FORT WORTH DISTRICT
DALLAS FLOODWAY LEVEE SYSTEM
SUPPLEMENTAL PROGRAM UPDATE

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Presentation for:
City of Dallas
Transportation and Infrastructure Committee
Date: June 9, 2025

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US Army Corps of Engineers®

City of Dallas

PURPOSE & AGENDA

Purpose: Inform the City of Dallas Transportation and Infrastructure Committee the current status of the Dallas Floodway and Dallas Floodway Extension projects to foster the partnership and support informed decision making to deliver critical infrastructure for the purpose of flood risk management.

Agenda:

1. Benefit to Nation
2. Project & System Overview
3. O&M Responsibilities
4. Supplemental Considerations
5. Project & Program Statuses
6. Future Schedule & Milestones
7. Closing & Questions

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BENEFITS TO NATION

UNITED STATES ARMY CORPS OF ENGINEERS

FORT WORTH DISTRICT

OUR MISSION

The Fort Worth District provides vital public engineering services, in peace and war, to strengthen our Nation's security, energize the economy, and reduce risks from disasters.

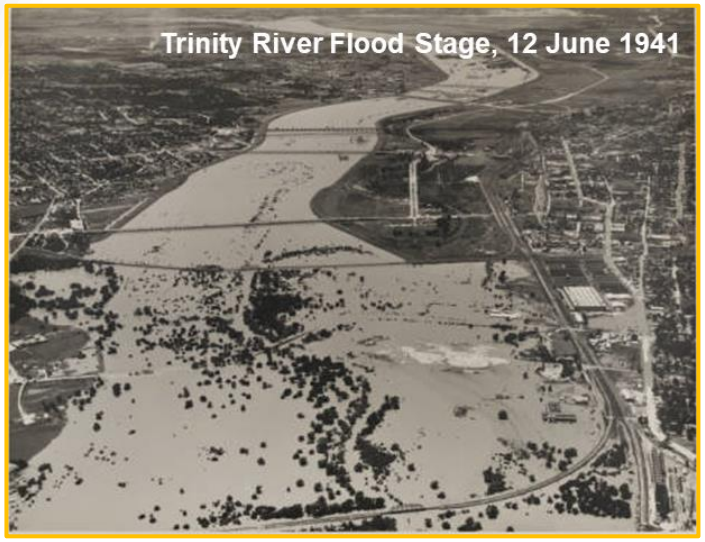
CIVIL WORKS **236** PROJECTS | **33%** OF STORED TEXAS SURFACE H_2O | **373** MILES OF LEVEES AND BANK PROTECTION | **9.6M** ACRES OF LAND AND WATER | **$155B** IN DAMAGES PREVENTED

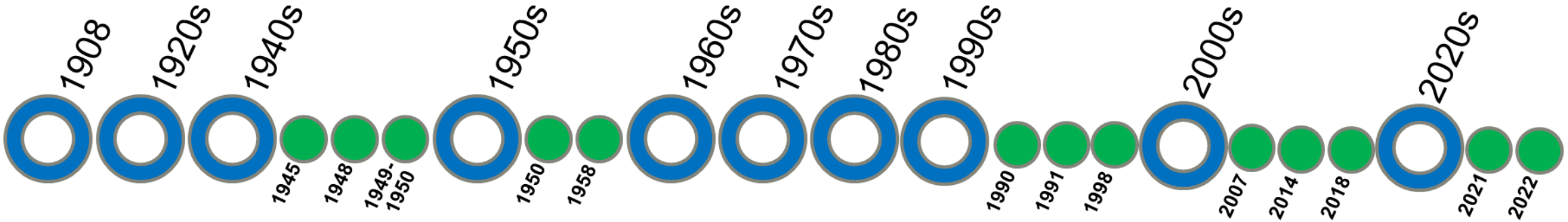
U.S. ARMY ENGINEERS
250 YEARS
1775 2025
BUILDING STRONG

https://www.usace.army.mil/Missions/Civil-Works/

DALLAS FLOODWAY SYSTEM HISTORIC TIMELINE

Trinity River thru Dallas over the years
First Dallas Floodway levee system built: 1930s
USACE began strengthening the levees in 1950s to present





*Large circles denote major flooding

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SYSTEM OVERVIEW

US Army Corps of Engineers

RESERVOIR CONSERVATION POOL CAPACITY

LAKE	OPERATOR	CONSERVATION POOL CAPACITY (ACRE-FEET)
BENBROOK	USACE - FORT WORTH DISTRICT	85,648
JOE POOL	USACE - FORT WORTH DISTRICT	175,800
RAY ROBERTS	USACE - FORT WORTH DISTRICT	788,167
LEWISVILLE	USACE - FORT WORTH DISTRICT	598,902
GRAPEVINE	USACE - FORT WORTH DISTRICT	163,064
LAVON	USACE - FORT WORTH DISTRICT	409,657
BARDWELL	USACE - FORT WORTH DISTRICT	43,857
NAVARRO MILLS	USACE - FORT WORTH DISTRICT	40,826

*Reservoir Storage amount is incremental storage of Conservation Pool only. *Distances Not To Scale *TRWD: Tarrant Regional Water District *TRA: Trinity River Authority *NTMWD: North Texas Municipal Water District

OPERATIONS & MAINTENANCE

- City of Dallas (CoD) maintains eligibility in Public Law 84-99 through compliance with operations and maintenance (O&M)
  - PL 84-99 provides emergency flood fighting assistance and rebuild efforts in the event of a publicly declared disaster
- CoD's responsibility is to adhere to O&M manuals for each project implemented
  - Design, Construction and O&M is reviewed and approved by USACE
- USACE inspects the levees, sumps, river and pump stations
  - Site visits – every year
  - Periodic Inspections – 5-year cycle
  - Special Inspections as needed – NFIP Levee Accreditation
- USACE maintains authority to render decisions under Section 408 for alterations to USACE Civil Works projects

