Texas Department of Transportation
Book 2 - Technical Provisions

IH 35E Managed Lanes Project

Attachment 4-4

Section 4(f) Mitigation Master Plan

ATTACHMENT 4-4
IH 35E MANAGED LANES PROJECT MITIGATION ELEMENTS

Key Map (NTS)

Mitigation Elements Key

Color Key

Design-Build

Copperas Branch Park

2.a Gatehouse
* 2.b1 Highland Village Road and Copperas Branch Park Vehicular Entry/Park Road
* 2.b2 Copperas Park Pedestrian Entry
2.c Signage
2.d Parking
2.g Precast Picnic Tables with Grills
2.h Metal Rail Fencing, Barrier Posts and Gates
2.i Landscaping
2.k Beach
2.l Buoys

Copperas Branch Park East

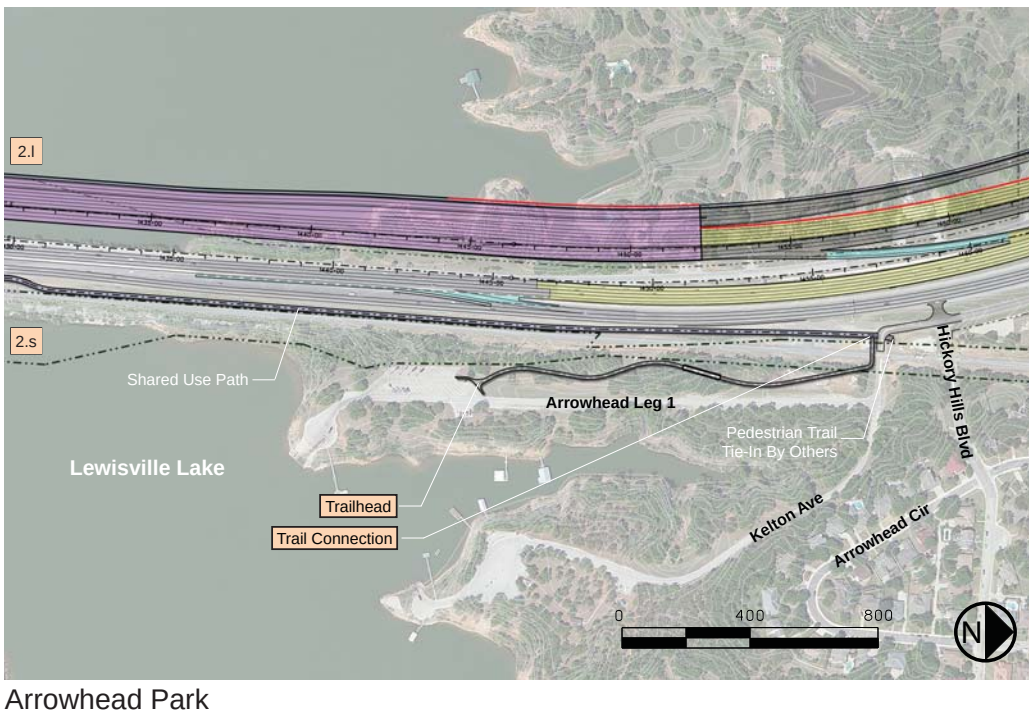
2.o Parking Access at Trailhead
2.p Copperas Branch Park East Trail
2.q Primary Trailhead
2.r Minimum Sanitary Facilities
2.s Buoys
2.v Connector Trail

Arrowhead Park

Trailhead
Trail Connection

Highland Lakes Park

Picnic Benches
Trash Receptacles
Parking Lot
Light Poles & Fixtures
Drinking Fountain
Park Entry Sign
Concrete Sidewalk & Native Plantings
Visual Screening Wall
Play Structure



Arrowhead Park

Attachment 4-4
IH 35E Managed Lanes Project

Mitigation Elements Report

Copperas Branch Park

2.a Gatehouse

A gatehouse shall be provided at the entry to Copperas Branch Park. The structure shall be Americans with Disabilities Act (ADA) compliant and programmed/sized according to the operational needs of the City of Highland Village. A building footprint of 260 square feet (sq ft) is shown on the master plan. The building exterior shall have a limestone veneer in a random ashlar pattern to coordinate with the other stone clad park features. Refer to the master plan document for the approximate location of the gatehouse.

2.b$_1$ Highland Village Road and Copperas Branch Park Vehicular Entry/Park Road

Copperas Branch Park Vehicular Entry

The vehicular entry to Copperas Branch Park is to be located as indicated on the master plan, off of Highland Village Road on the west side of the proposed 300' temporary construction easement. Improvements to Highland Village Road including replacement of the existing culverts with a larger precast arch section and associated end walls is anticipated. The park entry drive shall begin at Highland Village Road and extend approximately 1,200 linear feet (LF), ending just beyond the gatehouse at the main park gate. The park entry initially parallels the existing canal/ditch to avoid the existing pond areas. If designed at grade, a 10 – 12 feet (ft) tall retaining wall along the west side of the drive is anticipated to terrace the existing slope and to transition grades in fill and cut locations along this portion of the park drive. The new entry turns and crosses over the existing canal/ditch that runs parallel to Copperas Creek Court. A drainage structure shall be installed at the canal crossing and shall be designed per the requirements contained in the technical provisions for new drainage structures. Retaining walls should be constructed at the ends of the proposed drainage structure to support both sides of the embankment. The crossing shall accommodate a 24 ft wide concrete drive with curbs. If designed at grade, the retaining walls shall parallel both sides of the drive and continue to the vicinity of the new gatehouse. The retaining wall design is anticipated to be constructed using Mechanically Stabilized Earth (MSE) or big-block retaining wall units with a finish compatible to the other park elements. The retaining wall may also be cast in place concrete with a stone veneer. The tops of the retaining walls are to have a coping and an approved combination traffic rail. Refer to the master plan document for layout.

