TEXAS HISTORICAL COMMISSION

ANTIQUITIES PERMIT APPLICATION FORM ARCHEOLOGY

GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) RM 2243 (Phase 1A)
County (ies) Williamson
USGS Quadrangle Name and Number Leander, Round Rock, Leander NE, and Georgetown, Texas 7.5-minute
UTM Coordinates Zone 14 E N
Location From SR Hwy 183A to the RM 2243 intersection with Southwest Bypass
Federal Involvement ☐ Yes ☒ No
Name of Federal Agency Federal Highway Administration (FHWA)

Agency Representative Scott Pletka, TxDOT on behalf of FHWA

II. OWNER (OR CONTROLLING AGENCY)

Owner TxDOT
Representative Scott Pletka
Address 125 E. 11th St.
City/State/Zip Austin, Texas, 78701
Telephone (include area code) 512-416-2631 Email Address scott.pletka@txdot.gov

III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

Sponsor Williamson County
Representative Steven Snell, County Judge
Address 710 S. Main Street, Ste. 101
City/State/Zip Georgetown, TX 78664
Telephone (include area code) 512-943-1550 Email Address ctyjudge@wilco.org

PROJECT INFORMATION

I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name Eric Voss, MS, RPA
Affiliation BGE, Inc.
Address 595 Dallas Pkwy, Ste. 101,
City/State/Zip Frisco, Texas 7530
Telephone (include area code) (972) 464-4804 Email Address evoss@bgeinc.com

(OVER)

ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork October 2025
Requested Permit Duration 10 Years _____ Months (1 year minimum)
Scope of Work (Provided an Outline of Proposed Work) Intensive pedestrian survey and mechanical trenching

III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility BGE, Inc. – San Antonio
Permanent Curatorial Facility Center for Archaeological Research- UTSA

IV. LAND OWNER'S CERTIFICATION

I, _____, as legal representative of the Land Owner,
_____, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Owner, Sponsor, and Principal Investigator are responsible for completing the terms of the permit.
Signature _____ Date _____

V. SPONSOR'S CERTIFICATION

I, _____, as legal representative of the Sponsor, _____, do certify that I have review the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Sponsor, Owner, and Principal Investigator are responsible for completing the terms of this permit.
Signature _____ Date _____

VI. INVESTIGATOR'S CERTIFICATION

I, Eric Voss, as Principal Investigator employed by BGE, Inc. (Investigative Firm), do certify that I will execute this project according to the submitted plans and research design, and will not conduct any work prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Principal Investigator (and the Investigative Firm), as well as the Owner and Sponsor, are responsible for completing the terms of this permit.

Signature Eric Voss Date 09/17/2025

Principal Investigator must attach a research design, a copy of the USGS quadrangle showing project boundaries, and any additional pertinent information. Curriculum vita must be on file with the Archeology Division.

FOR OFFICIAL USE ONLY

Reviewer _____ Date Permit Issues _____
Permit Number _____ Permit Expiration Date _____
Type of Permit _____ Date Received for Data Entry _____

Texas Historical Commission
Archeology Division
P.O. Box 12276, Austin, TX 78711-2276
Phone 512-463-6096
thc.texas.gov

Archeological Survey Permit Application

Project Name: RM 2243 Phase 1A

District(s): Austin

County(s): Williamson

CSJ Number(s): 0914-05-222

Prepared By: BGE, Inc.

Date: September 24, 2025

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 17, 2025, and executed by FHWA and TxDOT.

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Introduction

Williamson County and the Texas Department of Transportation (TxDOT) propose to realign and widen both Hero Way and Ranch-to-Market (RM) 2243 in Williamson County, Texas. The ultimate RM 2243 corridor project (CSJ: 2103-01-038) extends for 12.64 kilometers (km; 7.87 miles [mi]) from United States (US) 183A to the Southwest Bypass near Georgetown. Federal funding was received for planning and design. An Environmental Assessment (EA) was prepared, and a Finding of No Significant Impact (FONSI) was issued on February 26, 2025.

The RM 2243 project will be constructed in four phases (1A, 1B, 2 and 3) with construction of Phase 1A beginning in January 2026 (**Figure 1**). **The purpose of this archeological survey is to survey areas within Phase 1A of the ultimate RM 2243 corridor project that were previously denied right-of-entry (ROE) in 2021 (Thomas, 2022). The archaeological survey area measures approximately 3.3 hectares (8.2 acres) out of the total 50.10 acres in Phase 1A. The denied ROE parcels for Phases 1B, 2, and 3 will be surveyed at a later date.**

RM 2243 Phase 1A will include constructing 3.4 miles of westbound frontage road along the existing Hero Way from the 183A northbound frontage road east to Ronald Reagan Boulevard. The proposed Phase 1A alignment will follow the westbound frontage road to a point east of the Garey Park entrance and tie into the existing RM 2243 roadway located in the City of Leander, Williamson County, Texas. (**Figures 1 and 2**). The western terminus of the project is located 175 meters (574 feet) east of the intersection of Highway 183A and Hero Way, and the eastern terminus of the project is located at approximately 950 meters (3,116 feet) west of Parkside Parkway (**Figures 1 and 2**).

The Area of Potential Effects (APE) for archeological resources is defined as the footprint of the proposed project, extending to the maximum depth of impact, including all easements and project-specific locations. For this review, the APE will correspond with construction activities representing only RM 2243 Phase 1A, approximately a total of 20.27 hectares (50.10 acres) that includes a width of approximately 10 meters (33 feet) to 60 meters (197 feet) and a length of approximately 5.47 kilometers (3.40 miles). Typical depths of construction are anticipated to be 0.60 meters (2 feet), with the maximum construction depth not expected to exceed 3.6 meters (12 feet) below the surface for the construction of culverts.

Williamson County is the project sponsor. Williamson County currently owns a portion of the project and ROW. A portion of the project is on the TxDOT system. Ultimately, the entire Phase 1A project will be on TxDOT's system. TxDOT is taking the lead to coordinate with THC for this project. Federal funding was received for the planning and design portions of the project, triggering a NEPA review. Section 106 of the National Historic Preservation Act

(Section 106) and the Antiquities Code of Texas (ACT) apply. TxDOT will coordinate on behalf of both requirements.

Project Setting

The project is located in the Balcones Canyonlands Level IV ecoregion, as established by the Environmental Protection Agency (Griffith et al., 2007). This area forms the southern border of the Edwards Plateau, rising over 1,000 feet in elevation above the coastal plain to the southeast. Underlain by limestone formations, the karstic region is dissected by waterways, and the resulting canyons, sinkholes, and caverns are common. There are five intermittent streams with six crossings in the Area of Potential Effect (APE). At RM 2243 Phase 1A, there are five crossings of tributaries of Brushy Creek. The easternmost crossing is of a tributary of the San Gabriel River. The nearest perennial stream is Brushy Creek, approximately 0.75 km (0.46 mi) to the south. The San Gabriel River is approximately 1.4 km (0.86 mi) to the north. The bedrock underlying the APE is composed primarily of the Edwards Limestone unit (Ked). Toward its western boundary, the APE resides on the Keys Valley Marl (Kkv) and Comanche Peak Limestone (Kc), which consists of Cretaceous-age limestone deposits. The nearby San Gabriel River has incised into the Fredericksburg Group of the Cretaceous-age Comanchean series just north of the APE.

The APE intersects six mapped soil units (**Figure 3**; Soil Survey Staff 2025a). These soil units contain five soil series as major components: Fairlie, Eckrant, Crawford, Doss, and Denton. The Fairlie, Crawford, and Denton series are composed of very deep, well-drained, moderately permeable soils that formed in ancient loamy and clayey calcareous sediments, indicating potential for intact archeological deposits. The Doss and Eckrant series are characterized by very shallow or slowly permeable soils that form over limestone, indicating a low potential for archeological deposits (Soil Survey Staff 2025b).

Archeological Background and Previous Studies

A 1-km (0.6 mi) Study Area was established to circumscribe the APE for archival records review. BGE conducted a review of available information at the Texas Archeological Research Laboratory (TARL) and the THC online Texas Archeological Sites Atlas (TASA) for previous cultural resource investigations documented within the Study Area, as well as for previously recorded cultural resources that may be adversely affected by the development of the APE. A search of the National Park Service (NPS) online National Register of Historic Places (NRHP) database was completed to determine whether the Study Area or the APE would have any impact on known existing historic properties, either listed or eligible for listing in the NRHP. A review of the Texas Freedom Colonies Atlas was also completed to identify any freedom settlements (i.e., freedmen's towns) within the Study Area and APE. These records identified 12 previously recorded archaeological surveys, 21 previously recorded archaeological sites, one Official Texas Historical Marker, and one cemetery within the Study Area. Additionally, no State Antiquities Landmarks (SAL), no Recorded Texas Historic Landmarks (RTHL), and no NRHP properties were identified in the Study Area.

The review indicated four previous archeological investigations have occurred within the overall APE, two of which intersect the APE **(Table 2; Figure 4).** The review also identified three archaeological sites within the APE, one of which overlaps with the APE **(Table 3; Figure 4).** Finally, one cemetery is located within the overall Study Area but not within the APE (**Figure 4**). One Official Texas Historical Marker, and no historic highways, NRHP-listed or -eligible properties or districts, or freedom colonies were identified within the Study Area (NPS, 2025; Roberts, 2025; TARL & THC, 2025).

Table 1. Previously recorded archeological surveys within the APE and 1-km (0.6-mi) Study Area.

Atlas No.	Texas Antiquities Permit No.	Fieldwork Date	Sponsoring Agency	Investigating Firm
8400010012	--	--	--	--
8500063837	2437	--	--	--
8500004588	--	1984	EPA	
8500011602	3245	November 2005	TxDOT	HDR and PAI
8500014054	--	May 2007	USACE--Fort Worth District	Horizon Environmental Services, Inc.
8500016332	5431	December 2009	City of Leander	Gray and Pape
8500018289	5644	August 2010	U.S. Department of Education	PBS& J
8500061451	2753	--	Athabasca Consulting Inc.	--
8500080611	7028	September 2014	City of Georgetown	SWCA Environmental Consultants
8500070880	--	August 2015	Meritage Homes of Texas	Horizon Environmental Services, Inc.
8500080336	7531	May 2017	LCRA	--
8500083179	30313	November 2021	TxDOT	AmaTerra Environmental, Inc.

In 2002, an intensive archaeological survey was conducted of the proposed extension of Parmer Lane between Farm-to-Market (FM) 2243 and State Highway (SH) 29 in Williamson County, Texas. All shovel tests and backhoe trenching were negative for cultural resources. During the pedestrian survey, one unrecorded archaeological site was located within the 500-ft APE for historical structures and properties. Site 41WM1043 is a twentieth-century homestead site characterized by a surficial scatter of household artifacts and a cylindrical well, which is covered with cut limestone blocks. No standing structures or foundations remain (Atlas, 2025).

In 2004, a linear survey (8500018289) was completed by PBS&J of a 163-acre area in Williamson County, Texas, at the request of Leander Independent School District. The area is proposed for the future construction of Leander Independent School District's schools and facilities. No further information was available (Atlas, 2025).

In 2009, HRA Gray & Pape, LLC, of Houston, Texas, performed a linear cultural resources intensive pedestrian survey (8500016332) on approximately 1.7 km (1.1 miles) of proposed road right-of-way near the City of Leander in Williamson County, Texas. The project involved the construction of a new four-lane roadway, known as Hero Way, that would connect the western terminus of County Road (CR) 269 to the eastern terminus of Broad Boulevard at United States Highway 183. The total area is less than 9.7 hectares (24 acres). Shovel testing was concentrated around the North Fork of Brushy Creek near previously recorded Sites 41WM697 and 41WM1007. Shovel tests yielded negative findings, indicating that Sites 41WM697 and 41WM1007 do not extend into the area. No new sites were identified during the survey (Atlas, 2025).

In 2014, a survey (8500080611) was completed by SWCA Environmental Consultants, sponsored by the City of Georgetown. A total of 201 shovel tests were conducted. In addition, a total of 10 backhoe trenches were excavated in an area identified as having the potential for deeply buried archaeological sites along the South San Gabriel River. As a result of these investigations, a total of 10 archaeological sites were documented: three previously recorded sites (41WM110, 41WM1100, and 41WM1198), six newly documented precontact sites (41WM1279–1283 and 41WM1285), and one newly documented historic era site (41WM1284). Sites 41WM110 and 41WM1282 are recommended for listing as SALs based on the integrity of the observed deposits. Shovel testing and backhoe trenching were conducted on both sites, and although cultural deposition was found to be relatively shallow, the sites exhibit potential for intact, buried features (Atlas, 2025).

In 2021, a survey (8500083179) was completed by AmaTerra Environmental, Inc. for RM 2243 from US 183A to Southwest Bypass, Williamson County, Texas, sponsored by TxDOT. In total, 275 shovel tests were placed in the APE; 14 of which were positive for cultural materials. Ten archeological sites have been previously recorded in the APE, four of which (41WM549, 41WM556, 41WM581, and 41WM593) were not revisited due to denied access (Atlas, 2025). Six previously recorded sites (41WM1005, 41WM1100, 41WM1198, 41WM1317, 41WM1333, and 41WM1342) were revisited during the survey. No new sites were identified.

Redacted for Confidential Purposes

One previously recorded site, 41WM1005, is within the APE Site. 41WM1005 is a previously recorded light historical artifact scatter consisting of historic glass in varying colors, metal tin cans/nails, and modern ceramic pottery. The site was first recorded in 2001 by Horizon Environmental Service (Horizon). Horizon noted that site 41WM1005 is located east of a massive wood dam/retaining wall on the creek crossing, a tributary to Brushy Creek, 1200 m (3937 ft) to the south-southeast. The site was reevaluated by AmaTerra Environmental, Inc. (AmaTerra) in 2022 during an intensive survey, and no cultural material was observed. The site has been subject to significant disturbance due to the construction of a gas station and its associated utilities. Site eligibility was recorded as undetermined (Atlas, 2025).

Sites 41WM691, 41WM692, 41WM693, 41WM697, and 41WM698 are all recorded as precontact sites of lithic scatters that included chert cores, tested chert nodules and cobbles, primary flakes, and bifaces. There was high disturbance due to plowing in preparation for the building of future housing development. Site eligibility for these sites was recorded as undetermined (Atlas, 2025).

Site 41WM1100 is characterized by a dense scatter of lithics and features areas of eroding hearths, although no diagnostic artifacts were observed. Site 41WM1115 is a shallowly buried, dense precontact lithic scatter, with observed cultural material consisting of bifaces, fragments of a point, and a knife (Atlas, 2025).

Sites 41WM1040, 41WM1168, 41WM1198, 41WM1246, and 41WM1390 are all precontact sites that consist of lithic manufacturing debris and some burned rock, located near an unnamed tributary of Brushy Creek. Cultural materials observed include tested cobbles, bifaces, and primary flakes. Sites 41WM1333, 41WM1318, 41WM1279, and 41WM1375 were previously recorded as a light lithic scatter. Sites were deemed ineligible due to the high disturbance caused by modern plow fields for agricultural purposes. Eligibility for these sites was listed as ineligible or undetermined (Atlas, 2025).

Site 41WB1392 is recorded as an early twentieth-century farmstead that included an abandoned house and two barns. Historical cultural material from the era was observed, including farmstead structures and various types of farm equipment. The site was deemed ineligible (Atlas, 2025).

An Official Texas Historical Marker (Marker No. 9369) within the Study Area **(Figure 4)** records the location of the Webster Massacre that occurred in 1839 when approximately 30 migrants were killed by Native Americans. This marker is located across Brushy Creek from the Davis Cemetery, also within the Study Area, where the Webster Massacre dead are buried along with additional interments. The marker and cemetery are not located immediately adjacent to the project, and the project is unlikely to impact these resources (Find a Grave, 2025; TARL and THC, 2025).

Historic Land Use

The Native American groups living in the Williamson County area at the time of contact with European explorers include the Tonkawa and small groups of the Kowa, Yojuane, Tawakoni, and Mayeye (Odintz, 2021). The Lipan Apache and the Comanches were also present in the

region into the nineteenth century. Spanish explorers traversed the area, and missions were established on the San Gabriel River in the eighteenth century. Although land grants were given to Mexican families, no homesteaders are known to have moved to the area at this time. European-American homesteading first began in the county in 1838 when settlers built on Brushy Creek. These migrants arrived in greater numbers by the mid-nineteenth century, sometimes accompanied by enslaved individuals.

The Civil War had little direct material impact on Williamson County, but the county's economic fortunes somewhat mirrored those of the broader Southeast after the war (Odintz, 2021). A post-war increase in cotton production was observed through 1900, accompanied by an increase in the number of tenant farms. Stock raising, including cattle and sheep, was standard before the Civil War, and this became an increasingly significant source of agricultural income in the county into the 1960s. In the late twentieth century, the area experienced a significant increase in population associated with the expansion of the broader Austin urban area.

The APE remained largely undeveloped into the mid-twentieth century, with most development related to agriculture. The historical 1893 topographic map does not depict any settlement concentrations near the APE (Figure 18), and the 1954 topographic map shows no additional development (Figure 19). The historic aerials from 1953 confirm that the western quarter of the APE is tilled farmland, and the remainder of the APE is generally open or lightly wooded grazing land.

Archeological Site Potential

BGE reviewed the Potential Archaeological Liability Maps (PALM) data created by TxDOT (**Figure 9**). This analysis showed that most of the APE is in areas with low geoarchaeological potential. About 0.54 percent of the APE is in regions labeled as having negative geoarchaeological potential, with roughly 99 percent classified as having low potential. Therefore, BGE believes there is a possibility of finding intact precontact cultural resources within the APE. The lack of standing structures in or near the APE in historical aerial images and topographic maps suggests a low chance of discovering significant historic cultural resources within the APE.

Proposed Survey Methods

Based on the results of the cultural resources desktop analysis and probability study, BGE recommends a Phase I cultural resources investigation in areas where ground-disturbing activities are planned (**Figure 10**). This investigation would follow guidance and standards established by the THC and the Council of Texas Archaeologists (CTA) for field investigations and documentation.

Linear projects are defined as being at least 10 times longer than they are wide and require at least one transect for every 30 meters of width or part thereof. At least one shovel test (ST) is required for every 100 linear meters of each transect (approximately 16 ST per mile) (CTA 2020).

Using this formula, at least 22 shovel tests would be needed to survey the area. Each shovel test would measure 30 cm (11.8 in) on each side and be excavated in 10-cm (3.9-in) levels to a depth of 80 cm (31.5 in) below the surface, or until pre-Holocene deposits are encountered, if feasible. Sediments would be screened through a 0.64 cm (0.25 in) mesh hardware cloth. Clay matrices that cannot be screened would be carefully sorted by hand or troweled and visually checked for cultural materials. All parts of the project where shovel testing is not possible or safe (such as graveled or paved roads, maintained utility rights-of-way, or oil/gas pads) will be appropriately documented with photographs.

For each shovel test, the following information will be recorded on BGE forms: location, maximum depth, soil layers, soil color and texture, and the presence of cultural materials. If an archaeological site is identified, shovel tests will be systematically excavated to determine the site's horizontal and vertical extent. Typically, site boundaries are defined by a series of shovel tests along transects radiating in the four cardinal directions or along major and minor axes, as appropriate. Shovel tests at the site will be spaced approximately 15 meters (49.2 feet) apart with boundaries usually marked by two consecutive negative shovel tests in each direction. Site field forms will include shovel test forms, site sketch maps, photo logs with corresponding photographs, and the Texas Archaeological Site Survey Form. Any non-archaeological historic structures within or immediately adjacent to the APE will be documented and recorded in case a supplementary historic resources survey is needed.

The Principal Investigator will join field crews for at least 25% of the fieldwork duration to ensure proper implementation of procedures and clear communication. The Project Archaeologist/Principal Investigator will review field data and forms daily to make sure all crew members accurately record survey data.

Reporting and Curation

After completing the fieldwork, a technical report will be prepared for the project following the Secretary of the Interior's Standards for Archaeological Documentation and the CTA Guidelines for Cultural Resource Management Reports (2022a). This report will include background research, a summary of field investigation results, and recommendations for construction approval. It will also feature aerial and topographic maps showing the APE, as well as the locations of all field investigations, shovel tests, trenching pits, and any newly identified cultural resource sites that may be encountered. If new cultural resource sites are identified, photographs and descriptions of all cultural materials documented in the field will be included. In survey areas with known or potential structures, additional documentation will be conducted in accordance with the CTA Performance Standards for Fieldwork and Analysis (2022b). These standards specify detailed site information, including estimated construction dates, the reasoning behind these dates, architectural styles, building

materials, construction techniques, structural functions, and construction sequences. All documents related to the field effort and all cultural materials will be submitted to the Center for Archaeological Research at the University of Texas at San Antonio for curation, in accordance with the terms of the anticipated State Antiquities Permit. Duplicates of these records will be stored electronically by BGE, Inc.

References Cited

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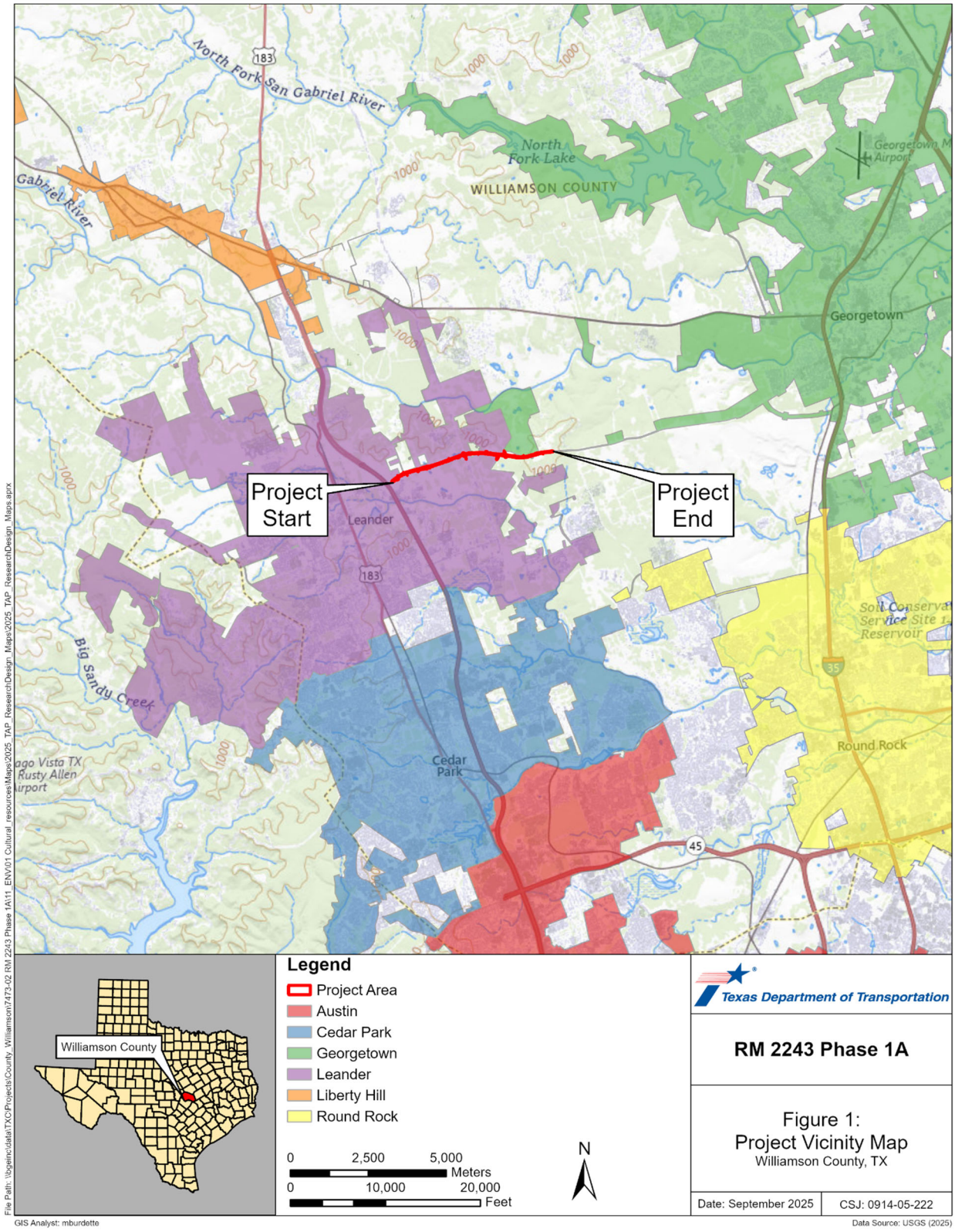
Figures


North Fork San Gabriel River
Gabriel River
North Fork Lake
WILLIAMSON COUNTY
Georgetown
Georgetown Municipal Airport
Project Start
Project End
Leander
Big Sandy Creek
Cedar Park
Round Rock
Soil Conservation Service Site 1 Reservoir
Rusty Allen Airport
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Williamson County
Legend
Project Area
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Cedar Park
Georgetown
Leander
Liberty Hill
Round Rock
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 1:
Project Vicinity Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
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GIS Analyst: mburdette
Data Source: USGS (2025)


Hero Way
Hero Way
Hero Way
Hero Way
Hero Way
County Road 269
Legend
Phase 1A APE
Recommended Survey Area
Project Start
Project End
0 110 220 Meters
0 510 1,020 Feet
N
Page 1 of 5
Texas Department of Transportation
RM 2243 Phase 1A
Figure 2:
2025 Aerial Image Map
Williamson County, TX
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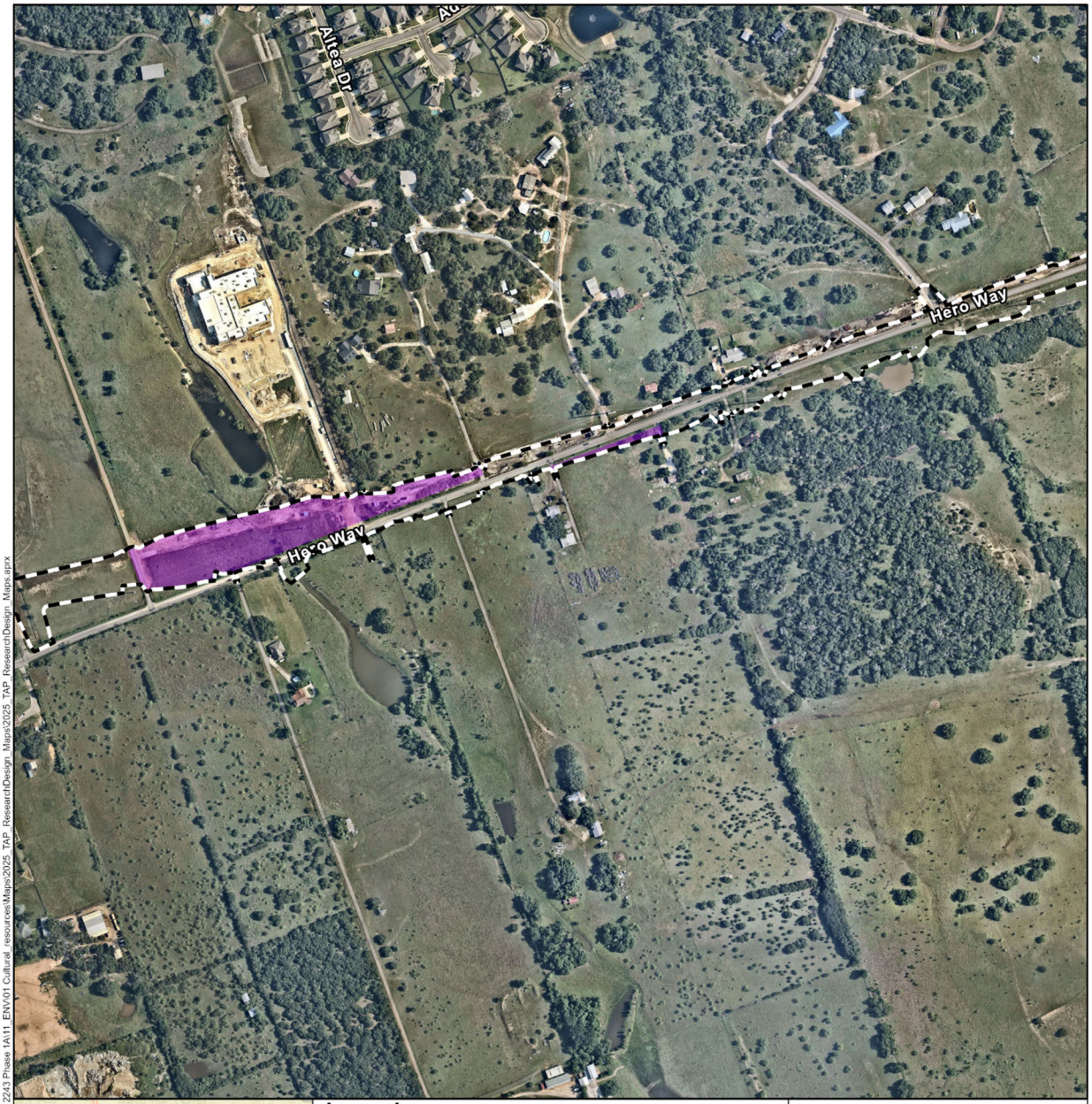
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: Nearmap (2025)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Page 2 of 5
Texas Department of Transportation
RM 2243 Phase 1A
Figure 2:
2025 Aerial Image Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
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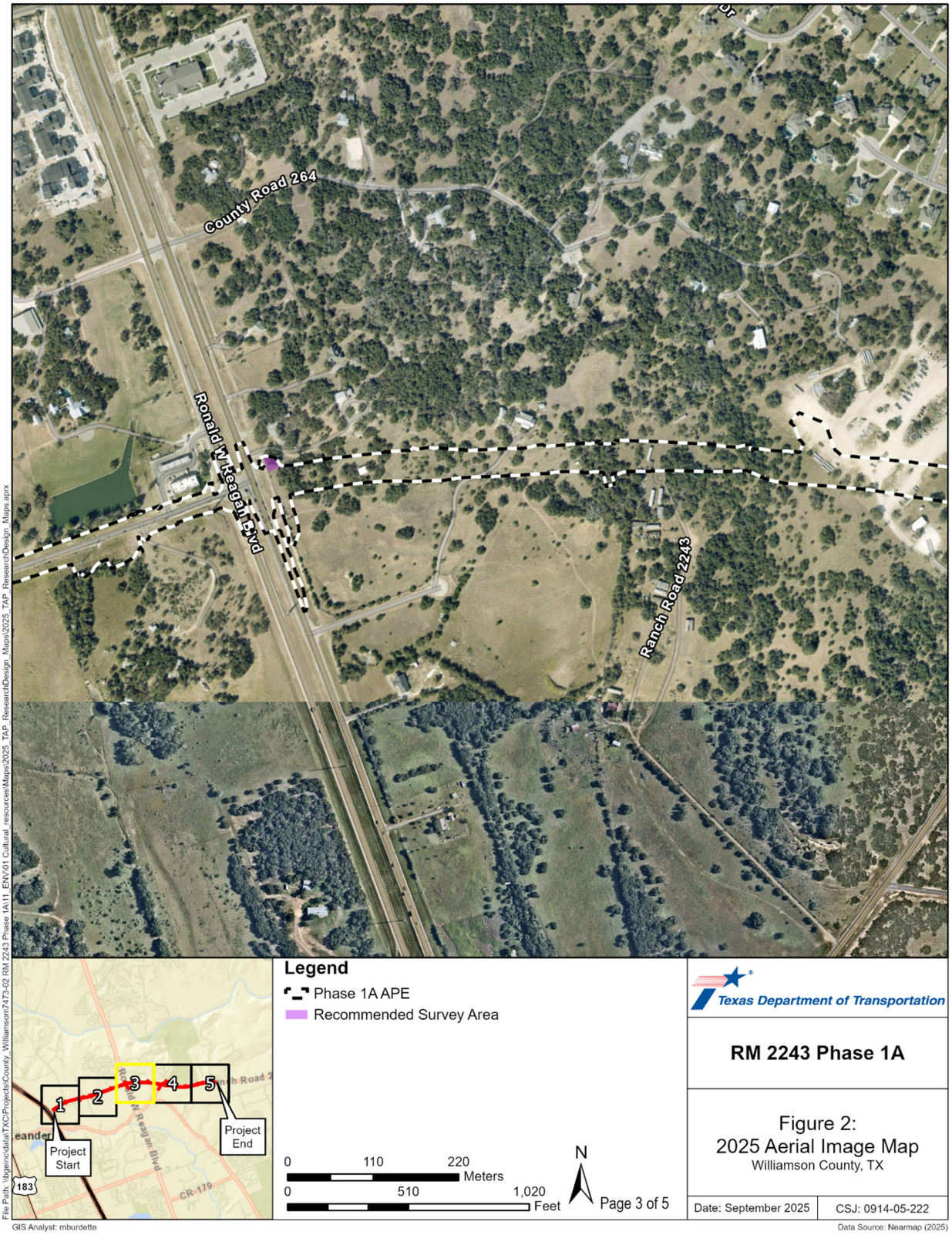
County Road 264
Ronald W Reagan Blvd
Ranch Road 2243
Legend
Phase 1A APE
Recommended Survey Area
Project Start
Project End
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CR-179
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Page 3 of 5
Texas Department of Transportation
RM 2243 Phase 1A
Figure 2:
2025 Aerial Image Map
Williamson County, TX
Date: September 2025
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GIS Analyst: mburdette
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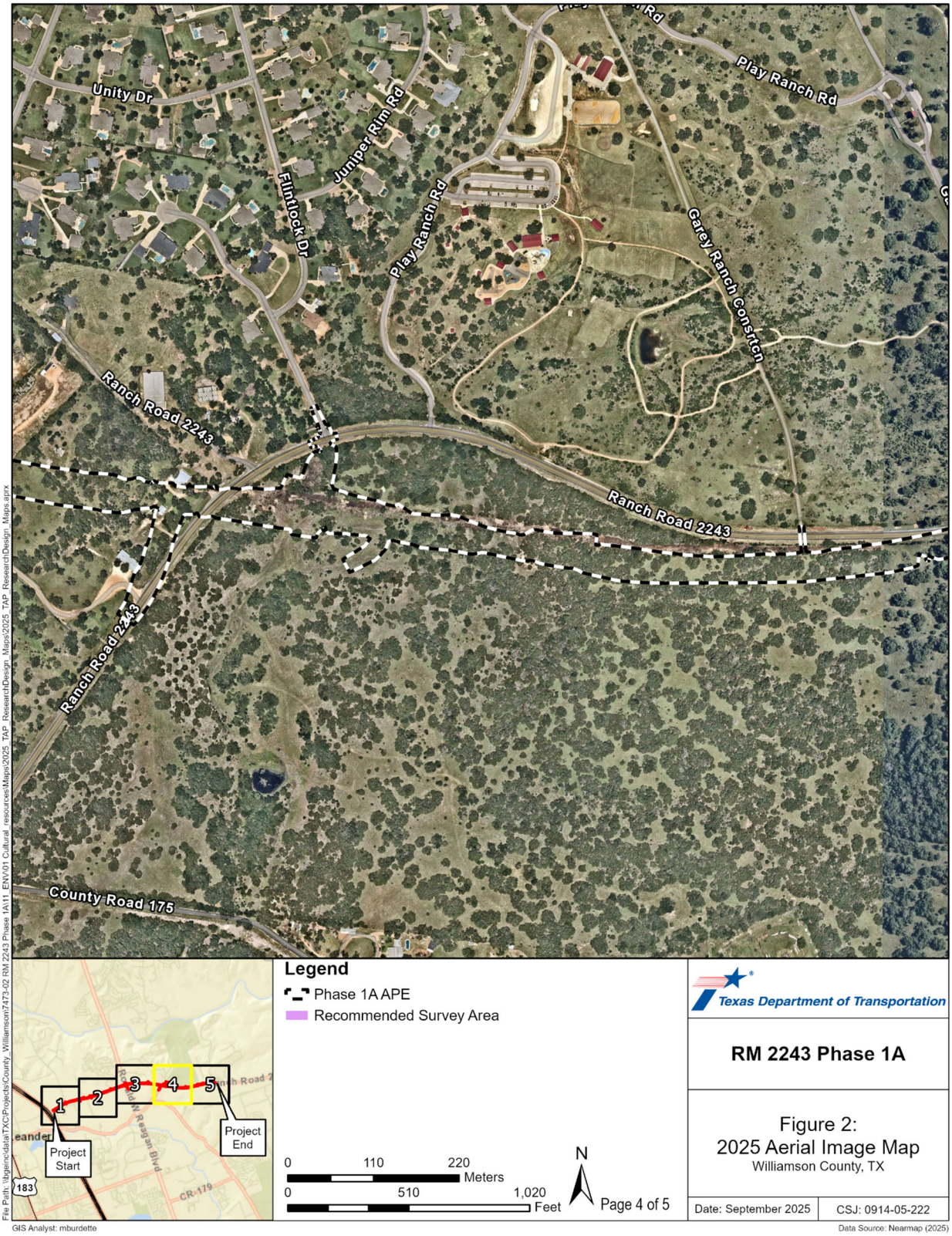
Unity Dr
Juniper Rim Rd
Flintlock Dr
Play Ranch Rd
Play Ranch Rd
Garey Ranch Constrtcn
Ranch Road 2243
Ranch Road 2243
Ranch Road 2243
County Road 175
Legend
Phase 1A APE
Recommended Survey Area
Project Start
Project End
0 110 220 Meters
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 2:
2025 Aerial Image Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
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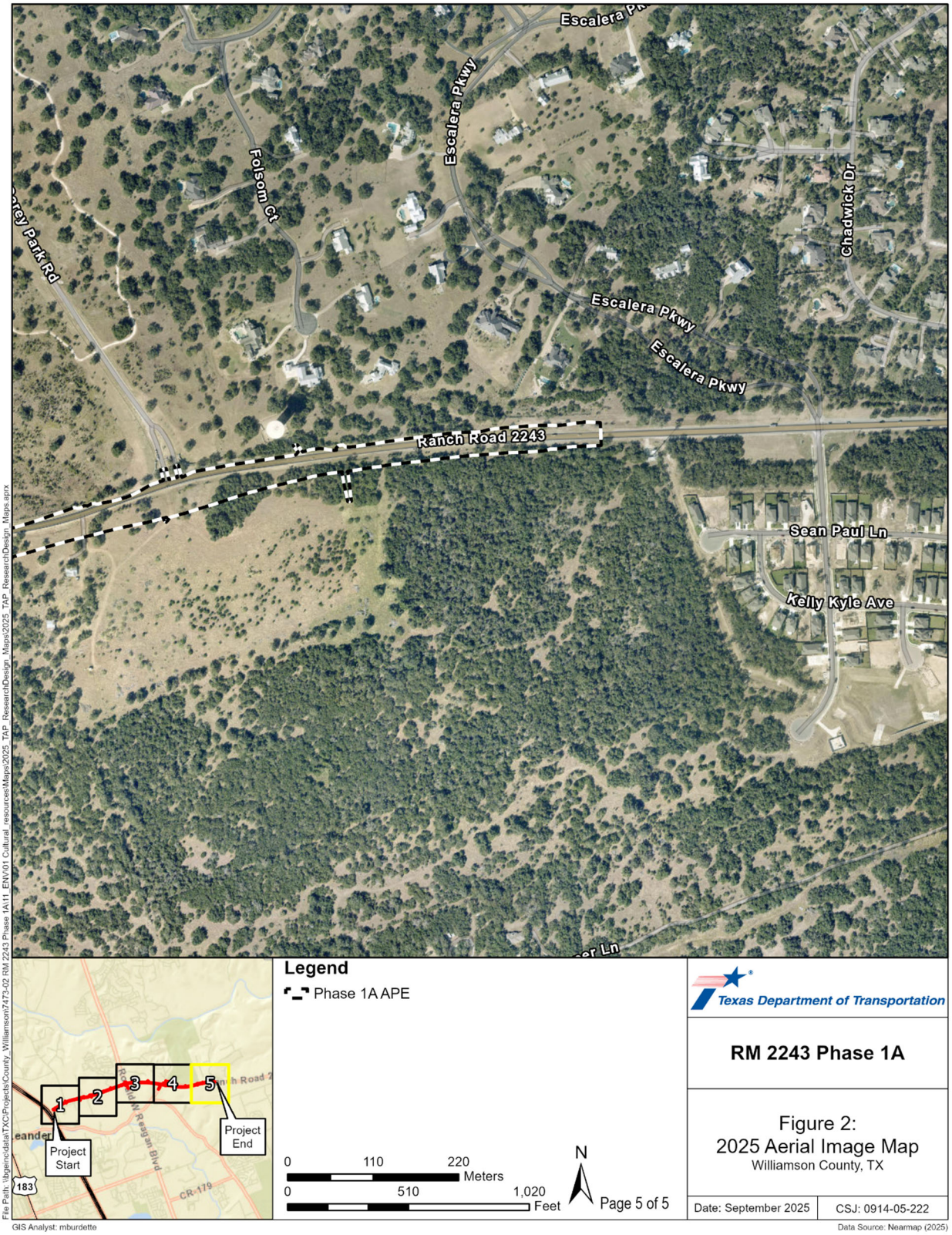
GIS Analyst: mburdette
Data Source: Nearmap (2025)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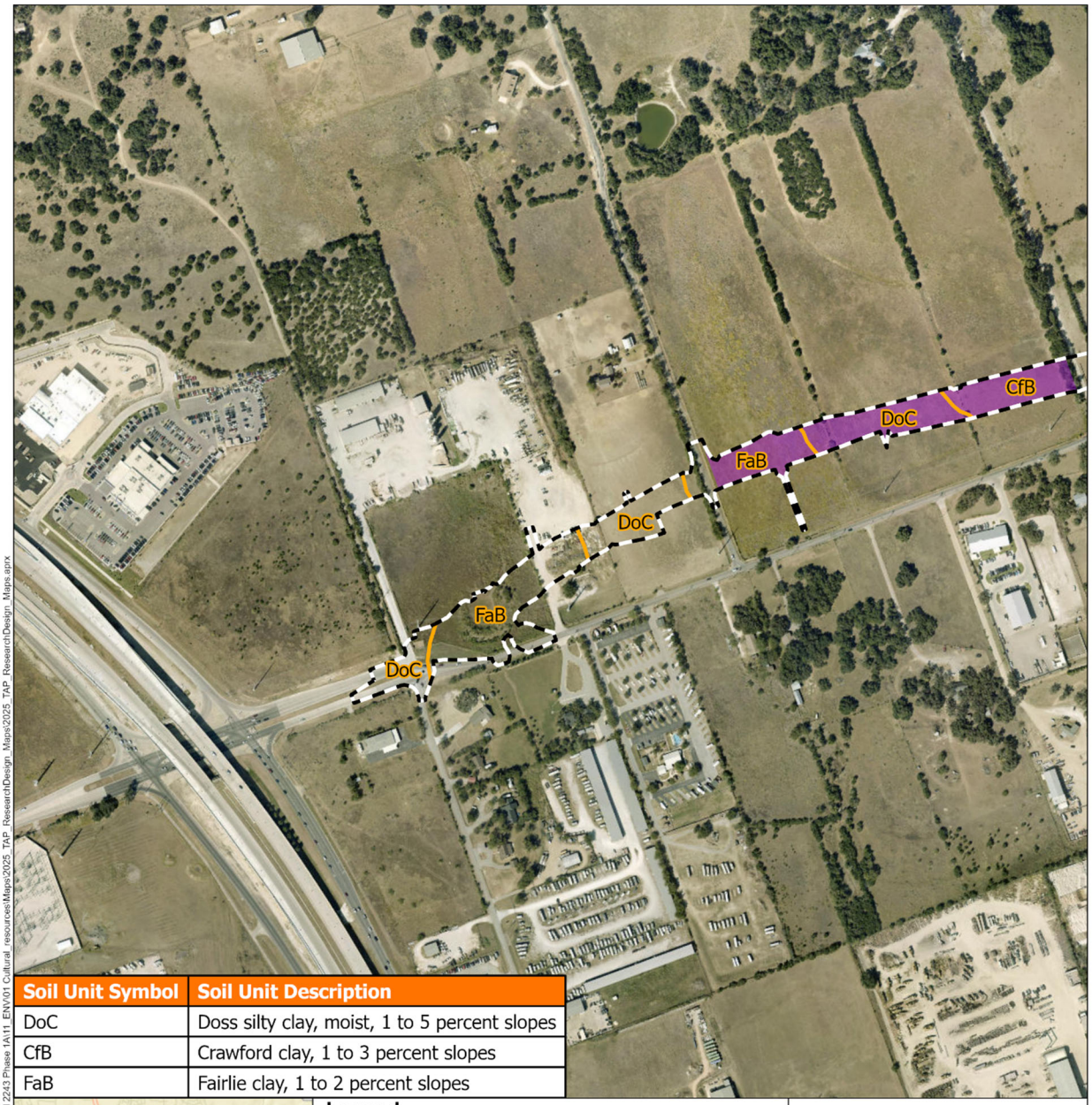
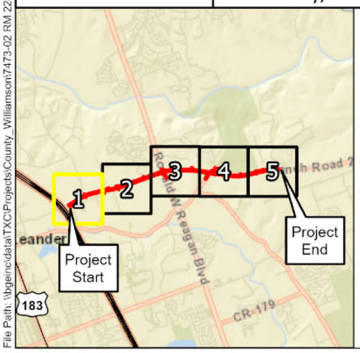
Page 5 of 5
Texas Department of Transportation
RM 2243 Phase 1A
Figure 2:
2025 Aerial Image Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: Nearmap (2025)