SUPPLEMENTAL OVERVIEW

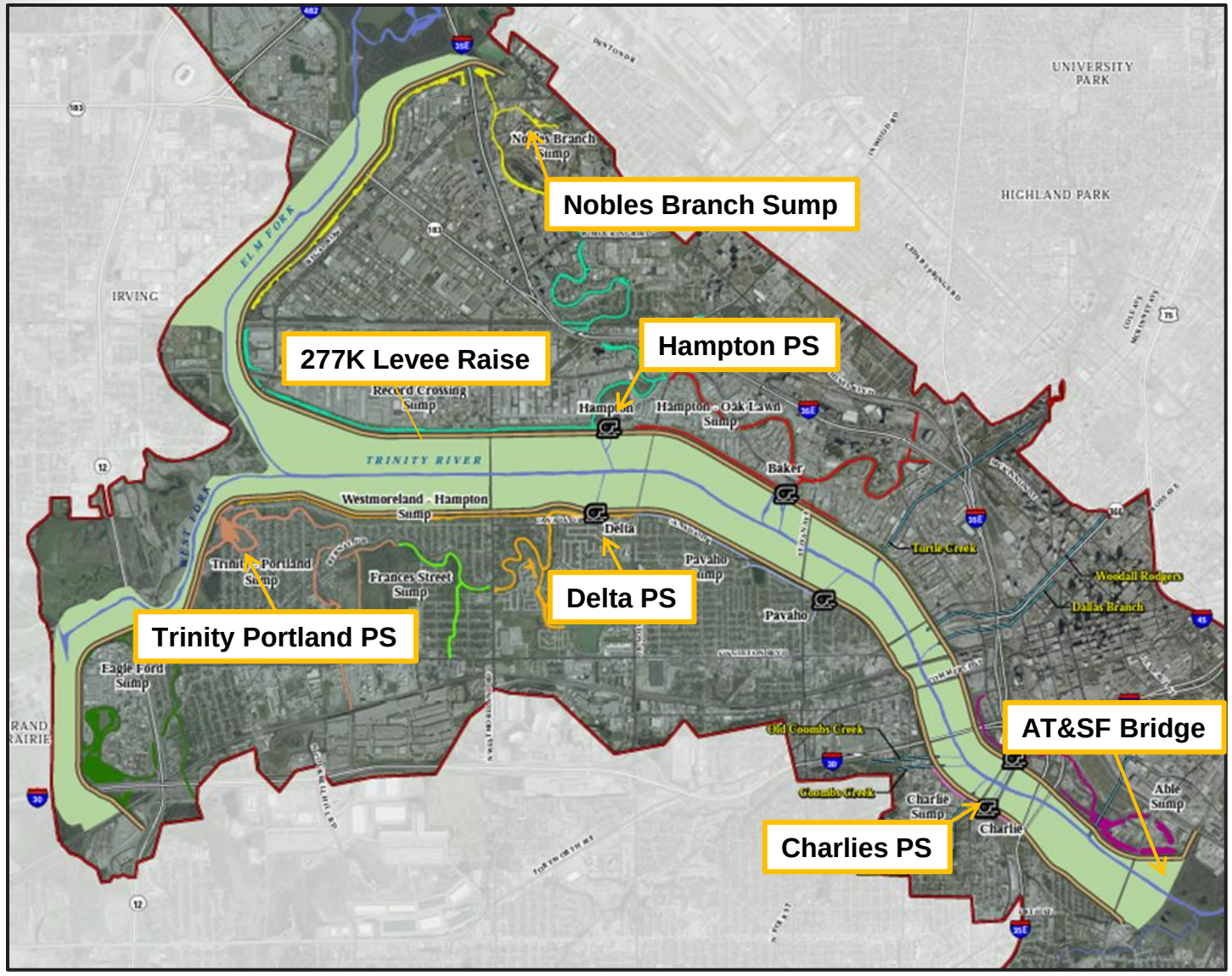
- Following a series of disaster declarations, Congress recognized the importance of fully funding flood risk management projects that could be implemented on an expedited schedule

- Dallas Floodway and Dallas Floodway Extension met criteria set and received:
  - $457.7M in federal and local funding for the Dallas Floodway
  - $135M in federal funding for Dallas Floodway Extension

- The City of Dallas is required to perform, and cost participate in certain items:
  - Cost share for Dallas Floodway (65% federal and 35% local)
  - Cost share for Dallas Floodway Extension (100% federal)
    - USACE performs routine cost analysis to account for current market conditions
  - Obtain fee simple land acquisition, subject to potential reimbursement for DFE only, easements and utility relocations, and all land must be “clean” prior to construction by USACE

- City of Dallas and USACE partner to review all design and construction activities; Regular and routine review of delivery by project management teams

DALLAS FLOODWAY PROJECT FEATURES



Authorization for Dallas Floodway by WRDA 2007, PL 110-114, Section 5141

Flood Risk Management Portion

- AT&SF Bridge Modification
- 277K cfs Levee Raise & Slope Flattening
- Charlie Pump Station
- Delta Pump Station
- Nobles Branch Sump Improvements
- Hampton 3 Pump Station
- Trinity Portland Pump Station
- New Hampton Renovation
- Old Hampton Demolition

Ecosystem Restoration

- River Relocation (add meanders to approx. 8 miles of the Trinity River in the Floodway)
- Approx. 80 acre wetland in Floodway

277K LEVEE RAISE & SLOPE FLATTENING

- Status
  - Construction completed April 2025 ahead of schedule
  - Total Construction Placement Cost: $71,189,117

