

IH 30 Rockwall County Lake Ray Hubbard Bridge

FY 2019 INFRA Grant Application
Attachment 1 – Cover Page and Project Narrative



North Central Texas
Council of Governments



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INFRA

US Department of Transportation FY 2019 INFRA Grant Application

IH 30 Rockwall County – Lake Ray Hubbard Bridge

Cover Page Chart

| | |
|---|--|
| Basic Project Information: | |
| What is the Project Name? | <u>IH 30 Rockwall County – Lake Ray Hubbard Bridge</u> |
| Who is the Project Sponsor? | <u>Texas Department of Transportation</u> |
| Was an INFRA application for this project submitted previously? (If Yes, please include title). | <u>No</u> |
| Project Costs: | |
| INFRA Request Amount | <u>\$ 100,000,000</u> |
| Estimated federal funding (excl. INFRA) | <u>\$49,620,064</u> |
| Estimated non-federal funding | <u>\$64,405,016</u> |
| Future Eligible Project Cost (Sum of previous three rows) | <u>\$214,025,080</u> |
| Previously incurred project costs (if applicable) | <u>\$2,133,479</u> |
| Total Project Cost (Sum of 'previous incurred' and 'future eligible') | <u>\$216,158,559</u> |
| Are matching funds restricted to a specific project component? If so, which one? | <u>No</u> |
| Project Eligibility: | |
| Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on National Highway Freight Network (NHFN)? | <u>\$210,632,080</u> |
| Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on the National Highway System (NHS)? | <u>\$210,632,080</u> |
| Approximately how much of the estimated future eligible project costs will be spent on components constituting railway-highway grade crossing or grade separation projects? | <u>\$3,393,000</u> |
| Approximately how much of the estimated future eligible project costs will be spent on components constituting intermodal or freight rail projects, or freight projects within the boundaries of a public or private freight rail, water (including ports), or intermodal facility? | <u>\$0</u> |
| Project Location: | |
| State(s) in which project is located..... | <u>Texas</u> |
| Small or large project..... | <u>Large</u> |
| Urbanized Area in which project is located, if applicable..... | <u>Dallas-Fort Worth-Arlington</u> |
| Population of Urbanized Area..... | <u>7,399,662 (2017)</u> |
| Is the project currently programmed in the:..... | |
| • TIP. | <u>Yes (Appendix D)</u> |
| • STIP. | <u>Yes (Appendix D)</u> |
| • MPO Long Range Transportation Plan. | <u>Yes</u> |
| • State Long Range Transportation Plan. | <u>Yeses</u> |
| • State Freight Plan? | <u>Yes</u> |



EXECUTIVE SUMMARY

The North Central Texas Council of Governments (NCTCOG), in cooperation with the Texas Department of Transportation (TxDOT) and Rockwall County, is seeking funding assistance of **\$100 million** through the Fiscal Year (FY) 2019 Infrastructure for Rebuilding America (INFRA) Discretionary Grant Program for the **Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge** Project. This project, with an estimated total cost of **\$214 million**, is illustrated in **Exhibit 1** and is comprised of the following improvements:

- a. Construction of new two- to three-lane continuous one-way frontage road bridges in each direction parallel to the existing IH 30 freeway, including a westbound barrier-separated eight-foot sidewalk and an eastbound barrier-separated 12-foot shared-use path, from Dalrock Road in Rowlett east to Horizon Road in Rockwall. Combined with imminent improvements for a neighboring segment west of Dalrock Road, this project would enable parallel frontage roads to complete a full four-mile traversal across Lake Ray Hubbard.
- b. Construction of planned interchanges at Dalrock Road, Horizon Road, and Farm-to-Market Road (FM) 740 to their ultimate configuration and capacity, including ramps, auxiliary lanes, and cross-street bridges.

Exhibit 1: Project Overview



The proposed project is incorporated within a larger 17-mile group of general-purpose lane capacity, frontage road, and interchange improvements from Bass Pro Drive to west of FM 2642



in Royse City, covering all IH 30 through Rockwall County. A detailed draft Environmental Assessment (EA) evaluating the potential social, economic, and environmental impacts of the overall IH 30 improvements has been prepared, and issuance of a Finding of No Significant Impact (FONSI) is expected later this spring. Overall improvements are included in *Mobility 2045: The Metropolitan Transportation Plan (MTP) for North Central Texas*, and in Appendix D of the *2019-2022 Transportation Improvement Program (TIP) for North Central Texas*.

IH 30 serves as the northeastern gateway to/from the North Central Texas region, an area whose rapid growth and travel demands are exerting substantial mobility, safety, and reliability challenges to both the project area and the corridor at-large. IH 30 is also a classified Federal Highway Administration (FHWA) Primary Highway Freight System (PHFS) corridor with strategic importance to the State as highlighted in the *Texas Freight Mobility Plan*, and its unique location, alignment, and connectivity attracts significant freight flows between Mexico and the midwestern/northeastern United States as a result of the North American Free Trade Agreement (NAFTA). The proposed project presents direct solutions for severe congestion, incident management, accessibility, and other corridor needs that are greatly tested by the geography of Lake Ray Hubbard, the crossing’s vulnerability to closure as a result of incidents/accidents, and isolation from comparable or readily available alternate routes. Addressing this critical segment quickly will dramatically improve the timing and effectiveness of many other planned IH 30 improvements between Dallas and Northeast Texas, all of which are essential to sustain economic vitality for the region, State, and the nation.

This application includes estimates of the project’s expected benefits based on the requirements and outcomes specified in the INFRA Notice of Funding Opportunity (NOFO) and the Benefit-Cost Analysis (BCA) Guidance for Discretionary Grant Programs (December 2018). The BCA attachment (**Attachment 2**) accompanying this Project Narrative will identify the benefit calculation methodology, quantify the monetary benefit in net present value for the project, and substantiate the expected benefits and costs in accordance with Federal requirements. The costs and benefits contained within this application were derived using NCTCOG travel demand model data, demographic and economic trends/forecasts, TxDOT safety and state of good repair information, reliability and speed data derived from the National Performance Management Research Dataset (NPMRDS), as well as other supporting information. As outlined in **Exhibit 2**, this project is projected to attain net benefits of over **\$854.1 million** over the 21-year time horizon with a benefit-cost ratio of **3.78**.

Exhibit 2: Benefit-Cost Analysis Summary Results

| Benefit-Cost Summary Results | | | Average Annual | Total Over 21 Years |
|------------------------------|-------------------|---------------------------------|----------------|---------------------|
| Life-Cycle Costs | \$225.9 million | ITEMIZED BENEFITS | | |
| Life-Cycle Benefits | \$2,863.1 million | Travel Time Savings (mil. \$) | \$35.2 | \$749.5 |
| Net Present Value | \$854.1 million | AQ Emissions Savings (thou. \$) | (\$8.4) | (\$176.1) |
| BENEFIT-COST RATIO | 3.78 | Safety Savings (mil. \$) | \$12.6 | \$264.8 |
| | | Quality of Life (mil. \$) | \$0.2 | \$4.0 |
| | | Residual Value (mil. \$) | N/A | \$104.4 |
| | | TOTAL BENEFITS (mil. \$) | \$40.7 | \$854.1 |
| | | Person-Hrs Delay Saved (mil) | 5.68 | 118.8 |

I. PROJECT DESCRIPTION

As displayed in **Exhibit 1**, the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge project consists of the following roadway and multimodal improvements within the cities of Rowlett and Rockwall in western Rockwall County, Texas:

- a. Construction of new two- to three-lane continuous one-way frontage road bridges in each direction parallel to the existing IH 30 freeway, including a westbound barrier-separated eight-foot sidewalk and an eastbound barrier-separated 12-foot shared-use path, from Dalrock Road in Rowlett east to Horizon Road in Rockwall. Combined with imminent improvements for a neighboring segment west of Dalrock Road, this project would enable parallel frontage roads to complete a full four-mile traversal across Lake Ray Hubbard.
- b. Construction of planned interchanges at Dalrock Road, Horizon Road, and FM 740 to their ultimate configuration and capacity, including ramps, auxiliary lanes, and cross-street bridges.

The project has independent utility and will be built consistent with the ultimate design, functionality, multimodal accommodations, and capacity characteristics identified in the IH 30 draft Environmental Assessment (EA) and schematics prepared for overall corridor improvements through Rockwall County. Issuance of a Finding of No Significant Impact (FONSI) for the EA is expected later this spring. The proposed typical section for the frontage road bridges (shown in red) is illustrated in **Exhibit 3**, and the cross-section diagram for the proposed Horizon Road bridge replacement over IH 30 is shown in **Exhibit 4**. A copy of the IH 30 EA is provided in the EA Attachment (**Attachment 4**) to this Fiscal Year (FY) 2019 Infrastructure for Rebuilding America (INFRA) Grant application.

Exhibit 3: Proposed IH 30 Typical Section – Dalrock Road to Horizon Road

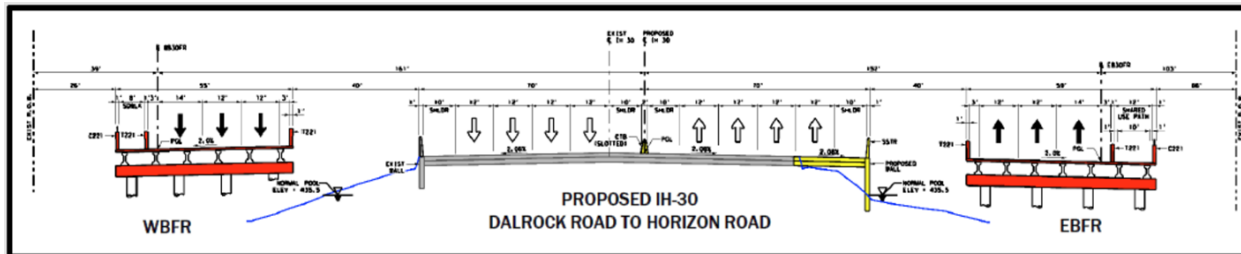
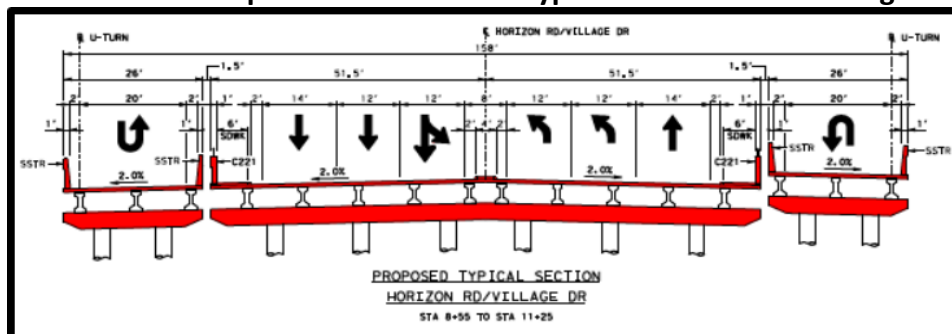


Exhibit 4: Proposed Horizon Road Typical Section – IH 30 Bridge





The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is being submitted for INFRA Discretionary Grant funding consideration by NCTCOG’s Regional Transportation Council (RTC). The RTC consists of 44 elected or appointed officials representing various local governments and transportation providers, and the group acts as the independent Metropolitan Planning Organization (MPO) policy body for the Dallas-Fort Worth (DFW) Metropolitan Planning Area (MPA). The project is included in *Mobility 2045: The Metropolitan Transportation Plan (MTP) for North Central Texas* (www.nctcog.org/trans/plan/mtp/2045), and in Appendix D of the *2019-2022 Transportation Improvement Program (TIP) for North Central Texas* (www.nctcog.org/trans/funds/tip). If awarded funds, expedited delivery of the project will be amended in the TIP as required. As this project represents a major partnership between NCTCOG, TxDOT, and Rockwall County, and is key to enabling TxDOT’s long-term coordinated IH 30 development strategy from Dallas east to the Arkansas State Line as described in further detail below, it is consistent with the desired INFRA Program requirements and objectives.

Project History

Original construction of the IH 30 freeway from downtown Dallas through Rockwall County and beyond into northeast Texas occurred during the early/mid-1960’s, and its alignment generally followed the existing U.S. Highway (US) 67 corridor for nearly all of the 320-mile distance between Dallas and Little Rock, Arkansas. The freeway’s first alteration in the study area occurred shortly after completion upon finalized plans by the city of Dallas to impound the East Fork Trinity River for a new water supply reservoir. By the 1969 completion of the Rockwall-Forney Dam which created Lake Ray Hubbard, construction of over four miles of new embankments and bridges raised IH 30 as much as 20 feet above its original elevation to accommodate the lake’s planned 490,000 acre-feet of storage capacity. The study area’s second major change resulted from a series of mid/late-1990’s reconstruction/widening projects between IH 635 in Mesquite and State Highway (SH) 205 in Rockwall which expanded IH 30 to its current pavement capacity (three general purpose lanes in each direction). Concepts for a third and ultimate modification were initially conceived through a 2008 corridor plan developed by Rockwall County and TxDOT, as well as the improvement or reconstruction of several interchanges built to the east in accordance with that plan. Those initial efforts ultimately set the stage for the project recommendations highlighted in this application.

Daily traffic volumes consistently exceeded available capacity by 2011 once the extension of the 52-mile-long President George Bush Turnpike (PGBT) was connected to IH 30 near the western end of the Lake Ray Hubbard crossing. New accessibility by the PGBT to/from emerging major employment centers north of Dallas in southern Collin County, as well as accelerating demographic growth to the east throughout Rockwall County, placed ever-increasing strains on IH 30 to accommodate travel demands across the lake. Though operational improvements completed in 2015 allowed the temporary striping of a fourth auxiliary lane in each direction between the PGBT, Dalrock Road, and Horizon Road/FM 740 interchanges, the congestion benefits for IH 30 segments both across and approaching the lake were short-lived, and it justified the need to bring the more comprehensive corridor plan to fruition.



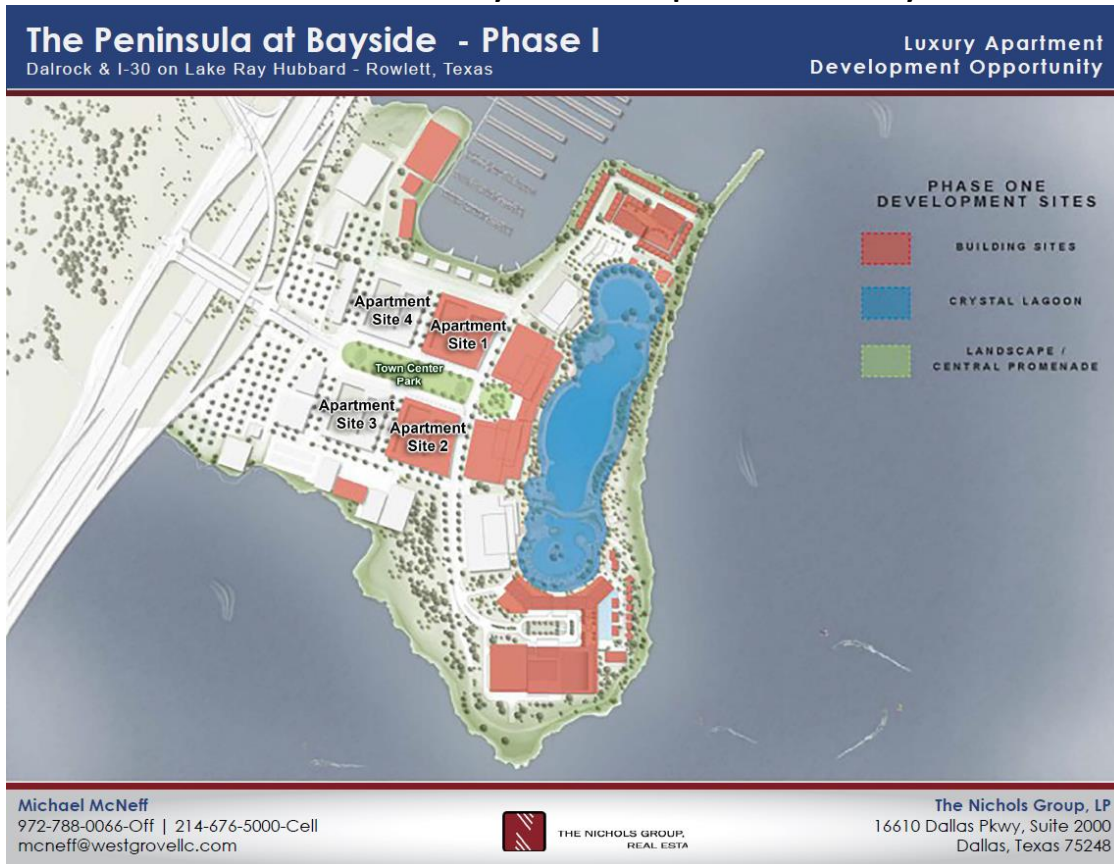
Following an extensive public/agency outreach campaign, the formal TxDOT study which prepared IH 30 design schematics and a draft EA concerning ultimate improvements between Bass Pro Drive in Garland and west of FM 2642 in Royse City is expected to conclude later this spring upon receipt of a FONSI. The study recommended and evaluated the following improvements within the 17-mile corridor segment, resulting in a total project cost of approximately \$627 million:

- a. Provide four continuous general purpose lanes in each direction between Bass Pro Drive and John King Boulevard, and three general purpose lanes in each direction between John King Boulevard and FM 2642.
- b. Provide two- to three-lane continuous one-way parallel frontage roads (with bicycle/pedestrian accommodations) in each direction for improved accessibility, circulation, and incident management, including over the Lake Ray Hubbard crossing.
- c. Provide improved ramps, auxiliary lanes, Texas U-turns, bicycle/pedestrian accommodations, and extra cross-street capacity at each of the segment’s 14 interchanges to enable enhanced and more efficient multimodal and thoroughfare network connectivity.

At nearly the same time TxDOT initiated the IH 30 corridor study, the city of Rowlett and a major private developer reached financial closure for acquisition of the former Elgin B. Robertson Park from the city of Dallas, a location stretching north and south of IH 30 on a peninsula adjacent to the Dalrock Road interchange. Since then, the public-private partnership worked together to establish a vision for a unique 262-acre, \$1 billion mixed-use waterfront development called Bayside. The development would feature 1.7 million square feet of prime commercial space, including proposed office, entertainment, retail, and hotel uses, as well as a new convention center and redeveloped marina. Bayside would also be home to over 3,000 new residential units, including a mix of condominiums, apartments, townhomes, and single-family residences, and all these various components would be interconnected by 45 acres of programmed parks, several miles of hike-and-bike trails, and other desirable quality-of-life amenities. Combined with other notable attractions such as the Harbor Point development in Garland (west) and The Harbor at Rockwall (east), these developments created enormous potential for Lake Ray Hubbard to be transformed into a significant resort destination and economic generator for the eastern part of the North Central Texas region, applying even greater travel demand pressures for the IH 30 corridor. Bayside’s initial delivery phase, including construction of several large multi-family residence buildings and site clearing for two single-family home subdivisions north of IH 30, began in early 2018. A proposed site plan highlighting the conceptual layout and preliminary phasing for buildings, land uses, and other amenities on the peninsula south of IH 30 is illustrated in **Exhibit 5**.

With the city of Rowlett’s creation and subsequent funding of a Public Improvement District (PID) and a Tax-Increment Reinvestment Zone (TIRZ) supporting the implementation of Bayside, as well as the developer’s anticipated build-out timeline covering less than ten years, the city and NCTCOG in cooperation with TxDOT were successful in obtaining State and Federal funds to accelerate partial delivery of the IH 30 ultimate improvements described above. Proposed frontage roads across the western portion of Lake Ray Hubbard between Bass Pro Drive and

Exhibit 5: The Peninsula at Bayside – Concept and Preliminary Site Plan



Dalrock Road, including a new interchange for Bayside Drive and initial reconstruction of enhanced access to/from Dalrock Road, was environmentally cleared in September 2018 and fully funded as a separate \$128 million project, and construction is expected to begin in Summer 2021. General purpose lane, frontage road, and interchange improvements totaling \$257 million between SH 205 and FM 2642 were also funded, and pending the FONSI for the overall larger project, construction is scheduled to get underway by Winter 2022. Ongoing negotiation between NCTCOG, TxDOT, and Rockwall County to fund remaining elements, particularly the frontage roads across Lake Ray Hubbard, was the impetus for preparing this project proposal for INFRA Grant consideration. Inability to deliver this project in tandem with other accelerated improvements would cause several major corridor-wide transportation challenges to remain unfulfilled, yet few descriptions may demonstrate these needs more than recent experiences from the city of Rowlett’s police and fire departments.

Targeted Transportation Challenges

With multiple-lane closures increasing from 106 occurrences in 2015 to 150 incidents in 2018 as a result of accidents, first responders from the city of Rowlett have the increasingly difficult responsibility of addressing public safety needs across the entire IH 30 crossing of Lake Ray Hubbard. However, over a two-week period in February 2019 one police officer was injured, as well as two police squad cars and a fire truck damaged, by two separate impaired driver



collisions suffered during active service calls on the crossing. This led to remarkable department-wide memos and public announcements from both the police and fire chiefs that upon immediate effect, to ensure the safety of Rowlett first responders and all those involved with a disabled vehicle or accident, police officers and firefighters had full discretion to shut down all lanes of the freeway to appropriately service any crash or motorist assistance call (www.fox4news.com/news/rowlett-police-vehicle-hit-by-dwi-suspect-2nd-time-this-month). Though such crash types are not uncommon on roadways across the country, the notice of broad authorization to further close a freeway where many closures already occur readily illustrates a situation calling for urgent action. The IH 30 Rockwall County Lake Ray Hubbard Bridge project will provide considerable relief from that condition, as well as additional benefits like accommodating future growth, improved accessibility and convenience, a greater potential to sustain a state of good repair, and an enhanced quality of life for all destined or just passing through this unique location in North Central Texas. The following information describes how the project will meet the challenges and needs of the IH 30 corridor both locally and beyond.

IH 30 serves as the primary gateway and major connection between the Dallas Central Business District (CBD) and northeastern Dallas County, Rockwall County, and numerous other locations through Northeast Texas. It is the only freeway serving east-west traffic through Rockwall County, and access to/from much of the DFW MPA is significantly impeded by the lack of comparable and/or readily available routes either across or around Lake Ray Hubbard. With goods movement facilitated by regional economic growth, as well nationally and internationally through the North American Free Trade Agreement (NAFTA), IH 30 carries a substantial volume of truck traffic connecting Dallas and the IH 35 corridor to Little Rock, Arkansas and other states to the northeast. In fact, the unique connectivity and alignment of IH 30 provides the only existing continuous Interstate route accommodating predominant southwest-to-northeast-oriented freight flows within a large expanse between the Oklahoma City (IH 35 – IH 44) and New Orleans (IH 10/12 – IH 59) metropolitan areas. However, this conduit for freight traffic is and will increasingly be hindered as open land in Rockwall County and other outlying counties are consumed by urban development. As highlighted in **Exhibit 6**, IH 30 will experience tremendous traffic growth by 2045 compared to already high volumes existing today. It is, therefore imperative for roadway improvements to existing facilities, as well as new roadways where feasible, be timely constructed to meet the area's increasing travel demands. Recommended improvements to IH 30 in Rockwall County are a prominent component of the MTP and the *Texas Freight Mobility Plan*, and are key to addressing additional capacity needs for many miles to the east as outlined in TxDOT's *2017 IH 30 East Texas Corridor Study*.

a. Improving Safety and Congestion

The nearly four-mile IH 30 traversal of Lake Ray Hubbard is one of the longest inland water crossings by an Interstate facility in the State of Texas, and it is the longest such crossing within the state located in an urbanized area. As mentioned above, the geography of Lake Ray Hubbard isolates IH 30 from any substantial parallel roadway capacity or alternate routes for miles on either side. This lack of a supporting network within a vast and rapidly growing region makes IH 30 and the surrounding area highly vulnerable to severe congestion when accidents

Exhibit 6: Current/Future Daily Traffic Volumes – IH 30 Rockwall County

| Location | 2018 Traffic Volumes ¹ | 2045 Traffic Volumes ² | Numerical Change | % Change |
|--|-----------------------------------|-----------------------------------|------------------|----------|
| PGBT/Bass Pro Drive to Dalrock Road | 149,700 | 253,700 | 104,000 | 69% |
| Dalrock Road to Horizon Road/FM 740 ³ | 139,900 | 240,300 | 100,400 | 72% |
| FM 740 to SH 205 | 93,900 | 187,600 | 93,700 | 100% |
| John King Boulevard to FM 549/FM 3549 | 74,100 | 136,900 | 62,800 | 85% |
| Ben Payne Road to FM 551 | 71,200 | 132,900 | 61,700 | 87% |
| Floyd Road to Erby Campbell Road | 66,800 | 115,500 | 48,700 | 73% |
| FM 35 to FM 2642 | 60,900 | 111,600 | 50,700 | 83% |

Sources: 1. Year 2018 NCTCOG DFWDFX regional travel demand model (Mobility 2045 Plan)
2. Year 2045 NCTCOG DFWDFX regional travel demand model (Mobility 2045 Plan)
3. Proposed INFRA Grant project segment

and/or severe weather events cause a full or even partial closure of the Lake Ray Hubbard crossing. The TxDOT graphic displayed in **Exhibit 7** illustrates the extent of Lake Ray Hubbard in relation to the overall thoroughfare network in and around Rockwall County. To put this in perspective, a freeway closure between Dalrock Road and Horizon Road/FM 740 would force a traveler to negotiate a minimum distance of 9.5 miles on city streets (i.e. Dalrock Road – SH 66 – SH 205 – FM 740), 14 traffic signals, and the near-constant friction from frequent driveways and/or local street access to complete the shortest alternative route around the incident. Additionally, there are no continuous existing or planned limited-access facility routes within the County or the region at-large that may be a reasonable option during an IH 30 lake closure. Considering 1,092 project area crashes were recorded via TxDOT’s Crash Records Information System between 2013 and 2017, including eight fatal and twenty serious injury incidents, it is plausible numerous non-recurring congestion events resulted in substantial excessive delay and associated economic impacts well beyond those associated with typical volume-related congestion. This reason, among others, was the primary catalyst to recommend continuous frontage roads across Lake Ray Hubbard, and the ability to expedite this project through INFRA Grant funding relative to TxDOT’s interim project west of Dalrock Road will allow potential area-wide safety, mobility, and reliability benefits to be fully realized.

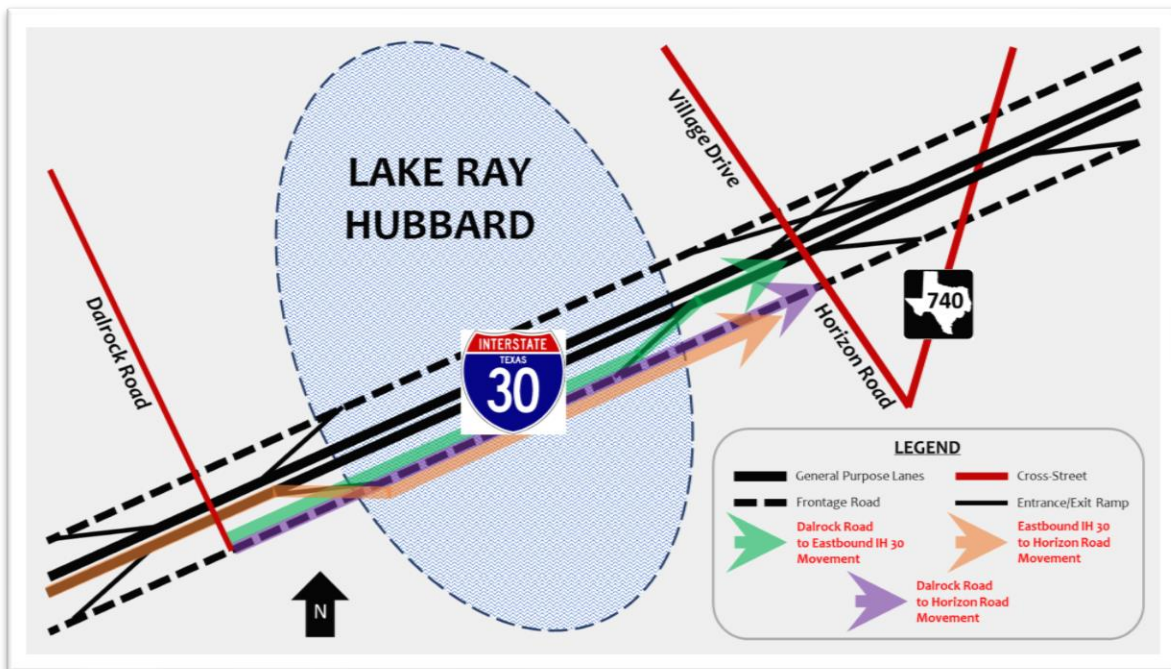
Exhibit 7: IH 30 Rockwall County Location Map



b. Enhancing Accessibility, Reliability, and State of Good Repair

Several other distinguishing features of the project enable additional regional transportation challenges to be met. The proposed configuration of entrance/exit ramps at Dalrock Road and at Horizon Road/FM 740 is a particularly important characteristic as a result of the continuous one-way frontage roads. Similar and complementary to the interim frontage road bridge project to be built west of Dalrock Road, existing entrance/exit ramps will be rebuilt and reversed to an X-ramp configuration. Immediate safety and accessibility benefits resulting from the change will be the elimination of existing freeway exit ramp conflicts with two-lane/two-way frontage roads, one located in the eastbound direction prior to Horizon Road, and the other prior to Dalrock Road in the westbound direction. However, as illustrated in **Exhibit 8**, the most significant mobility outcomes for local and long-distance travelers alike due to the X-ramps will be the more effective accommodation and distribution of all IH 30 corridor traffic crossing Lake Ray Hubbard.

Exhibit 8: IH 30 Lake Crossing Diagram – Ramp/Frontage Road Movements (Eastbound)



As depicted in simplified line diagram above, an eastbound traveler on the IH 30 general purpose lanes wishing to access Horizon Road (orange arrow) will exit on a new ramp just past Dalrock Road on the Rowlett peninsula. The vehicle will then travel all the way across the eastern portion of Lake Ray Hubbard using the new frontage road bridge before approaching the Horizon Road intersection. Another traveler wishing to access the eastbound general purpose lanes from Dalrock Road (green arrow) will also travel across the lake using the new frontage road bridge until reaching a new IH 30 entrance ramp at landfall just prior to Horizon Road. Additionally, this configuration will allow a local traveler between Dalrock Road and Horizon Road (purple arrow) to cross the lake on the frontage road bridge with no need to enter the IH 30 freeway. Similar movements in the opposite direction are equally replicated as



a result of the proposed project, and while collectively they will increase corridor traffic volumes, the burdens and vulnerability of the freeway itself will decrease. In harmony with the interim project to be built to the west, the proposed ramp configuration permits the new frontage roads to act as collector-distributor facilities, keeping local traffic from creating added congestion on the freeway as it crosses the lake, and enabling more efficient and less exposed access at locations where auxiliary lanes can provide safer and better weaving conditions for entering/exiting traffic. Because both existing and future corridor volumes grow considerably just east of where IH 30 begins crossing Lake Ray Hubbard, as identified previously in **Exhibit 6**, this condition offers greater accommodations to better absorb or disperse that traffic. The new access points will provide the added benefit of alleviating major adjustments to the existing IH 30 freeway embankments and/or bridges across the lake, which in turn will limit substantial traffic impacts to the freeway during construction. Yet, the added travel choices create the most significant incident management advantages, allowing internal corridor bypass opportunities for travelers to avoid most freeway closures across the lake without burden of any intervening intersection signal delays prior to returning to the freeway. This attribute is especially important considering the current performance, design, and operational challenges facing the IH 30 freeway crossing itself.

As mentioned previously, IH 30 operational improvements completed in 2015 allowed for a fourth auxiliary lane in each direction added between the PGBT, Dalrock Road, and Horizon Road/FM 740 interchanges. However, the pavement restriping to accomplish this eliminated the left shoulder and reduced all general purpose lane widths to 11 feet in both directions across the lake. Removal of the left shoulder has resulted in greater likelihood for disabled or damaged vehicles to block travel lanes, as well as less available refuge space for those affected by such events from oncoming traffic. Prevention of the fourth lane traveling through the Dalrock Road interchange has caused considerable bottlenecks and extra weaving conflicts due to queue jumping and/or other untimely maneuvers made to either avoid or exploit exit-only ramp conditions. Over time, with ever-increasing corridor travel demands and potentially more frequent occurrences like those described above for city of Rowlett first responders, this condition will lead to more rapid deterioration of infrastructure conditions, reliability, and incident management capabilities. The proposed continuous frontage roads and X-ramp configurations provided through the IH 30 Rockwall County – Lake Ray Hubbard Bridge project will enable improved short- and long-term abilities to address state of good repair, congestion, and safety simultaneously. It will dramatically loosen constraints to implement future planned construction phases that can restore appropriate Interstate facility design widths for all travel lanes and shoulders, allow expedited repair and rehabilitation of all essential existing IH 30 freeway structures across the lake, and ultimately build a continuous fourth general purpose lane in each direction extending from Bass Pro Drive to John King Boulevard.

c. Encouraging Active Transportation

A final challenge met as a result of this project is completion of a long-planned multimodal transportation linkage between existing and proposed bicycle/pedestrian network facilities within the cities of Garland, Rowlett, and Rockwall. Like the facilities to be constructed with the

IH 30 Rockwall County – Lake Ray Hubbard Bridge

interim project between Bass Pro Drive and Dalrock Road, new frontage road bridges across the eastern portion of Lake Ray Hubbard as part of this project will also include an eight-foot barrier-separated sidewalk in the westbound direction, and a 12-foot barrier-separated shared-use path in the eastbound direction. A 3-D simulated photo of the eastbound frontage road bridge with its

Exhibit 9: Frontage Road/Shared-Use Path Illustration



shared-use path is displayed in **Exhibit 9**, and Rockwall County active transportation recommendations as identified in the current MTP are illustrated in **Exhibit 10**. These provisions will enhance livability benefits and encourage greater utilization of active transportation choices around Lake Ray Hubbard, and the direct bicycle/pedestrian connections to/from major attractions like Bayside and other lakeshore developments will expand community recreational and economic growth opportunities. Near the IH 30 interchanges with Dalrock Road and Bayside Drive, for example, independent funding through the city of Rowlett Bayside PID/TIRZ will contribute over \$17 million for construction of trail connections, unique aesthetic treatments, and other desirable open space amenities.

II. PROJECT LOCATION

The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is located both in Rowlett and Rockwall, two cities in the western part of Rockwall County approximately 20 miles and 25 miles, respectively, northeast of downtown Dallas. Lake Ray Hubbard itself is a water supply reservoir of the East Fork Trinity River owned by the city of Dallas. Because the proposed roadway improvements are located in the portions of Rowlett and Rockwall just inside the eastern border of the Dallas-Fort Worth-Arlington Urbanized Area (ID 22042) as designated by the US Census Bureau, this project falls within an “urban area” as defined in the INFRA Grant program. A map highlighting the proposed project location and proximity to nearby land uses in adjacent communities is illustrated in **Exhibit 11**.

Exhibit 10: MTP – Rockwall County Bike Network

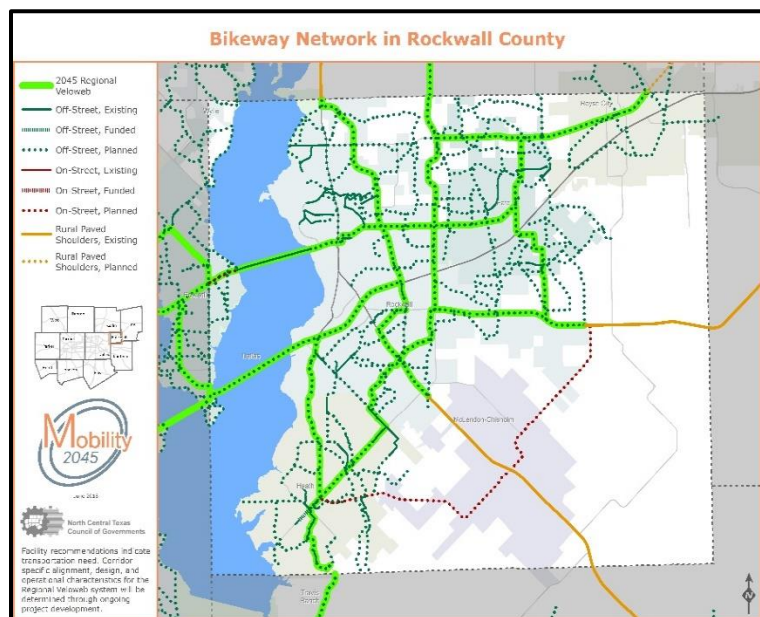
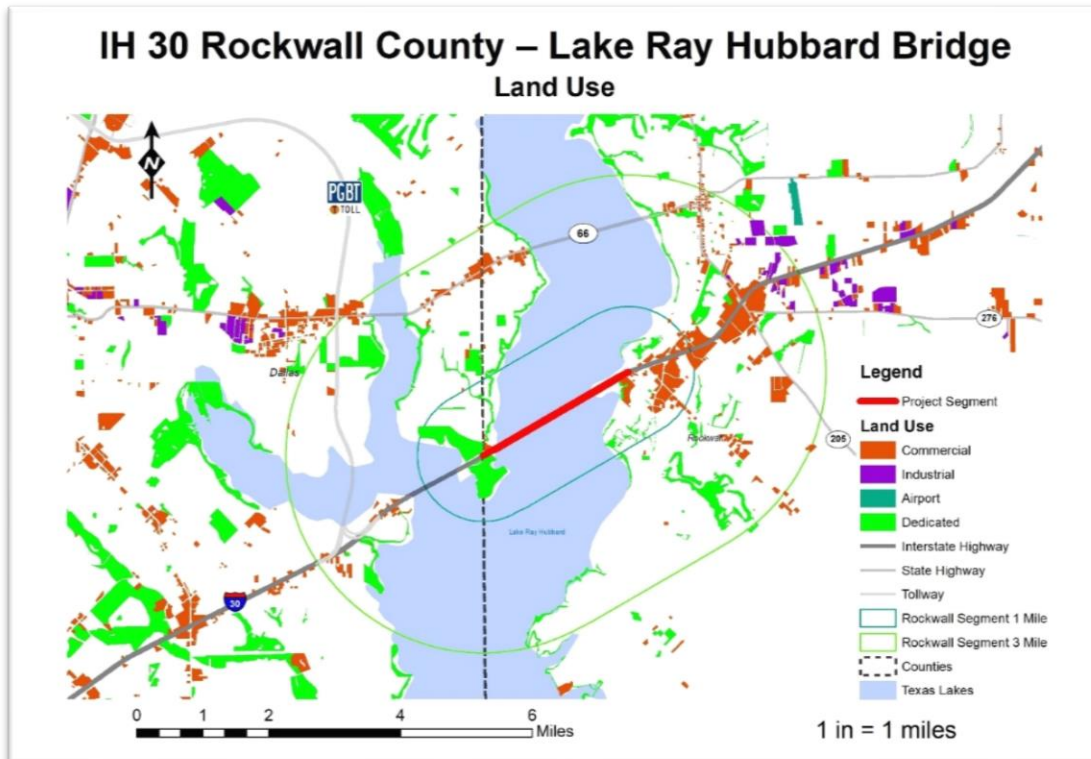


Exhibit 11: Project Location and Adjacent Land Uses



Regional Context

The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is located within the Dallas-Fort Worth-Arlington Census Metropolitan Statistical Area, which is commonly referred to as the DFW Metroplex. It is the largest inland metropolitan area in the United States. The 2017 US Census official estimate indicated the DFW Metroplex at 7,399,662 people and it, by population, the largest metropolitan area in Texas and the fourth largest in the United States. Additional details regarding population growth characteristics for the area surrounding the proposed project can be viewed in **Exhibit 12**.

In terms of economic activity, the DFW metropolitan area produces the fourth largest gross metropolitan product (GMP) in the United States and has approximately the tenth largest GMP in the world. The region is home to DFW International Airport, the third busiest airport in the world by aircraft movements and the tenth busiest by passenger traffic. The airport’s status as a major domestic and international air cargo center, combined with region’s location at a national railroad crossroads, help make the DFW Metroplex function as a national logistics hub. As such, the region is also identified as the nation’s largest inland port, where freight is moved, transferred, and distributed to destinations across the State and around the world. 98% of the US population can be reached from North Central Texas within 48 hours by truck.



Exhibit 12: Population Trends and Forecasts for Project-Related Locations

| Location | 1980 Census ¹ | 1990 Census ¹ | 2000 Census ¹ | 2010 Census ¹ | 2020 Forecast | 2040 Forecast | Growth 2010-2040 |
|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|-------------------------|------------------|
| Garland | 138,857 | 180,650 | 215,768 | 226,876 | 254,381 ² | 293,920 ² | 30% |
| Heath | 1,459 | 2,108 | 4,149 | 6,921 | 12,109 ² | 21,713 ² | 214% |
| Rockwall | 5,939 | 10,486 | 17,976 | 37,490 | 52,740 ² | 114,807 ² | 206% |
| Rowlett | 7,522 | 23,260 | 44,503 | 56,199 | 59,891 ² | 70,903 ² | 26% |
| Rockwall County | 14,528 | 25,604 | 43,080 | 78,337 | 119,410 ² | 213,619 ³ | 173% |
| NCTCOG MPA | 3,030,053 | 4,013,418 | 5,197,317 | 6,417,724 | 7,612,993 ² | 10,183,523 ³ | 59% |

Sources:

¹ US Census 2010 PL94-171, <https://www.census.gov/programs-surveys/decennial-census/decade.2010.html>

² Texas Water Development Board, 2021 Regional Water Plan Population Projections for 2020-2070 for Water User Groups by Region, County, and Basin in Texas, <http://www.twdb.texas.gov/waterplanning/data/projections/2022/popproj.asp>

³ NCTCOG 2040 Demographic Forecast, <https://data-nctcoqgis.opendata.arcgis.com/datasets/2040-nctcoq-demographic-forecast-tsz>

The IH 30 corridor, along with IH 20, IH 35 (including IH 35E and IH 35W branch routes), and IH 45, comprise the four primary Interstate Highway facilities crisscrossing the region. These facilities establish critical links to one of the most extensive surface and air transportation networks in the world, providing widespread trade opportunities for the more than 600 motor/trucking carriers and nearly 100 freight forwarders operating within the region. IH 30 is designated as part of the National Freight Network, as well as the State’s Primary Freight Network, and the corridor lies near numerous intermodal centers and freight-oriented developments given its connections to a dense network of transportation facilities across North Central Texas. Trucks comprise a range of 11% to 20% of the total IH 30 traffic volume across Rockwall County, and with emerging large commercial and industrial centers spreading to the east like Rockwall Technology Park (<http://www.rockwalledc.com/rockwall-technology-park/>) or the Greenville Industrial District in Hunt County (<https://greenvilletxedc.com/site-selection/business-parks/greenville-industrial-district>), it is possible those percentage ranges may increase even as overall traffic volumes on IH 30 continue to grow.

III. PROJECT PARTIES

The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is a multi-jurisdictional effort between NCTCOG, TxDOT, and Rockwall County. Rockwall County, its cities, NCTCOG, and TxDOT have developed a strong history of working together on cooperative roadway construction projects, including implementation of several recent IH 30 interchange reconstruction projects built in anticipation of future corridor capacity additions.

a. North Central Texas Council of Governments (Grant Applicant)

NCTCOG serves as the applicant for this proposed INFRA Grant project. NCTCOG is a voluntary association of multiple local government jurisdictions established in January 1966 to assist in planning for common needs, cooperating for mutual benefits, and coordinating for sound regional development. NCTCOG serves a growing metropolitan region comprised around the urban centers of Dallas and Fort Worth, and it consists of 234 members, including 16 counties,



169 cities, 22 independent school districts, and 28 special districts. Since 1974, NCTCOG has served as the MPO for the DFW area. The NCTCOG Transportation Department is responsible for the regional planning process for all transportation modes and serves as staff assistance to the RTC and its technical committees, which comprise the MPO policy-making structure. The department also provides technical aid to local governments and transportation providers in planning, coordinating, and implementing transportation decisions.

b. Texas Department of Transportation (Grant Recipient/Project Implementation)

The Texas Legislature originally established TxDOT in 1917 as the Texas Highway Department. TxDOT’s workforce of more than 12,000 employees is made up of engineers, administrators, designers, architects, sign makers, accountants, purchasers, maintenance workers, travel counselors, and many other professionals. Headquartered in Austin, TxDOT is made up of 25 district offices, 21 divisions, and 6 regional offices. This project is located in the Dallas District which plans, designs, builds, operates, and maintains the state transportation system in the following counties: Collin, Dallas, Denton, Ellis, Kaufman, Navarro, and Rockwall.

c. Rockwall County (Project Partner)

Rockwall County was established in 1873, named for a wall-like subterranean rock formation pervasive to the local area. Covering just 149 square miles, it is the smallest county in the State of Texas, but in the previous decade it was ranked by the US Census Bureau as the sixth fastest growing county in the nation. The current population is estimated at 96,788. Rockwall County is in an area supported by the TxDOT Dallas District and is located within NCTCOG’s MPA. Rockwall County is bounded on the west by Lake Ray Hubbard and bordered by Collin, Dallas Hunt, and Kaufman County. The City of Rockwall serves as the county seat.

IV. GRANT FUNDS, SOURCES, AND USES OF ALL PROJECT FUNDING

Exhibit 13 identifies the funding sources and cost estimates for the IH 30 Rockwall County – Lake Ray Hubbard Bridge project. All costs are listed in 2017 dollars, and the proposed INFRA Grant request of **\$100 million** is directed for use during the project’s construction phase. As illustrated below, several non-Federal funding sources via Rockwall County and the State of Texas will be utilized to cover approximately 30% of the overall project cost, while the requested INFRA grant and additional Federal funds will comprise the remaining 70% of the overall project cost. Calculations below do not include a previously-incurred project area expense of \$2,133,479 for preliminary design/engineering.

V. MERIT CRITERIA

a. Criterion #1: Support for National or Regional Economic Vitality

Current levels of congestion and unreliability on corridors like IH 30 can cause residents to have limited availability to job opportunities or business ventures, and concurrently employers may be denied full access to the widespread pool of job skills and talents within the North Central Texas region. Restricted mobility also results in increasing amounts of non-productivity given the extra time spent moving people and goods from one point to another. Economic costs associated with recurring and non-recurring congestion have direct effects on area competitiveness and abilities to create and sustain long-term employment, attributes which are



Exhibit 13: Summary of Project Funding Sources and Cost Estimates

| Funding Source | Type | Funding Amount | Percent |
|---|-------------------------------------|-----------------------|-------------------|
| State | TxDOT CAT4 – PS&E | \$ 10,487,229 | 5% |
| State | TxDOT CAT12 – ROW | \$ 4,560,000 | 2% |
| State | TxDOT CAT12 – Utility | \$ 1,900,000 | 1% |
| State | TxDOT CAT4 – Construction | \$ 21,512,771 | 10% |
| State | TxDOT CAT12 – Construction | \$ 5,945,016 | 3% |
| Local | Rockwall County Bond – Construction | \$ 20,000,000 | 9% |
| Total of Non-Federal Funding Sources | | \$ 64,405,016 | 30% |
| Federal | TxDOT CAT12 – ROW | \$ 18,240,000 | 8% |
| Federal | TxDOT CAT12 – Utility | \$ 7,600,000 | 4% |
| Federal | TxDOT CAT12 – Construction | \$ 23,780,064 | 11% |
| Federal | INFRA Request - Construction | \$ 100,000,000 | 47% |
| Total of Federal Funding Sources | | \$ 149,620,064 | 70% |
| Cost Category | Total Cost | Funding Source | |
| | | Non-Federal (Percent) | Federal (Percent) |
| Engineering (PS&E) | \$ 10,487,229 | 100% | 0% |
| Right-of-Way | \$ 22,800,000 | 20% | 80% |
| Utility Relocation | \$ 9,500,000 | 20% | 80% |
| Construction | \$ 149,818,060 | 28% | 72% |
| Contingency | \$ 21,419,791 | 28% | 72% |
| TOTAL PROJECT COST | \$ 214,025,080 | 30% | 70% |

critical for economic vitality and a high quality of life. However, when major transportation improvements are expedited, the availability of jobs and new business opportunities will grow as a result of real benefits to private sector bottom lines, whether derived through increased delivery speeds or reduced operating costs. In turn, those cost savings can be directed toward additional job creation, new/updated equipment or facilities, and/or other investment possibilities regardless of employment sector. These considerations are among the most essential focal points for effective transportation planning and accelerated implementation.

The MTP (*Mobility 2045*) represents the defining vision for multimodal transportation system preservation and progression in the DFW MPA. Serving a dynamic, diverse, and rapidly growing region estimated to reach a population of 11.2 million by 2045, the MTP directs the evolution and assimilation of a mature system of roads, transit, and active transportation modes to meet varied travel needs, complemented by local policies and programs to enhance infrastructure investment and support sustainable development. Central to the MTP’s effectiveness in this mission is extensive public/agency interaction and the coordinated integration of numerous local, regional, and State comprehensive planning initiatives and associated programming strategies. Applicable linkages to critical TxDOT document updates for the Unified Transportation Program (UTP), Strategic Plan, and Freight Mobility Plan enable sufficient technical, administrative, and financial resources to be timely organized for implementation of



high-priority projects. Occasionally, consultation of major studies and activities occurring outside the DFW MPA also occurs, such as with the *2017 IH 30 East Texas Corridor Study*, to acknowledge and prepare for specific statewide and/or multi-regional project influences.

Collectively, all these linked plans and studies consider IH 30 an integral component of a national and regional system that is critical to the goods movement logistics chain, as much as it is for commuter-oriented personal travel. Proposed improvements to the IH 30 corridor are essential in impacting mobility, reliability, connectivity, safety, and economic vitality over a large area. However, it is also clear that the progression of IH 30 improvements must be carefully optimized. In total, the consortium of fiscally-constrained plans indicates new capacity projects are targeted for a continuous 65-mile stretch of IH 30 between downtown Dallas and the Hunt/Hopkins County Line. Significant improvements to the east or west of Lake Ray Hubbard would cause a chain reaction for traffic rendering the crossing even more congested and vulnerable than in current conditions. Therefore, to enhance the logistics chain for goods movement, improve access and availability for jobs, and not only ensure but further unleash economic vitality for much of the North Central Texas region and beyond, it is vital that the IH 30 Rockwall County – Lake Ray Hubbard Bridge project be accelerated to construction.

b. Benefit-Cost Analysis (BCA) Results

Anticipated benefits and costs associated with the proposed IH 30 Rockwall County – Lake Ray Hubbard Bridge project are monetized in the BCA Attachment (**Attachment 2**) accompanying this INFRA application. The calculated benefits documented in the BCA are displayed in **Exhibit 14**, and the project’s resulting net present value (NPV) is shown in **Exhibit 15**. Applied to a total project cost of **\$225.9 million**, including initial capital and annual operations and maintenance (O&M) costs, a substantial net benefit is achieved assuming a seven percent discount rate.

Exhibit 14: Total Project Benefits

| Benefit Category | Benefits Total |
|------------------------------|--------------------|
| | (7% Discount Rate) |
| O&M Costs | (\$9,767,520) |
| Time Savings | \$749,460,661 |
| Air Quality Emission Savings | (\$75,534) |
| Safety Benefits | \$85,094,152 |
| Quality of Life | \$1,229,210 |
| Residual Value | \$15,701,991 |

Exhibit 15: Net Project Benefits

| Discount Rate | Net Present Value (NPV) of Total Benefits | Rounded NPV of Total Benefits | Return on Investment* |
|---------------|---|-------------------------------|-----------------------|
| 7 Percent | \$854,066,888 | \$854 million | 378% |

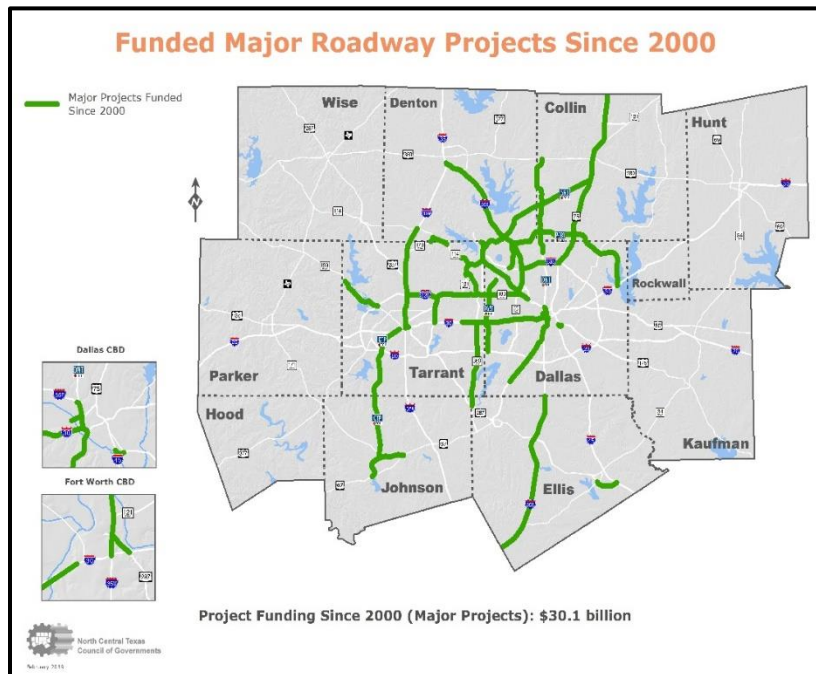
Based on a 21-year project life (through the MTP horizon year of 2045), the overall effect of this transportation investment will result in a positive net value of **\$854.1 million**, after netting out the lifecycle cost of the project. The overall net value of the proposed project will yield in a positive return on investment (ROI) of **378 percent (\$854.1 million/\$225.9 million)**. The results of this BCA clearly demonstrate that IH 30 Rockwall County – Lake Ray Hubbard Bridge project will provide a lifetime of quantifiable regional benefits with respect to various economic and quality of life measures. It should be noted this ROI does not include potential savings resulting from reductions in accident-related congestion delay. Given the type and configuration of proposed project improvements described above, and with prospects that full and/or partial closures of the lake crossing will be a far less frequent occurrence after delivery compared to current conditions, there is strong likelihood that the ROI expressed above is an underestimation. Details regarding the attempt to estimate non-recurring congestion delay benefits for this project, as well as specific calculations, assumptions, and methodologies used to determine the results shown, are discussed in the BCA Attachment (**Attachment 2**).

c. Criterion #2: Leveraging of Federal Funding

The massive task of supporting the dynamic and rapid growth of the North Central Texas region is made possible through decades of collaboration, innovation, and diligence among multiple transportation partners, local governments, and NCTCOG in leveraging Federal funds for the timely delivery of numerous transportation projects. Since 2000, the DFW metropolitan area leveraged over \$30.1 billion in Federal, State, regional, and private sector funds to build a variety of freeway, toll road, managed lane, and major interchange projects at rates exceeding those of most other large urbanized areas. **Exhibit 16** demonstrates the widespread distribution of those projects constructed using those partnership-driven innovative leveraging elements.

Despite Rockwall County being the smallest of Texas’ 254 counties, its small size often proved advantageous in advancing transportation project planning and implementation. Long-standing exemplary leadership helped to foster active consensus-building, efficient stakeholder relationships and task distribution, and enthusiastic support for the infusion of local funding to boost competitiveness for project selection and delivery. As mentioned above, regular meetings since 2003 between

Exhibit 16 – DFW MPA Projects with Federal Leveraging





representatives of the County, its cities, TxDOT, NCTCOG, and various consulting partners via the Rockwall County Planning Consortium have provided direct lines of communication and interaction on a frequent basis enabling effective management of all project development aspects. Beginning first with the County’s 2004 Bond Program, as well as additional initiatives afterward, funds to date have leveraged multiple TxDOT on-system projects totaling nearly \$209 million, or almost five times the local contribution. Though considerable funding was devoted to capacity expansions of State-owned thoroughfares throughout the County, other allocations were notably directed toward the accelerated delivery of five IH 30 interchange projects seamlessly built to tie into the future general widening needs of the corridor. These projects included construction of new interchanges at John King Boulevard (Rockwall) and Erby Campbell Road (Royse City), reconstruction of existing interchanges at FM 549/FM 3549 (Rockwall) and FM 551 (Fate), and the reversal of entrance exit ramps between SH 205 and John King Boulevard (www.rockwallcountytexas.com/180/Road-and-Bridge). Unallocated funds from those initiatives remained available toward use for other needed transportation projects as additional comprehensive planning efforts, environmental analyses, and programming issues became further defined.

In addressing Federal fund leveraging at the State level, 2013 and 2015 legislative actions allowed for additional transportation revenues ultimately and widely approved by voters as Proposition One and Proposition Seven. Proposition One authorized a constitutional amendment allocating a portion of the Economic Stabilization Fund derived from oil and gas revenues to be deposited in the State Highway Fund (SHF) for non-tolled projects. Proposition Seven enabled another constitutional amendment to dedicate portions of revenue from the State general sales and use tax, as well as from motor vehicle sales and rental taxes, to the SHF for non-tolled projects. Combined with yet another 2015 legislative action eliminating several ongoing diversions of state gas taxes to various agencies and initiatives unrelated to transportation, it is estimated that as of December 2018, the SHF has accumulated nearly \$7.9 billion from these additional funding sources to further address statewide transportation needs (<http://ftp.dot.state.tx.us/pub/txdot-info/fin/funding-sources.pdf>).

For programming purposes, TxDOT identifies the estimated funds available from these revenue sources distributed among various funding use categories which are formula-allocated to each State metropolitan region, and Texas House Bill 20 (2015) provides the performance metrics and evaluation apparatus to support project selection through an annually-updated Unified Transportation Program (UTP). The project selection and prioritization process is an intensive, multi-faceted, and highly coordinated effort directed between the Texas Transportation Commission (TTC), each of the 25 TxDOT Districts across the State, and their associated MPOs. Included as part of this effort is authorization by the Governor for the TTC to carry out a focused relief initiative to identify and address the most congested urban area bottlenecks, and work with MPOs to expedite additional capacity construction. Coined the Texas Clear Lanes Initiative (www.dot.state.tx.us/texasclearlanes/), it enables a specific set-aside of priority funding directed toward projects in the State’s five largest metropolitan regions, including the



DFW MPA. The most recent annual update of the process is responsible for the partial funding of recommended IH 30 Rockwall County improvements as outlined above.

The current development and overall programming status for IH 30 Rockwall County improvements, combined with the unique and critical characteristics of the segment between Dalrock Road and Horizon Road/FM 740, created potential for strong compatibility with INFRA Grant requirements and objectives, as well as another opportunity to demonstrate solid local, regional, and State performance for stretching Federal funds. The IH 30 Rockwall County – Lake Ray Hubbard Bridge project, as defined in this INFRA proposal, will be implemented using a total of \$64.4 million in non-Federal funds, comprising just over 30% of the \$214 million total project cost. Together with additional local/regional, State, and Federal commitments for addressing neighboring corridor recommendations, this concerted effort will ensure the vision and needs for IH 30 in North Central Texas will be fully and quickly addressed with respect to all levels of government, the economy, the environment and affected citizens.

d. Criterion #3: Potential for Innovation

1. Innovative Technologies

The robust development, deployment, and management of information technology and communications systems is essential for optimizing transportation functionality, particularly in expansive, dynamic, and high-growth urban areas. The North Central Texas region has already invested significant resources to produce a wealth of technology infrastructure supporting mobility, safety, and reliability, and a large amount of available information is shared through the existing 511DFW apparatus (<http://511dfw.org>). From that platform, information regarding transportation asset performance and/or traffic conditions is collected, analyzed, and distributed by individual providers throughout the DFW metropolitan area, including TxDOT, various transit entities, and local governments. Traveler information regarding closures, incidents, congestion levels, and specific weather-related warnings are processed and communicated via numerous media platforms and transmitted in the field through active intelligent transportation system (ITS) infrastructure, including dynamic message signs, warning lights, and automatic barricades. Given that the IH 30 Rockwall County – Lake Ray Hubbard Bridge project involves a vulnerable and isolated freeway segment with no comparable or readily available alternate routes in proximity, the application and management of these systems at this location is a vital element for successful lifecycle operation and sustainability.

As the primary subject of a June 2018 Advanced Transportation and Congestion Management Technologies Development (ATCMTD) Grant Initiative, NCTCOG proposed a Next Generation Platform for Regional Multimodal Transportation Management. As its centerpiece, a new Regional Information Hub would be developed to substantively transform 511DFW’s data utilization, processing, and sharing capabilities into a “cloud”-hosted, open-source reservoir of information for public consumption. The Regional Information Hub would house, in addition to numerous existing transportation data sources, various new data elements such as mobile location data, emissions monitoring, auto occupancy verification technology, vehicle detection

characteristics, and freight routing/parking information. One of the most significant implications and linkages between this initiative and the IH 30 Rockwall County – Lake Ray Hubbard Bridge project would be the processing and distribution of freight routing/parking information.

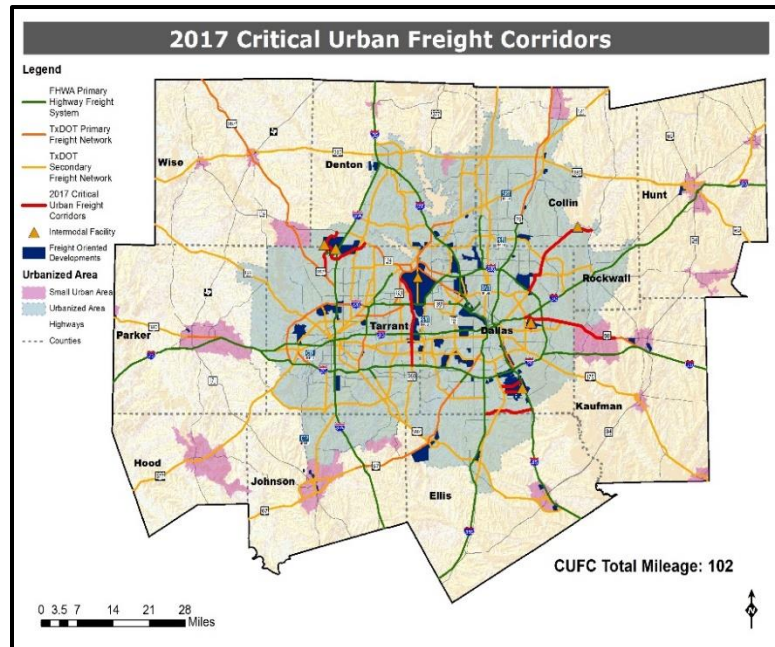
As illustrated in **Exhibit 17**, IH 30 is a designated Federal Highway Administration Primary Highway Freight System corridor with direct connections to/from the IH 35 “NAFTA Superhighway” as well as extensive interactions with

TxDOT Primary and Secondary Network facilities, existing/emerging intermodal centers, and multiple freight-oriented developments across North Central Texas. Enabling a nexus between the proposed IH 30 Rockwall County – Lake Ray Hubbard Bridge project and a comprehensive truck routing and parking information network would create substantial logistic advantages for travelers both within and well beyond the project area. The system would alert drivers to available truck parking locations along the region’s various freeway corridors and adjacent freight-oriented developments via dynamic and static messaging signs. The dynamic messaging signs, as well as vehicle detection technology at intermodal centers, would indicate available parking spaces or queue processing times at lift stations, whereas the static information signs would notify drivers of upcoming exits with truck stop access. The signage would significantly assist truck drivers with the Federal Motor Carrier Safety Administration’s Hours of Service compliance requirements. As freight information is further processed through the Regional Information Hub, alerts could be transmitted to notify drivers of truck parking availability, traffic on route, or potential alternate routes via web-based or application/voice notification tools (Freight Advanced Traveler Information Systems or other navigational devices). The benefits of this truck routing and parking information network would include decreased commercial motor vehicle crashes, improved safety, travel time reductions, and direct savings to shipping and maintenance costs, each of which given the unique nature of this project may be specifically realized.

1. Innovative Project Delivery

TxDOT and NCTCOG have regularly partnered together to take advantage of two innovative Federal programs that enable streamlined environmental review and permitting for accelerated project delivery. These strategies will be applied to the IH 30 Rockwall County – Lake Ray

Exhibit 17: North Central Texas Highway Freight Network





Hubbard Bridge project in meeting the INFRA Discretionary Grant Program’s aggressive schedule requirements for funding obligation. These programs help expedite the review of projects, but do not allow permitting, approval processes, and/or regulations to be circumvented or bypassed:

- Under the Surface Transportation Project Delivery Program (23 US Code 327), TxDOT applied for and was granted responsibility for review, consultation, and approval of National Environmental Policy Act (NEPA) documents for highway projects. As the second State DOT to assume NEPA responsibility for environmental documentation, the delegation eliminated a governmental review layer and allowed TxDOT to directly consult with Federal/State resource agencies, resulting in shorter review times.
- Many projects require a Section 404 permit under the Clean Water Act from the United States Army Corps of Engineers (USACE). The time needed to receive the permit varies by the permit type, magnitude of project impacts to wetlands and waters of the US, and complexity of the project. Section 214 of the Water Resources Development Act of 2000 allows the USACE to accept funds from non-Federal public entities to give priority to the evaluation of the USACE permit regulations. Under this Act, NCTCOG and USACE have had a Memorandum of Agreement to fund a USACE position to expedite permitting for high priority transportation projects in the DFW MPA since 2008. Opportunities to coordinate in advance has resulted in permitting time, mitigation cost, and impact reductions.

While TxDOT intends to utilize the traditional design-bid-build procurement approach for project construction, the agency also plans to employ a unique combination of incentive/disincentive and cost-plus-time bidding mechanisms to motivate potential contractors for completion ahead of schedule, awards based on minimizing traveler inconvenience or delay, and for delivery with the lowest possible cost. With Texas being one of the nation’s leaders in both population growth and number of construction projects simultaneously, TxDOT has devoted numerous resources toward multi-disciplinary measures that enable its staff, contracting partners, materials suppliers, equipment manufacturers, workforce specialists, financial institutions, and the public to all work together in achieving consistent expedited construction outcomes. Developed through a 2016-17 statewide series of workshops and information exchanges that also included the Associated General Contractors of Texas and the Texas A&M Transportation Institute, these provisions as outlined in the Accelerated Construction Guidelines Manual will be incorporated into the project to ensure streamlined delivery (www.dot.state.tx.us/cst/construction_strategies.htm).

2. Innovative Financing

As mentioned above, recent voter-approved measures such as Proposition One and Proposition Seven, as well as efforts to eliminate gas tax diversions, have resulted in nearly \$7.9 billion of new State revenues since 2015 for transportation investments. These funds have been infused into a variety of TxDOT programs aimed at improving roadway network capacity and state of good repair simultaneously, and the IH 30 Rockwall County – Lake Ray Hubbard Bridge project provides a unique opportunity to address both concerns as well. It should also be noted that via



the Bayside Service and Assessment Plan, efforts by the city of Rowlett in raising Bayside PID/TIRZ funds for initial construction of trail connections and aesthetic improvements, both within or adjacent to TxDOT right-of-way (ROW), will also be preserved for long-term maintenance needs (<http://rowlettonthefirstmove.com/projects/1/bayside.htm>).

e. Criterion #4: Performance and Accountability

In November 2018 following extensive research, analysis, and consultation between NCTCOG and TxDOT, the RTC took action supporting statewide pavement and bridge condition targets for the National Highway System (NHS) as part of National Highway Performance Program rules established by the Fixing America’s Surface Transportation (FAST) Act. Through its action, the RTC also directed NCTCOG staff to regularly collaborate with TxDOT on measures to expedite programming for regional NHS bridges and off-system NHS pavements in poor condition. This effort, combined with similar initiatives by other Texas MPOs, has ushered in a new evolution of cooperation, data collection/exchanges, and other innovative tools/measures through TxDOT meant to address performance and accountability in the project selection or prioritization process. As these agencies are each required to regularly document how substantial progress toward performance targets is achieved, and because this information must be linked and verified through a risk-based financial plan within TxDOT’s Transportation Asset Management Plan, significant multi-lateral oversight will be in place to account for infrastructure lifecycle considerations at both the project and network levels. NCTCOG has recently developed a comprehensive web page highlighting background data/information, meeting materials, status updates, and added links/resources to demonstrate its partnership commitments in holistically linking asset/performance management and traditional project/system planning (www.nctcog.org/trans/data/info/measures/system).

With respect to the IH 30 Rockwall County – Lake Ray Hubbard Bridge project, NCTCOG and TxDOT have calculated that the overall 50-year design life cost for the proposed improvements is estimated to be **\$258.1 million** in 2017 dollars, and the agencies have stable funds and contingency solutions in place to appropriately address this and numerous other infrastructure investments. Additionally, given the timeline of the proposed project schedule to be described below, potential for resources in the area to already be mobilized as a result of the neighboring interim project west of Dalrock Road, and TxDOT’s long-standing high performance record for on-time delivery of major DFW area projects, it is reasonable that the first accountability option listed in the INFRA NOFO may be accomplished as a condition of award.

VI. PROJECT READINESS

a. Technical Feasibility

The ultimate recommendations for the IH 30 Rockwall County – Lake Ray Hubbard Bridge project are derived from thorough technical analyses and extensive stakeholder considerations. Engineering schematics developed for the project incorporate design criteria consistent with the TxDOT Roadway Design Manual, TxDOT Bridge Design Manual, Texas Manual on Uniform Traffic Control Devices, and other State- and Federal-approved standards. Expected project performance, anticipated benefits, potential impacts, and identified mitigation strategies are



outlined in the EA, and other associated documentation such as the Interstate Access Justification Report and value engineering study has also been prepared by TxDOT. Upon receipt of the corridor FONSI, TxDOT will immediately develop a Cost Estimate Review (CER) and draft a Project Management Plan (PMP), per FHWA requirements, for an overall improvement cost in excess of \$500 million. The overall cost estimate for this project, itemized by development phase and including an approximate 10% contingency, is based on a detailed review of the preliminary design drawings and outcomes from the recent delivery of similar projects. Given scheduled implementation of the neighboring interim project between Bass Pro Drive and Dalrock Road, upon notification of a potential INFRA Grant award for this project, TxDOT expects to be sufficiently prepared for final design and construction mobilization.

b. Project Schedule

The proposed delivery schedule, including anticipated timeframes for major milestones, is illustrated in **Exhibit 18**. The displayed activities demonstrate that the project meets all identified INFRA Grant schedule requirements for fund obligation and construction initiation. Construction is expected to take approximately three years to complete, and the new improvements would be opened to traffic by winter 2025. The work would be timed to proceed shortly after construction of the interim project west of Dalrock Road is underway, and because a vast majority of improvements would be built on separate structures crossing Lake Ray Hubbard, only minimal disruption to IH 30 freeway traffic is expected through the duration of construction. All real property and ROW acquisition will be acquired in a timely manner in accordance with 49 Code of Federal Regulations (CFR) part 24, 23 CFR part 710, and other applicable legal requirements.

Exhibit 18: Project Schedule Overview

| Project Phases | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | | | | 2023 | | | | 2024 | | | | 2025 | | | |
|---------------------|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NEPA (FONSI) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design (PS&E) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROW Acquisition | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Utility Relocation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

c. Required Approvals

1. Environmental Permits and Reviews

(i.) NEPA Status

A draft EA for the segment of IH 30 from Bass Pro Drive to west of FM 2642 was presented at a Public Hearing on January 31, 2019, and issuance of a FONSI is expected later this spring. The EA (provided as **Attachment 4**) included evaluation of proposed recommendations for this project as outlined in this INFRA Grant application.



(ii.) Reviews, Approvals, and Permits by Other Agencies

In completion of the EA for the segment of IH 30 from Bass Pro Drive to west of FM 2642, coordination with the USACE, Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, Texas Historical Commission, and Federally-recognized tribes occurred under TxDOT’s Memorandums of Understanding and Programmatic Agreements with those agencies/entities. Section 8.0 (Environmental Permits, Issues, and Commitments) in the EA (**Attachment 4**) outlines the needs and/or actions to be pursued in the corridor for compliance with specific regulations. NCTCOG can confirm the Regulatory Project Manager for the USACE Fort Worth District under Section 214 is expediting the Clean Water Act Section 401/402/404 permitting processes for this project.

(iii.) Environmental Studies or Other Documents

Resources reviewed as part of the IH 30 EA for the segment through Rockwall County included community impacts, cultural and archeological resources, historic properties, water and biological resources, air quality, hazardous materials, noise impacts, indirect and cumulative impacts, and construction phase impacts. The EA documentation provides detailed information regarding the analyses, potential impacts, and proposed mitigation of the identified resources.

(iv.) Discussions with FHWA

Though TxDOT is granted responsibility for review, consultation, and approval of NEPA documents for highway projects, coordination with FHWA occurred regularly throughout the IH 30 EA development to provide assurances of appropriate review and compliance with Federal, State, and local regulations.

(v.) Public Involvement

TxDOT conducted three public engagement opportunities during EA development for IH 30 through Rockwall County, and an exclusive Public Hearing was also held facilitating expedited approval of the interim project between Bass Pro Drive and Dalrock Road (interim project FONSI – September 7, 2018). The following describes the meeting dates and locations:

- Open House Public Meeting – April 27, 2017
Royse City High School, 700 S. FM 2642, Royse City, TX 75189
- Open House Public Meeting – May 4, 2017
Rockwall County District Courthouse, 1111 E. Yellow Jacket Ln., Rockwall, TX 75087
- Public Hearing (Interim Project) – May 31, 2018
Hella Shrine (Terrace Room) – 2121 Rowlett Rd., Garland, TX 75043
- Public Hearing – January 31, 2019
Royse City High School, 700 S. FM 2642, Royse City, TX 75189

2. State and Local Approvals/Planning

As stated previously, overall IH 30 improvements between Bass Pro Drive and west of FM 2642 are included in *Mobility 2045: The Metropolitan Transportation Plan for North Central Texas*, Appendix D of the *2019-2022 Transportation Improvement Program (TIP) for North Central Texas*, and TxDOT’s 2019 Unified Transportation Program (UTP). Overall IH 30 improvements are also identified in the TxDOT 2016 Freight Mobility Plan, which identifies statewide freight needs, challenges, goals, policies, and investment strategies. Should INFRA Grant funds be



awarded for this project, NCTCOG and TxDOT will coordinate via the earliest available quarterly modification cycle to revise the TIP and State Transportation Improvement Program (STIP) accordingly. A TIP/STIP revision was recently performed to confirm available funding and aid in accelerating the delivery of the interim frontage road bridge project between Bass Pro Drive and Dalrock Road.

3. Assessment of Project Risks and Mitigation Strategies

As discussed above, TxDOT will immediately develop a CER and draft PMP upon issuance of the overall IH 30 Rockwall County corridor FONSI to identify a risk register for both cost and schedule. Potential uncertainties in those estimates such as environmental conditions, inflation, market conditions, third party impacts, and other risk events will be modeled and reviewed by a multi-disciplined team of subject matter experts to determine a forecast curve of cost and completion date ranges, as well as a list of appropriate mitigation responses. Section 8.0 (Environmental Permits, Issues, and Commitments) in the EA (**Attachment 4**) outlines the associated needs and/or actions to be pursued in compliance with known regulations.

Despite these potential uncertainties, TxDOT has been highly successful in the use of innovative project delivery methods and the implementation of highly complex projects in recent years. Efforts like IH 635 LBJ Express (\$2.7 billion), North Tarrant Express (\$2.4 billion), and the IH 30/IH 35E Horseshoe (\$800 million) have demonstrated the experience and expertise TxDOT has gained in planning, design, procurement, and numerous other project components. TxDOT staff is highly capable of delivering a project with the magnitude of the IH 30 Rockwall County – Lake Ray Hubbard Bridge project.

VII. LARGE/SMALL PROJECT REQUIREMENTS

The IH 30 Rockwall County – Lake Ray Hubbard Bridge project satisfies statutory requirements enumerated at 23 U.S.C. 117(g) and is considered for the INFRA Discretionary Grant Program as a Large Project. This determination is based on responses to the following questions:

- a. Does the project generate national/regional economic, mobility, or safety benefits?*
- b. Is the project cost-effective?*
- c. Does the project contribute to one or more of the National Goals under 23 USC 150?*
- d. Is the project based on the results of preliminary engineering?*
- e. With respect to non-Federal financial commitments, does the project have one or more stable and dependable funding or financing sources to construct, maintain, and operate the project?*
- f. Are contingency amounts available to cover unanticipated cost increases?*
- g. Is it the case that the project cannot be easily and efficiently completed without other Federal funding or financial assistance available to the project sponsor?*
- h. Is the project reasonably expected to begin construction not later than 18 months after the date of obligations of funds for the project?*

Summary responses to the questions are provided in the Large/Small Project Requirements Attachment (**Attachment 5**) which accompanies this application. Each response contains specific references to details discussed within this Project Narrative.

IH 30 Rockwall County Lake Ray Hubbard Bridge

FY 2019 INFRA Grant Application
Attachment 1 – Cover Page and Project Narrative



North Central Texas
Council of Governments



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IH 30 Rockwall County – Lake Ray Hubbard Bridge

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INFRA

US Department of Transportation FY 2019 INFRA Grant Application

IH 30 Rockwall County – Lake Ray Hubbard Bridge

| Cover Page Chart | |
|---|--|
| Basic Project Information: | |
| What is the Project Name? | <u>IH 30 Rockwall County – Lake Ray Hubbard Bridge</u> |
| Who is the Project Sponsor? | <u>Texas Department of Transportation</u> |
| Was an INFRA application for this project submitted previously? (If Yes, please include title). | <u>No</u> |
| Project Costs: | |
| INFRA Request Amount | <u>\$ 100,000,000</u> |
| Estimated federal funding (excl. INFRA) | <u>\$49,620,064</u> |
| Estimated non-federal funding | <u>\$64,405,016</u> |
| Future Eligible Project Cost (Sum of previous three rows) | <u>\$214,025,080</u> |
| Previously incurred project costs (if applicable) | <u>\$2,133,479</u> |
| Total Project Cost (Sum of 'previous incurred' and 'future eligible') | <u>\$216,158,559</u> |
| Are matching funds restricted to a specific project component? If so, which one? | <u>No</u> |
| Project Eligibility: | |
| Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on National Highway Freight Network (NHFN)? | <u>\$210,632,080</u> |
| Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on the National Highway System (NHS)? | <u>\$210,632,080</u> |
| Approximately how much of the estimated future eligible project costs will be spent on components constituting railway-highway grade crossing or grade separation projects? | <u>\$3,393,000</u> |
| Approximately how much of the estimated future eligible project costs will be spent on components constituting intermodal or freight rail projects, or freight projects within the boundaries of a public or private freight rail, water (including ports), or intermodal facility? | <u>\$0</u> |
| Project Location: | |
| State(s) in which project is located..... | <u>Texas</u> |
| Small or large project..... | <u>Large</u> |
| Urbanized Area in which project is located, if applicable..... | <u>Dallas-Fort Worth-Arlington</u> |
| Population of Urbanized Area..... | <u>7,399,662 (2017)</u> |
| Is the project currently programmed in the:..... | |
| • TIP. | <u>Yes (Appendix D)</u> |
| • STIP. | <u>Yes (Appendix D)</u> |
| • MPO Long Range Transportation Plan. | <u>Yes</u> |
| • State Long Range Transportation Plan. | <u>Yeses</u> |
| • State Freight Plan? | <u>Yes</u> |

EXECUTIVE SUMMARY

The North Central Texas Council of Governments (NCTCOG), in cooperation with the Texas Department of Transportation (TxDOT) and Rockwall County, is seeking funding assistance of **\$100 million** through the Fiscal Year (FY) 2019 Infrastructure for Rebuilding America (INFRA) Discretionary Grant Program for the **Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge** Project. This project, with an estimated total cost of **\$214 million**, is illustrated in **Exhibit 1** and is comprised of the following improvements:

- a. Construction of new two- to three-lane continuous one-way frontage road bridges in each direction parallel to the existing IH 30 freeway, including a westbound barrier-separated eight-foot sidewalk and an eastbound barrier-separated 12-foot shared-use path, from Dalrock Road in Rowlett east to Horizon Road in Rockwall. Combined with imminent improvements for a neighboring segment west of Dalrock Road, this project would enable parallel frontage roads to complete a full four-mile traversal across Lake Ray Hubbard.
- b. Construction of planned interchanges at Dalrock Road, Horizon Road, and Farm-to-Market Road (FM) 740 to their ultimate configuration and capacity, including ramps, auxiliary lanes, and cross-street bridges.

Exhibit 1: Project Overview



The proposed project is incorporated within a larger 17-mile group of general-purpose lane capacity, frontage road, and interchange improvements from Bass Pro Drive to west of FM 2642



in Royse City, covering all IH 30 through Rockwall County. A detailed draft Environmental Assessment (EA) evaluating the potential social, economic, and environmental impacts of the overall IH 30 improvements has been prepared, and issuance of a Finding of No Significant Impact (FONSI) is expected later this spring. Overall improvements are included in *Mobility 2045: The Metropolitan Transportation Plan (MTP) for North Central Texas*, and in Appendix D of the *2019-2022 Transportation Improvement Program (TIP) for North Central Texas*.

IH 30 serves as the northeastern gateway to/from the North Central Texas region, an area whose rapid growth and travel demands are exerting substantial mobility, safety, and reliability challenges to both the project area and the corridor at-large. IH 30 is also a classified Federal Highway Administration (FHWA) Primary Highway Freight System (PHFS) corridor with strategic importance to the State as highlighted in the *Texas Freight Mobility Plan*, and its unique location, alignment, and connectivity attracts significant freight flows between Mexico and the midwestern/northeastern United States as a result of the North American Free Trade Agreement (NAFTA). The proposed project presents direct solutions for severe congestion, incident management, accessibility, and other corridor needs that are greatly tested by the geography of Lake Ray Hubbard, the crossing’s vulnerability to closure as a result of incidents/accidents, and isolation from comparable or readily available alternate routes. Addressing this critical segment quickly will dramatically improve the timing and effectiveness of many other planned IH 30 improvements between Dallas and Northeast Texas, all of which are essential to sustain economic vitality for the region, State, and the nation.

This application includes estimates of the project’s expected benefits based on the requirements and outcomes specified in the INFRA Notice of Funding Opportunity (NOFO) and the Benefit-Cost Analysis (BCA) Guidance for Discretionary Grant Programs (December 2018). The BCA attachment (**Attachment 2**) accompanying this Project Narrative will identify the benefit calculation methodology, quantify the monetary benefit in net present value for the project, and substantiate the expected benefits and costs in accordance with Federal requirements. The costs and benefits contained within this application were derived using NCTCOG travel demand model data, demographic and economic trends/forecasts, TxDOT safety and state of good repair information, reliability and speed data derived from the National Performance Management Research Dataset (NPMRDS), as well as other supporting information. As outlined in **Exhibit 2**, this project is projected to attain net benefits of over **\$854.1 million** over the 21-year time horizon with a benefit-cost ratio of **3.78**.

Exhibit 2: Benefit-Cost Analysis Summary Results

| Benefit-Cost Summary Results | | | Average Annual | Total Over 21 Years |
|------------------------------|-------------------|---------------------------------|----------------|---------------------|
| Life-Cycle Costs | \$225.9 million | ITEMIZED BENEFITS | | |
| Life-Cycle Benefits | \$2,863.1 million | Travel Time Savings (mil. \$) | \$35.2 | \$749.5 |
| Net Present Value | \$854.1 million | AQ Emissions Savings (thou. \$) | (\$8.4) | (\$176.1) |
| BENEFIT-COST RATIO | 3.78 | Safety Savings (mil. \$) | \$12.6 | \$264.8 |
| | | Quality of Life (mil. \$) | \$0.2 | \$4.0 |
| | | Residual Value (mil. \$) | N/A | \$104.4 |
| | | TOTAL BENEFITS (mil. \$) | \$40.7 | \$854.1 |
| | | Person-Hrs Delay Saved (mil) | 5.68 | 118.8 |

I. PROJECT DESCRIPTION

As displayed in **Exhibit 1**, the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge project consists of the following roadway and multimodal improvements within the cities of Rowlett and Rockwall in western Rockwall County, Texas:

- a. Construction of new two- to three-lane continuous one-way frontage road bridges in each direction parallel to the existing IH 30 freeway, including a westbound barrier-separated eight-foot sidewalk and an eastbound barrier-separated 12-foot shared-use path, from Dalrock Road in Rowlett east to Horizon Road in Rockwall. Combined with imminent improvements for a neighboring segment west of Dalrock Road, this project would enable parallel frontage roads to complete a full four-mile traversal across Lake Ray Hubbard.
- b. Construction of planned interchanges at Dalrock Road, Horizon Road, and FM 740 to their ultimate configuration and capacity, including ramps, auxiliary lanes, and cross-street bridges.

