

Coit Road Improvements Presentation

From First Street to Frontier Parkway

August 23, 2018

6:00 pm

Town Hall Council Chambers

Coit Road

From: First Street to Frontier Parkway

Why

When

How



Why

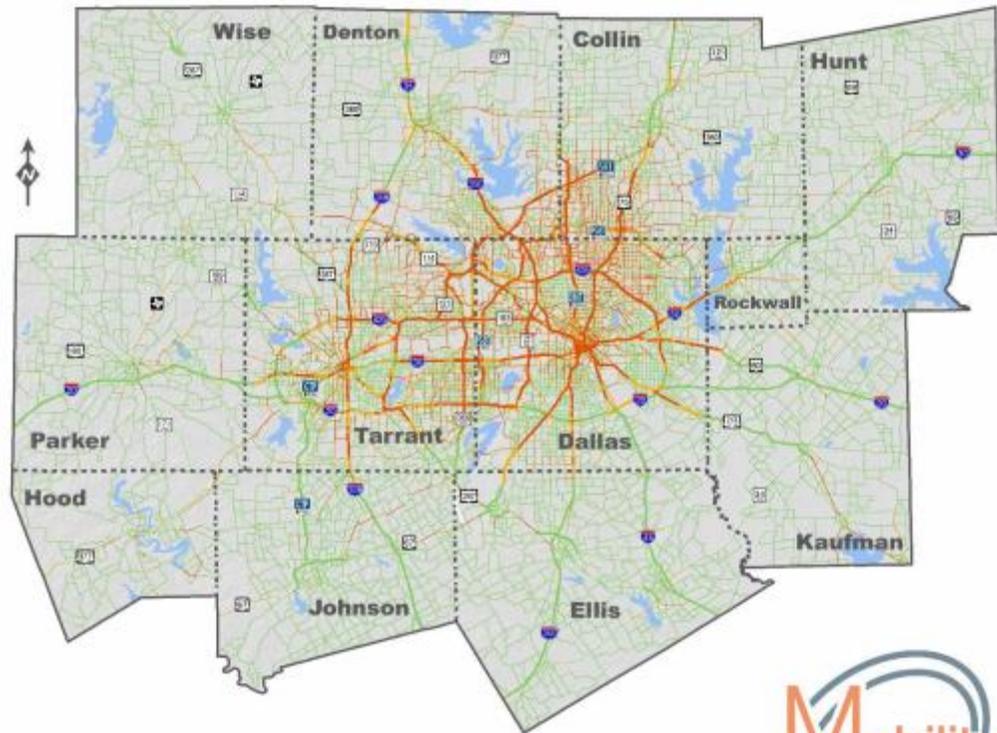
Regional Plans

- North Central Texas Council of Government (NCTCOG),
Mobility 2045 Plan
- Collin County Thoroughfare Plan
- Town of Prosper Comprehensive and Thoroughfare Plan

North Central Texas Council of Governments Mobility 2045

- Current Level of Service

2018 Peak Hour Level of Service



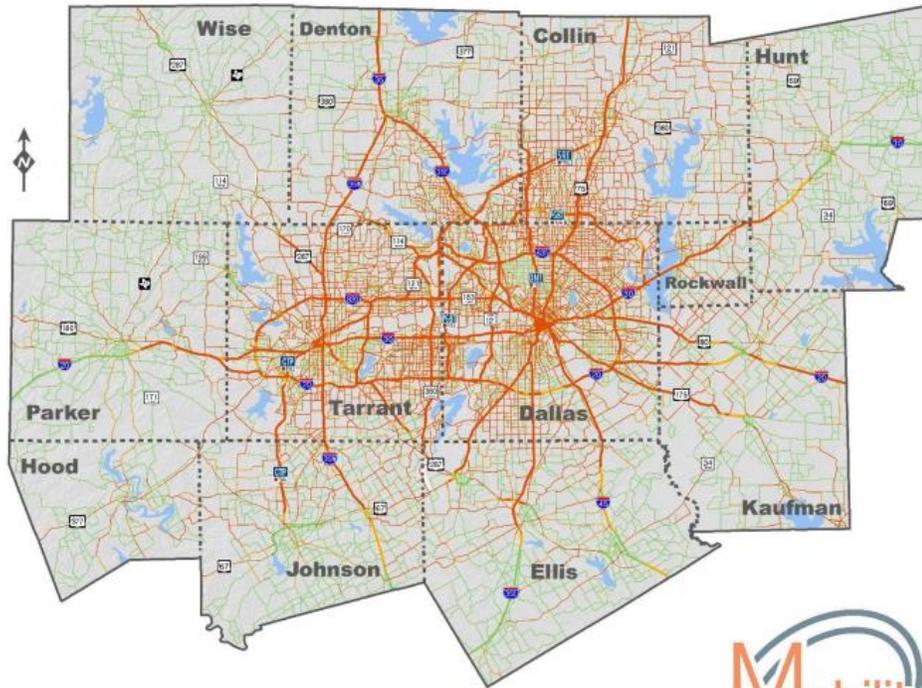
Level of Service

	ABC
	DE
	F

North Central Texas Council of Governments Mobility 2045

- 2045 Level of Service – NO BUILD

2045 No-Build Peak Hour Level of Service



Level of Service

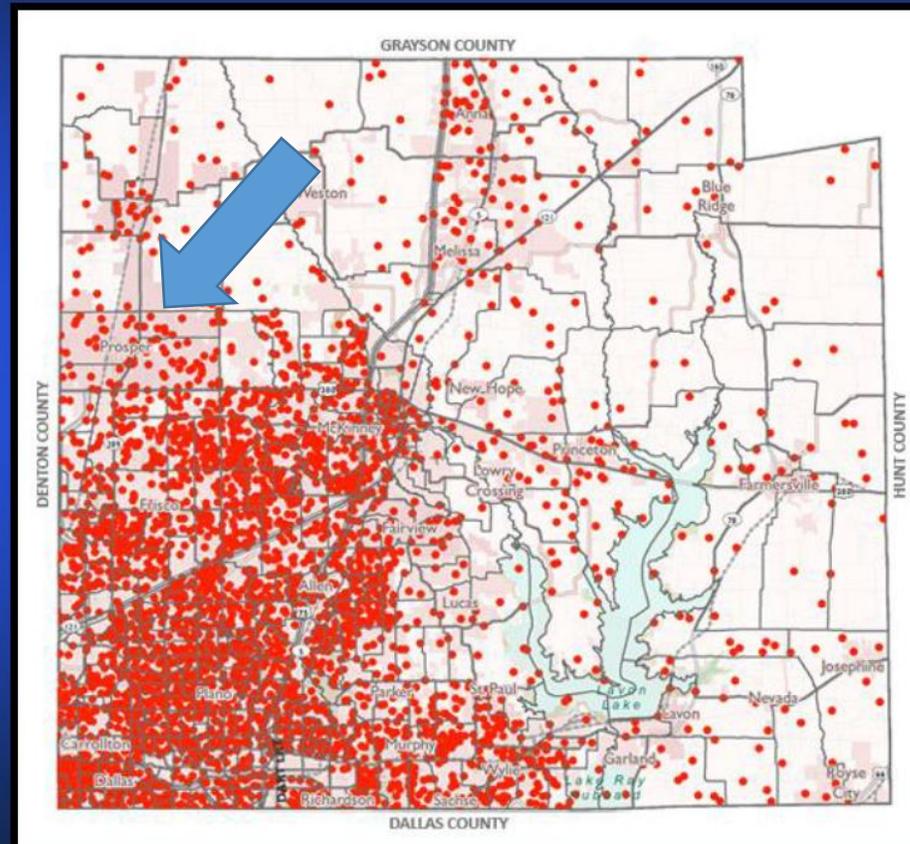
	ABC
	DE
	F

Collin County - Current Density



Our County Density 2020

Past projections have **West County** growing fastest ...

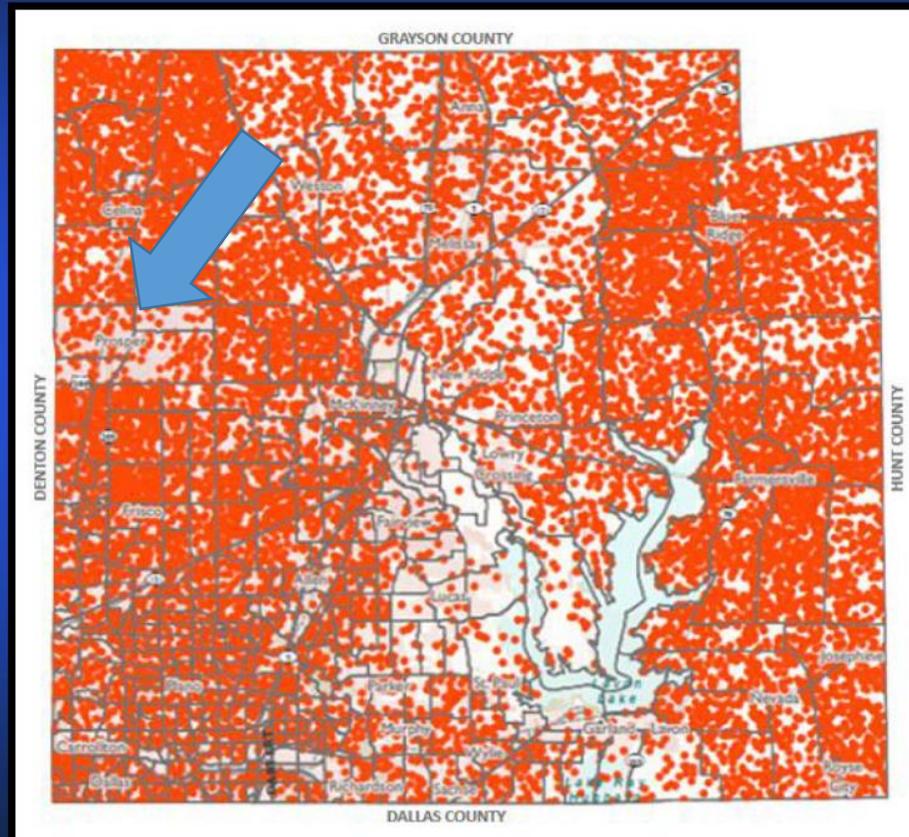


Collin County – Build-Out Density



Our County Density at Build-Out

But latest projections show **East County** will be as dense by build-out.



