APPENDIX I
REAL ESTATE PLAN

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APPENDIX I

REAL ESTATE PLAN

DALLAS FLOODWAY FEASIBILITY STUDY

DATE OF REPORT

December 16, 2014

PREPARED BY

REAL ESTATE DIVISION
U.S. ARMY CORPS OF ENGINEERS
FORT WORTH DISTRICT

This Real Estate Plan has been prepared in accordance with ER 405-1-12 dated 1 May 1998.

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1.0 PURPOSE

This Real Estate Plan has been prepared in support of the feasibility study that describes the lands, easements, rights-of-way, relocation, and disposal material areas (LERRDs) required for the Dallas Floodway Feasibility Study in Dallas County, Dallas, Texas. This plan refers to all the lands needed for the construction, operation and maintenance of the National Economic Development (NED) Flood Risk Management (FRM), the Balanced Vision Plan (BVP) and the Interior Drainage Plan (IDP) referred to as the "Water Resources Development Act (WRDA) 2007" authorized project. The WRDA project is a subset of the overall City of Dallas' BVP and IDP. It includes the NED FRM Plan, levee side slope flattening, Emergency Action Plan (EAP), Ecosystem Restoration and the pump station and sump improvements part of the East Levee IDP. In addition, the Water Resources Reform and Development Act (WRRDA) 2014 was signed into law on June 10, 2014, which amended WRDA 2007 to insert the Interior Levee Drainage Study Phase II report dated January 2009, referred to as the West Levee IDP. The West Levee IDP is part of the WRDA 2007 project. Construction of this plan would occur over an approximately 15-year period, beginning in 2015. In order to construct the project efficiently and to be technically sound and environmentally acceptable, appropriate project phasing is imperative. The Dallas Floodway Levee System is owned by the City of Dallas. The City of Dallas is the non-Federal sponsor and is responsible for acquiring all the LERRDs impacted by the WRDA 2007 and its subsequent amended WRRDA 2014, as the overall Modified Dallas Floodway Project.

2.0 DALLAS FLOODWAY HISTORY

Dallas Floodway is located in the City of Dallas along the Trinity River, upstream from the abandoned Atchison, Topeka and Santa Fe (AT&SF) Railroad Bridge to the confluence of the West Fork and Elm Fork Levee split. The levee splits upstream along the West Fork for approximately 2.2 miles, and upstream about 4 miles along the Elm Fork. Of the 22.6 miles of levees, the East Levee is 11.7 miles in length and the West Levee is 10.9 miles in length. Prior zoning and urban development in the Dallas Floodway Levee System use to include mixed neighborhoods, commercial and industrial businesses. Today's land use in the Dallas Floodway Levee System is vacant and open space.

Historic flood events such as the 1908, 1935, and 1942 Floods prompted Officials of the City of Dallas to construct the Dallas Floodway Levee System between 1928 and 1931, to reduce flood risk and provide flood protection to the citizens of Dallas. In 1945 and 1950, Congress approved and authorized the Dallas Floodway. After authorization, the United States Army Corps of Engineers (USACE) Fort Worth District performed major upgrades to the levees and constructed upstream reservoirs to reduce flood risk to the citizens and City of Dallas, completing construction in 1958. In 1990, a massive flood resulted in the Mayor and Officials of Dallas authorizing and approving with citizen voter approval, a bond package to fund flood control, transportation and recreation projects within the Dallas Floodway Levee System, also referred to by the City of Dallas as the "Trinity River Corridor Project." The Dallas Floodway is in partnership with the City of Dallas and USACE. The Trinity River Corridor Project is comprised of the Transportation and Community/Economic Development components of the BVP, as well as Local Feature projects of the City of Dallas. All of these projects require Section 408 submittal packages for review and approval processes by USACE. Ultimately, this requires project cooperation and partnerships with multiple local, state and Federal interests. USACE has the responsibility for all activities within the federally authorized Dallas Floodway Levee System and a small supporting role in the City's other projects, as an overseer.

3.0 DESCRIPTION OF TENTATIVELY SELECTED PLAN

Table 1 presents the City of Dallas' BVP and IDP project features and the subset Modified Dallas Floodway Project. The Modified Dallas Floodway Project includes the NED FRM Plan (277,000 cubic feet per second levee raise with Atchison, Topeka, and Santa Fe (AT&SF) Railroad Bridge modifications, levee side slope flattening, and EAP improvements); the Ecosystem Restoration Plan (Trinity River Relocation and modifications, existing Corinth Wetlands and Interior Drainage Outfall Extensions modifications); the IDP Phase I (East Levee - Hampton and Baker pump stations, and the Nobles Branch sump improvements), and the IDP Phase II (West Levee – Charlie, Delta and Trinity-Portland Pump Stations and Eagle Ford and Trinity-Portland Sump improvements). Currently, the Modified Dallas Floodway Project assumes the City of Dallas' Trinity Parkway Project would be constructed along the riverside toe of the East Levee. The remaining BVP and IDP features not included in the MDFP will be pursued by the City of Dallas under Section 408. Alternative 2 listed in the table refers the Dallas Floodway Project proposed action in the Environmental Impact Statement prepared under Section 5141 of WRDA 2007, as amended.

Table 1. Balanced Vision Plan and Interior Drainage Plan Features

Category	*Description*	*WRDA*[1]	*Alternative 2*	
			MDFP	*BVP/IDP*[2]
BVP Flood Risk Management				
Levees	Raise to 277,000 cfs Flood Height	✓	✓	
AT&SF	Removal of Wood Bridge Segment	✓	✓	
	Removal of Concrete Bridge Segment	✓	✓	
	Removal of Embankment Segments	✓	✓	
Levee Flattening	Flattening the Riverside Levee Side Slopes to 4H:1V[3]	✓	✓	
Cut-off Wall	Extend Cut-off Wall along the East Levee[4]	✓	✓	
Nonstructural	Emergency Action Plan Improvements	✓	✓	
	Install piezometers in the Floodway[4]	✓	✓	
BVP Ecosystem and Recreation				
Lakes	West Dallas Lake	✓		✓
	Urban Lake	✓		✓
	Natural Lake	✓		✓
River	Realignment and Modification	✓	✓	
Wetlands	Marshlands	✓		✓
	Corinth Wetlands	✓	✓	
Athletic Facilities	Potential Flex Fields	✓		✓
	Playgrounds	✓		✓
	River Access Points	✓		✓
General Features	Parking and Public Roads	✓		✓
	Lighting	✓		✓
	Vehicular Access	✓		✓
	Pedestrian Amenities	✓		✓
	Forested Ponds	✓		✓
	Restrooms	✓		✓

Category	*Description*	*WRDA*[1]	*Alternative 2*	
			MDFP	*BVP/IDP*[2]
Interior Drainage Outfall Extensions	Extend Pump Station Outfalls	✓	✓	
	Extend Pressure Sewer Outfalls	✓	✓	
Able Sump Ponds	Recreation and Ecosystem Enhancements	✓		✓
IDP Flood Risk Management				
East Levee	Demolish Old Hampton Pump Station	✓	✓	
	Construct New Hampton Pump Station		✓	
	Nobles Branch Sump Improvements	✓	✓	
	Construct New Baker Pump Station		✓[5]	
	Construct New Able Pump Station[6]	✓		
West Levee	Demolish Old Charlie Pump Station	✓	✓	
	Construct New Charlie Pump Station	✓	✓	
	Rehabilitate Existing Delta Pump Station	✓	✓	
	Construct New Trinity-Portland Pumping Plant	✓	✓	
	Construct New Pavaho Pump Station[6]	✓		
	Eagle Ford and Trinity-Portland Sump Improvements	✓		✓
	Pavaho and Delta Sump Improvements	✓		✓

Notes: [1] Includes Section 5141 of the WRDA 2007, as amended by WRRDA of 2014.

[2] Remaining non-Federal BVP elements to be completed by the City of Dallas under a future Section 408 submittal.

[3] Included in the MDFP, and entirely paid for by the City of Dallas as a betterment.

[4] Included in the MDFP as a risk mitigation feature of the River Relocation.

[5] The Baker Pump Station is part of the MDFP but was analyzed for NEPA compliance separately (Corps 2012).

[6] Able and Pavaho are not part of the MDFP and were processed under Section 408.

Dallas Floodway was originally authorized March 2, 1945 by Public Law 14, 79th Congress, first session and then amended in 1950 by Public Law 516, 81st Congress, second session to participate in the reconstruction of the Dallas Floodway levees and flood control works. This feasibility study for the Dallas Floodway Levee System was authorized by Section 5141 of WRDA 2007 as follows:

(a) IN GENERAL. – The project for flood control, Trinity River and tributaries, Texas, authorized by Section 2 of the Act entitled, "An Act authorizing the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," approved March 2, 1945 (59 Stat. 18), is modified to –

(1) direct the Secretary to review the Balanced Vision Plan for the Trinity River Corridor, Dallas, Texas, dated December 2003 and amended in March 2004, prepared by the non-Federal interest for the project;

(2) direct the Secretary to review the Interior Levee Drainage Study Phase -1 report, Dallas, Texas, dated September 2006, prepared by the non-Federal interest; and

(3) if the Secretary determines that the project is technically sound and environmentally acceptable, authorize the Secretary to construct the project at a total cost of $459,000,000, with an estimated Federal cost of $298,000,000 and an estimated non-Federal cost of $161,000,000.

(b) CREDIT. –

(1) IN-KIND CONTRIBUTIONS. – The Secretary shall credit, in accordance with section 221 of the Flood Control Act of 1970 (42 U.S. Code [U.S.C.] 1962d-5b), toward the non-Federal share of the cost of the project the cost of planning, design, and construction work carried out by the non-Federal interest for the project before the date of the partnership agreement for the project.

(2) CASH CONTRIBUTIONS. – The Secretary shall accept funds provided by the non-Federal interest for use in carrying out planning, engineering, and design for the project. The Federal share of such planning, engineering, and design carried out with non-Federal contributions shall be credited against the non-Federal share of the cost of the project."

A modification to WRDA 2007 was documented in WRRDA 2014, as follows:

SEC. 4301. TECHNICAL CORRECTIONS

(d) TRINITY RIVER AND TRIBUTARIES – Section 5141(a)(2) of the Water Resources Development Act of 2007 (121 Stat. 1253) is amended by inserting "and the Interior Levee Drainage Study Phase-II report, Dallas, Texas, dated January 2009," after "September 2006,".

The above cited legislation authorizes the West Levee IDP as part of the WRDA 2007.

4.0 DESCRIPTION OF THE RECOMMENDED PLAN

The Modified Dallas Floodway Project from Table 1 is the Recommended Plan and consists of the NED FRM Component, Ecosystem Restoration, and East and West Levee IDP projects. The Recommended Plan is presented in Addendum 1, Figures 1-3.

4.1. NED FRM Component

The recommended plan work involves the abandoned AT&SF Railroad Bridge modifications combined with levee height modifications to contain a 277,000 cubic feet per second water surface elevation which will result in levee raises along the low spots of the Dallas Floodway Levee System. In addition, EAP would be implemented with a more updated emergency action plan to alert the elderly population over 65, special needs households and other personnel targeted to evacuate during major flood events.

4.2. Ecosystem Restoration

Ecosystem Restoration involves the Trinity River Relocation with modifications and utility adjustments or relocations. The Corinth Wetlands extend from Oxbow Lake, downstream between the relocated Trinity River and the West Levee. The intent of this feature is to expand the existing wetlands in this area. USACE would participate in vegetation plantings and excavation of the Corinth Wetlands. The total size of the Corinth Wetlands is approximately 84 acres.

4.3. Interior Drainage Plan

The IDP features involve improvements being made to the existing East and West Levees interior drainage levee system. The work plan includes constructing new and rehabilitating existing pump stations, and improving some of the existing sump areas associated with those pump stations.

5.0 LANDS, EASEMENTS, AND RIGHTS-OF-WAY FOR THE RECOMMENDED PLAN

This section discusses the lands, easements, and rights-of-way (LER) required for the Modified Dallas Floodway Project – Recommended Plan features and their purpose as it relates to the acreages, estates and number of tracts and ownerships.