Park Road

Approximately 1,100 LF of primary park access road shall be constructed within Copperas Branch Park connecting from the gatehouse to the proposed parking lot area under the proposed southbound IH 35E bridge structure and continuing around to the approximate limits of the 300' construction easement. This access road shall be comprised of a 24 ft wide concrete section with curb/gutter per TxDOT standard. An open section without curbs shall be considered, but must include shoulders and barrier fencing acceptable to the City of Highland Village. Refer to the master plan document for layout of these park roads.

Highland Village Road

Highland Village Road shall be improved per the IH 35E interim schematic. Improvements to the road extend from the IH 35E frontage west to the park road entry. An existing culvert under

Highland Village Road shall be replaced. The new culvert shall be designed per the requirements contained in the technical provisions for new drainage structures.

2.b$_2$ Copperas Branch Park Pedestrian Entry

The pedestrian entry to the park is indicated off of Copperas Creek Court. The pedestrian entry shall begin at the existing cul-de-sac. The proposed pedestrian bridge is anticipated to be a pre-fabricated truss style with two (2) 120 ft spans, a 14 ft clear width, and concrete deck. The edge treatment is anticipated to be a prefabricated railing system with rub rail and vertical pickets spaced 4 inches apart. Bridge construction includes reinforced concrete abutments, piers, riprap and associated retaining walls where needed. The 240 ft long bridge may be engineered to have fewer, longer spans than the two (2) 120 ft spans anticipated. The final bridge location must be coordinated after confirming field conditions. Refer to the master plan document for approximate location and layout of the pedestrian bridge.

2.c Signage

Two (2) entry signs are to be constructed. The City of Highland Village sign shall be located at the northwest corner of Highland Village Road and the proposed southbound frontage road for IH 35E. The Copperas Branch Park entry sign shall be located at the northeast corner of Highland Village Road and the park entry road. Both shall be double sided cast stone panels supported by a concrete foundation with limestone veneer in a random ashlar pattern. The desired architectural style shall match the City of Highland Village park signage in aesthetics and character. Refer to the master plan document for approximate locations.

2.d Parking

A minimum of one hundred and eighty (180) parking spaces shall be provided under the proposed southbound IH 35E bridge structure. Standard spaces shall be a minimum of 9 ft x 18 ft with 24 ft wide two-directional drives in between bays. The parking facility shall comply with ADA requirements. Oversized spaces for buses, recreational vehicles (RVs) or boat trailers should also be included. The layout of the parking facility is to be coordinated with the bridge column layout of the IH 35E bridge structure. All parking areas shall be concrete section that is adequate to support the anticipated types of vehicular traffic utilizing the parking lot with curb/gutter per Texas Department of Transportation (TxDOT) standards. An open section without curbs shall be considered, but must include shoulders and barrier fencing acceptable to USACE and the City of Highland Village. Refer to the master plan document for generalized layout of the parking area.

2.g Precast Picnic Tables with Grills

Impacts to existing picnic tables and grills are anticipated. Approximately nine (9) precast concrete picnic tables with reinforced concrete pads, two (2) metal awnings and six (6) ground mounted metal grills are anticipated to be replaced. The picnic tables shall be ADA compliant. Refer to the master plan document for approximate location.

2.h Metal Rail Fencing, Barrier Posts and Gates

Approximately 1,300 LF of post and cable barriers shall be provided around the perimeter of the park to prevent vehicular access to the site where it is not desired. Included in this requirement is providing an access gate at the gatehouse and a maintenance access gate near the IH 35E frontage road. The extent of barriers may be reduced where highway traffic barriers such as metal beam guard fence shall be provided as part of the frontage road construction. Refer to the master plan document for approximate layout.

2.i Landscaping
Every reasonable effort should be made to preserve the existing trees in the park. Impacts to existing trees outside of the 300' temporary easement shall be replaced with native hardwood trees planted and established in accordance with USACE and City of Highland Village requirements. These canopy trees that are replaced must be maintained and warrantied for a period of time in accordance with USACE and the City of Highland Village. If any individual tree expires during this period, it must be replaced immediately and the warranty resets for that tree.

2.k Beach
Impacts to the beach complex shall be restored along the north shore of the park in accordance with United States Army Corps of Engineers (USACE) *Design Guidelines* document Section 6B & 6C for Beach Checklist and Beach Calculations.

2.l Buoys
A buoy system shall be installed and maintained throughout the duration of the developer contract. Buoys shall be placed no more than 300 ft apart along the full extent of the outside east and west edge of the IH 35E bridge structure within Lewisville Lake. The buoy system selected must satisfy USACE and US Coast Guard requirements. The system is expected to include a 12-inch diameter x 53-inch long Ionomer Foam Spar Buoy, white in color, with "SLOW NO WAKE" in black lettering and orange reflective bands and circle. Install buoy with pyramid anchor and chain assembly (or approved equivalent) that allows the top 33-inches of the buoy to float above the water line. Buoy maintenance shall become the responsibility of the owner at the conclusion of the project construction.

Copperas Branch Park East
2.o Parking Access at Trailhead
Parking for twenty (20) spaces shall be provided at the trailhead for access to Copperas Branch Park East. Standard spaces shall be 9 ft x 18 ft with a 24 ft wide two-directional drive. The parking facility shall comply with ADA requirements. All parking areas shall be concrete section that is adequate to support the anticipated types of vehicular traffic utilizing the parking lot with curb/gutter per TxDOT standard. An open section without curbs shall be considered, but must include shoulders and barrier fencing acceptable to the City of Lewisville. Retaining walls are anticipated to address grading and cross slope requirements. The retaining wall heights are variable but are generally 5 ft to 10 ft. Refer to the master plan document for layout of the parking area.

