NTTA
NORTH TEXAS TOLLWAY AUTHORITY

Example EE

Environmental Evaluation (EE) Approval Form

PROJECT INFORMATION

Project Name: Dallas North Tollway (Phase 4A Extension)

Project Limits: US 380 to FM 428

Project Description: New Location Six-Lane Tollway

PAL & Justification: PAL 3 – Analysis of build alternatives on new location, major amounts of ROW acquisition, public involvement, strong potential for controversy due to environmental impacts

PUBLIC INVOLVEMENT

☒ Stakeholder Meetings — 1/10/08, 2/14/08, 3/13/08, 4/10/08 (Dates)

☐ Meetings with Affected Property Owners — N/A (Dates)

☒ Public Meetings — 1/24/08 (Dates)

☒ Public Hearing — 6/12/08 (Dates)

APPROVAL

Director of Project Delivery — Date

Assistant Executive Director of Project Delivery — Date

Executive Director — Date

Chairman, Board of Directors — Date

SECTION 1 – PROJECT DESCRIPTION

- Project Name
- Project Limits
- Project Length
- Type of Work
- County(ies)
- Estimated Let Date
- Estimated Cost
- Funding Sources
- Existing Facility
- Proposed Facility
- Land Use
- Need and Purpose
- Traffic Volumes
- Alternatives Analysis
- ROW/Easements and Utilities
- Construction Phasing

SECTION 2 – IMPACT ASSESSMENT SUMMARIES

- Water Resources
  - Waters of the U.S., Including Wetlands
  - Navigable Waterways
  - Water Quality
  - Floodplains
- Biological Resources
  - Vegetation and Wildlife
  - Threatened and Endangered Species
- Cultural Resources
  - Historic-age Resources
  - Archeological Resources
- Physical Environment
  - Air Quality
  - Traffic Noise
  - Hazardous Materials
- Community Impacts
  - Socioeconomics
  - Environmental Justice
  - Indirect Impacts
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  - Public Lands
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  - Local Tree Ordinances
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- Summary of Impacts

SECTION 3 – PERMITS AND MITIGATION

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  - Section 404 Permits
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- Section 10(a) Permits
- Marl, Sand, Gravel, Shell, or Mudshell Permits
- Texas Antiquities Permits

Mitigation

- Waters of the U.S., Including Wetlands
- Storm Water
- Floodplains
- Vegetation and Wildlife
- Historic Resources
- Archeological Resources
- Traffic Noise
- Public Lands

SECTION 4 – ENVIRONMENTAL COMPLIANCE

Waters of the U.S., Including Wetlands
Storm Water
Floodplain Development
Wildlife / Threatened and Endangered Species
Cultural Resources
Hazardous Materials
Noise Abatement
Public Lands

SECTION 5 – AGENCY COORDINATION

Federal

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- Federal Emergency Management Agency (FEMA)
- U.S. Environmental Protection Agency (EPA)
- U. S. Coast Guard (USCG)

State

- Texas Commission on Environmental Quality (TCEQ)
- Texas Parks and Wildlife Department (TPWD)
- Texas Historical Commission/State Historic Preservation Officer (THC/SHPO)
- Texas Department of Transportation (TxDOT)

Local

- North Central Texas Council of Governments (NCTCOG)
- City
- County
- Dallas Area Rapid Transit (DART)
- Fort Worth Transportation Authority (The T)
- Denton County Transit Authority

Other

SECTION 6 – PROJECT AGREEMENTS

Interlocal Agreement
Memorandum of Understanding
Letter of Intent
Two-Party Agreement
Three-Party Agreement
Multi-Party Agreement

APPENDICES

SECTION 1
PROJECT DESCRIPTION

Project Name:	Dallas North Tollway (Phase 4A Extension)
Project Limits:	US 380 to FM 428
Project Length:	6 miles
Type of Work:	New Location Six-Lane Tollway (Extension of DNT)
County(ies):	Collin
Estimated Let Date:	To Be Determined
Estimated Cost:	$433,872,212
Funding Sources:	NTTA

Existing Facility

The existing Dallas North Tollway (DNT) mainlanes end at US 380, and mainlanes do not currently extend the limits of the proposed DNT Phase 4A project. Dallas Parkway, a two-lane road that extends from US 380 to FM 428 would serve as the northbound frontage road for the proposed DNT Phase 4A project if it is constructed along a parallel alignment.

Proposed Facility

The proposed DNT Phase 4A project would extend from the northern terminus of DNT Phase 3 at US 380 northward to FM 428 (**Exhibit 1-1**). This 6-mile controlled access tollway is proposed to be designed as an urban tollway with a design speed of 70 miles per hour. The proposed project would consist of six tolled mainlanes, three lanes in each direction, and three-lane non-tolled northbound and southbound frontage roads (**Exhibits 1-2** and **1-3**). Refer to **Exhibit 1-4** for existing ground photographs of the proposed project area.

Land Use

Existing land use in the project area consists primarily of agricultural and vacant land, floodplain, and some industrial and residential uses. The proposed project is included in the future land use plans for both the Town of Prosper and the City of Celina, and zoning for both municipalities supports its construction. Current development in the project area is primarily residential with some commercial development near other major thoroughfares.

Need and Purpose

The proposed project is needed to address current and projected increases in transportation demands and provide a safe and efficient thoroughfare by which to provide goods and services in the northeastern portion of the Dallas-Fort Worth (DFW) metropolitan area. The primary purpose of the proposed project is to address this need by constructing a facility that would increase mobility, transportation carrying capacity, and safety in the area. Supporting information and more details regarding the project need and purpose (i.e. population and

employment statistics, existing transportation network information, traffic projections, and level of service [LOS] data) are provided in **Appendix 1-1.**

Traffic Volumes

In considering the design for the proposed project, estimates for traffic volumes were obtained and are summarized in **Table 1-1** for selected segments of the project. The capacity of a rural freeway (similar to a toll-tag only tollway) with six lanes (three lanes in each direction) as referenced by the NCTCOG *Mobility 2025* Metropolitan Transportation Plan (MTP) ranges from 73,000 to 110,000 vehicles per day (vpd). All of the proposed DNT Phase 4A mainlanes are projected to be under capacity. Additional detailed information regarding traffic volumes is included in **Appendix 1-1.**

Table 1-1. DNT Phase 4A Projected Traffic Volume Summary

Mainlane Segment	Estimated Daily Traffic Volume for 2040 (vpd)	
	Northbound	Southbound
US 380 to First Street (CR 3)	46,100	46,100
First Street (CR 3) to Prosper Trail (CR 4)	42,700	42,700
Prosper Trail (CR 4) to Frontier Parkway (CR 5)	39,300	39,300
Frontier Parkway (CR 5) to (proposed) Light Farms Way	38,400	38,400
(Proposed) Light Farms Way to Future 4-Lane Arterial	35,700	35,700
Future 4-Lane Arterial to Outer Loop Direct Connector	9,400	9,400
Outer Loop Direct Connector to FM 428	17,300	17,300

Source: Wilbur Smith Associates, Inc., *Traffic Study for DNT Phase 4A*, June 2008.

Alternatives Analysis

A corridor study area was defined for the purposes of evaluating the proposed project. The limits of the corridor, shown on the constraints maps in **Exhibits 1-5** and **1-6,** outline an area which could contain the range of alternatives that could meet the need and purpose of the proposed project. **Exhibit 1-5** contains surface topography and natural features, constraints such as water features and prime farmland soils, within the corridor study area. The man-made constraints, depicted in **Exhibit 1-6**, contain obstacles such as hazardous materials sites, landfills, oil and gas wells, utilities, and leaking storage tanks.

In addition to the assessment of physical constraints affecting the location of the proposed project, the NTTA has sought the input of county and city leaders and staff, as well as the public, regarding known constraints and alignment alternatives. On January 10, 2008, the NTTA met with civic leaders in the first of a series of monthly stakeholder meetings that were also held in February, March, and April 2008. The purpose of these meetings was to brief the municipalities and other civic leaders on progress with the design of the proposed DNT Phase 4A project and to obtain recommendations from stakeholders instrumental in preparing road design details such as the types and locations of ramps for major intersections with cross streets. The NTTA held a public meeting January 24, 2008 to provide information about the preferred alignment and configuration of the proposed project. Community feedback from these efforts was generally positive in terms of both support for construction of the proposed DNT Phase 4A project and for its preferred alignment and design features. Resolutions in support of the preferred DNT Phase 4A alignment were passed by the Town Council of Prosper in April 2008 and by the City Council of Celina in May 2008 **(Appendix 1-3)**.

Although nearly all of the ROW necessary for the proposed project has been acquired by Collin County, the NTTA will not make a decision on the final selection of a preferred alternative until after the engineering and environmental studies have been finalized; all stakeholder and public comments have been evaluated; and feasibility studies have been concluded.

Supporting information for the alternatives analysis, including documentation on the development of the alternatives, the no-build alternative, and assessment of the preferred alternative is included in **Appendix 1-2.**

ROW/Easements and Utilities

Approximately 303.6 acres of right of way (ROW) and easements would be required to construct the proposed project. Of this amount, approximately 262.5 acres of ROW and 3.9 acres of drainage easements have already been acquired by Collin County through property owner donations. The remaining 29.2 acres of ROW to be acquired are spread across 11 locations throughout the project area. Additionally, 8 acres of easements would be required for drainage and project construction. The proposed project would have a minimum ROW width of 360 feet and would widen to 400 feet near cross street interchanges and for the mainlane toll gantry. The proposed DNT Phase 4A project would not require any displacements of commercial or residential properties.

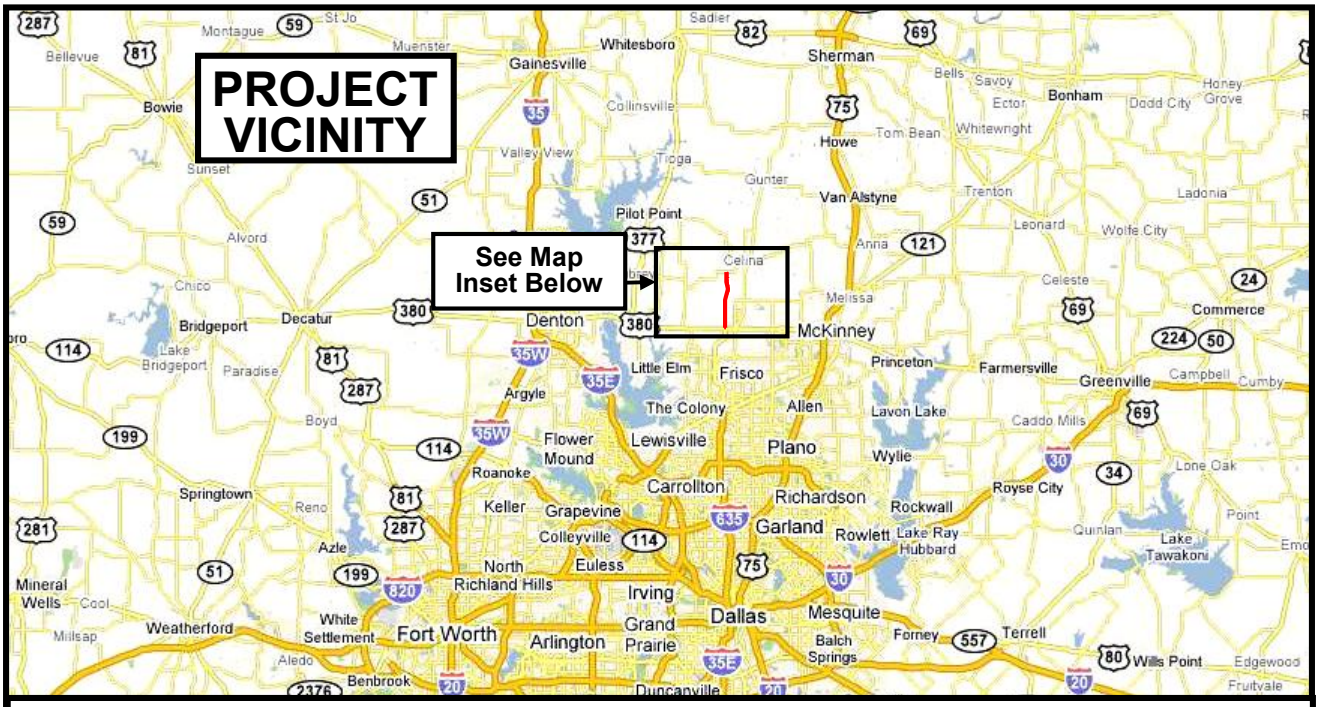
Utilities such as water lines, sewer lines, gas lines, telephone and fiber optic cables, electrical lines, and other subterranean and aerial utilities may require minor adjustments as a result of the proposed project. An east-west sanitary sewer line is planned along the Doe Branch drainage that would pass under the existing and planned bridge facilities. Other than potential temporary interruptions in service, no adverse impacts (i.e. termination of service or long-term interruptions) to utilities, such as electrical, gas, phone, water, or sewer are expected to occur from the construction of the proposed project. Schedules for any utility adjustments would be closely coordinated to minimize disruptions and inconvenience to the utility customers.

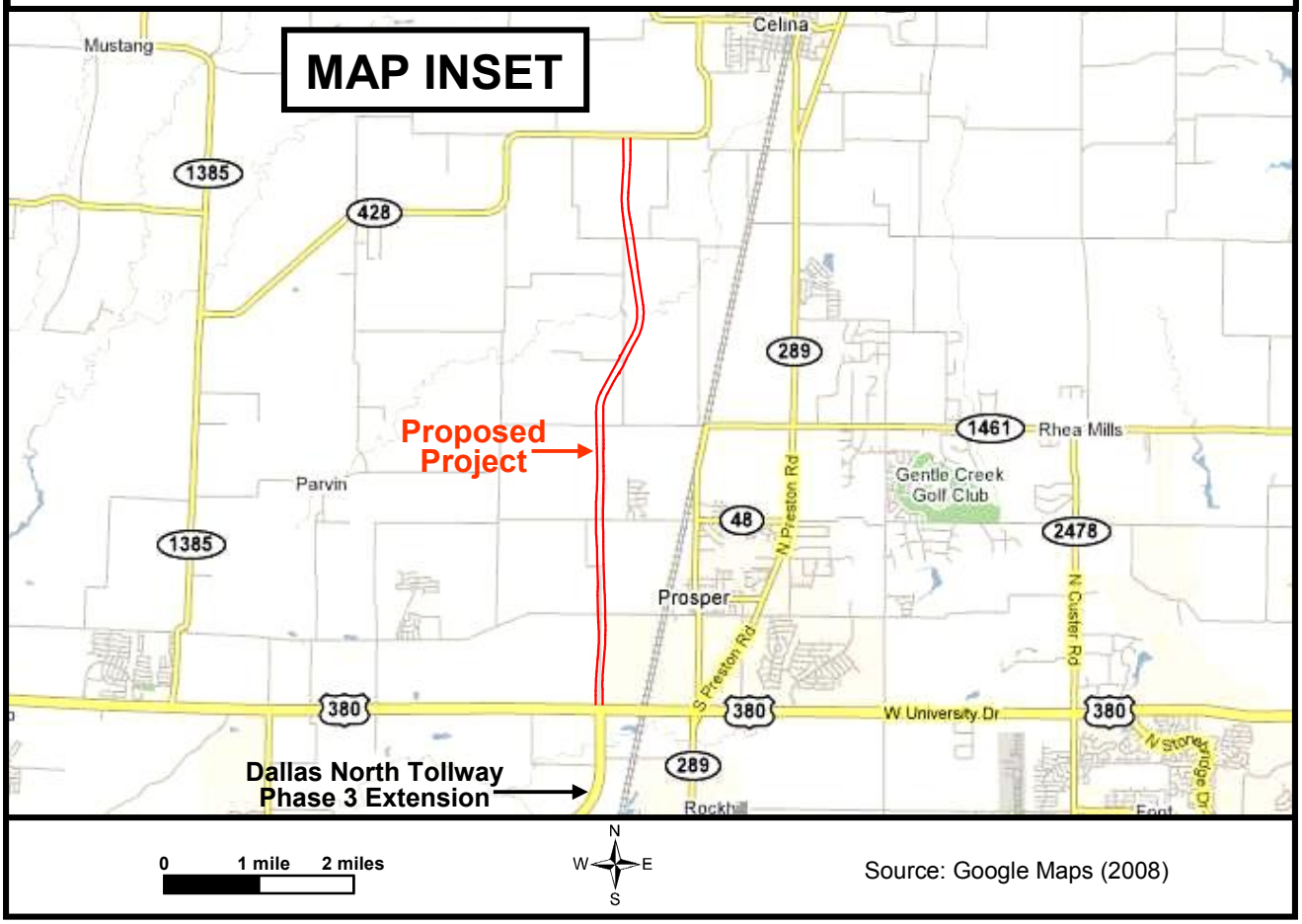
Construction Phasing

Construction plans have not been developed to date; however, as the proposed project is on new location, detours and complex construction sequencing are not anticipated.

Exhibits:
Exhibit 1-1: Project Vicinity Map
Exhibit 1-2: Proposed Typical Sections
Exhibit 1-3: Proposed Plan View Design Layouts
Exhibit 1-4: Project Area Photographs
Exhibit 1-5: Natural Features Constraints Map
Exhibit 1-6: Man-made Features Constraints Map

Appendices:
Appendix 1-1: Need and Purpose Supporting Information
Appendix 1-2: Alternatives Analysis Supporting Information
Appendix 1-3: Support Resolutions for Preferred Alignment



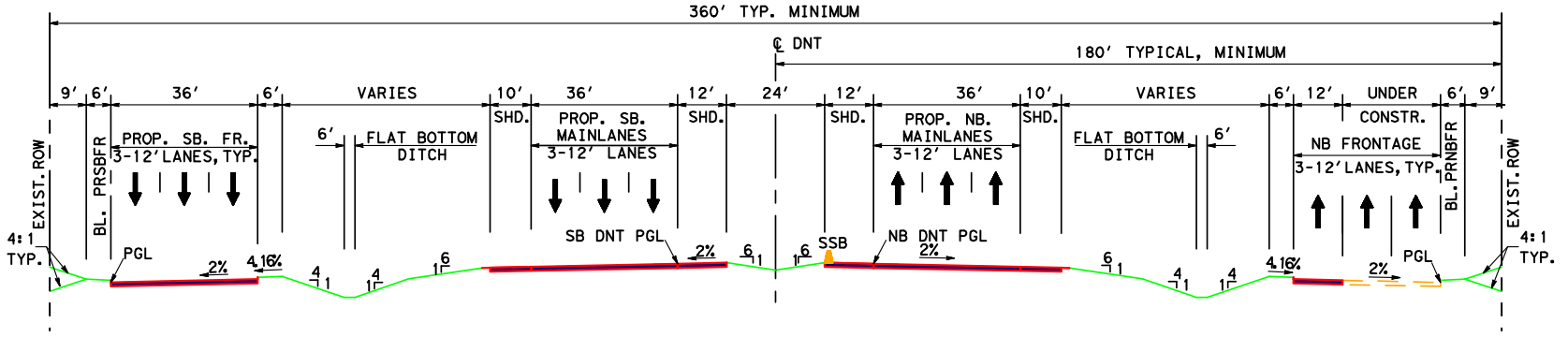


Project Vicinity Map and Map Inset

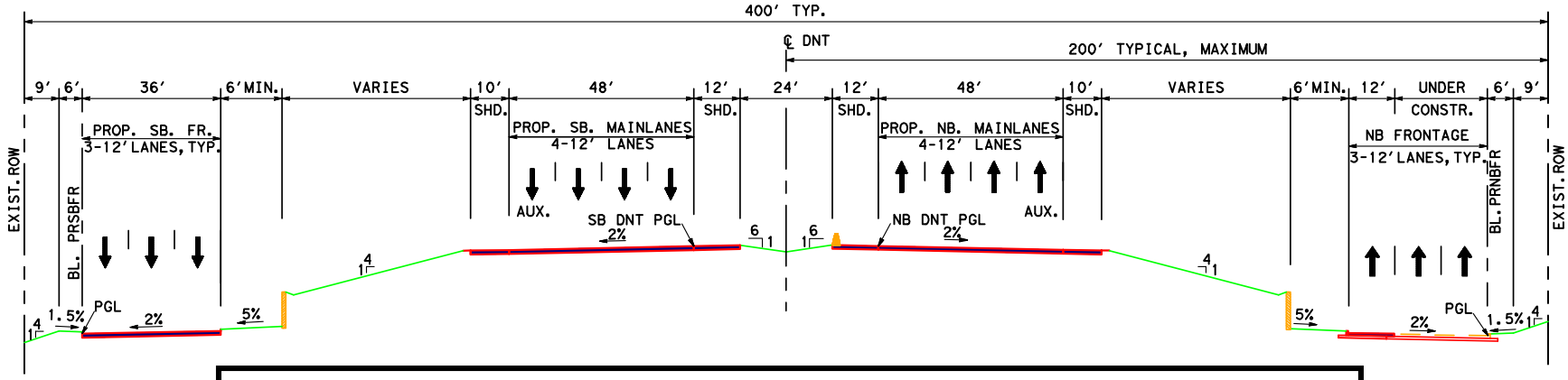
Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