5.1. NED FRM Component

The NED FRM land requirements are to construct levee raises with AT&SF Railroad Bridge modifications, levee side slope flattening, a borrow pit site, and temporary construction staging areas. The Dallas Floodway Levees (Elm Fork, West Fork, East and West Levees) would be raised in low spots along the levee system to contain a 277,000 cubic feet per second water surface elevation flow within the levee system. The levee raises would effect change to the West Fork and West Levees at approximately 29 reach areas for a combined approximately 25.31 acres and the Elm Fork and East Levees at approximately 19 reach areas for a combined approximately 26.41 acres. Raising the levees requires removing the top 8-inches of levee fill along the existing slopes to accommodate a 4H:1V side slope design. USACE levee height modifications required flattening to a 3H:1V design, however, variances in the slopes creates an operation and maintenance challenge for the City of Dallas. To alleviate this issue, the City of Dallas recommended that the levee side slope flattening be constructed at a 4H:1V design. The Project Delivery Team (PDT) analyzed the concept and determined the levee side slope flattening at a 4H:1V design would be constructed as a 100% non-federal betterment cost. Levee flattening will be designed at 4H:1V levee height modification on the riverside entire length of the levees and include a 16 feet levee crest width. The existing access roads that are on the crest of the levees will require 8-inches of levee crest excavated and be removed at any location where a levee raise is proposed. The borrow pit site would be excavated for material in the overbank region of the West Levee near Westmoreland Road/Mockingbird Lane. The borrow pit site would be excavated at a maximum depth of 6-8 feet, 200 feet from the toe of the levee, 50-100 feet from the Trinity River, utilizing approximately 16.41 acres. This site location is considered environmentally suitable material for the riverward levee side slope flattening and levee raises. Also, the borrow pit location is the site of the City's proposed BVP – West Dallas Lake project. Any additional excavated material not utilized during the levee work will be taken to a disposal site owned by the City for reuse toward the City's BVP local feature projects. Temporary construction staging areas will be located on land already owned by the City of Dallas. These areas will be determined during the preconstruction, engineering and design phase. The AT&SF Railroad Bridge would require removal of different structural segments of the bridge, 900 linear feet of wooden trestle bridge, 600 linear feet of concrete bridge and 970 linear feet of earthen embankment. Removal of the bridge segments will allow continuous water surface elevation flows through the Trinity River and avoid debris clogging within the Dallas Floodway Levee System. Demolition of the segments will be a construction project cost. The AT&SF Railroad Bridge is an abandoned structure owned by the Dallas Area Rapid Transportation (DART). This bridge is listed on the National Register of Historic Places.

Section 405(a) of the 2010 Supplemental Disaster Relief and Summer Jobs Act (Public Law 111-212) states that the Army is not required to make determinations of eligibility under the National Historic Preservation Act for the Dallas Floodway Project. The Corps Implementation Guidance dated October 19, 2010 directs the Fort Worth District not to make further determinations under the National Historic Preservation Act. The non-structural feature would require modifying and implementing the City's operational action plan to alert the elderly population over 65, special needs households and other personnel targeted to evacuate during flood events. The City of Dallas improvement measures would activate emergency response and public awareness through initiating transportation network improvements, utilizing public transportation and emergency response improvements as an added notification mechanism. USACE proposes to install piezometers in critical areas along the levee system to monitor groundwater and estimate the water flow and sand layer for potential underwater seepage concerns to the levee system.

Based on the NED FRM features, no land is to be acquired outside of the existing Dallas Floodway Levee. The City of Dallas owns in fee and by perpetual easements the tracts of land located between the East and West Levees commencing at the confluence of the Dallas Floodway downstream to the AT&SF Railroad Bridge. Previous lands were acquired in the 1920's by the Dallas County Levee Improvement District No. 5 for the original levee construction. In the 1960's the City of Dallas acquired tracts of lands in this vicinity that resulted in upgraded improvements to the levees as part of the initial Federal project performed by USACE. The Dallas Floodway Levee System will not be counted as a LERRD requirement in this feasibility study. It is not known the number of tracts or ownerships acquired along the Elm Fork and West Fork Levees. Ownership data research along the Elm Fork and West Fork Levees is currently being investigated by the City of Dallas. However, there are 64 tracts of land with approximately 1,897 acres acquired by the City of Dallas between the East and West Levees, beginning at the confluence of the Elm Fork and West Fork Levee split downstream to the AT&SF Railroad Bridge.

5.2. Ecosystem Restoration

Ecosystem restoration land requirements would consist of the Trinity River Relocation with modifications, existing Corinth Wetlands and improvements to the interior drainage outfall extensions. The Trinity River Relocation would begin upstream at the confluence of the West Fork and Elm Fork Levees, extending downstream for approximately 8 miles, merging with the existing river channel near Corinth Avenue. Realignment would be designed to avoid changes in the water surface elevation associated with the 100-year discharge and standard project flood while controlling water conveyance in the river channel from the interior storm drain discharge outfalls. Environmental restoration would create more natural riverine habitat which the Trinity River achieved prior to major flood events. Modifications to the river relocation would include vegetation plantings, river edge treatments, erosion protection, excavation and backfilling of the new river channel. In conjunction with the river realignment, existing features required to improve the river channel water surface elevation encompasses the IDP drainage structures and the City of Dallas' BVP local feature Three Lakes Project (West Dallas, Urban, and Natural Lakes) that requires Section 408 permits from USACE to the City of Dallas for approval compliance with the Federal levees. The existing Corinth Wetlands are proposed to be expanded at its current location by landscape configuration and riparian woodland plantings. The existing storm water outfalls would require modifications to accommodate the Trinity River Relocation water flow capacity with the improvements associated with the interior drainage plan.

As part of the Trinity River Relocation feature related to the 277,000 cubic feet per second water surface elevation, there are bridge-levee impacts that need to be addressed during the realignment of the river. Bridge work is required due to bridges having low chord or bridge deck elevations crossing the levee floodway. Multiple existing bridges cross the levee floodway. However, it was determined by the PDT analysis, four bridge crossings are interfaced with the levee due to bridge beams/deck spanning the levee, bridge abutment at/within the levee and a historic bridge special case scenario. First is the Corinth Avenue Bridge at the East Levee impacted by the bridge beams/deck spanning the levee. Corinth crosses the levee crest with the bridge abutment located on the land side, a distance from the levee. It is not considered feasible to raise the Corinth Bridge, so the preliminary resolution is to construct a structural cap on top of the levee crown to fit between and around the bridge beams. Next are the Union Pacific Railroad and SH-356 Bridges at the East Levee impacted by bridge abutments near or at the levee crest. Remedy for these bridges would be to reconfigure the levee on the land side of the abutment to allow raising the levee without modifying the bridges. Last, Houston Street Bridge at the West Levee. This bridge is listed on the National Register of Historic Places due to it being landmark structure that was first built over the Dallas Floodway Levee System in 1910. The bridge deck is lower than the top of the abutting levee at the intersection. The levee was built around the bridge and the levee rises above the bridge deck. The most flood risk reduction technique determined for the Houston Bridge would be to provide non-permanent measures such as sand bags, temporary floodwalls or traffic barriers to alert against a potential flood event in this area. Submittal design plans have not been fully developed for the bridge-levee impacts only discussed as the outlined bridges affected by the features. In addition, bridge pier modifications would be required as well for the Westmoreland Street, Continental Avenue, Union Pacific Railroad, Commerce Street, Houston Street, Jefferson Boulevard, IH-35E Southbound and IH-35E Northbound Bridges. Modifications are required due to the river relocation affecting the bridge piers and by construction of the City's BVP - Three Lakes Project to accommodate proper scour and erosion protection around the bridges. Design for the bridge pier modifications are at 20% submittal. All bridge work detail designs will be developed and reviewed in the future. Most of the bridges are owned by City of Dallas except for the Union Pacific Railroad, SH-356 and IH-30 and IH-35E bridges. Perpetual easements for IH-30 and IH-35E have been executed between the City of Dallas and the State of Texas to allow for the FRM and BVP project components. These easements are nonexclusive and subject to the City's BVP for the Trinity River as well as the federal levee floodway project purposes. We will investigate with the City to determine if they have perpetual easements with the Union Pacific Railroad Bridge and the SH-356 Bridge. The proposed bridge work is not considered as a LERRD requirement for this feasibility study, as the work is counted as a construction project cost aligned with the Trinity River Relocation that is an FRM component. Also, it is presumed and will be investigated that the City of Dallas should have acquired the proper real estate for the land and structures that impact the Dallas Floodway Levee System.

Interior drainage outfalls collect storm water from various areas of the City, and then releases the water into the sump areas that eventually flows into the Trinity River. With the relocation of the Trinity River, several existing outfall channels will no longer reach the river once the river is realigned resulting in extending the outfalls in order to accommodate the drainage system improvements. Improvements to the IDPs would increase the amount of discharge releasing into the levee floodway. The outfalls that are to be altered in varying lengths include the Baker, Charlie and Delta pump stations and the Belleview, Dallas Branch and Woodall Rodgers pressure sewers.

Utilities that either crosses the levee system or drain into the Trinity River would require relocating and/or adjusting the utilities to accommodate the realigned Trinity River and the interior drainage facility outfall extensions. Addendum 2, Figures 1-2, presents the required utilities to be relocated or adjusted.

USACE is the overseer for the City of Dallas' BVP and IDP projects to provide technical soundness and environmental acceptability to the Federal design of the Modified Dallas Floodway Project. The City of Dallas is responsible for the operation, maintenance, repair, rehabilitation, and replacement work in the Federal project after completion and the City's BVP and IDP local feature projects within the Modified Dallas Floodway. The City of Dallas is eligible for LERRDs credit acquired for the IDP component as well as the utility relocations and/or adjustments necessitated by the Trinity River Relocation but not for the existing bridge modification work planned as part of the Recommended Plan.

5.3. Interior Drainage Plan

The IDP consists of improvements to the existing East and West Levees Interior Drainage System referred to as pump stations, sumps, outfalls and pressure sewers. The IDP improvements intent is to provide storm water flood risk management protection from a 100-year storm event. Improvements to the pump stations includes the Baker and Hampton on the East Levee, Charlie and Delta on or adjacent to the West Levee and the proposed Trinity-Portland on or near the West Fork Levee. The IDP involves rehabilitating, demolishing existing pump stations and replacing demolished stations with new constructed pump stations for heavier water discharge capability. IDP land requirements impacts are explained as follows:

5.3.1 East Levee Interior Drainage Plan

Baker Pump Station consists of approximately 3,418 acres located on the landside of the East Levee, between Hampton and Sylvan Bridges. It has two existing pump stations – Old Baker and New Baker, which will replace the Old Baker Pump Station with the construction of Baker 3 Pump Station designed to handle water flow capacity of 700,000 gpm. Existing New Baker will remain operational. Combined water flow capacity with the New Baker and Baker 3 Pump Stations becomes 1,100,000 gpm. Currently, Baker 3 is in construction with a completion date of 2014.

Hampton Pump Station consists of approximately 6,355 acres located on the East Levee, upstream from Hampton Road crossing the levee system. It has two existing pump stations – Old Hampton and New Hampton, which will replace the Old Hampton Pump Station with the construction of Hampton 3 Pump Station designed to handle water flow capacity of 500,000 gpm. Existing New Hampton will remain operational. Combined water flow capacity with the New Hampton and Hampton 3 Pump Stations becomes 700,000 gpm.

5.3.2 West Levee Interior Drainage Plan

Charlie Pump Station consists of approximately 779 acres located adjacent to the West Levee, between Jefferson and Zang Boulevard. The existing pump station will be demolished with the construction of New Charlie Pump Station. The new water flow capacity becomes 225,000 gpm.

Delta Pump Station consists of approximately 4,414 acres located on the West Levee, upstream of Hampton Road. Its existing pump station will be renovated with improvements to the sump outfall area to prevent erosion and preserve the levee. Currently, the design is not fully developed for the river relocation. Also, a new constructed Delta Pump Station with concrete paving, transformer pad, and fencing is proposed around the entire station area. It will need to be remediated in the future for technical sound compliance similar to the other pump stations feasibility design level.

Trinity-Portland Pump Station is the new station that would be located on the West Fork Levee near Mexicana Drive. Currently, the design is not fully developed. Land requirement for this construction will be located outside of the City of Dallas' property boundary in Dallas County. The land is owned by the City of Irving. It is included in the 9 tracts of lands required for the IDP component.

In addition, the existing Nobles Branch Sump would require sump improvement at its location of Empire Central Drive. Location of this work is on the landside of the Elm Fork Levee and requires the construction of three 60-inch gated culverts. Along the West Fork Levee, the existing Eagle Ford and Trinity-Portland Sump is located near Mexicana Drive where the proposed Trinity-Portland pump station is to be constructed. This sump work would be to construct a 6 feet by 6 feet gated culvert with a remote operated motor controller. Other improvements for the sumps are to construct their intake pipes. This work is considered minimal and is not expected to affect the capacity of the sumps ability to maintain designed water levels. All work to the sumps will not affect the levees.