2.p Copperas Branch Park East Trail
Approximately one (1) mile of 10 ft wide, 6 inch thick, concrete trail shall be provided as a loop around Copperas Branch Park East. ADA compliance is required. The trail shall have a 4 ft clear buffer on each side for maintenance and security. Refer to the master plan document for layout.

2.q Primary Trailhead
Near the parking area, there shall be a trailhead to consist of a small concrete plaza, a precast concrete bench and a stone monument sign with the name of the park/trail. A concrete walk from the parking and trailhead to the existing pier area has been indicated. Refer to the master plan document for approximate location.

2.r Minimum Sanitary Facilities
A self-contained, precast concrete restroom facility shall be provided with connecting trails that allow for routine maintenance activities. The restroom shall be a double vault, fully accessible building approximately 175 sq ft with a drinking fountain. ADA compliance is required. Water supply shall be provided to support these elements. Refer to the master plan document for approximate location.

2.s Buoys
See 2.l Buoys.

2.v Connector Trail
A 2,350 LF, 12 ft wide concrete trail shall be provided to connect the primary trailhead to the loop trail at Copperas Branch Park East. This trail shall be installed along the embankment between the Denton County Transportation Authority (DCTA) tracks and Lewisville Lake. The existing DCTA embankment along the waterfront does not appear to provide a "shelf" to accommodate the trail. Construction of elevated structure and/or retaining walls is anticipated for most of the length of the connector trail. The connector trail, including elevated structures, is to be designed and constructed to support emergency and maintenance vehicles in addition to the pedestrian users. ADA compliance is required. Refer to the master plan document for layout.

Highland Lakes Park

Picnic Benches
Four (4) ground mounted picnic benches and tables shall be installed within Highland Lakes Park. Bench and table selection shall be perforated and coated table and bench tops to resist rotting, warping and chipping. The bench layout shall comply with ADA requirements. Refer to the master plan document for approximate location.

Trash Receptacles
Three (3) ground mounted trash receptacles shall be installed within Highland Lakes Park. Refer to the master plan document for approximate location.

Parking Lot
Parking for five (5) spaces shall be provided within Highland Lakes Park. Standard spaces shall be 9 ft x 18 ft. The parking facility shall comply with ADA requirements. All parking areas shall be concrete section that is adequate to support the anticipated types of vehicular traffic utilizing the parking lot with curb/gutter per TxDOT standard. Sidewalks shall be provided to connect parking spaces to the trail system. Refer to the master plan document for layout of the parking area.

Light Poles & Fixtures
Security lighting shall be provided for the parking area and the new play structure. The fixtures shall be full cutoff and the poles shall be sized appropriately for the neighborhood context. Refer to the master plan document for approximate locations.

Drinking Fountain
A drinking fountain shall be installed near the play structure in a location that is fully accessible. The fountain shall be ADA compliant with multilevel bowl heights. Refer to the master plan document for approximate location.

Park Entry Sign
A park entry sign shall be constructed within Highland Lakes Park. The desired architectural style shall be similar to what currently exists and shall be coordinated with the City of Lewisville. Refer to the master plan document for approximate location.

Concrete Sidewalk and Native Plantings
Provide approximately 1,025 LF of 10 ft wide concrete sidewalk to connect the parking area, trails and play structure area. The proposed thickness of the sidewalk shall meet TxDOT sidewalk standards. Native canopy, understory, shrubs, perennials and buffalo grass shall be installed adjacent to the sidewalk as a part of this item. Refer to the master plan document for approximate location.

Visual Screening Wall
A 10 ft tall visual screening wall shall be constructed along the east side of the park property. This wall shall be a precast concrete panel wall supported by concrete foundations and shall include aesthetic textures and color integral to the panel. Refer to the master plan document for approximate location.

Play Structure
A play structure shall be provided from a manufacturer acceptable to the City of Lewisville. Play structure location on the master plan document is approximate and final location shall be coordinated with the City of Lewisville. The structure shall contain a minimum of two (2) elevated play components and five (5) ground level components and shall be accessible by transfer, similar to the Landscape Structures Playbooster Model No. 3498. The play structure shall be manufactured and installed in accordance with applicable safety and ADA standards. An accessible protective surfacing shall be provided within the entire play structure use zone. Locate concrete mow strips and sidewalks at the perimeter of the surfacing for ease of maintenance.

NOTE: Further coordination with the City of Lewisville is required in order to finalize the layout and details of Highland Lakes Park elements before final design can proceed to construction.

Arrowhead Park
Trailhead
Near the parking area, there shall be a trailhead to consist of a small concrete plaza, a precast concrete bench and a stone monument sign with the name of the park/trail. Refer to the master plan document for approximate location.

Trail Connection
A 1,500 LF, 10 ft wide concrete trail shall be provided to connect the trailhead to the shared use path on the reconfigured IH 35E northbound bridge and approaches. The proposed thickness of the trail shall meet TxDOT sidewalk standards. The trail connection begins at the shared use path terminus at Kelton Avenue and crosses over the DCTA tracks, then south to the trailhead. A separate trail crossing with pedestrian gates at the DCTA tracks is anticipated. Developer shall coordinate with TxDOT and DCTA for specific rail crossing requirements. The trail within Arrowhead Park must cross a swale area which shall require one (1) pedestrian bridge. The proposed bridge is anticipated to be a pre-fabricated truss style with one (1) 120 ft span, a 14 ft clear width, and concrete deck. The edge treatment is anticipated to be a prefabricated railing

system with rub rail and vertical pickets spaced 4 inches apart. Bridge construction includes reinforced concrete abutments, piers, riprap and associated retaining walls where needed. ADA compliance is required. Refer to the master plan document for layout.