Soil Unit Symbol	Soil Unit Description
DoC	Doss silty clay, moist, 1 to 5 percent slopes
CfB	Crawford clay, 1 to 3 percent slopes
FaB	Fairlie clay, 1 to 2 percent slopes



Legend

- APE
- Soils (NRCS)
- Recommended Survey Area

0 110 220 Meters

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Texas Department of Transportation

RM 2243 Phase 1A

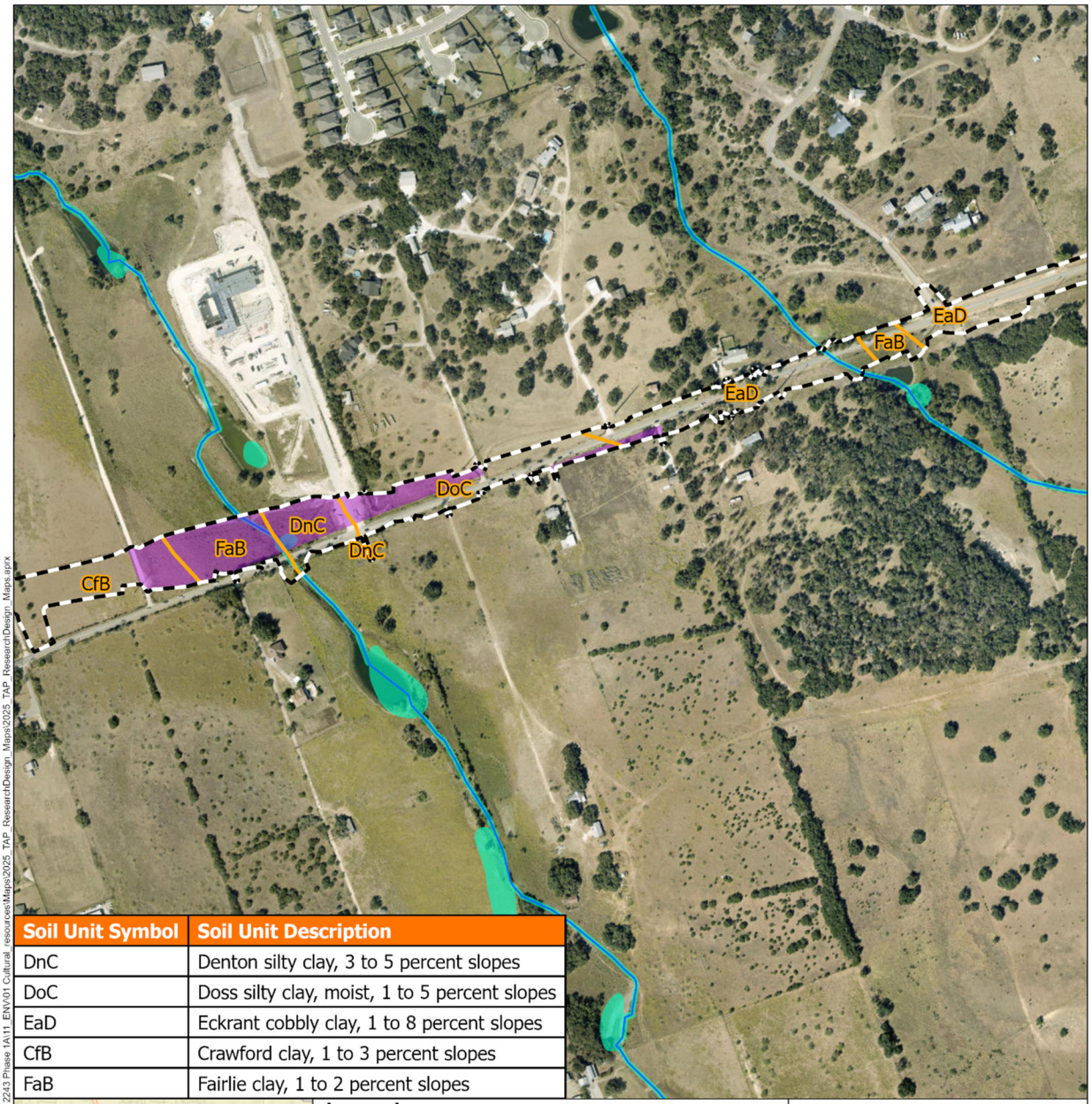
Figure 3: Soils and Water Resources Map
Williamson County, TX

Date: September 2025 | CSJ: 0914-05-222

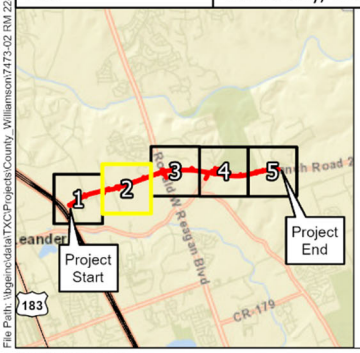
File Path: \\bgeincldata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx

GIS Analyst: mburdette

Data Source: Nearmap (2025), NRCS (2025), NWI (2025), NHD (2025)



Soil Unit Symbol	Soil Unit Description
DnC	Denton silty clay, 3 to 5 percent slopes
DoC	Doss silty clay, moist, 1 to 5 percent slopes
EaD	Eckrant cobbly clay, 1 to 8 percent slopes
CfB	Crawford clay, 1 to 3 percent slopes
FaB	Fairlie clay, 1 to 2 percent slopes



Legend

- Wetland (NWI)
- Streams (NHD)
- APE
- Soils (NRCS)
- Recommended Survey Area

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Texas Department of Transportation

RM 2243 Phase 1A

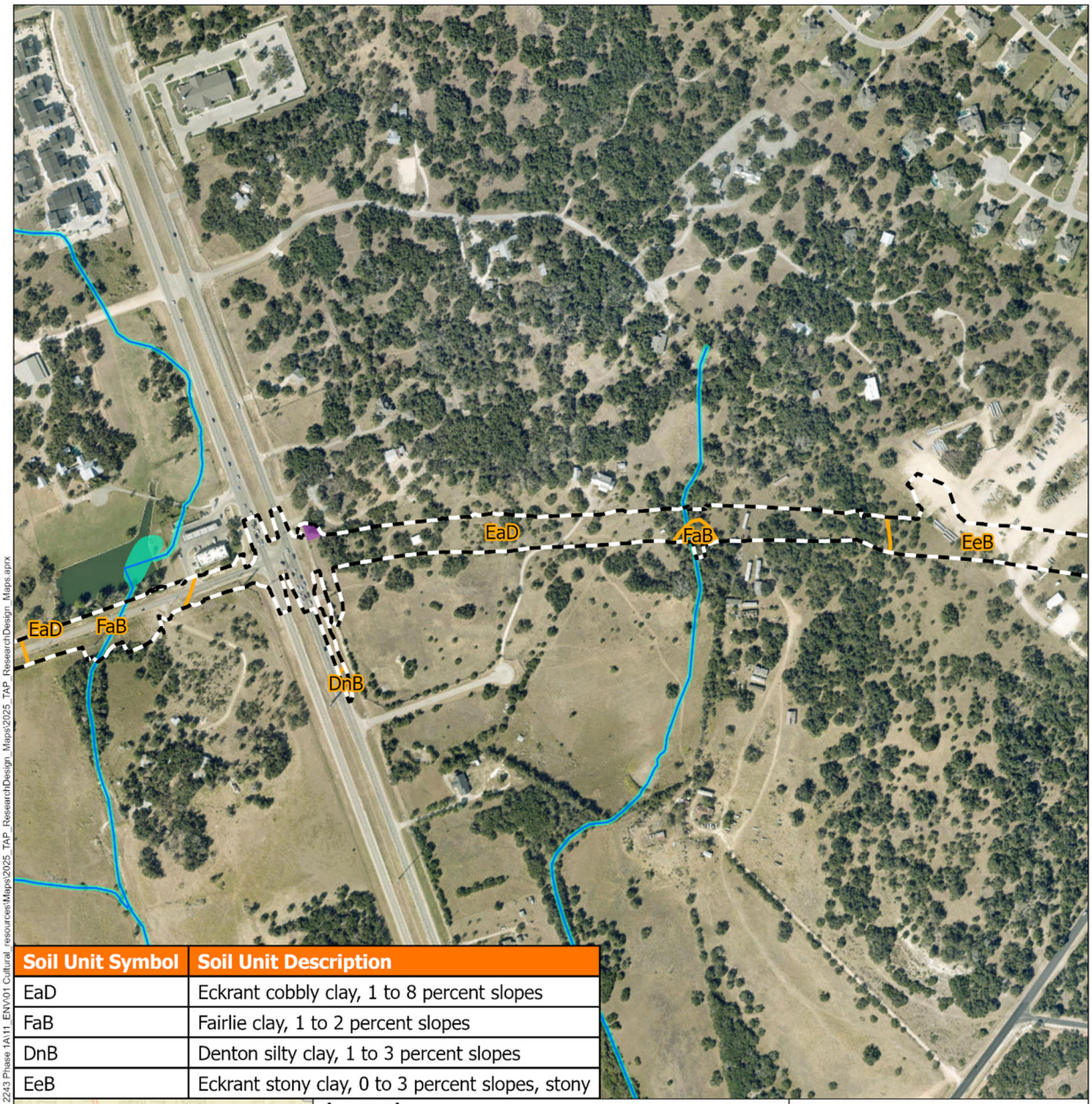
Figure 3: Soils and Water Resources Map
Williamson County, TX

Date: September 2025 | CSJ: 0914-05-222

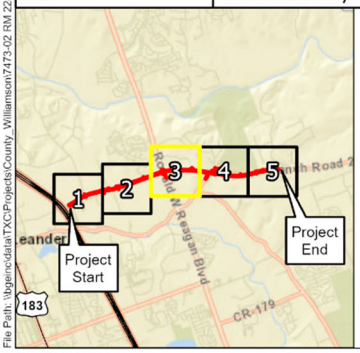
File Path: \\bgeincldata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx

GIS Analyst: mburdette

Data Source: Nearmap (2025), NRCS (2025), NWI (2025), NHD (2025)



Soil Unit Symbol	Soil Unit Description
EaD	Eckrant cobbly clay, 1 to 8 percent slopes
FaB	Fairlie clay, 1 to 2 percent slopes
DnB	Denton silty clay, 1 to 3 percent slopes
EeB	Eckrant stony clay, 0 to 3 percent slopes, stony



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- Wetland (NWI)
- Streams (NHD)
- APE
- Soils (NRCS)
- Recommended Survey Area

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Texas Department of Transportation

RM 2243 Phase 1A

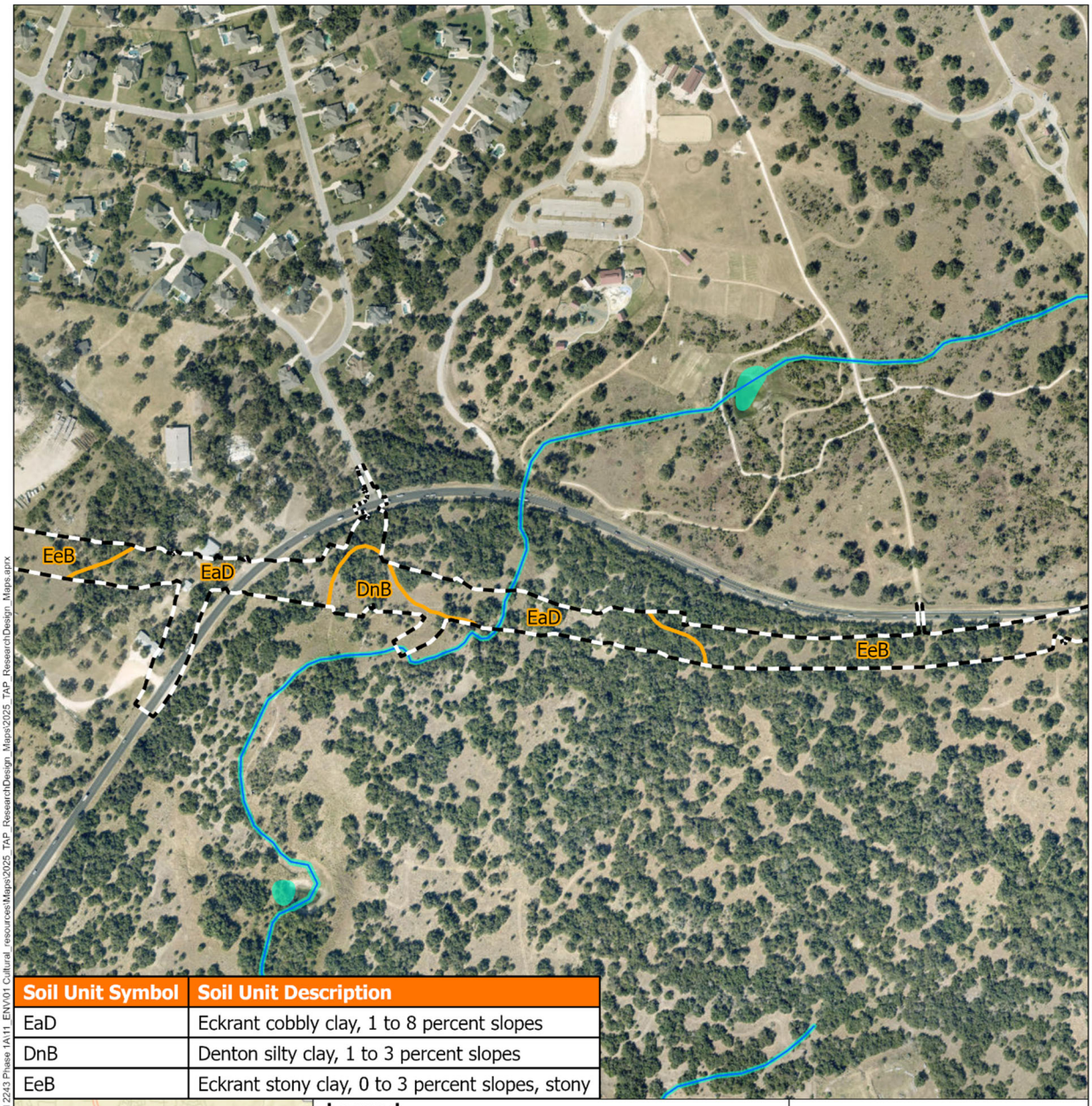
Figure 3: Soils and Water Resources Map
Williamson County, TX

Date: September 2025 | CSJ: 0914-05-222

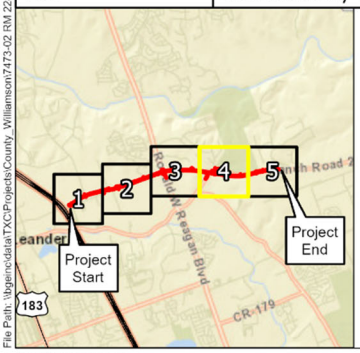
File Path: \\bgeincidata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx

GIS Analyst: mburdette

Data Source: Nearmap (2025), NRCS (2025), NWI (2025), NHD (2025)



Soil Unit Symbol	Soil Unit Description
EaD	Eckrant cobbly clay, 1 to 8 percent slopes
DnB	Denton silty clay, 1 to 3 percent slopes
EeB	Eckrant stony clay, 0 to 3 percent slopes, stony



Legend

- Wetland (NWI)
- Streams (NHD)
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- Soils (NRCS)
- Recommended Survey Area

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Texas Department of Transportation

RM 2243 Phase 1A

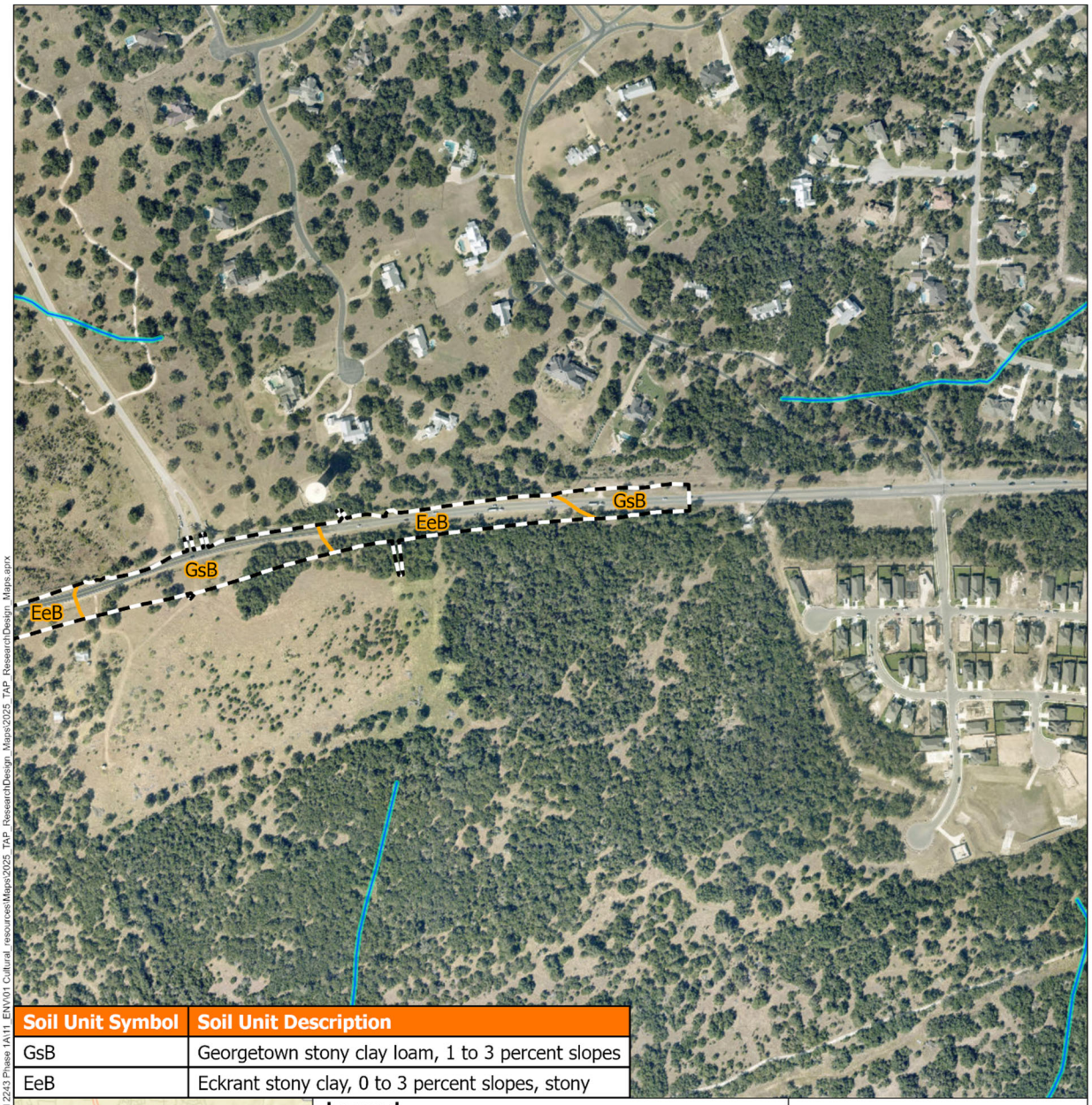
Figure 3: Soils and Water Resources Map
Williamson County, TX

Date: September 2025 | CSJ: 0914-05-222

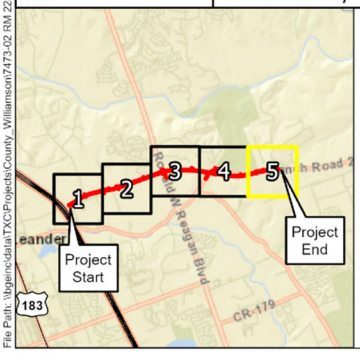
File Path: \\bgeincidata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx

GIS Analyst: mburdette

Data Source: Nearmap (2025), NRCS (2025), NWI (2025), NHD (2025)



Soil Unit Symbol	Soil Unit Description
GsB	Georgetown stony clay loam, 1 to 3 percent slopes
EeB	Eckrant stony clay, 0 to 3 percent slopes, stony



Legend

- Wetland (NWI)
- Streams (NHD)
- APE
- Soils (NRCS)

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Texas Department of Transportation

RM 2243 Phase 1A

Figure 3: Soils and Water Resources Map
Williamson County, TX

Date: September 2025 | CSJ: 0914-05-222

File Path: \\bgeincidata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx

GIS Analyst: mburdette

Data Source: Nearmap (2025), NRCS (2025), NWI (2025), NHD (2025)

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Texas Department of Transportation
RM 2243 Phase 1A
Figure 5:
1996 Aerial Image Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: Google (1996)
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 5:
1996 Aerial Image Map
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Date: September 2025
CSJ: 0914-05-222
File Path: \\bgeinc\data\TX\C\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx
GIS Analyst: mburdette
Data Source: Google (1996)


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Texas Department of Transportation
RM 2243 Phase 1A
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CSJ: 0914-05-222
GIS Analyst: mburdette
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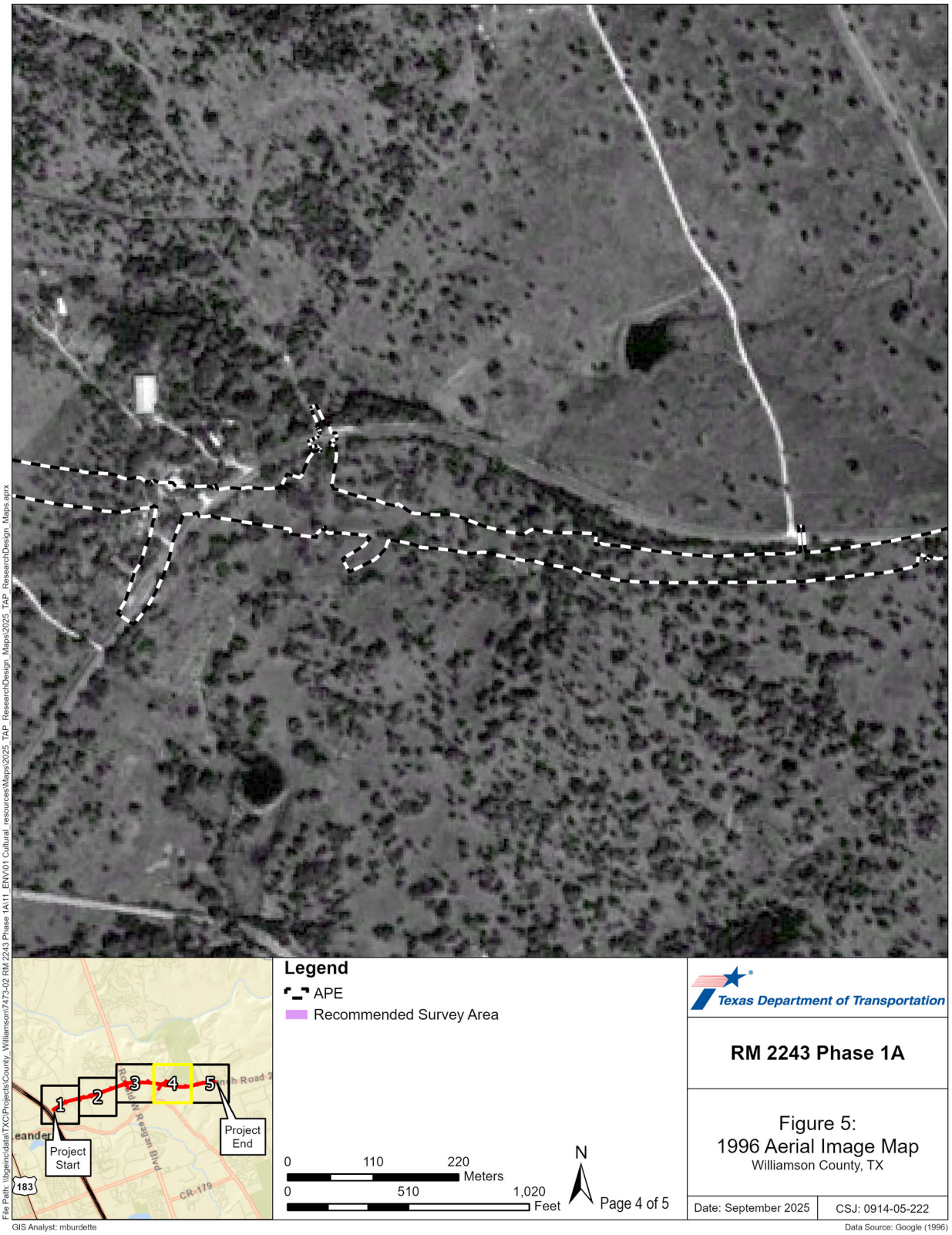
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Texas Department of Transportation
RM 2243 Phase 1A
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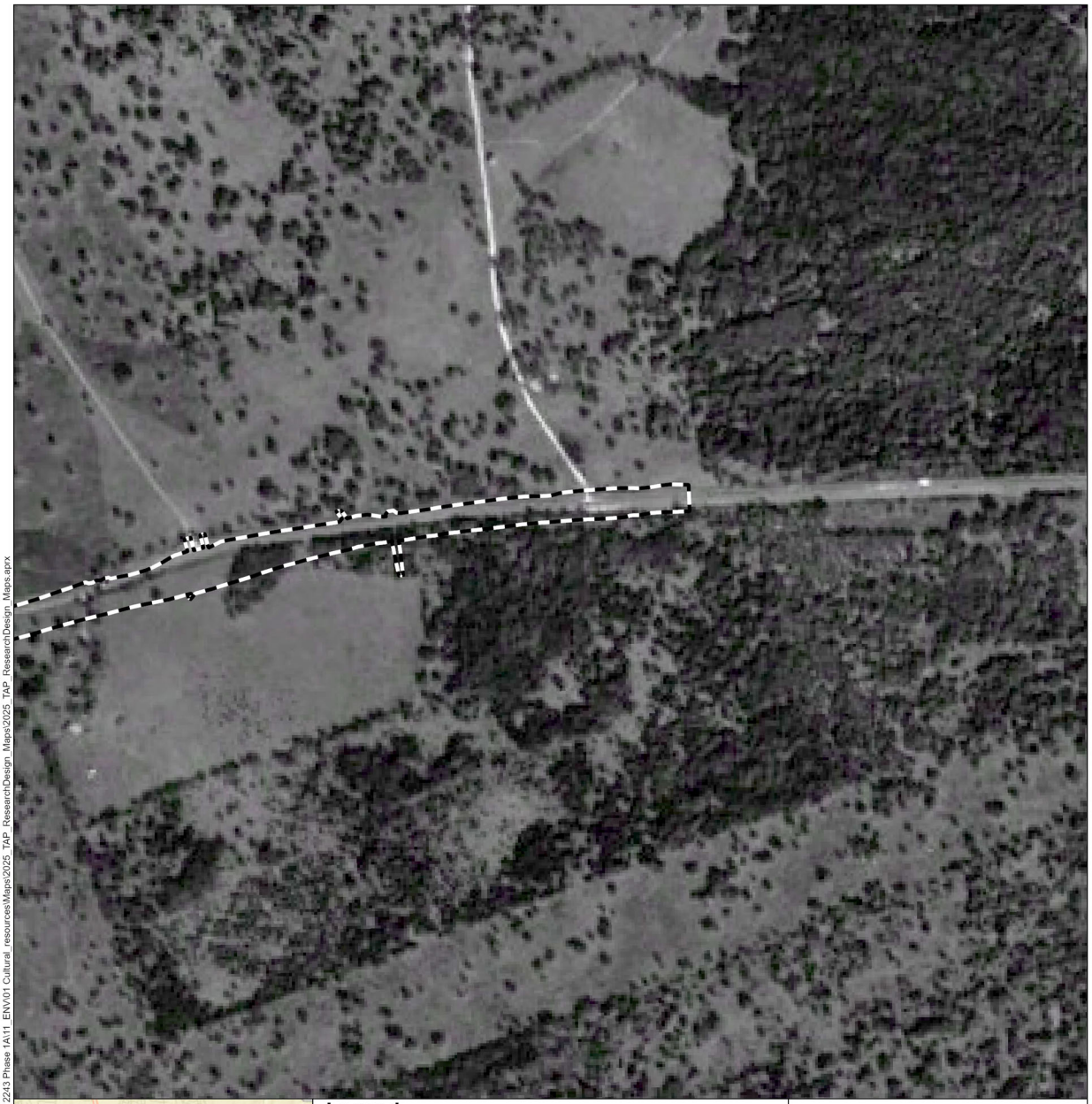
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Texas Department of Transportation
RM 2243 Phase 1A
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 6:
2002 Aerial Image Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
File Path: \\bgeinc\data\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx
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Data Source: Google (2002)


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Texas Department of Transportation
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Figure 6:
2002 Aerial Image Map
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GIS Analyst: mburdette
Data Source: Google (2002)