The project has independent utility and will be built consistent with the ultimate design, functionality, multimodal accommodations, and capacity characteristics identified in the IH 30 draft Environmental Assessment (EA) and schematics prepared for overall corridor improvements through Rockwall County. Issuance of a Finding of No Significant Impact (FONSI) for the EA is expected later this spring. The proposed typical section for the frontage road bridges (shown in red) is illustrated in **Exhibit 3**, and the cross-section diagram for the proposed Horizon Road bridge replacement over IH 30 is shown in **Exhibit 4**. A copy of the IH 30 EA is provided in the EA Attachment (**Attachment 4**) to this Fiscal Year (FY) 2019 Infrastructure for Rebuilding America (INFRA) Grant application.

Exhibit 3: Proposed IH 30 Typical Section – Dalrock Road to Horizon Road

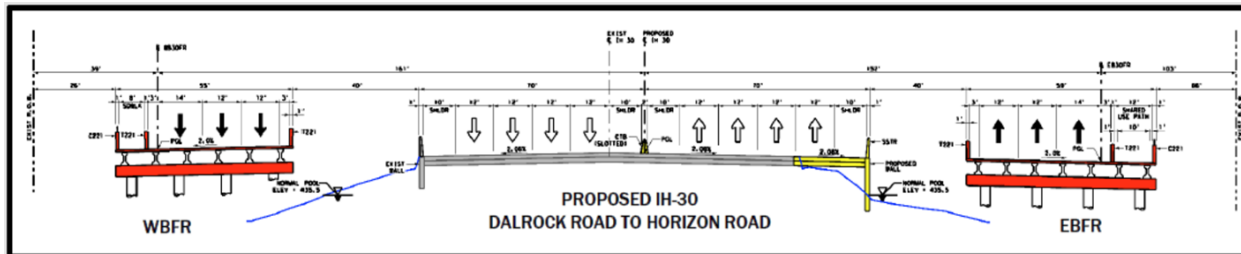
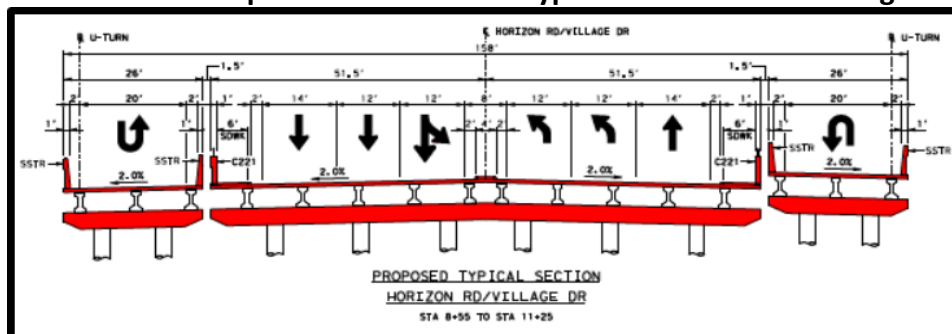


Exhibit 4: Proposed Horizon Road Typical Section – IH 30 Bridge





The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is being submitted for INFRA Discretionary Grant funding consideration by NCTCOG’s Regional Transportation Council (RTC). The RTC consists of 44 elected or appointed officials representing various local governments and transportation providers, and the group acts as the independent Metropolitan Planning Organization (MPO) policy body for the Dallas-Fort Worth (DFW) Metropolitan Planning Area (MPA). The project is included in *Mobility 2045: The Metropolitan Transportation Plan (MTP) for North Central Texas* (www.nctcog.org/trans/plan/mtp/2045), and in Appendix D of the *2019-2022 Transportation Improvement Program (TIP) for North Central Texas* (www.nctcog.org/trans/funds/tip). If awarded funds, expedited delivery of the project will be amended in the TIP as required. As this project represents a major partnership between NCTCOG, TxDOT, and Rockwall County, and is key to enabling TxDOT’s long-term coordinated IH 30 development strategy from Dallas east to the Arkansas State Line as described in further detail below, it is consistent with the desired INFRA Program requirements and objectives.

Project History

Original construction of the IH 30 freeway from downtown Dallas through Rockwall County and beyond into northeast Texas occurred during the early/mid-1960’s, and its alignment generally followed the existing U.S. Highway (US) 67 corridor for nearly all of the 320-mile distance between Dallas and Little Rock, Arkansas. The freeway’s first alteration in the study area occurred shortly after completion upon finalized plans by the city of Dallas to impound the East Fork Trinity River for a new water supply reservoir. By the 1969 completion of the Rockwall-Forney Dam which created Lake Ray Hubbard, construction of over four miles of new embankments and bridges raised IH 30 as much as 20 feet above its original elevation to accommodate the lake’s planned 490,000 acre-feet of storage capacity. The study area’s second major change resulted from a series of mid/late-1990’s reconstruction/widening projects between IH 635 in Mesquite and State Highway (SH) 205 in Rockwall which expanded IH 30 to its current pavement capacity (three general purpose lanes in each direction). Concepts for a third and ultimate modification were initially conceived through a 2008 corridor plan developed by Rockwall County and TxDOT, as well as the improvement or reconstruction of several interchanges built to the east in accordance with that plan. Those initial efforts ultimately set the stage for the project recommendations highlighted in this application.

Daily traffic volumes consistently exceeded available capacity by 2011 once the extension of the 52-mile-long President George Bush Turnpike (PGBT) was connected to IH 30 near the western end of the Lake Ray Hubbard crossing. New accessibility by the PGBT to/from emerging major employment centers north of Dallas in southern Collin County, as well as accelerating demographic growth to the east throughout Rockwall County, placed ever-increasing strains on IH 30 to accommodate travel demands across the lake. Though operational improvements completed in 2015 allowed the temporary striping of a fourth auxiliary lane in each direction between the PGBT, Dalrock Road, and Horizon Road/FM 740 interchanges, the congestion benefits for IH 30 segments both across and approaching the lake were short-lived, and it justified the need to bring the more comprehensive corridor plan to fruition.



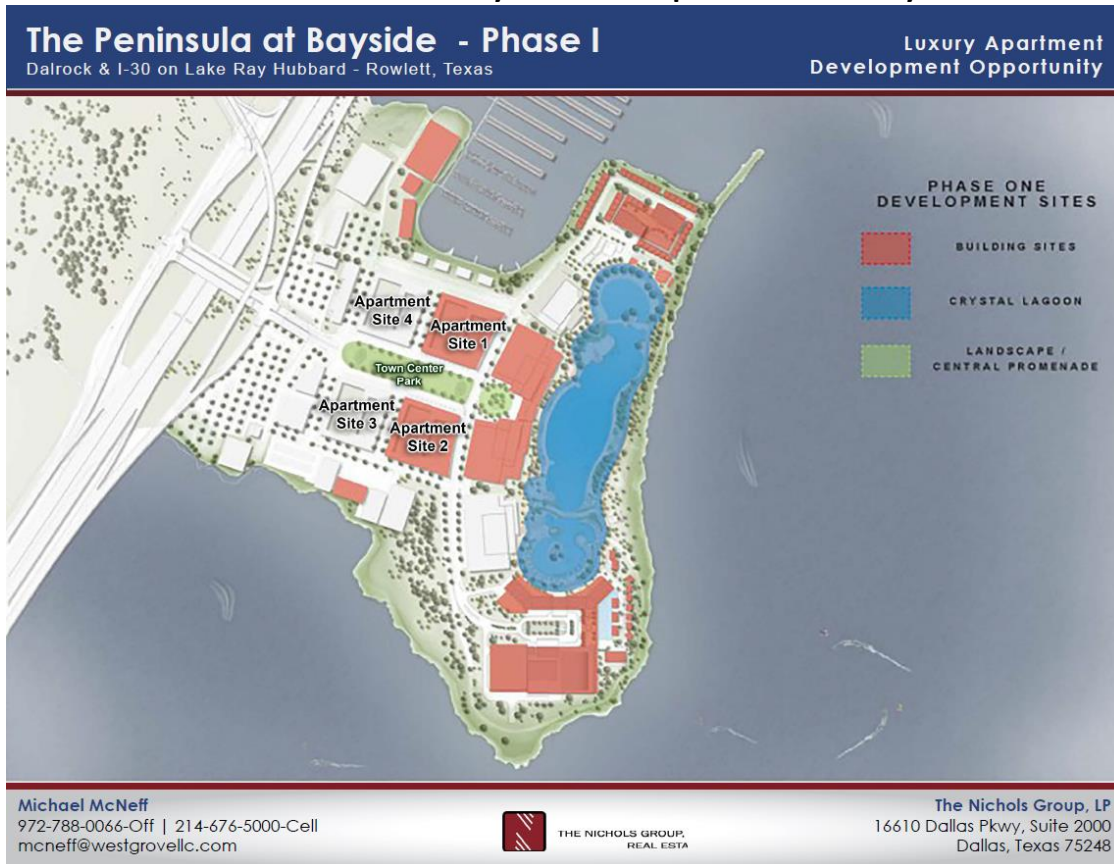
Following an extensive public/agency outreach campaign, the formal TxDOT study which prepared IH 30 design schematics and a draft EA concerning ultimate improvements between Bass Pro Drive in Garland and west of FM 2642 in Royse City is expected to conclude later this spring upon receipt of a FONSI. The study recommended and evaluated the following improvements within the 17-mile corridor segment, resulting in a total project cost of approximately \$627 million:

- a. Provide four continuous general purpose lanes in each direction between Bass Pro Drive and John King Boulevard, and three general purpose lanes in each direction between John King Boulevard and FM 2642.
- b. Provide two- to three-lane continuous one-way parallel frontage roads (with bicycle/pedestrian accommodations) in each direction for improved accessibility, circulation, and incident management, including over the Lake Ray Hubbard crossing.
- c. Provide improved ramps, auxiliary lanes, Texas U-turns, bicycle/pedestrian accommodations, and extra cross-street capacity at each of the segment’s 14 interchanges to enable enhanced and more efficient multimodal and thoroughfare network connectivity.

At nearly the same time TxDOT initiated the IH 30 corridor study, the city of Rowlett and a major private developer reached financial closure for acquisition of the former Elgin B. Robertson Park from the city of Dallas, a location stretching north and south of IH 30 on a peninsula adjacent to the Dalrock Road interchange. Since then, the public-private partnership worked together to establish a vision for a unique 262-acre, \$1 billion mixed-use waterfront development called Bayside. The development would feature 1.7 million square feet of prime commercial space, including proposed office, entertainment, retail, and hotel uses, as well as a new convention center and redeveloped marina. Bayside would also be home to over 3,000 new residential units, including a mix of condominiums, apartments, townhomes, and single-family residences, and all these various components would be interconnected by 45 acres of programmed parks, several miles of hike-and-bike trails, and other desirable quality-of-life amenities. Combined with other notable attractions such as the Harbor Point development in Garland (west) and The Harbor at Rockwall (east), these developments created enormous potential for Lake Ray Hubbard to be transformed into a significant resort destination and economic generator for the eastern part of the North Central Texas region, applying even greater travel demand pressures for the IH 30 corridor. Bayside’s initial delivery phase, including construction of several large multi-family residence buildings and site clearing for two single-family home subdivisions north of IH 30, began in early 2018. A proposed site plan highlighting the conceptual layout and preliminary phasing for buildings, land uses, and other amenities on the peninsula south of IH 30 is illustrated in **Exhibit 5**.

With the city of Rowlett’s creation and subsequent funding of a Public Improvement District (PID) and a Tax-Increment Reinvestment Zone (TIRZ) supporting the implementation of Bayside, as well as the developer’s anticipated build-out timeline covering less than ten years, the city and NCTCOG in cooperation with TxDOT were successful in obtaining State and Federal funds to accelerate partial delivery of the IH 30 ultimate improvements described above. Proposed frontage roads across the western portion of Lake Ray Hubbard between Bass Pro Drive and

Exhibit 5: The Peninsula at Bayside – Concept and Preliminary Site Plan



Dalrock Road, including a new interchange for Bayside Drive and initial reconstruction of enhanced access to/from Dalrock Road, was environmentally cleared in September 2018 and fully funded as a separate \$128 million project, and construction is expected to begin in Summer 2021. General purpose lane, frontage road, and interchange improvements totaling \$257 million between SH 205 and FM 2642 were also funded, and pending the FONSI for the overall larger project, construction is scheduled to get underway by Winter 2022. Ongoing negotiation between NCTCOG, TxDOT, and Rockwall County to fund remaining elements, particularly the frontage roads across Lake Ray Hubbard, was the impetus for preparing this project proposal for INFRA Grant consideration. Inability to deliver this project in tandem with other accelerated improvements would cause several major corridor-wide transportation challenges to remain unfulfilled, yet few descriptions may demonstrate these needs more than recent experiences from the city of Rowlett’s police and fire departments.

Targeted Transportation Challenges

With multiple-lane closures increasing from 106 occurrences in 2015 to 150 incidents in 2018 as a result of accidents, first responders from the city of Rowlett have the increasingly difficult responsibility of addressing public safety needs across the entire IH 30 crossing of Lake Ray Hubbard. However, over a two-week period in February 2019 one police officer was injured, as well as two police squad cars and a fire truck damaged, by two separate impaired driver



collisions suffered during active service calls on the crossing. This led to remarkable department-wide memos and public announcements from both the police and fire chiefs that upon immediate effect, to ensure the safety of Rowlett first responders and all those involved with a disabled vehicle or accident, police officers and firefighters had full discretion to shut down all lanes of the freeway to appropriately service any crash or motorist assistance call (www.fox4news.com/news/rowlett-police-vehicle-hit-by-dwi-suspect-2nd-time-this-month). Though such crash types are not uncommon on roadways across the country, the notice of broad authorization to further close a freeway where many closures already occur readily illustrates a situation calling for urgent action. The IH 30 Rockwall County Lake Ray Hubbard Bridge project will provide considerable relief from that condition, as well as additional benefits like accommodating future growth, improved accessibility and convenience, a greater potential to sustain a state of good repair, and an enhanced quality of life for all destined or just passing through this unique location in North Central Texas. The following information describes how the project will meet the challenges and needs of the IH 30 corridor both locally and beyond.

IH 30 serves as the primary gateway and major connection between the Dallas Central Business District (CBD) and northeastern Dallas County, Rockwall County, and numerous other locations through Northeast Texas. It is the only freeway serving east-west traffic through Rockwall County, and access to/from much of the DFW MPA is significantly impeded by the lack of comparable and/or readily available routes either across or around Lake Ray Hubbard. With goods movement facilitated by regional economic growth, as well nationally and internationally through the North American Free Trade Agreement (NAFTA), IH 30 carries a substantial volume of truck traffic connecting Dallas and the IH 35 corridor to Little Rock, Arkansas and other states to the northeast. In fact, the unique connectivity and alignment of IH 30 provides the only existing continuous Interstate route accommodating predominant southwest-to-northeast-oriented freight flows within a large expanse between the Oklahoma City (IH 35 – IH 44) and New Orleans (IH 10/12 – IH 59) metropolitan areas. However, this conduit for freight traffic is and will increasingly be hindered as open land in Rockwall County and other outlying counties are consumed by urban development. As highlighted in **Exhibit 6**, IH 30 will experience tremendous traffic growth by 2045 compared to already high volumes existing today. It is, therefore imperative for roadway improvements to existing facilities, as well as new roadways where feasible, be timely constructed to meet the area's increasing travel demands. Recommended improvements to IH 30 in Rockwall County are a prominent component of the MTP and the *Texas Freight Mobility Plan*, and are key to addressing additional capacity needs for many miles to the east as outlined in TxDOT's *2017 IH 30 East Texas Corridor Study*.

a. Improving Safety and Congestion

The nearly four-mile IH 30 traversal of Lake Ray Hubbard is one of the longest inland water crossings by an Interstate facility in the State of Texas, and it is the longest such crossing within the state located in an urbanized area. As mentioned above, the geography of Lake Ray Hubbard isolates IH 30 from any substantial parallel roadway capacity or alternate routes for miles on either side. This lack of a supporting network within a vast and rapidly growing region makes IH 30 and the surrounding area highly vulnerable to severe congestion when accidents

Exhibit 6: Current/Future Daily Traffic Volumes – IH 30 Rockwall County

| Location | 2018 Traffic Volumes ¹ | 2045 Traffic Volumes ² | Numerical Change | % Change |
|--|-----------------------------------|-----------------------------------|------------------|----------|
| PGBT/Bass Pro Drive to Dalrock Road | 149,700 | 253,700 | 104,000 | 69% |
| Dalrock Road to Horizon Road/FM 740 ³ | 139,900 | 240,300 | 100,400 | 72% |
| FM 740 to SH 205 | 93,900 | 187,600 | 93,700 | 100% |
| John King Boulevard to FM 549/FM 3549 | 74,100 | 136,900 | 62,800 | 85% |
| Ben Payne Road to FM 551 | 71,200 | 132,900 | 61,700 | 87% |
| Floyd Road to Erby Campbell Road | 66,800 | 115,500 | 48,700 | 73% |
| FM 35 to FM 2642 | 60,900 | 111,600 | 50,700 | 83% |

Sources: 1. Year 2018 NCTCOG DFWDFX regional travel demand model (Mobility 2045 Plan)
 2. Year 2045 NCTCOG DFWDFX regional travel demand model (Mobility 2045 Plan)
 3. Proposed INFRA Grant project segment

and/or severe weather events cause a full or even partial closure of the Lake Ray Hubbard crossing. The TxDOT graphic displayed in **Exhibit 7** illustrates the extent of Lake Ray Hubbard in relation to the overall thoroughfare network in and around Rockwall County. To put this in perspective, a freeway closure between Dalrock Road and Horizon Road/FM 740 would force a traveler to negotiate a minimum distance of 9.5 miles on city streets (i.e. Dalrock Road – SH 66 – SH 205 – FM 740), 14 traffic signals, and the near-constant friction from frequent driveways and/or local street access to complete the shortest alternative route around the incident. Additionally, there are no continuous existing or planned limited-access facility routes within the County or the region at-large that may be a reasonable option during an IH 30 lake closure. Considering 1,092 project area crashes were recorded via TxDOT’s Crash Records Information System between 2013 and 2017, including eight fatal and twenty serious injury incidents, it is plausible numerous non-recurring congestion events resulted in substantial excessive delay and associated economic impacts well beyond those associated with typical volume-related congestion. This reason, among others, was the primary catalyst to recommend continuous frontage roads across Lake Ray Hubbard, and the ability to expedite this project through INFRA Grant funding relative to TxDOT’s interim project west of Dalrock Road will allow potential area-wide safety, mobility, and reliability benefits to be fully realized.

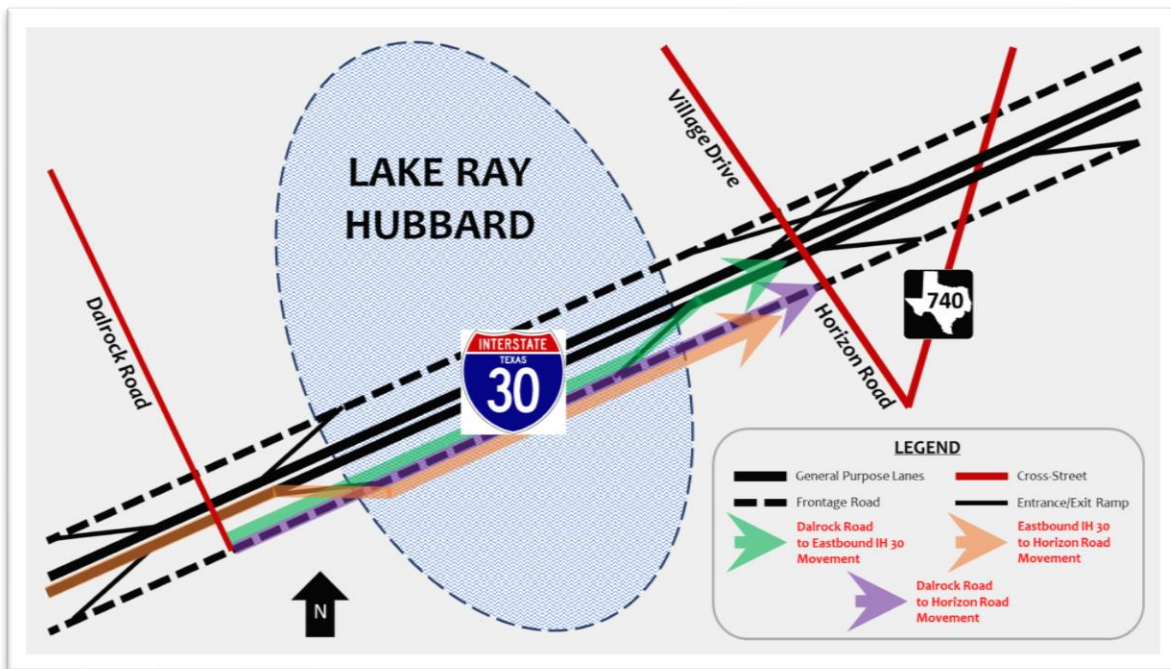
Exhibit 7: IH 30 Rockwall County Location Map



b. Enhancing Accessibility, Reliability, and State of Good Repair

Several other distinguishing features of the project enable additional regional transportation challenges to be met. The proposed configuration of entrance/exit ramps at Dalrock Road and at Horizon Road/FM 740 is a particularly important characteristic as a result of the continuous one-way frontage roads. Similar and complementary to the interim frontage road bridge project to be built west of Dalrock Road, existing entrance/exit ramps will be rebuilt and reversed to an X-ramp configuration. Immediate safety and accessibility benefits resulting from the change will be the elimination of existing freeway exit ramp conflicts with two-lane/two-way frontage roads, one located in the eastbound direction prior to Horizon Road, and the other prior to Dalrock Road in the westbound direction. However, as illustrated in **Exhibit 8**, the most significant mobility outcomes for local and long-distance travelers alike due to the X-ramps will be the more effective accommodation and distribution of all IH 30 corridor traffic crossing Lake Ray Hubbard.

Exhibit 8: IH 30 Lake Crossing Diagram – Ramp/Frontage Road Movements (Eastbound)



As depicted in simplified line diagram above, an eastbound traveler on the IH 30 general purpose lanes wishing to access Horizon Road (orange arrow) will exit on a new ramp just past Dalrock Road on the Rowlett peninsula. The vehicle will then travel all the way across the eastern portion of Lake Ray Hubbard using the new frontage road bridge before approaching the Horizon Road intersection. Another traveler wishing to access the eastbound general purpose lanes from Dalrock Road (green arrow) will also travel across the lake using the new frontage road bridge until reaching a new IH 30 entrance ramp at landfall just prior to Horizon Road. Additionally, this configuration will allow a local traveler between Dalrock Road and Horizon Road (purple arrow) to cross the lake on the frontage road bridge with no need to enter the IH 30 freeway. Similar movements in the opposite direction are equally replicated as



a result of the proposed project, and while collectively they will increase corridor traffic volumes, the burdens and vulnerability of the freeway itself will decrease. In harmony with the interim project to be built to the west, the proposed ramp configuration permits the new frontage roads to act as collector-distributor facilities, keeping local traffic from creating added congestion on the freeway as it crosses the lake, and enabling more efficient and less exposed access at locations where auxiliary lanes can provide safer and better weaving conditions for entering/exiting traffic. Because both existing and future corridor volumes grow considerably just east of where IH 30 begins crossing Lake Ray Hubbard, as identified previously in **Exhibit 6**, this condition offers greater accommodations to better absorb or disperse that traffic. The new access points will provide the added benefit of alleviating major adjustments to the existing IH 30 freeway embankments and/or bridges across the lake, which in turn will limit substantial traffic impacts to the freeway during construction. Yet, the added travel choices create the most significant incident management advantages, allowing internal corridor bypass opportunities for travelers to avoid most freeway closures across the lake without burden of any intervening intersection signal delays prior to returning to the freeway. This attribute is especially important considering the current performance, design, and operational challenges facing the IH 30 freeway crossing itself.

As mentioned previously, IH 30 operational improvements completed in 2015 allowed for a fourth auxiliary lane in each direction added between the PGBT, Dalrock Road, and Horizon Road/FM 740 interchanges. However, the pavement restriping to accomplish this eliminated the left shoulder and reduced all general purpose lane widths to 11 feet in both directions across the lake. Removal of the left shoulder has resulted in greater likelihood for disabled or damaged vehicles to block travel lanes, as well as less available refuge space for those affected by such events from oncoming traffic. Prevention of the fourth lane traveling through the Dalrock Road interchange has caused considerable bottlenecks and extra weaving conflicts due to queue jumping and/or other untimely maneuvers made to either avoid or exploit exit-only ramp conditions. Over time, with ever-increasing corridor travel demands and potentially more frequent occurrences like those described above for city of Rowlett first responders, this condition will lead to more rapid deterioration of infrastructure conditions, reliability, and incident management capabilities. The proposed continuous frontage roads and X-ramp configurations provided through the IH 30 Rockwall County – Lake Ray Hubbard Bridge project will enable improved short- and long-term abilities to address state of good repair, congestion, and safety simultaneously. It will dramatically loosen constraints to implement future planned construction phases that can restore appropriate Interstate facility design widths for all travel lanes and shoulders, allow expedited repair and rehabilitation of all essential existing IH 30 freeway structures across the lake, and ultimately build a continuous fourth general purpose lane in each direction extending from Bass Pro Drive to John King Boulevard.

c. Encouraging Active Transportation

A final challenge met as a result of this project is completion of a long-planned multimodal transportation linkage between existing and proposed bicycle/pedestrian network facilities within the cities of Garland, Rowlett, and Rockwall. Like the facilities to be constructed with the

IH 30 Rockwall County – Lake Ray Hubbard Bridge

interim project between Bass Pro Drive and Dalrock Road, new frontage road bridges across the eastern portion of Lake Ray Hubbard as part of this project will also include an eight-foot barrier-separated sidewalk in the westbound direction, and a 12-foot barrier-separated shared-use path in the eastbound direction. A 3-D simulated photo of the eastbound frontage road bridge with its shared-use path is displayed in **Exhibit 9**, and Rockwall County active transportation recommendations as identified in the current MTP are illustrated in **Exhibit 10**. These provisions will enhance livability benefits and encourage greater utilization of active transportation choices around Lake Ray Hubbard, and the direct bicycle/pedestrian connections to/from major attractions like Bayside and other lakeshore developments will expand community recreational and economic growth opportunities. Near the IH 30 interchanges with Dalrock Road and Bayside Drive, for example, independent funding through the city of Rowlett Bayside PID/TIRZ will contribute over \$17 million for construction of trail connections, unique aesthetic treatments, and other desirable open space amenities.

Exhibit 9: Frontage Road/Shared-Use Path Illustration



II. PROJECT LOCATION

The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is located both in Rowlett and Rockwall, two cities in the western part of Rockwall County approximately 20 miles and 25 miles, respectively, northeast of downtown Dallas. Lake Ray Hubbard itself is a water supply reservoir of the East Fork Trinity River owned by the city of Dallas. Because the proposed roadway improvements are located in the portions of Rowlett and Rockwall just inside the eastern border of the Dallas-Fort Worth-Arlington Urbanized Area (ID 22042) as designated by the US Census Bureau, this project falls within an “urban area” as defined in the INFRA Grant program. A map highlighting the proposed project location and proximity to nearby land uses in adjacent communities is illustrated in **Exhibit 11**.

Exhibit 10: MTP – Rockwall County Bike Network

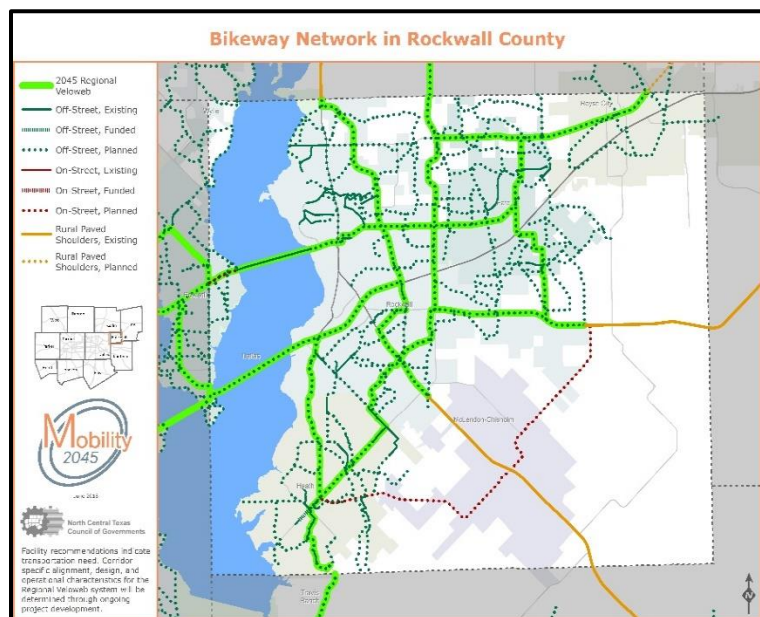
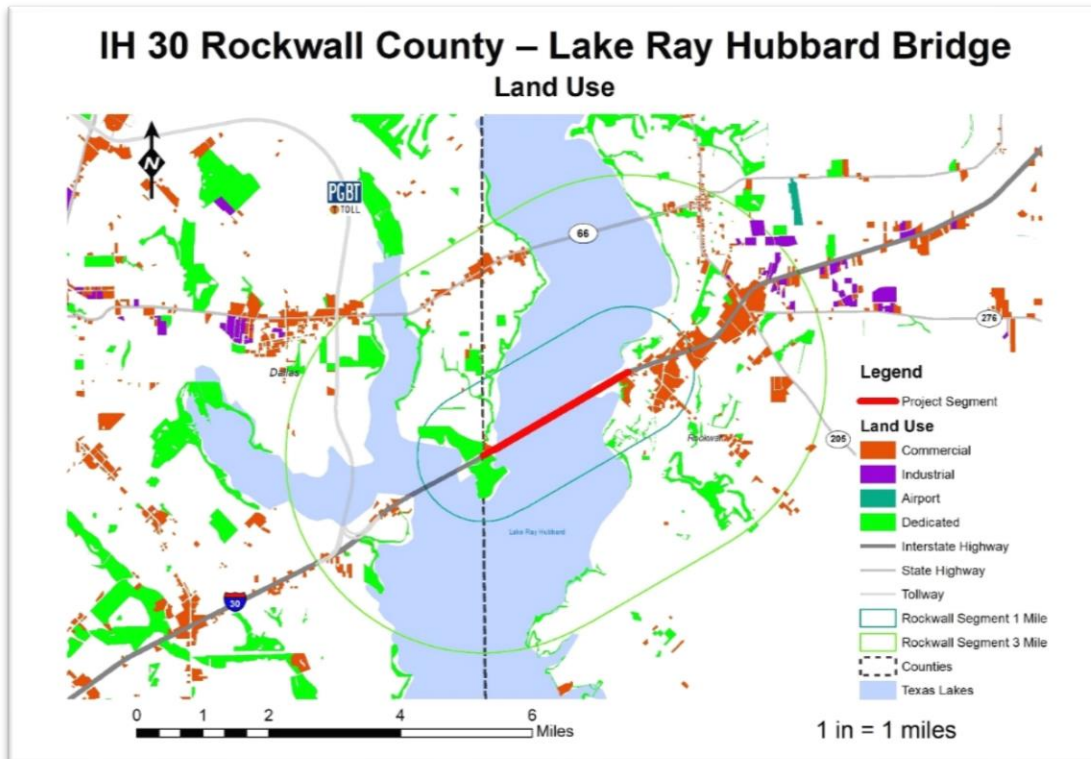


Exhibit 11: Project Location and Adjacent Land Uses



Regional Context

The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is located within the Dallas-Fort Worth-Arlington Census Metropolitan Statistical Area, which is commonly referred to as the DFW Metroplex. It is the largest inland metropolitan area in the United States. The 2017 US Census official estimate indicated the DFW Metroplex at 7,399,662 people and it, by population, the largest metropolitan area in Texas and the fourth largest in the United States. Additional details regarding population growth characteristics for the area surrounding the proposed project can be viewed in **Exhibit 12**.

In terms of economic activity, the DFW metropolitan area produces the fourth largest gross metropolitan product (GMP) in the United States and has approximately the tenth largest GMP in the world. The region is home to DFW International Airport, the third busiest airport in the world by aircraft movements and the tenth busiest by passenger traffic. The airport’s status as a major domestic and international air cargo center, combined with region’s location at a national railroad crossroads, help make the DFW Metroplex function as a national logistics hub. As such, the region is also identified as the nation’s largest inland port, where freight is moved, transferred, and distributed to destinations across the State and around the world. 98% of the US population can be reached from North Central Texas within 48 hours by truck.



Exhibit 12: Population Trends and Forecasts for Project-Related Locations

| Location | 1980 Census ¹ | 1990 Census ¹ | 2000 Census ¹ | 2010 Census ¹ | 2020 Forecast | 2040 Forecast | Growth 2010-2040 |
|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|-------------------------|------------------|
| Garland | 138,857 | 180,650 | 215,768 | 226,876 | 254,381 ² | 293,920 ² | 30% |
| Heath | 1,459 | 2,108 | 4,149 | 6,921 | 12,109 ² | 21,713 ² | 214% |
| Rockwall | 5,939 | 10,486 | 17,976 | 37,490 | 52,740 ² | 114,807 ² | 206% |
| Rowlett | 7,522 | 23,260 | 44,503 | 56,199 | 59,891 ² | 70,903 ² | 26% |
| Rockwall County | 14,528 | 25,604 | 43,080 | 78,337 | 119,410 ² | 213,619 ³ | 173% |
| NCTCOG MPA | 3,030,053 | 4,013,418 | 5,197,317 | 6,417,724 | 7,612,993 ² | 10,183,523 ³ | 59% |

Sources:

¹ US Census 2010 PL94-171, <https://www.census.gov/programs-surveys/decennial-census/decade.2010.html>

² Texas Water Development Board, 2021 Regional Water Plan Population Projections for 2020-2070 for Water User Groups by Region, County, and Basin in Texas, <http://www.twdb.texas.gov/waterplanning/data/projections/2022/popproj.asp>

³ NCTCOG 2040 Demographic Forecast, <https://data-nctcoqgis.opendata.arcgis.com/datasets/2040-nctcoq-demographic-forecast-tsz>

The IH 30 corridor, along with IH 20, IH 35 (including IH 35E and IH 35W branch routes), and IH 45, comprise the four primary Interstate Highway facilities crisscrossing the region. These facilities establish critical links to one of the most extensive surface and air transportation networks in the world, providing widespread trade opportunities for the more than 600 motor/trucking carriers and nearly 100 freight forwarders operating within the region. IH 30 is designated as part of the National Freight Network, as well as the State’s Primary Freight Network, and the corridor lies near numerous intermodal centers and freight-oriented developments given its connections to a dense network of transportation facilities across North Central Texas. Trucks comprise a range of 11% to 20% of the total IH 30 traffic volume across Rockwall County, and with emerging large commercial and industrial centers spreading to the east like Rockwall Technology Park (<http://www.rockwalledc.com/rockwall-technology-park/>) or the Greenville Industrial District in Hunt County (<https://greenvilletxedc.com/site-selection/business-parks/greenville-industrial-district>), it is possible those percentage ranges may increase even as overall traffic volumes on IH 30 continue to grow.

III. PROJECT PARTIES

The IH 30 Rockwall County – Lake Ray Hubbard Bridge Project is a multi-jurisdictional effort between NCTCOG, TxDOT, and Rockwall County. Rockwall County, its cities, NCTCOG, and TxDOT have developed a strong history of working together on cooperative roadway construction projects, including implementation of several recent IH 30 interchange reconstruction projects built in anticipation of future corridor capacity additions.

a. North Central Texas Council of Governments (Grant Applicant)

NCTCOG serves as the applicant for this proposed INFRA Grant project. NCTCOG is a voluntary association of multiple local government jurisdictions established in January 1966 to assist in planning for common needs, cooperating for mutual benefits, and coordinating for sound regional development. NCTCOG serves a growing metropolitan region comprised around the urban centers of Dallas and Fort Worth, and it consists of 234 members, including 16 counties,



169 cities, 22 independent school districts, and 28 special districts. Since 1974, NCTCOG has served as the MPO for the DFW area. The NCTCOG Transportation Department is responsible for the regional planning process for all transportation modes and serves as staff assistance to the RTC and its technical committees, which comprise the MPO policy-making structure. The department also provides technical aid to local governments and transportation providers in planning, coordinating, and implementing transportation decisions.

b. Texas Department of Transportation (Grant Recipient/Project Implementation)

The Texas Legislature originally established TxDOT in 1917 as the Texas Highway Department. TxDOT’s workforce of more than 12,000 employees is made up of engineers, administrators, designers, architects, sign makers, accountants, purchasers, maintenance workers, travel counselors, and many other professionals. Headquartered in Austin, TxDOT is made up of 25 district offices, 21 divisions, and 6 regional offices. This project is located in the Dallas District which plans, designs, builds, operates, and maintains the state transportation system in the following counties: Collin, Dallas, Denton, Ellis, Kaufman, Navarro, and Rockwall.

c. Rockwall County (Project Partner)

Rockwall County was established in 1873, named for a wall-like subterranean rock formation pervasive to the local area. Covering just 149 square miles, it is the smallest county in the State of Texas, but in the previous decade it was ranked by the US Census Bureau as the sixth fastest growing county in the nation. The current population is estimated at 96,788. Rockwall County is in an area supported by the TxDOT Dallas District and is located within NCTCOG’s MPA. Rockwall County is bounded on the west by Lake Ray Hubbard and bordered by Collin, Dallas Hunt, and Kaufman County. The City of Rockwall serves as the county seat.

IV. GRANT FUNDS, SOURCES, AND USES OF ALL PROJECT FUNDING

Exhibit 13 identifies the funding sources and cost estimates for the IH 30 Rockwall County – Lake Ray Hubbard Bridge project. All costs are listed in 2017 dollars, and the proposed INFRA Grant request of **\$100 million** is directed for use during the project’s construction phase. As illustrated below, several non-Federal funding sources via Rockwall County and the State of Texas will be utilized to cover approximately 30% of the overall project cost, while the requested INFRA grant and additional Federal funds will comprise the remaining 70% of the overall project cost. Calculations below do not include a previously-incurred project area expense of \$2,133,479 for preliminary design/engineering.

V. MERIT CRITERIA

a. Criterion #1: Support for National or Regional Economic Vitality

Current levels of congestion and unreliability on corridors like IH 30 can cause residents to have limited availability to job opportunities or business ventures, and concurrently employers may be denied full access to the widespread pool of job skills and talents within the North Central Texas region. Restricted mobility also results in increasing amounts of non-productivity given the extra time spent moving people and goods from one point to another. Economic costs associated with recurring and non-recurring congestion have direct effects on area competitiveness and abilities to create and sustain long-term employment, attributes which are



Exhibit 13: Summary of Project Funding Sources and Cost Estimates

| Funding Source | Type | Funding Amount | Percent |
|---|-------------------------------------|-----------------------|-------------------|
| State | TxDOT CAT4 – PS&E | \$ 10,487,229 | 5% |
| State | TxDOT CAT12 – ROW | \$ 4,560,000 | 2% |
| State | TxDOT CAT12 – Utility | \$ 1,900,000 | 1% |
| State | TxDOT CAT4 – Construction | \$ 21,512,771 | 10% |
| State | TxDOT CAT12 – Construction | \$ 5,945,016 | 3% |
| Local | Rockwall County Bond – Construction | \$ 20,000,000 | 9% |
| Total of Non-Federal Funding Sources | | \$ 64,405,016 | 30% |
| Federal | TxDOT CAT12 – ROW | \$ 18,240,000 | 8% |
| Federal | TxDOT CAT12 – Utility | \$ 7,600,000 | 4% |
| Federal | TxDOT CAT12 – Construction | \$ 23,780,064 | 11% |
| Federal | INFRA Request - Construction | \$ 100,000,000 | 47% |
| Total of Federal Funding Sources | | \$ 149,620,064 | 70% |
| Cost Category | Total Cost | Funding Source | |
| | | Non-Federal (Percent) | Federal (Percent) |
| Engineering (PS&E) | \$ 10,487,229 | 100% | 0% |
| Right-of-Way | \$ 22,800,000 | 20% | 80% |
| Utility Relocation | \$ 9,500,000 | 20% | 80% |
| Construction | \$ 149,818,060 | 28% | 72% |
| Contingency | \$ 21,419,791 | 28% | 72% |
| TOTAL PROJECT COST | \$ 214,025,080 | 30% | 70% |

critical for economic vitality and a high quality of life. However, when major transportation improvements are expedited, the availability of jobs and new business opportunities will grow as a result of real benefits to private sector bottom lines, whether derived through increased delivery speeds or reduced operating costs. In turn, those cost savings can be directed toward additional job creation, new/updated equipment or facilities, and/or other investment possibilities regardless of employment sector. These considerations are among the most essential focal points for effective transportation planning and accelerated implementation.

The MTP (*Mobility 2045*) represents the defining vision for multimodal transportation system preservation and progression in the DFW MPA. Serving a dynamic, diverse, and rapidly growing region estimated to reach a population of 11.2 million by 2045, the MTP directs the evolution and assimilation of a mature system of roads, transit, and active transportation modes to meet varied travel needs, complemented by local policies and programs to enhance infrastructure investment and support sustainable development. Central to the MTP’s effectiveness in this mission is extensive public/agency interaction and the coordinated integration of numerous local, regional, and State comprehensive planning initiatives and associated programming strategies. Applicable linkages to critical TxDOT document updates for the Unified Transportation Program (UTP), Strategic Plan, and Freight Mobility Plan enable sufficient technical, administrative, and financial resources to be timely organized for implementation of



high-priority projects. Occasionally, consultation of major studies and activities occurring outside the DFW MPA also occurs, such as with the *2017 IH 30 East Texas Corridor Study*, to acknowledge and prepare for specific statewide and/or multi-regional project influences.

Collectively, all these linked plans and studies consider IH 30 an integral component of a national and regional system that is critical to the goods movement logistics chain, as much as it is for commuter-oriented personal travel. Proposed improvements to the IH 30 corridor are essential in impacting mobility, reliability, connectivity, safety, and economic vitality over a large area. However, it is also clear that the progression of IH 30 improvements must be carefully optimized. In total, the consortium of fiscally-constrained plans indicates new capacity projects are targeted for a continuous 65-mile stretch of IH 30 between downtown Dallas and the Hunt/Hopkins County Line. Significant improvements to the east or west of Lake Ray Hubbard would cause a chain reaction for traffic rendering the crossing even more congested and vulnerable than in current conditions. Therefore, to enhance the logistics chain for goods movement, improve access and availability for jobs, and not only ensure but further unleash economic vitality for much of the North Central Texas region and beyond, it is vital that the IH 30 Rockwall County – Lake Ray Hubbard Bridge project be accelerated to construction.

b. Benefit-Cost Analysis (BCA) Results

Anticipated benefits and costs associated with the proposed IH 30 Rockwall County – Lake Ray Hubbard Bridge project are monetized in the BCA Attachment (**Attachment 2**) accompanying this INFRA application. The calculated benefits documented in the BCA are displayed in **Exhibit 14**, and the project’s resulting net present value (NPV) is shown in **Exhibit 15**. Applied to a total project cost of **\$225.9 million**, including initial capital and annual operations and maintenance (O&M) costs, a substantial net benefit is achieved assuming a seven percent discount rate.

Exhibit 14: Total Project Benefits

| Benefit Category | Benefits Total |
|------------------------------|--------------------|
| | (7% Discount Rate) |
| O&M Costs | (\$9,767,520) |
| Time Savings | \$749,460,661 |
| Air Quality Emission Savings | (\$75,534) |
| Safety Benefits | \$85,094,152 |
| Quality of Life | \$1,229,210 |
| Residual Value | \$15,701,991 |

Exhibit 15: Net Project Benefits

| Discount Rate | Net Present Value (NPV) of Total Benefits | Rounded NPV of Total Benefits | Return on Investment* |
|---------------|---|-------------------------------|-----------------------|
| 7 Percent | \$854,066,888 | \$854 million | 378% |

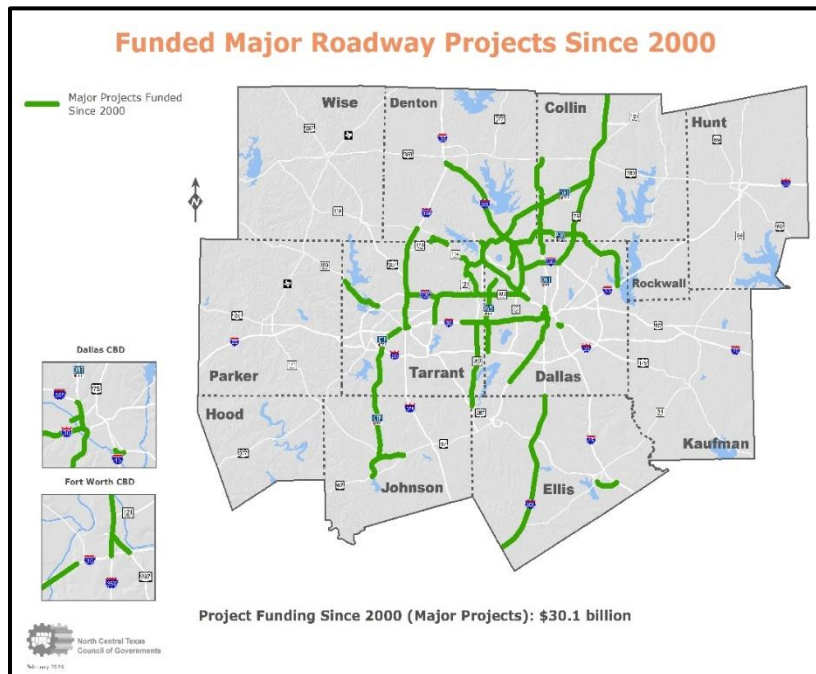
Based on a 21-year project life (through the MTP horizon year of 2045), the overall effect of this transportation investment will result in a positive net value of **\$854.1 million**, after netting out the lifecycle cost of the project. The overall net value of the proposed project will yield in a positive return on investment (ROI) of **378 percent (\$854.1 million/\$225.9 million)**. The results of this BCA clearly demonstrate that IH 30 Rockwall County – Lake Ray Hubbard Bridge project will provide a lifetime of quantifiable regional benefits with respect to various economic and quality of life measures. It should be noted this ROI does not include potential savings resulting from reductions in accident-related congestion delay. Given the type and configuration of proposed project improvements described above, and with prospects that full and/or partial closures of the lake crossing will be a far less frequent occurrence after delivery compared to current conditions, there is strong likelihood that the ROI expressed above is an underestimation. Details regarding the attempt to estimate non-recurring congestion delay benefits for this project, as well as specific calculations, assumptions, and methodologies used to determine the results shown, are discussed in the BCA Attachment (**Attachment 2**).

c. Criterion #2: Leveraging of Federal Funding

The massive task of supporting the dynamic and rapid growth of the North Central Texas region is made possible through decades of collaboration, innovation, and diligence among multiple transportation partners, local governments, and NCTCOG in leveraging Federal funds for the timely delivery of numerous transportation projects. Since 2000, the DFW metropolitan area leveraged over \$30.1 billion in Federal, State, regional, and private sector funds to build a variety of freeway, toll road, managed lane, and major interchange projects at rates exceeding those of most other large urbanized areas. **Exhibit 16** demonstrates the widespread distribution of those projects constructed using those partnership-driven innovative leveraging elements.

Despite Rockwall County being the smallest of Texas’ 254 counties, its small size often proved advantageous in advancing transportation project planning and implementation. Long-standing exemplary leadership helped to foster active consensus-building, efficient stakeholder relationships and task distribution, and enthusiastic support for the infusion of local funding to boost competitiveness for project selection and delivery. As mentioned above, regular meetings since 2003 between

Exhibit 16 – DFW MPA Projects with Federal Leveraging





representatives of the County, its cities, TxDOT, NCTCOG, and various consulting partners via the Rockwall County Planning Consortium have provided direct lines of communication and interaction on a frequent basis enabling effective management of all project development aspects. Beginning first with the County’s 2004 Bond Program, as well as additional initiatives afterward, funds to date have leveraged multiple TxDOT on-system projects totaling nearly \$209 million, or almost five times the local contribution. Though considerable funding was devoted to capacity expansions of State-owned thoroughfares throughout the County, other allocations were notably directed toward the accelerated delivery of five IH 30 interchange projects seamlessly built to tie into the future general widening needs of the corridor. These projects included construction of new interchanges at John King Boulevard (Rockwall) and Erby Campbell Road (Royse City), reconstruction of existing interchanges at FM 549/FM 3549 (Rockwall) and FM 551 (Fate), and the reversal of entrance exit ramps between SH 205 and John King Boulevard (www.rockwallcountytexas.com/180/Road-and-Bridge). Unallocated funds from those initiatives remained available toward use for other needed transportation projects as additional comprehensive planning efforts, environmental analyses, and programming issues became further defined.

In addressing Federal fund leveraging at the State level, 2013 and 2015 legislative actions allowed for additional transportation revenues ultimately and widely approved by voters as Proposition One and Proposition Seven. Proposition One authorized a constitutional amendment allocating a portion of the Economic Stabilization Fund derived from oil and gas revenues to be deposited in the State Highway Fund (SHF) for non-tolled projects. Proposition Seven enabled another constitutional amendment to dedicate portions of revenue from the State general sales and use tax, as well as from motor vehicle sales and rental taxes, to the SHF for non-tolled projects. Combined with yet another 2015 legislative action eliminating several ongoing diversions of state gas taxes to various agencies and initiatives unrelated to transportation, it is estimated that as of December 2018, the SHF has accumulated nearly \$7.9 billion from these additional funding sources to further address statewide transportation needs (<http://ftp.dot.state.tx.us/pub/txdot-info/fin/funding-sources.pdf>).

For programming purposes, TxDOT identifies the estimated funds available from these revenue sources distributed among various funding use categories which are formula-allocated to each State metropolitan region, and Texas House Bill 20 (2015) provides the performance metrics and evaluation apparatus to support project selection through an annually-updated Unified Transportation Program (UTP). The project selection and prioritization process is an intensive, multi-faceted, and highly coordinated effort directed between the Texas Transportation Commission (TTC), each of the 25 TxDOT Districts across the State, and their associated MPOs. Included as part of this effort is authorization by the Governor for the TTC to carry out a focused relief initiative to identify and address the most congested urban area bottlenecks, and work with MPOs to expedite additional capacity construction. Coined the Texas Clear Lanes Initiative (www.dot.state.tx.us/texasclearlanes/), it enables a specific set-aside of priority funding directed toward projects in the State’s five largest metropolitan regions, including the



DFW MPA. The most recent annual update of the process is responsible for the partial funding of recommended IH 30 Rockwall County improvements as outlined above.

The current development and overall programming status for IH 30 Rockwall County improvements, combined with the unique and critical characteristics of the segment between Dalrock Road and Horizon Road/FM 740, created potential for strong compatibility with INFRA Grant requirements and objectives, as well as another opportunity to demonstrate solid local, regional, and State performance for stretching Federal funds. The IH 30 Rockwall County – Lake Ray Hubbard Bridge project, as defined in this INFRA proposal, will be implemented using a total of \$64.4 million in non-Federal funds, comprising just over 30% of the \$214 million total project cost. Together with additional local/regional, State, and Federal commitments for addressing neighboring corridor recommendations, this concerted effort will ensure the vision and needs for IH 30 in North Central Texas will be fully and quickly addressed with respect to all levels of government, the economy, the environment and affected citizens.

d. Criterion #3: Potential for Innovation

1. Innovative Technologies

The robust development, deployment, and management of information technology and communications systems is essential for optimizing transportation functionality, particularly in expansive, dynamic, and high-growth urban areas. The North Central Texas region has already invested significant resources to produce a wealth of technology infrastructure supporting mobility, safety, and reliability, and a large amount of available information is shared through the existing 511DFW apparatus (<http://511dfw.org>). From that platform, information regarding transportation asset performance and/or traffic conditions is collected, analyzed, and distributed by individual providers throughout the DFW metropolitan area, including TxDOT, various transit entities, and local governments. Traveler information regarding closures, incidents, congestion levels, and specific weather-related warnings are processed and communicated via numerous media platforms and transmitted in the field through active intelligent transportation system (ITS) infrastructure, including dynamic message signs, warning lights, and automatic barricades. Given that the IH 30 Rockwall County – Lake Ray Hubbard Bridge project involves a vulnerable and isolated freeway segment with no comparable or readily available alternate routes in proximity, the application and management of these systems at this location is a vital element for successful lifecycle operation and sustainability.

As the primary subject of a June 2018 Advanced Transportation and Congestion Management Technologies Development (ATCMTD) Grant Initiative, NCTCOG proposed a Next Generation Platform for Regional Multimodal Transportation Management. As its centerpiece, a new Regional Information Hub would be developed to substantively transform 511DFW’s data utilization, processing, and sharing capabilities into a “cloud”-hosted, open-source reservoir of information for public consumption. The Regional Information Hub would house, in addition to numerous existing transportation data sources, various new data elements such as mobile location data, emissions monitoring, auto occupancy verification technology, vehicle detection

characteristics, and freight routing/parking information. One of the most significant implications and linkages between this initiative and the IH 30 Rockwall County – Lake Ray Hubbard Bridge project would be the processing and distribution of freight routing/parking information.

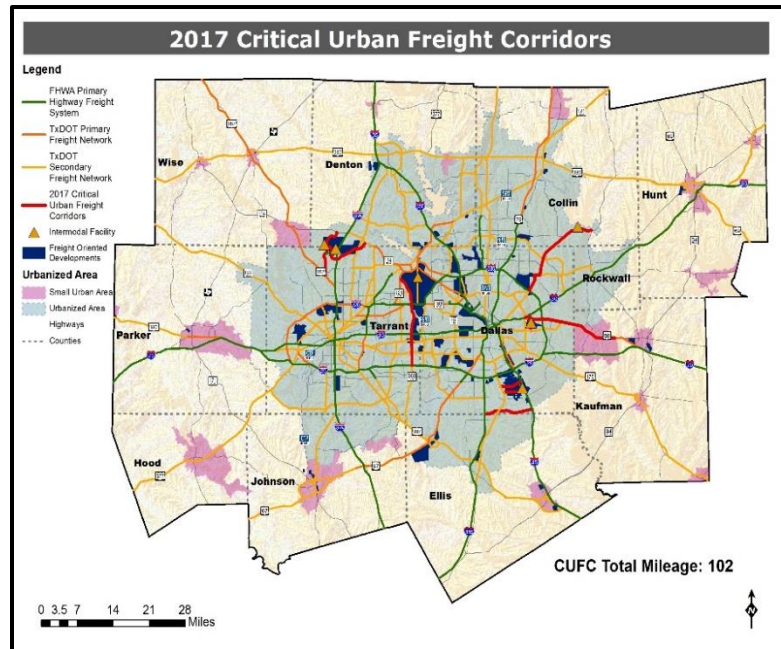
As illustrated in **Exhibit 17**, IH 30 is a designated Federal Highway Administration Primary Highway Freight System corridor with direct connections to/from the IH 35 “NAFTA Superhighway” as well as extensive interactions with

TxDOT Primary and Secondary Network facilities, existing/emerging intermodal centers, and multiple freight-oriented developments across North Central Texas. Enabling a nexus between the proposed IH 30 Rockwall County – Lake Ray Hubbard Bridge project and a comprehensive truck routing and parking information network would create substantial logistic advantages for travelers both within and well beyond the project area. The system would alert drivers to available truck parking locations along the region’s various freeway corridors and adjacent freight-oriented developments via dynamic and static messaging signs. The dynamic messaging signs, as well as vehicle detection technology at intermodal centers, would indicate available parking spaces or queue processing times at lift stations, whereas the static information signs would notify drivers of upcoming exits with truck stop access. The signage would significantly assist truck drivers with the Federal Motor Carrier Safety Administration’s Hours of Service compliance requirements. As freight information is further processed through the Regional Information Hub, alerts could be transmitted to notify drivers of truck parking availability, traffic on route, or potential alternate routes via web-based or application/voice notification tools (Freight Advanced Traveler Information Systems or other navigational devices). The benefits of this truck routing and parking information network would include decreased commercial motor vehicle crashes, improved safety, travel time reductions, and direct savings to shipping and maintenance costs, each of which given the unique nature of this project may be specifically realized.

1. Innovative Project Delivery

TxDOT and NCTCOG have regularly partnered together to take advantage of two innovative Federal programs that enable streamlined environmental review and permitting for accelerated project delivery. These strategies will be applied to the IH 30 Rockwall County – Lake Ray

Exhibit 17: North Central Texas Highway Freight Network





Hubbard Bridge project in meeting the INFRA Discretionary Grant Program’s aggressive schedule requirements for funding obligation. These programs help expedite the review of projects, but do not allow permitting, approval processes, and/or regulations to be circumvented or bypassed:

- Under the Surface Transportation Project Delivery Program (23 US Code 327), TxDOT applied for and was granted responsibility for review, consultation, and approval of National Environmental Policy Act (NEPA) documents for highway projects. As the second State DOT to assume NEPA responsibility for environmental documentation, the delegation eliminated a governmental review layer and allowed TxDOT to directly consult with Federal/State resource agencies, resulting in shorter review times.
- Many projects require a Section 404 permit under the Clean Water Act from the United States Army Corps of Engineers (USACE). The time needed to receive the permit varies by the permit type, magnitude of project impacts to wetlands and waters of the US, and complexity of the project. Section 214 of the Water Resources Development Act of 2000 allows the USACE to accept funds from non-Federal public entities to give priority to the evaluation of the USACE permit regulations. Under this Act, NCTCOG and USACE have had a Memorandum of Agreement to fund a USACE position to expedite permitting for high priority transportation projects in the DFW MPA since 2008. Opportunities to coordinate in advance has resulted in permitting time, mitigation cost, and impact reductions.

While TxDOT intends to utilize the traditional design-bid-build procurement approach for project construction, the agency also plans to employ a unique combination of incentive/disincentive and cost-plus-time bidding mechanisms to motivate potential contractors for completion ahead of schedule, awards based on minimizing traveler inconvenience or delay, and for delivery with the lowest possible cost. With Texas being one of the nation’s leaders in both population growth and number of construction projects simultaneously, TxDOT has devoted numerous resources toward multi-disciplinary measures that enable its staff, contracting partners, materials suppliers, equipment manufacturers, workforce specialists, financial institutions, and the public to all work together in achieving consistent expedited construction outcomes. Developed through a 2016-17 statewide series of workshops and information exchanges that also included the Associated General Contractors of Texas and the Texas A&M Transportation Institute, these provisions as outlined in the Accelerated Construction Guidelines Manual will be incorporated into the project to ensure streamlined delivery (www.dot.state.tx.us/cst/construction_strategies.htm).

2. Innovative Financing

As mentioned above, recent voter-approved measures such as Proposition One and Proposition Seven, as well as efforts to eliminate gas tax diversions, have resulted in nearly \$7.9 billion of new State revenues since 2015 for transportation investments. These funds have been infused into a variety of TxDOT programs aimed at improving roadway network capacity and state of good repair simultaneously, and the IH 30 Rockwall County – Lake Ray Hubbard Bridge project provides a unique opportunity to address both concerns as well. It should also be noted that via



the Bayside Service and Assessment Plan, efforts by the city of Rowlett in raising Bayside PID/TIRZ funds for initial construction of trail connections and aesthetic improvements, both within or adjacent to TxDOT right-of-way (ROW), will also be preserved for long-term maintenance needs (<http://rowlettonthefirstmove.com/projects/1/bayside.htm>).

e. Criterion #4: Performance and Accountability

In November 2018 following extensive research, analysis, and consultation between NCTCOG and TxDOT, the RTC took action supporting statewide pavement and bridge condition targets for the National Highway System (NHS) as part of National Highway Performance Program rules established by the Fixing America’s Surface Transportation (FAST) Act. Through its action, the RTC also directed NCTCOG staff to regularly collaborate with TxDOT on measures to expedite programming for regional NHS bridges and off-system NHS pavements in poor condition. This effort, combined with similar initiatives by other Texas MPOs, has ushered in a new evolution of cooperation, data collection/exchanges, and other innovative tools/measures through TxDOT meant to address performance and accountability in the project selection or prioritization process. As these agencies are each required to regularly document how substantial progress toward performance targets is achieved, and because this information must be linked and verified through a risk-based financial plan within TxDOT’s Transportation Asset Management Plan, significant multi-lateral oversight will be in place to account for infrastructure lifecycle considerations at both the project and network levels. NCTCOG has recently developed a comprehensive web page highlighting background data/information, meeting materials, status updates, and added links/resources to demonstrate its partnership commitments in holistically linking asset/performance management and traditional project/system planning (www.nctcog.org/trans/data/info/measures/system).

With respect to the IH 30 Rockwall County – Lake Ray Hubbard Bridge project, NCTCOG and TxDOT have calculated that the overall 50-year design life cost for the proposed improvements is estimated to be **\$258.1 million** in 2017 dollars, and the agencies have stable funds and contingency solutions in place to appropriately address this and numerous other infrastructure investments. Additionally, given the timeline of the proposed project schedule to be described below, potential for resources in the area to already be mobilized as a result of the neighboring interim project west of Dalrock Road, and TxDOT’s long-standing high performance record for on-time delivery of major DFW area projects, it is reasonable that the first accountability option listed in the INFRA NOFO may be accomplished as a condition of award.

VI. PROJECT READINESS

a. Technical Feasibility

The ultimate recommendations for the IH 30 Rockwall County – Lake Ray Hubbard Bridge project are derived from thorough technical analyses and extensive stakeholder considerations. Engineering schematics developed for the project incorporate design criteria consistent with the TxDOT Roadway Design Manual, TxDOT Bridge Design Manual, Texas Manual on Uniform Traffic Control Devices, and other State- and Federal-approved standards. Expected project performance, anticipated benefits, potential impacts, and identified mitigation strategies are



outlined in the EA, and other associated documentation such as the Interstate Access Justification Report and value engineering study has also been prepared by TxDOT. Upon receipt of the corridor FONSI, TxDOT will immediately develop a Cost Estimate Review (CER) and draft a Project Management Plan (PMP), per FHWA requirements, for an overall improvement cost in excess of \$500 million. The overall cost estimate for this project, itemized by development phase and including an approximate 10% contingency, is based on a detailed review of the preliminary design drawings and outcomes from the recent delivery of similar projects. Given scheduled implementation of the neighboring interim project between Bass Pro Drive and Dalrock Road, upon notification of a potential INFRA Grant award for this project, TxDOT expects to be sufficiently prepared for final design and construction mobilization.

b. Project Schedule

The proposed delivery schedule, including anticipated timeframes for major milestones, is illustrated in **Exhibit 18**. The displayed activities demonstrate that the project meets all identified INFRA Grant schedule requirements for fund obligation and construction initiation. Construction is expected to take approximately three years to complete, and the new improvements would be opened to traffic by winter 2025. The work would be timed to proceed shortly after construction of the interim project west of Dalrock Road is underway, and because a vast majority of improvements would be built on separate structures crossing Lake Ray Hubbard, only minimal disruption to IH 30 freeway traffic is expected through the duration of construction. All real property and ROW acquisition will be acquired in a timely manner in accordance with 49 Code of Federal Regulations (CFR) part 24, 23 CFR part 710, and other applicable legal requirements.

Exhibit 18: Project Schedule Overview

| Project Phases | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | | | | 2023 | | | | 2024 | | | | 2025 | | | |
|---------------------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| NEPA (FONSI) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Design (PS&E) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROW Acquisition | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Utility Relocation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

c. Required Approvals

1. Environmental Permits and Reviews

(i.) NEPA Status

A draft EA for the segment of IH 30 from Bass Pro Drive to west of FM 2642 was presented at a Public Hearing on January 31, 2019, and issuance of a FONSI is expected later this spring. The EA (provided as **Attachment 4**) included evaluation of proposed recommendations for this project as outlined in this INFRA Grant application.



(ii.) Reviews, Approvals, and Permits by Other Agencies

In completion of the EA for the segment of IH 30 from Bass Pro Drive to west of FM 2642, coordination with the USACE, Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, Texas Historical Commission, and Federally-recognized tribes occurred under TxDOT's Memorandums of Understanding and Programmatic Agreements with those agencies/entities. Section 8.0 (Environmental Permits, Issues, and Commitments) in the EA (**Attachment 4**) outlines the needs and/or actions to be pursued in the corridor for compliance with specific regulations. NCTCOG can confirm the Regulatory Project Manager for the USACE Fort Worth District under Section 214 is expediting the Clean Water Act Section 401/402/404 permitting processes for this project.

(iii.) Environmental Studies or Other Documents

Resources reviewed as part of the IH 30 EA for the segment through Rockwall County included community impacts, cultural and archeological resources, historic properties, water and biological resources, air quality, hazardous materials, noise impacts, indirect and cumulative impacts, and construction phase impacts. The EA documentation provides detailed information regarding the analyses, potential impacts, and proposed mitigation of the identified resources.

(iv.) Discussions with FHWA

Though TxDOT is granted responsibility for review, consultation, and approval of NEPA documents for highway projects, coordination with FHWA occurred regularly throughout the IH 30 EA development to provide assurances of appropriate review and compliance with Federal, State, and local regulations.

(v.) Public Involvement

TxDOT conducted three public engagement opportunities during EA development for IH 30 through Rockwall County, and an exclusive Public Hearing was also held facilitating expedited approval of the interim project between Bass Pro Drive and Dalrock Road (interim project FONSI – September 7, 2018). The following describes the meeting dates and locations:

- Open House Public Meeting – April 27, 2017
Royse City High School, 700 S. FM 2642, Royse City, TX 75189
- Open House Public Meeting – May 4, 2017
Rockwall County District Courthouse, 1111 E. Yellow Jacket Ln., Rockwall, TX 75087
- Public Hearing (Interim Project) – May 31, 2018
Hella Shrine (Terrace Room) – 2121 Rowlett Rd., Garland, TX 75043
- Public Hearing – January 31, 2019
Royse City High School, 700 S. FM 2642, Royse City, TX 75189

2. State and Local Approvals/Planning

As stated previously, overall IH 30 improvements between Bass Pro Drive and west of FM 2642 are included in *Mobility 2045: The Metropolitan Transportation Plan for North Central Texas*, Appendix D of the *2019-2022 Transportation Improvement Program (TIP) for North Central Texas*, and TxDOT's 2019 Unified Transportation Program (UTP). Overall IH 30 improvements are also identified in the TxDOT 2016 Freight Mobility Plan, which identifies statewide freight needs, challenges, goals, policies, and investment strategies. Should INFRA Grant funds be



awarded for this project, NCTCOG and TxDOT will coordinate via the earliest available quarterly modification cycle to revise the TIP and State Transportation Improvement Program (STIP) accordingly. A TIP/STIP revision was recently performed to confirm available funding and aid in accelerating the delivery of the interim frontage road bridge project between Bass Pro Drive and Dalrock Road.

3. Assessment of Project Risks and Mitigation Strategies

As discussed above, TxDOT will immediately develop a CER and draft PMP upon issuance of the overall IH 30 Rockwall County corridor FONSI to identify a risk register for both cost and schedule. Potential uncertainties in those estimates such as environmental conditions, inflation, market conditions, third party impacts, and other risk events will be modeled and reviewed by a multi-disciplined team of subject matter experts to determine a forecast curve of cost and completion date ranges, as well as a list of appropriate mitigation responses. Section 8.0 (Environmental Permits, Issues, and Commitments) in the EA (**Attachment 4**) outlines the associated needs and/or actions to be pursued in compliance with known regulations.

Despite these potential uncertainties, TxDOT has been highly successful in the use of innovative project delivery methods and the implementation of highly complex projects in recent years. Efforts like IH 635 LBJ Express (\$2.7 billion), North Tarrant Express (\$2.4 billion), and the IH 30/IH 35E Horseshoe (\$800 million) have demonstrated the experience and expertise TxDOT has gained in planning, design, procurement, and numerous other project components. TxDOT staff is highly capable of delivering a project with the magnitude of the IH 30 Rockwall County – Lake Ray Hubbard Bridge project.

VII. LARGE/SMALL PROJECT REQUIREMENTS

The IH 30 Rockwall County – Lake Ray Hubbard Bridge project satisfies statutory requirements enumerated at 23 U.S.C. 117(g) and is considered for the INFRA Discretionary Grant Program as a Large Project. This determination is based on responses to the following questions:

- a. Does the project generate national/regional economic, mobility, or safety benefits?*
- b. Is the project cost-effective?*
- c. Does the project contribute to one or more of the National Goals under 23 USC 150?*
- d. Is the project based on the results of preliminary engineering?*
- e. With respect to non-Federal financial commitments, does the project have one or more stable and dependable funding or financing sources to construct, maintain, and operate the project?*
- f. Are contingency amounts available to cover unanticipated cost increases?*
- g. Is it the case that the project cannot be easily and efficiently completed without other Federal funding or financial assistance available to the project sponsor?*
- h. Is the project reasonably expected to begin construction not later than 18 months after the date of obligations of funds for the project?*

Summary responses to the questions are provided in the Large/Small Project Requirements Attachment (**Attachment 5**) which accompanies this application. Each response contains specific references to details discussed within this Project Narrative.

IH 30 Rockwall County Lake Ray Hubbard Bridge

FY 2019 INFRA Grant Application
Attachment 2 – Benefit-Cost Analysis Documentation



North Central Texas
Council of Governments



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I. METHODOLOGY

The following description provides the methodology for the Benefit-Cost Analysis (BCA) conducted for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge as part of the Fiscal Year (FY) 2019 Infrastructure for Rebuilding America (INFRA) Discretionary Grant Program. This BCA will include detailed calculations of the various benefits and costs of the proposed project for the years between 2017 and 2045, for each cost and benefit factor. Benefits are assumed to incur after project completion in 2025 for a 21-year life span of the projects to 2045.

Traffic forecasts were conducted for build and no-build conditions in year 2028, 2037, and 2045 using the NCTCOG DFX Regional Travel Demand Model. The Dallas-Fort Worth Regional Travel Demand Model for the Expanded Area (DFX) software application is a collection of components that implements a trip-based four-step travel demand model on the TransCAD 5.0 platform. The DFX is the North Central Texas Council of Governments' (NCTCOG) official travel demand model, and the software is developed and maintained by the Model Development Group for NCTCOG's Transportation Department.

DFX accepts the following input files: demographic data, roadway network including toll roads and HOV, transit supply system including rail and park-and-ride, airport enplanements, and external stations forecasts. It produces traffic volumes and speeds on roadways and transit usage data on the transit system. In addition to flexible coding tools, a smooth menu system for performing model runs, and extensive reports, the software provides a comprehensive file management system for the organization of input and output data.

This version of the travel demand model and the build/no-build transportation networks were based on those developed for *Mobility 2045: The Metropolitan Transportation Plan (MTP) for North Central Texas*. The project is included in the build network scenarios for the horizon year 2045. The only modification made in running the no-build alternatives was to remove the IH 30 Rockwall County Lake Ray Hubbard Bridge project recommendations (as described in **Attachment 1 – Project Narrative**) from the transportation network.

a. Project Cost

Proposed construction costs were obtained from the Texas Department of Transportation (TxDOT) Dallas District office. The costs were estimated using engineering schematics developed for the IH 30 Draft Environmental Assessment (EA), which assume a 30 percent design level for the project, as well as TxDOT average unit bid prices. All costs are in 2017 dollars. The estimated project costs are displayed in **Exhibit 13 of Attachment 1 – Project Narrative, Section IV – Grant Funds, Sources, and Uses of All Project Funding**, as part of this INFRA Discretionary Grant Program application.

b. Travel Time (Mobility) Benefit

Travel time benefits were calculated based on travel demand modeling conducted for the project. Travel time benefits were calculated using the DFX travel demand model using the MTP 2045 networks for interim years 2028, 2037, and target year 2045. Performance reports of roadway alternative model runs were performed on these networks using Mobility 2045 demographics indicated a net reduction in Daily Vehicle Hours of Congestion Delay across the region. These translate into travel time benefits reflecting the reduced traffic congestion experienced by all users of transportation facilities in the region, as well as all commercial motor vehicles, decreased hours spent behind the wheel, and increased mobility and quality of life. The number of commercial motor vehicles was calculated using TxDOT assumptions included in the IH 30 Rockwall County Interstate Access Justification Report (IAJR).

Equation for Annual Travel Time Benefit:

$$\begin{aligned}
 & \text{Annual Travel Time Benefit (AUTO)} \\
 &= (\text{Daily Vehicle Hours of Congestion Delay (Build Network)} \\
 &\quad - \text{Daily Vehicle Hours of Congestion Delay (No Build Network)}) \\
 &\times 365 \text{ days} \times 1.39 \frac{\text{Occupants}}{\text{AUTO}} \times \frac{\$20.70}{\text{hour}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{Annual Travel Time Benefit (TRUCK)} \\
 &= (\text{Daily Vehicle Hours of Congestion Delay (Build Network)} \\
 &\quad - \text{Daily Vehicle Hours of Congestion Delay (No Build Network)}) \\
 &\times 365 \text{ days} \times \frac{\$28.60}{\text{hour}}
 \end{aligned}$$

c. Safety Benefits

To reduce future crashes, the proposed improvements include the addition of continuous one-way frontage roads across Lake Ray Hubbard parallel to the IH 30 freeway, as well as the reconfiguration of entrance/exit access points to X-ramps. The improvements are expected to lessen conflicts, alleviate crowding on mainlines, and allow safer lanes for slower vehicles. The new frontage roads will also include barrier-separated bicycle/pedestrian accommodations in both directions.

Crash data was provided through TxDOT's Crash Records Information System (CRIS) for years 2013 – 2017 for motor vehicle crashes on IH 30 from Dalrock Road to State Highway (SH) 205. The data is composed of TxDOT "Reportable Crashes" and non-reportable crashes. A "Reportable Motor Vehicle Traffic Crash" is defined by TxDOT as any crash involving motor vehicles in transport that occurs or originates on a traffic way, resulting in injury to or death of any person, or damage to the property of any one person to the apparent extent of \$1,000. Property damage only crash data was also obtained through CRIS.

Although the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project will provide many safety benefits, for purposes of this BCA a conservative approach was applied first using the benefits realized by the addition of lanes. The project will add two to three frontage road lanes in each direction. This benefit is calculated by applying a Crash Modification Factor (CMF) of 0.696 (www.cmfclearinghouse.org/detail.cfm?facid=7932). This CMF was applied to the five-year average of the crash rates for crashes on the IH 30 freeway general purpose lanes to estimate the build condition crash rate for the KABCO rating system. Secondly, additional benefits were incorporated as a result of the proposed X-ramp configurations. This benefit (is calculated by applying a Crash Modification Factor (CMF) of 0.65 (www.cmfclearinghouse.org/detail.cfm?facid=2207). This CMF was applied to the five-year average of the crash rates for crashes on the existing frontage roads approaching the bridge and their associated ramps and connectors to estimate the build condition crash rate for the KABCO rating system.

Equation for Annual Safety Benefit:

$$\begin{aligned}
 \text{Annual Safety benefit (per each KABCO rating)} \\
 &= \text{Annual Existing Crash Rate} \\
 &- (\text{Annual Existing Crash Rate} \times \text{CMF}) \times \text{monitized value}
 \end{aligned}$$

d. Air Quality Benefits

Air quality benefits for this project are derived from reduced Vehicle Miles Traveled (VMT) across the Dallas-Fort Worth Region based on DFX modelling results; the emissions reduction is the difference in emissions between the build and no build for each target year. The methodology used to calculate the total emissions for each scenario is consistent with NCTCOG’s 2018 Transportation Conformity, Chapter 7 www.nctcog.org/nctcg/media/Transportation/DocsMaps/Quality/Air/Chapter-7_Emission-Factors_MOVES-Model.pdf of the 2018 Transportation Conformity document. Annual estimates were calculated for both Nitrogen Oxides (NOX), Volatile Organic Compounds (VOCs), and Carbon Dioxide (CO₂). The emissions difference for years in between target years was calculated via linear interpolation. The annual regional reduction of emissions in short tons is multiplied by the value of that reduction in short tons to yield the value of the benefit for each year.

Emission Calculations:

$$\text{Emissions}_{\text{No-Build}} = \text{VMT}_{\text{No-Build}} \times \text{EmissionFactor}_{\text{vehicletype}} \times \text{VMT}_{\text{Mix}_{\text{vehicletype}}}$$

$$\text{Emissions}_{\text{Build}} = \text{VMT}_{\text{Build}} \times \text{EmissionFactor}_{\text{vehicletype}} \times \text{VMT}_{\text{Mix}_{\text{vehicletype}}}$$

Emission Reduction Benefit:

Emissions Build – *Emissions* No-Build

e. Quality of Life Benefits

1. Demographic Forecast Data and Bicycle and Pedestrian User Counts

The North Central Texas Council of Governments (NCTCOG), the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Region conducted a demographic forecast to year 2041 for the 12-county area including Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties. The data includes household, population and employment numbers at Traffic Survey Zone (TSZ) level used for the long-range transportation planning for the region. Population data from the demographic forecast were used to estimate user counts between 2021 and 2041 for each year. The demographic forecast data is available at five-year intervals and the intermediate year projections were created based on the five-year projections at TSZ level, assuming a linear projection.

2. Bicycle and Pedestrian User Catchment Areas

Based on Federal Transit Administration (FTA) guidelines (Federal Register Volume 76, Number 161, August 19, 2011. (www.gpo.gov/fdsys/pkg/FR-2011-08-19/html/2011-21273.htm), a three-mile catchment area was assumed for the proposed bike facilities and a half-mile catchment area was assumed for the proposed pedestrian only facilities and population at TSZ level was calculated.

3. Bicycle Needs Index (BNI) or Pedestrian Needs Indices (PNI)

A BNI and PNI has been established by the MPO for each TSZ in the Metropolitan Planning Area (MPA) to calculate user benefits of bicycle pedestrian projects as part of the MPO's Transportation Conformity Process to meet Environmental Protection Agency requirements. The BNI is determined by the percentage of total trips that are five miles or less, employment density, population density, and median income. Each of the TSZs within the MPA are ranked for each factor of the BNI and PNI. Index-to-region scores greater than 1.00 indicate higher than average levels for each characteristic, while index-to-region scores lower than 1.00 indicate lower than average levels. These index-to-region scores for each characteristic are then weighted by the relative value of each characteristic. The weighted index for all characteristics is summed for each TSZ to determine the final BNI or PNI score. One of the three BNI and PNI indices (0.01, 0.02, or 0.03) were assigned to each TSZ.

4. New Commuters and Induced Demand

The total population within the buffer was multiplied by the BNI and PNI values and an aggregate number of Bicycle and Pedestrian User Counts (UC) were determined in the buffer area. This number (UC) was multiplied by 0.4, assuming the national averages of 80% of residents are adults and 50% of adults are commuters, to calculate the number of daily commuters. A Likelihood Multiplier of 0.15 was multiplied by the User Count to determine the Induced Demand of the proposed facility.ⁱ A consistent Likelihood Multiplier of 0.15 was assumed to provide a conservative estimate of induced demand due to bicycle and pedestrian users.

$$\text{New Commuters (NC)} = \text{UC} * 0.4 * 0.15$$

5. Mobility Benefits

The mobility benefit quantitatively determines the value of an on-street (no parking) bicycle facility for users of that facility. Bicycle commuters are willing to trade off a higher travel time as a cost incurred to choosing a better facility. This calculation, based on stated guidelines (Pedestrian and Bicycle Information Center, “Translating Demand and Benefits Research into Guidelines”, Accessed May 2013 (www.bicyclinginfo.org/bikecost/docs/Translating%20Demand%20and%20Benefits%20Research%20into%20Guidelines.pdf)) found that bicycle commuters are willing to spend, on average, 18.02 extra minutes per trip to travel on an on-street (no parking) facility. Assuming an average hourly value of time of \$12 per hour or (\$12/60) per minute, the Mobility Benefit is calculated for the number of daily existing *and* induced commuters. This number is doubled to include trips both to and from work and also multiplied by 50 weeks per year and 5 days per week results for the annual benefit. This methodology assumes that no bicycle facility previously existed nearby, aside from streets with parking.

$$\text{Mobility Benefit} = 18.02 * (12.50/60) * (\text{NC}) * 50 * 5 * 2$$

6. Health Benefits

An annual per-capita cost savings from physical activity of \$128 was determined by taking the median value of 10 studies in the stated report (Krizek J. K., Poindexter G., Barnes G., Mogush P. “Analyzing the Benefits and Costs of Bicycle Facilities via Online Guidelines” Planning, Practice & Research, Vol. 22, No 2., pp. 197-213, May 2007). This number was \$128 by the total number of new bicyclists to arrive at an annual health benefit.

$$\text{Annual Health Benefit} = \text{total new cyclists} * \$12$$

7. Reduced Auto Use Benefits

Reduced auto use benefits include reduced congestion, reduced air pollution, and user cost savings. For an urban area such as Rowlett or Rockwall, research indicates that reduced auto use benefits is 13 cents per mile for a 3-mile average weekday commuting trip. The benefit per mile of replacing auto travel with bicycle travel is a function of location and day of the week. Therefore, reduced auto use benefits were calculated only for work days.

The reduced auto use benefit is calculated by multiplying New Commuters (NC) by the savings per mile (S) and the average round trip length (L). This number is then multiplied by 50 weeks per year and 5 days per week to result in the annual reduced auto use benefit.

$$\text{Reduced Auto Use Benefit} = (\text{NC}) * \text{S} * \text{L} * 50 * 5$$

f. Residual Value

The new frontage road bridges recommended for this project will have a remaining service life beyond the 21-year benefit calculation period in this BCA. The current value of each new bridge was divided by the years of its life span and then discounted annually. Value remaining after the end of the 21-year calculation was added to the benefit calculation per USDOT BCA 2018 Guidance. All project elements with life spans beyond the project are included in the attached BCA Excel Tables. All project components not included are expected to endure through the project analysis period or be covered in maintenance costs.

II. NON-QUANTIFIED BENEFITS

Reliability

One of the primary benefits of the IH 30 Rockwall County – Lake Ray Hubbard Bridge project will be a significant increase in corridor reliability as a result of the proposed improvements. Several methods of attempting to measure reliability were evaluated in preparing this INFRA Grant application. Current efforts include using data from the National Performance Management Research Dataset (NPMRDS), specifically the Level of Travel Time Reliability (LOTR) metric (80th percentile travel time / 50th percentile travel time). Once occurrences of unusually high non-recurring delay were extracted from the NPMRDS, they would be combined with TxDOT crash data allowing identification of delay levels directly associated with types of incidents, and the analysis would determine if certain incidents may be reduced by the project.

Ultimately, such a calculation requires a complex analysis involving the relation of two datasets that are not typically combined. Such an evaluation would be challenging to analyze in a reasonable time frame for the purposes of preparing a grant application. Furthermore, even if the analysis elicited a quantification of reliability, there would be the very difficult task of assigning it a monetary value that does not duplicate but is related to the value of travel time. The value of travel reliability as a benefit for the project is proportionately larger than many of the other benefits from the perspective of project stakeholders. NCTCOG attempted to

demonstrate this, but further research and collaboration with USDOT and national partners is needed.

III. ANALYSIS

The anticipated benefits and costs for this project available to be monetized were included in this BCA. The project benefits are shown in **Exhibit 1**. Detailed calculations used to determine these totals are shown in the attached BCA Excel Tables.

Exhibit 1: Total Project Benefits

| Benefit Category | Benefits |
|------------------------------|----------------------|
| | 7% Discount Rate |
| Operations & Maintenance | (\$9,767,520) |
| Travel Time Savings | \$749,460,661 |
| Air Quality Emission Savings | (\$75,534) |
| Safety Benefit | \$85,094,152 |
| Quality of Life | \$1,229,210 |
| Residual Value | \$15,701,991 |
| Total Benefits | \$854,066,888 |
| Benefit Cost Ratio | 3.78 |

This project will increase the mobility, reliability, and economic competitiveness of the North Central Texas region in the short-, medium- and long-term due to the proposed IH 30 improvements across Lake Ray Hubbard. Providing additional connectivity to existing project area roadways will result in direct benefits to project users including auto and commercial vehicle travel-time savings, improved safety, and increased quality of life. The benefit cost ratio of **3.78** neither includes the significant benefit of increased reliability of travel for drivers nor the substantial economic benefit to future real estate development.

| Benefit-Cost Summary Results | | | Total Over 20 Years |
|-------------------------------------|------------------|-----------------------------------|----------------------------|
| Life-Cycle Costs | \$225,926,079 | ITEMIZED BENEFITS | |
| Life-Cycle Benefits | \$ 2,863,080,277 | Travel Time Savings (bil. \$) | \$ 2.72 |
| Net Present Value | \$ 854,066,888 | Safety Cost Savings (mil. \$) | \$ 264.8 |
| BENEFIT-COST RATIO | 3.78 | Emissions Cost Savings (thou. \$) | (\$ 176) |
| | | Quality of Life Gains (mil. \$) | \$ 4 |
| | | TOTAL BENEFITS (bil. \$) | \$2.863 |
| | | Person-Hours Delay Saved | 119,213,840 |

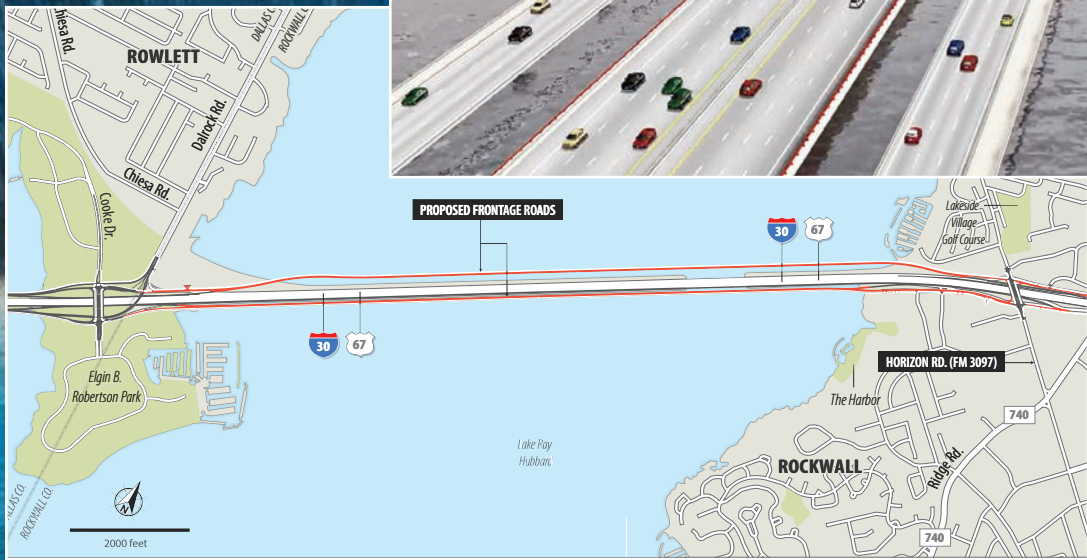
NOTE:

A copy of the Microsoft Excel file is included in the IH 30 Rockwall County – Lake Ray Hubbard Project Grant Application submittal.

