

# Spur 399 Extension Schematic Viewing Guide



## What is a Schematic?

A schematic is a layout that includes the basic information necessary for proper review and evaluation of a proposed roadway improvement. Among other items, a schematic includes:

- Project location and limits
- Traffic volumes, both existing and projected
- Proposed main lanes, ramps, frontage roads, bridges, and crossroads
- Horizontal and vertical alignments with curves, elevation, grades, and vertical clearances
- Existing and proposed bicycle and pedestrian accommodations

**The following slides provide helpful information on what is included in a schematic. The slides are in the order of how to view a schematic starting on the left side at the top and moving down and to the right across the page.**

**Additional slides zoom in to provide more detailed information on what is included in the plan view.**

# Spur 399 Extension Schematic Viewing Guide



## DALLAS DISTRICT DESIGN SCHEMATIC

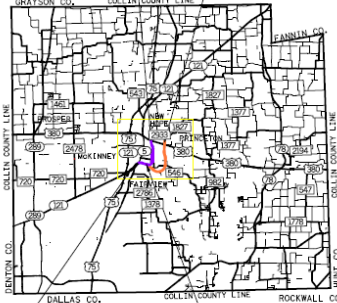
MOHAMED K. BUR, P.E.  
DALLAS DISTRICT ENGINEER

### SPUR 399

CSJ: 0364-04-051, 0047-05-058 & 0047-10-002  
FROM: US 75  
TO: US 380  
FUNCTIONAL CLASS: URBAN FREEWAY  
PURPLE ALTERNATIVE LENGTH: 5.4 MILES  
ORANGE ALTERNATIVE LENGTH: 7.0 MILES

#### DESIGN SPEEDS

MAINLANES (FREEWAY):	70 MPH
GENERAL RAMP (PRINCIPAL ARTERIAL):	50 MPH
FRONTAGE ROADS (COLLECTOR):	45 MPH
CROSS STREETS (MAJOR COLLECTOR):	VARIES



#### Design Speed

Roadway speed used to determine design criteria and constraints.  
This is NOT the speed limit for the roadway

#### Location Map

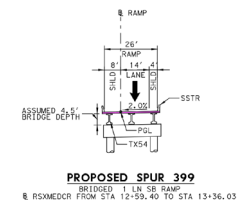
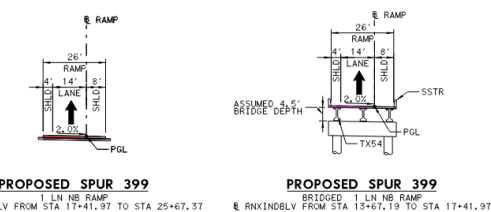
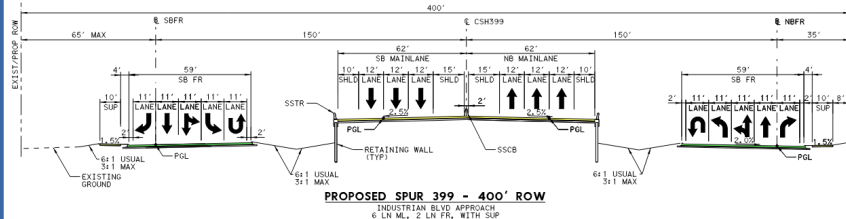
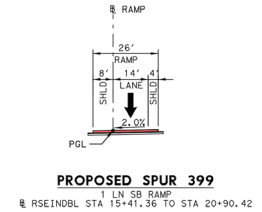
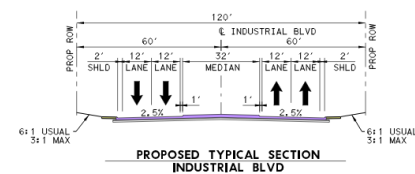
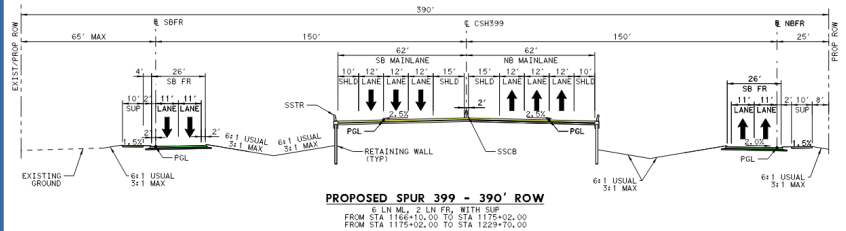
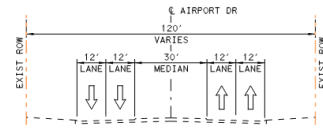
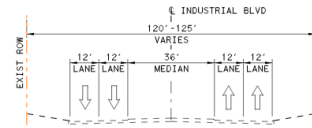
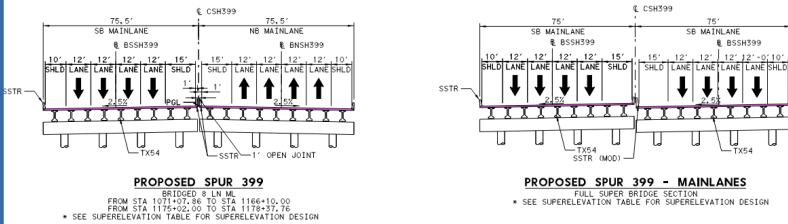
Displays the project location and limits for the  
roadway plans shown on the roll

