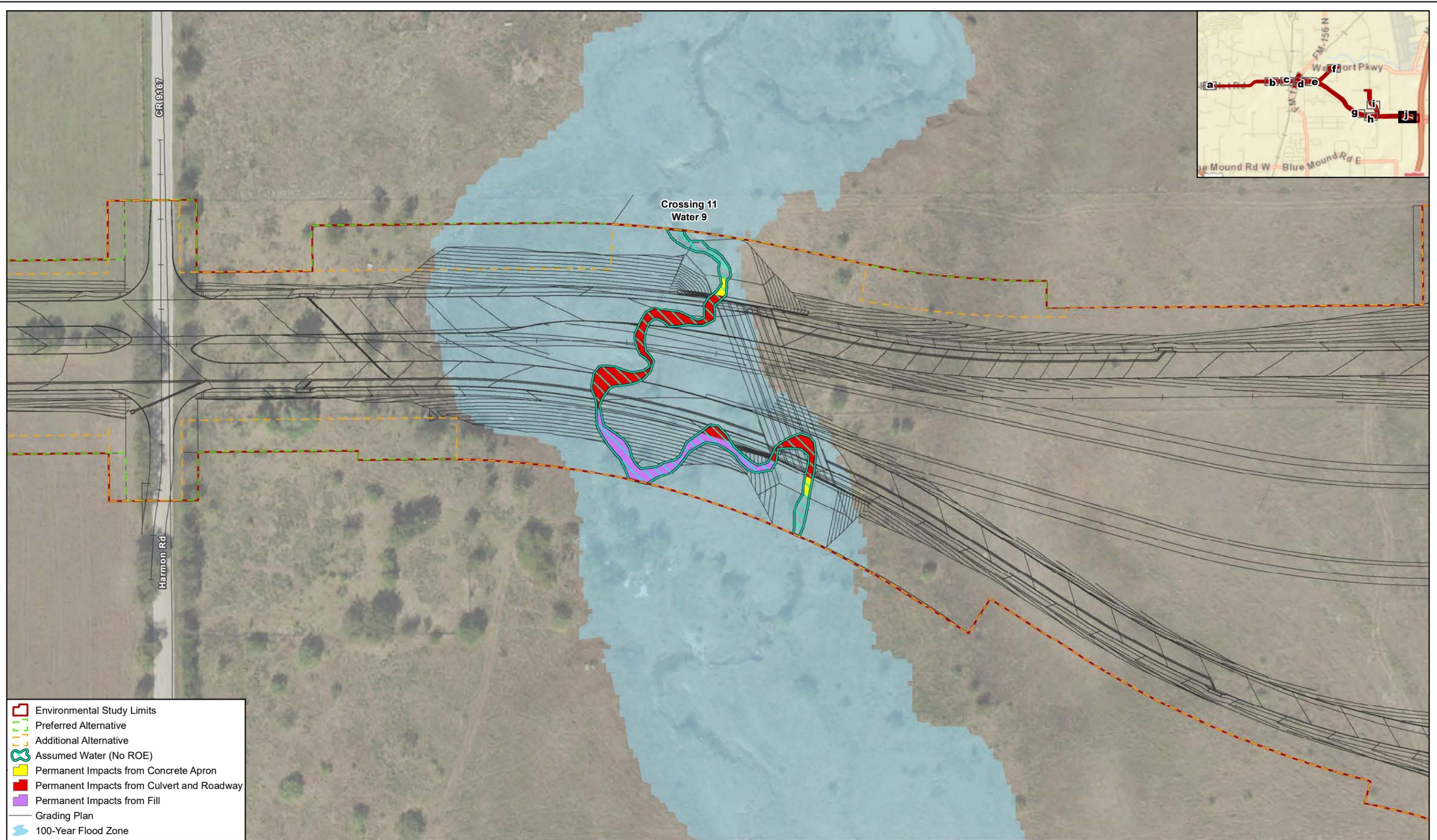


Figure 5i
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd

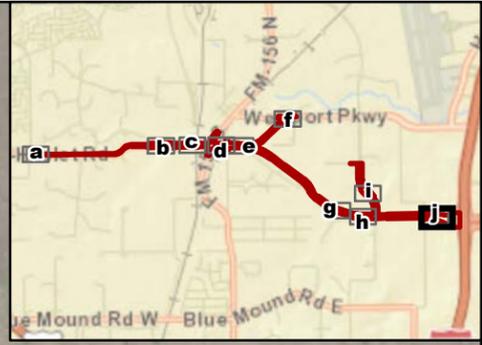
Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019) Aerial Source: Esri (2015)	Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021 0902-90-141	1 in = 100 feet Scale: 1:1,200 Date: 6/20/2019
	0 100 Feet 0 30 Meters	



- Environmental Study Limits
- Preferred Alternative
- Additional Alternative
- ~ Assumed Water (No ROE)
- Permanent Impacts from Concrete Apron
- Permanent Impacts from Culvert and Roadway
- Permanent Impacts from Fill
- Grading Plan
- 100-Year Flood Zone

Figure 5j
Potential Waters of the U.S.
AllianceTexas/Haslet Accessibility Improvement Project

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\EA_Figure 5 Crossings_20190620.mxd



	<small>1 in = 100 feet</small> <small>Scale: 1:1,200</small>
<small>Data Sources: NHD (2018), FEMA NFHL (2018), CMEC (2019), Aerial Source: Esri (2015)</small>	<small>Prepared for: TxDOT</small> <small>CSJ: 0902-90-020, 0902-90-021</small> <small>0902-90-141</small> <small>Date: 6/20/2019</small>

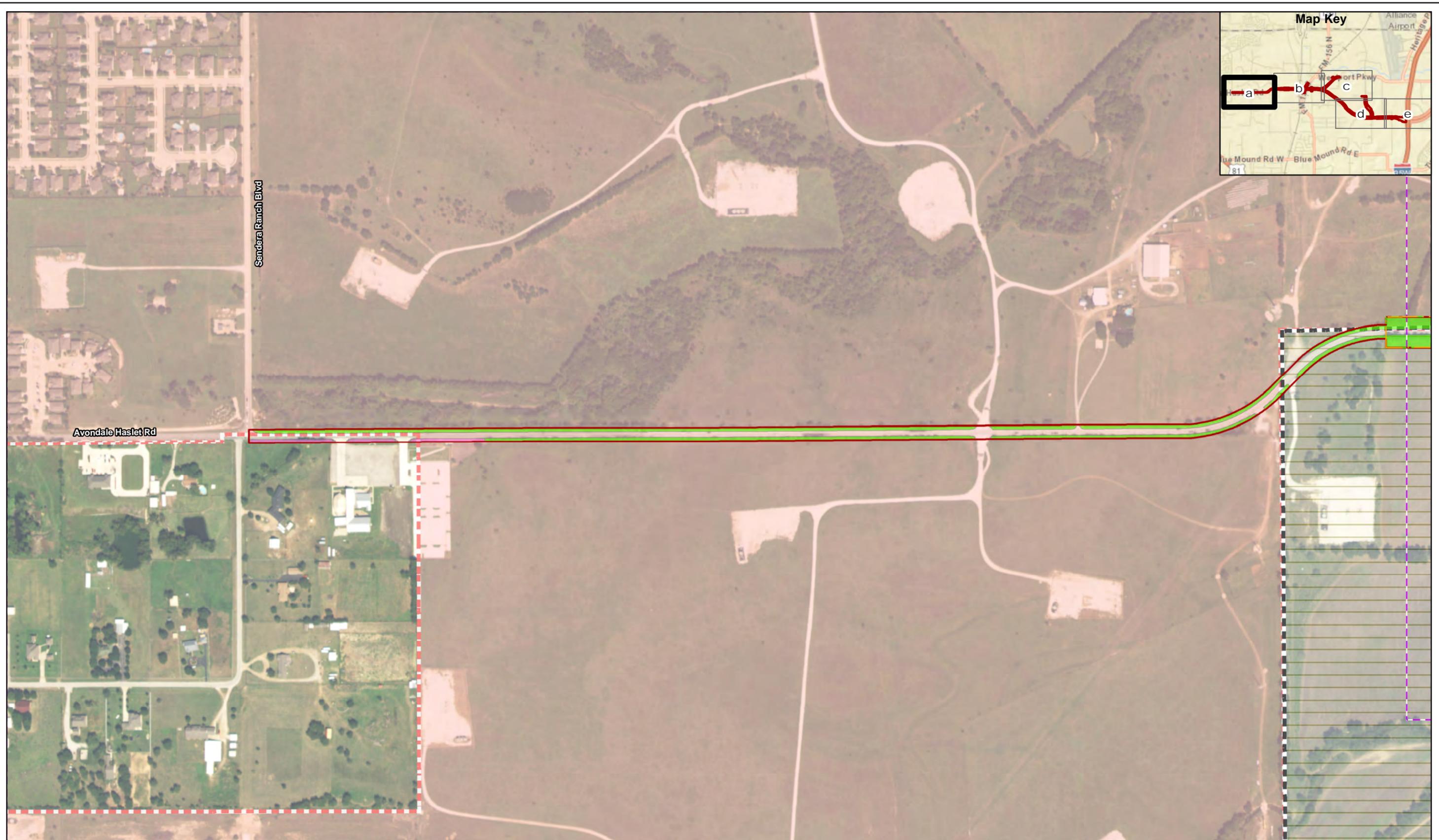


Figure 6a
 Observed Vegetation Types
AllianceTexas/Haslet Accessibility Improvement Project

- Map Key Sheet Limits
- City of Fort Worth
- Additional Alternative Construction Limits
- Edwards Plateau Savannah, Woodland, and Shrubland
- City of Haslet
- City of Haslet ETJ
- Preferred Alternative Construction Limits
- Urban
- Environmental Study Limits

Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021, and 0902-90-141	1 in = 400 feet Scale: 1:4,800 Date: 5/29/2019

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\jws EA_Figure 6_Observed_Vegetation_20190524.mxd

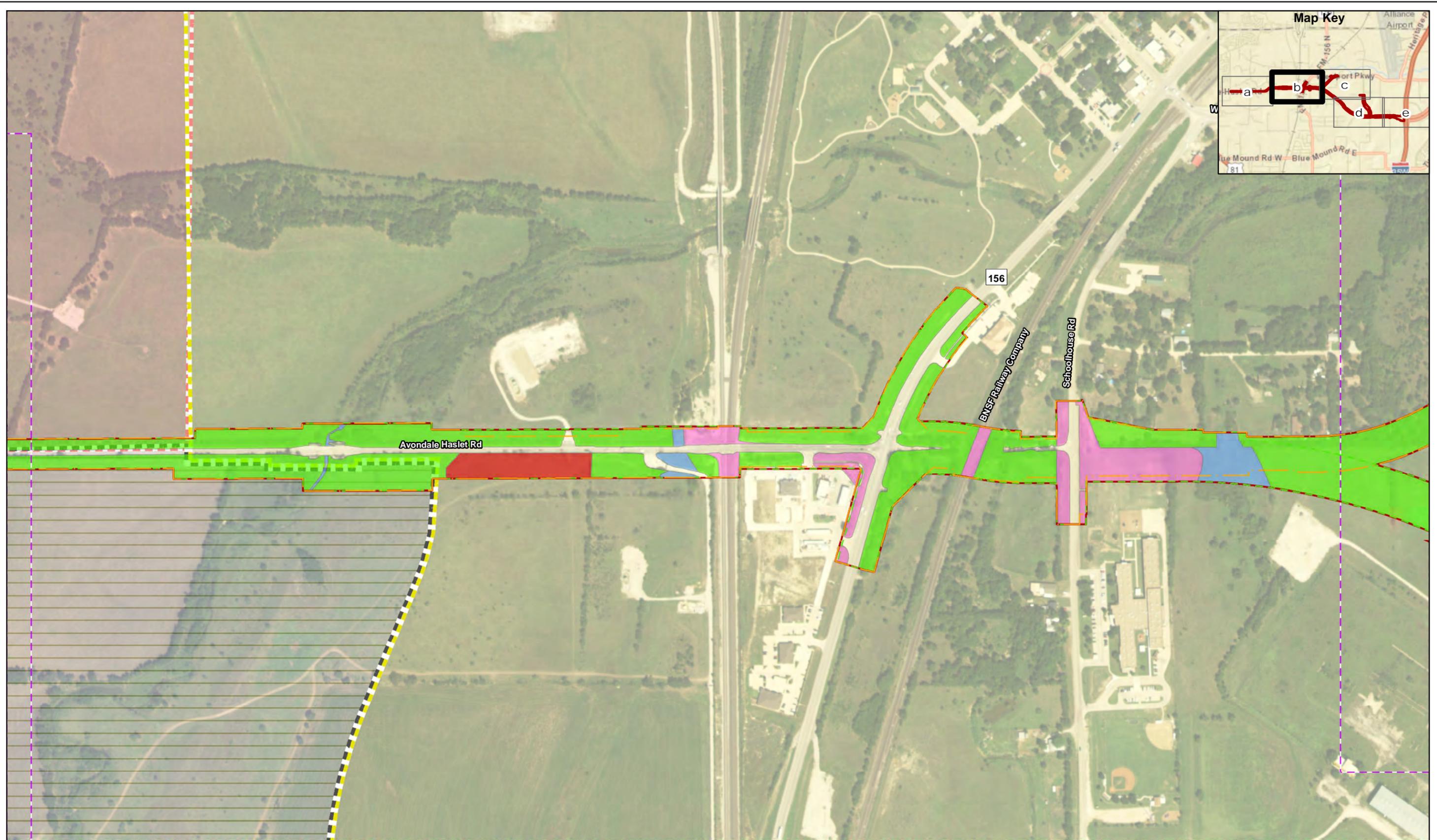


Figure 6b
Observed Vegetation Types

AllianceTexas/Haslet Accessibility Improvement Project

- | | | | |
|----------------------|--|---|----------|
| Map Key Sheet Limits | City of Fort Worth | Environmental Study Limits | Riparian |
| City of Haslet | Additional Alternative Construction Limits | Disturbed Prairie | Urban |
| City of Haslet ETJ | Preferred Alternative Construction Limits | Edwards Plateau Savannah, Woodland, and Shrubland | |

		Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021, and 0902-90-141	1 in = 400 feet Scale: 1:4,800 Date: 5/29/2019

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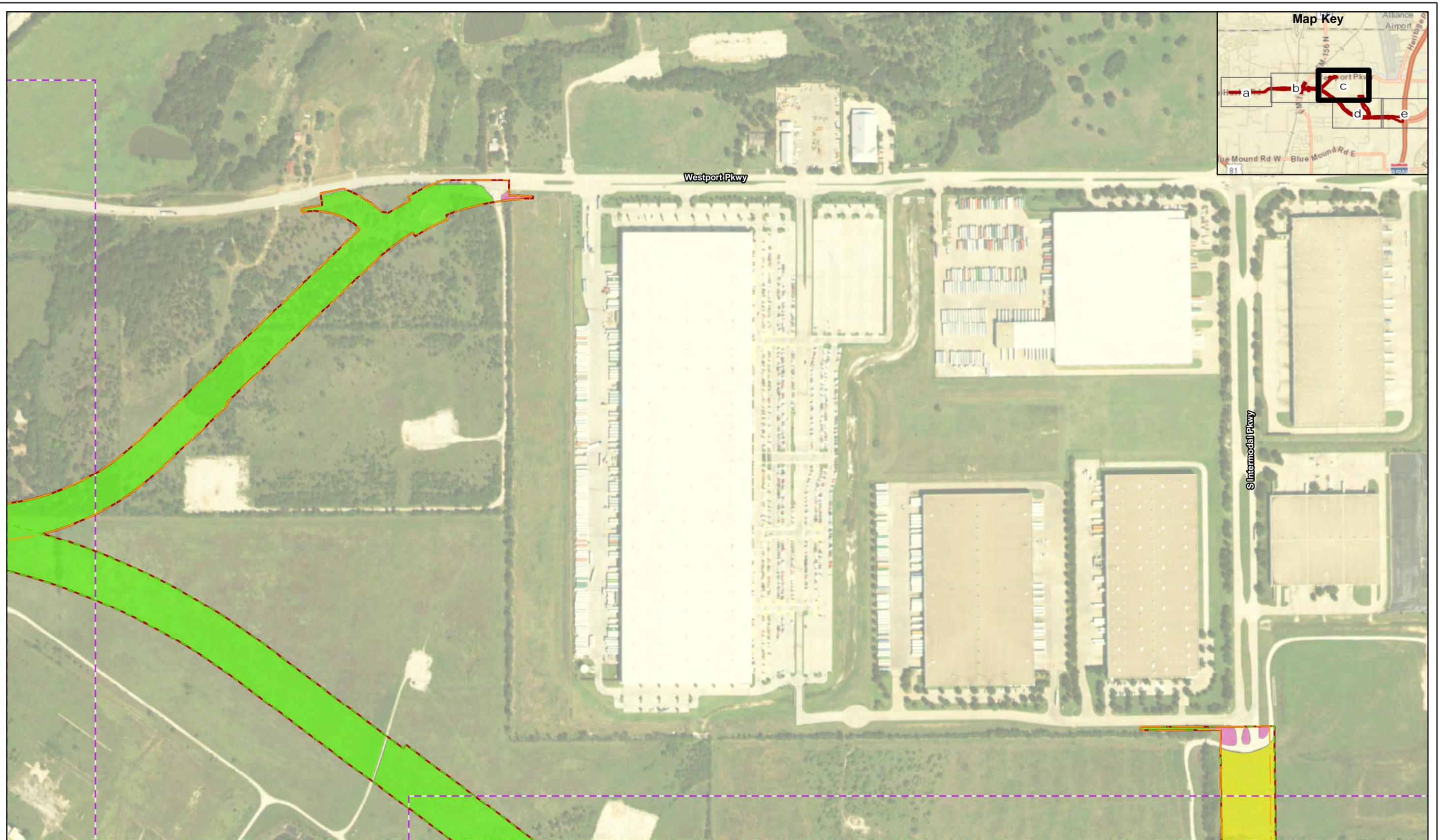


Figure 6c
Observed Vegetation Types

AllianceTexas/Haslet Accessibility Improvement Project

- Map Key Sheet Limits
- City of Fort Worth
- Additional Alternative Construction Limits
- Preferred Alternative Construction Limits
- City of Haslet
- Urban
- Edwards Plateau Savannah, Woodland, and Shrubland

		400 Feet
		120 Meters
Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021, and 0902-90-141		1 in = 400 feet Scale: 1:4,800 Date: 5/29/2019