¹ Pedestrian and Bicycle Information Center, "Translating Demand and Benefits Research into Guidelines", Accessed May 2013 www.bicyclinginfo.org/bikecost/docs/Translating%20Demand%20and%20Benefits%20Research%20into%20Guidelines.pdf

IH 30 Rockwall County Lake Ray Hubbard Bridge

FY 2019 INFRA Grant Application
Attachment 3 – Letters of Support



North Central Texas
Council of Governments

Congress of the United States
House of Representatives
Washington, DC 20515

February 26, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

As the Representative for Texas' 32nd Congressional District, I am writing in support of the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

The project would complete construction of a continuous six-lane frontage road system that fully crosses Lake Ray Hubbard adjacent to the existing IH 30 freeway between Dalrock Road and Farm-to-Market Road (FM) 740. Having this capacity is essential to preserving the IH 30 corridor's long-term viability to accommodate increased trips for both passenger vehicles and goods movement along this critical segment between Rockwall County and eastern Dallas County. Proposed interchange configurations at the project end points will also enable vehicles to cross the lake without having to use the highway itself, creating greater overall connectivity, improved reliability and more efficient incident management. Additionally, the project includes a barrier-separated sidewalk and shared-use path along the frontage road bridges, each consistent with the Regional Transportation Council's (RTC) Regional Veloweb recommendations for improved bicycle and pedestrian accommodations for the cities of Garland, Rowlett and Rockwall.

The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

Again, I fully support the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact my District Director, Judith Tankel, at Judith.Tankel@mail.house.gov.

Sincerely,



Congressman Colin Allred (TX-32)



DALLAS COUNTY JUDGE CLAY LEWIS JENKINS

February 27, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

Dallas County is pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central

411 Elm Street

Dallas County Administration Building
clay.jenkins@dallascounty.org
Dallas, TX 75202

(214) 653-7949

Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

Again, Dallas County fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at 214-653-7949.

Sincerely,



Clay Lewis Jenkins
Dallas County Judge



COMMISSIONER DR. THERESA M. DANIEL ROAD & BRIDGE DISTRICT 1

February 26, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

Dallas County is pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

Again, Dallas County fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at 214-653-6668.

Sincerely,

A handwritten signature in black ink that reads "Dr. Theresa M. Daniel".

Dr. Theresa M. Daniel
Dallas County Commissioner 1

411 Elm Street, Administration Building,
2nd Floor, Dallas, Texas 75202
(214) 653-6668

MICHAEL S. RAWLINGS
Mayor of Dallas



February 28, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

I am pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. Due to the geography of Lake Ray Hubbard, which isolates the IH 30 from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's

OFFICE OF THE MAYOR CITY HALL 1500 MARILLA ST., 5EN DALLAS, TEXAS 75201

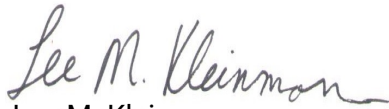
emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

We greatly appreciate your time and consideration for this project. If you have any questions, please contact Scott Goldstein, Chief of Policy and Communications, at 214.670.7977.

Best regards,



Michael S. Rawlings
Mayor



Lee M. Kleinman
Dallas City Council, District 11
Chair, Ad Hoc Legislative Committee



February 28, 2019

Jeffery Neal
Program Manager
NCTCOG – MPO
Arlington, Texas
Via Email: jneal@nctcog.org

Re: LETTER OF SUPPORT FOR I-30 PROJECT

Dear Mr. Neal:

Please let this letter serve as Fate's support for the widening and reconstruction of I-30 through the City of Fate in Rockwall County. Furthermore, the City of Fate supports the project moving forward with our neighboring jurisdictions and thanks the NCTCOG and TXDOT for their assistance.

The I-30 corridor has been the scene of the only traffic fatalities we have had in Fate over the last several years, including massive car pile-ups, truck accidents, and even tragic auto-pedestrian deaths. The I-30 improvements are logical and needed today to facilitate interstate transport logistics, tourism, and the movement of the local population. I-30 is a superior place to add capacity versus the creation of new tollways through undeveloped areas. For these reasons, the City of Fate supports the widening and rebuilding of I-30 within our jurisdiction.

If you have any further questions, please feel free to contact my office at (972) 771-4601.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Kovacs".

Michael Kovacs
City Manager

Capitol Office:
P.O. Box 12068
Austin, Texas 78711
Phone: (512) 463-0102
Fax: (512) 463-7202

Canton Office:
17585 State Highway 19, Suite 200
Canton, Texas 75103
Phone: (903) 567-0531
Fax: (903) 567-0533



SENATOR BOB HALL
DISTRICT 2

Rockwall Office:
Alliance Building #2
6537 Horizon Road, Suite B-1
Rockwall, Texas 75032
Phone: (972) 722-3131
Fax: (972) 722-3132

Greenville Office:
2816 Lee Street, Suite A
Greenville, Texas 75401
Phone: (903) 454-2880
Fax: (903) 454-2885

February 25, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

I am pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

The project would complete construction of a continuous six-lane frontage road system that fully crosses Lake Ray Hubbard adjacent to the existing IH 30 freeway between Dalrock Road and Farm-to-Market Road (FM) 740. Having this capacity is essential to preserving the IH 30 corridor's long-term viability to accommodate increased trips for both passenger vehicles and goods movement along this critical segment between Rockwall County and eastern Dallas County. Proposed interchange configurations at the project end points will also enable vehicles to cross the lake without having to use the highway itself, creating greater overall connectivity, improved reliability and more efficient incident management. Additionally, the project includes a barrier-separated sidewalk and shared-use path along the frontage road bridges, each consistent with the Regional Transportation Council's (RTC) Regional Veloweb recommendations for improved bicycle and pedestrian accommodations for the cities of Garland, Rowlett and Rockwall.

The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

Again, I fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at 512.463.0102.

Sincerely,

A handwritten signature in cursive script that reads "Bob Hall".

Bob Hall
Senator



Senate Committees:
Agriculture *Chair*, Veteran Affairs & Border Security *Vice-Chair*
Education, Nominations, State Affairs





NATHAN JOHNSON
STATE SENATOR • DISTRICT 16

February 26, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

I am pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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CAPITOL OFFICE
P.O. BOX 12068 • AUSTIN, TEXAS 78711-2068 • OFFICE: 512.463.0116 • FAX: 512.463.5555
nathan.johnson@senate.texas.gov



NATHAN JOHNSON
STATE SENATOR • DISTRICT 16

The project elements described above will enhance accessibility and increase attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

For these reasons, I fully support fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at 512-463-0116.

Sincerely,

A handwritten signature in black ink, appearing to read "Nathan Johnson", written over a horizontal line.

State Senator Nathan Johnson, District 19

NMJ/ja

Congress of the United States
House of Representatives
Washington, DC 20515

February 26, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

It was recently brought to my attention that the North Central Texas Council of Governments (NCTCOG) has applied for the US Department of Transportation's 2019 Infrastructure for Rebuilding America (INFRA) grant to support Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a transportation corridor that serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. It is my understanding that due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

The project would complete construction of a continuous six-lane frontage road system that fully crosses Lake Ray Hubbard adjacent to the existing IH 30 freeway between Dalrock Road and Farm-to-Market Road (FM) 740. This capacity would help preserve the IH 30 corridor's long-term viability to accommodate increased trips for both passenger vehicles and goods movement along this critical segment between Rockwall County and eastern Dallas County. Proposed interchange configurations at the project end points will also enable vehicles to cross the lake without having to use the highway itself. Additionally, the project includes a barrier-separated sidewalk and shared-use path along the frontage road bridges, each consistent with the Regional Transportation Council's (RTC) Regional Veloweb recommendations for improved bicycle and pedestrian accommodations for the cities of Garland, Rowlett and Rockwall.

It is also my understanding that the project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

For any further questions regarding NCTCOG's grant application, in accordance with existing agency rules, regulations, and ethical guidelines, please contact Kyle Roy, Communications Coordinator, at (817)-704-5610 or kroy@nctcog.org

Sincerely,

A handwritten signature in blue ink that reads "John Ratcliffe". The signature is written in a cursive style with a large, looping initial "J".

John Ratcliffe
Member of Congress



DAVID SWEET
ROCKWALL COUNTY JUDGE

February 19, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

Rockwall County is pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with [Mobility 2045: The Metropolitan Transportation Plan for North Central Texas](#).

Again, Rockwall County fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact 972-204-6000.

Sincerely,

David Sweet
Rockwall County Judge



City of Rockwall
The New Horizon

February 15, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

City of Rockwall is pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

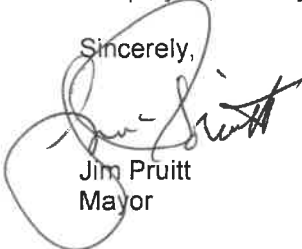
IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with [Mobility 2045: The Metropolitan Transportation Plan for North Central Texas](#).

Again, City of Rockwall fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at 972-771-7700 or jimpruitt@rockwall.com.

Sincerely,



Jim Pruitt
Mayor

Mayor ~ Tammy Dana-Bashian
Mayor Pro Tem – Martha Brown
Deputy Mayor Pro Tem ~
Matt Grubisich
City Council ~
Robert Blake Margolis
Brownie Sherrill
Debby Bobbitt
Pamela Bell
City Manager ~ Brian Funderburk



City of Rowlett ~ www.rowlett.com
4000 Main Street Rowlett, TX 75088
Phone ~ 972.412.6100 Fax ~ 972.412.6118

*A well-planned lakeside community
of quality neighborhoods,
distinctive amenities,
diverse employment, and
cultural charm.
THE place to live, work and play.*

February 20, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

The City of Rowlett is pleased to support the US Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project.

IH 30 is a vital transportation corridor that sustains the local, regional, and state economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH-30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

Again, the City of Rowlett fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact City Manager Brian Funderburk at 972.412.6113 or bfunderburk@rowlett.com.

Sincerely,

Tammy Dana-Bashian
Mayor, City of Rowlett





Carl L. Alsabrook
City Manager
City Hall
305 N. Arch St/P. O. Box 638
Royse City, Texas 75189
972-524-4824
Fax 972-635-2434
calsabrook@roysecity.com

February 28, 2019

Jeffrey Neal
Program Manager
NCTCOG-MPO
Arlington, Texas

Ref: Letter of support for I-30 expansion project

Mr. Neal,

Please allow this letter serve as Royse City's support for widening and reconstruction of I-30 through the city of Royse City in Rockwall County. We thank NCTCOG and TxDot for their assistance.

Expansion of I-30 is important to Royse City. Accidents occur regularly along this stretch of highway. Expansion is also vital for our continued economic development success. The I-30 improvements are a brilliant solution and will offer the further facilitation of interstate transport logistics, tourism, consumerism and movement of the local population.

If you have further questions, or if I can be of further assistance, please feel free to contact me personally at (972) 524-4825.

Respectfully,

A handwritten signature in black ink, appearing to read 'C. Alsabrook', with a long horizontal flourish extending to the right.

Carl Alsabrook
City Manager



The Transportation Policy Body for the North Central Texas Council of Governments
(Metropolitan Planning Organization for the Dallas-Fort Worth Region)

March 1, 2019

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

On behalf of the Regional Transportation Council (RTC), which serves as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth (DFW) area, I am pleased to support the United States Department of Transportation 2019 Infrastructure for Rebuilding America (INFRA) grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Interstate Highway (IH) 30 Rockwall County – Lake Ray Hubbard Bridge Project**.

IH 30 is a vital transportation corridor that sustains the local, regional, and State economy. Within the North Central Texas region, the corridor also serves as a principal route for local commuters providing access to several key highways and other transportation facilities. This project involves the eastern section of IH 30 as it crosses Lake Ray Hubbard. Due to the geography of the lake, which isolates the highway from any substantial parallel roadway capacity for miles on either side, its vulnerability for closure during accidents or severe weather events regularly exacerbates severe congestion.

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The project elements described above will support enhanced accessibility and increased attractiveness for economic development compatible with Lake Ray Hubbard's emergence as a significant tourism destination and quality of life asset for the eastern part of the North Central Texas region. The identified improvements for this section of IH 30 are both included in and consistent with Mobility 2045: The Metropolitan Transportation Plan for North Central Texas, and if awarded funds, the project will be amended as required in the 2019-2022 Transportation Improvement Program for North Central Texas.

P.O. Box 5888 • Arlington, Texas 76005-5888 • (817) 695-9240 • FAX (817) 640-3028
<http://www.nctcog.org/trans>

Secretary Elaine L. Chao
Page Two

March 1, 2019

Again, the RTC fully supports the 2019 INFRA grant application submitted by NCTCOG for the IH 30 Rockwall County – Lake Ray Hubbard Bridge Project. Thank you for your time and consideration. If you have any questions, feel free to contact Michael Morris, P.E., Director of Transportation for NCTCOG at (817) 695-9241 or mmorris@nctcog.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Fickes', with a stylized flourish at the end.

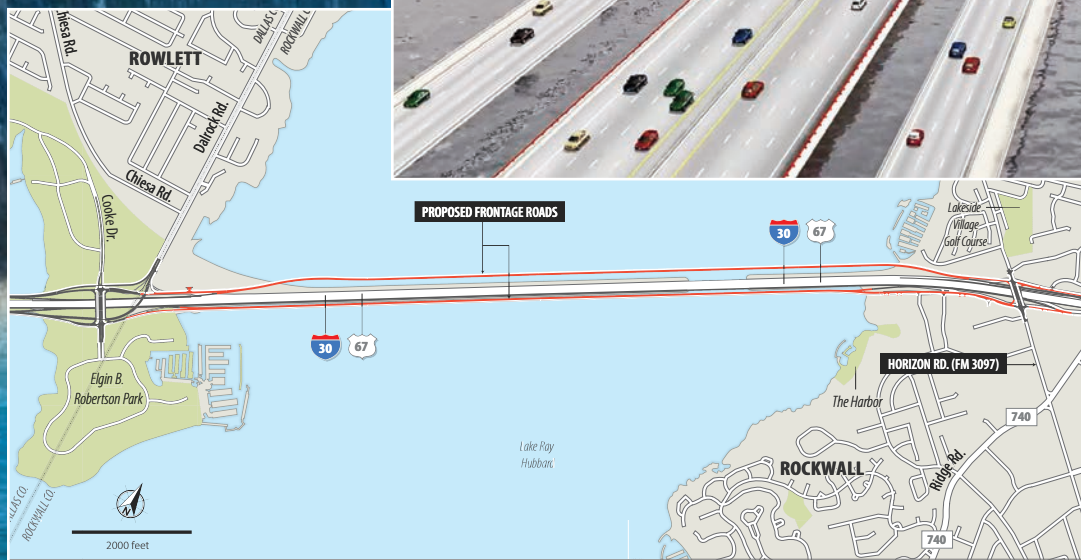
Gary Fickes, Chair
Regional Transportation Council
Commissioner, Tarrant County

KR:al

cc: Michael Morris, P.E., Director of Transportation, NCTCOG

IH 30 Rockwall County Lake Ray Hubbard Bridge

FY 2019 INFRA Grant Application
Attachment 4 – IH 30 Draft Environmental Assessment
(December 2018)



North Central Texas
Council of Governments



Draft Environmental Assessment

Interstate Highway (IH) 30 Improvements

From: Bass Pro Drive

To: West of FM 2642

Dallas and Rockwall Counties, Texas

Control-Section-Job (CSJ) 0009-11-238, 0009-12-215, 0009-12-219, 0009-12-220

Date: December 2018

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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List of Acronyms and Abbreviations

Included below is a list of common acronyms used throughout this document and their definitions:

| | |
|-------|---|
| AADT | average annual daily traffic |
| AOI | Area of Interest |
| APE | Area of Potential Effects |
| BMP | Best Management Practices |
| CWA | Clean Water Act |
| CEQ | Council on Environmental Quality |
| CIA | Community Impacts Assessment |
| CGP | Construction General Permit |
| ESA | Endangered Species Act |
| EA | Environmental Assessment |
| EJ | Environmental Justice |
| EIS | Environmental Impact Statement |
| EPA | Environmental Protection Agency |
| EO | Executive Order |
| FM | Farm to Market |
| FPPA | Farmland Protection Policy Act |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| FONSI | Finding of No Significant Impact |
| FIRM | Flood Insurance Rate Maps |
| GIS | geographic information system |
| IP | Individual Permit |
| ISA | Initial Site Assessment |
| LWCF | Land and Water Conservation Fund |
| LEP | Limited English Proficiency |
| MBTA | Migratory Bird Treaty Act |
| MS4 | municipal separate storm water sewer system |
| MOU | memorandum of understanding |
| NEPA | National Environmental Policy Act |
| NFIP | National Flood Insurance Program |
| NHPA | National Historic Preservation Act |
| NWP | Nationwide Permit |
| NRCS | Natural Resources Conservation Service |
| NAC | Noise Abatement Criteria |

| | |
|--------|--|
| NCTCOG | North Central Texas Council of Governments |
| NOI | Notice of Intent |
| NOT | Notice of Termination |
| PA | Programmatic Agreement |
| PM | particulate matter |
| PWC | Parks and Wildlife Code |
| PCN | Pre-Construction Notification |
| RSA | resource study area |
| ROW | right-of-way |
| SGCN | Species of Greatest Conservation Need |
| SHPO | State Historic Preservation Officer |
| SAL | State archaeological landmark |
| SW3P | Storm Water Pollution Prevention Plan |
| TCEQ | Texas Commission on Environmental Quality |
| TxDOT | Texas Department of Transportation |
| THC | Texas Historical Commission |
| TxNDD | Texas Natural Diversity Database |
| TPWD | Texas Parks and Wildlife Department |
| TPDES | Texas Pollutant Discharge Elimination System |
| TWDB | Texas Water Development Board |
| USACE | U.S. Army Corps of Engineers |
| USCB | U.S. Census Bureau |
| USCG | U.S. Coast Guard |
| USDA | U.S. Department of Agriculture |
| USGS | U.S. Geological Survey |
| VPD | vehicles per day |

1.0 INTRODUCTION

Texas Department of Transportation (TxDOT) Dallas District proposes the widening and reconstruction of the urban freeway, IH-30, between Bass Pro Drive in Garland, Dallas County, to West of Farm to Market (FM) 2642 near the Rockwall/Hunt County Line. The length of the project is an approximate 16.75 miles as shown on an aerial photograph map and U.S. Geological Survey (USGS) topographic map in **Appendix A**. Proposed improvements would reconstruct and/or widen the IH-30 mainlanes, and construct and/or reconstruct continuous frontage road system. The improvements include the reconstruction of interchanges at Horizon Road, FM 548, and FM 35, construction of new interchanges at Ben Payne / Rochelle Road, Blackland Road, and Floyd Road (future Outer Loop), and associated ramp modifications. Other recently constructed interchanges are being incorporated into the proposed design. A total of approximately 34.60 acres of new right-of-way (ROW), 12.07 acres of temporary easements, and 1.17 acres of permanent easements would be required. The new ROW required includes 19.41 acres of Lake Ray Hubbard ROW.

This draft Environmental Assessment (EA) evaluates the social, economic, and environmental impacts of the proposed project and determines whether such impacts warrant preparation of an Environmental Impact Statement (EIS). The planning process for this project follows TxDOT and Federal Highway Administration (FHWA) environmental policies and procedures in compliance with the National Environmental Policy Act (NEPA). The EA will be made available for public review during a public comment period; subsequently, TxDOT will consider any comments submitted. Once the comment period is over, TxDOT will prepare a final EA. If TxDOT determines there are no significant adverse effects, it will prepare and sign a Finding of No Significant Impact (FONSI), which will be made available to the public.

2.0 PROJECT DESCRIPTION

2.1 Existing Facility

The mainlanes within the project limits vary, but are generally eight lanes from Bass Pro Drive to Horizon Road, six lanes from Horizon Road to State Highway (SH) 205, and four lanes from SH 205 to west of FM 2642. From Bass Pro Drive to Lake Ray Hubbard, in Garland, there are six 11-foot wide lanes (three in each direction) and varying width outside shoulders. The section over Lake Ray Hubbard from Garland to Horizon Road in Rockwall has eight lanes (four in each direction) that vary in width from 11 to 12-feet with variable width outside shoulders. This section is built on a causeway with bridges to allow water flow and boat access to all parts of the lake.

From Horizon Road to SH 205 in Rockwall, there are currently six 12-foot wide mainlanes (three in each direction) with 14-foot wide inside shoulders and 10-foot wide outside shoulders. From SH 205 to west of FM 2642, there are four 12-foot wide mainlanes (two in each direction) with varying shoulders.

From Bass Pro Drive to Dalrock Road, there are continuous frontage roads. From Bass Pro Drive to west of Bayside Drive, there are six lanes (three in each direction) with the outside lanes being 14-foot wide with an 8-foot wide sidewalk along the westbound lanes and a 12-foot wide shared use path along the eastbound lanes. The sidewalk and shared use path are barrier separated from the vehicle lanes. From west of Bayside Drive to Dalrock Road, there are four 12-foot wide lanes (two in each direction) with right- and left-turn lanes at Bayside Drive. A two-lane bypass connection allows vehicles traveling southbound on Dalrock Road to enter westbound IH-30 without passing through the Bayside Road intersection. There is also a two-lane direct connector from the eastbound frontage road over the mainlanes to northbound Dalrock Road.

Bayside Drive crosses the IH-30 mainlanes on an overpass and is seven lanes wide which includes two through lanes in each direction plus left turn lanes. Dalrock Road intersects the westbound frontage road and is six lanes wide.

Currently within the project limits, discontinuous frontage roads exist along the east- and westbound mainlanes of IH-30 between Dalrock Road and Lake Ray Hubbard in Rowlett and along the eastbound mainlanes of IH-30 between Lake Ray Hubbard and Horizon Road in Rockwall. No frontage roads exist crossing over this section of Lake Ray Hubbard.

East of Dalrock Road to Lake Ray Hubbard are segments of frontage roads with temporary ramps that would be incorporated into this proposed project. The eastbound frontage road is two 12-foot wide lanes for 900 feet in length. The westbound frontage road varies from two to three 12-foot wide lanes and is 1,900 feet in length. There is also a two-way local access/service road in the westbound direction that provides access from the frontage road to commercial properties on the north side of the freeway including a Shell Gas Station, Comfort Suites Hotel, and a rail siding used for local shipment loading and unloading.

Between Lake Ray Hubbard and Horizon Road in Rockwall is an eastbound frontage road that provides access to several commercial properties including the Rockwall Harbor development. Between the lake and the eastbound exit ramp, the road is two-way with 10-foot wide lanes. Between the ramp and Horizon Road, the frontage road is one-way and has two to three 12-foot wide lanes. Total length is 0.5 mile. In Rockwall County, several of the interchanges have been reconstructed in recent years to provide improved access from intersecting roadways to IH-30. These interchanges include SH 205, John King Road, FM 3549, FM 551, and Erby Campbell Boulevard. Each includes new mainlane overpasses over the intersecting road to allow four to six lanes underneath, U-turns on both sides, sections of new two to three lane frontage roads and associated exit and entrance ramps. The proposed design utilizes as much of these improvements as practical while providing for needed improvements. The following provides a brief description of other existing facilities within the project limits:

Horizon Road currently carries four 12-foot wide lanes over IH-30 with 6-foot wide shoulders.

FM 740 / Ridge Road is currently six lanes wide with two through lanes in each direction and left turn lanes. This interchange has two lane frontage roads with one through lane and one left turn lane plus U-turns on either side.

FM 548 is currently four lanes wide with one through lane in each direction and left turn lanes.

FM 35 is currently two lanes wide.

Frontage roads are continuous and one-way from Horizon Road in Rockwall to west of FM 2642 in Royse City. The number of lanes vary from four to six (two to three in each direction) and lane widths vary from 11- to 12-feet. There are no shoulders and curb and gutter only at newer interchanges. Between Lake Ray Hubbard and the eastern end of the proposed project there are only short sections of sidewalk.

2.2 Proposed Facility

The project improvements include widening of IH-30, from Bass Pro Drive to west of FM 2642, in Dallas and Rockwall Counties, Texas. Approximately 34.60 acres of new ROW, 12.07 acres of temporary easements, and 1.17 acres of permanent easements would be required, to accommodate the proposed improvements, widening, ramps, and bridge structures.

Mainlanes between Bass Pro Drive and SH 205 would be widened to provide 12-foot lane widths and 10-foot inside and outside shoulders and associated ramps. Between Horizon Road and SH 205 the widening and improved ramps would provide eight mainlanes. A 0.23 mile section of mainlanes west of SH 205 would be reconstructed but the remaining pavement would be utilized in the widened facility.

Mainlanes between SH 205 and west of FM 2642 would be reconstructed and widened to six 12-foot lanes except at the recently reconstructed interchanges where only sections of widening would be required to add two new lanes.

The project improvements propose the construction of a continuous six-lane frontage road system crossing Lake Ray Hubbard along IH-30, between Dalrock Road and Horizon Road, in Rowlett and Rockwall, Texas, respectively. The improvements include associated ramp modifications. As currently proposed, this section would consist of three frontage road lanes in each direction (east- and west-bound) with two 12-foot wide inside travel lanes and one outside 14-foot wide shared use lane with associated entrance and exit ramp alignment modifications. The proposed ramp configurations would consist of a 14-foot lane with a 4-foot inside shoulder and 6-foot outside shoulder. An 8-foot wide sidewalk would be constructed along the westbound outer lane of the frontage road (barrier

separated) for pedestrian accommodation. A 12-foot wide shared-use path would be constructed along the eastbound outer frontage road lane (also barrier separated) for both bicyclists and pedestrian accommodation. The shared-use path would connect with the existing/planned shared-use facilities in the cities of Garland, Rowlett, and Rockwall as a part of the Regional Veloweb per North Central Texas Council of Governments (NCTCOG) plans.

Frontage roads from Horizon Road to west of FM 2642 are proposed to be reconstructed or widened to provide two to three lanes with 12-foot wide inside lanes and a 14-foot wide outside shared use lane and curb and gutter in each direction. Sidewalks are proposed along the outside of the frontage road lanes for the entire project limits.

The new Horizon Road bridge would be a six-lane overpass (two lanes traveling southbound and two lanes traveling northbound) plus left turn lanes connecting the east- and westbound frontage roads. Six-foot wide sidewalks would be constructed along the outer lanes of the Horizon Road bridge for pedestrian accommodation. The Bayside Drive bridge would also include paralleling U-turn bridges (20-foot wide travel lane) connecting with the east- and westbound frontage roads.

Improvements are proposed at FM 740 / Ridge Road to provide two frontage road through lanes in each direction and additional storage for the U-turn approaches.

An overpass is proposed at Ben Payne / Rochelle Road to allow an undercrossing where these streets currently intersect the frontage roads. One through lane in each direction plus left turn lanes are proposed along with Texas U-turns and sidewalks.

An overpass is proposed at Blackland Road to allow an undercrossing where this street currently intersects the eastbound frontage road. One southbound through lane plus a left turn lane and two northbound left turn lanes are proposed along with Texas U-turns and sidewalks.

At Floyd Road, only U-turns are proposed at this time until the proposed Rockwall County segment of the regional Outer Loop is constructed. Blackland Road and Floyd Road would provide current users with an opportunity for U-turns rather than having to utilize FM 551 or Erby Campbell Boulevard which are over 3 miles apart.

The existing overpass at FM 548 is proposed to be reconstructed and widened to four lanes with one through lane in each direction plus left turn lanes along with U-turns and sidewalks.

The existing overpass at FM 35 is proposed to be reconstructed and widened to four lanes with one southbound through lane plus a left turn lane and two northbound left turn lanes along with U-turns and sidewalks.

Logical termini for the proposed improvements to IH-30 are from Bass Pro Drive to west of FM 2642 because these roadways represent rational end points for the transportation improvements and for review of the environmental impacts of the proposed project. Within the logical termini, IH-30 is of independent utility because the proposed improvements can be accomplished without additional improvements in the proposed project limits. The project limits encompass the entire length of the project in which construction would take place and account for transitions into the existing roadway.

The proposed project is included in the Metropolitan Transportation Plan (MTP) (Mobility 2045), approved by the Regional Transportation Council (RTC) on June 14, 2018, and has been submitted for inclusion in the August 2018 revision cycle for the 2019-2022 Transportation Improvement Program (TIP), expected approval November 2018 (TxDOT 2018b). The anticipated total construction cost for the proposed project is \$566,694,989. See **Appendix E—Plan and Program Excerpts**.

3.0 PURPOSE AND NEED

3.1 NEED

The proposed project is needed due to traffic congestion that limits mobility and to provide for future growth within the project corridor.

3.2 SUPPORTING FACTS AND/OR DATA

The population of Rockwall County increased from 43,080 in 2000 to 78,377 in 2010, an increase of 82 percent over the 10-year period (U.S. Census Bureau [USCB] 2000, 2010). Based on the 2012-2016 American Community Survey, the population in Rockwall County has increased to 88,010, a 12 percent population growth over the previous six years. Additionally, the cities surrounding the project limits have seen exponential population growth from 2000 to 2010 (**Table 1**).

Table 1 – City Population Growth

| City | 2000 | 2010 | Percent Increase |
|------------|---------|---------|------------------|
| Fate | 497 | 6,357 | 1,179% |
| Garland | 215,768 | 226,876 | 5% |
| Rockwall | 17,976 | 37,490 | 109% |
| Rowlett | 44,503 | 56,199 | 26% |
| Royse City | 2,957 | 9,349 | 216% |

Source: USCB 2000, 2010

The improvements to IH-30 are necessary based on the population growth in the general vicinity of the project, as well as the projected increase in traffic volumes over the next 20 years. The existing average daily traffic (ADT) for the project was measured at 187,300 vehicles per day (VPD) from Bass Pro Drive to SH 205, 110,850 VPD from SH 205 to FM 551, and 77,250 VPD from FM 551 to FM 2642 in 2023. The ADT for these sections of IH-30 is predicted to increase to 259,150 VPD, 153,300 VPD, and 106,850 VPD, respectively, by the design year 2043.

Widening the roadway would accommodate future traffic volumes, reduce congestion, and improve pedestrian and bike safety along the corridor with the addition of sidewalks and a shared use path.

As part of a different project, frontage roads are being designed and constructed over Lake Ray Hubbard along IH-30 from Bass Pro Drive to Dalrock Road (CSJ 0009-11-241 and 0009-12-221), however they do not exist from Dalrock Road to Horizon Road. IH-30, which is an 8-lane divided freeway, is a major transportation facility over Lake Ray Hubbard, providing an east-west transportation route linking Dallas and Rockwall Counties. The continuous frontage road system between Bass Pro Drive to Horizon Drive would help to relieve traffic congestion along IH-30 and improve access and mobility to adjacent properties and neighborhoods.

3.3 PURPOSE

The purpose of the proposed project is to reduce traffic congestion and improve mobility along IH-30 from Bass Pro Drive to west of FM 2642.

4.0 ALTERNATIVES

4.1 BUILD ALTERNATIVE

The Build Alternative would widen an existing urban divided freeway. The project limits are from Bass Pro Drive in the City of Garland to west of FM 2642 near the Rockwall/Hunt County Line. The project length is approximately 16.75 miles and traverses the cities of Garland, Rowlett, Rockwall, Fate, Mobile City, and Royse City, and Dallas and Rockwall Counties. The proposed improvements would require ROW acquisition of approximately 34.60 acres including 19.41 acres of Lake Ray Hubbard ROW. See **Section 2.2** for more details.

The Build Alternative was selected because it would relieve traffic congestion along the IH-30 corridor and in the surrounding area as well as improve safety with the addition of sidewalks and shared-use paths. The Build Alternative has been designed to minimize environmental and human impacts as much as practicable while addressing the safety and congestion issues experienced on the current IH-30 freeway.

4.2 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, the existing IH-30 freeway would not be modified. The No-Build Alternative assumes that no transportation improvements beyond the continued maintenance of the existing facility would occur. This alternative would not improve safety or congestion within the study area; therefore, it would not meet the need and purpose of the project. The No-Build Alternative will be carried forward as a baseline against which the recommended Build Alternative will be compared.

4.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION

No other alternatives were identified.

5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

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

- Congestion Management Process Technical Report
- CO TAQA Technical Report
- MSAT Technical Report
- Archeological Resources Background Study
- Project Coordination Request for Historical Studies Project
- Biological Evaluation Form and Tier I Site Assessment
- Community Impact Assessment Technical Report
- Hazardous Materials Initial Site Assessment (ISA)
- Indirect Impacts Analysis Technical Report
- Traffic Noise Technical Report
- Water Resources Technical Report

The technical reports may be inspected and copied upon request at the TxDOT Dallas District Headquarters located at: 4777 East Highway 80, Mesquite, Texas 75150

The following sub-sections identify the environmental consequence of the Build and No-Build Alternatives on each resource.

5.1 Right-of-Way/Displacements

Build Alternative: The Build Alternative would require the acquisition of approximately 34.60 acres of new (additional) ROW including 19.41 acre of Lake Ray Hubbard ROW. Additionally, 12.07 acres of temporary easements and 1.17 acres of permeant easements would be required (see **Appendix C: Schematics**). The additional ROW and easements would be acquired from 96 parcels. No displacements are anticipated during the construction of this project.

No-Build Alternative: Under the No-Build Alternative, no project-related ROW would be acquired.

5.2 Land Use

The proposed project is located within Dallas and Rockwall Counties, and traverses the cities of Garland, Rowlett, Rockwall, Royse City, Mobile City, and Fate, and unincorporated areas in the counties.

Land surrounding the existing ROW consists of a mixture of agricultural, residential properties, and commercial and/or light industrial properties. The western portion of the project limits near the cities

of Garland, Rowlett, and Rockwall are highly urbanized with commercial and mixed-use properties. The eastern portion of the project limits is primarily agricultural with scattered homesteads and commercial/industrial properties located adjacent to the roadway.

Build Alternative: The approximately 34.60 acres of new ROW, 12.07 acres of temporary easements, and 1.17 acres of proposed easements that are currently designated as water, retail, commercial, agricultural, industrial and undeveloped land would be converted to transportation ROW; however, the proposed project would not substantially alter the existing land use in the area.

No-Build Alternative: Under the No-Build Alternative, the additional ROW would not be obtained and there would be no land use impacts.

5.3 Farmland

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) database, the proposed project area contains prime farmland soils. **Table 2** identifies the soil map units within the project limits and farmland classification according to the Web Soil Survey (NRCS 2018).

Table 2 – Soil Units and Farmland Classification for the IH-30 Improvements

| Soil Type | Farmland Classification |
|---|-------------------------|
| Altoga silty clay, 5 to 12 percent slopes, eroded | Not prime farmland |
| Branyon clay, 0 to 1 percent slopes | Prime farmland |
| Leson clay, 1 to 3 percent slopes | Not prime farmland |
| Houston Black clay, 0 to 1 percent slopes | Prime farmland |
| Houston Black clay, 1 to 3 percent slopes | Prime farmland |
| Altoga silty clay, 3 to 12 percent slopes, eroded | Not prime farmland |
| Burleson clay, 1 to 3 percent slopes | Prime farmland |
| Burleson clay, 0 to 1 percent slopes | Prime farmland |
| Burleson clay, 1 to 3 percent slopes | Prime farmland |
| Ferris-Heiden complex, 2 to 5 percent slopes | Prime farmland |
| Heiden clay, 3 to 5 percent slopes | Prime farmland |
| Houston Black clay, 0 to 1 percent slopes | Prime farmland |
| Houston Black clay, 1 to 3 percent slopes | Prime farmland |
| Lewisville silty clay, 1 to 3 percent slopes | Prime farmland |
| Trinity clay, occasionally flooded | Not prime farmland |
| Trinity clay, frequently flooded | Not prime farmland |

Source: NRCS 2018

Build Alternative: In compliance with the Farmland Protection Policy Act (FPPA) of 1981, Farmland Conversion Impact Rating Form NRCS-CPA-106 was completed because the proposed project would convert farmland subject to FPPA to a non-agricultural, transportation use. Because the site assessment score in Part VI of the form was less than 59 (actual score is 23), the project does not require coordination with the NRCS. The *Biological Evaluation Form* contains a copy of the Farmland Conversion Impact Rating Form (NRCS-CPA-106).

Farmland impacts would be limited to areas directly adjacent to the existing IH-30 project corridor and would not result in the division or separation of existing agricultural land. Adjacent farmlands would continue to function as they do under existing conditions; therefore, encroachment-alteration effects stemming from farmland impacts are not anticipated as a result of the Build Alternative.

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

5.4 Utilities/Emergency Services

The existing utilities along the proposed project include water lines, sewer lines, gas lines, overhead electrical lines, and telephone lines.

Build Alternative: Implementation of the proposed project may require the relocation and adjustment of utilities such as water lines, sewer lines, gas lines, overhead electrical lines, 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. TxDOT would coordinated with the affected utility provider to ensure that no substantial interruption of service would take place.

The Dallas and Rockwall County Emergency Medical Service (EMS) and Sheriff's Office, as well as the Fire and Police Departments of the surrounding communities would be notified of the construction start dates. Construction activities are not expected to cause substantial delays or access issues for emergency service vehicles. Construction of the proposed project could provide enhanced access and reduced response times for local emergency services.

Construction of the proposed project would be phased in a manner that would allow the existing and cross road systems to remain open to traffic during construction of the new roadway. A detailed traffic control plan would be completed prior to construction. At least one access to all properties would be available during construction.

No-Build Alternative: Under the No-Build Alternative there would be no project-related impacts to utilities. Emergency service response would continue to be hindered by heavy congestion and unreliable travel times associated with congestion.

5.5 Bicycles and Pedestrian Facilities

Build Alternative: In accordance with TxDOT's policy for bicycle and pedestrian accommodation and a federal policy statement on Bicycle and Pedestrian Accommodations Regulations and Recommendations by the U.S. Department of Transportation signed on March 11, 2010, the inclusion of bicycle and pedestrian facilities would be considered as part of the proposed project. Bicycle and pedestrian traffic would be accommodated with 6-foot wide sidewalks along the IH-30 frontage roads. Additionally, on the section crossing Lake Ray Hubbard from Bass Pro Drive to Horizon Road, bicycle and pedestrian traffic would be accommodated with a 12-foot wide outside shared-use path and 8-foot wide sidewalk. The sidewalk and shared use path over Lake Ray Hubbard are barrier separated from the vehicle lanes.

No-Build Alternative: Under the No-Build Alternative, new bicycle and pedestrian facilities would not be constructed.

5.6 Community Impacts

Build Alternative: A detailed discussion of the community impacts can be found in the *Community Impacts Assessment (CIA) Technical Report* for the proposed project.

The CIA study area is comprised of 1,117 census blocks that encompass the proposed project limits. The CIA study area encompasses portions of the cities of Garland, Rowlett, Rockwall, Fate, Mobile City, and Royse City. The general character is suburban, mixed use, and scattered rural.

Changes in access and travel patterns would result from the reconfiguration of ramps at 10 cross streets/side streets; the construction of under/overpasses at Ben Payne Road/Rochelle Road, Blackland Road, and the future Rockwall County Outer Loop; and the addition of approximately 2.8

miles of new frontage roads between Dalrock Road and Horizon Road. The proposed project would improve access and mobility for users along IH-30 and for the surrounding communities. The proposed roadway could improve emergency response times via improved mobility and reduced congestion. Also, the proposed shared-use lanes, sidewalks, and crosswalks could shorten the travel time between trips for pedestrians and cyclists. The proposed roadway would ultimately provide drivers, pedestrians, and cyclists a more efficient route to access cross streets and adjacent properties in the project limits. Therefore, negative impacts to access and travel patterns for communities in the project limits resulting from the implementation of the proposed project are not anticipated.

The proposed widening of IH-30 would increase the facility's capacity and improve mobility. Additionally, bike/pedestrian facilities would be introduced along the proposed project area frontage roads, providing improved access/use of the proposed project limits for members of the bike/pedestrian community. Existing cross streets would remain open and operational as they are currently, except for the Dalrock Road/Bayside Drive crossing and FM 3549/Corporate Crossing cross street which would be constructed prior to the ultimate improvements. New cross streets are proposed at Rochelle Road/Ben Payne Road and Blackland Road. Additionally, a bridge and U-Turns would be constructed to accommodate the future Rockwall County Outer Loop.

These proposed improvements would make it easier for people to travel within the CIA study area and to surrounding communities to complete their day to day activities. These effects from the proposed project would lead to improved community cohesion because area residents and workers would be better able to venture out into their communities, patronize local businesses, and interact with other community members and business patrons from both near and far. Negative impacts to community cohesion resulting from the implementation of the proposed project are not anticipated.

No-Build Alternative: Under the No-Build Alternative, there would be no impacts to the community associated with the proposed project.

5.6.1 Environmental Justice

An environmental justice (EJ) analysis was completed in accordance with Executive Order (EO) 12898 and a detailed discussion of EJ can be found in the *IH-30 CIA Technical Report*.

Build Alternative: Although EJ populations are present in the project limits, disproportionately high and adverse impacts on minority and/or low-income populations resulting from the implementation of the proposed project are not anticipated. The proposed project would not restrict access to any existing public or community services, businesses, commercial areas, or employment centers. Minority populations are present throughout the CIA study area. Two facilities that are utilized by minority and/or low-income populations (Hubbard's Ridge Apartments and Cypress Creek Apartment Homes at Parker Boulevard) are located adjacent to the proposed project. These facilities would not experience access and travel pattern impacts because they would continue to be accessible following the proposed improvements as they are currently. The remaining identified facilities that are utilized by minority and/or low-income populations would not be impacted. These facilities would realize the

same benefits as other facilities within the CIA study area. In the long-term, the entire community, including minority and low-income populations, would benefit from the proposed project, including improved safety and mobility, and reduced traffic congestion. All ROW acquisition would be completed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. 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.

No-Build Alternative: Under the No-Build Alternative, there would be no impacts to EJ as a result of the implementation of the proposed project.

5.6.2 Limited English Proficiency

Limited English Proficiency (LEP) is defined as persons who speak English "less than very well". The total recorded population (age five years and over) for the 25 census block groups that encompass the CIA study area is 69,504. Of the 69,504 people, 4,977 or 7.2 percent, speak English less than "very well". Of those that speak English less than "very well", 79.0 percent speak Spanish; 9.4 percent speak other Indo-European languages; 9.4 percent speak Asian and Pacific Island languages; and 2.2 percent speak other languages. For the 25 census block groups that contain LEP populations, the percent LEP ranges from 0.6 percent in Census Block Group 4 of Census Tract 403.02 to 67.4 percent in Census Block Group 1 of Census Tract 405.03.

Build Alternative: Reasonable steps have been and would continue to be taken to ensure LEP persons have meaningful access to the programs, services, and information TxDOT provides. Persons who have special communication or accommodation needs, or need an interpreter, have been, and will continue to be encouraged to contact the TxDOT Dallas District Public Information Office for assistance. Therefore, the requirements of EO 13166, pertaining to LEP, appear to be satisfied.

The legal notices for the public meetings were published in English and in Spanish, and provided contact information for persons interested in attending the meetings who had special communication/accommodation needs. A project team member fluent in Spanish was available at the public meetings to translate. Some public meeting handout materials were made available in Spanish. These or similar efforts to accommodate LEP persons would be repeated for the public hearing. Therefore, reasonable steps have been and will continue to be taken in the NEPA process to ensure that LEP persons have meaningful access to the programs, services, and information TxDOT provides.

No-Build Alternative: Under the No-Build Alternative, there would be no impacts to LEP populations as a result of the implementation of the proposed project.

5.7 Visual/Aesthetics Impacts

IH-30 is an existing divided freeway with discontinuous frontage roads within the project limits. Overhead lights are present throughout the corridor. Vegetation in the ROW consists primarily of

maintained grassed. Aesthetic enhancement of the existing roadway is minimal. The roadway is a dominant visual feature in the proposed project limits.

Build Alternative: The area is currently crisscrossed by a network of municipal roads, so the widening of the roadway is not anticipated to appreciably change the visual environment. The proposed project is not anticipated to impact existing landscaping or other aesthetic features. Landscaping would not be included as a part of the proposed project; however, it would likely be part of the construction phase of the project. Existing overhead lighting would be impacted by the widening of the existing roadway and would be relocated as part of the project construction.

The proposed project is not anticipated to adversely affect aesthetics; therefore, mitigation is not warranted.

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

5.8 Cultural Resources

Cultural resources are structures, buildings, archeological sites, districts (a collection of related structures, buildings, and/or archeological sites), cemeteries and objects. Both federal and state laws require consideration of cultural resources during project planning. At the federal level, NEPA and the National Historic Preservation Act (NHPA) of 1966, among others, apply to transportation projects such as this one. In addition, state laws such as the Antiquities Code of Texas apply to these projects. Compliance with these laws often requires consultation with the Texas Historic Commission (THC)/Texas State Historic Preservation Officer (SHPO) and/or federally recognized tribes to determine the project's effects on cultural resources. Review and coordination of this project followed approved procedures for compliance with federal and state laws.

5.8.1 Archeology

The purpose of the archeological investigation is to conduct an inventory or determine the presence/absence of archeological resources (36 Code of Federal Regulations [CFR] 800.4) and to evaluate identified resources for their eligibility for inclusion on the National Register of Historic Places (NRHP), as per Section 106 (36 CFR 800) of the NHPA of 1966, as amended, or as a designated state archeological landmark (SAL) under the Antiquities Code of Texas (13 Texas Administrative Code 26.12).

Background research for this project consisted of an online records search through the THC's Archeological Sites Atlas (THC, 2017) and a review of historical maps and aerial photographs. Research focused on the identification of archeological sites, sites listed as SAL, Recorded Texas Historic Landmarks (RTHL), sites listed on the NRHP, cemeteries, and previously conducted archeological surveys within 0.62 mile (one kilometer) of the Area of Potential Effects (APE) (**Appendix F**). The APE for archeological resources is defined as the footprint of the proposed project to the maximum depth of impact, including all easements, and project specific locations. The search

identified 15 previously conducted archeological surveys, 13 archeological sites, seven Texas Historical Markers (one of which is placed at an RTHL), six cemeteries, and one National Register site, which is also a RTHL, located within one kilometer of the APE. Only one archeological site (41RW24) is located in close proximity to the APE. Additionally, eight of the 15 previously conducted archeological surveys overlap with the APE. See the Archeological Background Study: Proposed Improvements to IH-30 from Bass Pro Drive to west of FM 2642, Dallas and Rockwall Counties, Texas report for detailed information on the previously listed sites and surveys.

Build Alternative: It is not anticipated that the proposed project would result in direct impacts to known archeological resources. In the unlikely event that cultural resources are discovered during construction of the proposed project, TxDOT would immediately initiate cultural resource discovery procedures. All work in the vicinity of the discovery would cease until a specialist from TxDOT and/or the THC could arrive on site and assess the discovery's significance and the need, if any, for additional investigation.

Consultation with federally-recognized Native American tribes was initiated on January 6, 2017 and concluded February 6, 2017. No objections or expressions of concern were received. See Appendix G for the tribal coordination documentation.

Potential impacts to archeological resources would be limited to the construction phase of the project and confined to the existing and proposed ROW/easements; thus, encroachment-alteration effects would not occur.

No mitigation would be required. It is not anticipated that the proposed project would result in direct impacts to known archeological resources.

No-Build Alternative: As construction of the proposed IH-30 improvements would not occur, there would be no project-related impacts on archeological resources associated with the No-Build Alternative.

5.8.2 Historic Properties

Build Alternative: The evaluation of potential impacts to historic-age cultural resources was initiated for the Build Alternative with the preparation of a project coordination request in March 2018. From this, TxDOT determined that a historical studies reconnaissance survey would be required, leading to the preparation of a historical studies research design in May 2018. Subsequently, a historic resources survey was conducted of the APE defined for historic-age resources, which was restricted to the existing ROW where project activities were confined to the existing ROW and 150 feet beyond the proposed ROW. The *Historic Resources Survey Report* (HRSR) examined 21 historic-age resources within the project area.

The HRSR found that none of the historic-age resources within the APE meet the criteria for potential eligibility to be individually listed on the NRHP. After reviewing the HRSR, TxDOT architectural historians concurred with the findings and recommendations within the HRSR report for the Build

Alternative, and concluded that the proposed project would have no direct, indirect, or cumulative effects on historic properties within the APE. In compliance with the Section 106 PA-TU, TxDOT historians determined project activities would not affect historic properties. In compliance with the Antiquities Code of Texas and the THC Memorandum of Understanding (MOU), TxDOT historians determined project activities have no potential for adverse effects (**Appendix G**). Individual project coordination with the SHPO is not required.

No-Build Alternative: As construction of the proposed IH-30 project would not occur, there would be no project-related impacts on historic properties associated with the No-Build Alternative.

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

Build Alternative: Section 4(f) protects publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State or local significance, and any land from an historic site of national, state, or local significance. ROW would be purchased from Lake Ray Hubbard which is owned by the City of Dallas. None of the parcels being purchased as part of this project are currently used as public park or recreation area; therefore, it was determined that there are no Section 4(f) properties within the project limits.

Additionally, there are no lands protected by Section 6(f) of the Land and Water Conservation Fund (LWCF) Act or Parks and Wildlife Code (PWC) Chapter 26 within the project limits.

No-Build Alternative: As construction of the proposed IH-30 project would not occur, there would be no project-related impacts on Section 4(f), LWCF Act Section 6(f) and PWC Chapter 26 properties associated with the No-Build Alternative.

5.10 Water Resources

The western portion of the proposed project occurs within the Trinity River basin, while the eastern portion occurs within the Sabine River basin. The project limits occur within four watersheds within those basins: East Fork Trinity River-Lake Ray Hubbard, Duck Creek-East Fork Trinity River, Kings Creek-Cedar Creek Reservoir, and Royse City-South Fork Sabine River. As detailed in the *Water Resources Technical Report*, the proposed project would cross 17 streams, two emergent wetlands, and three forested wetlands (**Appendix F**). See the *Water Resources Technical Report* for detailed information and figures.

5.10.1 Section 404 of the Clean Water Act

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into wetlands and other waters of the U.S. under Section 404, subsection 330.5(a)(21) of the Clean Water Act (CWA). Authorization is required from the USACE for any activity that would result in the discharge of dredged or fill material into waters of the U.S. Regulated activities may be permitted through the USACE via an Individual Permit (IP), Regional General Permit, or Nationwide Permit (NWP).

The proposed project would comply with U.S. Environmental Protection Agency's (EPA) Section 404(b)(1) Guidelines 40 CFR Part 230, allowing the discharge of dredged or fill material only if there is no practicable alternative that would have less adverse effects on the aquatic ecosystem. Since the proposed project would consist of expanding an existing facility, and there are no other practicable build alternatives, the discharge of dredged or fill material into waters of the U.S. is permissible.

Build Alternative: **Table 3** lists the water bodies identified within the proposed project limits, amount of impacts to the water bodies that would result from implementation of the proposed project, and the applicable USACE permit. Both NWP 25 - Structural Discharges and NWP 14 - Linear Transportation Projects would be used to authorize impacts to waters of the U.S. for this project. Since impacts at Crossing 14 would have permanent impacts to a wetland, a Pre-Construction Notification (PCN) to the USACE would be required for the proposed project. The impacts of the proposed project are presented in **Table 3**. Appropriate measures would be taken to maintain normal downstream flows and minimize flooding. Temporary fills would consist of clean materials and be placed in a manner that would not be eroded by expected high flows. Temporary fills would be removed in their entirety and the affected area returned to preconstruction elevations and revegetated as appropriate. Locations within the project limits that involve stream modification, stream channel modifications, including bank stabilization, would be limited to the minimum necessary to construct or protect the structure and the immediate vicinity of the project. The activity would comply with all general and regional conditions applicable to NWP 14 and 25.

The potential for project-related encroachment-alteration effects on waters of the U.S. would be mitigated through permanent (post-construction) Best Management Practices (BMPs) as described below. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

Mitigation could be required for this project and the final amount will be determined when the PCN is submitted to the USACE.

No-Build Alternative: As construction of the proposed IH-30 Improvements would not occur, there would be no project-related impacts on waters of the U.S. associated with the No-Build Alternative.

Table 3 – Potential Impacts to Water Features

| Crossing Number | Feature Name ¹ | Feature Type ² | Jurisdictional* | Existing Structure | Permanent Impacts Area | | Temporary Impacts Area | | USACE Permit |
|-----------------|---------------------------|---------------------------|-----------------|-----------------------|------------------------|---------|------------------------|---------|--------------|
| | | | | | Feet | (acres) | Feet | (acres) | |
| 1 | Lake Ray Hubbard | Lake | Yes | Bridge columns | NA | 0.30 | NA | 0 | NWP 25 |
| 2 | Wetland 1 | PEM | Yes | None | NA | 0 | NA | 0 | None |
| | Drainage Ditch 1 | Ephemeral | No | None | 0 | 0 | 0 | 0 | |
| 3 | Wetland 2 | PFO | Yes | None | NA | 0 | NA | 0 | None |
| | Drainage Ditch 2 | Ephemeral | No | None | 0 | 0 | 0 | 0 | |
| 4 | Wetland 3 | PEM | Yes | None | NA | 0 | NA | 0 | None |
| | Wetland 4 | PFO | Yes | None | NA | 0 | NA | 0 | |
| 5 | Wetland 5 | PEM | No | None | NA | 0 | NA | 0 | None |
| | Wetland 6 | PFO | No | None | NA | <0.01 | NA | 0.22 | |
| | Wetland 7 | PFO | No | None | NA | 0 | NA | 0.08 | |
| | Wetland 8 | PEM | No | None | NA | 0 | NA | 0.03 | |
| | Wetland 9 | PEM | No | None | NA | 0 | NA | 0 | |
| | Drainage Ditch 3 | Ephemeral | No | None | 0 | 0 | 0.0 | 0 | |
| 6 | Drainage Ditch 4 | Ephemeral | No | None | 0 | 0 | 477 | 0.02 | None |
| 7 | Drainage Ditch 5 | Ephemeral | No | None | 0 | 0 | 150 | <0.01 | None |
| | Wetland 10 | PEM | No | None | NA | 0 | NA | 0.17 | |
| 8 | Drainage Ditch 6 | Ephemeral | No | None | 258 | 0.01 | 0.0 | 0 | None |
| | Drainage Ditch 7 | Ephemeral | No | None | 0 | 0 | 13 | <0.01 | |
| | Wetland 11 | PEM | No | None | NA | 0.03 | NA | 0 | |
| 9 | S-1 | Ephemeral | Yes | Culvert under roadway | 9 | <0.01 | 26 | <0.01 | NWP 14 |
| | S-2 | Intermittent | Yes | Culvert under roadway | 30 | <0.01 | 82 | 0.01 | |

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| Crossing Number | Feature Name ¹ | Feature Type ² | Jurisdictional* | Existing Structure | Permanent Impacts Area | | Temporary Impacts Area | | USACE Permit |
|-----------------|----------------------------|---------------------------|-----------------|--------------------------|------------------------|---------|------------------------|---------|--------------------|
| | | | | | Feet | (acres) | Feet | (acres) | |
| | Drainage Ditch 8 | Ephemeral | No | None | 136 | <0.01 | 0 | 0 | |
| 10 | S-3 | Ephemeral | Yes | Culvert under roadway | 12 | <0.01 | 60 | 0.01 | NWP 14 |
| 11 | S-4 (Brushy Creek) | Intermittent | Yes | Culvert under roadway | 0 | 0 | 73 | 0.01 | NWP 14 |
| 12 | S-5 | Intermittent | Yes | Culvert under roadway | 0 | 0 | 0 | | None |
| 13 | S-6 | Ephemeral | Yes | Culvert under roadway | 8 | <0.01 | 26 | <0.01 | NWP 14 |
| 14 | S-7 | Ephemeral | Yes | Culvert under roadway | 8 | <0.01 | 30 | <0.01 | NWP 14 with PCN |
| | Wetland 12 | PFO | Yes | None | NA | 0.002 | NA | 0.01 | |
| 15 | S-8 | Ephemeral | Yes | Culvert under roadway | 8 | <0.01 | 19 | <0.01 | NWP 14 |
| 16 | S-9 | Intermittent | Yes | Culvert under roadway | 12 | <0.01 | 101 | 0.02 | NWP 14 |
| 17 | S-10 (Parker Creek) | Intermittent | Yes | Culvert under roadway | 6 | <0.01 | 104 | 0.07 | NWP 14 |
| 18 | S-11 | Ephemeral | Yes | Culvert under roadway | 21 | <0.01 | 61 | <0.01 | NWP 14 |
| 19 | S-12 | Intermittent | Yes | Culvert under roadway | 0 | 0 | 0 | 0 | None |
| 20 | S-13 (Pond Branch) | Intermittent | Yes | Culvert under roadway | 18 | 0.01 | 228 | 0.08 | NWP 14 |
| 21 | Drainage Ditch 9 | Intermittent | No | Culvert under roadway | 32 | <0.01 | 0 | 0 | None |
| 22 | S-14 | Intermittent | Yes | Culvert under roadway | 35 | 0.01 | 87 | 0.02 | NWP 14 |
| | S-15 (Bois d'Arc Creek) | Intermittent | Yes | Bridge piers and culvert | 0 | 0 | 591 | 0.23 | |
| | S-16 (Sabine Creek) | Intermittent | Yes | Bridge piers and culvert | 0 | 0 | 491 | 0.22 | |
| 23 | S-17 | Intermittent | Yes | Culvert under roadway | 43 | 0.01 | 35 | <0.01 | NWP 14 |

- ¹ Wetland 1, Wetland 2, Wetland 3, Wetland 4 and Wetland 5 will be impacted as part of the IH-30 Frontage Roads project (CSJ 0009-11-241 & 0009-12-221). There will be no additional impacts to these features due to this project.
- ² PFO (Palustrine forested wetland), PEM (Palustrine emergent wetland)
- * If these water features are determined by the USACE to be jurisdictional additional permitting could be required.

5.10.2 Clean Water Act Section 401

Build Alternative: Since a NWP would be necessary, construction activities would require compliance with the State of Texas Water Quality Certification Program. The 401 Certification requirements for NWP 14 would be met by implementing BMPs from the Texas Commission on Environmental Quality (TCEQ) 401 Water Quality Certification Conditions for NWPs.

Impacts to storm water would be minimized as much as possible by utilizing approved temporary and permanent erosion and sediment control BMPs as specified by TCEQ Construction General Permit (CGP) (TXR 150000). The CGP requires that a Storm Water Pollution Prevention Plan (SW3P), notice of intent (NOI), and notice of termination (NOT) be prepared for the proposed project. The proposed project is located within the boundaries of the City of Garland, Rowlett, Royse City, and Rockwall and TxDOT's municipal separate storm water sewer system (MS4) Phase I permits; TxDOT would comply with the applicable MS4 requirements.

No-Build Alternative: Under the No-Build Alternative, no impacts to waters of the U.S. would occur and, as a result, no 401 Certification would be required.

5.10.3 Executive Order 11990, Wetlands

EO 11990 Protection of Wetlands (42 Federal Register 26961, May 24, 1977) provides the requirement "to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative."

Build Alternative: In areas with jurisdictional wetlands, impacts would be limited to the road grading and culvert extensions and would result in minimal placement of permanent fill in jurisdictional areas. See **Table 3** for detailed wetland impacts.

No-Build Alternative: There would be no project-related impacts on wetlands associated with the No-Build Alternative.

5.10.4 Rivers and Harbours Act

This project does not involve work in or over a navigable water of the U.S.; therefore, Section 10 of the Rivers and Harbors Act does not apply. Likewise, a navigational clearance under the General Bridge Act of 1946, and Section 9 of the Rivers and Harbors Act (administered by the U.S. Coast Guard [USCG]) is not applicable. Coordination with the USCG (for Section 9 and the General Bridge Act) and the USACE (for Section 10) would not be required.

5.10.5 Section 303(d) of the Clean Water Act

Runoff from the project would discharge directly into Lake Ray Hubbard, Parker Creek, Buffalo Creek, Pond Branch, or Sabine Creek. The TCEQ has classified Lake Ray Hubbard (Segment 0820) as an unimpaired segment within the project area. According to the *2014 Texas Integrated Report 303(d)*

List, there are no streams listed as impaired within the proposed project limits. Lake Ray Hubbard and Buffalo Creek discharge into Segment 0819 of the East Fork Trinity River, which is a Section 303(d) listed impaired water approximately 5.2 miles downstream of the project limits.

5.10.6 Section 402 of the Clean Water Act

Build Alternative: This project would include five or more acres of earth disturbance. TxDOT would comply with TCEQ's Texas Pollutant Discharge Elimination System (TPDES) CGP. A SW3P would be implemented, and a construction site notice would be posted at the construction site. A NOI and a NOT would be required. The SW3P would detail what BMPs would be utilized and where they would be placed in order to reduce storm water impacts to the maximum extent practicable. The SW3P would also ensure that all disturbed areas are properly re-vegetated prior to the NOT being filed.

No-Build Alternative: This alternative would not alter the amount of runoff generated within the proposed project area.

5.10.7 Floodplains

EO 11988, Floodplain Management, requires federal agencies to avoid activities which directly or indirectly result in the development of floodplain area.

The Cities of Garland, Rowlett, Royse City, and Rockwall and Dallas and Rockwall Counties are participants in the National Flood Insurance Program (NFIP). Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the project limit crosses ten special flood hazard areas inundated by the 100-year flood (1 percent annual chance flood) in which base elevations have been determined. There are approximately 50 acres of 100-year floodplain within the project limits. The floodplain areas are located on Community-Panel Numbers 48113C0385L (effective 07/07/2014), 48397C0085L (effective 09/26/2008), 48113C0245K (effective 07/07/2014), 48397C0020L (effective 09/26/2008), 48085C057J (effective 06/02/2009), 48113C0275K (effective 07/20/2014), 48397C0060L (effective 09/26/2008), and 48085C0580J (effective 06/02/2009).

Build Alternative: The proposed project would impact 50 acres of 100-year floodplain and floodplain encroachments would occur as a result of the proposed project. Additionally, there would be flood storage lost due to the construction of the bridge piers across Lake Ray Hubbard. The hydraulic design for this project would be in accordance with current FHWA, TxDOT, and local design policies, laws, regulations, and standards. With the mitigation, the proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances. For these reasons, the proposed project is not anticipated to create a significant encroachment on any floodplains, as defined in 23 CFR 650.

No-Build Alternative: This alternative would avoid activities which directly or indirectly result in the development of floodplain area.

5.10.8 Wild and Scenic Rivers

The proposed project would not impact any present, proposed, or potential unit of the National Wild and Scenic Rivers System.

5.10.9 Trinity River Corridor Development Certification

The proposed project limits are not within the Trinity River Corridor Development Regulatory Zone; therefore, a Corridor Development Certificate permit would not be required.

5.10.10 Coastal Barrier Resources

The proposed project would not impact any Coastal Barrier Resources.

5.10.11 Coastal Zone Management

The proposed project limits are not located within or likely to affect land or water uses within the Texas Coastal Management Area.

5.10.12 Edwards Aquifer

The proposed project limits are not located within the Edwards Aquifer Contributing or Recharge Zones; therefore, the Edwards Aquifer Rules do not apply.

5.10.13 International Boundary and Water Commission

This proposed project limits are not located within the floodplain of the Rio Grande; therefore, coordination with the International Boundary Water Commission would not be required.

5.10.14 Drinking Water Systems

According to the Texas Water Development Board (TWDB) Groundwater Database, there are no water wells mapped within the project limits.

Build Alternative: Since no water wells were identified within the project limits, no impacts would be anticipated. If any wells are encountered during construction, they would be properly plugged in accordance with state statutes and regulations.

No-Build Alternative: This alternative would have no impacts to drinking water systems.

5.11 Biological Resources

5.11.1 Texas Parks and Wildlife Coordination

A TxDOT Biological Resources Technical Report, containing the Biological Evaluation Form, Tier I Site Assessment Form, and supporting documents, was completed for the proposed project. Early coordination with TPWD was initiated on August 30, 2018 and completed on October 26, 2018. See

Appendix G for the coordination documentation. Documentation of the *Biological Resources Technical Report* is maintained in the project file at the TxDOT Dallas District Office.

The Texas Natural Diversity Database (TxNDD) data, obtained from TPWD on June 19, 2018, was reviewed for known element occurrences (EO) of state or federally-listed species or managed areas. Three known EOs were identified within 1.5 miles of the proposed project limits, a rookery, Mollisol Blackland Prairie (*Schizachyrium scoparium* -*Andropogon gerardii* - *Sorghastrum nutans* - *Bifora americana* Mollisol Grassland), and a cave obligate isopod (*Caecidotea bilineata*).

Suitable habitat was observed within the proposed project limits for the following rare species (as identified in TPWD's Annotated County List of Rare Species for Dallas and Rockwall counties): Texas milk vetch (*Astragalus reflexus*), Western burrowing owl (*Athene cunicularia hypugaea*), Plains spotted skunk (*Spilogale putorius interrupta*), and Texas garter snake (*Thamnophis sirtalis annectens*) and the state-listed threatened species: Wood Stork (*Mycteria Americana*), Texas heelsplitter (*Potamilus amphichaenus*), Texas Pigtoe (*Fusconaia askewi*), Alligator snapping turtle (*Macrochelys temminckii*), and Timber rattlesnake (*Crotalus horridus*). Additionally, it was determined that habitat within the proposed project action area matches the habitat description for the American Peregrine Falcon, Arctic Peregrine Falcon (*Falco peregrinus tundrius*), Bald Eagle (*Haliaeetus leucocephalus*), and Peregrine Falcon (*Falco peregrinus*); however, due to the urban nature and proximity to the roadway, it is unlikely that these species would utilize the project area.

BMPs would be implemented for the following rare species: Western burrowing owl, Plains spotted skunk, and Texas garter snake. BMPs would be implemented for the following state-listed species: Wood Stork, Texas heelsplitter, Texas Pigtoe, Alligator snapping turtle, and Timber rattlesnake. There are no BMPs for the Texas milk vetch; therefore, the BMP PA does not eliminate the requirement for coordination.

The following BMPs would be implemented for the proposed project:

Wood Stork and Western Burrowing Owl BMPS (Bird BMPs): In addition to complying with the Migratory Bird Treaty Act (MBTA), perform the following BMPs:

- a) 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.
- b) Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season.
- c) Avoid the removal of unoccupied, inactive nests, as practicable.
- d) Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair.
- e) Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.

Plains spotted skunk BMPs: 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.

Alligator snapping turtle BMPs- Minimize impacts to wetland and riverine habitats and implement the Aquatic Reptile BMPs.

Amphibian and Aquatic Reptile BMPs

- a) Contractors would be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
- b) Minimize impacts to wetland, temporary and permanent open water features, including depressions, and riverine habitats.
- c) Maintain hydrologic regime and connections between wetlands and other aquatic features.
- d) Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.
- e) 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, using erosion control blankets or mats that contain no netting, or only contain loosely woven natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.
- f) Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.
- g) When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and overwinter sites (e.g., brush and debris piles, crayfish burrows) where feasible.
- h) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, which may be refugia for terrestrial amphibians, where feasible.
- i) If gutters and curbs are part of the roadway design, where feasible install gutters that do not include the side box inlet and include sloped (i.e. mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.
- j) For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two.

k) For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.

l) When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Where feasible, biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.

Texas garter snake and Timber rattlesnake BMPs (Terrestrial Reptile BMPs):

a) 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.

b) For open trenches and excavation 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.

c) Inform contractors that if reptiles are found on project site allow species to safely leave the project area.

d) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, where feasible.

e) Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

Texas Pigtoe and Texas heelsplitter BMPs (Freshwater Mussel BMPs):

a) When work is in the water, survey project footprints for state listed species where appropriate habitat exists.

b) When work is in the water and mussels are discovered during surveys, relocate state listed and SGCN mussels under TPWD permit and implement Water Quality BMPs.

c) When work is adjacent to the water, Water Quality BMPs implemented as part of SWPPP for a construction general permit or any conditions of the 401 water quality certification for the project would be implemented.

Water Quality BMPs: In addition to BMPs required for a TCEQ Storm Water Pollution Prevention Plan and/or 401 water quality permit:

a) Minimize the use of equipment in streams and riparian areas during construction. When possible, equipment access should be from banks, bridge decks, or barges.

b) When temporary stream crossings are unavoidable, remove stream crossings once they are no longer needed and stabilize banks and soils around the crossing.

5.11.2 Impacts on Vegetation

Build Alternative: According to the MOU with TPWD, important remnant vegetation includes communities listed as suitable habitat and within the range of SGCN. General habitat types listed for Blackland Prairies Ecoregion SGCN present within the proposed project include unmaintained vegetation, fencerow vegetation and riparian vegetation. The TXNDD identified a remnant vegetation, Mollisol Blackland Prairie (*Schizachyrium scoparium*, *Andropogon gerardii*, *Sorghastrum nutans*, *Bifora americana* Mollisol Grassland), within 1.5 miles of the proposed project. However, no vegetation or suitable habitat was observed within the proposed project that matches the description for the Blackland Prairie mollisols such as Big Bluestem (*Andropogon gerardii*). Therefore, based on field observations, no adverse impacts are anticipated.

Reconnaissance level surveys were conducted in December 2017 to determine habitat availability within the project limits and to assess potential impact to habitat and wildlife species. A Biological Resources Technical Report has been prepared for the proposed project and includes a detailed analysis of biological resources. A summary from the technical report is included this EA.

Based on field observations and interpretation of recent color aerial photography combined with a geographic information system (GIS) overlay of project design features, the proposed project would directly impact the following MOU Type habitats: Crosstimbers Woodland and Forest (0.3 acres); Agriculture (1.0 acre); Disturbed Prairie (9.9 acres); Open Water (126.9 acre); Riparian (1.5 acre); and Urban (670.1 acres). The 9.9 acres of Disturbed Prairie, Grassland MOU Type habitat disturbance is greater than the 3.0 acres area of disturbance indicated in the Threshold Table Programmatic Agreement (PA) for Texas Blackland Prairies (TBPR). The 1.5 acre of Riparian MOU Type habitat disturbance is greater than the 0.1-acre area of disturbance indicated in the Threshold Table PA for TBPR.

Potential impacts to vegetation would be confined to the existing and proposed ROW/easements; thus, encroachment-alteration effects would not occur.

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

No-Build Alternative: If the No-Build Alternative were implemented, the proposed project would not be constructed. No effects to vegetation related to the construction of the proposed project would occur. Existing land use and activities, including routine mowing, would continue to periodically affect vegetation communities.

5.11.3 Executive Order 13112 on Invasive Species

In accordance with EO 13112 on Invasive Species, seeding and replanting with TxDOT-approved seed mixes containing native species would be done where possible. Soil disturbance would be minimized in the ROW in order to minimize invasive species establishment.

5.11.4 Executive Memorandum on Environmentally and Economically Beneficial Landscaping

The proposed project is subject to and would comply with the federal Executive Memorandum on Environmentally and Economically Beneficial Landscaping, in effect since 1994. TxDOT implements this Executive Memorandum on a programmatic basis through its Roadside Vegetation Management Manual and Landscape and Aesthetics Design Manual.

Under the No-Build Alternative, existing vegetation would not be affected.

5.11.5 Impacts to Wildlife

The proposed project is located in eastern Dallas County and central Rockwall County, in the cities of Garland, Rowlett, Rockwall, Royse City, Mobile City, and Fate. Additionally, Lake Ray Hubbard is crossed by the proposed project.

Land adjacent to the proposed project is a mixture of developed and undeveloped properties. The portions of the proposed project in the vicinity of Garland, Rowlett, and Rockwall are more densely developed and include residential, commercial, retail, civic, and educational facilities. The adjacent land along the eastern portion of the project are used for agriculture. Wildlife species expected to inhabit the proposed project limits are likely adapted to both a rural environment as well as an urban, developed environment. Mammalian species that likely inhabit the area include the coyote (*Canis latrans*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and eastern gray squirrel (*Sciurus carolinensis*). Amphibian and reptilian species would also utilize the different available habitats. The species would include various snakes, turtles, lizards, and frogs native to north-central Texas. Examples would be the Texas rat snake (*Elaphe obsoleta lindheimen*), red-eared slider (*Trachemys scripta*), western ribbon snake (*Thamnophis proximus*), and the northern cricket frog (*Acris crepitans*). Various waterfowl and fish species could utilize Lake Ray Hubbard and other aquatic habitats. The agricultural fields and pastures still serve as foraging areas for resident and migratory species.

There is suitable habitat present within the proposed project limits for the SGCN species identified in **Section 5.11.1**

Build Alternative: Substantial impacts to wildlife are not anticipated. The proposed project is the widening of an existing roadway and therefore, is not newly bisecting continuous wildlife habitat. It is likely that wildlife currently avoids the proposed project limits due to the adjacent development and high-speed traffic. Terrestrial wildlife that does cross IH-30 would have to travel a greater distance when crossing the widened roadway upon project completion. This would result in terrestrial wildlife being exposed to predators, people, domestic pets, vehicles, etc. for a greater amount of time. Wildlife that does currently inhabit adjacent urban development and existing roadway structures (culverts,

utility poles, etc.) would be temporarily impacted due to potential structural displacements/relocations and roadway structure reconstruction and relocation. It is likely that the impacted wildlife would recolonize the available habitat once construction of the proposed project is complete.

No-Build Alternative: Under the No-Build Alternative, the proposed project would not be constructed; thus, there would be no project-related impacts to wildlife.

5.11.6 Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) of 1918 states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a Federal permit issued in accordance within the Act's policies and regulations.

Between October 1st and February 15th, the contractor would remove all old migratory bird nests from any structures that would be affected by the proposed project and complete any bridge work and/or vegetation clearing. In addition, the contractor would be prepared to prevent migratory birds from building nests between February 15th and October 1st. 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.

5.11.7 Fish and Wildlife Coordination Act

All impacts to waters of the U.S. would be authorized under a USACE Section 404 NWP. Therefore, the U.S. Fish and Wildlife Service (USFWS) consider Fish and Wildlife Coordination Act coordination to be complete as part of the NWPs review, which was last authorized and reissued on March 19, 2017.

5.11.8 Bald and Golden Eagle Protection Act of 2007

The proposed project limit does contain suitable eagle foraging habitat. However, no suitable roosting/nesting habitat is present and the proximity to the high-speed roadway decreases the likelihood of the project limits being utilized by the species. Additionally, no eagles were observed during the December 27, 2017 site visit. Therefore, no impact to bald or golden eagles or their habitat is anticipated as a result of the proposed project, as verified by a qualified biologist. The proposed project is not anticipated to impact Bald and Golden Eagles.

5.11.9 Magnuson-Stevens Fishery Conservation Management Act

There are no tidally influenced waters in Dallas or Rockwall Counties and the proposed project would not affect essential fish habitat; therefore, the project is not subject to the requirements of the Magnuson- Stevens Fishery Conservation Management Act.

5.11.10 Marine Mammal Protection Act

The proposed project would not affect marine mammals; therefore, the project is not subject to the requirements of the Marine Mammal Protection Act.

5.11.11 Threatened, Endangered and Candidate Species

The 1973 Endangered Species Act (ESA) seeks to conserve federally threatened and endangered fish, wildlife, and plant species and provides for the conservation of ecosystems upon which those threatened and endangered species depend. Section 7 of the ESA requires Federal agencies to ensure that any action authorized, funded or carried out by Federal agencies would not be likely to jeopardize the continued existence of listed species or modify their critical habitat.

Build Alternative: According to the Official Species List, the following federally protected species may occur or could potentially be affected by the proposed project: Golden-cheeked Warbler (*Dendroica chrysoparia*), Least Tern (*Sterna antillarum*), Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), and the Whooping Crane (*Grus americana*).

For the Piping Plover and Red Knot, there is no suitable habitat present within the action area, such as beaches; sand, algal, or tidal flats, or sparsely vegetated shores and islands of shallow lakes, ponds, and rivers. Additionally, according to the Official Species List, the Piping Plover and Red Knot only require consideration for wind energy projects. Therefore, TxDOT has determined that there would be no effect to the Piping Plover or Red Knot as a result of the proposed project.

Effects to the Least Tern are not anticipated because there is no suitable habitat present within the action area, such as sand and gravel bars within braided streams and rivers. There are perennial waters with small fish and crustaceans for feeding; however, it is not suitable for foraging habitat due to the proximity to the high-speed roadway, development, and continuous recreational usage. For the Whooping Crane, potential habitat within the action area includes lakes and wetlands. However, it is not suitable migratory or foraging habitat due to the proximity to the high-speed roadway and other developed areas. Therefore, TxDOT has determined that the proposed project would have no effect on either the Least Tern or Whooping Crane.

Finally, no Golden-cheeked Warbler habitat was identified in the proposed project action area such as mature Ashe juniper or juniper-oak woodlands. Therefore, the proposed project would have no effect on the Golden-cheeked Warbler.

USFWS designated Critical Habitat is not present within the proposed project limits.

No-Build Alternative: Under the No-Build Alternative, the proposed project would not be constructed; thus, there would be no effects to federally listed threatened, endangered, or candidate species.

5.12 Air Quality

This project is located within an area that has been designated by the Environmental Protection Agency (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 Dallas 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).

Build Alternative: Both the Mobility 2045 Metropolitan Transportation Plan (MTP) and the 2019-2022 Transportation Improvement Program (TIP) were initially found to conform to the Texas Commission on Environmental Quality (TCEQ) State Implementation Plan (SIP) by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) on November 21, 2018, and September 28, 2018, respectively; however, the proposed project is not consistent with this conformity determination. CSJ 0009-12-219 for this project is currently identified as not approved in the 2019 -2022 STIP. TxDOT will not take final action on this environmental document until the proposed project is consistent with a currently conforming MTP and TIP. Copies of the TIP and MTP pages are included in in Appendix E.

The project is not located within a carbon monoxide (CO) or particulate matter (PM) nonattainment or maintenance area; therefore, a project level hot spot analysis is not required.

Carbon Monoxide Traffic Air Quality Assessment

A Carbon Monoxide Traffic Air Quality Assessment (CO TAQA) Technical Report, Quantitative Mobile Source Air Toxic (MSAT) Analysis Technical Report, and Congestion Management Process (CMP) Technical Report were completed for the proposed project and are maintained in the project file at the TxDOT Dallas District Office. Because the proposed project would add capacity in a nonattainment area, it would be coordinated under TxDOT's MOU with TCEQ.

As show in Table 4 below, the AADT projections for two sections of the project exceed 140,000 VPD in the design year; therefore, triggering the need for a traffic air quality analysis. The topography and meteorology of the project area would not restrict dispersion of the air pollutants. The traffic data used in the analysis was obtained from the TxDOT Transportation Planning and Programming (TPP).

Table 4 - Projected AADT and DHV Along I-30

| Location | 2024 (ETC Year) | | 2045 (Design Year) | |
|--------------------------|--|---------------------------|--------------------|---------------|
| | AADT ¹ (VPD ²) | DHV ³ (VPD) | AADT (VPD) | DHV* (VPD) |
| Bass Pro Drive to SH 205 | 189,400 | 16,288 | 263,700 | 22,678 |
| SH 205 to FM 551 | 112,650 | 9,688 | 156,850 | 13,489 |
| FM 551 to FM 2642 | 78,500 | 6,751 | 109,350 | 9,404 |

Source: TxDOT Transportation Planning and Programming (TPP) Division, December 2016.

1 AADT - Average Annual Daily Traffic.

2 VPD - Vehicles per day.

3 DHV - Design hour volume. DHV was calculated by multiplying each segment's AADT by the specific K factor (0.086).

Carbon monoxide concentrations for the proposed action were modeled using CALINE3 and MOVES2014 and factored in adverse meteorological conditions and sensitive receptors at the ROW line in accordance with TxDOT's *Standard Operating Procedure for Complying with CO TAQA Requirements*. Local concentrations of carbon monoxide are not expected to exceed national standards at any time.

Table 5 - Project Carbon Monoxide Concentrations

| Year | 1-Hour CO Concentration* | 1-Hour % NAAQS* | 8-Hour CO Concentration | 8-Hour % NAAQS |
|------|--------------------------|-----------------|-------------------------|----------------|
| 2024 | 2.8 | 8.0 | 2.8 | 31.6 |
| 2045 | 2.4 | 6.9 | 2.6 | 28.9 |

Source: Study Team, September 2018.

* The NAAQS for CO is 35 ppm for 1-hour and 9 ppm for 8-hours. Analysis includes a one-hour CO background concentration of 1.9 ppm and an 8-hour CO background concentration 2.3 ppm.

Mobile Source Air Toxics Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (<http://www.epa.gov/iris/>). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment (NATA) (<https://www.epa.gov/national-air-toxics-assessment>). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel PM, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

Motor Vehicle Emissions Simulator (MOVES)

According to EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010.

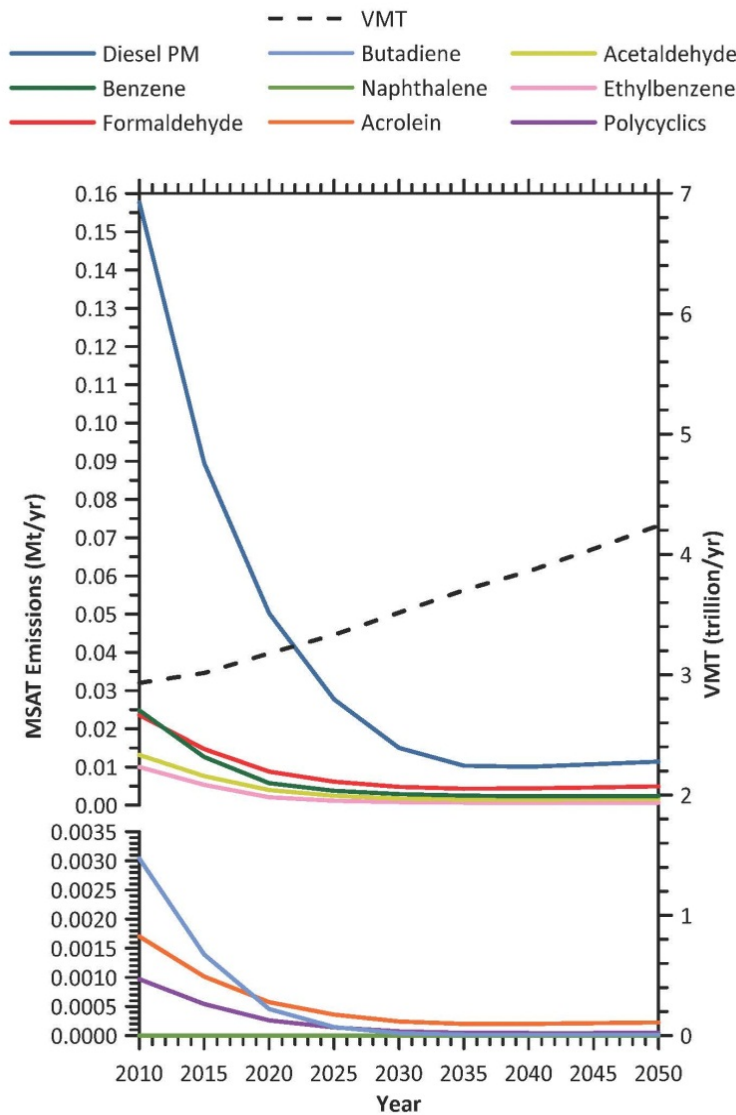
These new emissions data are for light- and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and vehicle miles traveled (VMT) data. MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010.

These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344).

Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide

<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100NNR0.txt>), EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014. Using EPA's MOVES2014a model, as shown in Figure 1, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Figure 1– Projected National MSAT Emission Trends 2010 – 2050 for Vehicles Operating on Roadways Using EPA’s Moves2014a Model



Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.

Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorological, and other factors.

Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES2014a will notice some differences in emissions compared with MOVES2010b. MOVES2014a is based on updated data on some emissions and pollutant processes compared to MOVES2010b, and also reflects the latest

Federal emissions standards in place at the time of its release. In addition, MOVES2014a emissions forecasts are based on lower VMT projections than MOVES2010b, consistent with recent trends suggesting reduced nationwide VMT growth compared to historical trends.

MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA. The FHWA, EPA, the Health Effects Institute (HEI), and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

Project Specific MSAT Information

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives, found at: https://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.cfm

For each alternative in this document, the amount of MSAT emitted would be proportional to the VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for the Build Alternative is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Also, regardless of the alternative chosen, 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 between 2010 and 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 nearly all cases.

The additional travel lanes contemplated as part of the Build Alternative would have the effect of moving some traffic closer to nearby homes, day care centers, churches, medical clinics, and businesses; therefore, under the Build Alternative, there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced on frontage roads and where highway mainlanes, and ramps intersect. However, the magnitude and the duration of these potential increases compared to the No Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the CAA and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the IRIS, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, <http://www.epa.gov/iris/>). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the HEI. A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents (http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). Among the adverse health effects linked to MSAT compounds at high exposures are; cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16,

<https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust, Section II.C.

https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0642.htm#quainhal).

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the CAA to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than one in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than one in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two-step decision framework.

Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable

([https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/\\$file/07-1053-1120274.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)).

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Analysis Results

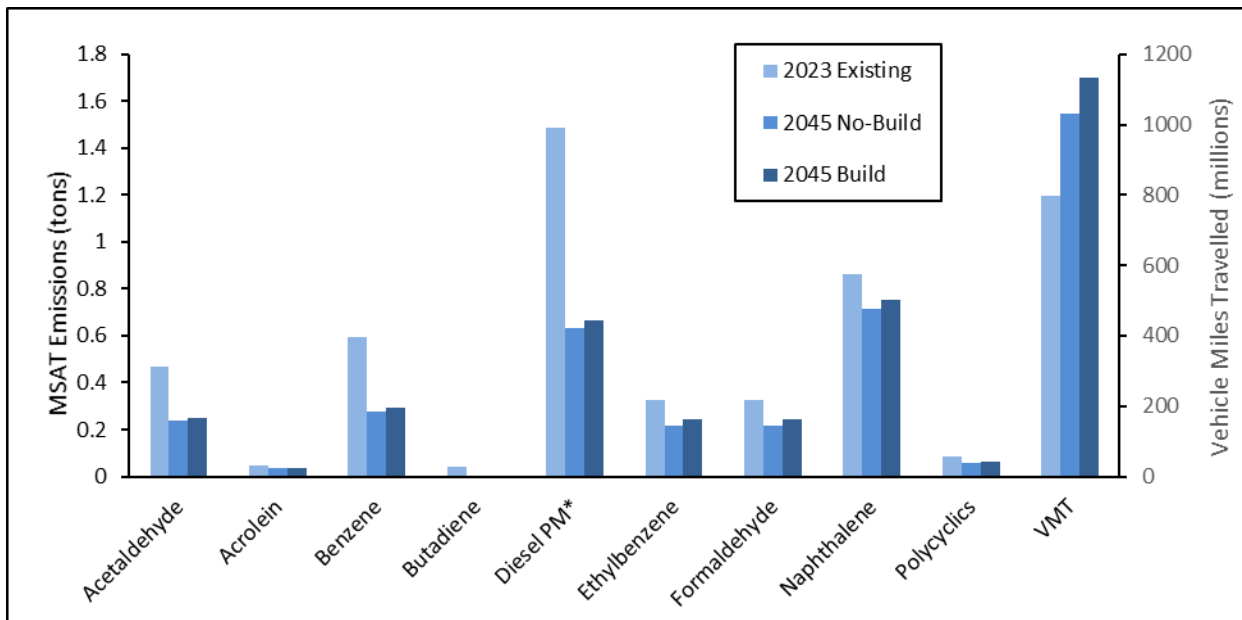
From the base year (2023) to the Design Year (2045), the annual VMT in the ATC was estimated to increase by 42.3 percent in the No Build Alternative, and by 44.9 percent in the Build Alternative (Table 6, Illustrations 2 and 3). Conversely, total annual priority MSAT emissions in 2045 were estimated to decrease by 48.1 percent in the No Build Alternative, and by 44.9 percent in the Build Alternative, as compared to base year levels (2023) (Table 6; Figure 2 and 3).

Table 6 - Annual Priority MSAT Emissions and VMT

| Scenario/Alternative | 2023 Base Year | 2045 No Build | 2045 Build | Percent Change from 2023 vs. | |
|-------------------------|-------------------------|------------------|---------------|---------------------------------|---------------|
| | | | | 2045 No Build | 2045 Build |
| Priority MSAT | Emissions (tons) | | | Percent Change | |
| Acetaldehyde | 0.469 | 0.238 | 0.251 | -49.3% | -46.5% |
| Acrolein | 0.049 | 0.033 | 0.035 | -32.7% | -28.6% |
| Benzene | 0.592 | 0.275 | 0.293 | -53.5% | -50.5% |
| Butadiene | 0.043 | 0.002 | 0.003 | -95.3% | -93.0% |
| Diesel PM | 2.969 | 1.265 | 1.328 | -57.4% | -55.3% |
| Ethylbenzene | 0.327 | 0.216 | 0.246 | -33.9% | -24.8% |
| Formaldehyde | 0.865 | 0.715 | 0.755 | -17.3% | -12.7% |
| Naphthalene | 0.085 | 0.058 | 0.061 | -31.8% | -28.2% |
| Polycyclics | 0.030 | 0.014 | 0.015 | -53.3% | -50.0% |
| Total | 5.43 | 2.82 | 2.99 | -48.1% | -44.9% |
| VMT (millions per year) | 723.6 | 1,029.6 | 1,048.2 | 42.3% | 44.9% |

Source: IH-30 MSAT Technical Report, (August 2018).

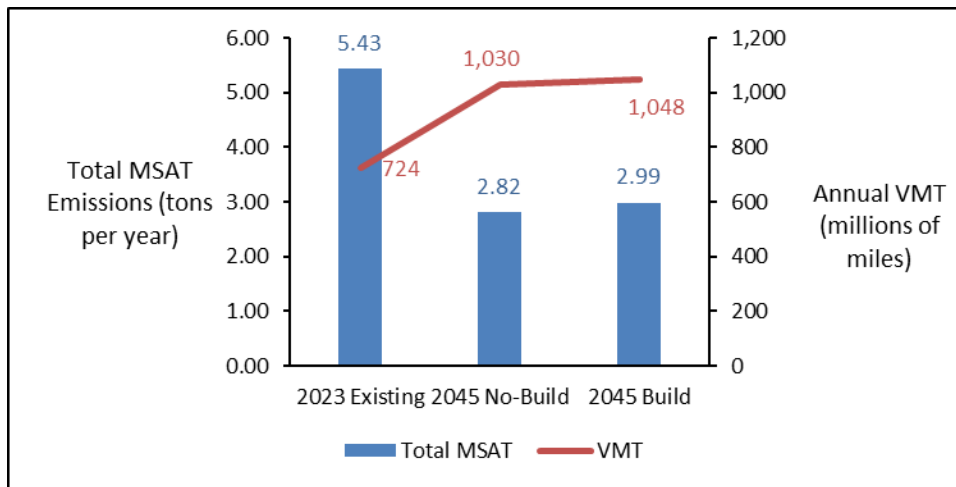
Figure 2 - Annual Priority MSAT Emissions



Source: Table 5.

* Diesel PM is plotted as 50% of its actual value for visibility.

Figure 3 – Total Annual Priority MSAT Emissions and VMT



Source: IH 30 MSAT Technical Report, (August 2018).

Reduced diesel PM accounts for 65.3 and 67.3 percent of the reduction in the total priority MSAT emissions for the 2023 base year versus the 2045 No Build and Build Alternatives, respectively. Reduction in total priority MSAT in the 2045 No Build versus the 2045 Build Alternatives is due to improved performance of the network (despite a 1.8 percent increase in VMT in the 2045 Build versus 2045 No Build Alternatives).

MSAT Conclusions

In summary, a quantitative assessment has been conducted, relative to the proposed project's No Build and Build Alternatives, for MSAT emissions. The qualitative assessment has acknowledged that the Build Alternative may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain and, because of this uncertainty, the health effects from these emissions cannot be estimated. Regardless of whether the No Build Alternative or the Build Alternative is selected for the proposed project, the quantitative assessment indicates that total MSAT emissions are expected to be lower in 2045 No Build and Build Alternatives versus 2023 base year.

Congestion Management Process

The 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 from the NCTCOG CMP, which meets all requirements of 23 CFR 450.320 and 500.109, as applicable. The CMP was approved by the Regional Transportation Council (RTC) in July 2013. The NCTCOG is tentatively scheduled to initiate and complete an update to the CMP (2019 CMP Update) by the end of next year. The CMP for the Dallas-Fort Worth (DFW) region can be found at <https://www.nctcog.org/trans/manage/congestion-management-process>.

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

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

Committed congestion reduction strategies and operational improvements within the study boundary will consist of addition of frontage road lanes; mainlanes, intersection improvements; ramps, and bicycle and pedestrian facility improvements. Individual projects are listed in Table 7.

Table 7 - Congestion Process Management Strategies

| Operational Improvements in Travel Corridor | | |
|---|---|---------------------|
| Location | Type | Implementation Date |
| I-30 - Bass Pro Drive to Dalrock Road. | Construct 0 to 6-lane frontage roads, Bayside bridge, and ramp modifications; reconstruct Dalrock interchange, addition of lanes, new roadway, bridge, interchange. | 2021 |
| I-30 - Dalrock Road (Dallas County Line) to SH 205 | Dalrock to Horizon Road; add shoulder; reconstruct and widen existing 6 to 8 mainlanes; reconstruct existing 4 to 6 discontinuous to 4 to 6 continuous frontage roads; ramp modifications, addition of lanes. | 2022 |
| FM 3549 – I-30 to north of SH 66 | Widen from 2-lane rural to 4-lane urban divided section, addition of lanes. | 2018 |
| I-30 – SH 205 to west of FM 2642 (Hunt County Line) | Reconstruct and widen 4 to 6 mainlanes; reconstruct and widen 4 to 4/6-lane frontage roads; construct new and reconstruct existing interchanges; ramp modifications, addition of lanes, interchange. | 2021 |

Source: NCTCOG Transportation improvement Program Information System (TIPINS). Accessed September 2018.

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

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

In July 2013, the RTC also adopted a policy that requires the review and application of congestion mitigation strategies to correct corridor deficiencies identified in the CMP when performing corridor and environmental studies and report findings back to NCTCOG. Therefore, NCTCOG has developed a project level CMP analysis. The analysis requires completion of the Project Implementation Form, and, if warranted, the Roadway Corridor Deficiency Form and Corridor Analysis Fact Sheet. The results of this analysis are attached in Appendix C.

Construction Air Emissions

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

The potential impacts of PM emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at: <http://www.tceq.texas.gov/airquality/terp/>.

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

No-Build Alternative: Implementation of the No-Build Alternative would lead to increased traffic congestion and decreased mobility along IH-30, resulting in decreased vehicular speed and increased stop-and-go traffic. However, EPA's fuel and vehicle standards are projected to reduce emissions of air pollutants and MSAT and to contribute to continued maintenance and improvement of air quality regardless of the alternative chosen.

5.13 Hazardous Materials

An initial site assessment (ISA) including a visual survey of the project limits and surrounding area, research of existing and previous land use, and limited review of federal and state regulatory databases/lists was prepared for the proposed project. The purpose of the ISA is to identify possible hazardous materials within the project limits. A review of a regulatory database list was conducted as part of the ISA. **Section 5.1** of the ISA lists the regulatory records that were reviewed. The *IH-30 Improvements Hazardous Materials Initial Site Assessment Report* and *Hazardous Materials Project Impact Evaluation* are maintained in the TxDOT Dallas District project files.

Build Alternative: Based on the *Hazardous Materials ISA* and *Hazardous Materials Project Impact Evaluation*, there is a possibility for hazardous materials impacts on or near existing hazardous materials sites or in areas adjoining mapped and identified contaminant migration areas. Facilities or areas identified by the *Hazardous Materials ISA* have been assigned to a specific, color-coded category relative to potential unresolved concerns to the proposed project. Sites classified as requiring additional information to resolve, or that may exhibit a high level of concern, have been assigned to colors yellow or red, in accordance with the following criteria.

- Possible Project Impacts (Yellow): Not enough information is currently known about the project and/or the issue to determine potential impacts. Further investigation, and/or additional project design and right-of-way information, is required.
- Anticipated Project Impacts (Red): The issue has a high potential to impact the proposed project and further investigations, co-ordination, or contingencies may be required.

Six regulatory sites were determined to be either moderate or high environmental risk to the project. Table 8 presents a summary of unresolved hazardous materials sites associated with the proposed project and **Appendix F**, provides their location and classification on an aerial base map.

Based on the final engineering design drawings and prior to construction occurring, additional regulatory research would be conducted of the six regulatory sites that were determined to be either moderate or high environmental risk. The more in-depth analysis would help to understand the location, history, and type of hazardous materials that may be of concern so that a plan for soil and/or groundwater testing could be developed and implemented, as warranted. Based on the site investigation and results, the level of potential contamination at each of the sites with unresolved potential hazardous materials concerns could then be understood. The interviews with former and current property owners, facility operators, TCEQ regulators, and neighboring facilities are recommended to be conducted at the same time as more detailed records and property owner research is conducted to help formulate the need for site investigations. The goal would be to identify, more specifically, the possible hazardous materials concerns at each site and develop an understanding of the location of areas of past releases, the areas with planned construction involving soil removal and/or groundwater dewatering during construction.

A total of five pipelines transect the project corridor. Of those, three are natural gas or HVL pipelines and are not considered an environmental concern. The remaining two are crude oil pipelines. Excavations at these pipelines could cause a rupture. Based on the contents of the pipelines, crude pipelines are considered a high environmental risk to the project. Formal utilities location and advance planning would be required to facilitate pipeline and utilities adjustments and to otherwise avoid associated impacts. TxDOT Dallas District SUE Coordinator and ROW will be responsible for the adjustments and displacements.

The proposed project would include construction of at-grade and elevated (bridge) sections with retaining walls and bridge supports; relocation and installation of utilities; and related activities that would require excavation, mixing, stockpiling, testing, and management of natural soils and fill material including soils and sediments. Excavation may increase the potential of encountering hazardous material contamination during construction. Additional subsurface environmental investigations would be conducted to determine whether possible contamination might be encountered during construction. If hazardous constituents were confirmed, then appropriate soils and/or groundwater management plans for activities within these areas would be developed.

The proposed project includes the reconstruction of bridge structures. Applicable asbestos and lead-based paint inspections, specification, notification, license, accreditation, abatement and disposal, would be in compliance with federal, state, and local regulations. Bridge structure asbestos and/or lead-based paint issues would be addressed prior to construction.

Storage and use of hazardous materials would be necessary during construction of the proposed project. For example, temporary aboveground storage tanks (ASTs) containing oil and diesel for on-site equipment and vehicles would be regulated and require control measures for spills and leaks. In

addition, potential impacts from spills and leaks from fueling and maintenance of equipment and vehicles could occur on-site. These impacts would be minimized and BMPs would be implemented to reduce these types of impacts during construction. In addition, activities associated with the use and storage of hazardous materials would be required to conform to TxDOT standards for spill containment and control strategies.

No-Build Alternative: Under the No-Build Alternative, the proposed project would not be constructed; thus, project-related hazardous materials impacts would not occur.

Table 8 – Summary of Unresolved Hazardous Materials Sites

| Map ID | Site Information | Location in Reference to Project | Regulatory Database Listing(s) | Environmental Concern Summary | Potential to Impact Project |
|--------|--|--------------------------------------|--------------------------------|--|-----------------------------|
| 11 | Sunmart 106 926 E. IH-30 Royse City, TX (incorrectly listed in Fate) (current facility) Photo: 47 | Adjacent N, Proposed ROW Acquisition | PST | The facility is east of S. Jones St. A minor amount of ROW would be acquired from the site. The site currently utilizes three 20,000-gallon diesel and three 12,000-gallon gasoline underground PSTs, all installed in 1985. The site has two tank holds. One is located approx. 80 feet northwest from existing ROW and the second is approx. 260 feet northwest of existing ROW. The tank holds are located approx. 460 feet east-northeast and 410 ft northeast of proposed ROW, respectively. During the 3-25-18 site reconnaissance, diesel stains around the tank hold ports and discarded fuel pumps near one of the tank holds were observed. The TCEQ Central Registry reports that the site was issued a commissioners' enforcement action on 10-3-16. The status is reported as active. Additional information was not provided. No releases are reported for the facility. Based on ROW acquisition from the site, the age and material of the PSTs, and site observations, the site is considered a moderate environmental risk the proposed project. | Moderate |
| 18 | Tiger Mart 42 117 W. IH-30 Royse City, TX (current facility) Photo: 48 | Adjacent S, Proposed ROW Acquisition | PST | The facility is at the southwest corner of IH-30 and FM 548. ROW (corner clip) would be required from the site. The site currently utilizes one 20,000-gallon gasoline and one 20,000-gallon split diesel/gasoline underground PST, both installed in 2004. The tank hold is approx. 30 feet southeast of existing ROW and 80 feet southwest of proposed ROW. The TCEQ Central Registry reports no releases, commissioners' enforcement actions or effective enforcement orders. Based on ROW acquisition from the site and the location of the tank hold relative to project improvements, the site is considered a moderate environmental risk to the project. | Moderate |
| 20 | Prime Travel Stop 1016 E. IH-30 Royse City, TX (incorrectly listed in Fate) (currently abandoned) | Adjacent N | LPST PST | The site is east of S. Jones St. No ROW would be required from the site. The site formerly utilized one 10,000-gallon gasoline, one 12,000-gallon gasoline, one 20,000-gallon gasoline, and one 20,000-gallon diesel underground PSTs, all installed in 1986 and emptied/ temporarily placed out of service in 2014. An additional three gasoline underground PSTs of unreported capacity were permanently filled in place in | High |

Table 8 – Summary of Unresolved Hazardous Materials Sites

| Map ID | Site Information | Location in Reference to Project | Regulatory Database Listing(s) | Environmental Concern Summary | Potential to Impact Project |
|--------|--|---|--------------------------------|---|-----------------------------|
| | Photo: 49 | | | <p>1987. A release was reported on 3-15-94. Only soil contamination was reported. The TCEQ issued final concurrence on 3-22-94 and the case was closed.</p> <p>A second release was reported at the site on 1-17-97. Groundwater was impacted and, according to the TCEQ Central Registry, groundwater monitoring was conducted through at least 2001. The TCEQ issued final concurrence on 1-16-02 and the case was closed. The facility building was razed in 2014 however, the pump islands/canopies remain in place. The facility's tank hold is 20 ft from the project existing ROW. Based on tanks remaining in place, two reported releases at the site, and the location of the tank hold relative to the project, the site is considered a high environmental risk.</p> | |
| 24 | Triple C Convenience Store/Scooters 100 W. IH-30 Royse City, TX (current facility) Photo: 50 | Adjacent NW | LPST PST | <p>The facility is at the northwest corner of IH-30 at FM 548. No ROW would be acquired from the site. The site currently utilizes two 10,000-gallon gasoline and one 10,000-gallon diesel underground PSTs, all installed in 1989. A release was reported on 10-11-99. Groundwater was impacted and monitoring performed. There were no apparent threats or impacts to receptors. The TCEQ issued final concurrence on 2-9-04 and the case was closed. The facility's tank hold is adjacent to the existing ROW and an isolated fuel pump is approx. 30 ft from the existing ROW. Based on the facility being an active gas station, the prior release, and the location of the tank hold and the isolated fuel pump relative to the ROW, the site is considered a high environmental risk to the project.</p> | High |
| 45 | Loves Country Store 283 1990 E. IH-30 Rockwall, TX (current facility) Photo: 51 | Adjacent S, Proposed ROW Acquisition | LPST PST | <p>The facility is at the southwest corner of IH-30 and FM 3549 (Corporate Crossing). ROW would be acquired from the site. The site currently utilizes one 1,000-gallon oil/water separator, two 20,000-gallon gasoline, and two 20,000-gallon diesel underground PSTs, all installed in 2000; and one 20,000-gallon diesel underground PST installed in 2012. A release was reported on 9-28-06. According to the TCEQ</p> | Moderate |

Table 8 – Summary of Unresolved Hazardous Materials Sites

| Map ID | Site Information | Location in Reference to Project | Regulatory Database Listing(s) | Environmental Concern Summary | Potential to Impact Project |
|--------|--|--|--------------------------------|--|-----------------------------|
| | | | | Central Registry, groundwater was impacted and monitoring performed. In addition, free product recovery was also performed. The TCEQ issued final concurrence on 3-17-08 and the case was closed. The tank hold is approx. 160 ft south of the proposed ROW. Based on ROW acquisition from the site, the prior release, and the distance the tank hold relative to the project, the site is considered a moderate environmental risk to the project. | |
| 49 | Rockwall 76 Truck Stop/ Rockwall Travel Center 2105 S. Goliad Street (SH 205) Rockwall, TX (current facility) Photo: 52 | Adjacent SE, Proposed ROW Acquisition | LPST PST | The facility is at the southwest corner of IH-30 and SH 205 (S Goliad Street). ROW would be acquired from the site. The site formerly utilized one 500-gallon used oil, two 20,000-gallon gasoline, and three 20,000-gallon diesel underground PSTs, all installed in 1970 and removed in 1998 and 2002. The site currently utilizes three 30,000-gallon diesel underground PSTs, all installed in 2002; one 4,000-gallon used oil, one 8,000-gallon new oil, one 15,000-gallon gasoline, and one 15,000-gallon split diesel/gasoline underground PSTs, all installed in 2003. A release was reported on 12-17-1996. Groundwater was not impacted and there were no apparent threats or impacts to receptors. The TCEQ issued final concurrence on 6-23-00 and the case was closed. The facility has two tank holds. One of the tank holds abuts the proposed ROW along IH-30. The second tank hold is approx. 370 ft southeast of the proposed ROW. Based on ROW acquisition from the site, the prior release, and the location of one of the tank holds relative to proposed ROW, the site is considered a high environmental risk to the project. | High |

Source: IH-30 Improvements Hazardous Materials ISA Report and Hazardous Materials Project Impact Evaluation 2018

5.14 Traffic Noise

Build Alternative: A traffic noise analysis was conducted in accordance with TxDOT's *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT 2011). Refer to the *IH-30 Traffic Noise Technical Report* for a detailed discussion of the traffic noise analysis.

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

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type and speed of vehicles; highway alignment and grade; cuts, fills and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Existing and predicted traffic noise levels were modeled at receiver locations (Table 9 and Appendix F) that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement.

Table 9 - Traffic Noise Levels dB(A) Leq

| Representative Receiver | NAC Category | NAC Level | Existing | Predicted 2043 | Change (+/-) | Noise Impact |
|---|--------------|-----------|----------|----------------|--------------|--------------|
| R1 - Faulkner Point North 2/Windward II Condominiums (Balcony, 1 st floor) | B | 67 | 71 | 74 | +3 | Yes |
| R1 - Faulkner Point North 2/Windward II Condominiums (Balcony, 2 nd floor) | B | 67 | 74 | 77 | +3 | Yes |
| R2 - Quality Inn & Suites Garland - East Dallas (Motel Pool) | E | 72 | 64 | 68 | +4 | No |
| R3 - Bayside Development (1 st floor) | B | 67 | 66 | 71 | +5 | Yes |
| R3 - Bayside Development (2 nd floor) | B | 67 | 73 | 77 | +4 | Yes |
| R3 - Bayside Development (3 rd floor) | B | 67 | 74 | 78 | +4 | Yes |
| R3 - Bayside Development (4 th floor) | B | 67 | 75 | 79 | +4 | Yes |
| R4 - Bayside Development (1 st floor) | B | 67 | 69 | 73 | +4 | Yes |
| R4 - Bayside Development (2 nd floor) | B | 67 | 73 | 76 | +3 | Yes |
| R4 - Bayside Development (3 rd floor) | B | 67 | 74 | 77 | +3 | Yes |
| R4 - Bayside Development (4 th floor) | B | 67 | 75 | 78 | +3 | Yes |
| R5 - Comfort Suites Lake Ray Hubbard (Hotel Pool) | E | 72 | 71 | 73 | +2 | Yes |
| R6 - Oar House (outdoor seating) | E | 72 | 71 | 71 | 0 | Yes |
| R7 - Culpepper's Steakhouse (outdoor seating) | E | 72 | 75 | 76 | +1 | Yes |
| R8 - Single-Family residential | B | 67 | 68 | 70 | +2 | Yes |
| R9 - Snuffers Bar and Grill (outdoor seating) | E | 72 | 69 | 72 | +3 | Yes |
| R10 - Genghis Grill (outdoor seating) | E | 72 | 66 | 69 | +3 | No |
| R11 - El Chico (outdoor seating) | E | 72 | 72 | 75 | +3 | Yes |
| R12 - Taco Cabana (outdoor seating) | E | 72 | 70 | 73 | +3 | Yes |
| R13 - Lake Pointe Church (interior value) | D | 52 | 42 | 45 | +3 | No |
| R14 - On the Border (outdoor seating) | E | 72 | 70 | 74 | +4 | Yes |
| R15 - Johnny Carinos (outdoor seating) | E | 72 | 72 | 75 | +3 | Yes |
| R16 - Cotton Patch (outdoor seating) | E | 72 | 67 | 71 | +4 | Yes |

| Representative Receiver | NAC Category | NAC Level | Existing | Predicted 2043 | Change (+/-) | Noise Impact |
|--|--------------|-----------|----------|----------------|--------------|--------------|
| R17 - Buffalo Wild Wings (outdoor seating) | E | 72 | 68 | 72 | +4 | Yes |
| R18 - La Madeline (outdoor seating) | E | 72 | 68 | 71 | +3 | Yes |
| R19 - Mickey Florence Multi- Purpose Facility (bleacher seating) | C | 67 | 64 | 68 | +4 | Yes |
| R20 - Rockwall County Courthouse Trail (trailhead) | C | 67 | 60 | 63 | +3 | No |
| R21 - Rozies Grill (outdoor seating) | E | 72 | 70 | 73 | +3 | Yes |
| R22 - Foursquare Healthcare (outdoor seating) | C | 67 | 59 | 63 | +4 | No |
| R23 - Anita Scott Elementary School (playground) | C | 67 | 56 | 60 | +4 | No |
| R24 - Single-Family residential | B | 67 | 62 | 64 | +2 | No |
| R25 - Single-Family residential | B | 67 | 66 | 68 | +2 | Yes |
| R26 - Lakewood Estates Mobile Home Park | B | 67 | 66 | 69 | +3 | Yes |
| R27 - Holiday Inn Express (pool) | E | 72 | 65 | 67 | +2 | No |
| R28 - Single-Family residential | B | 67 | 67 | 70 | +3 | Yes |
| R29 - Single-Family residential | B | 67 | 69 | 72 | +3 | Yes |
| R30 - Single-Family residential | B | 67 | 68 | 71 | +3 | Yes |
| R31 - HH Browning Alternative Learning Center (playground) | C | 67 | 70 | 72 | +2 | Yes |

Source: IH-30 Traffic Noise Technical Report, 2018

As indicated in Table 9, the proposed project would result in a traffic noise impact to 30 representative receivers. The following noise abatement measures were considered: traffic management; alteration of horizontal and/or vertical alignments; acquisition of undeveloped property to act as a buffer zone; and the construction of noise barriers.

Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50 percent of impacted, first row receivers by at least 5 dB(A); and to be "reasonable," it must not exceed the cost-effectiveness criterion of \$25,000 for each receiver that would benefit by a reduction of at least 5 dB(A) and the abatement measure must be able to reduce the noise level for at least one impacted, first row receiver by at least 7 dB(A).

R3 and R4 – These receivers represent a total of 28 receivers (Bayside Development, at the balconies, 4 floors). Based on preliminary calculations, a noise barrier 832 feet in length and 20 feet in height, located along the existing ROW, would reduce the noise levels by five dB(A) for ten benefitted receivers and seven dB(A) for five benefitted receivers at a total cost of \$299,520 or \$19,968per benefitted receiver.

R5 - This receiver represents a total of four receivers (the Comfort Suites Lake Ray Hubbard pool). Based on preliminary calculations, a noise barrier 250 feet in length and 18 feet in height, located along the existing ROW, would reduce noise levels by seven dB(A) for the four benefitted receivers at a total cost of \$81,000 or \$20,250 per benefitted receiver.

As described above, results indicated that noise barriers would be both feasible and reasonable at R3, R4, and R5; and therefore, are proposed for incorporation into the project.

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

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 (2043) noise impact contours (Table 10).

Table 10 - Noise Impact Contours in the Project Study Area

| Location | Land Use NAC category | Impact Contour ¹ | Distance from Proposed ROW Line |
|---|-----------------------|-----------------------------|---------------------------------|
| From Bass Pro Drive to Dalrock Road | B & C | 66 dB(A) | 432 feet |
| | E | 71 dB(A) | 138 feet |
| From Dalrock Road to Village Drive/Ridge Road | B & C | 66 dB(A) | 434 feet |
| | E | 71 dB(A) | 185 feet |
| From Village Drive/Ridge Road to SH 205 | B & C | 66 dB(A) | 410 feet |
| | E | 71 dB(A) | 174 feet |
| From SH 205 to Erby Campbell Boulevard. | B & C | 66 dB(A) | 380 feet |
| | E | 71 dB(A) | 129 feet |
| From Erby Campbell Boulevard to Hunt County Line (West of FM 2642 | B & C | 66 dB(A) | 343 feet |
| | E | 71 dB(A) | 31 feet |

¹ - Impact contours are one dB(A) lower than the NAC per category to reflect impacts that would occur as a result of approaching the NAC for the respective contours.

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

No-Build Alternative: If the No-Build Alternative were implemented, traffic noise levels would be expected to increase with an associated increase in traffic volumes over time.

5.15 Induced Growth

The Council on Environmental Quality (CEQ) defines indirect effects as those “caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the

pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems” (40 CFR Section 1508.8).

Build Alternative: An analysis of indirect impacts followed the processes outlined in TxDOT’s Indirect Impacts Analysis Guidance (July 2016). Refer to *the IH-30 Indirect and Cumulative Impacts Analysis Technical Report* for a detailed discussion of the indirect effects analysis.

Results of the analysis indicate that there is the potential for 2,889 acres of induced growth to occur as a result of the proposed project, located within the Cities of Garland, Rowlett, Fate, and Royse City.

Approximately 1,167 acres of Agriculture; 142 acres of Disturbed Prairie; 2 acres of Post Oak Savanna; 168 acres of Riparian; 1,256 acres of Tallgrass Prairie, Grassland; and 154 acres of Urban vegetation would be potentially impacted by induced growth. The induced growth impacts on non-Urban vegetation/habitat in the Area of Interest (AOI) total approximately 2,735 acres.

Wildlife that may utilize the previously discussed vegetation for food and habitat include the plains spotted skunk (*Spilogale putorius interrupta*), a state species of concern (SOC); western burrowing owl (*Athene cunicularia hypugaea*), a state SOC; the Texas garter snake (*Thamnophis sirtalis annectens*), a state SOC; and the timber rattlesnake (*Crotalus horridus*), a state-listed threatened species, among others. SGCN that may inhabit the areas subject to potential induced development include, but are not limited to, the eastern spotted skunk (*Spilogale putorius*), Mississippi kite (*Ictinia mississippiensis*), and Shinner's sedge (*Carex shinersii*), among others. Habitat fragmentation and loss would occur as a result of the induced growth. However, due to much of this land being disturbed regularly, whether by mowing maintenance, agricultural production, livestock grazing, or vehicular disturbance, it is unlikely that high quality wildlife habitat is present within the areas considered subject to induced growth related to the proposed project. Additionally, the proposed project and some associated induced growth are located in a mostly rural setting. Similar and higher quality habitat is present in the surrounding area, such as where Rowlett Creek and Muddy Creek drain into Lake Ray Hubbard, and largely rural, unincorporated regions located to the north, east and south of the eastern AOI. Lastly, while the potential induced growth impacts to vegetation and wildlife habitat are considered at a broad/resource scale (potential impact to percent of all non-Urban habitat/vegetation in the AOI), the potential 17 and 16 percent impacts to Agriculture and Tallgrass Prairie, Grassland MOU types, respectively, are considered substantial.

There are approximately 21,201 acres of prime farmland and farmland of statewide importance in the AOI. Approximately 2,527 acres of prime farmland and farmland of statewide importance would be impacted by induced development. This represents approximately 12 percent of the 21,201 acres of prime farmland soils and farmland soils of statewide importance in the AOI and is considered substantial.

Of the 2,527 acres of prime farmland potentially impacted by induced development, 2,491 acres are located outside of the U.S. Census Bureau (USCB) 2017 Dallas-Fort Worth-Arlington, TX Urban Area and are potentially subject to the Farmland Protection Policy Act (FPPA).

There are approximately 7,574 acres of open water (lakes and ponds), 195 acres of riverine features, and 227 acres of potential wetlands within the AOI. Waters of the U.S. that could be impacted by induced development include three acres of wetlands, 19 acres of open waters (freshwater ponds), and 20 acres of riverine features, for a total of 42 acres. This represents approximately 0.3 percent of the 7,574 acres of open water; 10 percent of the 195 acres of riverine features; and one percent of the 227 acres of potential wetlands within the AOI. The impacts to Waters of the U.S. from potential induced development are not considered substantial.

There are approximately 11,268 acres of 100-year flood zone within the AOI. Approximately 199 acres of the 100-year flood zone is located within the areas of potential induced development. The potential impact represents approximately two percent of the 11,268 acres of 100-year flood zone within the AOI and is not considered substantial.

The induced growth associated with the proposed project does not conflict with study area goals, would not delay or interfere with the planned improvement of a resource, and is not inconsistent with any applicable laws; therefore, mitigation for the impacts to Waters of the U.S., floodplains, and socio-economic/community resources is not warranted. There are no known mitigative responsibilities for private developers in Texas for impacts to Agriculture or Tallgrass Prairie, Grassland vegetation. Private developers would not be subject to the FPPA for impacts to prime farmland soils and farmland soils of statewide importance.

Land development activities would be regulated by the local municipalities. The mitigation of the potential development within the AOI considered for this assessment would be the responsibility of the agencies with the authority to implement such controls. This authority rests with the municipal governments of Garland, Rowlett, Fate, and Royse City and, to a lesser extent, Dallas, Rockwall, and Hunt Counties. Examples of municipal government regulations include Article 4: Tree Preservation and Mitigation in the City of Garland's GDC; Plant Material/Protected Tree Guide in the City of Rowlett's Development Code; the City of Fate's UDO, which contains rules to protect trees, and mandates tree preservation, permitting, and mitigation; and Royse City's Code of Ordinances regarding tree preservation and removal. Additionally, developers often incorporate existing vegetation features, such as green belts, into their design plans; thus, maintaining some existing natural vegetation and wildlife habitat. The responsibility of transportation providers such as TxDOT, local and regional transit agencies, and the local governments would be to implement a transportation system to complement the land use.

All developers, public and private, would be subject to the Clean Water Act, Endangered Species Act, and Migratory Bird Treaty Act; however, private developers would not be subject to Section 106 of the National Historic Preservation Act or the FPPA.

The responsibility of transportation providers such as TxDOT, local and regional transit agencies, and the local governments would be to implement a transportation system to complement the land use.

No-Build Alternative: This alternative would not result in induced growth.

5.16 Cumulative Impacts

The CEQ defines cumulative impacts as those which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7). As such, it may be difficult to understand the role that a proposed action may have in contributing to the overall or cumulative impacts to an area or resource.

Build Alternative: An analysis of cumulative impacts followed the processes outlined in TxDOT's *Cumulative Impacts Analysis Guidelines (July 2016)*. Refer to the *IH-30 Indirect and Cumulative Impacts Analysis Technical Report* for a detailed discussion of the cumulative impacts analysis.

Cumulative impacts to vegetation and wildlife habitat and floodplains were analyzed because there are direct impacts, indirect effects, and the resource is in poor and/or declining health.

For the cumulative impacts analysis, a resource study area (RSA) was selected which has both temporal and geographic components. The temporal component of the RSA is the timeframe in which effects to resources are expected to occur. The year 2001 was used as the beginning temporal boundary because it corresponds to the end of the longest period of economic expansion in recent U.S. history. The temporal boundary extends to 2045, the end of the current MTP planning cycle.

Due to laws and regulations concerning Waters of the U.S. and associated floodplains, agricultural practices and residential/commercial development usually avoid streams and their associated floodplains and can leave portions of pristine habitat in place. For this reason, quality wildlife habitat and vegetation are usually found within stream systems, adjacent to intermittent and perennial streams. The proposed project is located within subbasins for Buffalo Creek, Brushy Creek, Parker Creek, Pond Branch, Sabine Creek and their associated tributaries. The geographical RSA for vegetation and wildlife used in this analysis consist of these subbasins because they support the vegetation, wildlife habitat, and waters most likely to be affected by the proposed project. The Buffalo Creek, Brushy Creek, Parker Creek, Pond Branch, Sabine Creek and their associated tributaries subbasins RSA is also the geographical RSA for farmland (soils). The RSA boundary follows topographical highs. Topography affects soil formation and development, and the chemical and physical properties of soil. These factors play a part in determining soil quality. Therefore, using the subbasins RSA for farmland (soils) is admissible.

Extending the RSA beyond these subbasins would include areas outside the influence of the proposed project. The RSA captures the Cities of Garland, Rowlett, Rockwall, Mobile City, Fate, and Royse City, Dallas County, and unincorporated areas of Rockwall, Collin and Hunt Counties. The RSA totals approximately 55,245 acres.

Vegetation and Wildlife Habitat

Results of the analysis indicate that the cumulative impacts on non-urban vegetation and wildlife habitat resulting from 13 acres of direct impacts, 2,735 acres of induced development impacts, and 11,411 acres of impacts from other past, present, and reasonably foreseeable actions would total 14,159 acres. Cumulative impacts to vegetation and wildlife habitat would affect 34 percent of the approximately 41,519 acres of non-Urban MOU Habitat-type vegetation within the RSA.

While cumulative impacts would affect approximately 14,159 acres of non-Urban MOU Habitat-type vegetation and potential wildlife habitat, it is likely that most of the wildlife that resides in the resource study area (RSA), which consists of approximately 25 percent urban, are somewhat accustomed to an urban landscape or would migrate to other areas of available non-human-altered habitat. In addition, riparian areas are known to be migration corridors for wildlife. It is expected that these areas would not be adversely affected due to municipal protections to riparian resources within floodplains. That is, restrictions on construction within floodplains and tree preservation regulations make it probable that most of the riparian habitat within the RSA would not be subject to widespread removal. Based on the continued availability of protected habitat areas, the potential cumulative impact occurring over a 44-year period, allowing for resource recovery; and assuming appropriate implementation of regulated avoidance, minimization, and mitigation strategies for vegetation and habitat impacts, the proposed project would not contribute to substantial cumulative impacts to the area's vegetation and habitat.

Incorporating parks, open spaces, and riparian corridors around and within developed areas would provide wildlife habitat and shelter. Planting these areas with native fruit or nut-bearing trees and shrubs, and native grain-bearing grasses would provide food for wildlife and would help to mitigate impacts to habitat used by wildlife. This mitigation could be conducted by whoever is responsible for the impact such as a city or a developer. Private development within the associated municipalities within the RSA (Garland, Rowlett, Rockwall, Fate, and Royse City) would be subject to the laws and ordinances regulating residential, commercial and industrial development set by each municipal government. Examples of municipal government regulations include Article 4: Tree Preservation and Mitigation in the City of Garland's Garland Development Code; Plant Material/Protected Tree Guide in the City of Rowlett's Development Code; the City of Fate's Unified Development Ordinance, which contains rules to protect trees, and mandates tree preservation, permitting, and mitigation; and Royse City's Code of Ordinances regarding tree preservation and removal. Mitigation could include mandatory park areas or a limit on lot sizes.

Farmland

Results of the analysis indicate that the cumulative impacts on prime farmland subject to FPPA resulting from one acres of direct impacts, 2,491 acres of induced growth impacts, and 7,553 acres of impacts from other past, present, and reasonably foreseeable actions would total 10,045 acres. Cumulative impacts to vegetation and wildlife habitat would affect 45 percent of the resource within the RSA.

Private developers would not be subject to the FPPA for impacts to prime farmland soils and farmland soils of statewide importance.

The Texas Farm and Ranch Lands Conservation Program (TFRLCP), created in 2005, is a grant-making program that provides landowners with financial incentives to conserve their land and productivity through Agricultural Conservation Easements. These easements restrict all future development while allowing the landowner to continue farming or ranching (American Farmland Trust, 2009). The TFRLCP was transferred from the Texas General Land Office (GLO) to TPWD in 2016. Approved grant projects awarded by the Texas GLO range in size from 175 acres to 2,995 acres and by the TPWD range in size from 144 acres to 7,229 acres. This type of program could be effective mitigation within the Farmland (Soils) RSA. The average farm size in Collin County is 138 acres; Dallas County is 100 acres; Hunt County is 108 acres; and Rockwall County is 103 acres (USDA, 2012).

Incorporated areas can manage growth issues through local ordinances, such as zoning and subdivision ordinances. Development activities outside of the incorporated areas are under the jurisdiction of Collin, Dallas, Hunt, and Rockwall Counties, which use subdivision ordinances primarily to regulate lot sizes and density.

No-Build Alternative: The implementation of this alternative would not contribute to cumulative impacts of the RSA.

5.17 Construction Phase Impacts

Build Alternative: Depending on required traffic control and phasing, the construction phase of the proposed project, and associated construction impacts, is anticipated to be 36 months. During the construction phase of the proposed project, there is the potential for noise, dust or light pollution; impacts associated with physical construction activity, temporary lane, road or bridge closures (including detours); and other traffic disruptions. These potential impacts are discussed as follows:

Construction Noise – There would be loud noise from heavy equipment during construction of the project. Noise associated with the construction is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns and would not be restricted to any specific location.

Construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the businesses and residences along the project is expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected.

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.

Fugitive Dust and Air Pollutants – During the construction phase of this project, temporary increases in PM and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related

emissions of MSAT are diesel PM from diesel powered construction equipment and vehicles. Refer to **Section 5.12** of this EA and the *IH-30 Air Quality Assessment Technical Report* for a detailed discussion of fugitive dust and air pollutants.

Construction-related pollutants that are not contained onsite are expected to dissipate readily in the normal course of atmospheric mixing. Considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this project would have any substantial impact on air quality in the proposed project area.

The potential impacts of PM emissions would be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The TERP provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at:

<http://www.tceq.state.tx.us/implementation/air/terp/>.

Light Pollution – Construction normally occurs during daylight hours; however, construction could occur during the night-time hours to minimize impacts to the traveling public during the daylight hours.

Due to the close proximity of businesses and residents to the project, if construction were to occur during the night-time hours, it would be of short duration and would not be conducted late in the evening.

Construction during the night-time hours would be of short duration and would follow any local policies and ordinances established for construction activities, such as light limitations.

Construction Activity Impacts – Construction activities would be limited to the proposed project footprint. Excessive vibration from construction equipment is not anticipated. If there was excessive vibration from construction equipment, it would be of short duration.

Traffic control plans would be prepared and implemented in coordination with the cities and the counties. Construction that would require cross street closures would be scheduled so only one crossing in an area is affected at one time. Where detours are required, clear and visible signage for an alternative route would be displayed. In residential areas, major activity would be limited to normal work hours whenever practicable, to avoid noise and related impacts to the local population.

Temporary Lane, Road or Bridge Closures (Including Detours) – Traffic control plans would be prepared and implemented in coordination with the cities and the county. Construction that would require cross street closures would be scheduled so only one crossing in an area is affected at one time. No detours are anticipated for project construction.

Motorists would be inconvenienced during construction of the project due to lane and cross-street closures; however, these closures would be of short duration and alternate routes would be provided.

Residents and businesses in the immediate construction area would be notified in advance of proposed construction activity using a variety of techniques, including signage, electronic media, community newspapers, and other techniques. The proposed project would not restrict access to any existing public or community services, businesses, commercial areas, or employment centers.

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

6.0 AGENCY COORDINATION

Coordination with the USACE, TCEQ, TPWD, THC, and federally-recognized tribes has occurred under TxDOT's respective MOUs and PA with these agencies/entities. See **Appendix G** for the written coordination exchanges.

7.0 PUBLIC INVOLVEMENT

TxDOT held two open house public meeting to present the project to the public and receive comments. The first meeting was held at Royse City High School, 700 South FM 2642, Royse City, Texas 75189 on Thursday, April 27, 2017 from 5:30 pm to 8 pm. The second meeting was held at Rockwall County District Courthouse, 1111 East Yellow Jacket Lane #401, Rockwall, Texas 75087 on Thursday, May 4, 2017 from 5:30 pm to 8 pm. Comments received as a result of the public meeting concerned public safety, noise, driveways and other access issues.

The Public Meeting Documentation may be inspected and copied upon request at the TxDOT Dallas District Office. A public hearing would be held following approval of the draft EA.

A notice of impending construction would be provided to owners of adjoining property and affected local governments and public officials. The notice may be provided via a sign or signs posted in the ROW, mailed notice, printed notice distributed by hand, or notice via website when the recipient has previously been informed of the relevant website address. This notice would be provided after the environmental decision (i.e. FONSI), but before earthmoving or other activities requiring the use of heavy equipment begin.

8.0 ENVIRONMENTAL PERMITS, ISSUES, AND COMMITMENTS

ROW Acquisition and Relocation

The TxDOT ROW Acquisition and Relocation Assistance Program would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended, in the Uniform Relocation Assistance Act of 1987, and relocation resources are available without discrimination to all facilities being relocated.

Limited English Proficiency

A Public Hearing would be conducted for the proposed project. Reasonable steps would be taken to ensure that LEP persons have meaningful access to the programs, services, and information TxDOT provides. During the Public Hearing, an interpreter for specific languages would be provided if requests are made prior to the event date.

Cultural Resources

In the unlikely event that cultural resources are discovered during construction of the proposed project, TxDOT would immediately initiate cultural resource discovery procedures. All work in the vicinity of the discovery would cease until a specialist from TxDOT and/or the THC could arrive on site and assess the discovery's significance and the need, if any, for additional investigation.

Clean Water Act Section 401

The SW3P would include at least one BMP from the 401 Water Quality Certification Conditions for NTPs as published by the TCEQ. These BMPs would address each of the following categories:

- Category I Erosion Control would be addressed by using temporary vegetation, blankets/matting, permanent seeding/sodding, and stone outlet structures.
- Category II Sedimentation Control would be addressed by installing silt fence, rock berms, and stabilized construction exits.
- Category III Post-Construction TSS control would be addressed by installing grass swales and vegetative filter strips.

Other approved methods would be substituted if necessary using one of the BMPs from the identical category.

Clean Water Act Section 402

TxDOT would comply with the requirements of the TCEQ TPDES General Permit No. TxR150000. In order to comply with TPDES General Permit Number TxR150000 for Construction Activities requirements, a NOI would be filed with TCEQ stating that TxDOT would have a SW3P in place during construction of this project. A construction site notice would be posted on the construction site. This SW3P utilizes the temporary control measures as outlined in TxDOT's manual Standard Specifications for the Construction of Highways, Streets, and Bridges.

Sections of the Build Alternative are located within the boundaries of an MS4 and would comply with the applicable MS4 requirements.

Executive Order 11988, Floodplain Management

The proposed project would be in compliance with 23 CFR 650 regarding location and hydraulic design of highway encroachments within the floodplains, and the proposed project would comply with EO 11988, Floodplain Management. Local floodplain administrator coordination would be conducted.

Biological Resources

Impacts to vegetation would be avoided or minimized by limiting disturbance to only that which is necessary to construct the proposed project. The removal of native vegetation, particularly mature native trees and shrubs would be avoided to the greatest extent practicable.

In accordance with the TxDOT-TPWD Memorandum of Agreement, the following BMPs would be implemented for the wood stork, western burrowing owl, plains spotted skunk, alligator snapping turtle, Texas garter snake, timber rattlesnake, Texas Pigtoe, and Texas heelsplitter:

Wood Stork and Western Burrowing Owl BMPS (Bird BMPs): In addition to complying with the Migratory Bird Treaty Act (MBTA), perform the following BMPs:

- a) 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.
- b) Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season.
- c) Avoid the removal of unoccupied, inactive nests, as practicable.
- d) Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair.
- e) Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.

Plains spotted skunk BMPs: 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.

Alligator snapping turtle BMPs- Minimize impacts to wetland and riverine habitats and implement the Aquatic Reptile BMPs.

Amphibian and Aquatic Reptile BMPs

- a) Contractors would be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
- b) Minimize impacts to wetland, temporary and permanent open water features, including depressions, and riverine habitats.
- c) Maintain hydrologic regime and connections between wetlands and other aquatic features.
- d) Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.

- e) 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, using erosion control blankets or mats that contain no netting, or only contain loosely woven natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.
- f) Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.
- g) When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and overwinter sites (e.g., brush and debris piles, crayfish burrows) where feasible.
- h) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, which may be refugia for terrestrial amphibians, where feasible.
- i) If gutters and curbs are part of the roadway design, where feasible install gutters that do not include the side box inlet and include sloped (i.e. mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.
- j) For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two.
- k) For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.
- l) When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Where feasible, biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.

Texas garter snake and Timber rattlesnake BMPs (Terrestrial Reptile BMPs):

- a) 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.

- b) For open trenches and excavation 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.
- c) Inform contractors that if reptiles are found on project site allow species to safely leave the project area.
- d) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, where feasible.
- e) Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

Texas Pigtoe and Texas heelsplitter BMPs (Freshwater Mussel BMPs):

- a) When work is in the water, survey project footprints for state listed species where appropriate habitat exists.
- b) When work is in the water and mussels are discovered during surveys, relocate state listed and SGCN mussels under TPWD permit and implement Water Quality BMPs.
- c) When work is adjacent to the water, Water Quality BMPs implemented as part of SWPPP for a construction general permit or any conditions of the 401 water quality certification for the project would be implemented.

Water Quality BMPs: In addition to BMPs required for a TCEQ Storm Water Pollution Prevention Plan and/or 401 water quality permit:

- a) Minimize the use of equipment in streams and riparian areas during construction. When possible, equipment access should be from banks, bridge decks, or barges.
- b) When temporary stream crossings are unavoidable, remove stream crossings once they are no longer needed and stabilize banks and soils around the crossing.

Executive Order 13112 on Invasive Species

Seeding and replanting with TxDOT-approved seed mixes containing native species would be conducted where possible. Soil disturbance would be minimized in the ROW in order to minimize invasive species establishment. Preserve native vegetation to the extent practical. Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, and 752 in order to comply with the requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

Executive Memorandum on Environmentally and Economically Beneficial Landscaping

Seeding and replanting of disturbed areas with TxDOT-approved seed mixes that are in compliance with the Executive Memorandum on Beneficial Landscaping would be done where possible.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a Federal permit issued in accordance within the Act's policies and regulations. The contractor would remove all old migratory bird nests from any structure where work would be done from October 1 to February 15. In addition, the contractor would be prepared to prevent migratory birds from building nest(s) between February 15 and October 1. In the event that migratory birds are encountered on-site during project construction, efforts to avoid adverse impacts on protected birds, active nests, eggs, and/or young would be observed.

Hazardous Materials or Contamination Issues

Any unanticipated hazardous materials encountered during construction would be handled according to applicable federal, state, and local regulations per TxDOT Standard Specifications. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. All construction materials used for this project would be removed as soon as the work schedules permit.

Should hazardous materials/substances be encountered, the TxDOT Dallas District Hazardous Materials Section would be notified and steps would be taken to protect personnel and the environment. If necessary, the plans, specifications, and estimates would include provisions for the appropriate soil and/or groundwater management plans for activities within these areas. The management plans would be initiated in accordance with all applicable federal, state and local regulations.

9.0 CONCLUSION

The engineering, social, economic, and environmental investigations conducted thus far indicate that implementation of the proposed project would result in no significant impacts on the human or natural environment. A FONSI is recommended.

10.0 REFERENCES

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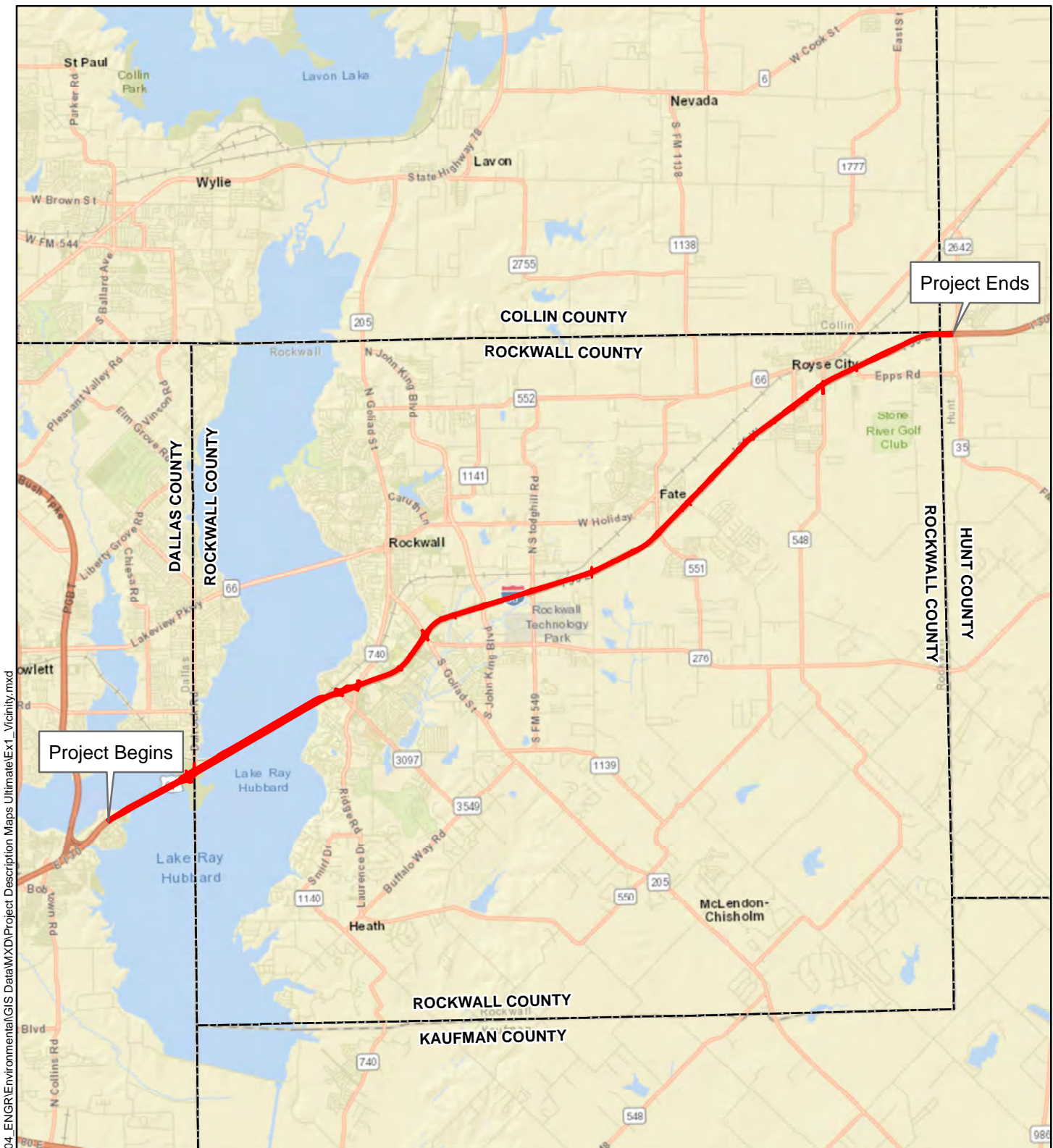
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11.0 APPENDICES

Appendix A – Project Location Maps



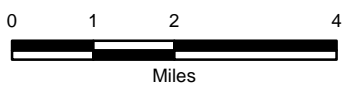
Project Begins

Project Ends

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Project Limits
 County Line



**Exhibit A-1
Project Location Map**

Interstate Highway 30
From Bass Pro Drive to
West of FM 2642

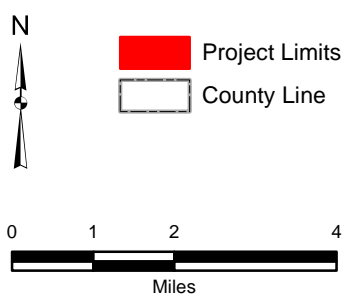
CSJ 0009-11-238, etc.

Dallas & Rockwall Counties, TX

Date: April 2018 | Proj. No: 3450-00 | Exhibit No: A-1



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Aerial Image: 2017 ESRI Imagery

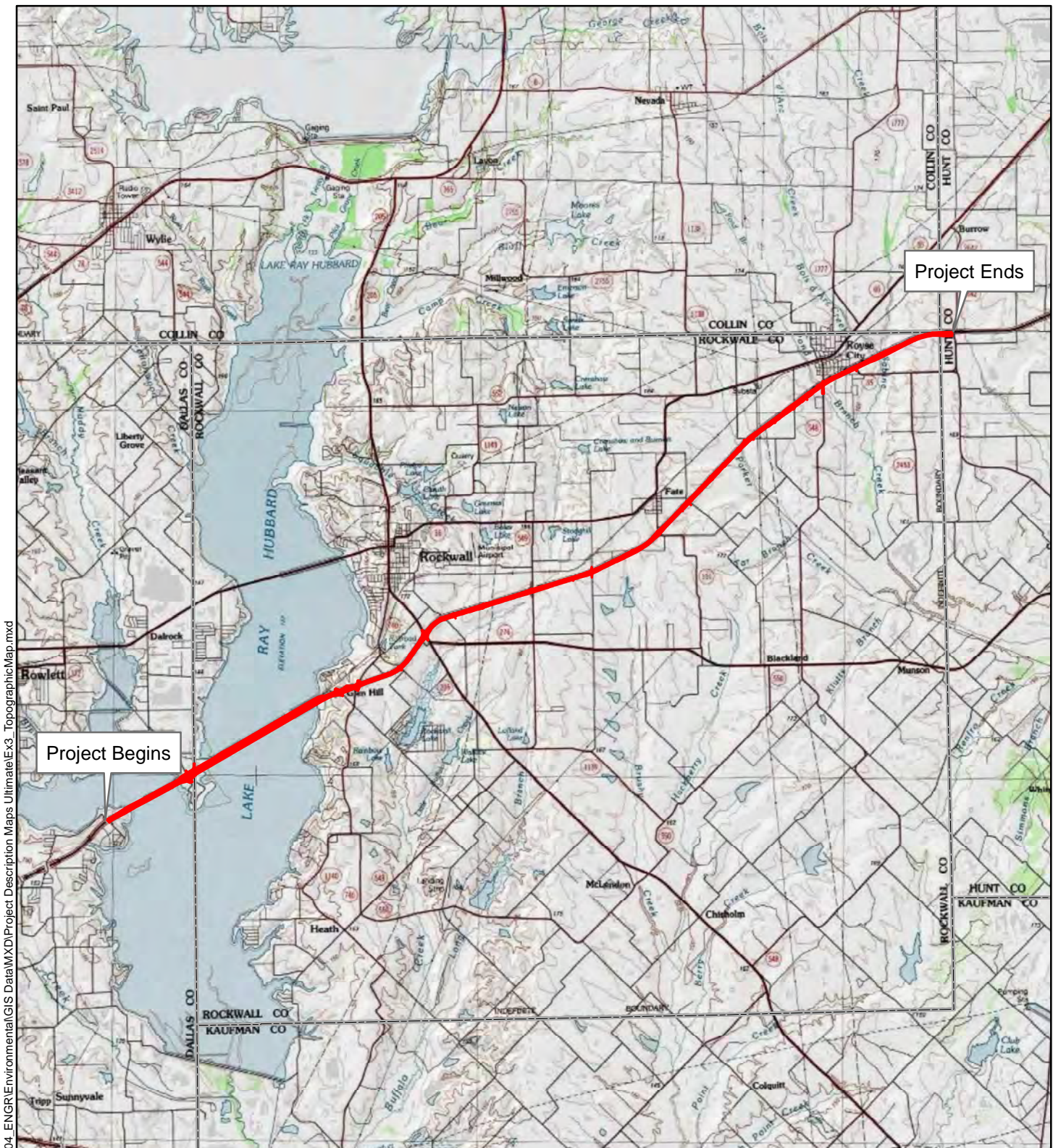
Exhibit A-2
Project Location on Aerial Map

Interstate Highway 30
From Bass Pro Drive to
West of FM 2642

CSJ 0009-11-238, etc.

Dallas & Rockwall Counties, TX

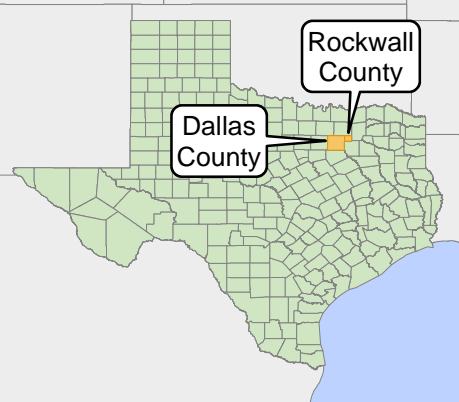
Date: April 2018 | Proj. No: 3450-00 | Exhibit No: A-2



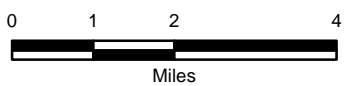
Project Begins

Project Ends

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Project Limits
 County Line



Topographical Image: 1995 Mesquite, Forney North, Rockwall, & Rowlett Quadrangle

Exhibit A-3
Project Location on Topographic Map

Interstate Highway 30
From Bass Pro Drive to
West of FM 2642

CSJ 0009-11-238, etc.

Dallas & Rockwall Counties, TX

Date: April 2018 | Proj. No: 3450-00 | Exhibit No: A-3

Appendix B – Project Photos

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 1 - View of Stream 1 facing north (westbound).



Photograph 2 - View of Stream 2 facing north (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 3 - View of Stream 2 facing north (westbound).



Photograph 4 - View of Stream 3 facing north-west (westbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 5 - View of Stream 4 facing north (westbound).



Photograph 6 - View of Stream 4 facing south (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 7 - View of Stream 5 facing northwest (westbound).



Photograph 8 - View of Stream 5 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 9 - View of Stream 6 facing northwest (westbound).



Photograph 10 - View of Stream 6 face northwest (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 11 - View of culvert to Stream 7 facing northeast (westbound).



Photograph 12 - View of Stream 7 and Wetland 12 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 13 - View of Stream 8 facing southeast (eastbound).



Photograph 14 - View of Stream 9 facing northwest (westbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 15 - View of Stream 9 facing southeast (eastbound).



Photograph 16 - View of Stream 10 facing northwest (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 17 - View of Stream 10 facing southwest (eastbound).



Photograph 18 - View of Stream 11 facing northeast (westbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 19 - View of Stream 11 facing southeast (eastbound).



Photograph 20 - View of Stream 12 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 21 - View of Stream 13 facing northwest at FM 548.



Photograph 22 - View of Stream 13 facing northwest (westbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 23 - View of Stream 14 facing northwest (westbound).



Photograph 24 - View of Stream 14 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 25 - View of Stream 15 facing northwest (westbound).



Photograph 26 - View of Stream 15 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 27 - View of Stream 16 facing northwest (westbound).



Photograph 28 - View of Stream 16 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 29 - View of Stream 17 facing northwest (westbound).

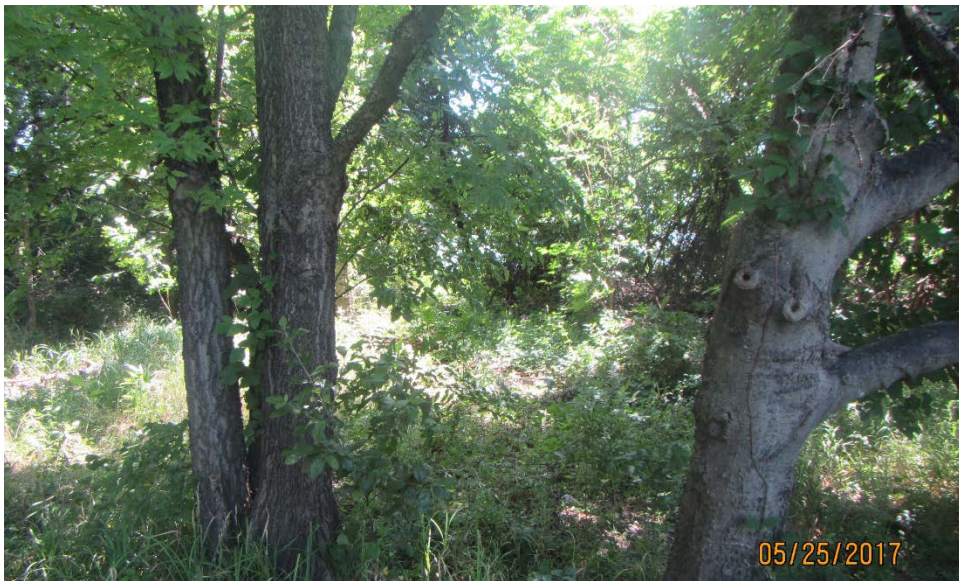


Photograph 30 - View of Stream 17 facing southeast (eastbound).

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 31 - View of Wetland 1.



Photograph 32 - View of Wetland 2.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 33 - View of Wetland 3, facing west.



Photograph 34 - View of Lake Ray Hubbard near Bass Pro Drive, facing southeast.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 35 - View of Lake Ray Hubbard near Bass Pro Shop, facing southeast.



Photograph 36 - View of Lake Ray Hubbard near Bass Pro Shop, facing northeast.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 37 - View of Lake Ray Hubbard near Dalrock Road, facing northeast.



Photograph 38 - View of Lake Ray Hubbard near Dalrock Road, facing southwest.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 39 - View of Wetland 4, facing northeast.



Photograph 40 - View of Wetland 5, facing west.



Photograph 41 - View of Wetland 6.



Photograph 42 - View of Wetland 7.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 43 - View of Wetland 8, facing east.



Photograph 44 - View of Wetland 9, facing east.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 45 - View of Wetland 10, facing northeast.



Photograph 46 - View of Wetland 11, facing east.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
CSJ-0009-11-238, 0009-12-215, 0009-12-219, & 0009-12-220



Photograph 47 – View looking east-southeast near approximate I-30 Sta. 714+00 towards one of two tank holds of the Sunmart 106 PST site at 926 E. I-30, Royse City, TX (Map ID 11). This tank hold serves automobiles and small trucks at pump islands (right of the photo out of view). ROW would be acquired from the site. The former Prime Travel Stop gas station is in the background of the photo. The site is considered a moderate environmental risk to the proposed project.



Photograph 48 – View looking northeast near approximate I-30 Sta. 673+50 to 675+50 towards the tank hold of the Tiger Mart 42 gas station LPST and PST site at 117 W. I-30, Royse City, TX (Map ID 18). ROW would be required from the site. The site is considered a moderate environmental risk to the project.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
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Photograph 49 – View looking northeast near approximate I-30 Sta. 715+00 to 718+00 towards the former Prime Travel Stop gas station LPST and PST site at 1016 E. I-30, Royse City, TX (Map ID 20). No ROW would be acquired from the site. The site is considered a high environmental risk.



Photograph 50 – View looking southwest near approximate I-30 Sta. 676+50 to 678+00 towards the pump island and tank hold of the Triple C Convenience Store and gas station LPST and PST site at 100 W. I-30, Royse City, TX (Map ID 24). No ROW would be acquired from the site. The site is considered a high environmental risk to the project.

IH-30 Improvements from Bass Pro Drive to west of FM 2642
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Photograph 51 – View looking northeast towards one of two tank holds of Loves Country Store 283 gas station LPST and PST site at 1990 E. I-30, Rockwall, TX (Map ID 45). I-30 is in the background of the photo and the pump islands in the photo serve automobiles and small trucks. ROW would be acquired from the site. The site is considered a moderate environmental risk to project



Photograph 52 – View looking west towards one of the three tank holds of the Rockwall 76 Truck Stop LPST and PST site at 2105 S. Goliad Street (SH 205), Rockwall, TX (Map ID 49). This tank hold abuts the proposed ROW. I-30 is in the background of the photo. ROW would be acquired from the site. The site is considered a high environmental risk to the project.

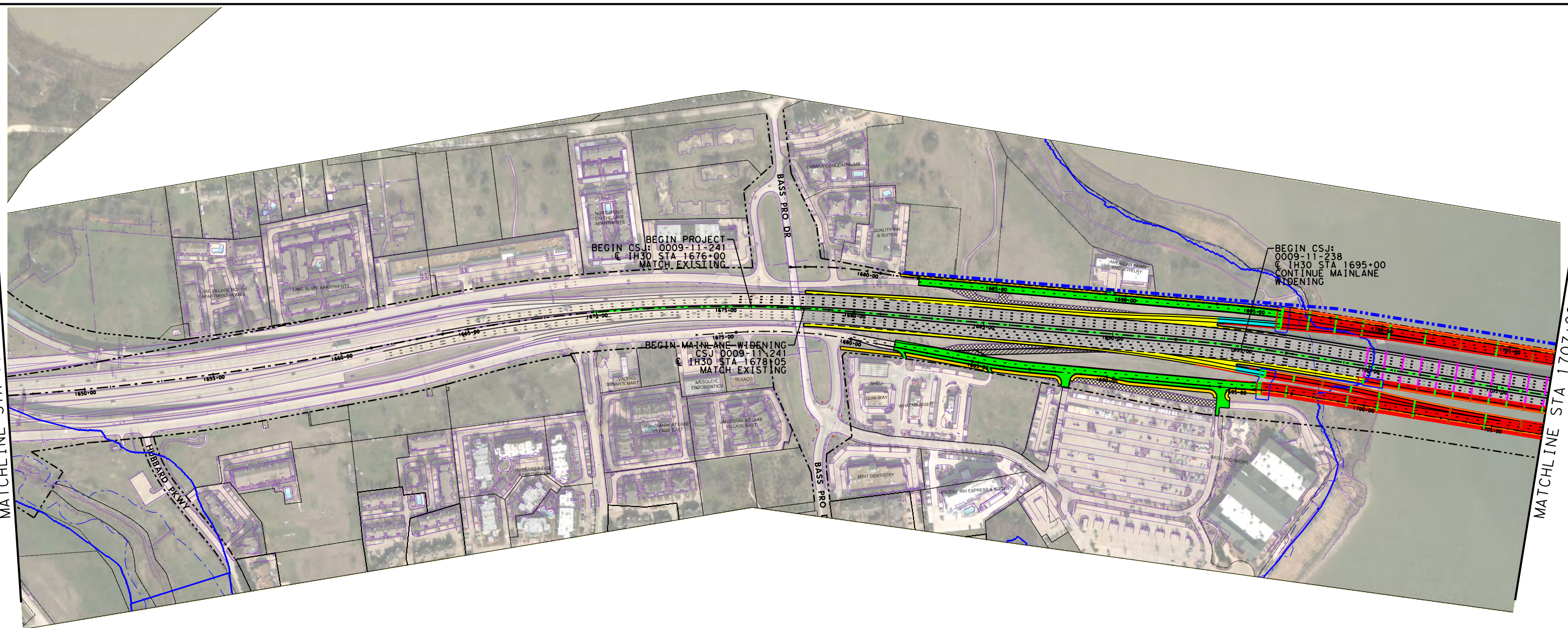
Appendix C – Schematics

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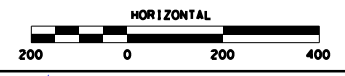
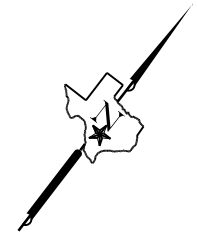
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| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADJUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
| ----- | EXISTING PROPERTY LIMITS | ----- | PROPOSED RETAINING WALL | ----- | PROPOSED SIDEWALK |
| ----- | EXISTING CULVERTS | ----- | PROPOSED NOISE WALL | ----- | PAVEMENT / BRIDGE TO BE REMOVED |
| ----- | EXISTING 100 YR FLOODPLAIN LIMITS | ----- | PROPOSED CULVERT | ----- | PROPOSED BRIDGE (UNDER CONSTRUCTION BY OTHERS) |
| ----- | EXISTING PLANIMETRIC FEATURES | ----- | EXISTING ROADWAY TO REMAIN | ----- | PROPOSED MAIN LANES (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED CENTERLINE/BASELINE | ----- | EXISTING BRIDGE TO REMAIN | ----- | PROPOSED RAMP (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED ROW | ----- | PROPOSED BRIDGE | ----- | PROPOSED FRONTAGE ROAD (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED DRAINAGE EASEMENT | ----- | PROPOSED MAIN LANES | ----- | PROPOSED CROSS STREET (UNDER CONSTRUCTION BY OTHERS) |
| ----- | TEMPORARY CONSTRUCTION EASEMENT | ----- | PROPOSED RAMP | | |
| ----- | PROPOSED EDGE OF PAVEMENT | ----- | PROPOSED FRONTAGE ROAD | | |



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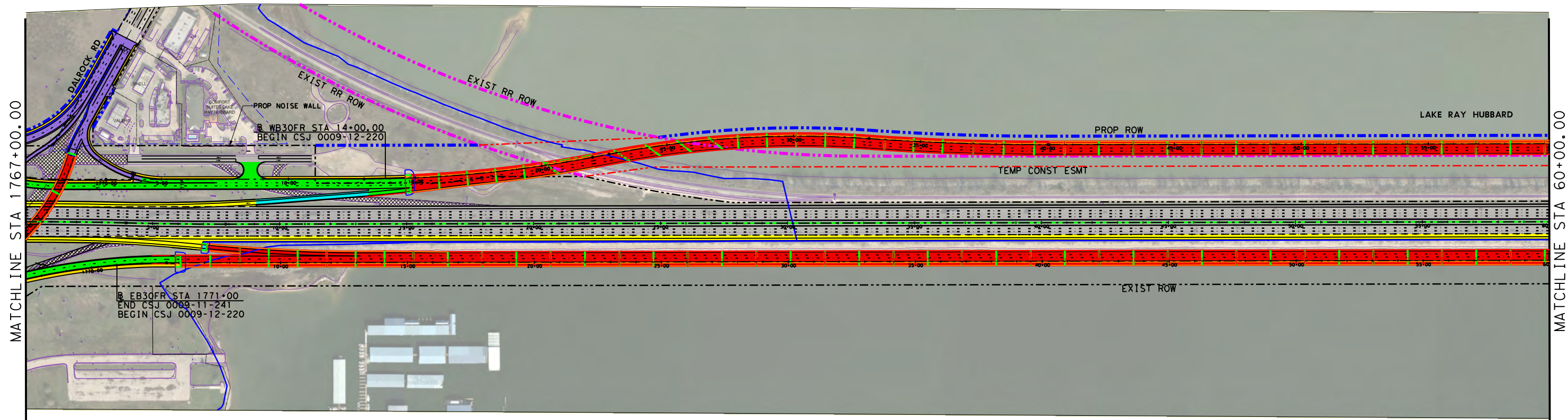
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NAME P.E. NUMBER
HOSSEIN M. HOSSEINY, P.E. 118668
NAME P.E. NUMBER
DATE

Texas Department of Transportation

IH 30-ROCKWALL CO
FROM BASS PRO DR TO
HUNT C/L (WEST OF FM 2642)
DESIGN SCHEMATIC

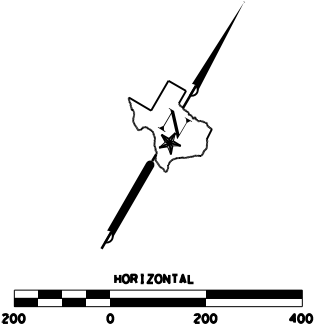
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| ----- | EXISTING PROPERTY LIMITS | ----- | PROPOSED RETAINING WALL | ----- | PROPOSED SIDEWALK |
| ----- | EXISTING CULVERTS | ----- | PROPOSED NOISE WALL | ----- | PAVEMENT / BRIDGE TO BE REMOVED |
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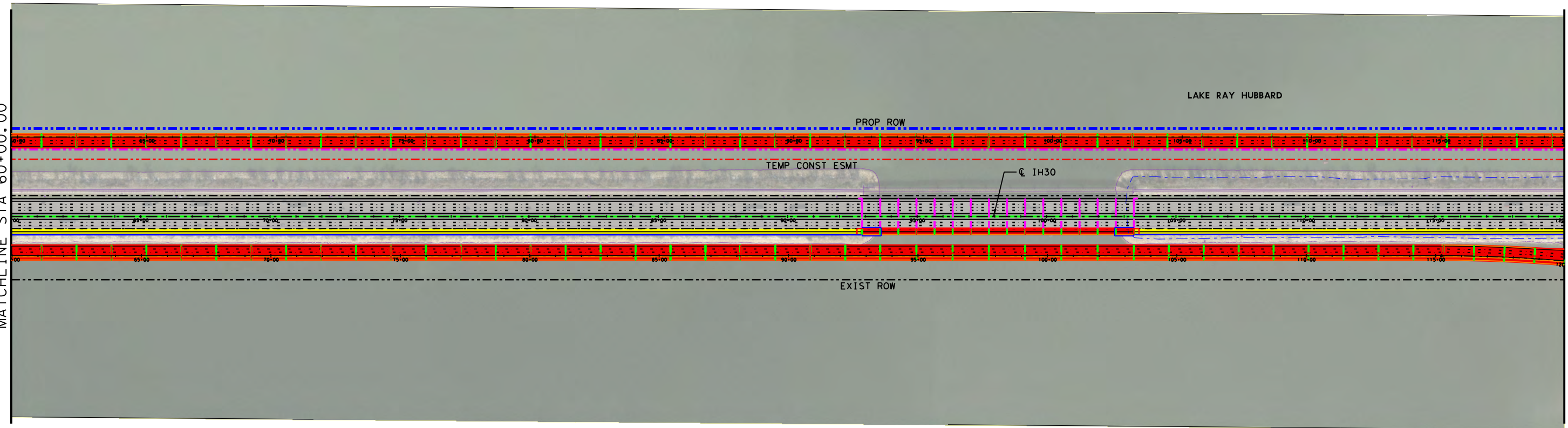
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CSJ 0009-11-238, ETC.
DATE: SEPT. 2018 SHEET 3 OF 16
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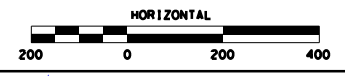
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| ----- | TEMPORARY CONSTRUCTION EASEMENT | ----- | PROPOSED RAMP | ----- | |
| ----- | PROPOSED EDGE OF PAVEMENT | ----- | PROPOSED FRONTAGE ROAD | ----- | |



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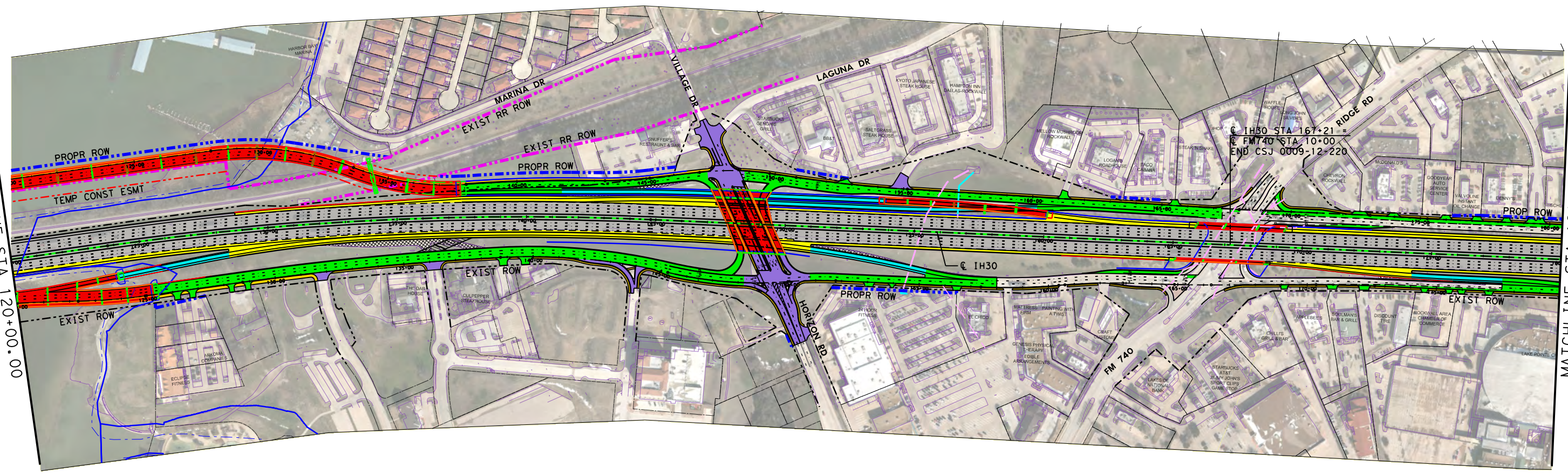
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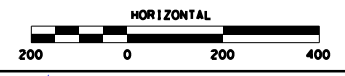
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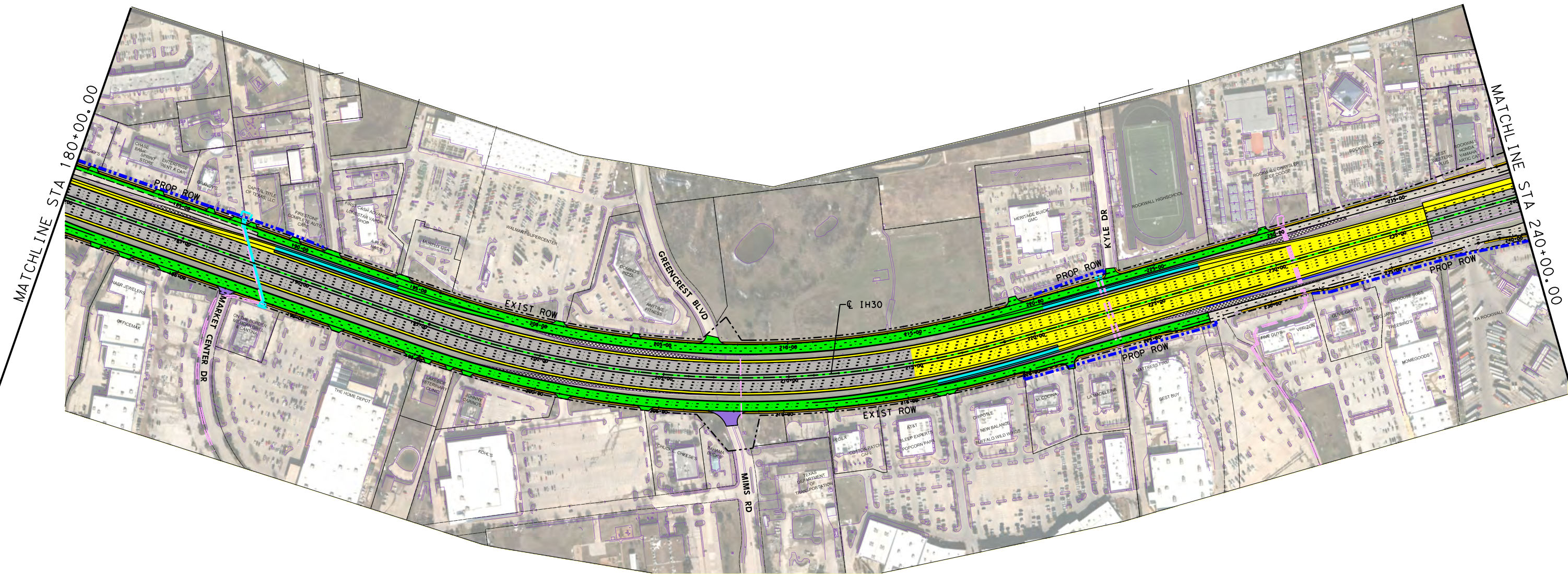
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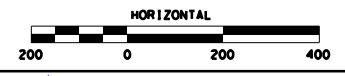
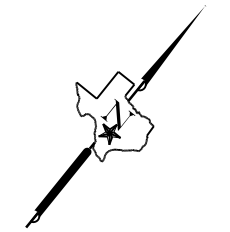
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LEGEND:

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| ----- | TEMPORARY CONSTRUCTION EASEMENT | ----- | PROPOSED RAMP | | |
| ----- | PROPOSED EDGE OF PAVEMENT | ----- | PROPOSED FRONTAGE ROAD | | |



