P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

ENVIRONMENTAL DETERMINATION

TO: File

FROM: T. Clay Schultz, Ph.D., Director, Regional Water Project Development Clay Schultz Digitally signed by Clay Schultz Date: 2026.05.22 14:50:15 -05'00'

SUBJECT: City of Irving, Dallas County, Texas
TWDB FIF Project No. 40206
West Irving Creek Channel Improvements
Phase D
Total Commitment Amount: $45,000,000
Loan No. L1001613
Grant No. G1001614

The environmental review for the proposed City of Irving (City) West Irving Creek Channel Improvements Project, Phase D has been completed consistent with 31 Texas Administrative Code (TAC) § 363.14 and 363.16. The City is proposing to use $45,000,000 in financing from the Flood Infrastructure Fund (FIF) program to construct phases A and D of the West Irving Creek Channel Improvements project. The TWDB committed this financing on July 25, 2023. The City closed the financing on November 14, 2023. Funding for phases B and C was committed on May 31, 2026, and is yet to be closed upon.

The City is constructing the West Irving Creek Channel Improvements project in multiple phases that function independently of each other and have therefore elected to conduct environmental review under separate environmental findings. This Environmental Determination (ED) corresponds to Phase D. Phase D includes bridge and channel modifications for flood control in West Irving Creek, as well as a trash rack to filter litter from the channelized portion of the stream before it enters a gravel pit that eventually drains to the West Fork Trinity River. An ED for Phase A was issued by the TWDB on February 21, 2024. Phases B and C are currently pending environmental review.

This environmental review is documented by the enclosed ED, which contains mitigative environmental conditions that will be applied to the project to avoid significant adverse impact on waters of the U.S., floodplains, cultural or historical resources, threatened or endangered species, and protected migratory bird species.

Based on a detailed environmental review of the planning information, the Environmental Data Form received by the TWDB on April 14, 2025, with the supplementary materials submitted to the TWDB on April 10, 2026, the project meets the requirements of 31 TAC § 363.14 with the following special and standard environmental conditions:

Our Mission
Leading the state's efforts in ensuring a secure water future for Texas

Board Members
L'Oreal Stepney, P.E., Chairwoman | W. Brady Franks, Board Member | Ashley Morgan, Board Member
Bryan McMath, Executive Administrator

Special Environmental Conditions

- Consistent with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, the proposed project will comply with the terms and conditions of United States Army Corps of Engineers Nationwide Permit (NWP) 14 for Linear Transportation Projects (Project Numbers SWF-2024-00250, SWF-2024-00305, and SWF-2024-00306) and NWP 43 for Stormwater Management Facilities (Project Number SWF-2025-00501).

- Consistent with the Flood Insurance Reform Act of 2004, federal Executive Order (EO) 11988 as amended by EO 13690, Texas Water Code Section 16.315, and local floodplain development ordinances, a floodplain development permit will be obtained from the City of Irving floodplain administrator prior to construction in, across, or under a Special Flood Hazard Area, and any requirements contained therein will be adhered to.

- As per an agreement with the Texas Parks and Wildlife Department (TPWD), Ecological & Environmental Planning Program (Project No. 52939), to ensure compliance with 31 Texas Administrative Code (TAC) Chapter 57, Texas Parks and Wildlife Code, Chapters 1, 12, 64, and 67, the Endangered Species Act of 1973, as amended, the Migratory Bird Treaty Act, and applicable federal regulations pertaining to protected species, the following measures will be implemented:
    - Vegetation clearing must be excluded during the general bird nesting season and tricolored bat pupping season, March 15 through September 15, to avoid adverse impacts to breeding birds and tricolored bats (*Perimyotis subflavus*). If vegetation clearing during this time is unavoidable, the area proposed for disturbance will be surveyed by a qualified biologist to identify occupied nests and pupping habitat, not more than five days prior to clearing activities. If occupied nests or bat roosts or hibernacula are observed during surveys, a vegetation buffer area of no less than 100 feet in diameter will remain around the nest or roost until all young have fledged; however, the size of the buffer zone depends on various factors and can be coordinated with the local or regional USFWS office. State and federal regulations as currently interpreted do not permit incidental take.
    - Culverts will be inspected for bats prior to construction. If bats are found to occupy a culvert, culvert construction activities will be avoided during the November 16 through March 14 hibernating season.
    - Contractors and construction crews will be provided with informational materials identifying potential protected species, including the tricolored bat and species of greatest conservation need (SGCN) that may occur in the project area and instructing them on how to avoid impacts to wildlife that are encountered: If wildlife are encountered, the animals will be allowed to leave the area safely. Wildlife in danger from project activities that will not readily leave the site can be translocated to a nearby area with similar habitat. Any translocation of reptiles will occur within 100-200 yards from the initial

encounter location. State-listed species will be handled only by persons with authorization obtained through the Texas Parks and Wildlife Department.

- For soil stabilization and revegetation, no-till drilling, hydromulching (avoiding plastic ingredients), and/or hydroseeding will be used rather than erosion control blankets or mats, which pose an entanglement hazard to wildlife. If erosion control blankets or mats cannot be avoided, products that contain no netting or loosely woven natural fiber netting will be used, avoiding any type of plastic netting.
- During construction, trucks and equipment will use existing bridges to cross creeks. Disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, pools, and gravel stream bottoms will be avoided.
- The City of Irving (City) will minimize vegetation removal and retain vegetative riparian buffers along waterbodies to the extent practicable. The City will avoid the removal of trees that have hollows to the extent practicable, as they provide suitable habitat for roosting bats such as the tricolored bat.
- If tricolored bats, alligator snapping turtle (*Macrochelys temminckii*), or the Monarch butterfly (*Danaus plexippus*) become federally listed prior to vegetation clearing and/or construction, the City will conduct additional coordination with the USFWS to ensure compliance with the ESA.
- The City will utilize trenchless construction methods for proposed water and wastewater pipeline crossings of West Irving Creek, avoiding impacts to potential waters of the U.S., including wetlands and aquatic habitat.