- Raised & Flattened the East and West Levees back to base design elevations in order to service a 277K Cubic Feet per Second (CFS) water surface elevation

- Performed riverbank stabilization on East Levee near Bellevue Sump between I-35 and Corinth Street bridge

Left: Earth hauling for levee raise; Right; final inspection of west levee prior to O&M turnover

East Levee Riverbank Stabilization near Bellevue Station Outfall in February 2025

CHARLIE 2 PUMP STATION

- Status
  - Construction contract awarded 15 March 2022
  - Projected Construction Placement Cost: $64,070,928
  - Projected completion mid 2026; schedule impaired
- Construct a new pump station capable of 225K Gallons Per Minute (GPM) increasing pumping capacity in surrounding area by over 100K GPMs
- Old Charlie Demolition
  - Templated after new pump station brought online

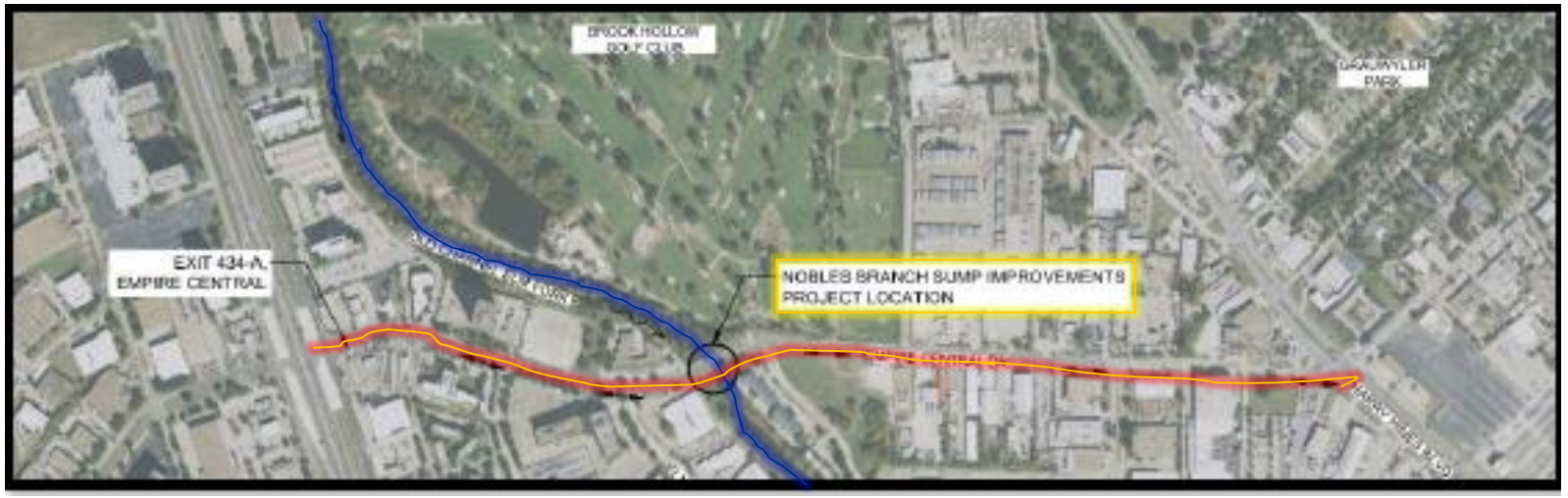
Above: Aerial view of project site May 2025; Below: Discharge channel on levee riverside

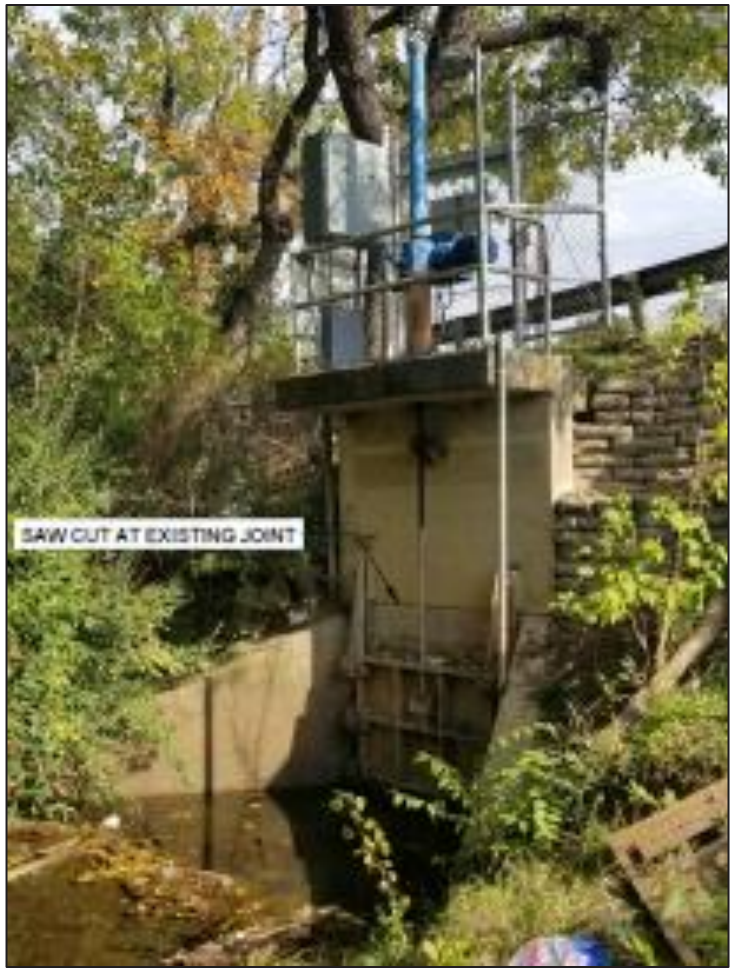
NOBLES BRANCH SUMP IMPROVEMENTS

- Status
  - Construction contract awarded 12 February 2025
  - Projected Construction Placement Cost: $13,543,885
  - Projected completion late 2026