# Spur 399 Extension Schematic Viewing Guide



## Typical Section

Existing or proposed roadway layouts that display lanes, medians, and buffer zone widths (area between roadway and shared use path)

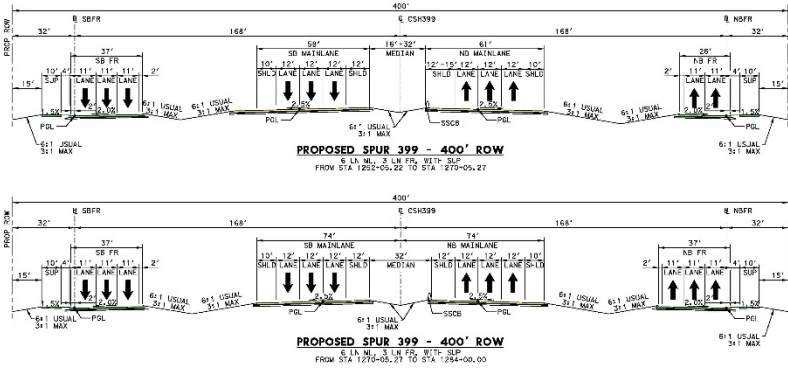


# Spur 399 Extension Schematic Viewing Guide

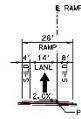


## Traffic Diagrams

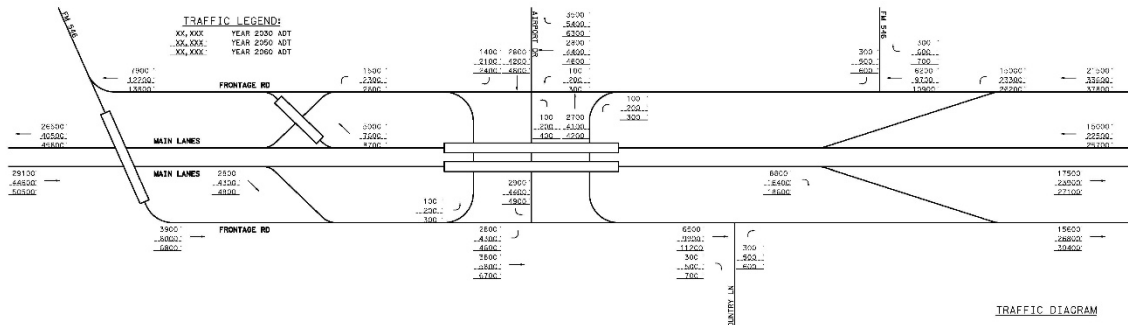
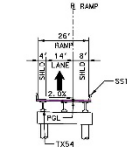
Traffic projections in opening and future design years for thru and turning movements at intersections



**PROPOSED SPUR 399**  
 1 LANE RAMP  
 RNS5464 FROM STA 12+45.36 TO STA 21+85.78  
 RSEPTREN FROM STA 15+49.32 TO STA 28+60.30