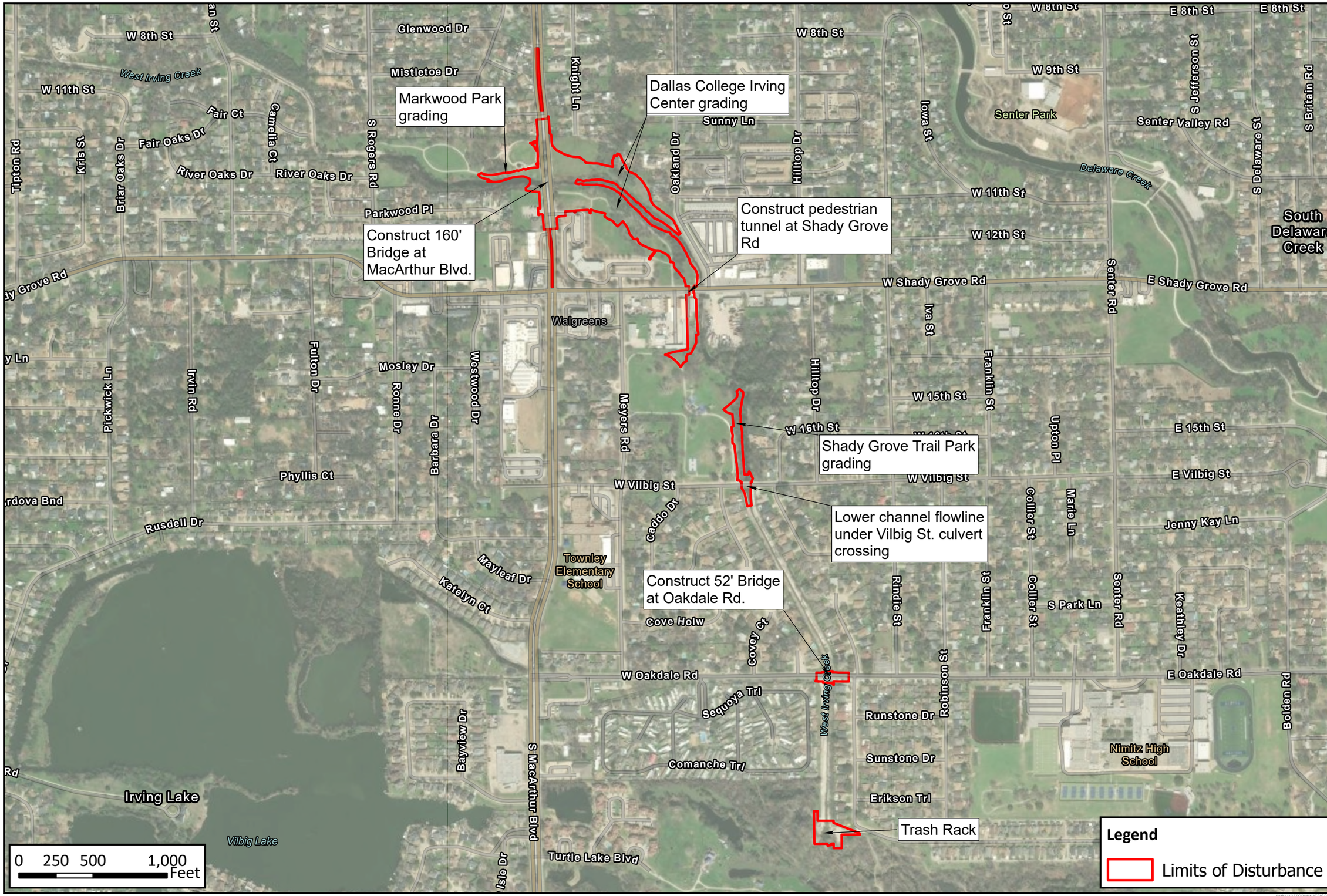
<u>Standard Environmental Conditions</u>

- Consistent with the TWDB Supplemental Construction Contract Conditions (TWDB-0552), the City will abide by the standard emergency condition for the discovery of cultural resources.

- Consistent with the TWDB Supplemental Construction Contract Conditions (TWDB-0552), the City will abide by the standard emergency condition for the discovery of threatened and endangered species.

With the addition of these requirements, design funds may be released once all other requirements are satisfied.

Enclosures



PROJECT COMPONENTS

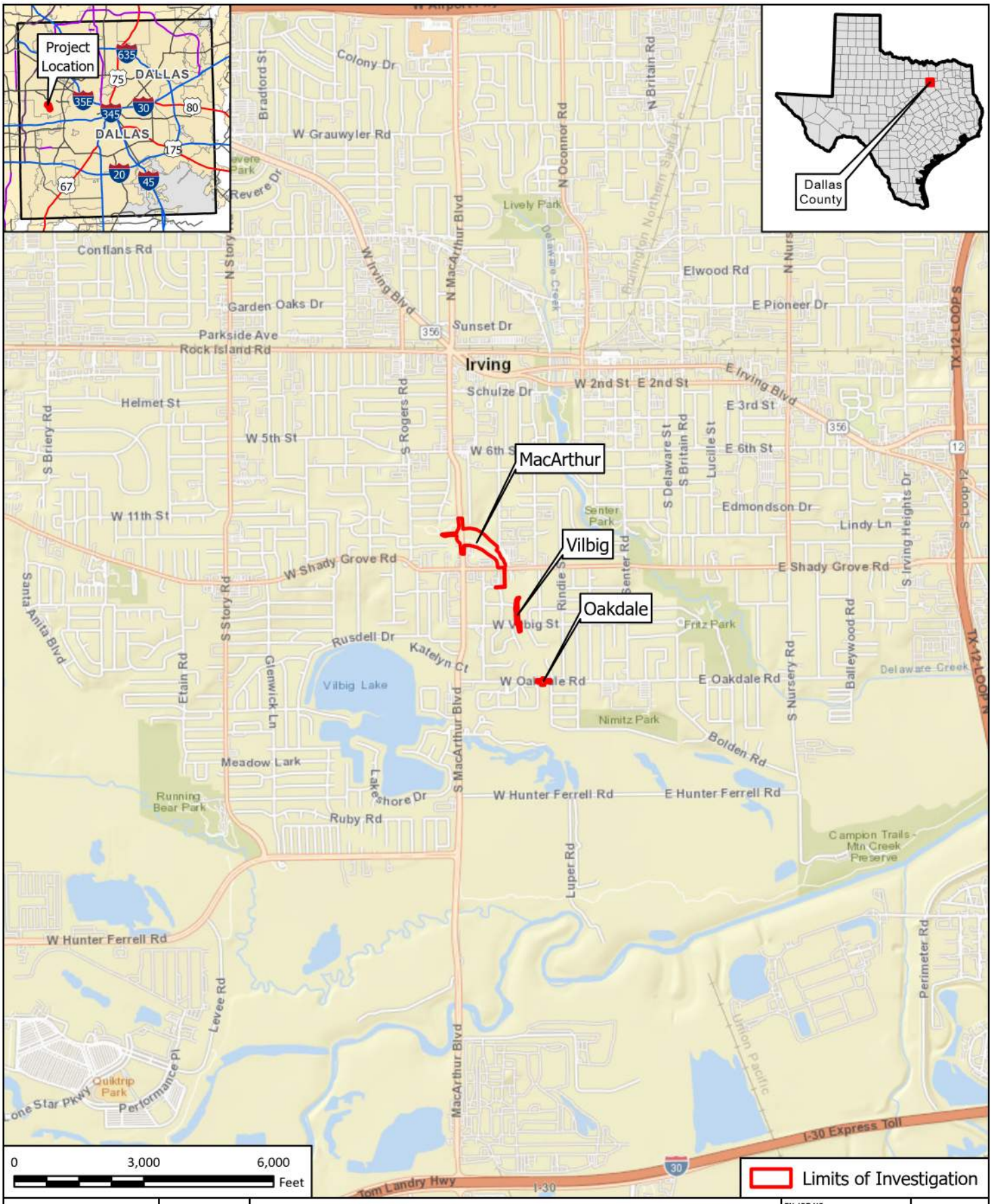
WEST IRVING CREEK PHASE D

FIGURE 2

FN JOB NO	IRV23981
FILE	Memo
DATE	3/10/2026
SCALE	1" = 500'
DRAFTED	08855

FREESE AND NICHOLS
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
(P) 817-735-7300 (F) 817-735-7491