- Install four new 60-inch reinforced concrete pipe culverts with slide gates under Empire Central Drive while maintaining trafficability

- Project will maintain integrity of existing water conveyance during construction and deliver greater conveyance of water from west Dallas along the Elm Fork towards Hampton Pump Stations when complete





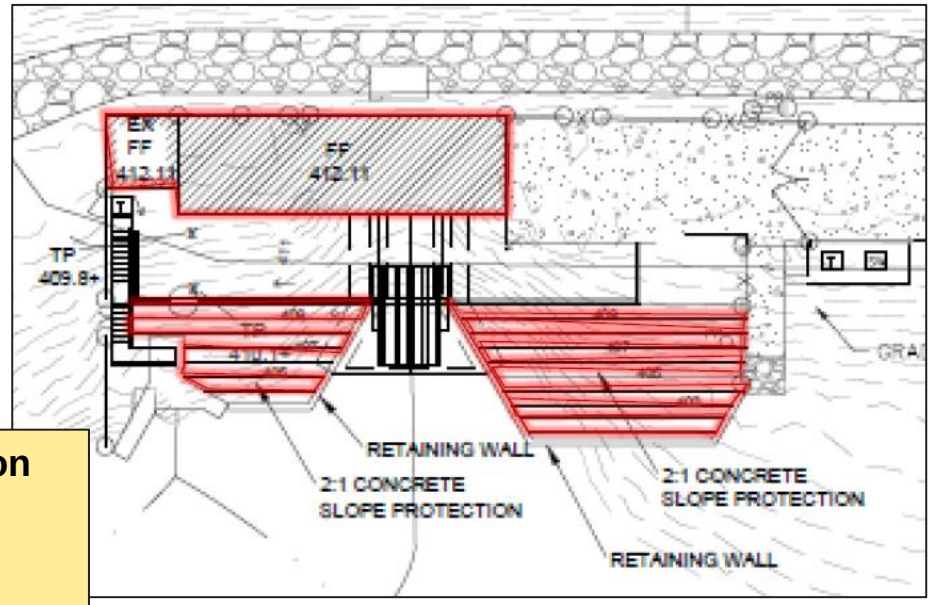
Above: Existing Headwall & Slide Gate structure to be replace with four new 60-inch culverts and gates

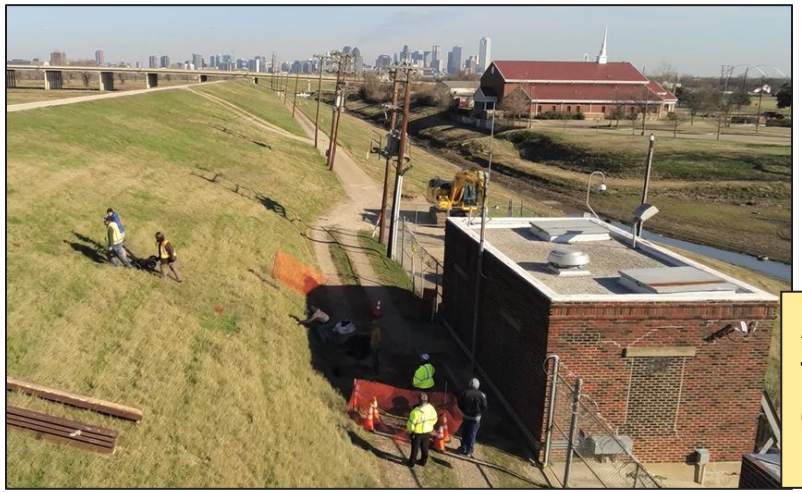
DELTA PUMP STATION REPLACEMENT

- Status
  - Construction contract awarded 4 April 2025
  - Projected Construction Placement Cost: $26,318,300
  - Projected completion late 2027

- Replacement of existing pump house building with upgraded electrical and installation of two 700HP pumps capable of 40K Gallons Per Minute (GPM) operation with higher efficiency than existing system

- Additional features will be new trash rack with expanded gallery deck for debris removal by front loader creating safer and more efficient operation





Above: Existing Delta Pump Station from landside; Below: Conceptual design of facility improvements; Left: preliminary site survey