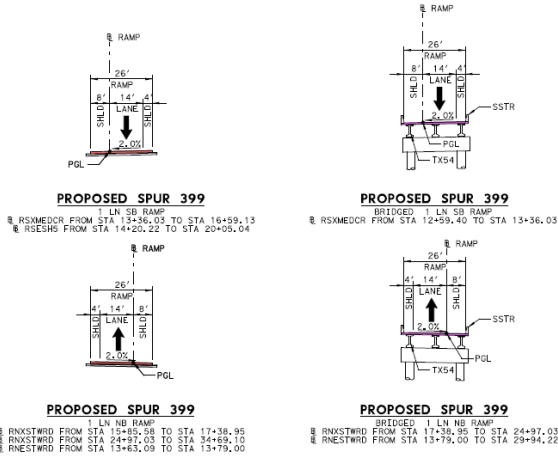
**PROPOSED TYPICAL SECTION**  
 FUTURE FM 546A



## MAINLANE SUPERELEVATION

STATION NAME	2000 ADT	2020 ADT	2040 ADT
100+00.00	100+00.00	100+00.00	100+00.00
101+00.00	101+00.00	101+00.00	101+00.00
102+00.00	102+00.00	102+00.00	102+00.00
103+00.00	103+00.00	103+00.00	103+00.00
104+00.00	104+00.00	104+00.00	104+00.00
105+00.00	105+00.00	105+00.00	105+00.00
106+00.00	106+00.00	106+00.00	106+00.00
107+00.00	107+00.00	107+00.00	107+00.00
108+00.00	108+00.00	108+00.00	108+00.00
109+00.00	109+00.00	109+00.00	109+00.00
110+00.00	110+00.00	110+00.00	110+00.00

# Spur 399 Extension Schematic Viewing Guide



## TYPICAL SECTIONS LEGEND:

- DIRECTION OF TRAVEL
- PROPOSED BRIDGE
- PROPOSED MAINLANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROADS
- PROPOSED CROSS STREETS
- PROPOSED SHARED USE PATH (SUP)
- PROPOSED TRANSITION
- PROJECT BY OTHERS

**Typical Section Legend**  
Legend, or key, for various elements on the roadway plans

## NOTES:

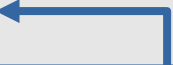
- EXISTING FEATURES WERE PARTIALLY SURVEYED. SCHEMATICS ARE BASED ON PARTIAL SURVEY (2020-2021), AERIAL IMAGERY (2021) AND RECORD PLANS.
- EXISTING R.O.W. SHOWN IS BASED ON INFORMATION FROM ADJACENT PROJECTS AND PROPERTY PARCEL DATA. EXISTING R.O.W. MAPPING ONGOING AND TO BE FINALIZED PRIOR TO THE 90% SUBMITTAL.
- PROPERTY OWNER DATA WAS OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT (JULY, 2021.)
- APPROXIMATE 100-YEAR FLOODPLAIN LIMITS (2011) WERE OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT.
- SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL (UNLESS OTHERWISE NOTED).
- CURBS ON THE FRONTAGE ROAD AND CROSS STREETS ARE TYPE II (UNLESS NOTED OTHERWISE).
- EXISTING DRIVEWAYS WILL REMAIN UNLESS IT IS DETERMINED DURING DETAILED DESIGN STAGE AND COORDINATION WITH THE LOCAL GOVERNMENT THAT THE DRIVEWAY IS A SAFETY ISSUE AND/OR IS LOCATED WITHIN ACCESS DENIAL LIMITS SHOWN.
- BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED R.O.W. PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE. INDUCED DISPLACEMENTS WERE DETERMINED WHERE DRIVEWAYS OR PARKING ARE IMPACTED.
- CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
- WB-67 DESIGN VEHICLE WAS USED IN EVALUATION OF TURNING MOVEMENTS.
- TRAFFIC SIGNALS SHOWN ON THE SCHEMATIC ARE SUBJECT TO CHANGE BASED ON THE TxDOT TRAFFIC SIGNAL WARRANT ANALYSIS.
- TRAFFIC VOLUMES ON THE TRAFFIC DIAGRAM ARE BASED ON TRAFFIC COUNTS AND GROWTH RATES APPROVED BY TTP (DATE: XX/XX/XXXX).
- ALL BRIDGE SPANS WILL UTILIZE TX54 WITH A ASSUMED DEPTH OF 6' FROM TOP OF DECK TO BOTTOM OF BEAM.
- WETLANDS SHOWN ORIGINATED FROM FIELD SURVEYS CONDUCTED FROM AUGUST 2020 TO JUNE 2021.
- SCHEMATICS SHOW CULVERT INFORMATION ONLY. DETAILED DRAINAGE TO BE INCLUDED IN THE PS&E PHASE.