Exhibit 1-1



Typical Cross-Section at Grade

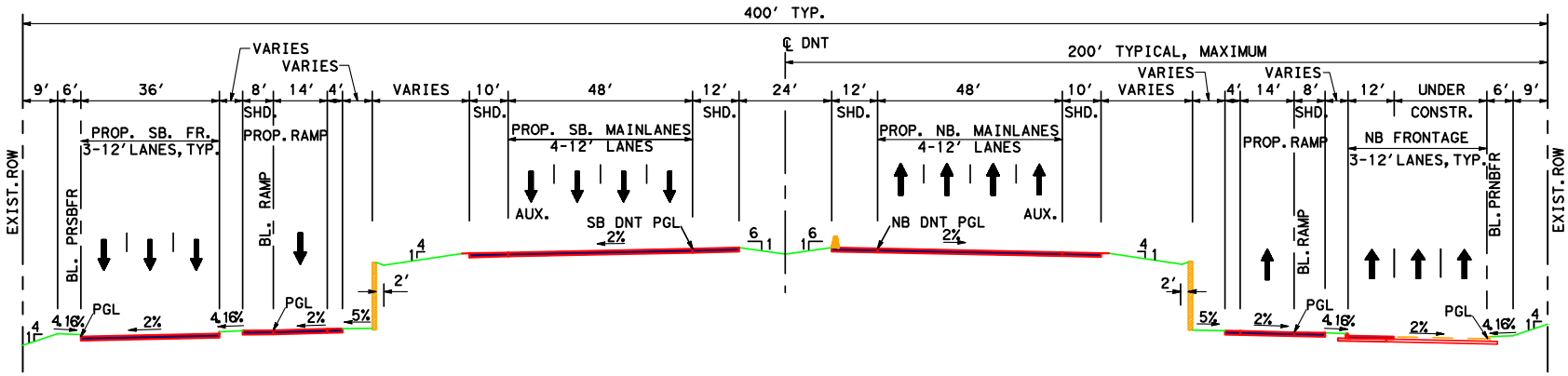


Typical Cross-Section Near Intersection

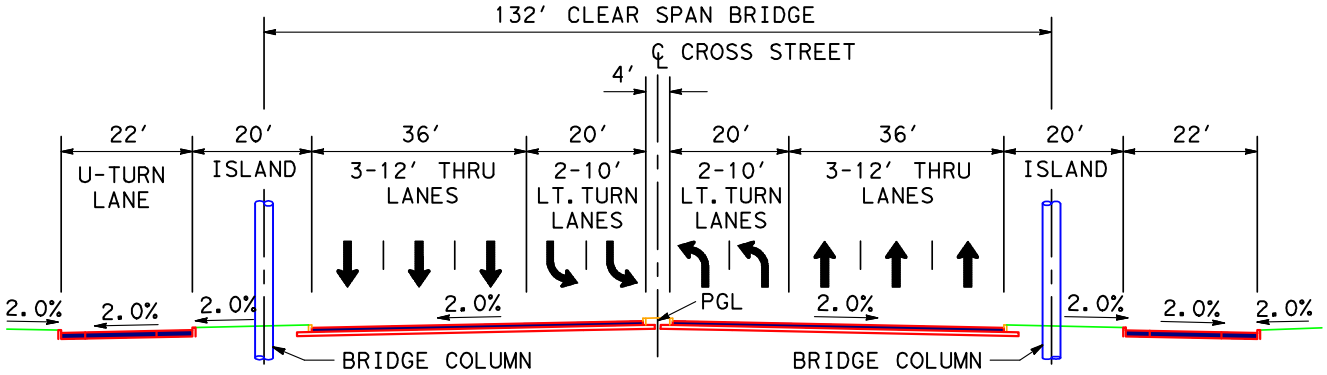
Proposed Typical Cross-Sections

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX -- Not to Scale --

Exhibit 1-2, Page 1



Typical Cross-Section at Ramps



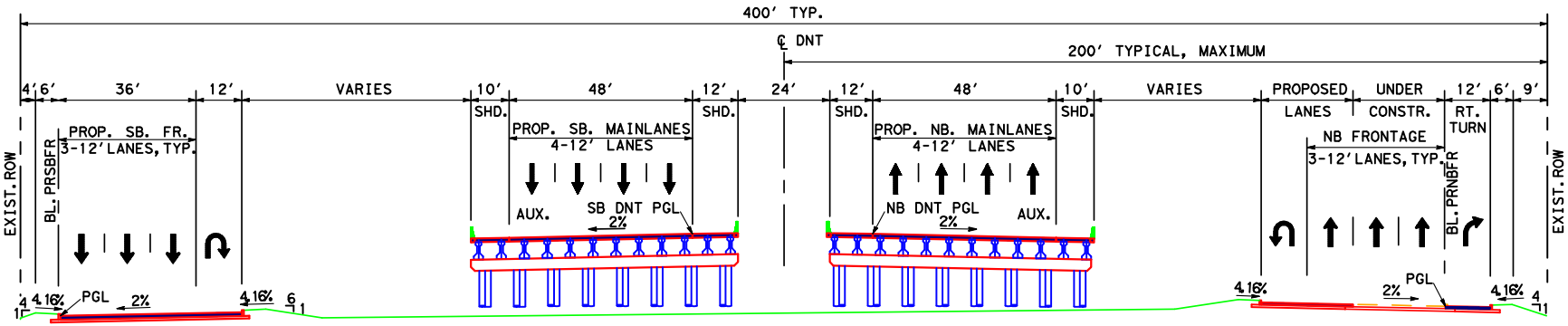
Typical Cross-Section at Cross Streets

(Lovers Parkway, First Street (CR 3), Prosper Trail (CR 4), Frontier Parkway (CR5), Light Farms Way, and CR 7)

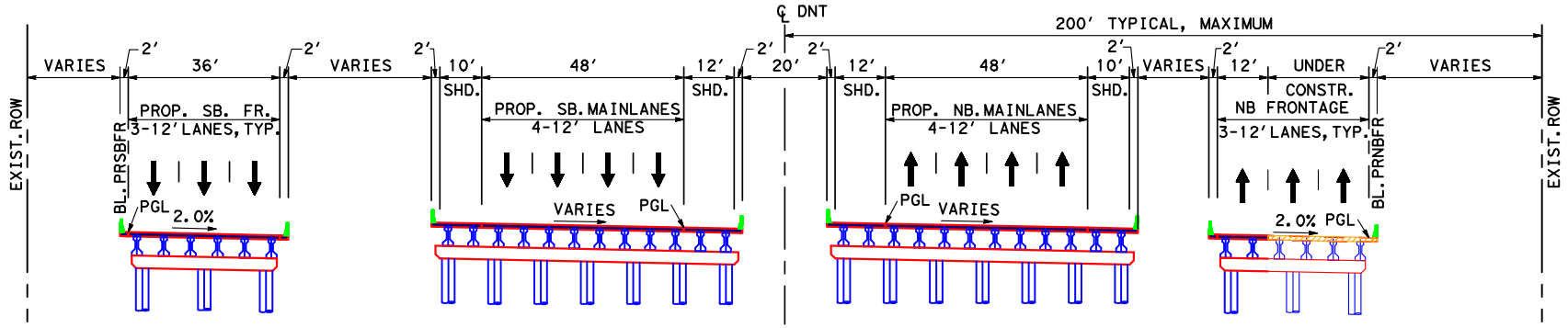
Proposed Typical Cross-Sections

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX -- Not to Scale --

Exhibit 1-2, Page 2



Typical Cross-Section for Bridge at Intersections



Typical Cross-Section for Bridge at Doe Branch

Proposed Typical Cross-Sections

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX -- Not to Scale --

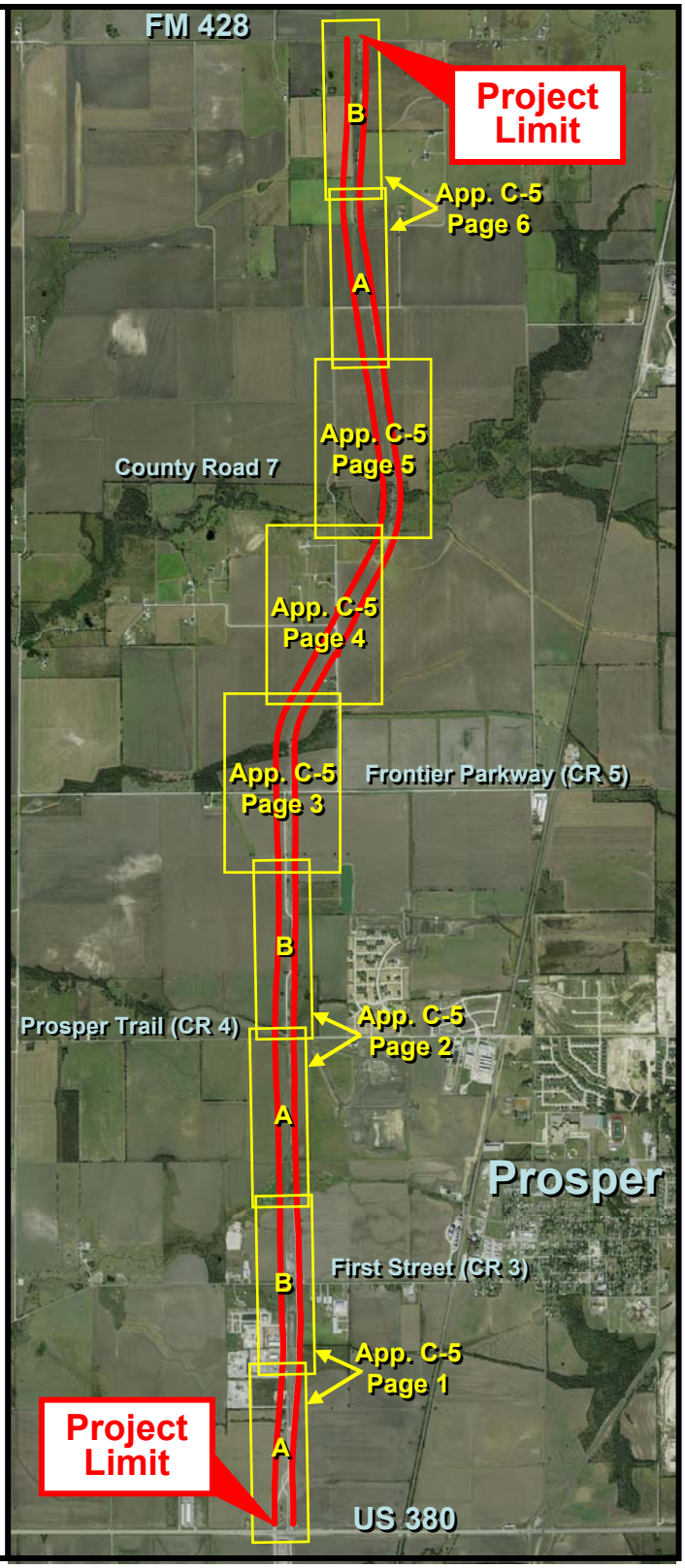
Exhibit 1-2, Page 3

Legend

for Plan View Design Maps in Appendix C-5

LEGEND:

- EXIST. ROW
- PROPOSED R.O.W.
- PROPERTY LINE
- PROPOSED DRAINAGE EASEMENT
- 65 PROPERTY PARCEL #
- 100 YEAR FLOODPLAIN
- EXISTING STORM DRAINAGE
- PROPOSED STORM DRAINAGE
- STORM INLET
- DIRECTION OF TRAFFIC
- EXISTING POWER POLE
- EXISTING CONTOURS
- PAVEMENT EDGE
- PAVEMENT TO BE REMOVED
- PROPOSED DNT 4A CENTERLINE
- DRAINAGE DIRECTION
- PROPOSED RETAINING WALL
- PROPOSED NOISE WALL
- PROPOSED TWO WAY TRAFFIC BARRIER
- PROPOSED ONE WAY TRAFFIC BARRIER
- CONTROL OF ACCESS LINE
- PROPOSED PROJECT (BY OTHERS)
- PROPOSED BRIDGE
- PROPOSED DNT 4A MAIN LANES
- PROPOSED RAMP / DIRECT CONNECTOR
- PROPOSED FRONTAGE ROAD AND CROSS STREETS
- EXISTING FRONTAGE ROAD
- EXISTING CROSS & LOCAL STREET
- POTENTIAL DISPLACEMENTS
- PROPOSED TOLL GANTRY
- ADDITIONAL RIGHT-OF-WAY REQUIREMENTS
- FUTURE BRAIDED RAMP BRIDGE
- FUTURE BRAIDED RAMP PAVEMENT



0 2000' 4000' 6000' 8000'

N W E S

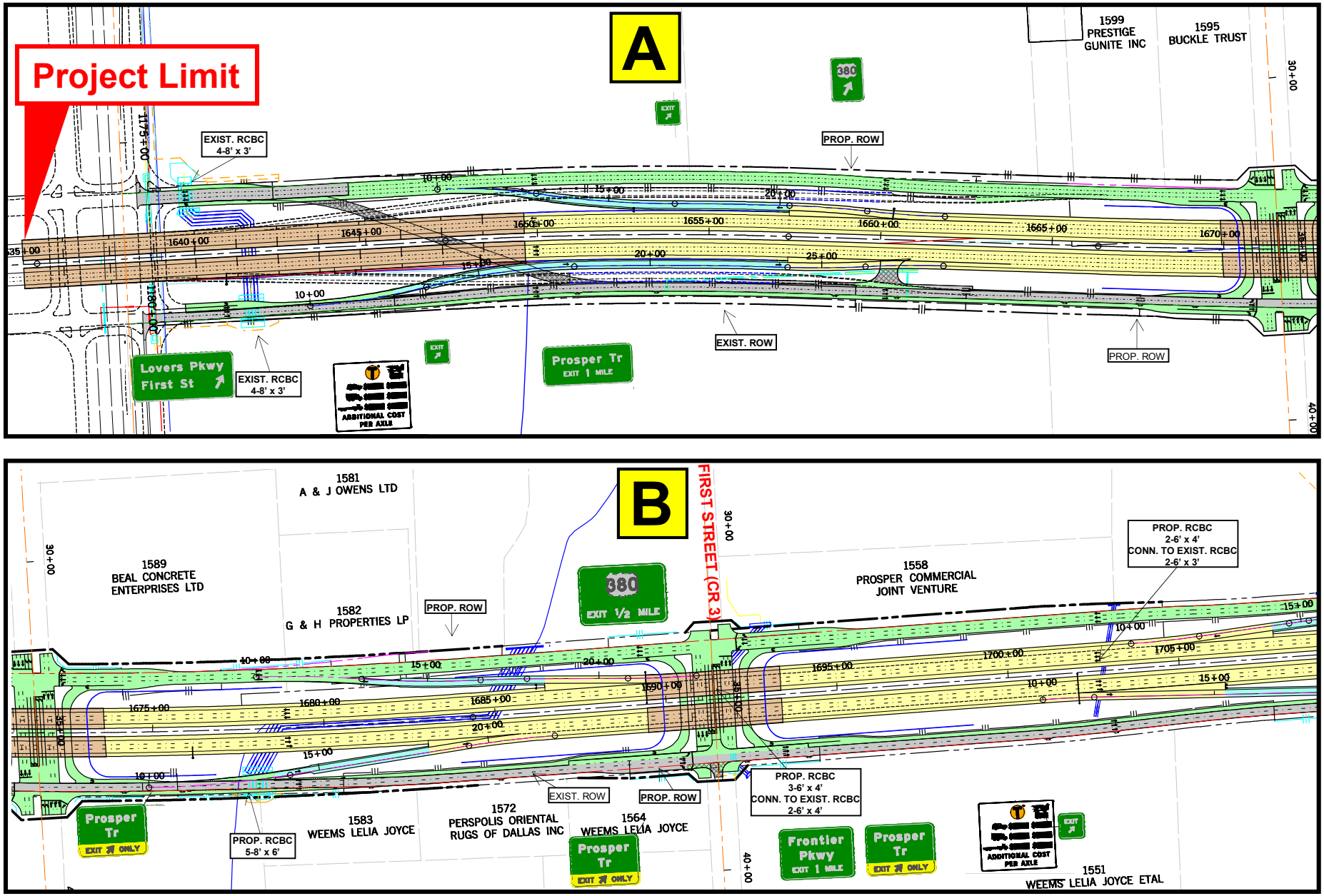
Source/Year of Aerial Photograph: Landiscor/2007

Location of Aerial Photographs:
Yellow frames outline areas shown in detail with project design overlays and impacts in Appendix C-5, Pages 1-6.

Legend and Index for Plan View Design Maps (App. C-5)

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

NTTA NORTH TEXAS TOLLWAY AUTHORITY



0 100' 200' 400' 600' 800'

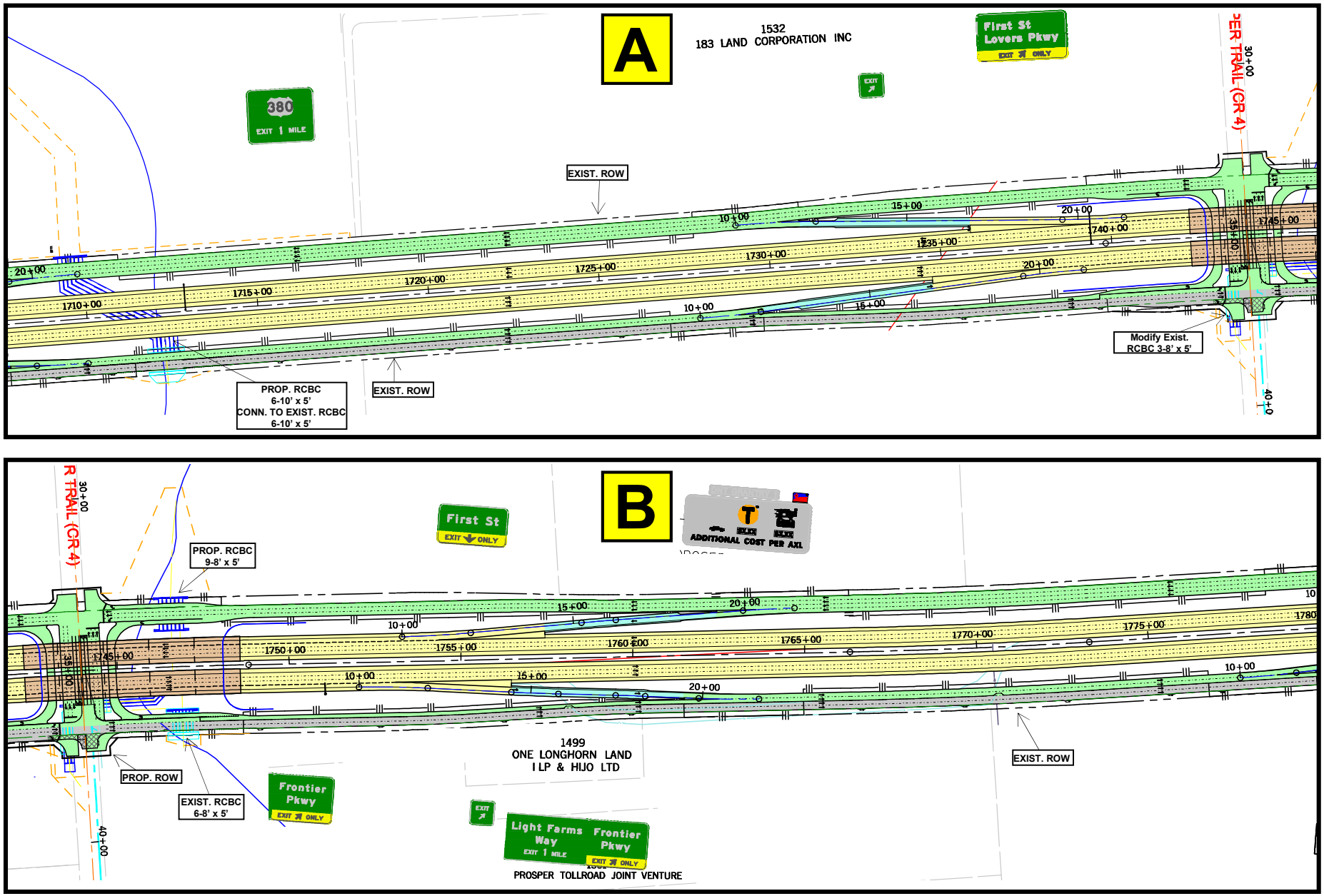
NOTES:

1. Legend is shown in Appendix C-4.
2. Map shows main proposed design features; see project schematic for design details.

Plan View of Project Design Features

DNT Phase 4A Extension, Collin County, TX

Exhibit 1-3, Page 2



0 100' 200' 400' 600' 800'

NOTES:

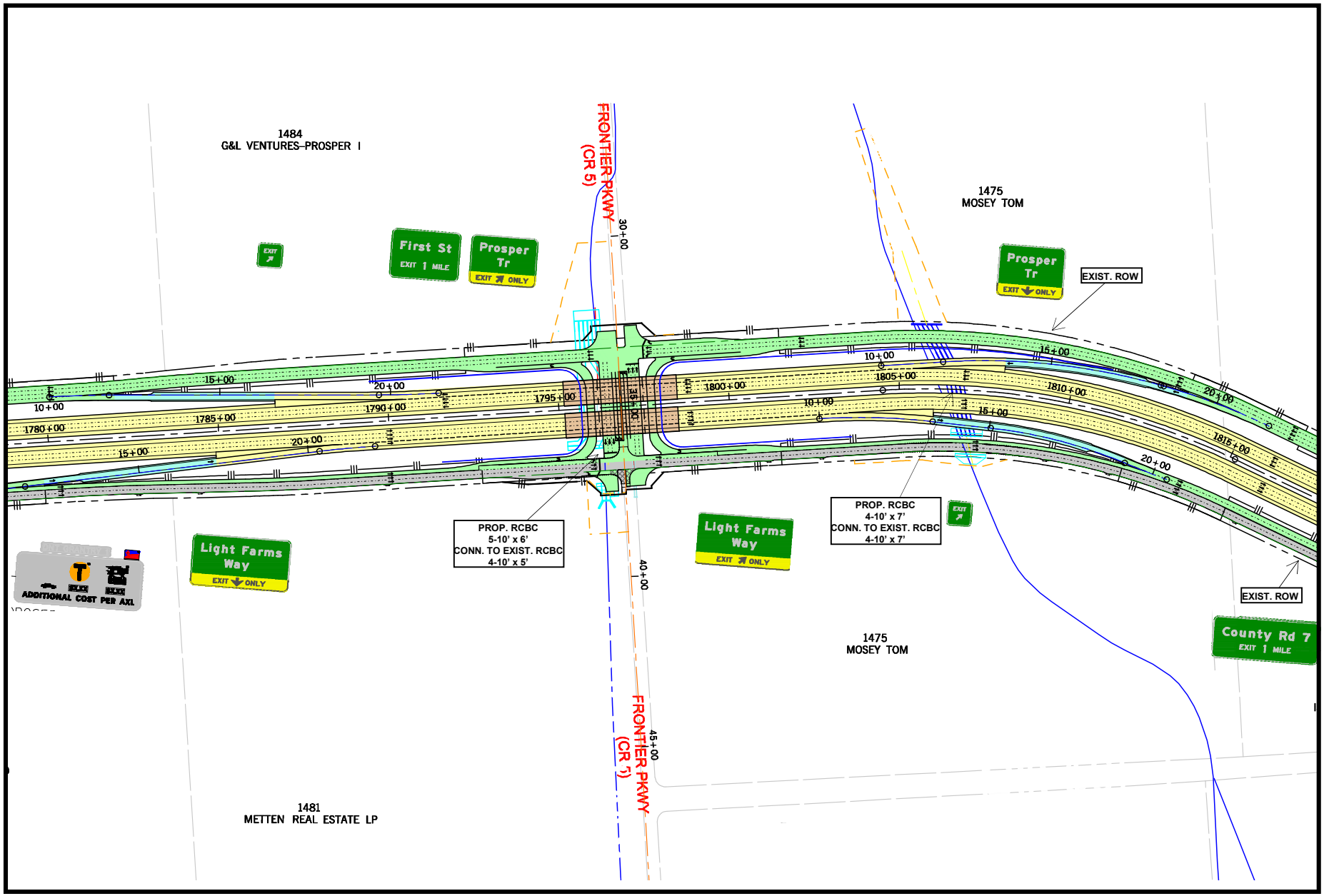
1. Legend is shown in Appendix C-4.
2. Map shows main proposed design features; see project schematic for design details.