* The Draft Master Plan and Mitigation Elements Report indicates design intent. Location of all elements is approximate and subject to change based on detailed engineering and final approval. All take-offs and quantities are best estimation. Existing site conditions may require design modification and quantity adjustment. Coordination with the U.S. Army Corps of Engineers and the cities of Highland Village and Lewisville, Town of Hickory Creek, and Denton County Transportation Authority shall be required in order to confirm and finalize design elements before construction.

Texas Department of Transportation
Book 2 - Technical Provisions

IH 35E Managed Lanes Project

Attachment 4-5

Environmental Permits, Issues, and Commitments (EPIC)

I. STORMWATER POLLUTION PREVENTION PLAN-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Perrmit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 1122.

☐ No Action Required ☒ Required Action

Action No.	Commitment
1. File NOI with TCEQ for CGP	Developer must stabilize the project site as stated in the SW3P.
2. File NOT with TCEQ	Developer must stabilize the project site as stated in the SW3P.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas. No equipment is allowed in any sream channel below the ordinary High Water Mark except on approved temporary stream crossings or drill pads.

The Developer must adhere to all of the terms and conditions associated with the following permit(s):

☐ No Permit Required
☒ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
☒ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
☐ Individual 404 Permit Required
☐ Other Nationwide Permit Required:

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

REFER TO EPIC SHEET 2 OF 2 - LEFT COLUMN
FOR SECTION II - CONTINUATION
FOR WATERS OF THE U.S DESCRIPTIONS AND APPROXIMATE LOCATION AND ACTIONS

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices for applicable 401 General Conditions:

Erosion	Sedimentation	Post-Construction TSS
☒ Temporary Vegetation	☒ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☒ Rock Berm	☐ Retention/Irrigation Systems
☒ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☒ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☒ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact TxDOT immediately.
Developer is responsible for the required actions below.

☒ No Action Required ☐ Required Action

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.

☐ No Action Required ☒ Required Action

Action No.	Location	Commitment
1.	Entire project	Permanent soil erosion features would be constructed as soon as possible during the early stage of construction through proper seeding and/or sodding techniques.
2.	Entire project	Disturbed areas would be restored and stabilized as soon as developers schedule permits. Temporary seeding would be considered where large areas of disturbed ground would be left bare for a considerable length of time. Use only native plants for landscaping and in seeding mixtures where practicable.
3.	Entire project	Trees within the ROW, but not in the construction zone, would not be removed if possible.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT.

Developer is responsible for the required actions below.

☐ No Action Required ☒ Required Action

Action No.

1. Prior to any construction activities a qualified biologist shall survey the proposed project corridor for any listed species, due to the time period that would elapse between this evaluation and the start of construction activities.

REFER TO EPIC SHEET 2 OF 2 - MIDDLE COLUMN
FOR SECTION V - CONTINUATION
FOR LIST OF SPECIES POTENTIALLY WITHIN PROJECT AREA WITH HABITAT DESCRIPTION AND ADDITIONAL ACTIONS

LIST OF ABBREVIATIONS

BMP: Best Management Practice	SPCC: Spill Prevention Control and Countermeasure
CGP: Construction General Permit	SW3P: Storm Water Pollution Prevention Plan
DSHS: Texas Department of State Health Services	PCN: Pre-Construction Notification
ENV: Environmental Affairs Division	PPCC: Spill Prevention Control and Countermeasure
FEMA: Federal Emergency Management Agency	PSL: Project Specific Location
FHWA: Federal Highway Administration	SPILLS: Spill Listings
MOA: Memorandum of Agreement	TCEQ: Texas Commission on Environmental Quality
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
MBTA: Migratory Bird Treaty Act	TxDOT: Texas Department of Transportation
NOT: Notice of Termination	T&E: Threatened and Endangered Species
NWP: Nationwide Permit	USACE: U.S. Army Corp of Engineers
NOI: Notice of Intent	USFWS: U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):
Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act. Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Developer shall be responsible for the proper containment and cleanup of all product spills.
Contact TxDOT if any of the following are detected:

* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canisters, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation(s) or replacement(s) (bridge class structures not including box culverts)?
☒ Yes ☐ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?
☐ Yes ☒ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notifiy DSHS 15 working days prior to any scheduled demolition.

In either case, the Developer is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between TxDOT and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☐ No Action Required ☒ Required Action

REFER TO EPIC SHEET 2 OF 2 - RIGHT COLUMN
SECTION VI - CONTINUATION
FOR OTHER HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☐ No Action Required ☒ Required Action

Action No.	Location	Commitment
1. Floodplains	Elm Fork Trinity River Floodplain	The project is within the Trinity River Corridor Development Regulatory Zone; therefore, a Corridor Development Certificate would be required.

GENERAL NOTE:

Any change orders and/or deviations from the final design must be reported to TxDOT prior to commencement of construction activities, as additional environmental clearance may be required.