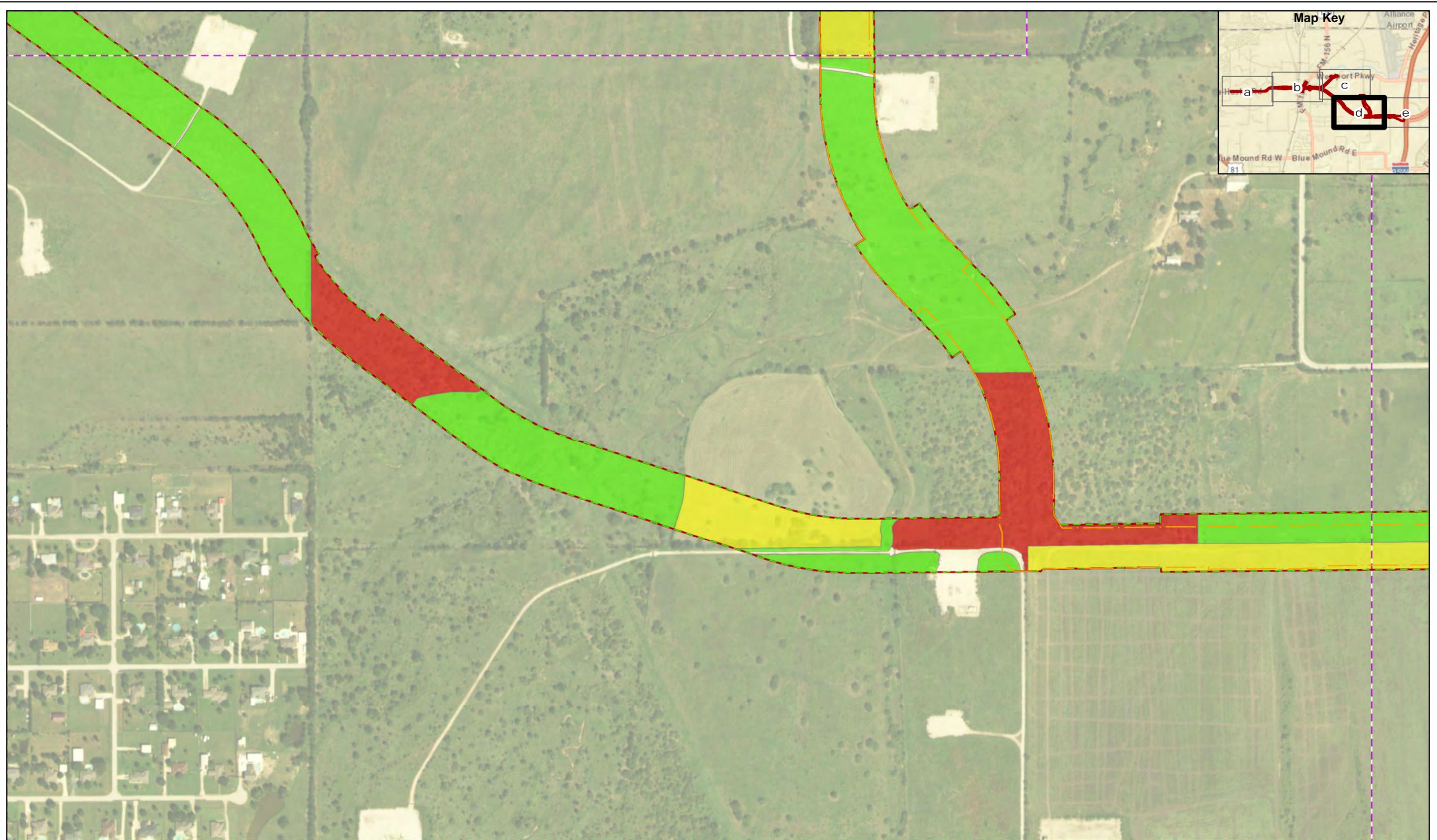
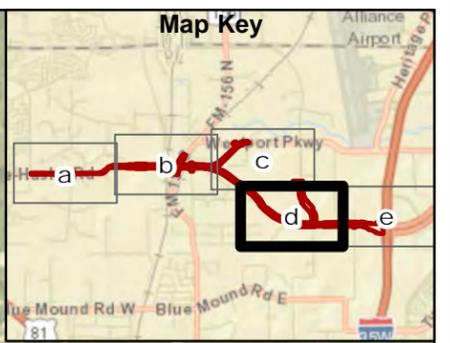


Figure 6d
 Observed Vegetation Types
AllianceTexas/Haslet Accessibility Improvement Project

- Map Key Sheet Limits
- City of Fort Worth
- Environmental Study Limits
- Edwards Plateau Savannah, Woodland, and Shrubland
- City of Haslet
- Additional Alternative Construction Limits
- Agriculture
- City of Haslet ETJ
- Preferred Alternative Construction Limits
- Disturbed Prairie



Prepared for: TxDOT	1 in = 400 feet
CSJ: 0902-90-020, 0902-90-021, and 0902-90-141	Scale: 1:4,800
Data Source: CMEC (2019) Aerial Source: NAIP (2016)	Date: 5/29/2019

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\jws EA_Figure 6_Observed_Vegetation_20190524.mxd

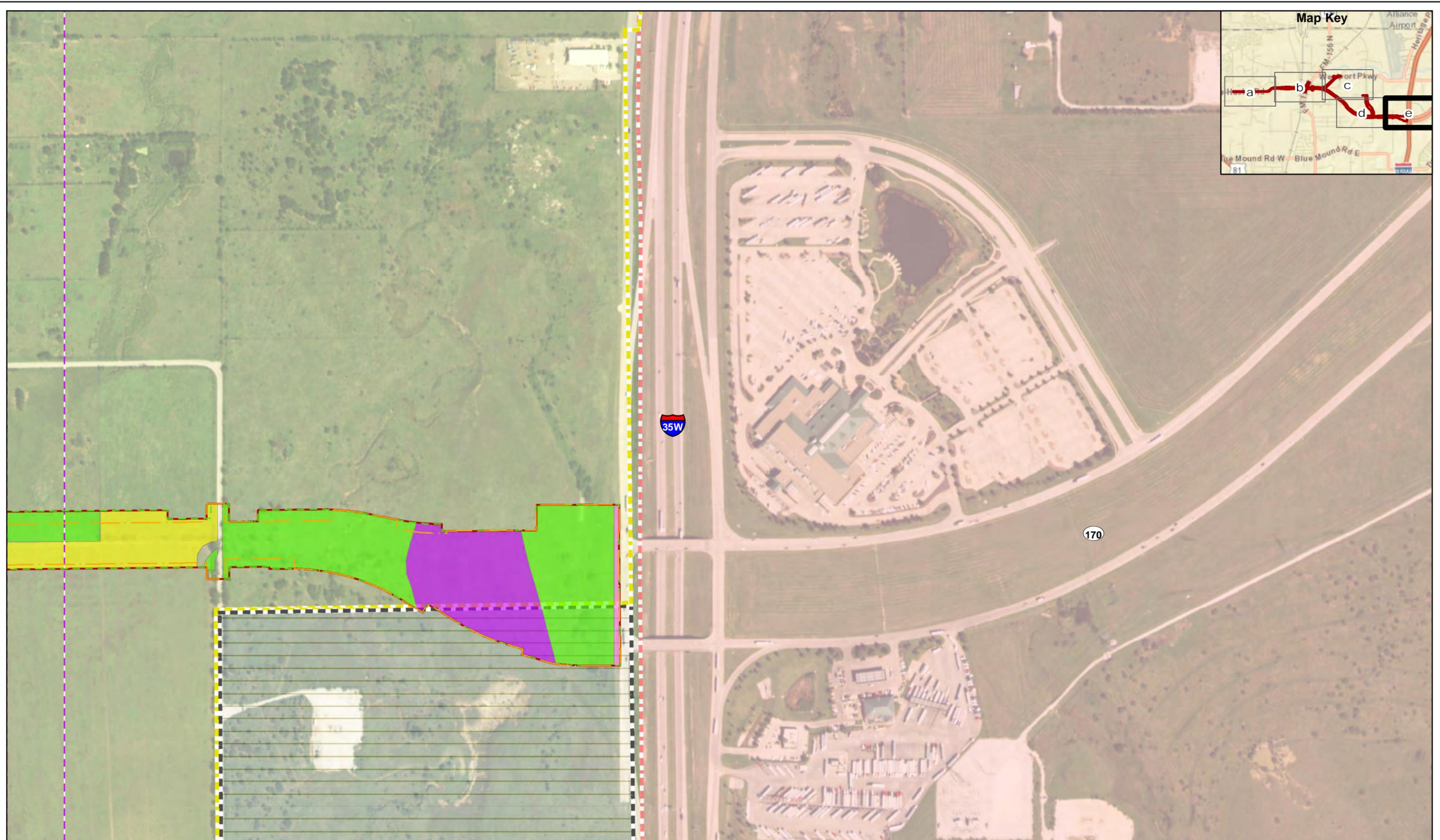


Figure 6e
 Observed Vegetation Types
AllianceTexas/Haslet Accessibility Improvement Project

- Map Key Sheet Limits
- City of Fort Worth
- Environmental Study Limits
- Tallgrass Prairie, Grassland
- City of Haslet
- Additional Alternative Construction Limits
- Agriculture
- Urban
- City of Haslet ETJ
- Preferred Alternative Construction Limits
- Edwards Plateau Savannah, Woodland, and Shrubland

	Prepared for: TxDOT CSJ: 0902-90-020, 0902-90-021, and 0902-90-141	
Data Source: CMEC (2019) Aerial Source: NAIP (2016)		1 in = 400 feet Scale: 1:4,800 Date: 5/29/2019

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\jws EA_Figure 6_Observed_Vegetation_20190524.mxd

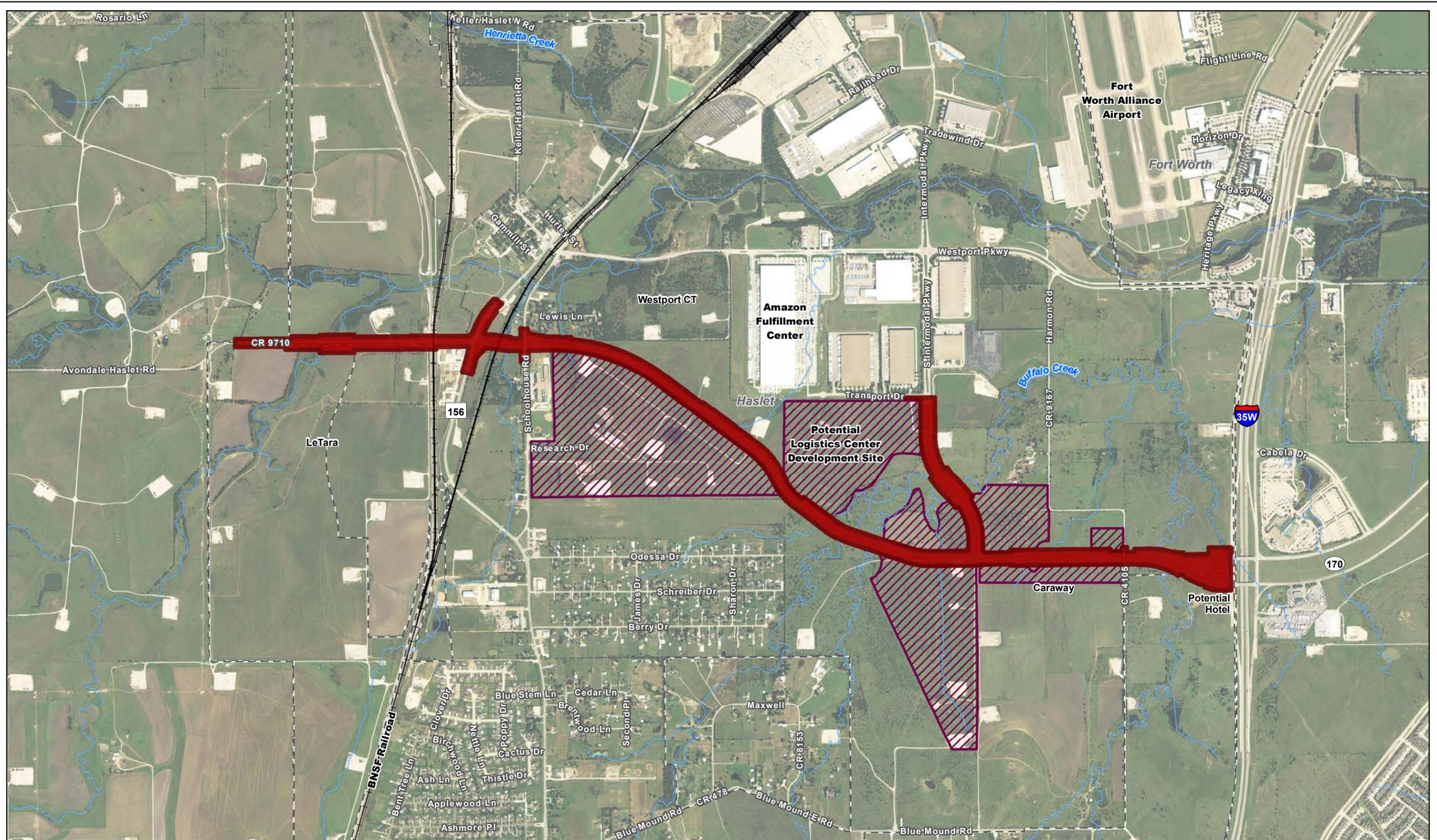


Figure 7a
Area of Induced Growth (Preferred Alternative)
AllianceTexas/Haslet Accessibility Improvements

- Preferred Alternative
- City Boundary
- Area of Induced Growth (Preferred)
- Railroad
- NHD Stream

Data Sources: CMEC (2019),
 FEMA (2018), NHD (2018),
 CSJ: 0902-90-020, 0902-90-021
 TxDOT (2018)
 Aerial Source: NAIP (2016)

Prepared for: TxDOT 0902-90-141	1 in = 1,500 feet Scale: 1:18,000 Date: 6/25/2019

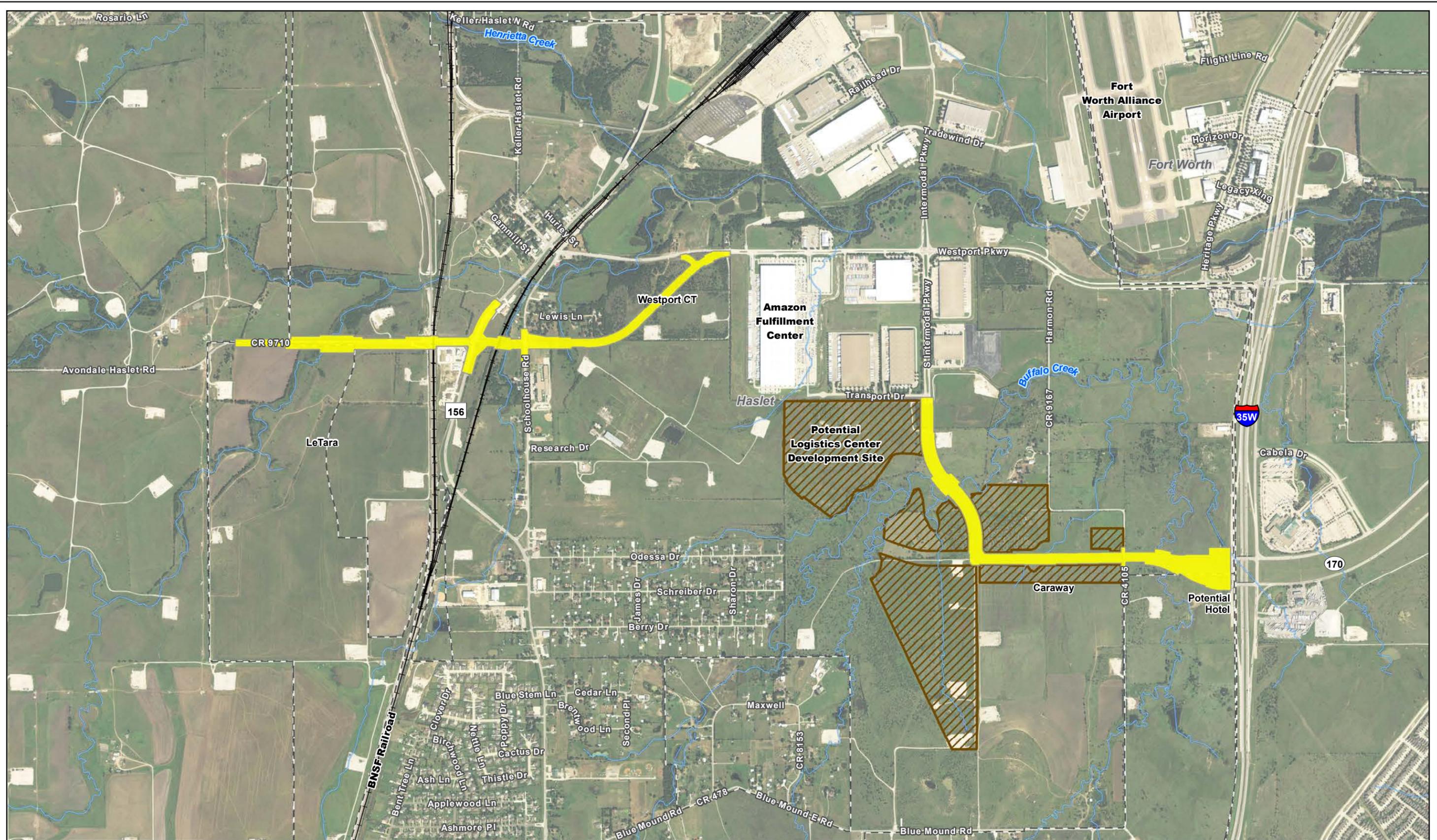


Figure 7b
Area of Induced Growth (Additional Alternative)
AllianceTexas/Haslet Accessibility Improvements

- Additional Alternative
- City Boundary
- Railroad
- NHD Stream
- Area of Induced Growth (Additional)

Data Sources: CMEC (2019),
 FEMA (2018), NHD (2018),
 CSJ: 0902-90-020, 0902-90-021
 TxDOT (2018)
 Aerial Source: NAIP (2016)

	0	1,500 Feet
	0	500 Meters
Prepared for: TxDOT	1 in = 1,500 feet	
Scale: 1:18,000	Date: 6/25/2019	

Appendix G—Resource Agency Coordination

TPWD Coordination

THC Coordination

Tribal Consultation

Elisa Garcia

From: Elisa Garcia
Sent: Wednesday, May 15, 2019 8:05 AM
To: 'Sue Reilly'
Subject: RE: Alliance Texas 0902-90-020 & 0902-90-021 Tarrant County, Texas

Sue,

THANK YOU!

From: Sue Reilly [<mailto:Sue.Reilly@tpwd.texas.gov>]
Sent: Tuesday, May 14, 2019 4:38 PM
To: Elisa Garcia
Subject: RE: Alliance Texas 0902-90-020 & 0902-90-021 Tarrant County, Texas

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

Hi Elisa,

Thanks for your patience, I got caught up in something yesterday afternoon.

I appreciate you applying the BMPs correctly. I do not have any comments on this project.