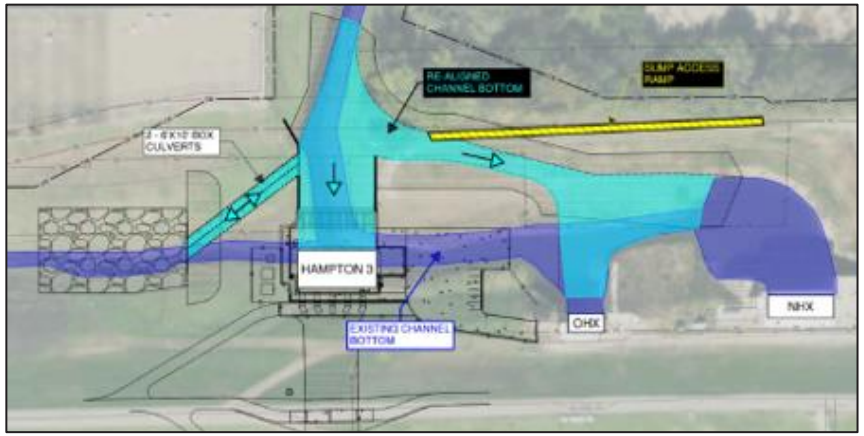
HAMPTON PUMP STATION PROJECTS

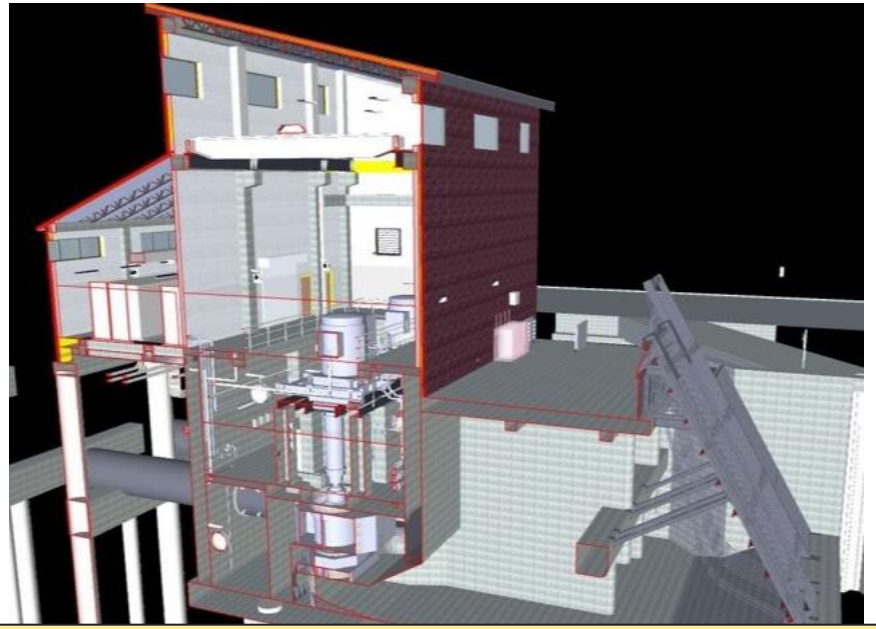
- Status
  - Projected Contract First Award: Late 2026
  - Projected Construction Placement Cost: $100M-$150M
  - Projected Completion 2031-2033

- Hampton 3: Construct a new pump station capable of 700 Gallons Per Minute (GPM) operation along East Levee near Inwood Road

- New Hampton Renovation: Replacement of electrical equipment, supervisory control and data acquisition system, and incidental related work. To be completed after Hampton 3 brought online

- Old Hampton Demolition: To be completed after Hampton 3 brought online





Above: Planview of Hampton project site;
Below: Isometric of Hampton 3 Pump Station

TRINITY PORTLAND PUMP STATION

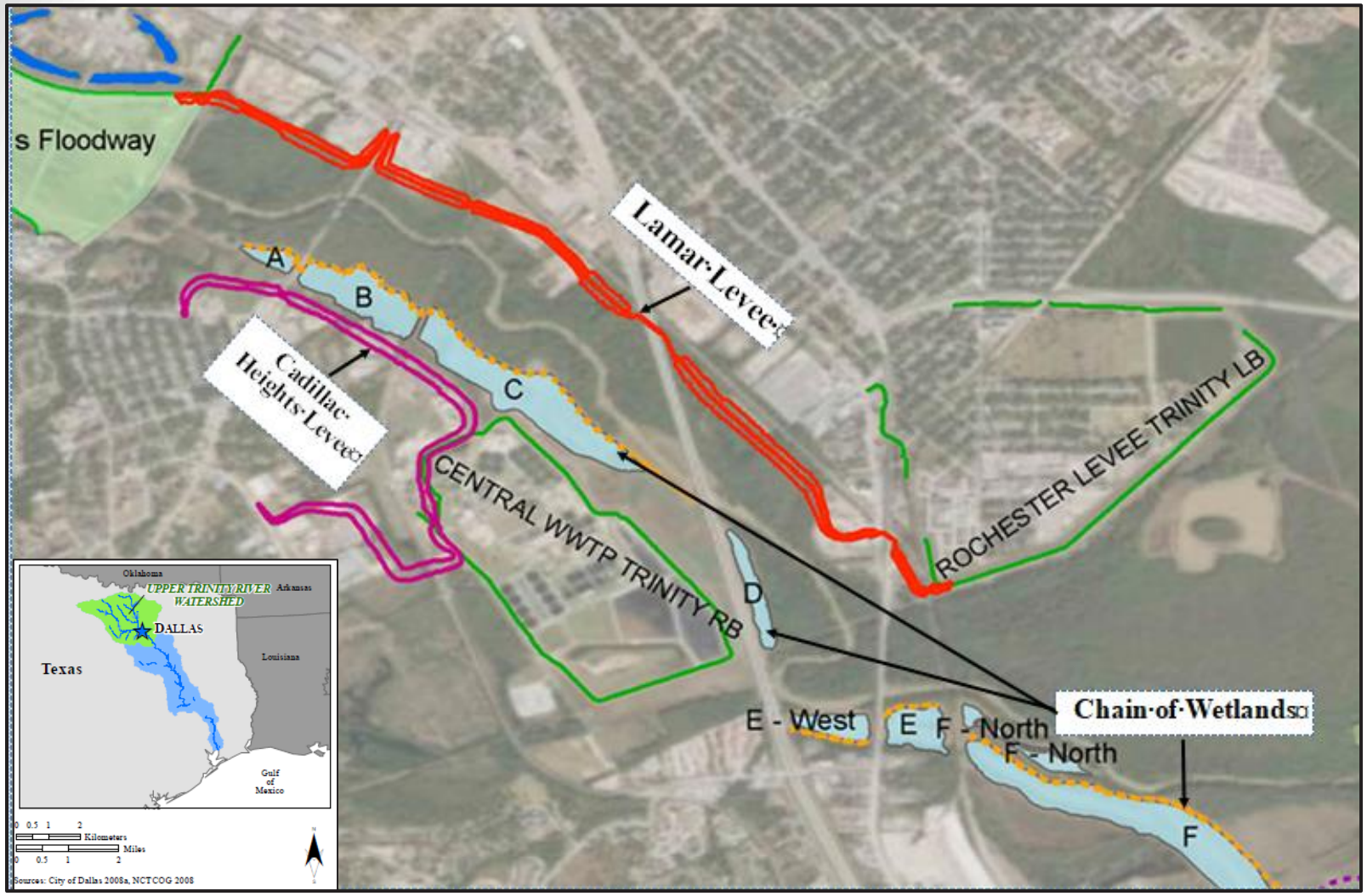
- Status
  - Construction contract terminated November 2023
  - Projected re-procurement in Fiscal Year 2027
  - Projected Construction Placement Cost: $60M