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Dallas District Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 1 OF 2

FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6			IH 35E
STATE	DISTRICT	COUNTY	SOUTH
TEXAS	DALLAS	DALLAS	
CONTROL	SECTION	JOB	SHEET NO.
0196	03	138, 180, 240	

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2. *If additional space is needed for a numbered section, fence and adjust sections up or down as needed for proportioning and readability but do not relocate from its relative position.*
3. *All areas should be addressed thoroughly and verify the necessary pay items are set up to support actions needed.*

Revised: September 2012
Prepared by HNTB on 9/18/12

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404 -- (CONTINUATION FROM EPIC SHEET 1 OF 2)

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1. Section 404 permits from USACE/Section 401 Water Quality Certification from Texas Commission on Environmental Quality (TCEQ) based on the specific roadway work and linear transportation crossings identified in the permits and associated with the Draft Interim Schematic and Draft Interim Schematic ROW.

2. Table of preliminary jurisdictional features would be provided in Addendum 4 or the RID.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT. - (CONTINUATION FROM EPIC SHEET 1 OF 2)

Species Potentially within Project Area w/ Description	Habitat Description
1. Alligator snapping turtle: characterized by a large, heavy head, and a long, thick shell with three dorsal ridges of large scales; are a solid gray, brown, black, or olive-green in color, and often covered with algae; radiating yellow patterns around the eyes.	Perennial water bodies, deep water of rivers, canals, lakes and oxbows; also swamps, bayous, ponds near deep running water; usually in water with mud bottom and abundant aquatic vegetation.
2. Timber/canebrake rattlesnake: black and brown crossbands down the back, broad dark shape present behind the eye, black tail above the rattle up to 25% of the body length.	Swamps, floodplains, upland woodlands, riparian zones, abandoned farmland; prefers dense ground cover, i.e. grapevines or palmetto.
3. Texas garter snake: A small to medium sized terrestrial snake that can grow to about a 39-48 inches long. Their backs are green to black, with a distinctive stripe of red or orange, and either side features yellowish stripes.	Wet or moist microhabitats are conducive to the species occurrence, but the snake is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August.
4. Mussells (Little spectaclecase, Louisiana pigtoe, Texas heelsplitter, and Wabash pigtoe): Adult can range from approximately 1-inch to 12-inches in length. Some species have thin shells and shells vary both on the inside and outside of mussels, depending upon the mussel species. Color, texture, and shape variations in shells are used to help identify different types of mussels.	Small and large rivers especially on sand, mud, rocky mud, and sand and gravel, also silt and cobble bottoms in still to swiftly flowing waters.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the TxDOT immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the TxDOT immediately.

Special Note: The Migratory Bird 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 to 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.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES (CONTINUATION FROM EPIC SHEET 1 OF 2)

Action No.

1. A review of hazardous materials regulatory databases was conducted to determine if any known sites might affect the construction activites based on the interim schematic. See the Limited Phase 1 Environmental Site Assessment Report. Based on this review 8 sites are categorized as high risk, 6 sites are characterized as moderate risk, 38 sites are categorized as low risk. For the high and moderate risk sites Phase II ESAs are recommended prior to the development of the plans and specifications to confirm or deny the potential presence of contamination. The Phase II ESAs should follow the ASTM Designation E1903-11, Standard Practice for Environmental Site Assessments: Phase II ESAs.

2. Developer shall prepare Hazardous Materials Management Plan (HMMP) which will be followed during construction.

GENERAL NOTE:

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Texas Department of Transportation
Dallas District Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 2 OF 2

FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6			IH 35E
STATE	DISTRICT	COUNTY	SOUTH
TEXAS	DALLAS	DALLAS	SHEET NO.
CONTROL	SECTION	JOB	
0196	03	138, 180, 240	

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3. *All areas should be addressed thoroughly and verify the necessary pay items are set up to support actions needed.*

Revised: September 2012
Prepared by HNTB on 9/18/12

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3. *All areas should be addressed thoroughly and verify the necessary pay items are set up to support actions needed.*

Revised: September 2012
Prepared by HNTB on 9/18/12

I. STORMWATER POLLUTION PREVENTION PLAN-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 1122.

☐ No Action Required ☒ Required Action

Action No.	Commitment
1. File NOI with TCEQ for CGP	Developer must stabilize the project site as stated in the SW3P.
2. File NOT with TCEQ	Developer must stabilize the project site as stated in the SW3P.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas. No equipment is allowed in any sream channel below the ordinary High Water Mark except on approved temporary stream crossings or drill pads.

The Developer must adhere to all of the terms and conditions associated with the following permit(s):

☐ No Permit Required
☒ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
☒ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
☐ Individual 404 Permit Required
☐ Other Nationwide Permit Required: NWP# _____

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

REFER TO EPIC SHEET 2 OF 2 - LEFT COLUMN
FOR SECTION II - CONTINUATION
FOR WATERS OF THE U.S DESCRIPTIONS AND APPROXIMATE LOCATION AND ACTIONS

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices for applicable 401 General Conditions:

Erosion	Sedimentation	Post-Construction TSS
☒ Temporary Vegetation	☒ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☒ Rock Berm	☐ Retention/Irrigation Systems
☒ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☒ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☒ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact TxDOT immediately.

☒ No Action Required ☐ Required Action

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Developer is responsible for the required actions below.

☐ No Action Required ☒ Required Action

Action No.	Location	Commitment
1.	Entire project	Permanent soil erosion features would be constructed as soon as possible during the early stage of construction through proper seeding and/or sodding techniques.
2.	Entire project	Disturbed areas would be restored and stabilized as soon as contractors schedule permits. Temporary seeding would be considered where large areas of disturbed ground would be left bare for a considerable length of time. Use only native plants for landscaping and in seeding mixtures where practicable.
3.	USACE property	Compensation for the loss of approx. 3.2 acres of riparian woodlands and individual trees with a diameter at breast height greater than 20 inches. Trees within the ROW, but not in the construction zone, would not be removed if possible. Mitigation for permanent impacts to natural resources on USACE property consists of a direct payment to LLELA or on site mitigation on USACE property. Coordination with USACE is required for final approval.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT.