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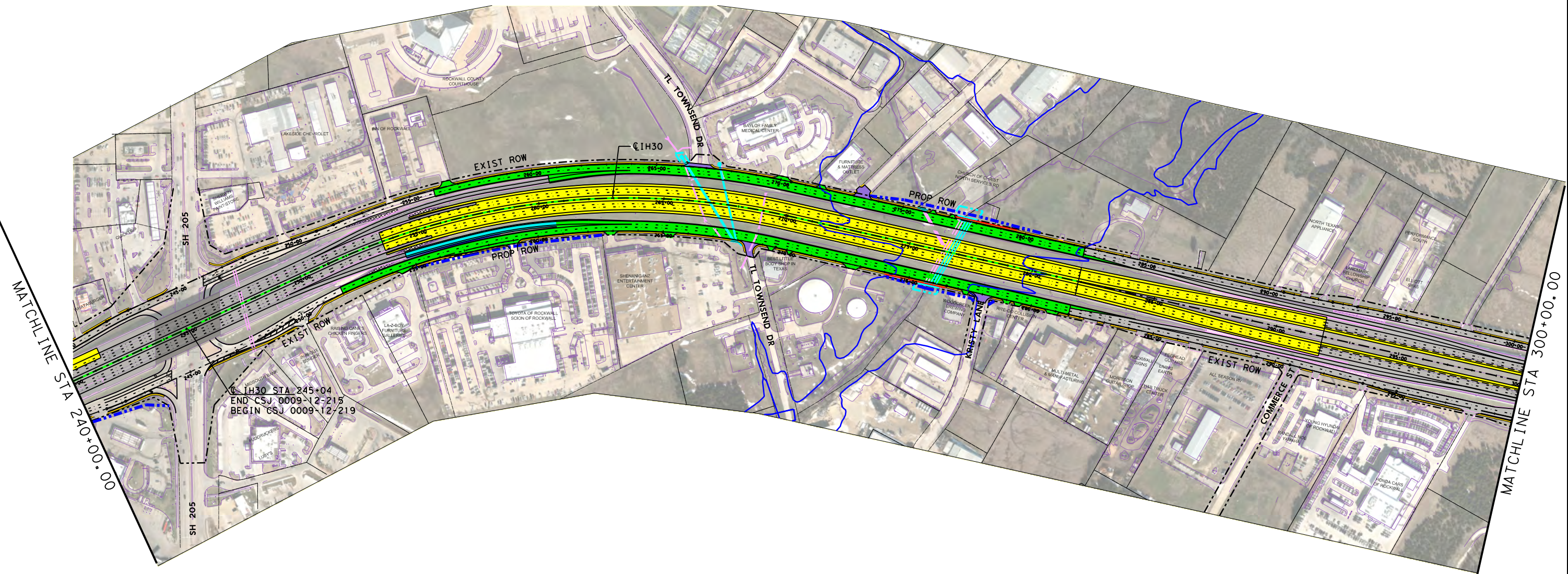
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HOSSEIN M. HOSSEINY, P.E. 118668
NAME P.E. NUMBER
DATE DATE

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IH 30-ROCKWALL CO
FROM BASS PRO DR TO
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DESIGN SCHEMATIC

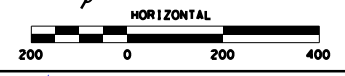
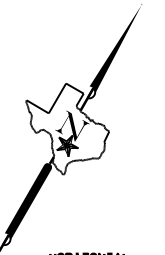
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LEGEND:

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| ----- | EXISTING PROPERTY LIMITS | ----- | PROPOSED RETAINING WALL | ----- | PROPOSED SIDEWALK |
| ----- | EXISTING CULVERTS | ----- | PROPOSED NOISE WALL | ----- | PAVEMENT / BRIDGE TO BE REMOVED |
| ----- | EXISTING 100 YR FLOODPLAIN LIMITS | ----- | PROPOSED CULVERT | ----- | PROPOSED BRIDGE (UNDER CONSTRUCTION BY OTHERS) |
| ----- | EXISTING PLANIMETRIC FEATURES | ----- | EXISTING ROADWAY TO REMAIN | ----- | PROPOSED MAIN LANES (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED CENTERLINE/BASELINE | ----- | EXISTING BRIDGE TO REMAIN | ----- | PROPOSED RAMP (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED ROW | ----- | PROPOSED BRIDGE | ----- | PROPOSED FRONTAGE ROAD (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED DRAINAGE EASEMENT | ----- | PROPOSED MAIN LANES | ----- | PROPOSED CROSS STREET (UNDER CONSTRUCTION BY OTHERS) |
| ----- | TEMPORARY CONSTRUCTION EASEMENT | ----- | PROPOSED RAMP | | |
| ----- | PROPOSED EDGE OF PAVEMENT | ----- | PROPOSED FRONTAGE ROAD | | |



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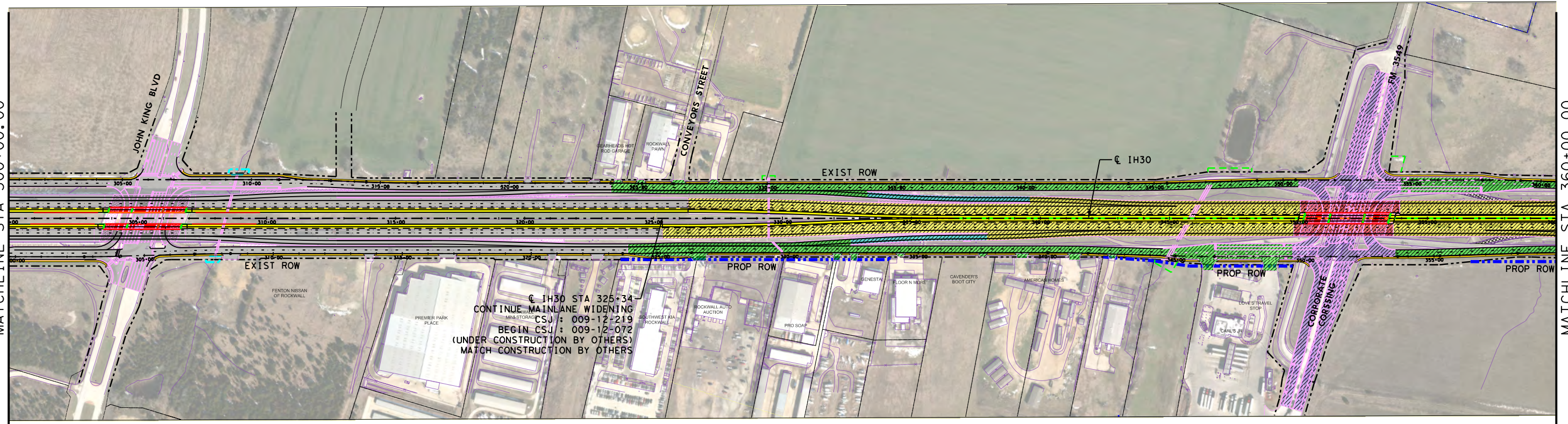
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HUNT C/L (WEST OF FM 2642)
DESIGN SCHEMATIC
CSJ 0009-11-238, ETC.
DATE: SEPT. 2018 SHEET 7 OF 16
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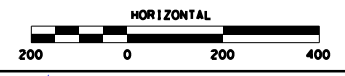
MATCHLINE STA 300+00.00

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LEGEND:

| | | | | | |
|-------|-----------------------------------|-------|-------------------------------|-------|---|
| ----- | EXISTING ROW | ----- | PROPOSED TRAFFIC BARRIER | ----- | PROPOSED CROSS STREET |
| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
| ----- | EXISTING PROPERTY LIMITS | ----- | PROPOSED RETAINING WALL | ----- | PROPOSED SIDEWALK |
| ----- | EXISTING CULVERTS | ----- | PROPOSED NOISE WALL | ----- | PAVEMENT / BRIDGE TO BE REMOVED |
| ----- | EXISTING 100 YR FLOODPLAIN LIMITS | ----- | PROPOSED CULVERT | ----- | PROPOSED BRIDGE (UNDER CONSTRUCTION BY OTHERS) |
| ----- | EXISTING PLANIMETRIC FEATURES | ----- | EXISTING ROADWAY TO REMAIN | ----- | PROPOSED MAIN LANES (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED CENTERLINE/BASELINE | ----- | EXISTING BRIDGE TO REMAIN | ----- | PROPOSED RAMP (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED ROW | ----- | PROPOSED BRIDGE | ----- | PROPOSED FRONTAGE ROAD (UNDER CONSTRUCTION BY OTHERS) |
| ----- | PROPOSED DRAINAGE EASEMENT | ----- | PROPOSED MAIN LANES | ----- | PROPOSED CROSS STREET (UNDER CONSTRUCTION BY OTHERS) |
| ----- | TEMPORARY CONSTRUCTION EASEMENT | ----- | PROPOSED RAMP | ----- | |
| ----- | PROPOSED EDGE OF PAVEMENT | ----- | PROPOSED FRONTAGE ROAD | ----- | |



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SCHEMATIC PREPARED BY:
BGE, INC.
REGISTRATION NUMBER F-1046
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES
Prepared by or under the Direct Supervision of:
MICHAEL H. GARRISON, P.E. 79285
NAME P.E. NUMBER
HOSSEIN M. HOSSEINY, P.E. 118668
NAME P.E. NUMBER
#DATE#
DATE

Texas Department of Transportation

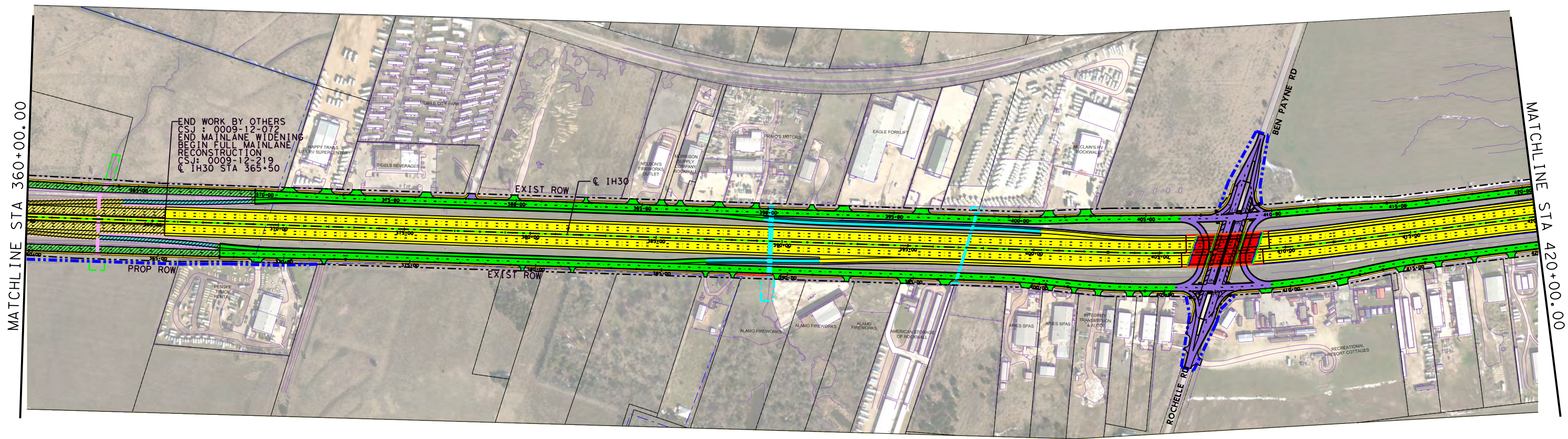
IH 30-ROCKWALL CO

FROM BASS PRO DR TO
HUNT C/L (WEST OF FM 2642)

DESIGN SCHEMATIC

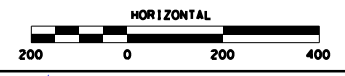
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LEGEND:

| | | | | | |
|-------|-----------------------------------|-------|--------------------------------|-------|---|
| ----- | EXISTING ROW | ----- | PROPOSED TRAFFIC BARRIER | ----- | PROPOSED CROSS STREET |
| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADJUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
| ----- | EXISTING PROPERTY LIMITS | ----- | PROPOSED RETAINING WALL | ----- | PROPOSED SIDEWALK |
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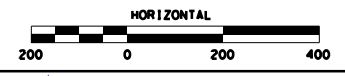
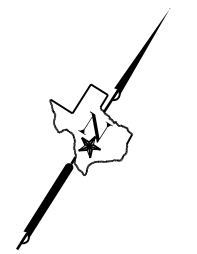
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| ----- | EXISTING ROW | ----- | PROPOSED TRAFFIC BARRIER | ----- | PROPOSED CROSS STREET |
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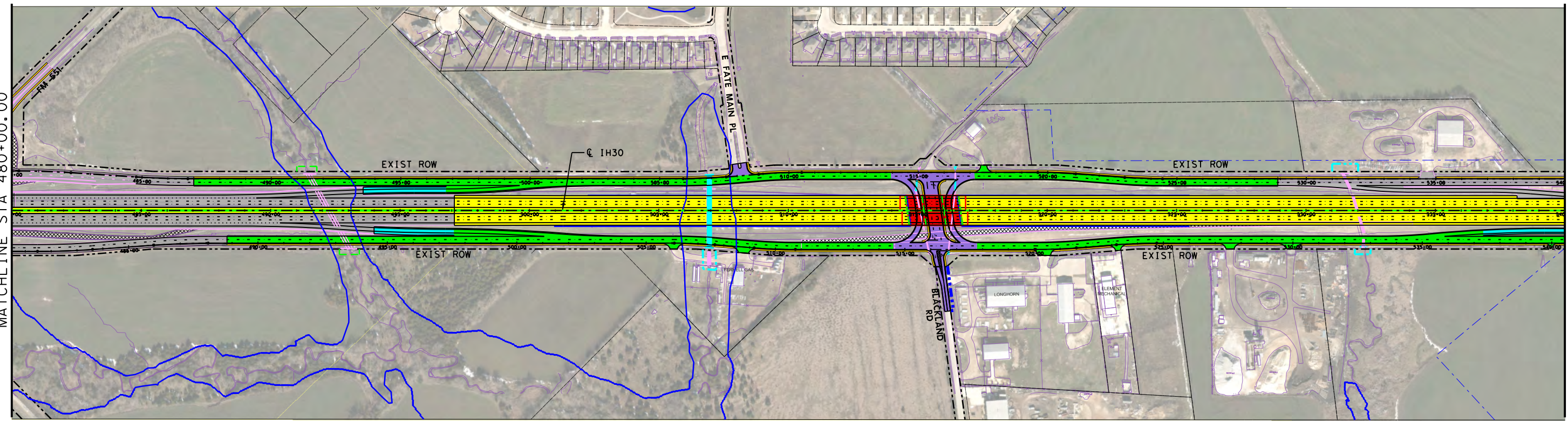
IH 30-ROCKWALL CO
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CSJ 0009-11-238, ETC.

DATE: SEPT. 2018 SHEET 10 OF 16
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\$DATES

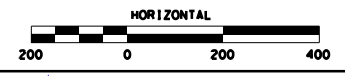
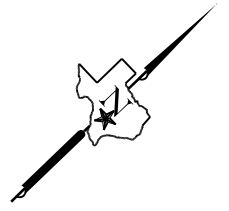
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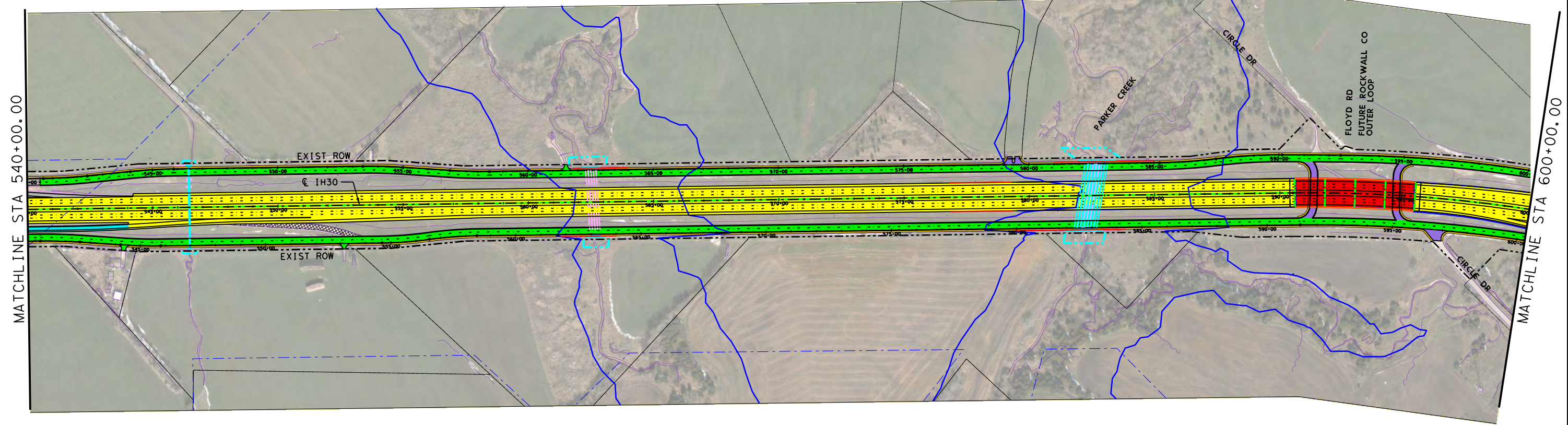
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Texas Department of Transportation

IH 30-ROCKWALL CO
FROM BASS PRO DR TO
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DESIGN SCHEMATIC

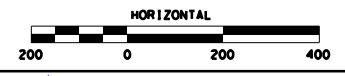
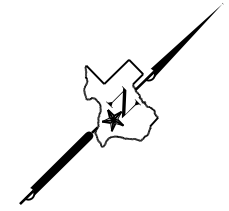
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FOR REPORT PURPOSES ONLY



LEGEND:

| | | | | | |
|-------|-----------------------------------|-------|--------------------------------|-------|---|
| ----- | EXISTING ROW | ----- | PROPOSED TRAFFIC BARRIER | ----- | PROPOSED CROSS STREET |
| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADJUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
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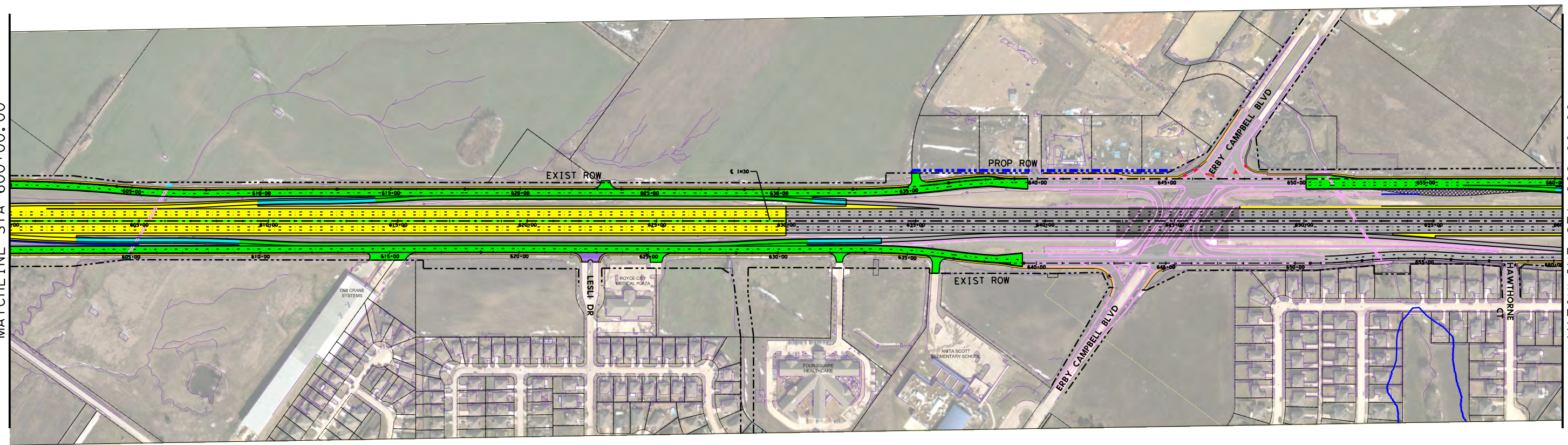
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FROM BASS PRO DR TO
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DESIGN SCHEMATIC

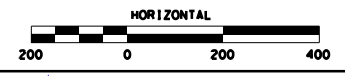
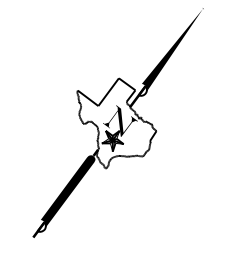
CSJ 0009-11-238, ETC.

DATE: SEPT. 2018 SHEET 12 OF 16
FOR REPORT PURPOSES ONLY



LEGEND:

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| ----- | EXISTING ROW | ----- | PROPOSED TRAFFIC BARRIER | ----- | PROPOSED CROSS STREET |
| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADJUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
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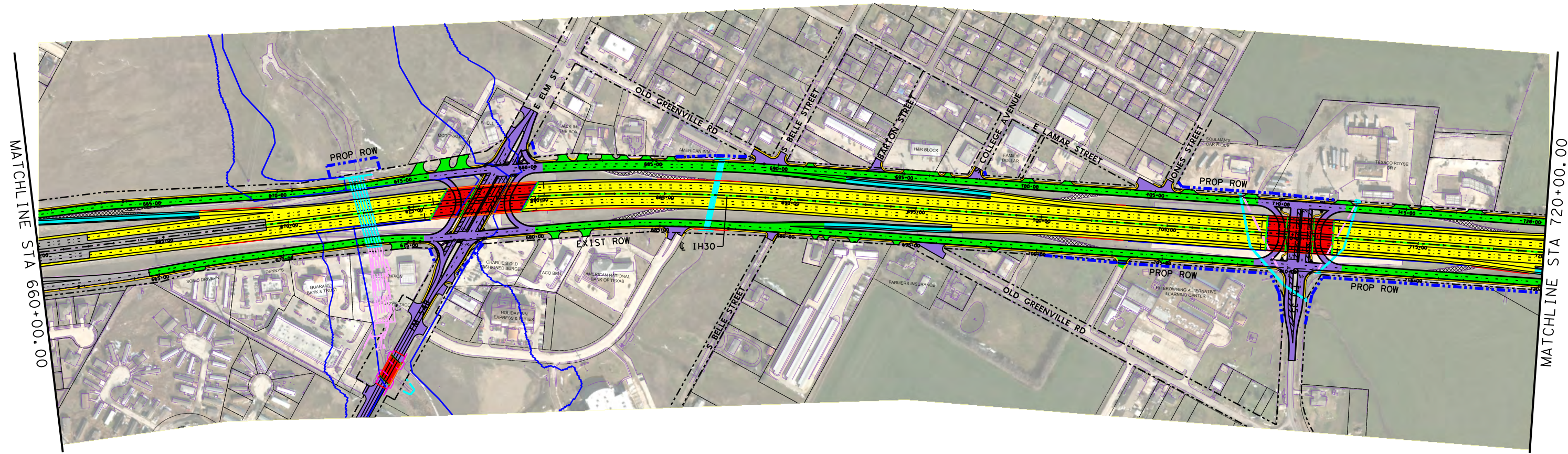
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Texas Department of Transportation

IH 30-ROCKWALL CO
FROM BASS PRO DR TO
HUNT C/L (WEST OF FM 2642)
DESIGN SCHEMATIC

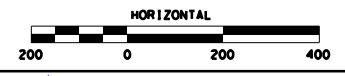
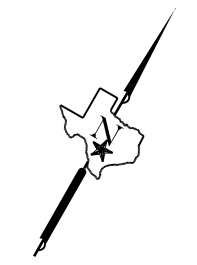
CSJ 0009-11-238, ETC.

DATE: SEPT. 2018 SHEET 13 OF 16
FOR REPORT PURPOSES ONLY



LEGEND:

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|-------|----------------------------------|-------|--------------------------------|-------|---|
| ----- | EXISTING ROW | ----- | PROPOSED TRAFFIC BARRIER | ----- | PROPOSED CROSS STREET |
| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADJUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
| ----- | EXISTING PROPERTY LIMITS | ----- | PROPOSED RETAINING WALL | ----- | PROPOSED SIDEWALK |
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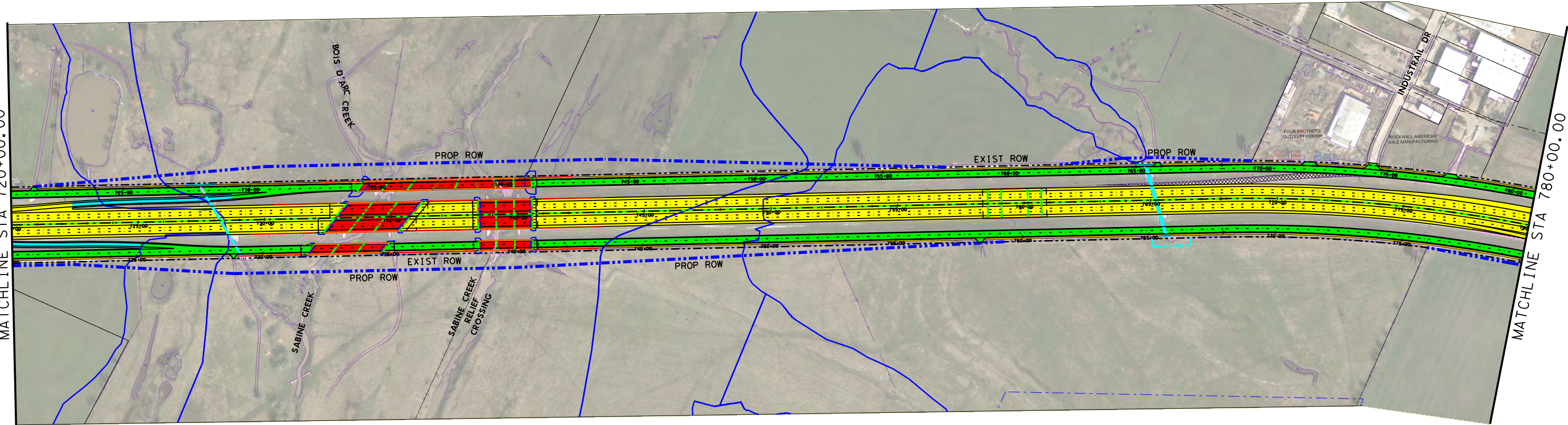
IH 30-ROCKWALL CO
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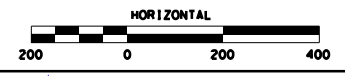
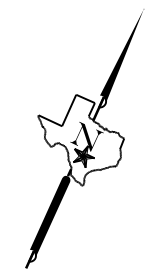
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LEGEND:

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| ----- | EXISTING EASEMENT | ----- | PROPOSED BRIDGE ADJUTMENT/BENT | ----- | PROPOSED DRIVEWAY |
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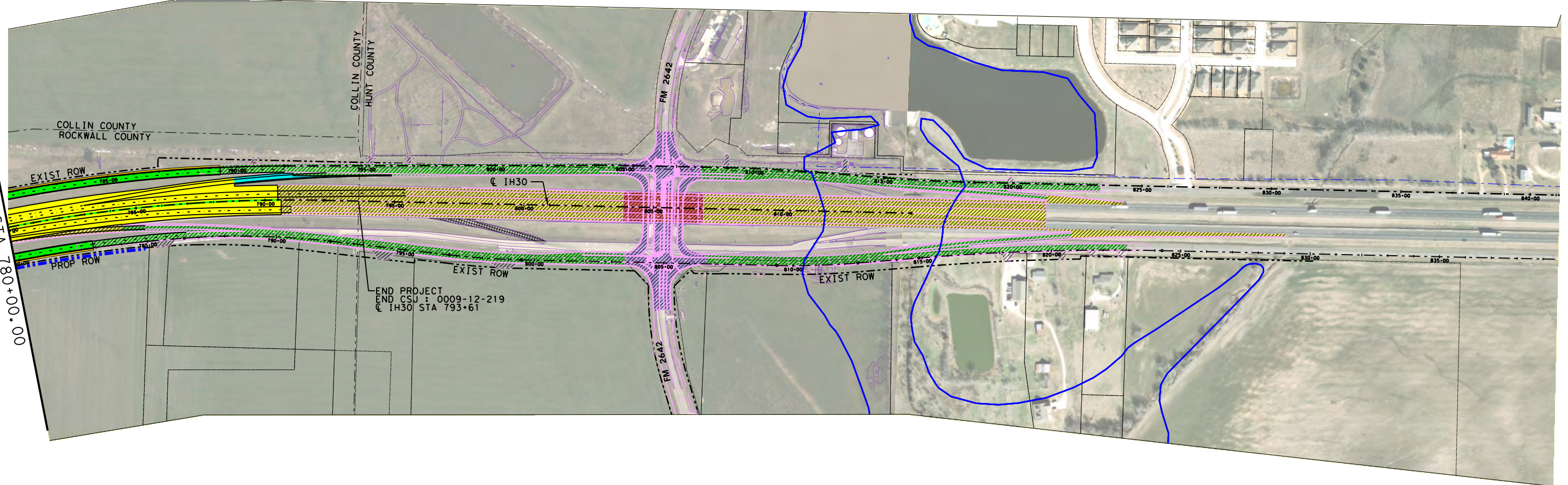
Texas Department of Transportation

IH 30-ROCKWALL CO
FROM BASS PRO DR TO
HUNT C/L (WEST OF FM 2642)
DESIGN SCHEMATIC

CSJ 0009-11-238, ETC.

DATE: SEPT. 2018 SHEET 15 OF 16
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MATCHLINE STA 780+00.00



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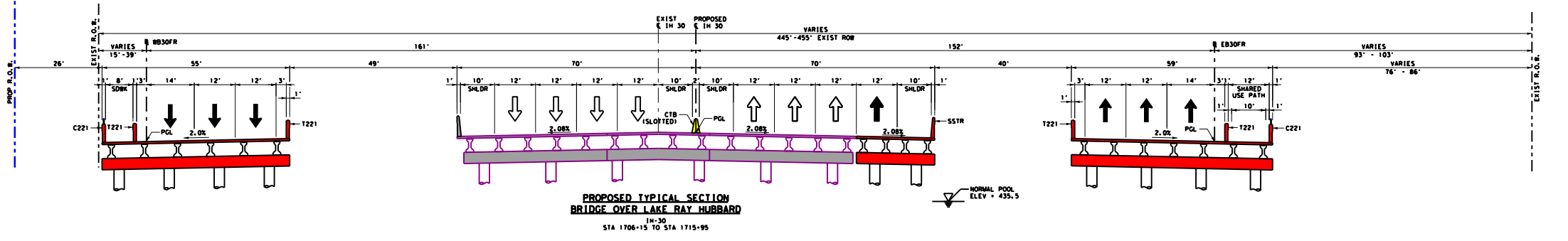
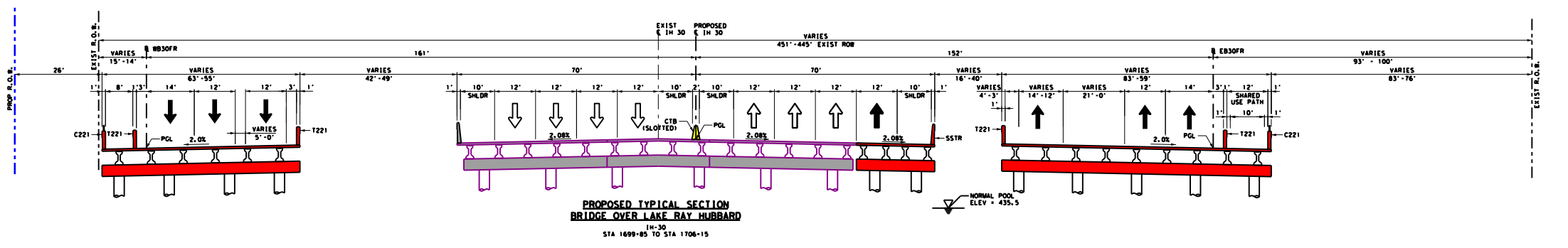
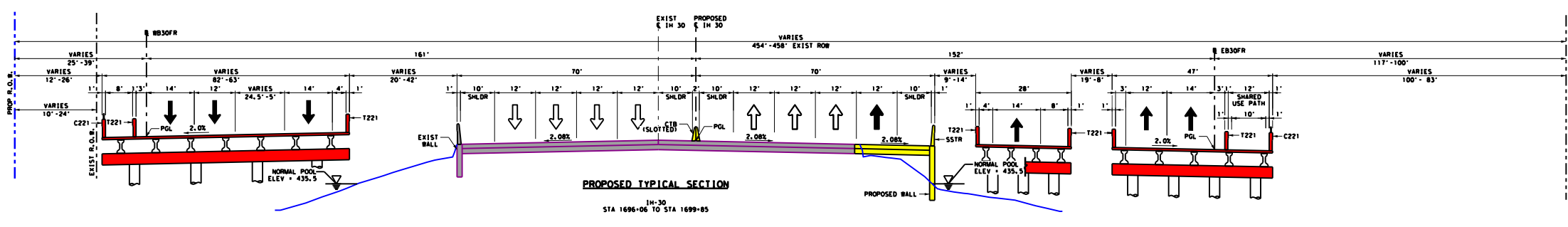
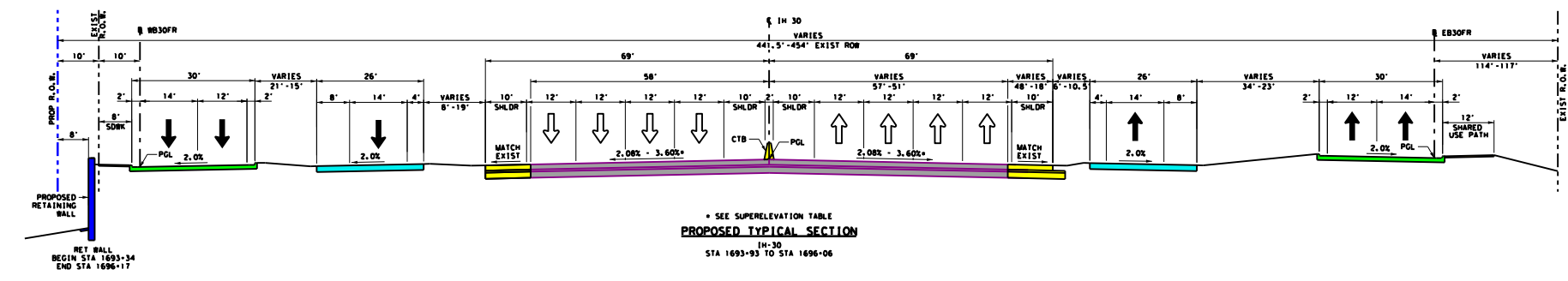
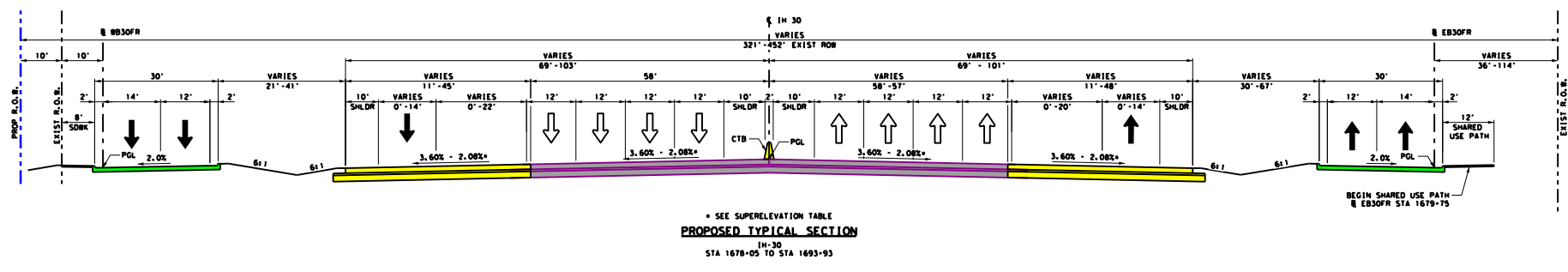
CSJ 0009-11-238, ETC.

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Appendix D – Typical Sections

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 REGISTRATION NUMBER F-1046
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 Prepared by or under the
 Direct Supervision of:
 MICHAEL H. GARRISON, P.E. 79285
 NAME P.E. NUMBER
 HOSSEIN M. HOSSEINY, P.E. 11868
 NAME P.E. NUMBER
 DATE

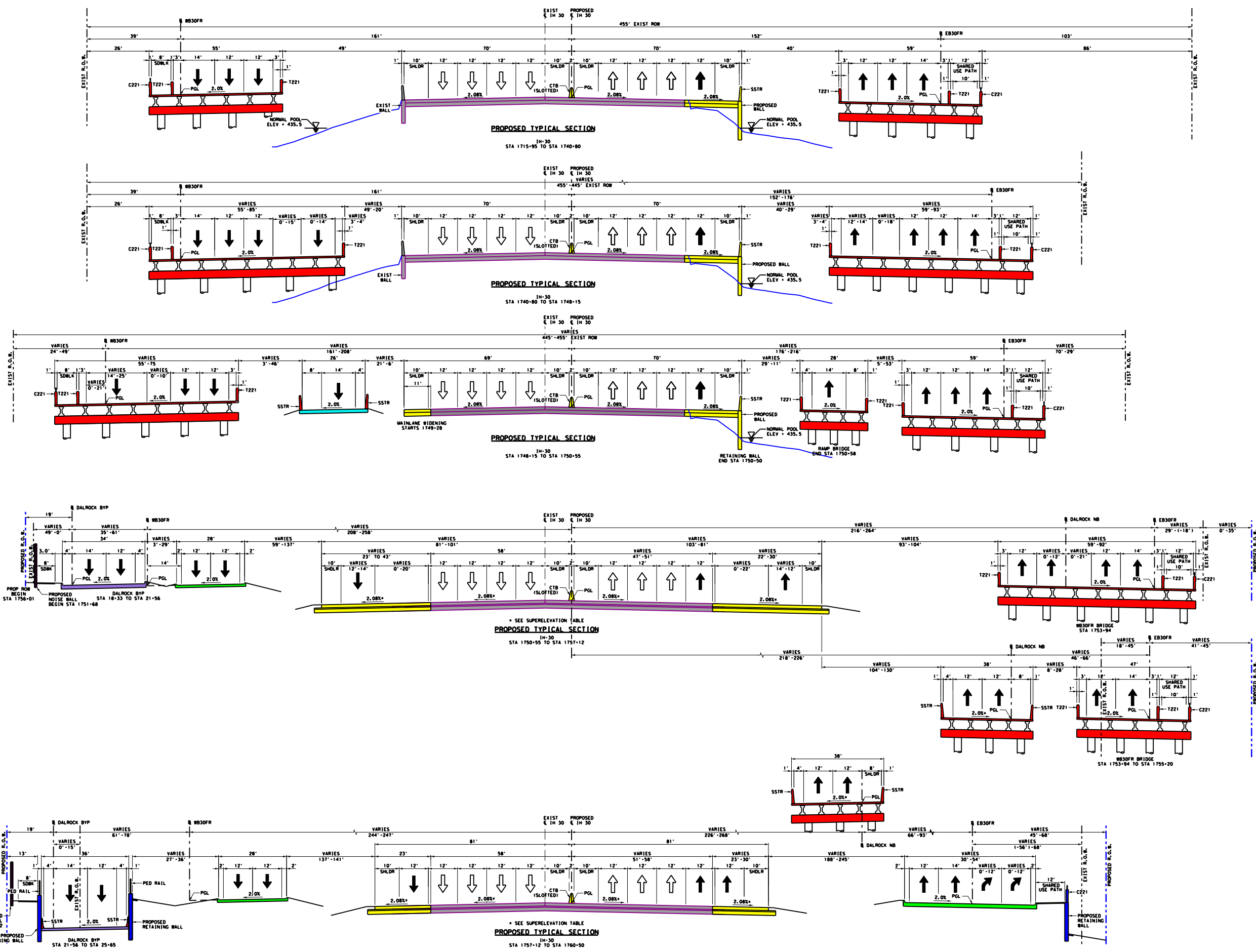
Texas Department of Transportation

IH 30-ROCKWALL CO
 FROM BASS PRO DR TO
 HUNT C/L (WEST OF FM 2642)
 DESIGN SCHEMATIC
 PROPOSED TYPICAL SECTIONS
 CSJ 0009-11-238, ETC.

DATE: OCT. 2018 SHEET 1 OF 18
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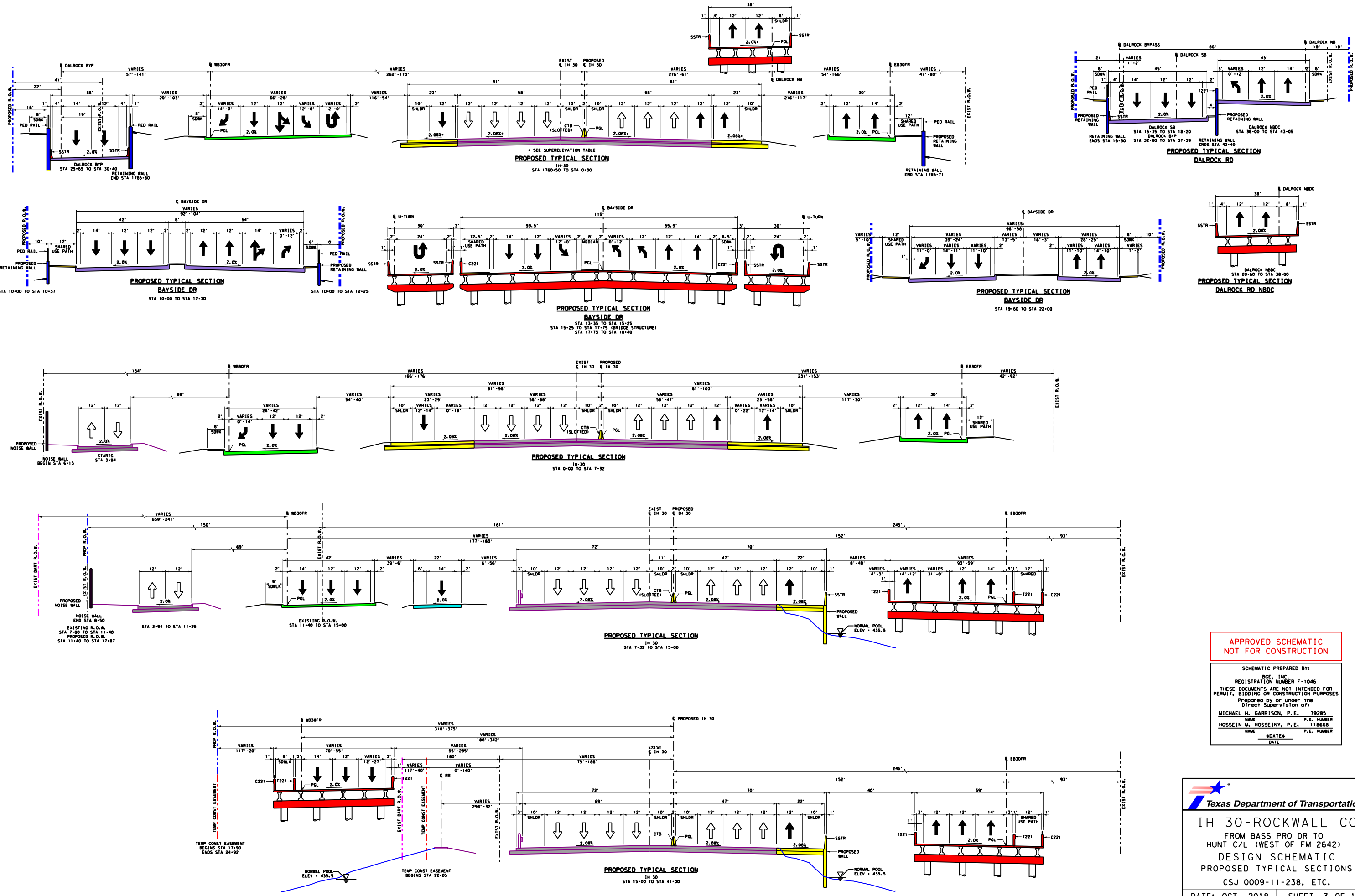
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 CSJ 0009-11-238, ETC.
 DATE: OCT. 2018 SHEET 2 OF 18
 FOR REPORT PURPOSES ONLY

SDATES

\$FILES

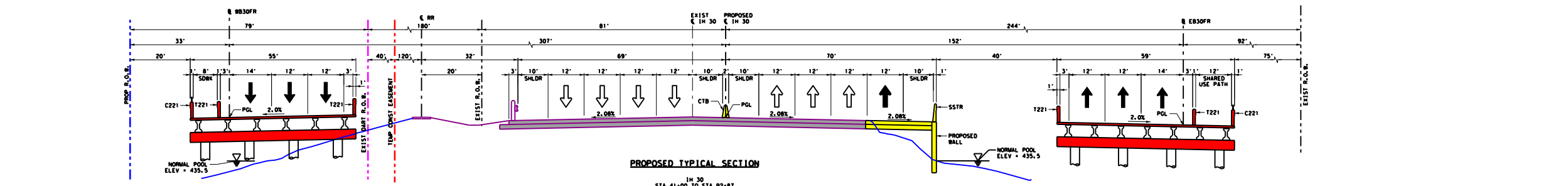


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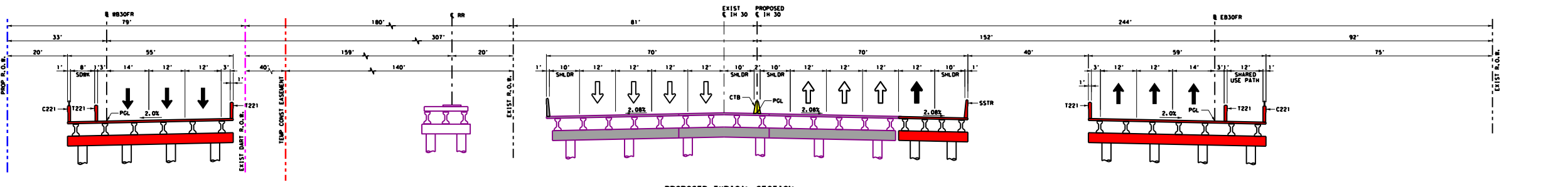
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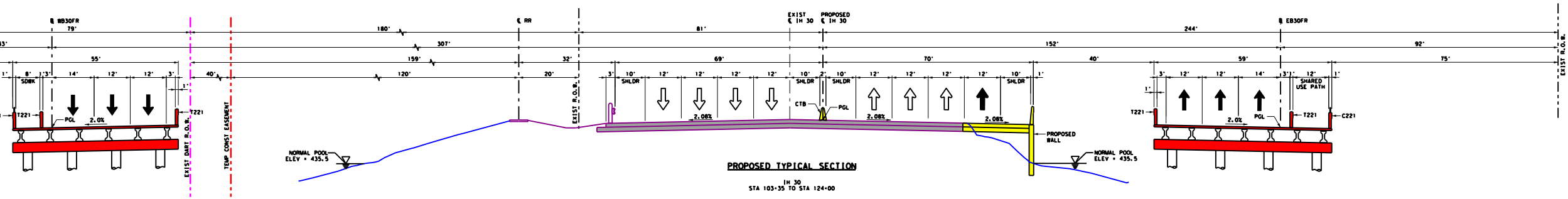
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CSJ 0009-11-238, ETC.
DATE: OCT. 2018 SHEET 3 OF 18
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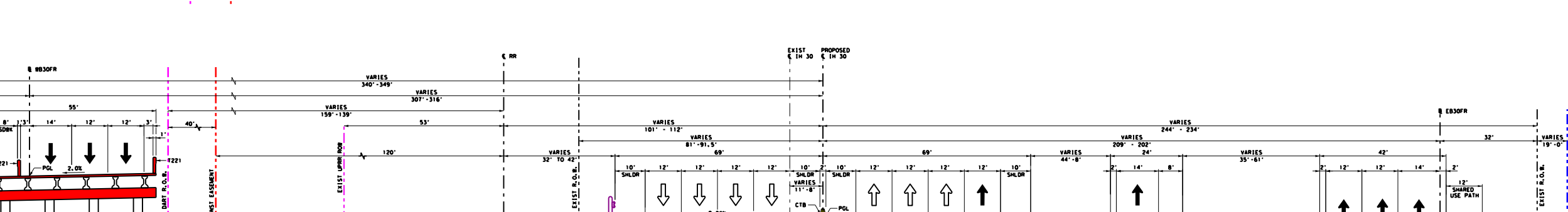
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STA 41-00 TO STA 92-87



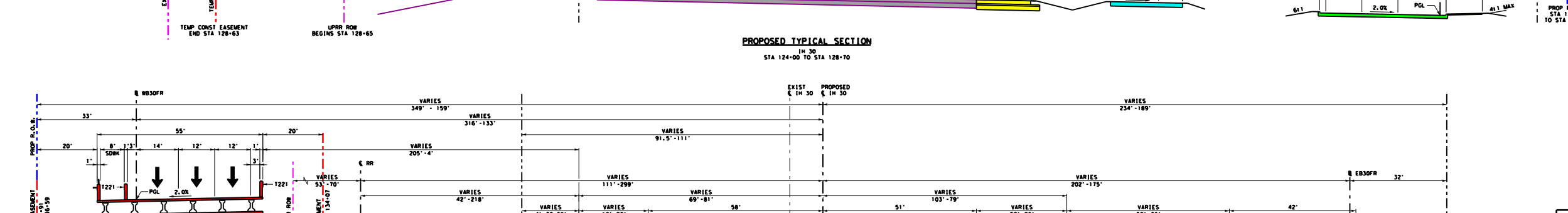
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BRIDGE OVER LAKE RAY HUBBARD
I.H. 30
STA 92-87 TO STA 103-35



PROPOSED TYPICAL SECTION
I.H. 30
STA 103-35 TO STA 124-00



PROPOSED TYPICAL SECTION
I.H. 30
STA 124-00 TO STA 128-70



PROPOSED TYPICAL SECTION
I.H. 30
STA 128-70 TO STA 137-50

APPROVED SCHEMATIC
NOT FOR CONSTRUCTION

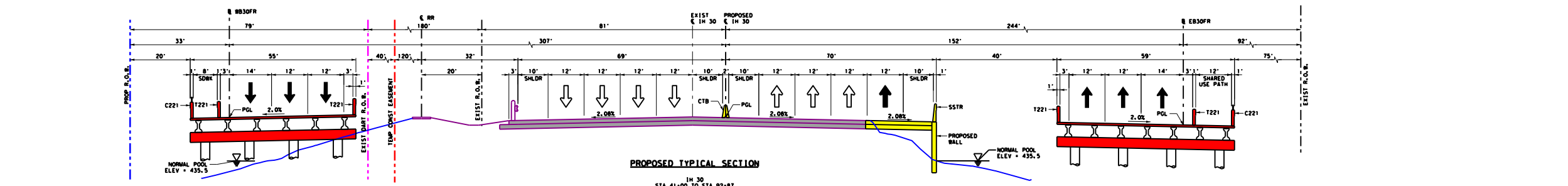
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| DATE | |

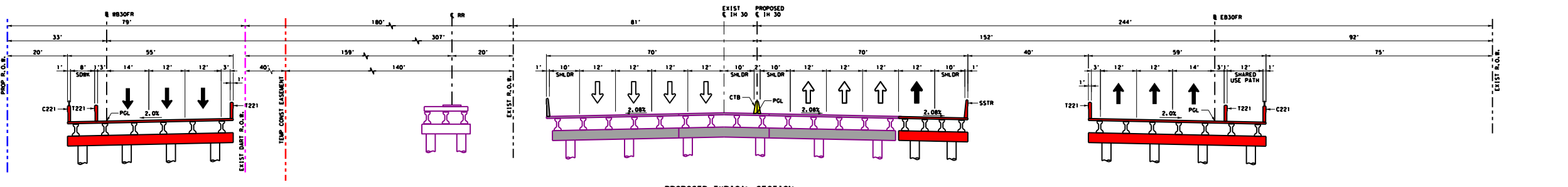
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DESIGN SCHEMATIC
PROPOSED TYPICAL SECTIONS
CSJ 0009-11-238, ETC.

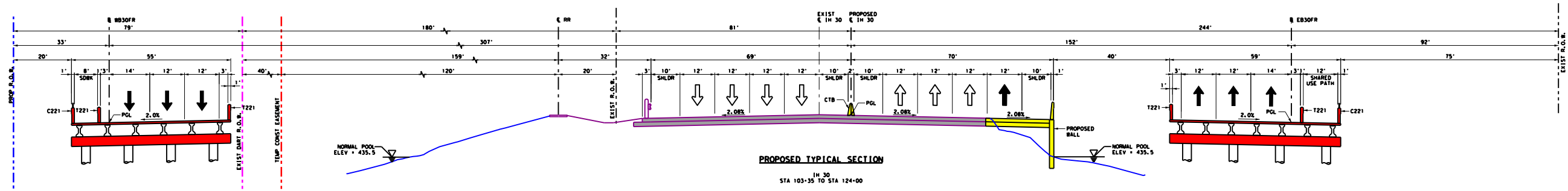
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| DATE: OCT. 2018 | SHEET 4 OF 18 |
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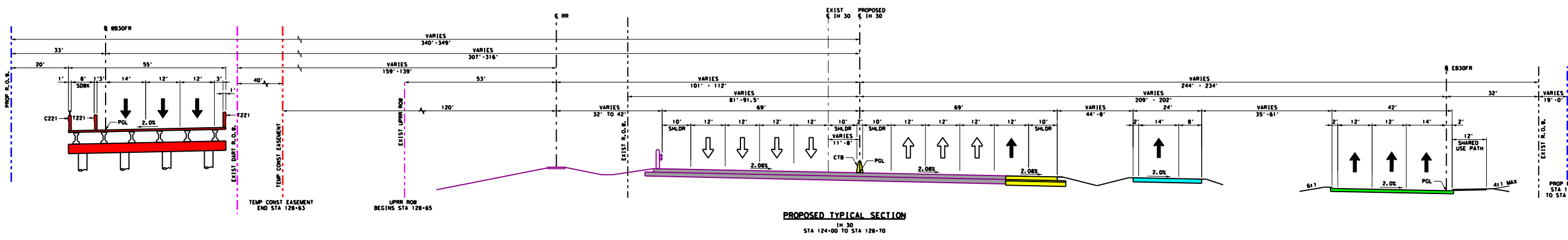
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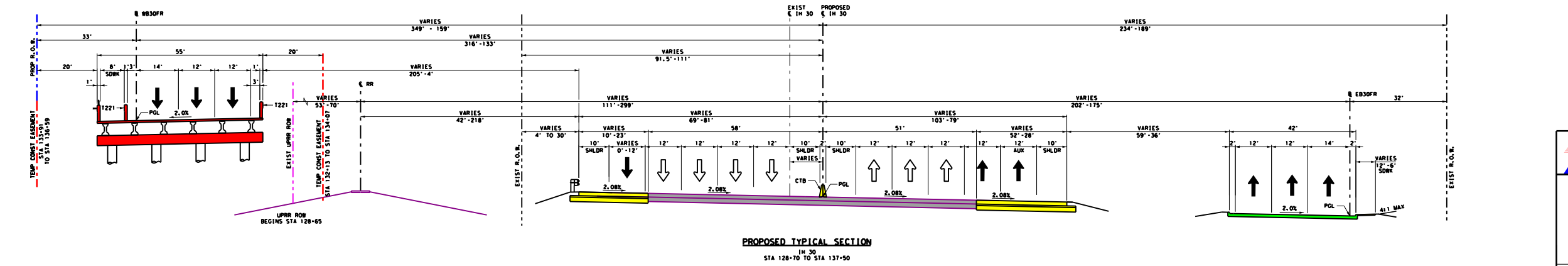
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BRIDGE OVER LAKE RAY HUBBARD
I.H. 30
STA 92-87 TO STA 103-35



PROPOSED TYPICAL SECTION
I.H. 30
STA 103-35 TO STA 124-00



PROPOSED TYPICAL SECTION
I.H. 30
STA 124-00 TO STA 128-70



PROPOSED TYPICAL SECTION
I.H. 30
STA 128-70 TO STA 137-50

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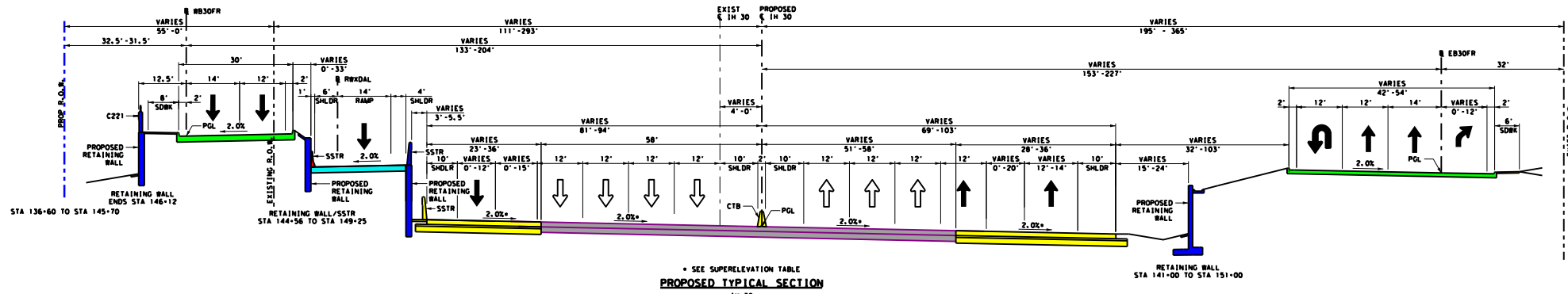
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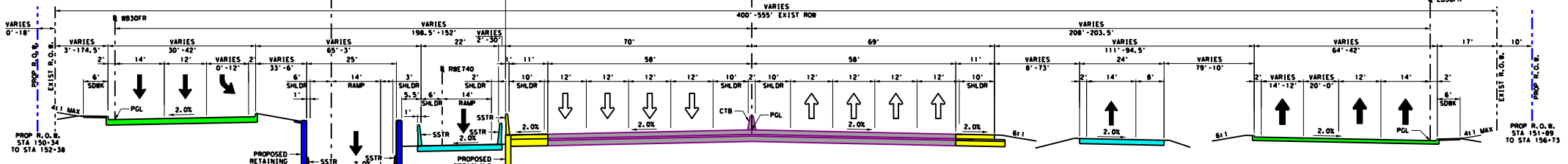
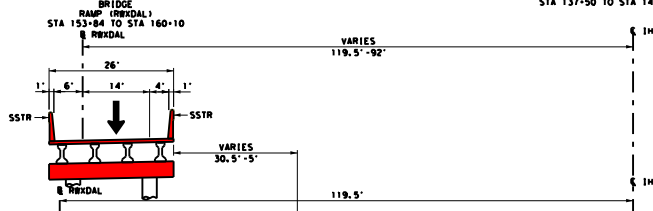
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| DATE: OCT. 2018 | SHEET 5 OF 18 |
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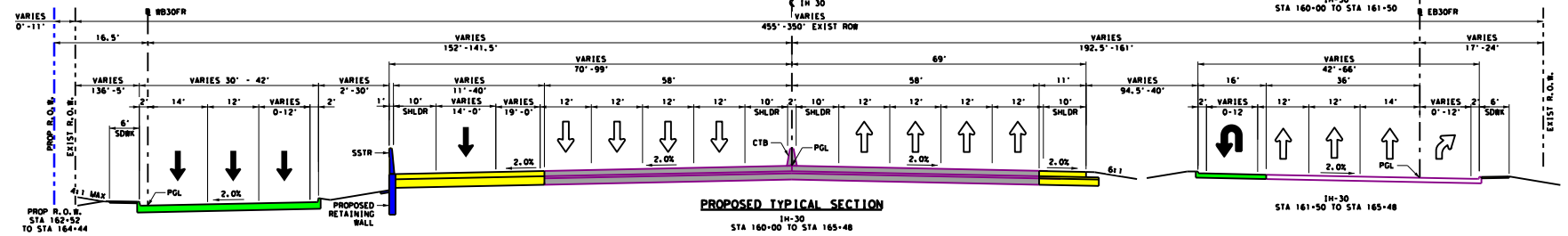
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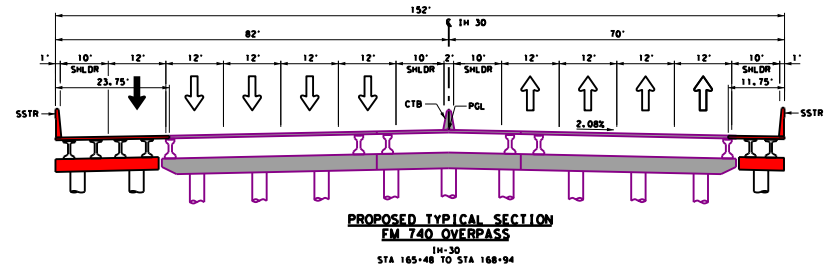
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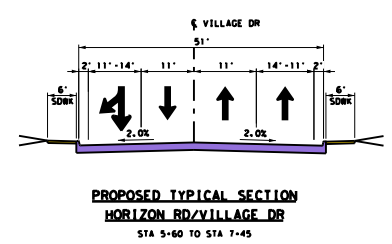
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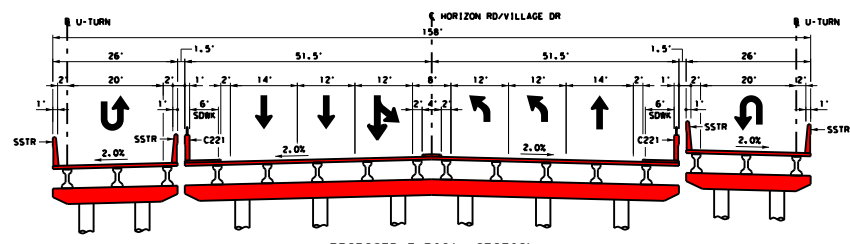
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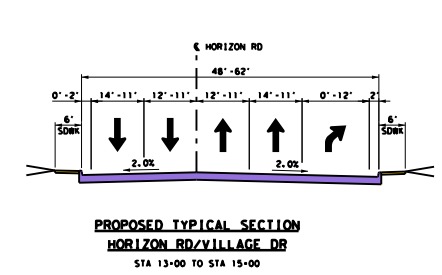
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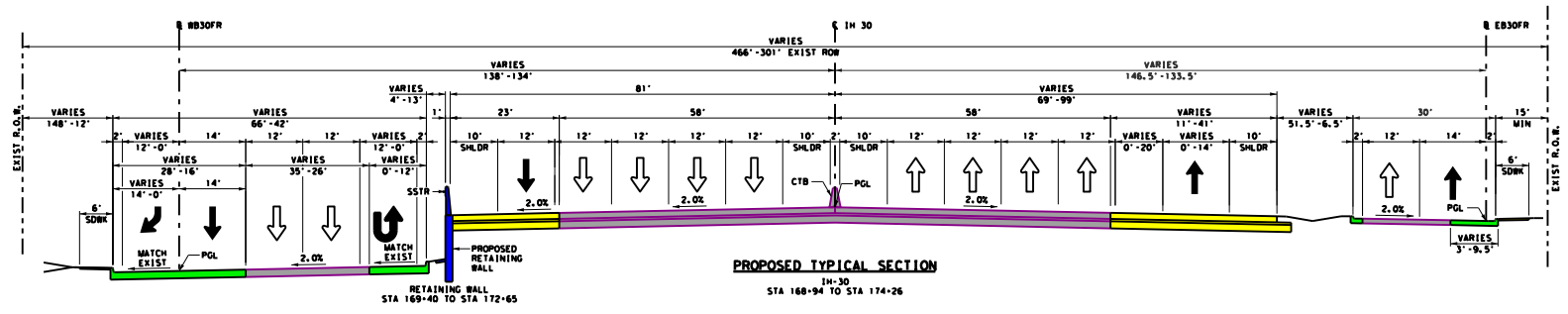
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PROPOSED TYPICAL SECTION HORIZON RD/VILLAGE DR STA 8-55 TO STA 11-25



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PROPOSED TYPICAL SECTION STA 169-40 TO STA 172-65

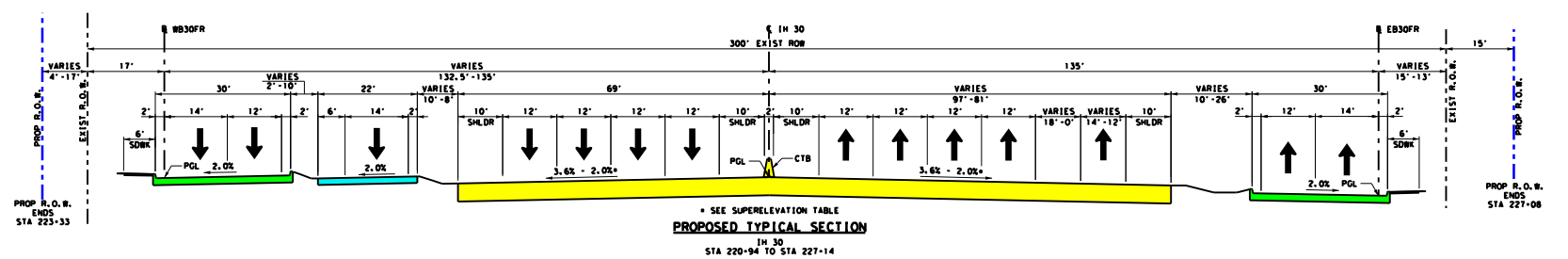
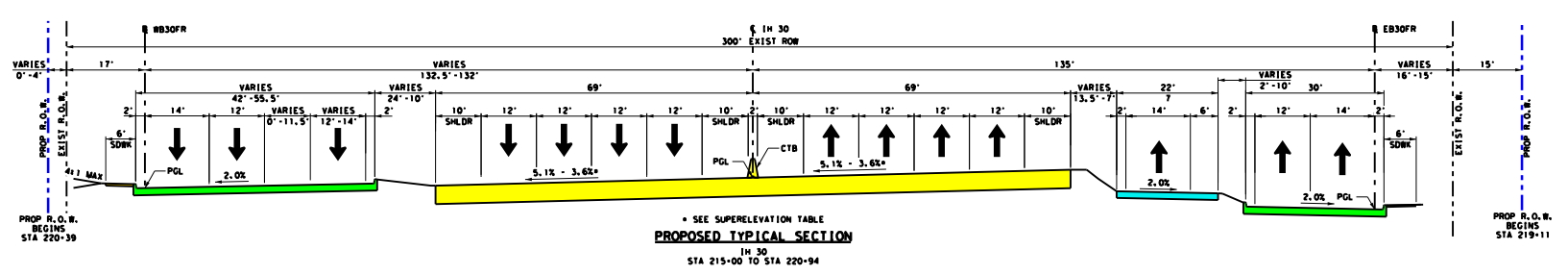
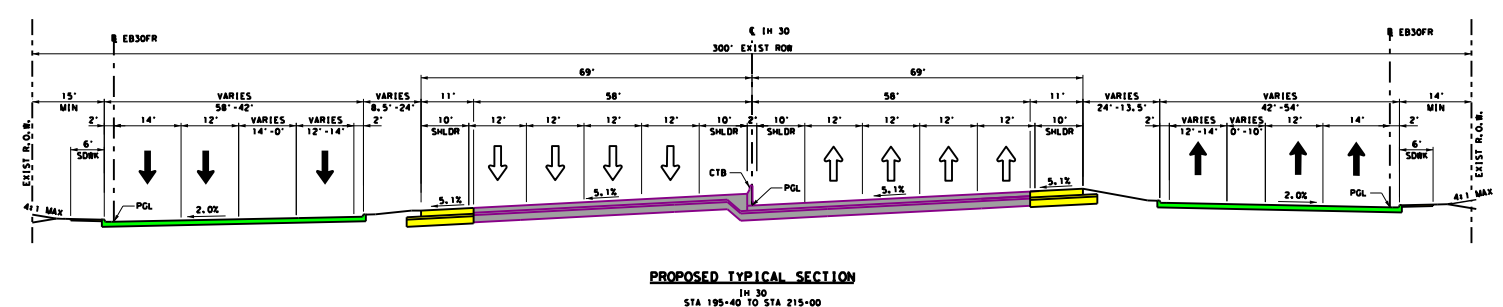
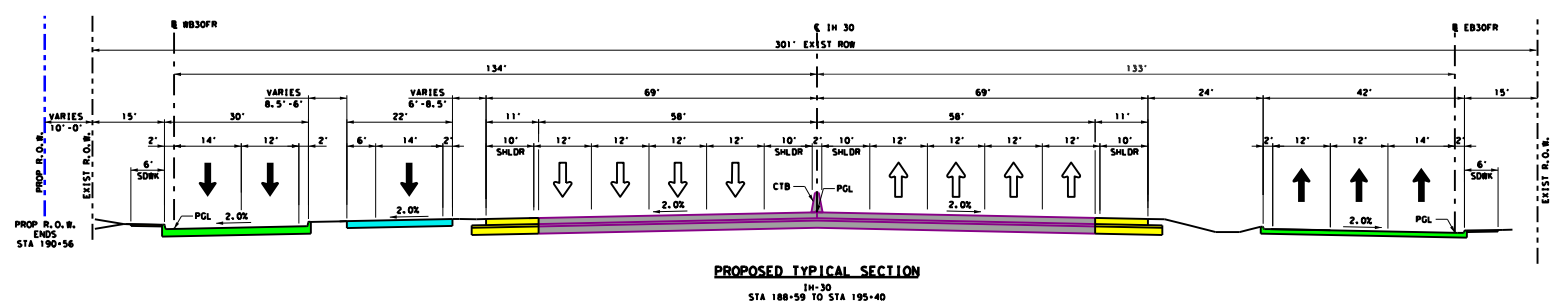
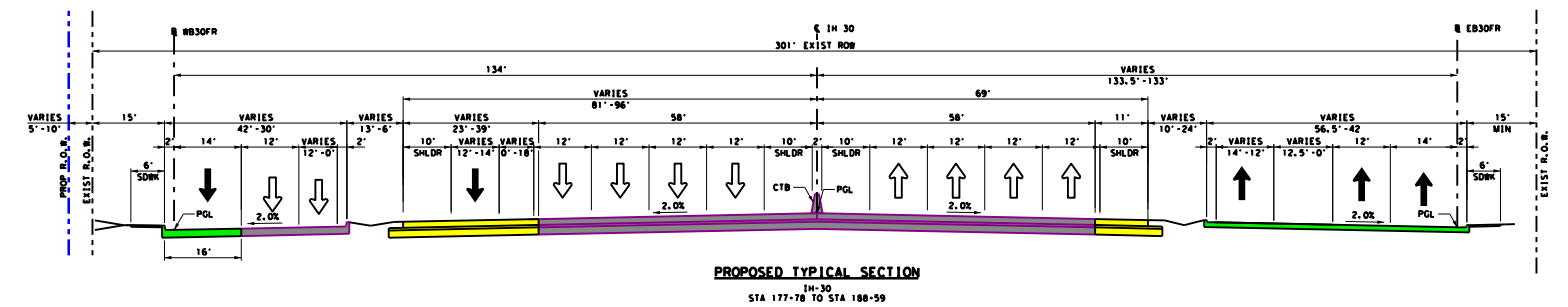
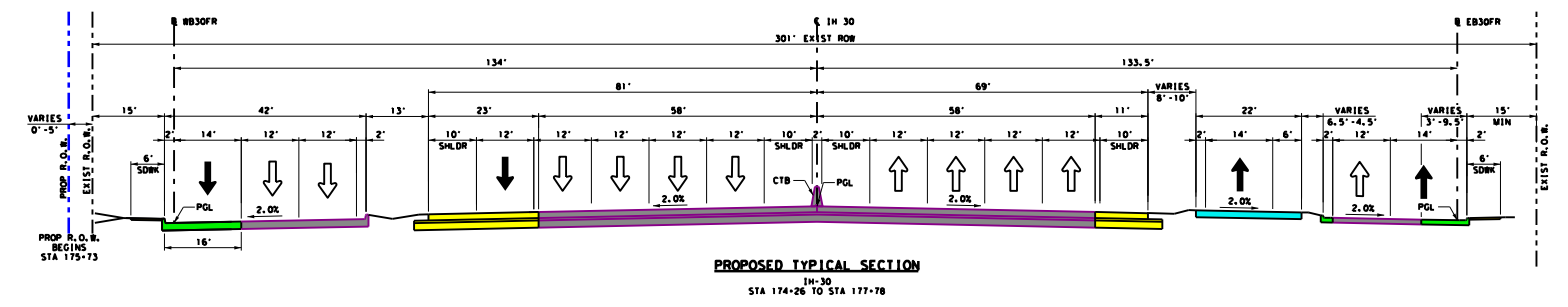
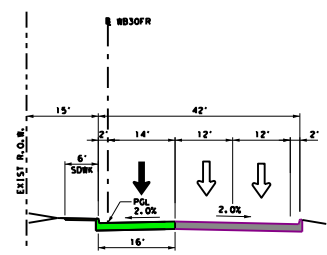
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Texas Department of Transportation

IH 30-ROCKWALL CO
 FROM BASS PRO DR TO
 HUNT C/L (WEST OF FM 2642)
 DESIGN SCHEMATIC
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 CSJ 0009-11-238, ETC.
 DATE: OCT. 2018 SHEET 6 OF 18
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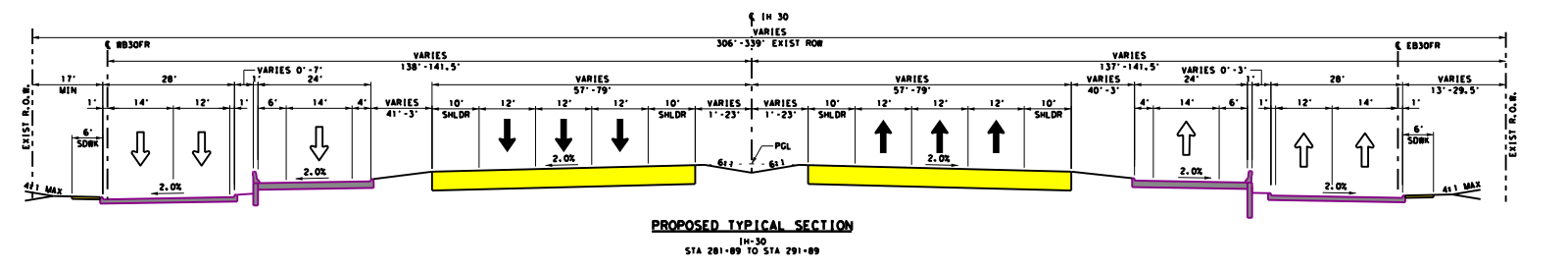
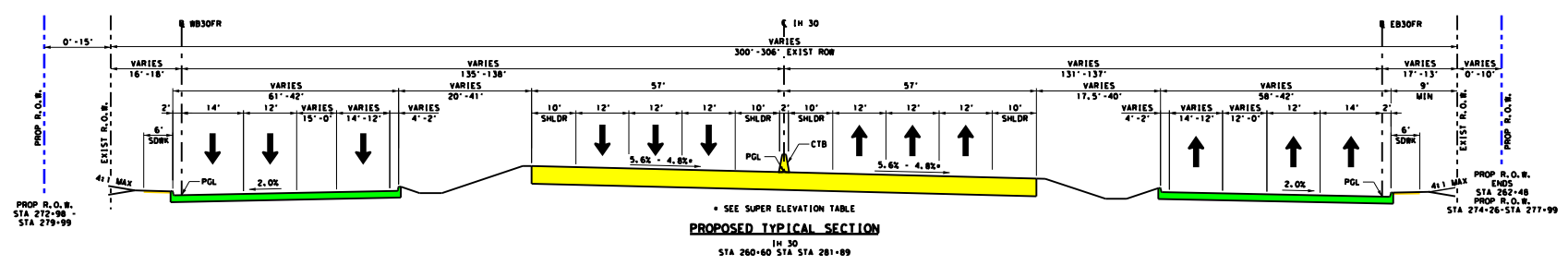
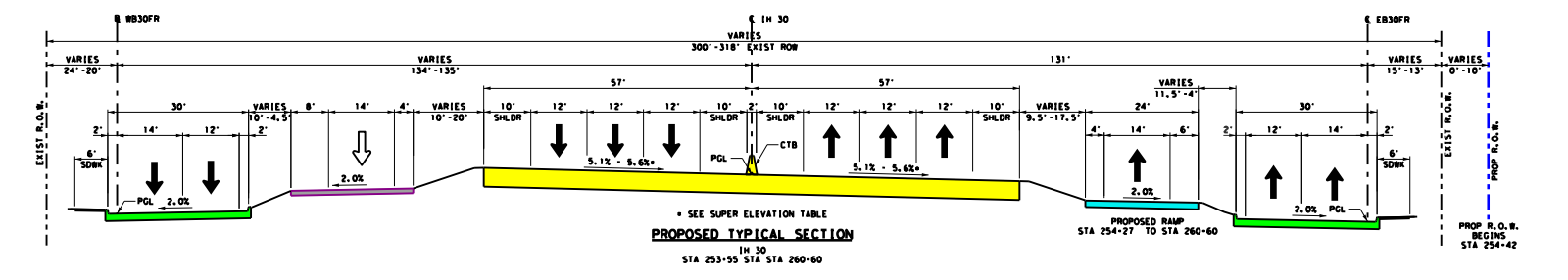
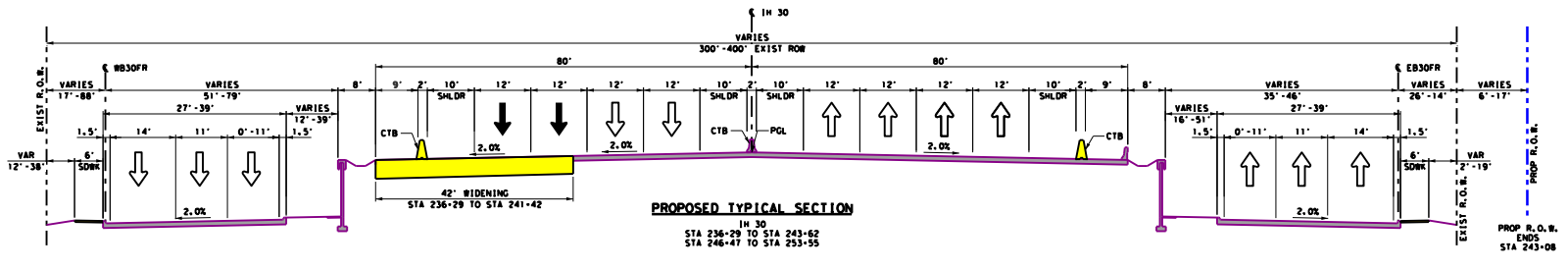
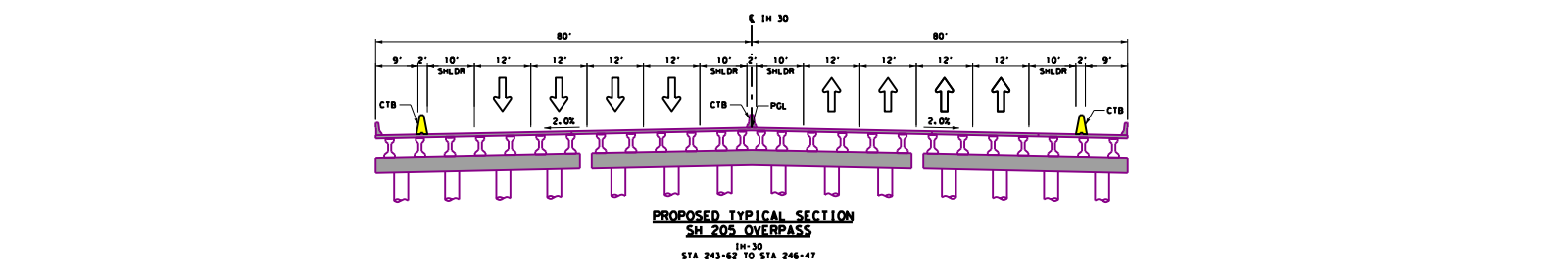
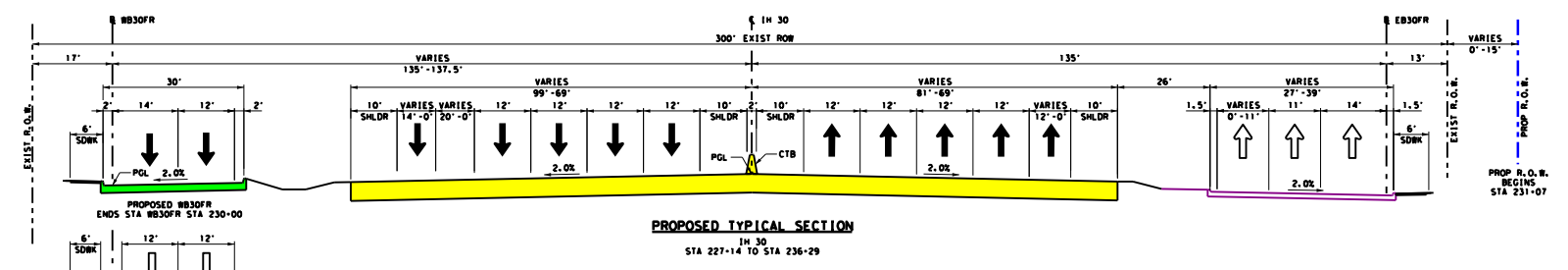
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HUNT C/L (WEST OF FM 2642)
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PROPOSED TYPICAL SECTIONS
CSJ 0009-11-238, ETC.
DATE: OCT. 2018 SHEET 7 OF 18
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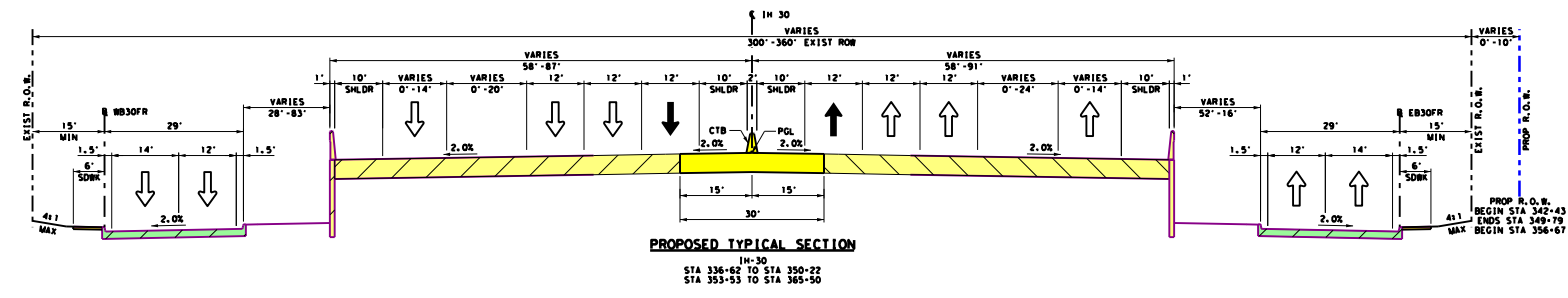
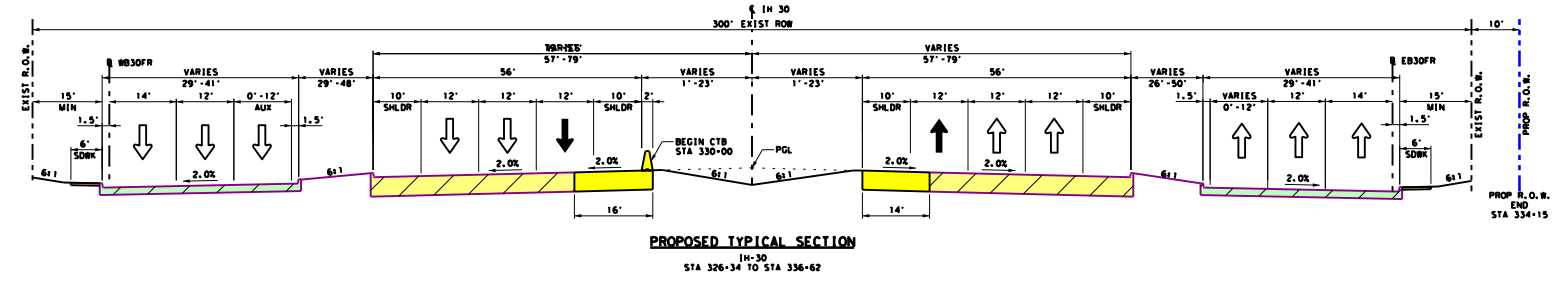
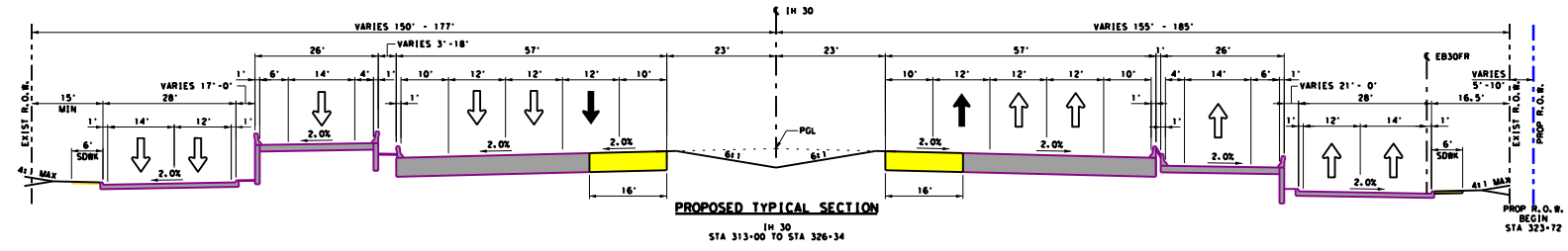
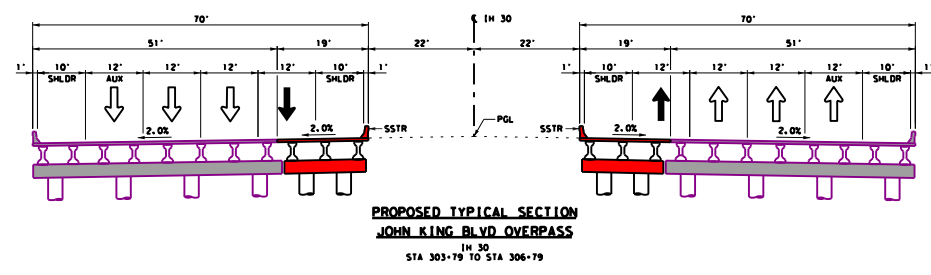
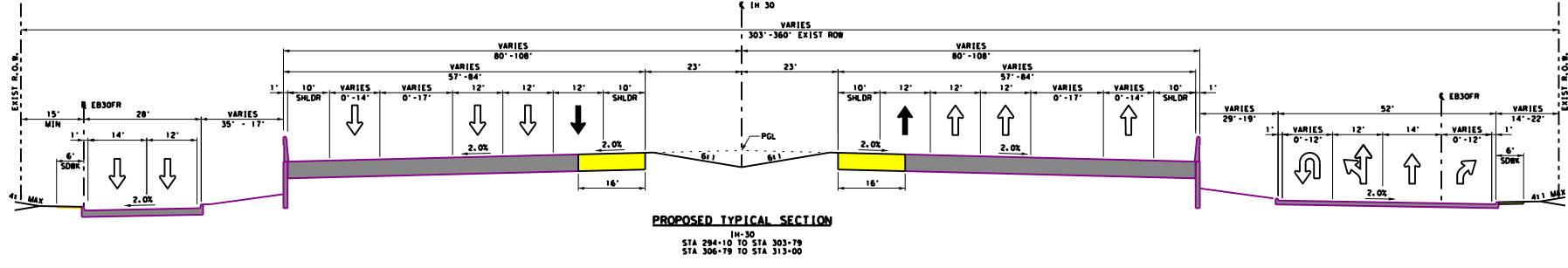
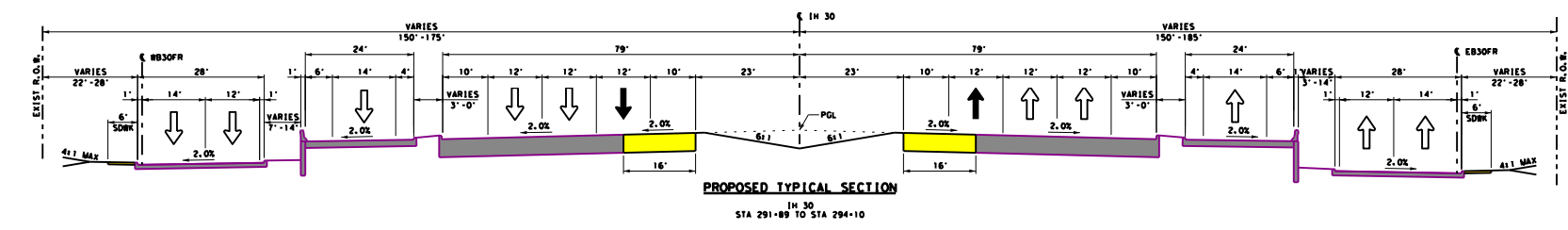
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 DATE: OCT. 2018 SHEET 8 OF 18
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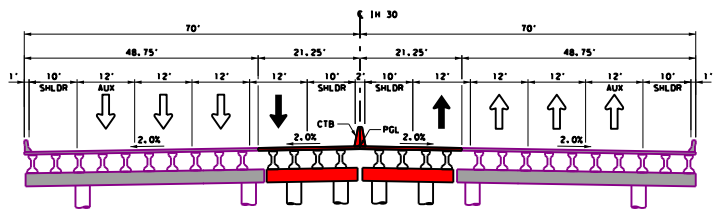