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Texas Department of Transportation
RM 2243 Phase 1A
Figure 6:
2002 Aerial Image Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: Google (2002)
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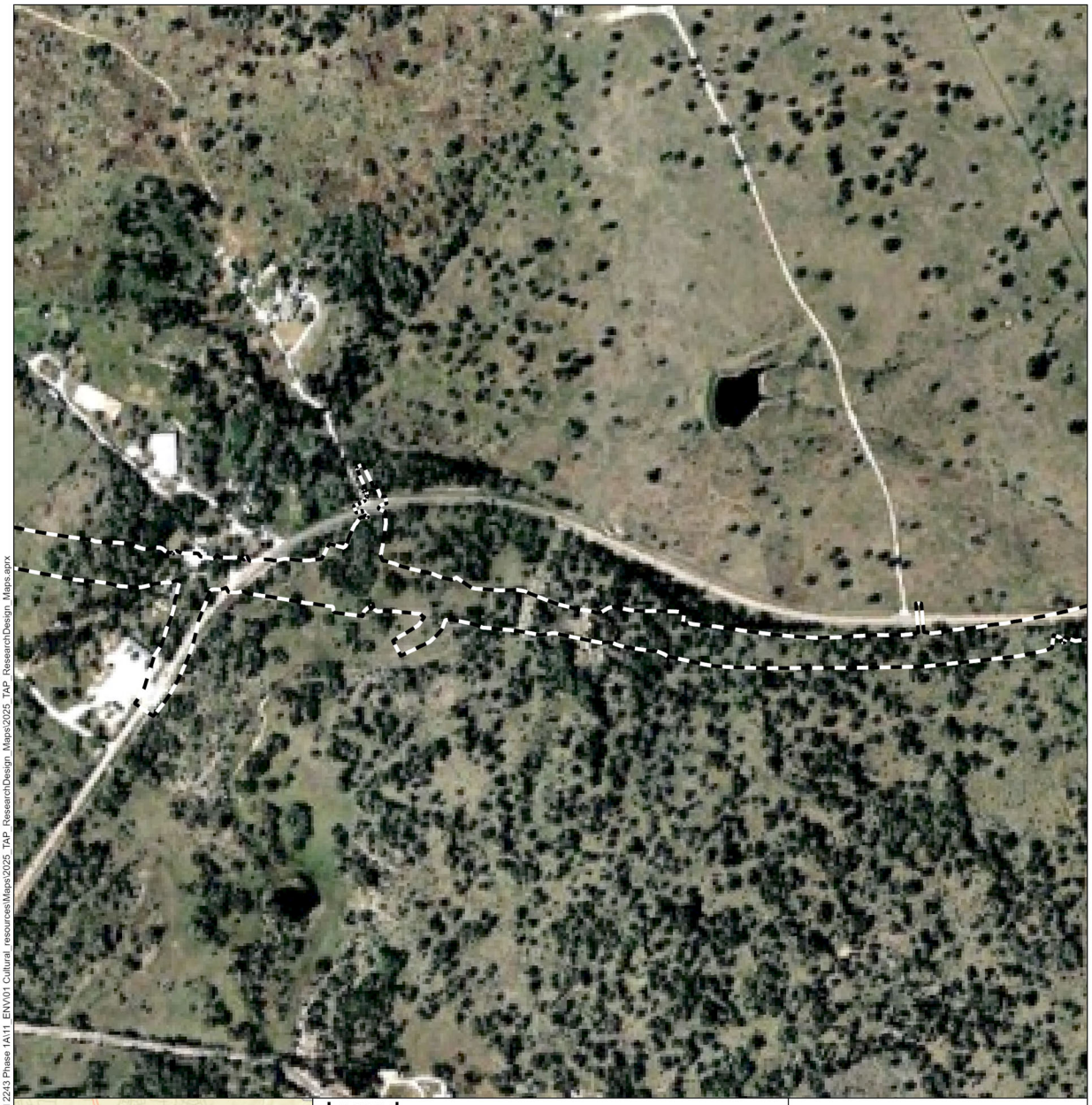
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Texas Department of Transportation
RM 2243 Phase 1A
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 6:
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 7:
2005 Aerial Image Map
Williamson County, TX
Date: September 2025
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File Path: \\bgeincldata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx
GIS Analyst: mburdette
Data Source: Google (2005)


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Texas Department of Transportation
RM 2243 Phase 1A
Figure 7:
2005 Aerial Image Map
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Data Source: Google (2005)


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Texas Department of Transportation
RM 2243 Phase 1A
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Williamson County, TX
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CSJ: 0914-05-222
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Data Source: Google (2005)
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Texas Department of Transportation
RM 2243 Phase 1A
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 7:
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Texas Department of Transportation
RM 2243 Phase 1A
Figure 8: 1962 USGS Leander TX 7.5 Minute Topographic Quadrangles
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: USGS (1962)
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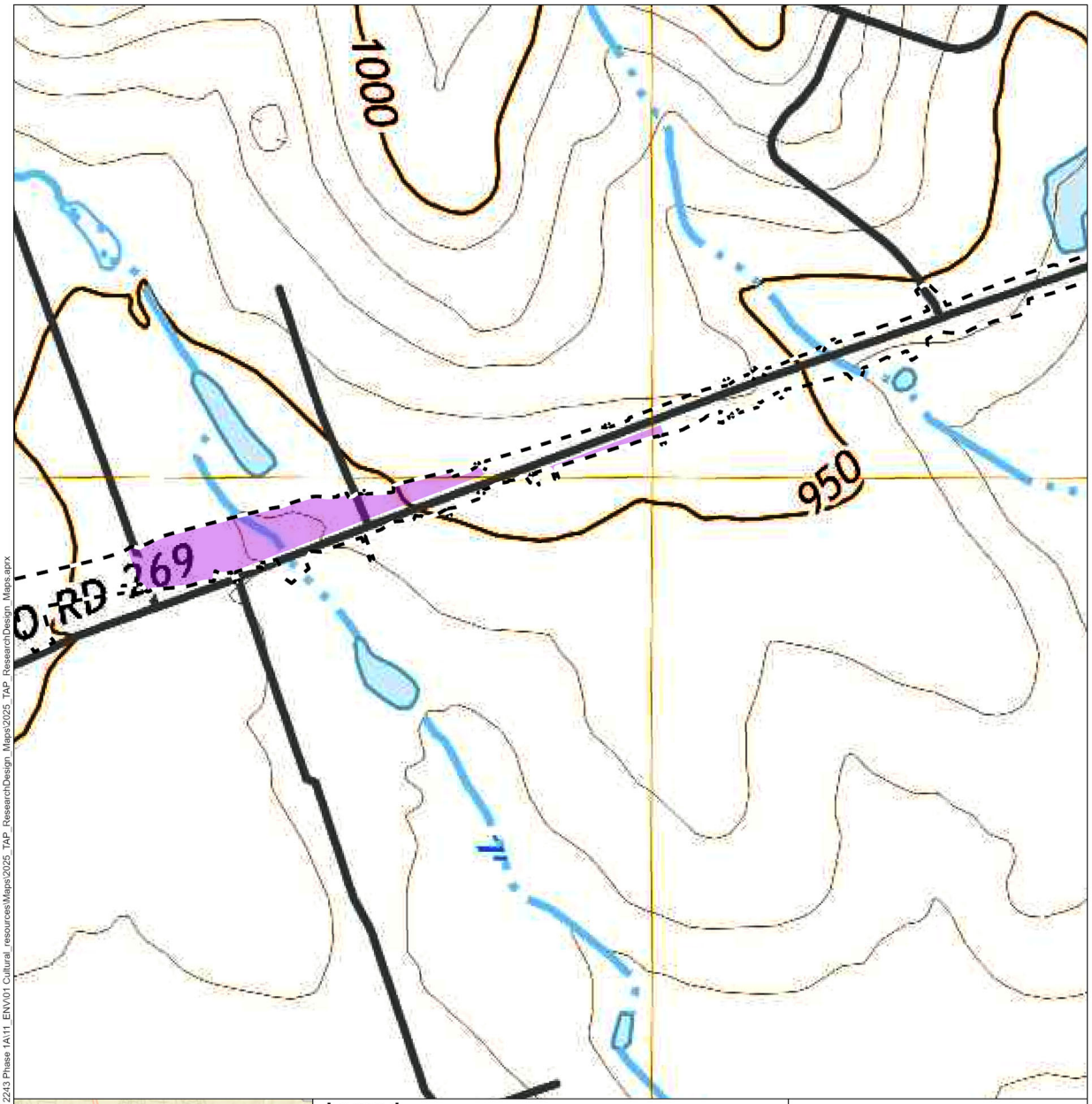
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Texas Department of Transportation
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Figure 8: 1962 USGS Leander TX 7.5 Minute Topographic Quadrangles
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: USGS (1962)
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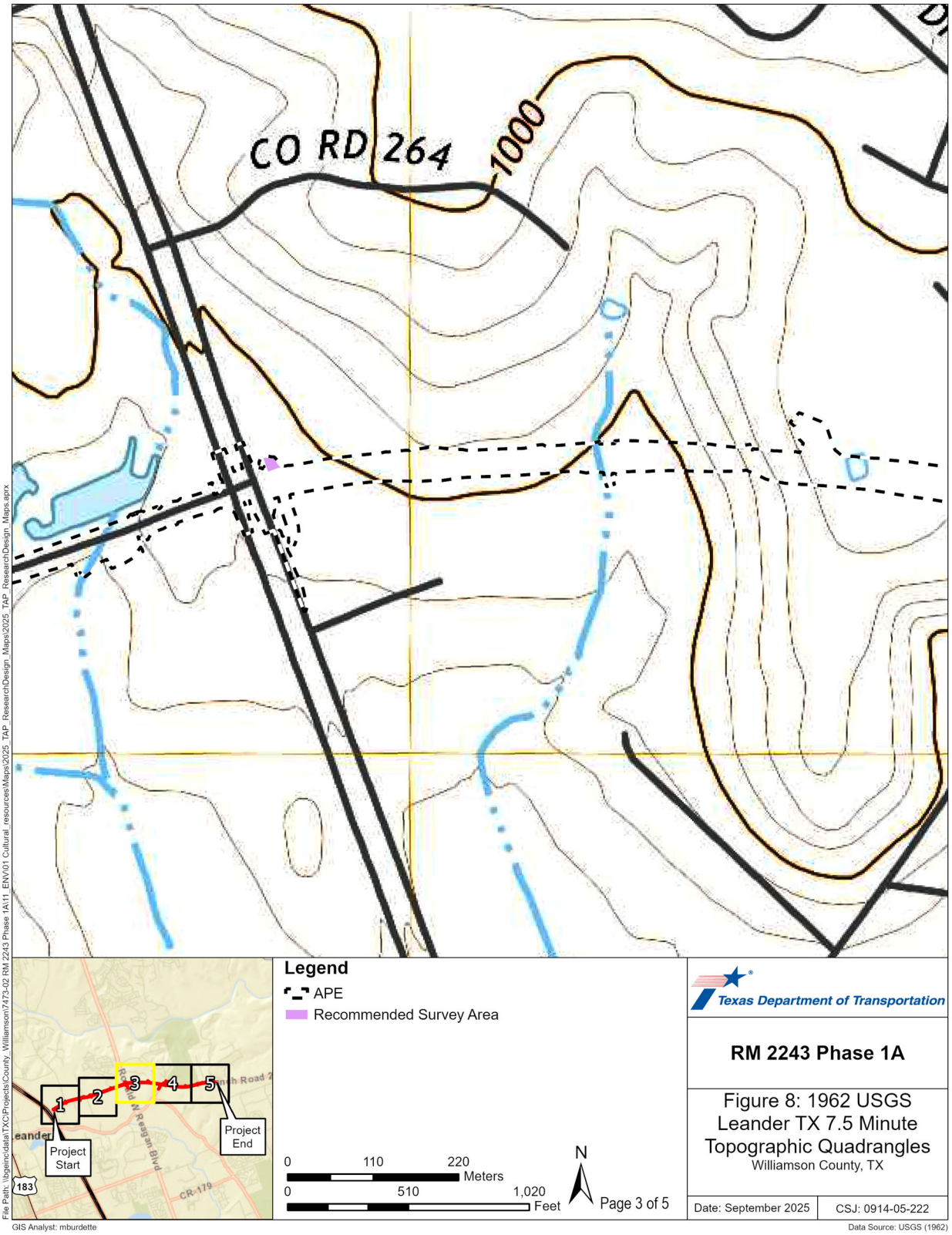
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Page 3 of 5
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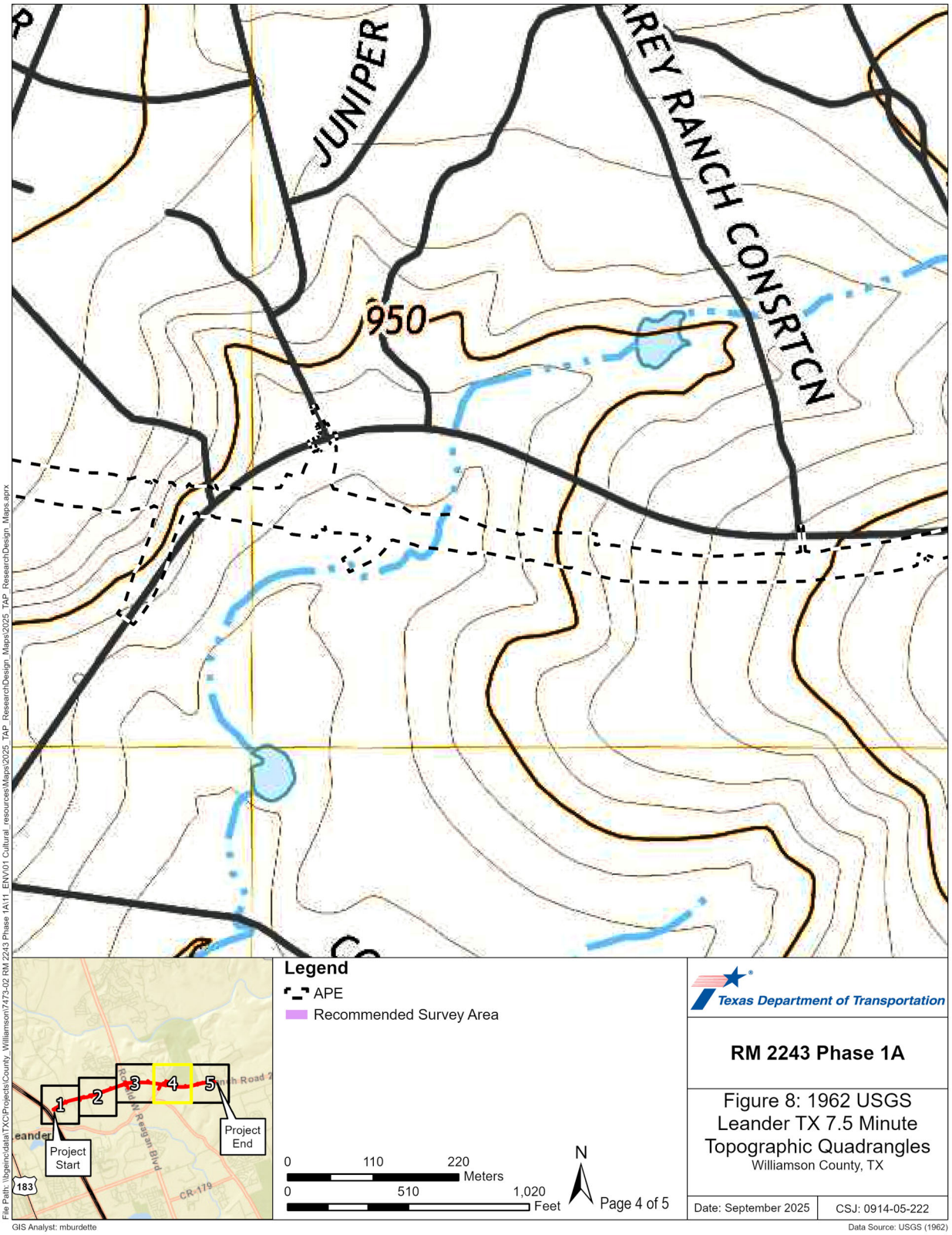
Texas Department of Transportation
RM 2243 Phase 1A
Figure 8: 1962 USGS Leander TX 7.5 Minute Topographic Quadrangles
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
Data Source: USGS (1962)
GIS Analyst: mburdette
File Path: \\bgeincldata\TXC\Projects\County_Williamson\7473-02 RM 2243 Phase 1A\11_ENV\01 Cultural_resources\Maps\2025_TAP_ResearchDesign_Maps\2025_TAP_ResearchDesign_Maps.aprx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Texas Department of Transportation
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Date: September 2025
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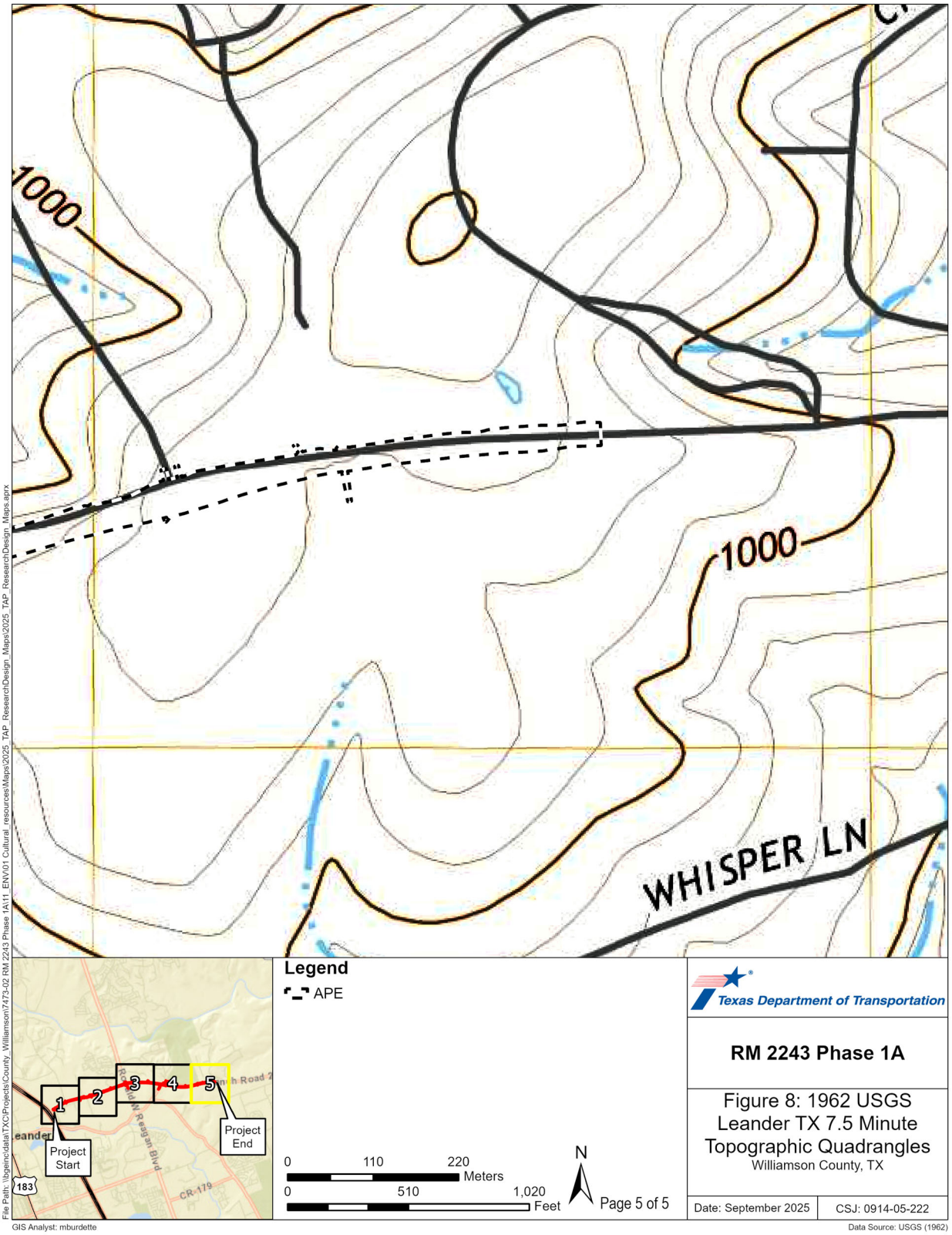
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Figure 8: 1962 USGS Leander TX 7.5 Minute Topographic Quadrangles
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GIS Analyst: mburdette
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Figure 9:
Potential Archeological Liability (PALM) Map
Williamson County, TX
Date: September 2025
CSJ: 0914-05-222
GIS Analyst: mburdette
Data Source: TxDOT (2025), Nearmap (2025)
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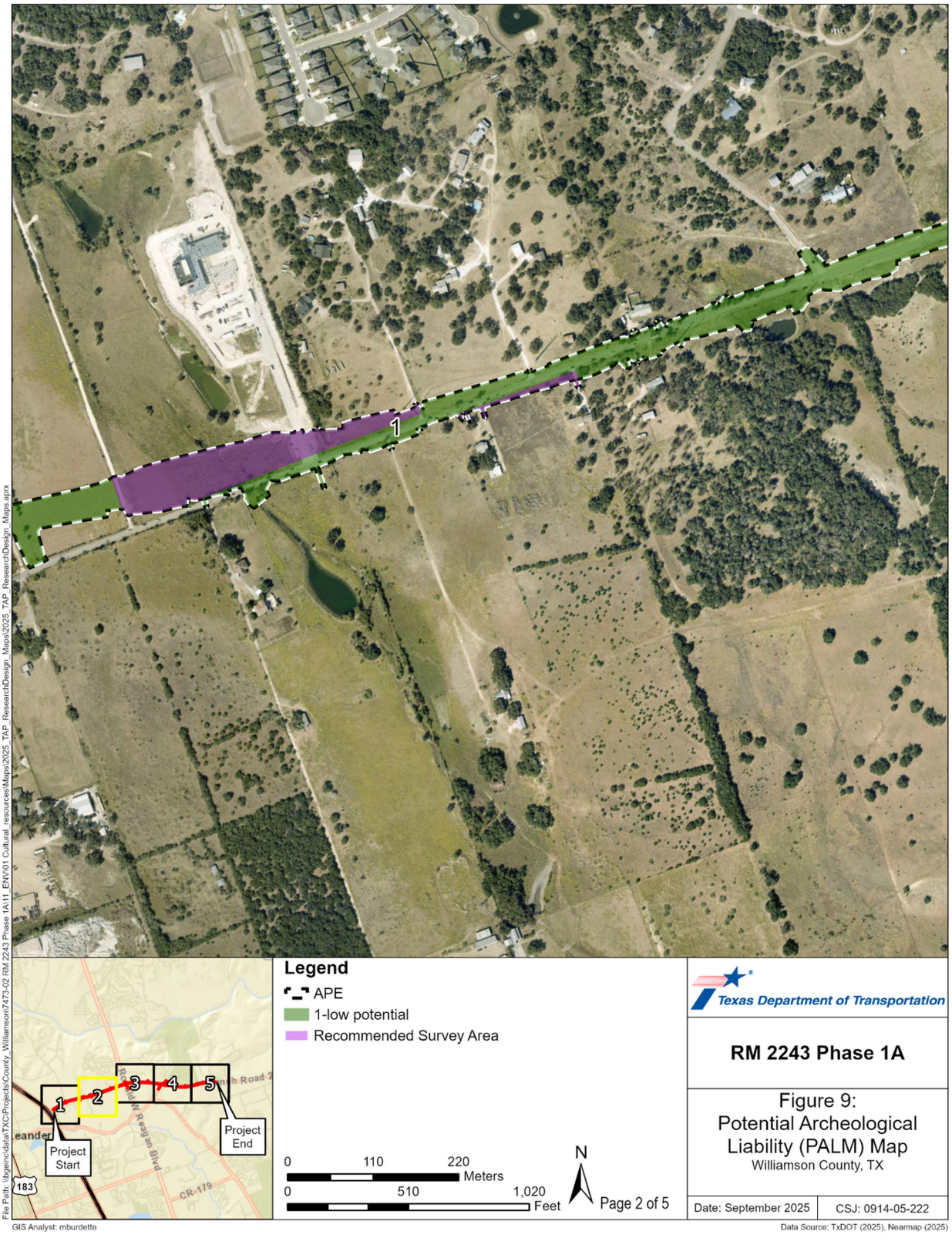
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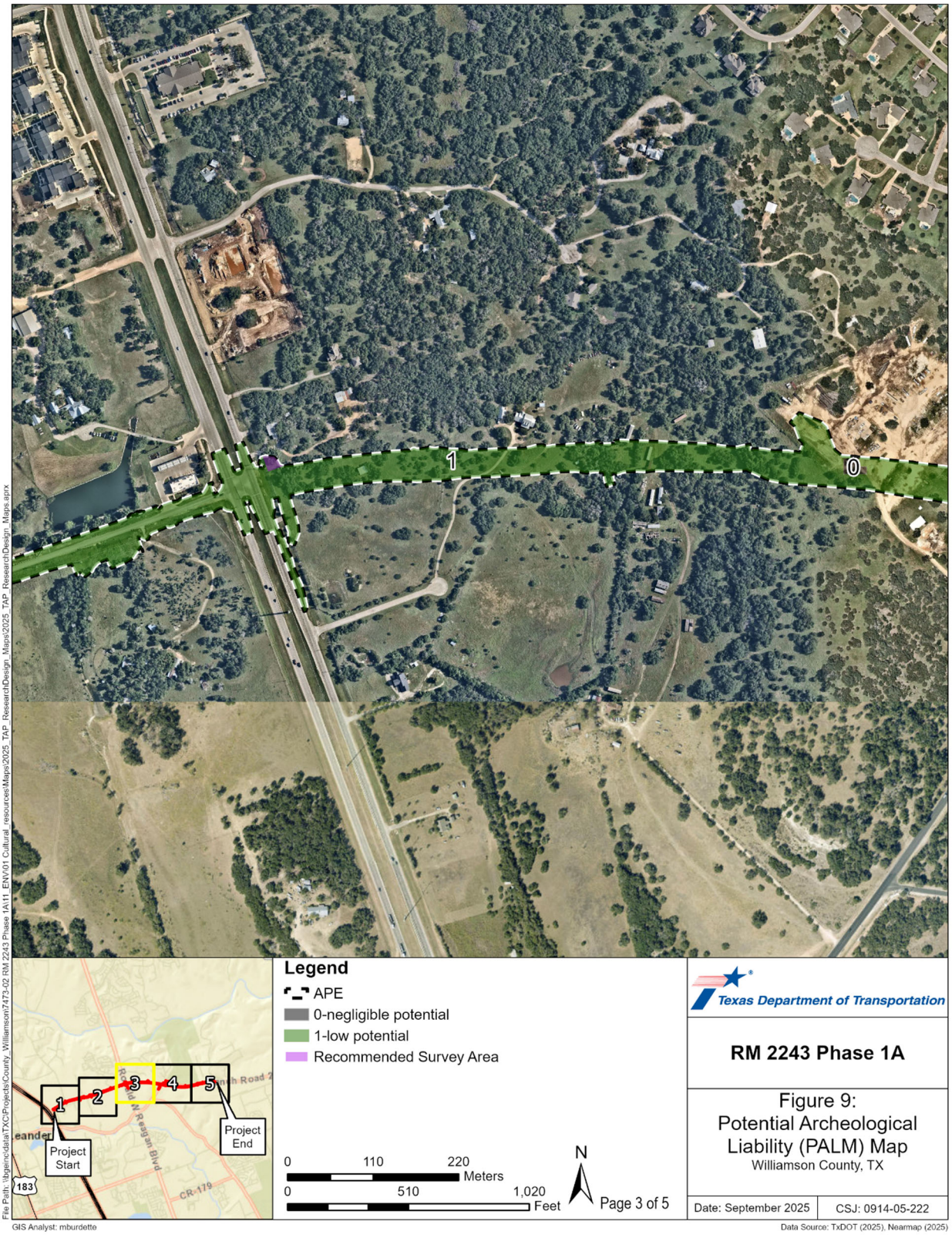
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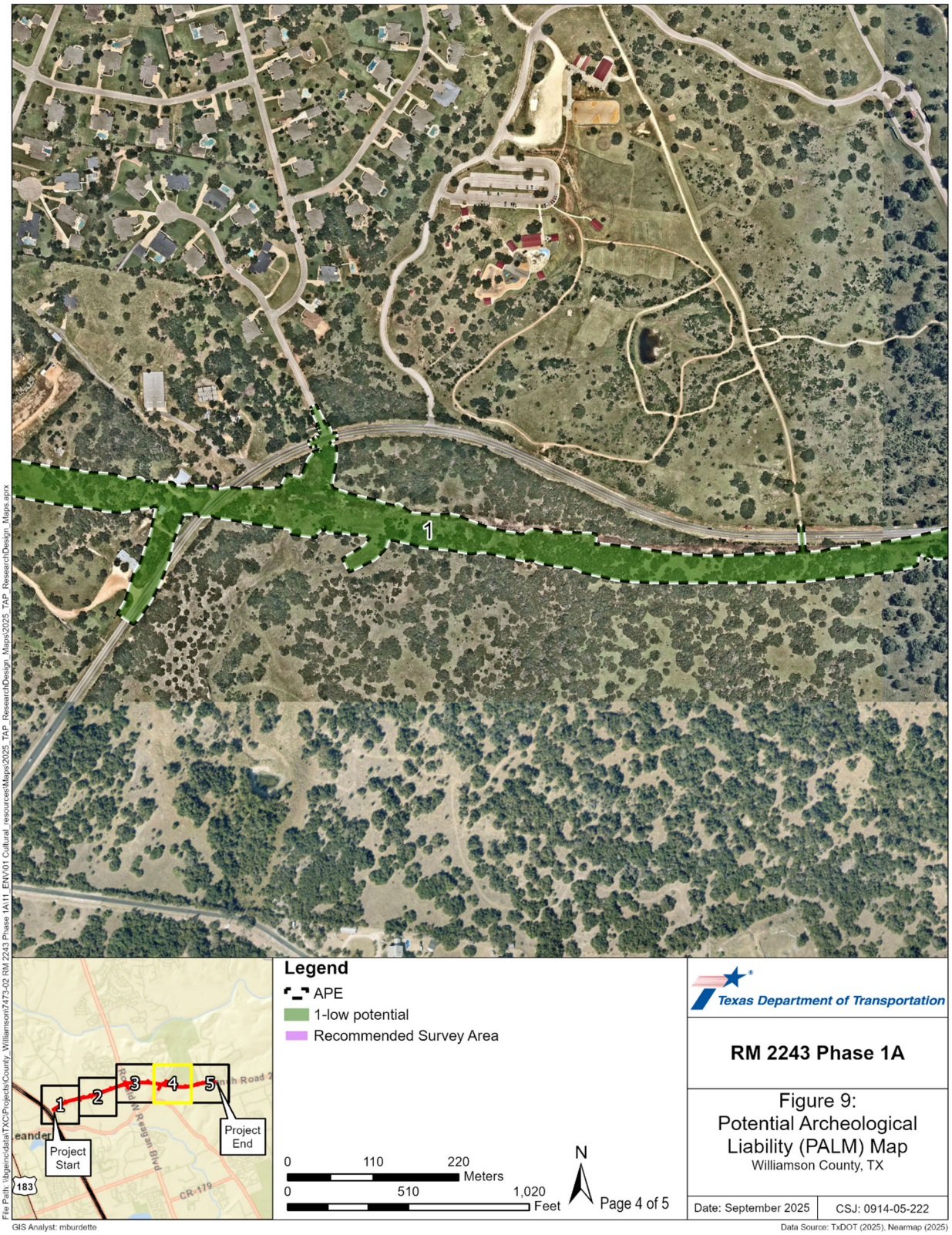
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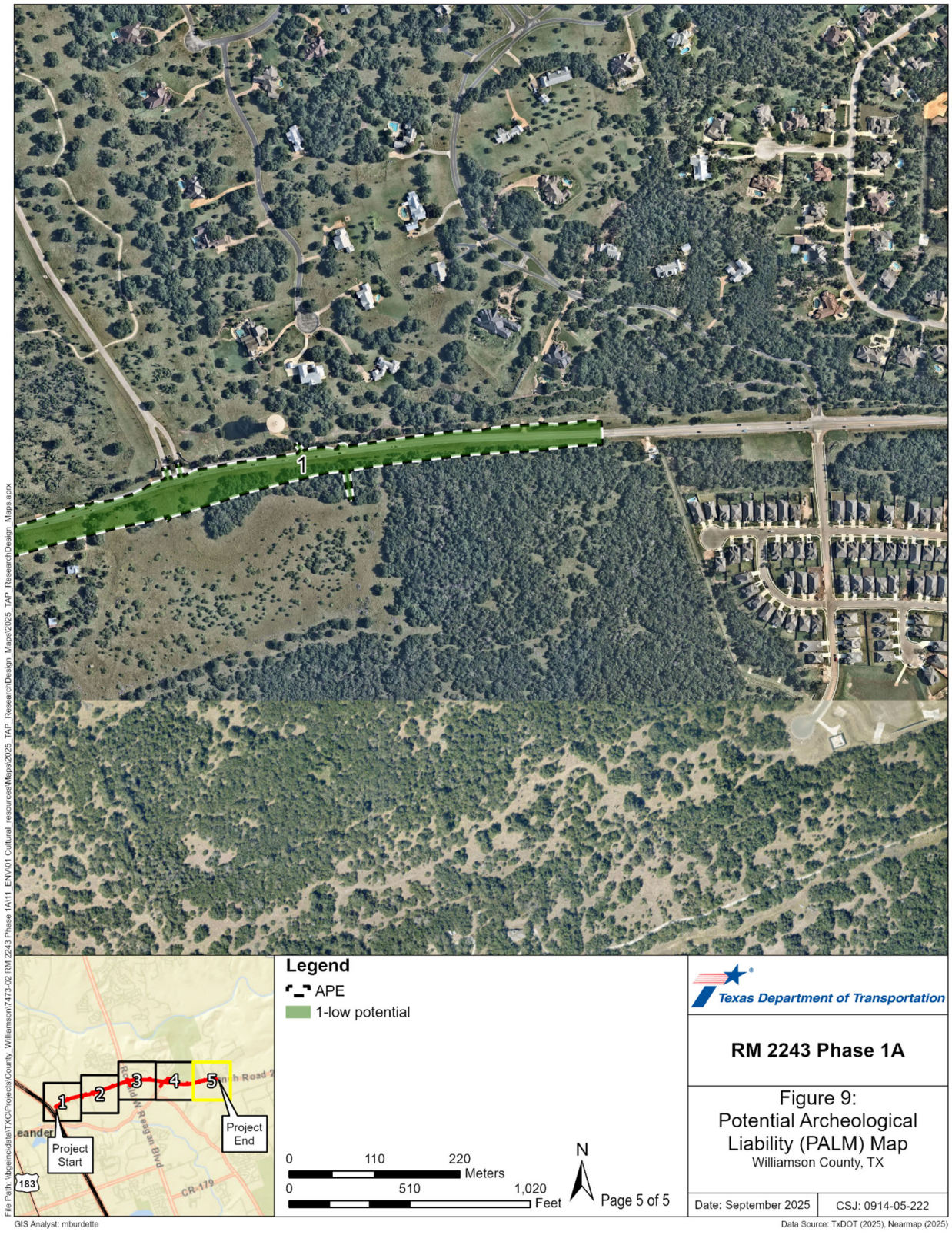
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Previous Archeological Survey Report
AmaTerra Environmental, Inc. (Thomas, 2022)

Archeological Survey Report

Project Name: RM 2243

From US 183A **To** Southwest Bypass

District(s): Austin

County(s): Williamson County

CSJ Number(s): 2103-01-038

Prinicipal Investigator and Firm/Organization: Sunshine Thomas, AmaTerra Environmental, Inc.

Antiquities Permit No. 30313

Report Completion Date: April 25, 2022

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated 12-09-19, and executed by FHWA and TxDOT.

Abstract

At the request of BGE, Inc. (BGE) and on behalf of Williamson County and the Texas Department of Transportation (TxDOT), AmaTerra Environmental, Inc. (AmaTerra) conducted an archeological survey for the proposed widening and drainage improvements of RM 2243 between US 183A and Southwest Bypass in Williamson County, Texas (CSJ: 2103-01-038). The APE encompasses a total of 510.7 acres, of which 408.4 acres is proposed new ROW. Approximately 306.2 acres of proposed ROW and easements had Right-of-Entry (ROE), and ROE was denied for 204.5 acres at the time of survey. Approximately 6 acres of the APE was not recommended for survey. The survey evaluated approximately 306.2 acres; 60.7% of the APE recommended for survey and 60% of the total APE.

The survey was completed in compliance with Section 106 of the National Historic Preservation Act (Section 106) and the Antiquities Code of Texas (ACT) under Permit No. 30313. Work was conducted on November 15–19, 22–23, 2021, and consisted of a 100% intensive pedestrian survey and shovel testing of the areas recommended for survey where ROE was granted. In total, 275 shovel tests were placed in the APE; 14 of which were positive for cultural materials. Ten archeological sites have been previously recorded in the APE, four of which (41WM549, 41WM556, 41WM581, and 41WM593) were not revisited due to denied access and will need to be revisited when ROE is granted. Six previously recorded sites (41WM1005, 41WM1100, 41WM1198, 41WM1317, 41WM1333, and 41WM1342) were revisited during the survey. No new sites were identified during survey.

Site 41WM1100 is a subsurface lithic artifact scatter; as a result of the current survey, the boundaries are extended south into the APE. Site 41WM1342 is an early to mid-twentieth century farmstead. Surveyors recorded a historical debris scatter containing a cistern, a corral, and a fence within the APE; the boundaries were extended to encompass the complete fence. Site 41WM1005 was previously recorded as a light historical scatter; it has been extensively disturbed by construction of a gas station, and none of its cultural material was observed. Site 41WM1198 was previously recorded as a light lithic scatter. This survey was granted partial ROE; most of the site is located north of RM 2243, outside of the APE. None of its cultural constituents were observed during the current survey. Site 41WM1317 was previously recorded as a moderately dense lithic scatter; little of this site is within the APE and none of its cultural constituents were observed. Site 41WM1333 was previously recorded as a light lithic scatter; it has been extensively disturbed by construction of a driveway, and none of its cultural constituents were observed. None of the revisited sites meet the criteria for eligibility in the National Register of Historic Places (NRHP) or as a State Antiquities Landmark (SAL).

Further work is recommended within the APE to complete Section 106 and ACT requirements, including survey and shovel testing in the areas where ROE was denied at the time of the survey. No artifacts were collected as part of this project. All field notes and documentation will be permanently curated at the Center for Archaeological Studies (CAS) in San Marcos, Texas.

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Management Summary and Introduction

- **Management Summary**

  This project is subject to the Antiquities Code of Texas (ACT) because the proposed construction will include ground disturbance on lands that the Texas Department of Transportation (TxDOT) and/or Williamson County currently owns or will own at that time. The Federal Highway Administration (FHWA) is partially funding the project though TxDOT. This funding triggers federal cultural resource regulation outlined in Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106).

  Sunshine Thomas served as the Principal Investigator; Andrew Milam and Matthew Carter were the project archeologists. An intensive pedestrian survey and shovel testing was performed November 15–19, 22-23, 2021, in the 306.2 acres of the APE where ROE was not denied. The field effort involved a total of 169 person-hours.