- Construct a new pump station capable of 225K Gallons Per Minute adding interior drainage capability where none previously existed

- The Corps continues to partner with City of Dallas to ensure all real estate and environmental actions are completed by end of 2025

Above: Project site of future Trinity Portland Pump Station; Below: Rendering of Pump Station

DALLAS FLOODWAY EXTENSION FEATURES



Authorization of Dallas Floodway Extension by Section 301, River and Harbor Act of 1965, modified by Section 351 WRDA 1996 and Section 256 of WRDA 1999

Flood Risk Management Portion

- Flood control wetlands (Upper& Lower Chain of Wetlands)
- Cadillac Heights Levee
- Lamar Levee

Other portions include

- Ecosystem restoration
- Transportation
- Recreation

LAMAR LEVEE

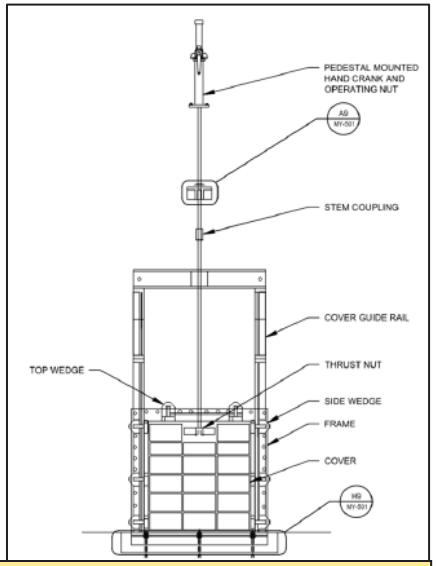
- Status
  - Design contract awarded: 29 September 2021
  - Projected construction contract award: Fiscal Year 2028

- Construct approximately 3 miles of new levee and floodwalls tying into existing Dallas Floodway East Levee near and continuing southeast to Rochester Park Levee

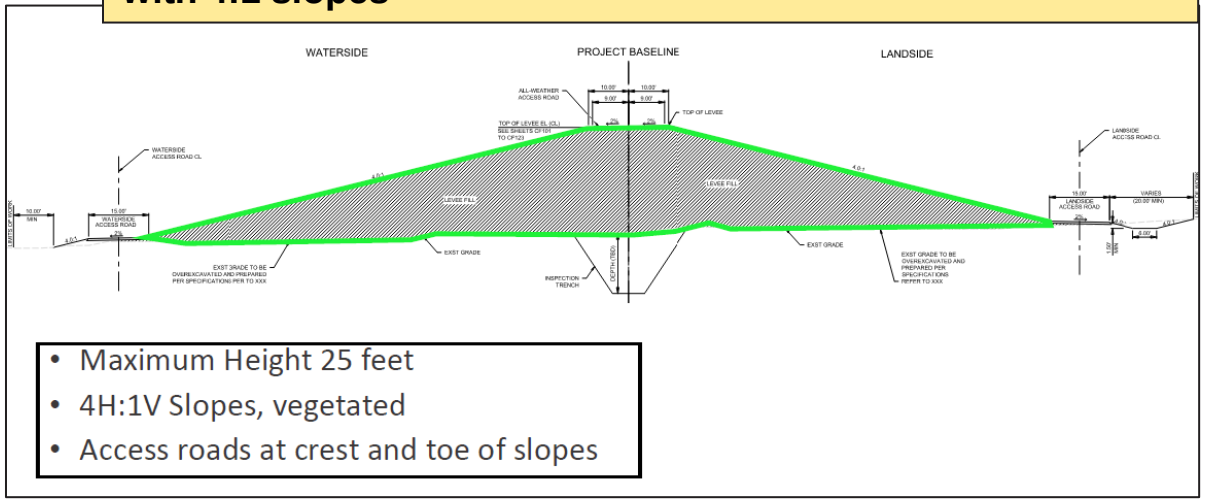
- Project updated design scope in 2024 to encompass utility relocation design. Design efforts continue in parallel with real estate acquisition by the City of Dallas with aim to achieve clean and clear lands by end of 2026

- Design includes option as a betterment for floodwall features to accommodate future Dallas to Houston High Speed Rail

- Design incorporates three critical roadway (SH 310) and railroad (BNSF & UPRR) closure structures