Path: H:\STORMWATER\Final Exhibits\Floodplain Permit Memo\Memo.aprx



FREESE AND NICHOLS
FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

Overview Map

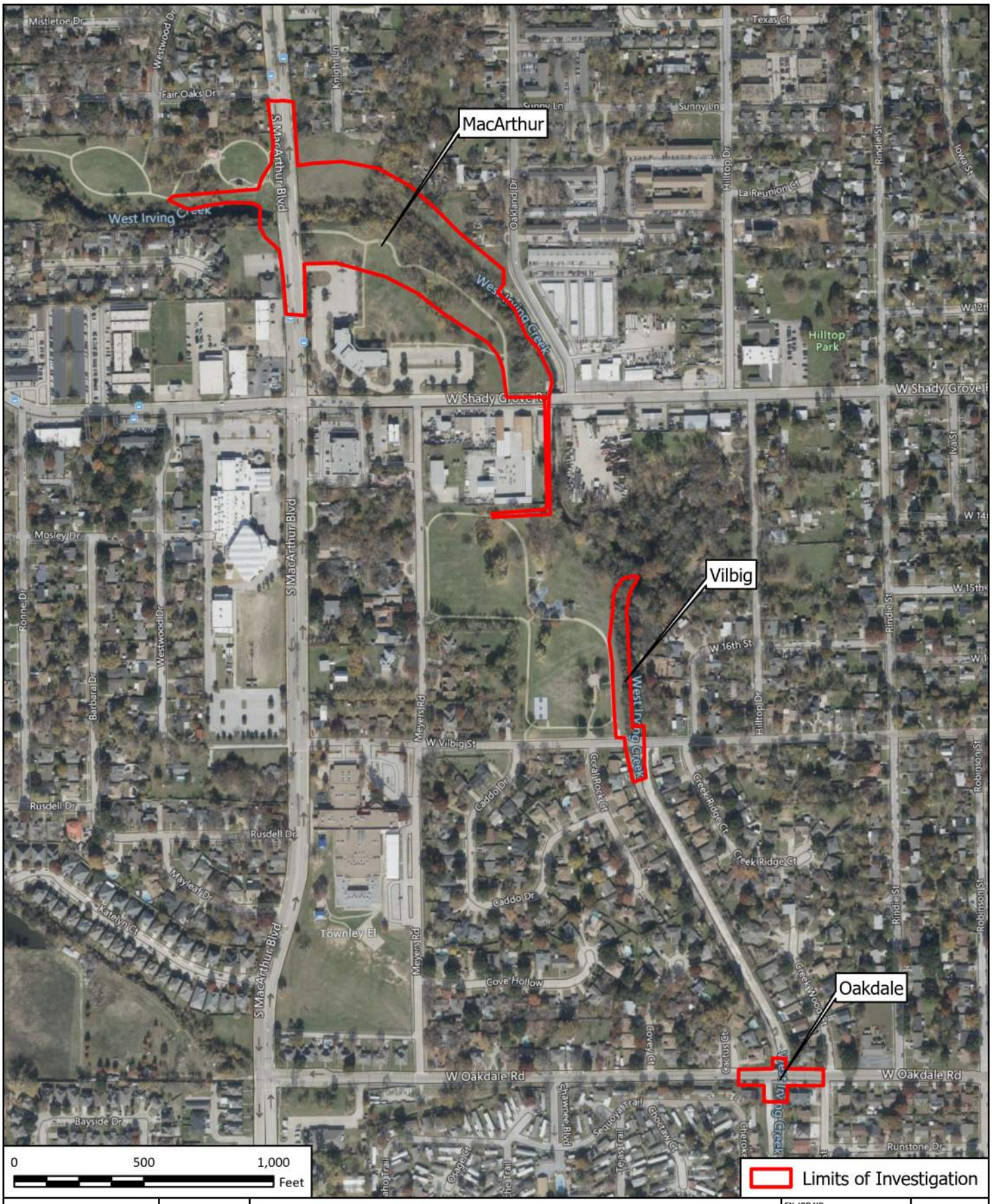
FN JOB NO	IRV23981
LAYOUT NAME	Fig1_Overview
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

1

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS

FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

Aerial Map

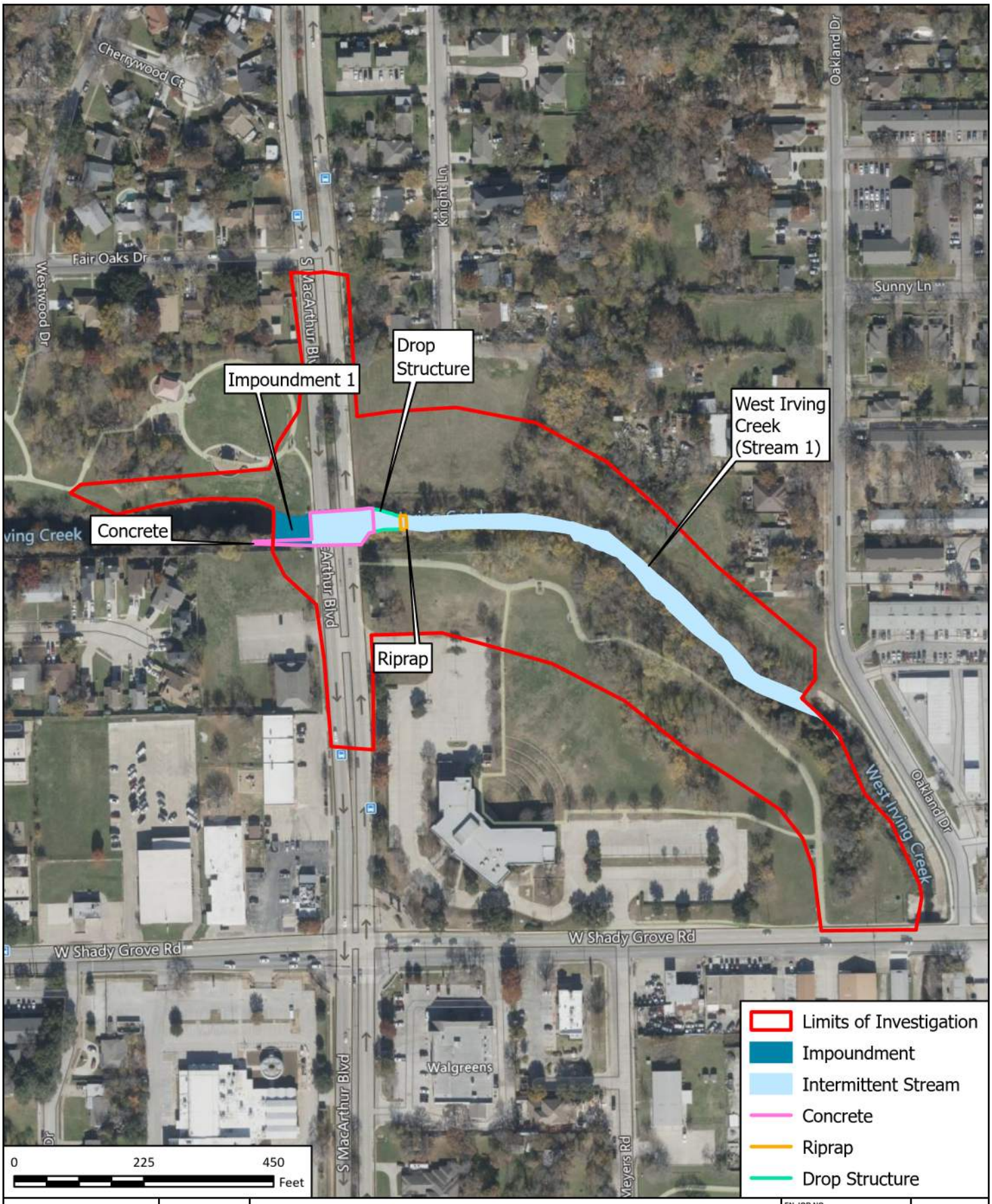
FN JOB NO	IRV23981
LAYOUT NAME	Fig2_Aerial
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

2

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS

FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

Waterbodies Map (MacArthur)