- **Introduction**

  At the request of BGE and on behalf of Williamson County and the TxDOT, AmaTerra has prepared this report of the results of an archeological survey of the Area of Potential Effects (APE) (Attachment 1) for the proposed realignment and widening of the existing undivided Hero Way and Ranch to Market (RM) 2243 between United States (US) 183A and Southwest Bypass in Williamson County, Texas (Attachment 2). The project will extend for 12.64 kilometers (7.87 miles) from United States (US) 183A to Southwest Bypass and will be entirely within the existing and proposed right-of-way (ROW). The current ROW is typically 24.2 meters (80 feet) wide. The proposed project will extend the current ROW to a typical width of 117.1 meters (385 feet) and a maximum width of 295.1 meters (970 feet). The current roadway is two lanes with two-foot shoulders and open ditches. Project plans include reconstruction of the existing roadway into a controlled access roadway with three 3.7-meter (12-foot) primary travel lanes in each direction, three 3.7-meter (12-foot) frontage road lanes in each direction (Attachment 3). Associated grading, erosion control, and landscaping activities are also planned.

Project Information

- **This survey is:** ☒ the initial survey for this project.

  ☐ a continuation of previous survey(s) due to:

  ☐ access issues and/or

  ☐ design changes.

  Identify previous investigation(s):

- **Report Completion Date:** 4/25/2022

- **Date(s) of Survey:** 11/15/2021 to 11/19/2021, 11/22/2021 to 11/23/2021

- **Archeological Survey Type:** ☐ Reconnaissance ☒ Intensive

- **Report Version:** ☐ Draft ☒ Final

- **Report Author(s) and Affiliation:** Andrew Milam and Sunshine Thomas, AmaTerra Environmental, Inc.

- **Estimated Percentage of Time that the Principal Investigator was in the Field:** 57%

Area of Potential Effects and Survey Area

- **Area of Potential Effects (APE)**

  The APE is defined to encompass the limits of the existing right of way; proposed, new project right of way; permanent and temporary easements; and any project-specific locations and utility relocations designated by TxDOT. Note: the APE encompasses the entirety of the APE, regardless of the extent of prior archeological investigations, the particular locations subject to field investigations, or the portion of a project added through a design change. If impacts are not known, worst-case impacts are assumed in defining the APE.

  The APE encompasses 510.7 acres of which 102.3 acres are in the existing ROW and 408.4 acres are in the proposed new ROW. The maximum depth of impacts is estimated to be 22.9 meters (75 feet), with the typical dept of impact being 1.5 meters (5 feet) for road construction. See Attachment 1 for a map of the APE, which is based on the project information provided as Attachment 2.

- **No Survey Area**

  Portions of the APE previously subject to an intensive terrestrial survey that meets the current standards for Texas as outlined by the CTA and adopted by the THC were not recommended for survey. This includes six acres of the total 510.7-acre APE. A portion of the APE previously surveyed with Atlas Number 8500080426 has been excluded from the recommended survey area because the intensive survey meets the current standards for Texas (Attachment 4). This includes the part of site 41WM549 determined by SHPO as Ineligible within ROW for listing in the NRHP.

- **Access Denied Area:**

  ROE was denied for 204.5 acres (40%) of the APE (Attachment 12).

- **Survey Area:**

  AmaTerra had access to the entire existing ROW (acres) and approximately 193.4 acres of the APE where ROE was granted (Attachment 12). Approximately, 60% of the APE was accessible at the time of survey.

- **APE Ownership:**

  Williamson County and TxDOT own the existing ROW. The proposed ROW resides on parcels owned by the City of Georgetown and several private landowners.

Project Setting

- **Natural Setting**
  - Topography:

    The APE is in the Balcones Canyonlands level IV ecoregion established by the Environmental Protection Agency (Griffith et al. 2007). This area forms the southern border of the Edwards Plateau, rising over 1,000 feet in elevation above the coastal plain to the southeast. Underlain by limestone formations, the karstic region is dissected by waterways, and the resulting canyons, sinkholes, and caverns are common. There are five intermittent streams with six crossings in the APE. At RM 2243 there are five crossings of tributaries of Brushy Creek. The easternmost crossing is of a tributary of the San Gabriel River. The nearest perennial stream is Brushy Creek, approximately 0.75 kilometers (km) to the south. The San Gabriel River is approximately 1.4 km to the north.

  - Geology:

    According to the USGS (2021), the APE is primarily on the Edwards Limestone unit (Ked) (**Attachment 5**). Toward its western boundary, the APE resides on the Keys Valley Marl (Kkv) and Comanche Peak Limestone (Kc), consisting of Cretaceous-age limestone deposits. The nearby San Gabriel River has incised into the Fredericksburg Group of the Cretaceous-age Comanchean series just north of the APE.

  - Soils:

    Ninety-six percent of soils within the APE (**Attachment 6; Table 3**), as identified by the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS 2021), are shallow, rocky, and clayey soils with Cretaceous-aged bedrock observed close to (or at) the surface. These soils are primarily derived from *in situ* residuum weathered from limestone and marl that are heavily eroded and well drained. The potential for shallow cultural deposits exists throughout the APE. This suggests any undocumented sites within the APE would be present at or near the surface.

  - Hybrid Potential Archeological Liability Map (HPALM):

    A HPALM of the area (**Attachment 7**) shows the upland areas have low shallow potential and low deep potential for buried archeological materials. The areas near stream crossings have moderate shallow potential and low deep potential for buried archeological materials. The southwestern terminus of the APE, which is just north of Brushy Creek, has a moderate shallow potential and low deep potential for buried cultural deposits.

  - Historic Land Use:

    The APE and surrounding area remained largely undeveloped into the mid-twentieth century with most land use related to agriculture. The 1893 topographic map (**Attachment 8**) does not depict any settlement concentrations near the APE, and the 1954 topographic map shows no additional development (**Attachment 9**). Aerial photographs from 1953 confirm that the western quarter of

the APE is tilled farmland, and the remainder of the APE is generally open or lightly wooded grazing land (Attachment 10).

- Land Use:

  A few scattered residences and commercial properties are interspersed among larger tracts of agricultural land, particularly in the western portion of the APE. The remainder of the APE is generally open or lightly wooded grazing land with new housing developments being constructed just north of the APE.

- Vegetation:

  The APE is in the Balcones Canyonlands level IV ecoregion established by the Environmental Protection Agency (Griffith et al. 2007). This ecoregion is variable and includes forests that host drought tolerant species, protected areas home to plants rare for the region, and oak savannas between drainages. Managed pastureland is common and managed for both native and domestic species.

- Estimated Ground Surface Visibility:

  Surface visibility throughout the APE is 0–10% with areas of surface exposed bedrock approaching 100% visibility.

- **Regional Cultural History:**

The proposed APE is located within the Central Texas archeological region (Perttula 2004). The cultural chronology is typically divided into four major periods: Paleoindian (12,000–8500 years before present [BP]), Archaic (8500–1250 BP), Late Prehistoric (c. 1250–250 BP), and Historic (250 BP–present) (Perttula 2004). The precontact periods are principally defined by the presence of diagnostic projectile points and other technologies but are intended to delineate change in socio-cultural patterns. However, cultural change proceeded at somewhat different rates across Texas. In some regions, hunting and gathering cultures persisted throughout prehistory; in others, cultures with farming and settled village life dominated. Precontact cultures in Central Texas appeared to maintain a hunter-gatherer lifestyle throughout the Archaic and into the Late Prehistoric Period with moderate changes in technology.

- Paleoindian Period (ca. 15,000–8500 BP)

  The arrival of humans in the New World occurred between 16,000 and 14,500 BP (Gilbert et al. 2008, Pitblado 2011), and until recently, it was generally thought that the Paleoindian Period in Texas did not begin until around 12,000 BP (Perttula 2004). However, new evidence from the Debra L. Friedkin and Gault sites in Central Texas have begun to push the date of earliest occupation back to 15,000 BP or more (Swaminathan 2014; Williams et al. 2018). As the Pleistocene ended, diagnostic Paleoindian materials in the form of Clovis, Folsom, and Plainview projectile points began to enter the archeological record. These points were lanceolate-shaped and fluted for hafting to wooden spears. Using the launching momentum from atlatls (spear-throwers), large game such as mammoth, mastodons, bison, camel, and horse were hunted (Black 1989). In addition to megafauna, Paleoindian groups also subsisted on antelope, turtle,

frogs, rabbit, fish, other small animals, and some flora (Bousman et al. 2004). Stylistic changes in projectile point technology occurred during this later portion of the period, eventually shifting to Dalton, Scottsbluff, and Golondrina traditions. While widespread in geographic range, these types occurred in high densities in the High Plains and Central Texas (Meltzer and Bever 1995). Environmental studies suggest that Late Pleistocene climates were wetter and cooler (Mauldin and Nickels 2001), gradually shifting to drier and warmer conditions during the Early Holocene (Bousman 1998). As megafauna gradually died off during the shift to warmer climates, subsistence patterns relied more upon smaller game and plant foraging.

- The Archaic Period (ca. 8500–1250 BP)

  The Archaic period, broadly divided into the Early, Middle, and Late Archaic sub-periods, signifies a more intensive exploitation of local floral and faunal resources with diversification of lithic technologies (Collins 2004). The archeological record begins to indicate more widespread use of burned rock middens, a wider variety of site functions, and more localized geographic distributions of these materials.

  Hester places the Early Archaic between 7950 and 4450 BP based on Early Corner Notched and Early Basal Notched projectile points (1995:436–438). Collins' dating of the Early Archaic period to 8800–6000 BP is founded on unstemmed point types (1995:383). Around 8000 BP, styles transitioned to stemmed varieties such as the Martindale and Uvalde (Black 1989), but unstemmed Early Triangular points were also in use as well (Turner and Hester 1999). With the extinction of megafauna, changing subsistence patterns show an increased reliance on deer, fish, and plants. In the archeological record, this trend equates to greater densities of ground stone artifacts, burned rock midden features, and task specific tools such as Clear Fork gouges and Guadalupe and Nueces bifaces (Turner et al. 2011). A great deal of Guadalupe Bifaces was recovered near river drainage systems like the San Antonio River, flowing toward the Gulf Coast off the Edwards Plateau, and are thought to function as primarily woodworking tools in a hafted capacity (Black and McGraw 1985). Most Early Archaic open-campsite concentrations were distributed along the eastern and southern margins of the Edwards Plateau in areas with reliable water sources. Population densities were relatively low and consisted of small bands with a high degree of mobility (Story 1985:39). Loeve-Fox, Jetta Court, and Sleeper sites are representative sites of the Early Archaic (Collins 1995).

  Middle Archaic materials date from about 6000–4000 BP, with increased occurrence of multiuse bifacial knives and burned rock middens (Collins 1995). Diagnostic points from this period include Bell, Andice, Taylor, Nolan, and Travis. The Tortugas point also appears in Middle Archaic contexts and possibly earlier (Turner et al. 2011). According to Collins (1995, 2004), large-game hunting of bison still occurred in the beginning of the Middle Archaic, and the climate became much drier toward the end of the Middle Archaic.

  This climatic change necessitated a heavier reliance on sotol and acorn harvesting (Collins 2004; Weir 1976). An expansion of oak woodlands on the Edwards Plateau and Balcones Escarpment may have been conducive to the intensified exploitation of certain plants (Weir 1976). This period also experienced population increases, and it is possible that previously scattered bands of hunter-gatherers began to combine harvesting and processing efforts (Weir 1976). Panthers

Spring Site, Landslide, Wounded Eye, and Gibson sites demonstrate cultural trends of the Middle Archaic (Collins 1995).

The last sub-period of the Archaic falls between 4000 and 800 BP (Collins 1995). Dart points of the Late Archaic are somewhat smaller, triangular points with corner notches such as the Ensor and Ellis (Turner et al. 2011). Other Late Archaic points include Bulverde, Pedernales, Marshall, and Marcos (Collins 1995). It is not entirely clear whether this period experienced a rise (Collins 1995; Prewitt 1981) or decline (Black 1989) in population numbers, but large cemeteries, grave goods, and exotic trade items are known to occur at this time at sites such as Loma Sandia, Rudy Haiduk, Silo, Ernest Witte, and Morhiss Mound in Central and South Texas. Evidence from the Thunder Valley sinkhole cemetery has suggested that territoriality may have been a social feature of the Late Archaic, possibly as a result of population increase (Bement 1991). The frequency of burned rock middens and open campsites appears to increase. Characteristic Late Archaic sites include the Anthon and Loeve Fox sites (Collins 1995).

- Late Prehistoric Period (ca. 1250 BP–250 BP)

  There exists some degree of overlap between diagnostic tools that are considered Late Archaic and Late Prehistoric, but the commonly held date for the beginning of this interval is 1250 BP. A hallmark transition for this period is the introduction of the bow and arrow, which enabled prehistoric hunters to harvest prey from greater distances with a lesser need for brushless, wide-open spaces required for atlatl maneuverability. The use of arrows is indicated by smaller-sized projectile points such as Perdiz and Scallorn. Another turning point in the Late Prehistoric period is the first substantial presence of pottery in the northern South Texas Plain and Central Texas (Black 1989; Collins 2004; Story 1985). Incidences of burned rock middens and ground stone artifacts increased as Late Prehistoric populations relied more heavily on plant food consumption. Many Late Prehistoric sites rest along creeks during this period as opposed to dispersing along other landforms. Researchers generally agree that during the beginning of this period there was a drop in population (Black 1989). Although burned rock middens associated with Scallorn and Edwards points have been recorded (Goode 1991; Houk and Lohse 1993), most researchers argue that such cases are rare. However, the “heyday of middenery” eventually peaked during the Late Prehistoric (Black et al. 1997). Inter-group conflicts between various bands of hunter-gatherers may have also been an issue, based on evidence of arrow inflicted deaths seen in human remains from various Late Prehistoric cemeteries. Sites with distinct Late Prehistoric components include the Kyle, Smith, and Currie sites (Collins 1995). Interval divisions for this period are the Austin and Toyah phases. Johnson (1994) believes these phases may possibly be two distinct cultures (see Black et al. 1997).

  The Austin phase of the Late Prehistoric eventually demonstrated intensive use of burned rock middens (Black et al. 1997) and includes the appearance of diagnostic point types Scallorn and Edwards (Collins 1995; Turner et al. 2011). During this phase, the use of burned rock middens was still quite widespread and may have even been on the rise (Mauldin et al. 2003). The Toyah phase of the Late Prehistoric suggests interaction between Central Texas and ceramic-producing traditions in East and North Texas with the presence of bone-tempered, plainware ceramics (Perttula et al. 1995). Ceramics were in common usage in East Texas by 2450 BP, but the first

Central Texas plainwares did not appear until ca. 650/700 BP. Other technological traits of this phase include the diagnostic Perdiz point, alternately beveled bifaces, and specialized processing kits as an adaption to flourishing bison populations (Ricklis 1992).

- Historic Period (ca. 500 BP–Present)

  The earliest known historical occupants of the county, the Tonkawas, were a flint-working, hunting people who followed the buffalo on foot and periodically set fire to the prairie to aid them in their hunts. While Álvar Núñez Cabeza de Vaca may have traveled through the area in the sixteenth century, the area was probably first explored by Europeans in the late seventeenth century, when Capt. Alonso De León sought a route between San Antonio and the Spanish missions in East Texas that would serve as a drier alternative to the more southerly Camino Real. In the mid-eighteenth century the San Xavier missions were founded and occupied a series of sites along the San Gabriel River. Anglo settlement began during the Texas Revolution and the early days of the Republic of Texas, when the area was part of Milam County. In 1835, a military post was built near the headwaters of Brushy Creek in what would become southwestern Williamson County but was abandoned in 1836 when its garrison was withdrawn to deal with the Mexican invasion. In 1838 the first civilian settlement was established at Kenney's Fort on Brushy Creek near the site of the present-day crossing of the Missouri-Kansas-Texas Railroad. Several other sites on Brushy Creek were settled soon after, but Indian raids kept white settlement in check. In 1842, many of the early farms were abandoned when Governor Sam Houston advised settlers to pull back from the frontier. The Indian threat eased after 1846, and part of the influx of settlers who came to Texas after its annexation traveled to the frontier along Brushy Creek and the San Gabriel River (Odintz 2021a).

  By 1848, there were at least 250 settlers in what was then western Milam County when the Texas legislature established Williamson County. According to the census of 1850 Williamson County had a population of 1,379 white people and 155 enslaved people, living in agricultural communities on Brushy Creek and the San Gabriel. As was common in other frontier counties, most of the improved acreage was used to grow corn. Three families enslaved fifteen or more people in 1850, but family farms and subsistence agriculture remained the norm prior to the Civil War. On the eve of the Civil War, Williamson County had become a populous, agriculturally diverse county. Agricultural pursuits were quite varied and reflected the county's geographical diversity. Farmers were using the rich blackland soils in the eastern half of the county to grow wheat and corn. Cotton was introduced in the 1850s, but it was not an important cash crop for most farmers. The early settlers had found large herds of wild cattle in the 1840s, and cattle ranching, both for home consumption and for market, was widespread throughout the county by 1860. Similarly, the number of sheep grew from 2,937 producing 3,499 pounds of wool in 1850 to 16,952 sheep and 32,994 pounds of wool in 1860 (Odintz 2021a).

  Though the Civil War had caused little material damage in the area, the county was a much poorer place in 1870 than it had been in 1860. The economic recovery in the 1870s was aided by the growth of the cattle and sheep industries and a dramatic expansion of cotton farming. Various feeder routes to the Chisholm Trail passed through Williamson County, and many cattle drives passed through or originated in the county from the 1860s through the early 1880s. With

the coming of the railroads to the county in the 1870s, Taylor, in the eastern part of the county, became an important rail center for the cattle trade. Cattle raising, after declining somewhat in importance in the early twentieth century, was again a major part of the agricultural economy by 1950. Sheep and goat raising declined in the late nineteenth and early twentieth centuries, but the industry revived in the 1930s. Mohair became a significant agricultural product by 1930. Cotton, the second boom industry in Williamson County, which had been insignificant before the war, developed alongside the cattle industry. Farm tenancy rates began to decline during the Great Depression with the shift away from cotton and other staple crops. The depression encouraged diversification among farmers and a shift away from staple crops to livestock. Between 1930 and 1940, the number of acres used for cotton growing fell by almost half. Cropland acreage used for corn production increased over the same period by about one half, and wool and mohair production more than doubled. Farmers increasingly turned to other crops, like sorghum and wheat, and to livestock raising in the later twentieth century. Along with traditional livestock like sheep and cattle, poultry farming played a significant role in the economy by 1950 (Odintz 2021a).

Urbanization and "suburbanization" continued to transform Williamson County during the 1990s and into the early twenty-first century. In the early twenty-first century, high-tech businesses, various manufacturing concerns, and agriculture were important elements of the county's economy, and many residents commuted to Austin to work. In 2002 the county had 2,510 farms and ranches covering 583,099 acres, 52% of which were devoted to crops and 42% to pasture. Corn, cattle, grain, sorghum, cotton, and wheat were the chief agricultural products (Odintz 2021a).

- **Previous Investigations and Known Archeological Sites:**

Background research was completed for a study area that includes the APE and a one-kilometer (0.6-mile) radius beyond the APE boundary. An online records search of the Texas Historical Commission's (THC) Archeological Sites Atlas (THC 2021) and a review of historical maps and aerial photographs was completed. Research focused on the identification of archeological sites, sites listed as State Antiquities Landmarks (SALs), Recorded Texas Historical Landmarks (RTHLs), sites listed in the National Register of Historic Places (NRHP), Official Texas Historical Markers, cemeteries, and previously conducted archeological surveys within the study area (Attachment 11). This records search identified 47 previously recorded archeological sites (Table 4), no SAL, no RTHL, no NRHP properties, one Official Texas Historical Marker, one cemetery, and 37 previously recorded archeological surveys within the study area (Table 5).

Archeological sites recorded within the study area can be typically characterized as precontact lithic scatters or lithic procurement sites without refined temporal assessment. Six sites within this same area have postcontact components that date to the late nineteenth or early twentieth century, typically rural residential sites. Ten of the previously recorded archeological sites are within the APE. Site 41WM549 is a surficial precontact lithic scatter and a twentieth century artifact scatter. Site 41WM556 is a surficial archaic lithic scatter. Sites 41WM581, 41WM593, 41WM1100, 41WM1198,

41WM1317, 41WM1333 are surficial precontact lithic scatters. Site 41WM1005 is a mid-twentieth century historic artifact scatter. Site 41WM1342 is an early to mid-twentieth century farmstead.

Of the ten sites within the APE, four have been determined Ineligible for listing in the NRHP by the State Historic Preservation Officer (SHPO) (41WM1342, 41WM1317, 41WM1198, and 41WM1005). Site 4WM549 was determined Ineligible within the ROW by the SHPO in 2017 as part of a survey for a proposed bypass road (Atlas No. 8500080426). A portion of this previous survey overlaps the current proposed APE at the south end of the project. However, the APE of the proposed project also includes portions of this site that have not been reviewed for eligibility. The remaining five archeological sites (41WM1333, 41WM1100, 41WM593, 41WM581, and 41WM556) are Undetermined for listing in the NRHP.

An Official Texas Historical Marker (Marker No. 9369) within the study area records the location of the 'Webster Massacre' that occurred in 1839 when approximately 30 migrants were killed by Native Americans. This marker is located across Brushy Creek from the Davis Cemetery, also within the study area, where the Webster Massacre dead are buried along with additional interments. The marker and cemetery are not located immediately adjacent to the project and the project is unlikely to affect these resources.

Twelve of the 37 previously recorded archeological surveys identified within the study area occur within the APE including Atlas Numbers 8500004588, 8500011602, 8500015070, 8500015216, 8500016332, 8500061451, 8500063837, 8500076619, 8500080336, 8500080426, 8500080611, and 8500080716. Little of the existing ROW within the APE has been previously surveyed and sections of the proposed new ROW have not been previously surveyed.

One previous archeological survey that occurs within the APE was conducted with methods that meet the current standards for Texas as outlined by the Council of Texas Archeologists (CTA) and adopted by the THC. Atlas Number 8500080426 was an intensive cultural resources survey completed for a proposed Southwest Bypass with fieldwork completed in 2017. This survey overlaps the current APE at the eastern boundary (Attachment 11d). Methods included pedestrian survey with shovel testing systematically excavated within the APE.

- **Evaluation of Project Setting:**

  Previous survey has been conducted in only a few small portions of the existing ROW (Attachment 11). The existing ROW is heavily disturbed by previous construction of Hero Way, Ronald Reagan Blvd, and RM 2243 and has low potential for intact archeological materials. However, sections of proposed new ROW have not been previously surveyed. A comparison of modern and archival aerial imagery and topographic maps depicts little development within the APE other than a few scattered residences and commercial properties interspersed among larger tracts of agricultural land, particularly in the western portion of the APE. The remainder of the APE is generally open or lightly wooded grazing land. Wider area disturbances include new housing developments under construction just north of the APE (Attachment 1b).

  The HPALM depicts most of the APE as having low potential for archeological sites (Abbott and Pletka 2015; Attachment 7). A few small areas of moderate shallow potential/low deep potential are present

in the eastern portion of the APE; these are locations of previously recorded archeological sites within the APE. One small area of moderate potential occurs on the western end of the APE, just north of Brushy Creek; this location has not been previously surveyed but faces profound disturbance due to road construction. Surface lithic scatters and lithic procurement sites are commonly recorded in the project vicinity. These sites are typically located on terraces associated with area drainages and unrecorded sites of this type may be present. Late nineteenth and early twentieth century sites may also be present in the area, particularly within the APE along the existing route of RM 2243. Ten archeological sites overlap with the APE (**Attachment 11**). Due to the potential presence of archeological deposits and features, pedestrian survey augmented with shovel testing is recommended for all undisturbed sections of the APE. No trenching is recommended due to shallow soils within the APE and low potential for buried cultural deposits within undisturbed portions of the APE.

Survey Methods

- **Surveyors:**

  Matthew Carter and Andrew Milam, PA; Sunshine Thomas, PI

- **Description of Methods:**

  The existing ROW was visually inspected during pedestrian survey and photographed. Additionally, 100% intensive pedestrian survey of all parcels with granted ROE was undertaken.

  Shovel testing was conducted in all areas of the APE with ROE that were not significantly disturbed by past land use, installation of utilities, and/or construction of existing roadways. Methods met or exceeded the Council of Texas Archeologists (CTA) minimum standards for linear surveys. Transects were spaced 30 meters apart and shovel tests were placed every 100 meters on the transect. A total of 275 shovel tests were excavated to sterile basal clay subsoil. Sediments were screened in the field through ¼-inch mesh or troweled through if they were compacted or dried clay. Site boundaries were defined by two negative shovel tests in each direction or to the edge of the APE. All tests were marked using a hand-held GPS unit and logged on standardized forms that recorded profile characteristics, depth, and contents. Investigators took photographs of sites, the landscape, and various disturbances within and near the APE. All artifacts from shovel tests were photographed, as were diagnostic and representative non-diagnostic artifacts from the sites. No artifacts were collected during the survey.

  USDA-NRCS (2021) data indicate that approximately 96% of the APE is mapped as either shallow, rocky soils derived from in situ Cretaceous-aged limestone and marl parent material or as rock quarries with no soil present. Moreover, Austin PALM data suggest most of the APE has low geoarcheological potential (TxDOT 2011). As such, no deep prospection survey was conducted, as deeply buried cultural deposits are likely not present beneath the maximum 80-centimeter shovel testing depth and no Holocene-aged soil is mapped below three feet.

- **Subsurface Probes**

  See Attachment 12–Attachment 13 for survey results and Table 7 for detailed subsurface probe results. Table 1 summarizes subsurface probe types and density.

Table 1. Summary of subsurface probes.

Method	Quantity in Existing ROW	Quantity in Proposed New ROW	Quantity in Proposed New Easements	Total Number per Acre Surveyed
Shovel Test Pits	2	273	0	1.1 (1.4 new ROW)
Power Auger Probes	0	0	0	0
Mechanical Trenches/Scrapes	0	0	0	0

- **Other Methods:**

  None.

- **Collection and Curation:** ☐ **NO** ☒ **YES**

  Artifacts were not collected during the survey. However, all photographs and records of sites will be curated at CAS, according to their standards.

- **Comments on Methods:**

  Further survey and shovel testing is recommended in the areas where ROE was denied at the time of survey.

Survey Results

- **Survey Area Description:**

  The APE is upland dissected by ephemeral drainages into Brushy Creek and the San Gabriel River. The nearest perennial water sources are at Brushy Creek, 1.15 kilometers to the south, and at the San Gabriel River, two kilometers to the north. Soils within the APE are clays formed in residuum derived from limestone and marl (United States Department of Agriculture-Natural Resources Conservation Service [USDA-NRCS] 2020; Attachment 6). They are typically well drained, and bedrock is often encountered above one meter in depth. Most landforms in the APE are degradational, with deposition only occurring along the ephemeral drainages.

  Based on observations during surface inspection and shovel testing (Table 7), the upland sediments appear very eroded by wind and sheetwash due to over a century of ranching and agriculture (Attachment 14a–Attachment 14d). There has been very little development within the APE other than a few scattered residences and commercial properties interspersed among larger tracts of agricultural land, particularly in the western portion of the APE. Surveyors observed on property east of Ronald Regan Boulevard and north of Creekview Circle, a surface collection of numerous automobiles, dismantled mobile homes, and other large materials. A few of these items are notably over 50 years in age (Attachment 14h), but the dismantling and salvaging activities at the site appear active and not historical in nature. The remainder of the APE is generally open or lightly wooded grazing land with primary disturbances being new housing developments still under construction just north of the APE.

  Disturbance by previous construction of Hero Way and RM 2243 (Attachment 1b) represents the main artificial impact to archeological materials. Damaging winds and soil erosion represent the main natural impacts to abandoned structures and archeological materials. Naturally occurring surface cherts are common on the landscape, and breakage due to mechanical land clearing and grazing is common.

  Generally, the area was desirable for historic period settlers as farmland and ranchland. For precontact nomadic peoples, the area is better suited to short term encampments rather than longer occupations due to the lack of reliable water. On the uplands, conditions are poor for the preservation and stratification of cultural materials.

- **Potential Buffer Zone Description:**

  The above description of the APE also applies to any potential buffer zone within 50 feet of the APE.

- **Archeological Materials Identified and Archeological Site Description:**

  Four previously recorded sites, 41WM549, 41WM556, 41WM581, and 41WM593, were on parcels with denied ROE during the time of the survey. Three isolated finds (IF) were identified during survey. Six previously recorded sites (41WM1005, 41WM1100, 41WM1198, 41WM1317, 41WM1333, and 41WM1342) were revisited, and no new sites were identified during survey.

- IF01

  IF01 consisted of a surface find of a single deteriorated side-seam steel can, opened with a "church key" style can opener, embossed with "SAE 40, SINCLARE" (**Attachment 14e**) located approximately 0.08 mile east of the intersection of Play Ranch Rd and RM 2243 and 0.1 mile south of RM 2243 (**Attachment 12d**). No other cultural materials were observed at this location during pedestrian survey. Due to shallow soils and IF01 being observed in an ephemeral drainage, no additional shovel tests were performed.

- IF02

  IF02 consisted of a surface find of two grey chert flakes (**Attachment 14f**) located approximately 0.15 mile south of the intersection of RM 2243 and Play Ranch Rd (**Attachment 12d**). Additional shovel tests (n=8) were placed at 10-meter intervals in cardinal directions until two consecutive negative shovel tests were encountered, all additional shovel tests were negative for cultural material. A typical soil profile from shovel testing consisted of (7.5YR 4/6) silty clay to a depth of approximately 40 centimeters below surface (cmbs) containing gravel and CaCO3 underlain by limestone bedrock.

- IF03

  IF03 consisted of a surface find of a single crushed side-seam steel can (**Attachment 14g**) located along RM 2243 approximately 0.15 miles east of its intersection with Garey Park Rd and 20 meters south of RM 2243 (**Attachment 12e**). No other cultural materials were observed during pedestrian survey.

- Site 41WM1005

  Site 41WM1005 is a previously recorded light historical artifact scatter. Previous researchers conducted surface inspection and some shovel testing at the site, identifying it as a general trash scatter (Ralph and Clark 2001). Current surveyors completed survey of the site and adjacent areas within the APE. North of Hero Way, the area has been subject to profound disturbance from construction of a gas station and associated utilities. Shovel tests placed north of this disturbance identified no cultural materials. Shovel testing and pedestrian survey located immediately south of the recorded site location and Hero Way also identified no cultural materials (**Attachment 12c**). The current survey did not locate any evidence of the site; it is likely destroyed. The site does not possess integrity of location, design, materials, or association within the APE.

- Site 41WM1100

  Site 41WM1100 is a previously recorded shallowly buried, lithic scatter (**Attachment 12d and Attachment 13a**). Previous researchers noted its location above an unnamed drainage and that most cultural material are early-state reduction flakes found on the surface (Iruegas 2004). The site was characterized as an undated lithic procurement and reduction site (Stotts et al. 2013).

  Current surveyors defined the site boundaries by shovel testing and the APE boundaries. Shovel testing to the north and south was limited to the bounds of the APE. The eastern and western site boundaries are defined by negative shovel tests. Vegetation consisted of mixed grasses

between patches of dense woodland (**Attachment 14i**). Ground visibility on-site was 0–5% due to vegetation. Recorded soils in the site consist of Eckrant extremely stony clay (0–3% slopes). A typical soil profile from shovel testing consisted of (10YR 3/6) clay or clay loam to a depth of approximately 40 cmbs silty clay containing gravels and CaCO3 underlain by bedrock.

Archeologists excavated 20 shovel tests to delineate the site in cardinal directions as the landform, vegetation, and APE boundaries allowed. Positive shovel tests contained cultural materials consisting of burned rock (n=2), a retouched chert flake (n=1), and lithic debris (n=74) (**Attachment 14j**). Most artifacts were recovered 0–20 centimeters below surface (cmbs), but deposits did extend to 30 cmbs in one shovel test.

The previously boundaries of site 41WM1100, are located on the north side of RM 2243 and extend across the road in a few locations. Based on the similarity of general artifact types recovered during the current survey and the proximity to site 41WM1100, AmaTerra archeologists identified the materials recovered during the current survey as a continuation of site 41WM1100. The new site boundaries extend south into the APE and cultural deposits may be present beyond the southern boundary of the APE (**Attachment 13a**). The expanded site area measures approximately 119,675 square meters.

Within the APE, the site is shallowly buried and has been impacted by erosion. Surveyors noted lithics represented different stages of reduction and included numerous pieces of angular debris. The site possesses only general integrity of location, design, materials, and association.

- Site 41WM1198

  Site 41WM1198 was previously recorded as a light lithic scatter and has been determined Ineligible for listing in the NRHP by the SHPO. Descriptions of the site in 2008 noted naturally occurring chert nodules with a thin surface scatter of lithic reduction debris (Bradle and Bernhardt 2008). Recorders also noted erosion and previous major land clearing that have impacted the site. A site survey in 2013 included shovel testing and also described the site as a surface and shallowly buried site across a landscape where chert was naturally abundant on the surface.

  The current survey was granted partial ROE along the northern boundary along RM 2243. Surveyors conducted pedestrian survey to confirm disturbance due to previous road construction within the APE; no cultural materials were observed (**Attachment 12e– Attachment 12f**). It is unlikely this site extends to the south side of RM 2243 further into the APE, as shovel testing on this side of the road identified no cultural materials. Within the APE, the site is impacted by the previous construction of RM 2243 and does not possess integrity of location, design, materials, or association.

- Site 41WM1317

  Site 41WM1317 was previously recorded as a moderately dense lithic scatter and has been determined Ineligible for listing in the NRHP by the SHPO. Descriptions of the site from 2015 and 2017 record very shallow soils and bedrock often exposed at the surface (Brownlow and Smith

2015, Rodriguez 2017). Past surveyors noted a lack of diagnostic tools or features and the presence of many primary reduction flakes.

Very little of the previously recorded site area is within the APE. Surveyors conducted pedestrian survey to confirm disturbance due to previous road construction of RM 2243 within the APE; no cultural materials were observed (**Attachment 12f**). It is unlikely this site extends to the south side of RM 2243 further into the APE, as shovel testing on the south side of the road identified no cultural materials. Within the APE, the site has been impacted by the previous construction of RM 2243, and does not possess integrity of location, design, materials, or association.

- Site 41WM1333

  Site 41WM1333 was previously recorded as a small surface lithic scatter consisting of seven flakes. Surveyors in 2016 noted the nearby building and gravel yard, and indicated the site was impacted by erosion, natural colluvial mixing, and ongoing building construction and demolition (Evans 2016).

  The current survey confirmed the site location has been subjected to profound disturbance due to construction of a driveway for the active construction yard. Shovel testing in relatively undisturbed adjacent areas located no cultural materials (**Attachment 12d**); the site may be destroyed. Within the APE, no evidence of the site was identified, and the site does not possess integrity of location, design, materials, or association.

- Site 41WM1342

  Site 41WM1342 was previously recorded as a historical farmstead (**Attachment 14k–Attachment 14p**) dating to the mid-twentieth century located at the southwestern corner of the intersection of RM 2243 and Parkside Parkway in Georgetown, Texas (**Attachment 13b**). Previous surveyors recorded one standing residential building, four support buildings, and one feature-an above ground limestone cistern (Padilla and Matthews 2016).

  Current surveyors were granted ROE to the site on the east side of CR 1434 that now runs through the previously documented site area. Shovel testing was conducted within and adjacent to the site and pedestrian survey was completed between shovel tests. Vegetation consisted of mixed grasses between patches of dense woodland (**Attachment 14n**). Ground visibility on site was 0–5% due to vegetation. Soils in the site consist of Georgetown stony clay loam (1–3%). A typical soil profile from shovel testing consisted of (10YR 3/3) silty clay loam to a depth of approximately 40 cmbs containing medium to large gravels underlain by bedrock.

  Archeologists excavated six shovel tests to delineate the site in cardinal directions as the landform and vegetation allowed. All shovel tests were negative for cultural materials. AmaTerra recorded three cultural features within the APE.

  Feature 1 (**Attachment 14l**) is the previously recorded above-ground cistern. Engraved on its northeast side is the date June 15th, 1939 (**Attachment 14m**), an associated well was observed immediately to its north. Feature 1 is located approximately 215 feet (66 meters) west of Parkside Parkway and 220 feet (67 meters) south of RM 2243. There is an electrical utility pole

near the cistern to the southeast. The cistern is roughly 13 feet (3.9) in diameter, made of concrete, and open at the top. Vegetation has grown inside the cistern.

Roughly 40 feet (12 meters) northeast of the cistern is Feature 2 (**Attachment 14n**), the remnants of a collapsed corral. The corral is made from corrugated metal and wood materials of many sources, including raw cedar and milled lumber, held together with wire nails. The corral measures approximately 25 feet (7.6 meters) by 35 feet (10.6 m) oriented in the cardinal directions.

Feature 3 (**Attachment 14o–Attachment 14p**) is a fence, which runs north to south approximately 310 feet (94.4 meters) and defines the western boundary of the site. The fence is made from multiple materials including raw cedar posts, metal t-posts, wire, and barbed wire. The southern half of the fence, near the cistern, is made of cedar posts arranged tightly and held together with wire nails and wire. The northern half of the fence, near RM2443, is made from metal safety posts with barbed wire strewn across.

There were no diagnostic artifacts observed. An artifact scatter of mostly building debris exists throughout the site and contains both historical and modern cultural materials. Artifacts observed include metal barrels, metal debris, wood debris, fencing debris, corrugated metal, rubber hoses, plastic debris, roofing tiles, sheet metal, tires, PVC pipes, and wire nails. Over 500 artifacts were observed in this large trash scatter.

The site does not appear on archival topographic maps or aerial photographs (**Attachment 8–Attachment 10**). Modern imagery from 1995 shows that across the currently existing Parkside Parkway there was an active homestead with an occupied house and barn. It appears that the property began to fall into disrepair around 2009, with the roof of the corral in the survey area falling in between March 2011 and August 2012. All structures and buildings of the homestead were standing until January 2018 when they were deliberately demolished. By November 2019, construction to build Parkside Parkway was underway. By March 2021, all debris from the barn and house and been removed.