## LEGEND:

- EXISTING ROW
- EXISTING PROPERTY LINES
- EXISTING STREAMS
- EXISTING WETLANDS
- EXISTING 100-YR FLOODPLAIN
- EXISTING FLOODWAY
- PROPOSED CENTERLINE/BASELINE
- PROPOSED ROW
- PROPOSED ROW (BY OTHERS)
- PROPOSED EASEMENT (BY OTHERS)
- PROPOSED TRAFFIC BARRIER
- PROPOSED BRIDGE BENTS/ABUTMENTS
- PROPOSED RETAINING WALL
- PROPOSED CULVERTS
- PROPOSED CULVERTS (BY OTHERS)
- PROPOSED ULTIMATE/FUTURE IMPROVEMENTS
- DIRECTION OF TRAVEL
- SIGNALIZED INTERSECTION
- PROPOSED BRIDGE
- PROPOSED MAINLANES
- PROPOSED RAMP
- PROPOSED FRONTAGE ROADS
- PROPOSED CROSS STREETS/DRIVEWAYS
- PROPOSED SHARED USE PATH (SUP)
- PROPOSED TRANSITION
- PROJECT BY OTHERS
- BUILDING DISPLACEMENT
- ROADWAY REMOVAL
- CURVE NUMBER
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING GAS
- EXISTING ELECTRIC
- EXISTING TELEPHONE

**Schematic Legend**  
Legend, or key, for various elements on the roadway plans

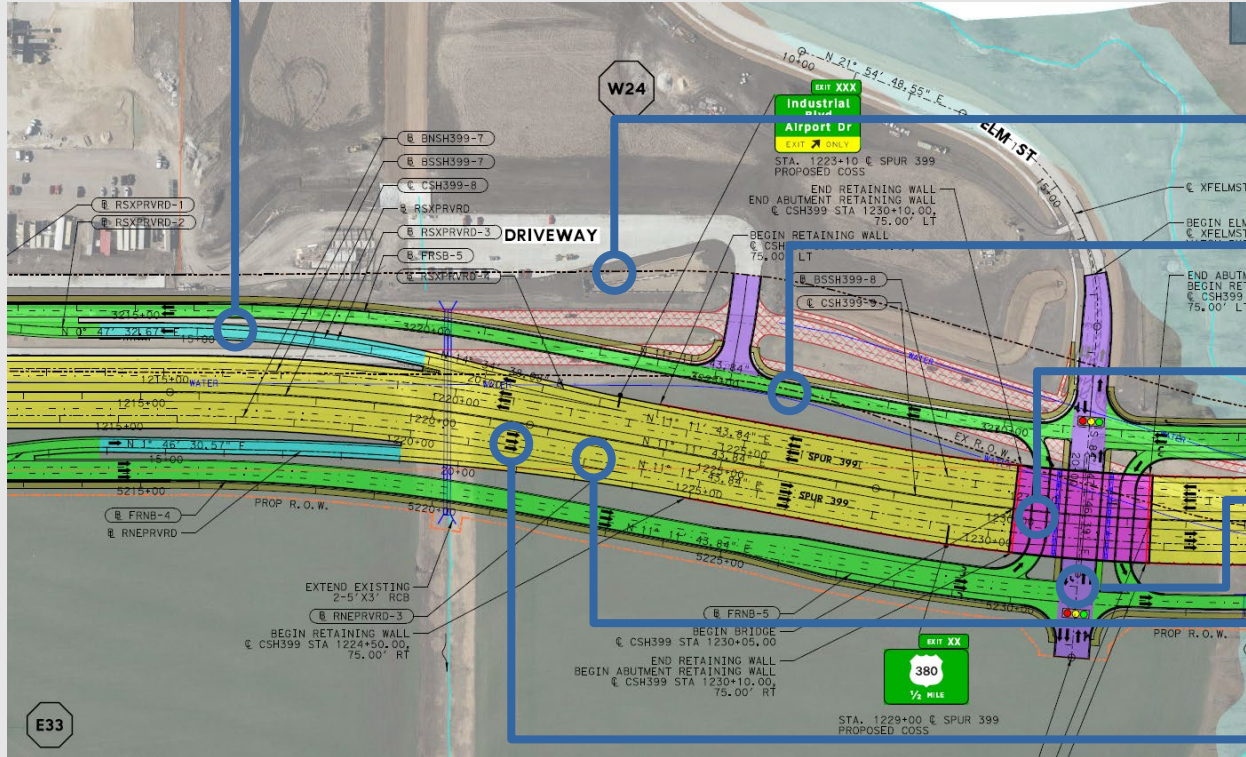
## Two-dimensional bird's eye view of roadway plans