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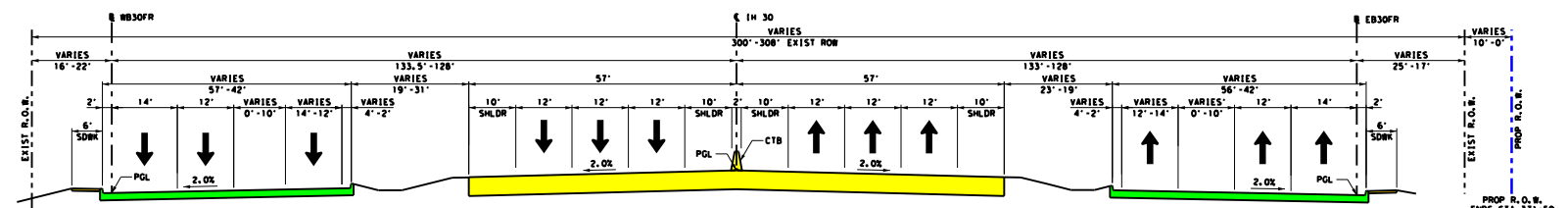
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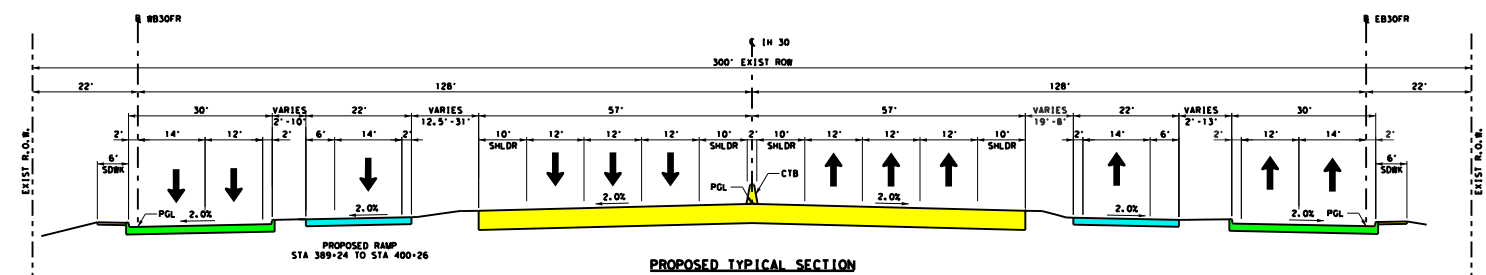
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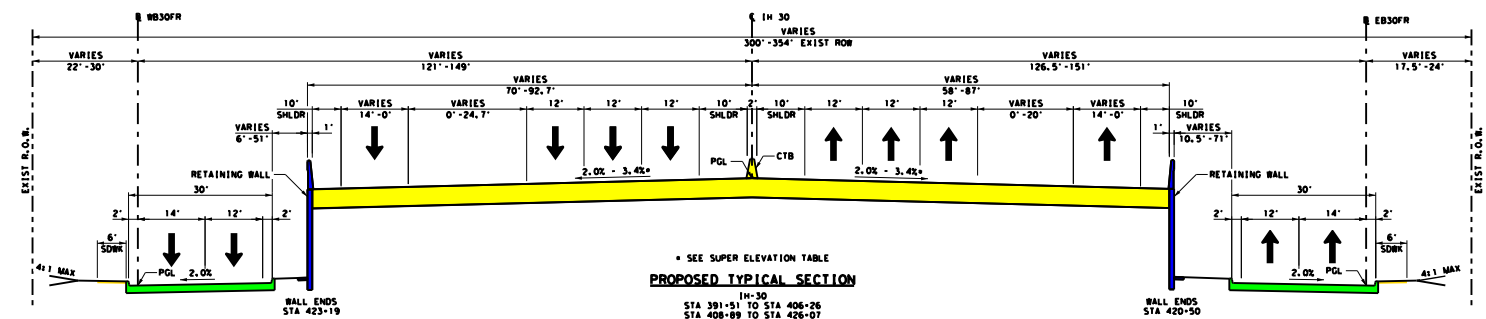
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FM 3549 OVERPASS**
IN 30
STA 350+22 TO STA 353+53



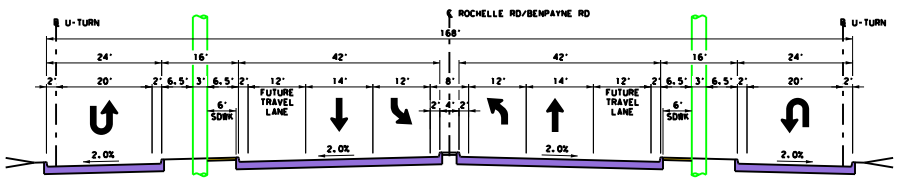
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IN 30
STA 365+50 TO STA 387+00



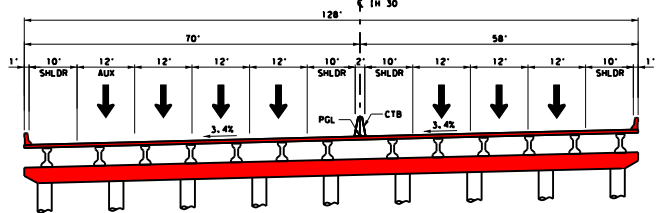
PROPOSED TYPICAL SECTION
IN 30
STA 387+00 TO STA 391+51



PROPOSED TYPICAL SECTION
IN 30
STA 391+51 TO STA 406+26
STA 408+89 TO STA 426+07



**PROPOSED TYPICAL SECTION
ROCHELE RD/BEN PAYNE RD**
STA 13+80 TO STA 16+05



**PROPOSED TYPICAL SECTION
ROCHELE RD/BEN PAYNE RD OVERPASS**
IN 30
STA 406+26 TO STA 408+89

**APPROVED SCHEMATIC
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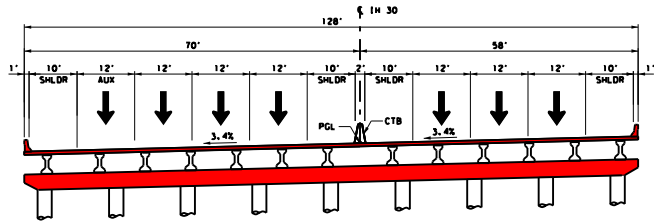
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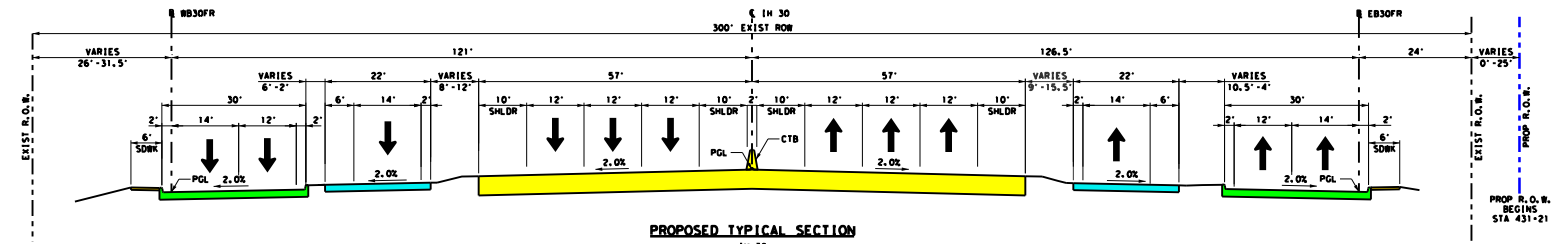
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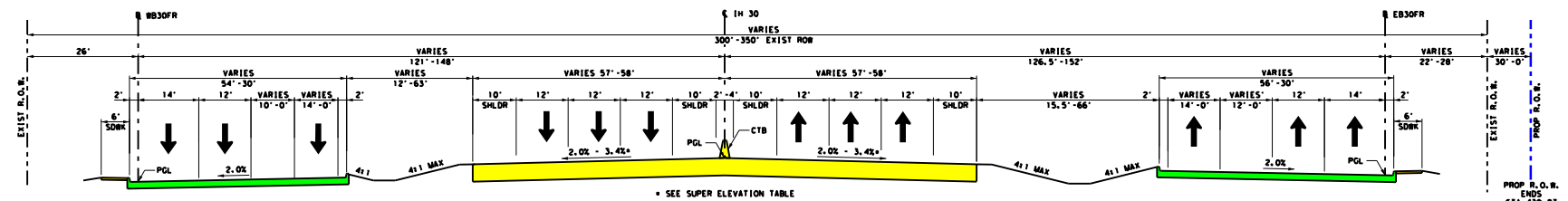
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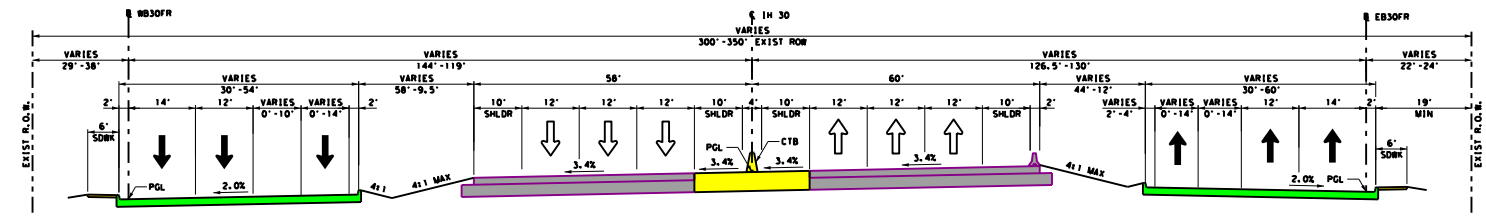
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ROCHELLE RD/BEN PAYNE RD OVERPASS
 IN 30
 STA 406+26 TO STA 408+89



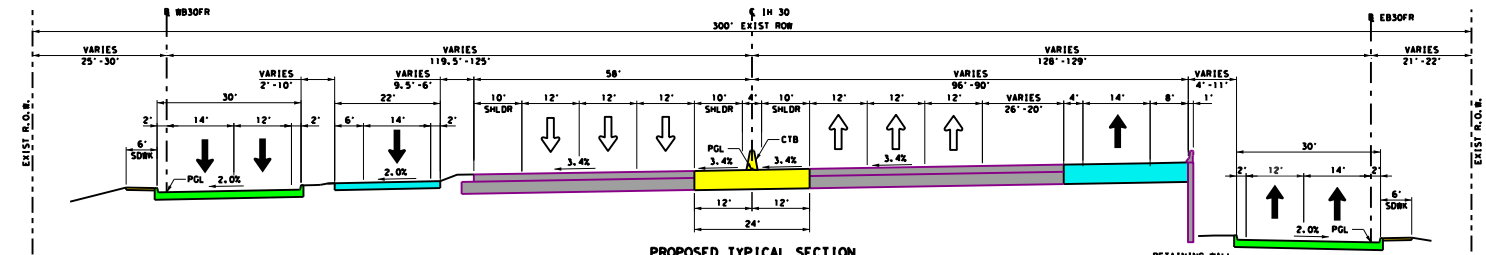
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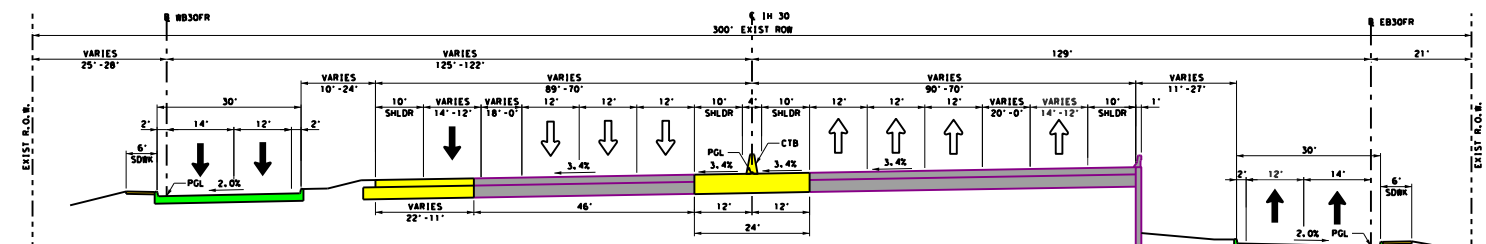
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 IN 30
 STA 433+02 TO STA 454+29



PROPOSED TYPICAL SECTION
 IN 30
 STA 454+29 TO STA 459+50



PROPOSED TYPICAL SECTION
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 STA 459+50 TO STA 464+47



PROPOSED TYPICAL SECTION
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 STA 464+47 TO STA 468+00

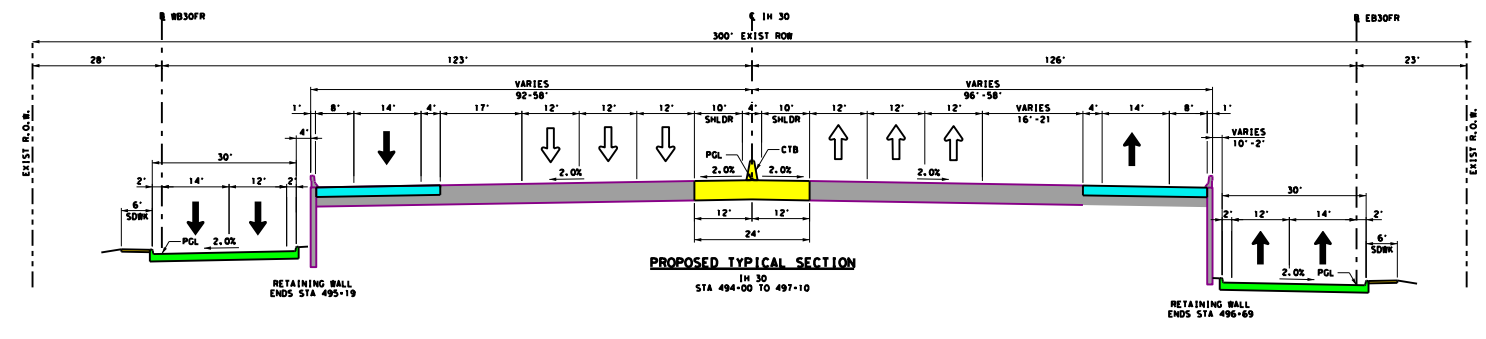
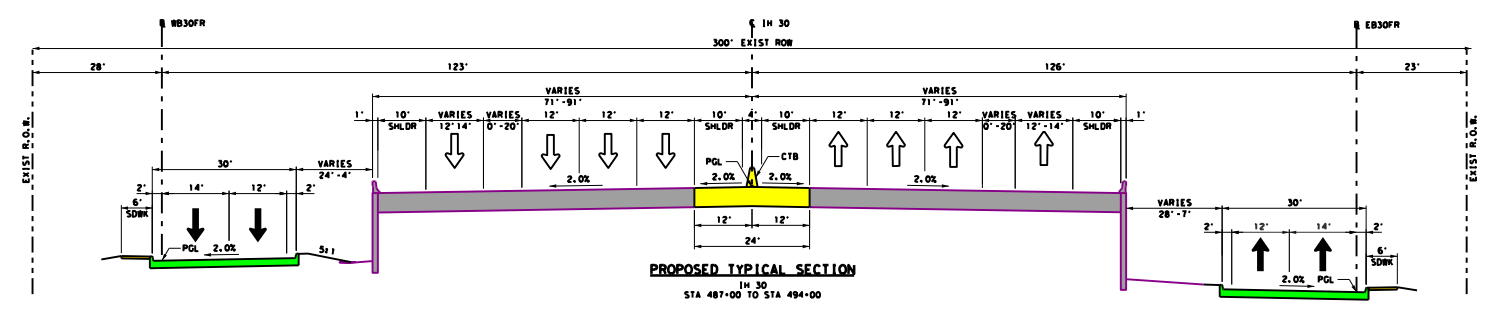
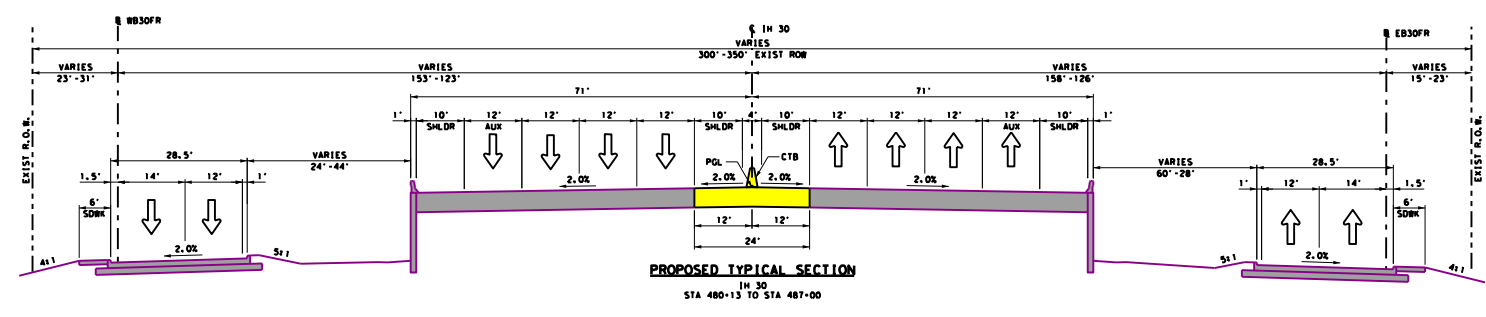
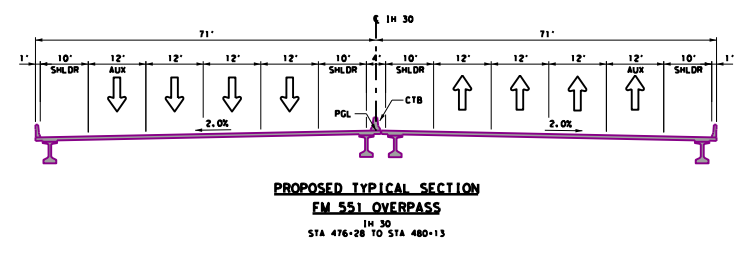
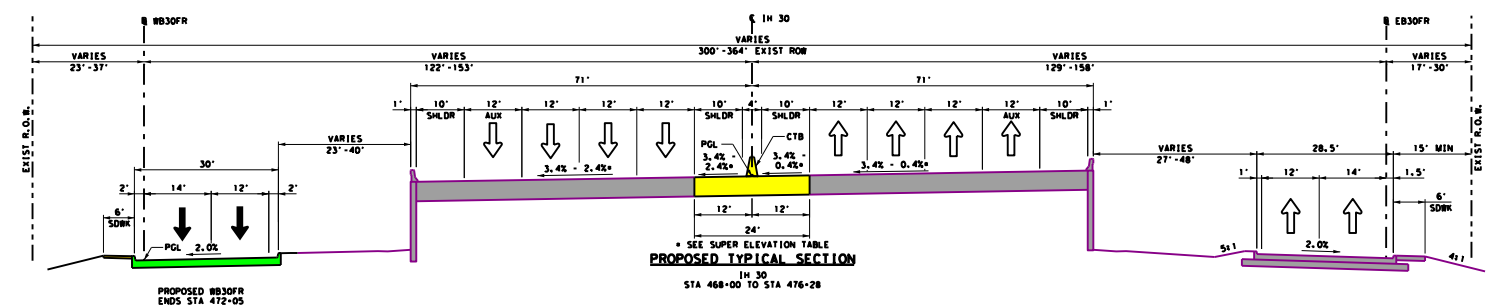
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 HOSSEIN M. HOSSEINY, P.E. 118659
 NAME P.E. NUMBER
 \$DATE DATE

Texas Department of Transportation

IH 30-ROCKWALL CO
 FROM BASS PRO DR TO
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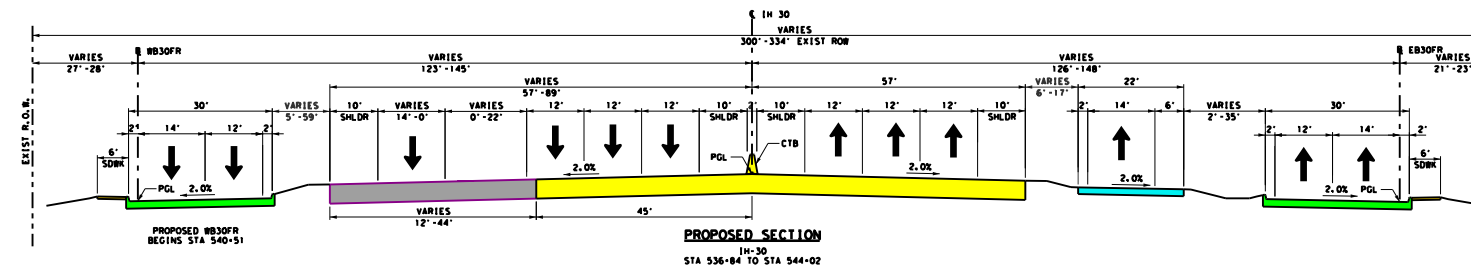
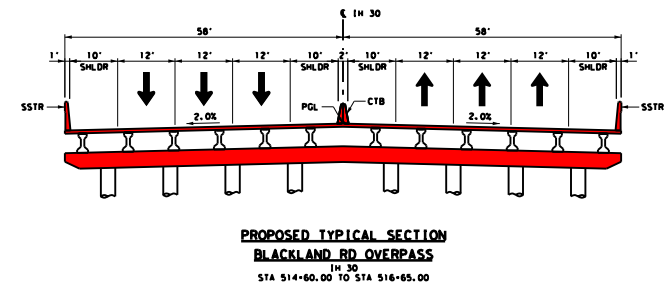
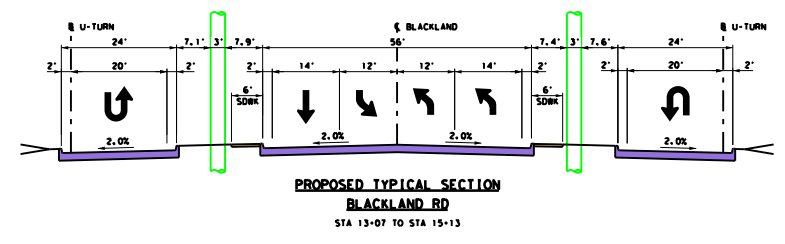
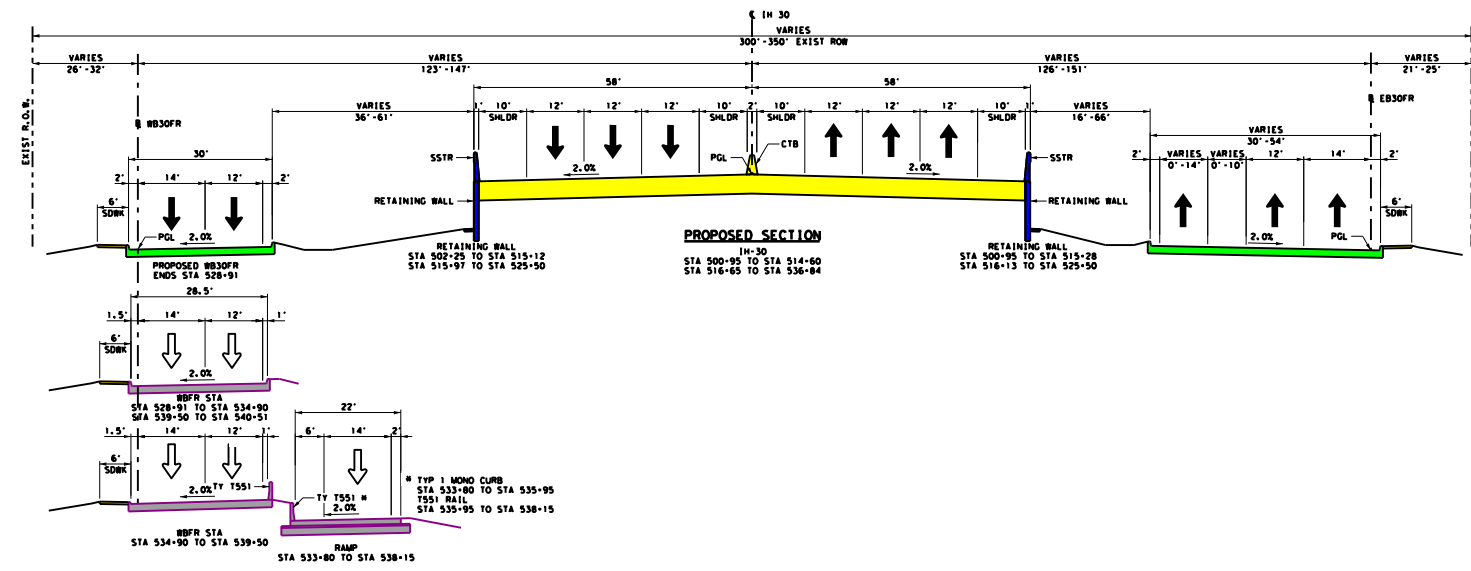
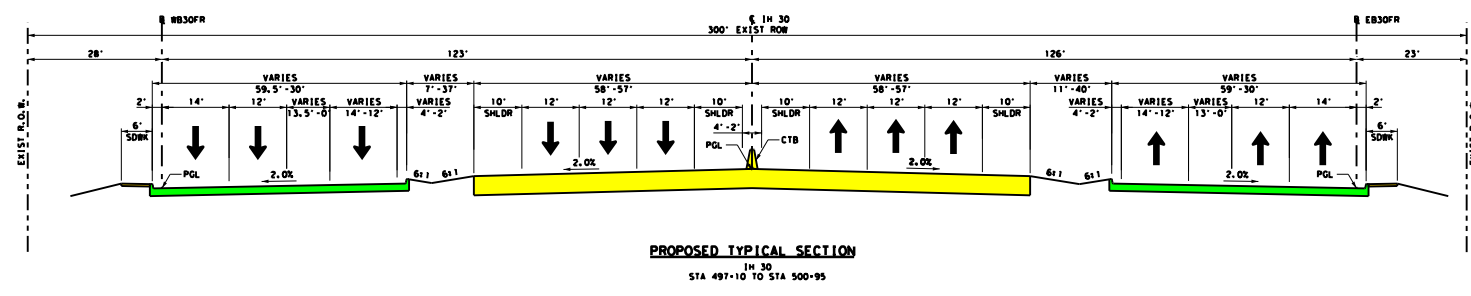
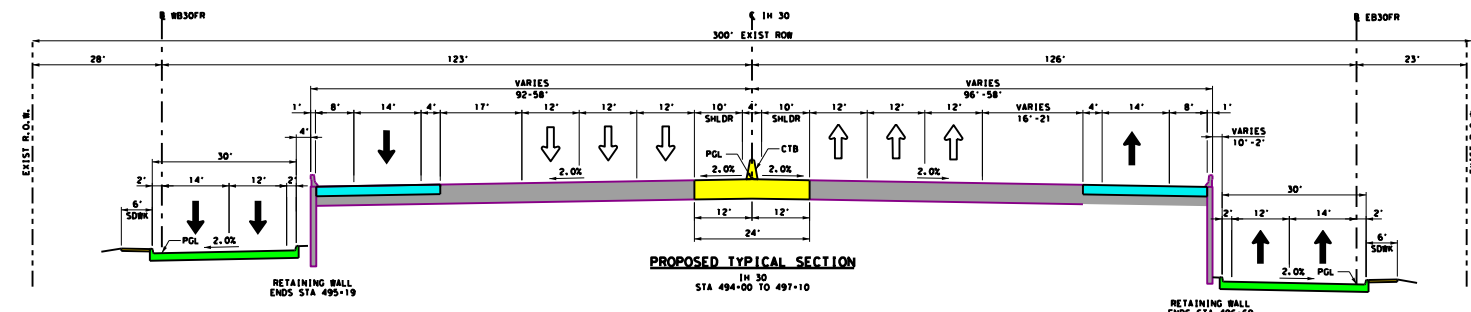
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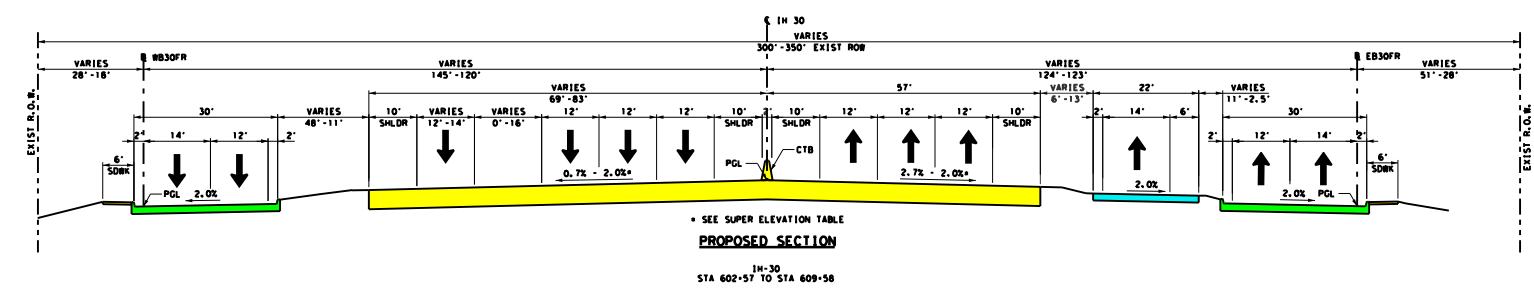
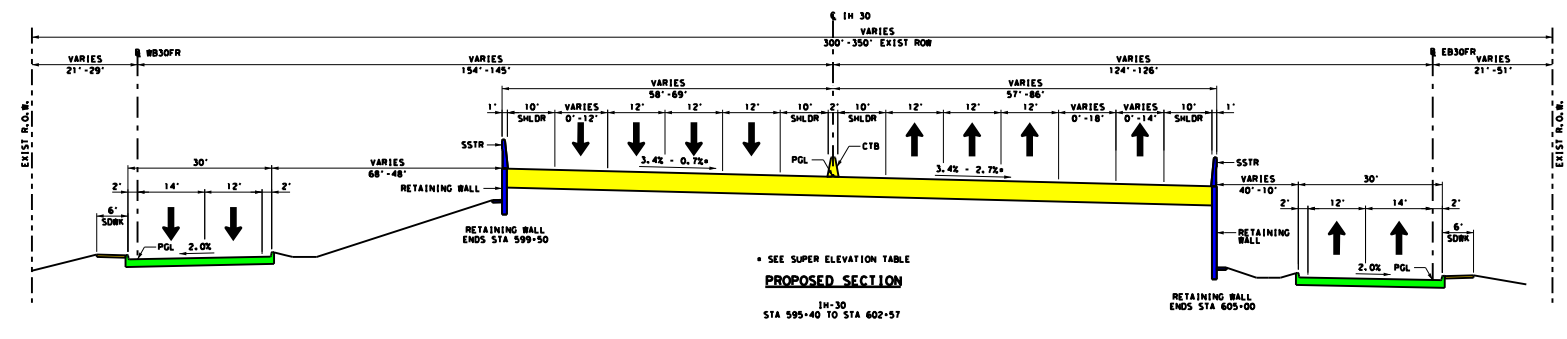
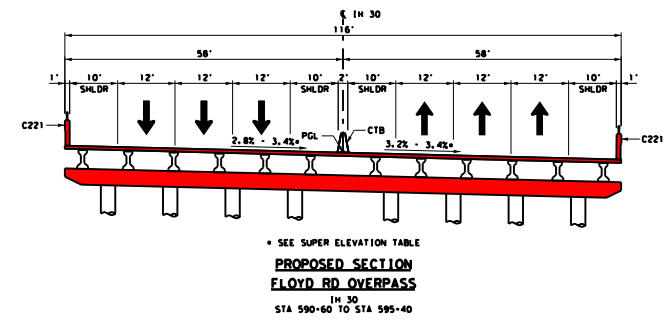
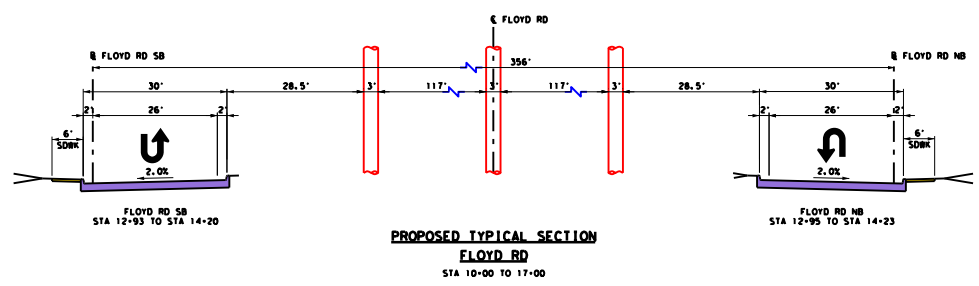
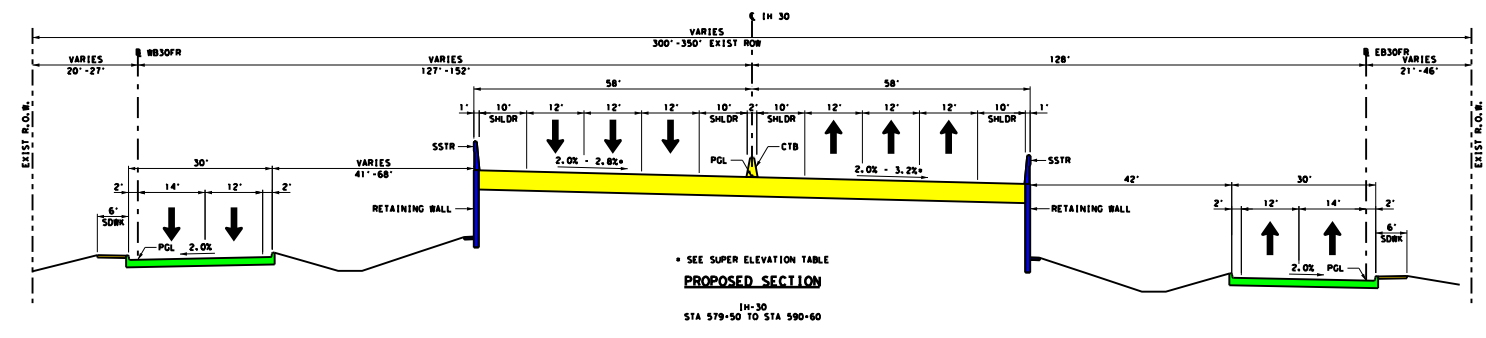
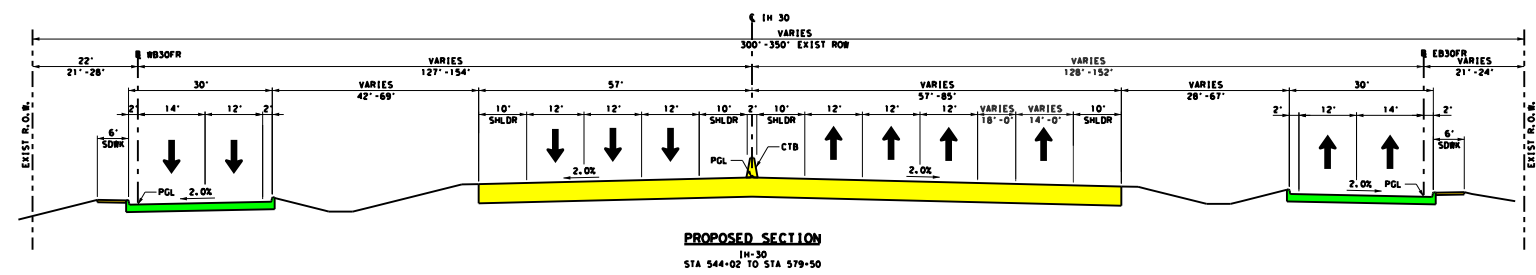


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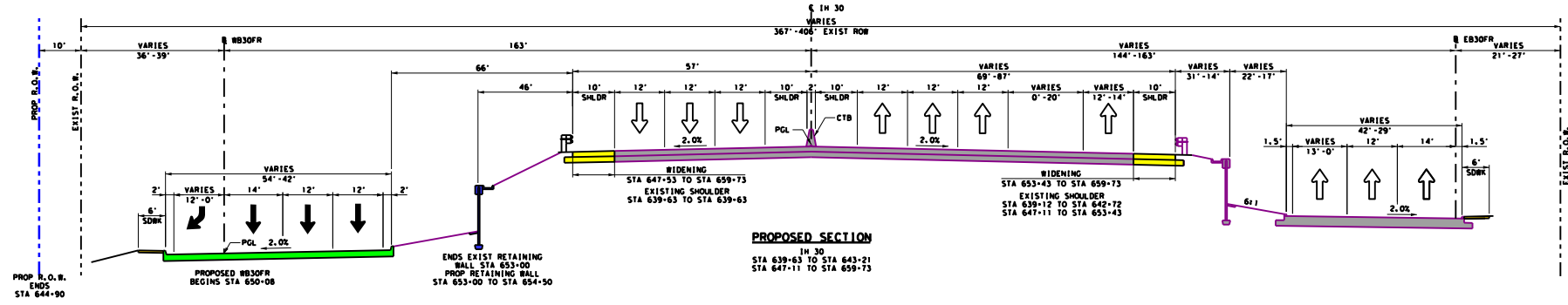
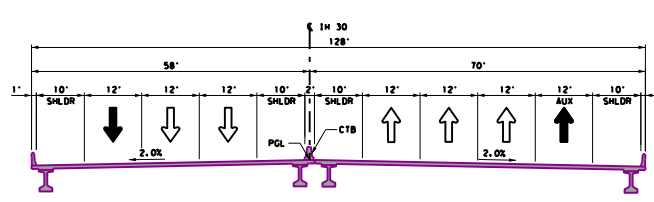
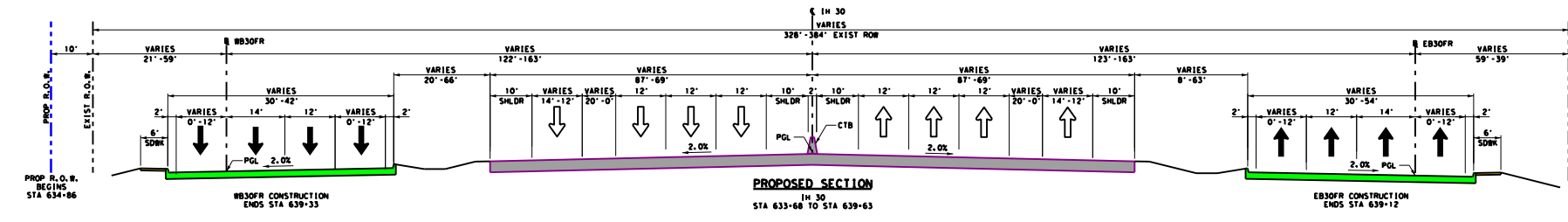
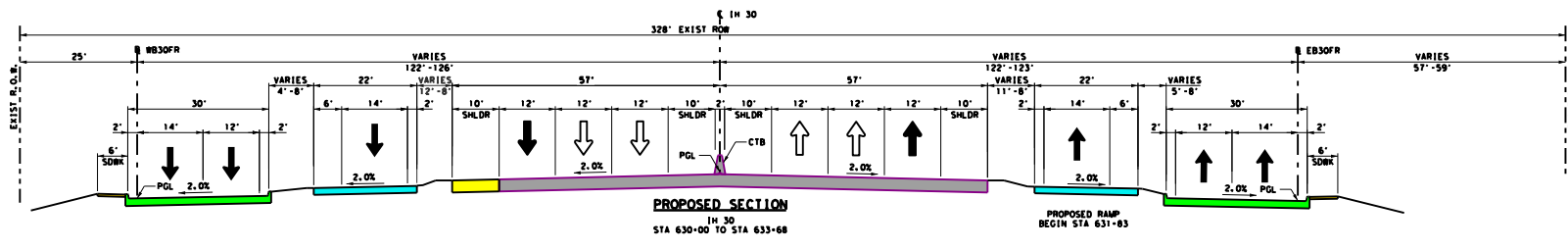
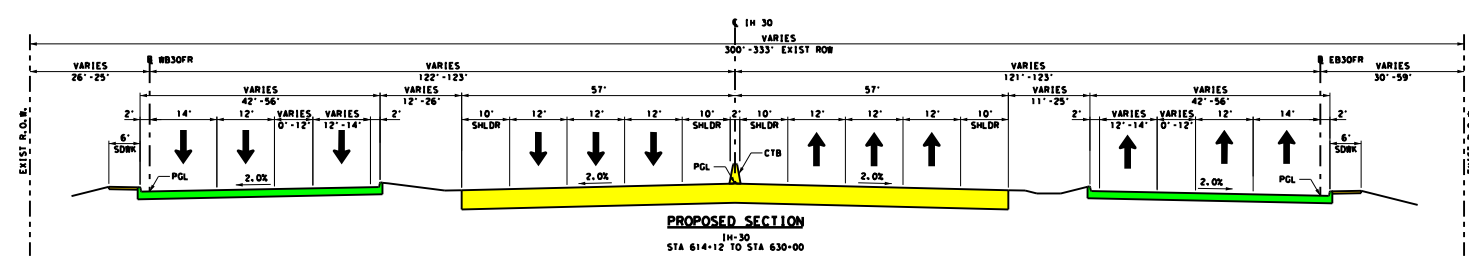
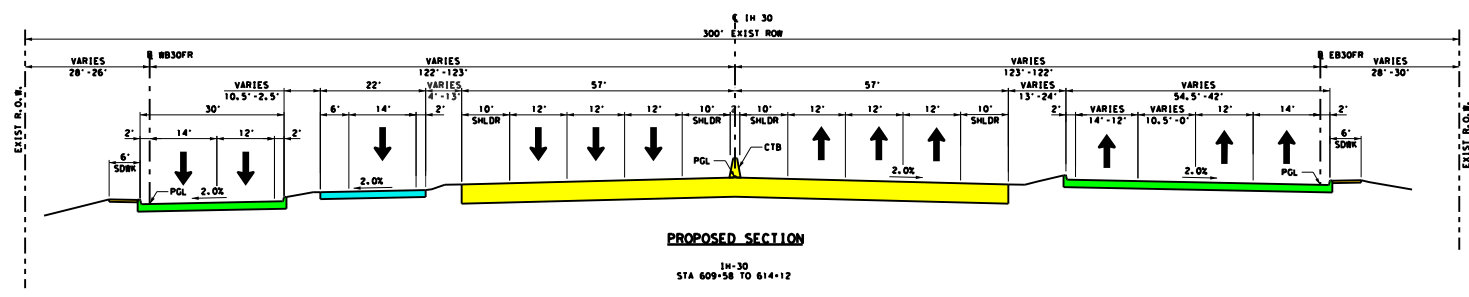
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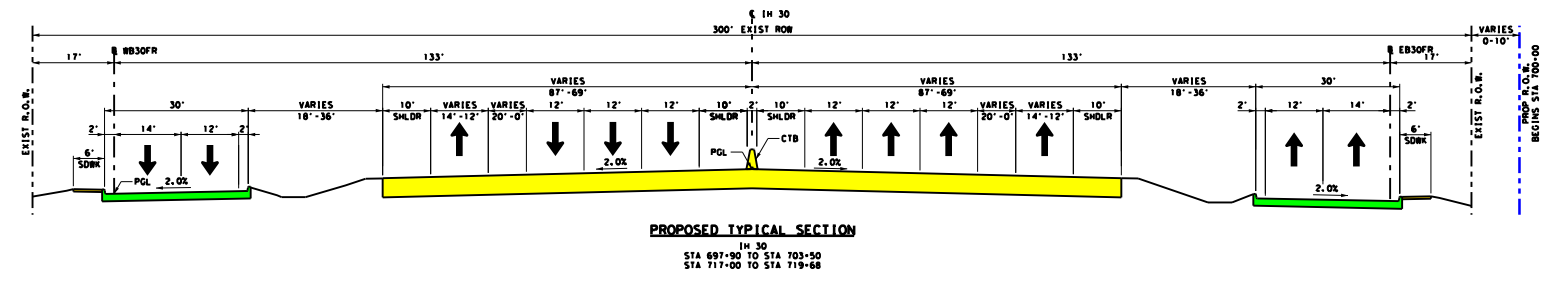
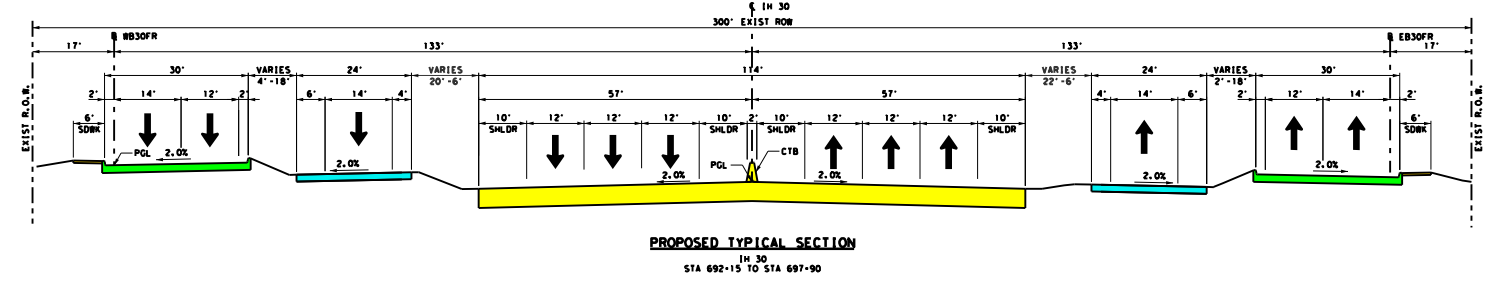
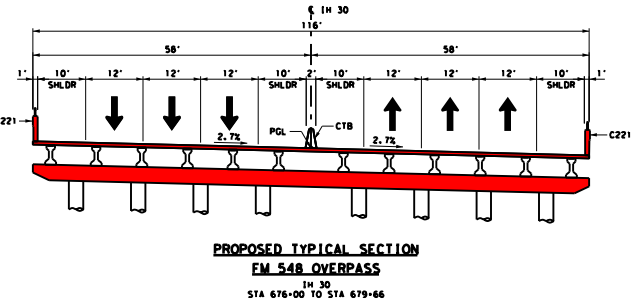
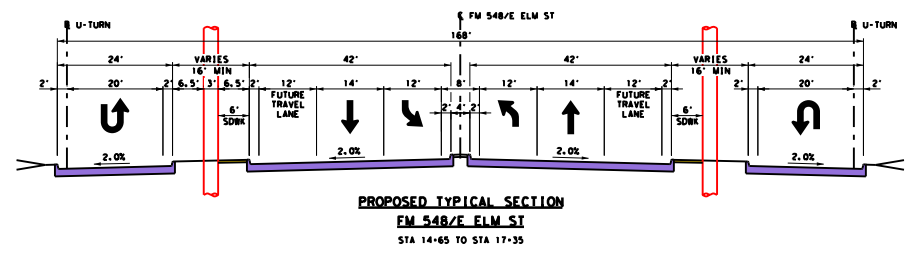
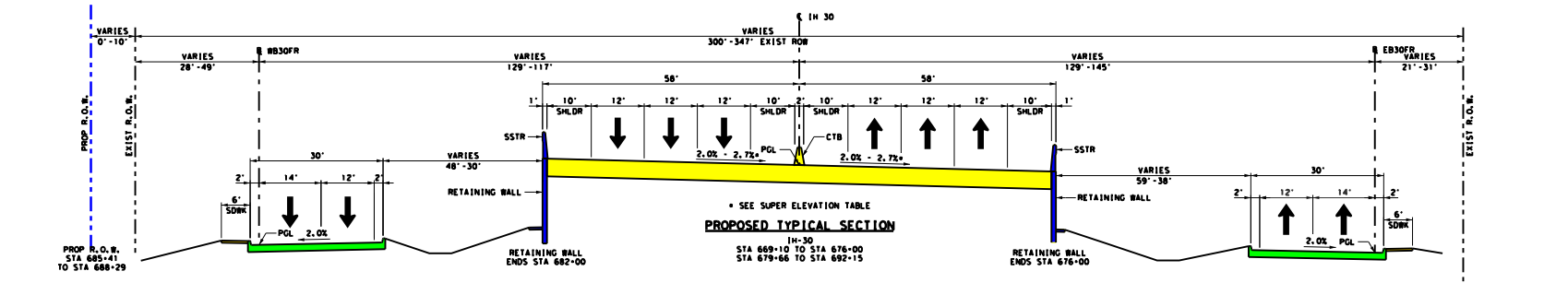
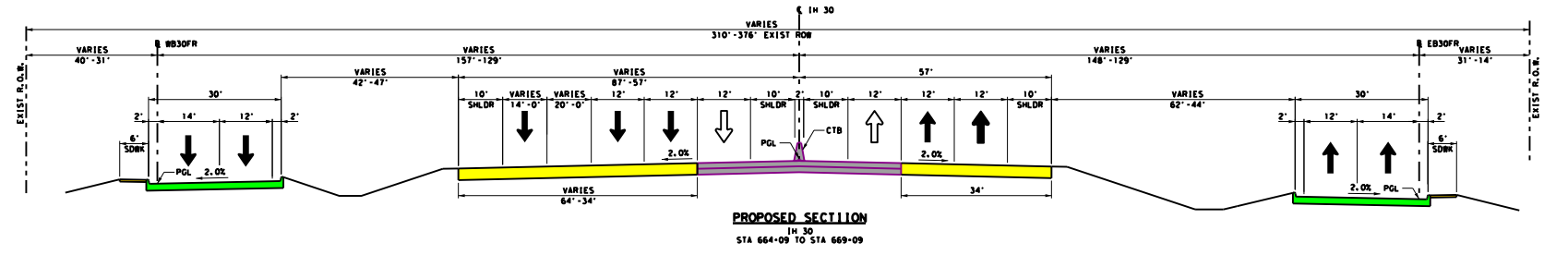
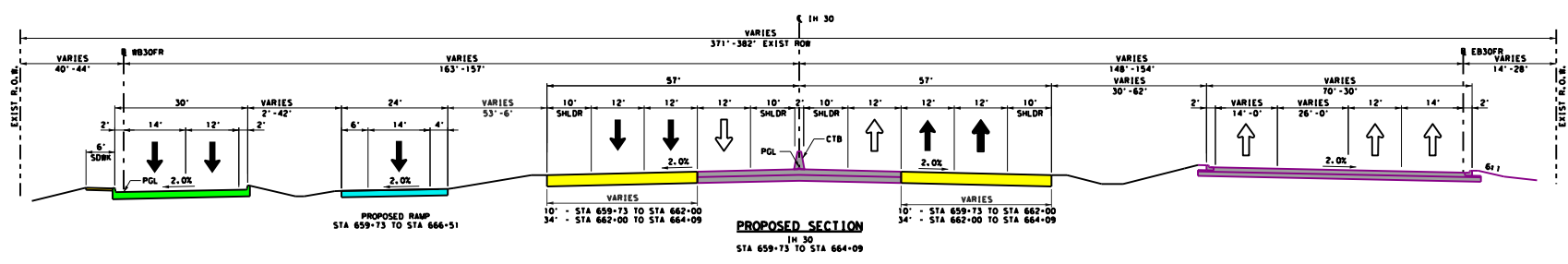
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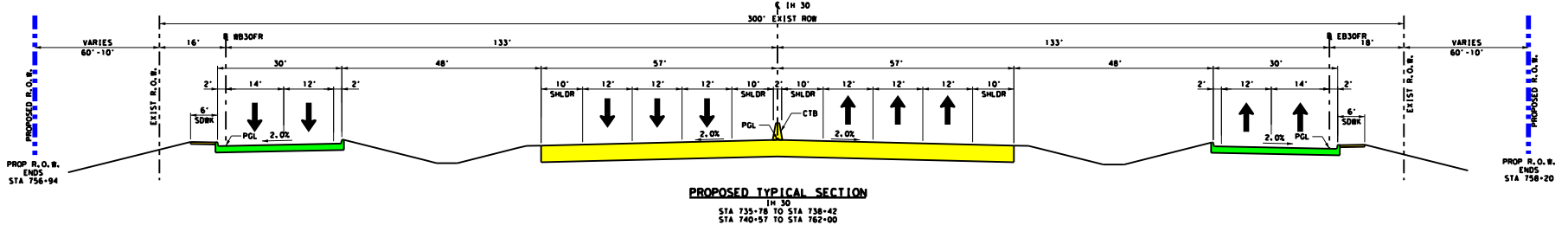
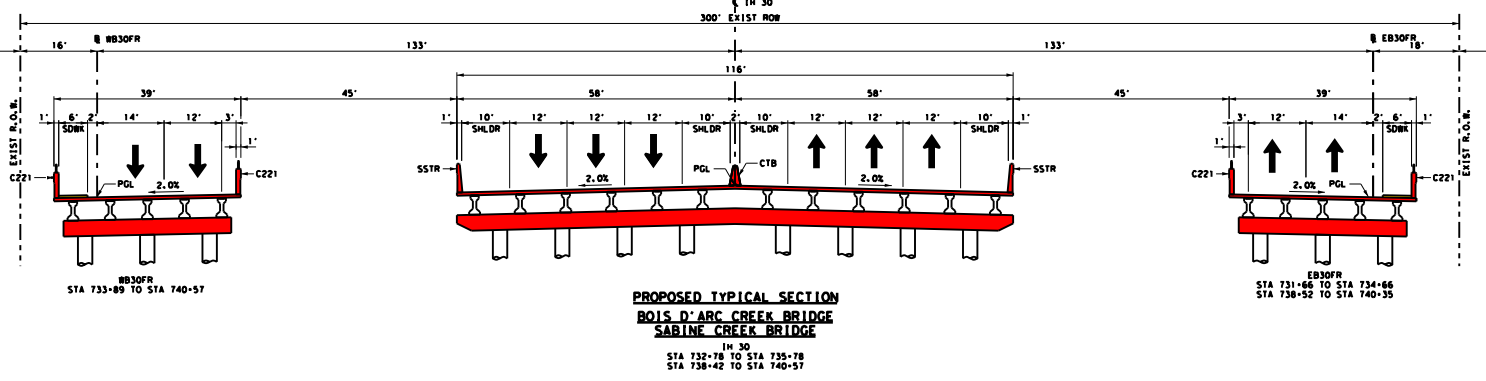
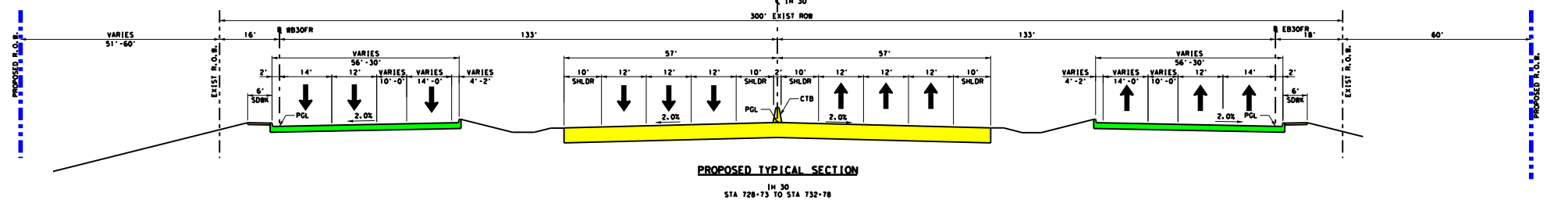
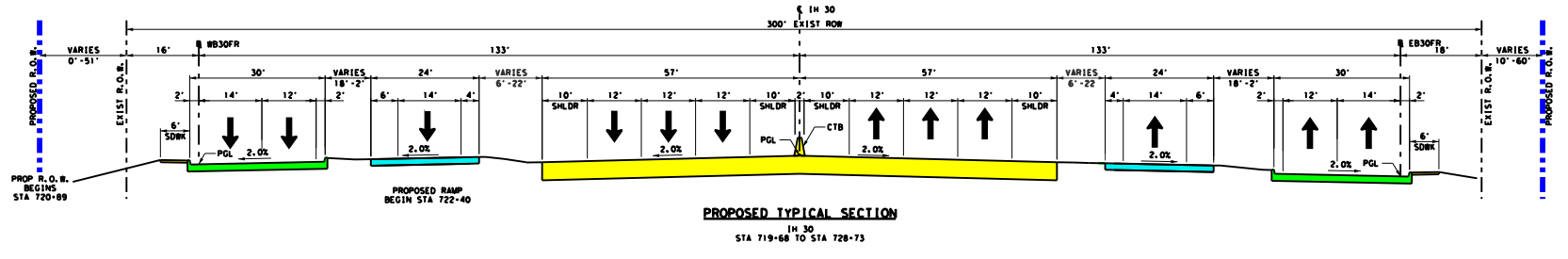
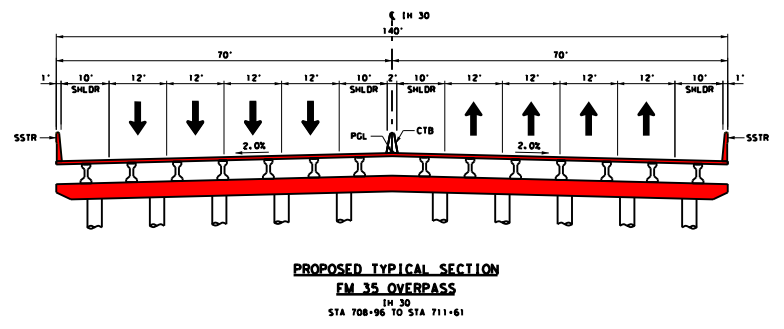
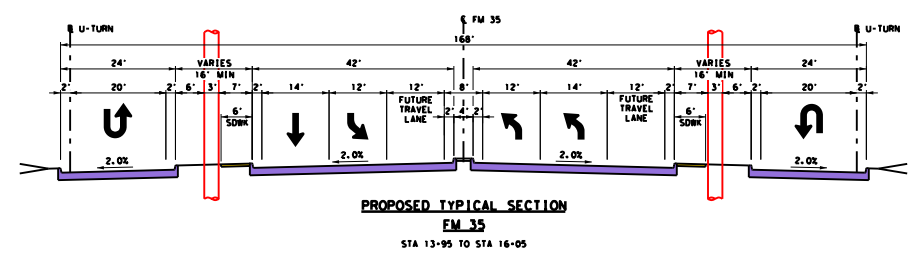
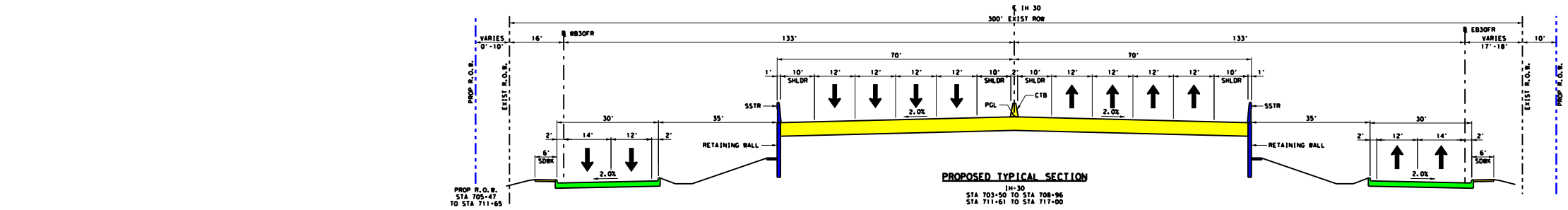

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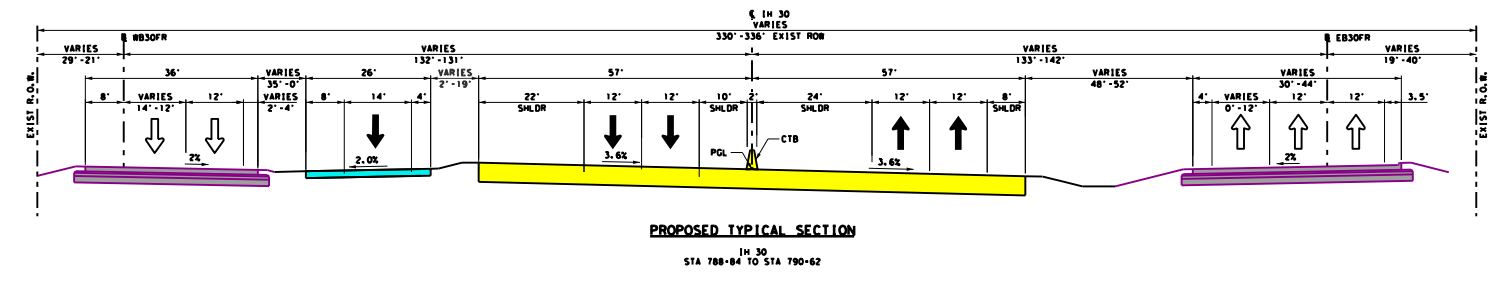
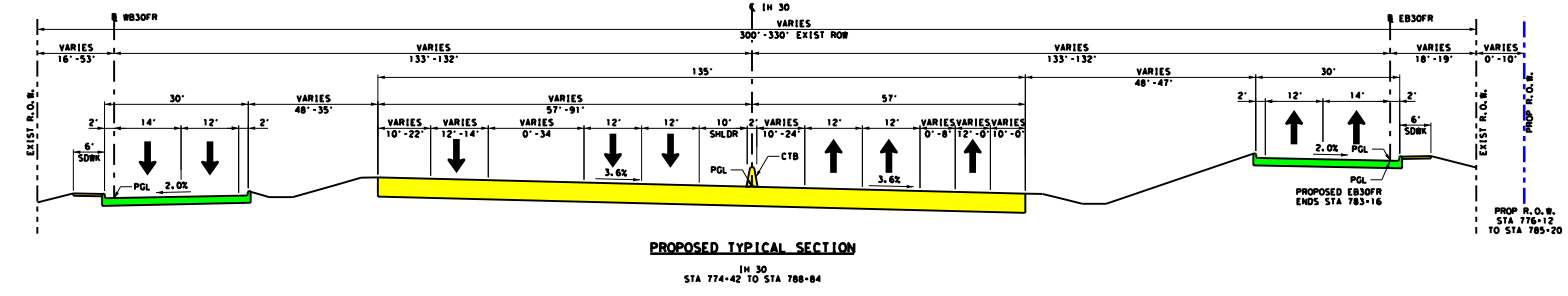
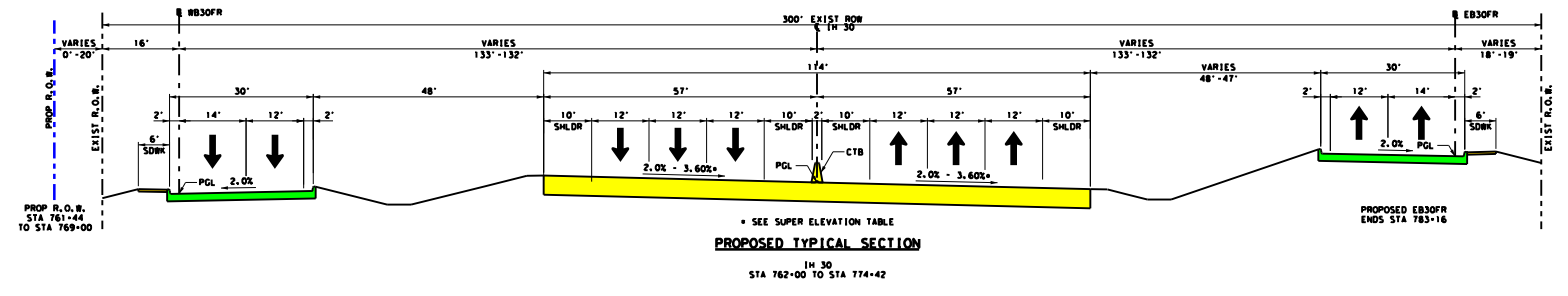
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Appendix E – Plan and Program Excerpts

| DISTRICT | COUNTY | CSJ | HWY | PHASE | CITY | PROJECT SPONSOR |
|---|--|-------------|-------|-------|--------------|---|
| DALLAS | COLLIN | 0000-18-027 | CS | C | FRISCO | FRISCO |
| LIMITS FROM: | LEBANON RD FROM COIT RD | | | | | REV DATE: 07/2018 |
| LIMITS TO: | INDEPENDENCE PKWY | | | | | MPO PROJECT ID: 83112 |
| TIP | WIDEN FROM 2 LANES TO 4 LANES | | | | | MTP REFERENCE: NRSA1-DAL-167 |
| DESCRIPTION: | | | | | | |
| REMARKS: | LOCAL CONTRIBUTION PAID BY FRISCO | | | | | |
| Project History: | | | | | | |
| DALLAS | DENTON | 0000-18-031 | CS | C | FLOWER MOUND | FLOWER MOUND |
| LIMITS FROM: | DENTON CREEK BLVD AT IH 35W | | | | | REV DATE: 07/2018 |
| LIMITS TO: | | | | | | MPO PROJECT ID: 83129.2 |
| TIP | INTERCHANGE | | | | | MTP REFERENCE: NRSA1-DAL-178 |
| DESCRIPTION: | | | | | | |
| REMARKS: | LOCAL CONTRIBUTION PAID BY CITY OF FLOWER MOUND | | | | | |
| Project History: DENTON CREEK SPINE RD WILL BE PAID BY DEVELOPER | | | | | | |
| DALLAS | COLLIN | 0000-18-082 | MH | E | VARIOUS | COLLIN CO |
| LIMITS FROM: | ON COLLIN COUNTY OUTER LOOP FROM DNT | | | | | REV DATE: 07/2018 |
| LIMITS TO: | US 75 | | | | | MPO PROJECT ID: 84149 |
| TIP | DEVELOP SCHEMATIC FOR ROW ACQUISITION | | | | | MTP REFERENCE: FT1-110.20.1, FT3-008, RSA1-2.150.650 |
| DESCRIPTION: | | | | | | |
| REMARKS: | LOCAL CONTRIBUTION PAID BY COLLIN COUNTY | | | | | |
| Project History: | | | | | | |
| DALLAS | VARIOUS | 0009-03-910 | SH 66 | E | ROWLETT | ROWLETT |
| LIMITS FROM: | AT DALROCK ROAD | | | | | REV DATE: 07/2018 |
| LIMITS TO: | | | | | | MPO PROJECT ID: 14007 |
| TIP | INTERSECTION IMPROVEMENT | | | | | MTP REFERENCE: TSMO2-001 |
| DESCRIPTION: | | | | | | |
| REMARKS: | LOCAL CONTRIBUTION PAID BY THE CITY OF ROWLETT | | | | | |
| Project History: | | | | | | |
| DALLAS | ROCKWALL | 0009-05-012 | SH 66 | E,R | VARIOUS | TXDOT-DALLAS |
| LIMITS FROM: | EAST OF ERBY CAMPBELL | | | | | REV DATE: 07/2018 |
| LIMITS TO: | FM 1777 | | | | | MPO PROJECT ID: 54132 |
| TIP | WIDEN AND RECONSTRUCT FROM 2 LANE RURAL UNDIVIDED TO 4 LANE URBAN DIVIDED | | | | | MTP REFERENCE: RSA1-2.370.800, RSA1-2.370.820, RSA1-2.370.825 |
| DESCRIPTION: | WITH 2/2 COUPLET FROM W OF HOUSTON ST TO JOSEPHINE ST | | | | | |
| REMARKS: | | | | | | |
| Project History: | | | | | | |
| DALLAS | DALLAS | 0009-11-129 | IH 30 | C | VARIOUS | TXDOT-DALLAS |
| LIMITS FROM: | IH 45 | | | | | REV DATE: 07/2018 |
| LIMITS TO: | BASS PRO DRIVE | | | | | MPO PROJECT ID: 13043 |
| TIP | RECONST 4/6/8 LN DISCONT TO 4/6 LN CONT FRTG RDS; IH 45 TO US 80: RECONST & | | | | | MTP REFERENCE: FT1-28.60.3, FT1-28.70.1, FT1-28.70.2 |
| DESCRIPTION: | WIDEN 8 TO 10 MAINLANES W/1 REV HOV TO 2 REV MGD LNS; US 80 TO IH 635: RECONST 6 TO 6 MAINLANES W/1 REV HOV LN TO 1 REV MANAGED LN; IH 635 TO BASS PRO: OPERATIONAL IMPROVEMENTS | | | | | |
| REMARKS: | | | | | | |
| Project History: 10-YEAR PLAN PROJECT | | | | | | |
| DALLAS | DALLAS | 0009-11-181 | IH 30 | C | DALLAS | TXDOT-DALLAS |
| LIMITS FROM: | IH 35E | | | | | REV DATE: 07/2018 |
| LIMITS TO: | IH 45 | | | | | MPO PROJECT ID: 13030 |
| TIP | RECONSTRUCT AND WIDEN 6 TO 12 MAINLANES AND RECONSTRUCT AND WIDEN 0/2 LANE | | | | | MTP REFERENCE: FT1-28.60.1, FT1-28.60.2 |
| DESCRIPTION: | DISCONTINUOUS TO 2/8 LANE DISCONTINUOUS FRONTAGE ROADS | | | | | |
| REMARKS: | | | | | | |
| Project History: 10-YEAR PLAN PROJECT | | | | | | |
| DALLAS | DALLAS | 0009-11-238 | IH 30 | E,R | GARLAND | TXDOT-DALLAS |
| LIMITS FROM: | BASS PRO DRIVE IN GARLAND | | | | | REV DATE: 07/2018 |
| LIMITS TO: | DALROCK RD | | | | | MPO PROJECT ID: 55179 |
| TIP | WIDEN TO ADD SHOULDER | | | | | MTP REFERENCE: MO3-001 |
| DESCRIPTION: | | | | | | |
| REMARKS: | | | | | | |
| Project History: | | | | | | |

| AO Corridor | ID | Facility | From | To | Type | YOE Cost |
|----------------------------|---------|----------|------------------------------------|-------------------------------------|--|---------------------|
| 5 - IH 20 (Tarrant County) | 30.40.1 | IH 20 | IH 35W | Forest Hill Drive | Operational Improvements/Bottleneck Removal | |
| 6 - IH 30 (East) | 28.80.1 | IH 30 | IH 635 | Bobtown Road | Operational Improvements/Bottleneck Removal | included w/ 28.60.3 |
| 6 - IH 30 (East) | 28.80.2 | IH 30 | Bobtown Road | Dalrock Road (Rockwall County Line) | Operational Improvements/Bottleneck Removal and Addition of Frontage Roads | included w/ 28.60.3 |
| 7 - IH 30 West Freeway | 28.10.1 | IH 30 | IH 20 | East of IH 20 (Tarrant County Line) | Operational Improvements/Bottleneck Removal | \$65,000,000 |
| 7 - IH 30 West Freeway | 28.10.2 | IH 30 | East of IH 20 (Parker County Line) | Spur 580/Camp Bowie W Blvd | Operational Improvements/Bottleneck Removal | included w/ 28.10.1 |
| 7 - IH 30 West Freeway | 28.20.2 | IH 30 | Camp Bowie Blvd | Chisholm Trail Parkway | Operational Improvements/Bottleneck Removal | included w/ 28.20.1 |
| 7 - IH 30 West Freeway | 28.20.3 | IH 30 | Chisholm Trail Parkway | Henderson Street | Safety Improvements | included w/ 28.20.1 |
| 7 - IH 30 West Freeway | 28.20.4 | IH 30 | Henderson Street | IH 35W | Safety Improvements | included w/ 28.20.1 |
| 7 - IH 30 West Freeway | 28.30.1 | IH 30 | IH 35W | US 287 | Operational Improvements/Bottleneck Removal | included w/ 28.30.3 |
| 8 - IH 35W (South) | 5.70.1 | IH 35W | IH 30 | Berry Street | Safety Improvements | \$20,000,000 |
| 8 - IH 35W (South) | 5.70.2 | IH 35W | Berry Street | IH 20 | Safety Improvements | included w/ 5.70.1 |
| 9 - IH 45 | 27.20.1 | IH 45 | US 175 | IH 20 | Safety Improvements | |
| 9 - IH 45 | 27.30.1 | IH 45 | IH 20 | Pleasant Run Road | Operational Improvements/Bottleneck Removal | |

*Interim Peak-Hour Lanes
 **Technology Lanes

**Appendix 12.8
Mobility 2045 Freeway/Tollway Lane Inventory Listing
2018 Transportation Conformity**

| FT Corridor | AO Corridor | ID | Facility | From | To | Year | Southbound or Eastbound | | | | | Northbound or Westbound | | | | | Toll | | Cont Frtg | Rural Hwy | Managed Lane Type | |
|-------------|-------------|-------|---------------------------------|-----------------------------------|----|------|-------------------------|-----|----|----|----------------|-------------------------|---|----|----|------|------|----|-----------|-----------|-------------------|---------|
| | | | | | | | Frtg | | CD | GP | Managed Lanes* | | | GP | CD | Frtg | | GP | | | | CD |
| | | | | | | | Min | Max | | | C | R | C | | | Min | Max | | | | | |
| 11 | 28.60.3 | IH 30 | IH 45 | Ferguson Rd | | 2018 | 2 | 3 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 2 | 3 | N | N | N | N | HOV |
| | | | | | | 2020 | 2 | 3 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 2 | 3 | N | N | N | N | HOV |
| | | | | | | 2028 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 2 | 3 | N | N | N | N | Managed |
| | | | | | | 2037 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 2 | 3 | N | N | N | N | Managed |
| | | | | | | 2045 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 2 | 3 | N | N | N | N | Managed |
| 11 | 28.70.1 | IH 30 | Ferguson Rd | US 80 | | 2018 | 2 | 3 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 2 | 4 | N | N | N | N | HOV |
| | | | | | | 2020 | 2 | 3 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 2 | 4 | N | N | N | N | HOV |
| | | | | | | 2028 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 2 | 3 | N | N | Y | N | Managed |
| | | | | | | 2037 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 2 | 3 | N | N | Y | N | Managed |
| | | | | | | 2045 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 2 | 3 | N | N | Y | N | Managed |
| 11 | 28.70.2 | IH 30 | US 80 | IH 635 | | 2018 | 2 | 3 | 0 | 3 | 0 | 1 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | HOV |
| | | | | | | 2020 | 2 | 3 | 0 | 3 | 0 | 1 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | HOV |
| | | | | | | 2028 | 2 | 3 | 0 | 3 | 0 | 1 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | Managed |
| | | | | | | 2037 | 2 | 3 | 0 | 3 | 0 | 1 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | Managed |
| | | | | | | 2045 | 2 | 3 | 0 | 3 | 0 | 1 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | Managed |
| 6 | 28.80.1 | IH 30 | IH 635 | Bobtown Rd | | 2018 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2020 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2028 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2037 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2045 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| 6 | 28.80.2 | IH 30 | Bobtown Rd | Dalrock Rd (Rockwall County Line) | | 2018 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | N | N | |
| | | | | | | 2020 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | N | N | |
| | | | | | | 2028 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2037 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2045 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| 13 | 28.90.1 | IH 30 | Dalrock Rd (Dallas County Line) | SH 205 | | 2018 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 3 | N | N | N | N | |
| | | | | | | 2020 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 3 | N | N | N | N | |
| | | | | | | 2028 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2037 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2045 | 2 | 3 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 2 | 3 | N | N | Y | N | |
| 13 | 28.90.2 | IH 30 | SH 205 | FM 2642 (Hunt County Line) | | 2018 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | N | N | Y | N | |
| | | | | | | 2020 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | N | N | Y | N | |
| | | | | | | 2028 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2037 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | |
| | | | | | | 2045 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 3 | N | N | Y | N | |



| FT Corridor | ID | Facility | From | To | 2018 (Attainment Year) | 2020 (Attainment Year) | 2028 | 2037 | 2045 | Type | YOE Cost |
|--------------------------------|----------|----------|-----------------------------------|---------------------------------------|--|--|---|---|---|---|------------------------|
| 10 - IH 20 West Tarrant County | 30.30.1 | IH 20 | IH 820 | SH 183 | 6 (Frwy), 4/6 (Frtg-D) | 6 (Frwy), 4/6 (Frtg-D) | 8 (Frwy), 4/6 (Frtg-D) | 8 (Frwy), 4/6 (Frtg-D) | 8 (Frwy), 4/6 (Frtg-D) | Operational Improvements/ Bottleneck Removal | \$255,000,000 |
| 11 - IH 30 (East) | 28.60.3 | IH 30 | IH 45 | Ferguson Road | 8 (Frwy) + 1 (HOV-R), 4/6 (Frtg-D) | 8 (Frwy) + 1 (HOV-R), 4/6 (Frtg-D) | 10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-D) | 10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-D) | 10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-D) | | \$1,600,000,000 |
| 11 - IH 30 (East) | 28.70.1 | IH 30 | Ferguson Road | US 80 | 8 (Frwy) + 1 (HOV-R), 4/8 (Frtg-D) | 8 (Frwy) + 1 (HOV-R), 4/8 (Frtg-D) | 10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C) | 10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C) | 10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C) | | included w/ 28.60.3 |
| 11 - IH 30 (East) | 28.70.2 | IH 30 | US 80 | IH 635 | 6 (Frwy) + 1 (HOV-R), 4/6 (Frtg-C) | 6 (Frwy) + 1 (HOV-R), 4/6 (Frtg-C) | 6 (Frwy) + 1/2 (ML/T-R), 4/6 (Frtg-C) | 6 (Frwy) + 1/2 (ML/T-R), 4/6 (Frtg-C) | 6 (Frwy) + 1/2 (ML/T-R), 4/6 (Frtg-C) | | included w/ 28.60.3 |
| 12 - IH 30 (Hunt County) | 28.100.1 | IH 30 | FM 2642 (Rockwall County Line) | SH 34 | 4 (Frwy), 4/6 (Frtg-C) | 4 (Frwy), 4/6 (Frtg-C) | 6 (Frwy), 4/6 (Frtg-C) | 6 (Frwy), 4/6 (Frtg-C) | 6 (Frwy), 4/6 (Frtg-C) | | \$301,000,000 |
| 12 - IH 30 (Hunt County) | 28.100.2 | IH 30 | SH 34 | Spur 302 | 4 (Frwy), 4/6 (Frtg-D) | 4 (Frwy), 4/6 (Frtg-D) | 6 (Frwy), 4/6 (Frtg-D) | 6 (Frwy), 4/6 (Frtg-D) | 6 (Frwy), 4/6 (Frtg-D) | | \$89,377,968 |
| 12 - IH 30 (Hunt County) | 28.100.3 | IH 30 | Spur 302 | East of CR 3203 (Hopkins County Line) | 4 (Frwy), 4 (Frtg-D) | 4 (Frwy), 4 (Frtg-D) | 6 (Frwy), 4 (Frtg-C) | 6 (Frwy), 4 (Frtg-C) | 6 (Frwy), 4 (Frtg-C) | | \$155,000,000 |
| 13 - IH 30 (Rockwall County) | 28.90.1 | IH 30 | Dalrock Road (Dallas County Line) | SH 205 | 6 (Frwy), 4/6 (Frtg-D) | 6 (Frwy), 4/6 (Frtg-D) | 8 (Frwy), 4/6 (Frtg-C) | 8 (Frwy), 4/6 (Frtg-C) | 8 (Frwy), 4/6 (Frtg-C) | | included w/ 28.60.3 |
| 13 - IH 30 (Rockwall County) | 28.90.2 | IH 30 | SH 205 | FM 2642 (Hunt County Line) | 4 (Frwy), 4 (Frtg-C) | 4 (Frwy), 4 (Frtg-C) | 6 (Frwy), 4/6 (Frtg-C) | 6 (Frwy), 4/6 (Frtg-C) | 6 (Frwy), 4/6 (Frtg-C) | | included w/ 28.60.3 |
| 14 - IH 30 (Tarrant County) | 28.30.2 | IH 30 | US 287 | Oakland Blvd | 8 (Frwy) | 8 (Frwy) | 8 (Frwy) | 8 (Frwy) + 2 (ML/T-C) | 8 (Frwy) + 2 (ML/T-C) | | included w/ 28.30.3 |

*Interim Peak-Hour Lanes

**Technology Lanes

(HOV-ExL) – HOV/Tolled Express Lanes; (HOV) – HOV Lanes; (ExL) – Express Lanes; (ML/T) – Tolled Managed Lanes; (-C) – Concurrent Lanes; (-R) – Reversible Lanes