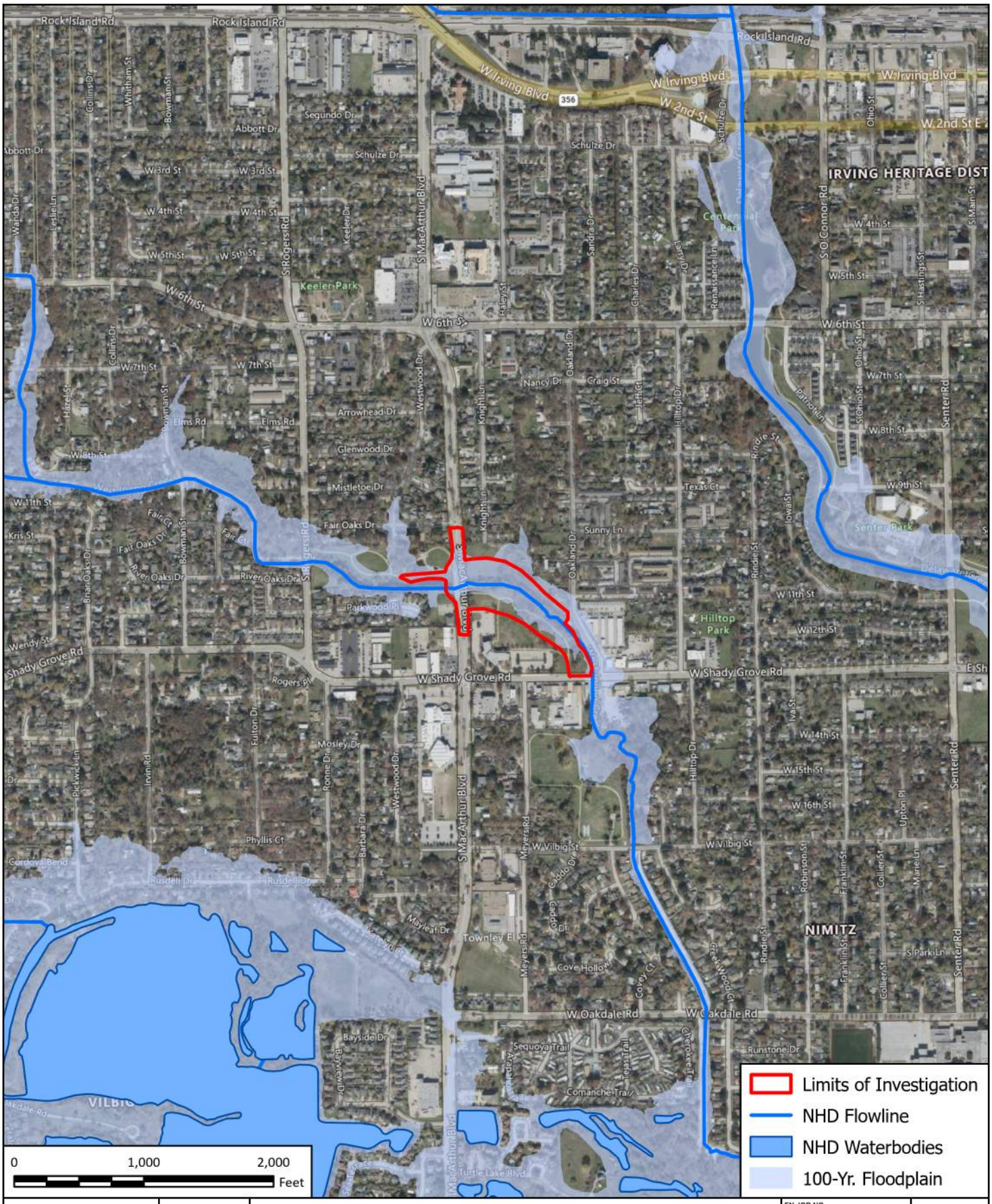
FN JOB NO	IRV23981
LAYOUT NAME	Fig3_Waterbodies_MacArthur
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

3

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 StatePlane Texas North Central FIPS 4202 Feet



FREESE AND NICHOLS
FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

FEMA 100-Yr. Floodplain Map (MacArthur)

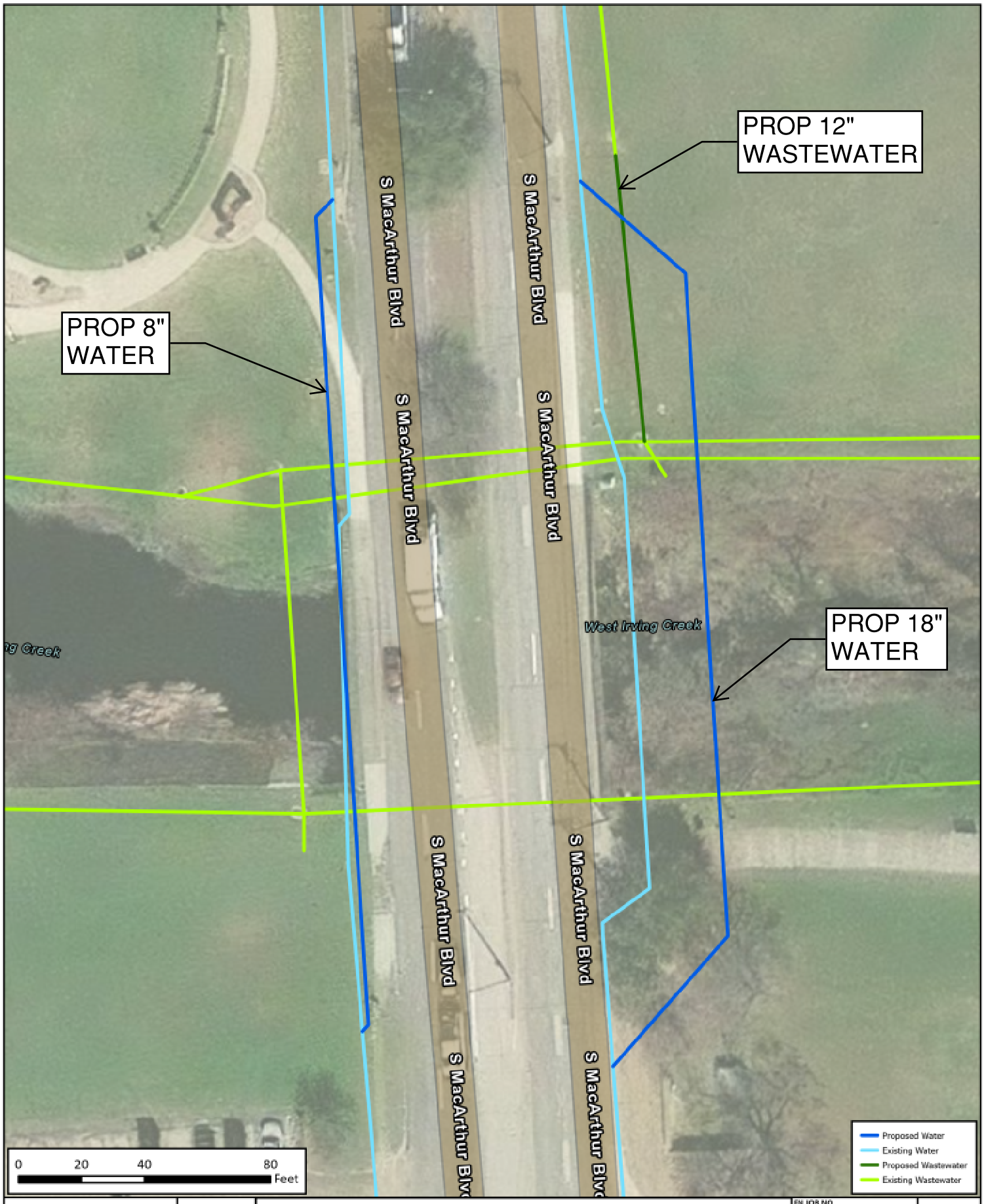
FN JOB NO	IRV23981
LAYOUT NAME	Fig5_Flood_MacArthur
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

5

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
817-735-7300 | www.freese.com