Developer is responsible for the required actions below.

☐ No Action Required ☒ Required Action

Action No.

1. Prior to any construction activities a qualified biologist shall survey the proposed project corridor for any listed species, due to the time period that would elapse between this evaluation and the start of construction activities.

*TPWD records indicate that the Texas garter snake has been found within the corporate limits of the Town of Hickory Creek on the west side of IH 35E.Care should be taken and brief pre-construction presence/absence survey for the Texas garter snake shall be conducted prior to construction clearing.

REFER TO EPIC SHEET 2 OF 2 - MIDDLE COLUMN
FOR SECTION V - CONTINUATION
FOR LIST OF SPECIES POTENTIALLY WITHIN PROJECT AREA WITH HABITAT DESCRIPTION AND ADDITIONAL ACTIONS

LIST OF ABBREVIATIONS

BMP: Best Management Practice
CGP: Construction General Permit
DSHS: Texas Department of State Health Services
ENV: Environmental Affairs Division
FEMA: Federal Emergency Management Agency
FHWA: Federal Highway Administration
LLELA: Lewisville Lake Environmental Learning Area
MOA: Memorandum of Agreement
MOU: Memorandum of Understanding
MS4: Municipal Separate Stormwater Sewer System
MBTA: Migratory Bird Treaty Act
NOT: Notice of Termination
NWP: Nationwide Permit
NOI: Notice of Intent
SPCC: Spill Prevention Control and Countermeasure
SW3P: Storm Water Pollution Prevention Plan
PCN: Pre-Construction Notification
PPCC: Spill Prevention Control and Countermeasure
PSL: Project Specific Location
SPILLS: Spill Listings
TCEQ: Texas Commission on Environmental Quality
TPDES: Texas Pollutant Discharge Elimination System
TPWD: Texas Parks and Wildlife Department
TxDOT: Texas Department of Transportation
T&E: Threatened and Endangered Species
USACE: U.S. Army Corp of Engineers
USFWS: U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):
Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act. Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Developer shall be responsible for the proper containment and cleanup of all product spills.
Contact TxDOT if any of the following are detected:

* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canisters, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation(s) or replacement(s) (bridge class structures not including box culverts)?
☒ Yes ☐ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?
☐ Yes ☒ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notifiy DSHS 15 working days prior to any scheduled demolition.
In either case, the Developer is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between TxDOT and the asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☐ No Action Required ☒ Required Action

Action No.

1. A review of hazardous materials regulatory databases was conducted to determine if any known sites might affect the construction activites based on the interim schematic. See the Limited Phase 1 Environmental Site Assessment Report.
2. Based on this review 8 sites are categorized as high risk, 7 sites are characterized as moderate risk, 22 sites are categorized as low risk. For the high and moderate risk sites Phase II ESAs are recommended prior to the development of the plans and specifications to confirm or deny the potential presence of contamination. The Phase II ESAs should follow the ASTM Designation E1903-11, Standard Practice for Environmental Site Assessments: Phase II ESAs.
3. Developer shall prepare Hazardous Materials Management Plan (HMMP) which will be followed during construction.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

REFER TO EPIC SHEET 2 OF 2 - RIGHT COLUMN
SECTION VII - CONTINUATION
FOR OTHER ENVIRONMENTAL ISSUES

GENERAL NOTE:

Any change orders and/or deviations from the final design must be reported to TxDOT prior to commencement of construction activities, as additional environmental clearance may be required.

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 Texas Department of Transportation
Dallas District Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 1 OF 2

FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6			IH 35E MIDDLE
STATE	DISTRICT	COUNTY	
TEXAS	DALLAS	DALLAS	
CONTROL	SECTION	JOB	SHEET NO.
0196	03	068, 073, 096, 114, 245	

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404 -- (CONTINUATION FROM EPIC SHEET 1 OF 2)

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1. Section 404 permits from USACE/Section 401 Water Quality Certification from Texas Commission on Environmental Quality (TCEQ) based on the specific roadway work and linear transportation crossings identified in the permits and associated with the Draft Interim Schematic and Draft Interim Schematic ROW.

2. Table of preliminary jurisdictional features would be provided in Addendum 4 or the RID.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT. - (CONTINUATION FROM EPIC SHEET 1 OF 2)

Species Potentially within Project Area w/ Description	Habitat Description
1. Timber/canebrake rattlesnake: black and brown crossbands down the back, broad dark shape present behind the eye, black tail above the rattle up to 25% of the body length.	Swamps, floodplains, upland woodlands, riparian zones, abandoned farmland; prefers dense ground cover, i.e. grapevines or palmetto.
2. Alligator snapping turtle: characterized by a large, heavy head, and a long, thick shell with three dorsal ridges of large scales; are a solid gray, brown, black, or olive-green in color, and often covered with algae; radiating yellow patterns around the eyes.	Perennial water bodies, deep water of rivers, canals, lakes and oxbows; also swamps, bayous, ponds near deep running water; usually in water with mud bottom and abundant aquatic vegetation.
3. White-faced ibis: A dark, chestnut colored-bird with green or purple on its head and upper parts, and a long, down-curved bill. It has reddish legs and feet and red bare skin on the face around the eyes.	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.
4. Mussells (Fawnsfoot, Little spectaclecase, Louisiana pigtoe, Pistolgrip, Rock pocketbook, Sandbank pocketbook, Texas heelsplitter, and Wabash pigtoe): Adult can range from approximately 1-inch to 12-inches in length. Some species have thin shells and shells vary both on the inside and outside of mussels, depending upon the mussel species. Color, texture, and shape variations in shells are used to help identify different types of mussels.	Small and large rivers especially on sand, mud, rocky mud, and sand and gravel, also silt and cobble bottoms in still to swiftly flowing waters.
5. Texas garter snake*: A small to medium sized terrestrial snake that can grow to about a 39-48 inches long. Their backs are green to black, with a distinctive stripe of red or orange, and either side features yellowish stripes.	Wet or moist microhabitats are conducive to the species occurrence, but the snake is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August.
6. Plains spotted skunk: Small slender body with fine black body fur, a white triangular patch on the forehead, four to six broken white stripes extending from the neck along the back and sides, and solid black tail.	Catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact TxDOT immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the TxDOT immediately.