Thank you for submitting the following project for early coordination: Alliance Texas/Haslet Accessibility Improvement Project (CSJ 092-90-020, and -021). TPWD appreciates TxDOT's commitment to implement the practices listed in the Tier I Site Assessment submitted on May 13, 2019 and Biological Evaluation Form submitted on April 1, 2019. Based on a review of the documentation, the avoidance and mitigation efforts described, and provided that project plans do not change, TPWD considers coordination to be complete. However, please note it is the responsibility of the project proponent to comply with all federal, state, and local laws that protect plants, fish, and wildlife. According to §2.204(g) of the 2013 TxDOT-TPWD MOU, TxDOT agreed to provide TXNDD reporting forms for observations of tracked SGCN (which includes federal- and state-listed species) occurrences within TxDOT project areas. Please keep this mind when completing project due diligence tasks. For TXNDD submission guidelines, please visit the following link: http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/txnnd/submit.phtml

Thank you,

Sue Reilly
Transportation Assessment Liaison
Texas Parks and Wildlife
Wildlife Division
512-389-8021

From: WHAB_TxDOT
Sent: Monday, April 1, 2019 1:11 PM

To: Elisa Garcia <Elisa.Garcia@txdot.gov>

Cc: Sue Reilly <Sue.Reilly@tpwd.texas.gov>

Subject: RE: Alliance Texas 0902-90-020 & 0902-90-021 Tarrant County, Texas

The TPWD Wildlife Habitat Assessment Program has received your request and has assigned it project ID # 41702. The Habitat Assessment Biologist who will complete your project review is copied on this email.

Thank you,

John Ney

Administrative Assistant

Texas Parks & Wildlife Department

Wildlife Diversity Program – Habitat Assessment Program

4200 Smith School Road

Austin, TX 78744

Office: (512) 389-4571

From: Elisa Garcia [<mailto:Elisa.Garcia@txdot.gov>]

Sent: Monday, April 01, 2019 8:32 AM

To: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>

Subject: Alliance Texas 0902-90-020 & 0902-90-021 Tarrant County, Texas

TxDOT requests early coordination for the **Alliance Texas** project in **Tarrant County**, Texas. I have attached the following:

- The Tier 1 Site Assessment Form, including BMPs to be implemented;
- Supporting Documents as appropriate including but not limited to location map, Species Analysis Tool/IPaC, EMST documentation, NDD EOID List and Tracked Managed Areas Map and NDD information file
- and site photos.

These documents, along with other project-related information, are also available in ECOS under the CSJ: **0902-90-020**. The planned NEPA clearance date for this project is **November 2019**. In order for the project to remain on its current letting schedule, please provide comments or complete coordination before that date.



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

April 248 , 2019

Section 106/Antiquities Code of Texas: Consultation
TAC Permit # 8809
Re: Review of the draft report:
Archeological Resources Intensive Survey of the AllanceTexas/Haslet Accessibility Improvement
Project
Tarrant County, Fort Worth District
CSJ: 0902-90-020 and 0902-90-021

Pat Mercado-Allinger
Archeology Division Director/State Archeologist
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Ms. Mercado-Allinger:

In accordance with the Programmatic Agreement (PA) among the Advisory Council on Historic Preservation, the Federal Highway Administration, the Texas State Historic Preservation Officer (SHPO), and the Texas Department of Transportation (TxDOT), and the Memorandum of Understanding (MOU) between TxDOT and the Texas Historical Commission (THC), we hereby initiate consultation under Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas for the undertaking identified.

In March 2019, an intensive survey was completed to inventory and evaluate archeological resources within the footprint of the proposed project includes three segments of roadway: Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway. The proposed project has two alternative alignments (a preferred alternative and an additional alternative) which each include the reconstruction of Avondale-Haslet Road from the Haslet city limits to Farm-to-Market Road (FM) 156, to extend Avondale-Haslet Road to IH 35W or Westport Parkway, and to extend Intermodal Parkway. The environmental study limits for the project will extend from Sendera Ranch Boulevard to IH 35W. The work associated with this archeological survey was carried out under Texas Antiquities Permit 8809 by Cox|McLain Environmental Consulting, Inc.

The survey revealed disturbed contexts throughout the APE, the majority from long-term agriculture or animal grazing that resulted in general erosion, disturbances due to modern residential and commercial developments, oil and gas drilling, buried utility lines, and road construction and maintenance. No surface or subsurface archeological deposits or remains were identified during the survey and no new sites were recorded.

Because the APE has been subjected to numerous disturbances, the search of historical data did not produce any indication of early occupation or utilization of the project area, and the results of the survey of over 74.1 acres did not result in the identification of any archeological materials, features, or deposits, Therefore, additional survey of the remaining 57.8 acres for which no access was granted is not considered necessary.

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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No further work is recommended within the Area of Potential Effects. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

TxDOT requests your explicit concurrence that the survey report is in partial fulfillment of the TAC Permit. We look forward to receipt of your comments on the draft document, so that we may complete our obligations under the Antiquities Code.

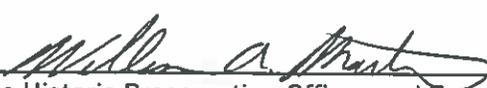
If you have any questions, please call Barbara Hickman at 512-416-2637 or e-mail barbara.hickman@txdot.gov.

Sincerely,



Barbara J Hickman, Staff Archeologist
Archeological Studies Program
Environmental Affairs Division

Concurrence by:



Date:

4/26/19

For Mark Wolfe, State Historic Preservation Officer and Executive Director

Attachments

cc w/o attachments: Fort Worth District EC; BJH, ENV-ARCH; ENV-Scan; ECOS File



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

April 29, 2019

RE: CSJ: 0902-90-020 and 0902-90-021; AllianceTexas on Avondale-Haslet Road, Haslet Accessibility Improvement Project, Section 106 Consultation; Tarrant County, Fort Worth District

To: Representatives of Federally-recognized Tribes with Interest in this Project Area

The above referenced transportation project is being considered for construction by the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT). Environmental studies are in the process of being conducted for this project. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

The purpose of this letter is to contact you in order to consult with your Tribe pursuant to stipulations of the Programmatic Agreement among the Federal Highway Administration, the Texas Department of Transportation, the Texas State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings (PA-TU). The project is located in an area that is of interest to your Tribe.

Undertaking Description

TxDOT's Fort Worth District, North Central Texas Council of Governments, and the City of Haslet is proposing to construct the AllianceTexas/Haslet Accessibility Improvement Project in Haslet in Tarrant County, Texas (Exhibits A and B).

The proposed project includes three segments of roadway: Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway. The proposed AllianceTexas has two alternative alignments (a preferred alternative and an additional alternative) which each require the reconstruction of Avondale-Haslet Road to extend Avondale-Haslet Road to Interstate Highway (IH) 35 West or Westport Parkway and to extend Intermodal Parkway. The total area of potential effects for the project comprises 131.9 acres, with the preferred and additional alternatives partially overlapping in sections. The overlapping areas of both alternatives cover approximately 82.7 acres of existing right-of-way and proposed right-of-way/easements.

The preferred alternative includes intersection improvements at the FM 156 and Avondale-Haslet Road intersection. The preferred alternative also includes a direct connection for mobility and transit from FM 156 to IH 35W, known as Haslet Parkway. As part of the new roadway extension, a new intersection will be constructed at Schoolhouse Road and Haslet Parkway. To accommodate FM 156 intersection improvements, approximately 0.76 miles of existing Avondale-Haslet Road will be widened over an unnamed tributary to Henrietta Creek and at the Burlington Northern Santa Fe

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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(BNSF) Railroad crossing to the city limits of Haslet and Fort Worth. In addition, Intermodal Parkway will be extended from its current southern terminus to the new roadway extension of Haslet Parkway to enhance traffic circulation, relieve traffic congestion, and to provide a new route for freight traffic.

The preferred alternative entails widening Avondale-Haslet Road from an existing two-lane asphalt roadway to a four-lane concrete roadway for approximately 0.76 miles to accommodate improvements at the FM 156 intersection. Haslet Parkway will be a new four-lane, curb-and-gutter system roadway that extends from FM 156 to IH 35W. The new extension of Intermodal Parkway will be a new six-lane curb-and-gutter system roadway. The Avondale-Haslet Road/FM 156 and Haslet Parkway/Schoolhouse Road intersections will be four-lane through sections with left and right accommodating turn lanes. The typical sections for the entirety of the project include 5-foot sidewalks and a 14-foot shared-use lane. As part of the preferred alternative, installation of a 12-inch water line and a 12-inch sanitary sewer line is proposed. These utility improvements will be located within the medians of Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway roadways from Schoolhouse Road to IH 35W. Based on future demand(s) and available funding, portions of the Intermodal Parkway segment may have a phased construction.

Area of Potential Effects

The project's area of potential effects (APE) comprises the following area.

- The project limits extend from the Haslet city limits to Farm-to-Market Road (FM) 156 along Avondale-Haslet Road. The total project length is thus 29,040 feet (alternative alignment: 24,446 feet).
- The existing right of way is 120 to 160 feet in width.
- The existing right of way comprises an area estimated at 15.9 acres. Additional right-of-way is needed totaling 62.3 acres (alternative alignment: 49.0 acres).
- New easements are planned. The project requires 50.1 acres of easements in the preferred alignment with 29.0 acres in the alternative alignment.
- The estimated depths of impact would be 3 feet.
- For the purposes of this cultural resources review, the APE also includes an additional 50-foot area around the previously-described horizontal dimensions to account for potential alterations to the proposed APE included in the final project design. Consultation would be continued if potential impacts extend beyond this additional area, based on the final design.

Identification Efforts

For this project, TxDOT has conducted a survey:

The survey revealed disturbed contexts throughout the APE the majority from long-term agriculture or animal grazing that resulted in general erosion, disturbances due to modern residential and commercial developments, oil and gas drilling, buried utility lines, and road construction and maintenance. No surface or subsurface archeological deposits or remains were identified during the survey and no new sites were recorded.

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Because the APE has been subjected to numerous disturbances, the search of historical data did not produce any indication of early occupation or utilization of the project area, and the results of the survey of over 74.1 acres did not result in the identification of any archeological materials, features, or deposits. Therefore, additional survey of the remaining 57.8 acres for which no access was granted is not considered necessary.

Conclusions:

- The survey identified no archeological materials.
- The survey found that the project's APE has been extensively disturbed by prior construction. Such activities would have destroyed any fragile archeological materials and moved more durable archeological materials from their original location, if any such material occurred within the APE. Any sites that may occur within the existing ROW would likely lack sufficient integrity of location, association, and materials to be able to address important questions of history and prehistory (36 CFR 60.4).
- There is little to no reasonable potential to expect archeological historic properties (36 CFR 800.16(l)) to be located within the APE.

Findings and Recommendations

Based on the above, TxDOT proposes the following findings and recommendations:

- survey of the APE has found no archeological historic properties (36 CFR 800.16(l)), the project would have no effect on such properties, and the proposed project may proceed to construction;
- that a zone of 50 feet beyond the horizontal project limits be considered as part of the cultural resources evaluation; and
- if any future changes to the project APE extend beyond the additional 50-foot zone or if archeological deposits are discovered, your Tribe would then be contacted for further consultation.

According to our procedures and agreements currently in place regarding consultation under Section 106 of the National Historic Preservation Act, we are writing to request your comments on historic properties of cultural or religious significance to your Tribe that may be affected by the proposed project APE and the area within the above defined buffer. Any comments you may have on the TxDOT findings and recommendations should also be provided. Please provide your comments within 30 days of receipt of this letter. Any comments provided after that time will be addressed to the fullest extent possible. If you do not object that the proposed findings and recommendations are appropriate, please sign below to indicate your concurrence. In the event that further work discloses the presence of archeological deposits, we will contact your Tribe to continue consultation.

Thank you for your attention to this matter. If you have questions, please contact Laura Cruzada at 512/416-2638 (email: Laura.Cruzada@txdot.gov). When replying to this correspondence by US Mail, please ensure that the envelope address includes reference to the Archeological Studies Branch, Environmental Affairs Division.

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Sincerely,

A handwritten signature in blue ink that reads "Scott Pletka". The signature is fluid and cursive, with the first name "Scott" and last name "Pletka" clearly legible.

Scott Pletka, Deputy Section Director
Environmental Affairs Division

Concurrence by:

Date:

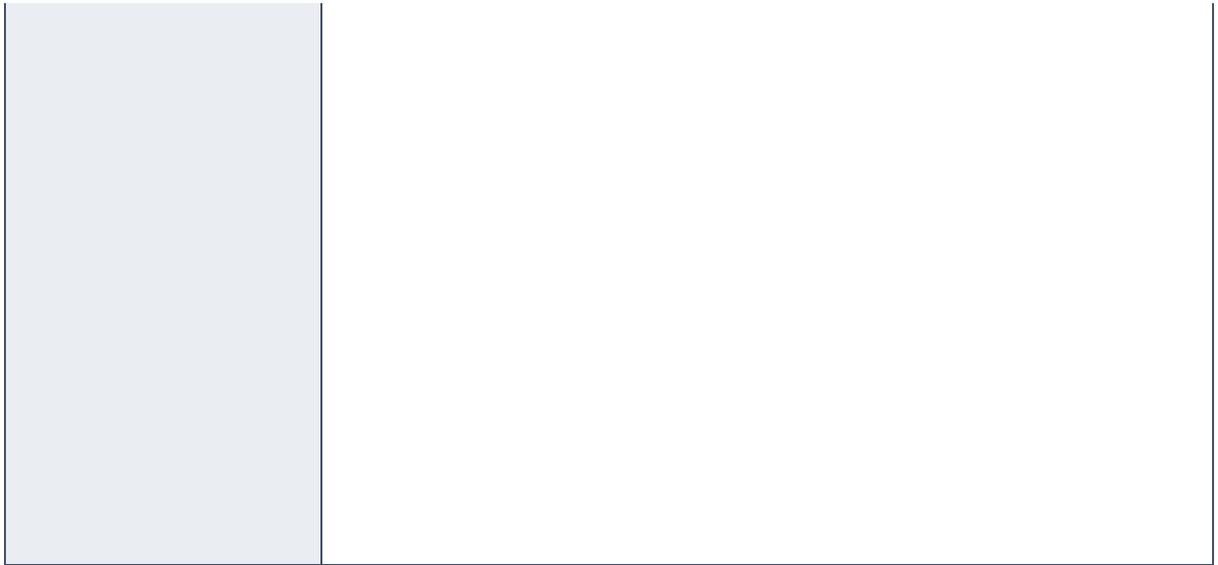
Enclosure

cc w/ enclosure: ENV-ARCH ECOS

From: Laura Cruzada
To: "jason.nelson@kttribe.org"; "kentcollier2000@yahoo.com"; "dpacheco@okkt.net"; "mooseanico@gmail.com"; "kellie@tribaladminsivices.org"; Ivy Smith; Holly Houghten; "Gary.McAdams@wichitatribe.com"; "Terri.Parton@wichitatribe.com"; "dhill@caddo.xyz"; Tamara Francis; "david.cook@kialegetribe.net"; "dkelly@delawarenation.com"; "nalligood@delawarenation.com"; "lbrown@tonkawatribe.com"; "mallen@tonkawatribe.com"; "jwaffle@tonkawatribe.com"; "lhaikey@pci-nsn.gov"; "mopopehill@gmail.com"; "martinac@comanchenation.com"; "theodorev@comanchenation.com"
Cc: [Barbara Hickman](#)
Subject: TxDOT Sec. 106 Consultation Request: CSJ: 0902-90-020 and 0902-90-021; AllianceTexas on Avondale-Haslet Road, Haslet Accessibility Improvement Project; Tarrant County, Fort Worth District
Date: Monday, April 29, 2019 10:06:00 AM
Attachments: [090290020 Consultation Request 4-29-19.pdf](#)

Good morning,
Please let me know if you would like a copy of the survey. Thanks!

<h1>Sec. 106 Consultation</h1>																	
APRIL 29, 2019																	
<p>Contacts: Laura Cruzada 512-416-2368</p>	<p>We kindly request your comments regarding a proposed undertaking. Please see the attached info for project details and information. A summary is provided below.</p> <p>Summary:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;"><i>Project ID (CSJ), County and TxDOT District</i></td> <td style="padding: 5px;"><i>CSJ: 0902-90-020 and 0902-90-021; Tarrant County, Fort Worth District</i></td> </tr> <tr> <td style="padding: 5px;"><i>Project Sponsor:</i></td> <td style="padding: 5px;"><i>TxDOT, North Central Texas Council of Governments and the City of Haslet</i></td> </tr> <tr> <td style="padding: 5px;"><i>Short Description:</i></td> <td style="padding: 5px;"><i>AllianceTexas on Avondale-Haslet Road, Haslet Accessibility Improvement Project</i></td> </tr> <tr> <td style="padding: 5px;"><i>New Right of Way:</i></td> <td style="padding: 5px;"><i>Yes</i></td> </tr> <tr> <td style="padding: 5px;"><i>Depth of Impacts:</i></td> <td style="padding: 5px;"><i>3 ft</i></td> </tr> <tr> <td style="padding: 5px;"><i>Known Archeological Sites or Properties in project area:</i></td> <td style="padding: 5px;"><i>No</i></td> </tr> <tr> <td style="padding: 5px;"><i>Identification Efforts:</i></td> <td style="padding: 5px;"><i>Survey</i></td> </tr> <tr> <td style="padding: 5px;"><i>Recommendations:</i></td> <td style="padding: 5px;"><i>No sites or impacts; proceed to construction</i></td> </tr> </table> <p>The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT</p>	<i>Project ID (CSJ), County and TxDOT District</i>	<i>CSJ: 0902-90-020 and 0902-90-021; Tarrant County, Fort Worth District</i>	<i>Project Sponsor:</i>	<i>TxDOT, North Central Texas Council of Governments and the City of Haslet</i>	<i>Short Description:</i>	<i>AllianceTexas on Avondale-Haslet Road, Haslet Accessibility Improvement Project</i>	<i>New Right of Way:</i>	<i>Yes</i>	<i>Depth of Impacts:</i>	<i>3 ft</i>	<i>Known Archeological Sites or Properties in project area:</i>	<i>No</i>	<i>Identification Efforts:</i>	<i>Survey</i>	<i>Recommendations:</i>	<i>No sites or impacts; proceed to construction</i>
<i>Project ID (CSJ), County and TxDOT District</i>	<i>CSJ: 0902-90-020 and 0902-90-021; Tarrant County, Fort Worth District</i>																
<i>Project Sponsor:</i>	<i>TxDOT, North Central Texas Council of Governments and the City of Haslet</i>																
<i>Short Description:</i>	<i>AllianceTexas on Avondale-Haslet Road, Haslet Accessibility Improvement Project</i>																
<i>New Right of Way:</i>	<i>Yes</i>																
<i>Depth of Impacts:</i>	<i>3 ft</i>																
<i>Known Archeological Sites or Properties in project area:</i>	<i>No</i>																
<i>Identification Efforts:</i>	<i>Survey</i>																
<i>Recommendations:</i>	<i>No sites or impacts; proceed to construction</i>																



Laura Cruzada
512-416-2638
laura.cruzada@txdot.gov
Public Involvement Specialist & Tribal Liaison
Environmental Affairs Division
Cultural Resources Management

From: [Ivy Smith](#)
To: [Laura Cruzada](#)
Cc: [Kellie J. Lewis](#)
Subject: CSJ: 0902-90-020 & 0902-90-021 & 042401054
Date: Wednesday, May 01, 2019 11:10:29 AM
Attachments: [TXDOT 4-26-19 NAE.pdf](#)
[TXDOT 4-29-19 NAE.pdf](#)

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Good Morning,

Attached are the determinations for these projects. Please be advised undiscovered properties may be encountered and must be immediately reported to the Kiowa Tribe Office of Historic Preservation under NHPA and NAGPRA regulations. Should you have any questions, please do not hesitate to contact our office. Thank you for your time and consideration.