Utilities

West Irving Creek Phase D

FN JOB NO	IRV29981
FILE	EDF_Utilities
DATE	5/13/2026
SCALE	1" = 40'
DRAFTED	04312

EXHIBIT 1

Path: H:\STORMWATER\Final Exhibits\FIF\EDF_Utilities\EDF_Utilities\EDF_Utilities.aprx

FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

Waterbodies Map (Vilbig)

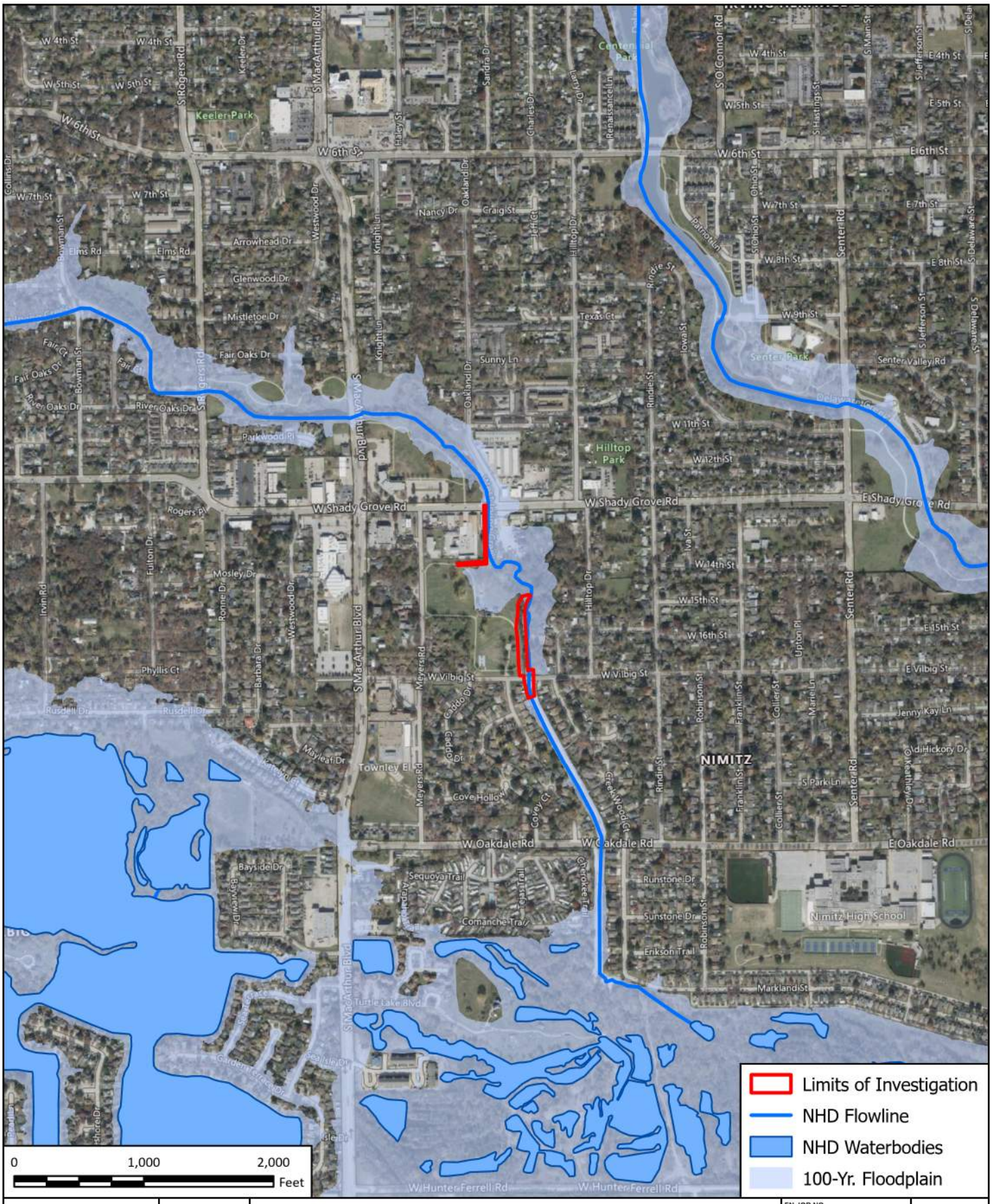
FN JOB NO	IRV23981
LAYOUT NAME	Fig7_Waterbodies_Vilbig
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

7

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS
FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

N
W E
S

CITY OF IRVING

West Irving Creek Phase D

FEMA 100-Yr. Floodplain Map (Vilbig)

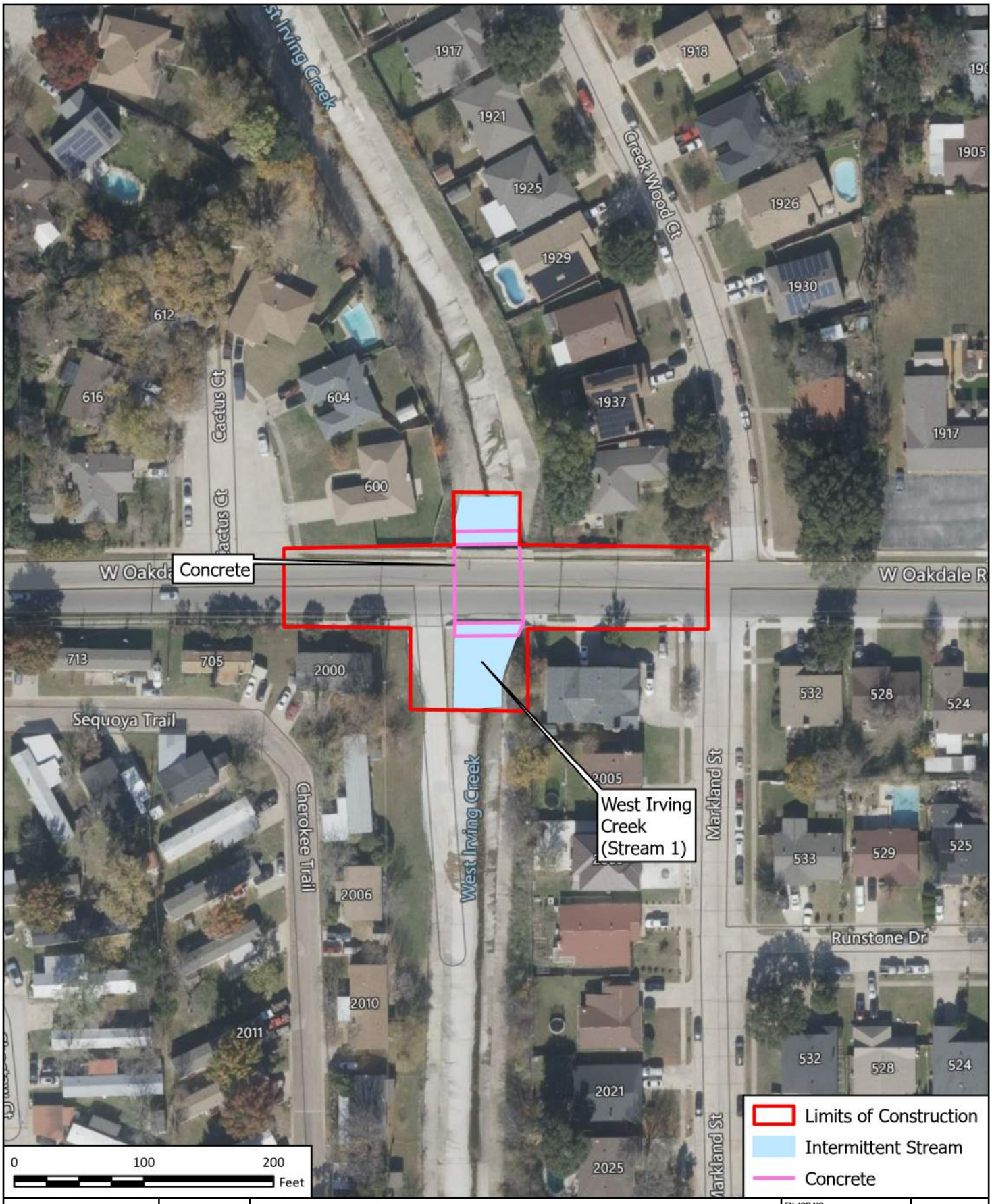
FN JOB NO	IRV23981
LAYOUT NAME	Fig9_Flood_Vilbig
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