W S N E

Plan View of Project Design Features

DNT Phase 4A Extension, Collin County, TX

Exhibit 1-3, Page 3



0 100' 200' 400' 600' 800'

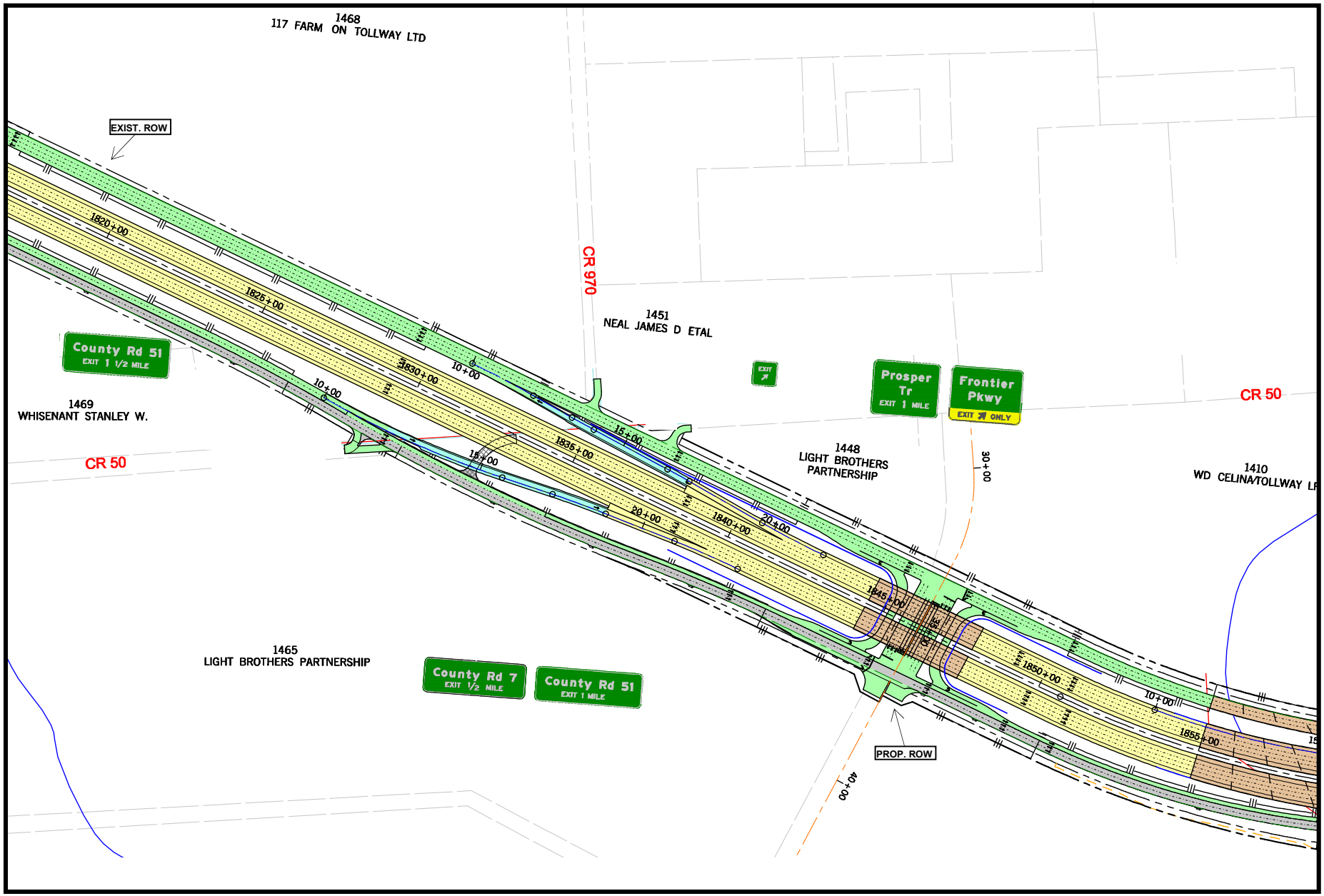
NOTES:

1. Legend is shown in Appendix C-4.
2. Map shows main proposed design features; see project schematic for design details.

Plan View of Project Design Features

DNT Phase 4A Extension, Collin County, TX

Exhibit 1-3, Page 4



0 100' 200' 400' 600' 800'

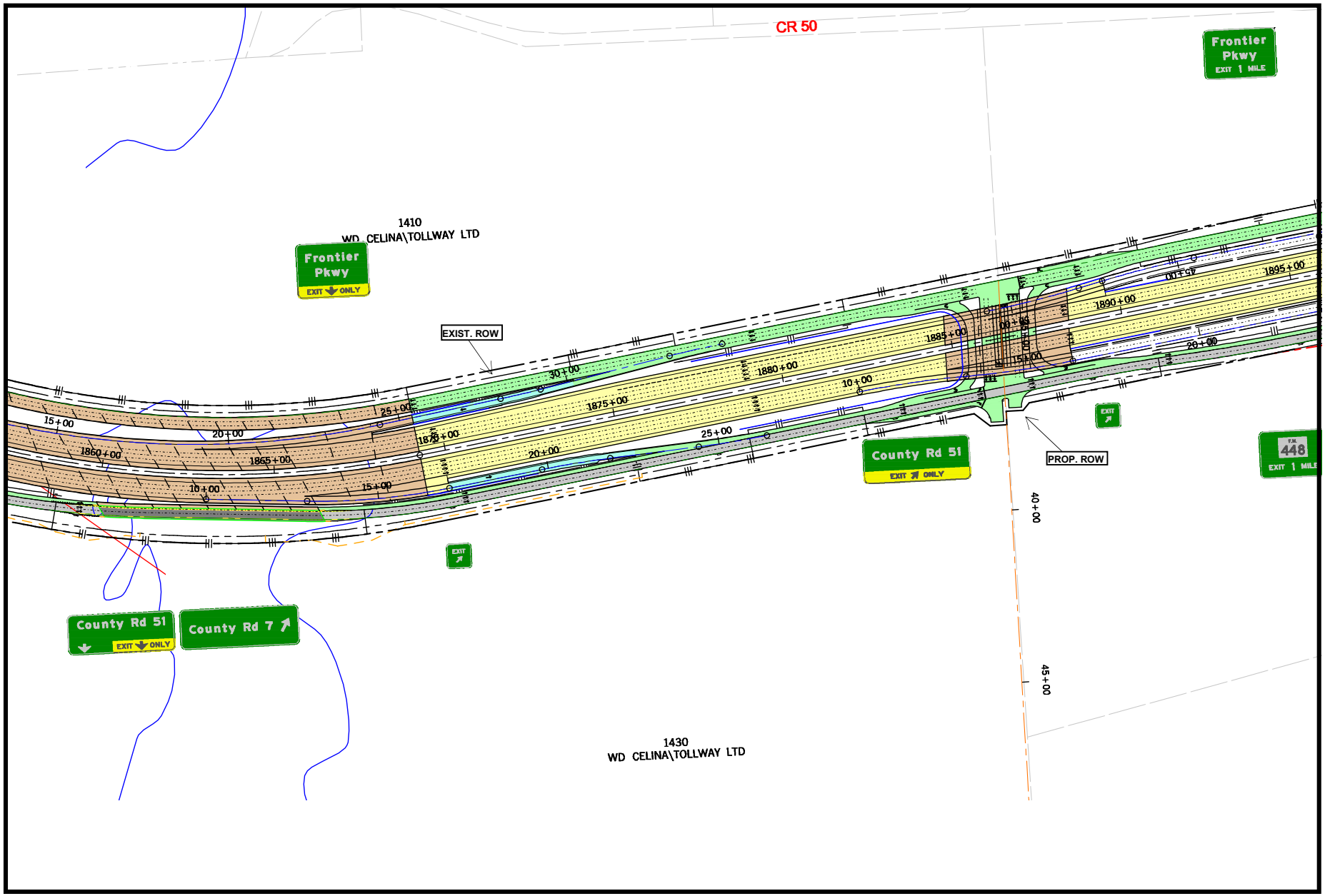
NOTES:

1. Legend is shown in Appendix C-4.
2. Map shows main proposed design features; see project schematic for design details.

Plan View of Project Design Features

DNT Phase 4A Extension, Collin County, TX

Exhibit 1-3, Page 5



0 100' 200' 400' 600' 800'

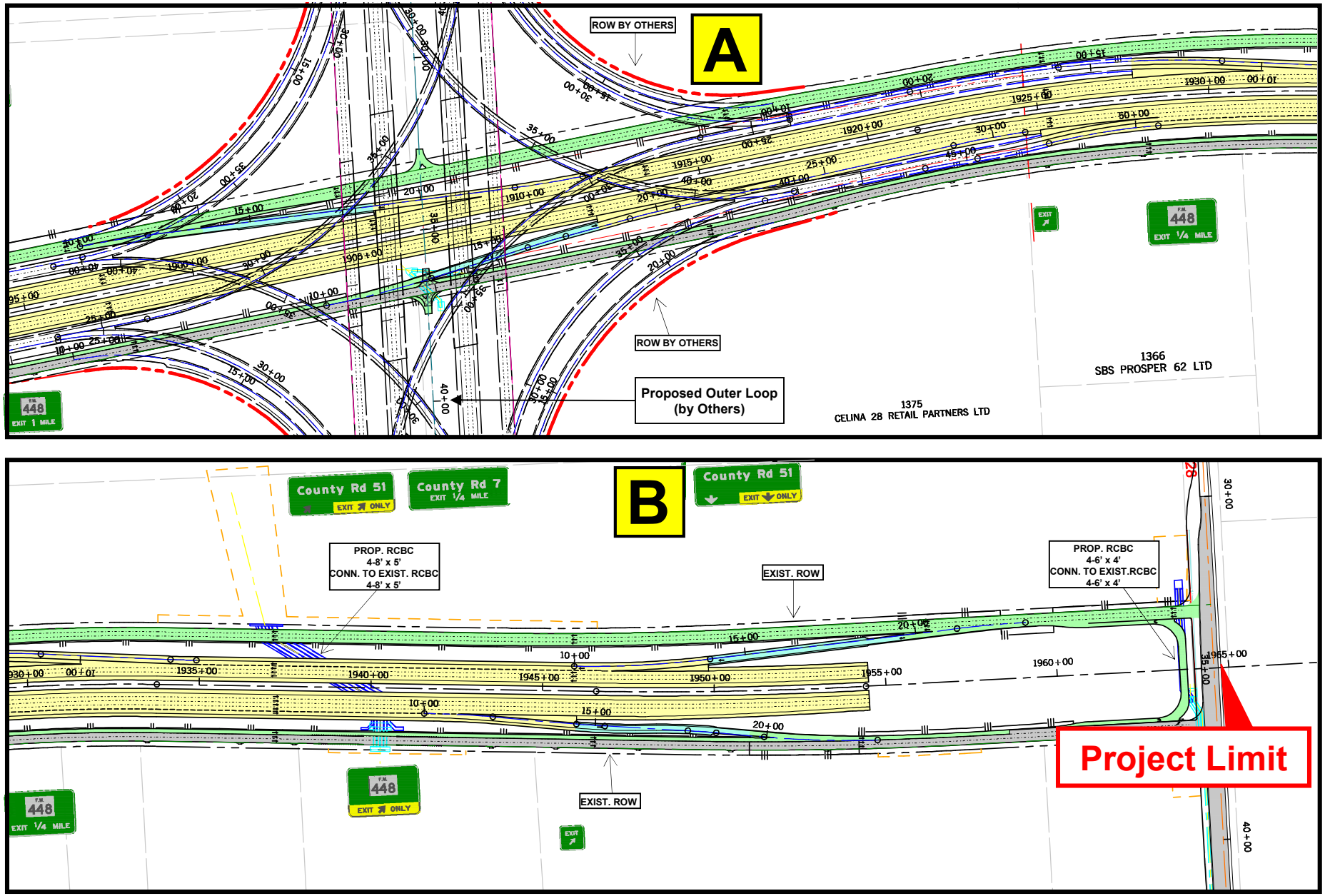
NOTES:

1. Legend is shown in Appendix C-4.
2. Map shows main proposed design features; see project schematic for design details.

Plan View of Project Design Features

DNT Phase 4A Extension, Collin County, TX

Exhibit 1-3, Page 6



0 100' 200' 400' 600' 800'

NOTES:

1. Legend is shown in Appendix C-4.
2. Map shows main proposed design features; see project schematic for design details.

Plan View of Project Design Features

DNT Phase 4A Extension, Collin County, TX

Exhibit 1-3, Page 7

Photograph 1. Southern terminus of project at US 380, showing Dallas Parkway under construction by Collin County. The portion of the road between US 380 and First Street (CR 3) has been completed.

Photograph 2. Northern terminus of project at FM 428, showing Dallas Parkway (in photo center) under construction.

Photograph 3. Existing land use in the area includes industrial sites such as this concrete plant located north of US 380.

Photograph 4. This unoccupied structure, located south of First Street (CR 3), is the only structure within the ROW and is owned by Collin County.

Photograph 5. This field was used to grow sorghum in 2007. It is located north of First Street (CR 3) and is characteristic of much of the existing agricultural land use in the project area.

Photograph 6. Development in the area includes several residential communities, such as the Lakes of Prosper on the north side of Prosper Trail (CR 4).

DNT 4A Project Area Ground Photographs

Date of All Photos: 18 January 2008

Photograph 7. Natural features in the project area include this wetland, located north of First Street (CR 3). Grain silos adjacent to the BNSF Railroad can be seen in the background.

Photograph 8. Riparian vegetation typical of the project area adjacent to an unnamed tributary to Little Elm Creek just north of Prosper Trail (CR 4).

Photograph 9. Recent construction of Dallas Parkway removed much of the woody vegetation westward, as shown in this photo taken just east of Photograph 8.

Photograph 10. An unusually large black willow tree (i.e. greater than 20 inches in diameter) is located within the proposed ROW north of Frontier Parkway (CR 5) in a riparian area.

Photograph 11. Typical riparian woodland located adjacent to an ephemeral stream just north of Frontier Parkway (CR 5).

Photograph 12. Hackberry fencerow trees are found within the project ROW near FM 428.

DNT 4A Project Area Ground Photographs

Date of All Photos: 18 January 2008

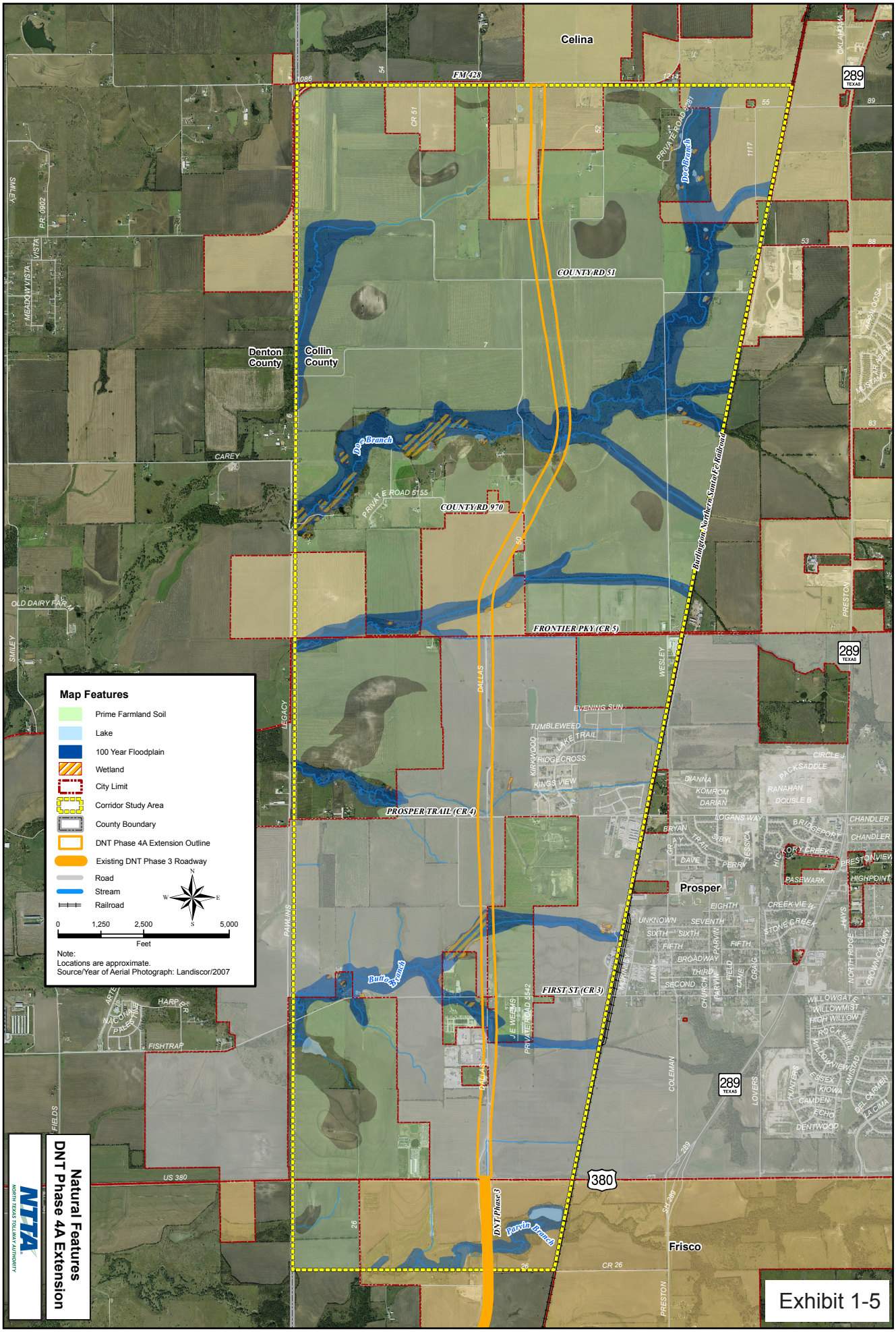

Celina
Denton County
Collin County
Prosper
Frisco
FM 428
COUNTY RD 51
COUNTY RD 970
FRONTIER PKY (CR 5)
PROSPER TRAIL (CR 4)
FIRST ST (CR 3)
US 380
CR 26
Doe Branch
Parvin Branch
Butler Branch
DNT Phase3
Burlington Northern Santa Fe Railroad
Map Features
Prime Farmland Soil
Lake
100 Year Floodplain
Wetland
City Limit
Corridor Study Area
County Boundary
DNT Phase 4A Extension Outline
Existing DNT Phase 3 Roadway
Road
Stream
Railroad
0 1,250 2,500 5,000
Feet
Note:
Locations are approximate.
Source/Year of Aerial Photograph: Landiscor/2007
Natural Features
DNT Phase 4A Extension
NTTA
NORTH TEXAS TOLLWAY AUTHORITY
Exhibit 1-5