Deed research (**Table 6**) indicates the property changed hands several times. The earliest available record is from 1899, when S. L. Sexton purchased two tracts of land, which became the property, from R. W. Insall and S. J. Walker, respectively. The Sexton family took ownership of the property until selling it to A. D. Fulkes in 1902. The property remained under ownership of the Fulkes family until conveying it to T. R. Peaslee in April of 1939. The only diagnostic cultural feature, the cistern (Feature 1) is engraved with the date June 15th, 1939, which is two months after T. R. Peaslee took ownership. The property was passed down through T. R. Peaslee's heirs until being conveyed to John L. Dennis, Trustee, in 1986. Following that date, it has been transferred back and forth through private businesses and trustees.

Only portions of the site within the current APE were surveyed. The previously recorded site boundaries were expanded to encompass all of Feature 3. The site now measures approximately 225 square meters. Based on materials observed, previously recorded site data, aerial imagery, and deed research the site may be less than 10% intact. Observations of CR 1434 and the eastern portion of the site indicate that all other previously recorded structures are demolished,

and near-surface archeological deposits are likely disturbed. However, the presence, depth, and extent of any below-ground deposits associated with this site remains unsurveyed. The portion of the site subject to the current survey, west of CR 1434 represents only a small piece of the original homestead and possesses little integrity of location, design, materials, and association.

Recommendations

- **Results Valid Within (check all that apply to define the buffer zone):**

No Survey Area (NSA)	Survey Area	Either
☐ 50 feet of NSA	☐ 50 feet of survey area	☐ Variable, see map
☒ 0 feet of NSA	☒ 0 feet of survey area	<Reference figure(s) or delete>

- **The Definition and Evaluation of this Horizontal Buffer Zone Is Based on One or More of the Following Considerations (check all that apply):**

☒ The integrity of the areas has been affected by prior development, modern land use practices, or other disturbances.
☐ The areas are unlikely locations for past human activity.
☐ The survey shows that archeological materials are unlikely to exist in this area.
☒ The survey shows that areas may contain intact archeological sites or the survey results cannot preclude the possibility of such sites.
☐ Other (specify)

- **Archeological Site Evaluations:**

Six sites were surveyed, in whole or in part, during the current survey. Two sites (41WM1005 and 41WM1333) are likely destroyed and recommended not eligible for listing in the NRHP or for designation as a SAL. Three sites have previously been determined ineligible for listing in the NRHP (41WM1198, 41WM1317, and 41WM1342). AmaTerra recommends these sites not be designated as SAL and the NRHP determinations remain unchanged. This includes a newly recorded portion of site 41WM1342. A newly recorded portion of site 41WM1100 was surveyed within the APE; this portion is recommended not eligible for listing in the NRHP or for designation as a SAL.

– 41WM1005

Previously recorded site 41WM1005 has been subject to profound disturbance due to construction of a gas station at the northwest corner of the intersection of Ronald Reagan Blvd and Hero Way. It is less than 1% intact and has no research potential. Because site 41WM1005 does not meet criteria for inclusion in the NRHP (Criteria A-D), AmaTerra recommends the site is not eligible for registration in the NRHP or as a SAL.

- 41WM1100

  Within the APE, previously recorded site 41WM1100 is shallowly buried and has likely been impacted by erosion. The site possesses only general integrity of location, design, materials, and association. Due to the limited archeological content and lack of context, the site is unlikely to yield information important to history (Criterion D). It does not meet other criteria for inclusion in the NRHP (Criteria A-C). Accordingly, AmaTerra recommends that the portion of the site within the APE is not eligible for listing in the NRHP or as a SAL.

- 41WM1198

  Within the APE, 41WM1198 has been subject to profound disturbance from construction of existing RM 2243. Most of the site is located north of the APE. ROE was granted for part of the site within the APE, however no cultural materials were observed within the APE. The site has previously been determined Ineligible for listing in the NRHP. The surveyed portion of the site within the APE meets no criteria for inclusion in the NRHP (Criterial A-D), and AmaTerra recommends the newly recorded portion within the APE is also not eligible for listing in the NRHP or as a SAL. AmaTerra recommends the NRHP determination remain unchanged.

- 41WM1317

  Within the APE, 41WM1317 has been subject to profound disturbance from construction of existing RM 2243. The site extends north beyond the limits of the APE. No cultural materials were observed within the APE. The site has previously been determined Ineligible for listing in the NRHP. The surveyed portion of the site within the APE meets no criteria for inclusion in the NRHP (Criterial A-D). AmaTerra recommends it is not eligible for listing as a SAL and that the NRHP determination remain unchanged.

- 41WM1333

  Previously recorded site 41WM1333 has been subject to profound disturbance due to development of an active construction yard at the intersection of existing RM 2243 and the APE east of Ronald Reagan Blvd. The site is less than 1% intact and has no research potential (Criterion D). It does not meet other criteria for inclusion in the NRHP (Criteria A-C). Accordingly, AmaTerra recommends the site is not eligible for registration in the NRHP or as a SAL.

- 41WM1342

  Within the surveyed portion of the APE, previously recorded site 41WM1342 is limited to the surface, has likely been impacted by erosion, and continues to serve as a discard location for modern debris. This portion represents only a small part of the original homestead and possesses little integrity of location, design, materials, and association. The site has previously been determined Ineligible for listing in the NRHP. Due to the limited archeological content and lack of context the site is unlikely to yield information important to history (Criterion D). It does not meet other criteria for inclusion in the NRHP (Criteria A-C). AmaTerra recommends that the site, including the newly recorded portion, is not eligible for listing as a SAL and that the NRHP determination remain unchanged.

- **Comments on Evaluations:**

  None.

- **Further Work:**

  The proposed project would have no effect on archeological historic properties and/or State Antiquities Landmarks within the horizontal buffer zone where survey was conducted, with a few exceptions as specified below. Any design change within this area would not require additional review or investigation. Design changes that either extend beyond the buffer zone or result in potential impacts deeper than the impacts considered in this report would require additional review. In addition, the following recommendations apply to the APE.

  AmaTerra recommends no further work in 306.2 acres (including the existing ROW and areas previously not recommended for survey), which were fully evaluated at the time of survey. Shovel testing only is recommended for 204.5 acres where ROE was denied. (Attachment 15).

- **Justification:**

  Areas where AmaTerra was denied ROE require pedestrian survey and shovel testing. Once TxDOT or Williamson County has been granted ROE or takes ownership of the parcel, sites 41WM549, 41WM556, 41WM581, 41WM593, and surveyed portions of 41WM1198 should be revisited to document their condition and deposits and assess their eligibility for listing in the NRHP and as a SAL.

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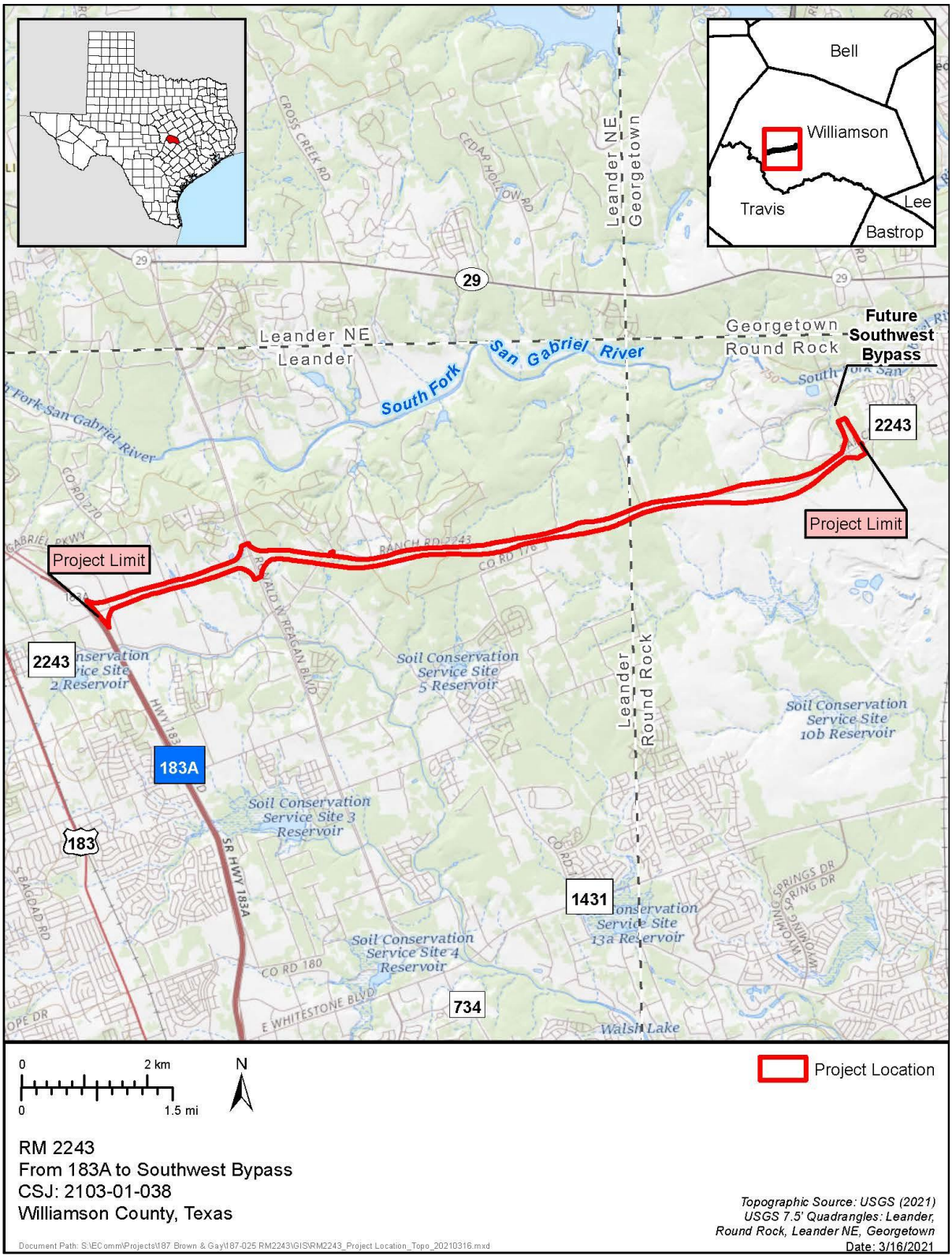
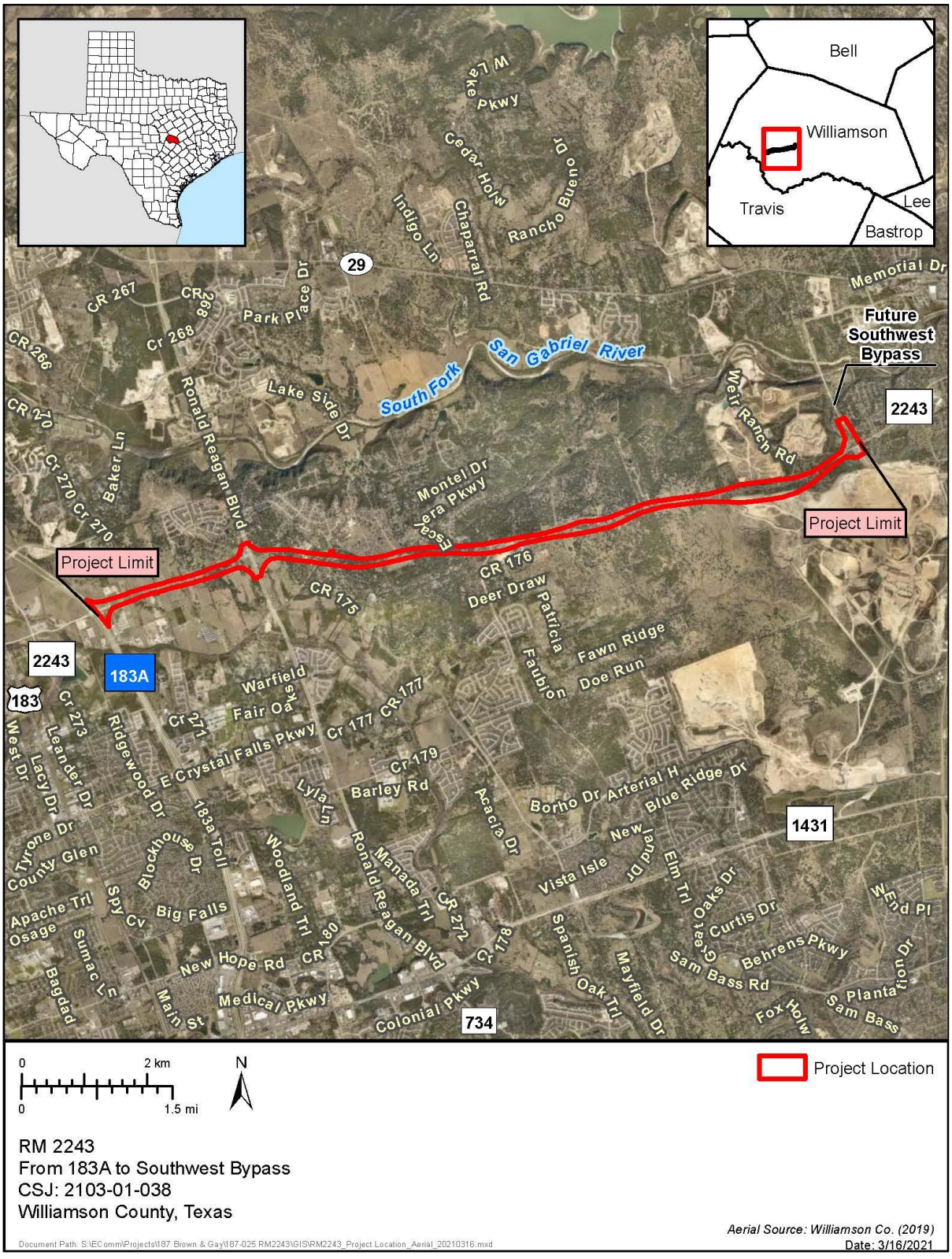
Attachments

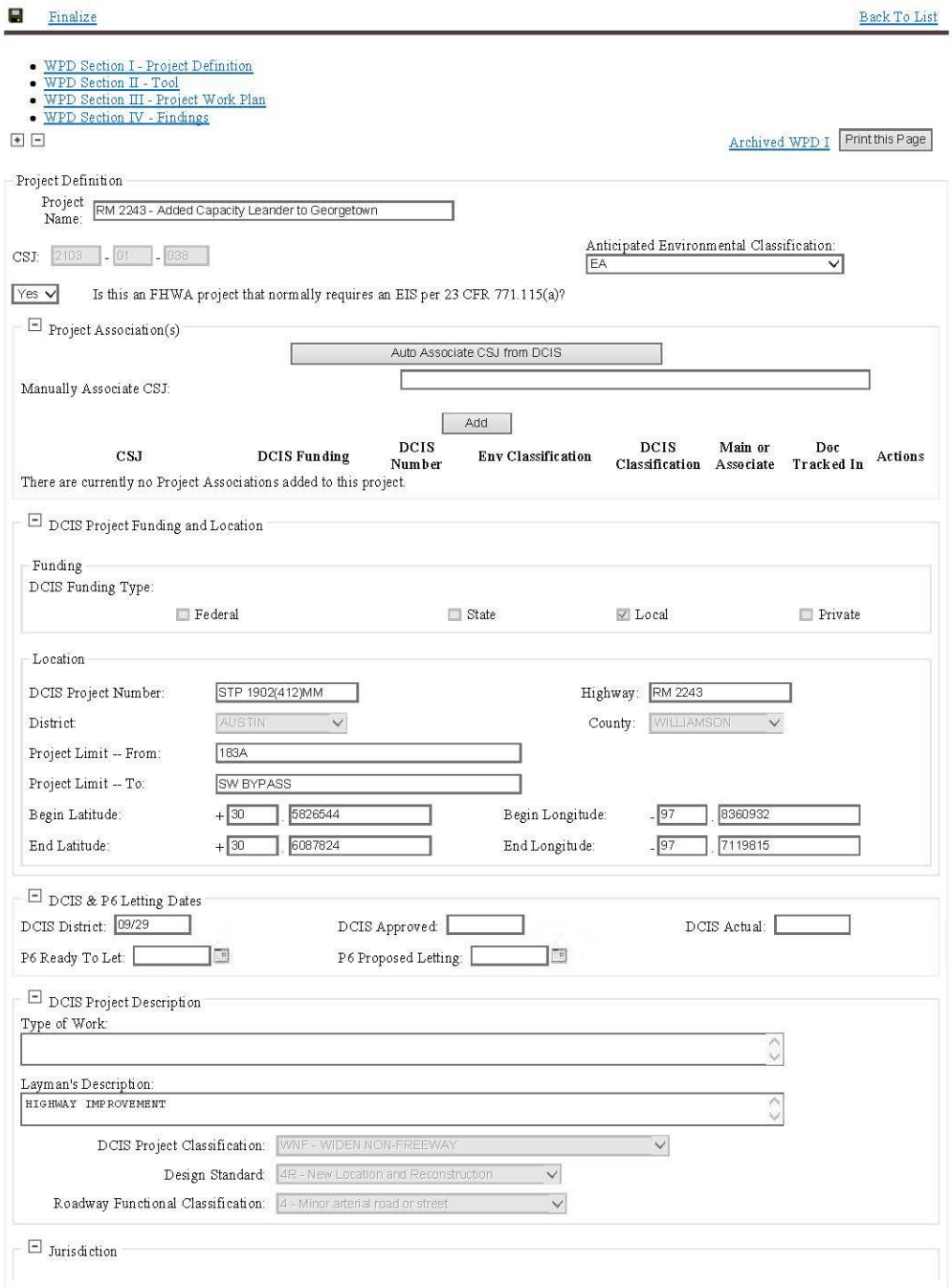
- **Attachment 1a – Topographic map showing horizontal extent of APE, including existing ROW and proposed ROW/new easements.**



- **Attachment 1b – Map showing horizontal extent of APE, including existing ROW and proposed ROW/new easements on modern aerial imagery.**



- **Attachment 2a– Project information**



Finalize | Back To List

- WPD Section I - Project Definition
- WPD Section II - Tool
- WPD Section III - Project Work Plan
- WPD Section IV - Findings

Archived WPD I | Print this Page

Project Definition

Project Name: RM 2243 - Added Capacity Leander to Georgetown

CSJ: 2103 - 01 - 038

Anticipated Environmental Classification: EA

Yes — Is this an FHWA project that normally requires an EIS per 23 CFR 771.115(a)?

Project Association(s)

Auto Associate CSJ from DCIS

Manually Associate CSJ:

Add

CSJ	DCIS Funding	DCIS Number	Env Classification	DCIS Classification	Main or Associate	Doc Tracked In	Actions

There are currently no Project Associations added to this project.

DCIS Project Funding and Location

Funding

DCIS Funding Type: ☐ Federal ☐ State ☑ Local ☐ Private

Location

DCIS Project Number: STP 1902(412)MM — Highway: RM 2243

District: AUSTIN — County: WILLIAMSON

Project Limit -- From: 183A

Project Limit -- To: SW BYPASS

Begin Latitude: + 30 . 5826544 — Begin Longitude: - 97 . 8360932

End Latitude: + 30 . 6087824 — End Longitude: - 97 . 7119815

DCIS & P6 Letting Dates

DCIS District: 09/29 — DCIS Approved: — DCIS Actual:

P6 Ready To Let: — P6 Proposed Letting:

DCIS Project Description

Type of Work:

Layman's Description: HIGHWAY IMPROVEMENT

DCIS Project Classification: WNF - WIDEN NON-FREEWAY

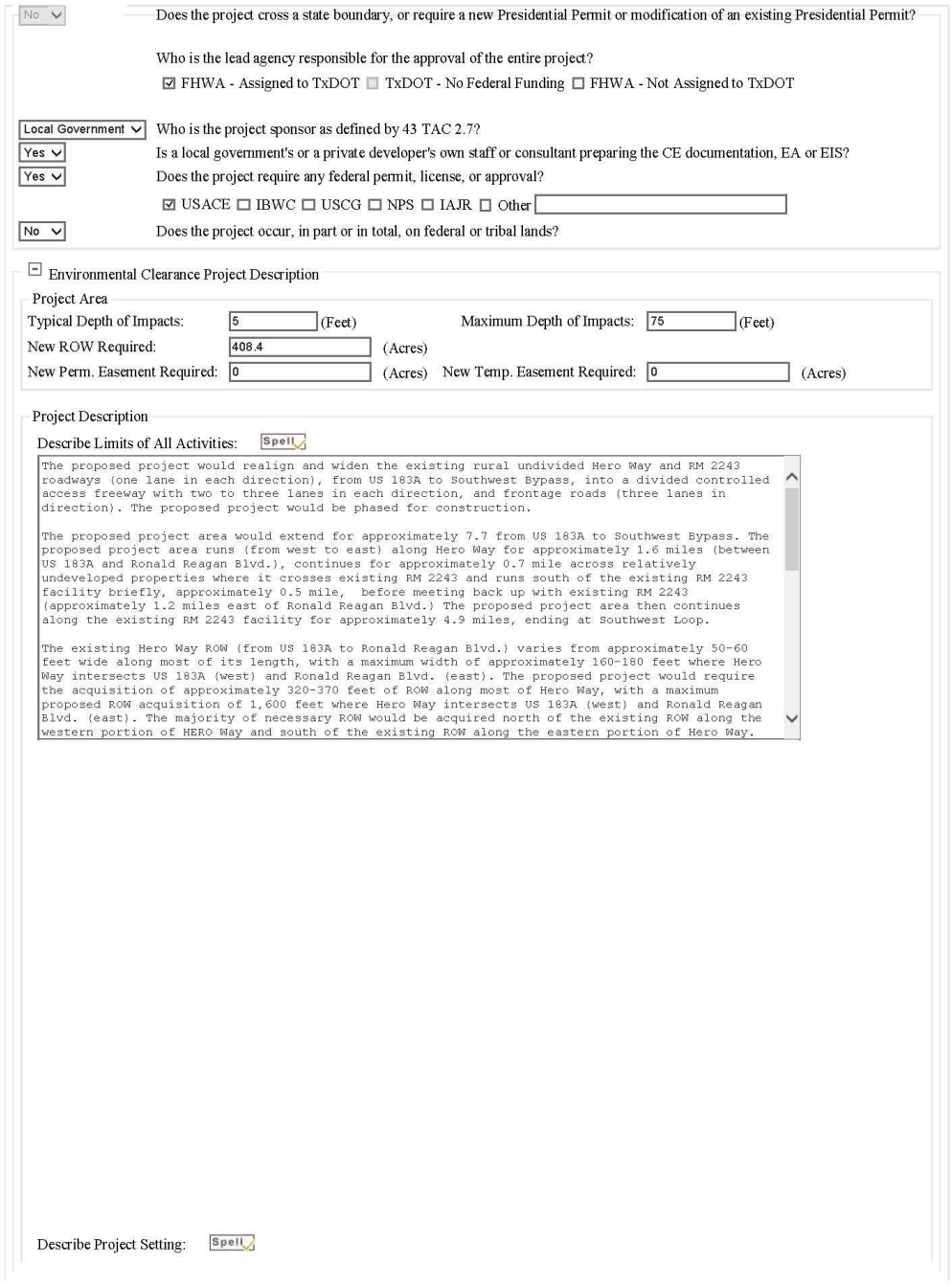
Design Standard: 4R - New Location and Reconstruction

Roadway Functional Classification: 4 - Minor arterial road or street

Jurisdiction

https://www.dot.state.tx.us/ECOS/apps/ecos/project_definition.jsp?submitStatus=Y&error... 2/25/2021

- **Attachment 2b– Project information**



No — Does the project cross a state boundary, or require a new Presidential Permit or modification of an existing Presidential Permit?

Who is the lead agency responsible for the approval of the entire project?

☑ FHWA - Assigned to TxDOT ☐ TxDOT - No Federal Funding ☐ FHWA - Not Assigned to TxDOT

Local Government — Who is the project sponsor as defined by 43 TAC 2.7?

Yes — Is a local government's or a private developer's own staff or consultant preparing the CE documentation, EA or EIS?

Yes — Does the project require any federal permit, license, or approval?

☑ USACE ☐ IBWC ☐ USCG ☐ NPS ☐ IAJR ☐ Other

No — Does the project occur, in part or in total, on federal or tribal lands?

Environmental Clearance Project Description

Project Area

Typical Depth of Impacts: 5 (Feet) Maximum Depth of Impacts: 75 (Feet)

New ROW Required: 408.4 (Acres)

New Perm. Easement Required: 0 (Acres) New Temp. Easement Required: 0 (Acres)

Project Description

Describe Limits of All Activities: Spell

The proposed project would realign and widen the existing rural undivided Hero Way and RM 2243 roadways (one lane in each direction), from US 183A to Southwest Bypass, into a divided controlled access freeway with two to three lanes in each direction, and frontage roads (three lanes in direction). The proposed project would be phased for construction.

The proposed project area would extend for approximately 7.7 from US 183A to Southwest Bypass. The proposed project area runs (from west to east) along Hero Way for approximately 1.6 miles (between US 183A and Ronald Reagan Blvd.), continues for approximately 0.7 mile across relatively undeveloped properties where it crosses existing RM 2243 and runs south of the existing RM 2243 facility briefly, approximately 0.5 mile, before meeting back up with existing RM 2243 (approximately 1.2 miles east of Ronald Reagan Blvd.) The proposed project area then continues along the existing RM 2243 facility for approximately 4.9 miles, ending at Southwest Loop.

The existing Hero Way ROW (from US 183A to Ronald Reagan Blvd.) varies from approximately 50-60 feet wide along most of its length, with a maximum width of approximately 160-180 feet where Hero Way intersects US 183A (west) and Ronald Reagan Blvd. (east). The proposed project would require the acquisition of approximately 320-370 feet of ROW along most of Hero Way, with a maximum proposed ROW acquisition of 1,600 feet where Hero Way intersects US 183A (west) and Ronald Reagan Blvd. (east). The majority of necessary ROW would be acquired north of the existing ROW along the western portion of HERO Way and south of the existing ROW along the eastern portion of Hero Way.

Describe Project Setting: Spell

https://www.dot.state.tx.us/ECOS/apps/ecos/project_definition.jsp?submitStatus=Y&error... 2/25/2021

- **Attachment 2c– Project information**

Describe Project Setting:
The project area is mostly located in a rural part of Williamson County. It starts in Leander on the west end at Hero Way and 183A and extends toward the east to Georgetown at the intersection of RM 2243 and SW Bypass.

A majority of the proposed ROW is currently undeveloped land, which is zoned by the cities for future residential and commercial developments. Approximately 12 percent of the project area (existing and proposed ROW) is listed as prime farmland.

Impacts to structures have been avoided and minimized to the maximum extent practicable. It is anticipated that the project would result in approximately 12 displacements (11 residences and one commercial). Available property of comparable type, size and cost would be offered to any displaced property owners in accordance with the Uniform Relocation Act.

No impacts to community cohesion, Environmental Justice populations, or Limited-English populations are anticipated. Minor alterations to access and travel patterns are anticipated due the proposed controlled access facility; however, no access that is currently available to properties would be denied or removed without replacement.

The project is in the Edwards Aquifer recharge and contributing zones and in Karst Zones 1 and 2. A Karst survey has been done and one cave has been identified that would be impacted by construction. There are 4 endangered karst species of concern with habitat in the immediate project area. A Georgetown Salamander CHU is located within 1.5 miles of the project area toward the northwest. There is also Golden Cheeked Warbler habitat in the project area. Efforts would be undertaken during detailed schematic design to avoid and minimize impacts to protected species habitat. A biological evaluation would be completed during the project development process to determine effects from any proposed improvements on any of the protected species, and consultation with the USFWS would be initiated as applicable. It is anticipated that any needed mitigation would include participation in the Williamson County RHCP.

The proposed project crosses seven unnamed intermittent streams. The NWI maps a number of freshwater ponds, but no mapped wetlands within the project area. The proposed improvements would be authorized under Nationwide Permit (NWP) 14 with no need for an individual permit.

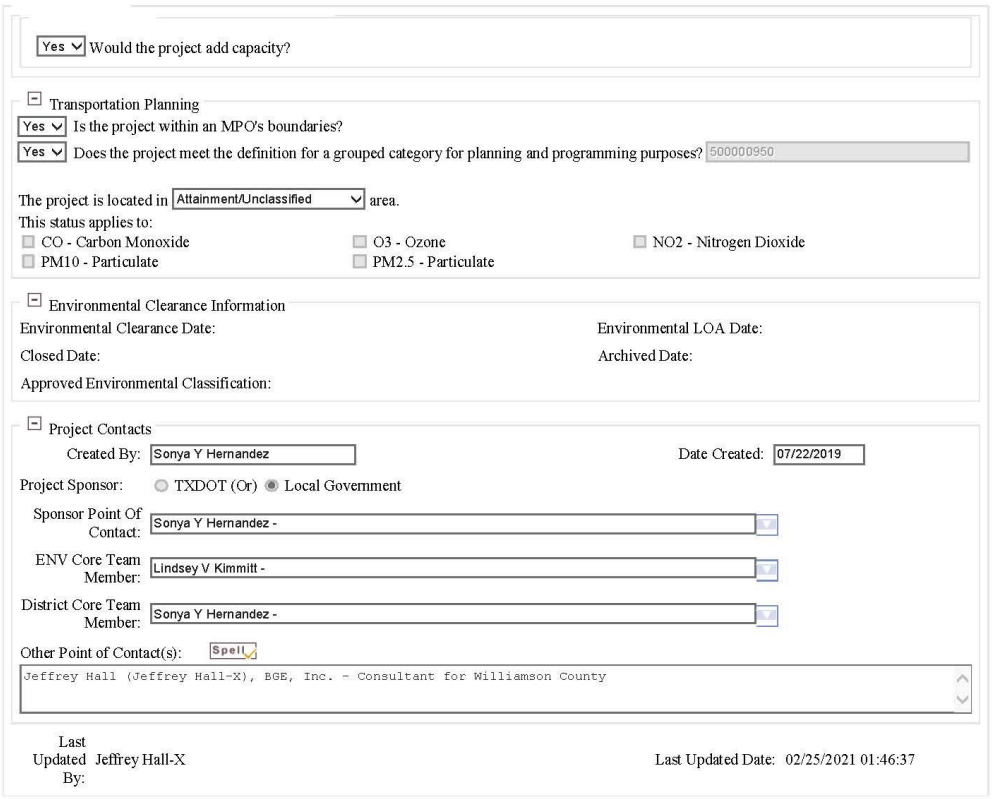
Describe Existing Facility: Spell

The existing Hero Way and RM 2243 facilities are undivided rural roadways with two 11-foot travel lanes, one eastbound and one westbound lane, and two-foot outside shoulders. The existing roadways are at-grade facilities for travel lanes and intersections. Drainage is accommodated via open ditches. The existing width of the ROW is approximately 50-6- feet for Hero Way and 80-110 feet for RM 2243.

Describe Proposed Facility: Spell

The proposed project would include phased reconstruction of the Hero Way and RM 2243 existing facilities into an ultimate controlled access facility with approximately 350-970 foot proposed ROW. The proposed project is approximately 7.7 miles in length and would involve approximately 102.3 acres of existing ROW and 408.4 acres of new ROW and easements. This project would involve approximately 12 displacements. Proposed mainlanes include three 12-foot lanes in each direction with 4-foot inside shoulders, and 10-foot outside shoulders. The east and west bound lanes would be separated by a concrete barrier. The mainlanes and frontage roads would be separated by a 38-foot wide open ditch consisting of a flat bottom and vegetative filter strips on the side slopes. Frontages roads would consist of three 12-foot westbound lanes and three 12-foot eastbound lanes. The frontage roads would have a 4-foot inside shoulder and 2-foot curb and gutter on the outside. A 10-foot shared use path is proposed. There would be a 5-foot inside grassy buffer between the frontage roads and the shared use path and a varying 13-foot to 30-foot grassy buffer between the outside of the shared use path and the proposed ROW line. Proposed drainage includes open ditch between the mainlanes and frontage roads, and curb-and-gutter will be along the frontage roads with underground utilities. Grade separation is proposed at arterial cross-streets and multi-level interchanges are proposed at 183A, Ronald Reagan, and Southwest Bypass. The proposed project area referenced in the NEPA document will include all anticipated ROW and temporary and permanent easements. Easements are under development and will be identified on the 60 percent schematic.

- **Attachment 2d– Project information**



Yes Would the project add capacity?

Transportation Planning

Yes Is the project within an MPO's boundaries?

Yes Does the project meet the definition for a grouped category for planning and programming purposes? 500000950

The project is located in Attainment/Unclassified area.