The lands required for the Modified Dallas Floodway Project – Recommended Plan consists of 9 tracts of land for the IDP improvements that are located outside of the Dallas Floodway Levee System. These tracts are identified in Addendum 3, Figures 1-4. The properties are comprised of commercial and agricultural vacant lands and industrial and residential improved lands. The total acreage needed for the 9 tracts is approximately 29.69 acres with all the tracts to be acquired in fee. The acreages necessary for the IDP features were determined based on design drawings for the latest submittals of the various features at the time of the draft report. These properties are needed for the City's modification work to their existing pump stations as well as the new construction of the Hampton 3, Delta and Trinity-Portland Pump Stations. The Baker 3 Pump Station is currently being constructed on Irving Boulevard. Baker is part of the Recommended Plan with an estimated construction completion date of September 2014. Its real estate cost was provided by the City of Dallas as sunk cost and did not require a LERRDs cost estimate. Although Baker is almost complete, Addendum 3, Figure 2 presents the Baker interior drainage alignment as it relates to the project. The Hampton 3 Pump Station will be in close proximity to its existing plant located between Westmoreland and Inwood Street Viaducts within the levee system. Since current designs for the Delta pump station are not fully developed, assumption is made that the proposed constructed station will remain at its existing location on the West Levee upstream from Hampton Road. Modifications to the existing Charlie Pump Station would be located between the Jefferson Street Viaduct and Zang Boulevard/IH-35E on the West Levee. Construction of the Trinity-Portland Pump Station would be near Perimeter Road and the West Fork Levee. Of the 9 tracts to be acquired for the East and West Levees IDP, 3 tracts are near the East Levee and the remaining 6 tracts are on or near the West and West Fork Levees.

Table 2. Lands, Easements, And Rights Of Way - Dallas Floodway Levee System
City of Dallas' Interior Drainage Plan Properties

Estate	*Tracts*	*Estimated Value*
PROJECT PURPOSE: Flood Risk Management		
PROJECT FEATURE: Dallas Floodway Levee System		
West Levee - Fee Estate	6	$527,794
East Levee - Fee Estate	3	$7,180,178

The standard estates proposed for the IDP improvement features and the utility relocations and/or adjustments are the fee estate and utility and/or pipeline easement. The estates are numbered as appears in Chapter 5 of Engineer Regulation 405-1-12.

1. FEE

The fee simple title to (the land described in Schedule A0 (Tracts Nos. ____, ____ and ____), subject however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

13. UTILITY AND/OR PIPELINE EASEMENT

A perpetual and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos., _____, _____ and _____) for the location, construction, operation, maintenance, alteration; repair and patrol of (overhead) (underground) (specifically name type of utility or pipeline) ; together with the right to trim, cut, fell and remove there from all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

6.0 LANDS EASEMENTS, AND RIGHTS-OF-WAY ALREADY OWNED BY THE CITY OF DALLAS

In the mid 1920s, the Elm Fork and West Fork Levees were constructed by the Dallas County Levee Improvement District No. 5 to protect the City of Dallas and its population, commercial, industrial, residential and agricultural lands. In 1926, the Dallas County Levee Improvement District No. 5 was dissolved and a second levee district named City and County of Dallas Levee Improvement District was created by the Dallas County Commissioners Court. This levee district footprint extended from the confluence of the Elm Fork and West Fork Levees of the Trinity River downstream to the AT&SF Railroad Bridge that defines the end of the existing Dallas Floodway. The levee floodway was defined by the flood delineation limits of the first known major flood event of 1908. Additionally in 1926, a Joint Reclamation Plan was adopted and filed that combined approximately 10,650 acres reclaimed along the Trinity River as the Elm Fork Levee and West Fork Levee footprint between the two levee districts. Reclamation was completed in 1932. We have not received ownership documentation for the existing Elm Fork Levee nor the West Fork Levee footprint. The lands shown in Addendum 1, Figure 4 along the Elm Fork is in the ownership of the City of Dallas as stated from the Dallas County Appraisal District documentation. The City's Real Estate Staff is researching the ownership documentation along the footprint of the Elm and West Forks. We will continue to pursue the ownership documentation and feel

since there are no land owners or improved structures impeding the levee floodway, the risk to proceed with the project is considered low. The City of Dallas will have to obtain new title records for the missing deeds along the Elm Fork Levee and the West Fork Levee, if unable to provide documentation. Addendum 1, Figure 4 displays the Recommended Plan features overlaid on existing lands owned by the City of Dallas in the Modified Dallas Floodway Project.

Ownership research was performed for existing documentation on the ownership of lands in the Dallas Floodway Project from the confluence downstream to approximately the AT&SF Bridge. Based on a report prepared in 2004, the City of Dallas has acquired 64 tracts of land, totaling approximately 1,897 acres, located from the Westmoreland Bridge, extending downward between the East and West Levee to the AT&SF Railroad Bridge. The report was land ownership research for the Trinity Parkway alignment for alternatives considered in their EIS. A majority of this land between the East and West Levee, totals approximately 1,530 acres (of the 1,897) comprised of 24 tracts, were donated by Industrial Properties Corporation to the City of Dallas in 1972 and 1973. The provision in the instrument conveyed full control to the City of Dallas to do any and all things necessary to control floodwaters, prevent damage to persons and property from the floodwaters of the Trinity River and its tributaries as well as to maintain and operate the improvements made by the USACE in the flood control system. In addition, the City of Dallas acquired approximately 365 acres comprised of 38 tracts that were conveyed to the City of Dallas by the City and County of Dallas Levee Improvement District, Dallas County Levee Improvement District No. 5 and Dallas County Flood Control District instrument dated September 1968. The levee districts acquired title to these tracts between 1926 and 1929. No specific land uses were outlined in the deeds. The remaining 2 tracts of lands comprised of approximately 1 acre each were acquired in fee by the City of Dallas in 1966. Review of the East Levee and West Levee conveyance documents determined that the City of Dallas has perpetual ownership interest in, on and over the East Levee and West Levee with sufficient real property interests available to support the Modified Dallas Floodway Project from the confluence split of Elm Fork Levee and West Fork Levee to the AT&SF Railroad Bridge.

7.0 NON-STANDARD ESTATES

There are no non-standard estates associated with this feasibility study.

8.0 EXISTING FEDERAL PROJECTS

The Dallas Floodway Extension Project is a Federal project in close proximity to the existing Modified Dallas Floodway Project.

Dallas Floodway Extension begins downstream of the AT&SF Railroad Bridge which is the end of the Modified Dallas Floodway Project. The railroad bridge is the division boundary between the two projects. The Project Cooperation Agreement for the Dallas Floodway Extension was executed in December 2001 with the Lower Chain of Wetlands construction contracts beginning in 2004 and completed in 2008. Dallas Floodway Extension is an on-going construction project of the Upper Chain of Wetlands which is scheduled for contract award in 2014 and the planning phases for the proposed construction of the Lamar Levee and modifications to the existing Rochester Levee. The Dallas Floodway Extension Project is aim to provide flood risk management, ecosystem restoration, mitigation and recreation components to the project area. Both the Modified Dallas Floodway and Dallas Floodway Extension project lands are independent of each other, they do not overlap.

The City of Dallas is the non-Federal sponsor for both projects. No Federal land holdings are in the project lands.

9.0 FEDERALLY-OWNED LAND

There is no federally owned land associated with this project.

10.0 NAVIGATIONAL SERVITUDE

For purposes of the Modified Dallas Floodway Project, (NED FRM and City of Dallas' IDP components), there is no real estate interests to be acquired over or under the Trinity River for this project, which are considered to be navigable water of the United States. Navigational servitude is non-applicable to the Modified Dallas Floodway Project.

11.0 PROJECT MAPS

Prior to the preconstruction, engineering and design, the most accurate delineated real estate maps necessary for the construction, operation and maintenance of the project recommended plan alignment will be obtained. Project maps are included in the Addendums of this report.

- Addendum 1 – General Project Maps
- Addendum 2 – Utility Relocations Table and Maps
- Addendum 3 – Interior Drainage Plan Acquisition Tracts

12.0 INDUCED FLOODING

There will be no induced flooding by implementing the Modified Dallas Floodway Project.

We reviewed the hydrology and hydraulics report and examined the Modified Dallas Floodway Project maps. Under the Fifth Amendment, the Government is held liable for induced flooding when operation of a flood control project is caused by permanent flooding or intermittent flooding. It was concluded the project would not cause land to be permanently submerged nor does the project land include construction of dams or water release infrastructures that could create a foreseeable inundation of water. The project effect only valley storage and peak water surface elevation impacts at a 1% annual chance exceedance flood event, rather than a recurring overflow.

13.0 RELOCATION ASSISTANCE PROGRAM PUBLIC LAW 91-646

The NED FRM Component for the Recommended Plan requires no structural relocation of homes or businesses as this work is located within the existing Dallas Floodway Levee System. The IDP Component, which is included in the Modified Dallas Floodway Project, includes interior drainage modification work to existing or new pump station facilities. Based on the East and West Levee IDP Pump Stations presented in Addendum 3, Figures 1-4, three residential homes identified as Parcels 7, 8 and 9 are impacted by the construction design of the Trinity-Portland Pump Station. There is a strong possibility that the construction design of the Trinity-Portland Pump Station can be altered to avoid these parcels. However, for the purpose of this report, $25,000 is estimated for each of the residential relocations. There are no business relocations within the IDP Component to be acquired. There are unimproved tracts of land presented in Figures 1, 3 and 4 that are comprised of approximately 17.27 acres that impacts Parcel 1 for the Charlie Pump Station, Parcels 2 and 3 for the Hampton Pump Station and Parcels 5 and 6 for the Trinity-Portland Pump Station. Previously, the City completed the acquisition of

Parcel 4 for the Hampton Pump Station. At this point, the interior drainage modification alignments in Figures 1, 3 and 4 are assumed the most accurate alignment for the pump station modifications as these alignments were provided by the City of Dallas.

14.0 FACILITY OR UTILITY RELOCATIONS

The Modified Dallas Floodway Project includes project objectives supported for the NED FRM Plan, Ecosystem Restoration Plan and the Interior Drainage Plans. The features included are the levee raise to 277,000 cubic feet per second flood height with the AT&SF Railroad Bridge modifications, levee side slope flattening and non-structural plan. The ecosystem restoration objective is satisfied by the Trinity River Relocation. Project construction in the levee floodway supports those features.

During feasibility, a more accurate detail analysis into the nature of impact to each of the utilities was not developed. The major description available for the affected utilities is for impacts associated with the realigned Trinity River. Addendum 2, Figures 1 and 2, presents the existing and new locations of the utilities to be relocated.

Pursuant to guidance in the Real Estate Policy Guidance Letter No. 31, the estimated cost of the utility relocations does exceed the 30% total project cost by 1%, therefore a preliminary attorney's opinion of compensability report for each of the utilities would be required. We will continue to work with the City of Dallas in obtaining these reports. The utility facilities affected by the project generally would be eligible for compensation under the substitute facility doctrine; however, confirmation and review of the reports is needed. The cost of reviewing the utilities is included in Table 5 of the real estate baseline cost estimate. The City of Dallas is advised that inclusion of the substitute facilities cost in the report or other feasibility study estimates is for planning and budgeting purposes only and does not constitute a preliminary or final determination of compensability by the agency even if the cost of the substitute facilities are reflected in feasibility study documents. Use of this real estate assessment does not eliminate the need to obtain a final attorney's opinion of compensability prior to execution of the Project Partnership Agreement. An attorney's opinion of compensability in the utilities affected by this feasibility was not prepared. As such, the PDT provided preliminary rough cost estimates associated with the necessary utilities to include in the overall project cost.

Any conclusion or categorization contained in this report that an item is a utility or facility relocation to be performed by the non-Federal sponsor as part of its LERRDs responsibilities is preliminary only. The Government will make a final determination of the relocations necessary for the construction, operation or maintenance of the project after further analysis and completion and approval of final attorney's opinion of compensability for each of the impacted utilities and facilities.

15.0 BASELINE COST ESTIMATE

For purposes of this report the following Baseline Cost Estimate tables show:

Table 3 - Baseline Cost Estimate For Real Estate - West Levee IDP

This table represents the Real Estate cost estimate total of $883,842 for the West Levee IDP LERRDs.