Collin County – Limited Access Roadway(LAR) Priorities

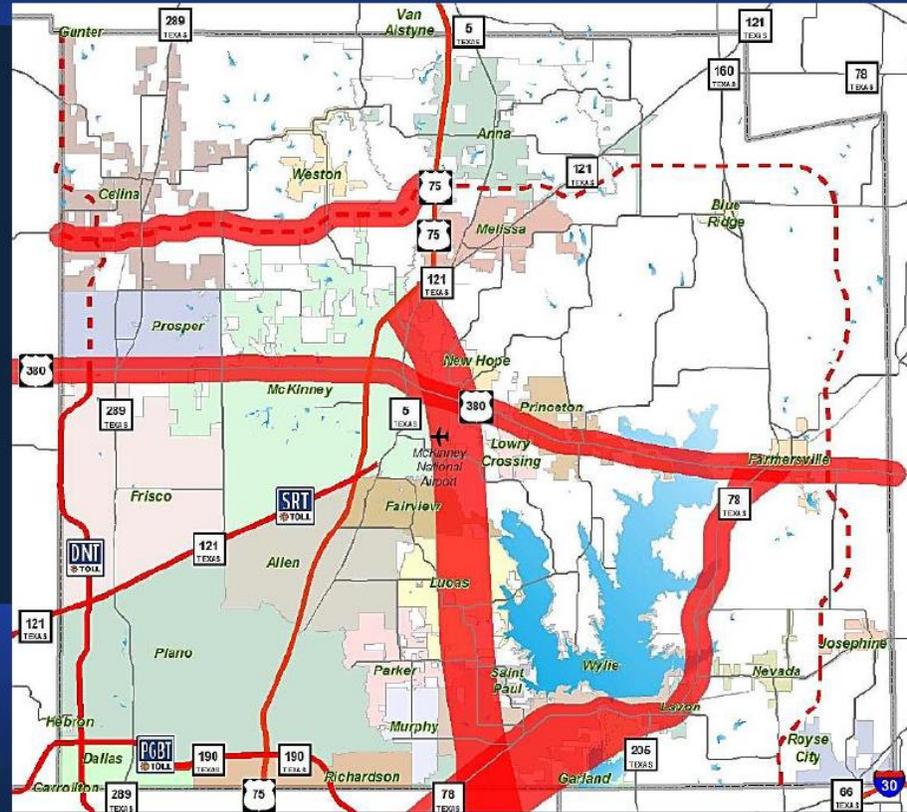


LARs Priorities

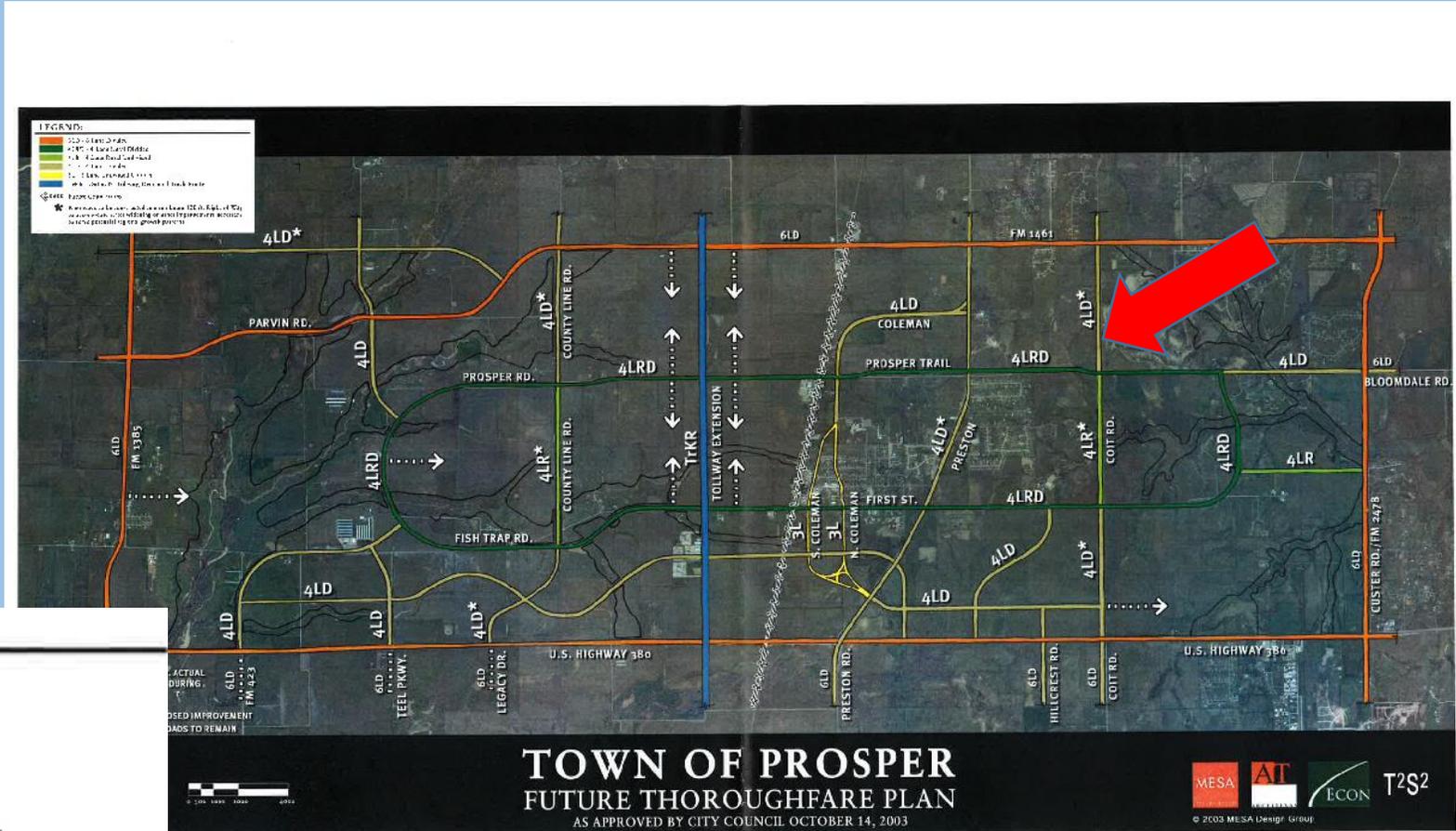
1. US 380
2. SH 78
3. N-S Road between US 75 & Lake Lavon
4. Outer Loop