Sincerely,

Ivy Smith
Kiowa Tribe Office of Historic Preservation
PO Box 50
Carnegie, OK 73015
(405) 203-2874



P.O. Box 50 | Carnegie, OK 73015 | 405.203.2874

April 30, 2019

Scott Pletka
Deputy Section Director
Environmental Affairs Division
Texas Department of Transportation
125 East 11th Street
Austin, TX 78701-2483

RE: Section 106 Consultation and Review of Proposed CSJ: 0902-90-020 and 0902-90-021; AllianceTexas Accessibility Improvement Project to extend Avondale-Haslet Road to Interstate Highway (IH) 35 West or Westport Parkway and extend Intermodal Parkway in Fort Worth, Tarrant County, TX

Dear Mr. Pletka,

The Kiowa Tribe Office of Historic Preservation has received the information and materials requested for our Section 106 Review and Consultation. Section 106 of the National Historic Preservation Act of 1966 (NHPA), and 36 CFR Part 800 requires consultation with the Kiowa Tribe.

Given the information provided, you are hereby notified that the proposal project location should have minimal potential to adversely affect any known Archaeological, Historical, or Sacred Kiowa sites. Therefore, in accordance with 36 CFR 800.4(d) (1), you may proceed with your proposed project. However, please be advised undiscovered properties may be encountered and must be immediately reported to the Kiowa Tribe Office of Historic Preservation under both the NHPA and NAGPRA regulations.

This information is provided to assist you in complying with 36 CFR Part 800 for Section 106 Consultation procedures. Please retain this correspondence to show compliance. Should you have any questions, please do not hesitate to contact me at kellie@tribaladminserves.org. Thank you for your time and consideration.

Sincerely,

Kellie J. Lewis
Acting Tribal Historic Preservation Officer (THPO)

From: [Hector H. Gonzalez](#)
To: [Laura Cruzada](#)
Cc: [KickapooLegal](#)
Subject: TxDOT Sec. 106 Consultation Request: CSJ: 0902-90-020 and 0902-90-021; AllianceTexas on Avondale-Haslet Road, Haslet Accessibility Improvement Project; Tarrant County, Fort Worth District
Date: Friday, May 03, 2019 11:28:27 AM
Attachments: [image001.png](#)

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

Good morning Ms. Cruzada,

The Kickapoo Traditional Tribe of Texas does not require a copy of the survey regarding the above mentioned project.

Best,

*Hector H. Gonzalez, Paralegal
Kickapoo Traditional Tribe
of Texas c/o Legal Department
P.O. Box 2505
Eagle Pass, TX 78852
Office: (830) 421-5899
Cell: (830) 319-1667*



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Appendix H—Comment Response Matrix from Public Meeting

Committer Number	Committer Name	Representing	Texas Transportation Code §201.811(a)(5)	Address	Date Received	Source	Comment Topic	Resource Category	Response
1	Lisa McLeod			313 Schreiber Drive Haslet, TX 76052	10/25/2018	Meeting	I am totally OPPOSED to the red preferred route. I live in Haslet Park, only about 700-800 feet from the proposed road. I can already hear traffic from I-35, the Speedway, and the coupling of the trains from Intermodal. So I will definitely be hearing extreme noise and traffic from the new route. Truck traffic should be routed along Intermodal and Westport Parkway and north to the Intermodal - where the trucks originate. If you really want to make a difference, widen and fix the intersection of Westport Parkway and I-35. It is no problem going to 170 to frontage road to Westport. Re-do that intersection and problem solved. There are already 3 East-West roads from I-35 to 287. Westport to Avondale-Haslet, Blue Mound Road and Bonds Ranch. Widen these before adding a new unneeded road so close to an established neighborhood. It is possible that living that close to such a large road would adversely affect the market value of my home. Possibly even as much as \$50,000. I am a widow. When I sell I cannot afford to lose that much value. My answer is HELL NO to red route.	Traffic noise; Design; Property Value	A traffic noise analysis will be conducted as part of the environmental review for both build alternatives to determine the potential noise impacts to potential receivers (including adjacent residential and commercial properties). The purpose of the proposed project is to develop a corridor that will meet future transportation needs and to facilitate the safe movement of goods and people from the city of Haslet to SH 170 and I-35W. TxDOT is proposing improvements to the intersection of I-35W and Westport Parkway that include widening to three lanes each direction along Westport Parkway between the frontage roads and adding Texas U-turn lanes. The frontage roads and Westport Parkway intersections are also proposed to be reconstructed. Direct connections are planned to be installed at SH 170 to accommodate the northbound traffic from I-35W traveling to eastbound SH 170. This will relieve the traffic congestion at the current I-35W and SH 170 intersection. In addition, the proposed project will help relieve the traffic congestion at the current I-35W and Westport Parkway intersection. The current Westport Parkway, from FM 156 to I-35W, is at its ultimate width of four lanes per the City's current Master Thoroughfare Plan. Blue Mound Road currently connects from FM 156 to Harmon Road. There is an indirect route connecting Blue Mound Road to I-35W through Harmon Road and Keller Hicks Road. There are no funded planned improvements for Blue Mound Road, Harmon Road, or Keller Hicks Road. The City's current Master Thoroughfare Plan shows Blue Mound Road ultimately connecting to I-35W. FM 156 is currently under design by TxDOT to be reconstructed and widened to six lanes south of Avondale-Haslet Road and four lanes north of Avondale-Haslet Road. Bonds Ranch Road is currently under design by the City of Fort Worth to be widened to a four lane street. Property values are based on a variety of site specific factors as well as economic and real estate market conditions. The City of Haslet and TxDOT cannot reasonably foresee how the value of property may change in a negative or positive way because of various factors (i.e., property location, size, access, zoning, and improvements) and changing market conditions.
2	Patricia Hilborn	Myself and Council member of Haslet		2207 Virginia Lane Haslet, TX 76052	10/25/2018	Meeting	This is a great plan. I prefer to Primary Route: Avondale-Haslet -> Haslet-Parkway East-West to I-35. Plus Intermodal extension. Great design.	Alignment Preference	Thank you for your comment and support of the preferred alternative alignment.
3	Elizabeth Shores			120 Berry Drive Haslet	10/25/2018	Meeting	Red route appears to be better	Alignment Preference	Thank you for your comment and support of the preferred alternative alignment.
4	Rich Doarn	Myself		13248 Moonlake Way Haslet, TX 76052	10/25/2018	Meeting	1. Connector from 170 to Intermodal has to be done. Makes total sense. But it needs to stop at that intersection. 2. Blue Mound Road is a better choice for east to west traffic. A) Straight road B) Can easily accommodate a fly over C) Only a few interchanges into the development to the south 3. the "Red" proposed road could easily be moved to Blue Mound. Little to no development - commercial 7-11, doctors offices, etc.	Design	The purpose of the proposed project is to develop a corridor that will meet future transportation needs and to facilitate the safe movement of goods and people from the city of Haslet to SH 170 and I-35W. Constructing only the segment from SH 170 to Intermodal Parkway would not fulfill the overall purpose of the project. Blue Mound Road currently connects from FM 156 to Harmon Road. There is an indirect route connecting Blue Mound Road to I-35W through Harmon Road and Keller Hicks Road. There are no funded planned improvements for Blue Mound Road, Harmon Road, or Keller Hicks Road. The City's current Master Thoroughfare Plan shows Blue Mound Road ultimately connecting to I-35W.
5	Dorell and Kathy Bolton			104 Lewis Lane	10/25/2018	Meeting	- We live on Lewis Lane and are concerned about noise. Will there be a noise barrier permanently installed? - How will this affect our property value? - Drainage ditch behind our property: What will be installed to prevent our property from washing out? - Traffic signal at new 170 and Schoolhouse intersection, we want one there.	Traffic Noise; Property Value; Drainage; Design	1. A traffic noise analysis will be conducted as part of the environmental review for both build alternatives to determine the potential noise impacts to potential receivers (including adjacent residential and commercial properties). The decision of installing a noise barrier will be determined during the environmental process through the noise impact analysis. 2. Property values are based on a variety of site specific factors as well as economic and real estate market conditions. The City of Haslet and TxDOT cannot reasonably foresee how the value of property may change in a negative or positive way because of various factors (i.e., property location, size, access, zoning, and improvements) and changing market conditions. 3. The design of the roadway would include a storm drainage system. The evaluation of the roadway and drainage design will ensure there are no adverse impacts to the drainage system and adjacent properties. 4. A signal warrant analysis would be performed to determine the need for a signal at the proposed Schoolhouse Road and Haslet Parkway intersection.
6	Glen Townsend			13313 Austin Stone Drive	10/25/2018	Meeting	I prefer the Preferred. I prefer fly over where applicable.	Alignment Preference	Thank you for your comment and support of the preferred alternative alignment. A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds.
7	Troy Huhmann			2829 Aston Wood Drive Haslet, TX 76052	10/25/2018	Meeting	1 - BNSF train crossing blocking Avondale Haslet for hours at a time which seems like everyday 2 - Feeding all the traffic onto a 2 land road (Avondale Haslet) 3 - Traffic at Haslet Elementary, kids safety 4 - Adding a sign at Boar/Sendra Ranch Blvd that will inform people if a train is blocking Avondale/Haslet Road train crossing to let people choose a new route instead of being trapped on Avondale Haslet Road.	Traffic congestion; Traffic signal; Safety	1. The City has contacted BNSF railroad to notify them of the feedback following the public meeting regarding trains blocking the tracks on Avondale-Haslet Road and blocking traffic along Avondale-Haslet Road and FM 156. BNSF indicated they are not able to modify or publish their train schedule due to their security protocol. 2. The proposed project includes expanding Avondale-Haslet Road from FM 156 to the City of Haslet's city limits. The extension to the city limits will help relieve congestion at FM 156 and the railroad. Beyond the city limits is the City of Fort Worth city limits. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion. 3. Northwest ISD currently has plans to close Haslet Elementary by 2020 which would be prior to the construction of this project. A new Haslet Elementary site has been identified west of the BNSF railroad tracks, along future John Day Road. 4. Following the public meeting, coordination efforts occurred between BNSF and the City of Haslet to see if there is a way for BNSF to post signage. BNSF indicated they are not able to include signage due to their security protocol.

Committer Number	Committer Name	Representing	Texas Transportation Code §201.811(a)(5)	Address	Date Received	Source	Comment Topic	Resource Category	Response
8	Jessi Vernon			301 Schoolhouse Rd Haslet, TX 76052	10/25/2018	Meeting	1. Property value - up or down? Can this be determined prior to constructions? Is there assistance for this? 2. Flood concerns flowing from roadway down to Schoolhouse Rd. 3. Noise level during construction. 4. Noise level from traffic after constructed. 5. Traffic coming from Schoolhouse/Lewis Ln toward Haslet Pkwy. 6. Safety - walking- increased traffic	Property value; Drainage; Traffic Noise; Traffic patterns; Safety	1. Property values are based on a variety of site specific factors as well as economic and real estate market conditions. The City of Haslet and TxDOT cannot reasonably foresee how the value of property may change in a negative or positive way because of various factors (i.e., property location, size, access, zoning, and improvements) and changing market conditions. 2. The design of the roadway would include a storm drainage system. The evaluation of the roadway and drainage design will ensure that there are no adverse impacts to the drainage system and adjacent properties. 3. Normal construction level noises would be expected during construction. Construction will be maintained during normal working hours during the day. Noise abatement and best management practices will be included during the construction phase of the project as applicable to minimize noise impacts to adjacent properties. 4. A traffic noise analysis will be conducted as part of the environmental review for both build alternatives to determine the potential noise impacts to potential receivers (including adjacent residential and commercial properties). The decision of installing a noise barrier will be determined during the environmental process through the noise impact analysis. 5. A traffic study and signal warrant analysis would be performed to determine the need for a signal at the proposed Schoolhouse Road and Haslet Parkway intersection. The design of the roadway would evaluate the traffic along Schoolhouse/Lewis. Any improvements needed to address any traffic impacts would be considered as part of the design. 6. The corridor would include pedestrian elements such as a minimum 5-foot wide sidewalk along both sides of the road and crosswalks at the intersections. Sidewalks are typically offset by a minimum of two feet from the back of curb. Where warranted, design includes signalized pedestrian crossings.
9	Anonymous				10/25/2018	Meeting	Truck traffic from Intermodal flowing towards 287 and causing traffic jams at every intersection including Schoolhouse Rd and Haslet Pkwy. A light needs to be placed at that intersection.	Traffic signal	A signal warrant analysis would be performed to determine the need for a signal at Schoolhouse Road and Haslet Parkway.
10	Charlie Plumlee			2821 Aston Wood Haslet, TX 76052	10/25/2018	Meeting	Preferred Route routes traffic (3 lanes each way) from 170 to a single lane just west of RR tracks on W. side of 156. Without Ft. Worth expanding their portion of Avondale-Haslet (1 each way from 2 lanes to 4+) it will create a total stop of traffic.	Traffic pattern	The proposed project includes expanding Avondale-Haslet Road from FM 156 to the City of Haslet's city limits. The extension to the city limits will help relieve congestion at FM 156 and the railroad. Beyond the city limits is the City of Fort Worth city limits. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion.
11	Anonymous				10/25/2018	Meeting	- Install "NO TRUCK" signs on Avondale/Haslet Road immediately - Bridge over tracks at Avondale Haslet - Plan for future development and expansion with North Star, Sanders (Sendera?), and more Tilt Wall Buildings - Build connecting road from Intermodal to 287 North of Sanders	Truck route; Design; Future construction	1. The purpose of the proposed project is to develop a corridor that will meet future transportation needs and to facilitate the safe movement of goods and people from the City of Haslet to SH 170 and I-35W. Avondale-Haslet Road is designated as a Principal Arterial on the Master Thoroughfare Plan and, when fully constructed, will support truck traffic. 2. A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds. 3. The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion. 4. A connector road from Intermodal to US 287 was proposed several years ago and was later removed from the regional mobility plan by NCTCOG due to local concerns by residents. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Rancho Canyon Parkway and Eagle Parkway extending from John Day Road to US 287 for future east-west connectivity.
12	Ken Kristofek	CCRE/FtW RRs		8223 San Fernando Way Dallas, TX 75218	10/25/2018	Meeting	We need a min. additional Alternative to gain access to land to enable it to be constructed on. On Preferred Alt. like the proposal but need alignment adjust shift Haslet Parkway to N-NE at 103 to 110 to be on property line at 08 FtW RRs land to have access to the roadway. Additional Alt. we support this Alt. Either preferred or Add Alt is good. Alt yellow - we don't think this will benefit the community.	Design; Alignment preference	Thank you for your comment and support of the preferred alternative alignment. We have taken your comment into consideration, the preferred alternative alignment near this property has been revised to accommodate property owners concerns regarding access, as much as possible. The preferred alternative alignment could not be located along the property line 08 due to existing gas valve station constraints (located adjacent to the property). Additionally, the preferred alternative was revised to avoid impacts to the existing utility lines.
13	Ernie Romero			104 1st Street	10/25/2018	Meeting	The preferred alternative in my opinion is the better choice of route. But there need to be a bridge that directs traffic over BNSF on Avondale Haslet Rd.	Alignment Preference	Thank you for your comment and support of the preferred alternative alignment. A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds.
14	Leticia ML [Mike Leticia]			204 Thistle Drive 76052	10/25/2018	Meeting	Like the Red "Preferred" Alternative route. Need to convince City Council to approve. Sorry for bad "pen"-manship!	Alignment preference	Thank you for your comment and support of the preferred alternative alignment. The current City Council prepared a resolution in support of the preferred alternative alignment as part of the BUILD grant application for construction of the proposed project.
15	Marsha Rowlinson			202 Bayne Rd	10/25/2018	Meeting	Looks great. Can't come soon enough.	Support	Thank you for your comment.
16	Dennis Hilborn			Haslet	10/25/2018	Meeting	Haslet needs these road improvements.	Support	Thank you for your comment.
17	Jana Doarn			13248 Moonlake Way 76052	10/25/2018	Meeting	Eastern to Intermodal part of this project is a must!! Even taking it to 156. Past 156 is like hitting a brick wall of train tracks, 2 lane "unkept" roads, dangers S curve, neighborhoods w/ houses within 25 feet and future traffic circles - VERY DANGEROUS SITUATION is being created!! 156 to Blue Mound makes much more sense and it less dangerous!! If this project must involve Avondale Haslet all parties (City FW, Haslet, TxDOT, County) need to get it together and make it all flow together. As it stands its going to be a mess! And dangerous! [Drawing included]	Design	The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion. Blue Mound Road currently connects from FM 156 to Harmon Road. There is an indirect route connecting Blue Mound Road to I-35W through Harmon Road and Keller Hicks Road. There are no funded planned improvements for Blue Mound Road, Harmon Road, or Keller Hicks Road. The City's current Master Thoroughfare Plan shows Blue Mound Road ultimately connecting to I-35W. FM 156 is currently under design by TxDOT to be reconstructed and widened to six lanes south of Avondale-Haslet Road and four lanes north of Avondale-Haslet Road.