This status applies to:

- CO - Carbon Monoxide
- O3 - Ozone
- NO2 - Nitrogen Dioxide
- PM10 - Particulate
- PM2.5 - Particulate

Environmental Clearance Information

Environmental Clearance Date:

Environmental LOA Date:

Closed Date:

Archived Date:

Approved Environmental Classification:

Project Contacts

Created By: Sonya Y Hernandez

Date Created: 07/22/2019

Project Sponsor: TXDOT (Or) Local Government

Sponsor Point Of Contact: Sonya Y Hernandez -

ENV Core Team Member: Lindsey V Kimmitt -

District Core Team Member: Sonya Y Hernandez -

Other Point of Contact(s): Spell

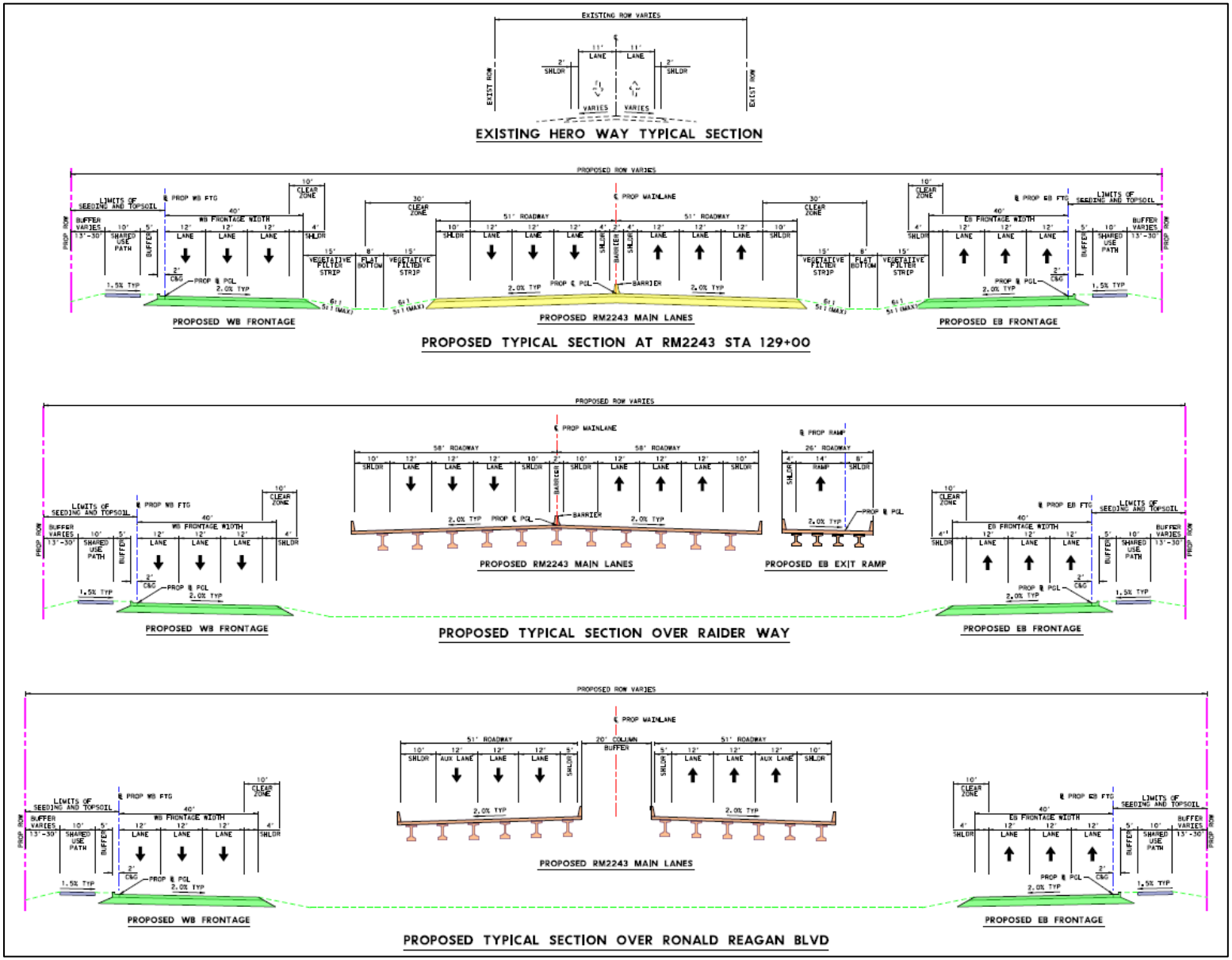
Jeffrey Hall (Jeffrey Hall-X), BGE, Inc. - Consultant for Williamson County

Last Updated By: Jeffrey Hall-X

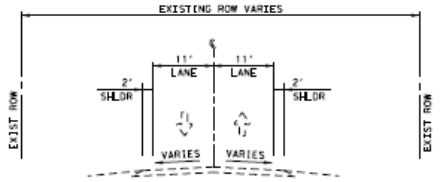
Last Updated Date: 02/25/2021 01:46:37

https://www.dot.state.tx.us/ECOS/apps/ecos/project_definition.jsp?submitStatus=Y&error... 2/25/2021

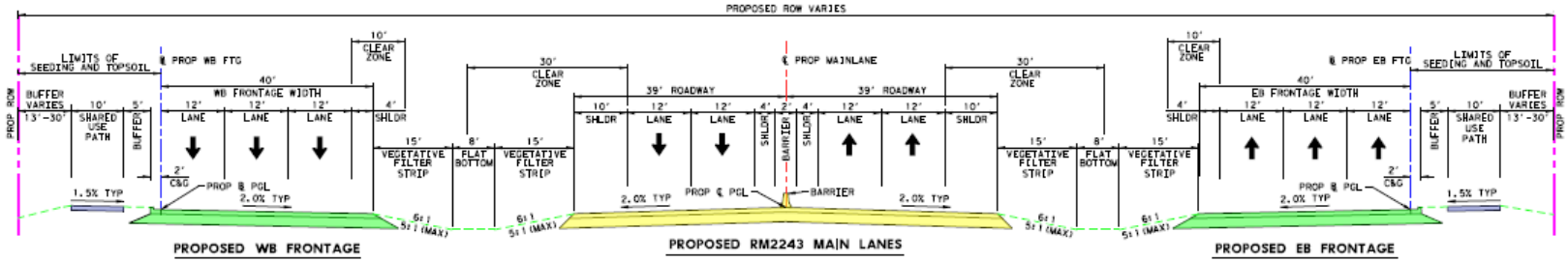
- **Attachment 3a– Project plans typical sections (1 of 4).**



- **Attachment 3b– Project plans typical sections (2 of 4).**



EXISTING RM 2243 TYPICAL SECTION

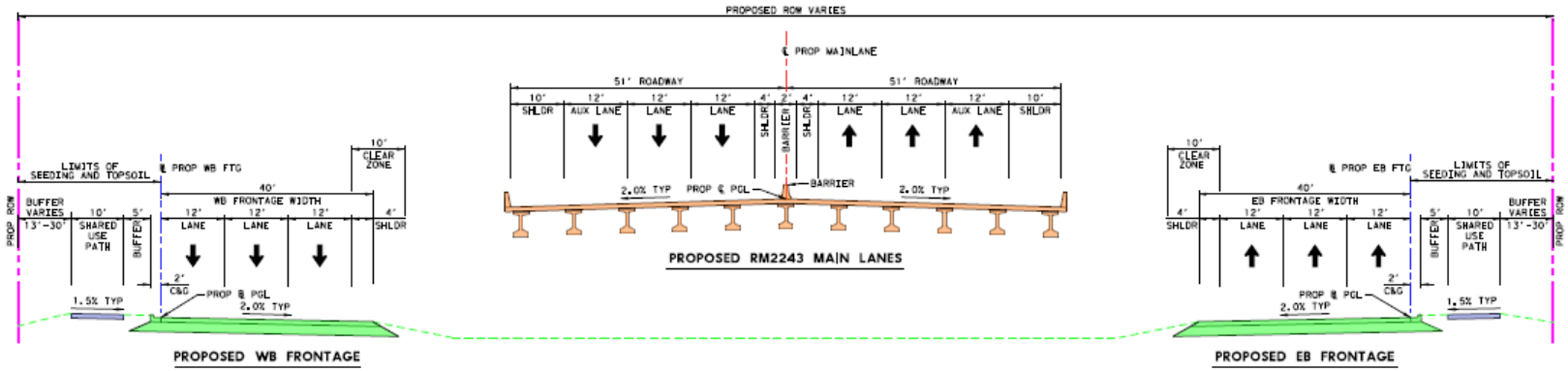


PROPOSED WB FRONTAGE

PROPOSED RM2243 MAIN LANES

PROPOSED EB FRONTAGE

PROPOSED TYPICAL SECTION AT RM2243 STA 280+00



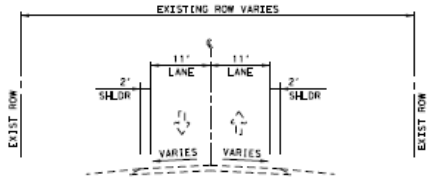
PROPOSED RM2243 MAIN LANES

PROPOSED WB FRONTAGE

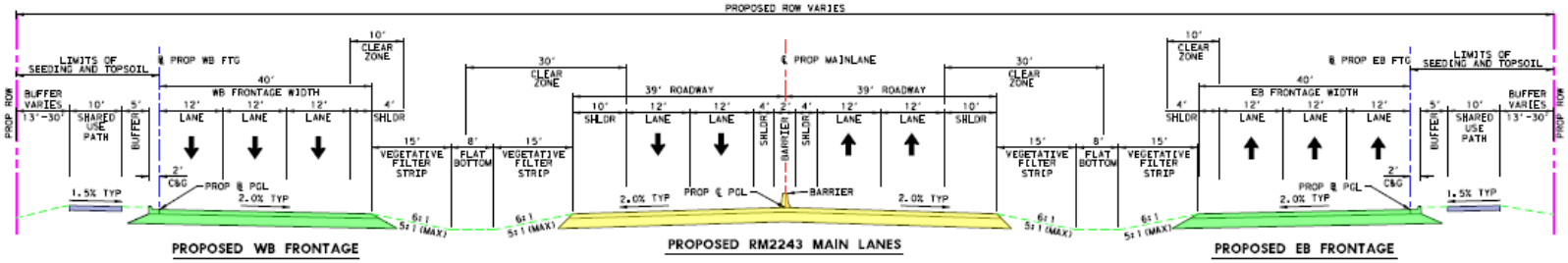
PROPOSED EB FRONTAGE

PROPOSED TYPICAL SECTION GRADE SEPARATED INTERSECTION

- **Attachment 3c– Project plans typical sections (3 of 4).**



EXISTING RM 2243 TYPICAL SECTION

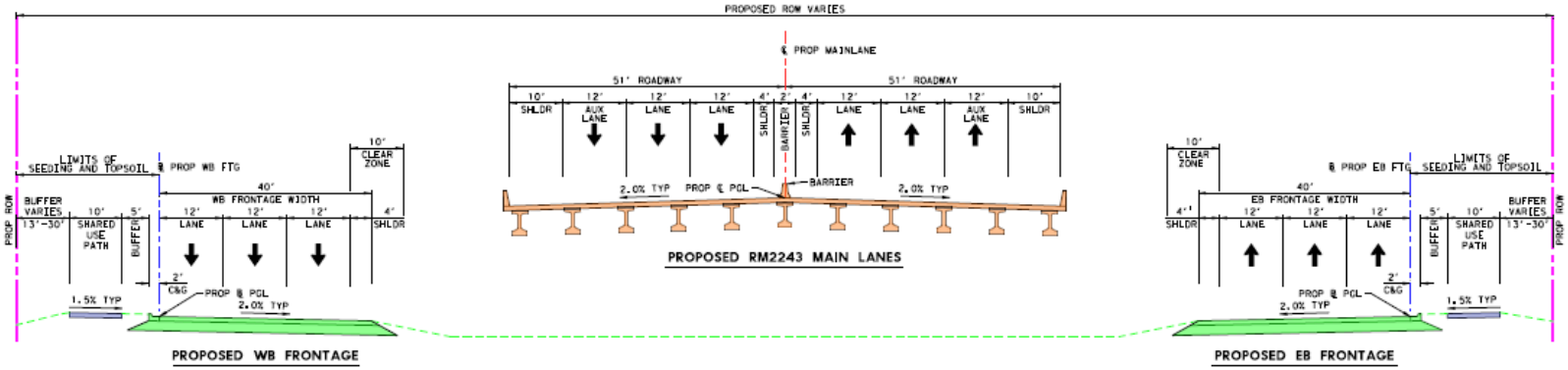


PROPOSED WB FRONTAGE

PROPOSED RM2243 MAIN LANES

PROPOSED EB FRONTAGE

PROPOSED TYPICAL SECTION AT RM2243 STA 415+00



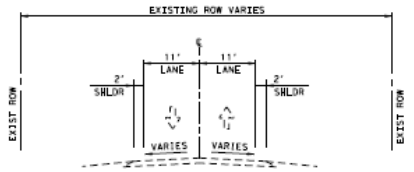
PROPOSED WB FRONTAGE

PROPOSED RM2243 MAIN LANES

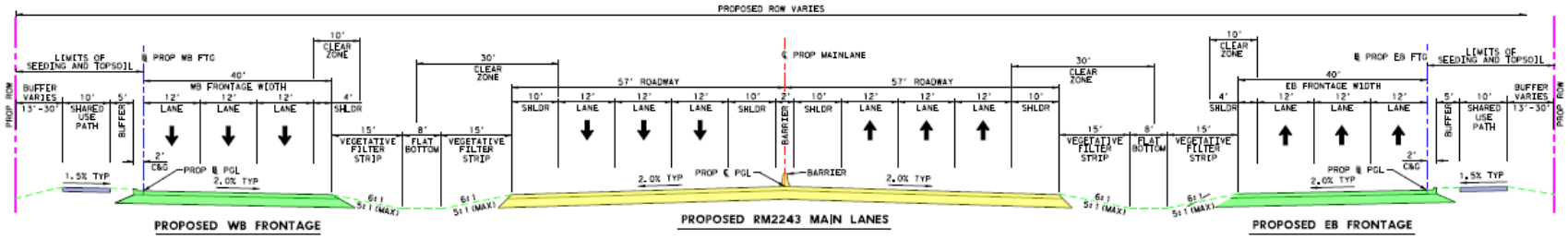
PROPOSED EB FRONTAGE

PROPOSED TYPICAL SECTION GRADE SEPARATED INTERSECTION

- **Attachment 3d– Project plans typical sections (4 of 4).**



EXISTING RM 2243 TYPICAL SECTION

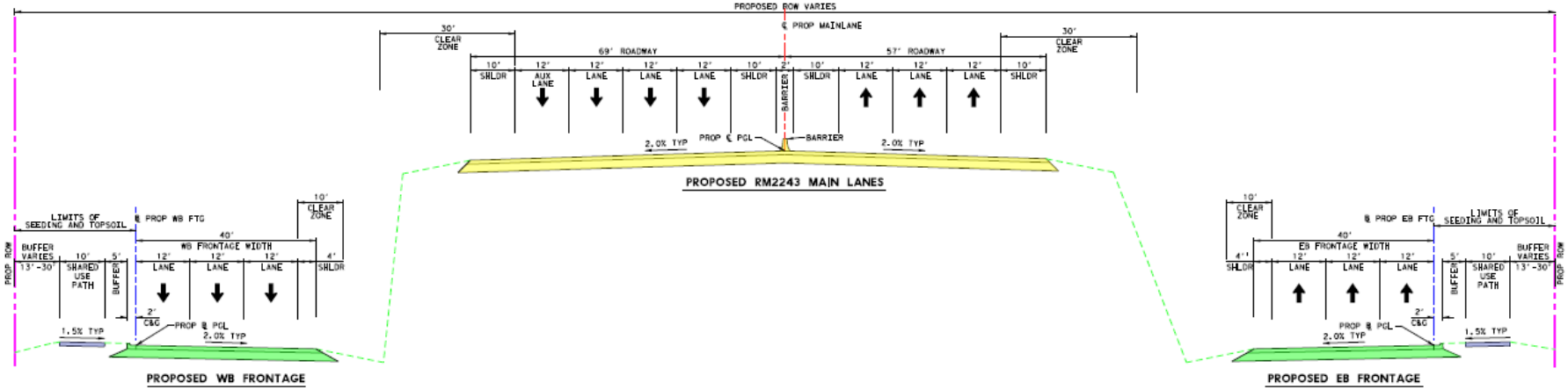


PROPOSED WB FRONTAGE

PROPOSED RM2243 MAIN LANES

PROPOSED EB FRONTAGE

PROPOSED TYPICAL SECTION AT RM2243 STA 491+00



PROPOSED WB FRONTAGE

PROPOSED RM2243 MAIN LANES

PROPOSED EB FRONTAGE

PROPOSED TYPICAL SECTION OVER ARTERIAL SW3 (QUARRY)

Redacted for Confidential Purposes

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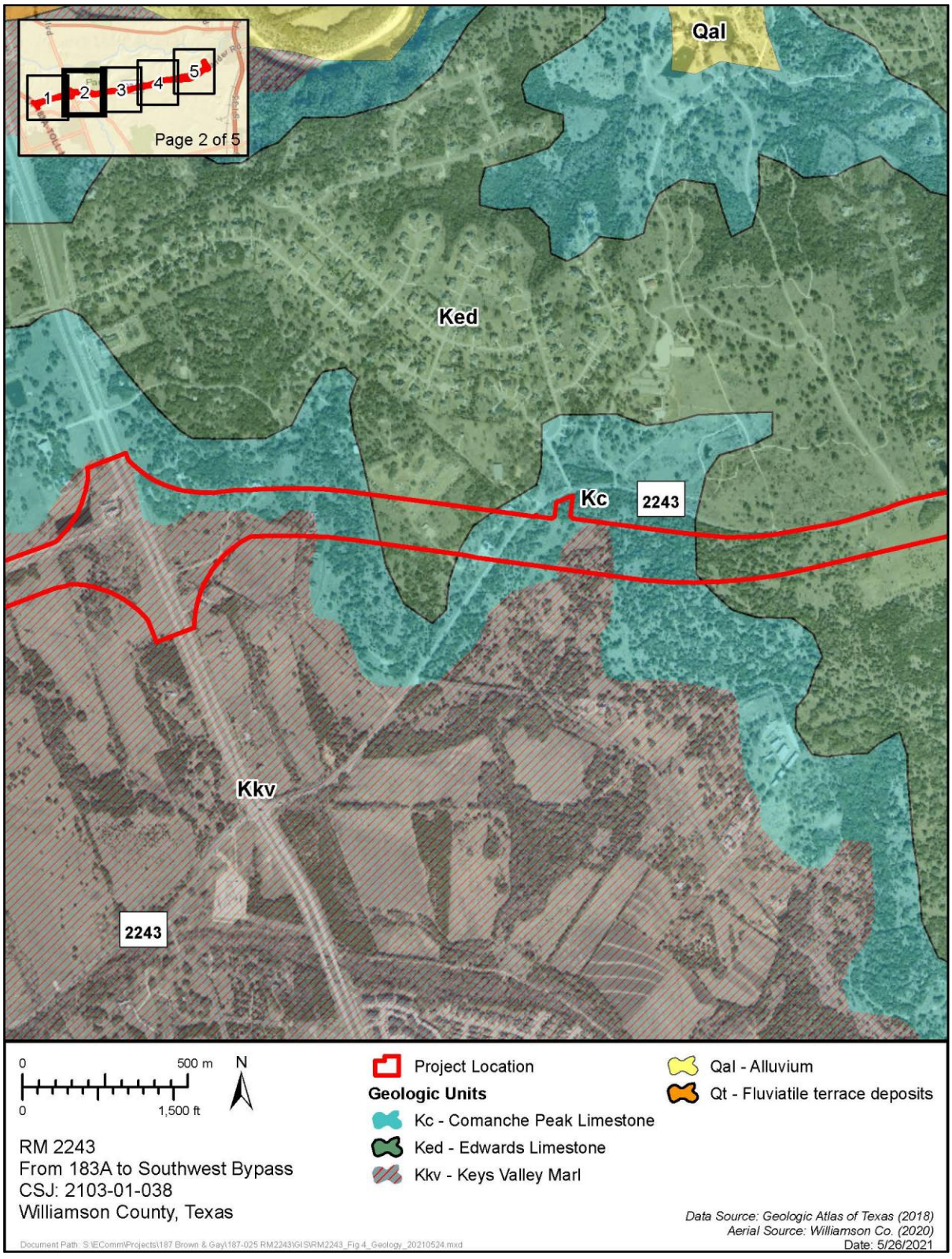
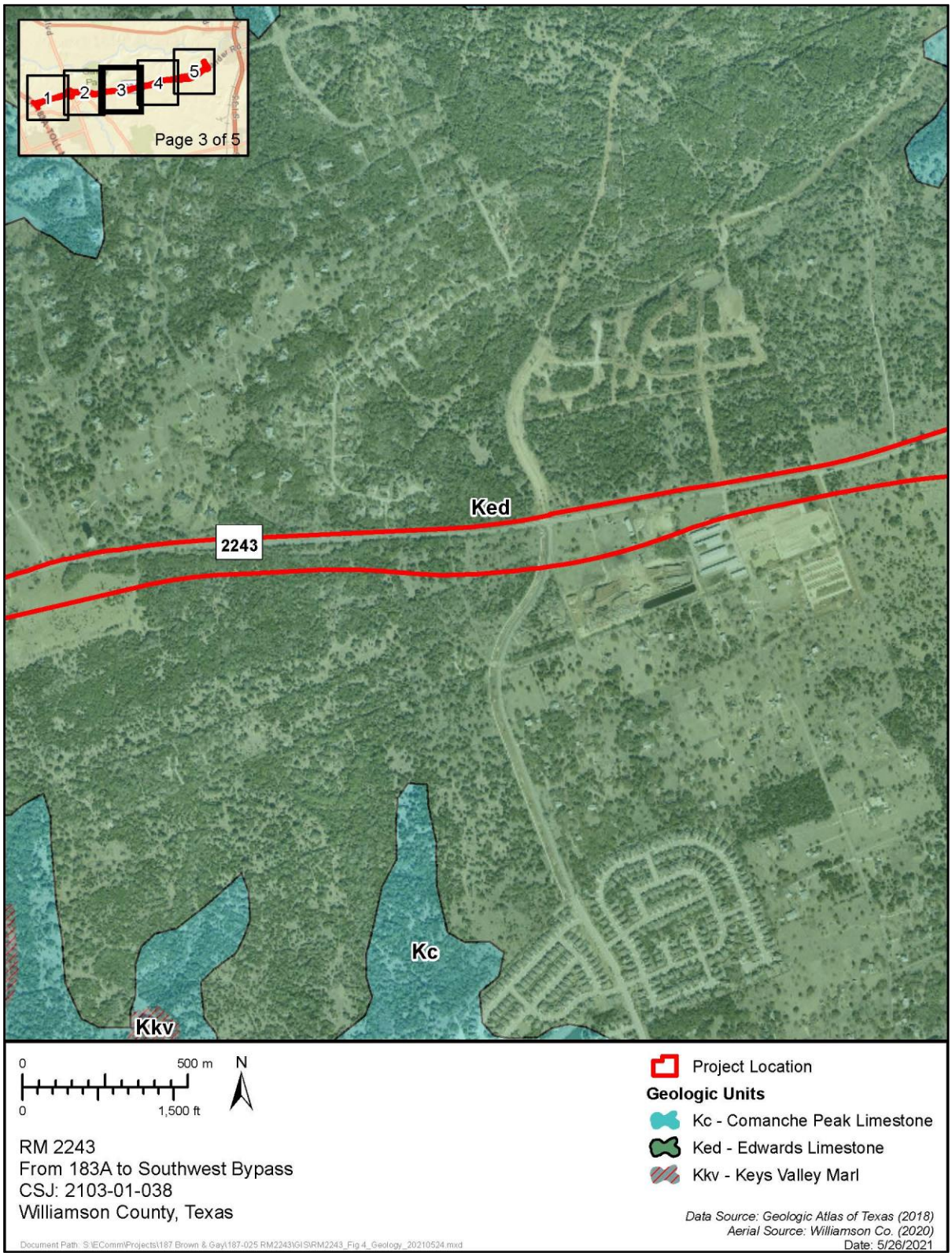
- **Attachment 5b: Geologic map of the project APE.**



- **Attachment 5c: Geologic map of the project APE.**



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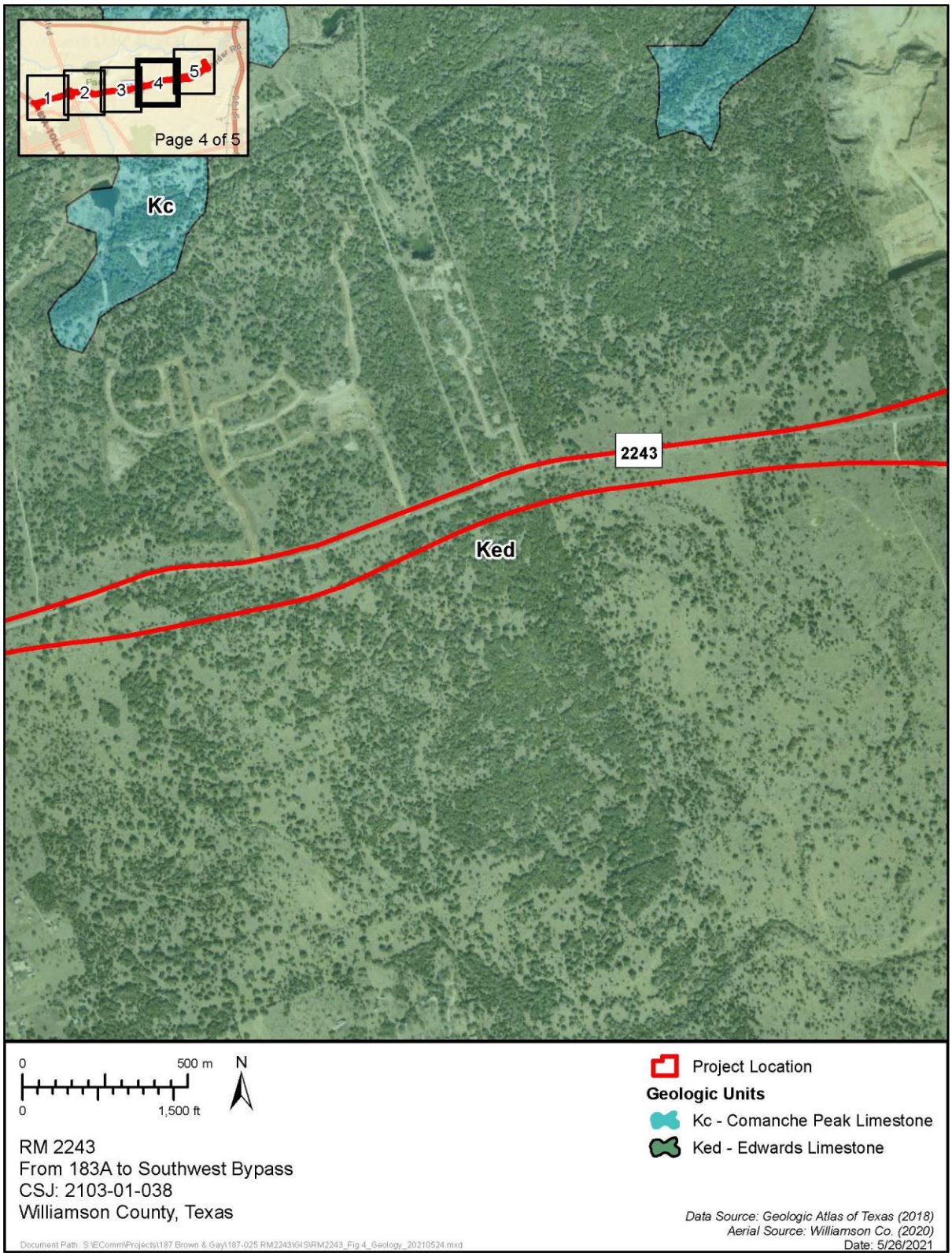
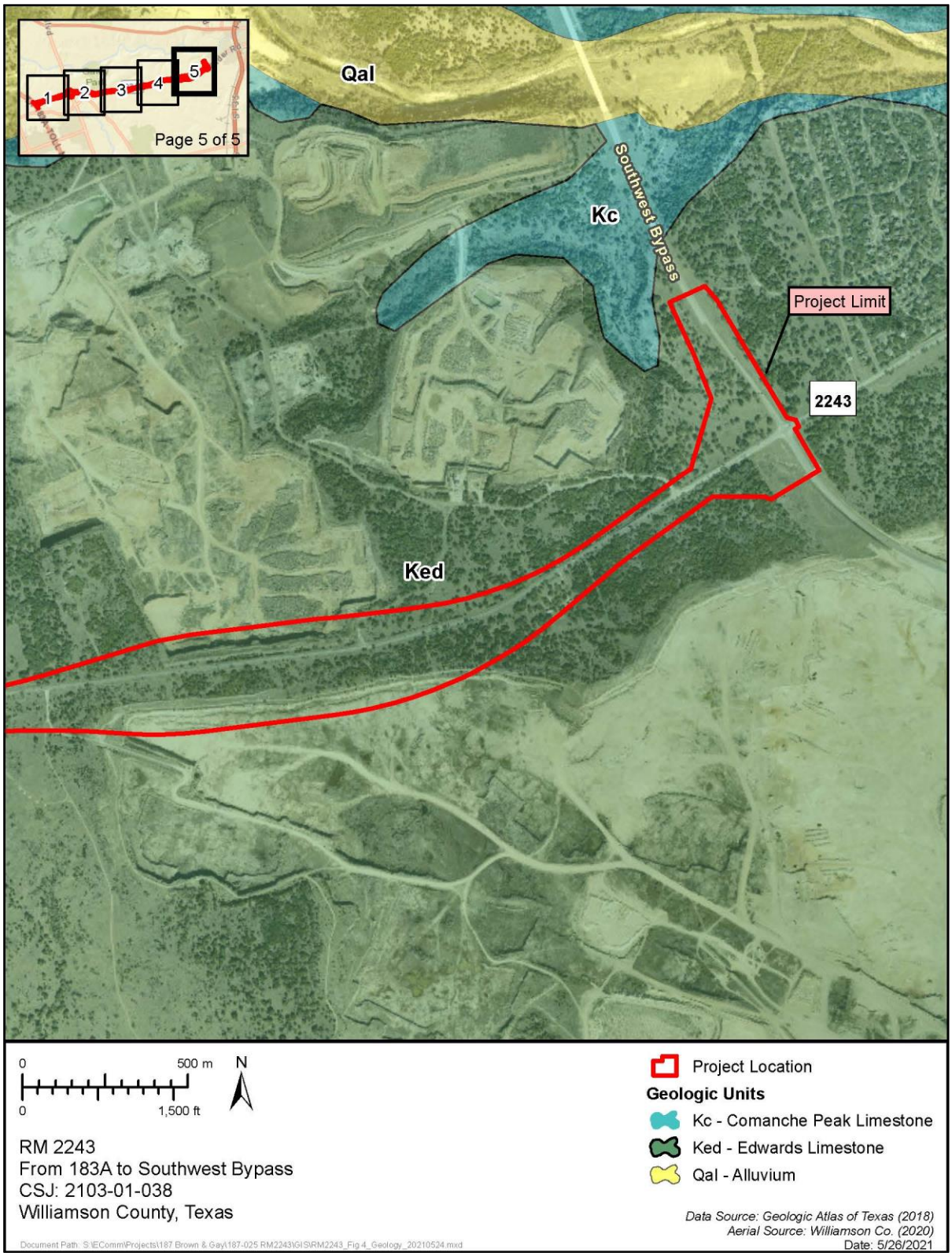
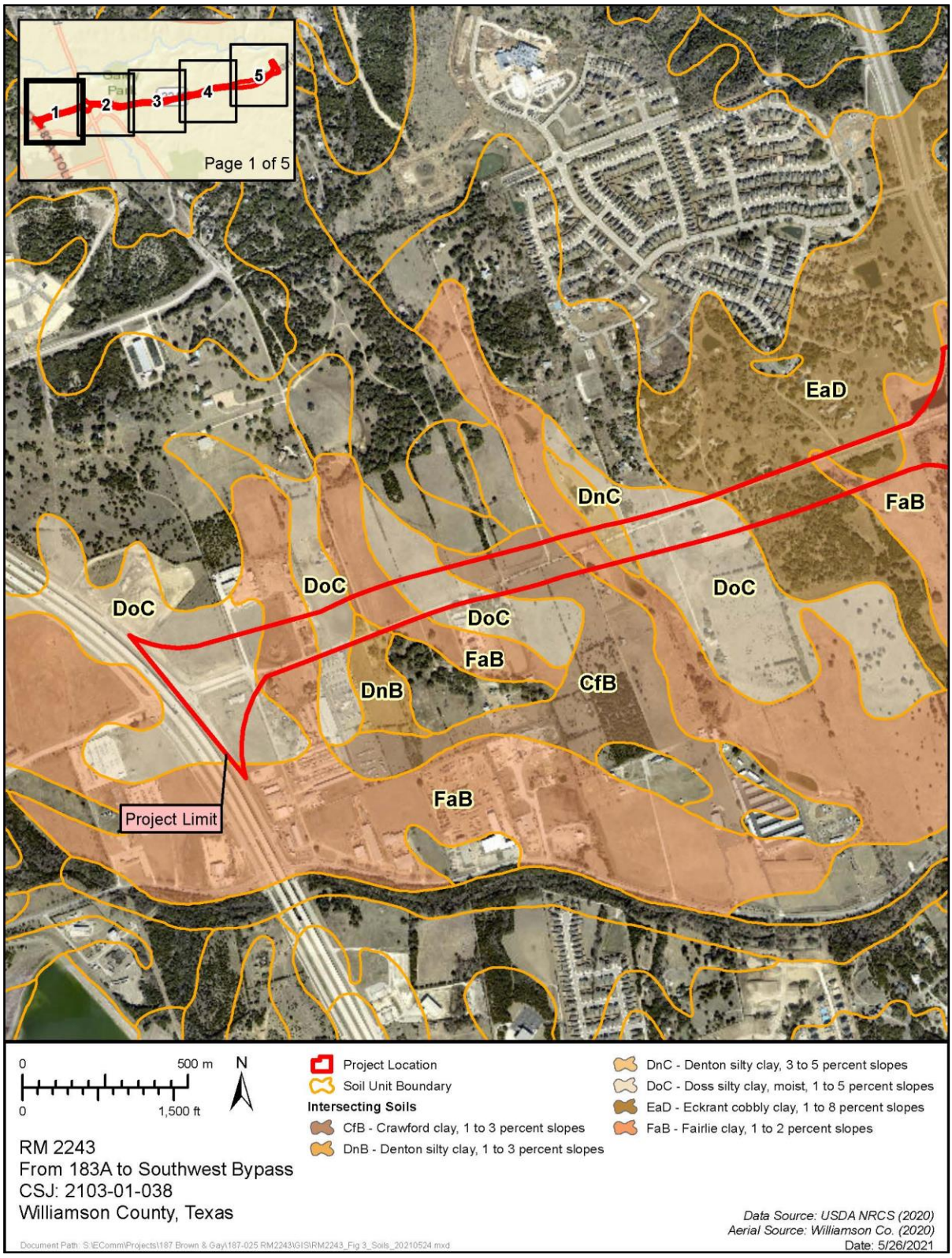


- **Attachment 5e: Geologic map of the project APE.**



- **Attachment 6a: Soils within the project APE.**



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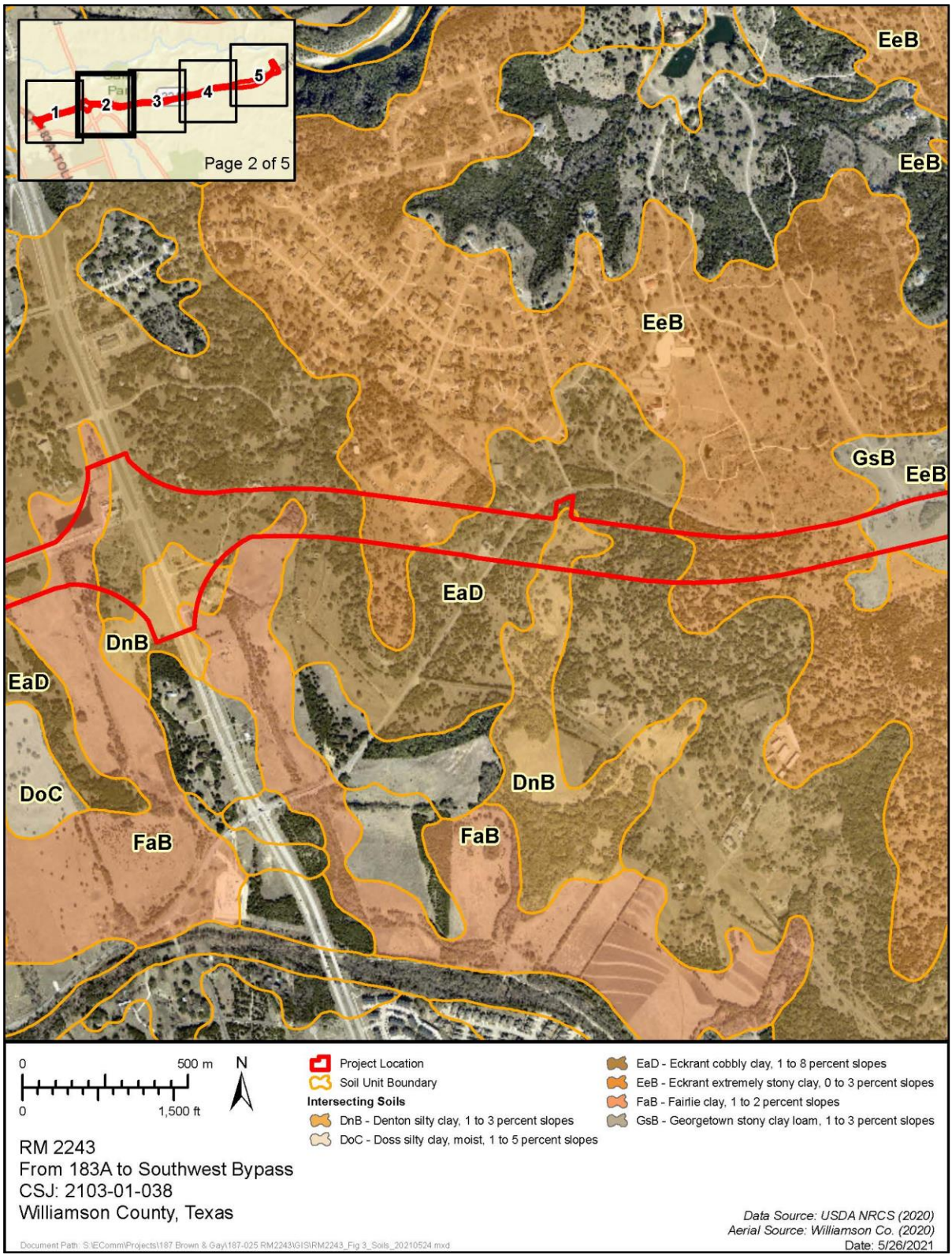
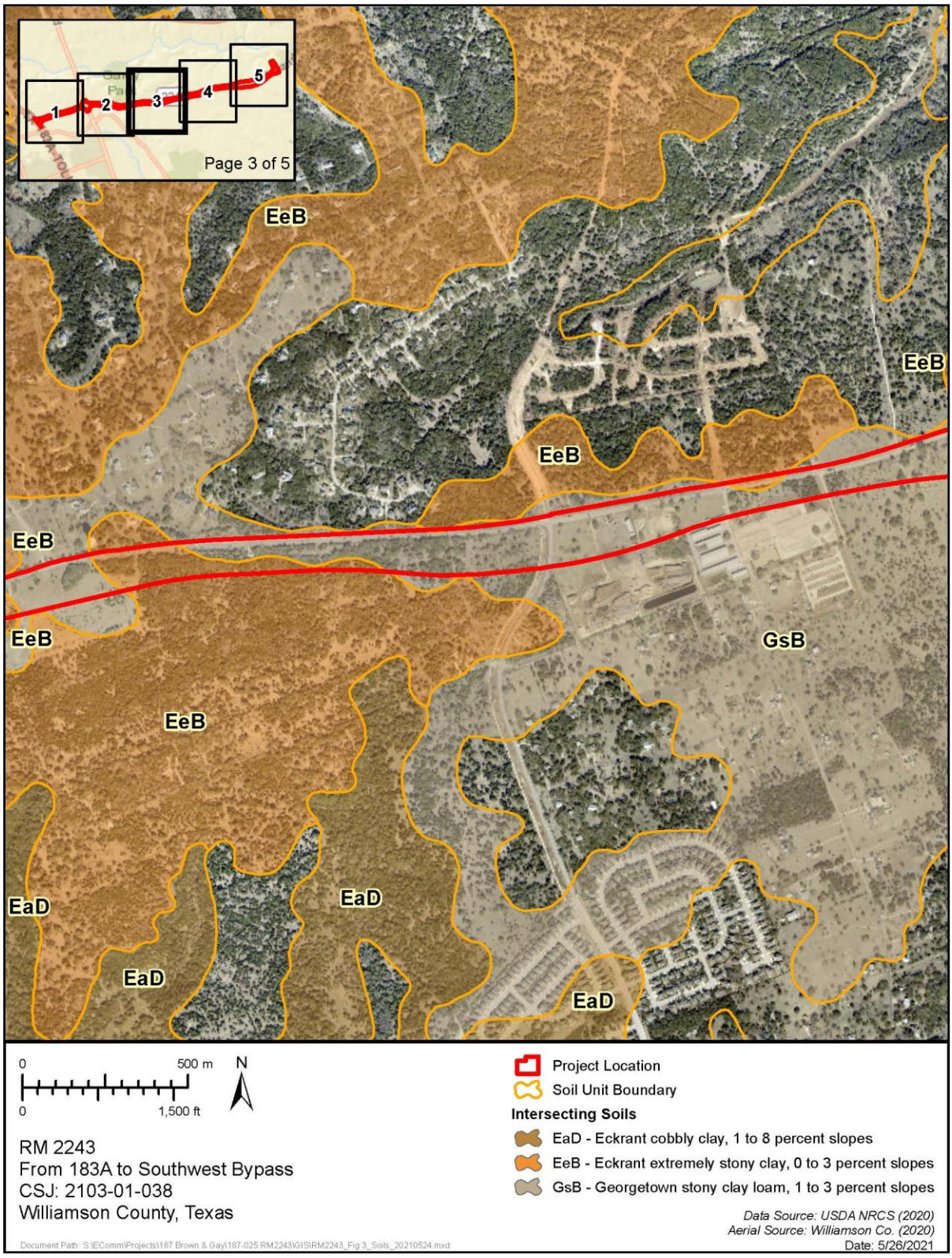