* Actual routes to be determined

Commissioners Court
February 1, 2016



Town of Prosper 2003 Thoroughfare Plan



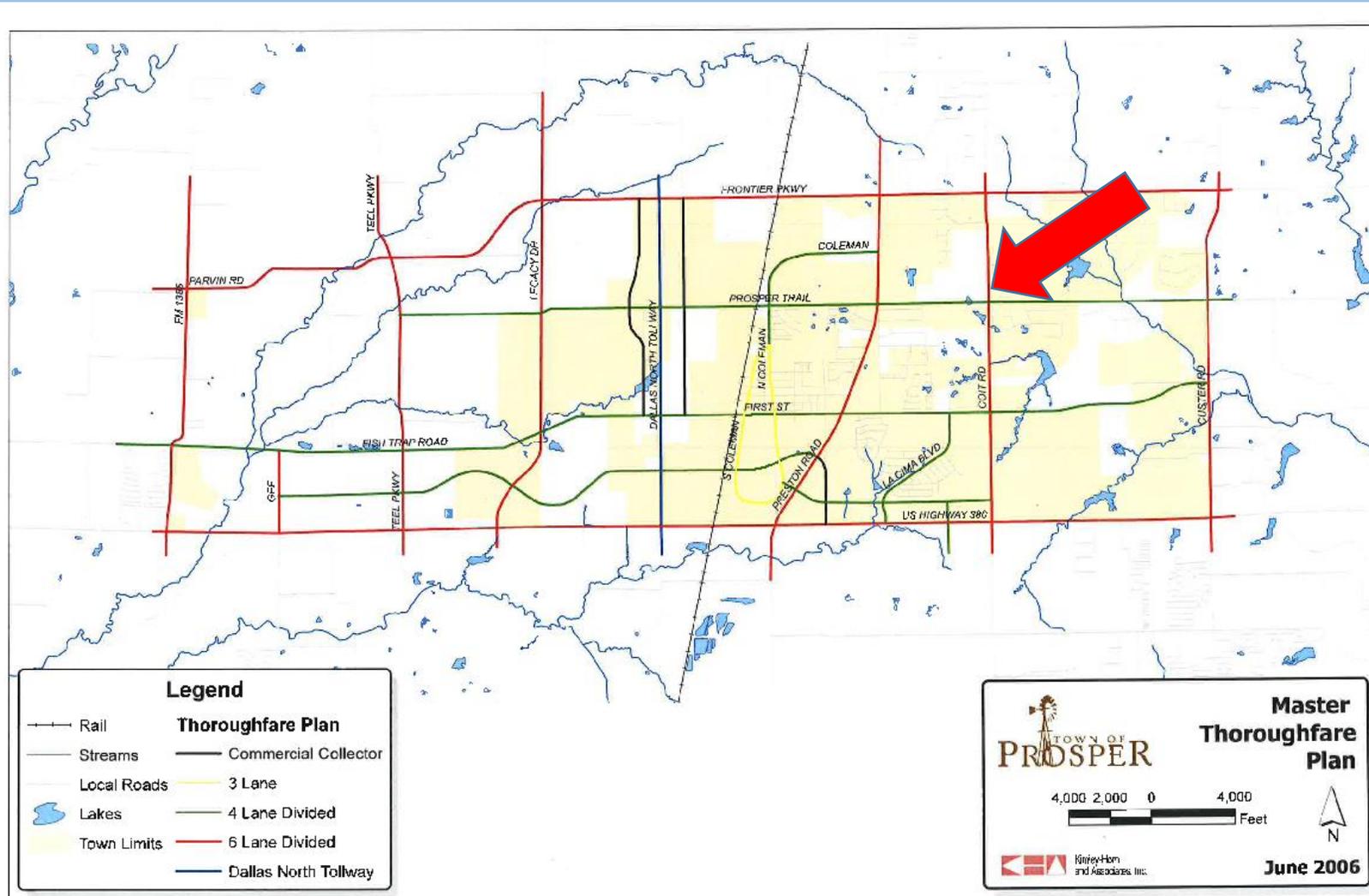
LEGEND:
 6LD - 6 Lane Divided
 4LRD - 4 Lane Rural Divided
 4LR - 4 Lane Rural Undivided
 4LD - 4 Lane Divided
 3L - 3 Lane Undivided Couplet
 TrKR - Dallas N. Tollway, Dedicated Truck Route
 * - Roadways to be constructed in a minimum 120 ft. Right of Way to accommodate street widening or other improvements necessary to serve potential regional growth patterns

LEGEND:

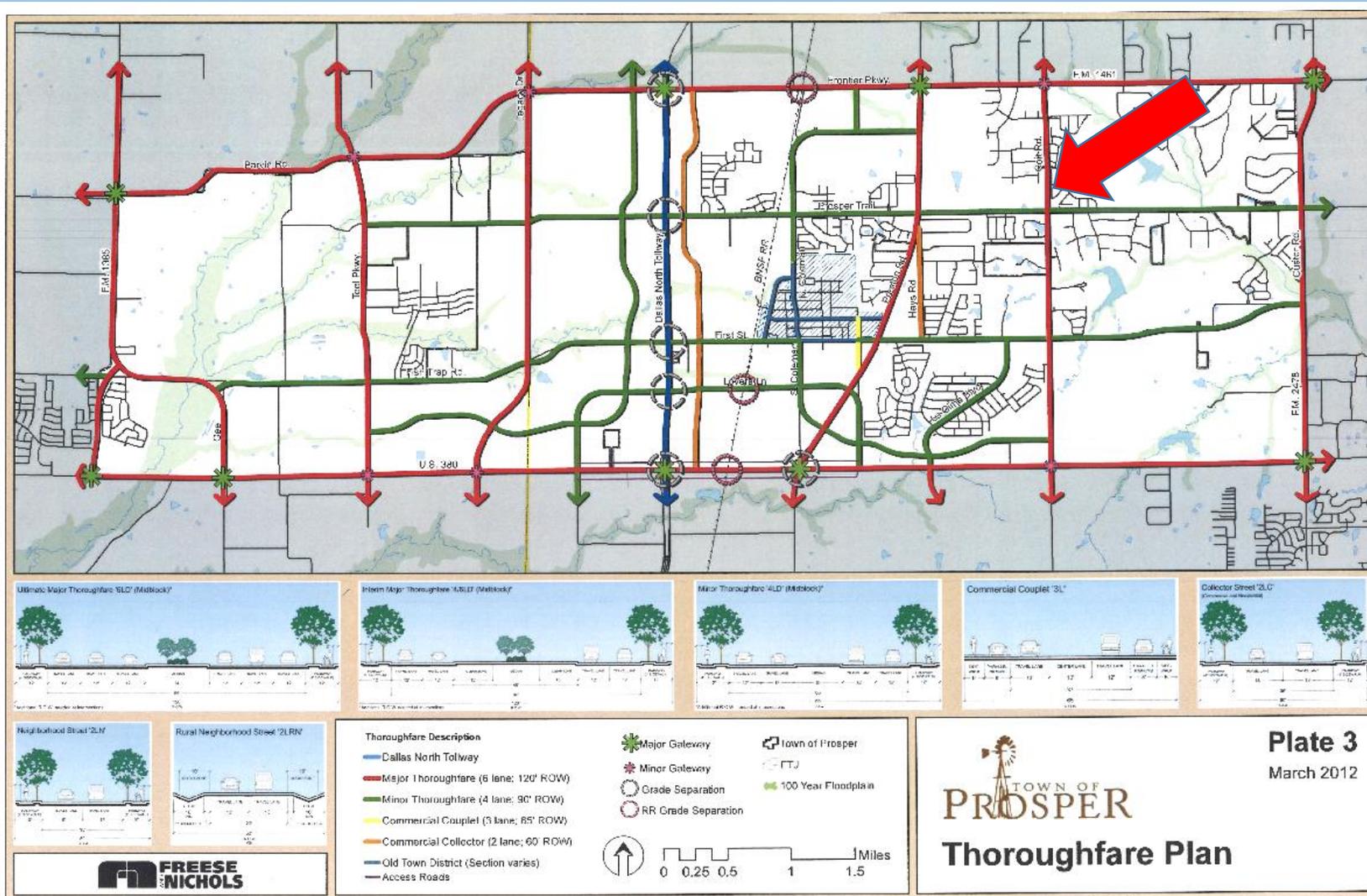
- 6LD - 6 Lane Divided
- 4LRD - 4 Lane Rural Divided
- 4LR - 4 Lane Rural Undivided
- 4LD - 4 Lane Divided
- 3L - 3 Lane Undivided Couplet
- TrKR - Dallas N. Tollway, Dedicated Truck Route
- Future Connections
- * Roadways to be constructed in a minimum 120 ft. Right of Way to accommodate street widening or other improvements necessary to serve potential regional growth patterns