Committer Number	Committer Name	Representing	Texas Transportation Code §201.811(a)(5)	Address	Date Received	Source	Comment Topic	Resource Category	Response
18	Sheri Stine			117 Berry Drive Haslet, TX	10/25/2018	Meeting	It seems this will be a bottleneck at 156 and the new road - especially when traffic backs up for the trains on Avondale/Haslet	Traffic pattern	The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. The proposed project includes expanding Avondale-Haslet Road from FM 156 to the City of Haslet's city limits. The extension to the City limits will help relieve congestion at FM 156 and the railroad. Beyond the city limits is the City of Fort Worth city limits. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion. FM 156 is currently under design by TxDOT to be reconstructed and widened to 6 lanes south of Avondale-Haslet Road and 4 lanes north of Avondale-Haslet Road.
19	Shee Romero			104 1st Street Haslet, TX 76052	10/25/2018	Meeting	Agree with preferred alternate roadway. Additional concerns/needs are the BSNF railroad that crosses Avondale-Haslet rd. Trains stop on tracks multiple times a day blocking traffic for sometimes hours at a time. There's no way to know if train is stopped or ways to turn around/go around it. Causes hours of traffic and congestion daily. Bridge is needed desperately.	Alignment preference; Traffic congestion	Thank you for your comment and support of the preferred alternative alignment. A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds. Following the public meeting, coordination efforts occurred between BNSF and the City of Haslet to see if there is a way for BNSF to post signage of when the trains are stopped on the tracks. BNSF indicated they are not able to include signage or able to modify or publish their train schedule due to their security protocol.
20	Lisa White				10/25/2018	Meeting	Prefer red route Def need 4 - 6 lanes need bridge over trains	Alignment preference; Design	Thank you for your comment and support of the preferred alternative alignment. A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds.
21	Clint White	Self		2825 Aston Meadows Haslet, TX 76052	10/25/2018	Meeting	Prefer Red Route. Really needs bridge over railroad.	Alignment preference; Design	Thank you for your comment and support of the preferred alternative alignment. A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds.
22	John S. Dreiling	Myself		1200 Durango Springs Drive Haslet, TX 76052-3562	10/25/2018	Meeting	I love the project; especially the "preferred" route. I live west of the project in Fort Worth. I am concerned about the increased traffic, including semis, going west on Avondale Haslet to Hwy 287. Fort Worth's current plans for widening Avondale Haslet Rd are meager and do not appear to be compatible with improvements to be done in this project. I fear that Avondale Haslet west of this project will be swamped.	Alignment preference; Traffic pattern	Thank you for your comment and support of the preferred alternative alignment. The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. The proposed project includes expanding Avondale-Haslet Road from FM 156 to the City of Haslet's city limits. The extension to the city limits will help relieve congestion at FM 156 and the railroad. Beyond the city limits is the City of Fort Worth city limits. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet Road to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion.
23	Jerry Quicksall	120 Land Corporation and Madison Halet LLC as Managing Owner of 56 Acre tract captioned.		3028 Hulen Ct Fort Worth, TX 76109	10/25/2018	Meeting	Alternative Route: (1) Damages from dividing the 56 acres (#32) with the Alternative Route alignment will be significant. (2) Alternative Route creates two curves through this 56 acres and poorly serves the economic viability of this property. (3) Alternative yields much less relief to the east-west traffic congestion. (Less traffic lanes) Preferred Route: 1) Provides much needed additional traffic lane at a bargain price vs. Alternative. 2) Provide more direct connection to I 35W. 3) Opens up significant area to fruitful development! Summary: THE PREFERRED ROUTE GIVES WHAT the Alternative Route denies.	Alignment preference	Thank you for your comment and support of the preferred alternative alignment.
24	Larry Brumbaugh	Fort Worth RR Storage			10/25/2018	Meeting	There is a land strip (06) between 08 along Haslet Parkway that would eliminate Haslet Pkwy access to 08 (FWRS) property. We request that the entire 300' strip be purchased as ROW so FWRR (08) would have direct access to Haslet Parkway. See attached. Also please provide median plan and curb cuts along Haslet Pkwy. and Intermodal	ROW acquisition; Design	Thank you for your comment and support of the preferred alternative alignment. We have taken your comment into consideration, the preferred alternative alignment near this property has been revised to accommodate property owners concerns regarding access, as much as possible. The preferred alternative alignment could not be located along the property line 08 due to existing gas valve station constraints (located adjacent to the property). Additionally, the preferred alternative was revised to avoid impacts to the existing utility lines. The proposed alternative realignment shows the remaining land strip between 08 and Haslet Parkway is needed for drainage easement. An access management plan for the proposed corridor will be developed as part of the design. Curb cuts/median openings will be determined based upon the access management plan and existing developments/intersections. Additional correspondence from Fort Worth RR Storage representative Pat Mcdowell (to Thad chambers of the City of Haslet) was received on 10/30/2018 stating that "the owner has approved and is in favor of the proposed new alignment of Haslet Parkway through their property located north of the initial alignment of Haslet Parkway." A copy of the correspondence has been added to Section D of the Public Meeting Summary Report.
25	Brian and Jess Clarke	117 Schreiber Drive			11/9/2018	Mail	I am concerned that the connection at Schoolhouse Rd. will destroy the historic stairs/sone wall there, will it? I'd also like to make sure there is enough greenery (trees, etc) included in this plan. We have concerns of traffic backing up at railroad tracks to Schoolhouse Road intersection. The preferred route is best, but we have concerns about noise with respect to Haslet Park Neighborhood.	Historic resources; Traffic pattern; Alignment preference; Traffic noise	An analysis regarding historic resources occurring within and adjacent to the proposed project area will be conducted as part of the environmental review for the proposed project. This will include the masonry wall along Schoolhouse Road which is currently proposed for partial demolition to facilitate both alternatives. This wall was constructed as part of the Works Progress Administration from 1935-1937. Enhanced landscaping is not planned with this project. Future landscaping projects will be considered by the City of Haslet. Following the public meeting, coordination efforts occurred between BNSF and the City of Haslet to see if there is a way for BNSF to post signage of when the trains are stopped on the tracks. BNSF indicated they are not able to include signage or able to modify or publish their train schedule due to their security protocol. The roadway expansion will help relieve congestion at FM 156 both east and west of the railroad. A traffic noise analysis will be conducted as part of the environmental review for both build alternatives to determine the potential noise impacts to potential receivers (including adjacent residential and commercial properties). The decision of installing a noise barrier will be determined during the environmental process through the noise impact analysis.

Committer Number	Committer Name	Representing	Texas Transportation Code §201.811(a)(5)	Address	Date Received	Source	Comment Topic	Resource Category	Response
26	Sandra Smith				10/25/2018	Email	Travis, I had planned on attending the meeting tonight to get answers to some questions I have but will be unable to attend. Is there any way you can provide a map of proposed routes with estimated distance from my home? Also, are there any sound, traffic, and value impact studies for/to surrounding property owners with proposed routes? If so, can you provide those or do I get those from TXDOT?	Traffic pattern; Property value; Traffic noise	Ms. Smith, Attached please find a map of the alternatives being considered and a fact sheet for the project. Sound and traffic studies are conducted as part of the environmental clearing process which is presently occurring. Once available, they will be made public documents. The value of the land surrounding the roadway is expected to increase as part of the funding mechanism for the roadway is a Tax-Increment-Reinvestment-Zone (TIRZ) where some of the construction money can be recouped as the land develops. The Economic Development Director is working on the financing portion of the roadway.
27	Concerns voiced during meeting				10/25/2018	Meeting	Will a traffic/noise study be conducted?	Traffic noise	A traffic noise analysis will be conducted as part of the environmental review for both build alternatives to determine the potential noise impacts to potential receivers (including adjacent residential and commercial properties).
28	Concerns voiced during meeting				10/25/2018	Meeting	Will property values be reassessed?	Property value	Property values are based on a variety of site specific factors as well as economic and real estate market conditions. The City of Haslet and TxDOT cannot reasonably foresee how the value of property may change in a negative or positive way because of various factors (i.e., property location, size, access, zoning, and improvements) and changing market conditions. As part of the Tarrant Appraisal District process, property values are assessed every three years.
29	Concerns voiced during meeting				10/25/2018	Meeting	Want a bridge over the railroad tracks.	Design	A flyover (direct connector) along Avondale-Haslet Road over FM 156, the railroad, and School House Road was previously considered by the City of Haslet. However, it has not been included in this proposed project. A flyover may be considered as a future project since the construction cost for a flyover exceeds available funds.
30	Concerns voiced during meeting				10/25/2018	Meeting	No traffic near homes.	Design	The purpose of the proposed project is to develop a corridor that will meet future transportation needs and to facilitate the safe movement of goods and people from the City of Haslet to SH 170 and I-35W. An alternative analysis will be conducted to determine the final alignment as part of the environmental review for both build alternatives.
31	Concerns voiced during meeting				10/25/2018	Meeting	How will this project connect to other projects, like the one planned in Fort Worth?	Design	The purpose of the proposed project is to develop a corridor that will meet future transportation needs and to facilitate the safe movement of goods and people from the City of Haslet to SH 170 and I-35W. TxDOT is proposing improvements to the intersection of I-35W and Westport Parkway that include widening to three lanes each direction along Westport Parkway between the frontage roads and adding Texas U-turn lanes. The frontage roads and Westport Parkway intersections are also proposed to be reconstructed. Direct connections are planned to be installed at SH 170 to accommodate the northbound traffic from I-35W traveling to eastbound SH 170. This will relieve the traffic congestion at the current I-35W and SH 170 intersection. In addition, the proposed project will help relieve the traffic congestion at the current I-35W and Westport Parkway intersection. The current Westport Parkway, from FM 156 to I-35W, is at its ultimate width of four lanes per the City's current Master Thoroughfare Plan. Blue Mound Road currently connects from FM 156 to Harmon Road. There is an indirect route connecting Blue Mound Road to I-35W through Harmon Road and Keller Hicks Road. There are no funded planned improvements for Blue Mound Road, Harmon Road, or Keller Hicks Road. The City's current Master Thoroughfare Plan shows Blue Mound Road ultimately connecting to I-35W. FM 156 is currently under design by TxDOT to be reconstructed and widened to six lanes south of Avondale-Haslet Road and four lanes north of Avondale-Haslet Road. Bonds Ranch Road is currently under design by the City of Fort Worth to be widened to a four lane street.
32	Concerns voiced during meeting				10/25/2018	Meeting	Can there be an early warning to signal traffic stopped due to the railroad?	Traffic signal	Following the public meeting, coordination efforts occurred between BNSF and the City of Haslet to see if there is a way for BNSF to post signage of when the trains are stopped on the tracks. BNSF indicated they are not able to include signage or able to modify or publish their train schedule due to their security protocol.
33	Concerns voiced during meeting				10/25/2018	Meeting	Will Odessa Drive ultimately be connected to the new roadway and be used as a cut-through?	Design	Connecting Odessa Drive is not within the scope of this project and is not in the City's Master Thoroughfare Plan.
34	Concerns voiced during meeting				10/25/2018	Meeting	Will the greenspace around Buffalo Creek be compromised?	Design	The green space around Buffalo Creek is FEMA designated floodplain. The proposed roadway will be crossing the creek. The current schematic shows the installation of a concrete culvert box structure, however, the constructability of a bridge structure will also be evaluated through the design process. The area upstream and downstream of this crossing will remain in its existing state.
35	Concerns voiced during meeting				10/25/2018	Meeting	Is the project still worthwhile even though it will be four lanes converging to two lanes on the Fort Worth side?	Design	The proposed project includes expanding Avondale-Haslet Road from FM 156 to the City of Haslet's city limits. The extension to the city limits will help relieve congestion at FM 156 and the railroad. Beyond the city limits is the City of Fort Worth city limits. The City of Fort Worth's 2016 Master Thoroughfare Plan envisions Avondale-Haslet Road to be an ultimate five lane section (two lane each direction with center turn lane). The City of Fort Worth currently does not have plans or monies available to expand Avondale-Haslet Road. The environmental review process will consider potential impacts along Avondale-Haslet Road from the City of Haslet/City of Fort Worth municipal boundary west to Sendera Ranch Boulevard. An evaluation of future traffic values will be considered to determine whether two lane Avondale-Haslet Road will cause traffic congestion.
36	Concerns voiced during meeting				10/25/2018	Meeting	Extra drainage on Lewis Lane?	Drainage	The design of the roadway would include a storm drainage system. The evaluation of the roadway and drainage design will ensure that there are no adverse impacts to the drainage system and adjacent properties.

Appendix I – Traffic Noise Technical Report



Traffic Noise Technical Report

AllianceTexas/Haslet Accessibility Improvement Project

CSJs: 0902-90-020 and 0902-90-021

Tarrant County, Texas

March 2019

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

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1.0 Project Description

The City of Haslet is partnering with the North Central Texas Council of Governments (NCTCOG) and the Texas Department of Transportation (TxDOT) to construct the AllianceTexas/Haslet Accessibility Improvement Project in the City of Haslet, Tarrant County, Texas. The proposed AllianceTexas/Haslet Accessibility Improvement Project will utilize the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program funding and will be administered by the NCTCOG. The proposed project includes three segments of roadway: Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway. The environmental study limits for the project will extend from Sendera Ranch Boulevard to Interstate Highway 35W (I-35W).

The proposed project includes two alternative alignments that each include the reconstruction of Avondale-Haslet Road from the Haslet city limits to Farm-to-Market Road (FM) 156. Each alternative would extend Avondale-Haslet Road to I-35W or Westport Parkway, and would extend Intermodal Parkway.

Description of the Preferred Alternative

The preferred alternative includes intersection improvements at the FM 156 and Avondale-Haslet Road intersection. The preferred alternative also includes a direct connection for mobility and transit from FM 156 to I-35W, known as Haslet Parkway. As part of the new roadway extension, a new intersection will be constructed at Schoolhouse Road and Haslet Parkway. To accommodate FM 156 intersection improvements, approximately 0.76 miles of existing Avondale-Haslet Road will be widened over an unnamed tributary of Henrietta Creek and at the Burlington Northern Santa Fe (BNSF) Railroad crossing to the city limits of Haslet and Fort Worth. In addition, Intermodal Parkway will be extended from its current southern terminus to the new roadway extension of Haslet Parkway to enhance traffic circulation, relieve traffic congestion, and to provide a new route for freight traffic.

The preferred alternative entails widening Avondale-Haslet Road from an existing two-lane asphalt roadway to a four-lane concrete roadway for approximately 0.76 miles to accommodate improvements at the FM 156 intersection. Haslet Parkway will be a new four-lane, curb and gutter system roadway that extends from FM 156 to I-35W. The new extension of Intermodal Parkway will be a new six-lane curb and gutter system roadway. The Avondale-Haslet Road/FM 156 and Haslet Parkway/Schoolhouse Road intersections will be four-lane through sections with left-turn and right-turn lanes.

The typical sections for the entirety of the project include 5-foot-wide sidewalks and a 14-foot-wide shared-use lane. As part of the preferred alternative, installation of a 12-inch water line and a 12-inch sanitary sewer line is proposed. These utility improvements will be located within the median of Avondale-Haslet Road, Haslet Parkway, and Intermodal Parkway roadways from Schoolhouse Road to I-35W. Based on future demand(s) and available funding, portions of the Intermodal Parkway segment may have a phased construction.

To accommodate the preferred alternative, it is anticipated that approximately 60 feet of new right-of-way (ROW) will be needed for Avondale-Haslet Road and 120 feet of new ROW width will be needed for Haslet Parkway and Intermodal Parkway. The environmental study limit for the preferred alternative is approximately 5.50 miles long, and the construction limit for the preferred

alternative is approximately 4.52 miles long. The environmental study limit for the preferred alternative is located on approximately 15.9 acres of existing ROW, 50.1 acres of proposed easements, and 62.3 acres of proposed ROW, for a total area of 128.3 acres. The design speed for the preferred alternative is 45 miles per hour (mph).

Description of the Additional Alternative

The additional alternative entails widening Avondale-Haslet Road from an existing two-lane asphalt roadway to a four-lane concrete roadway for approximately 0.76 miles, extending Avondale-Haslet Road from FM 156 to Westport Parkway, and extending Intermodal Parkway southward and eastward to connect to I-35W/State Highway (SH) 170.

To accommodate the additional alternative, it is anticipated that approximately 60 feet of new ROW width will be needed along Avondale-Haslet Road where widening will occur, approximately 110 feet of new ROW width will be needed for the Avondale-Haslet Road extension, and approximately 120 feet of new ROW width will be needed for Intermodal Parkway.

The environmental study limit for the additional alternative is approximately 4.63 miles long, and the construction limit for the additional alternative is approximately 3.65 miles long. The environmental study limit for the additional alternative is located on approximately 15.9 acres of existing ROW, 29.0 acres of proposed easements, and 49.0 acres of proposed ROW, for a total area of 93.9 acres. The design speed for the additional alternative is 45 mph.

Purpose and Need of the Project

The purpose of the proposed project is to develop a corridor that will meet future transportation needs and to facilitate the safe movement of goods and people from the City of Haslet to SH 170 and I-35W.

The proposed need is to

- address growing transportation needs and reduce traffic congestion through the provision of added capacity;
- improve the safety and efficiency of travel for heavy truck traffic by providing a direct connector to SH 170 and I-35W; and
- foster economic development in areas by providing increased accessibility.

2.0 Noise Analysis

Background and Methodology

This analysis was completed in accordance with TxDOT's *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (April 2011), which has been approved by the Federal Highway Administration (FHWA). Traffic Noise Model version 2.5 (TNM 2.5) was utilized in this assessment. Traffic volume data used in this analysis and approved by TxDOT's Transportation Planning and Programming division can be found in **Appendix 3**.

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

frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as “dB(A).” Also, because traffic sound levels are never constant due to the changing number, type, and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as “Leq.”

Dominant noise sources within the proposed project area include traffic on existing roads and various kinds of local activity.

A traffic noise analysis typically includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise
- Determination of existing noise levels
- Prediction of future noise levels
- Identification of possible noise impacts
- Consideration and evaluation of measures to reduce noise impacts

FHWA has established the Noise Abatement Criteria (NAC) listed in Table 1 for various land use activity areas. The NACs are one of two approaches used to determine when a traffic noise impact would occur.

Table 1: Noise Abatement Criteria		
Activity Category	FHWA (dB(A) Leq)	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 (exterior)	Residential
C	67 (exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F
F	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	--	Undeveloped lands that are not permitted

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

- Absolute criterion: the predicted noise level at a receiver approaches, equals, or exceeds the NAC. "Approach" is defined as one dB(A) below the FHWA NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.
- Relative criterion: the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. "Substantially exceeds" is defined as more than 10 dB(A). For example, a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

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

For receivers adjacent to new-location roadway segments (R6, R8–R12), the existing ambient noise levels were established by performing field measurements on January 8, 2019, using a Quest Technologies (3M) Soundpro SE/DL Type I Sound Meter. For all other receivers, the FHWA TNM 2.5 was used to calculate existing and predicted (2045) traffic noise levels. The model primarily considers the number, type, and speed of vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Consideration of Future Noise Impacts

Existing and predicted traffic noise levels were modeled at receiver locations that (1) represent the land use activity areas adjacent to the proposed project, (2) might be impacted by traffic noise, and (3) might potentially benefit from feasible and reasonable noise abatement (Tables 2 and 3 and Figure 2).