Table 4 - Baseline Cost Estimate For Real Estate - East Levee IDP

This table represents the Real Estates cost estimate total of $11,258,732 for the East Levee IDP LERRDs.

Table 5 - Combined Baseline Cost Estimates For All Real Estate – East Levee IDP, West Levee IDP and Utility Relocations LERRDs.

This table represents the real estate cost estimate combined grand total of $54,039,774 for the East and West Levee IDP LERRDs and the utility relocations and adjustments for the Trinity River Relocation. These project features are eligible for LERRDs credit.

The cost estimate in Table 5 includes a line item for the Baker IDP real estate costs. This cost was provided by the City of Dallas as sunk costs for City real estate lands acquired and utility relocation for the Baker pump station in the amount of $2,465,833.00. The Baker sunk cost has been accounted for in Table 5 as payment by the local sponsor and is also in the total project costs and M2 estimate.

Property values included are based on a Cost Estimate dated May 21, 2013 prepared by a Fort Worth District Staff Appraiser. The Fort Worth District Realty Services Branch Staff estimated administrative cost. Contingencies have been added to the estimates as follows:

- 01.23.03.01 Real Estate Planning Documents, 20% based on reasonable cost estimates
- 01.23.03.02 Real Estate Acquisition Documents, 20% based on reasonable certainty
- 01.23.03.03 Real Estate Condemnation Documents, 20% based on the expectation of at least 10% will be condemned
- 01.23.03.05 Real Estate Appraisal Documents, 20% based on reasonable certainty of contract costs
- 01.23.03.06 Real Estate PL 91-646 Asst. Documents, 10% based on reasonable certainty
- 01.23.03.15 Real Estate Payment Documents, based on value estimate and contingencies assigned by the Appraiser in the Gross Appraisal
- 01.23.03.17 Real Estate LERRD Accounting Documents, 20 % based on reasonable certainty regarding accounting requirements
- 02.00.00.00 Real Estate Utility Relocation Documents, 20% contingency based on reasonable certainty

The cost estimates for the total LERRDs required for the project is presented in Table 5. The estimates are presented in the standard Code of Accounts from M-CACES Model Database, October 1994.

Table 3. West Levee Interior Drainage Plan
(Eligible for LERRDS)

Account	*Description*	*LERRDs*	*Contingencies*	*Sub-total LERRDs Only*	*Non-Creditable Costs*
01.23.03.01	**Real Estate Planning Docs**				
	Planning by Non Federal Sponsor				$720
01.23.03.02	**Real Estate Acquisition Docs**				
	Acquisitions by Sponsor	$48,000	$9,600	$57,600	
	Review of Sponsor				$3,600
01.23.03.03	**Real Estate Condemnation Docs**				
	Condemnations by Sponsor	$45,000	$9,000	$54,000	
	Review of Sponsor				$900
01.23.03.05	**Real Estate Appraisal Docs**				
	Appraisals by Sponsor	$18,000	$3,600	$21,600	
	Review of Sponsor				$3,600
01.23.03.06	**Real Estate PL 91-646 Asst. Docs**				
	PL 91-646 Asst. by Sponsor	$9,000	$900	$9,900	
	Review of Sponsor				$1,650
01.23.03.15	**Real Estate Payment Docs**				
	Payments by Sponsor	$527,794	$105,278	$633,072	
	Payments by Sponsor (PL91-646)	$75,000	$15,000	$90,000	
	Review of Sponsor				$3,600
01.23.03.17	**Real Estate LERRD Credit Docs**				$3,600
	Total Admin & Payments	**$722,794**	**$143,378**		**$17,670**
	Total LERRDs + Contingencies			**$866,172**	
	GRAND TOTAL	**$883,842**			

Table 4. East Levee Interior Drainage Plan
(Eligible for LERRDS)

Account	*Description*	*LERRDs*	*Contingencies*	*Sub-total LERRDs Only*	*Non-Creditable Costs*
01.23.03.01	**Real Estate Planning Docs**				
	Planning by Non Federal Sponsor				$360
01.23.03.02	**Real Estate Acquisition Docs**				
	Acquisitions by Sponsor	$24,000	$4,800	$28,800	
	Review of Sponsor				$1,800
01.23.03.03	**Real Estate Condemnation Docs**				
	Condemnations by Sponsor	$40,000	$8,000	$48,000	
	Review of Sponsor				$1,800
01.23.03.05	**Real Estate Appraisal Docs**				
	Appraisals by Sponsor	$9,000	$1,800	$10,800	
	Review of Sponsor				$1,800
01.23.03.06	**Real Estate PL 91-646 Asst. Docs**				
	PL 91-646 Asst. by Sponsor	$9,000	$900	$9,900	
	Review of Sponsor				$1,650
01.23.03.15	**Real Estate Payment Docs**				
	Payments by Local Sponsor	$7,180,178	$1,432,211	$8,612,389	
	Payments by Local Sponsor Baker	$2,465,833		$2,465,833	
	Payment by Sponsor (PL 91- 646)	$60,000	$12,000	$72,000	
	Review of Sponsor				$1,800
01.23.03.17	**Real Estate LERRD Credit Docs**				$1,800
	Total Admin & Payments	**$9,788,011**	**$1,459,711**		**$11,010**
	Total LERRDs + Contingencies			**$11,247,722**	
	GRAND TOTAL	**$11,258,732**			

Table 5. Combined East and West Levees Interior Drainage Plan and Utility Relocations (Eligible for LERRDS)

Account	*Description*	*LERRDs*	*Contingencies*	*Sub-total LERRDs Only*	*Non-Creditable Costs*
01.23.03.01	**Real Estate Planning Docs**				
	Planning by Non Federal Sponsor				$1,080
01.23.03.02	**Real Estate Acquisition Docs**				
	Acquisitions by Sponsor	$72,000	$14,400	$86,400	
	Review of Sponsor				$5,400
01.23.03.03	**Real Estate Condemnation Docs**				
	Condemnations by Sponsor	$85,000	$17,000	$102,000	
	Review of Sponsor				$2,700
01.23.03.05	**Real Estate Appraisal Docs**				
	Appraisals by Sponsor	$27,000	$5,400	$32,400	
	Review of Sponsor				$5,400
01.23.03.06	**Real Estate PL 91-646 Asst. Docs**				
	PL 91-646 Asst. by Sponsor	$18,000	$1,800	$19,800	
	Review of Sponsor				$3,300
01.23.03.15	**Real Estate Payment Docs**				
	Payments by Local Sponsor	$7,707,972	$1,537,489	$9,245,461	
	Payments by Local Sponsor Baker IDP Sunk Cost	$2,465,833		$2,465,833	
	Payment by Sponsor (PL 91-646)	$135,000	$27,000	$162,000	$5,400
	Review of Sponsor				$5,400
01.23.03.17	**Real Estate LERRD Credit Docs**				
02.00.00.00	**Real Estate Utility Relocations**				
	Payment by Sponsor	$31,960,623	$9,920,577	$41,881,200	
	Review of Sponsor				$16,000
	Total Admin + Payments	**$42,471,428**	**$11,523,666**		
	Total LERRDs + Contingencies			**$53,995,094**	
	GRAND TOTAL	**$54,039,774**			

The estimated cost for the lands and damages East and West Levee IDP acquisition requirements was provided to the cost estimator for inclusion in the cost estimate for the total project cost. In the tables listed above, the estimated costs for the IDP acquisitions for Charlie, New Trinity Portland and Hampton, plus the non-creditable costs are included as the baseline cost in the M2 without contingencies. For example, the West Levee IDP LERRDs cost is $723,000, plus $15,000 (which is $17,600 without contingencies), equaling $738,000 in the M2. Delta did not require any land acquisition. The baseline costs are carried over into the Total Project Cost Summary (TPCS). Contingencies are then added in the TPCS directly from the contingencies developed in this report. The contingencies of the non-creditable costs are broken out based on the same percentage of the other contingencies. The base cost of the non-creditable items and the base cost for the lands and damages is the total base cost presented in the TPCS.

16.0 MINERAL AND TIMBER ACTIVITY

There is no significant mineral exploration or production activity proposed in the project area. It is assumed since all lands in the Dallas Floodway Levee System is or will be owned by the City of Dallas, no mineral exploration or production activity is anticipated to be performed due to the City of Dallas' overall BVP projects to be constructed in the levee system.

17.0 NON-FEDERAL SPONSOR'S CAPABILITY TO ACQUIRE LERRD

Of the 9 tracts required for the IDP components, one tract of land that is located outside of the City of Dallas's political boundary owned by the City of Irving shown as Parcel 6 in Addendum 3, Figure 3 of this report. The land requirement is for construction of the Trinity-Portland pump station. The existing land use is designated as vacant, undeveloped and open space. Construction of this pump station is required to fully work with the existing Eagle Ford and Trinity-Portland sump.

The City of Dallas is a Texas municipal corporation conferred by the Home Rule Amendment to the Constitution of the State of Texas and the Enabling Act. The City of Dallas has the authority by its City Charter to acquire real estate from local governments, private and public entities. The City of Dallas has extensive experience and full legal and professional capability to acquire the necessary LERRDs in compliance with the standard Feasibility Cost Share Agreement and Project Management Plan. An Assessment of Non-Federal Sponsor's Real Estate Acquisition Capability Form has been prepared in accordance with Chapter 12 of ER 405-1-12 and is in Addendum 4 of this report. The City of Dallas has been advised of the requirements of Public Law 91-646, as amended, and the requirements for documenting expenses for credit purposes. We do not anticipate the City of Dallas requesting the Federal government assistance to acquire the remaining LERRDs.

USACE will work with the City of Dallas throughout the project, to the extent appropriate and allowable, to ensure that there is understanding of the Federal real estate principles. Action will also be taken to address any policy issues that could significantly impact the project.

18.0 ZONING ORDINANCES

There are no special zoning ordinances proposed for enactment with the project.

19.0 MILESTONES FOR REAL ESTATE ACQUISITION

To date, it is unknown the actual construction date schedule. The current feasibility study indicates the Record of Decision is expected to be signed by the Assistant Secretary of the Army the second quarter of FY15. The schedule below reflects an approximate reasonable realistic timeframe of 18 months to complete the FRM component. Table 6 presents the schedule.

Table 6. Real Estate Milestone Schedule For Dallas Floodway Feasibility Study Flood Risk Management

Milestones Based on Project Partnership Agreement (PPA) Execution	
Transmittal of ROW drawings and estates	30 days after PPA signed
Obtain Surveys	60 days after transmittal of ROW drawings and estate(s)
Obtain Title Evidence	60 days after obtaining surveys
Obtain Appraisal and Reviews	60 days after obtaining titles
Authorization to Proceed with Offer	10 days after obtaining appraisals and reviews
Conclude Negotiations	90 days after start of negotiations
Conclude Closings	45 days after concluding closings
Conclude Condemnations	240 days after condemnation process starts
Attorney Certify Availability of LERRD	15 days after condemnation concluded
Corps Certifies Availability of LERRD	5 days after Sponsor Attorney Certifies LERRD
Review LERRD Credit Request	45 days after receiving LERRD documentation
Approve or Deny LERRD Credit Requests	5 days after concluding review of LERRD documentation

20.0 CONTAMINANTS ON REAL ESTATE ACQUISITIONS

In 2010 and again in 2013, a Phase I Background Database Search was prepared. The report listed 34 sites within the study for hazardous materials and wastes. In April and October 2013, qualified USACE personnel visited the sites that were identified in the 2010 and 2013 reports (two historic river discharge sites [4 and 5] and the Superfund site were not visited). It was concluded that there was no evidence of further contamination and a Phase II investigation of the sites was not warranted. The WRDA project would avoid directly disturbing any known hazardous waste sites.

Given the construction activities of the Modified Dallas Floodway Project, there could be a chance that contaminants of concern could be determined during construction related activities; however, a soil management plan will be developed. It will address a contingency plan for encountering and properly disposing contaminants, hazardous materials and wastes in accordance with the Army Regulation 2001 Environmental Protection and Enhancement and USACE Engineering Regulation 1165-2-132 Hazardous, Toxic, and Radioactive Waste Guidance for Civil Works Projects.

Additionally, a description of the IDP improvements nearest a contaminant site is identified as follows:

- Hampton Pump Station and Sump Improvement – A solid waste facility landfill site is located approximately 400 feet from the proposed pump station and sump improvement and would not be impacted by the project.
- Charlie Pump Station and Sump Improvement – Construction of the new Charlie pump station would be located on the West Levee. No known contaminated sites are located within this area; however, the proposed construction area is located close to the superfund site. The superfund site closest to the new Charlie pump station has been remediated with no further remedial action necessary. United States Environmental Protection Agency performed the initial remediated cleanup and was granted approval clearance by the Texas Council of Environmental Quality.