Town of Prosper 2005 Thoroughfare Standards

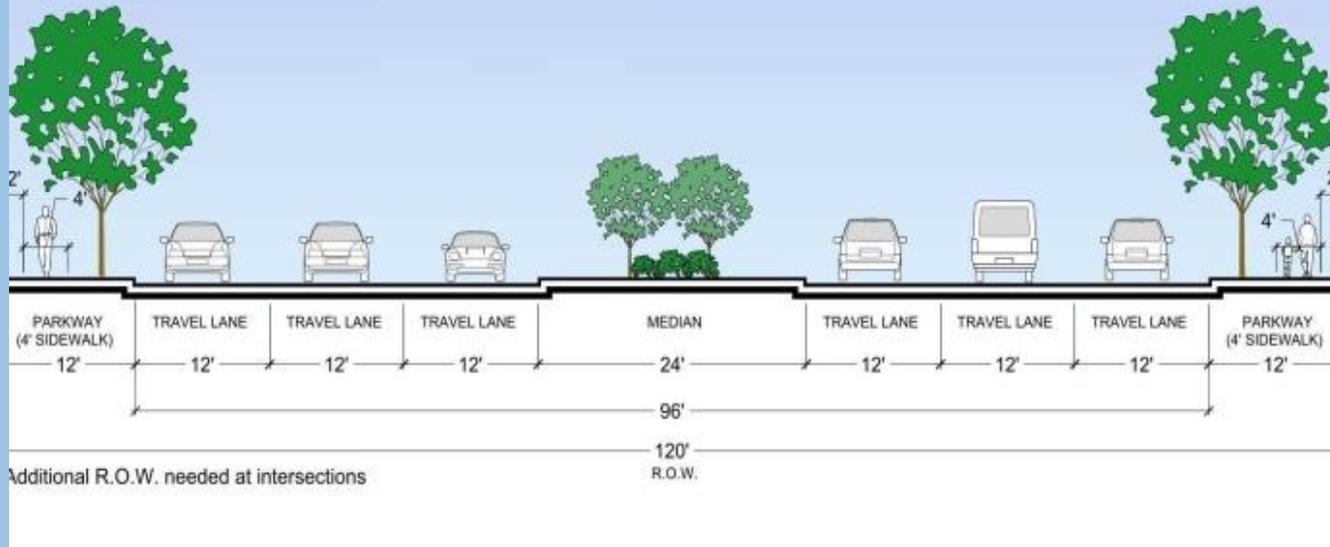
Town of Prosper 2006 Thoroughfare Plan



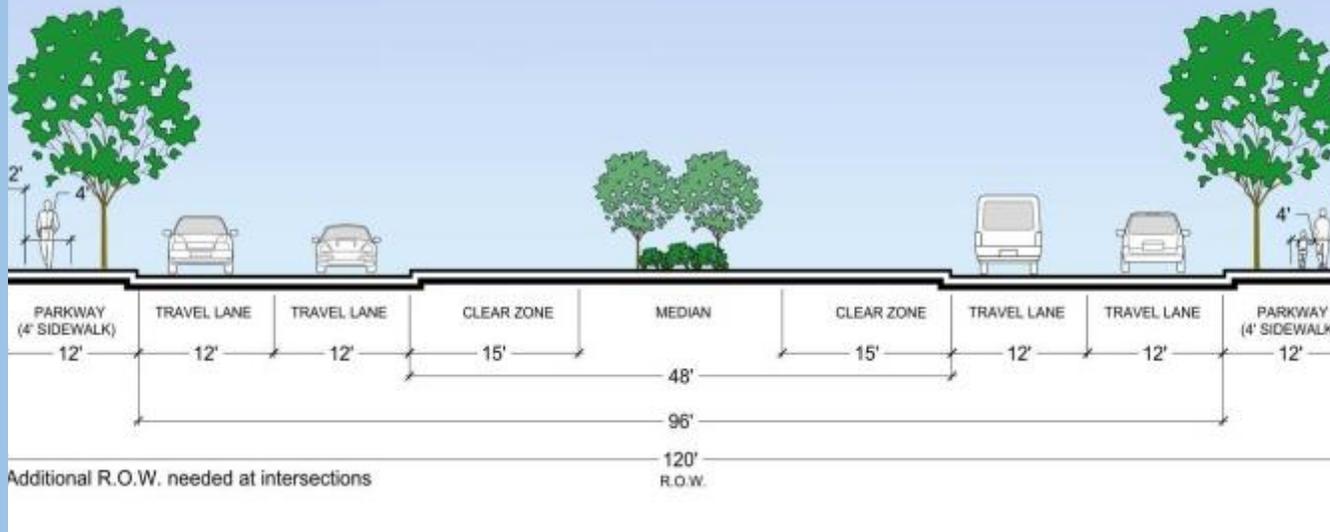
Town of Prosper 2012 Thoroughfare Plan



Ultimate Major Thoroughfare '6LD' (Midblock)*



Interim Major Thoroughfare '4/6LD' (Midblock)*



Phased approach
to roadway
construction

When

Shovel Ready Design Projects

- Prosper Trail (Coit Road to Custer Road): 4-lane divided \$11,755,000
- First Street (Dallas North Tollway to Coleman Street): 4-lane divided \$8,000,000
- Victory Way (Coleman Street to Frontier Parkway): 2 lanes of 4-lane divided \$2,250,000
- Dallas North Tollway/First Street Intersection Widening \$1,250,000
- Teel/Fishtrap Intersection Widening \$1,350,000
- Coit Road (First Street to Frontier Parkway): 4 lanes of 6-lane divided \$14,000,000

Shovel Ready Projects don't have funding identified, but will be ready to go to construction as soon as funding is secure.

Leveraging Regional Funding Sources

Collin County

- \$2,217,713: Prosper Trail (DNT – Preston Road)
- \$1,142,903: Coit Road (US 380 – First Street)
- \$1,516,672: First Street (Craig – Coit Road)
- \$1,412,500: Coleman St. (Prosper High School – Preston Road)
- **\$6,289,788: Total Collin County**

Denton County

- \$4,000,000: West Prosper Roads RTR Funding

When do we go from 4 lanes to 6 lanes on Coit Road

In the 2012 Town Comprehensive Plan, Coit Road was specifically included in a sensitivity analysis to assess the viability of constructing Coit Road as a 4-lane roadway that may ultimately need to be built to 6-lanes.

This analysis showed that 4-lanes of Coit Road were adequate for projected traffic demands to 2035, recent analysis by the NCTCOG puts the **expansion closer to 2045**.

“While ultimately, these specific roadways may need to be built to six lanes, a phased approach to facility implementation could be undertaken.”

On-Going Transportation Improvements Projects

- US 380 (TxDOT) = \$59,000,000
 - Preston Road Overpass
 - BNSF RR Overpass
 - DNT Overpass
- Dallas North Tollway (NTTA) = \$467,000,000
 - Southbound Frontage Road (Collin County)
 - DNT Overpass at US 380
 - Extension of Main Lanes to north of Prosper
- FM 2478 from US 380 to FM 1461 (TxDOT) = \$56,818,000
- FM 1461 from SH 289 to CR 165 (TxDOT) = \$53,000,000