Receiver	NAC Category	NAC Level	Existing 2025	Predicted 2045	Change (+/-)	Noise Impact
R1	B (Residential)	67	54	55	+1	No
R2	C (Church)	67	53	55	+2	No
R3	B (Residential)	67	50	52	+2	No
R4	E (Restaurant)	72	58	61	+3	No
R5	E (Restaurant)	72	63	65	+2	No
R6	C (School)	67	52	56	+4	No
R7	B (Residential)	67	54	58	+4	No
R8	B (Residential)	67	52	56	+4	No
R9	B (Residential)	67	52	53	+1	No
R10	B (Residential)	67	52	54	+2	No
R11	B (Residential)	67	52	52	0	No
R12	B (Residential)	67	52	52	0	No
R13	B (Residential)	67	57	58	+1	No
R14	B (Residential)	67	62	64	+2	No
R15	B (Residential)	67	60	62	+2	No

Receiver	NAC Category	NAC Level	Existing 2025	Predicted 2045	Change (+/-)	Noise Impact
R1	B (Residential)	67	54	55	+1	No
R2	C (Church)	67	53	55	+2	No
R3	B (Residential)	67	50	52	+2	No
R4	E (Restaurant)	72	58	61	+3	No
R5	E (Restaurant)	72	63	65	+2	No
R6	C (School)	67	52	55	+3	No
R7	B (Residential)	67	54	58	+4	No
R8	B (Residential)	67	52	55	+3	No
R9	B (Residential)	67	52	53	+1	No
R10	B (Residential)	67	52	54	+2	No
R11	B (Residential)	67	52	53	+1	No
R12	B (Residential)	67	52	54	+2	No
R13	B (Residential)	67	57	56	-1	No
R14	B (Residential)	67	62	60	-2	No
R15	B (Residential)	67	60	57	-3	No

As indicated in **Tables 2 and 3**, the proposed project would not result in a traffic noise impact.

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 (2045) noise impact contours (**Table 4**).

Land Use	Impact Contour	Distance from Right-of-Way	
		Haslet Parkway	Intermodal Parkway
NAC Categories B & C	66 dB(A)	23 feet	Within Right-of-Way
NAC Category E	71 dB(A)	Within Right-of-Way	Within Right-of-Way

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 receivers are expected to be exposed to construction noise for a long duration; therefore, 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.

3.0 Conclusions

As indicated in **Tables 2** and **3**, the proposed project would not result in a traffic noise impact; therefore, no abatement measures are proposed for this project.

4.0 Local Officials Statement

A copy of this traffic noise analysis will be made available to local officials to ensure, to the maximum extent possible, future developments are planned, designed, and programmed in a manner that would avoid traffic noise impacts. 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.

Appendix 1

Figures

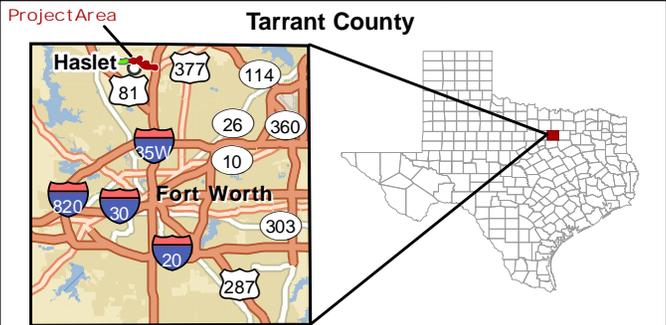
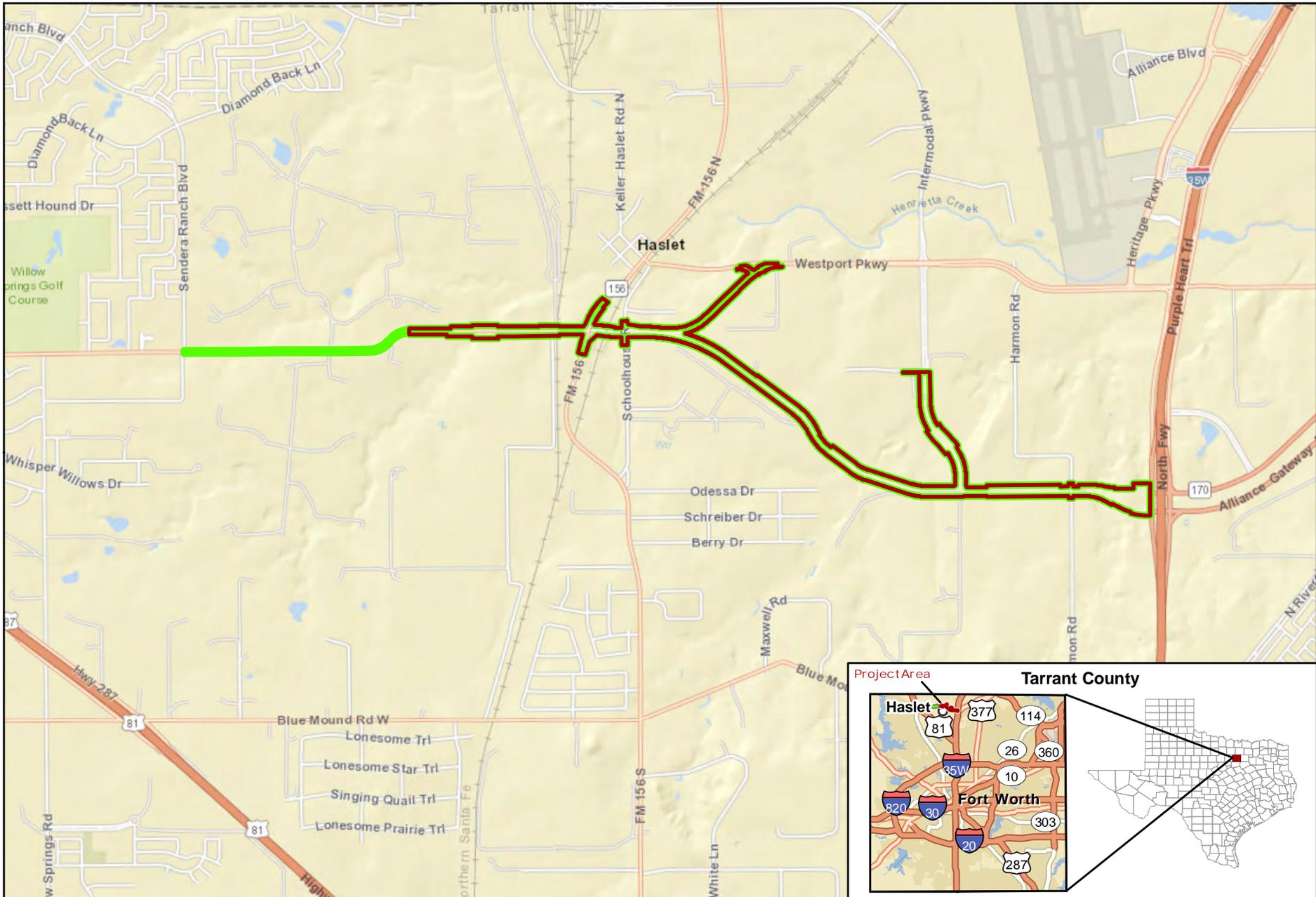


Figure 1
 Project Location (Road Base)
AllianceTexas/Haslet Accessibility Improvements

- Study Limits
- Construction Limits

Prepared for: TxDOT	1 in = 3,000 feet
Basemap Source: ESRI (2019)	Scale: 1:36,000
CSJ: 0902-90-020, 0902-90-021	Date: 1/8/2019

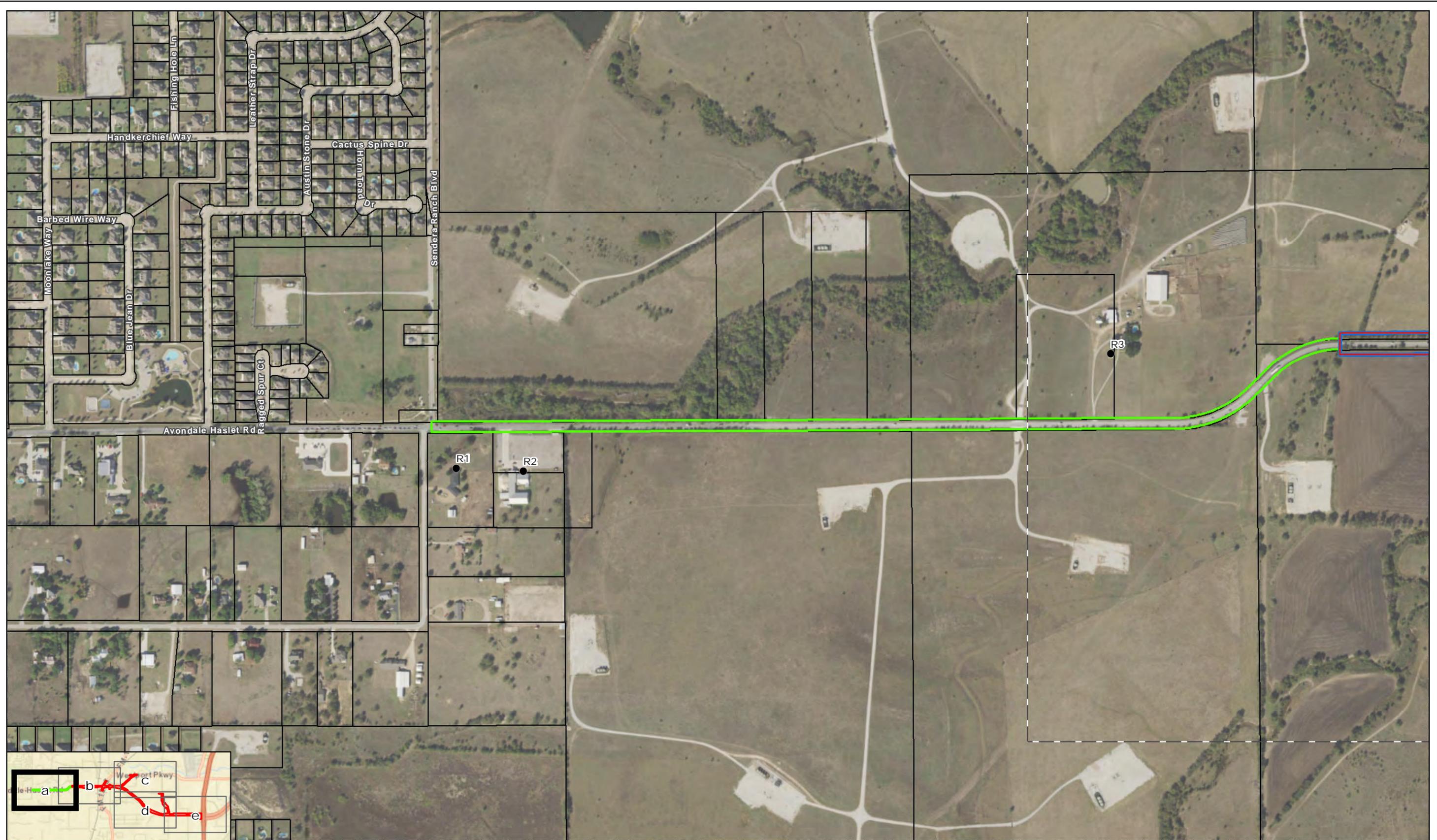


Figure 2a
 Location of Noise Receivers
AllianceTexas/Haslet Accessibility Improvements

- ▬ Preferred Alternative Proposed Right-of-Way
- ▬ Additional Alternative Proposed Right-of-Way
- ▬ Study Limit Extension (West)
- Parcel Boundary
- Sheet Limits
- Receivers

Data Sources:
 TAD (2018),
 TxDOT (2018), FHWA (2018)
 Aerial Source: DigitalGlobe (2017)

Prepared for: TxDOT	Scale: 1:6,000
CSJ: 0902-90-020, 0902-90-021	Date: 1/24/2019

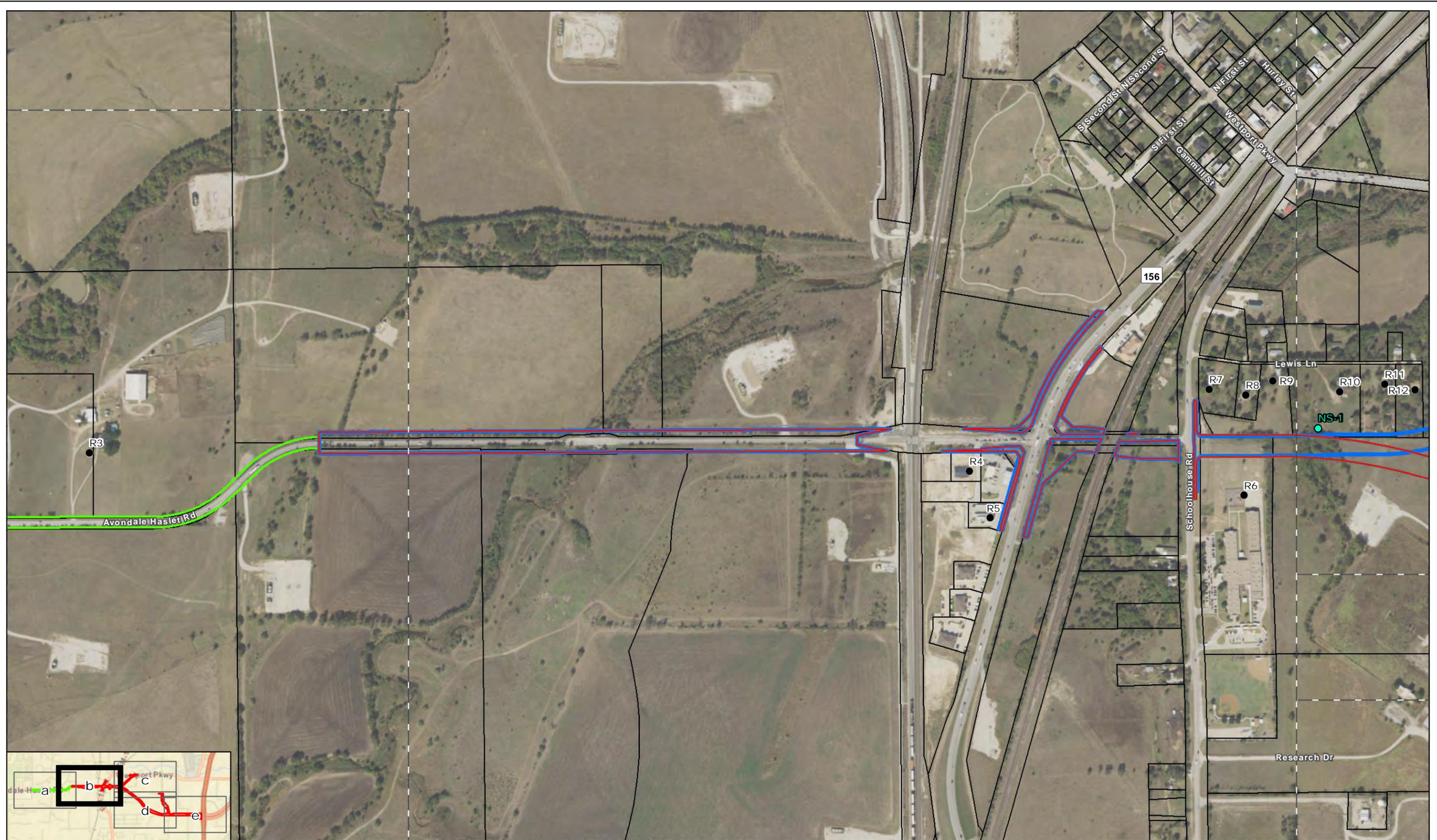


Figure 2b
 Location of Noise Receivers
AllianceTexas/Haslet Accessibility Improvements

- ▬ Preferred Alternative Proposed Right-of-Way
- ▬ Additional Alternative Proposed Right-of-Way
- ▬ Study Limit Extension (West)
- Parcel Boundary
- Sheet Limits
- Receivers
- Ambient Noise Sample Locations

Data Sources:
 TAD (2018), FHWA (2018)
 TxDOT (2018), FHWA (2018)
 Aerial Source: DigitalGlobe (2017)

Prepared for: TxDOT
 CSJ: 0902-90-020, 0902-90-021

1 in = 500 feet
 Scale: 1:6,000
 Date: 1/24/2019

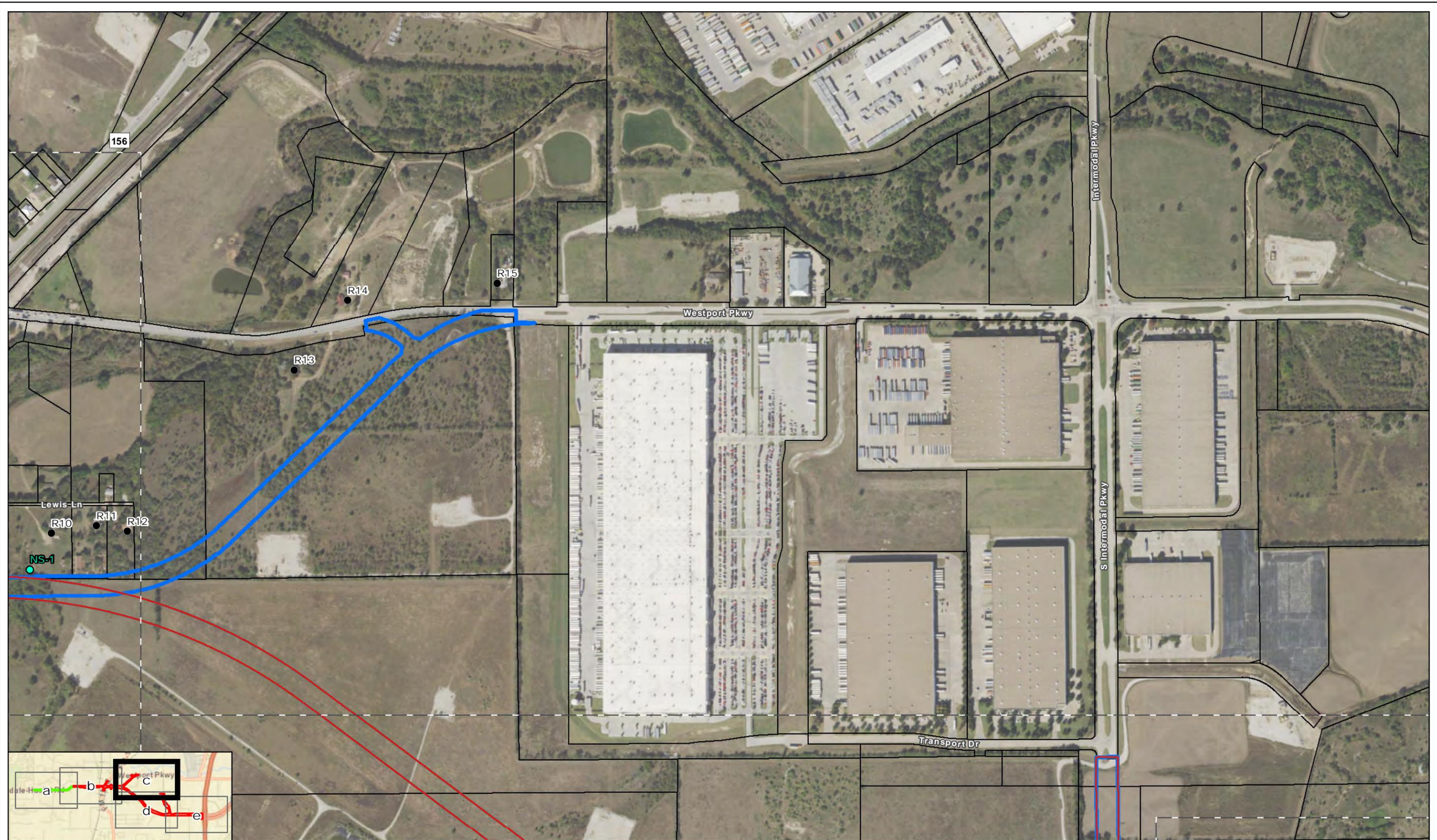


Figure 2c
Location of Noise Receivers

AllianceTexas/Haslet Accessibility Improvements

- ▬ Preferred Alternative Proposed Right-of-Way
- ▬ Additional Alternative Proposed Right-of-Way
- Parcel Boundary
- Sheet Limits
- Receivers
- Ambient Noise Sample Locations