9

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

Waterbodies Map (Oakdale)

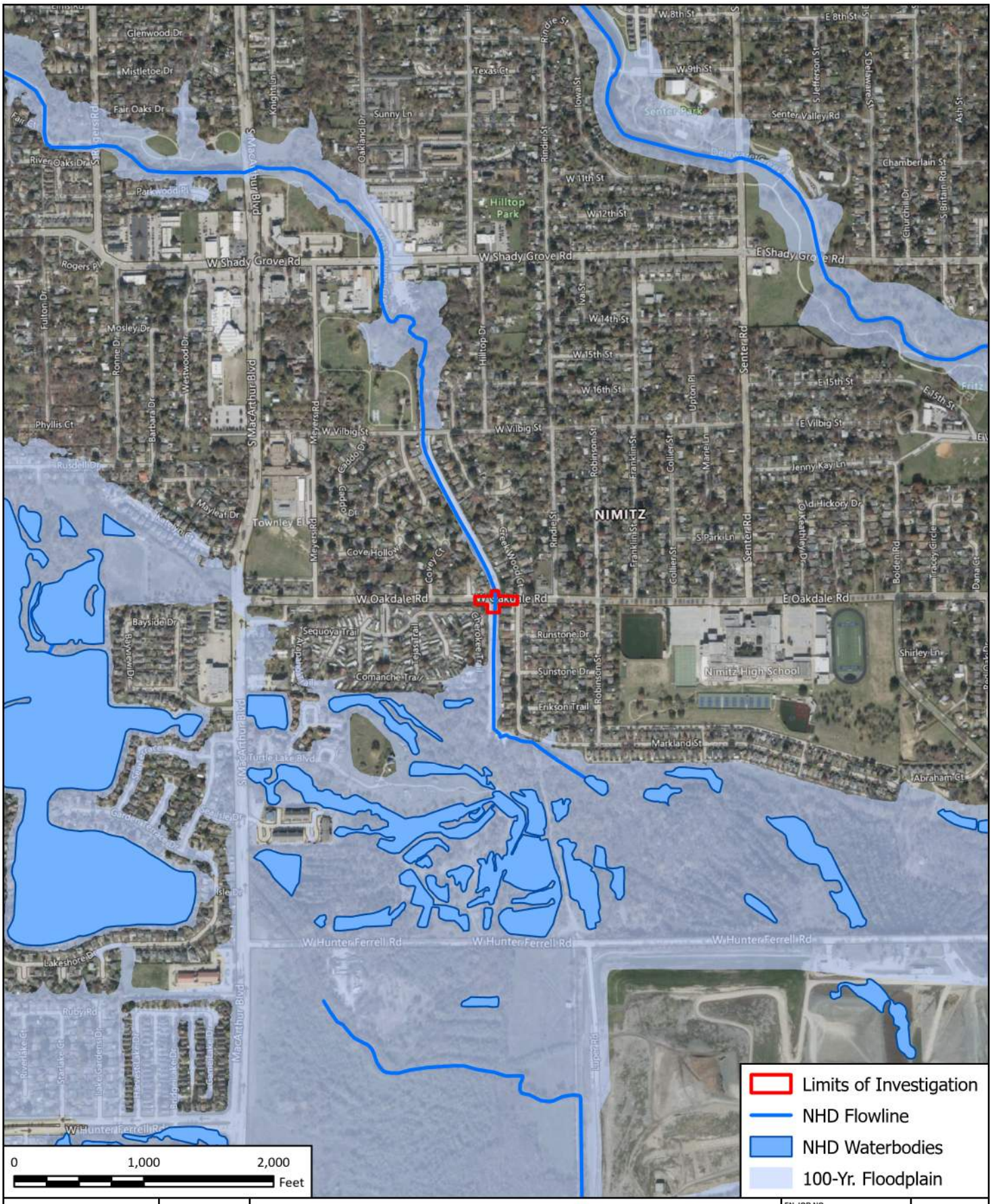
FN JOB NO	IRV23981
LAYOUT NAME	Fig11_Waterbodies_Oakdale
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

11

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS
FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, TX 76102
Phone - (817) 735 - 7300

CITY OF IRVING

West Irving Creek Phase D

FEMA 100-Yr. Floodplain Map (Oakdale)

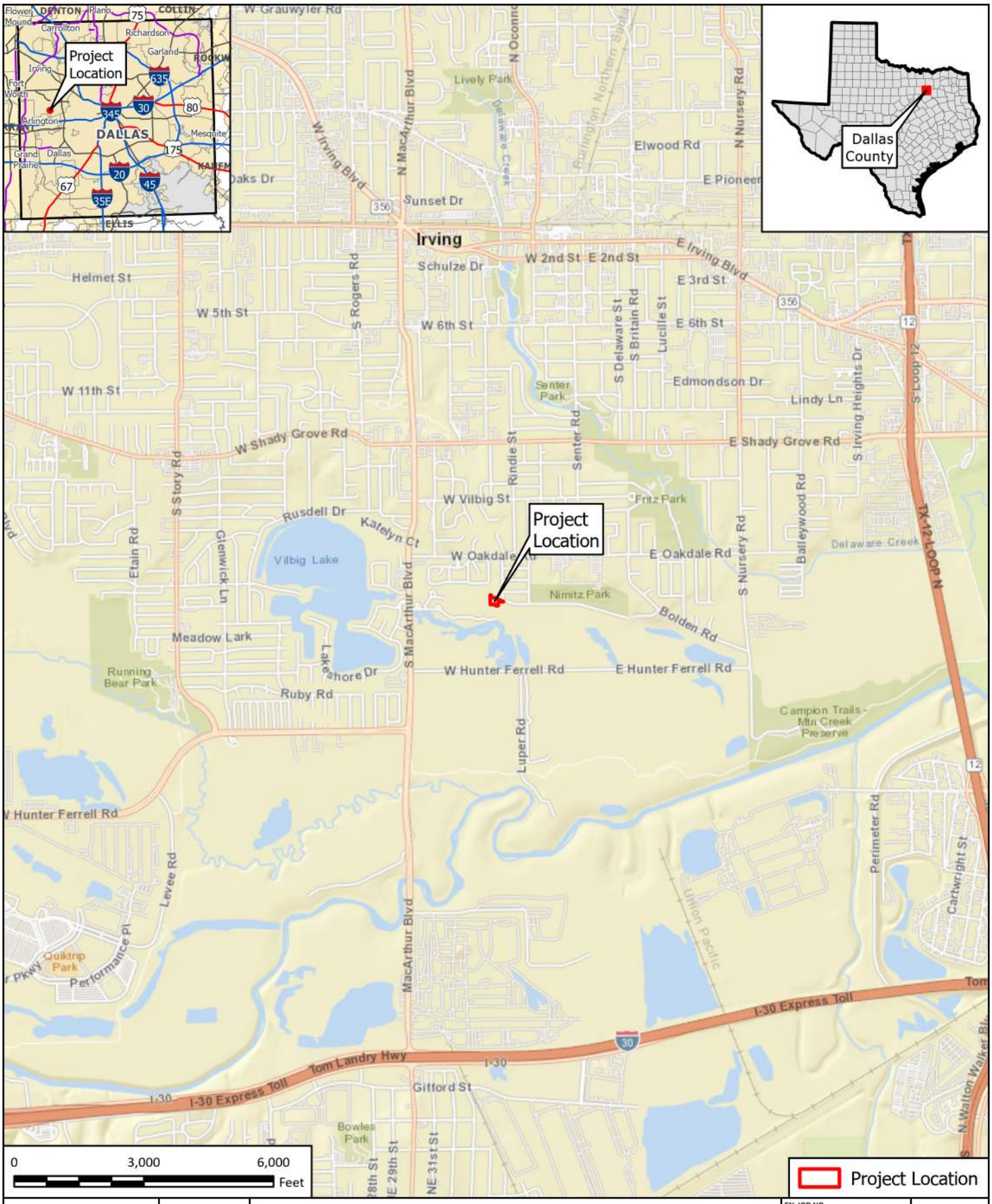
FN JOB NO	IRV23981
LAYOUT NAME	Fig13_Flood_Oakdale
DATE	4/14/2025
DESIGNED	MK
DRAFTED	MK