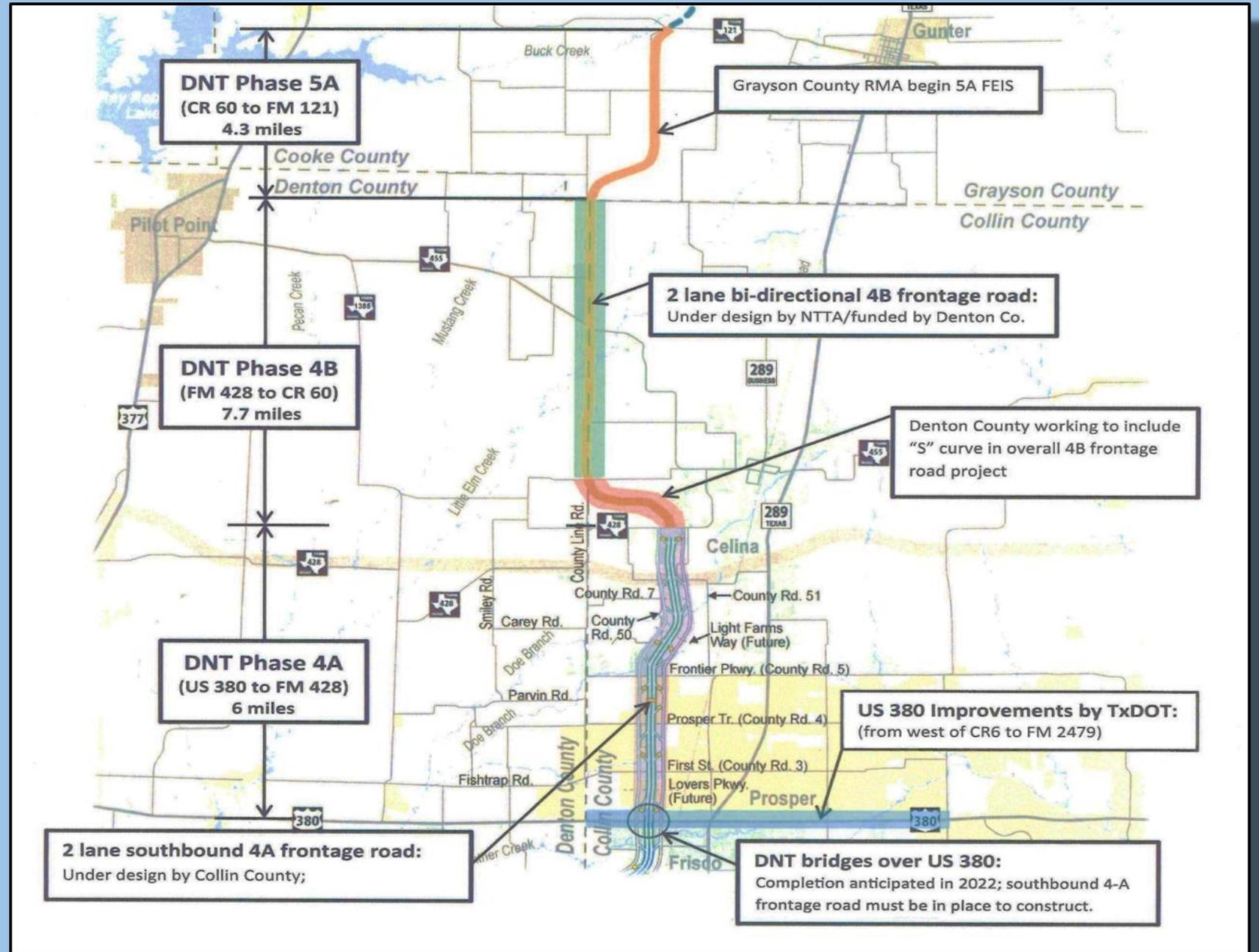
TOTAL = \$635,818,000

NTTA – Dallas North Tollway Improvements

Construction Overpass
2022

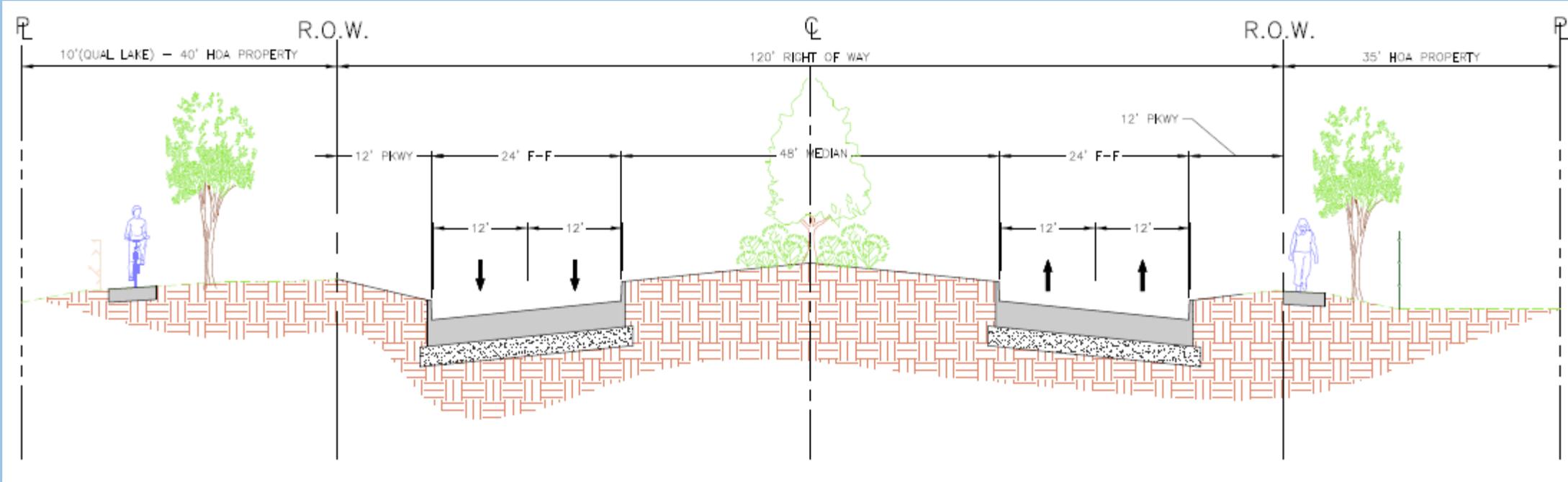
Design Main Lanes
2022

Construction Main Lanes
2026



How

US 380 to First Street (120' ROW) Existing 4-lane Roadway



Existing Coit Road from US 380 to First Street



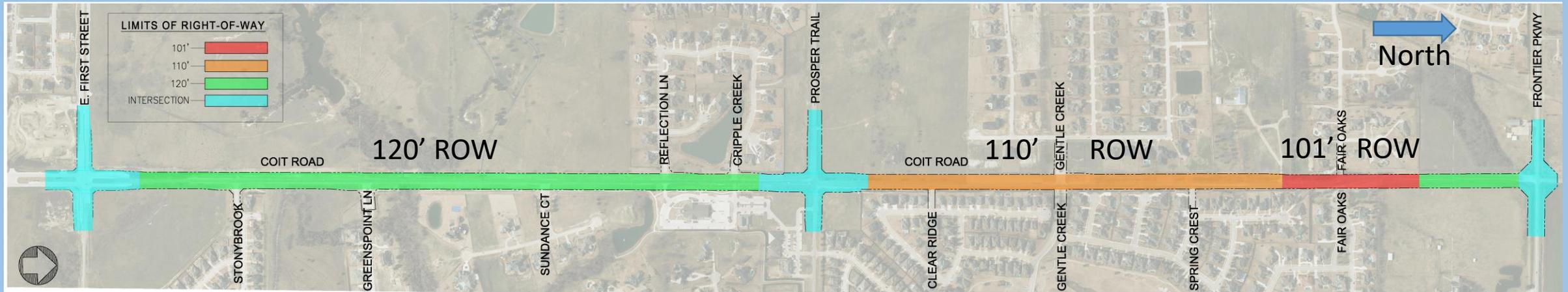
Typical Landscaping at Median



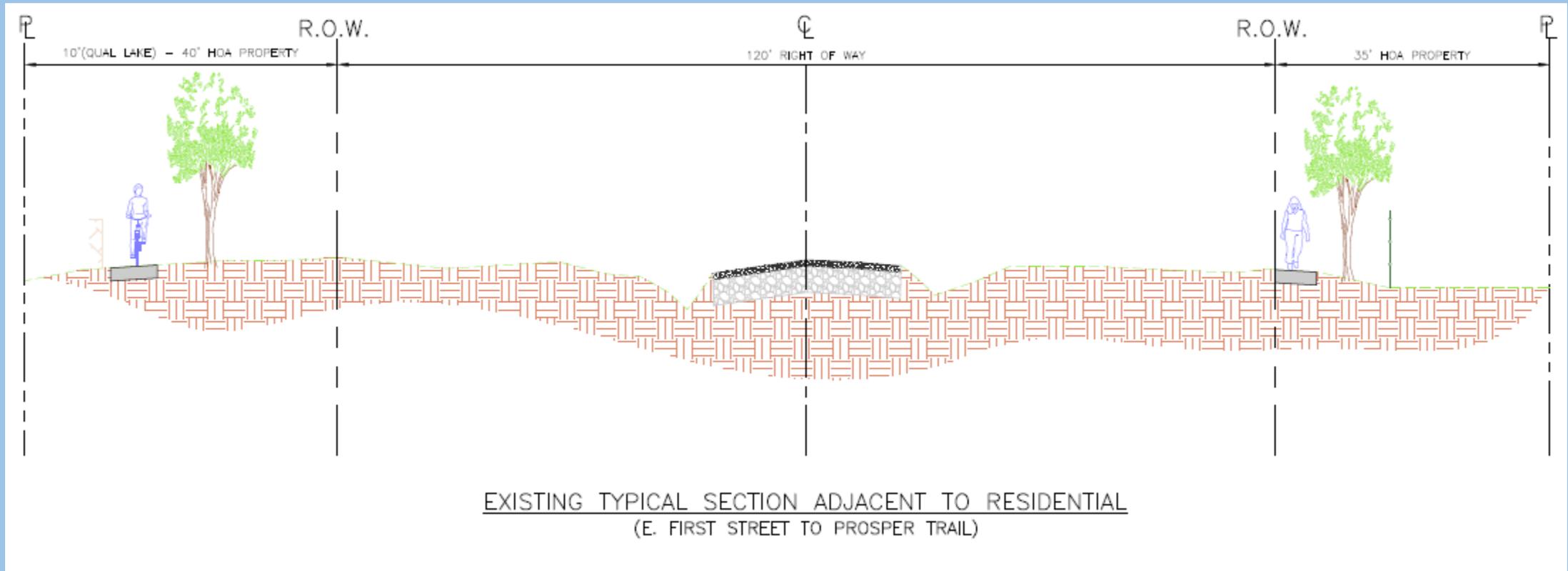
Typical Landscaping and Meandering Sidewalk