- Delta Pump Station and Sump Improvement – There are no known hazardous material sites located in this area; however, the boundary of the superfund site is located south of the West Levee. It is not expected to impact potential contaminated soil due to its close proximity to the superfund site.
- Trinity-Portland Pump Station and Sump Improvement – There are no known hazardous material sites located in this area and no impact of potential contaminated soils is expected.

Refer to the Final Environmental Impact Statement for the Dallas Floodway Project, which identifies a map with the site where known land contaminants exist and are not expected to disturb the project area.

21.0 OPPOSITION BY LANDOWNERS IN PROJECT AREA

The Dallas Floodway Project is a highly publicized project for the citizens of Dallas that has been in existence for several decades. Most concerned landowners are those in close proximity to the levee system. The City of Dallas in conjunction with USACE has held several public meetings most recently on January 29, 2013 to inform the public of the flood risk management plans for the levee system. Attendance was great at the meeting and only two or three citizens expressed concerns for other project proposals for the City to complete such as having a greater connectivity between East and West Dallas, the construction of a tunnel tollway and park buildings. No landowner present at the meeting expressed opposition for the Dallas Floodway Feasibility Project.

22.0 OTHER REAL ESTATE ISSUES

No other Real Estate issues are known to exist.

Addendum 1
General Project Maps

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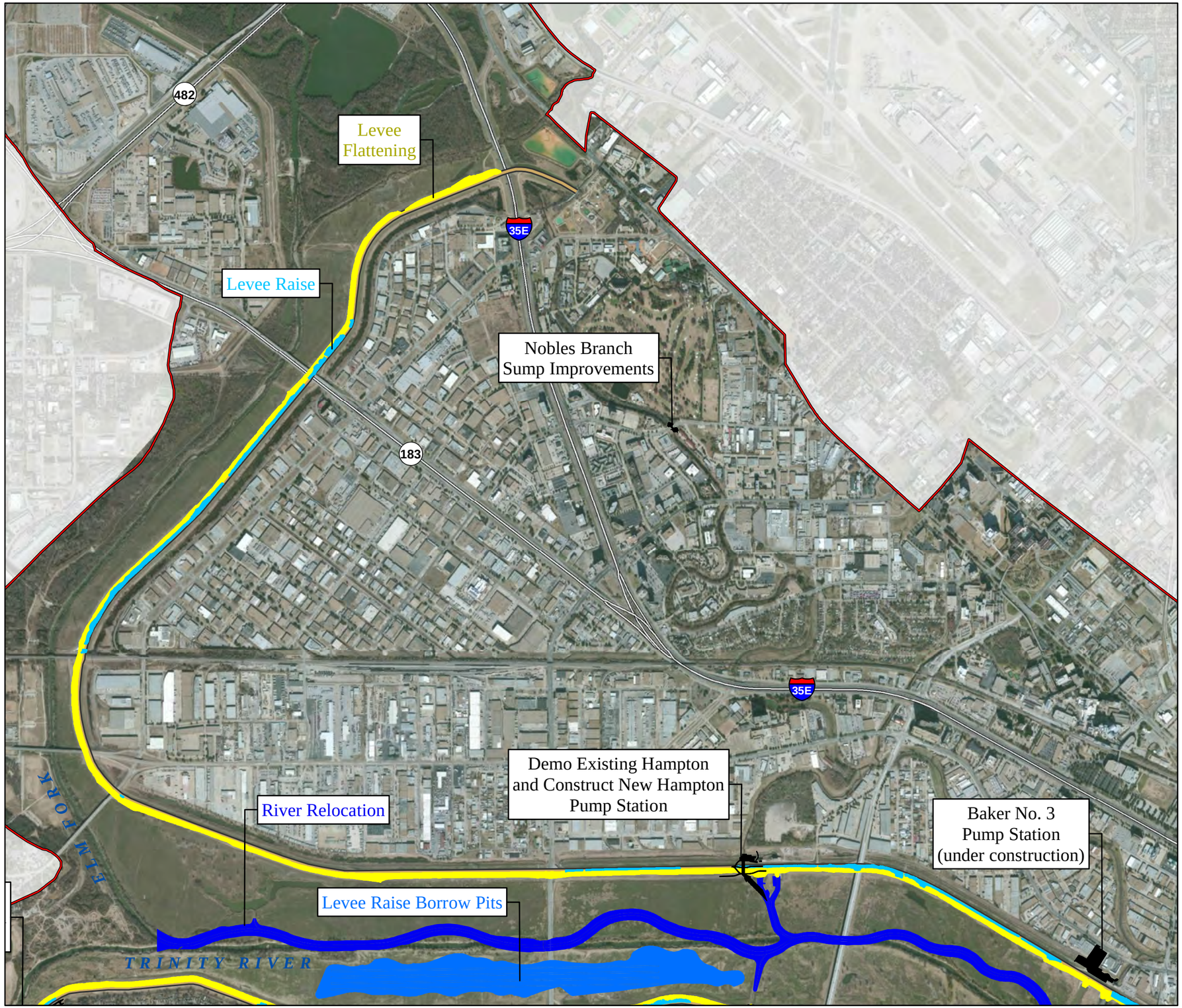


Figure 1
Detail of MDFP: Segment I

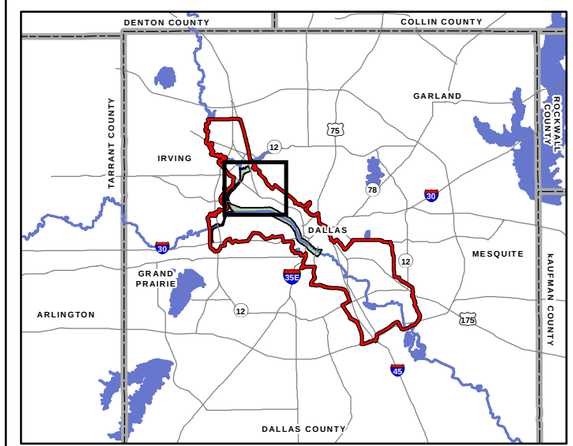
LEGEND

MDFP Elements

- 277K Levee Raise
- Levee Flattening (4:1 Ratio) (local sponsor action)
- Levee Raise Borrow Pits
- River Relocation
- IDP Improvements

Existing Features

- Dallas Floodway Levee System Levee
- Freeway
- Study Area



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Sources: City of Dallas 2008a, 2009c, NCTCOG 2008

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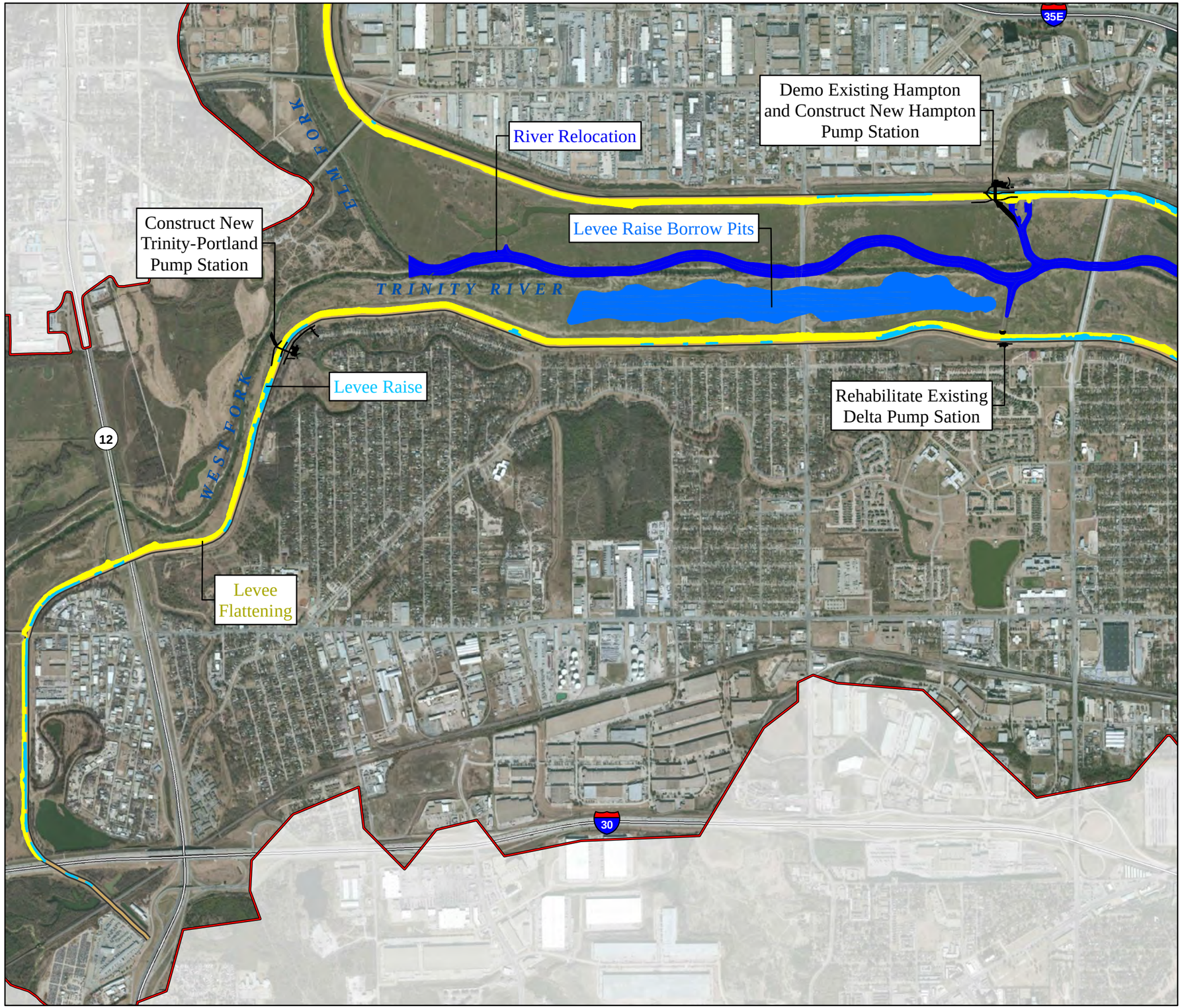


Figure 2
Detail of MDFP: Segment II

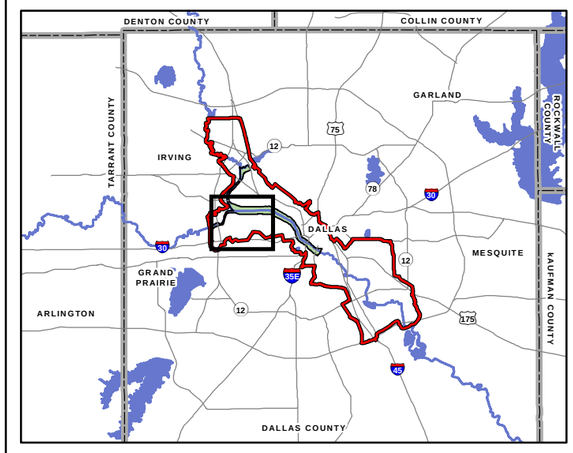
LEGEND

MDFP Elements

- 277K Levee Raise
- Levee Flattening (4:1 Ratio) (local sponsor action)
- Levee Raise Borrow Pits
- River Relocation
- IDP Improvements

Existing Features

- Dallas Floodway Levee System Levee
- Freeway
- Study Area



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Sources: City of Dallas 2008a, 2009c, NCTCOG 2008