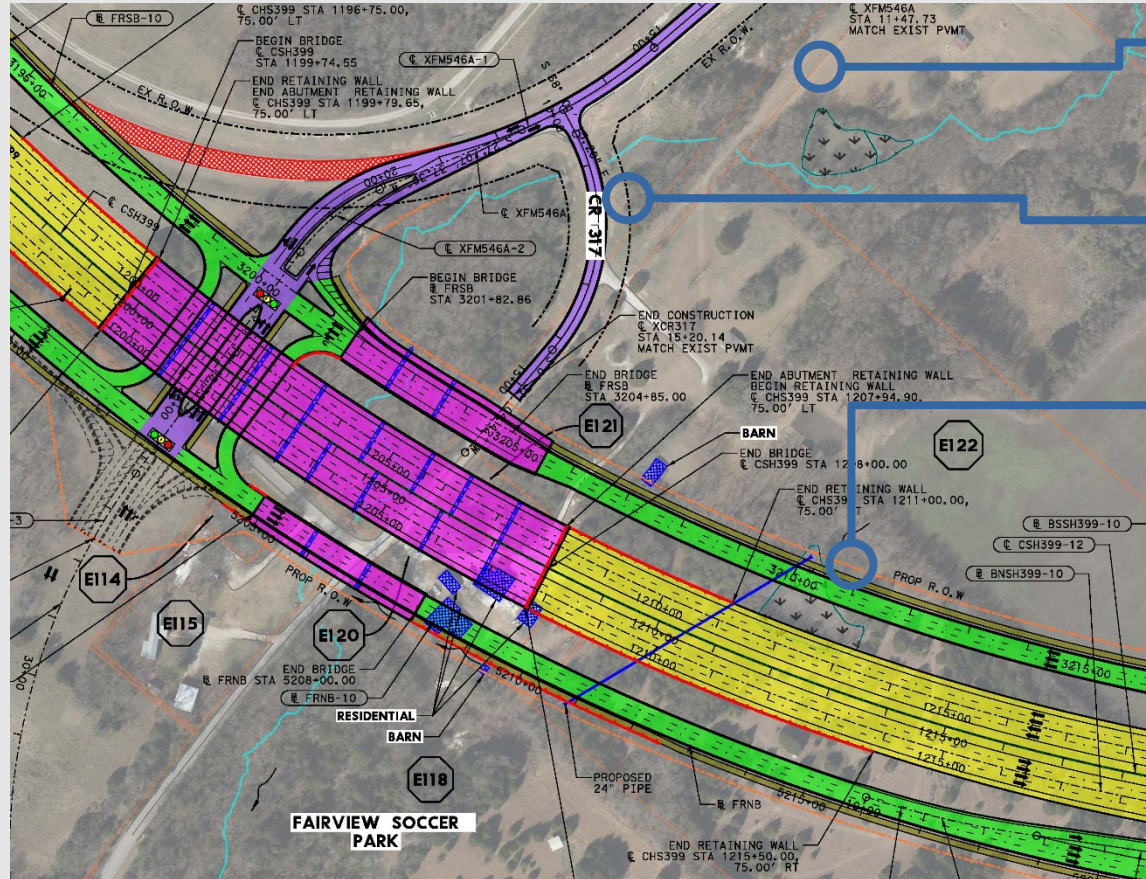
## Two-dimensional view of roadway hills and valleys