Exhibit 1-5

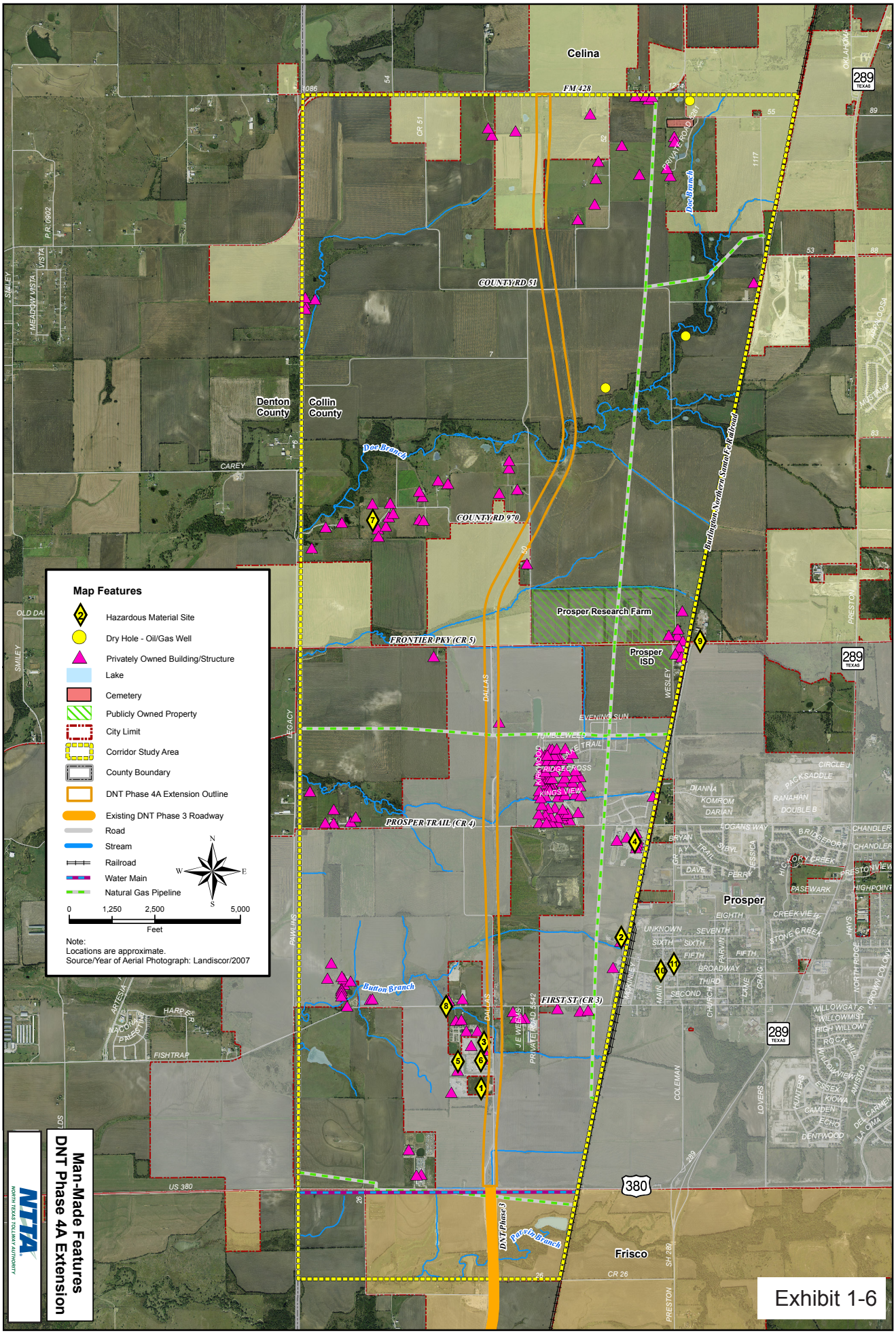

Celina
FM 428
COUNTY RD 51
COUNTY RD 970
Denton County
Collin County
Doe Branch
Burlington Northern Santa Fe Railroad
Prosper Research Farm
FRONTIER PKY (CR 5)
Prosper ISD
PROSPER TRAIL (CR 4)
Prosper
FIRST ST (CR 3)
Button Branch
Parvin Branch
DNT Phase 3
Frisco
US 380
CR 26
289
Map Features
Hazardous Material Site
Dry Hole - Oil/Gas Well
Privately Owned Building/Structure
Lake
Cemetery
Publicly Owned Property
City Limit
Corridor Study Area
County Boundary
DNT Phase 4A Extension Outline
Existing DNT Phase 3 Roadway
Road
Stream
Railroad
Water Main
Natural Gas Pipeline
0 1,250 2,500 5,000
Feet
Note:
Locations are approximate.
Source/Year of Aerial Photograph: Landiscor/2007
NTTA
NORTH TEXAS TOLLWAY AUTHORITY
Man-Made Features
DNT Phase 4A Extension
Exhibit 1-6

Exhibit 1-6

SECTION 2
IMPACT ASSESSMENT SUMMARIES

Water Resources

Waters of the U.S., Including Wetlands

Waters of the United States (U.S.), including wetlands, refer to those waterways which fall within the jurisdictional authority of the United States Army Corps of Engineers (USACE) according to the Clean Water Act (CWA). The proposed project crosses five tributaries of the Doe Branch watershed (including Doe Branch). All tributaries are waters of the U.S., including one wetland which abuts Button Branch in the southern portion of the project corridor. Permanent impacts to these waters of the U.S. are anticipated by construction of the tollway, new culverts, culvert extensions, and grading within drainage easements. **Exhibit 2-1** depicts anticipated water crossing locations on a topographic map, and **Exhibit 2-2** depicts the same locations on an aerial photograph. **Exhibit 1-3** contains design plans for crossings of waters of the U.S. **Table 2-1** summarizes proposed impacts to waters of the U.S. for each water crossing (listed from south to north along the proposed alignment). No temporary impacts to waters of the U.S. are anticipated, as the structures discussed in **Table 2-1** would remain in place after construction is completed.

Table 2-1: Impacted Waters of the U.S.

Crossing/Location	Description[1]	Waters of U.S.	Activity	Area of Impact[2]
W-3 Station 1678+80	Cross-Drainage/ Ephemeral Stream OHWM = 5 feet	No/Yes[3]	Culvert Extension and Drainage Easement	0.02 acre (145 linear feet)
W-6 Station 1713+00	Button Branch Emergent Wetland Area	Yes	Culvert Extension, Road Base Paving, and Drainage Easement	5.40 acres
W-7 Station 1749+53	Unnamed Tributary, Ephemeral Stream OHWM = 15 feet	Yes	New Culvert and Drainage Easement	0.35 acre (1,015 linear feet)
W-8 Station 1799+79	Cross-Drainage/ Ephemeral Stream OHWM = 5 feet	No/Yes[3]	Culvert Extension and Drainage Easement	0.02 acre (190 linear feet)
W-10 Station 1809+42	Unnamed Tributary, Ephemeral Stream OHWM = 9 feet	Yes	Culvert Extension and Drainage Easement	0.21 acre (970 linear feet)

Notes:
[1] OHWM - ordinary high water mark (i.e. the average width of the stream channel throughout the length of the stream segment at the OHWM level).
[2] N/A - not applicable.
[3] Impacts from extending an existing culvert within the project ROW affect water features that are not waters of the U.S., including wetlands. However, within the drainage easement west of the ROW these channel features have a defined OHWM and are considered waters of the U.S., including wetlands, for which impacts are shown.

There are 11 culvert crossings along the proposed alignment; however, only three involve waters of the U.S., including wetlands, within the proposed DNT Phase 4A project ROW (i.e., Crossings W-6, W-7, and W-10). Each crossing of these waters of the U.S. would be placed in a culvert to prevent restriction of flow. The culvert at Crossing W-6 and the associated road base and paving, as well as a drainage easement, are expected to affect 5.40 acres of

emergent wetland associated with Button Branch. The Button Branch channel is impounded to the extent it is indistinguishable from the wetland complex; consequently, no separate impacts to a stream channel could be identified. The culvert at Crossing W-7 would be a new culvert and drainage easement which would impact 0.35 acre of ephemeral stream. The culvert at Crossing W-10 would extend an existing culvert and add a drainage easement, impacting approximately 0.21 acre of ephemeral stream. The support columns for the bridges over Doe Branch are not expected to result in any impacts to waters of the U.S. at that location.

The determination of jurisdictional status of water features within the proposed DNT Phase 4A project corridor is consistent with the jurisdictional determination in the Individual Permit (IP) under Section 404 issued in February 2008 for the construction of the Dallas Parkway. The preliminary jurisdictional determination report for waters of the U.S., including wetlands, in the proposed DNT Phase 4A project area is included as **Appendix 2-1**.

Avoidance and minimization of impacts to wetlands were considered in the design of the proposed project. Preliminary corridor studies developed and evaluated several alignment alternatives that were considered (**Appendix 1-2**); however, none were developed that could completely circumvent the emergent wetland within the proposed project area. In addition, the alignment selected would incorporate the existing Dallas Parkway where possible, thereby further reducing impacts.

Navigable Waterways
There are no navigable waterways within the proposed project area.

Water Quality
Storm Water
Because the proposed project would disturb more than 1 acre, the NTTA would be required to comply with the TCEQ Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP). The project would also disturb more than 5 acres; therefore, a Notice of Intent (NOI) would be filed with the TCEQ stating that the NTTA would have a Storm Water Pollution Prevention Plan (SW3P) in place during the construction period. Impacts would be minimized by avoiding work by construction equipment directly in stream channels and/or adjacent areas. No permanent water quality impacts are expected as a result of the proposed project.

Impaired Waters
Doe Branch and its associated tributaries are not identified in the Texas Commission on Environmental Quality's (TCEQ) 2006 *Water Quality Inventory*. None of the aquatic features crossed by the proposed project are designated as either threatened or impaired, and the proposed project is not within 5 miles upstream of a threatened or impaired water segment.

Floodplains
The proposed project crosses an established 100-year floodplain at four locations: south of First Street (CR 3), 8.05 acres; north of First Street (CR 3) at the emergent wetland, 6.05 acres; north of Frontier Parkway (CR 5), 3.99 acres; and south of CR 7 at Doe Branch, 10.94 acres (**Exhibit 1-5**). The project corridor is shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Numbers 48085C0255G, 48085C0260G, and 48085C0125G, dated January 1996, for Collin County. Flood prone areas on FIRMs include the following features: (1) Zone AE designates special flood hazard areas inundated by the 100-year flood (base flood elevations determined); (2) Zone A designates special flood hazard areas inundated by the 100-year flood (no base flood elevations determined); and, (3) Zone X (shaded) designates areas of 500-year flood, areas of 100-year flood with average depths less

than one foot or with drainage areas less than one square mile, and areas protected by levees from 100-year floods. The proposed project crosses Zone X throughout the length of the alignment and all four floodway crossings by the proposed project are within Zone A. Collin County is a participant in the National Flood Insurance Program.

The hydraulic design for the proposed project would be in accordance with current NTTA design policies and procedures. The tollway facility would permit the conveyance of the design year flood without causing substantial damage to the roadway, stream, or other property. The proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations or ordinances. Furthermore, in cooperation with the FEMA, the NTTA would conform to the standard for temporary and permanent fill set by the FIRM.

Biological Resources

Vegetation and Wildlife

The project corridor is located within the Blackland Prairie natural region of Texas, which encompasses approximately 23,500 square miles. The rich, deep, and fertile black clay soils once supported tallgrass prairie communities that were characterized by wooded riparian areas along the creeks and streams within the region. According to the Texas Parks and Wildlife Department (TPWD), the study corridor is located in the "Crops" physiognomic region.[1] Commonly associated plants of this vegetation type include cultivated cover crops or row crops providing food and/or fiber for either man or domestic animals.

Several field reconnaissance visits from January through March 2008 verified that the existing vegetation within the project area is consistent with agricultural areas, landscaping for residential and commercial developments, and wooded riparian corridors. Introduced pasture grasses are frequently found in vacant fields and forested areas throughout the vicinity, predominately Bermuda grass (*Cynodon dactylon*) and Johnson grass (*Sorghum halepense*). The vast majority of vegetation within the existing ROW is dominated by grass crops. Most areas within the proposed project ROW are plowed annually and seeded to either sorghum (*Sorghum* sp.) or corn (*Zea mays*). Also within and adjacent to the proposed ROW are upland and riparian forested areas, along with an atypical pasture/meadow containing native prairie grasses.

The proposed project is expected to have an overall footprint of approximately 303.63 acres representing all ROW and easements. Areas of temporary ground disturbance would affect 280.96 acres of the project footprint during road construction, which would include 12.38 acres of existing roads or parking areas (paved and dirt surface) and 268.58 acres of vegetated or water surfaces. It is expected that areas of temporary impacts to vegetation that are not ultimately paved would be revegetated with grass-dominated ground cover that would be maintained by periodic mowing (i.e. "maintained grass"). These grass areas would comprise approximately 124.91 acres. Permanent impacts would result from the creation of 156.05 acres of new paved surfaces within the project footprint.

The construction-related conversion of existing vegetation to either paved surfaces or maintained grass is expected to affect 20.22 acres of vegetation or water features with particular importance as wildlife habitat. The inventory of habitat types described in **Appendix 2-2** follows the guidelines established by the TPWD[2] for assessing and mitigating impacts to wildlife habitat for transportation projects and includes the following habitat within the ROW: creeks (0.60 acre); wetlands (5.40 acres); ponds (0.43 acre); riparian forest (7.01 acres); upland forest (1.51 acres);

[1] *The Vegetation Types of Texas* map (1984).
[2] *TxDOT-TPWD Memorandum of Agreement for the Finalization of the 1998 Memorandum of Understanding Concerning Habitat Descriptions and Mitigation*.

fencerows (0.93 acre); several unusually large trees; and, a hay meadow or pasture interspersed with native tallgrass prairie vegetation (4.33 acres).

Based on the above mentioned impacts to habitat and vegetation, construction of the proposed project is expected to affect approximately 470 trees greater than 6 inches diameter at breast height (dbh) occurring on 9.45 acres of combined riparian forest, upland forest, and fencerow vegetation. Impacts to forested areas are unavoidable in light of the design constraints for constructing a six-lane tollway with frontage roads and ramps along the preferred alignment adjacent to Dallas Parkway. Similarly, impacts to the water features and the unusual habitat represented by the tallgrass-dominated hay meadow/pasture would be unavoidable for the same reason.

In accordance with the TPWD guidelines for TxDOT transportation projects cited previously, the NTTA has considered mitigation for the expected losses to habitat as described. The proposed project would not affect habitat required by threatened or endangered species, nor would it disturb any rare vegetation series. Thus, the habitats for which the TPWD generally requires compensatory mitigation would not be affected. With regard to habitat types for which mitigation is discretionary under the TPWD guidelines, mitigation would not be necessary to compensate for riparian habitat losses due to the limited size and quality of habitat affected by the proposed project and the abundance of riparian habitat and water features throughout the extensive floodplain in the area.

During project development, the NTTA would design, use, and promote construction practices that minimize adverse effects on both regulated and unregulated wildlife habitat. Existing vegetation, especially native trees, would be avoided and preserved wherever practicable. Every effort would be made to preserve trees within the ROW and other areas where they neither compromise safety nor substantially interfere with construction of the project.

Migratory Birds

The Migratory Bird Treaty Act (MBTA) states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, or egg in part or in whole, without a federal permit issued in accordance with the MBTA's policies and regulations. Migration patterns would not likely be affected by the proposed DNT Phase 4A project. However, as riparian habitat and creeks would be affected by the proposed project, a survey of these areas would be conducted prior to construction to verify if any migratory birds are found in the project area.

Threatened and Endangered Species

The presence or absence of state-listed threatened and endangered species was researched via the TPWD website. The potential presence of federally-listed species was also checked with internet information maintained by the U.S. Fish and Wildlife Service (USFWS). In addition, a database search was conducted using the TPWD Natural Diversity Database (NDD). The TPWD maintains the NDD to track known occurrences of special species on public land throughout Texas. The TPWD and USFWS websites listed several threatened or endangered species that may occur within Collin County. The listed status and anticipated impacts to each of these species is included in **Appendix 2-3**.

The timber/canebrake rattlesnake is the only species that may potentially possess habitat within the proposed project area. Preferred habitat for the timber/canebrake rattlesnake exists within forested areas with dense ground cover. The distribution of the timber/canebrake rattlesnake stretches from the East Coast westward into Texas, and as far north as New England. In the southern portions of its range, this species prefers to make its den in somewhat swampy, wetland habitats. The DFW metroplex represents the far western edge of its range and is

characterized by drier conditions than generally preferred for this species. Populations tend to be higher in eastern Texas where greater concentrations of wetlands and humid forests are found. Forested areas located near permanent water sources are also utilized as fallen debris from trees can act as refugia for the rattlesnake. The timber/canebrake rattlesnake is a shy animal that prefers to live in areas with high amounts of cover and available refuge. This type of habitat is the most likely within the DFW metroplex to be suitable for this species. In addition, the home range of this species is large, at times encompassing in excess of 100 acres. Within the proposed project area, possible habitat includes forested areas within the floodplain for Doe Branch. The proposed project is not likely to adversely affect this species because the amount of affected habitat (5.3 acres located in three separate patches) is a small portion of the rattlesnake's range, and there is a general lack of preferred brushy habitat in the project area. To ensure a minimization of effects, the forested habitat near Doe Branch and its tributaries would be surveyed for signs of this species prior to construction activities.

No federally-listed or state-listed threatened or endangered species would be adversely affected by the proposed project. During project development, the NTTA would design, use, and promote construction practices that minimize adverse effects on both regulated and unregulated wildlife habitat. Existing vegetation, especially native trees, would be avoided and preserved wherever practicable.

Cultural Resources

Historic-age Resources

A reconnaissance survey of non-archeological historic properties was conducted for the proposed project. The area of potential effects (APE) was defined as 300 feet beyond the proposed ROW.

The Secretary of the Interior's Guidelines for National Register of Historic Places (NRHP) eligibility prescribes a criterion of 50-year old properties for consideration for inclusion in the NRHP; however, a 45-year cutoff (45 years prior to the estimated let date) is suggested in order to allow for unforeseen delays in letting. Although a projected let date for the proposed project has not been established, the year 2020 was assumed for purposes of establishing a historic-age limit. Thus, 1975 was the cutoff date used for determining which resources meet the historic-age criteria.

A review of the NRHP, the list of State Archeological Landmarks (SAL), and the list of Recorded Texas Historic Landmarks (RTHL) indicated that no historically significant resources have been previously documented within the APE. A site visit revealed that there are 13 historic-age resources (built prior to 1975) located within the project APE. The survey determined that none of the historic-age resources were NRHP eligible. Furthermore, there are no Official State Historical Markers (OHSM) or Texas Historical Markers within the APE.

Because no properties within the APE and/or ROW are NRHP-eligible, the proposed project would have no effect to historic properties. The complete historic resources survey report for the proposed DNT Phase 4A project is provided as **Appendix 2-4**.

Archeological Resources

The NTTA conducted an archeological evaluation of the project corridor study area in March and April 2002 during the planning stages of the project. This evaluation considered several possible routes in support of transportation planning efforts and in anticipation of compliance with Section 106 and the Texas Antiquities Code. The evaluation was considered a windshield survey as it did not involve on-the-ground field inspections. No prehistoric or historic sites were recorded. A copy of the report is included as **Appendix 2-5**.

Collin County conducted a more intensive archeological survey in November 2006 for the proposed project ROW once a preferred route had been selected. No prehistoric sites were encountered; however, one historic site (41COL191) was discovered west of and adjacent to CR 49 approximately 1,500 feet south of Frontier Parkway (CR 5). The site consists of a cistern and historic trash scatter and possibly dates to the 1930s. The associated homestead and any other possible historic structures or features have been removed. Because the cistern is not associated with a historic homestead or other associated historic structures/features and will not provide significant information to the prehistory or history of Collin County or the State of Texas, the site is not considered eligible for the NRHP. A copy of this report is included as **Appendix 2-6**.

The NTTA will coordinate with the Texas Historical Commission (THC), as necessary, and will continue with its Section 106 review throughout the planning process for the proposed DNT Phase 4A project. In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area will cease, and the NTTA's environmental compliance and archeological technical consultants will be contacted to initiate post review discovery procedures.

Physical Environment

Air Quality

The proposed DNT Phase 4A project is located in Collin County, which is part of the Environmental Protection Agency's (EPA) designated nine-county nonattainment area for the eight-hour standard for the pollutant ozone; therefore, the transportation conformity rule applies. The proposed project is consistent with the area's financially constrained long-range MTP and the 2008-2011 Transportation Improvement Program (TIP), as proposed by the North Central Texas Council of Governments (NCTCOG). The FHWA found the MTP to conform to the State Implementation Plan (SIP) on June 12, 2007, and found the 2008-20011 TIP to conform on October 31, 2007. All projects in the NCTCOG's TIP that are proposed for federal or state funds were initiated in a manner consistent with requirements of amended 23 United States Code (U.S.C.) 134, 23 U.S.C. 135, 176(c) of the Clean Air Act (CAA) (42 U.S.C. 5306(c)) and 49 U.S.C. 5303. Energy, environment, air quality, cost, and mobility considerations are addressed in the programming of the TIP. The appropriate MTP and Statewide Transportation Improvement Program pages are located in **Appendix 2-7**.

Traffic Air Quality Analysis

Design year traffic for the proposed DNT Phase 4A project is less than 140,000 vpd; therefore, a traffic air quality analysis (TAQA) is not required because previous analyses of similar transportation projects did not result in a violation of National Ambient Air Quality Standards (NAAQS).

Mobile Source Air Toxics Analysis

The EPA is the lead federal agency for administering the CAA and has certain responsibilities regarding the health effects of mobile source air toxics (MSAT). The EPA issued a Final Rule[3] under the authority in Section 202 of the CAA. In its rule, the EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, the FHWA projects that even with a 64% increase in vehicle miles traveled (VMT), these programs would reduce on-highway emissions of acrolein, benzene,

[3] *Controlling Emissions of Hazardous Air Pollutants from Mobile Sources* (66 FR 17229), March 29, 2001.

formaldehyde, 1,3-butadiene, and acetaldehyde by 57% to 65%, and would reduce on-highway diesel PM emissions by 87%.

Although the VMT for the proposed DNT Phase 4A project build scenario would increase approximately 68% by 2030 when compared to 2007, total MSAT emissions for the same scenario would decrease at least 57% by 2030. The total MSAT loads for the build scenarios in 2015 and 2030 are 0.67 and 0.63 tons higher than the no-build scenarios, respectively. MSAT emissions for the build scenarios are higher than the no-build scenarios because of greater number of vehicles utilizing the roadways and higher VMT.

Regardless of the alternative chosen, emissions would likely be lower than present levels in the future year as a result of the EPA's national control programs that are projected to reduce MSAT emissions by 57% to 87% between 2000 and 2020, and even more than these reductions when factoring in the 2007 MSAT rule. Local conditions may differ from these national projections in terms of fleet mix, vehicle turnover rates, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great that MSAT emissions in the study area are likely to be lower in the future in all cases.

The CAA has established toxic emission levels at which a cause of these emissions (toxics) would be considered a major source, and therefore, subject to more stringent regulation. Section 112 of the CAA defines a major source as "any stationary source or groups of stationary sources that emit more than 10 tons per year of any one hazardous air pollutant or 25 tons per year of any combination of air pollutants." The proposed project travel study area MSAT emissions do not reach the 10-ton per year or the 25-ton per year threshold.

The EPA's highway vehicle emission factor model, MOBILE6.2, is a program that provides average in-use fleet emission factors for criteria pollutants (CO, and NOx) and also provides emission factors for VOCs. These emission factors can be estimated for any year between 1952 and 2050 and under various conditions affecting in-use emission levels. The output from the model is in the form of emissions factors expressed as grams of pollutant per vehicle mile traveled (g/mi).

When evaluating the future options for upgrading a transportation corridor, the major mitigating factor in reducing MSAT emissions is the implementation the EPA's new motor vehicle emission control standards. Substantial decreases in MSAT emissions will be realized from a current base year (2007) through an estimated time of completion for a planned project and its design year. Accounting for anticipated increases in VMT and varying degrees of efficiency of vehicle operation, total MSAT emissions were predicted to decline more than 65% from 2007 to 2025.