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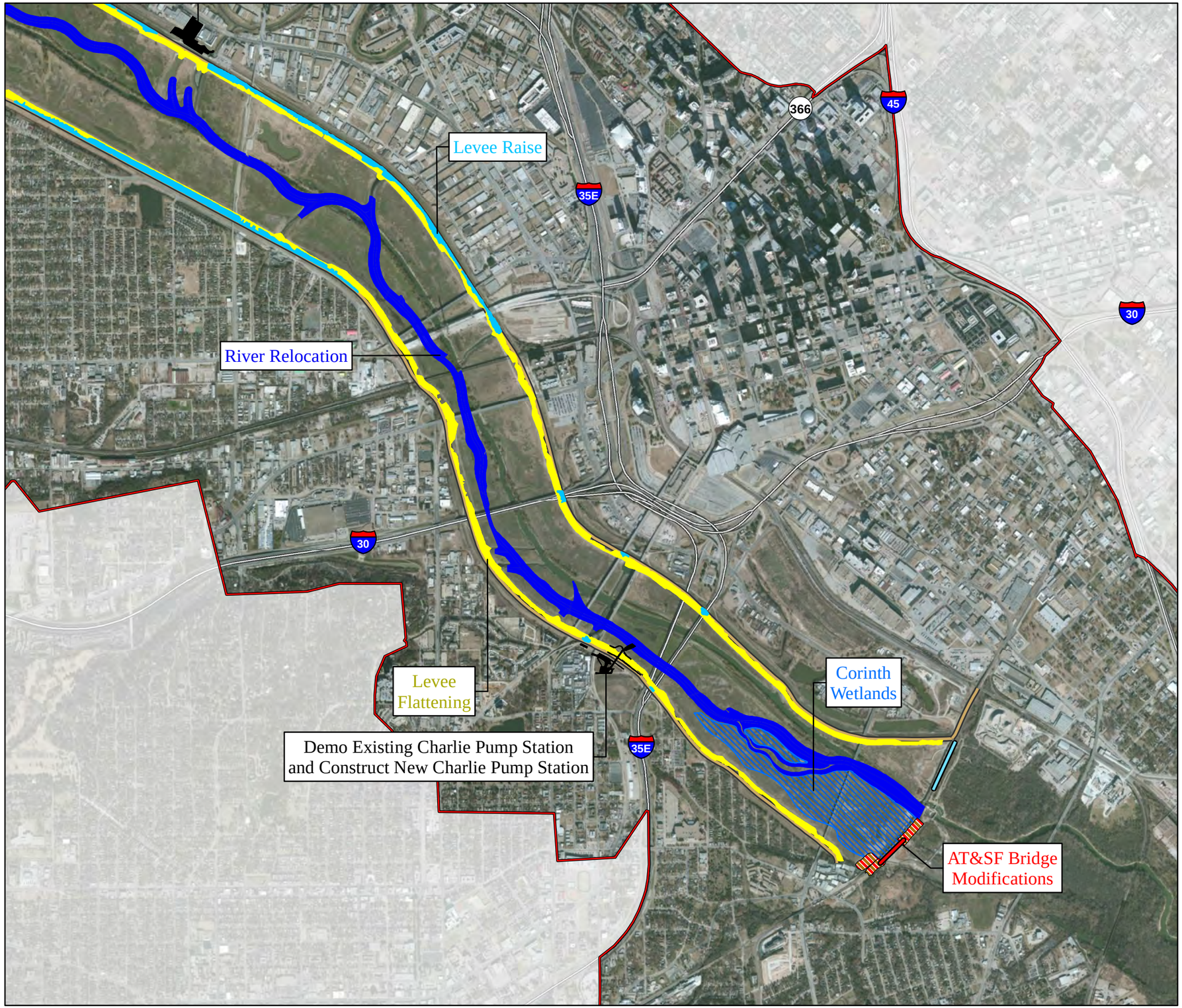


Figure 3
Detail of MDFP: Segment III

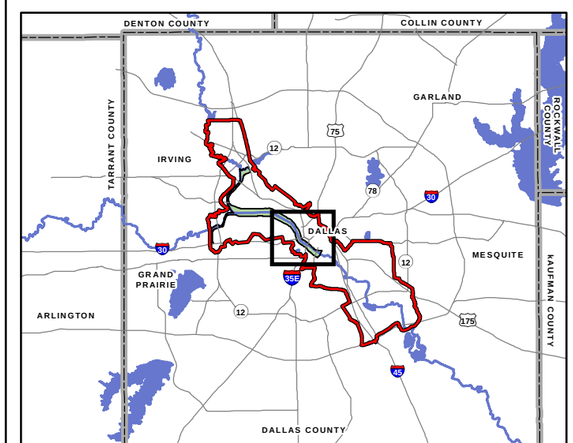
LEGEND

MDFP Elements

- 277K Levee Raise
- Levee Flattening (4:1 Ratio) (local sponsor action)
- Embankment Removal
- Corinth Wetlands
- River Relocation
- IDP Improvements

Existing Features

- Dallas Floodway Levee System Levee
- Freeway
- Study Area



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Sources: City of Dallas 2008a, 2009c, NCTCOG 2008

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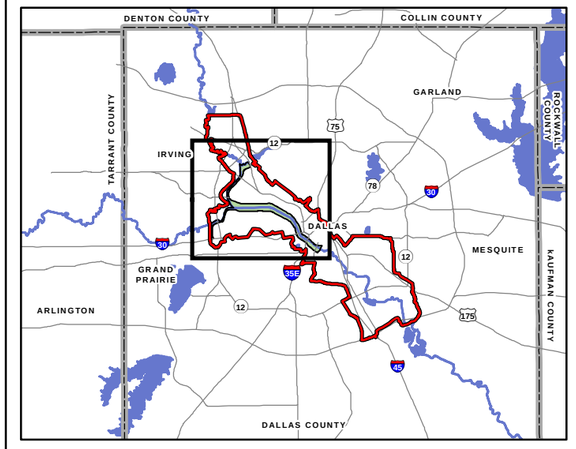
Figure 4
Dallas Floodway Ownership Parcels

LEGEND

Ownership Status of Dallas Floodway Parcels

- Owners other than City of Dallas
- City of Dallas Ownership
- MDFP Elements
- Pumping Plant
- Dallas Floodway Levee System Levee
- Freeway
- Study Area
- Dallas Floodway
- Surface Water



0 0.5 1 2 Kilometers

0 0.5 1 2 Miles

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Sources: City of Dallas 2008a, NCTCOG 2008, USACE 2011

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Addendum 2
Utility Relocations and Adjustments
(Oct 2013 Price Levels, Contingencies, and Escalation included)

Project Component	*Utility Owner*	*Utilities*	
Ecosystem Restoration (River Relocation)	City Owned	Belleview Storm Sewer Outfall	$2,110,642.88
	City Owned	Dallas Branch Storm Sewer Outfall	$5,289,674.50
	City Owned	Woodall Rogers Storm Sewer Outfall	$3,764,567.75
	City Owned	Houston Street Viaduct Water Line	$4,938,503.37
	City Owned	Hampton Road/Inwood Water Line	$10,387,053.87
	City Owned	Removal of Misc. Pipelines	$523,225.89
	City Owned	Able Pump Station Discharge	$10,221,824.22
	Atmos Energy	Gas Main - 16" North of Houston St.	$625,545.77
	Atmos Energy	Gas Main - 30" South of Sylvan St.	$559,990.14
	Oncor	Underground Electric North of Commerce St.	$1,099,253.11
	Oncor	Underground Electric South of Houston	$947,231.33
	Oncor	Aerial 138kV Elec. Transm. North of Continental Ave.	$51,886.81
	AT&T	Underground Telecomm. South of IH-30	$921,681.19
	Verizon	Underground Fiber Optics South of UPRR	$160,694.48
	AT&T	Underground Fiber Optics Between Sylvan and Continental Ave.	$45,078.17
	Magellan	Jet Fuel Pipeline - 6" West of Westmoreland Rd.	$243,346.47
Total			**$41,881,199.95**

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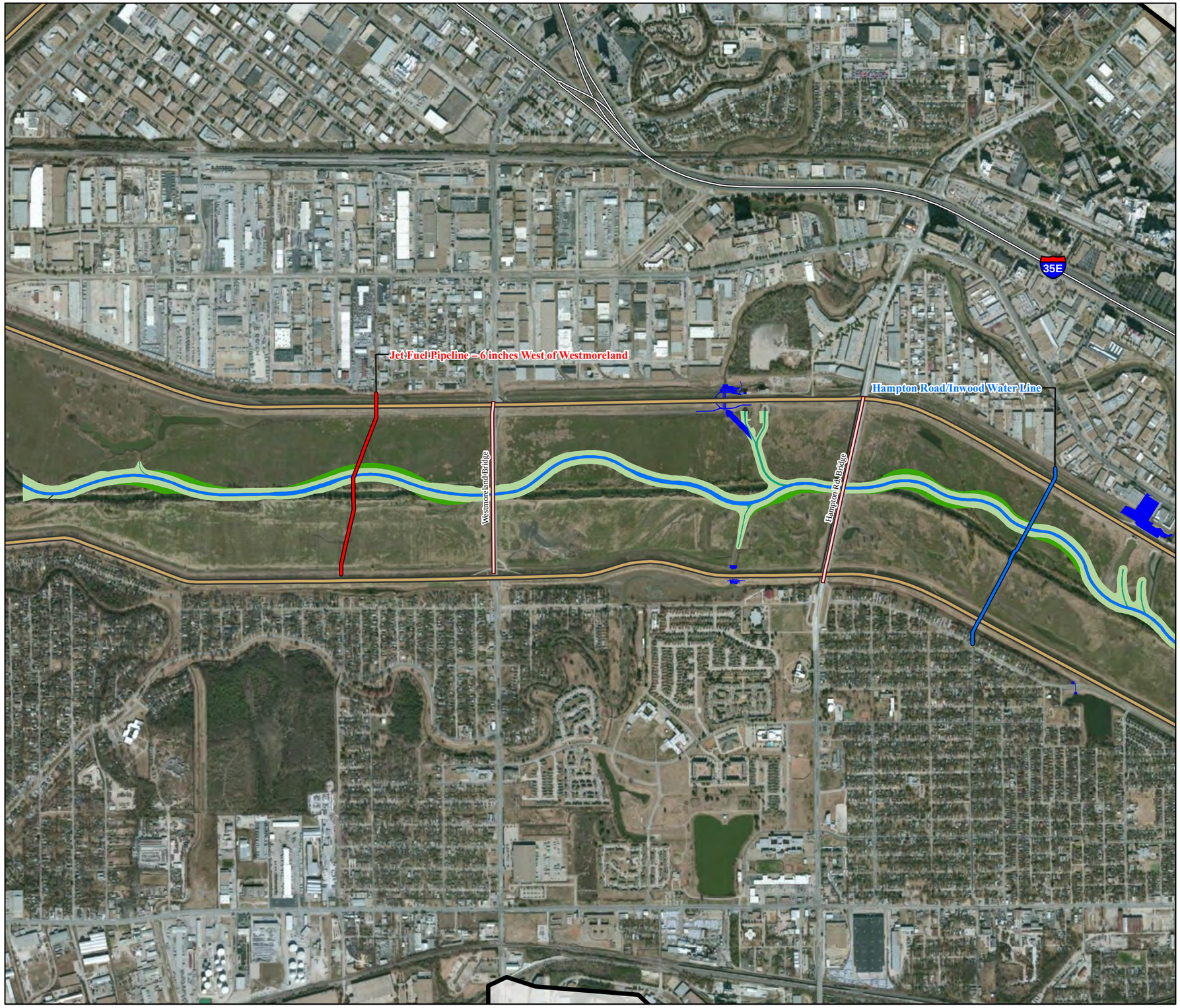


Figure 1
Utility Adjustment Locations and MDFP Features: Upper Floodway

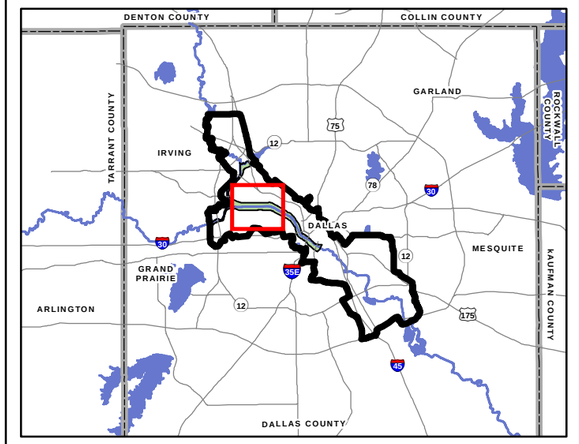
LEGEND

Utility Line to be Adjusted

- Water Main
- Jet Fuel

MDFP Proposed Features

- River Bank
- River Channel
- River Sump
- River Terrace
- Interior Drainage Upgrade
- Dallas Floodway Levee Crest
- Bridge
- Freeway
- Study Area