13

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\EDF_Figures\EDF_Figures.aprx

NAD 1983 2011 StatePlane Texas North Central FIPS 4202 FtUS



FREESE AND NICHOLS

FREESE AND NICHOLS, INC
12770 Merit Drive, Suite 900
Dallas, TX 75251
Phone - (214) 217 - 2200

CITY OF IRVING

West Irving Creek Phase D

Vicinity Map

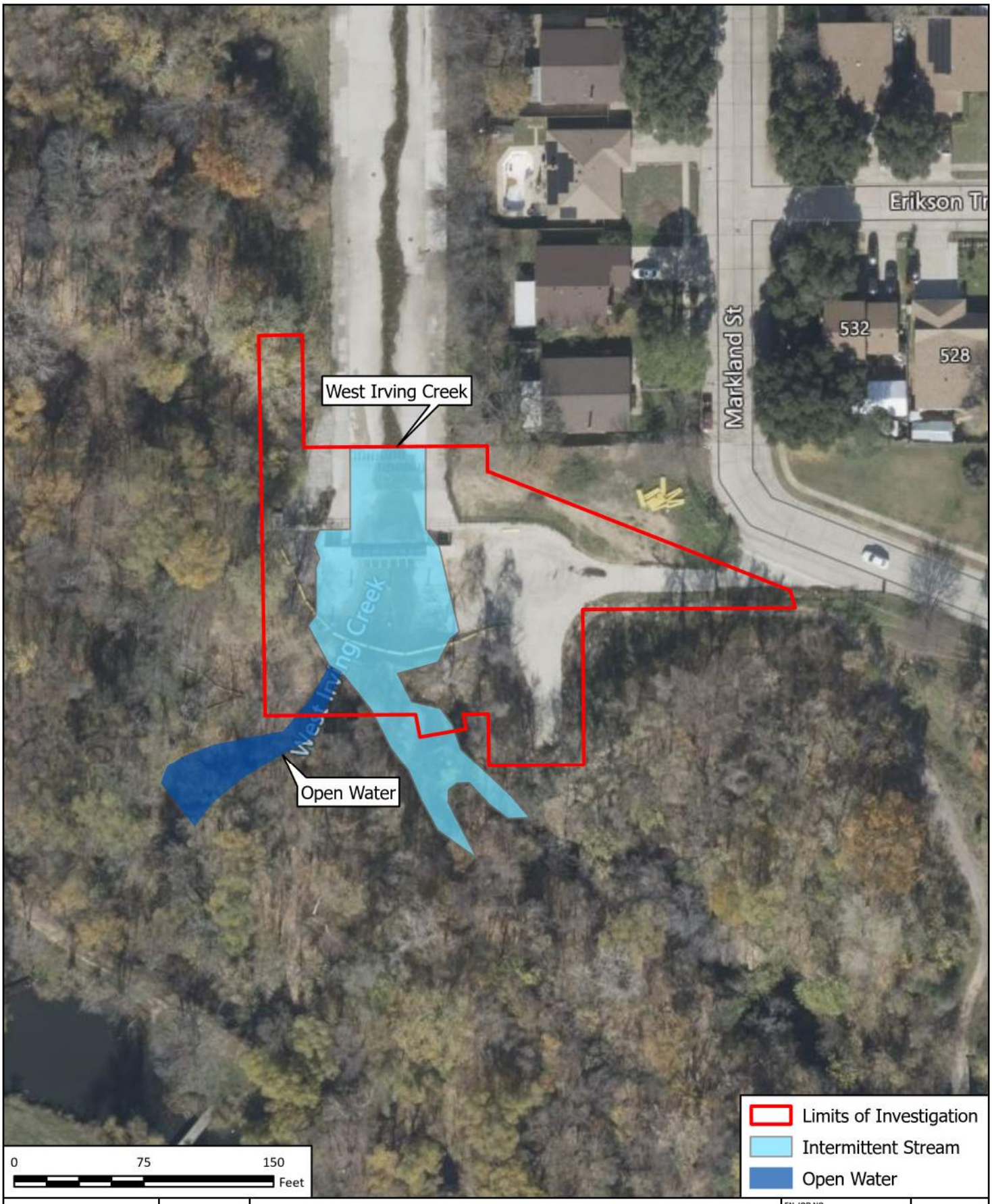
FN JOB NO	IRV23981
LAYOUT NAME	Fig1_Overview
DATE	11/18/2025
DESIGNED	MK
DRAFTED	MK

1

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\Delineation_Report\Trash\Delineation_Report_Trash.aprx

NAD 1983 StatePlane Texas North Central FIPS 4202 Feet



FREESE AND NICHOLS
FREESE AND NICHOLS, INC
12770 Merit Drive, Suite 900
Dallas, TX 75251
Phone - (214) 217 - 2200