Special Note: The Migratory Bird 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 to 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.

VII. OTHER ENVIRONMENTAL ISSUES - (CONTINUATION FROM EPIC SHEET 1 OF 2)

☐ No Action Required ☒ Required Action

Action No.	Location	Commitment
1. Section 4(f)	USACE property including Copperas Branch Park, Copperas Branch Park East, Arrowhead Park, and Highland Lakes Park	Impacted amenities at Copperas Branch Park would be replaced as described in Book 2, Attachment 4-4.

2. Traffic Noise Mitigation

Noise Barrier 2A	Sta. 1158+19 To Sta. 1159+27 (Right of C/L)	Construct traffic noise barriers 2A and 2B with a 150 ft offset to the right of the centerline. Barrier heights would be 10 ft.
Noise Barrier 2B	Sta. 1160+08 To Sta. 1169+59 (Right of C/L)	
Noise Barrier 5A	Sta. 1348+50 To Sta. 1354+80 (Left of C/L)	Construct traffic noise barriers 5A with a 107 ft offset to the left of the centerline. Barrier heights would be 14 ft.
Noise Barrier 5B	Sta. 1353+76 To Sta. 1357+69 (Left of C/L)	Construct traffic noise barriers 5B with a 189 ft offset to the left of the centerline. Barrier heights would be 10 ft.
Noise Barrier 5C	Sta. 1357+10 To Sta. 1372+95 (Left of C/L)	Construct traffic noise barriers 5C with a 82 ft to 145 ft offset to the left of the centerline. Barrier heights would be 10 ft.
Noise Barrier 5D	Sta. 1380+66 To Sta. 1400+60 (Left of C/L)	Construct traffic noise barriers 5D with a 79 ft offset to the left of the centerline. Barrier heights would be 12 ft.
Noise Barrier 5E	Sta. 1400+32 To Sta. 1409+33 (Left of C/L)	Construct traffic noise barriers 5E with a 148 ft to 152 ft offset to the left of the centerline. Barrier heights would be 12 ft.
Noise Barrier 6A	Sta. 1446+13 To Sta. 1454+19 (Left of C/L)	Construct traffic noise barriers 6A with a 148 ft to 152 ft offset to the left of the centerline. Barrier heights would be 12 ft.
Noise Barrier 6B	Sta. 1454+19 To Sta. 1473+80 (Left of C/L)	Construct traffic noise barriers 6B with a 79 ft offset to the left of the centerline. Barrier heights would be 12 ft.

Special Note
Measures to control fugitive dust would be considered and incoporated into the final design and construction specifications.

See Book 2 (4.3.2) for additional requirements.

GENERAL NOTE:

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 Texas Department of Transportation
Dallas District Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 2 OF 2

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6			IH 35E MIDDLE
STATE	DISTRICT	COUNTY	
TEXAS	DALLAS	DALLAS	SHEET NO.
CONTROL	SECTION	JOB	
0196	03	068, 073, 096, 114, 245	

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3. *All areas should be addressed thoroughly and verify the necessary pay items are set up to support actions needed.*

Revised: September 2012
Prepared by HNTB on 9/18/12

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Revised: September 2012
Prepared by HNTB on 9/18/12

I. STORMWATER POLLUTION PREVENTION PLAN-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 1122.

☐ No Action Required ☒ Required Action

Action No.	Commitment
1. File NOI with TCEQ for CGP	Developer must stabilize the project site as stated in the SW3P.
2. File NOT with TCEQ	Developer must stabilize the project site as stated in the SW3P.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas. No equipment is allowed in any sream channel below the ordinary High Water Mark except on approved temporary stream crossings or drill pads.

The Developer must adhere to all of the terms and conditions associated with the following permit(s):

☐ No Permit Required
☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
☒ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
☐ Individual 404 Permit Required
☐ Other Nationwide Permit Required:

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

REFER TO EPIC SHEET 2 OF 2 - LEFT COLUMN
FOR SECTION II - CONTINUATION
FOR WATERS OF THE U.S DESCRIPTIONS AND APPROXIMATE LOCATION AND ACTIONS

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices for applicable 401 General Conditions:

Erosion	Sedimentation	Post-Construction TSS
☒ Temporary Vegetation	☒ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☒ Rock Berm	☐ Retention/Irrigation Systems
☒ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☒ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact TxDOT immediately.

☒ No Action Required ☐ Required Action

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Developer is responsible for the required actions below.

☐ No Action Required ☒ Required Action

Action No.	Commitment
1.	Permanent erosion features would be constructed as soon as feasible during the early stage of construction through proper sodding and/or seeding techniques.
2.	Disturbed areas would be restored and stabilized as soon as the construction schedule permits. Temporary sodding would be considered where large areas of disturbed ground would be left bare for a considerable length of time. Use only native plants for landscaping and in seeding mixtures where practicable.
3.	Compensate for the loss of approximately 2.27 acres of upland woodlands and 0.49 acre of riparian woodland. Mitigation may occur as in-lieu fee payment to the Lewisville Lake Environmental Learning Center.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT.