- **Attachment 6c: Soils within the project APE.**



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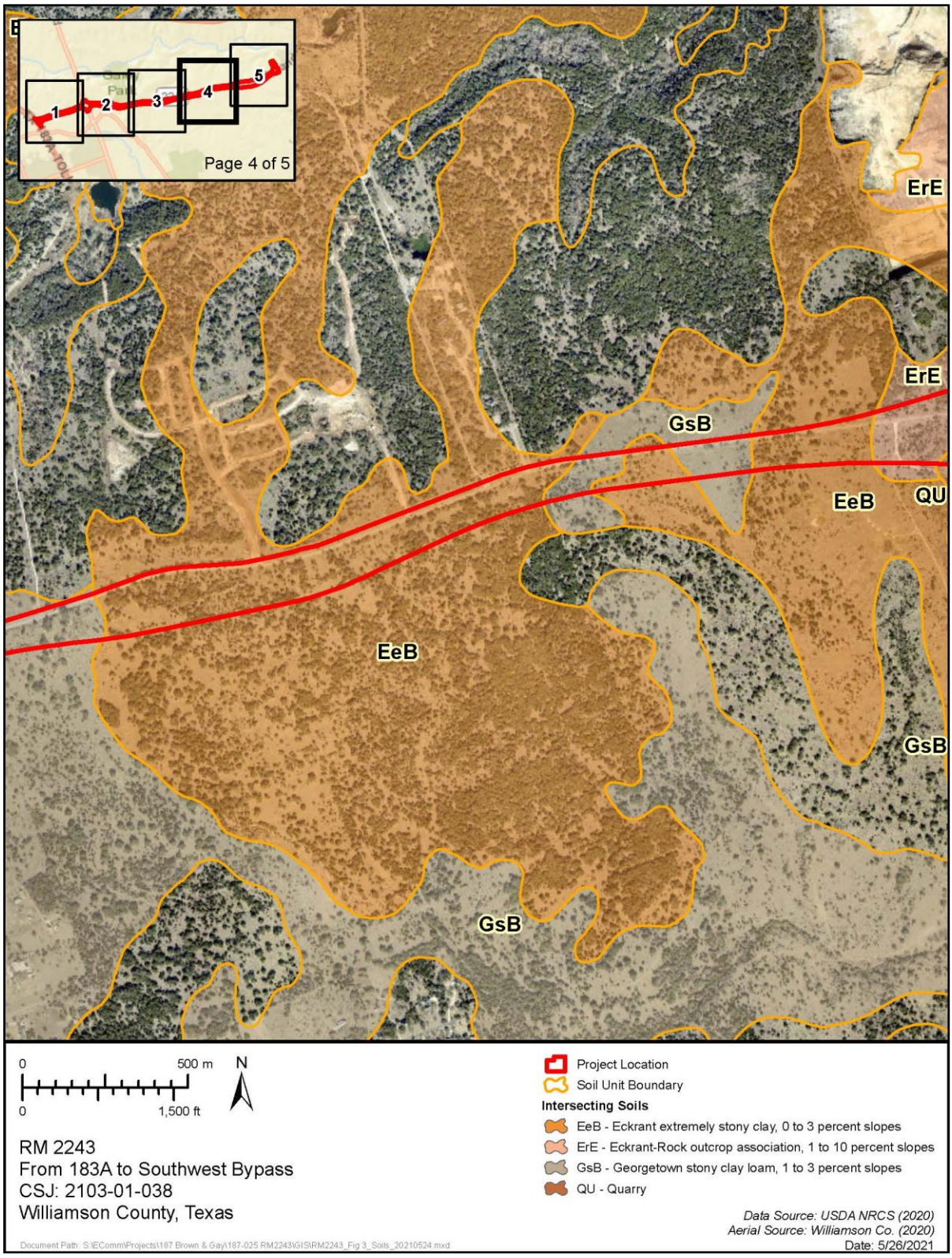

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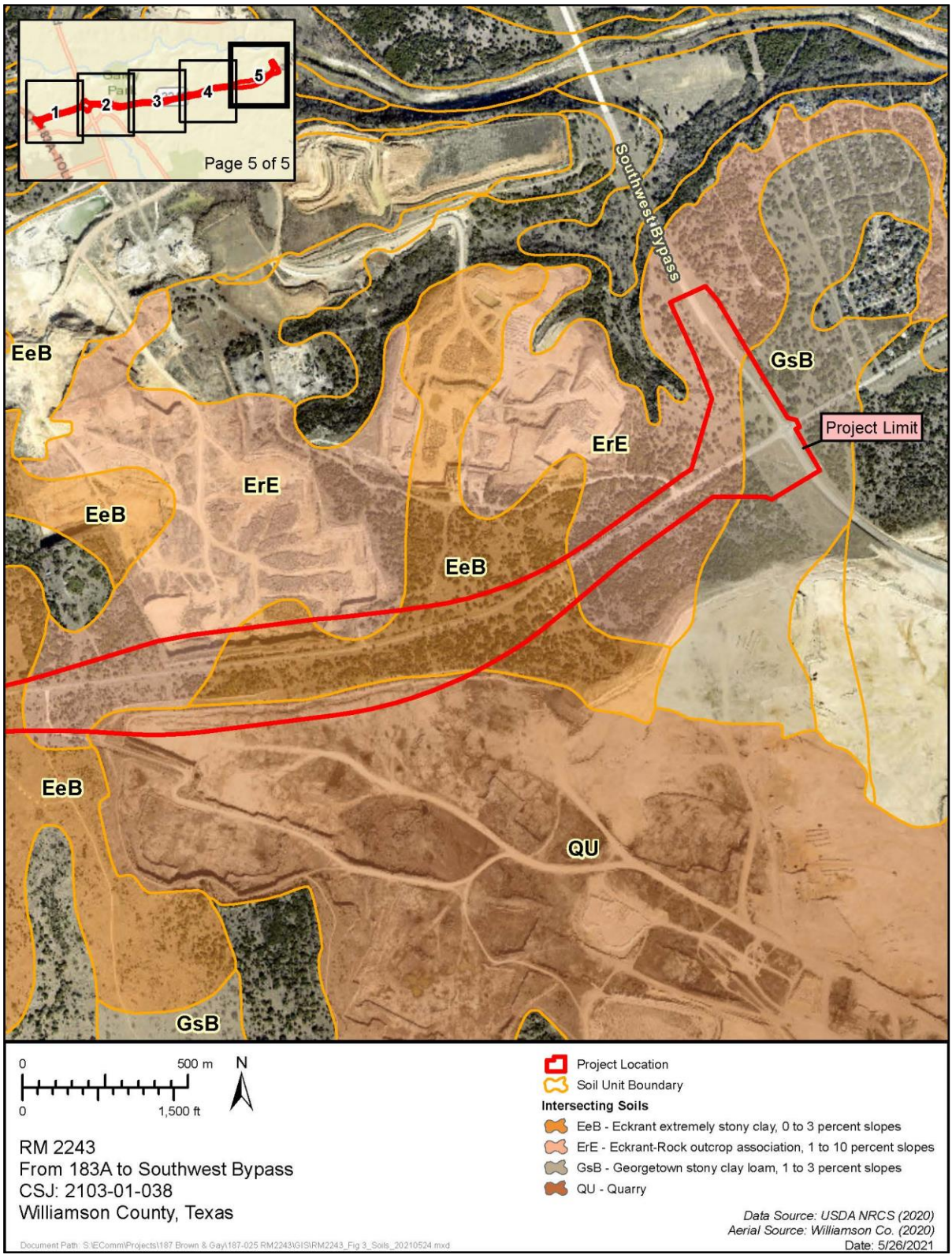
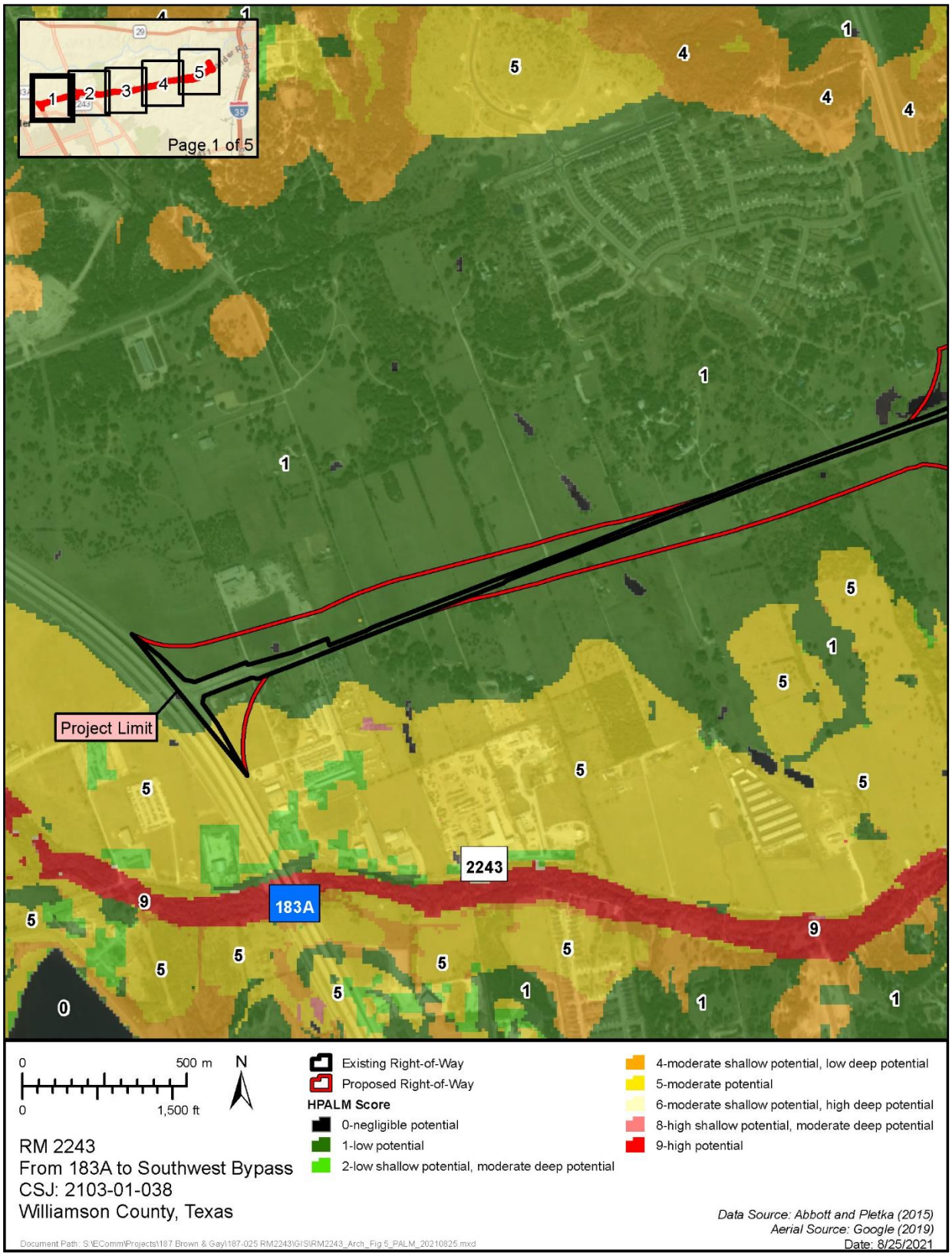
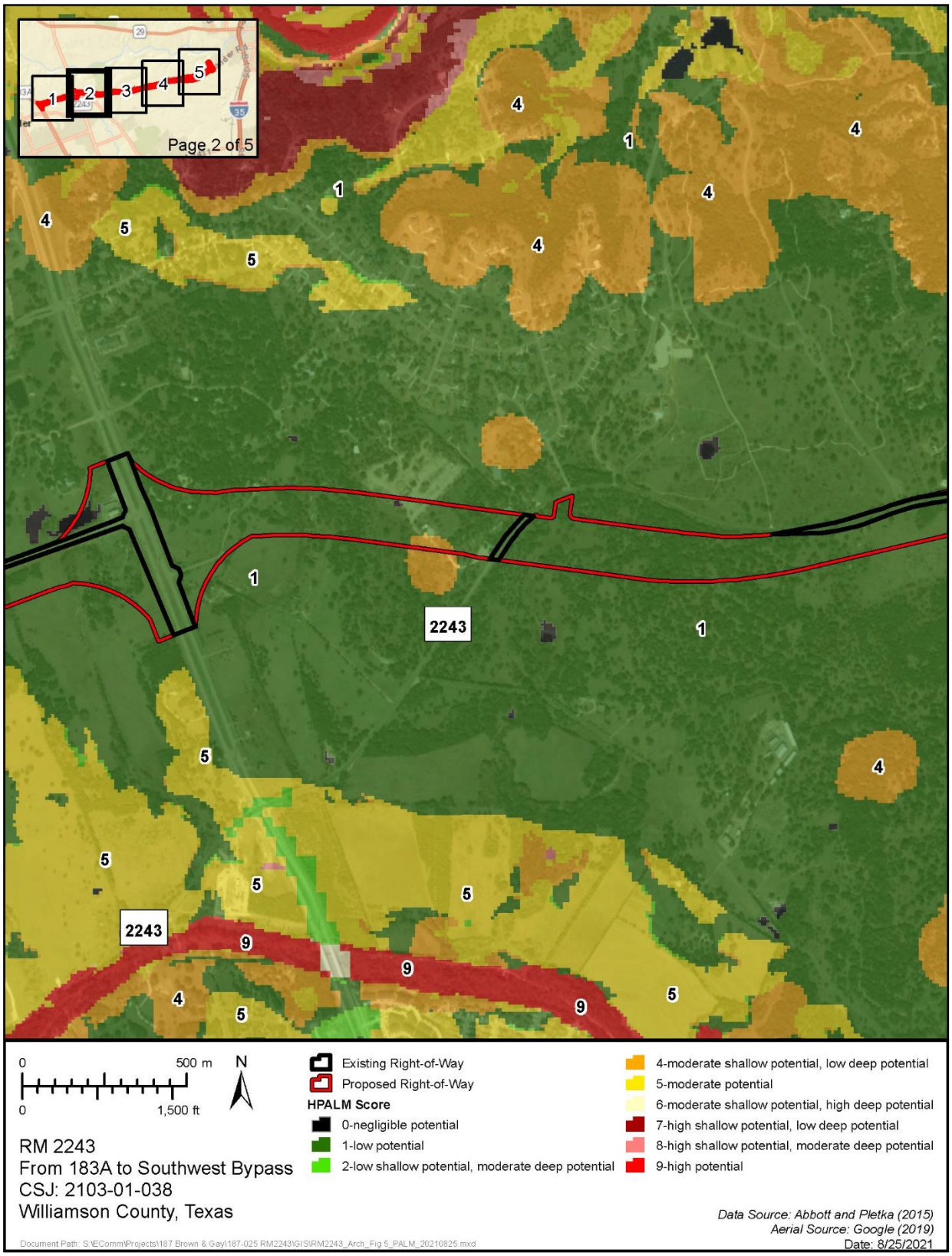


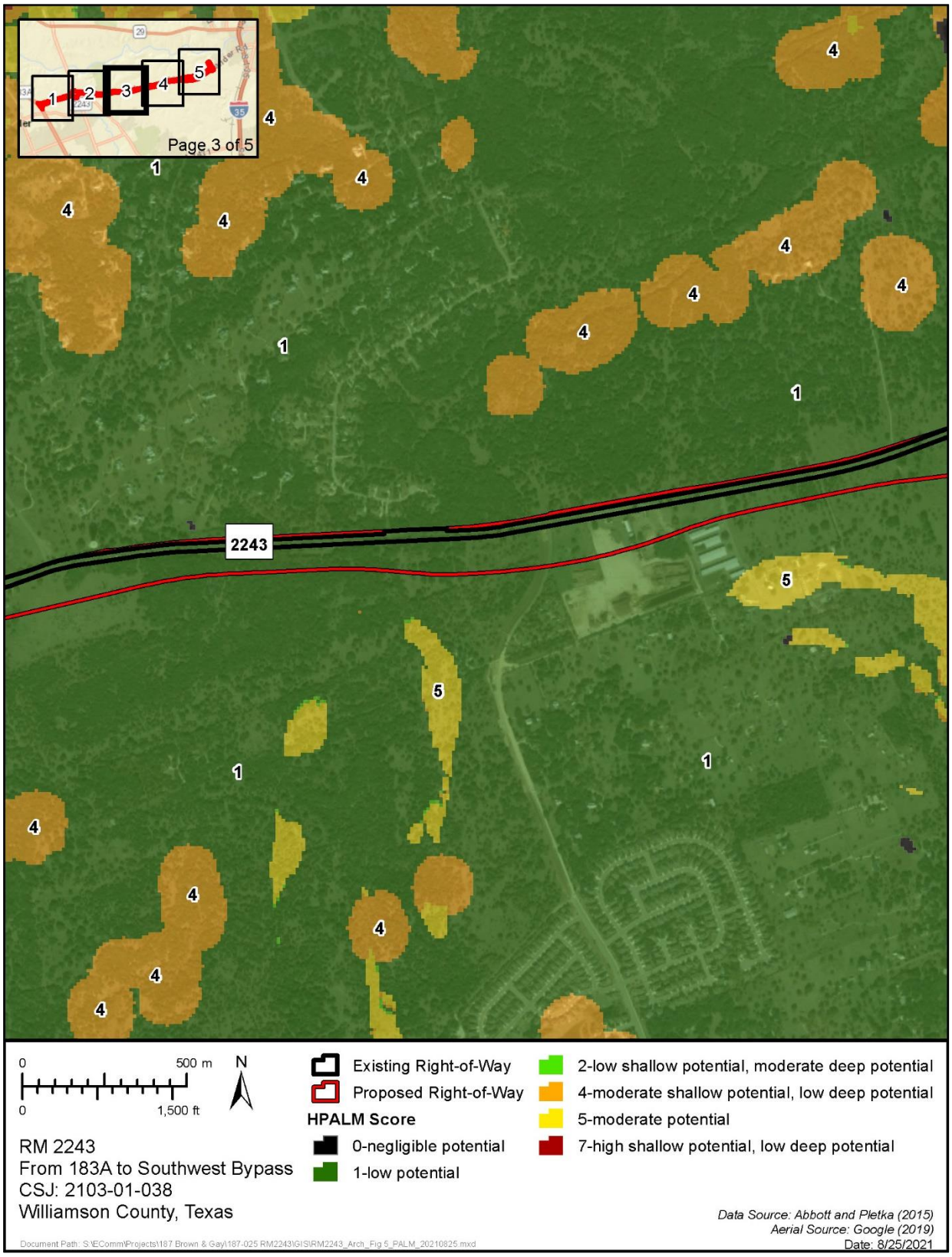
- **Attachment 7a: HPALM map of the project APE.**



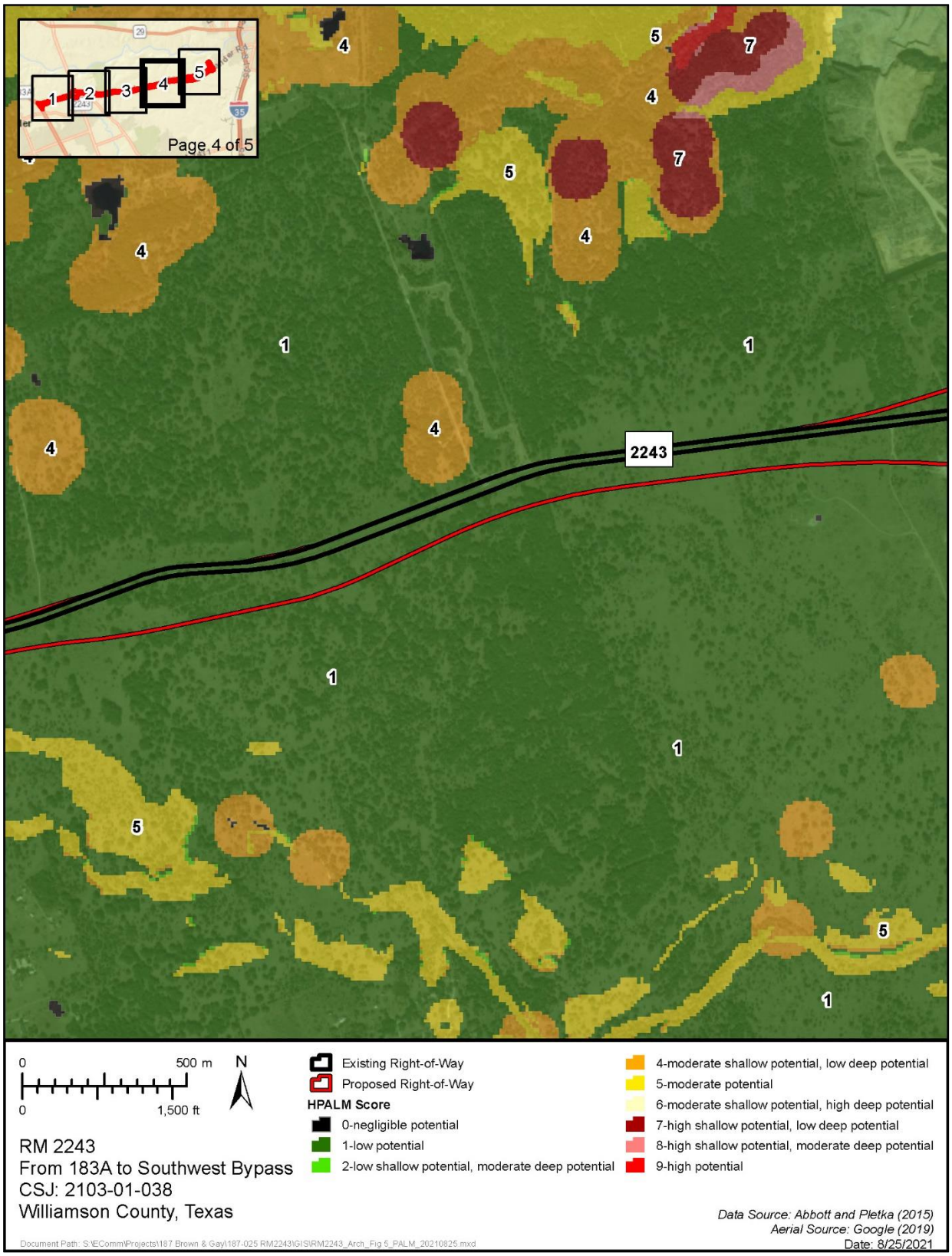
- **Attachment 7b: HPALM map of the project APE.**



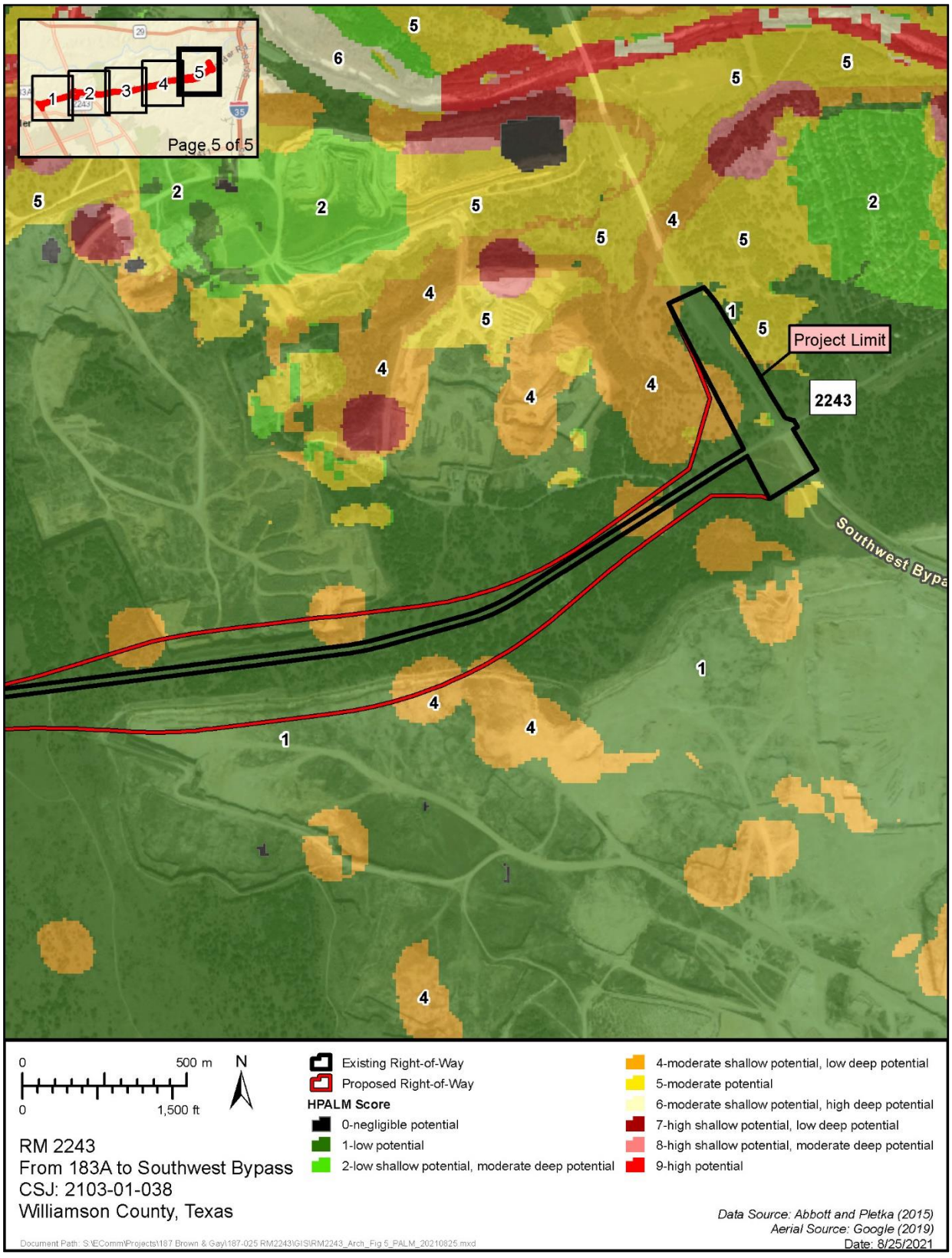
- **Attachment 7c: HPALM map of the project APE.**



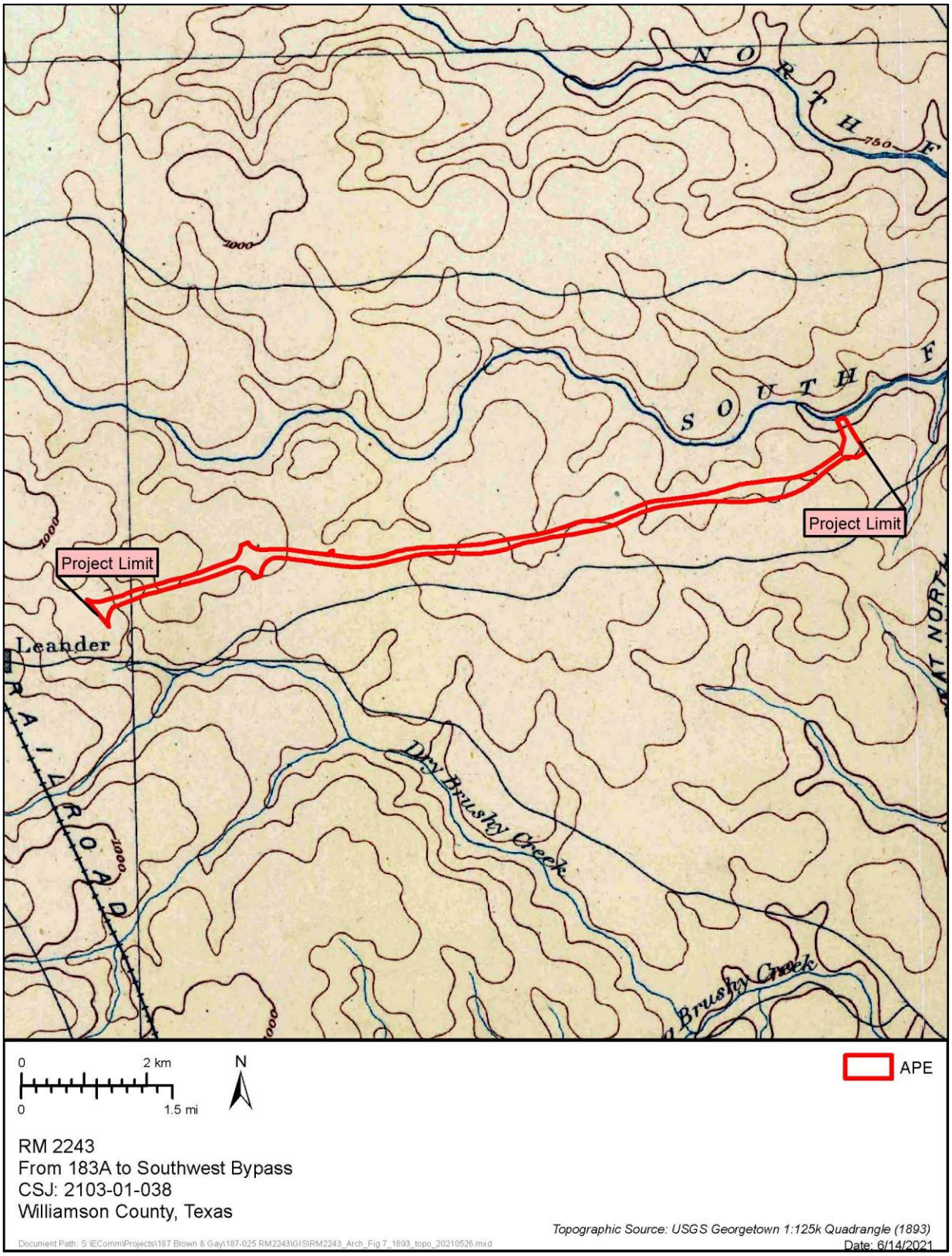
- **Attachment 7d: HPALM map of the project APE.**



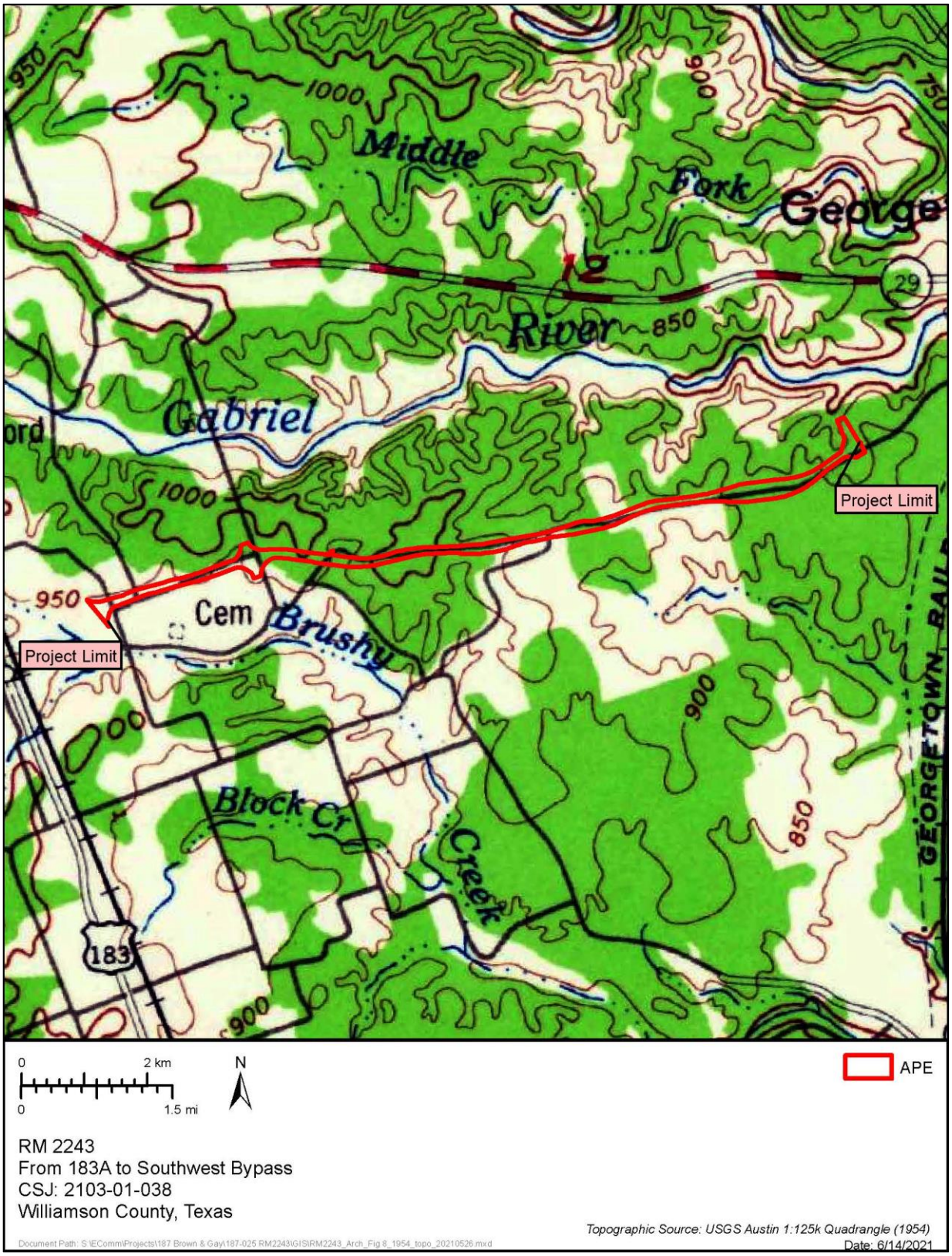
- **Attachment 7e: HPALM map of the project APE.**



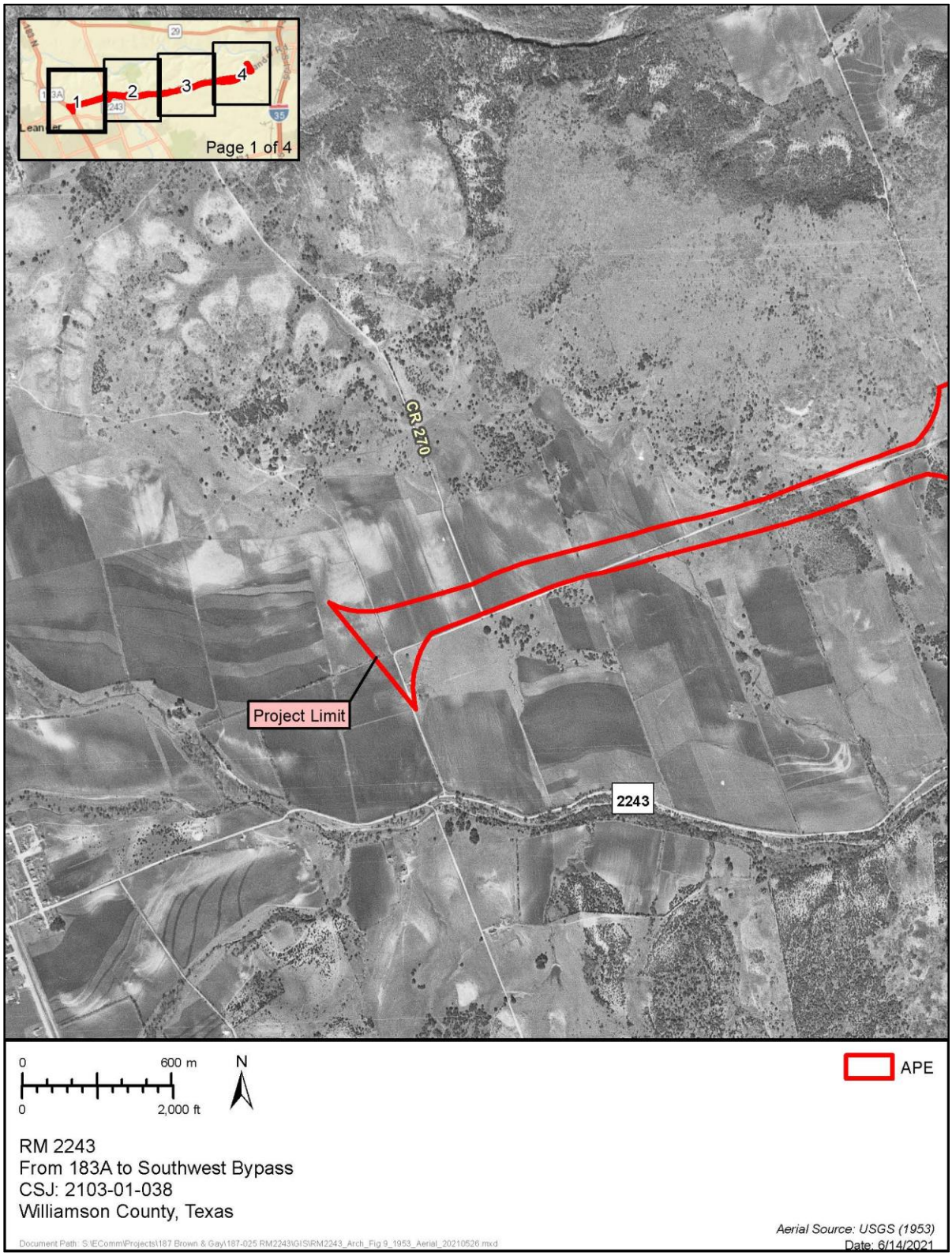
- **Attachment 8: Project APE overlaid on an 1893 topographic map.**