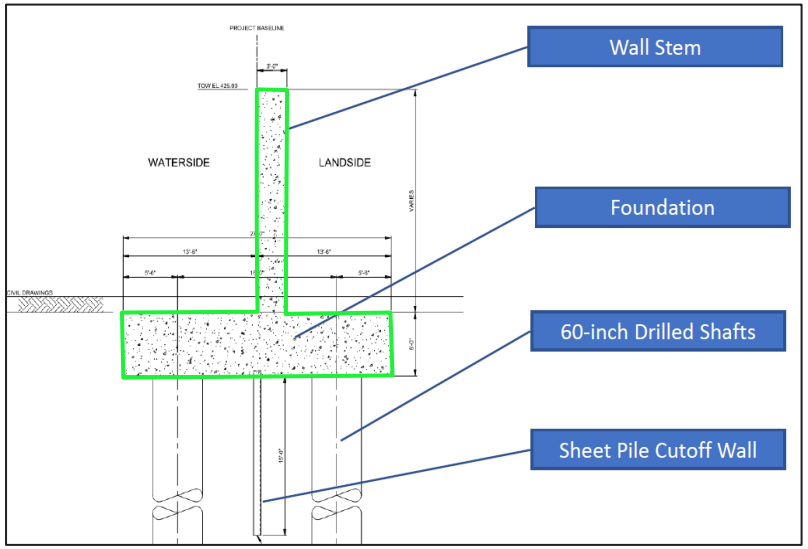


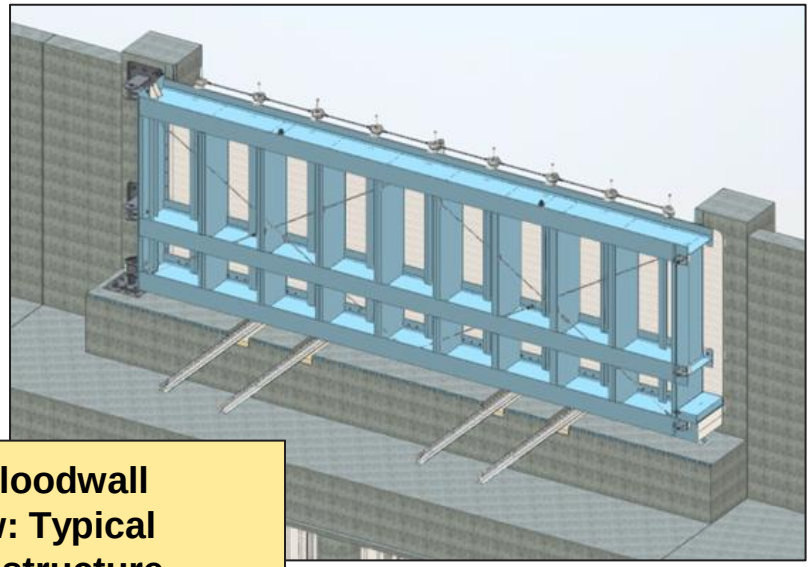
Above: Typical sluice gate detail to accommodate drainage sump operations; Below: Typical levee section planned with 4:1 slopes



CADILLAC HEIGHTS LEVEE

- Status
  - Design contract awarded: 3 December 2021
  - Projected construction contract award: Fiscal Year 2028
- Construct approximately 2.25 miles of new levee and floodwalls in vicinity of the Cadillac Heights Neighborhood tying into high ground at start and finish
- Project updated design scope in 2024 to encompass utility relocation design. Design efforts continue in parallel with real estate acquisition by the City of Dallas with aim to achieve clean and clear lands by end of 2026
- Design incorporates four critical roadway (Cedar Crest, Sergeant Road) and railroad (BNSF, CWWTP Spur) closure structures
- Cadillac Levee ties into CWWTP Levee on the West Side and deign plans for uninterrupted operations of the plant during construction





Above: Typical floodwall structure; Below: Typical railroad closure structure

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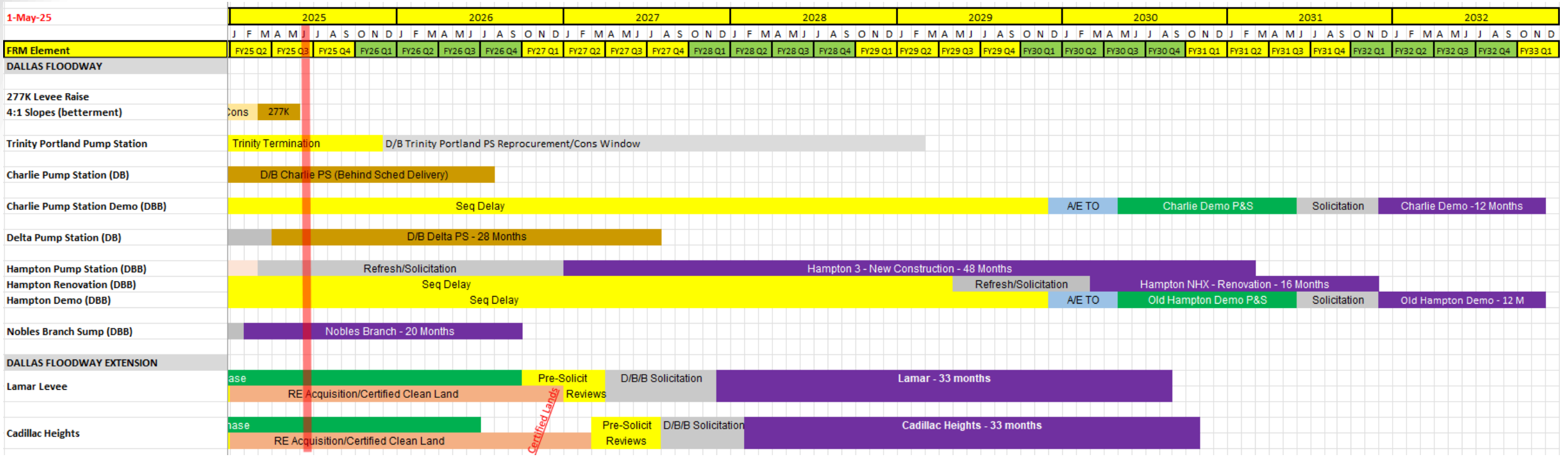
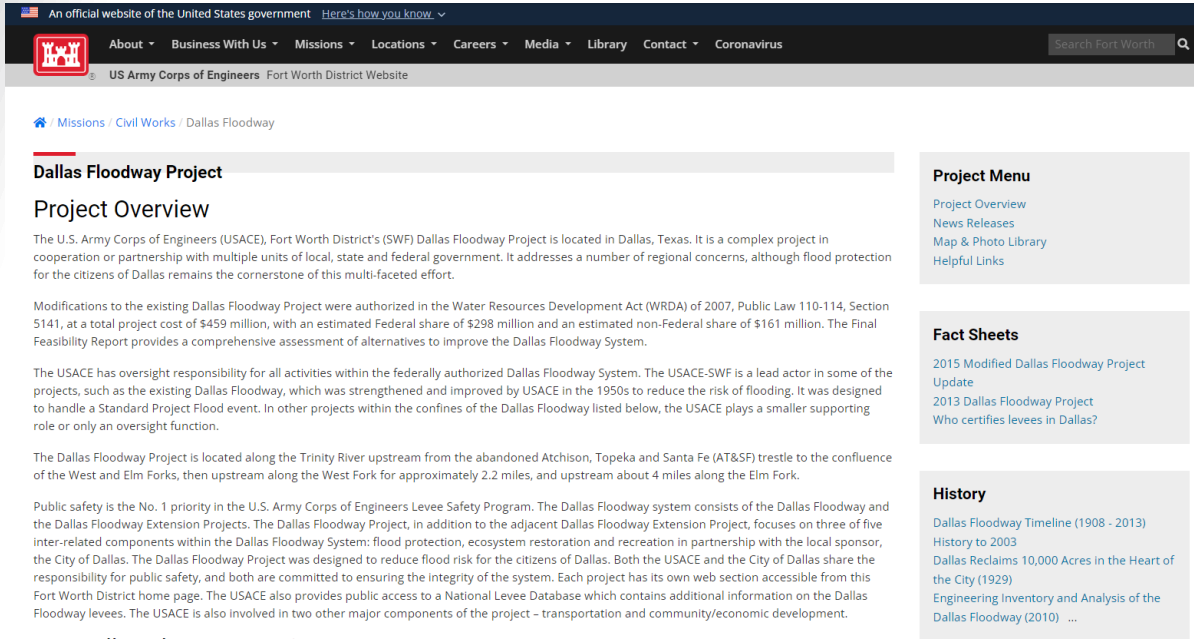
SCHEDULE AND MILESTONES