CITY OF IRVING

West Irving Creek Phase D

Aerial Imagery Map With Field Mapped Waterbodies

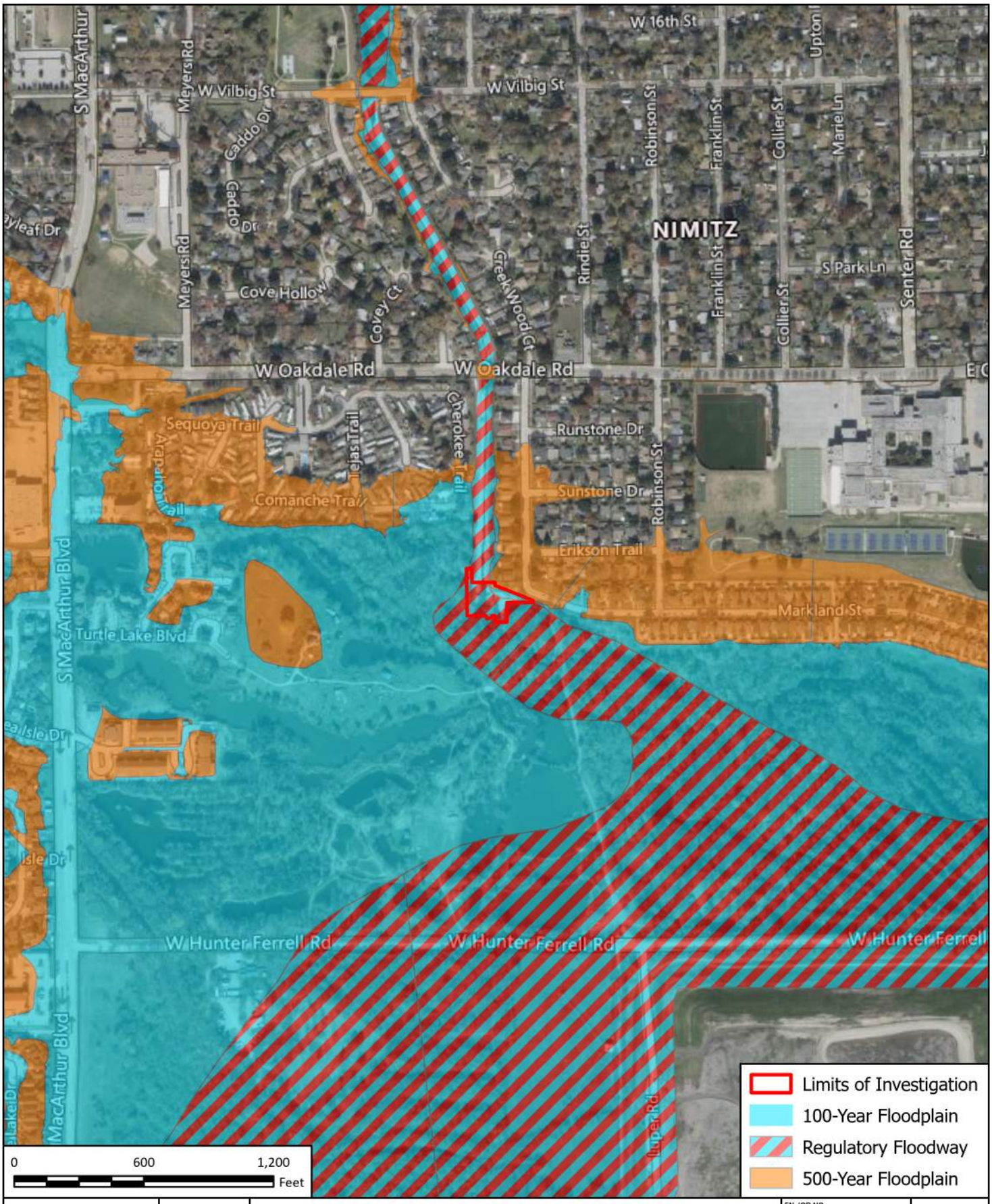
FN JOB NO	IRV23981
LAYOUT NAME	Fig2_Field Waterbodies
DATE	11/18/2025
DESIGNED	MK
DRAFTED	MK

2

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\Delineation_Report\Trash\Delineation_Report_Trash.aprx

NAD 1983 StatePlane Texas North Central FIPS 4202 Feet



FREESE AND NICHOLS

FREESE AND NICHOLS, INC
12770 Merit Drive, Suite 900
Dallas, TX 75251
Phone - (214) 217 - 2200

N W E S

CITY OF IRVING

West Irving Creek Phase D

FEMA Floodplain Map

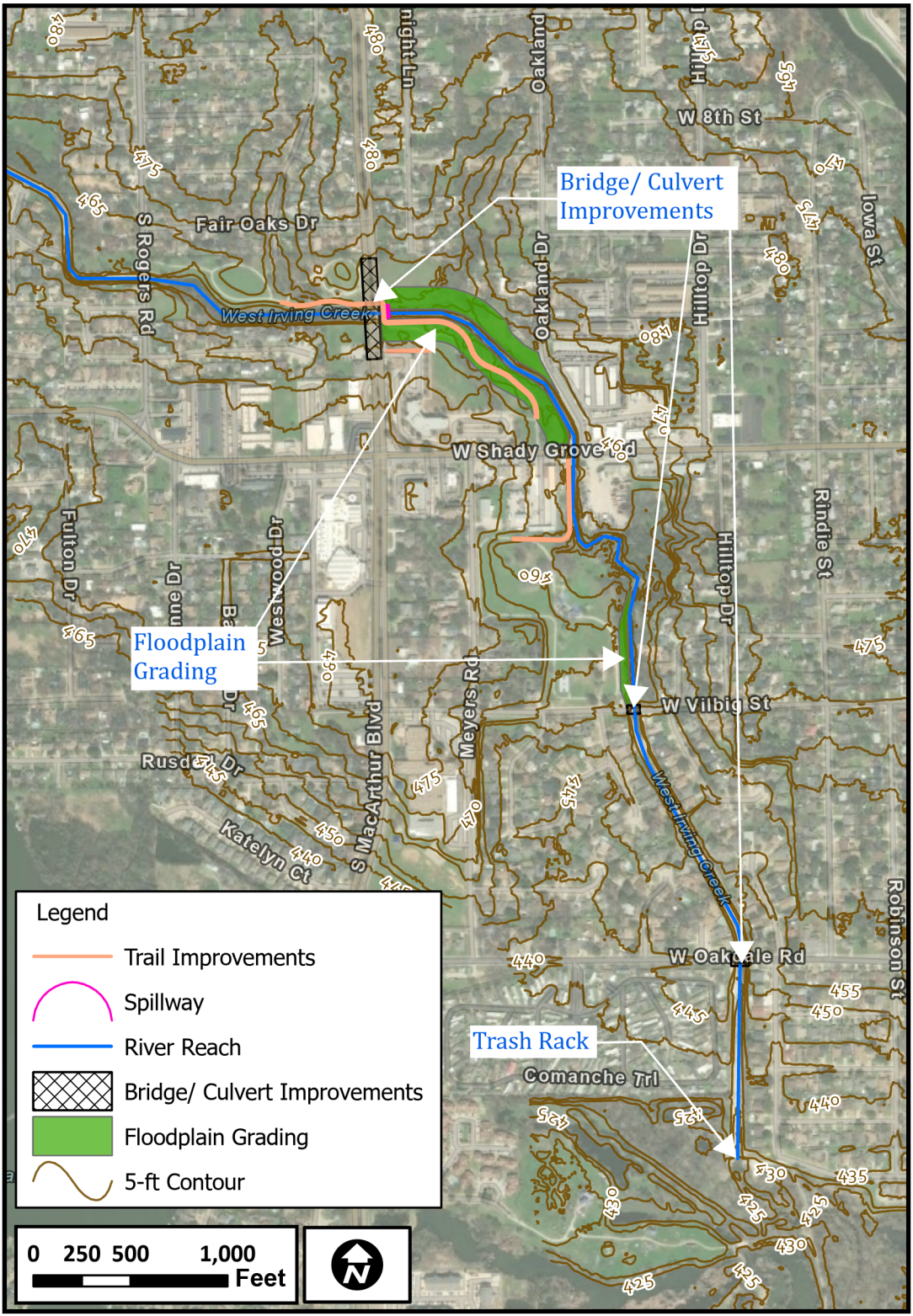
FN JOB NO	IRV23981
LAYOUT NAME	Fig4_Flood
DATE	11/18/2025
DESIGNED	MK
DRAFTED	MK

4

FIGURE

Path: H:\ENVIRONMENTAL\Final_Exhibits\Delineation_Report\Trash\Delineation_Report_Trash.aprx

NAD 1983 StatePlane Texas North Central FIPS 4202 Feet


Bridge/ Culvert Improvements
Floodplain Grading
Trash Rack
West Irving Creek
Fair Oaks Dr
S Rogers Rd
W 8th St
Oakland Dr
Hilltop Dr
Iowa St
W Shady Grove Rd
Rindie St
Fulton Dr
Westwood Dr
Meyers Rd
S MacArthur Blvd
W Vilbig St
Rusdale Dr
Katelyn Ct
W Oakdale Rd
Robinson St
Comanche Trl
Legend
Trail Improvements
Spillway
River Reach
Bridge/ Culvert Improvements
Floodplain Grading
5-ft Contour
0 250 500 1,000
Feet
N