0 0.5 1 Kilometers

0 0.25 0.5 Miles

N

S

GIS Sources: City of Dallas 2008a, 2008c; NCTCOG 2008; USACE 2011

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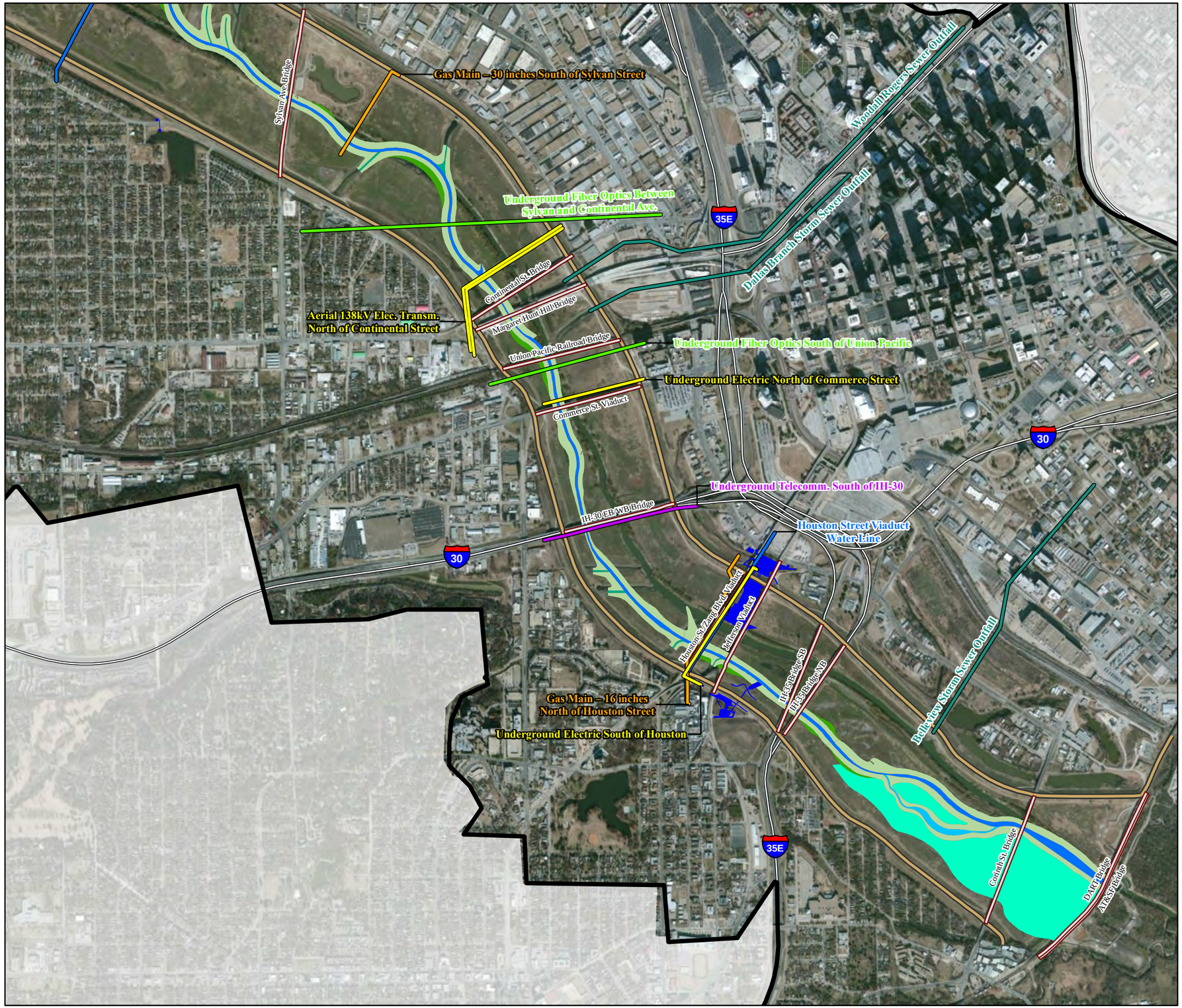


Figure 2
Utility Adjustment Locations and MDFP Features: Lower Floodway

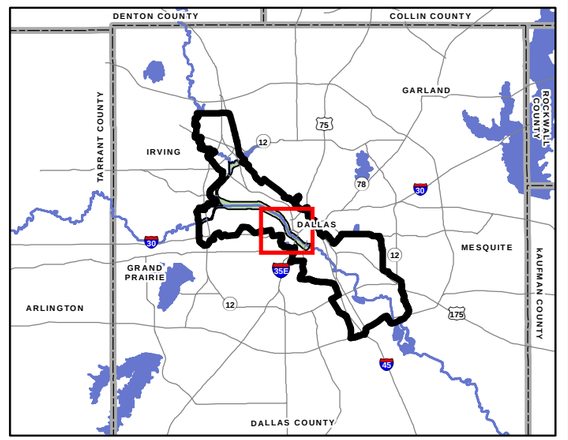
LEGEND

Utility Line to be Adjusted

- Electrical
- Natural Gas
- Water Main
- Fiber Optic
- Telecommunication
- Pressure Sewer

MDFP Proposed Features

- Corinth Wetlands
- Oxbow Lake
- River Bank
- River Channel
- River Sump
- River Terrace
- Interior Drainage Upgrade
- Dallas Floodway Levee Crest
- Bridge
- Freeway
- Study Area



0 0.5 1 Kilometers

0 0.25 0.5 Miles

N S

GIS Sources: City of Dallas 2008a, 2008c; NCTCOG 2008; USACE 2011

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Addendum 3 – East and West Levees IDP Acquisitions

Parcel No.	*Property Address\ Description*	*Owner*	*Improved\ Unimproved*
East Levee Interior Drainage Plan – Properties Eligible for LERRDS			
Charlie Pump Station – Figure 1			
1	909 E. Colorado Blvd.	Beltline Trinity Gateway	Unimproved
Hampton Pump Station – Figure 2			
2	2500 Conveyor Ln.	Seacal Texas Industrial I	Unimproved
3	4800 Lakawana St	Town of Highland	Unimproved
4	Abandoned RR ROW	Union Pacific Railroad	Unimproved
West Fork Levee Interior Drainage Plan – Properties Eligible for LERRDS			
Proposed Trinity Portland Pump Station – Figure 4			
5	7166 Ingersoll St.	Sterling W. Kenty, Trustee	Unimproved
6	1912 E. Shady Grove Rd.	City of Irving	Unimproved
7	5051 Mexicana Rd.	Tony Garcia Rogers	Improved
8	5047 Mexicana Rd.	Patricia A. Calvillo	Improved
9	5043 Mexicana Rd.	Segundo A. Arguetta	Improved
TOTAL 9 TRACTS			

Figure 1

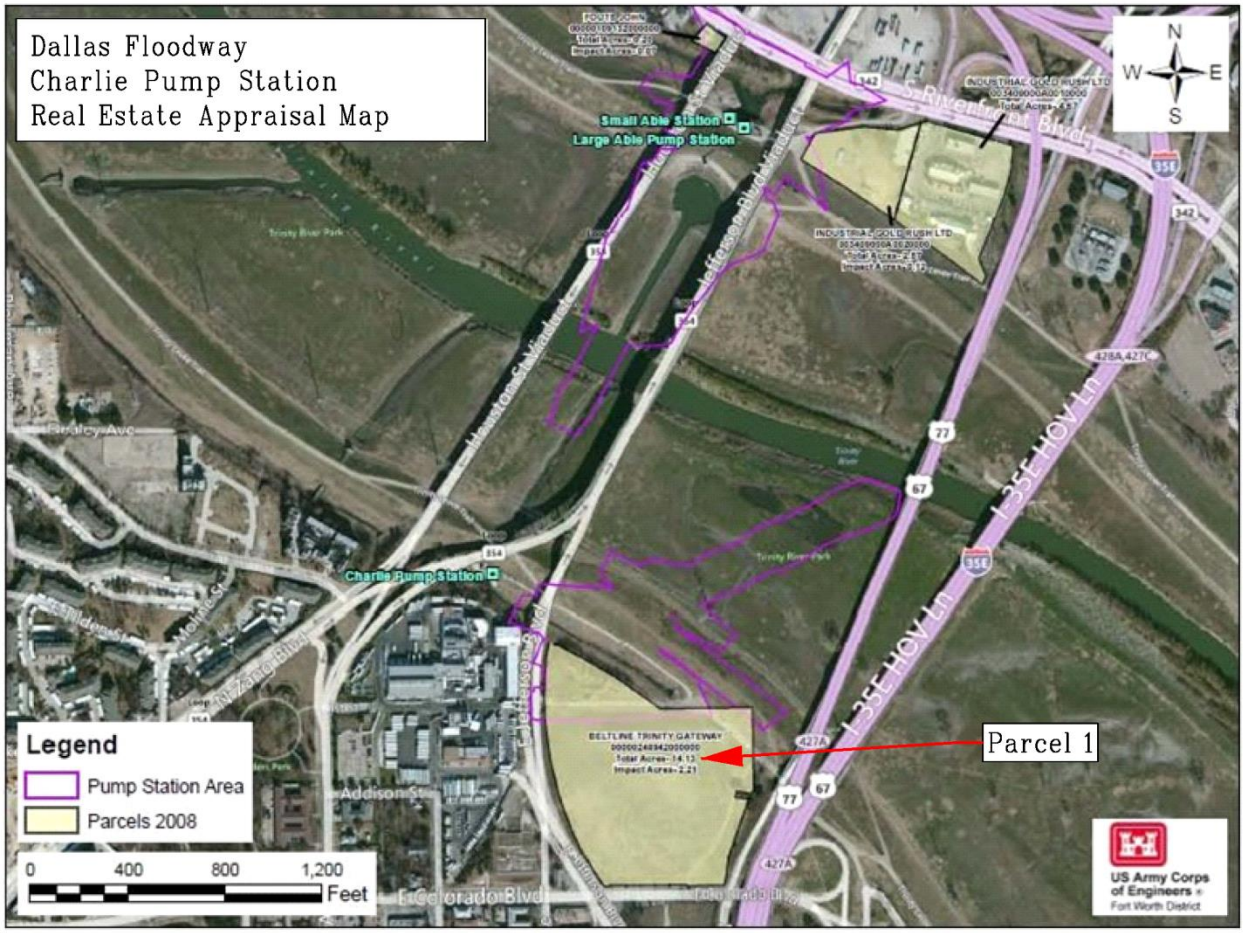

Dallas Floodway
Charlie Pump Station
Real Estate Appraisal Map
Small Able Station
Large Able Pump Station
Charlie Pump Station
Parcel 1
Legend
Pump Station Area
Parcels 2008
0 400 800 1,200
Feet
N
W
E
S
I-35E HOV Ln
Riverfront Blvd
Jefferson Blvd Viaduct
Houston St Viaduct
Colorado Blvd
Addison St
US Army Corps of Engineers
Fort Worth District