The Collin County area is in attainment for both PM_{10} and $PM_{2.5}$. The MSAT emissions from mobile sources, especially benzene, have dropped dramatically since 1995 and are expected to continue dropping. The introduction of RFG has lead to a substantial part of this improvement. In addition, Tier 2 automobiles introduced in model year 2004 will continue to help reduce MSAT. Diesel exhaust emissions have been falling since the early 1990s with the passage of the CAA. The CAA provided for improvement in diesel fuel through reductions in sulfur and other diesel fuel improvements. In addition, the EPA has further reduced the sulfur level in diesel fuel, effective in 2006. The EPA also has called for dramatic reductions in NOx emissions and PM from on-road and off-road diesel engines.

Recent studies have demonstrated that proximity to roadways is related to negative health outcomes, particularly respiratory problems. Most studies have encompassed the full spectrum of both criteria pollutants and other pollutants including air toxics. Thus, it is difficult to

determine whether MSAT, the criteria pollutants, or some other factors are responsible for the negative health outcomes.

The American Housing Survey of 2001 found that populations living near major roadways had generally lower income and education levels. Both of these factors have also been found to be associated with lack of adequate health care (including prenatal care), and increased early mortality in addition to other negative health effects. The lack of professional consensus on concentration levels needed to impact health is evident. What can be determined fairly consistently among the research is the tendency for pollutant levels to drop off substantially as the distance from the roadway increases. Assigning a causal relationship between roadways and pollutants can be difficult. The tendency for pollutant levels to drop off substantially with increased distance from the roadway is well documented. The concentrations of pollutants decrease greatly at approximately 100 meters. By 500 meters, most studies cannot accurately distinguish between background levels of a given pollutant and elevated levels that may be attributed to roadway pollution. Additionally, wind direction and speed, vehicle traffic levels, and roadway design can each confound the relationship between background pollution and elevated pollution levels due to proximity of a roadway.

A qualitative MSAT analysis, including a sensitive receptor assessment, was completed for the proposed project. Sensitive receptors are considered as all public and private schools, hospitals, senior citizen care facilities, and registered daycare facilities. Within the proposed DNT Phase 4A project area, there are no sensitive receptors identified within 100 meters and 500 meters of the proposed ROW.

A basic quantitative MSAT analysis of mass air toxic emissions from the travel study area was completed for the proposed project. For the purpose of this analysis three scenarios were modeled:

- "2007 base year" or "existing condition" in 2007,
- "2015 open year" or "interim year" build (tolled) and no-build,
- "2030 design year" build (tolled) and no-build.

Appendix 2-8 contains supplemental information on air quality as well as the results of the qualitative and quantitative MSAT analyses.

Traffic Noise

The traffic noise analysis for the proposed DNT Phase 4A project was accomplished in accordance with FHWA approved guidelines.

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type and speed of vehicles; highway alignment and grade; cuts, fills and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Because the proposed project is on a new location, existing noise levels were measured using an ANSI S1.4-1983 type 1 Brüel & Kjær (model 2231) modular precision sound level meter at representative receivers along the corridor. Predicted traffic noise levels were modeled at locations (**Table 2-2** and **Exhibit 2-3**) that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement. **Table 2-2** summarizes the measured existing noise levels and predicted design year noise levels. **Exhibit 2-3** identifies the locations of the representative receivers.

Table 2-2. Traffic Noise Levels (dBA Leq)

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2030	Change (+/-)	Noise Impact
R1 (Residential)	B	67	65	64	-1	No
R2 (Residential)	B	67	62	66	+4	Yes

Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at an impacted receiver by at least 5 decibels (dBA); and to be "reasonable," it must not exceed the cost-effectiveness criterion of $25,000 for each receiver that would benefit by a reduction of at least 5 dBA.

A noise wall would not be feasible and reasonable for the impacted residential receiver (R2) and, therefore, is not proposed for incorporation into the project. A noise wall that would achieve the minimum feasible reduction of 5 dBA at this receiver would exceed the reasonable, cost-effectiveness criterion of $25,000.

To avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs should ensure, to the maximum extent possible, that no new activities are planned or constructed along or within the 175-ft predicted (2030) 66-dBA residential noise impact contours.

A copy of the traffic noise analysis will be available to local officials. On the date of approval of this document (Date of Public Knowledge), the NTTA is no longer responsible for providing noise abatement for new development adjacent to the project.

Hazardous Materials

In accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Phase I Environmental Site Assessment (ASTM-1527-05), a state and federal regulatory database search was conducted to identify potential hazardous materials sites within the project area. This search identified potential hazardous/regulated materials sites and facilities located within 1 mile of either side of the proposed DNT Phase 4A project. The database identified 17 sites at 12 different locations. The sites identified consist of one Resource Conservation and Recovery Act - Corrective Action (USRCRAC) site, four Facility Registry System (USFRS) sites, three National Pollutant Discharge Elimination System (USNPDES) sites, one Closed and Abandoned Landfill Inventory (CALF) site, one TCEQ Leaking Underground Storage Tank (LUST) site, two Municipal Solid Waste Landfill (TXMSWLF) sites and five TCEQ Petroleum Storage Tank (TXPST) sites.

Sites that have a highest potential for contamination and are located close to or within the proposed ROW are considered to be high risk. As a result of the search, five sites associated with the preferred alternative were categorized as high risk. **Table 2-3** summarizes the high risk sites.

Table 2-3. Potential Risk Facilities

Site No.	Site Name/ Site Information	Type of Contamination	Regulatory Status	Database Listing
1	Prosper Ready Mix/Prosper WWTP/Lattimore Materials 307 CR 27, Town of Prosper	N/A	N/A	USFRS TXPST USNPDES
3	LDJ Ready Mix, 765 CR 27, Town of Prosper	N/A	N/A	USFRS USNPDES
5	Prosper –WWTP, 551 CR 27	N/A	N/A	USFRS
6	Beall Concrete, 749 CR 27	N/A	N/A	TXPST
8	Prosper, 1.5 miles west of Town of Prosper on CR 27	N/A	N/A	CALF
Note: Site numbers correspond to hazardous materials sites shown on **Exhibit 1-6**.				

On January 16, 2008, a field survey was conducted throughout the proposed DNT Phase 4A project area in accordance with ASTM procedures. Results of the field survey identified Recognized Environmental Conditions (RECs). These RECs indicate the presence or likely presence of any hazardous substances or petroleum products on a site under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures of the site or into the ground, groundwater, or surface water on the site. The REC sites identified are detailed and site locations are shown according to their Site ID numbers (Site ID #1 - #11) on **Exhibit 1-6**. Site ID #12 is not identified on the map as it is outside the project area limits shown on **Exhibit 1-6**.

Community Impacts

Socioeconomics

To determine potential social and economic effects on the community, Limited English Proficiency (LEP) populations, low-income, and minority populations of the proposed DNT Phase 4A project area were identified. The following elements were evaluated.

Community Cohesion

The southern portion of the proposed alignment passes through the Town of Prosper while the northern portion passes through the City of Celina. Within the Town of Prosper, the proposed alignment would primarily affect areas zoned for commercial, retail, and office development, as well as some areas zoned for single-family development. Currently, the only developments present along the proposed ROW are industrial/commercial establishments. No neighborhoods or communities are located along the proposed ROW within the limits of the Town of Prosper. The northern portion of the alignment passes through undeveloped, privately owned land within the City of Celina. No neighborhoods or communities are currently located within this portion of the proposed project.

Limited English Proficiency

In accordance with Executive Order (EO) 13166, *Improving Access to Services for Persons with Limited English Proficiency*, the NTTA has examined the services provided for the proposed project for those with LEP. Public involvement thus far has included monthly stakeholder meetings, and a public meeting held on January 24, 2008. Notices for the public meeting were published in area newspapers, including the widely-circulated Spanish-language paper, *Al Día*. The public meeting notice informed citizens of the opportunity to request an interpreter be present at the public meeting for language or other special communication needs. Such steps would continue to be taken throughout the public involvement process to ensure that LEP persons have meaningful access to the programs, services, and information that the NTTA provides.

Relocations and Displacements
The proposed alignment would require no single-family residential or business relocations.

Tollway Access
Access to the mainlanes of the proposed DNT Phase 4A project would be limited to those who either elect to or can only on occasional basis afford to pay the toll. The proposed DNT Phase 4A would be a limited-access facility.

- Non-Toll Alternatives
  Frontage roads with three lanes in each direction would be available along the entire length of the proposed alignment. Motorists utilizing these frontage roads may experience longer travel times than motorists using the tolled facility due to a lower posted speed limit and signalization.
- Transit Usage
  Operating the proposed DNT Phase 4A as an Electronic Toll Collection (ETC) facility is not expected to adversely affect transit usage because no mass transit system exists within the proposed project area. The Dallas Area Rapid Transit (DART) system utilizes the existing DNT facility in the cities of Dallas, Farmers Branch, Carrollton, Plano, and the Town of Addison. However, the cities of Frisco and Celina and the Town of Prosper are not members of DART at this time.
- Toll Rate
  The toll rates for the proposed DNT Phase 4A would be consistent with other toll rates in the region. The exact toll rate for the proposed facility would be determined prior to the facility opening.
- Methods of Toll Charge Collection
  The NTTA proposes to incorporate an ETC system with ZipCash® along the proposed DNT Phase 4A facility. The Dallas area TollTag® (transponder), TxTag® stickers, and the Houston area EZ TAG® (transponder) would be accepted on the proposed facility. Toll charges could be automatically deducted from a prepaid credit account or would be mailed as a monthly statement to the driver if the ZipCash® method is utilized. If the driver has a TollTag® or other toll transponder account, the tolls would automatically be deducted from the account when the facility is used. The account would be a prepaid account which means the driver must maintain sufficient funds to cover incurred toll charges, such as for accounts currently in use for existing toll roads.
- Comparison of Payment Methods
  Not maintaining a prepaid account would impact any user, including low-income users, because the cost of paying the accumulated toll charges without an account would represent a higher toll rate than toll charges affiliated with a prepaid account. Cash payment options are available for each payment method; however, only those users who maintain prepaid accounts would benefit from reduced toll rates. In summary, toll rates are one-third more for drivers who do not have an electronic toll transponder to offset the costs related to processing the license plate information associated with ZipCash®. Although certain toll transponder account holders are required to pay up-front fees or deposits for toll transponders ($9.65 fee per transponder for TxTag® accounts and $25 deposit for TollTag® “cash users” accounts), the toll transponder account holders would benefit from reduced toll rates compared to the total toll rates associated with ZipCash®.

Environmental Justice

Based on the analysis provided in **Appendix 2-9**, no significant direct environmental justice effects would result from the proposed extension of the DNT. The study area contains a total minority population of 10% and a total low-income population of 6.2%. These populations are not present in the proposed project area as a readily identifiable group but are scattered throughout the project area. Census data and field investigations reveal a homogenous rural community. The majority of the proposed ROW has already been acquired, and no displacements or relocations would be associated with the proposed project. Mitigation would be conducted for vegetation and water quality impacts. No air quality or hazardous materials impacts are expected. One receiver would be negatively impacted by noise associated with the project; however, it is unknown whether this receiver is considered to be an environmental justice household.

Low-income populations would be impacted by toll rates, toll collection, and other matters associated with user fees. Should a low-income person be unable to pay the toll and/or utilize non-toll alternatives, this may result in a difference of time travel associated with utilizing non-toll alternatives. In addition, the economic impact of tolling would be higher for low-income users because the cost of paying tolls would represent a higher percentage of household income than for non-low-income users.

The EO 12898 term "disproportionately high and adverse effect" considers the *totality* of significant individual or cumulative human health or environmental effects. The benefits associated with the implementation of tolling would include the acceleration of infrastructure improvements to support the increased development and commerce in the immediate area, provision of mobility and relief of traffic congestion for all motorists using the systems funded by the proposed project. In the case of implementing tolling along the proposed DNT Phase 4A facility and considering the totality of the significant effects of this project, the overall benefits provided for the environmental justice population, as well as the entire community, outweigh the specific concerns about environmental justice addressed throughout this evaluation. Over the long term, the entire corridor and users would benefit from the proposed tolling as a result of improved system linkage and mobility in the area. There do not appear to be any disproportionately high and adverse impacts on minority or low-income populations associated with the project. The requirements of EO 12898 appear to be satisfied.

Indirect Impacts

An indirect impacts analysis was conducted for the proposed DNT Phase 4A project in accordance with the eight-step process suggested in *NCHRP Report 466* for assessing indirect impacts. Indirect impacts differ from the direct impacts associated with the construction and operation of the proposed project and are caused by other actions that have an established relationship or connection to the proposed project. These induced actions are those that would not or could not occur except for the implementation of the proposed project. Refer to **Appendix 2-10** and **Exhibit 2-4** for the indirect impacts analysis and associated map.

Cumulative Impacts

CEQ regulations[4] define cumulative impacts (i.e. effects) as "the impact on the environment which results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions." As this regulation suggests, the purpose of cumulative impacts analysis is to view the direct and indirect impacts of the proposed project within larger contexts of time and space. An analysis of cumulative impacts was conducted following the eight steps outlined in the *Guidance* set forth by TxDOT[5]. The methodology used

[4] 40 CFR Section 1508.7.
[5] TxDOT *Guidance on Preparing Indirect and Cumulative Impact Analyses* (December 2006).

to prepare this evaluation is also in accordance with the requirements of controlling case law[6] and guidance from the CEQ[7]. Refer to **Appendix 2-11** and **Exhibits 2-5** and **2-6** for the cumulative impacts analysis and associated maps.

Public Lands

The proposed project would not require the use of or substantially impair the purposes of any publicly owned land from a public park, recreation area, wildlife/waterfowl refuge, or any historic sites of national, state, or local significance. Therefore, a Section 4(f) evaluation would not be warranted.

Other

Local Tree Ordinances

Municipal governments have the authority to avoid, minimize, and mitigate the impacts of private property development to habitat within their jurisdictions through the application of regulations that guide the intensity, type, and location of new development. Local ordinances and processes that regulate development and preserve natural resources would be followed as required.

Airway-Highway Clearance

Airway-highway clearance regulations do not apply to the proposed project because federal funding is not being utilized. There are no airports within the proposed project vicinity; therefore, coordination with local airports is not required.

Visual Quality and Aesthetics

The visual landscape near the proposed DNT Phase 4A project area is characterized by primarily farmland, vacant land, and floodplains with a limited number of residences and one industrial area. The proposed project is in compliance with, and would facilitate, local development plans. The implementation of the NTTA's Design Guidelines for the proposed project would allow the user to experience system continuity, corridor identity, consistent and attractive gateways, a high quality driving experience, and enhanced safety along the corridor. In this regard, the proposed project would result in a beneficial aesthetic impact for views of and from the road.

Summary of Impacts

Potential impacts resulting from the proposed DNT Phase 4A project are summarized in **Table 2-4**.

[6] Fritiofson v. Alexander, 772 F.2d 1225, 5th Circuit (1985).
[7] *Considering Cumulative Effects under the National Environmental Policy Act* (1997).

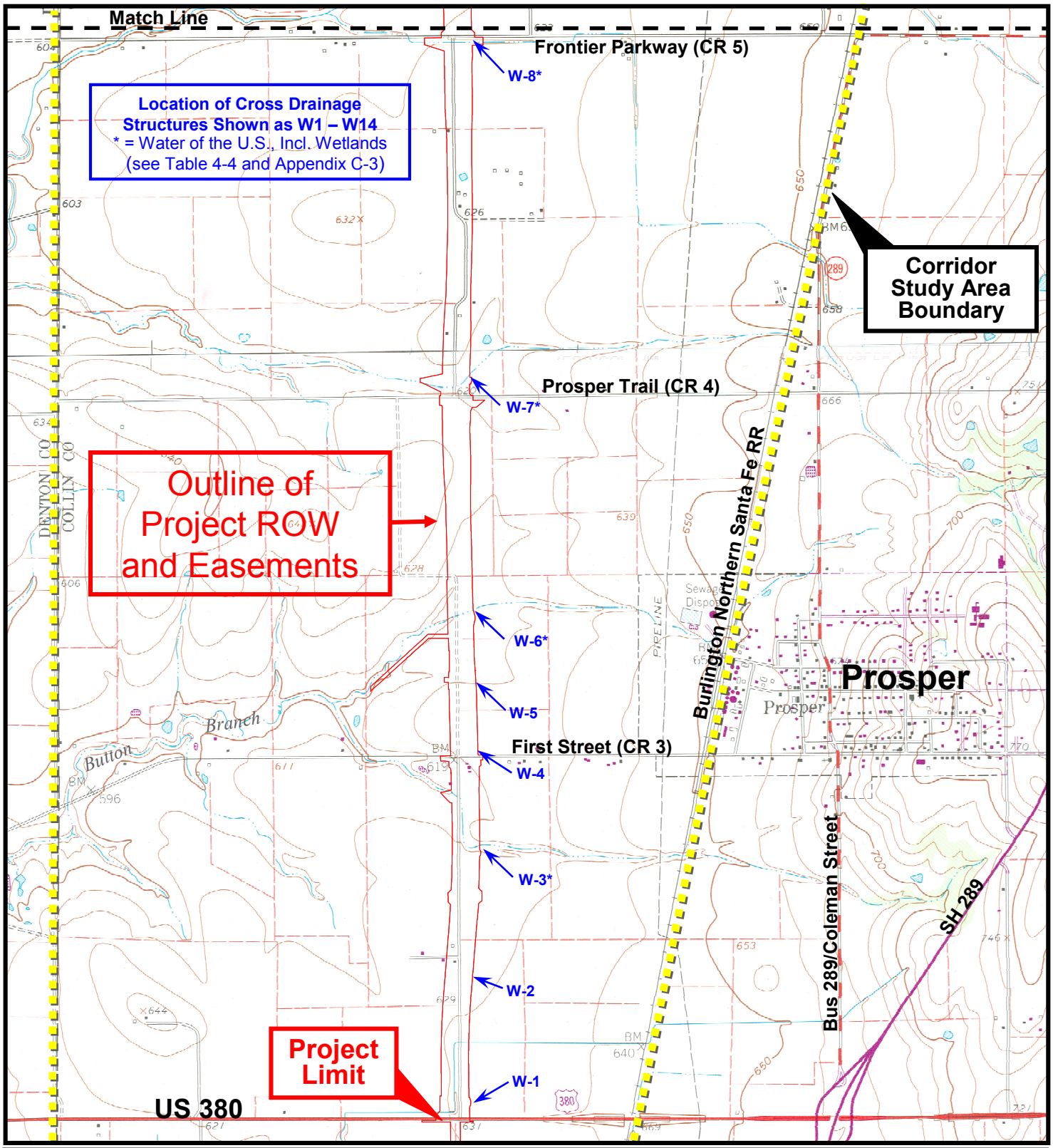
Table 2-4: Summary of Impacts

Comparison Factors	Unit of Measure	No-Build Alternative	Build Alternative
Project Description			
Total Length	Miles	---	6.0
Total Proposed ROW	Acres	---	291.7
Total Proposed Easements	Acres	---	11.9
Estimated Cost	$ (in millions)	---	433.9
Water Resources			
Waters of the U.S., Wetlands	Acres	---	5.4
Waters of the U.S., Streams	Acres	---	0.6
Navigable Waterways	Acres	---	---
Impaired Waters	Y/N; if Y (Acres)	N	N
Floodplains	Acres	---	29.03
Biological Resources			
Riparian Forest Habitat	Acres	---	7.01
Upland Forest Habitat	Acres	---	1.51
Fencerow Vegetation	Acres	---	0.93
Large Trees (>20” dbh)	Number	---	5
Unusual Vegetation	Acres	---	4.33
Wildlife Habitat	Acres	---	20.22
Threatened and Endangered Species	Y/N	N	N
Cultural Resources			
Historic-age Resources	Number	---	---
Archeological Resources	Number	---	---
Physical Environment			
MSAT Sensitive Receptors	Number	---	---
MSAT Emissions	Decrease/Increase	Decrease	Decrease
Noise Receivers	Number	---	1
High Risk Hazardous Materials Sites	Number	---	5
Community Impacts			
Change in Community Cohesion	Y/N	N	N
Residential Displacements	Number	---	---
Commercial Displacements	Number	---	---
Community and Public Facility Displacements	Number	---	---
Environmental Justice Issues	Y/N	N	N
Public Lands	Acres	---	---
Indirect Impacts	Y/N	N	Y
Cumulative Impacts	Y/N	N	Y

Note: The above table can be modified based on project specific impacts.