## Two-dimensional view of roadway hills and valleys





# Spur 399 Extension Schematic Viewing Guide



Existing Property Line

EXISTING PROPERTY LINES

Existing Right-of-Way

EXISTING ROW

Proposed Right-of-Way

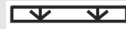
PROPOSED ROW



# Spur 399 Extension Schematic Viewing Guide



## Existing Wetlands (NWI)



EXISTING WETLANDS

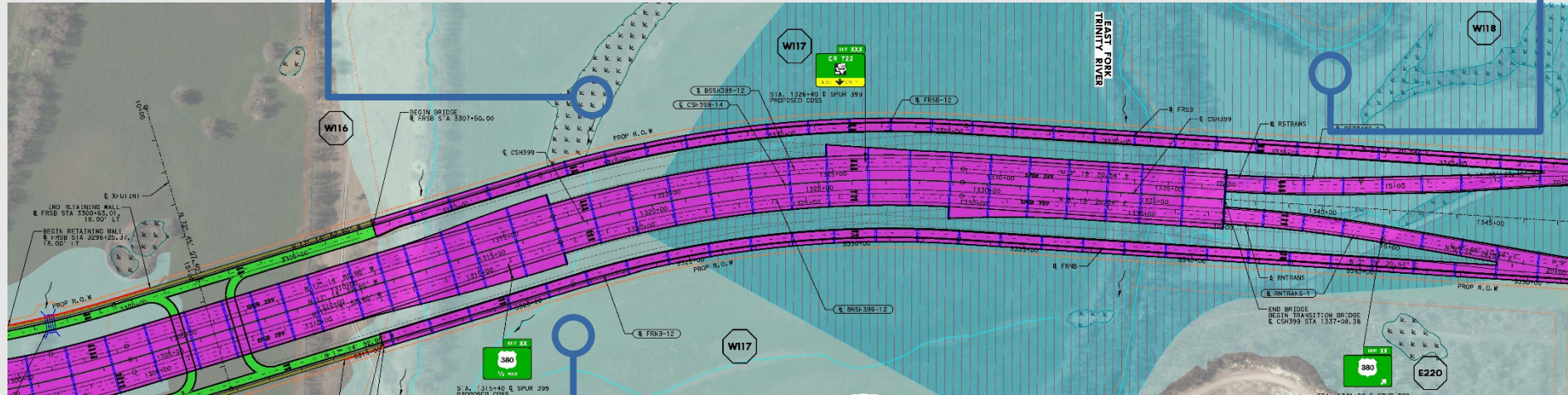
## Existing Floodway



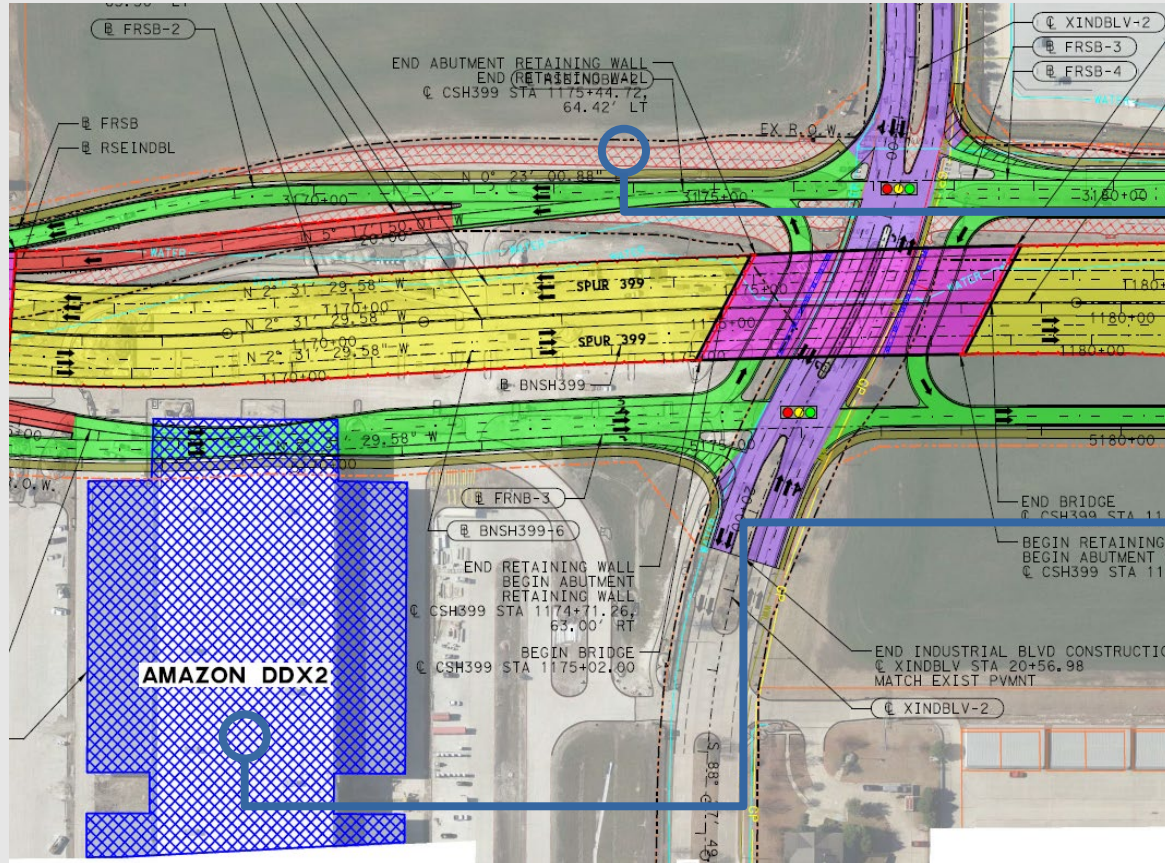