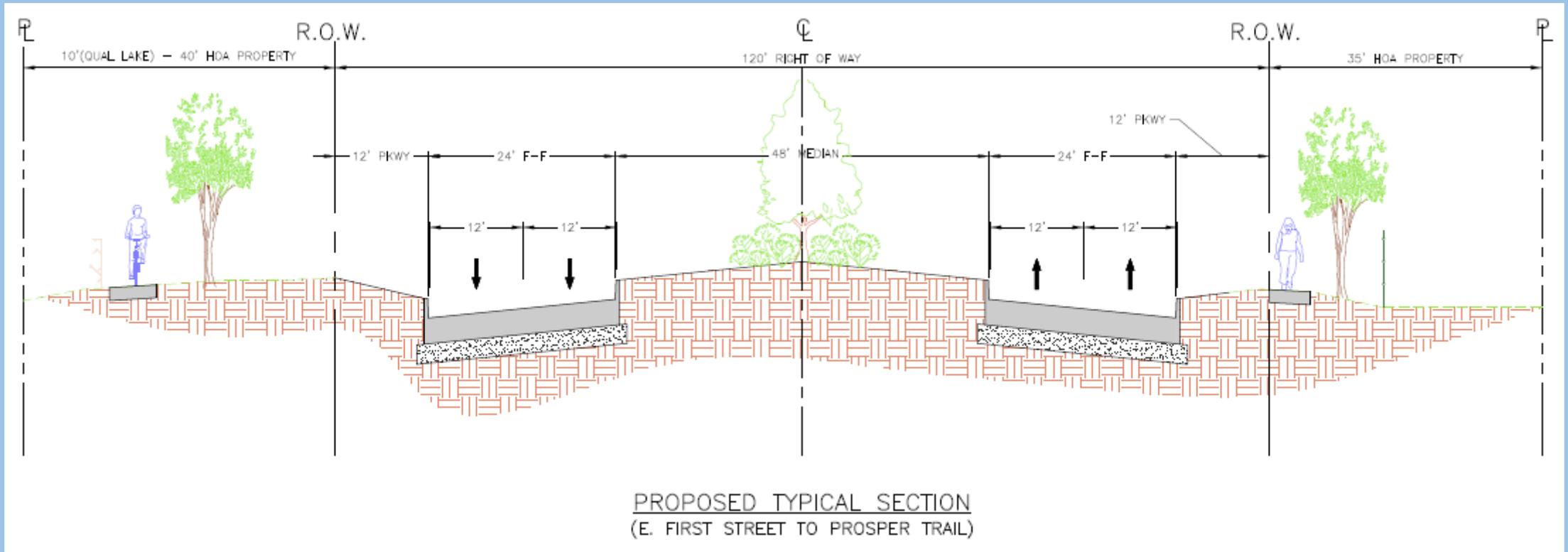
ROW Sections on Coit Road



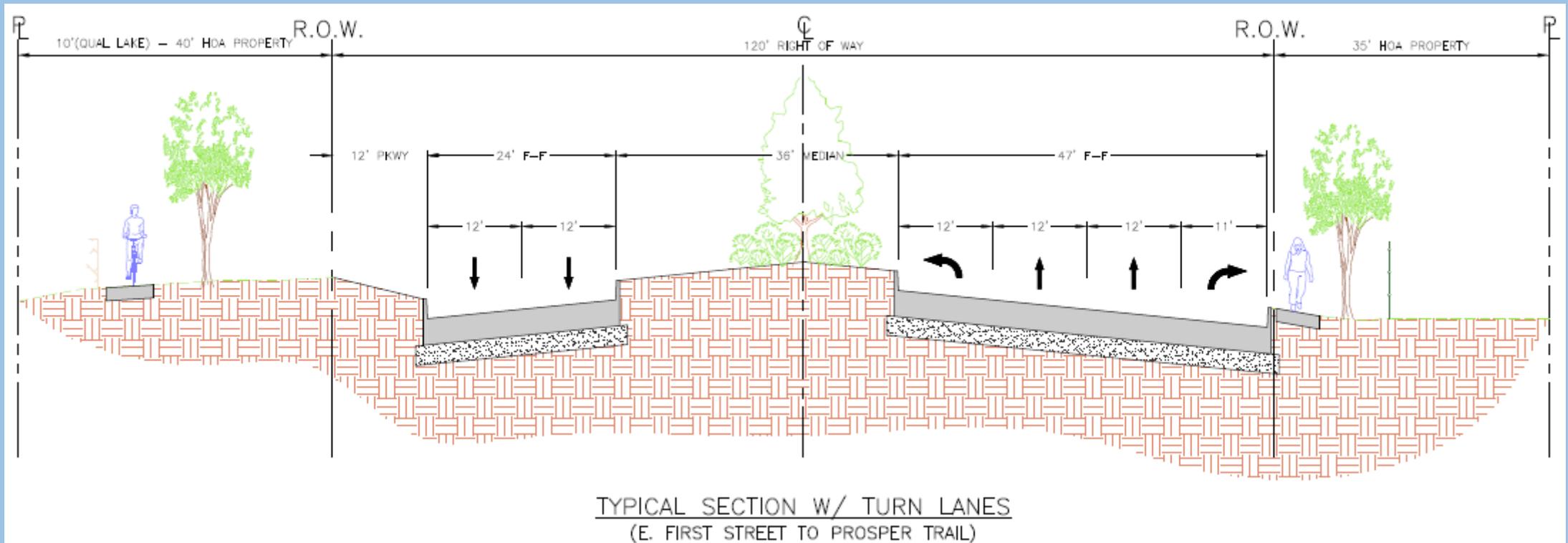
First Street to Prosper Trail (120' ROW) Existing



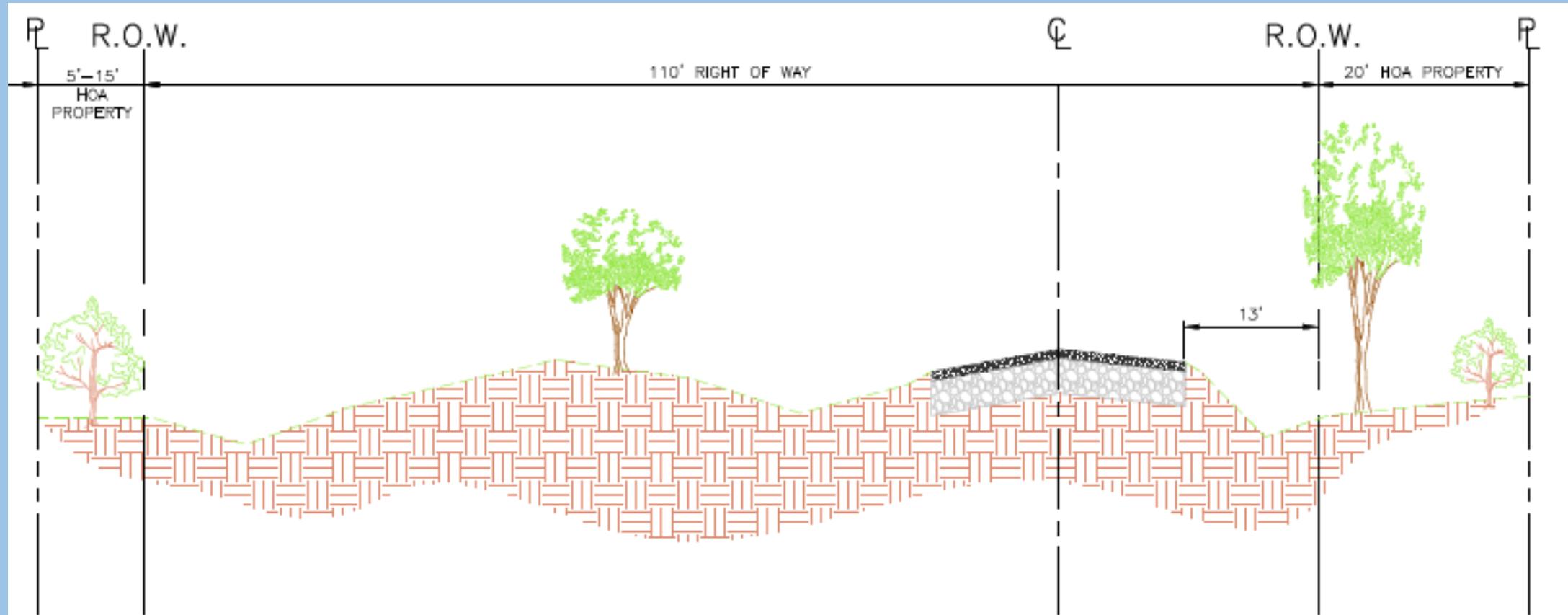
First Street to Prosper Trail (120' ROW) Typical 4-lane Roadway