Exhibits:
Exhibit 2-1: Location of Proposed Cross Drainage Structures within Project Area on Topographic Map
Exhibit 2-2: Location of Proposed Cross Drainage Structures within Project Area on Aerial Photograph
Exhibit 2-3: Noise Receiver Map
Exhibit 2-4: Indirect Impacts Map
Exhibit 2-5: Cumulative Impacts Analysis Resource Study Areas Map
Exhibit 2-6: Natural Resources RSA Map

Appendices:
Appendix 2-1: Preliminary Jurisdictional Determination Report for Waters of the U.S., Including Wetlands
Appendix 2-2: Inventory of Habitat Types
Appendix 2-3: Federal and State Threatened and Endangered Species in Collin County
Appendix 2-4: Historic Resources Survey Report (HRSR) for DNT Phase 4A
Appendix 2-5: Archeological Evaluation Report (2002) for DNT Phase 4A
Appendix 2-6: Archeological Survey Report (2006) for DNT Phase 4A
Appendix 2-7: 2008-2011 Transportation Improvement Program (TIP) and *Mobility 2030 Plan: The Metropolitan Transportation Plan (MTP)*
Appendix 2-8: Air Quality Supporting Information and MSAT Analysis Results
Appendix 2-9: Environmental Justice Supporting Information
Appendix 2-10: Indirect Impacts Analysis and Supporting Information
Appendix 2-11: Cumulative Impacts Analysis and Supporting Information



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

N

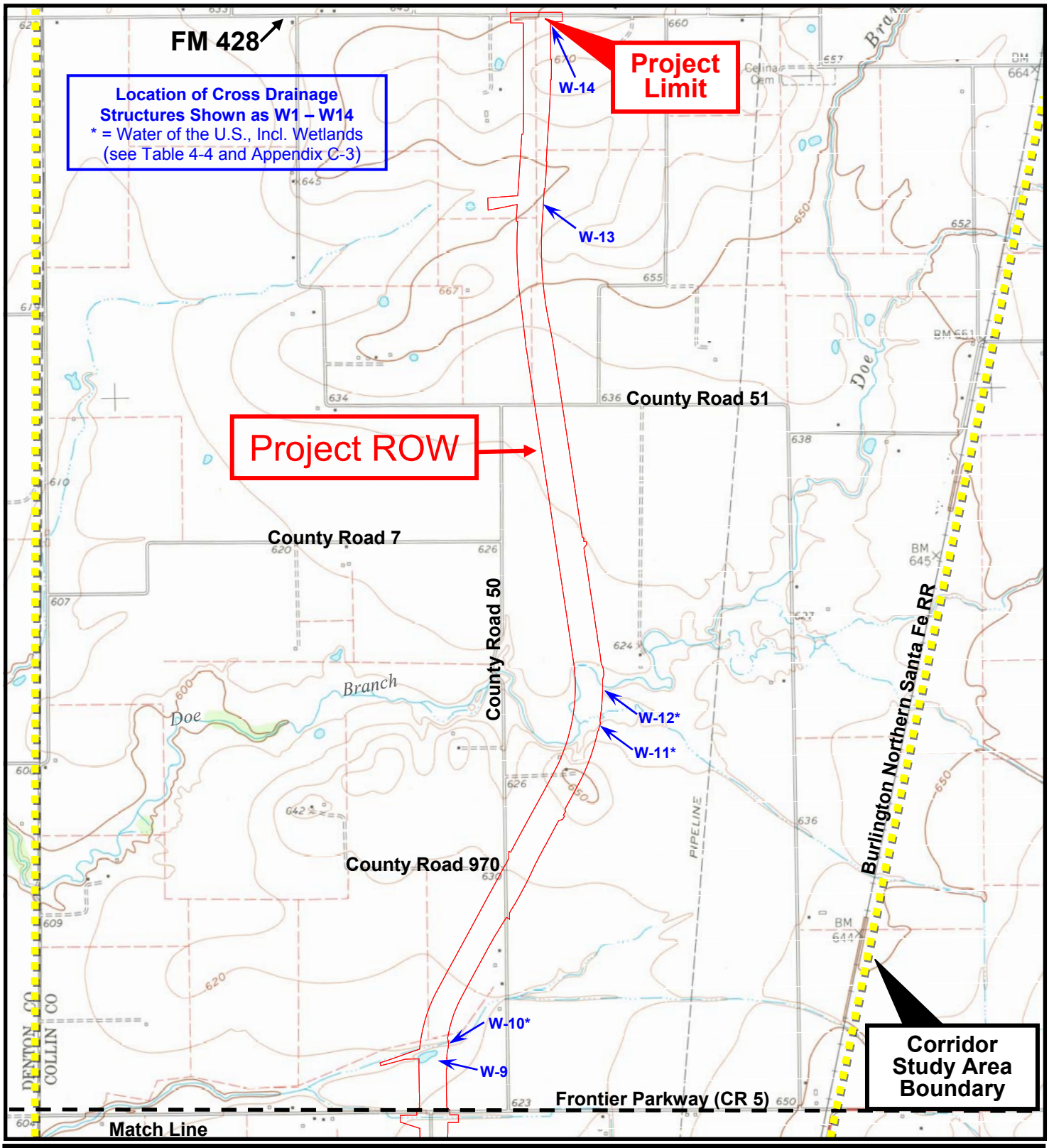
BASE MAP: CELINA & FRISCO QUADRANGLES, TX
7.5 MINUTE SERIES (TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET
MAP YEAR: 1960 FRISCO QUADRANGLE PHOTOREVISED: 1982

Project on Topographic Map (South Section)

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

NTTA
NORTH TEXAS TOLLWAY AUTHORITY



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

N

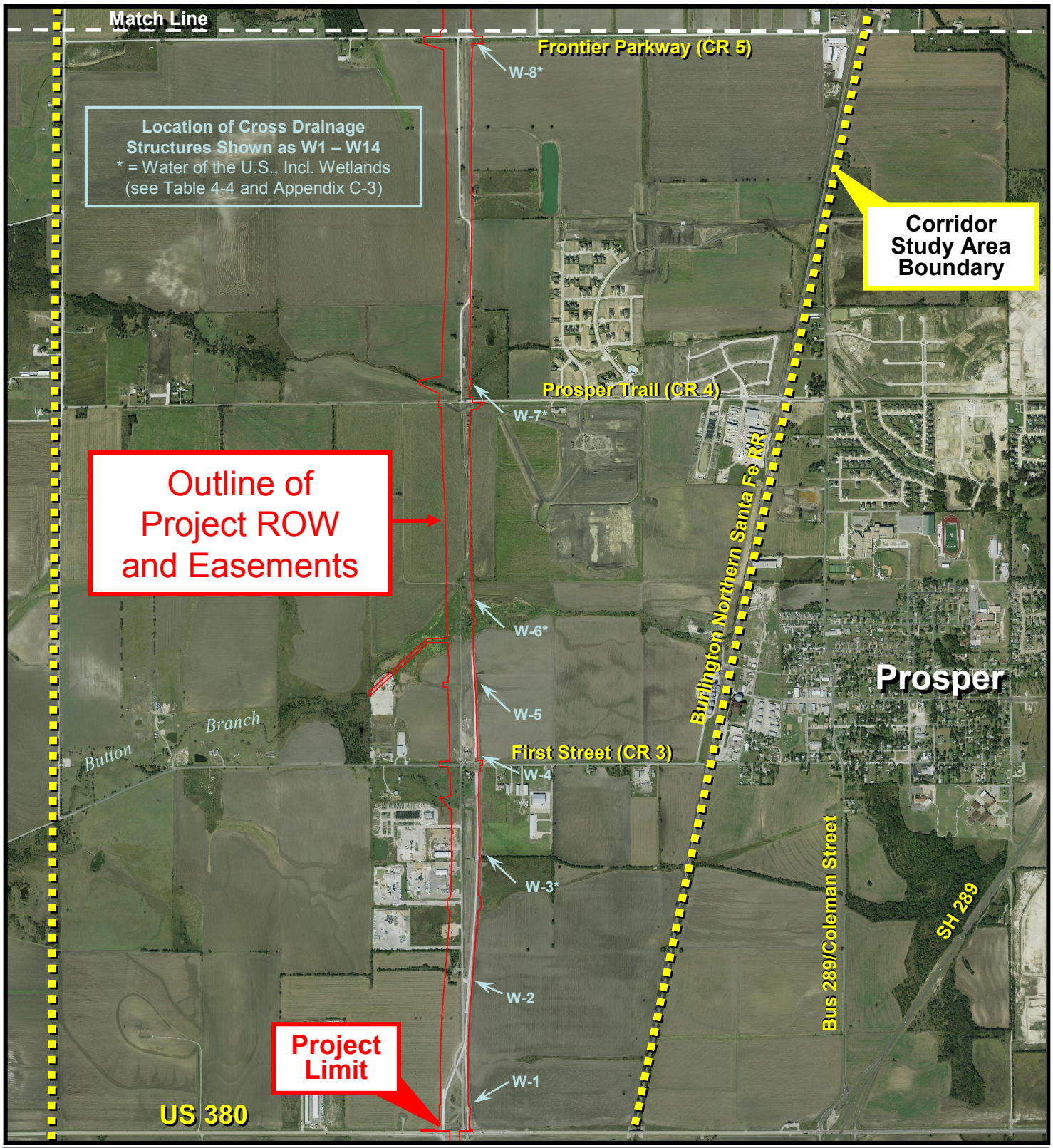
BASE MAP: CELINA QUADRANGLE, TX
7.5 MINUTE SERIES (TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET
MAP YEAR: 1960

Project on Topographic Map (North Section)

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

NTTA
NORTH TEXAS TOLLWAY AUTHORITY



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

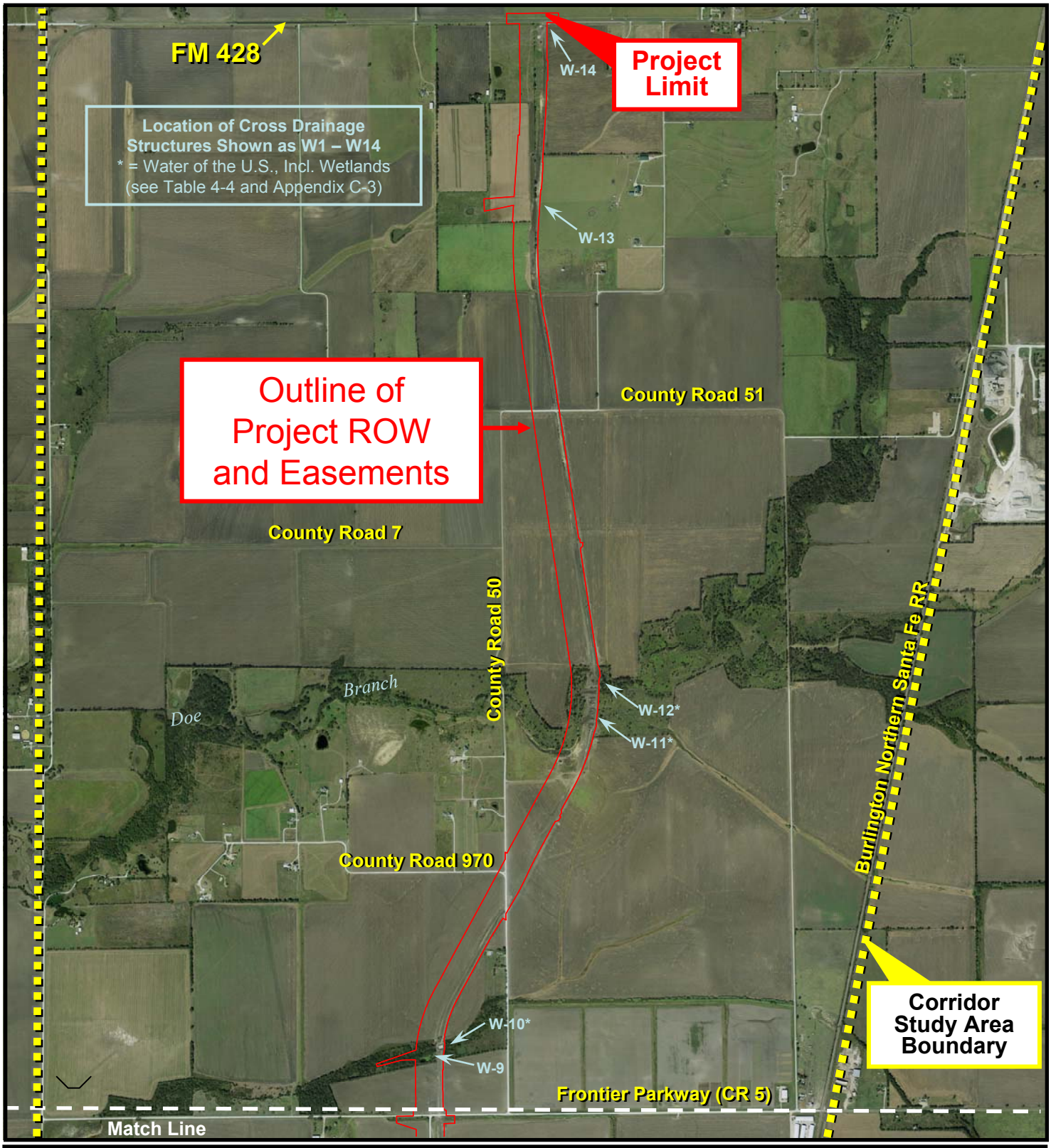
N

SOURCE/YEAR OF AERIAL PHOTOGRAPH: LANDISCOR/2007

Project On Aerial Photograph (South Section)

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

NTTA NORTH TEXAS TOLLWAY AUTHORITY



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

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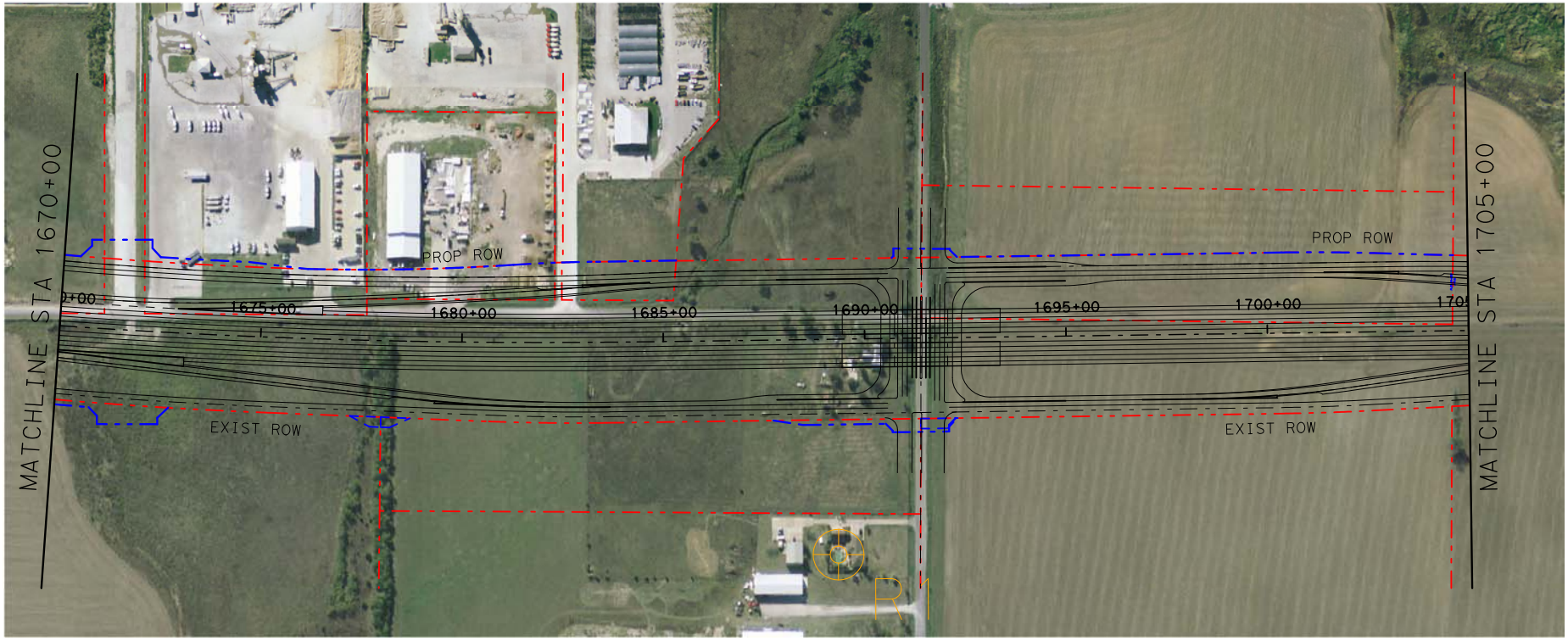
SOURCE/YEAR OF AERIAL PHOTOGRAPH: LANDISCOR/2007

Project on Aerial Photograph (North Section)