Interchange Recommendations Summary

June 6, 2018

| INT ID | Agency | Facility | Connection | Year Open | Description | YOE Cost |
|----------|--------------|----------------------|---|-----------|------------------|-------------|
| 21.120.1 | TxDOT Dallas | Dallas North Tollway | President George Bush Turnpike | 2018 | Improvements | \$0 |
| 21.2.1 | TxDOT Dallas | Dallas North Tollway | US 380 | 2028 | New Interchange | \$0 |
| 18.32.1 | TxDOT Dallas | East Branch (SH 190) | US 80 | 2028 | New Interchange | \$0 |
| 28.121.1 | TxDOT Dallas | East Branch (SH 190) | President George Bush Turnpike (SH 190) | 2028 | Reconstruct | \$0 |
| 6.30.1 | TxDOT Dallas | East Branch (SH 190) | IH 20 | 2028 | New Interchange | \$0 |
| 30.38.1 | TxDOT Dallas | IH 20 | US 67 | 2028 | Reconstruct | \$0 |
| 28.111.1 | TxDOT Dallas | IH 30 | Outer Loop/Floyd Road | 2028 | New Interchange | \$0 |
| 28.200.1 | TxDOT Dallas | IH 30 | Bayside Drive | 2028 | New Interchange | \$0 |
| 28.546.1 | TxDOT Dallas | IH 30 | Ben Payne/Rochelle Road | 2028 | New Interchange | \$0 |
| 28.548.1 | TxDOT Dallas | IH 30 | FM 3549 (FM 549) | 2020 | Reconstruct | \$0 |
| 28.549.1 | TxDOT Dallas | IH 30 | FM 551 | 2018 | Reconstruct | \$0 |
| 28.550.1 | TxDOT Dallas | IH 30 | Erby Campbell Blvd | 2018 | Grade Separation | \$0 |
| 28.550.2 | TxDOT Dallas | IH 30 | Dalrock Road | 2028 | Reconstruct | \$2,000,000 |
| 28.553.1 | TxDOT Dallas | IH 30 | Blackland Road | 2028 | New Interchange | \$0 |
| 3.100.1 | TxDOT Dallas | IH 35 | State Loop 288 | 2037 | Reconstruct | \$0 |
| 3.95.1 | TxDOT Dallas | IH 35 | US 77 (Denton County) | 2028 | Reconstruct | \$0 |
| 1.7.1 | TxDOT Dallas | IH 35E | US 287 | 2028 | Reconstruct | \$8,400,000 |
| 3.5.1 | TxDOT Dallas | IH 35E | IH 35W | 2028 | Reconstruct | \$0 |
| 7.11.1 | TxDOT Dallas | IH 35E | SH 121 | 2028 | Reconstruct | \$0 |
| 7.17.1 | TxDOT Dallas | IH 35E | State Loop 12 | 2028 | Reconstruct | \$0 |
| 7.28.1 | TxDOT Dallas | IH 35E | IH 30 | 2018 | Reconstruct | \$0 |
| 7.30.1 | TxDOT Dallas | IH 35E | IH 20 | 2028 | Reconstruct | \$0 |
| 7.38.1 | TxDOT Dallas | IH 35E | US 67 | 2028 | Reconstruct | \$0 |
| 7.503.1 | TxDOT Dallas | IH 35E | FM 66 | 2028 | Reconstruct | \$0 |
| 7.504.1 | TxDOT Dallas | IH 35E | FM 1446 | 2028 | Reconstruct | \$0 |
| 7.508.1 | TxDOT Dallas | IH 35E | BU 287 | 2028 | Reconstruct | \$8,400,000 |
| 7.509.1 | TxDOT Dallas | IH 35E | Lofland Drive | 2028 | Reconstruct | \$8,400,000 |

Mobility 2045
Interchange Summary Table

11/27/2018

| INT ID | Agency | Facility | Connection | Yr Open | Description | YOE Cost |
|-----------|--------------|----------------------|---|---------|------------------|---------------------------|
| 21.120.1 | TxDOT Dallas | Dallas North Tollway | President George Bush Turnpike | 2018 | Improvements | included w/ FT - 21.10.3 |
| 21.2.1 | TxDOT Dallas | Dallas North Tollway | US 380 | 2028 | New Interchange | included w/ FT - 21.10.1 |
| 18.32.1 | TxDOT Dallas | East Branch (SH 190) | US 80 | 2028 | New Interchange | included w/ FT - 39.10.1 |
| 28.121.1 | TxDOT Dallas | East Branch (SH 190) | President George Bush Turnpike (SH 190) | 2028 | Reconstruct | included w/ FT - 39.10.1 |
| 6.30.1 | TxDOT Dallas | East Branch (SH 190) | IH 20 | 2028 | New Interchange | included w/ FT - 39.10.1 |
| 30.38.1 | TxDOT Dallas | IH 20 | US 67 | 2028 | Reconstruct | included w/ FT - 7.80.3 |
| 28.111.1 | TxDOT Dallas | IH 30 | Outer Loop/Floyd Road | 2028 | New Interchange | included w/ FT - 110.20.1 |
| 28.200.1 | TxDOT Dallas | IH 30 | Bayside Drive | 2028 | New Interchange | included w/ AO - 28.80.2 |
| 28.546.1 | TxDOT Dallas | IH 30 | Ben Payne/Rochelle Road | 2028 | New Interchange | included w/ FT - 28.60.3 |
| 28.548.1 | TxDOT Dallas | IH 30 | FM 3549 (FM 549) | 2020 | Reconstruct | included w/ FT - 28.60.3 |
| 28.549.1 | TxDOT Dallas | IH 30 | FM 551 | 2018 | Reconstruct | included w/ FT - 28.60.3 |
| 28.550.1 | TxDOT Dallas | IH 30 | Erby Campbell Blvd. | 2018 | Grade Separation | included w/ FT - 28.60.3 |
| 28.550.2 | TxDOT Dallas | IH 30 | Dalrock Road | 2028 | Reconstruct | \$2,000,000 |
| 28.553.1 | TxDOT Dallas | IH 30 | Blackland Road | 2028 | New Interchange | included w/ FT - 28.60.3 |
| 3.100.1 | TxDOT Dallas | IH 35 | State Loop 288 | 2037 | Reconstruct | included w/ FT - 3.10.1 |
| 3.95.1 | TxDOT Dallas | IH 35 | US 77 (Denton County) | 2028 | Reconstruct | included w/ FT - 3.10.1 |
| 1.7.1 | TxDOT Dallas | IH 35E | US 287 | 2028 | Reconstruct | \$8,400,000 |
| 3.5.1 | TxDOT Dallas | IH 35E | IH 35W | 2028 | Reconstruct | included w/ FT - 3.20.3 |
| 7.11.1 | TxDOT Dallas | IH 35E | SH 121 | 2028 | Reconstruct | included w/ FT - 3.20.3 |
| 7.17.1 | TxDOT Dallas | IH 35E | State Loop 12 | 2028 | Reconstruct | included w/ FT - 7.50.1 |
| 7.28.1 | TxDOT Dallas | IH 35E | IH 30 | 2018 | Reconstruct | included w/ FT - 7.80.3 |
| 7.30.1 | TxDOT Dallas | IH 35E | IH 20 | 2028 | Reconstruct | included w/ FT - 7.80.3 |
| 7.38.1 | TxDOT Dallas | IH 35E | US 67 | 2028 | Reconstruct | included w/ FT - 7.80.3 |
| 7.503.1 | TxDOT Dallas | IH 35E | FM 66 | 2028 | Reconstruct | included w/ FT - 7.100.5 |
| 7.504.1 | TxDOT Dallas | IH 35E | FM 1446 | 2028 | Reconstruct | included w/ FT - 7.100.5 |
| 7.508.1 | TxDOT Dallas | IH 35E | BU 287 | 2028 | Reconstruct | \$8,400,000 |
| 7.509.1 | TxDOT Dallas | IH 35E | Lofland Drive | 2028 | Reconstruct | \$8,400,000 |
| 7.510.1 | TxDOT Dallas | IH 35E | Butcher Road | 2028 | Reconstruct | \$8,400,000 |
| 7.512.1 | TxDOT Dallas | IH 35E | Sterrett Road | 2028 | Reconstruct | \$8,400,000 |
| 7.515.1 | TxDOT Dallas | IH 35E | FM 664 | 2028 | Reconstruct | \$40,000,000 |
| 7.552.1 | TxDOT Dallas | IH 35E | FM 407 | 2037 | Reconstruct | included w/ FT - 3.20.3 |
| 7.576.1 | TxDOT Dallas | IH 35E | Dickerson Pkwy. | 2018 | New Interchange | included w/ FT - 3.20.3 |
| 5.103.1 | TxDOT Dallas | IH 35W | State Loop 288 | 2037 | New Interchange | included w/ FT - 3.10.1 |
| 27.29.1 | TxDOT Dallas | IH 45 | S.M. Wright | 2028 | Reconstruct | included w/ FT - 26.20.1 |
| 27.554.1 | TxDOT Dallas | IH 45 | Fulgham Rd | 2028 | Improvements | included w/ AO - 27.30.2 |
| 27.560.1 | TxDOT Dallas | IH 45 | FM 664 | 2028 | New Interchange | \$50,000,000 |
| 131.577.1 | TxDOT Dallas | IH 635 | Skillman/Audelia Street | 2023 | Reconstruct | included w/ FT - 131.10.1 |
| 28.131.1 | TxDOT Dallas | IH 635 | IH 30 | 2028 | Reconstruct | included w/ FT - 131.10.1 |
| 32.131.1 | TxDOT Dallas | IH 635 | US 80 | 2028 | Improvements | included w/ FT - 131.10.1 |
| 7.130.1 | TxDOT Dallas | IH 635 | IH 35E | 2037 | Reconstruct | included w/ FT - 7.50.1 |
| 12.42.1 | TxDOT Dallas | SH 114 | Spur 482 | 2023 | Reconstruct | \$17,118,564 |

**2019 - 2022 STIP
- Federal Comments**

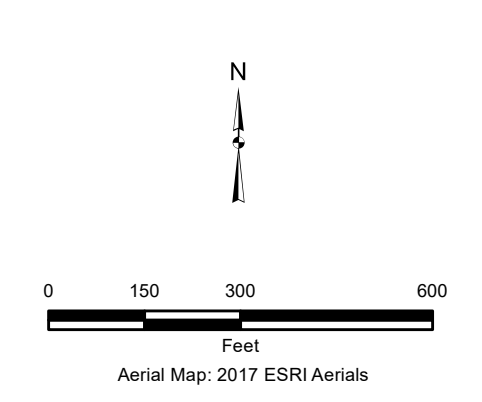
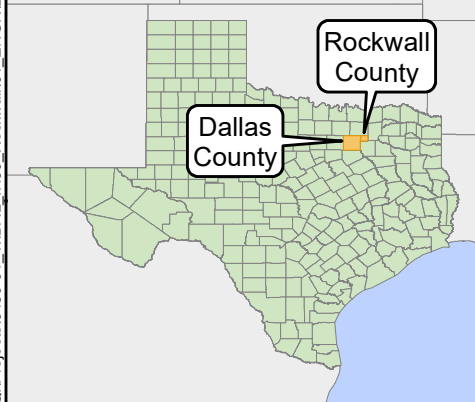
| # | District / MPO | CSJ Number | STIP comment |
|----|----------------|-------------|---|
| 36 | AUS / CAMPO | 61-00133-00 | Approved. However, please clarify discrepancy in local funding source and project sponsor reflected in e-STIP and that reflected in the CAMPO 2019-2022 TIP. |
| 37 | AUS / Rural | 0914-23-012 | Not approved. This project is not approved as part of the 2019-2022 STIP. TxDOT has indicated that this project was let under the 2017-2020 STIP. |
| 39 | BRY / BCSMPO | 0049-12-110 | Not Approved. Project description of “widen freeway facility” does not include number of lanes and is not consistent with the 2040 MTP (Table ES.2). Approval is withheld pending clarification of the project description. |
| 40 | DAL / NCTCOG | 0000-18-101 | Not Approved. Unable to determine project eligibility with the information provided. Cat 7 |
| 41 | DAL / NCTCOG | 0009-11-129 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 42 | DAL / NCTCOG | 0009-11-181 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 43 | DAL / NCTCOG | 0009-12-219 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 44 | DAL / NCTCOG | 0047-06-158 | Not Approved. Conversion of the existing HOV lanes to general purpose lanes is not allowable. |
| 45 | DAL / NCTCOG | 0047-06-161 | Not Approved. Unable to determine project consistency with the 2040 MTP. |
| 46 | DAL / NCTCOG | 0047-06-163 | Not Approved. Conversion of the existing HOV lanes to general purpose lanes is not allowable. |
| 47 | DAL / NCTCOG | 0047-07-232 | Not Approved. Conversion of the existing HOV lanes to general purpose lanes is not allowable. |
| 48 | DAL / NCTCOG | 0047-09-034 | Not Approved. The project does not appear to be consistent with the Mobility 2040. |
| 49 | DAL / NCTCOG | 0048-04-094 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 50 | DAL / NCTCOG | 0092-03-053 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 51 | DAL / NCTCOG | 0094-03-060 | Not Approved. Unable to determine project consistency with the 2040 MTP. |
| 52 | DAL / NCTCOG | 0095-02-096 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 53 | DAL / NCTCOG | 0095-02-107 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 54 | DAL / NCTCOG | 0095-03-080 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 55 | DAL / NCTCOG | 0442-03-042 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 56 | DAL / NCTCOG | 0918-47-240 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 57 | DAL / NCTCOG | 1051-01-051 | Not Approved. Unable to determine project consistency with the 2040 MTP. |
| 58 | DAL / NCTCOG | 1051-01-052 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |
| 59 | DAL / NCTCOG | 2374-01-190 | Not Approved. The project does not appear to be consistent with the 2040 MTP. |

Appendix F – Resource-specific Maps

LAKE RAY HUBBARD



| | | |
|-----------------------------|--|--|
| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
| Temporary Easement | School | Non-impacted Noise Receiver |
| Proposed ROW | Emergency Medical Facility | Impacted Noise Receiver |
| Existing ROW | Public/Civic Facility | Noise Barrier |
| Existing Railroad ROW | Historic Age | Haz-Mat Sites |
| Drainage Ditch | NRHP Property | Anticipated Project Impacts |
| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |



Project Resource Map

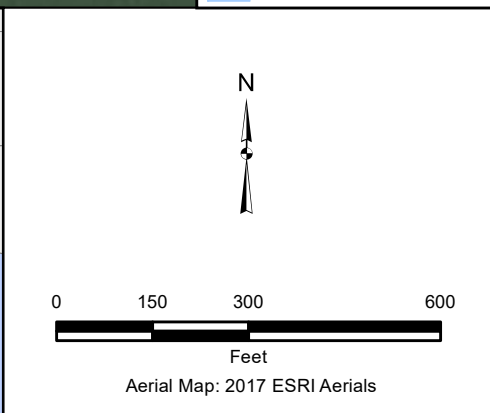
CSJ 0009-11-238, etc.
 IH-30 Improvements from
 Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 1

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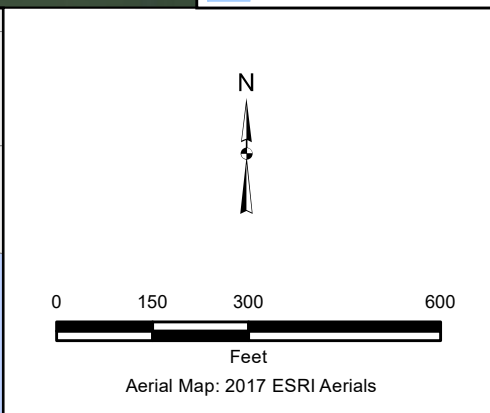
Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

| | | |
|--------------------|-------------------|-------------|
| Date: October 2018 | Proj. No: 3450-00 | Sheet No: 2 |
|--------------------|-------------------|-------------|

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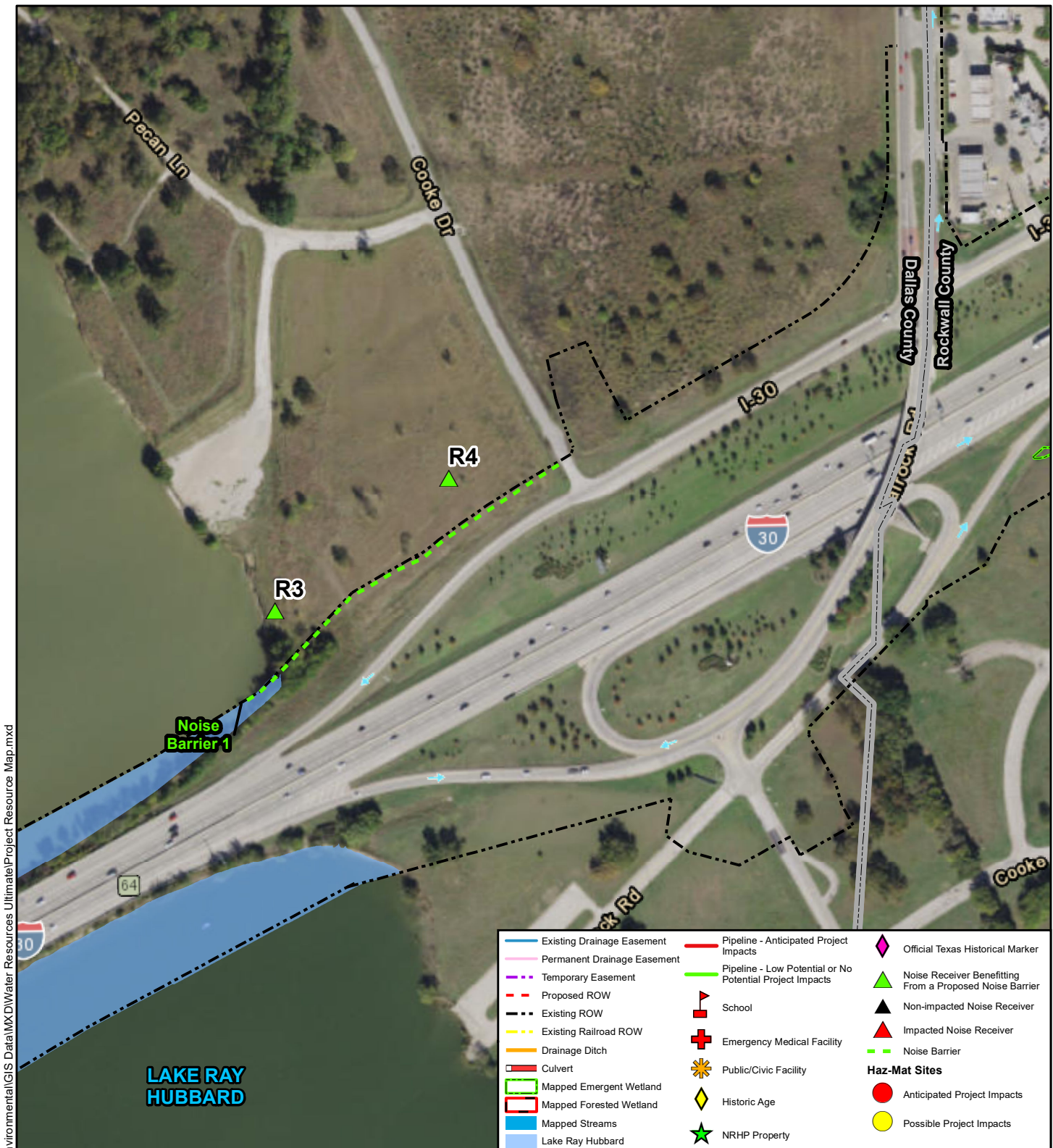


Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

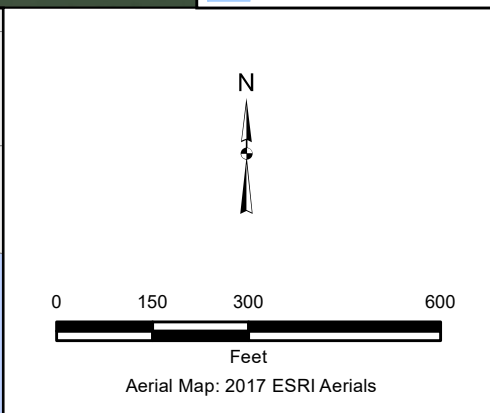
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 3



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| | | |
|-----------------------------|--|---|
| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefiting From a Proposed Noise Barrier |
| Temporary Easement | School | Non-impacted Noise Receiver |
| Proposed ROW | Emergency Medical Facility | Impacted Noise Receiver |
| Existing ROW | Public/Civic Facility | Noise Barrier |
| Existing Railroad ROW | Historic Age | Haz-Mat Sites |
| Drainage Ditch | NRHP Property | Anticipated Project Impacts |
| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

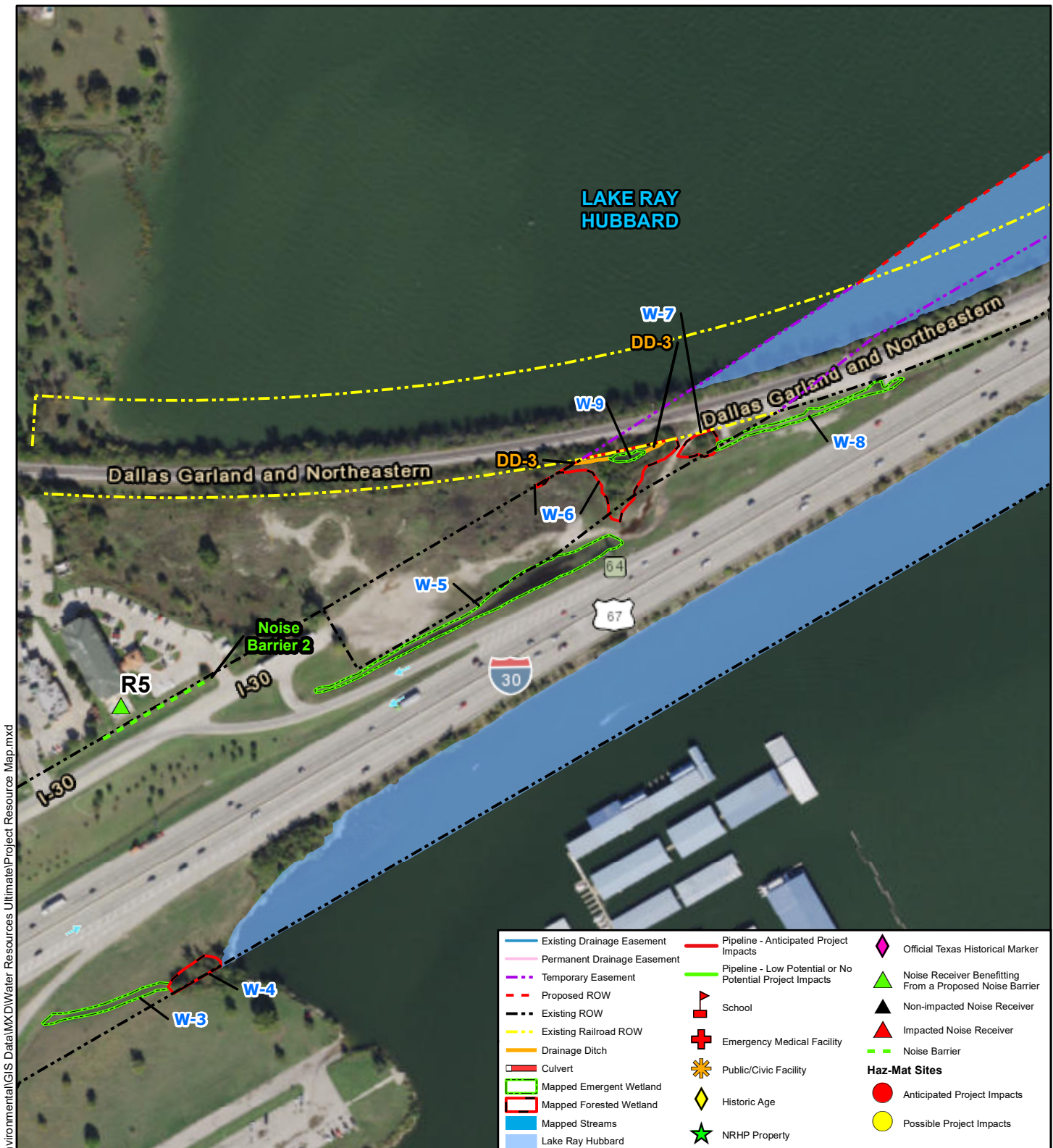


Project Resource Map

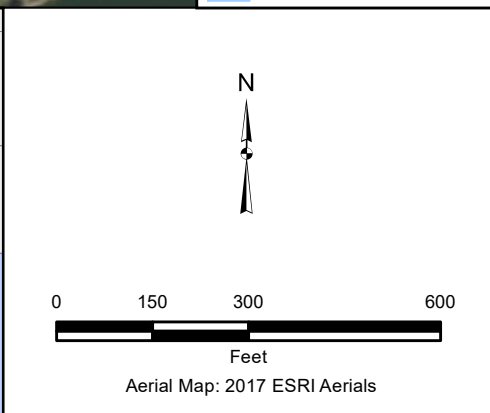
CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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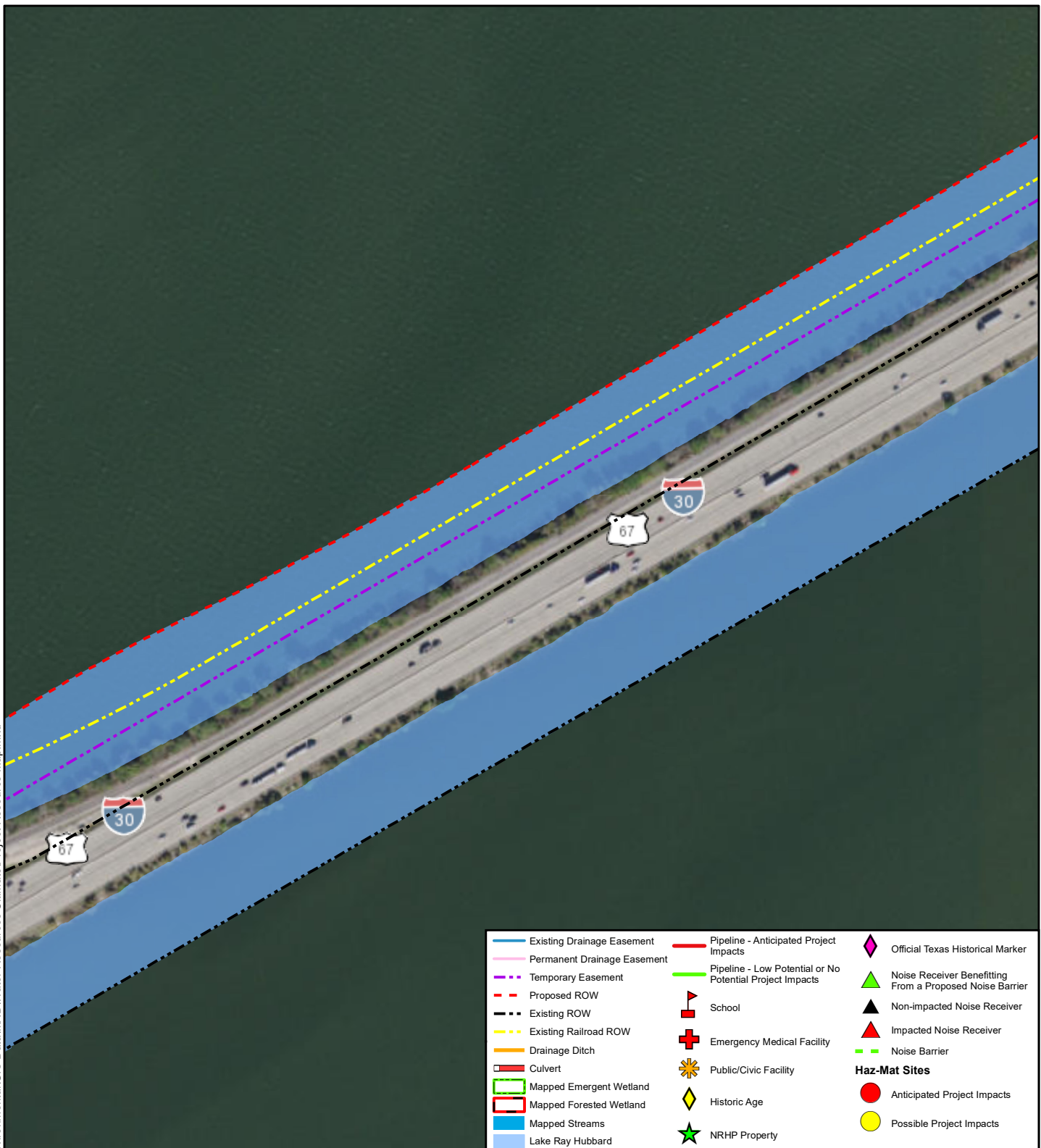
Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

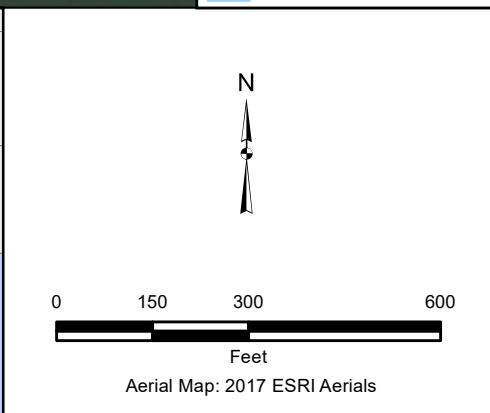
Dallas & Rockwall Counties, TX

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| Date: October 2018 | Proj. No: 3450-00 | Sheet No: 5 |
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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
| Temporary Easement | School | Non-impacted Noise Receiver |
| Proposed ROW | Emergency Medical Facility | Impacted Noise Receiver |
| Existing ROW | Public/Civic Facility | Noise Barrier |
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| Drainage Ditch | NRHP Property | Anticipated Project Impacts |
| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |



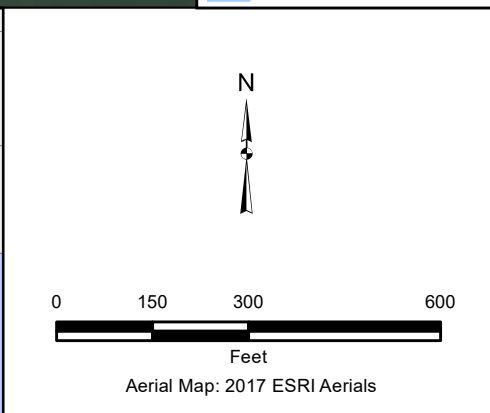
Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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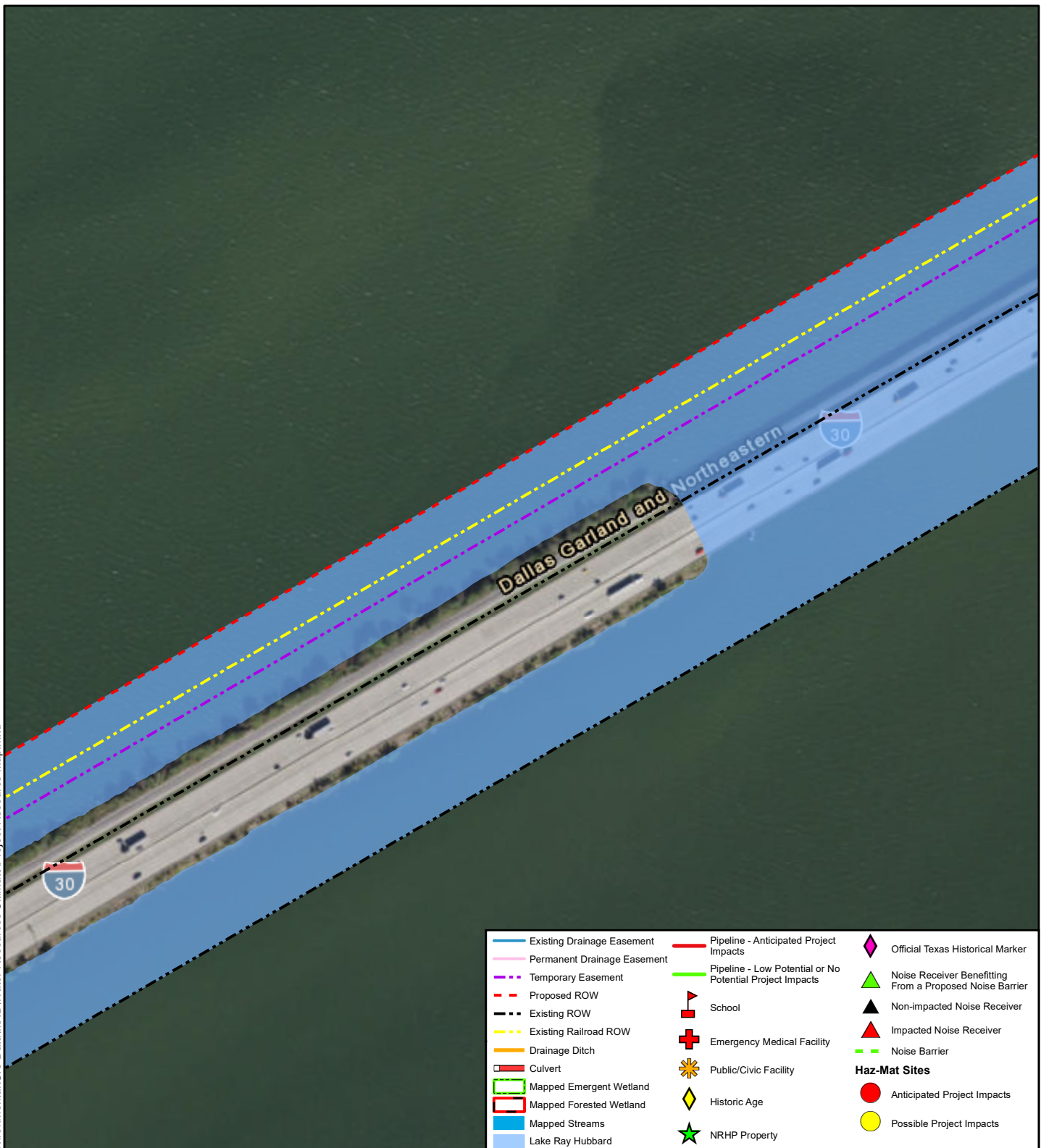
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CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

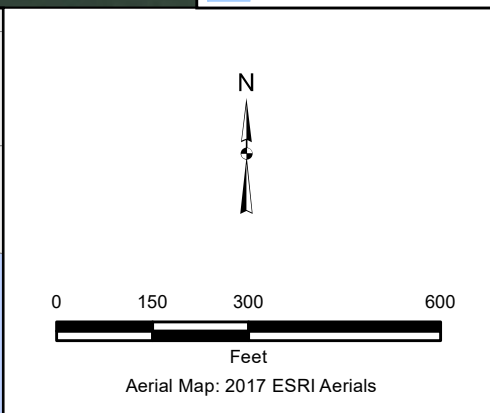
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
| Temporary Easement | School | Non-impacted Noise Receiver |
| Proposed ROW | Emergency Medical Facility | Impacted Noise Receiver |
| Existing ROW | Public/Civic Facility | Noise Barrier |
| Existing Railroad ROW | Historic Age | Haz-Mat Sites |
| Drainage Ditch | NRHP Property | Anticipated Project Impacts |
| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |



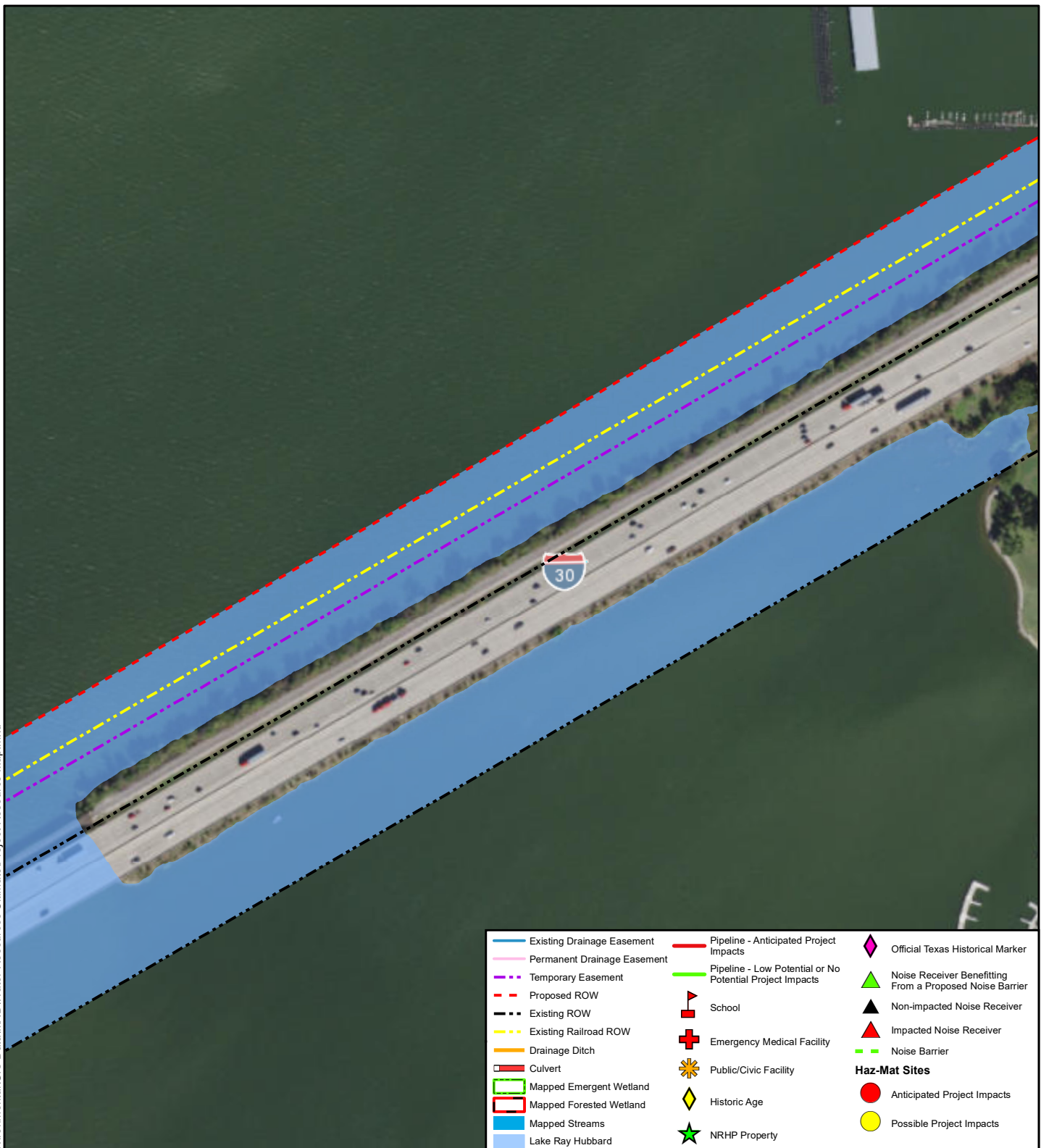
Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

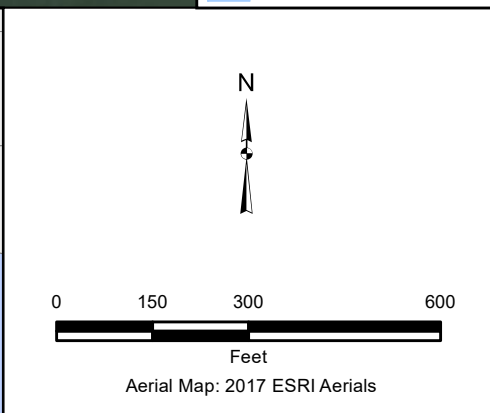
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
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| Drainage Ditch | NRHP Property | Anticipated Project Impacts |
| Mapped Emergent Wetland | | Possible Project Impacts |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

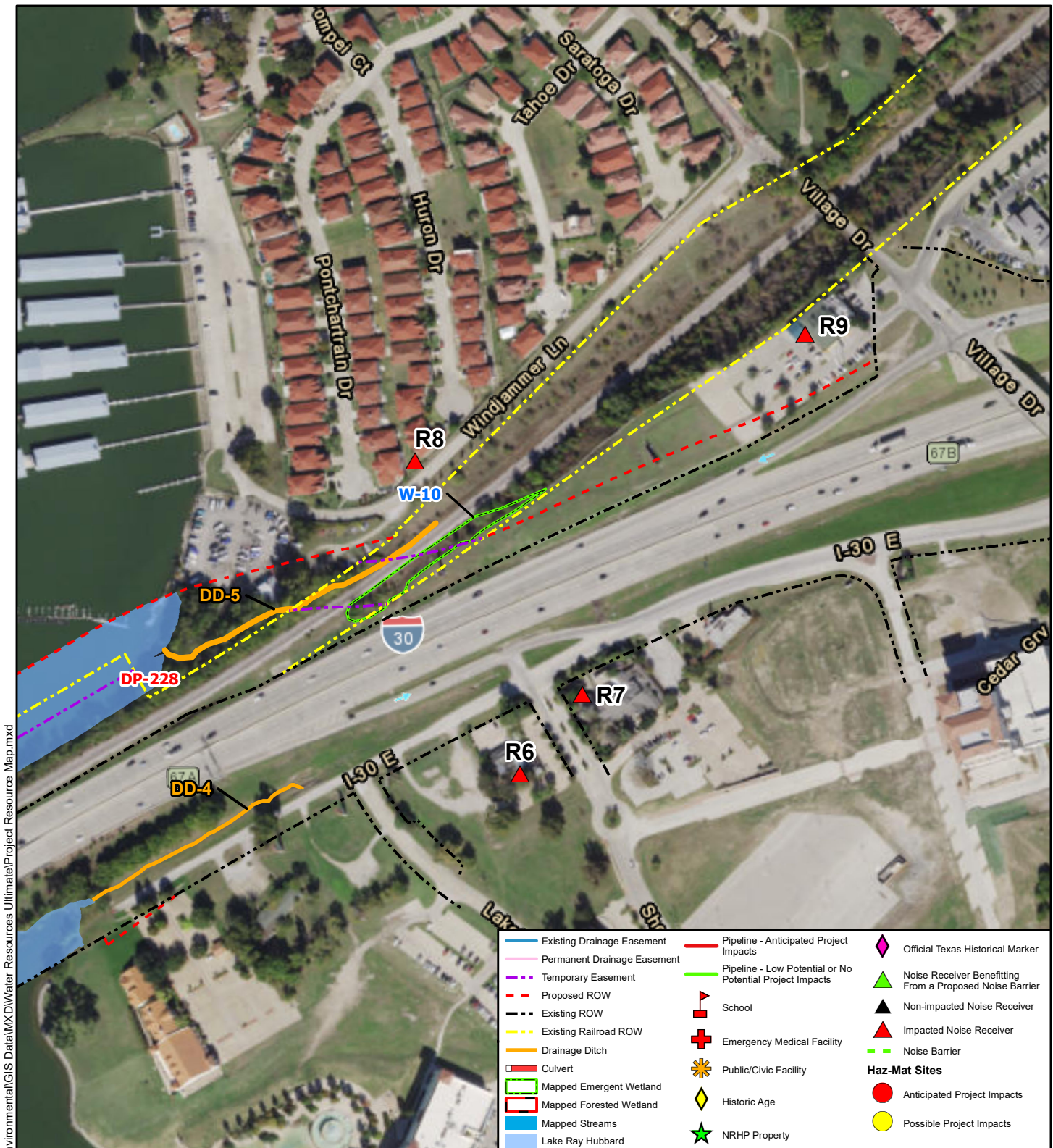


Project Resource Map

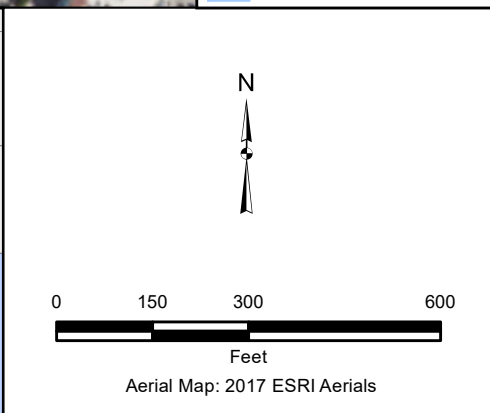
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

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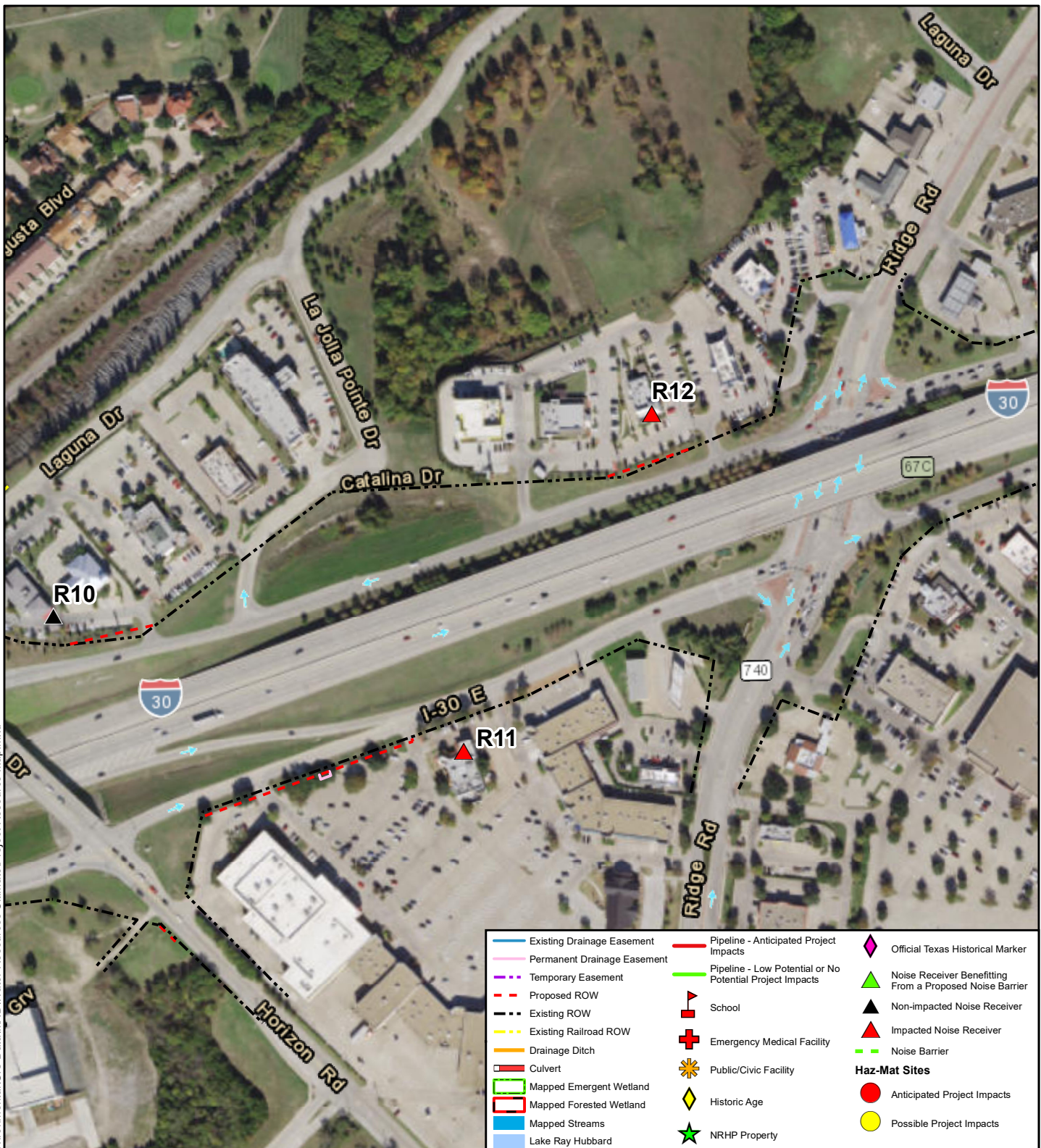


Project Resource Map

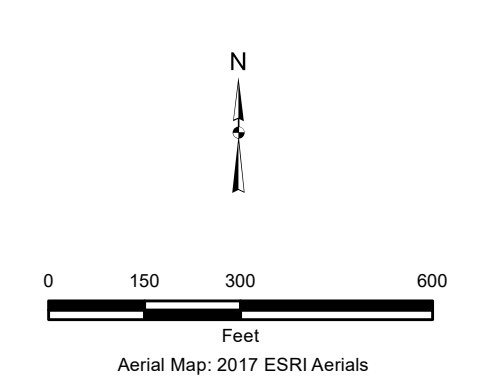
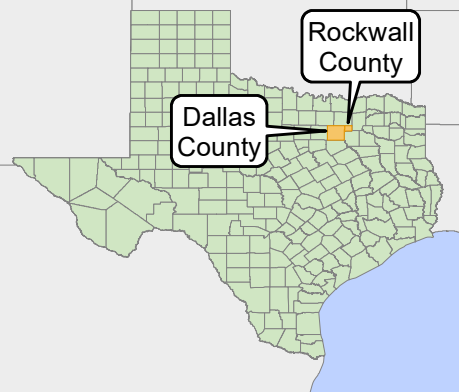
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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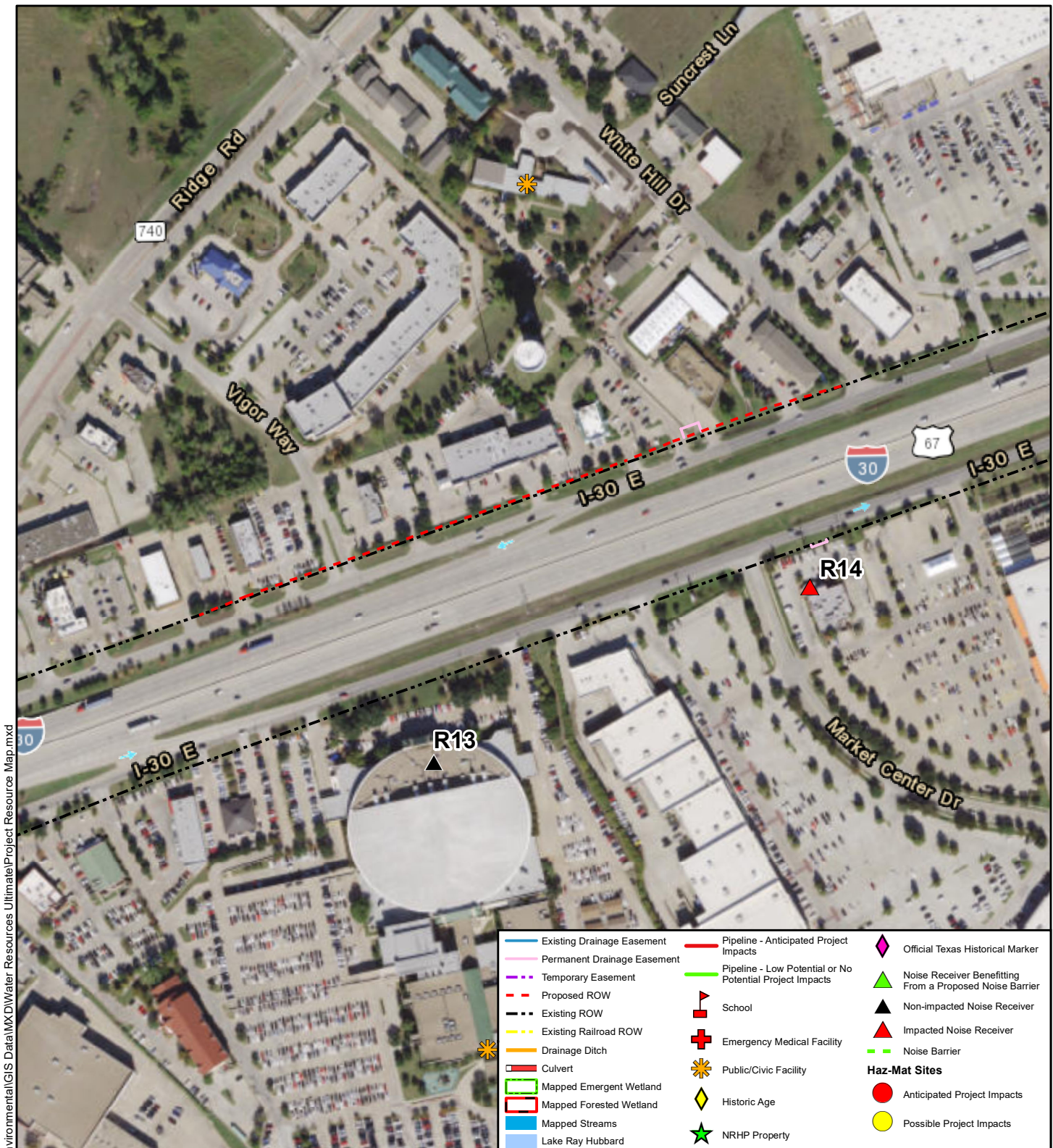


Project Resource Map

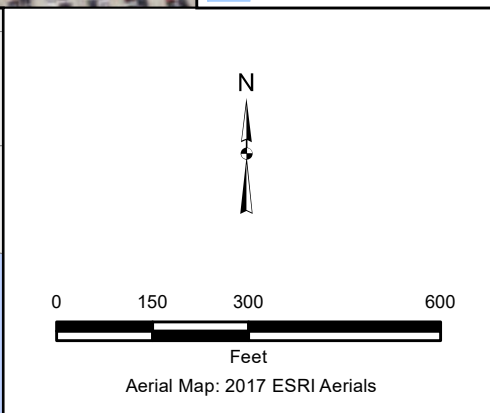
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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Project Resource Map

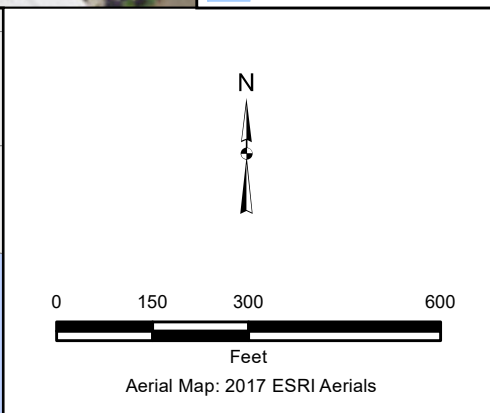
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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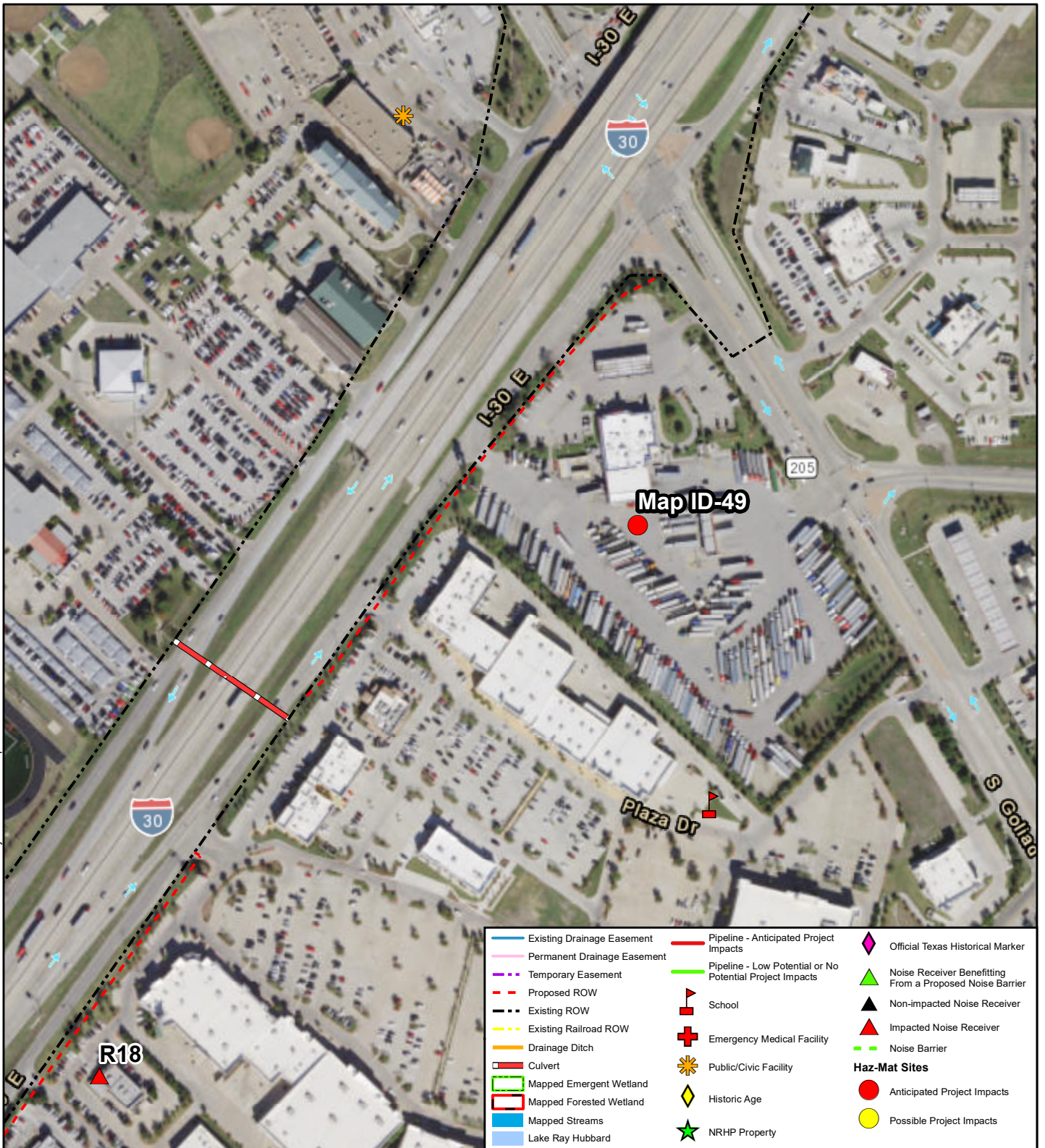
Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

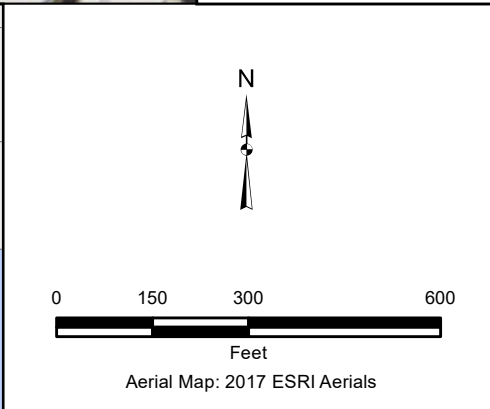
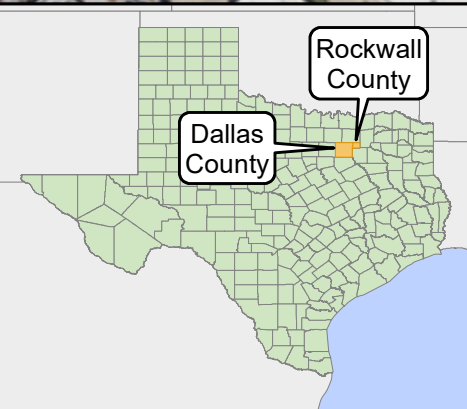
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
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| Existing Railroad ROW | Historic Age | Haz-Mat Sites |
| Culvert | NRHP Property | Anticipated Project Impacts |
| Mapped Emergent Wetland | | Possible Project Impacts |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

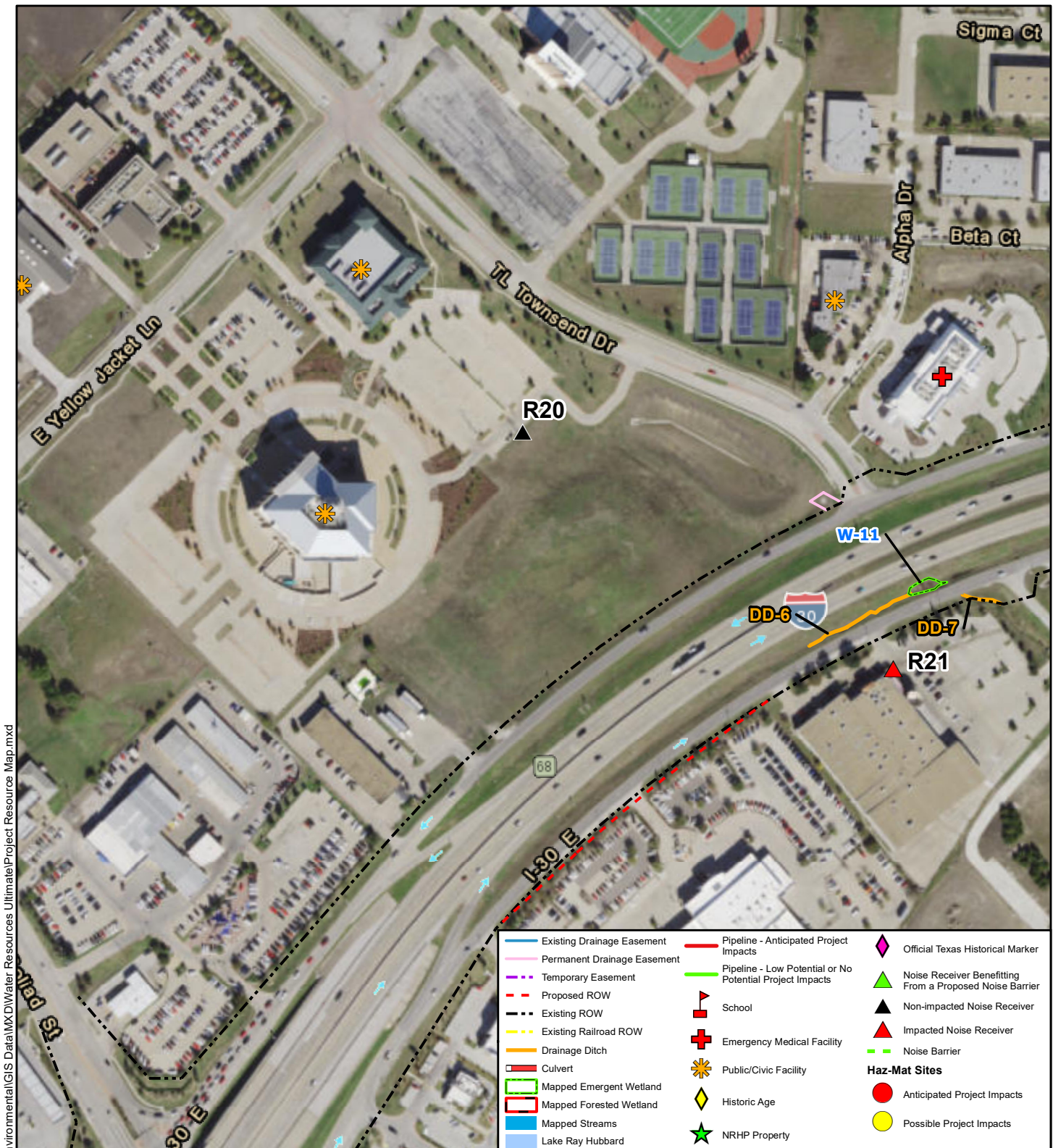


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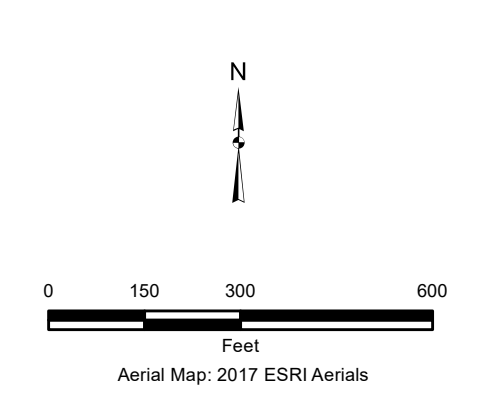
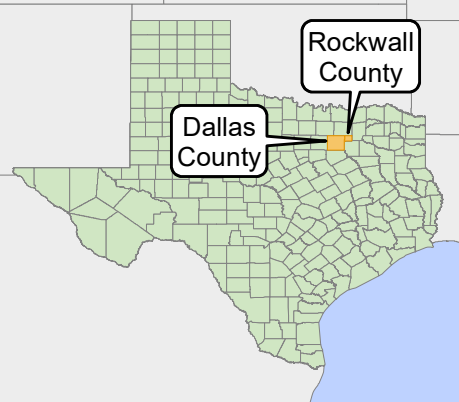
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

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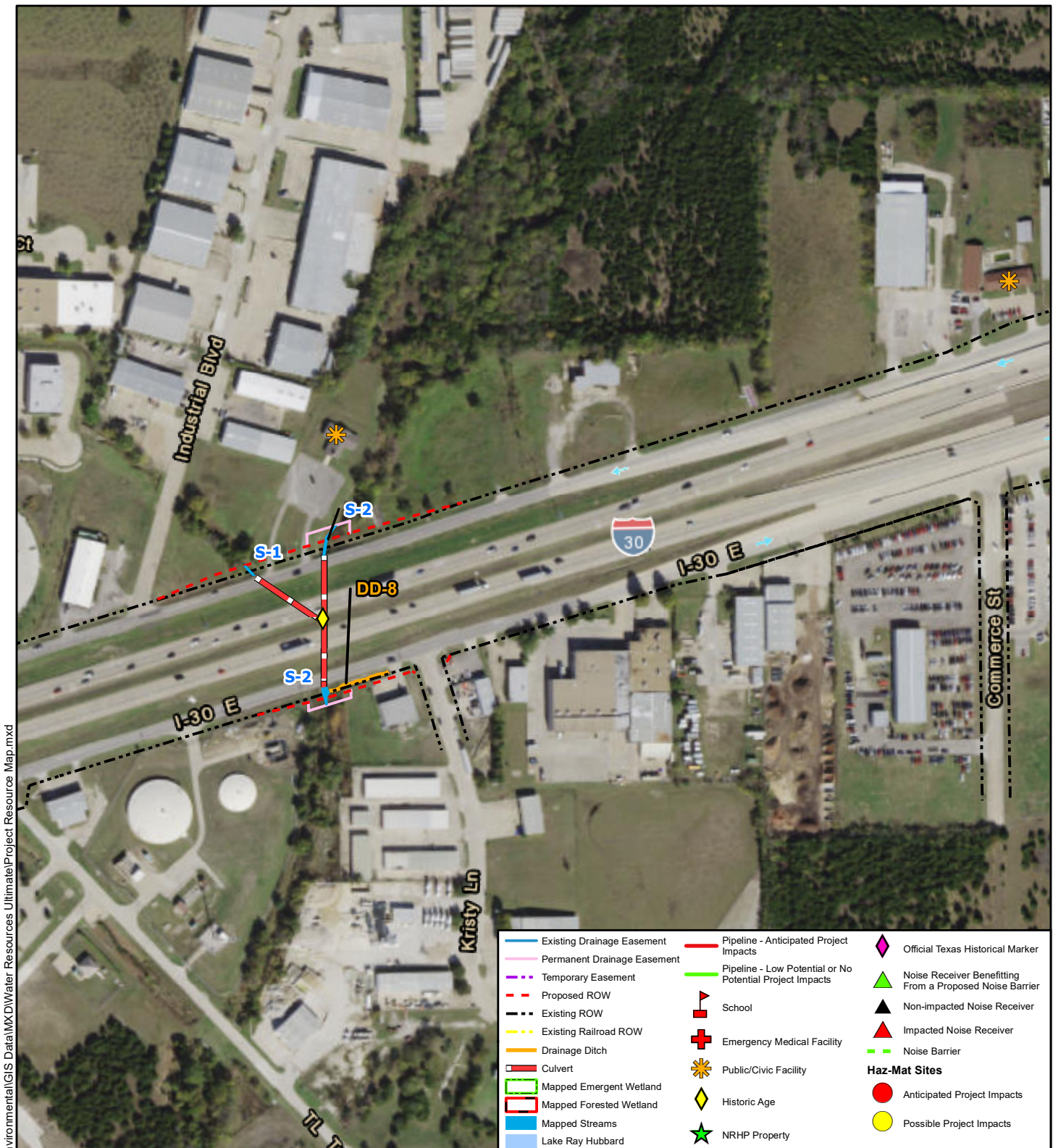


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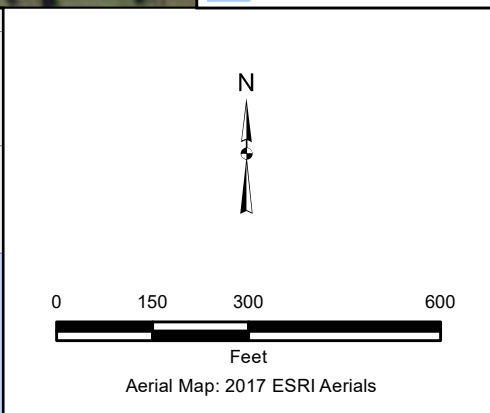
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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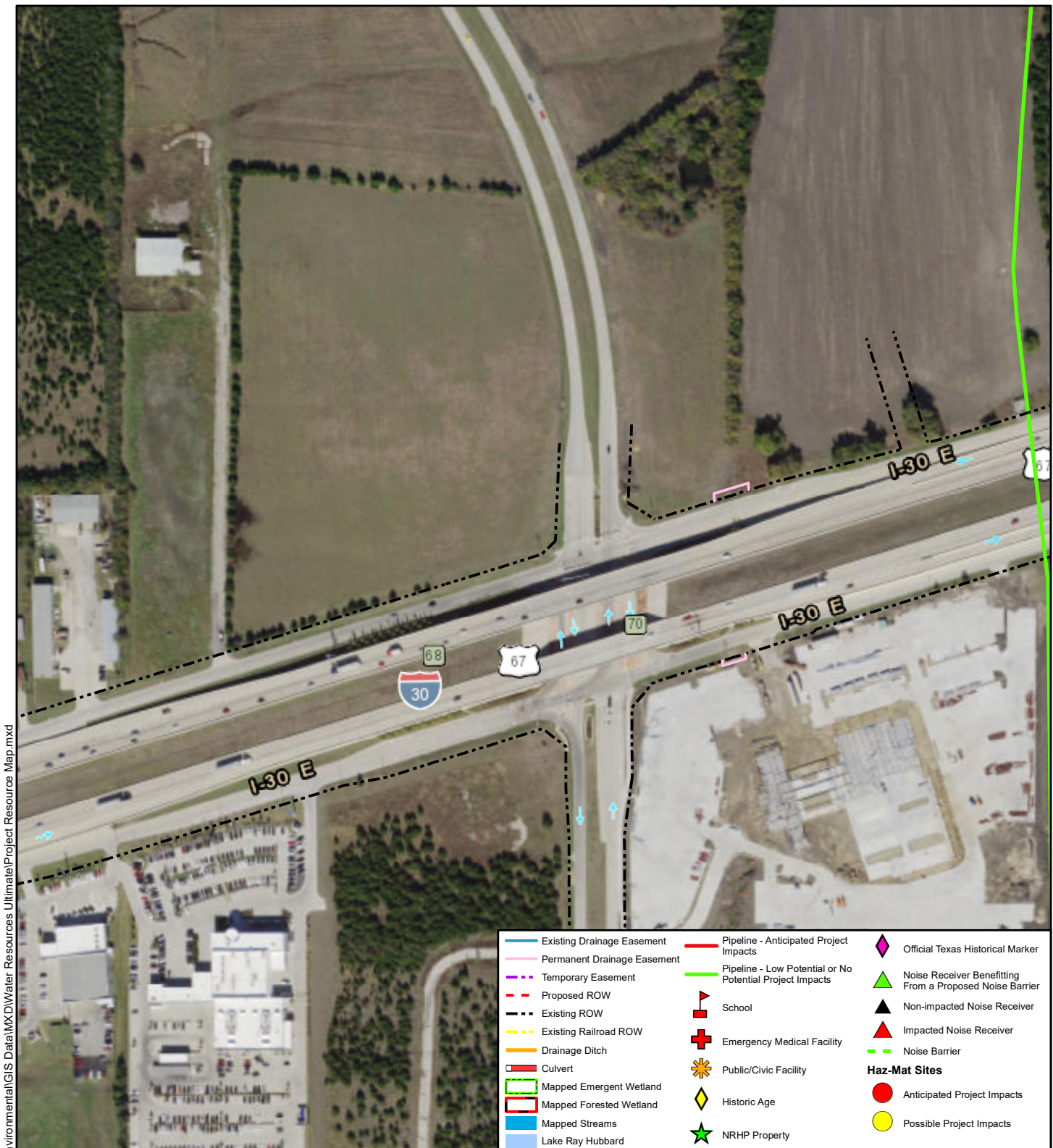


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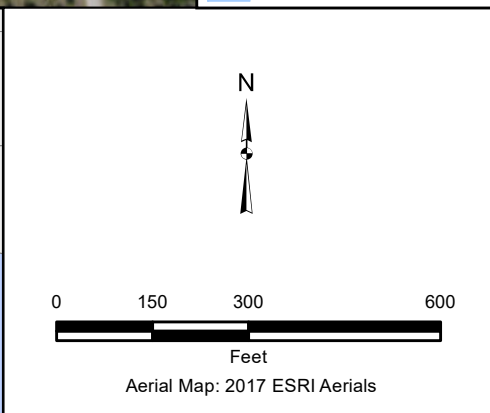
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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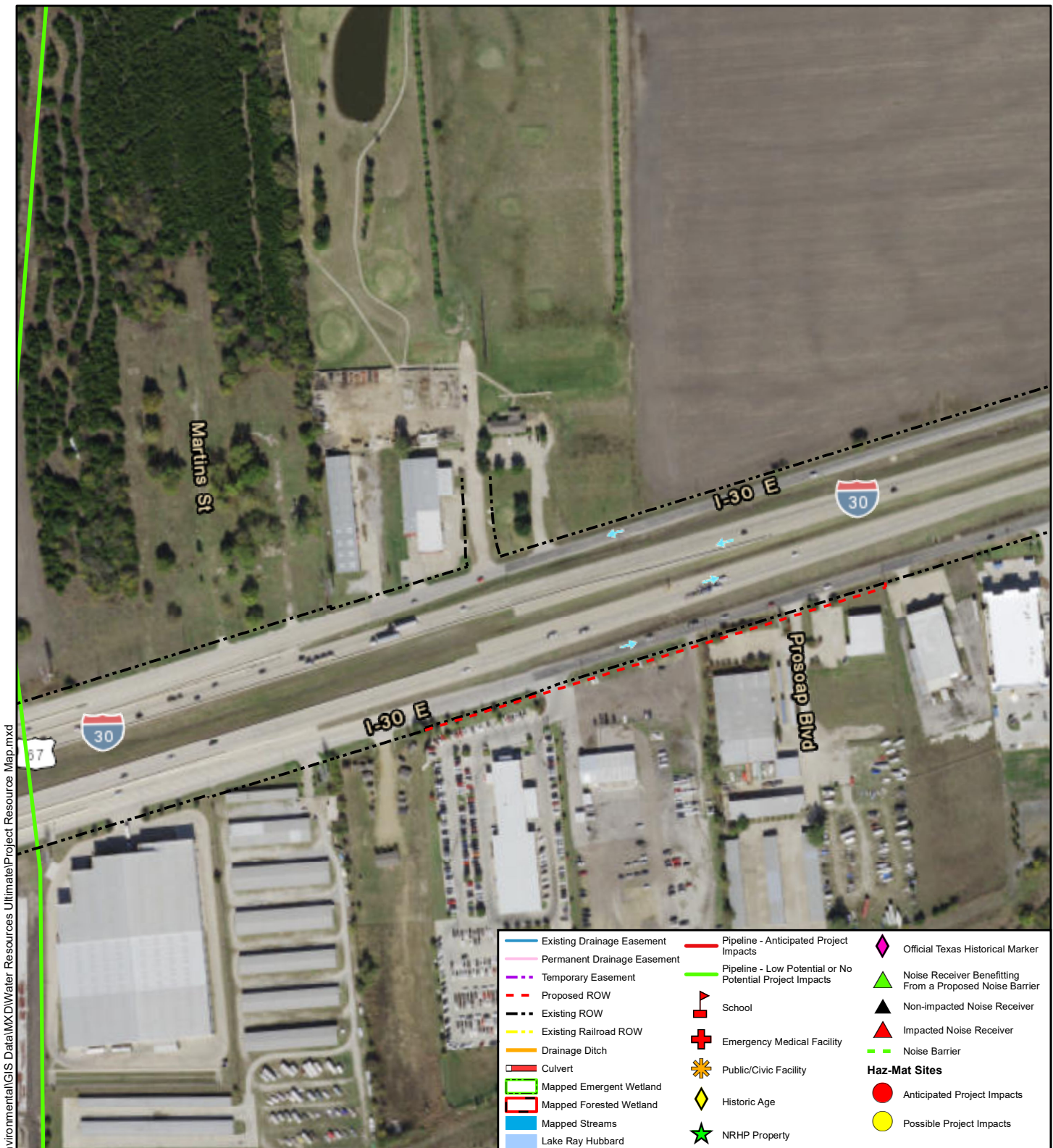


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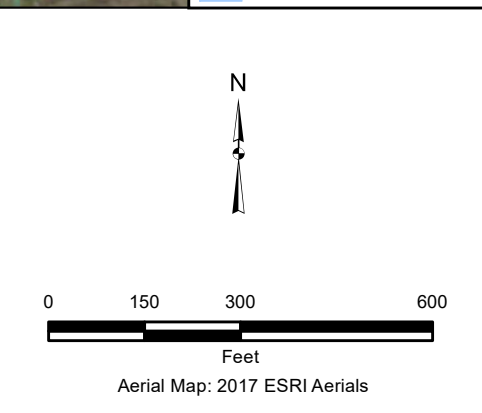
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 IH-30 Improvements from
 Bass Pro Drive to West of FM 2642

 Dallas & Rockwall Counties, TX

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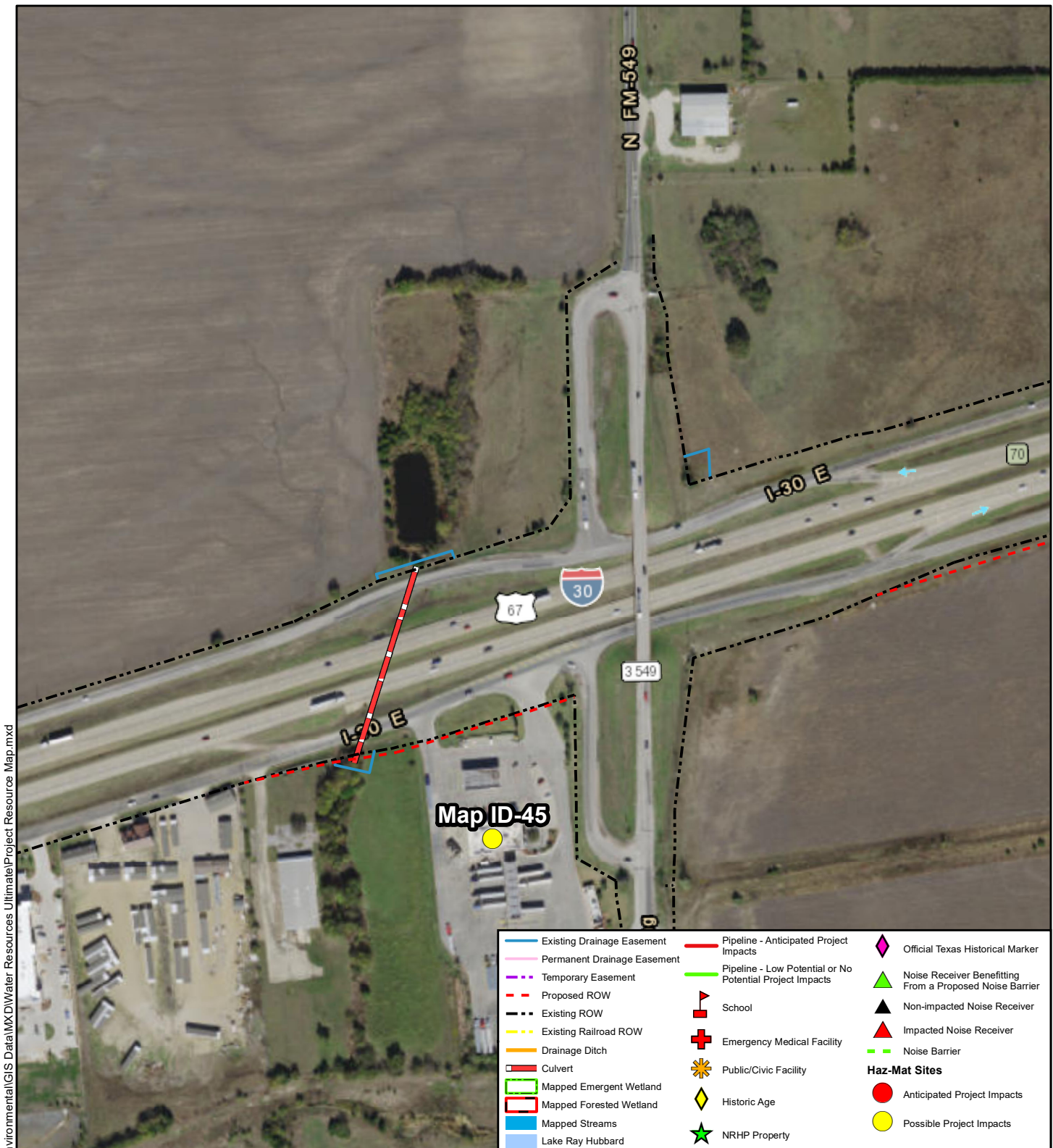


Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

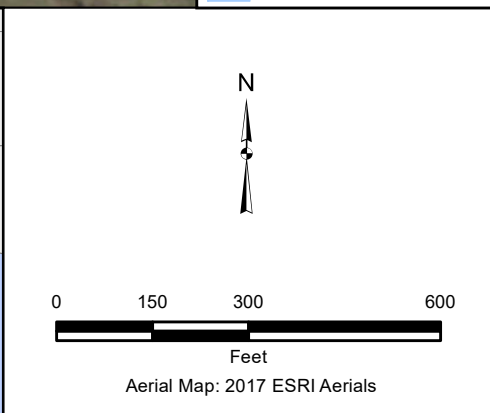
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 18



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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
| Temporary Easement | School | Non-impacted Noise Receiver |
| Proposed ROW | Emergency Medical Facility | Impacted Noise Receiver |
| Existing ROW | Public/Civic Facility | Noise Barrier |
| Existing Railroad ROW | Historic Age | Haz-Mat Sites |
| Drainage Ditch | NRHP Property | Anticipated Project Impacts |
| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |



Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

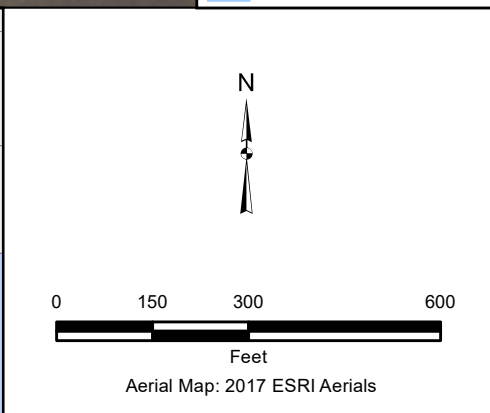
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
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| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