First Street to Prosper Trail (120' ROW) Typical 4-lane Roadway with Turn Lanes

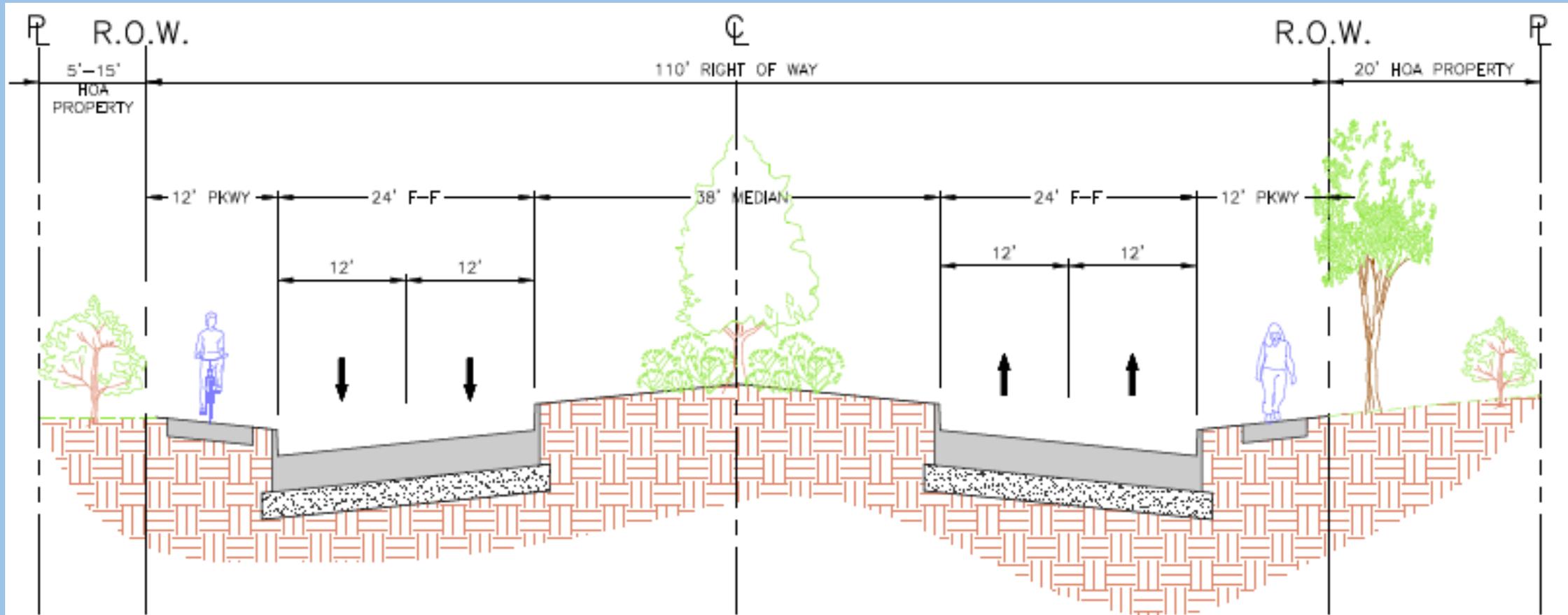


Prosper Trail to Frontier Pkwy (110' ROW) Typical Existing



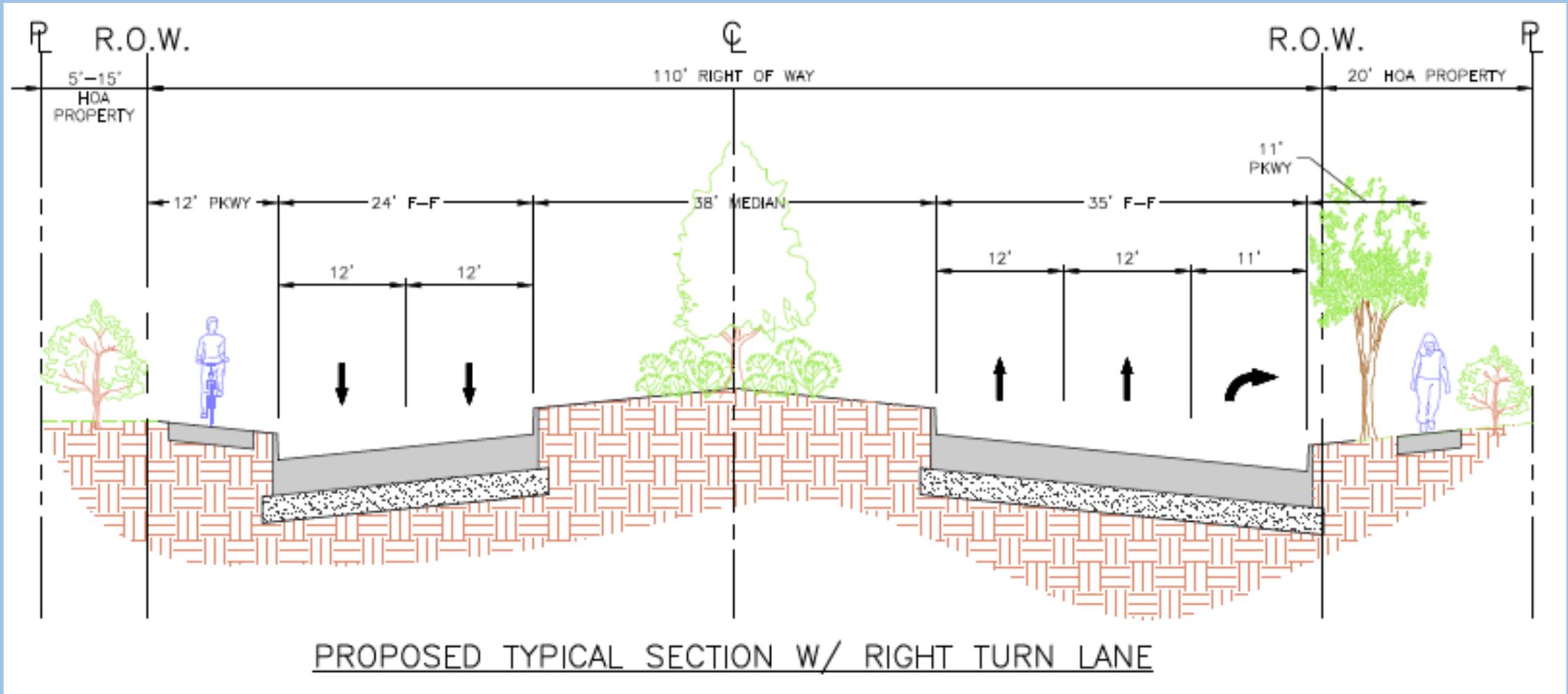
EXISTING TYPICAL SECTION
(GENTLE CREEK & WHISPERING MEADOWS)