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

NTTA NORTH TEXAS TOLLWAY AUTHORITY

NORTH TEXAS TOLLWAY AUTHORITY



BASE MAP SOURCE: AERIALS EXPRESS, 2006

LEGEND

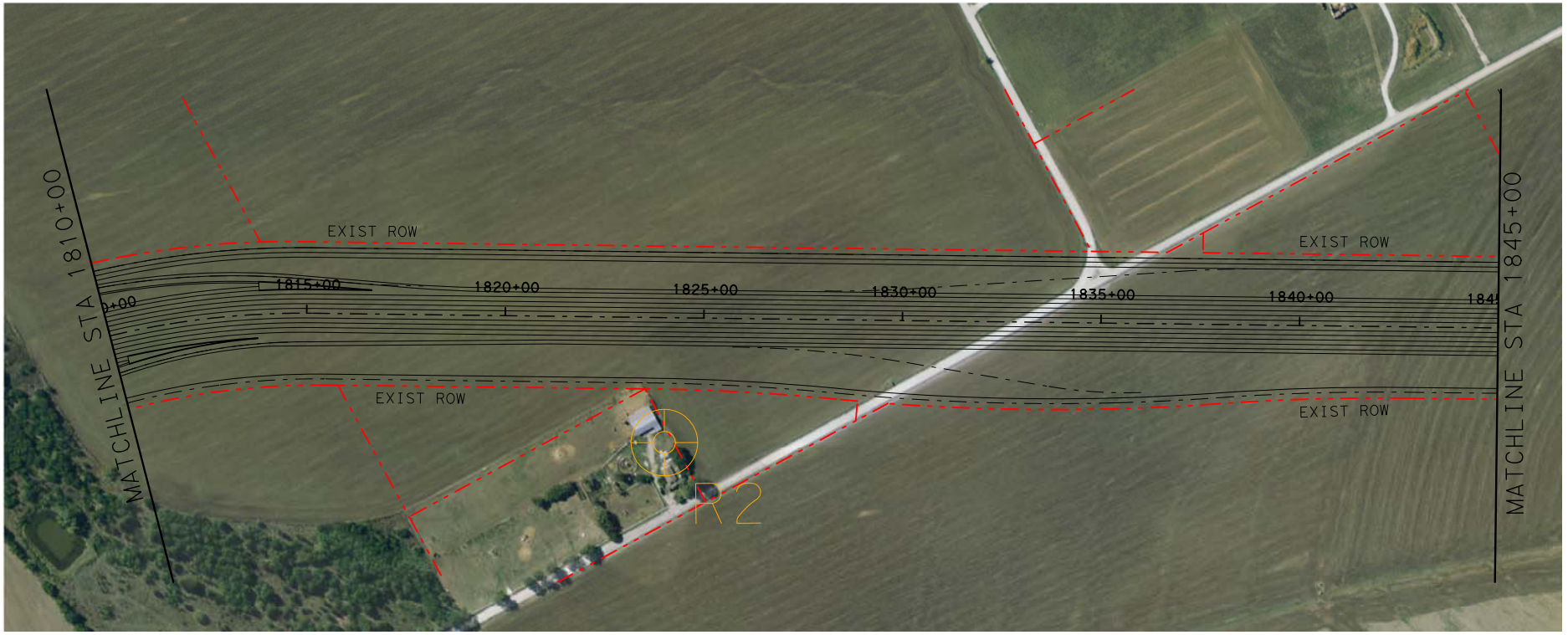
- PROPOSED ROADWAY
- PROPOSED ROW
- EXISTING ROW
- NOISE RECEIVER

NOISE RECEIVERS MAP

DNT PHASE 4A EXTENSION, COLLIN COUNTY, TX

Exhibit 2-3, Page 1

NORTH TEXAS TOLLWAY AUTHORITY



0 200 400 600 800

SCALE IN FEET

BASE MAP SOURCE: AERIALS EXPRESS, 2006

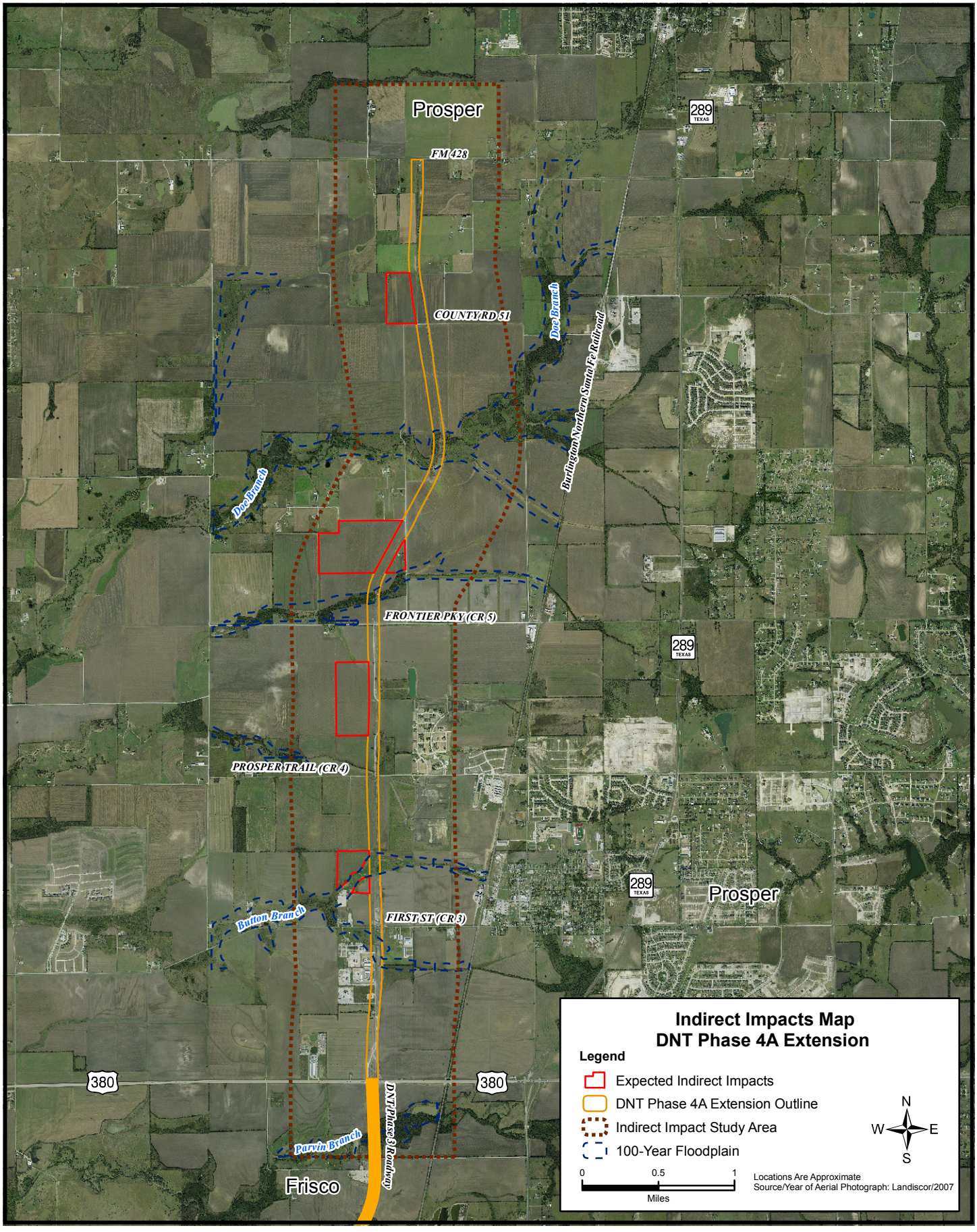
LEGEND

- PROPOSED ROADWAY
- PROPOSED ROW
- EXISTING ROW
- NOISE RECEIVER

NOISE RECEIVERS MAP

DNT PHASE 4A EXTENSION, COLLIN COUNTY, TX

Exhibit 2-3, Page 2

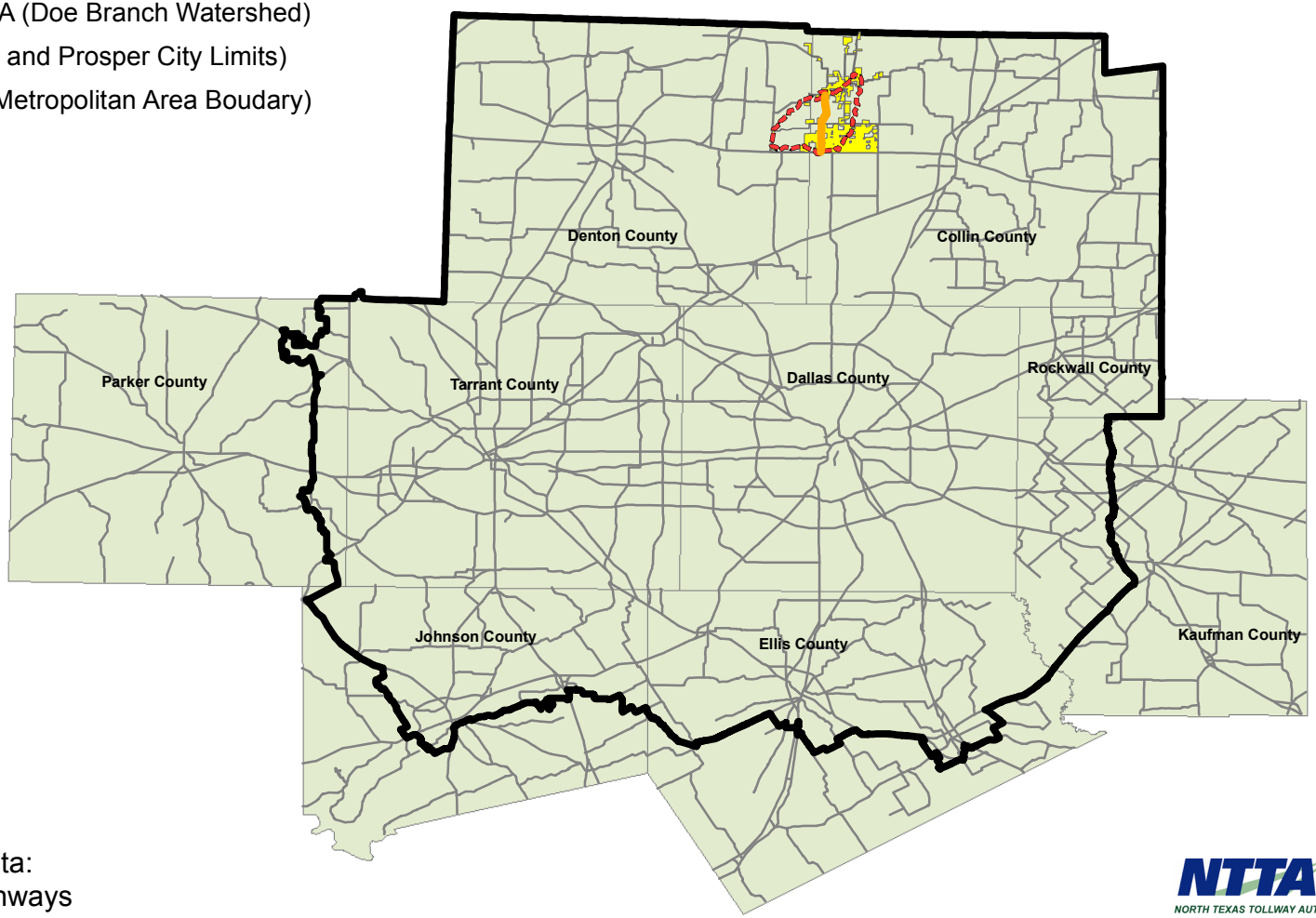


NTTA
NORTH TEXAS TOLLWAY AUTHORITY

Exhibit 2-4

Map Features

- Major Roads
- DNT 4A Project Alignment
- Air Quality/MSAT RSA (9 County 8-Hour Ozone Non-Attainment Area)
- Natural Resources RSA (Doe Branch Watershed)
- Land Use RSA (Celina and Prosper City Limits)
- EJ/Tolling RSA (DFW Metropolitan Area Boudary)



Source: NCTCOG GIS Data:
Counties and Highways

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

Resource Study Areas (RSA) for the Cumulative Impacts Analysis

Dallas North Tollway Phase 4A Extension from US 380 to FM 428, Collin County, TX

0 5 10 20 30
SCALE IN MILES

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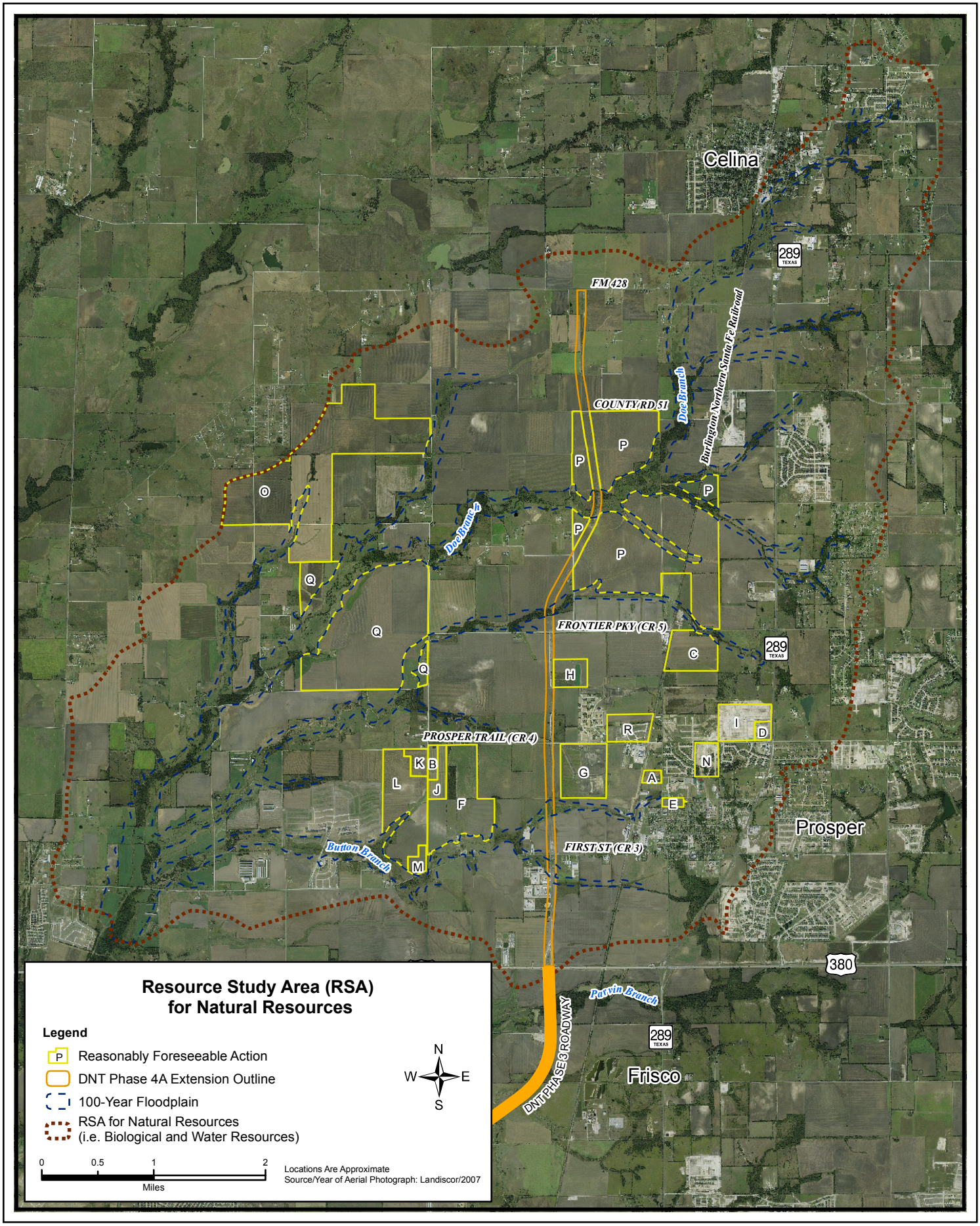
W E
S

Exhibit 2-5

Exhibit 2-5



NTTA
NORTH TEXAS TOLLWAY AUTHORITY

Exhibit 2-6

SECTION 3
PERMITS AND MITIGATION

Permits

- ☒ Section 404 Permits
- ☒ Section 401 Certifications
- ☐ Section 9 and Section 10 Permits
- ☐ Section 408 Determinations
- ☒ Section 402 TPDES Permits
- ☐ Corridor Development Certificate Permits
- ☐ Section 10(a) Permits
- ☐ Marl, Sand, Gravel, Shell, or Mudshell Permits
- ☐ TAPs

Mitigation

- ☒ Waters of the U.S., Including Wetlands
- ☐ Storm Water
- ☐ Floodplains
- ☐ Vegetation and Wildlife
- ☐ Historic Resources
- ☐ Archeological Resources
- ☒ Traffic Noise
- ☐ Public Lands

Permits

Section 404 Permits

The proposed DNT Phase 4A project is anticipated to result in greater than 0.5 acre of impacts to waters of the U.S. and would require a Section 404 IP. Refer to **Appendix 3-1** for a copy of the Section 404 draft IP application.

Section 401 Certifications

Permits under Section 404 of the CWA require applicants to also obtain the appropriate level of state water quality certification under Section 401 of the CWA. In Texas, compliance with CWA Section 401 requires the use of the TCEQ's best management practices (BMPs) to manage water quality on construction areas.

Under the TCEQ program, the proposed project would qualify as a Tier II project, as impacts to Crossing W-6 would be greater than 3 acres. TCEQ requirements for the proposed project would require completion of the Tier II 401 Certification Questionnaire and Alternatives Analysis Checklist.

Section 402 TPDES Permits

Because this project would disturb more than 1 acre, the NTTA would be required to comply with the TCEQ TPDES CGP. The project would also disturb more than 5 acres; therefore, an NOI would be filed to comply with the TCEQ stating that the NTTA would have an SW3P in place during the construction period. Impacts would be minimized by avoiding work by construction equipment directly in stream channels and/or adjacent areas. No permanent water quality impacts are expected as a result of the proposed project.

Mitigation

Waters of the U.S., Including Wetlands

Avoidance and minimization of impacts to wetlands were considered in the design of the proposed project. Preliminary corridor studies developed and evaluated several alignment alternatives. The location of the wetland crossing was common to all preliminary alternatives, given the proximity of the fixed terminus connection to DNT Phase 3. The fixed location of the nearby Phase 3 northern terminus would require a dramatic west-east redirection of the alignment to avoid the wetland, followed by another east-west redirection to return to the proposed north-south configuration. Alternative corridors were considered, but none were developed that could completely circumvent the emergent wetland. In addition, the route selected would incorporate the existing Dallas Parkway where possible, thereby further reducing impacts. A bridging option would be a less environmentally damaging alternative from a fill perspective, allowing the emergent wetlands to be spanned, and impacts would be associated with the placement of piers within the wetland. However, it is likely that the permanent shade imposed by a bridge would still have some effect on the vegetation within the footprint, and the cost would be substantially greater than the current plan even after adding the anticipated costs for compensatory mitigation. From a logistic comparison, the bridge would also have to be built up substantially above the flat terrain, making the roadway less accessible to adjacent properties, which is contrary to the need and purpose of enhanced traffic mobility in the region. Consequently, while the design of the proposed project includes wetland impacts, avoidance of impacts was considered in project planning, and mitigation is anticipated as part of the permitting process.

To minimize impacts to water quality during construction, the proposed project would utilize temporary erosion and sedimentation control practices (i.e. silt fence, rock berm, and/or drainage swales). Where appropriate, these temporary erosion and sedimentation control structures would be in place prior to the initiation of construction and would be maintained

throughout the construction period. Clearing of vegetation would be limited and/or phased to maintain a natural water quality buffer and minimize the amount of erodible earth exposed at any one time. Upon completion of earthwork operations, disturbed areas would be restored and reseeded.

Traffic Noise

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the noise receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

Appendices:

Appendix 3-1: Section 404 Draft Individual Permit Application

SECTION 4
ENVIRONMENTAL COMPLIANCE

EPIC Categories

☒ Waters of the U.S., Including Wetlands

☒ Storm Water

☐ Floodplain Development

☒ Wildlife / Threatened and Endangered Species

☒ Cultural Resources

☒ Hazardous Materials

☐ Noise Abatement

☐ Public Lands

The Design Section Engineers (DSEs) shall ensure that all applicable environmental issues, permits, and commitments (EPIC) are included on the proposed DNT Phase 4A project EPIC sheet(s). EPIC sheet(s) shall be included in the final plans, specifications, and estimates (PS&E) prior to bidding. At the time of this EE, known EPIC are as follows:

EPIC Categories

Waters of the U.S., Including Wetlands

The EPIC sheet(s) shall convey to the Contractor the USACE Section 404 permit number and locations of water crossing(s) within the project area and direct the Contractor to be familiar with the permit and all of its conditions (general and/or special).

Storm Water

The EPIC sheet(s) shall include best management practices (BMPs) as required by current state and local regulations.

Wildlife / Threatened and Endangered Species

The EPIC sheet(s) shall include:

- The state-listed threatened timber/canebrake rattlesnake and its habitat description;
- The location of the forested habitat near Doe Branch and its tributaries;
- Instructions to survey appropriate habitat areas (the Doe Branch and its tributaries) for signs of the timber/canebrake rattlesnake prior to construction activities;
- Instructions to notify the NTTA Environmental Compliance Manager if this species or any other federal and/or state-listed threatened and/or endangered species are encountered during construction activities; and
- Instructions to avoid and/or preserve existing vegetation, especially native trees, wherever practicable.

Cultural Resources

The EPIC sheet(s) shall require the Contractor to notify the NTTA Environmental Compliance Manager if any previously undiscovered artifacts are encountered. At the time of this approval, there were no known historic-age structures (built prior to 1975) within the proposed DNT Phase 4A project area of potential effects (APE).

Hazardous Materials

The Contractor shall take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. The use of construction equipment within environmentally sensitive areas such as streams or wetlands shall be minimized or eliminated entirely. All construction materials used for this project shall be removed as soon as the work schedules permit. Any unanticipated hazardous materials and/or petroleum contamination encountered during construction shall be handled according to applicable federal, state, and local regulations.

The EPIC sheet(s) shall require the Contractor to notify the NTTA Environmental Compliance Manager if any undocumented regulated material is encountered.

SECTION 5
AGENCY COORDINATION

Federal

- ☒ USACE
- ☐ USFWS
- ☐ FEMA
- ☐ EPA
- ☐ USCG

State

- ☒ TCEQ
- ☒ TPWD
- ☒ THC/SHPO
- ☐ TxDOT

Local

- ☐ NCTCOG
- ☐ City
- ☐ County
- ☐ DART
- ☐ The T
- ☐ Denton County Transit Authority

Other

- ☒ NRCS

Federal

USACE

Coordination with the USACE will be required for the authorization of a Section 404 IP for the proposed impacts associated with the wetland at Crossing W-6 (Button Branch) prior to the start of construction. Coordination with the USACE has not been initiated to date but will be added to **Appendix 5-1** as it occurs.

State

TCEQ

Coordination with the TCEQ will be required in order for the proposed project to comply with the TPDES CGP and SW3P regulations. In addition, coordination with the TCEQ will also be required for the proposed project to be in compliance with the CWA Section 401 water quality certification requirements for a Tier II level project. Coordination with the TCEQ has not been initiated to date but will be added to **Appendix 5-1** as it occurs.

TPWD

Coordination with the TPWD was required in order to confirm the presence or absence of state-listed threatened and endangered species within Collin County as well as to obtain the Natural Diversity Database (NDD) information for the county. Copies of written coordination with the TPWD are included in **Appendix 5-1.**

THC/SHPO

Coordination with the THC/SHPO will occur, as necessary, throughout the planning process for the proposed DNT Phase 4A project in order to determine if the project would affect any previously recorded historic sites and/or archeological resources. Coordination with the THC/SHPO has not been initiated to date but will be added to **Appendix 5-1** as it occurs.

Other

NRCS

The proposed DNT Phase 4A project is in a region that contains areas currently being used for agricultural purposes or zoned as agricultural. Although no federal funding will be utilized for the proposed project and compliance with the Farmland Protection Policy Act (FPPA) is not required, the additional ROW required for the project was scored using U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), form CPA-106 (Farmland Conversion Impact Rating). The resulting score was below the threshold required for further consideration by the NRCS. Correspondence received from the NRCS, dated January 14, 2008 (**Appendix 5-1**) indicated that much of the area is considered already converted to urban use because it is adjacent to an urban area.

Appendices:
Appendix 5-1: Agency Coordination Letters

SECTION 6
PROJECT AGREEMENTS

Types of Agreements

☒ Interlocal Agreement

☒ Memorandum of Understanding

☐ Letter of Intent

☐ Two-Party Agreement

☐ Three-Party Agreement

☐ Multi-Party Agreement

Types of Agreements

Interlocal Agreement

Collin County worked with the NTTA and the Town of Prosper to execute an Interlocal Agreement (ILA) on June 30, 2004; wherein, Collin County assumed responsibility to acquire the proposed DNT Phase 4A project ROW and to design and construct Dallas Parkway, which could later serve as the two-lane northbound frontage road along the eastern edge of the proposed DNT Phase 4A project ROW. The Town of Prosper agreed under the ILA to arrange for utility services to be provided for the proposed DNT Phase 4A project; relocate utilities; and to construct any noise walls, retaining walls, or similar structures deemed necessary. The ILA requires the NTTA to evaluate the revenue feasibility of the proposed DNT Phase 4A project and to construct the facility if, where, and when it determines that a toll facility would be cost-effective.

Collin County subsequently acquired the ROW necessary for construction of Dallas Parkway. Paving and bridge work on the Dallas Parkway began in 2007, and the road was completed in late 2008. The County has negotiated ROW donations and purchases for nearly all of the land needed for the proposed DNT Phase 4A mainlanes and southbound frontage road. Ongoing planning for the proposed DNT Phase 4A project will likely lead to ILA modifications to address future responsibilities of the parties, which may include phased construction of the facility prior to the ultimate build out of the tollway mainlanes. A copy of the ILA is included in **Appendix 6-1**.

Memorandum of Understanding

The NTTA is in the process of developing a Memorandum of Understanding (MOU) with the Town of Prosper in order to clarify items in the existing ILA. It is unknown when the MOU is expected to be finalized. A copy of the draft MOU, dated May 2010, is included in **Appendix 6-2**.

Appendices:
Appendix 6-1: Interlocal Agreement (ILA) with the NTTA, Collin County, and the Town of Prosper
Appendix 6-2: Draft Memorandum of Understanding (MOU) with the NTTA and the Town of Prosper

APPENDICES

SECTION 1
Appendix 1-1: Need and Purpose Supporting Information
Appendix 1-2: Alternatives Analysis Supporting Information
Appendix 1-3: Support Resolutions for Preferred Alignment

SECTION 2
Appendix 2-1: Preliminary Jurisdictional Determination Report for Waters of the U.S., Including Wetlands
Appendix 2-2: Inventory of Habitat Types
Appendix 2-3: Federal and State Threatened and Endangered Species in Collin County
Appendix 2-4: Historic Resources Survey Report (HRSR) for DNT Phase 4A
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Appendix 2-9: Environmental Justice Supporting Information
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Appendix 2-11: Cumulative Impacts Analysis and Supporting Information

SECTION 3
Appendix 3-1: Section 404 Draft Individual Permit Application

SECTION 4
N/A

SECTION 5
Appendix 5-1: Agency Coordination Letters

SECTION 6
Appendix 6-1: Interlocal Agreement (ILA) with the NTTA, Collin County, and the Town of Prosper
Appendix 6-2: Draft Memorandum of Understanding (MOU) with the NTTA and the Town of Prosper

Appendices provided only for Section 1 of Example EE

Appendix 1-1
Need and Purpose Supporting Information

Population and Employment

Continued growth in population and employment has created a need for a more efficient transportation system in the DFW Metropolitan Area. The 2000 Census reported the population of the DFW Consolidated Metropolitan Statistical Area at 5,221,801 residents. According to a 2030 demographic forecast prepared by the NCTCOG in 2003, the population and employment for the DFW Metropolitan Area will grow by approximately 63% and 64% respectively, from 2000 to 2025. By 2025, the DFW Metropolitan Area is expected to have nearly 8,000,000 residents supporting approximately 5,000,000 jobs. On average, the region is expected to add population at a rate of nearly 120,000 persons per year and employment at a rate of approximately 72,000 jobs per year from 2000 to 2025. This regional trend is being experienced in the northwest portion of Collin County as demonstrated by the population data in **Table 1**.

Table 1. Population Trends

Location	1980 Census	1990 Census	2000 Census	2006 Estimated Population	2007 Estimated Population	Percent Change 2006-2007
Collin County	144,576	264,036	491,675	692,900	724,900	5%
City of Celina	1,520	1,737	1,861	4,200	4,650	11%
Town of Prosper	675	1,018	2,097	5,250	6,050	15%

Source: NCTCOG, *2007 Current Population Estimates,* March 2007.

Table 2 summarizes the population projections for the North Central Texas Region from 2000 through 2030. This region contains all or portions of ten counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties) within which the DFW Metropolitan Area is located. Again, the growth in population, households, and employment in the northwestern portion of Collin County would be expected to be similar or greater than the DFW area as a whole.

Table 2. North Central Texas Regional Projections

Year	2000	2010	2020	2030	Percent Change 2000-2030
Population	5,067,400	6,328,200	7,646,600	9,107,900	80%
Households	1,886,700	2,350,300	2,851,400	3,396,100	80%
Employment	3,158,200	3,897,000	4,658,700	5,416,700	72%

Source: NCTCOG, *2030 Demographic Forecast*, April 2003.