EXISTING FLOODWAY

## Existing 100 Year Floodplain

EXISTING 100-YR FLOODPLAIN



# Spur 399 Extension Schematic Viewing Guide



## Roadway Removal

Occurs when right-of-way requires removal of an existing roadway



ROADWAY REMOVAL

## Building Displacement

Occurs when right-of-way physically impacts a structure



BUILDING DISPLACEMENT



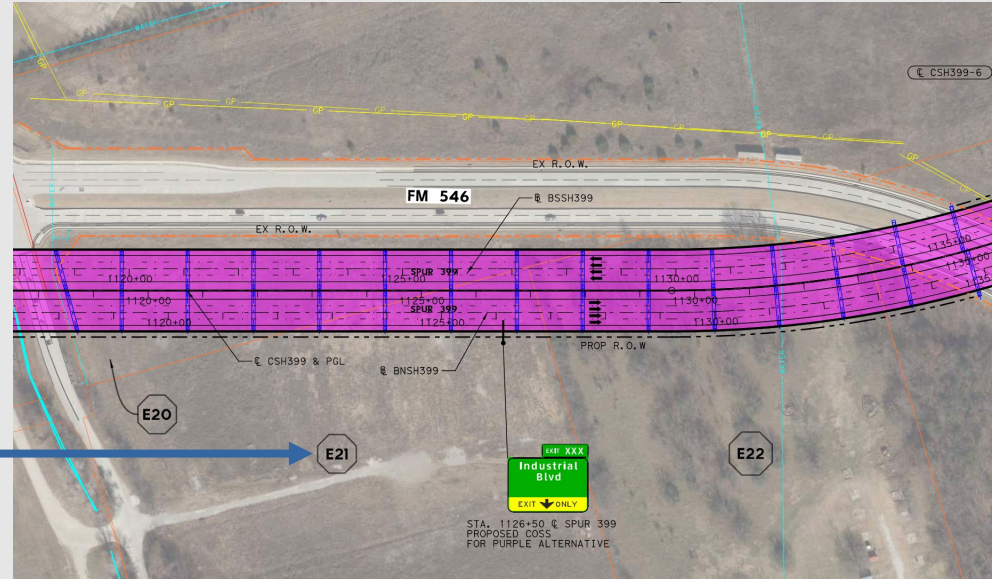
# Spur 399 Extension Schematic Viewing Guide