Developer is responsible for the required actions below.

☐ No Action Required ☒ Required Action

Action No.	
1.	Prior to any construction activities a qualified biologist shall survey the proposed project corridor for any listed species, due to the time period that would elapse between this evaluation and the start of construction activities.

REFER TO EPIC SHEET 2 OF 2 - MIDDLE COLUMN
FOR SECTION V - CONTINUATION
FOR LIST OF SPECIES POTENTIALLY WITHIN PROJECT AREA WITH HABITAT DESCRIPTION AND ADDITIONAL ACTIONS

LIST OF ABBREVIATIONS

BMP: Best Management Practice
CGP: Construction General Permit
DSHS: Texas Department of State Health Services
ENV: Environmental Affairs Division
FEMA: Federal Emergency Management Agency
FHWA: Federal Highway Administration
MOA: Memorandum of Agreement
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MS4: Municipal Separate Stormwater Sewer System
MBTA: Migratory Bird Treaty Act
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SW3P: Storm Water Pollution Prevention Plan
PCN: Pre-Construction Notification
PPCC: Spill Prevention Control and Countermeasure
PSL: Project Specific Location
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TCEQ: Texas Commission on Environmental Quality
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TPWD: Texas Parks and Wildlife Department
TxDOT: Texas Department of Transportation
T&E: Threatened and Endangered Species
USACE: U.S. Army Corp of Engineers
USFWS: U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):
Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act. Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Developer shall be responsible for the proper containment and cleanup of all product spills.
Contact TxDOT if any of the following are detected:

* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canisters, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation(s) or replacement(s) (bridge class structures not including box culverts)?
☒ Yes ☐ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?
☐ Yes ☒ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notifiy DSHS 15 working days prior to any scheduled demolition.

In either case, the Developer is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between TxDOT and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☐ No Action Required ☒ Required Action

REFER TO EPIC SHEET 2 OF 2 - RIGHT COLUMN
SECTION VI - CONTINUATION
FOR OTHER HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☐ No Action Required ☒ Required Action

Action No.	Location	Commitment
1. Noise Barrier NW5	Sta. 1995+66 To Sta. 2004+74 (Right of C/L)	Construct traffic noise barriers NW5 with a 146 ft to 147 ft offset to the right of the centerline. Barrier heights would be 12 ft.

Special Note
Measures to control fugitive dust would be considered and incoporated into the final design and construction specifications.

See Book 2 (4.3.2) for additional requirements.

GENERAL NOTE:

Any change orders and/or deviations from the final design must be reported to the Engineer prior to commencement of construction activities, as additional environmental clearance may be required.

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Dallas District Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 1 OF 2

FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6			IH 35E
STATE	DISTRICT	COUNTY	NORTH
TEXAS	DALLAS	DALLAS	
CONTROL	SECTION	JOB	SHEET NO.
195, 196	03 01	050, 071, 056, 074	

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404 -- (CONTINUATION FROM EPIC SHEET 1 OF 2)

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1. Section 404 permits from USACE/Section 401 Water Quality Certification from Texas Commission on Environmental Quality (TCEQ) based on the specific roadway work and linear transportation crossings identified in the permits and associated with the Draft Interim Schematic and Draft Interim Schematic ROW.

2. Table of preliminary jurisdictional features would be provided in Addendum 4 or the RID.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT. - (CONTINUATION FROM EPIC SHEET 1 OF 2)

Species Potentially within Project Area w/ Description	Habitat Description
1. Timber/canebrake rattlesnake: black and brown crossbands down the back, broad dark shape present behind the eye, black tail above the rattle up to 25% of the body length.	Swamps, floodplains, upland woodlands, riparian zones, abandoned farmland; prefers dense ground cover, i.e. grapevines or palmetto.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact TxDOT immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact TxDOT immediately.

Special Note: The Migratory Bird 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 to 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.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES (CONTINUATION FROM EPIC SHEET 1 OF 2)

Action No.

1. A review of hazardous materials regulatory databases was conducted to determine if any known sites might affect the construction activites based on the interim schematic. See the Limited Phase 1 Environmental Site Assessment Report.
2. Based on this review 3 sites are categorized as high risk, 0 sites are characterized as moderate risk, 41 sites are categorized as low risk. For the high and moderate risk sites Phase II ESAs are recommended prior to the development of the plans and specifications to confirm or deny the potential presence of contamination. The Phase II ESAs should follow the ASTM Designation E1903-11, Standard Practice for Environmental Site Assessments: Phase II ESAs.
3. Developer shall prepare Hazardous Materials Management Plan (HMMP) which will be followed during construction.

GENERAL NOTE:

Any change orders and/or deviations from the final design must be reported to TxDOT prior to commencement of construction activities, as additional environmental clearance may be required.

---D R A F T---

This document is released for informational purposes and is subject to change based on comments from approving agencies and public input. It is not to be used for construction purposes.

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 2 OF 2

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6			IH 35E
STATE	DISTRICT	COUNTY	NORTH
TEXAS	DALLAS	DALLAS	SHEET NO.
CONTROL	SECTION	JOB	
195, 196	03 01	050, 071, 056, 074	

1. *Do not alter Sheet Design or Font style, size or weight - match text attributes.*
2. *If additional space is needed for a numbered section, fence and adjust sections up or down as needed for proportioning and readability but do not relocate from its relative position.*
3. *All areas should be addressed thoroughly and verify the necessary pay items are set up to support actions needed.*

Revised: September 2012
Prepared by HNTB on 9/18/12