Data Sources:
TAD (2018),
TxDOT (2018), FHWA (2018),
Aerial Source: DigitalGlobe (2017)

Prepared for: TxDOT

1 in = 500 feet
Scale: 1:6,000

CSJ: 0902-90-020, 0902-90-021
Date: 1/24/2019

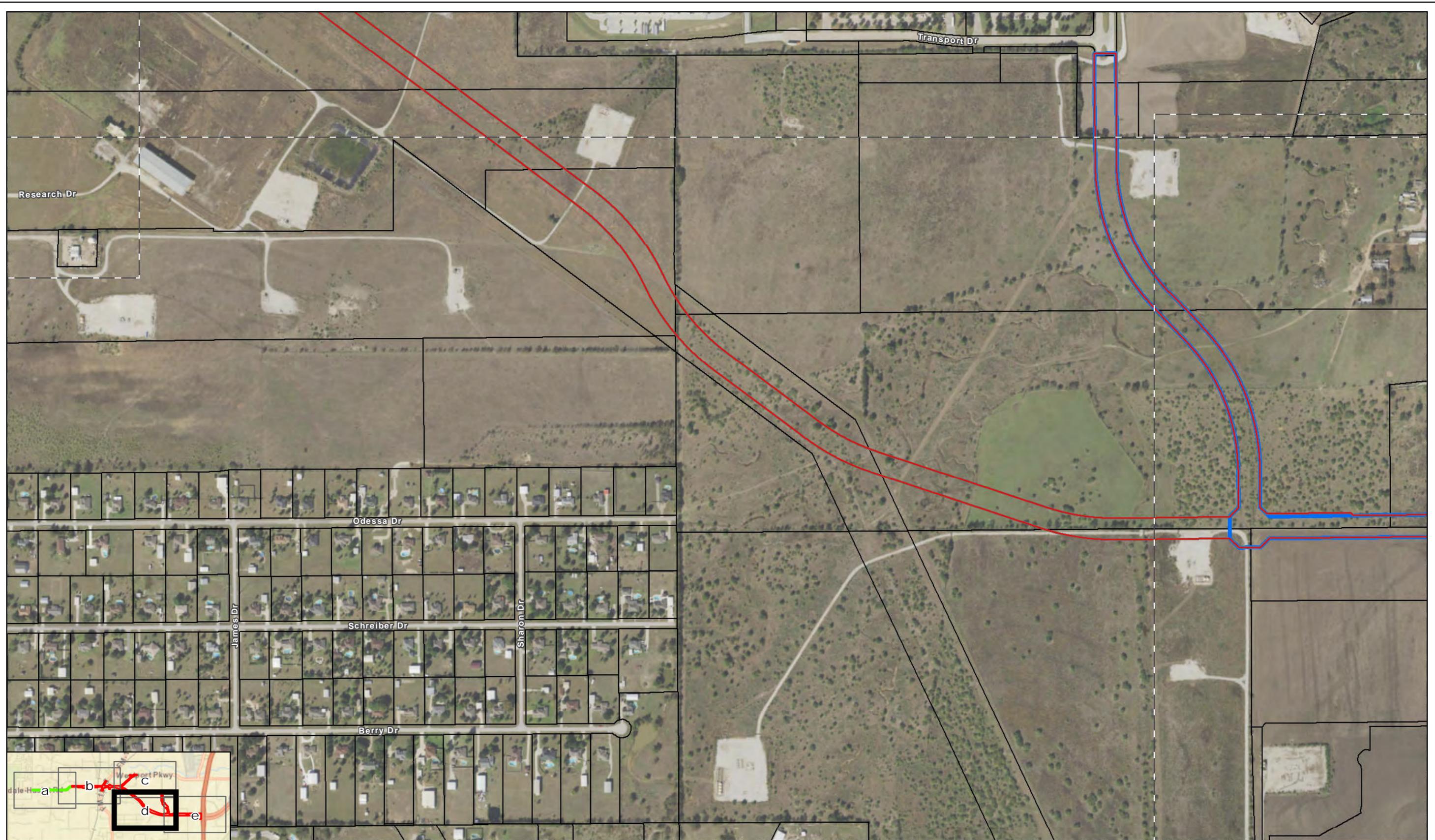


Figure 2d
Location of Noise Receivers

AllianceTexas/Haslet Accessibility Improvements

- Preferred Alternative Proposed Right-of-Way
- Additional Alternative Proposed Right-of-Way
- Parcel Boundary
- Sheet Limits

<p>Data Sources: TAD (2018), TxDOT (2018), FHWA (2018) Aerial Source: DigitalGlobe (2017)</p>	<p>Prepared for: TxDOT</p> <p>Scale: 1:6,000</p> <p>Date: 1/24/2019</p>
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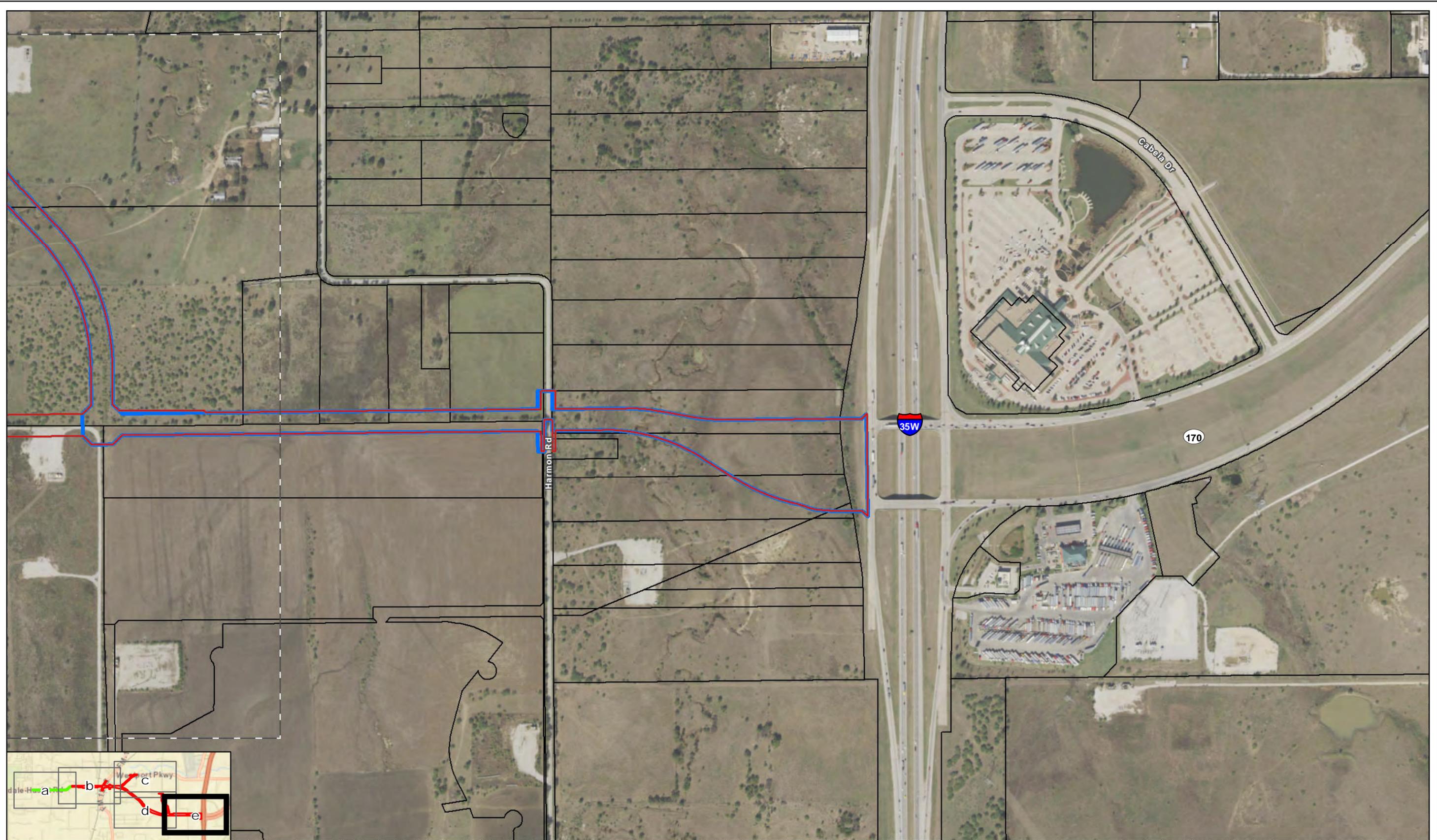


Figure 2e
 Location of Noise Receivers
AllianceTexas/Haslet Accessibility Improvements

- ▬ Preferred Alternative Proposed Right-of-Way
- ▬ Additional Alternative Proposed Right-of-Way
- Parcel Boundary
- Sheet Limits

G:\Projects\CityofHaslet\Updated_Avondale_Haslet_Intermodal_2018\Noise_Figure2_20190123.mxd

<p>Data Sources: TAD (2018), TxDOT (2018), FHWA (2018) Aerial Source: DigitalGlobe (2017)</p>	<p>Prepared for: TxDOT</p> <p>Scale: 1:6,000</p> <p>Date: 1/24/2019</p>
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Appendix 2 Design Schematics
(Located in Appendix C)

Appendix 3

Traffic Analysis for Highway Design and Anticipated Average Daily Traffic and Turning Movement Schematics



MEMO

December 10, 2018

To: Loyl C. Bussell, P.E., District Engineer
Attention: Ricardo Gonzalez, P.E., Director of TPD

Through: William E. Knowles, P.E.
Traffic Analysis Section Director, TPP 

From: Lee Theobald
Planner, TPP

Subject: Traffic Data
CSJ: 0902-90-020
Avondale-Haslet Road / Intermodal Parkway:
From Haslet City Limits (West of FM 156)
To SH 170
Tarrant County

Attached are diagrams depicting 2025, 2045 and 2055 average daily traffic volumes and turning movements on Avondale-Haslet Road/Intermodal Parkway also Avondale-Haslet Road to the Westport Parkway from Haslet City Limits (West of FM 156) to SH 170. Also attached are tabulations showing traffic analysis for highway design for the 2025 to 2045 twenty year period and 2025 to 2055 thirty year period for the described limits of the route. Also included are tabulations showing data for use in air and noise analysis.

Due to differences in traffic volumes on Alternative 1 the project was separated into two sections.
Section 1: From Haslet City Limits (West of FM 156) to Intermodal Parkway
Section 2: From Intermodal Parkway to SH 170

Please refer to your original request and updated email request dated September 28, 2018.

If you have any questions or need additional information, please contact Lee Theobald at (512) 486-5143.

Attachments

CC: Ram Dhakal, P.E.,
Transportation Engineer, Fort Worth District
Design Division

OUR VALUES: People • Accountability • Trust • Honesty

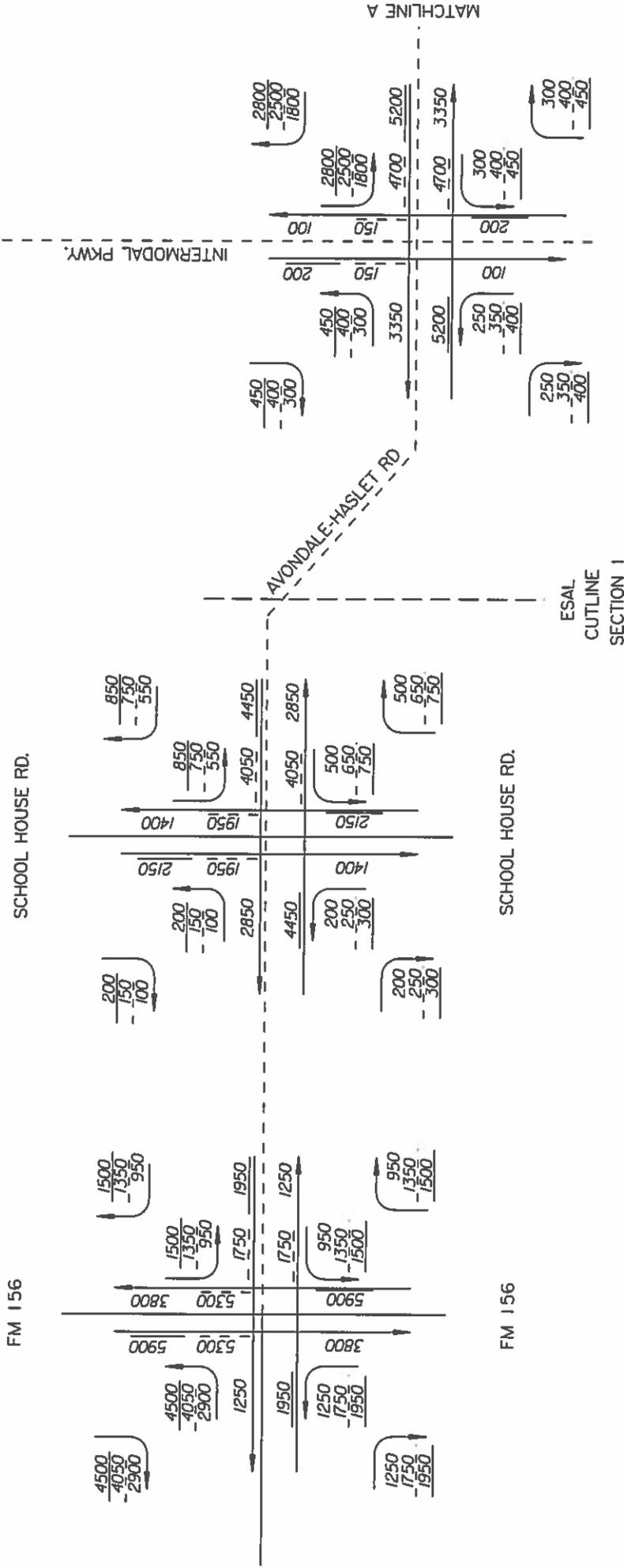
OUR MISSION: Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

An Equal Opportunity Employer

ALTERNATIVE # 1



MATCHLINE B



LEGEND

1000 - 2025 ADT
1000 - 2045 ADT
1000 - 2055 ADT

--- PROPOSED ROADWAY

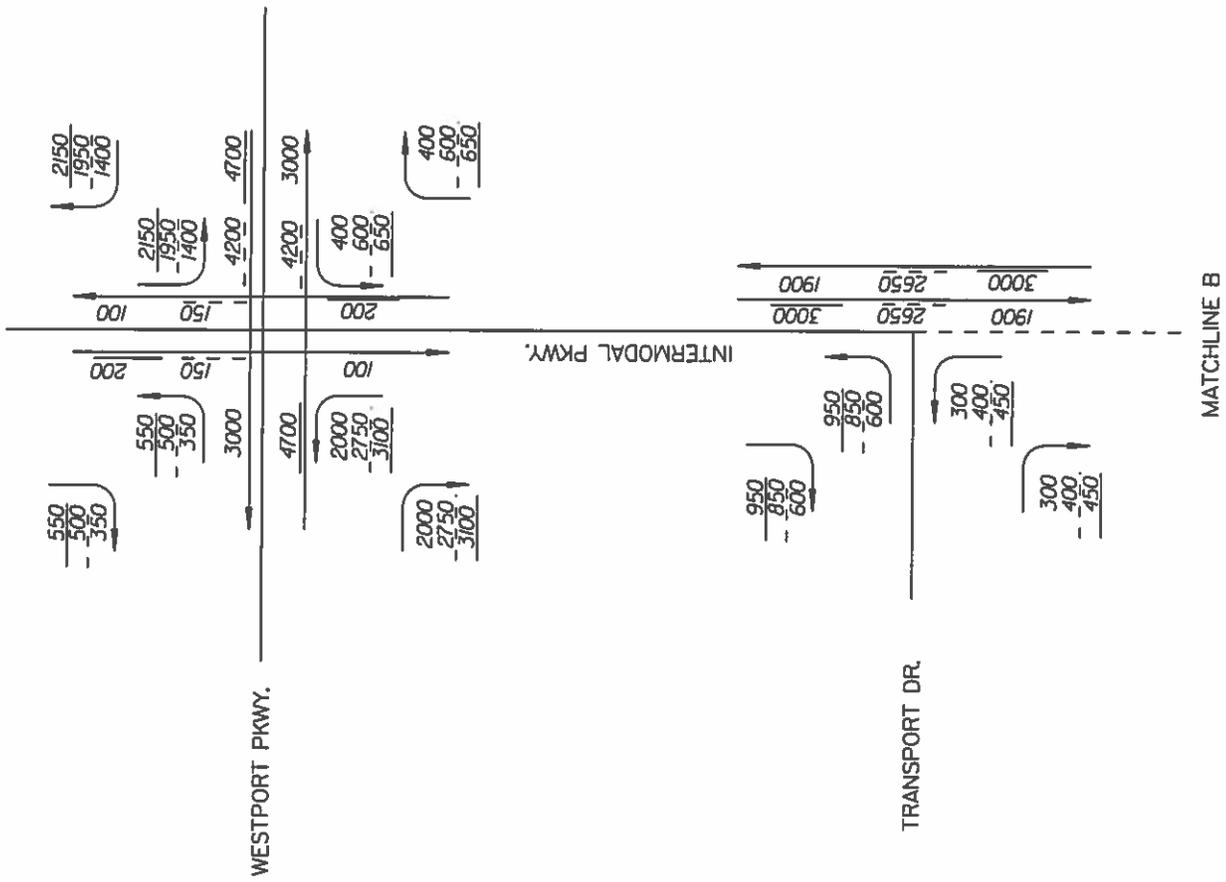
ESAL CUTLINE SECTION 1

2025, 2045 AND 2055 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG AVONDALE-HASLET ROAD / INTERMODAL PARKWAY FROM FM 156 TO SH 170 TARRANT COUNTY