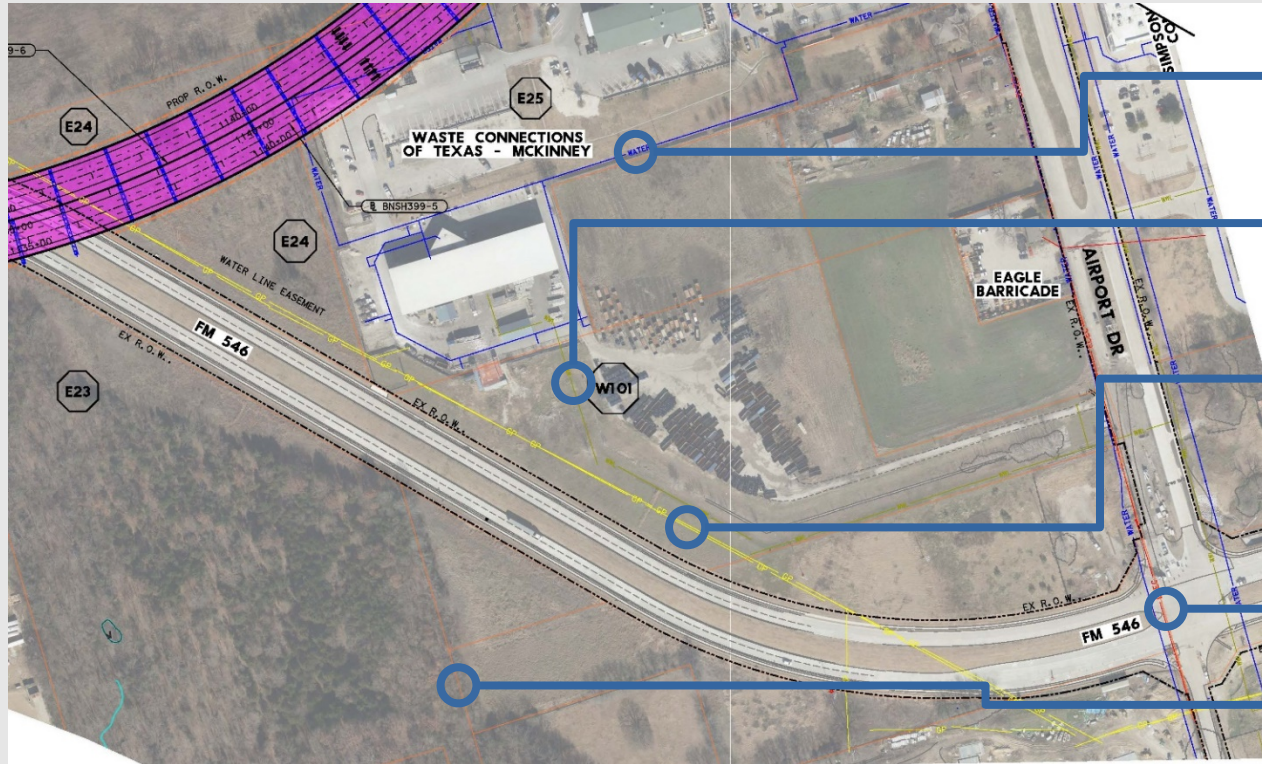
## PROPERTY OWNER DATA

ID	OWNER'S NAME	ADDRESS
E17	MCKINNEY ECONOMIC DEVELOPMENT CORPORATION	5900 S LAKE FOREST DR STE 110
E18	MCKINNEY CITY OF	PO BOX 517
E19	MCKINNEY CITY OF	PO BOX 517
E20	MCKINNEY NATIONAL INDUSTRIAL PARK LLC	20475 STATE HIGHWAY 249 STE 100
E21	MCKINNEY NATIONAL INDUSTRIAL PARK LLC	20475 STATE HIGHWAY 249 STE 100
E22	MCKINNEY ISD	1 DUVALL ST
E3	MCKINNEY NATIONAL INDUSTRIAL PARK LLC	20475 STATE HIGHWAY 249 STE 100
E4	MCKINNEY NATIONAL INDUSTRIAL PARK LLC	20475 STATE HIGHWAY 249 STE 100
E5	TROIANI FAMILY INVESTMENTS LTD	1910 N COLLEGE ST
E6	RUDD PAULA F	15076 COUNTY ROAD 614
E7	MOTSENBOCKER DARYL R	661 OAKMONT CT
E8	SIMPSON MANUFACTURING CO INC	5956 W LAS POSITAS BLVD
E9	SFG LM MCKINNEY LLC	3280 PEACHTREE RD NE STE 2700
E0	ENCORE WIRE CORPORATION	1329 MILLWOOD RD
E01	IESI TX CORP	3903 BELLAIRE BLVD
E02	MONTGOMERY JIMMY R & SUSAN K	1229 OLD MILL RD
E03	MONTGOMERY JIMMY RAY & SUSAN KAY	1229 OLD MILL RD
W6	MCKINNEY NATIONAL INDUSTRIAL PARK LLC	20475 STATE HIGHWAY 249 STE 100
W7	MCKINNEY HORIZONS LP	2600 ELDORADO PKWY STE 115
W8	CROOKED CREEK INC	808 HIGHWAY 34 W
W9	MCKINNEY HORIZONS LP	2600 ELDORADO PKWY STE 115
W0	ENCORE WIRE LIMITED &	PO BOX 1149
W01	IESI TX CORP	3903 BELLAIRE BLVD

**Property Owner Data**  
ID corresponds to location of property



# Spur 399 Extension Schematic Viewing Guide



## Utilities

### Water Lines

— WATER — EXISTING WATER

### Sewer Lines

— WWL — EXISTING SANITARY SEWER

### Gas Lines

— GP — EXISTING GAS

### Electric Lines

— ELEC — EXISTING ELECTRIC

### Telephone Lines

— TELE — EXISTING TELEPHONE