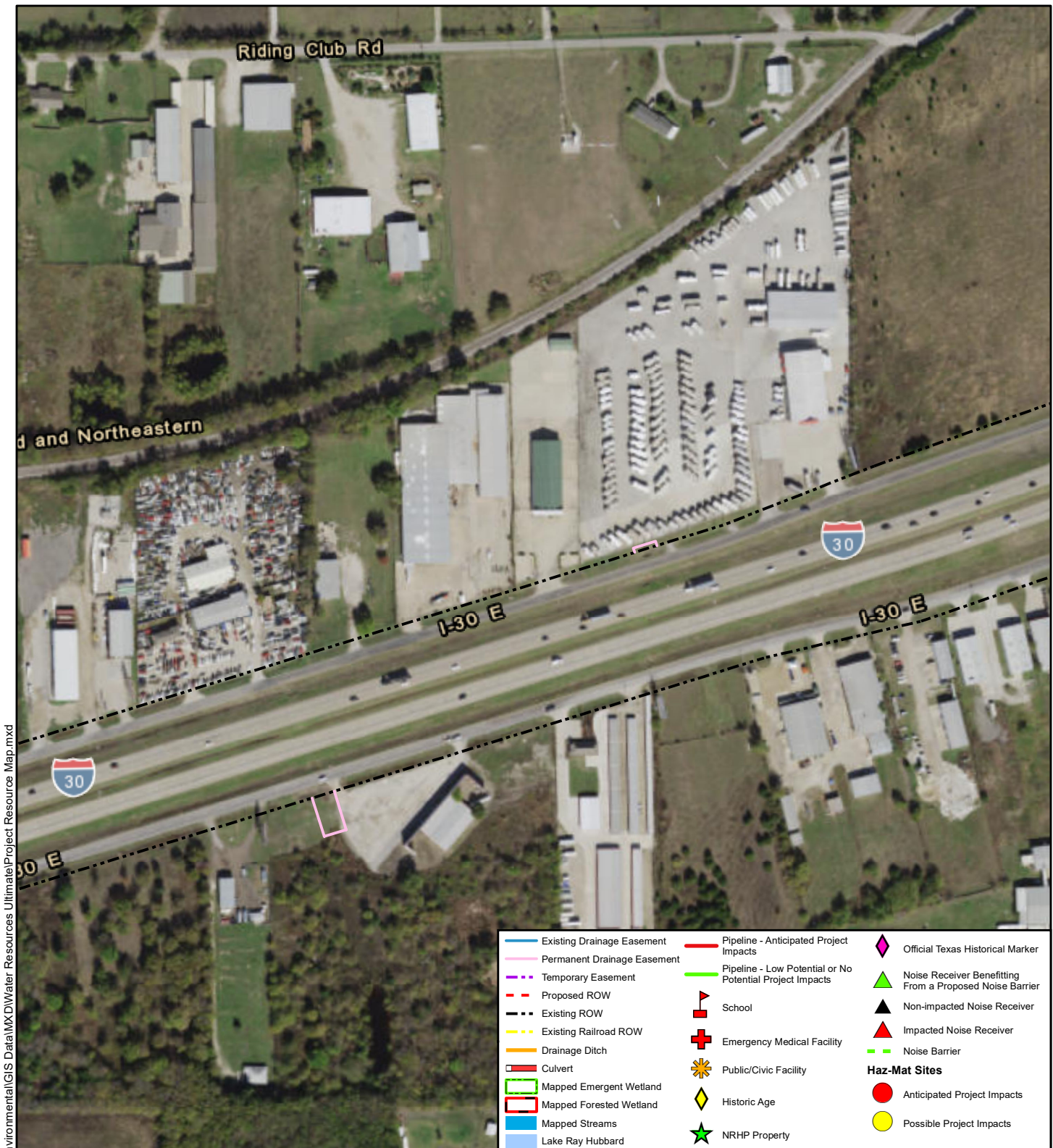


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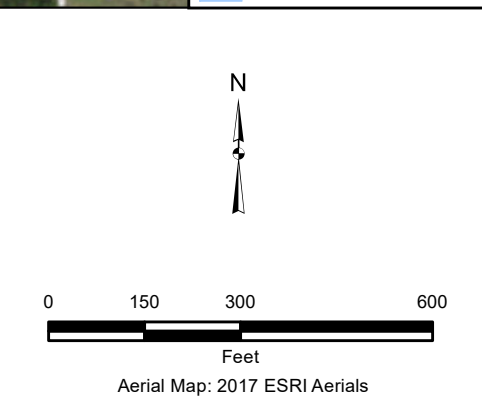
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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Project Resource Map

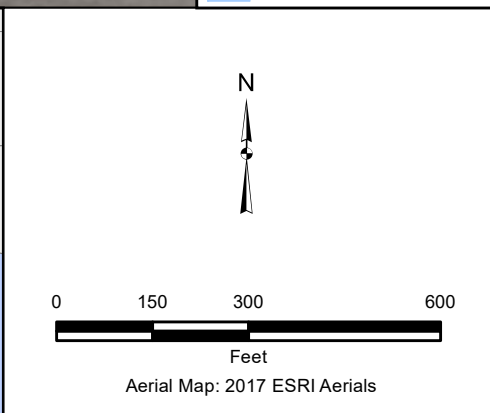
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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Project Resource Map

CSJ 0009-11-238, etc.
 IH-30 Improvements from
 Bass Pro Drive to West of FM 2642

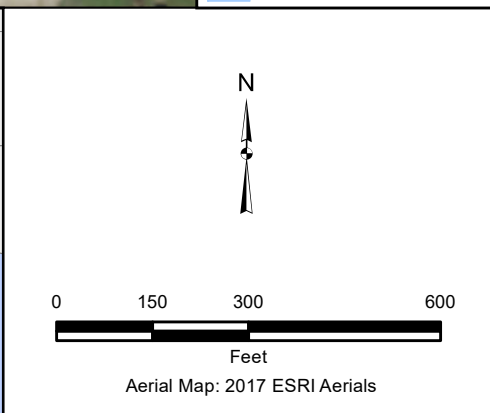
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
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| Culvert | | Possible Project Impacts |
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| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |



Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

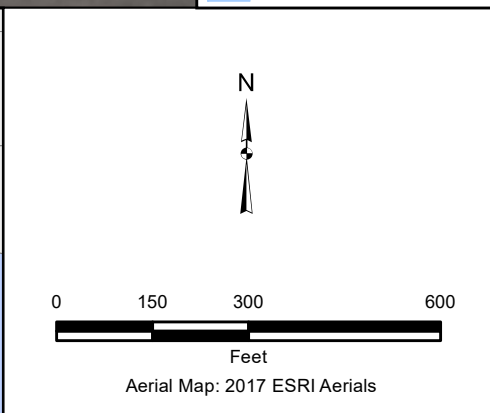
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefiting From a Proposed Noise Barrier |
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| Culvert | | Possible Project Impacts |
| Mapped Emergent Wetland | | |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

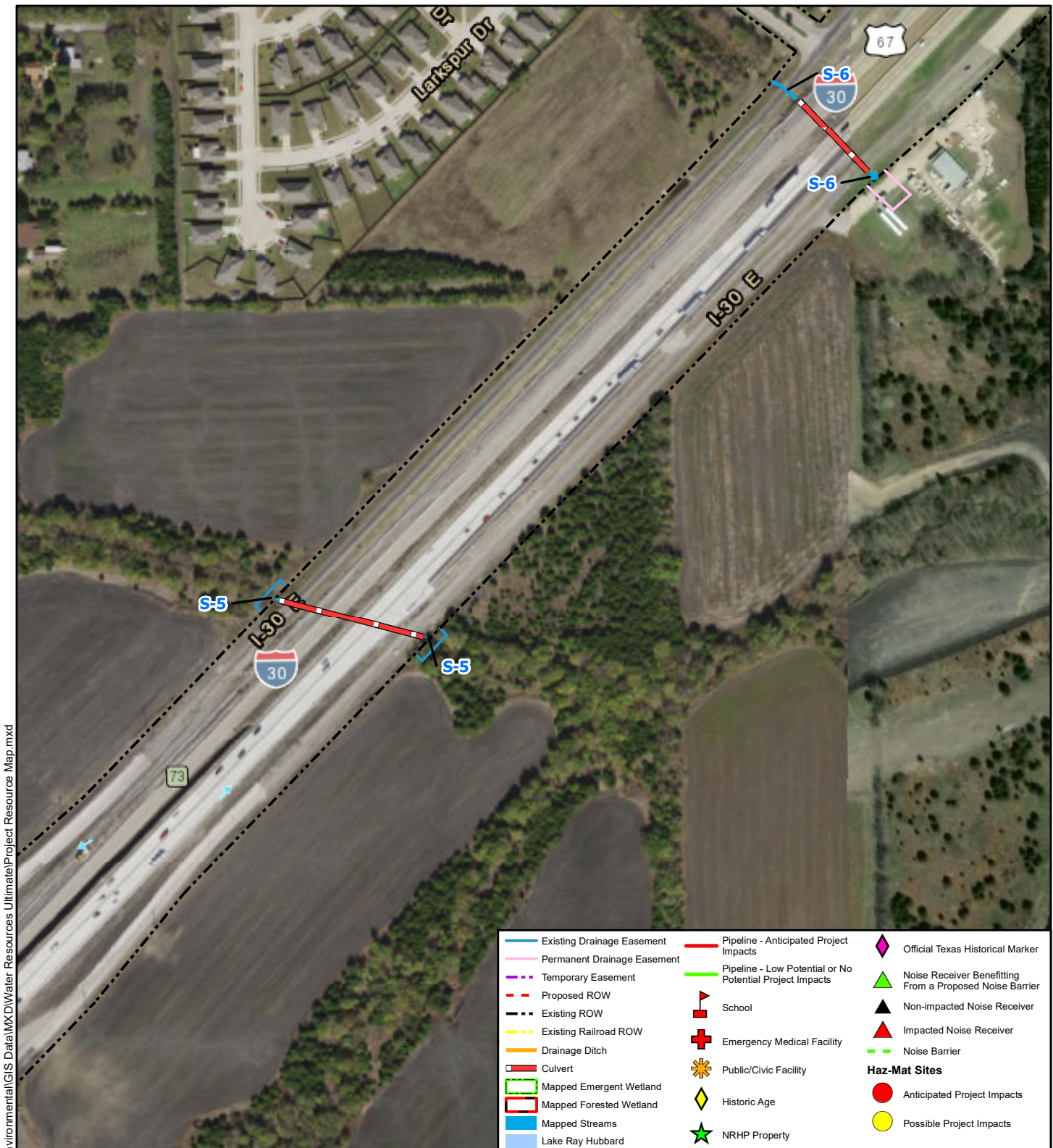


Project Resource Map

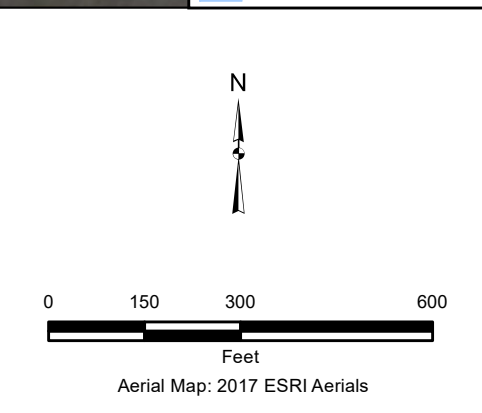
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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Project Resource Map

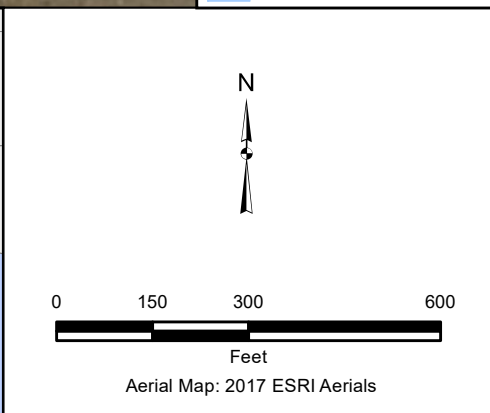
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IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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Project Resource Map

CSJ 0009-11-238, etc.
 IH-30 Improvements from
 Bass Pro Drive to West of FM 2642

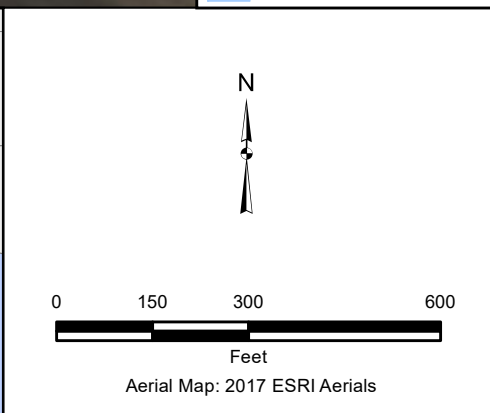
Dallas & Rockwall Counties, TX

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
| Permanent Drainage Easement | Pipeline - Low Potential or No Potential Project Impacts | Noise Receiver Benefitting From a Proposed Noise Barrier |
| Temporary Easement | School | Non-impacted Noise Receiver |
| Proposed ROW | Emergency Medical Facility | Impacted Noise Receiver |
| Existing ROW | Public/Civic Facility | Noise Barrier |
| Existing Railroad ROW | Historic Age | Haz-Mat Sites |
| Culvert | NRHP Property | Anticipated Project Impacts |
| Mapped Emergent Wetland | | Possible Project Impacts |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |



Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

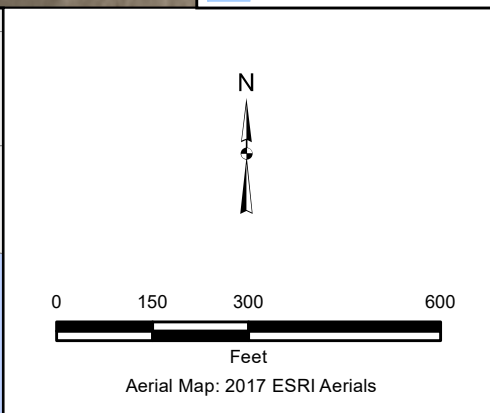
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 27

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| Mapped Streams | | |
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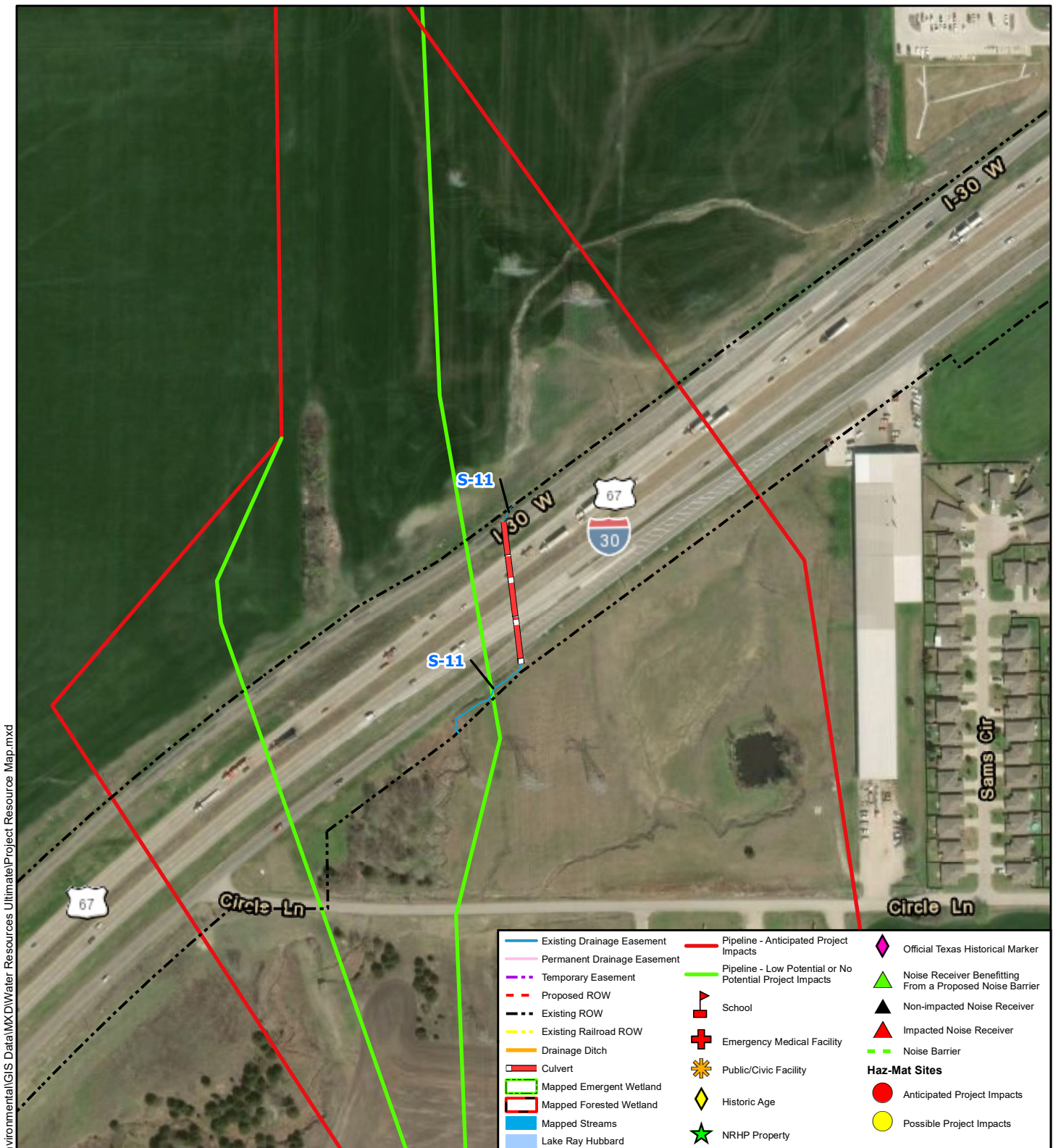


Project Resource Map

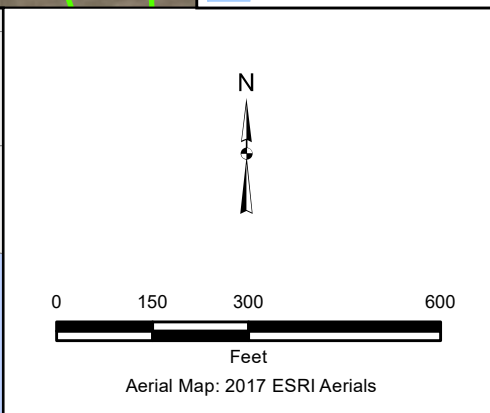
CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 28



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Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

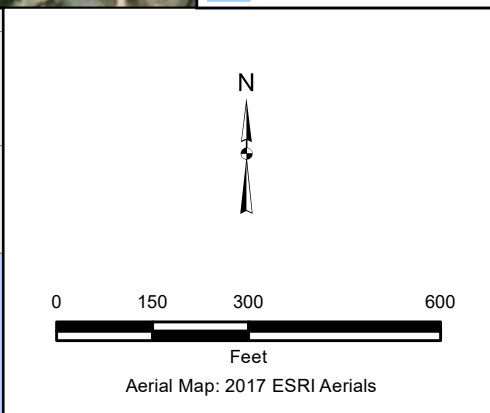
Dallas & Rockwall Counties, TX

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| Date: October 2018 | Proj. No: 3450-00 | Sheet No: 29 |
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| Mapped Streams | | |
| Lake Ray Hubbard | | |



Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

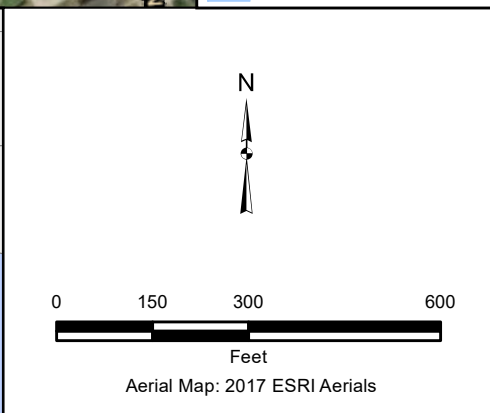
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 30



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| Mapped Emergent Wetland | | Possible Project Impacts |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

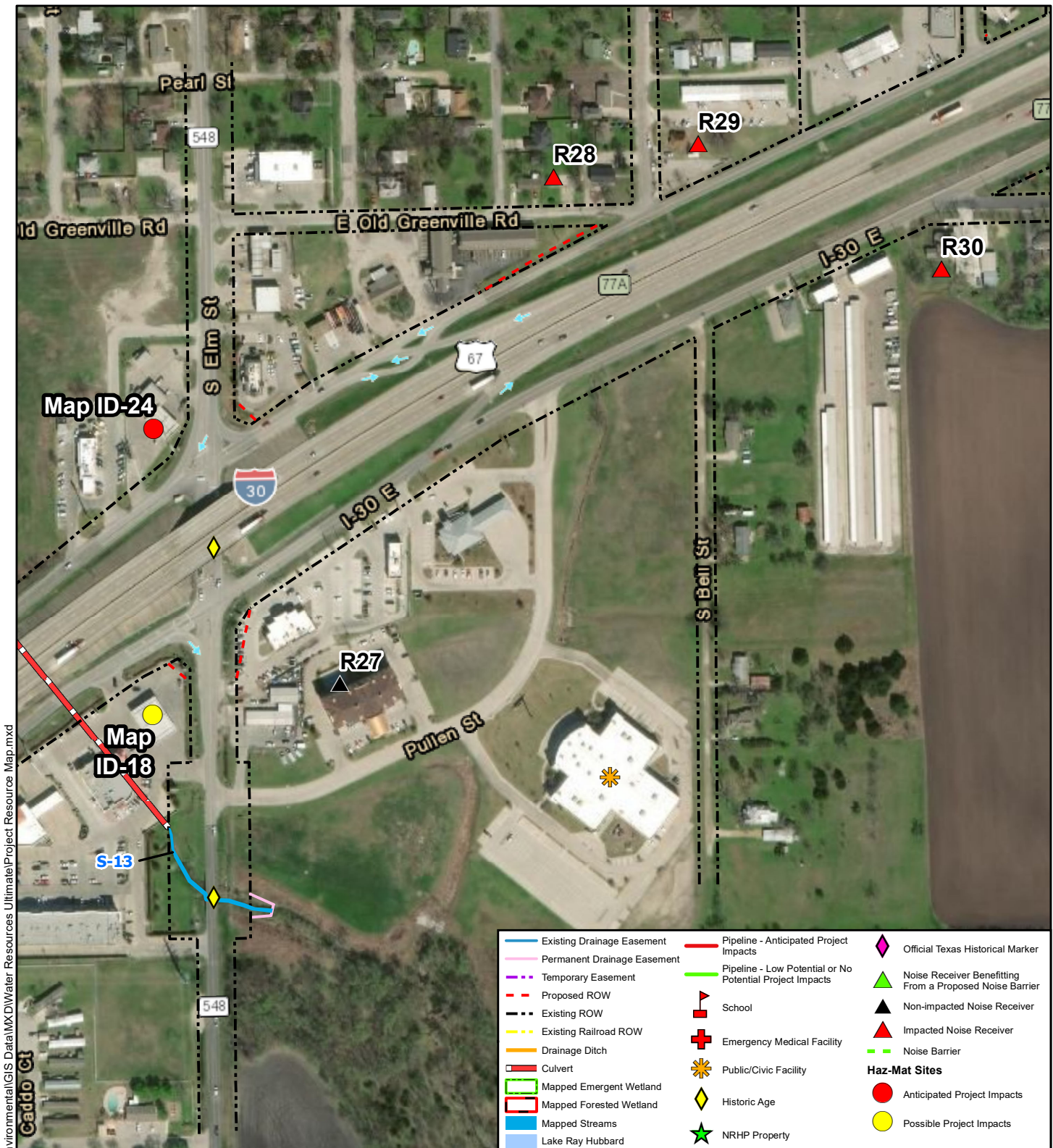


Project Resource Map

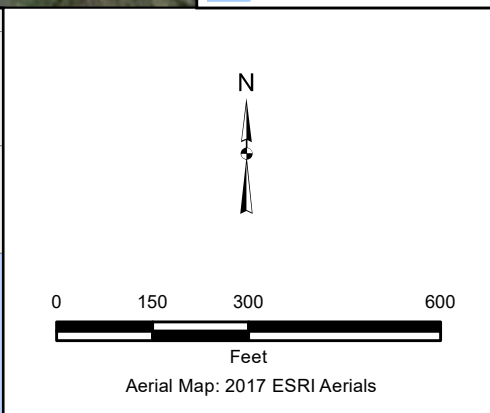
CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 31



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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
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| Mapped Streams | | |
| Lake Ray Hubbard | | |

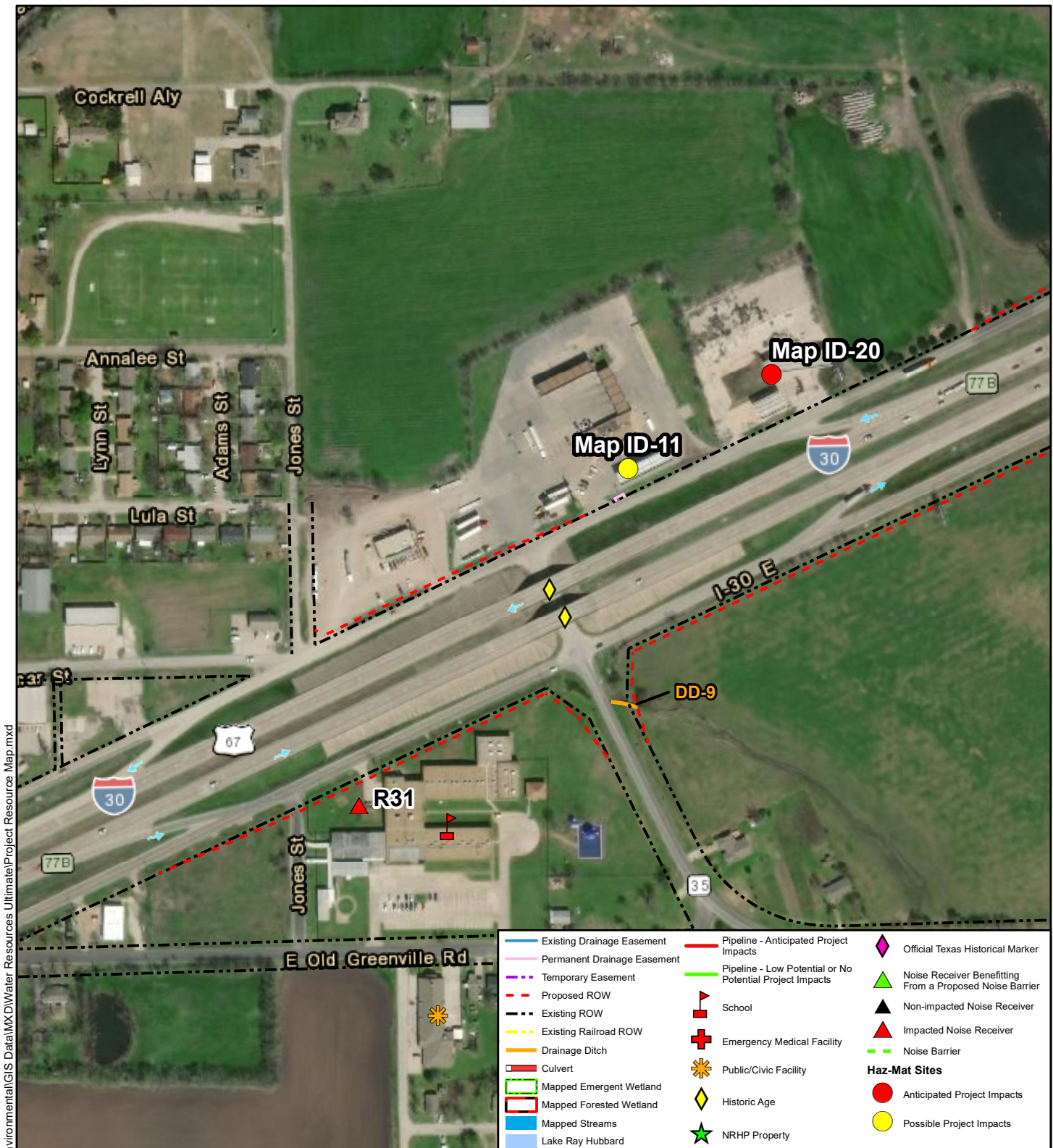


Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

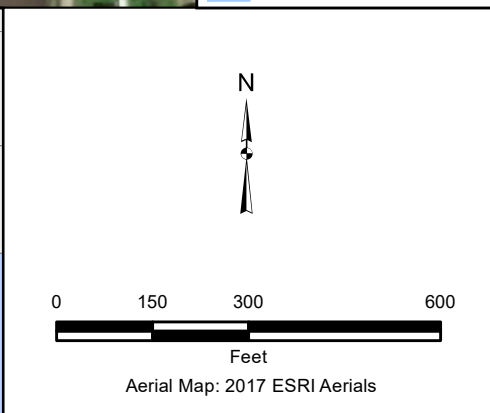
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 32



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| Culvert | | Possible Project Impacts |
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| Mapped Forested Wetland | | |
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| Lake Ray Hubbard | | |

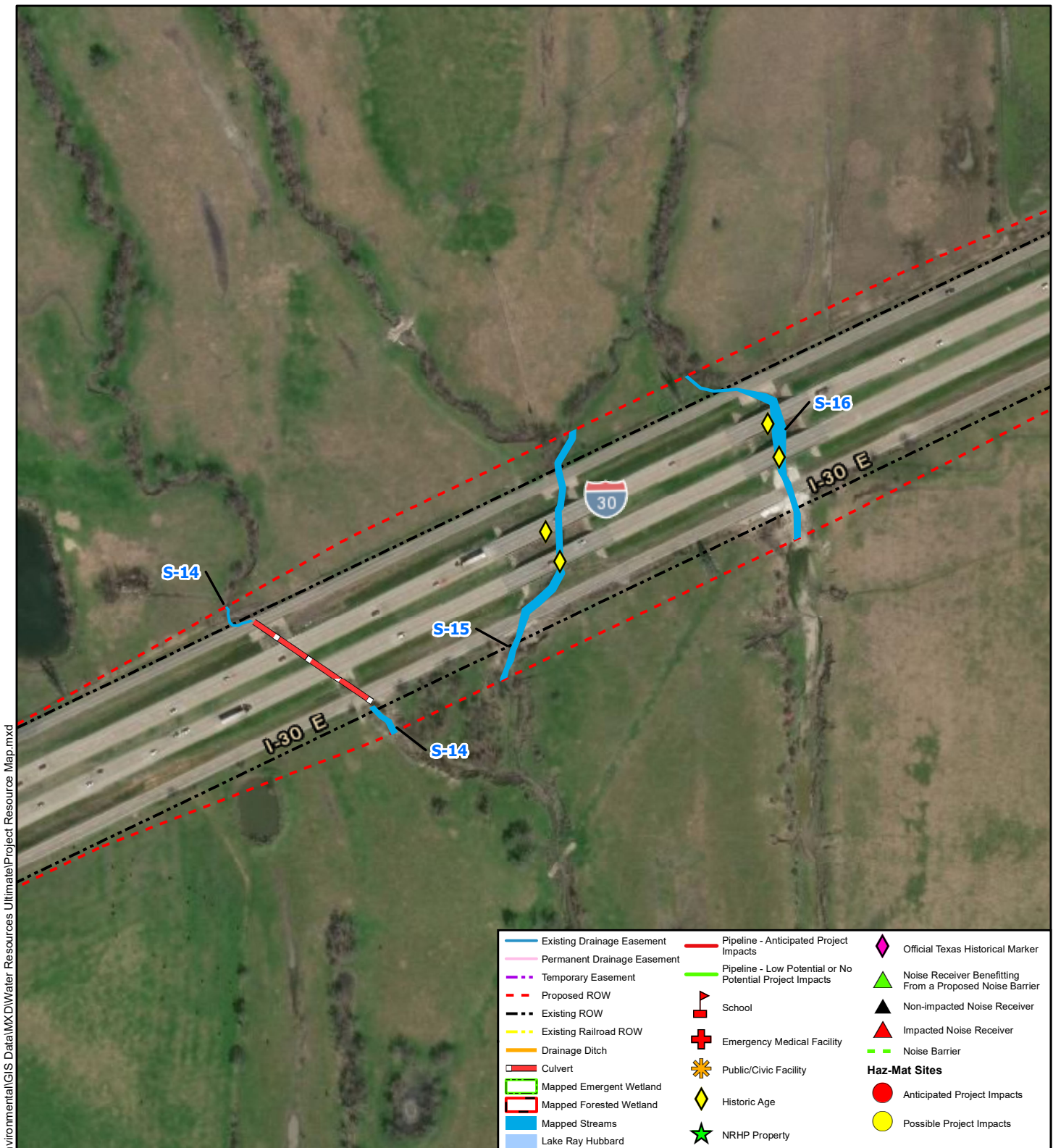


Project Resource Map

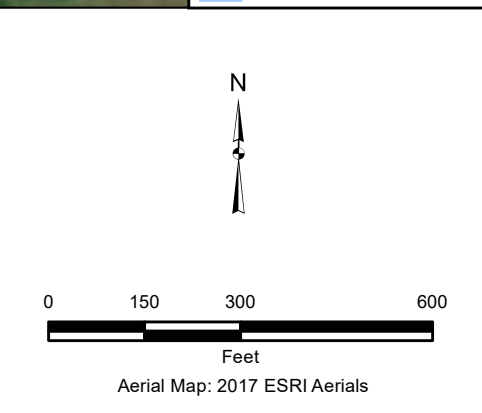
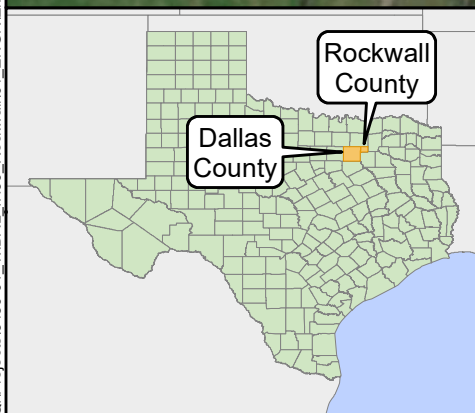
CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 33



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Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

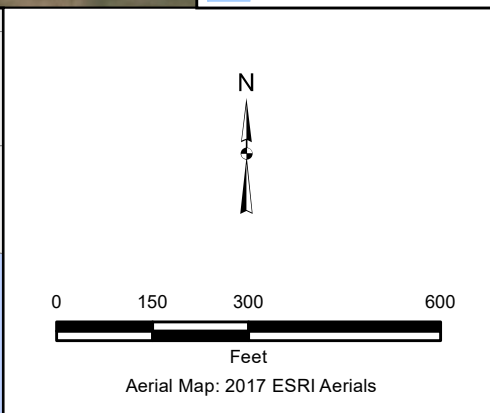
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 34

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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
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| Mapped Emergent Wetland | | Possible Project Impacts |
| Mapped Forested Wetland | | |
| Mapped Streams | | |
| Lake Ray Hubbard | | |

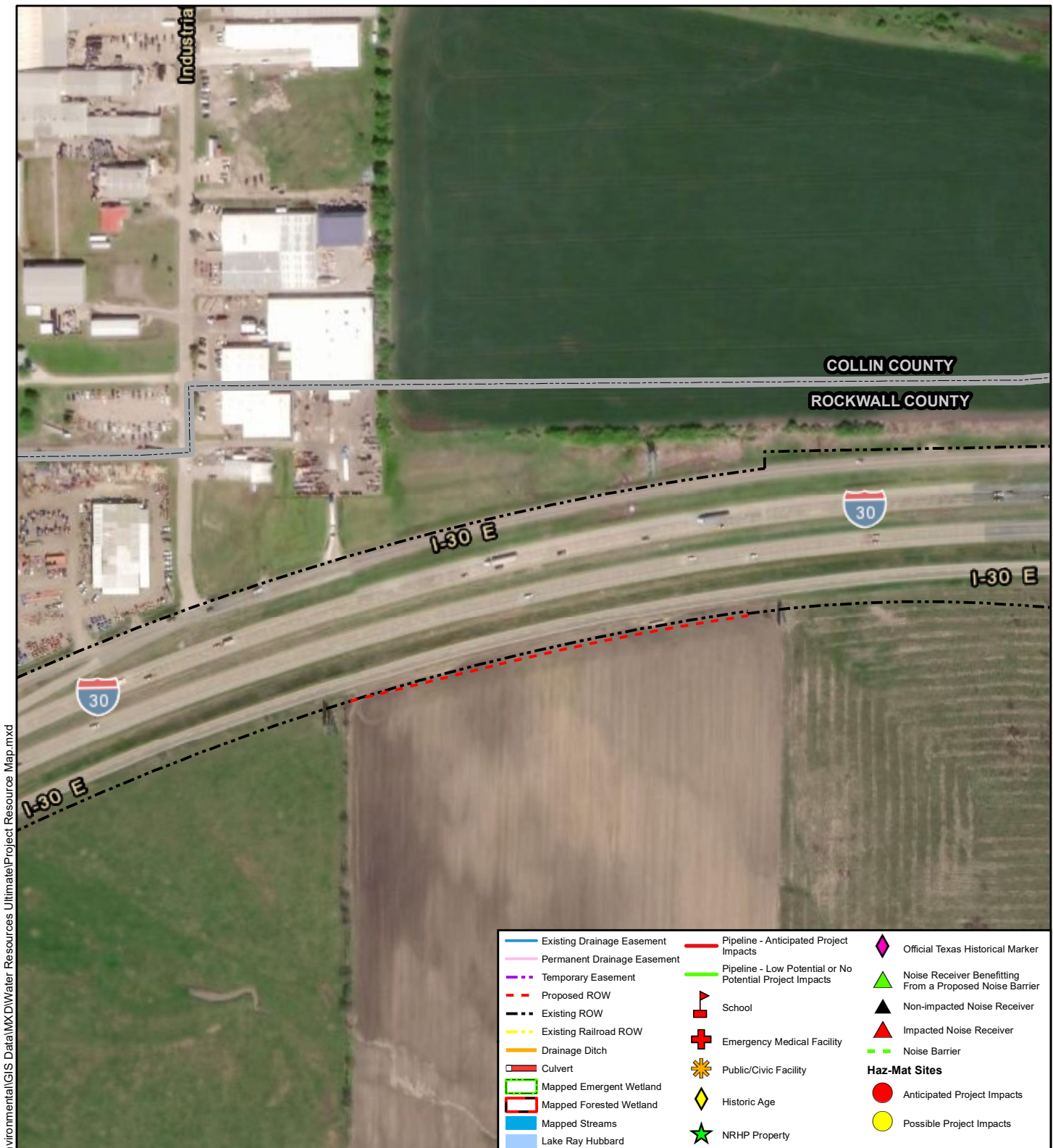


Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

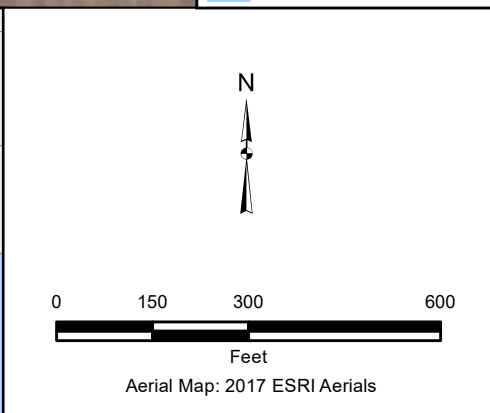
Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 35



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| Existing Drainage Easement | Pipeline - Anticipated Project Impacts | Official Texas Historical Marker |
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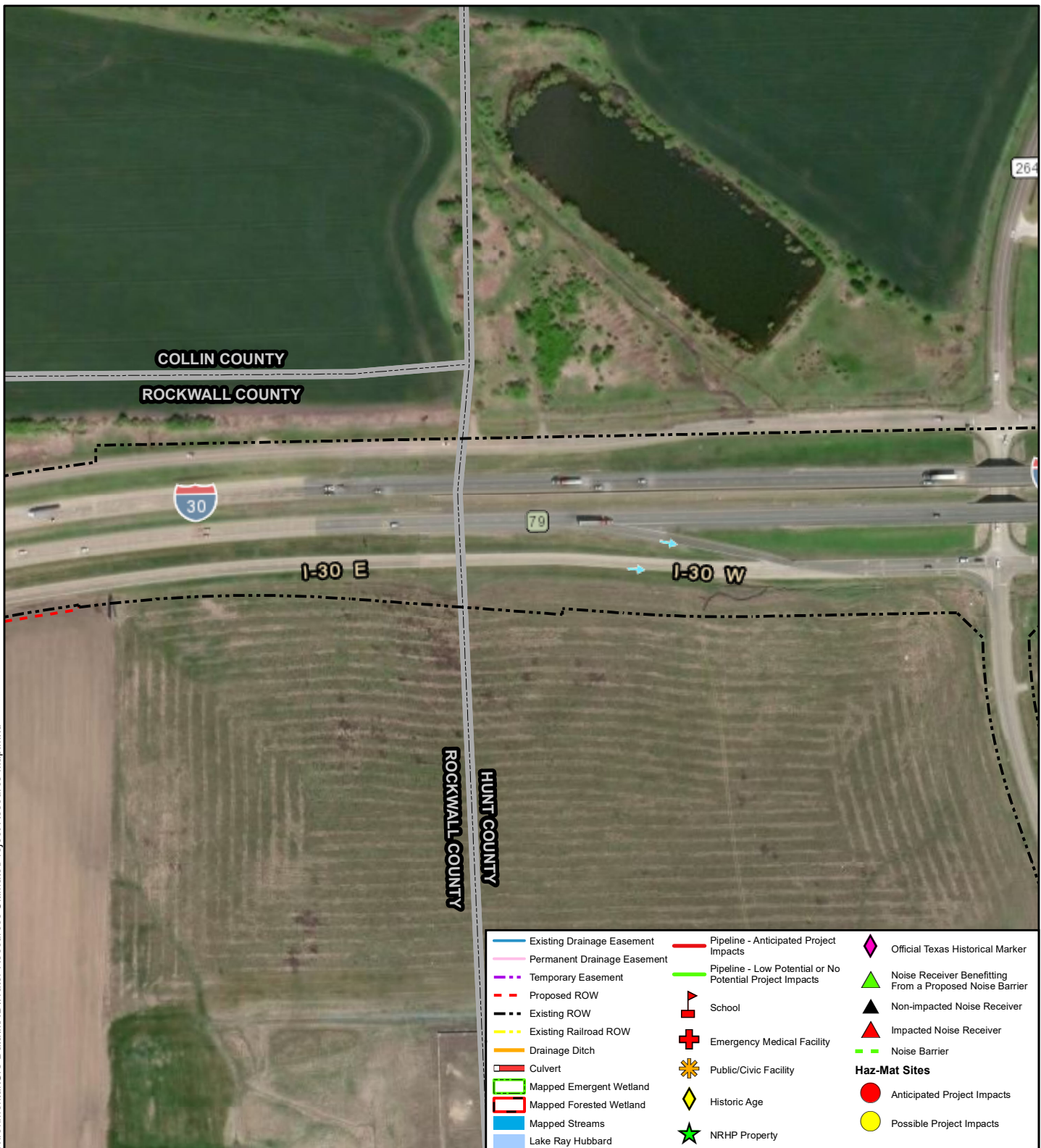


Project Resource Map

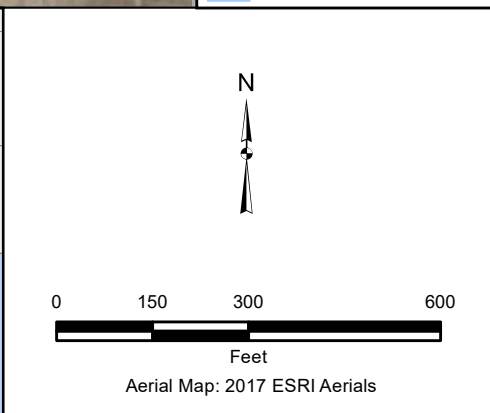
CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

Date: October 2018 | Proj. No: 3450-00 | Sheet No: 36



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Project Resource Map

CSJ 0009-11-238, etc.
IH-30 Improvements from
Bass Pro Drive to West of FM 2642

Dallas & Rockwall Counties, TX

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| Date: October 2018 | Proj. No: 3450-00 | Sheet No: 37 |
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Appendix G – Resources Agency Coordination

Leslie Mirise

From: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Sent: Friday, August 31, 2018 4:36 PM
To: Leslie Mirise; Sandra Williams; Christine Polito; Dan Perge
Cc: Sue Reilly
Subject: RE: CSJ 0009-11-238, etc. IH 30 Widen & Add Shoulders Project - Request for Early Coordination

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.

The TPWD Wildlife Habitat Assessment Program has received your request and has assigned it project ID # 40634. 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: Leslie Mirise [<mailto:Leslie.Mirise@txdot.gov>]
Sent: Thursday, August 30, 2018 5:36 PM
To: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Cc: Sandra Williams <Sandra.Williams2@txdot.gov>; Christine Polito <Christine.Polito@txdot.gov>; Dan Perge <Dan.Perge@txdot.gov>
Subject: CSJ 0009-11-238, etc. IH 30 Widen & Add Shoulders Project - Request for Early Coordination

Hello,

TxDOT requests early coordination for the IH 30 Widen & Add Shoulders Project in Dallas and Rockwall counties, Texas. I have attached the following:

1. The Tier 1 Site Assessment Form, including BMPs to be implemented;
2. The Biological Evaluation Form, for the purpose of reviewing the analyses performed on federally listed species that share state-listing status;

3. Supporting Documents including but not limited to location map, species lists from TPWD and USFWS/IPaC, EMST documentation, and site photos;
4. The EMST and Observed Vegetation Excel spreadsheet; and
5. A separate NDD information file.

These documents, along with other project-related information, are also available in ECOS under the CSJ: 0009-11-238. The project plans will be sent to the assigned biologist in a separate email (or dropbox depending on file size).

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

Thank you,

Leslie Mirise

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

A Texas Department of Transportation (TxDOT) message



Leslie Mirise

From: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Sent: Friday, October 26, 2018 9:43 AM
To: Leslie Mirise
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

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.

Leslie,

Thanks for the clarification. I'll make sure that is in my records.

Have a great weekend!

Sue

From: Leslie Mirise <Leslie.Mirise@txdot.gov>
Sent: Wednesday, October 24, 2018 10:48 AM
To: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

Thanks, Sue. I have just one clarification to make because this email chain for the 0009-11-238, etc. (IH 30 Ultimate) got attached to the previously coordinated IH 30 Frontage Roads project (CSJ 0009-11-241) early on. Just to state it for the record, the Frontage Roads project is completely separate. The IH 30 Ultimate project's early coordination request was sent in to WHAB on August 30, 2018, which I will upload to ECOS separately. The IH 30 Ultimate's controlling CSJ's project limits extend from Bass Pro Drive in Garland to Dalrock Rd. However, the entire project limits extend from Bass Pro Drive in Garland (Dallas County) to FM 2642 near the Rockwall/Hunt County line. Sorry about the confusion. Please let me know if this makes sense.

Thank you,

Leslie Mirise

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

From: Sue Reilly [<mailto:Sue.Reilly@tpwd.texas.gov>]
Sent: Tuesday, October 23, 2018 9:05 PM
To: Leslie Mirise
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

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.

Leslie,

Thanks for the water resources report and the information on Mussel BMPs and dewatering. Based on that information, I am going to close the project.

Thank you for submitting the following project for early coordination: IH-30 widening and adding shoulders from Bass Pro Drive to Dalrock Road (CSJ 0009-11-238). TPWD appreciates TxDOT's commitment to implement the practices listed in the Tier I Site Assessment submitted on August 30, 2018 and in subsequent emails (below). 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/txnodd/submit.phtml

Thank you,

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

From: Leslie Mirise <Leslie.Mirise@txdot.gov>
Sent: Thursday, October 18, 2018 3:50 PM
To: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

Sorry about that, Sue. The dropbox link is heading your way.

Thanks,

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

From: Sue Reilly [<mailto:Sue.Reilly@tpwd.texas.gov>]
Sent: Thursday, October 18, 2018 3:24 PM
To: Leslie Mirise
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

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.

Would you mind sending over the Water Resources Report? I would like to see it. If it's in ECOS let me know and I can grab it there. (If you already sent it, I apologize, I can't find it!)

Thanks,
Sue

From: Leslie Mirise <Leslie.Mirise@txdot.gov>
Sent: Friday, October 12, 2018 12:42 PM
To: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Cc: Dan Perge <Dan.Perge@txdot.gov>; Christine Polito <Christine.Polito@txdot.gov>; Sandra Williams <Sandra.Williams2@txdot.gov>
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

Sue,

I apologize for the delay – I thought I had responded.

Dewatering is not part of the project description. Because this comes down to construction means and methods, it would be the contractor's responsibility to follow all local, state, and Federal laws, as stated in their contract.

TxDOT has committed to implementing the Freshwater Mussel BMPs, including survey/relocation of state-listed & SGCN mussels, in areas that contain suitable habitat for state-listed freshwater mussels, including Lake Ray Hubbard. TxDOT would apply for all required permits with TPWD, including submittal of an ARRPs to the Kills and Spills Team. In addition, TxDOT has committed to the implementation of the Amphibian and Aquatic Reptile BMPs, in areas that contain suitable habitat for alligator snapping turtle, and the Water Quality BMPs.

If mitigation for jurisdictional wetlands/waters is required, it would be coordinated with the USACE as part of the 404 permitting process. However, I believe the project impacts are below the threshold where mitigation would be required. The final Water Resources Tech Memo has not been uploaded to ECOS; however, I'll send it to you via dropbox (massive file size).

I've attached the KMZ file for the project that includes waters impacts. Please let me know if you have any problems with it.

Thanks,

Leslie Mirise

Environmental Specialist
Dallas District – Advance Planning
Texas Department of Transportation

4777 East Highway 80
Mesquite, Texas 75150
(214) 320-6162 office
(214) 320-4470 FAX

From: Sue Reilly [<mailto:Sue.Reilly@tpwd.texas.gov>]
Sent: Friday, September 28, 2018 4:52 PM
To: Leslie Mirise
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

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.

Leslie,

Is there any chance of dewatering? Based on the size and location of the project, I would advise contacting the Kills and Spills team at TPWD in advance to discuss potential dewatering or construction impacts. https://tpwd.texas.gov/landwater/water/enviroconcerns/kills_and_spills/regions/kas_r2.phtml

Adam's email is Adam.Whisenant@tpwd.texas.gov

Is there any mitigation proposed for impacts to special aquatic sites?

Thank you,

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

From: Leslie Mirise <Leslie.Mirise@txdot.gov>
Sent: Thursday, September 27, 2018 5:13 PM
To: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Subject: RE: 0009-11-238, etc. IH 30 Ultimate - Request for Early Coordination

Sue,

There is a bit of overlap between the current project (IH 30 Ultimate, CSJ 0009-11-238, etc) and the one previously coordinated (IH 30 Frontage Roads, CSJ 0009-11-241). Here is a short description of the differences:

The IH 30 Frontage Roads project is the construction of a six-lane frontage road system crossing Lake Ray Hubbard along IH-30, from Bass Pro Drive to Dalrock Road. There is no main lane construction as part of the Frontage Roads Project. The Ultimate Project is the widening and reconstruction of the IH 30 main lanes, from Bass Pro Drive to West of FM 2642 (near the Rockwall/Hunt County Line). The Ultimate Project also includes the continuation of the six-lane frontage road system from Dalrock Road to Horizon Road crossing to the east side of Lake Ray Hubbard along IH-30.

I've included KMZs of both projects for your reference. The consultant is putting together another KMZ of the IH 30 Ultimate that includes waters impacts. I will send that as soon as it is ready, but it may be next week.

Please let me know if you have any questions.

Thanks!

Leslie Mirise

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

From: Sue Reilly [<mailto:Sue.Reilly@tpwd.texas.gov>]
Sent: Thursday, September 27, 2018 10:50 AM
To: Leslie Mirise
Subject: FW: 0009-11-241 IH 30 Frontage Roads - Request for Early Coordination

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.

Leslie,

It seems like part of the 0009-11-238 project that you submitted on August 30, 2018 is already covered under a previous coordination (below). Can you detail the differences between the projects?

Also, if you have schematics or KMZ files, especially showing water impacts, can you please share those?

Thanks,

Sue

From: Sue Reilly
Sent: Friday, November 17, 2017 4:04 PM

To: Leslie Mirise <Leslie.Mirise@txdot.gov>

Subject: RE: 0009-11-241 IH 30 Frontage Roads - Request for Early Coordination

Leslie,

Thank you for your response. I do not have any further comments.

Thank you for submitting the following project for early coordination: IH-30 frontage roads from Bass Pro Shop Drive to Dalrock Road (CSJ 0009-11-241). TPWD appreciates TxDOT's commitment to implement the practices listed in the Tier I Site Assessment submitted on October 25, 2017 and in subsequent emails (below). 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
TPWD Wildlife Division
512-389-8021

From: Leslie Mirise [<mailto:Leslie.Mirise@txdot.gov>]

Sent: Friday, November 17, 2017 1:26 PM

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

Cc: Jan Heady <Jan.Heady@txdot.gov>; Christine Polito <Christine.Polito@txdot.gov>; Sandra Williams <Sandra.Williams2@txdot.gov>; Dan Perge <Dan.Perge@txdot.gov>; Stirling Robertson <Stirling.Robertson@txdot.gov>

Subject: RE: 0009-11-241 IH 30 Frontage Roads - Request for Early Coordination

Sue,

TPWD Recommendation #1: TPWD recommends that impact avoidance measures for aquatic organisms, including all native fish and freshwater mussel species, regardless of state-listing status, be considered during project planning and construction activities.

TxDOT Response #1: TxDOT will include language in the EPIC sheet stating that the contractor will be instructed to avoid harming wildlife within the entire project area.

TPWD Recommendation #2: If construction occurs during times when water is present in streams and dewatering activities or other harmful construction activities are involved (such as placement of temporary or permanent fills), then TPWD may recommend relocating potentially impacted native aquatic resources in conjunction with a Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters and an Aquatic Resource Relocation Plan. The ARRP should be completed and approved by the department 30 days prior to activity within project waters and/or resource relocation and submitted with an application for a no-cost Permit to Introduce Fish, Shellfish, or Aquatic Plants into

Public Waters. It is imperative that the ARRP reference the appropriate project CSJ Number to facilitate searching for and reviewing previous coordination information in TPWD's project-tracking database. Aquatic Resource Relocation Plans can be submitted to Adam Whisenant, TPWD Region 2 KAST. Please contact Adam Whisenant at 903-566-8387 or adam.whisenant@tpwd.texas.gov for more information or to initiate coordination for a Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters.

TxDOT Response #2: TxDOT will include language in the EPIC sheet instructing the contractor to file for all necessary State and Federal permits, including an ARRP and Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters 30-days prior to any in-water work.

TPWD Recommendation #3: Because many aquatic invasive plant species (AIS) can propagate from very small fragments, TPWD recommends that a brief AIS transfer prevention plan also be prepared to outline BMPs for preventing inadvertent transfer of these species to new areas on project equipment. These BMPs may include removal of mud/plant debris from all equipment and rinsing, preferably with high pressure and/or hot water and allowing equipment to dry before use in another water body. Please visit the TPWD Wildlife Habitat Assessment Program webpage to download 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/tools.phtml) for further and more detailed information about how to avoid spreading harmful aquatic invasive species.

TxDOT Response #3: An AIS transfer plan is required information for an ARRP; therefore, please see Response #2 above.

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

Thank you,

Leslie Mirise

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

From: Sue Reilly [<mailto:Sue.Reilly@tpwd.texas.gov>]
Sent: Friday, November 10, 2017 4:29 PM
To: Leslie Mirise
Subject: RE: 0009-11-241 IH 30 Frontage Roads - Request for Early Coordination

Leslie,

Here are my comments for the project.

- TPWD recommends that impact avoidance measures for aquatic organisms, including all native fish and freshwater mussel species, regardless of state-listing status, be considered during project planning and construction activities.

- If construction occurs during times when water is present in streams and dewatering activities or other harmful construction activities are involved (such as placement of temporary or permanent fills), then TPWD may recommend relocating potentially impacted native aquatic resources in conjunction with a Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters and an Aquatic Resource Relocation Plan. The ARRP should be completed and approved by the department 30 days prior to activity within project waters and/or resource relocation and submitted with an application for a no-cost Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters. It is imperative that the ARRP reference the appropriate project CSJ Number to facilitate searching for and reviewing previous coordination information in TPWD's project-tracking database. Aquatic Resource Relocation Plans can be submitted to Adam Whisenant, TPWD Region 2 KAST. Please contact Adam Whisenant at 903-566-8387 or adam.whisenant@tpwd.texas.gov for more information or to initiate coordination for a Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters.

TPW Code Section 66.007 and 66.0072 grant TPWD authority to regulate harmful or potentially harmful fish, shellfish, and aquatic plants. The list of these regulated species is published in Title 31, Chapter 57, Subchapter A of the TAC. Except as specifically authorized by permit, it is an offense to release into the water of this state, transport, or possess (e.g., accidental possession, transport, and introduction on improperly cleaned equipment) any species, hybrid of a species, subspecies, eggs, seeds, or any part of any species defined as a harmful or potentially harmful exotic fish, shellfish, or aquatic plant. This list includes many problematic plants such as giant and common salvinia, hydrilla, Eurasian watermilfoil, and alligatorweed, which cost the state over \$1M annually to manage. The full list of prohibited species can be found on the TPWD website at:

http://tpwd.texas.gov/huntwild/wild/species/exotic/prohibited_aquatic.phtml .

- Because many aquatic invasive plant species (AIS) can propagate from very small fragments, TPWD recommends that a brief AIS transfer prevention plan also be prepared to outline BMPs for preventing inadvertent transfer of these species to new areas on project equipment. These BMPs may include removal of mud/plant debris from all equipment and rinsing, preferably with high pressure and/or hot water and allowing equipment to dry before use in another water body. Please visit the TPWD Wildlife Habitat Assessment Program webpage to download 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/tools.phtml) for further and more detailed information about how to avoid spreading harmful aquatic invasive species.

Thank you,

Sue Reilly
Transportation Assessment Liaison
TPWD Wildlife Division
512-389-8021

From: WHAB_TxDOT
Sent: Wednesday, October 25, 2017 3:22 PM
To: Leslie Mirise <Leslie.Mirise@txdot.gov>
Cc: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Subject: RE: 0009-11-241 IH 30 Frontage Roads - Request for Early Coordination

The TPWD Wildlife Habitat Assessment Program has received your request and has assigned it project ID # 38747. 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: Leslie Mirise [<mailto:Leslie.Mirise@txdot.gov>]

Sent: Wednesday, October 25, 2017 12:00 PM

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

Cc: Sandra Williams <Sandra.Williams2@txdot.gov>; Dan Perge <Dan.Perge@txdot.gov>; Jan Heady <Jan.Heady@txdot.gov>; Lani Marshall <Lani.Marshall@txdot.gov>

Subject: CSJ: 0009-11-241 IH 30 Frontage Roads - Request for Early Coordination

Hello,

TxDOT requests early coordination for the IH 30 Frontage Roads Project in Dallas and Rockwall counties, Texas. I have attached the following:

1. The Tier 1 Site Assessment Form, including BMPs to be implemented;
2. The Biological Evaluation Form, for the purpose of reviewing the analyses performed on federally listed species that also share state-listing status;
3. Supporting Documents, including but not limited to, species lists from TPWD and USFWS/IPaC, EMST documentation, and site photos;
4. The EMST and observed vegetation Excel spreadsheet; and
5. A separate NDD information figure.

These documents, along with other project-related information, are also available in ECOS under the CSJ: 0009-11-241.

The preliminary project schematic has been uploaded in ECOS under the following filename: 0009-11-241-IH30

Preliminary Interim Schem-Typicals_06-22-17 .pdf

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

Thank you,

Leslie Mirise

Environmental Specialist

Dallas District – Advance Planning

Texas Department of Transportation

4777 East Highway 80

Mesquite, Texas 75150

(214) 320-6162 office

(214) 320-4470 FAX



A Texas Department of Transportation (TxDOT) message



A Texas Department of Transportation (TxDOT) message



A Texas Department of Transportation (TxDOT) message



.....
A Texas Department of Transportation (TxDOT) message





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

January 6, 2017

RE: Early Coordination for Sec. 106 Consultation

To: 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 the Federal Highway Administration (FHWA) and TxDOT.

The purpose of this letter is to include more detailed information about TxDOT's consultation program. The documents include information on the **TxDOT Early Tribal Coordination Tool** and a table of the projects and nearby archeological sites, if any, that the **TxDOT Early Tribal Coordination Tool** map depicts. This letter provides more detail about both the **TxDOT Early Tribal Coordination Tool** and the table.

TxDOT Early Coordination Tool

The first attachment contains the link, log in information and directions for the **TxDOT Early Tribal Coordination Tool**. This web-based map depicts hundreds of both minor and major TxDOT projects within your area of interest and any known archeological sites within a kilometer of each project. Each project's provisional area of effects (APE) is defined in the tool as the area within 500 feet of a roadway segment. As TxDOT develops detailed plans for each project and finalizes the APE, this provisional APE in most cases will likely be refined to a smaller area. Archeological sites do occur in proximity to some of the projects, and new sites may be discovered through further investigations. Archeological sites that qualify for inclusion in the National Register of Historic Properties are, however, rare. TxDOT thus expects that most of these projects will have no effect on archeological historic properties. All of the depicted projects have been or will be reviewed by the Environmental Affairs' Archeology Branch to verify that the projects will have no effect.

****YOU MAY COMMENT AT ANY TIME DURING THIS EARLY COORDINATION PROCESS AND USE OF THE TOOL DOES NOT PRECLUDE THE ABSENTEE SHAWNEE TRIBE OF OKLAHOMA FROM ENTERING INTO CONSULTATION PER SEC. 106 OF THE NATIONAL HISTORIC PRESERVATION ACT (NHPA).**

We will continue to send you consultation letters on any project whose area of potential effects includes Native American sites and on all major projects. Major projects:

- include border crossing facility construction, conversion of non-freeways to freeways, new location non-freeways, new location freeways, widening non-freeways, and widening freeways; and
- Require new right-of-way.

Major projects would cause more than 100 cubic yards of ground disturbance to previously-undisturbed areas, and such projects may affect areas that have not been previously surveyed for cultural resources.

For minor projects, TxDOT will conduct investigations of the final APE. These investigations will comprise review of available background information and, in some cases, field studies. TxDOT will not provide further information about such minor projects unless these investigations reveal the presence of a site.

Table of Projects and Sites

The second attachment contains a table of the projects and any sites within the 500-foot APE of each project. As previously noted, sites may have already been identified within this provisional APE. The table lists, as a separate row, each site found within 500 feet of a project. For projects where multiple sites have been found within the provisional APE, the same project will be listed multiple times in the table. Projects for which no known sites occur within 500 feet will be listed only once. The table can be sorted in various ways, such as by County, project status, and let date.

If you have any questions about these tools or would like to consult on any of the projects listed, please contact Laura Cruzada at 512/416-2638, 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.

Thank you for your attention to this matter.

Sincerely,



Scott Pletka, Deputy Section Director
Environmental Affairs Division

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Print this Page

New Coordination

Program Area: Schedule Status: Complete

Task Type:

Agency Name: Standard Agency Review Time: (# Days)

Coordination Status:

Add Correspondence

Correspondence For:

Correspondence Type: Date:

Correspondence From: Correspondence To:

Comments:

| Correspondence For | Correspondence Type | Date | Correspondence From | Correspondence To | Comments | Actions |
|--|---------------------|------|---------------------|-------------------|----------|---------|
| There are currently no Correspondences that have been added. | | | | | | |

Has the coordination letter been uploaded? Sent Date: Upload Date:

Has the coordination response been uploaded? Sent Date: Upload Date:

Has the letter of concurrence and/or authorization to proceed been uploaded? Sent Date: Upload Date:

Planned Start Date: 01/06/2017 Actual Start Date: 01/06/2017

Planned End Date: 02/06/2017 Actual End Date: 02/06/2017

Comments:

Consultation request sent 06-Jan-2017 to Kiowa Indian Tribe of Oklahoma, Mescalero Apache Tribe, Wichita and Affiliated Tribes, Caddo Nation of Oklahoma, Cherokee Nation of Oklahoma, Tonkawa Tribe of Oklahoma, Comanche Nation of Oklahoma

Last Updated By: Sarah G Stroman Last Updated Date: 04/19/2018 08:38:42



MEMO

April 19, 2018

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

From: Scott Pletka, Ph.D.

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

Listed below are the projects reviewed internally by qualified TxDOT archeologists from 4/12/18 to 4/18/18. The projects will have no effect on archeological historic properties. As provided under the PA-TU, consultation with the Texas State Historic Preservation Officer is not necessary for these undertakings. As provided under the MOU, the proposed projects do not require individual coordination with the Texas Historical Commission.

| CSJ | DISTRICT | COUNTY | ROADWAY | DESCRIPTION | WORK PERFORMED |
|--|----------------|-----------|-----------------------|--------------------------------------|------------------|
| 0902-90-077 | Fort Worth | Tarrant | Cotton Belt Extension | Trail Extension, Safety Improvements | Background Study |
| 0009-11-238 0009-12-215 0009-12-220 0009-12-219 | Dallas | Dallas | IH 30 | Widen to Add Shoulders | Background Study |
| 0270-04-006 | Corpus Christi | Karnes | BS 72 | Rehab Roadway | Background Study |
| 0691-01-035 | Corpus Christi | Karnes | FM 81 | Widen Roadway & Replace Structures | Background Study |
| 0912-70-093 | Houston | Harris | Calhoun Street | Bridge Replacement | Background Study |
| 0025-03-097 | San Antonio | Guadalupe | IH 10 | Highway Expansion Seguin Section | Background Study |
| 0465-02-027 | San Antonio | Bexar | FM 1518 | Intersection Improvements | Background Study |

Signature _____
 For TxDOT
 cc: ECOS Data Entry; PD; ENV_ARC: PA File

Date: 04 / 19 / 2018

Table Template for Weekly List Memo.doc

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

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Properties ★ Details

Archeology Background Study Details

Documentation of Project Setting

1. Does the project conform to a type agreed (per Appendix 3 of PA-TU) to pose no potential to affect historic properties?
2. Geologic Atlas of Texas map or PALM or soils maps examined.
3. Texas Archeological Sites Atlas map examined for sites within one kilometer of the project area.
4. Historical information examined. Check all that apply.

Resources Used During the Initial Assessment

- Topographic map(s) Soil map(s) Road map(s) As-built plans Other

If other selected, please identify:

A map from 1918 shows the majority of settlement in the project area in and around what is now Lake Ray Hubbard, and in the small communities of Fate and Roysse City. IH 30 was constructed through Rockwall County in the

5. Aerial images or project area images (e.g., Google Maps with Street View) examined.

Analysis of Project Setting

6. Have archeological sites been identified within the area of potential effects (APE) or within 150 feet of the APE?

Comments:

Background research for this project consisted of an online records search through the Texas Historical Commission's (THC) Archeological Sites Atlas (Atlas) and a review of historical maps and aerial photographs. Research

7. Do cemeteries occur within the APE or within 25 feet of the APE?

Comments:

Six cemeteries are located within one kilometer of the APE, and none overlap or are immediately adjacent to the project area. Of these six cemeteries, the Glen Hill Cemetery (RW-C031) was the longest in continual use (1820s to

8. Do Holocene-age deposits mapped on Geologic Atlas of Texas or PALM or soils maps occur within the APE?

Comments:

According to Geologic Atlas of Texas (GAT), Dallas Sheet, the APE is geologically underlain by Upper Cretaceous-age Wolfe City Sand and Marlbrook Marl formations. Human occupations typically occur in Holocene-age deposits.

9. Does the APE cross a waterway with the potential for shipwrecks?

Comments:

10. Is the APE within 500 feet of a historically reliable water source?

Comments:

11. Does the APE include a wetland or frequently flooded area?

Comments:

12. Does the Atlas map or other information (enter comment) show that occupation typically occurs on particular landform or landforms that the APE does not contain?

Comments:

13. Have all settings that may have been favorable for occupation been subject to previous disturbances? Check all that apply.

Previous Disturbances Identified During the Initial Assessment

- Previous road construction and maintenance Installation of utilities
 Modern land use practices like plowing and brush clearing Urban and/or suburban development
 Erosion and scouring by natural processes Other

If other selected, please identify:

[Empty text box]

14. Have the majority of the settings with high potential for archeological sites within the APE been previously surveyed? No

Comments:

According to the Atlas, there are 13 archeological sites present within one kilometer (0.62 mile) of the APE. However, only one (41RW24) is located immediately adjacent to the APE and may extend into TxDOT ROW. Site 41RW24 is a

Conclusions

15. Have previous investigations covered a sufficient proportion of the APE to conclude that the APE is unlikely to contain archeological sites or cemeteries? Yes

Comments:

[Empty text box]

16. Has the APE been sufficiently disturbed that any prehistoric archeological sites would lack the integrity to address important questions? Any such sites would lack integrity of (check all that apply): Yes

Integrity Issues Identified During the Initial Assessment

- Location Design Materials Association Other

If other selected, please identify:

[Empty text box]

17. Has the APE been sufficiently disturbed that any historic-era archeological deposits would lack sufficient integrity to address important questions? Any such sites would lack integrity of (check all that apply): Yes

Integrity Issues Identified During the Initial Assessment

- Location Design Materials Association Other

If other selected, please identify:

[Empty text box]

18. Does historic research show that historic-era archeological deposits, cemeteries, and shipwrecks are not likely to occur within the APE? Yes

Comments:

The project area was historically occupied by several tribes of the Caddo. In the early nineteenth century, Cherokee peoples from east of the Mississippi relocated into the area. In the 1840s, Anglo-Americans settled the area

19. Does the project area occur in a setting that was not conducive to human occupation and activity? No

Comments:

No intact deposits are expected as the APE has undergone many ground disturbing impacts from road construction and maintenance, ditch improvements, and utilities installations. Construction and maintenance practices have

20. Will the project adversely affect archeological sites or cemeteries? No

Comments:

The Texas Department of Transportation (TxDOT) proposes to make improvements to Interstate Highway (IH) 30 from Bass Pro Drive to the Hunt County Line (west of Farm-to-Market [FM] 2642) in Dallas and Rockwall Counties, Texas

Last Updated By: Barbara J Hickman Last Updated Date: 04/17/2018 05:27:01



MEMO

April 26, 2018

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

From: Scott Pletka, Ph.D.

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

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| CSJ | DISTRICT | COUNTY | ROADWAY | DESCRIPTION | WORK PERFORMED |
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| 0009-11-238 0009-12-215 0009-12-220 0009-12-219 | Dallas | Dallas | IH 30 | Widen to Add Shoulders | Background Study |
| 0924-06-578 | El Paso | El Paso | Spur 6 | Landscaping | Background Study |
| 0142-15-026 | San Antonio | Kendall | IH 10 | Operational Improvements | Background Study |
| | | | | | |

Signature _____
For TxDOT

cc: ECOS Data Entry; PD; ENV_ARC: PA File

Table Template for Weekly List Memo.doc

Date: 04 / 26 / 2018

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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Properties ★ Details

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3. Texas Archeological Sites Atlas map examined for sites within one kilometer of the project area.
4. Historical information examined. Check all that apply.

Resources Used During the Initial Assessment

- Topographic map(s) Soil map(s) Road map(s) As-built plans Other

If other selected, please identify:

A map from 1918 shows the majority of settlement in the project area in and around what is now Lake Ray Hubbard, and in the small communities of Fate and Roysse City. IH 30 was constructed through Rockwall County in the

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Background research for this project consisted of an online records search through the Texas Historical Commission's (THC) Archeological Sites Atlas (Atlas) and a review of historical maps and aerial photographs. Research

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Comments:

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9. Does the APE cross a waterway with the potential for shipwrecks?

Comments:

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Comments:

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Comments:

12. Does the Atlas map or other information (enter comment) show that occupation typically occurs on particular landform or landforms that the APE does not contain?

Comments:

13. Have all settings that may have been favorable for occupation been subject to previous disturbances? Check all that apply.

Previous Disturbances Identified During the Initial Assessment

- Previous road construction and maintenance Installation of utilities
 Modern land use practices like plowing and brush clearing Urban and/or suburban development
 Erosion and scouring by natural processes Other

If other selected, please identify:

[Redacted]

14. Have the majority of the settings with high potential for archeological sites within the APE been previously surveyed? N

Comments:

According to the Atlas, there are 13 archeological sites present within one kilometer (0.62 mile) of the APE. However, only one (41RW24) is located immediately adjacent to the APE and may extend into TxDOT ROW. Site 41RW24 is a

Conclusions

15. Have previous investigations covered a sufficient proportion of the APE to conclude that the APE is unlikely to contain archeological sites or cemeteries? Y

Comments:

[Redacted]

16. Has the APE been sufficiently disturbed that any prehistoric archeological sites would lack the integrity to address important questions? Any such sites would lack integrity of (check all that apply): Y

Integrity Issues Identified During the Initial Assessment

- Location Design Materials Association Other

If other selected, please identify:

[Redacted]

17. Has the APE been sufficiently disturbed that any historic-era archeological deposits would lack sufficient integrity to address important questions? Any such sites would lack integrity of (check all that apply): Y

Integrity Issues Identified During the Initial Assessment

- Location Design Materials Association Other

If other selected, please identify:

[Redacted]

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The project area was historically occupied by several tribes of the Caddo. In the early nineteenth century, Cherokee peoples from east of the Mississippi relocated into the area. In the 1840s, Anglo-Americans settled the area

19. Does the project area occur in a setting that was not conducive to human occupation and activity? N

Comments:

No intact deposits are expected as the APE has undergone many ground disturbing impacts from road construction and maintenance, ditch improvements, and utilities installations. Construction and maintenance practices have

20. Will the project adversely affect archeological sites or cemeteries? N

Comments:

The Texas Department of Transportation (TxDOT) proposes to make improvements to Interstate Highway (IH) 30 from Bass Pro Drive to the Hunt County Line (west of Farm-to-Market [FM] 2642) in Dallas and Rockwall Counties, Texas

Last Updated By: Barbara J Hickman Last Updated Date: 04/23/2018 03:55:10



MEMO

October 11, 2018

TO: Administrative File
From: Carolyn A Nelson

District: Dallas
County: Dallas/Rockwall
CSJ#: 0009-11-238
Highway: Interstate Highway (IH) 30
Limits: Bass Pro Drive in Garland Dallas County to West of Farm to Market (FM) 2642
Let Date: September 2022

Project Limits: From Interstate Highway (IH) 30 North Frontage Road to Gibson Lane/Arrington
Project Description: Stipulation IX, Appendix 6. Widen urban freeway mainlanes and frontage roads and add sidewalks. 34.05 acres new ROW, 13.24 acres permanent and temporary easements. No Historic Properties Present.

SUBJECT: Internal review under the Section 106 Programmatic Agreement (Section 106 PA) among the Texas Department of Transportation, Texas State Historic Preservation Officer, Advisory Council on Historic Preservation, and Federal Highway Administration; and the Memorandum of Understanding (MOU) between the Texas Historical Commission and the Texas Department of Transportation.

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.

Proposed Project:

TxDOT Dallas District proposes to widen and reconstruct Interstate Highway 30 (IH-30) between Bass Pro Drive in Garland to west of Farm to Market (FM) 2642 just east of Rockwall County, Texas. The length of the project is an approximate 16.75 miles. This would include an addition of a frontage road system over Lake Ray Hubbard in Dallas and Rockwall counties, expansion of the mainlanes (eight mainlanes between Horizon Road and SH 205, and six mainlanes between SH 205 and west of FM 2642), and reconstruction or widening of the frontage roads between Horizon Road and west of FM 2642. Sidewalks are proposed along the outside of the frontage road lanes for the entire project limits. Additional bridges, overpasses, and U-turns would also be constructed at select intersections in the project corridor. Although most of the work would occur within existing right-of-way, 34.05 acres of new right-of-way would be required, in addition to 1.1748 acres of permanent easement and 12.067 acres for temporary easements.

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From: [NEPA](#)
To: [Michelle Lueck](#)
Subject: RE: EA Review - IH 30 - Dallas and Rockwall Counties (CSJ 0009-11-238 etc.)
Date: Thursday, December 06, 2018 4:35:26 PM

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

Re: Response to Request for TCEQ Environmental Review

The Texas Commission on Environmental Quality (TCEQ) received a request from the Texas Department of Transportation (TxDOT) regarding the following project: EA Review - IH 30 - Dallas and Rockwall Counties (CSJ 0009-11-238 etc.).

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

This project is in an area of Texas classified by the United States Environmental Protection Agency as moderate nonattainment for the 2008 ozone National Ambient Air Quality Standard (NAAQS) and marginal nonattainment for the 2015 ozone NAAQS. Air Quality staff has reviewed the document in accordance with transportation and general conformity regulations codified in 40 Code of Federal Regulations Part 93 Subparts A and B. We concur with TxDOT's assessment.

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

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

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

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

From: Michelle Lueck <Michelle.Lueck@txdot.gov>
Sent: Tuesday, November 20, 2018 1:29 PM
To: NEPA <NEPA@tceq.texas.gov>
Subject: EA Review - IH 30 - Dallas and Rockwall Counties (CSJ 0009-11-238 etc.)

TxDOT requests the TCEQ review the IH 30 project per 43 TAC 2.305. The proposed project would include widening of existing IH 30 in Dallas and Rockwall Counties, Texas. We are requesting TCEQ review since the project meets MOU triggers related to **water and air quality**.

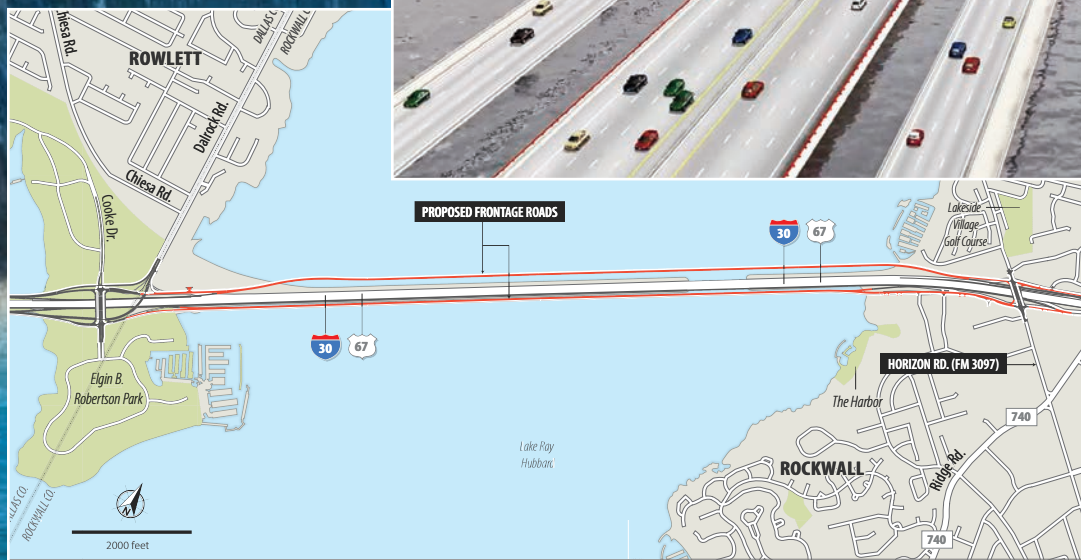
An electronic version of the Draft Environmental Assessment will be transmitted to your office using our FTP system. Let me know if you have any questions.

Michelle Lueck
TxDOT-Environmental Affairs Division
Project Delivery Section
512-416-2644



IH 30 Rockwall County Lake Ray Hubbard Bridge

FY 2019 INFRA Grant Application
Attachment 5 – Large/Small Project Requirements



North Central Texas
Council of Governments

LARGE/SMALL PROJECT REQUIREMENTS

The IH 30 Rockwall County – Lake Ray Hubbard Bridge project, as stated in the Project Narrative (**Attachment 1**) satisfies statutory requirements enumerated at 23 U.S.C. 117(g) and is considered for the INFRA Discretionary Grant Program as a Large Project. That determination is based on summary responses to the following questions below:

a. Does the project generate national or regional economic, mobility, or safety benefits?

Yes. By implementing continuous one-way frontage roads across Lake Ray Hubbard between Dalrock Road and Horizon Road/FM 740, the project will relieve congestion, advance mobility, increase connectivity, improve reliability, address safety, and enhance economic competitiveness (see **Attachment 1**, Section I. – Targeted Transportation Challenges).

b. Is the project cost-effective?

Yes. The overall net effect of this transportation investment is a positive return on investment of **378%** (\$854.1 million/\$225.9 million), after discounting at seven percent. Though only based on a 21-year period of analysis, results of the BCA clearly indicate the IH 30 Rockwall County – Lake Ray Hubbard Bridge project will provide a lifetime of regional benefits for travelers (see **Attachment 1**, Section V.b. – Benefit-Cost Analysis Results).

c. Does the project contribute to one or more of the National Goals under 23 USC 150?

Yes. The proposed project contributes to national goals as specified below.

Safety – The project does result in safety improvements for IH 30, significantly reducing vulnerability of the Lake Ray Hubbard crossing to be closed (see **Attachment 1**, Section I.a. – Targeted Transportation Challenges – Improving Safety and Congestion).

Infrastructure Condition – Proposed continuous one-way frontage roads and relocation of entrance/exit ramps will alleviate deterioration of IH 30 freeway structures across Lake Ray Hubbard. The new internal corridor bypass options offered by the frontage roads provide greater opportunities to address future freeway maintenance and capacity needs with reduced traffic disruptions (see **Attachment 1**, Section I.b. – Targeted Transportation Challenges – Enhancing Accessibility, Reliability, and State of Good Repair).

Congestion Reduction – With the continuous one-way frontage roads and X-ramp configurations creating operations like collector-distributor facilities, both recurring and non-recurring congestion on the IH 30 corridor across Lake Ray Hubbard is reduced (see **Attachment 1**, Section I.a. – Targeted Transportation Challenges – Improving Safety and Congestion).

IH 30 Rockwall County – Lake Ray Hubbard Bridge

System Reliability – Added travel choices and distribution of traffic flows across Lake Ray Hubbard as a result of the project will greatly contribute to improved system reliability (see **Attachment 1**, Section I.b. – Targeted Transportation Challenges – Enhancing Accessibility, Reliability, and State of Good Repair).

Freight Movement and Economic Vitality – Freight movements are provided greater priority and accommodations on the IH 30 freeway as a result of the frontage roads enabling redistributed traffic flows and more efficient access locations for local traffic. Provisions for barrier-separated bicycle/pedestrian access and connectivity will increase recreational opportunities and livability benefits for new and emerging economic development sites near Lake Ray Hubbard (see **Attachment 1**, Section I.b. – Targeted Transportation Challenges – Enhancing Accessibility, Reliability, and State of Good Repair; Section I.c. – Targeted Transportation Challenges – Encouraging Active Transportation).

Environmental Sustainability – New active transportation choices resulting from this project will encourage modal shifts and other mixed-use development opportunities that can reduce automobile dependency. The project will neither substantively alter existing IH 30 freeway structures across Lake Ray Hubbard nor its normal pool elevation, and as necessary provide mitigation to preserve water quality and other environmental concerns (see **Attachment 1**, Section I.c. – Targeted Transportation Challenges – Encouraging Active Transportation; Section VI.c. – Project Readiness – Required Approvals).

Reduced Project Delivery Delays – Utilization of the design-bid-build procurement approach for project construction will also incentive/disincentive and cost-plus-time bidding mechanisms combinations to expedite completion, reduce traveler delays, and decrease cost (See **Attachment 1**, Section V.d.2 – Merit Criteria – Innovative Project Delivery; Section VI.b.

d. Is the project based on the results of preliminary engineering?

Yes. The draft EA for the IH 30 segment between Bass Pro Drive and west of FM 2642 includes this project, and proposed improvements are justified. Engineering schematics are developed at a 30% level as required for potential issuance of a FONSI (see **Attachment 1**, Section VI.a – Project Readiness – Technical Feasibility).

e. With respect to non-Federal financial commitments, does the project have one or more stable and dependable funding or financing sources to construct, maintain, and operate the project?

Yes. A combination of Federal, State, and local funding sources will be used to design and construct the project. New Federal requirements to set and report progress on infrastructure condition performance targets have generated new tools, data exchanges, and enhanced partnerships between TxDOT, NCTCOG, and local governments for monitoring infrastructure performance and ensuring dedicated programming for lifecycle considerations. Recent State

IH 30 Rockwall County – Lake Ray Hubbard Bridge

initiatives to create new revenue sources have and will continue to provide sustained funding for future transportation needs. (see **Attachment 1**, Section V.c. – Merit Criteria – Criterion #2: Leveraging of Federal Funding; Section V.e. – Merit Criteria – Criterion #4: Performance and Accountability).

f. Are contingency amounts available to cover unanticipated cost increases?

Yes. Should unanticipated cost increases occur, TxDOT and NCTCOG have Federal and State revenue sources that can be applied to cover those overruns. Cost estimated prepared for this application include an approximate 10% contingency (see **Attachment 1**, Section IV – Grant Funds, Sources, and Uses of All Project Funding).

g. Is it the case that the project cannot be easily and efficiently completed without other Federal funding or financial assistance available to the project sponsor?

Yes. The overall estimated cost for recommended IH 30 improvements through Rockwall County is \$627 million. Because there are vast transportation needs across the DFW MPA and the State, funding is unavailable to address the overall 17-mile corridor as one project, but two of four independent utility segments have successfully been programmed. However, until the IH 30 Rockwall County – Lake Ray Hubbard Bridge project is implemented, any interim project benefits will be limited and future IH 30 capacity needs for miles on either side of the lake will create more severe congestion, reliability, safety, economic vitality, and state of good repair issues for the project area (see **Attachment 1**, Section I. – Project History; Section V.a. – Merit Criteria – Criterion #1: Support for National and Regional Economic Vitality).

h. Is the project reasonably expected to begin construction not later than 18 months after the date of obligations of funds for the project?

Yes. The IH 30 EA is expected to receive a FONSI later this spring, and a funded interim project to build continuous one-way frontage roads between Bass Pro Drive and Dalrock Road is scheduled for construction starting in Summer 2021. With the IH 30 Rockwall County – Lake Ray Hubbard Bridge project situated immediately to the east, TxDOT will be mobilized and in a coordinated position to begin construction shortly afterward if INFRA Grant funds are awarded. Permitting for improvements over the entire lake crossing through USACE Section 214 is confirmed to be underway (see **Attachment 1**, Section VI.b – Project Readiness – Project Schedule; Section VI.c. – Project Readiness – Required Approvals).