Prosper Trail to Frontier Pkwy (110' ROW) Typical 4-lane Roadway

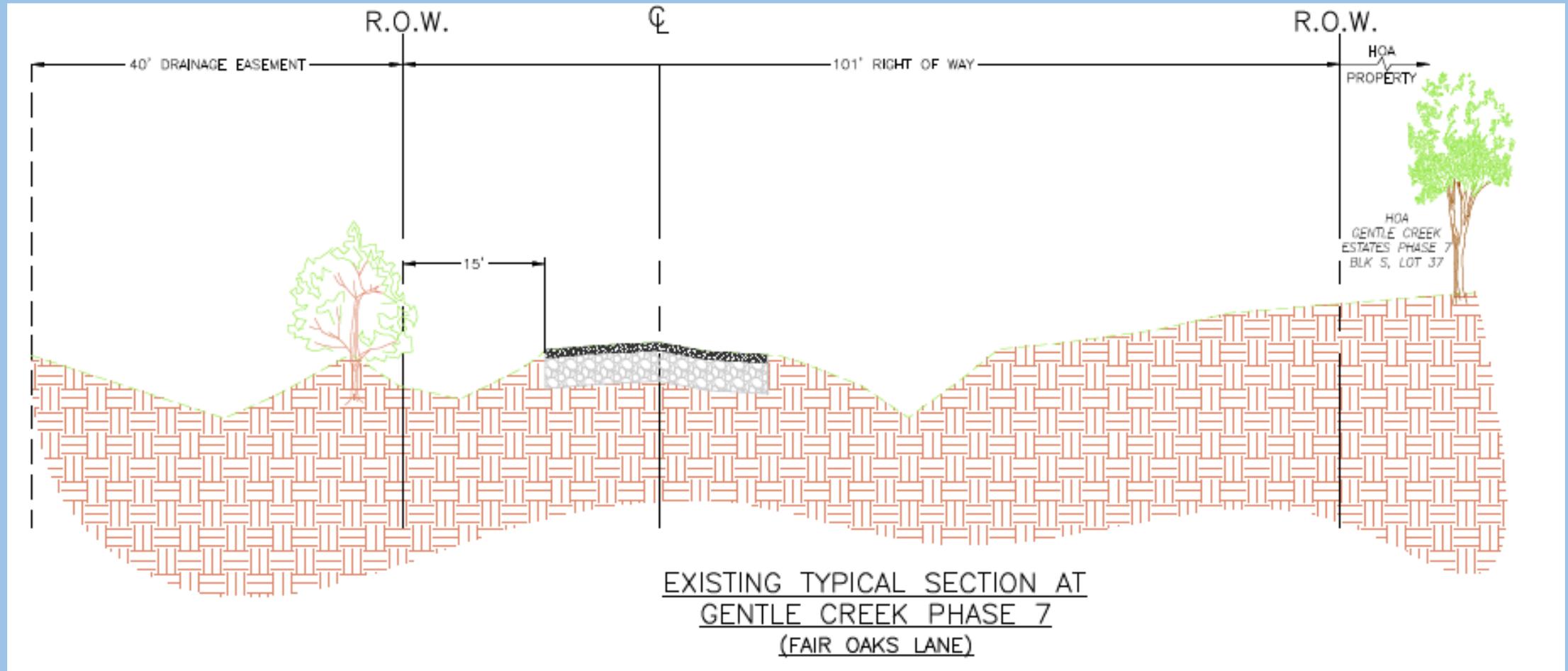


PROPOSED TYPICAL SECTION

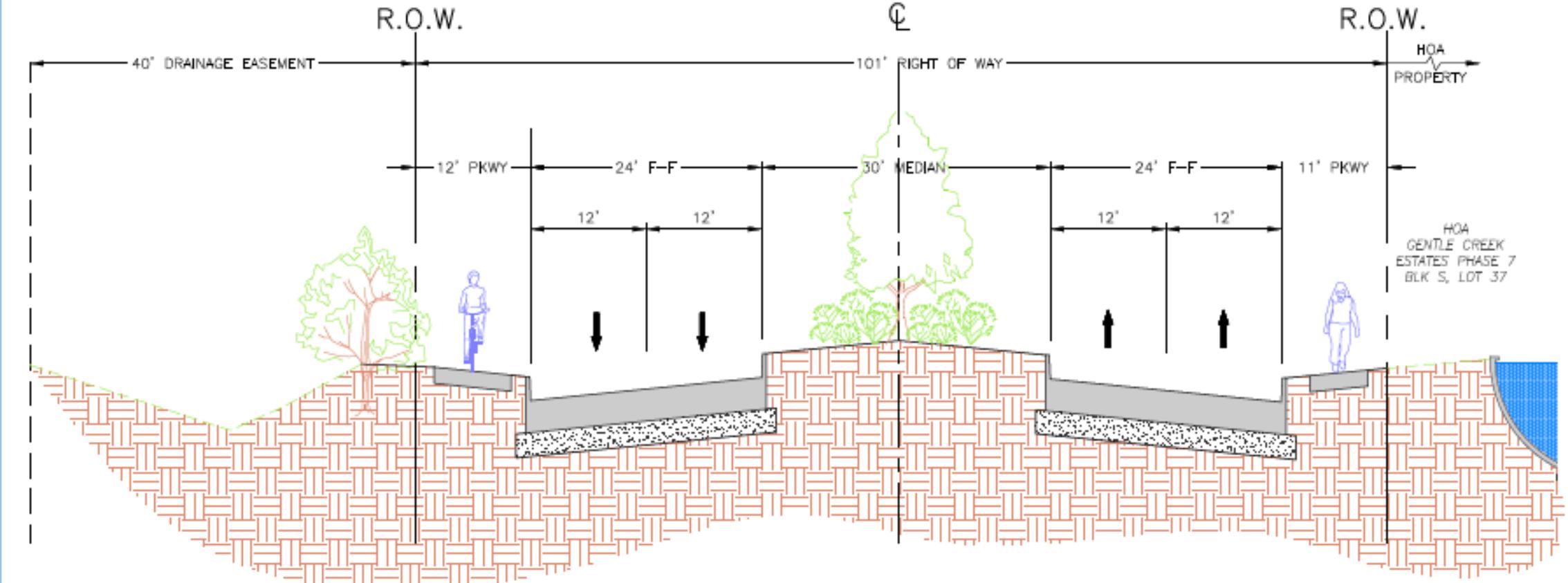
Prosper Trail to Frontier Pkwy (110' ROW) Typical 4-lane Roadway with Turn Lanes



Prosper Trail to Frontier Pkwy (101' ROW) Typical Existing

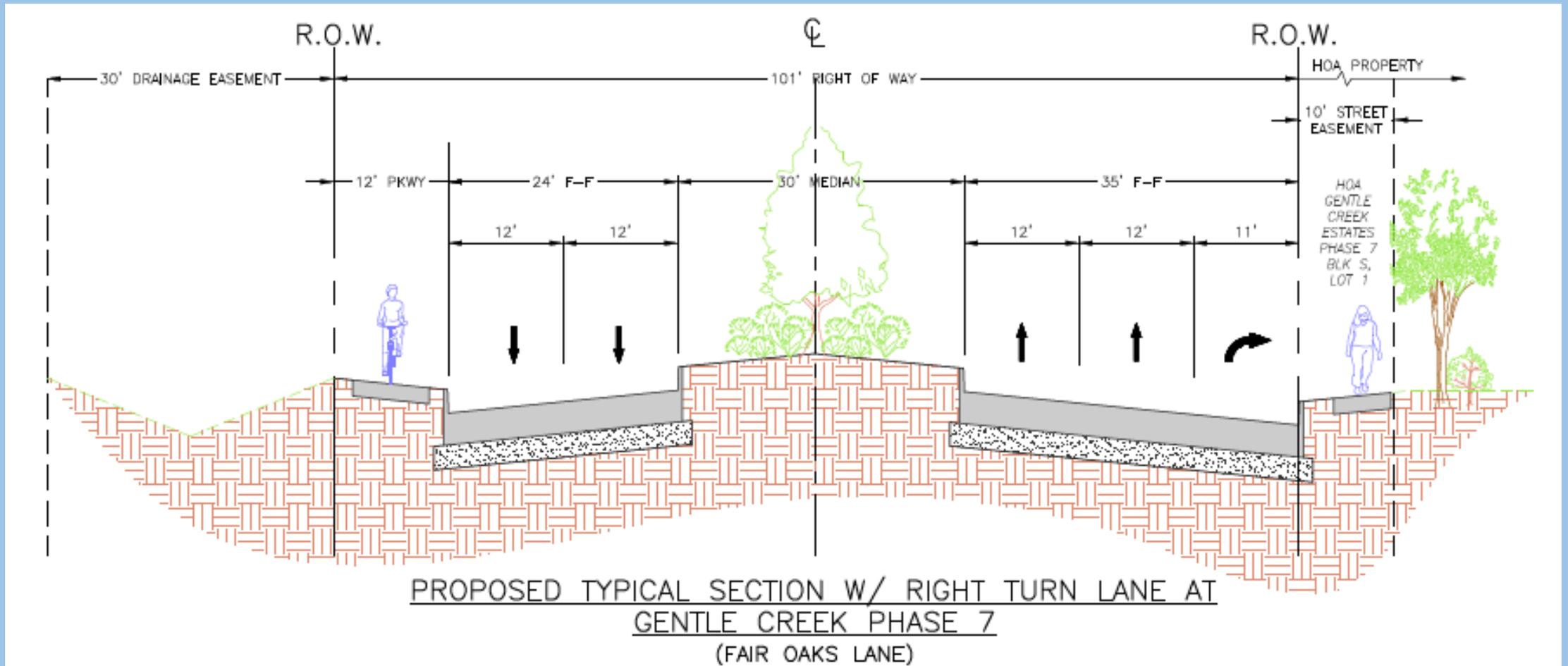


Prosper Trail to Frontier Pkwy (101' ROW) Typical 4-lane Roadway



PROPOSED TYPICAL SECTION AT
GENTLE CREEK PHASE 7
(FAIR OAKS LANE)

Prosper Trail to Frontier Pkwy (101' ROW) Typical 4-lane Roadway with Turn Lane



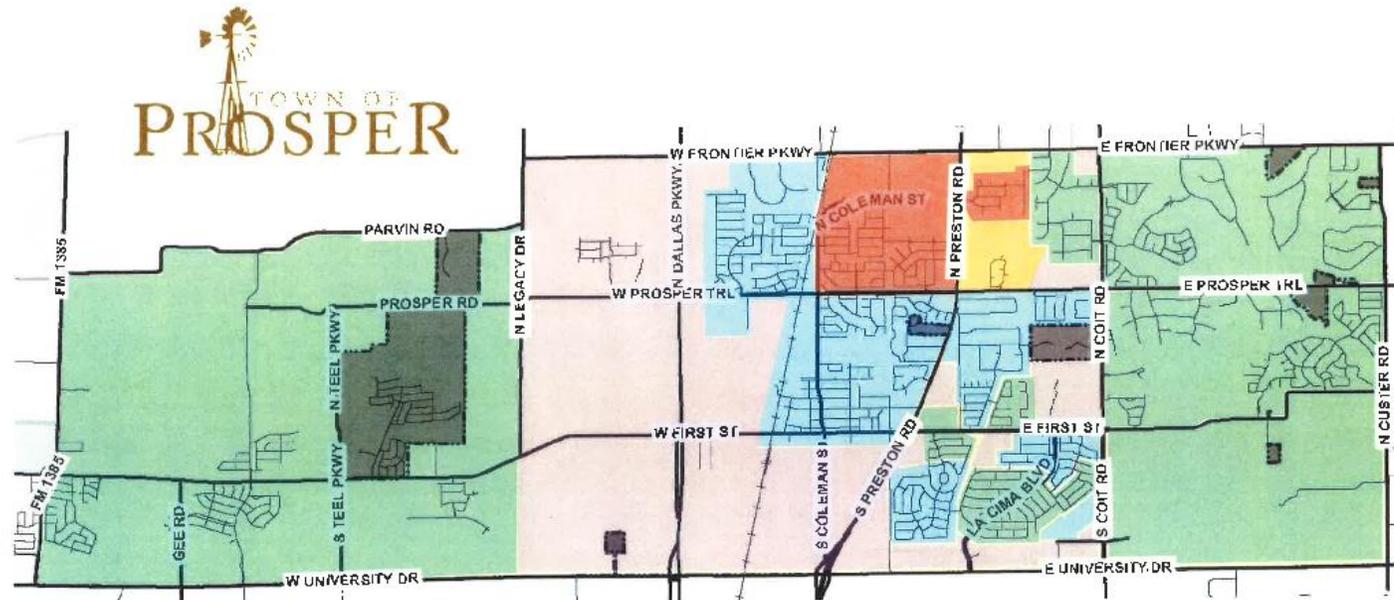
Typical Trees and Landscaping, Coit Road - from: US 380 to First Street



Examples of existing trees and landscaping



Electric Providers for the Town of Prosper



- CoServ Electric
- GCEC
- Oncor Electric
- CoServ/Oncor Electric
- CoServ/Oncor/GCEC Electric

January 2015 Electrical Franchise boundaries . Actual service limited to facilities in place at the time of request.

Key Takeaways

- NO need to expand to 6-lanes in next 30+ years
- NO additional residential property required for Coit Road Improvements
- Town Standard 12' Parkway (Curb to Right of Way)
- Safeguarding existing HOA and Homeowner landscaping
- Installing enhanced landscaping and trees in roadway median, and selected locations along parkway adjacent to residential properties
- No identified funding source for construction
- Timeline for design completion is summer 2019
- Timeline for construction is next 5 years

Break Out Session