Legend
RE Acquisition
Writing AE SOW and awarding AE task order
Delays, either RE or sequence
Full design
Construction procurement
DB Construction - includes Design
DBB Construction

QUESTIONS?

https://www.swf.usace.army.mil/Missions/Civil-Works/Dallas-Floodway/



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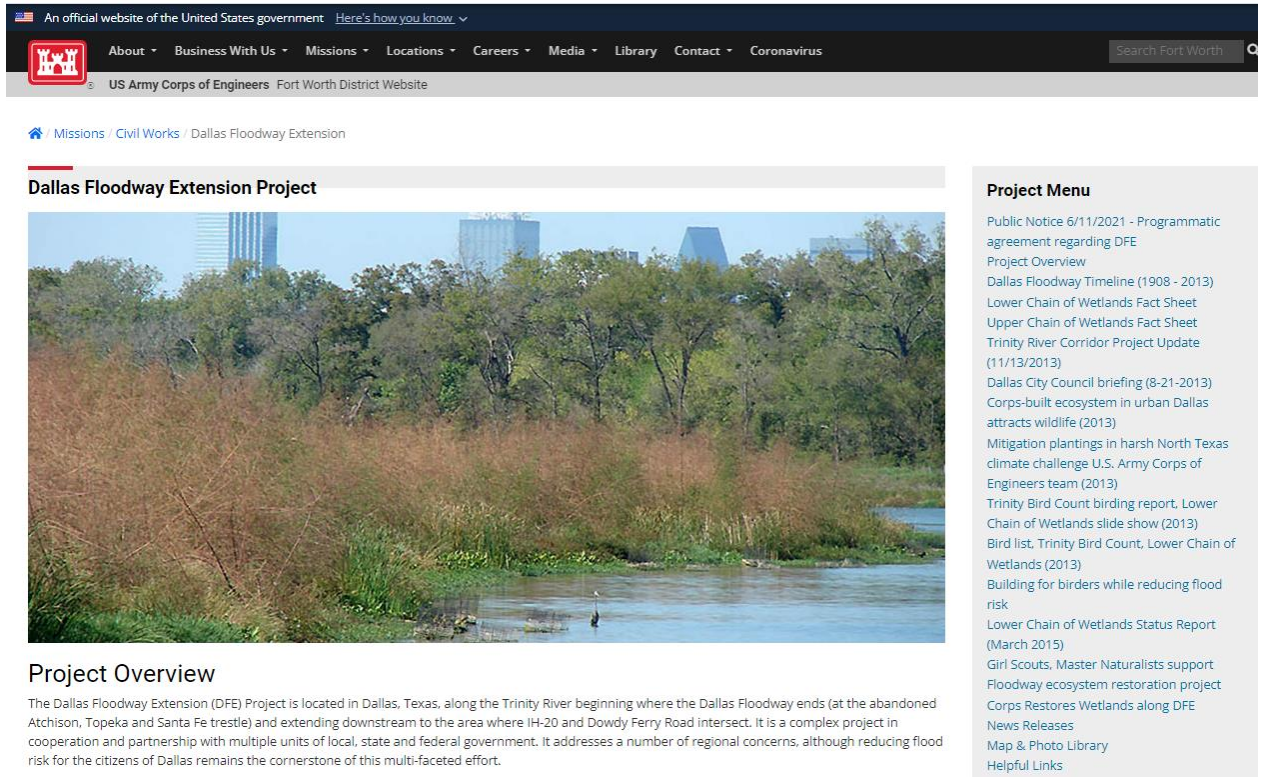

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References

Dallas Floodway

Dallas Floodway Extension