Figure 2

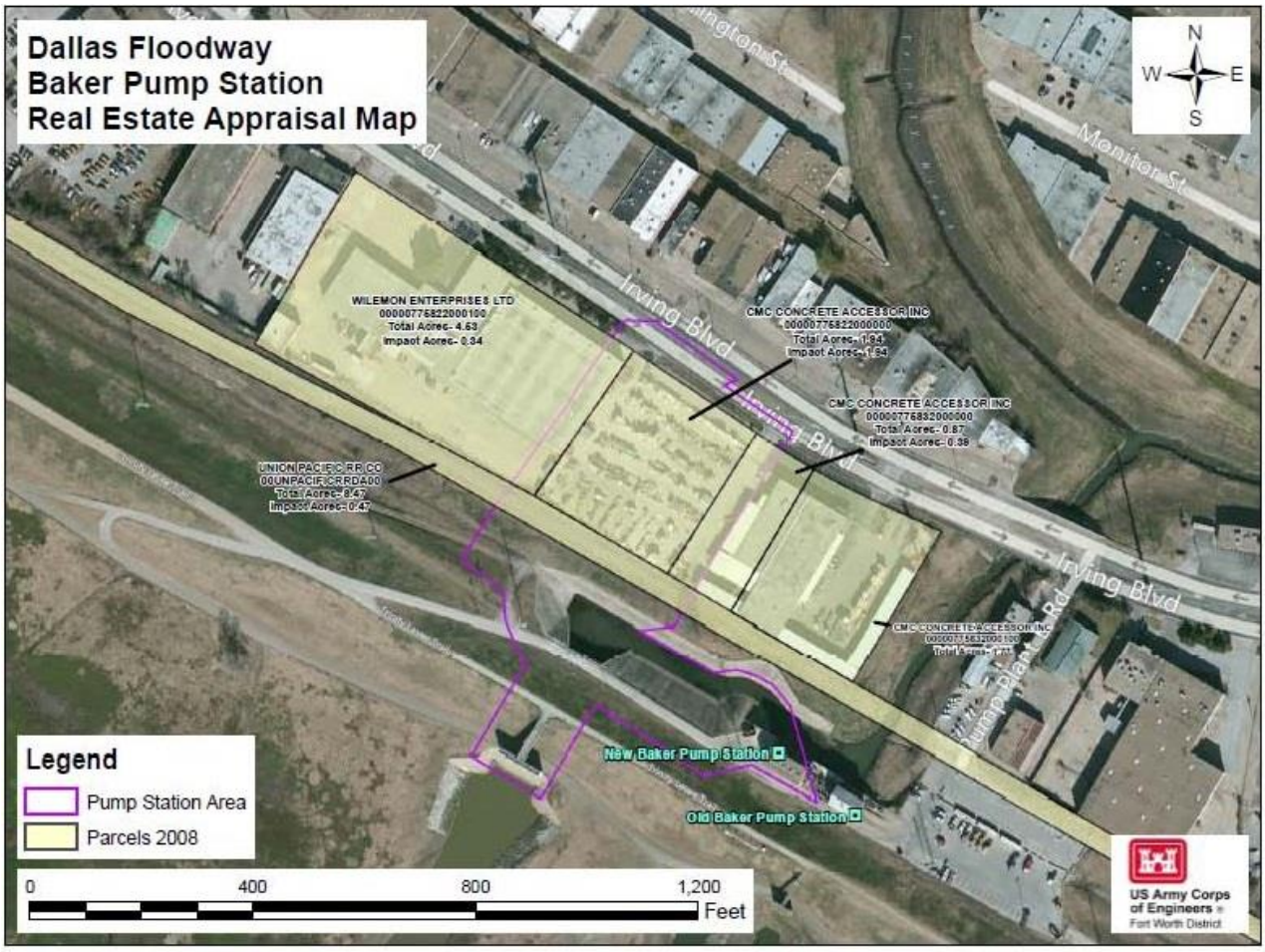

Dallas Floodway
Baker Pump Station
Real Estate Appraisal Map
N
W
E
S
Monitor St
Irving Blvd
WILEMON ENTERPRISES LTD
00000775822000100
Total Acrec- 4.63
Impact Acrec- 0.34
CMC CONCRETE ACCESSOR INC
00000775822000000
Total Acrec- 1.94
Impact Acrec- 1.94
CMC CONCRETE ACCESSOR INC
00000775832000000
Total Acrec- 0.87
Impact Acrec- 0.38
UNION PACIFIC RR CO
00UNPACIFCRRDA00
Total Acrec- 8.47
Impact Acrec- 0.47
Pump Station Rd
New Baker Pump Station
Old Baker Pump Station
Legend
Pump Station Area
Parcels 2008
0
400
800
1,200
Feet
US Army Corps of Engineers
Fort Worth District

Figure 3

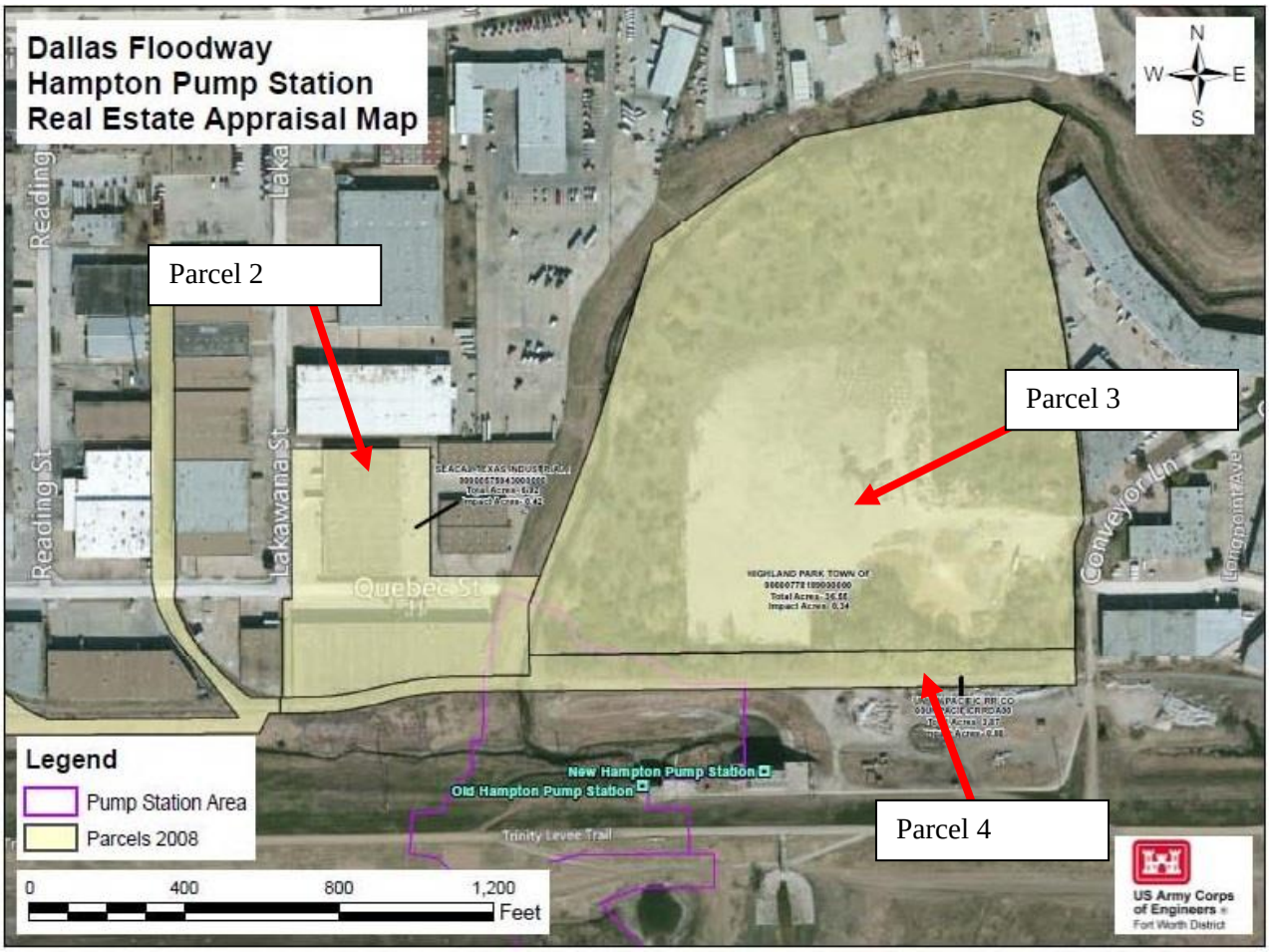
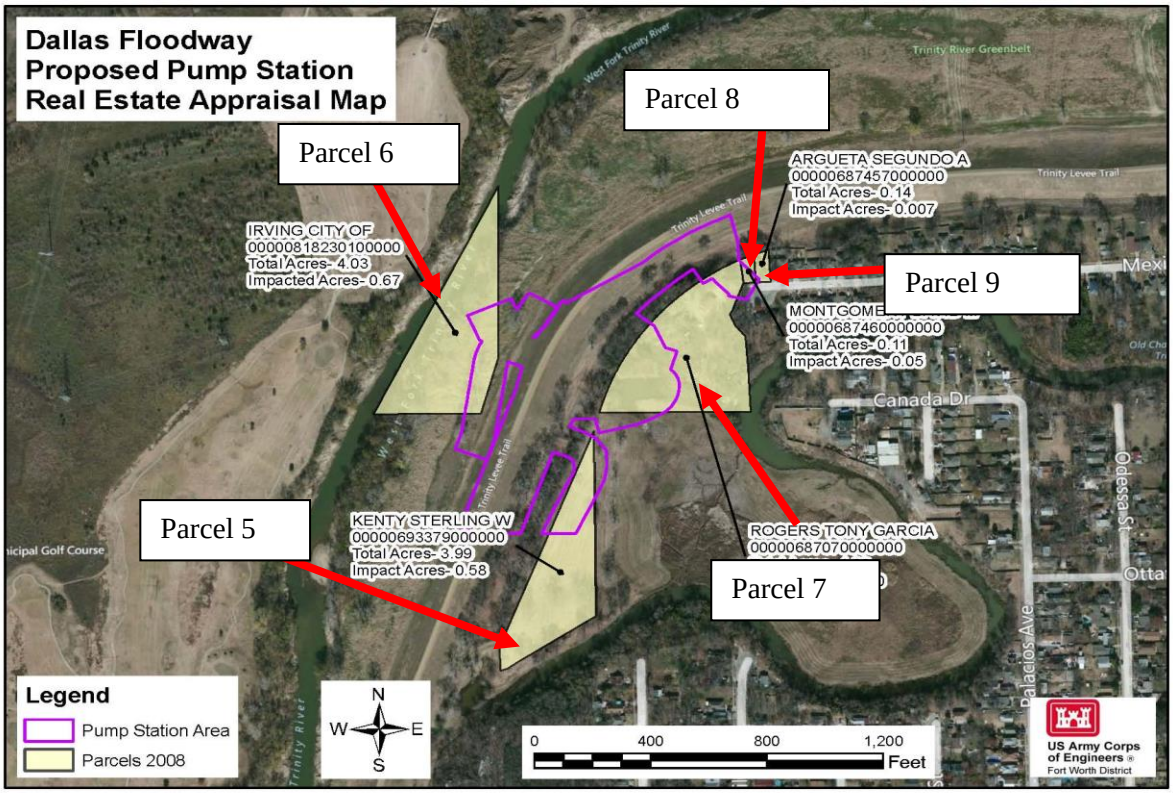

Dallas Floodway
Hampton Pump Station
Real Estate Appraisal Map
N
W
E
S
Parcel 2
Parcel 3
Parcel 4
Reading St
Lakawana St
Quebec St
Conveyor Ln
Longpoint Ave
New Hampton Pump Station
Old Hampton Pump Station
Trinity Levee Trail
Legend
Pump Station Area
Parcels 2008
0
400
800
1,200
Feet
US Army Corps of Engineers
Fort Worth District

Figure 4


Dallas Floodway
Proposed Pump Station
Real Estate Appraisal Map
Parcel 6
Parcel 8
Parcel 9
Parcel 5
Parcel 7
IRVING CITY OF
00000818230100000
Total Acres- 4.03
Impacted Acres- 0.67
ARGUETA SEGUNDO A
00000687457000000
Total Acres- 0.14
Impact Acres- 0.007
MONTGOME
00000687460000000
Total Acres- 0.11
Impact Acres- 0.05
KENTY STERLING W
00000693379000000
Total Acres- 3.99
Impact Acres- 0.58
ROGERS TONY GARCIA
00000687070000000
Trinity River Greenbelt
West Fork Trinity River
Trinity Levee Trail
Canada Dr
Odessa St
Palacios Ave
Legend
Pump Station Area
Parcels 2008
N
W
E
S
0
400
800
1,200
Feet
US Army Corps of Engineers
Fort Worth District

Addendum 4

ER 405-1-12
Change 31
1 May 98

APPENDIX 12-E

ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY

I. Legal Authority:

a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? (yes/no)
b. Does the sponsor have the power of eminent domain for this project? (yes/no)
c. Does the sponsor have "quick-take" authority for this project? (yes/no)
d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? (yes/no)
e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? (yes/no)

II. Human Resource Requirements:

a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? (yes/no)
b. If the answer to II.a. is "yes," has a reasonable plan been developed to provide such training? (yes/no)
c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? (yes/no)
d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? (yes/no)
e. Can the sponsor obtain contractor support, if required in a timely fashion? (yes/no)
f. Will the sponsor likely request USACE assistance in acquiring real estate? (yes/no) (If "yes," provide description)

III. Other Project Variables:

a. Will the sponsor's staff be located within reasonable proximity to the project site? (yes/no)
b. Has the sponsor approved the project/real estate schedule/milestones? (yes/no)

IV. Overall Assessment:

a. Has the sponsor performed satisfactorily on other USACE projects? (yes/no/not applicable)
b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. (If sponsor is believed to be "insufficiently capable," provide explanation)

ER 405-1-12
Change 31
1 May 98

APPENDIX 12-E

V. Coordination:

a. Has this assessment been coordinated with the sponsor? (yes/no)
b. Does the sponsor concur with this assessment? (yes/no) (If "no," provide explanation

Prepared by:

DIANNE T. HAHN
[typed name]
[title] CHIEF REAL ESTATE SPEC.

Reviewed and approved by:

[typed name] DIANNE T. HAHN
Chief, Real Estate Division

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