Existing Transportation Network

In many instances rapid growth in the DFW region is surpassing the transportation system's ability to accommodate it, resulting in increased traffic congestion. Transportation demand for the region was 125 million vehicle miles traveled (VMT) in 1999, meaning that on a typical weekday area residents traveled approximately 125 million miles on area freeways, arterials, and local streets. The regional traffic demand is expected to increase to 233 million VMT in 2025.

Currently, the DNT extends from downtown Dallas northward to US 380 in the City of Frisco, a distance of approximately 32 miles. The existing facility is a six-lane, limited access tollway throughout its entire length. Throughout most of the northern portion of the DNT (i.e. north of the President George Bush Turnpike), the DNT also includes two- or three-lane frontage roads in both north and south directions.

SH 289 is a two-lane highway near the project area. It is the closest north-south thoroughfare located 2 miles to the east of the proposed project. The nearest north-south thoroughfare to the west of the proposed project is FM 1385, a two-lane road approximately 4.5 miles away. The project area is generally characterized by a network of two-lane county roads that provide access to residences and agricultural fields in the area, none of which serve as major transportation thoroughfares in the area.

Extending the DNT north of US 380 would improve access and mobility for the residents of the Town of Prosper and City of Celina, as well as Collin County and the eastern portion of Denton County. Local traffic circulation patterns would improve, and opportunities for new development would occur adjacent to the DNT 4A frontage roads. In response to ongoing and planned residential and commercial development north of US 380 in this area, Collin County has undertaken the construction of Dallas Parkway, a two-lane road that extends from US 380 to FM 428 (**Exhibit 1-4**, Photographs 1 and 2). This road is scheduled for completion in late 2008 and would serve as the northbound frontage road for the proposed DNT Phase 4A project if it is constructed along a parallel alignment. Although Dallas Parkway will improve access to properties throughout the length of the project area, it is expected that much of the planned economic development near the proposed project would not occur until the mainlanes and southbound frontage road are constructed.

Traffic Projections and Level of Service

Highway segments may be evaluated for present and/or future traffic handling capacity through use of standardized level of service (LOS) grading systems. The LOS is a qualitative measure of describing operational conditions within a traffic stream or at an intersection, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The LOS ratings are designated A through F (A being the best and F the worst) and cover the entire range of traffic operations that may occur. The definitions of LOS A through F are presented in **Table 3**.

Table 3. Levels of Service

LOS	DEFINITION
A	Highest quality of service. Free traffic flow, low volume, and densities. Little or no restriction on maneuverability or speed. 55+ mph. No delay.
B	Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability. 50 mph. No delay.
C	Stable traffic flow, but less freedom to select speed, change lanes or pass. Density increasing. 45 mph. Minimal delay.
D	Speeds tolerable, but subject to sudden and considerable variation. 40 mph. Minimal delay.
E	Unstable traffic flows with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability, and low driver comfort. 35 mph. Considerable delay.
F	Forced traffic flow. Speed and flow may drop to zero with high densities. Less than 25 mph. Considerable delay.

Source: Transportation Research Board, *Highway Capacity Manual*, 2000.

Generally, when a roadway is operating below capacity during peak hours, no improvements or travel demand reductions are warranted because the roadway is considered to be operating at an acceptable LOS. When traffic volumes approach a roadway's capacity, substantial delays are experienced with stop-and-go movements taking place along the roadway. When this occurs, any incident, such as a disabled car pulled onto the shoulder or inclement weather, is likely to reduce the roadway's capacity enough to produce excessive congestion and delay. When a roadway is at or over capacity, a breakdown in vehicle flow occurs.

In considering the design for the proposed project, estimates for traffic volumes were obtained and are summarized in **Table 4** for selected sections along the proposed DNT Phase 4A project.

Table 4. DNT 4A Projected Traffic Volume Summary

Mainlane Segment	Estimated Daily Traffic Volume for 2040 (vpd)	
	Northbound	Southbound
US 380 to First Street (CR 3)	46,100	46,100
First Street (CR 3) to Prosper Trail (CR 4)	42,700	42,700
Prosper Trail (CR 4) to Frontier Parkway (CR 5)	39,300	39,300
Frontier Parkway (CR 5) to (proposed) Light Farms Way	38,400	38,400
(proposed) Light Farms Way to Future 4-Lane Arterial	35,700	35,700
Future 4-Lane Arterial to Outer Loop Direct Connector	9,400	9,400
Outer Loop Direct Connector to FM 428	17,300	17,300

Source: Wilbur Smith Associates, Inc., *Traffic Study for DNT 4A,* June 2008.

The capacity of a rural freeway (similar to a toll-tag only tollway) with six lanes (three lanes in each direction) as referenced by the NCTCOG *Mobility 2025* MTP ranges from 73,000 to 110,000 vpd. All of the mainlane sections of the proposed DNT Phase 4A project are projected to be under capacity.

Tollway Analysis

The detailed LOS of the forecasted AM and PM peak hour volumes indicated that all tollway mainlane sections would operate at LOS B or better in both directions. The LOS analysis assumes a three-lane capacity of 7,200 vehicles per hour (VPH) at LOS E. LOS modeling for DNT 4A estimated maximum 2030 traffic volumes for three northbound mainlanes to be 2,460 VPH for the AM peak and 2,960 VPH for PM; southbound maximum three-lane traffic volumes are estimated to be 3,210 VPH for AM and 2,570 for PM.

Ramp Analysis

The detailed LOS of all of the ramps in both directions indicated that the ramps would operate at LOS C or better with the exception of the northbound off-ramp (direct connector) to the proposed Outer Loop. A ramp junction analysis of the direct connector indicates that the ramp would operate at LOS F if the ramp was constructed as a single lane off-ramp, and would operate at LOS B if the ramp was constructed as two lanes. The analysis of the ramps and the ramp influence areas for the direct connectors to and from the proposed Outer Loop indicates that these direct connectors would operate under capacity.

Weaving Analysis

A multilane weaving analysis was performed for several weaving sections on both the northbound and southbound proposed DNT Phase 4A project. The results of this analysis indicate that all weaving sections would operate at LOS B or better. An analysis of the mainlane sections between the on-ramps and off-ramps (weaving areas) was also performed to determine if there were any mainlane capacity problems. This analysis did not find any problem areas along the length of the proposed DNT Phase 4A project.

Frontage Road Analysis

The NCTCOG *Mobility 2025* indicates that the hourly capacity of a frontage road lane in a rural area is 775 VPH. The frontage roads proposed for the DNT Phase 4A project are three lanes in each direction for an expected hourly capacity of 2,325 VPH. The forecasted frontage road traffic volumes for the AM and PM peak hour volumes between the interchanges and ramps were compared to the expected capacity, and all proposed frontage road sections were projected to be under capacity.

Cross Street (Intersection Analysis)

The LOS analysis of all interchanges indicated that cross street intersections would operate at LOS C or better, except that eastbound traffic on Frontier Parkway (CR 5) entering the proposed DNT Phase 4A southbound ramp was modeled at LOS D. Additional analyses could be conducted once actual traffic volumes are available to further improve levels of service grading.

Project Purpose

General Statement of Purpose

The purpose of the proposed DNT Phase 4A project is to provide transportation improvements for the citizens of Collin County, City of Celina, and Town of Prosper to address the area's rapid growth in population, employment, and transportation demand. Several aspects of this general purpose are discussed in the next section.

Specific Purposes of the Proposed Action

The planned transportation improvements are intended to satisfy the purposes outlined and discussed briefly below:

- ***Improve Mobility*** - Transportation mobility is a critical need of the DFW Metropolitan Area, which includes Collin County, and the proposed project should enhance mobility. The lack of adequate mobility causes citizens to have limited access to job opportunities, and employers are denied full access to the region's pool of job skills and talents. Limited mobility also results in increasing amounts of unproductive time spent moving people and goods from one point to another. Economic costs associated with traffic congestion have a direct effect on the competitiveness of the area and its ability to create and sustain long-term employment opportunities.

- ***Prevent Traffic Congestion*** - The project should help prevent traffic congestion within the study area by addressing future traffic demands before congestion becomes a serious problem. The traffic capacity constraints of existing east-west streets and the availability of only one major alternate north-south highway in the study corridor have led to the proposed design.

- ***Increase People and Goods Carrying Capacity*** - The project should increase transportation capacity with minimal disruptions to existing facilities. There are physical

limitations and other substantial problems (e.g. cost, business disruptions, and environmental impacts) associated with improving the capacity of existing roadways for additional vehicle trips in the study corridor. Expanding SH 289 would be problematic, as development already exists along many sections and at major intersections of this roadway. In addition, extending the DNT would reduce development pressures adjacent to SH 289 in the study area and would create non-tolled frontage roads. Construction of the proposed second north-south roadway in the project area would also increase efficiency of emergency services and vehicles throughout the project corridor.

- ***Enhance Safety*** - Transportation safety is of the utmost importance for the traveling public and the proposed project should facilitate safe travel. The presence of numerous driveways and cross streets along SH 289 increases the potential for incidents and collisions. The lack of median and street lights also contributes to reduced safety on SH 289. The proposed project would provide a safer and more secure alternative to local motorists.

- ***Compatibility with Local, County, and Regional Needs and Plans*** - The proposed project would be compatible with local, county, and regional planning. Local government officials and citizens have been very active in considering the potential impacts (both beneficial and adverse) associated with the proposed project. In November 2003, Collin County approved funding in support of the proposed DNT Phase 4A project as part of a bond program special election. In June 2004, the NTTA entered into an ILA with Collin County and the Town of Prosper wherein the county agreed to acquire sufficient ROW to allow the construction of proposed DNT Phase 4A project and to construct Dallas Parkway along the eastern edge of the ROW. The proposed project is listed in the Master Thoroughfare Plans of the City of Celina and Town of Prosper, and both municipalities have built their zoning ordinances around the anticipated construction of the proposed project. Although not a purpose of the proposed DNT Phase 4A project, this tollway would facilitate the economic development that local governments are anticipating. From a regional perspective, the planning of Dallas Parkway is included as a locally funded regionally significant project in the 2008-2011 Transportation Improvement Program (TIP), as proposed by the NCTCOG, and full build out of the proposed DNT Phase 4A project is included within the regional financially constrained long-range *Mobility 2030* MTP.

- ***Minimize Social, Economic, and Environmental Effects on Both Human and Natural Environments -*** The proposed project would avoid or minimize impacts to local communities and natural resources in the area. Local government officials, property owners, and citizens have been active participants in consideration of the potential impacts associated with the proposed project and in selecting the proposed alignment. Additional planning for the proposed project should continue to emphasize avoidance, minimization, and mitigation of potential impacts to both human communities and the natural environment.

Appendix 1-2
Alternatives Analysis Supporting Information

Development of Alternatives

The process of defining the type of roadway and the location of an alignment to meet the need and purpose for the proposed project dates back to the 1990s. In 1998, the NTTA commissioned a toll road corridor study to develop alternative transportation corridors in Collin County from US 380 northward to the Grayson County line. The *Collin County Corridor Study* was prepared in tandem with a corridor study for Grayson County. These studies considered both type of facility and alignment alternatives that would ultimately connect the DNT from US 380 to the Grayson County Airport.

The *Collin County Corridor Study*, completed in July 2000, utilized an analysis of aerial photography to identify natural and man-made features that would influence the location of road alignments. The development of alignments sought to minimize crossings of water features, railroads, major developed areas, and other attributes that would create undesirable socio-economic or environmental impacts. The corridor study represents a process of balancing impacts to sensitive facilities (e.g. churches, schools, and cemeteries), other existing residential and commercial facilities, and natural resources with the need for improving mobility in the area. The study also identified and discussed a range of facility alternatives including a limited access regional tollway, limited access county arterial, and a farm-to-market road.

Two alternative alignments were identified in the *Collin County Corridor Study* for the proposed DNT Phase 4A project. Both alternatives studied were identical from US 380 to Frontier Parkway (CR 5), as this portion of the roadway would follow Dallas Parkway for nearly three-fourths of this 3-mile segment. At that point, the alternatives turned either to the east or west, thereby avoiding several residences located north of CR 970 and south of Doe Branch. Once north of Doe Branch, both east and west alternatives then extended directly northward to FM 428. The *Collin County Corridor Study* did not make a recommendation as to facility or location alternatives, but outlined the general steps that would be necessary for further development of a toll road project. A noteworthy aspect of this process is the necessity for Collin County to acquire ROW as a means of preserving transportation corridors as Texas law does not give county governments zoning authority. In the absence of the ability to restrict land use and development in unincorporated county areas, the county may seek voluntary donations of ROW and/or purchase it under its eminent domain authority.

The NTTA and Collin County continued to consider feasible routes for the proposed DNT Phase 4A project from 2000 through 2004, during which time the county worked with property owners to determine their level of interest in donating land for the 400-ft wide proposed ROW. In addition, the Town of Prosper and City of Celina actively assisted the county in its efforts to contact property owners and obtain letters of intent to donate land for ROW. By October 2003, the process outlined above culminated in the preparation of a preferred alternative that mirrors the alignment for the proposed project. This alignment extends directly north from US 380 along existing Dallas Parkway past Frontier Parkway (CR 5) where it angles eastward. After bridging over Doe Branch, the alignment then turns westward before resuming a north-south alignment just south of FM 428. This alignment, which includes planned grade-separated interchanges at First Street (CR 3), Prosper Trail (CR 4), Frontier Parkway (CR 5), and CR 51, was approved by Collin County voters in a November 2003 special bond election.

Collin County worked with the NTTA and the Town of Prosper to execute an Interlocal Agreement (ILA) on June 30, 2004; wherein Collin County assumed responsibility to acquire

ROW and to design and construct Dallas Parkway that could later serve as the two-lane northbound frontage road along the eastern edge of the proposed DNT Phase 4A project ROW. The Town of Prosper agreed under the ILA to arrange for utility services to be provided for the proposed DNT Phase 4A project; relocate utilities; and construct any noise barriers, retaining walls, or similar structures deemed necessary. The ILA requires the NTTA to evaluate the revenue feasibility of the proposed DNT Phase 4A extension and to construct the facility if, where, and when it determines that a toll facility would be cost-effective. Collin County subsequently acquired the ROW necessary for construction of Dallas Parkway. Paving and bridge work on the Dallas Parkway began in 2007 and the road is expected to be completed by October 2008. The County has negotiated ROW donations and purchases for nearly all of the land needed for the proposed DNT Phase project 4A mainlanes and southbound frontage road. Ongoing planning for the proposed project will likely lead to ILA modifications to address future responsibilities of the parties, which may include phased construction of the facility prior to the ultimate buildout of the tollway mainlanes.

No-Build Alternative

The no-build alternative represents the case in which the proposed project is not constructed. At present, there are no other planned north-south transportation improvements north of US 380 within 5 miles east or west of DNT Phase 3. Consequently, the no-build alternative would require other transportation improvements not yet identified in *Mobility 2030,* the MTP for the DFW area, to satisfy the need for increased north-south mobility in the area. The no-build alternative, which relies on SH 289 as the principal north-south corridor, would not satisfy the increasing need for a north-south thoroughfare to facilitate ongoing and planned development.

Assessment of the Preferred Alternative

In accordance with the 2004 ILA described above, the NTTA is assessing the location of the preferred alignment as part of its ongoing obligation to determine the feasibility of constructing the proposed toll facility. This process has included a study of the soils, topography, and land use within the project area, as well as identification of natural and man-made constraints that could affect the site selection of a major transportation thoroughfare. Although nearly all of the ROW necessary for the proposed project has been acquired by Collin County, the NTTA will not make a decision on the final selection of a preferred alternative until after the engineering and environmental studies have been finalized, all stakeholder and public comments have been evaluated, and feasibility studies have been concluded.

For purposes of this assessment of the proposed DNT Phase 4A alignment, a corridor study area was defined. The limits of the corridor outline an area which could contain the range of alternatives that could meet the need and purpose of the proposed project. With a fixed southern terminus, which is coincident with the northern terminus for the DNT Phase 3 extension, it was determined that any north-south roadway connecting to FM 428 would not shift to the east or west much more than a mile from the preferred alternative's alignment. Consequently, the Collin-Denton County line was used to define the western edge of the corridor study area, and the Burlington Northern Santa Fe Railroad defined the eastern edge.

Within the proposed DNT Phase 4A corridor study area, the surface topography is nearly flat to gently sloping with a local topographic trend toward Little Elm Creek which lies to the west of local streams. According to the *Soil Survey of Collin County*[1], nearly all of the soil in the project area is Houston Black clay (0 to 3% slopes), with most of the remaining soils (i.e. clays or silty

[1] *Soil Survey of Collin County*, USDA, 1969; updated by soils information from the Web Soil Survey, USDA (December 2007).

clays) on steeper slopes (3 to 12%) associated with stream drainages. The project area lies within the Blackland Prairie zone, a region within North Central Texas characterized by dark heavy-textured soils which have been farmed over the past century. Originally, the primary crop raised was cotton, but in recent years most agricultural fields are used primarily to produce sorghum, with some corn production. While agricultural land use continues to dominate the landscape in the corridor study area, notable residential and industrial developments have occurred in recent decades (**Exhibit 1-4**, Photographs 3, 5, and 6).

The most notable natural features in the corridor study area are water features and prime farmland soils (**Exhibit 1-5**). With watershed drainage patterns that run generally east to west, any north-south roadway through the corridor would unavoidably cross several streams. The preferred alignment minimizes contact with special aquatic features such as wetlands, except for the wetland associated with Button Branch. The preferred alignment avoids wetlands associated with Doe Branch to the west and also avoids that portion of Doe Branch that turns north to the east of the alignment. With regard to crossing prime farmland soils, the Houston Black clay soil is ubiquitous throughout the corridor and any alignment would have similar impacts to this resource.

Several aspects of the man-made constraints in the corridor provide greater obstacles to the possibility of altering the proposed DNT Phase 4A project alignment (**Exhibit 1-6**). Except for one unoccupied structure in the existing ROW acquired by the county, the preferred alignment avoids all other structures. However, if the alignment were to be shifted westward, it would either cause displacements of industrial facilities at the southern end of the road segment, or residential structures to the south of Doe Branch. Similarly, if the alignment were to be shifted eastward, there would be displacements of residential structures recently constructed and planned just north of Prosper Trail (CR 4) or a large church facility under construction to the south of Prosper Trail (CR 4) (i.e. just south of King's View Street). Also, any eastward shift of the alignment would cross the Texas A&M University Prosper Research Farm located north of Frontier Parkway (CR 5). The process of considering both natural and man-made constraints in the corridor study area did not suggest any basis for altering the proposed alignment for the DNT Phase 4A project.

Appendix 1-3
Support Resolutions for Preferred Alignment

TOWN OF PROSPER, TEXAS RESOLUTION NO. 08 - 040

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF PROSPER, TEXAS, HEREBY SUPPORTING THE DEVELOPMENT OF THE DALLAS NORTH TOLLWAY EXTENSION, PHASE 4A FROM U.S. 380 TO F.M. 428

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PROSPER, TEXAS:

SECTION 1: Whereas, the North Texas Tollway Authority (the "NTTA") plans to extend the Dallas North Tollway (the "DNT") north through Collin County, Texas, and;

SECTION 2: Whereas, the DNT Extension is one of four regionally significant projects classified by Collin County through the 2003 Collin County Bond Program, and;

SECTION 3: Whereas, Phase 4A of the planned extension shall be from U.S. 380 to F.M. 428, a distance of approximately six miles, and;

SECTION 4: Whereas, Collin County, through a cooperative process with community leaders in Prosper and Celina, identified potential corridors for the extension of the DNT north of U.S. 380 and south of F.M. 428. Those corridors have been evaluated and discussed with property owners who could potentially be affected. A preferred corridor has been identified that would have a variable right-of-way width ranging from approximately 360 feet to 400 feet, and;

SECTION 5: Whereas, the NTTA has conducted a series of stakeholder outreach initiatives and has held a public meeting to educate, inform and receive feedback from the

public. In addition, the NTTA has incorporated stakeholder and public feedback into the proposed schematic, and;

SECTION 6: Whereas, the Town is in support of the development of the Dallas North Tollway Extension, Phase 4A from U.S. 380 to F.M. 428.

SECTION 7: This Resolution shall take effect immediately upon its passage.

RESOLVED THIS THE 22nd day of April, 2008.

Charles Niswanger, Mayor

ATTEST TO:

Matthew D. Denton, TRMC
Town Secretary

TOWN OF PROSPER
TEXAS

RESOLUTION NO. 2008-07 R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CELINA, TEXAS SUPPORTING THE ALIGNMENT AND SCHEMATIC FOR THE DEVELOPMENT OF THE DALLAS NORTH TOLLWAY EXTENSION, PHASE 4A FROM U.S. 380 TO F.M. 428

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CELINA, TEXAS:

SECTION 1: Whereas, the North Texas Tollway Authority (the "NTTA") plans to extend the Dallas North Tollway (the "DNT") north through Collin County, Texas, and;

SECTION 2: Whereas, the DNT Extension is one of four regionally significant projects classified by Collin County through the 2003 Collin County Bond Program, and;

SECTION 3: Whereas, Phase 4A of the planned extension shall be from U.S. 380 to F.M. 428, a distance of approximately six miles, and;

SECTION 4: Whereas, Collin County, through a cooperative process with community leaders in Prosper and Celina, identified potential corridors for the extension of the DNT north of U.S. 380 and south of F.M. 428. Those corridors have been evaluated and discussed with property owners who could potentially be affected. A preferred corridor has been identified that would have a variable right-of-way width ranging from approximately 360 feet to 400 feet, and;

SECTION 5: Whereas, the NTTA has conducted a series of stakeholder outreach initiatives and a public meeting to educate, inform and receive feedback from the public. In addition, the NTTA has incorporated stakeholder and public feedback into the proposed schematic, and;

SECTION 6: Whereas the City Council of the City of Celina, Texas, accepts and supports the proposed schematic and development of the DNT Phase 4A project as presented to the City Council on April 14, 2008.

PASSED AND APPROVED by the City Council of the City of Celina, Texas, this the 12th day of May, 2008.

Corbett Howard, Mayor

Vicki Faulkner, City Secretary