TRANSPORTATION PLANNING AND PROGRAMMING DIVISION
DECEMBER 7, 2018



ALTERNATIVE # 1

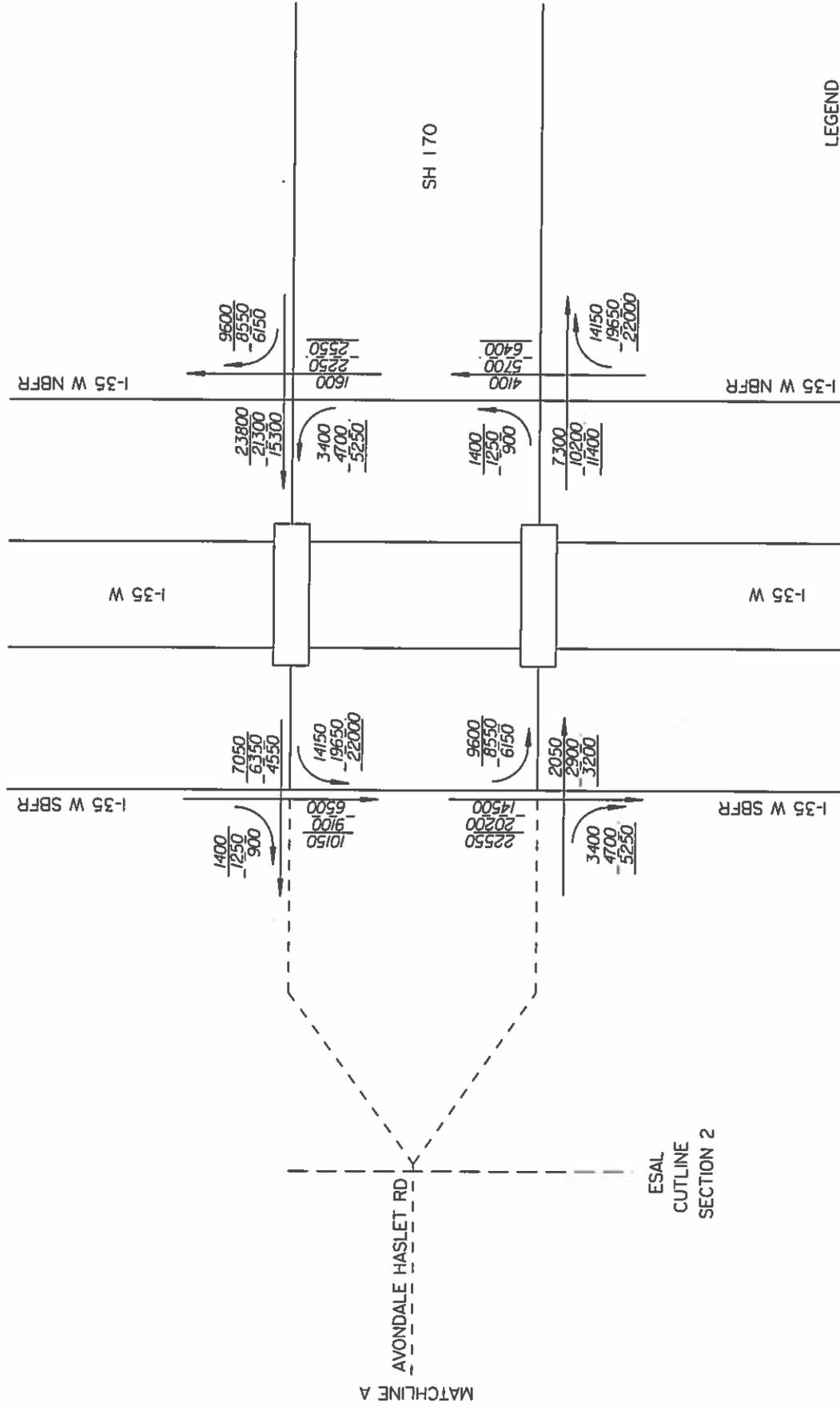


LEGEND
 1000 - 2025 ADT
 1000 - 2045 ADT
 1000 - 2055 ADT

2025, 2045 AND 2055 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG AVONDALE-HASLET ROAD / INTERMODAL PARKWAY FROM FM 156 TO SH 170 TARRANT COUNTY

TRANSPORTATION PLANNING AND PROGRAMMING DIVISION
 DECEMBER 7, 2018

ALTERNATIVE # 1



LEGEND
 1000 - 2025 ADT
 1000 - 2045 ADT
 1000 - 2055 ADT

----- PROPOSED ROADWAY

2025, 2045 AND 2055 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG AVONDALE-HASLET ROAD / INTERMODAL PARKWAY FROM FM 156 TO SH 170 TARRANT COUNTY

TRANSPORTATION PLANNING AND PROGRAMMING DIVISION
 DECEMBER 7, 2018

SHEET 3 OF 3

MATCHLINE A

ALTERNATIVE #2

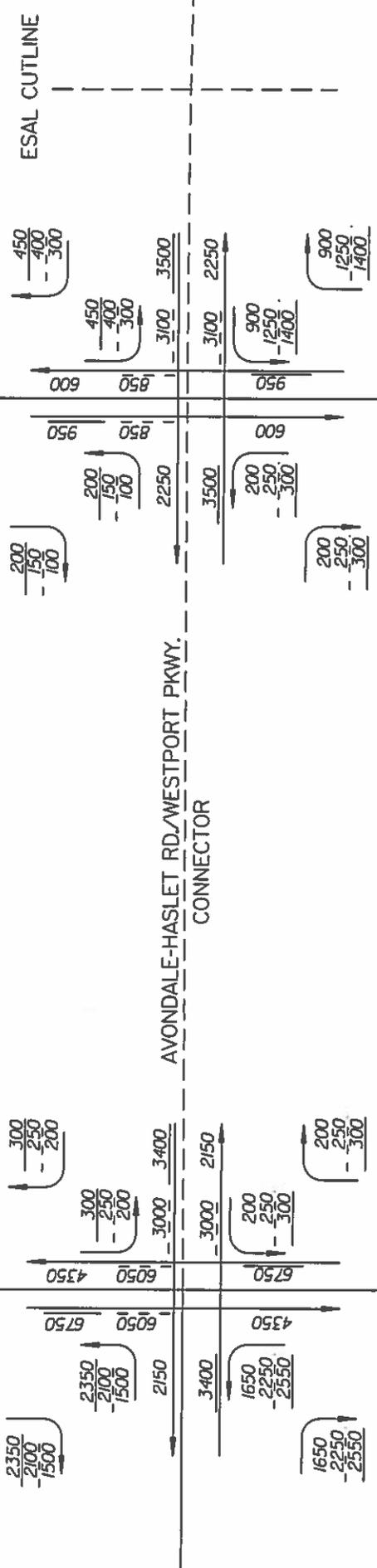
MATCHLINE A

MATCHLINE B



SCHOOL HOUSE RD.

FM 156

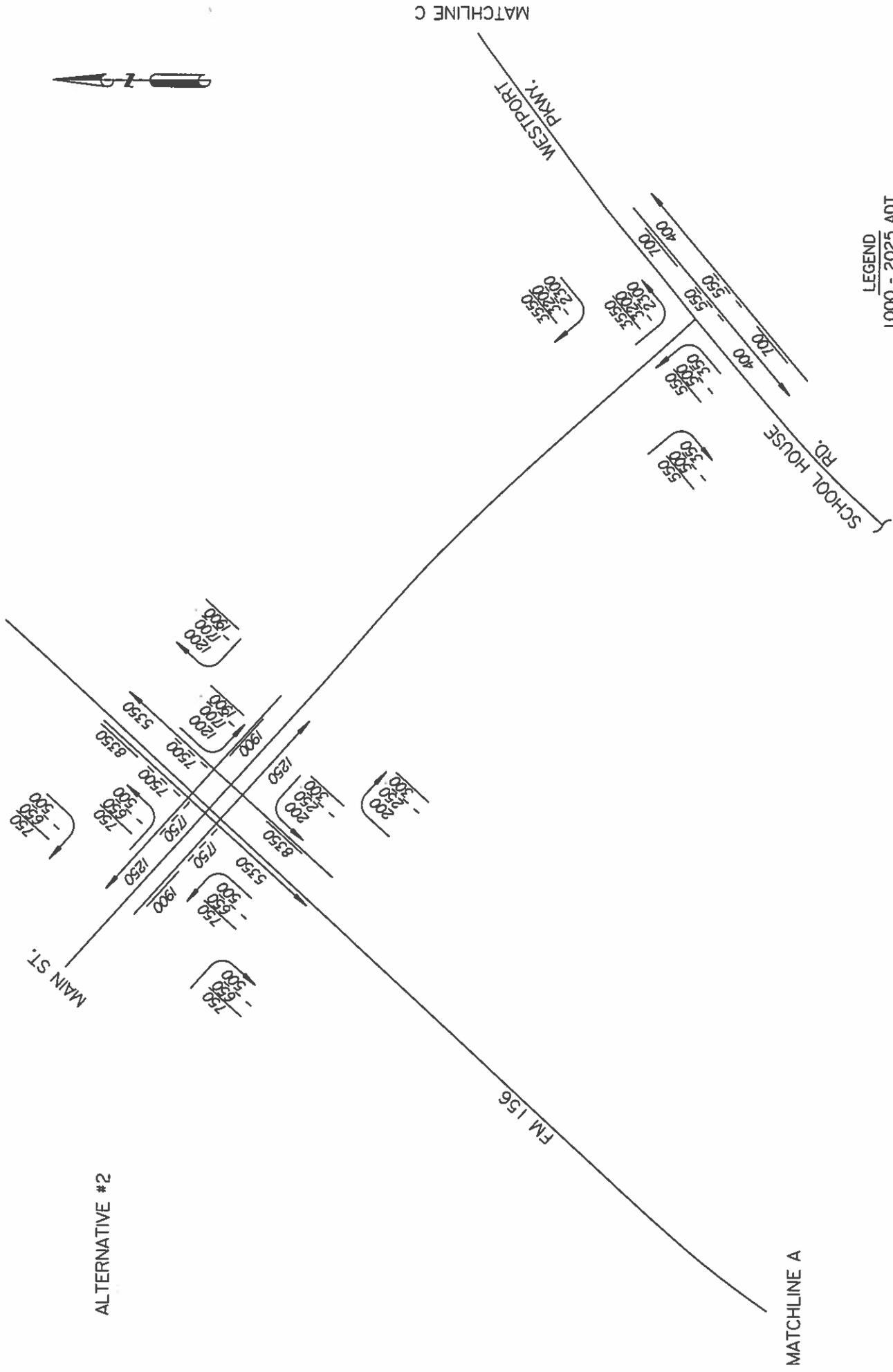


LEGEND

1000	-	2025	ADT
1000	-	2045	ADT
1000	-	2055	ADT

2025, 2045 AND 2055 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG AVONDALE-HASLET RD/WESTPORT PKWY. CONNECTOR FROM HASLET CL TO WESTPORT PKWY. TARRANT COUNTY

ALTERNATIVE #2



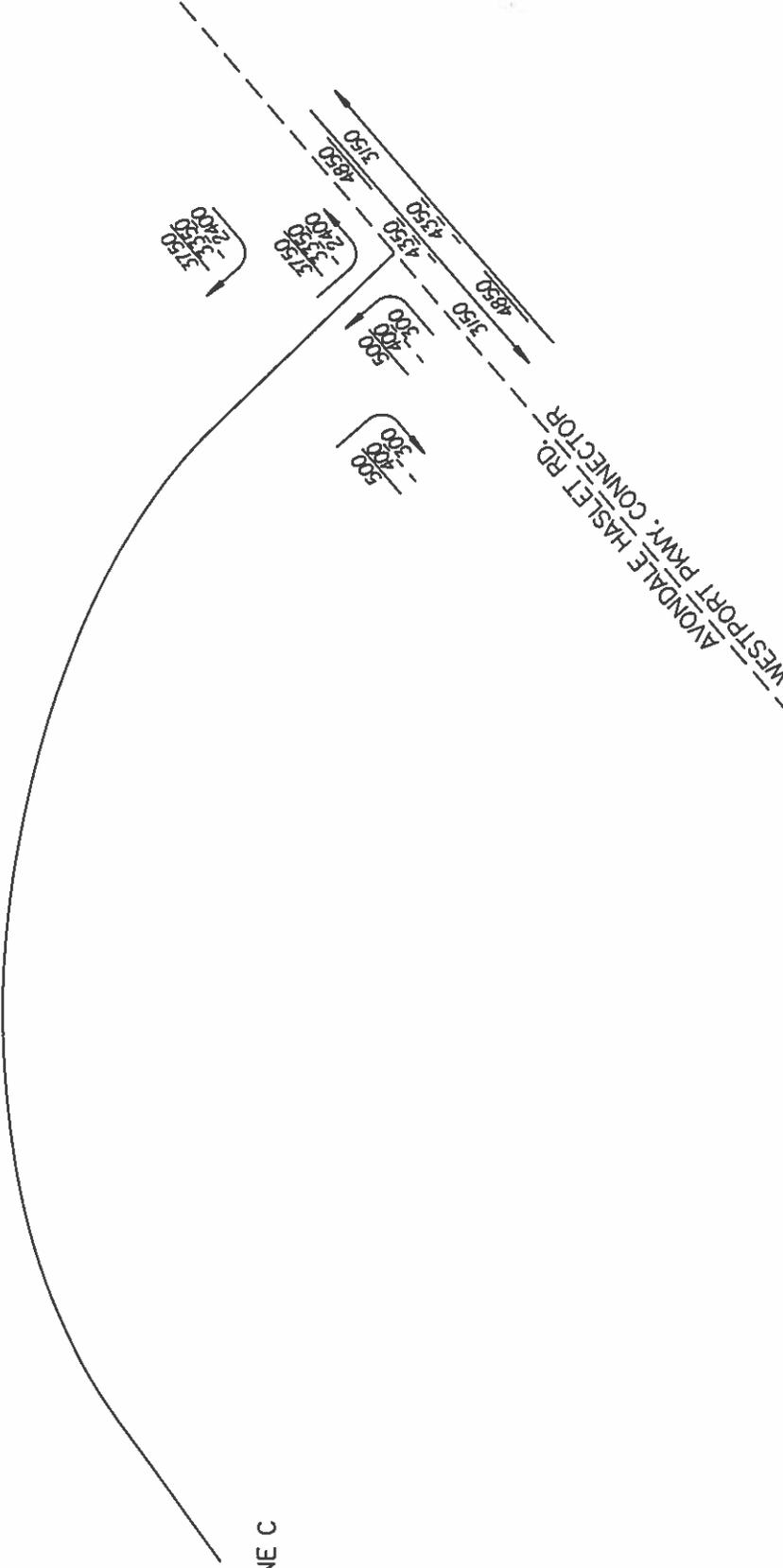
2025, 2045 AND 2055 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG AVONDALE-HASLET RD/WESTPORT PKWY. CONNECTOR FROM HASLET CL TO WESTPORT PKWY. TARRANT COUNTY

TRANSPORTATION PLANNING AND PROGRAMMING DIVISION
DECEMBER 7, 2018

ALTERNATIVE #2



WESTPORT PKWY.



MATCHLINE C

MATCHLINE B

LEGEND

1000 - 2025 ADT
1000 - 2045 ADT
1000 - 2055 ADT

2025, 2045 AND 2055 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG AVONDALE-HASLET RD./WESTPORT PKWY. CONNECTOR FROM HASLET CL TO WESTPORT PKWY. TARRANT COUNTY

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Fort Worth District

December 6, 2018

Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2025 to 2045)				
	2025		2045			K Factor	ADT	DHV			Flexible Pavement	S	Rigid Pavement	N	SLAB
	2025	2045	2025	2045											
Avondale-Haslet Rd / Intermodal Pkwy (Alternative #1 Section 1) From Haslet City Limits (West of FM 156) To Inermodal Parkway Tarrant County	7,800	10,900	63 - 37	11.1	5.7	4.3	10,900	50	1,698,000	3	2,242,000	8"			
Data for Use in Air & Noise Analysis															
Vehicle Class	Base Year														
	% of ADT	% of DHV													
	94.3	95.7													
Light Duty	1.8	1.4													
Medium Duty	3.9	2.9													
Heavy Duty															
Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2025 to 2055)				
	2025		2055			K Factor	ADT	DHV			Flexible Pavement	S	Rigid Pavement	N	SLAB
	2025	2055	2025	2055											
Avondale-Haslet Rd / Intermodal Pkwy (Alternative #1 Section 1) From Haslet City Limits (West of FM 156) To Inermodal Parkway Tarrant County	7,800	12,100	63 - 37	11.1	5.7	4.3	10,900	50	2,710,000	3	3,578,000	8"			

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Fort Worth District

December 6, 2018

Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2025 to 2045)													
	2025		2045			K Factor	ADT	Percent Trucks			DHV	Flexible Pavement	S	N	Rigid Pavement	SLAB								
	10,900	15,200	63 - 37	11.1													25.6	19.2	12,100	50	11,660,000	3	16,423,000	8"
<p style="text-align: center;">Data for Use in Air & Noise Analysis</p>																								
Vehicle Class																								
Light Duty																								
Medium Duty																								
Heavy Duty																								
<p style="text-align: center;">Data for Use in Air & Noise Analysis</p>																								
Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2025 to 2055)													
	2025		2055			K Factor	ADT	Percent Trucks			DHV	Flexible Pavement	S	N	Rigid Pavement	SLAB								
	10,900	16,900	63 - 37	11.1													25.6	19.2	12,100	50	18,631,000	3	26,241,000	8"

Avondale-Haslet Rd / Intermodal Pkwy
 (Alternative #1 Section 2)
 From Intermodal Parkway
 To SH 170
 Tarrant County

Avondale-Haslet Rd / Intermodal Pkwy
 (Alternative #1 Section 2)
 From Intermodal Parkway
 To SH 170
 Tarrant County

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Fort Worth District

December 6, 2018

Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2025 to 2045)			
	2025		2045			K Factor	ADT	DHV			Flexible Pavement	S	Rigid Pavement	SLAB
	2025	2045	2025	2045										
Avondale-Haslet Rd/Westport Pkwy Connector (Alternative #2) From Haslet City Limits (West of FM 156) To Westport Parkway Tarrant County	6,900	9,500	63 - 37	11.1	6.1	4.6	10,900	50	1,592,000	3	2,103,000	8"		
Data for Use in Air & Noise Analysis														
Vehicle Class	% of ADT		% of DHV											
	93.9		95.4											
	1.9		1.4											
Heavy Duty	4.2		3.2											
Description of Location	Average Daily Traffic				Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2025 to 2055)			
	2025		2055			K Factor	ADT	DHV			Flexible Pavement	S	Rigid Pavement	SLAB
	2025	2055	2025	2055										
Avondale-Haslet Rd/Westport Pkwy Connector (Alternative #2) From Haslet City Limits (West of FM 156) To Westport Parkway Tarrant County	6,900	10,700	63 - 37	11.1	6.1	4.6	10,900	50	2,563,000	3	3,385,000	8"		