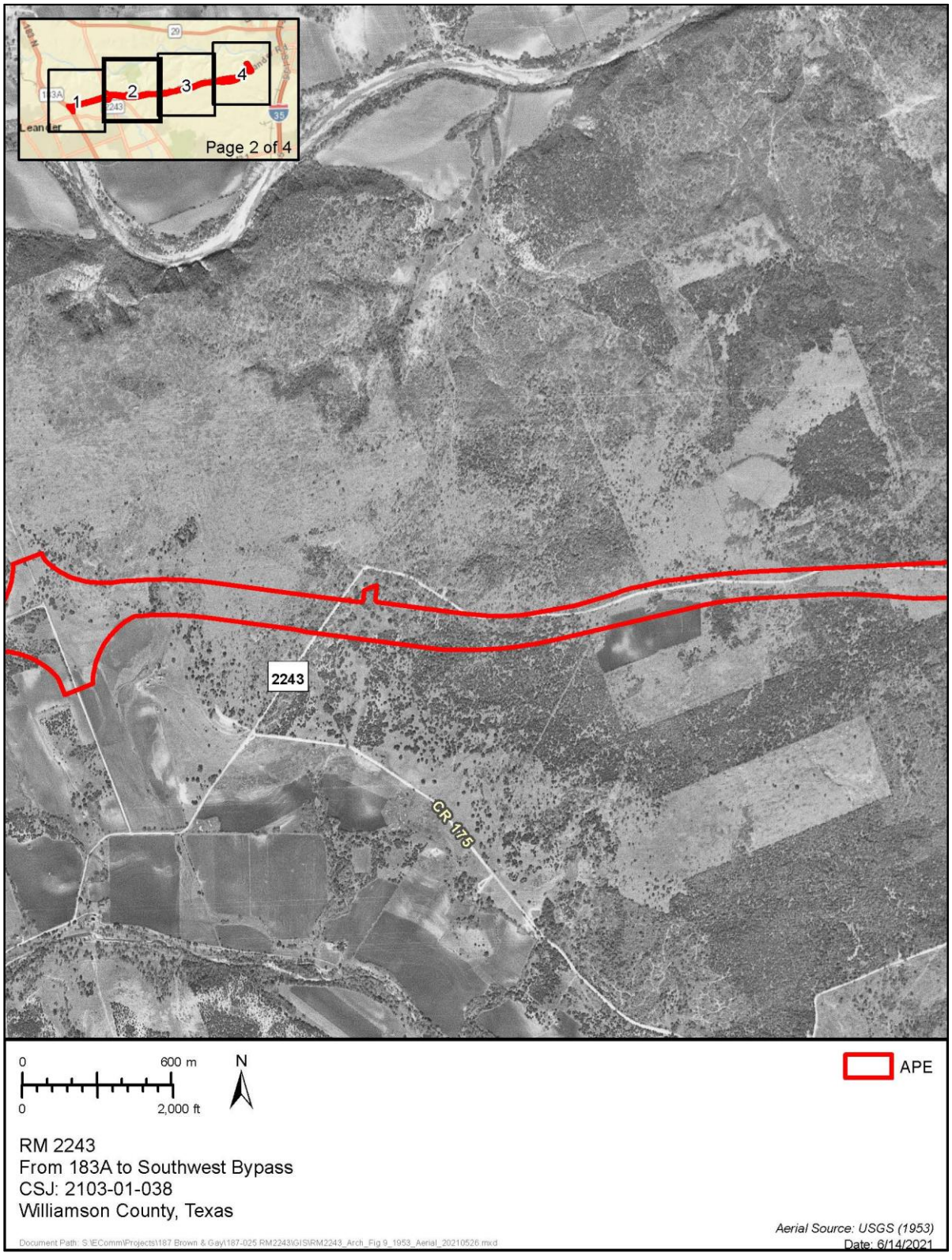
- **Attachment 9: Project APE overlaid on a 1954 topographic map.**



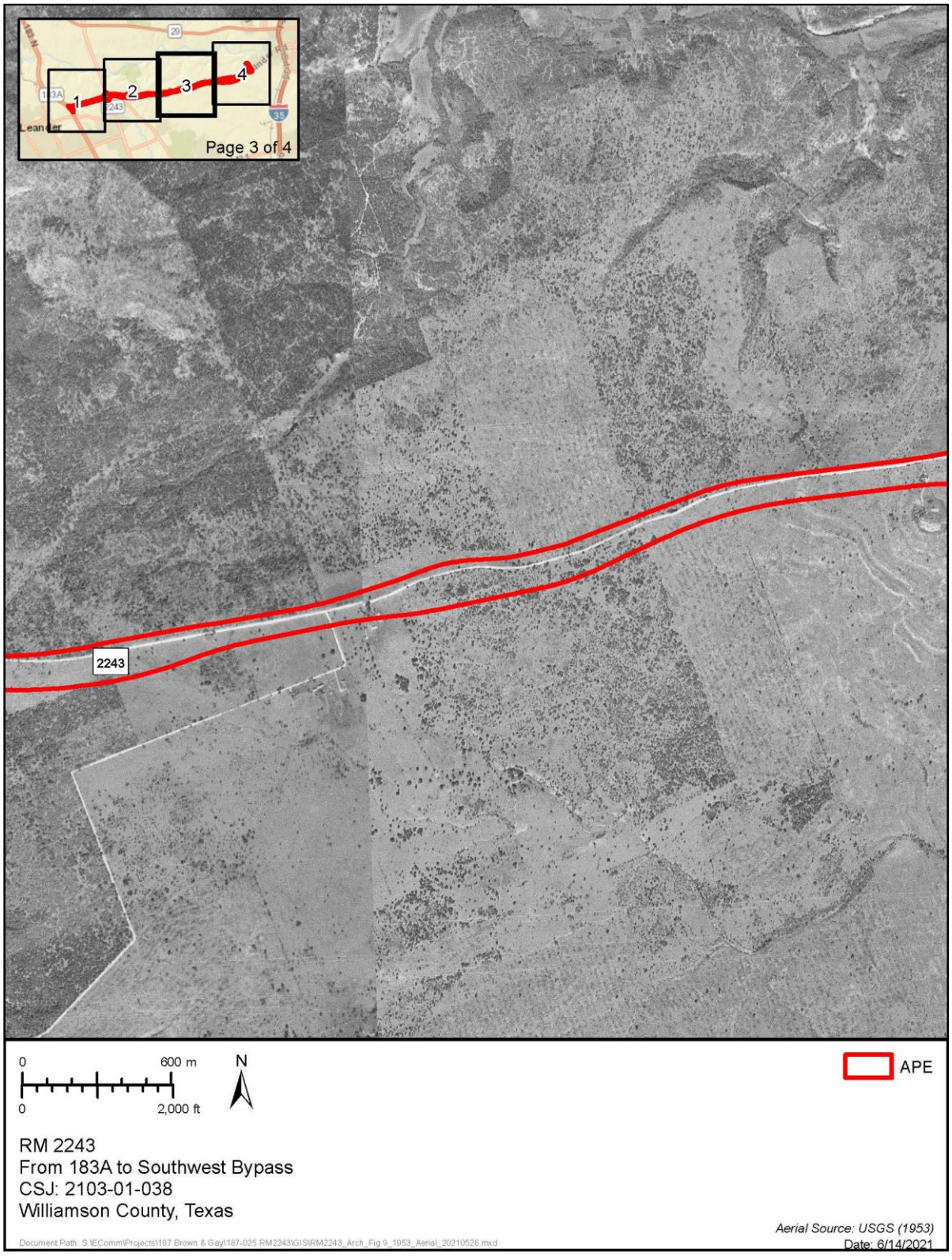
Attachment 10a: Project APE overlaid on a 1953 aerial map.



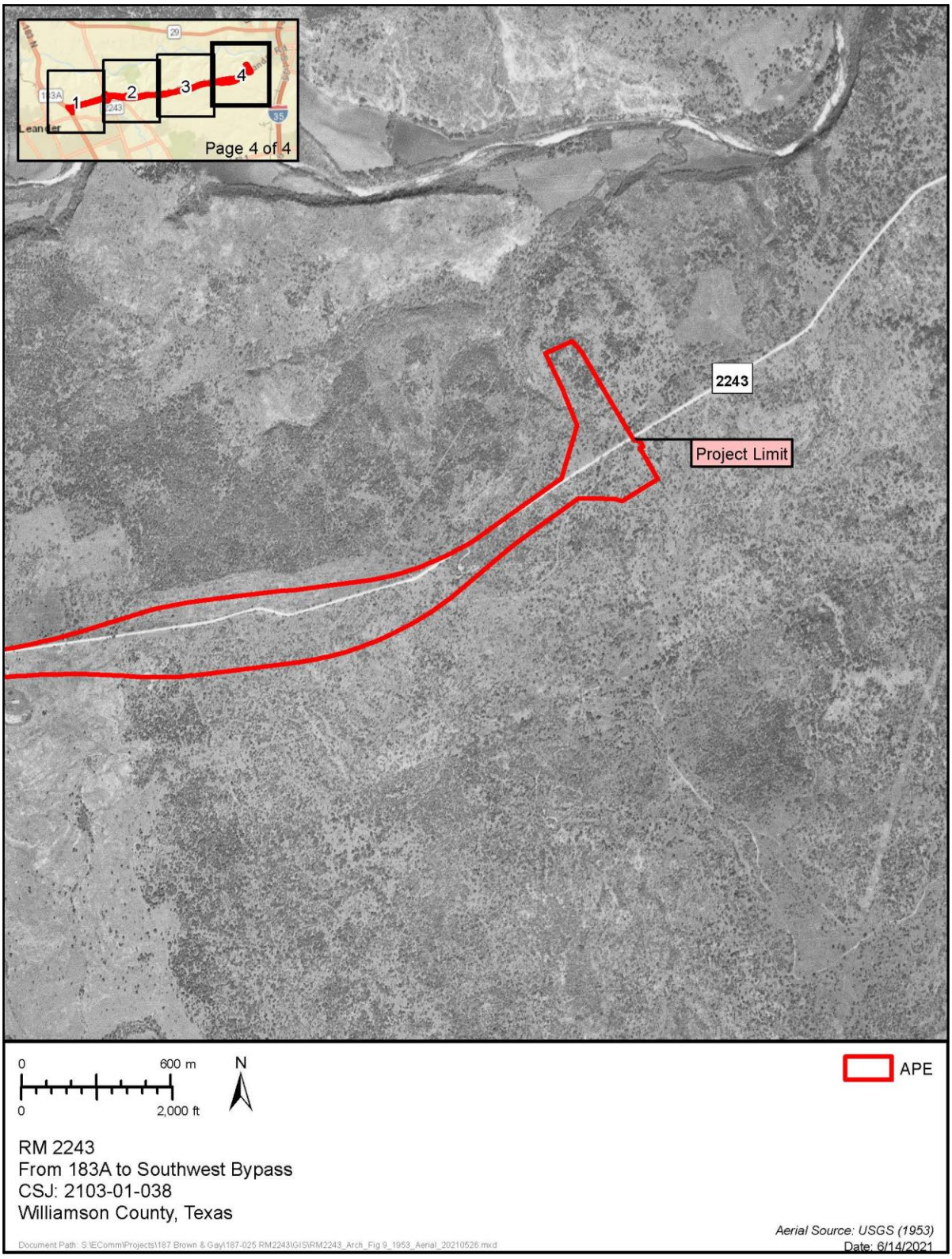
- **Attachment 10b: Project APE overlaid on a 1953 aerial map.**



- **Attachment 10c: Project APE overlaid on a 1953 aerial map.**



- **Attachment 10d: Project APE overlaid on a 1953 aerial map.**



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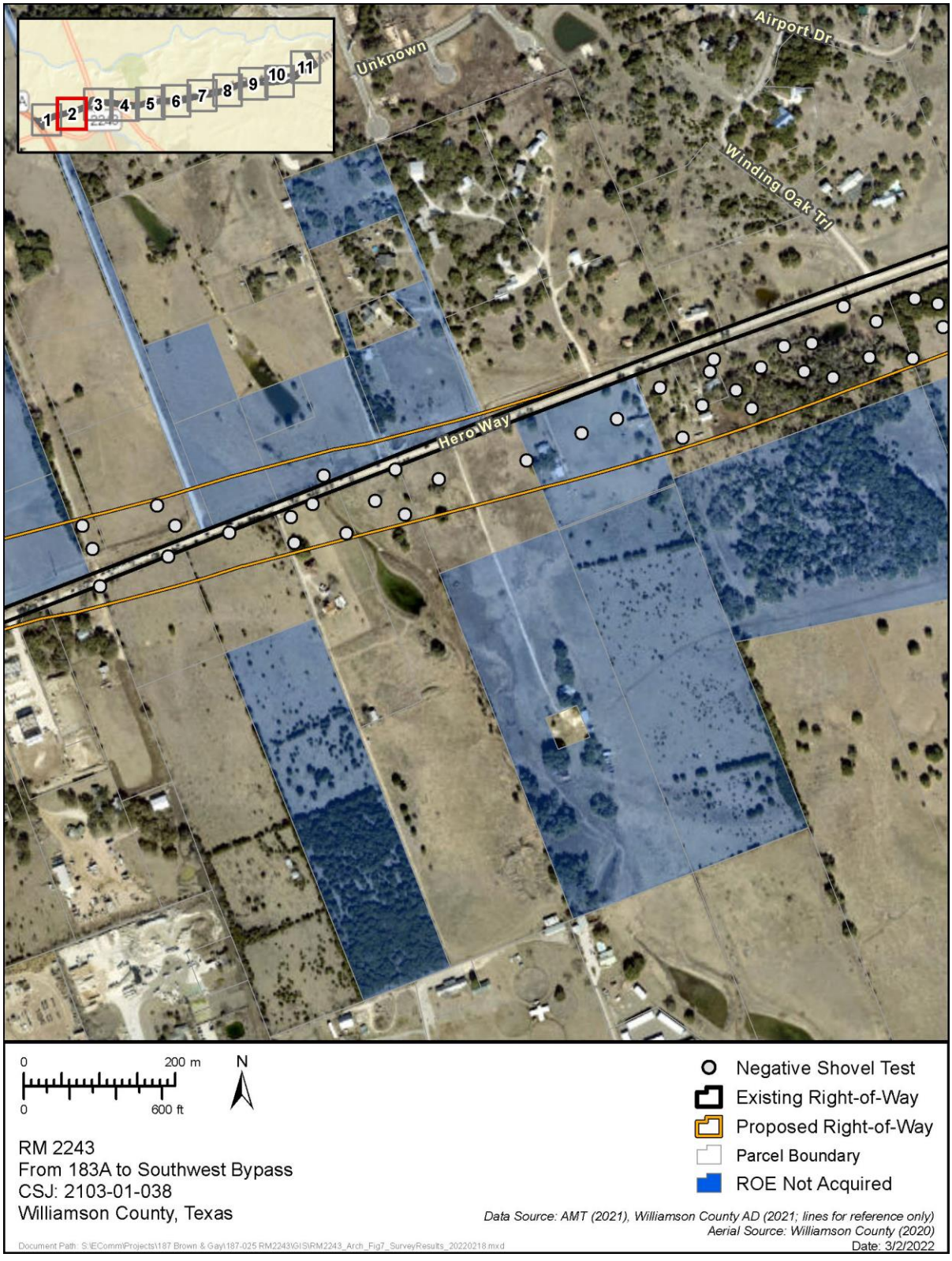
- **Attachment 12a: Survey results maps**

- **Attachment 12b: Survey results Maps**



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- **Attachment 14: Additional figures**
  - 14a. Typical setting of new ROW east of Ronald Reagan Blvd and west of Parkside Parkway.

  - 14b. RM 2243 typical setting and new/existing ROW west of Ronald Reagan Blvd.

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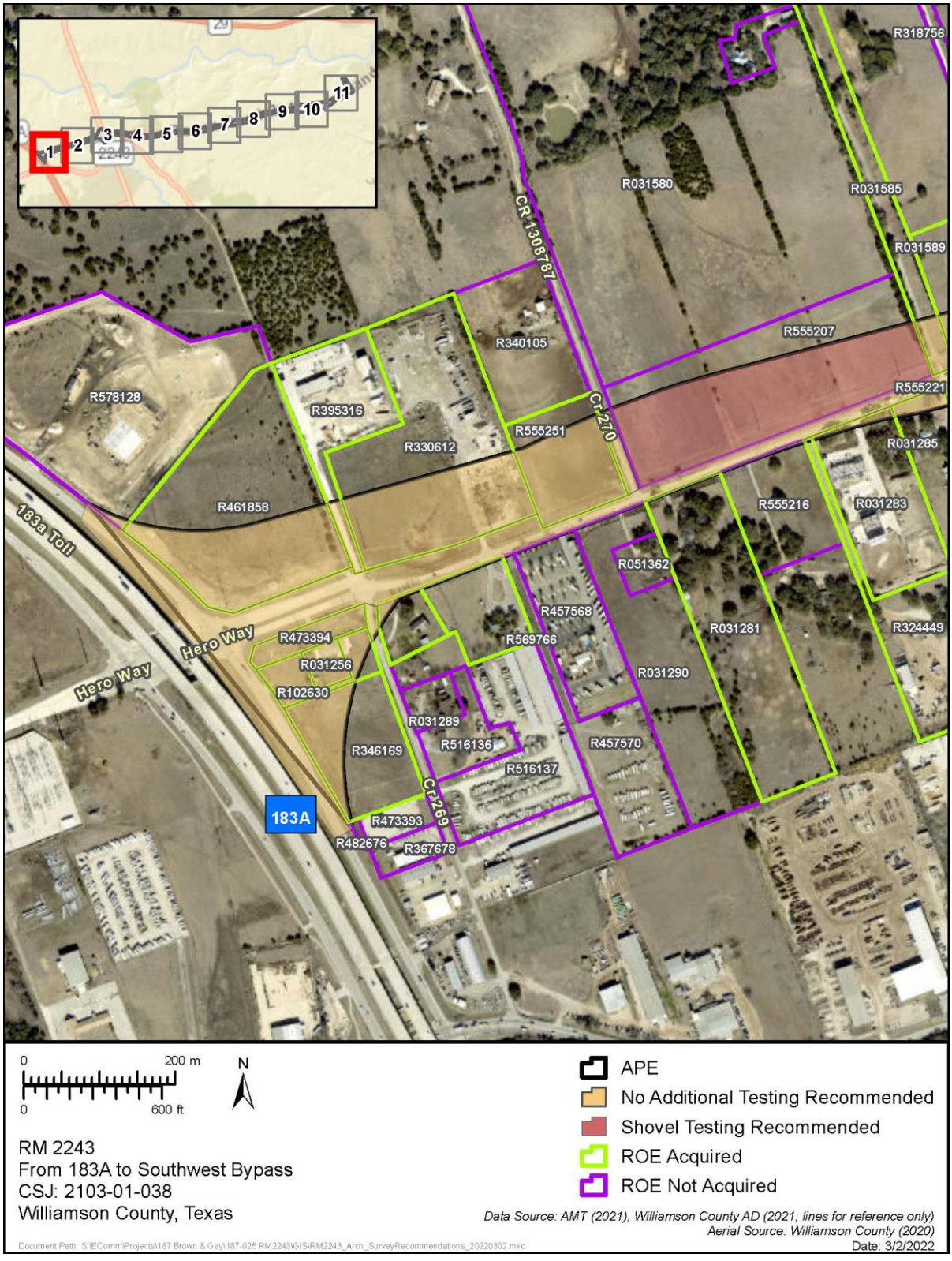
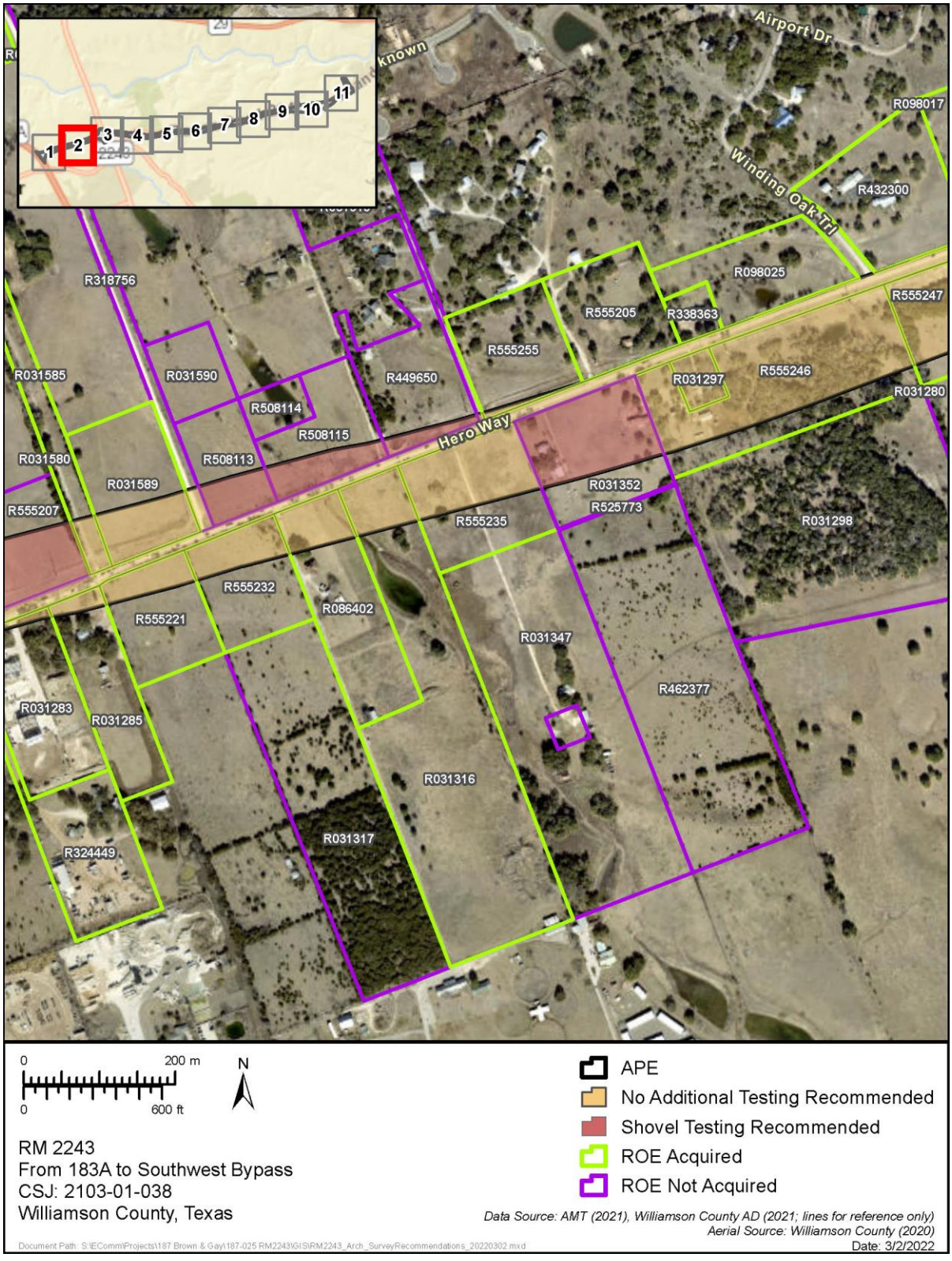
– 14o. Site 41WM1342 Feature 3 – Northwest facing view of southern portion of partially collapsed fence

– 14p. Site 41WM1342 Feature 3 – Southwest facing view of northern portion of partially collapsed fence

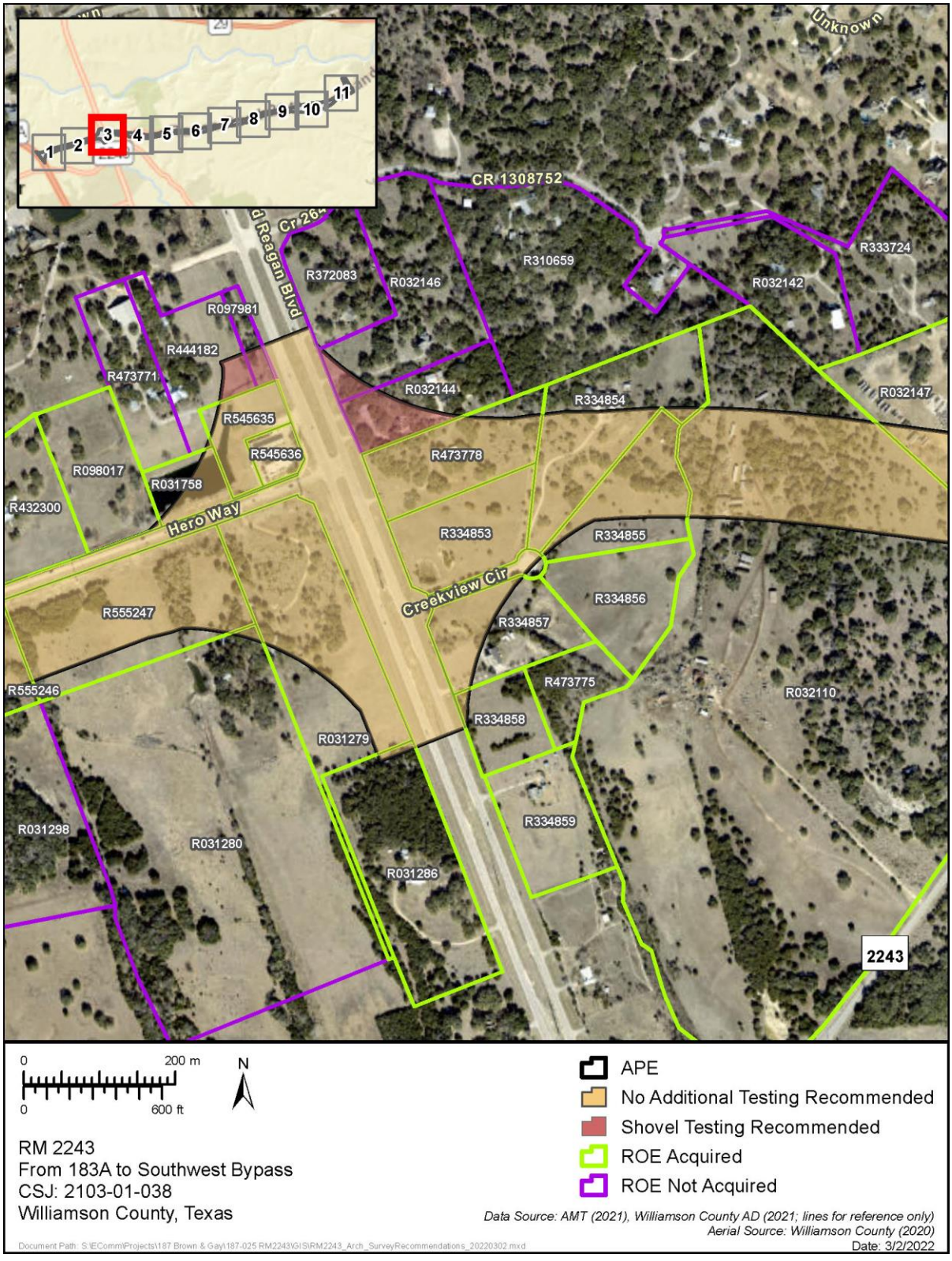
- **Attachment 15a: Recommendations for further work.**



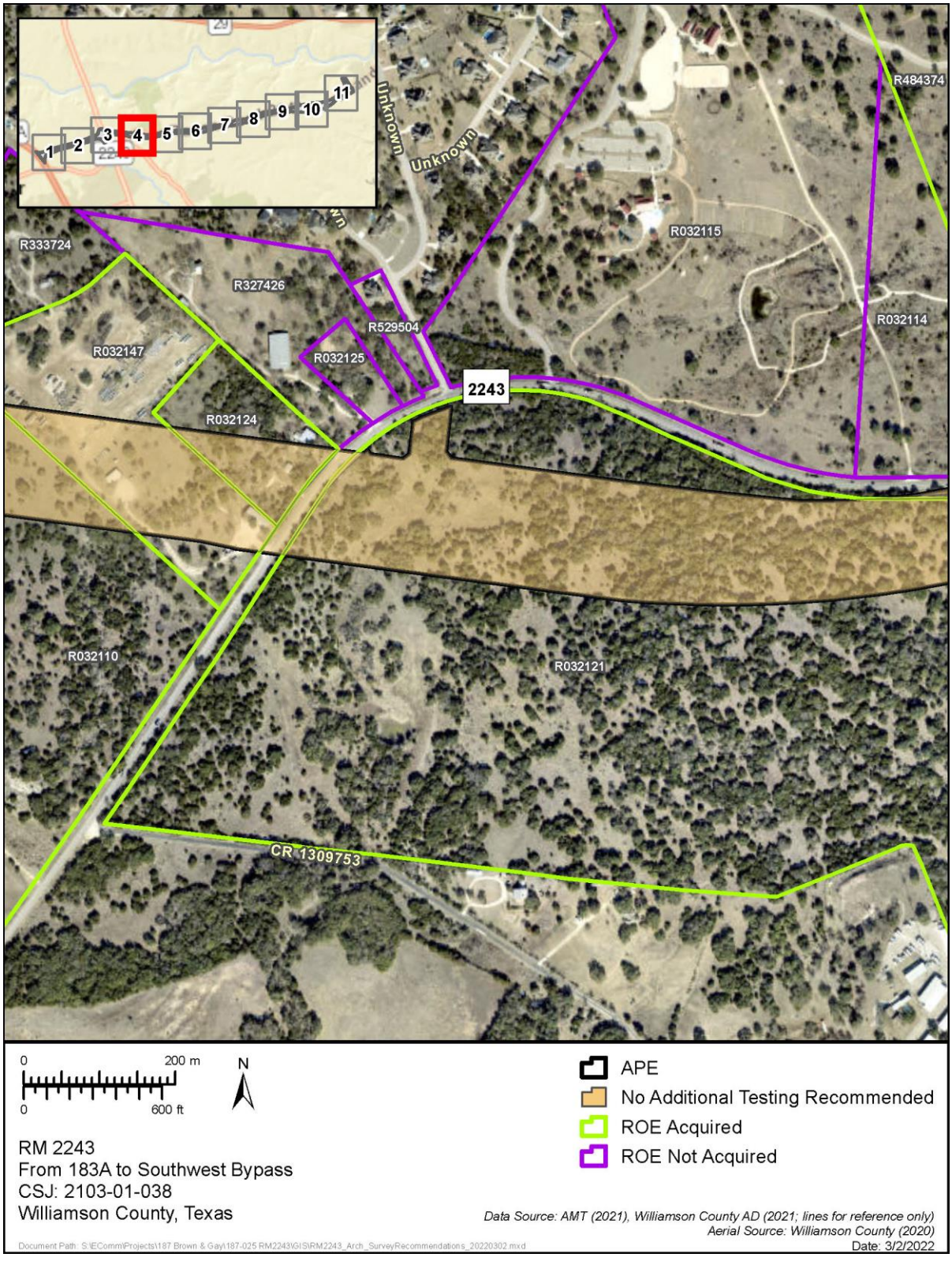
- **Attachment 15b: Recommendations for further work.**



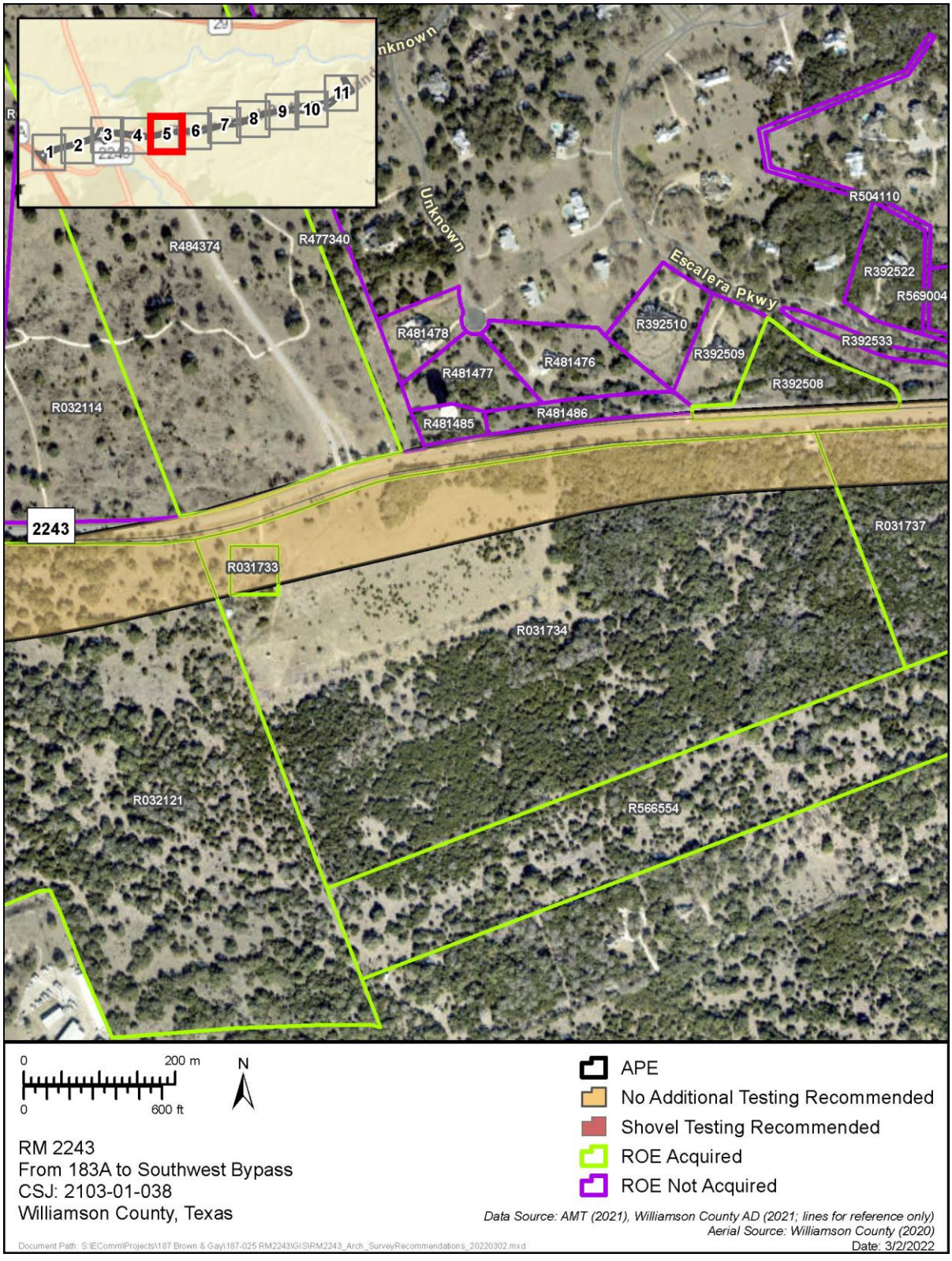
- **Attachment 15c: Recommendations for further work.**



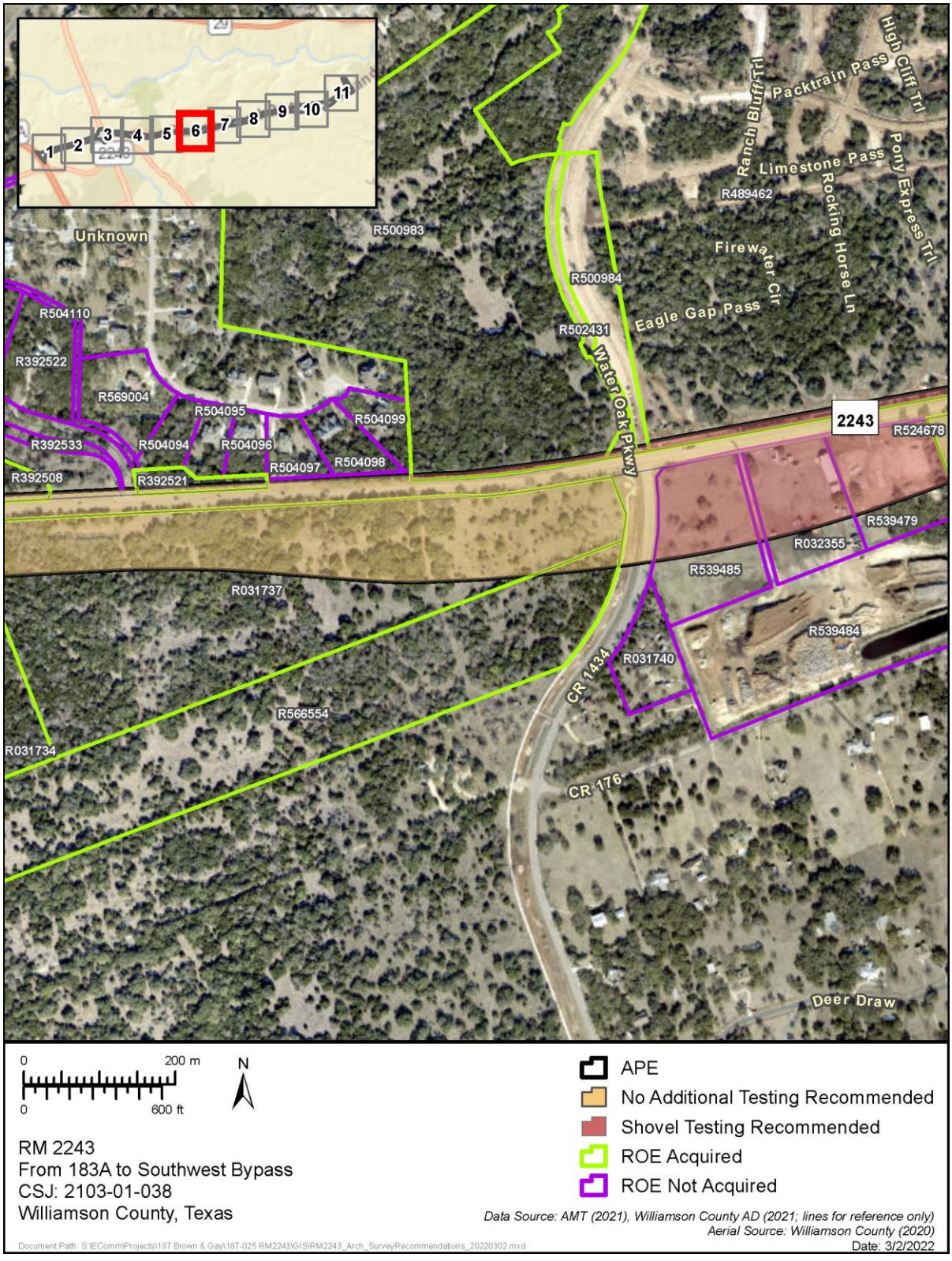
- **Attachment 15d: Recommendations for further work.**



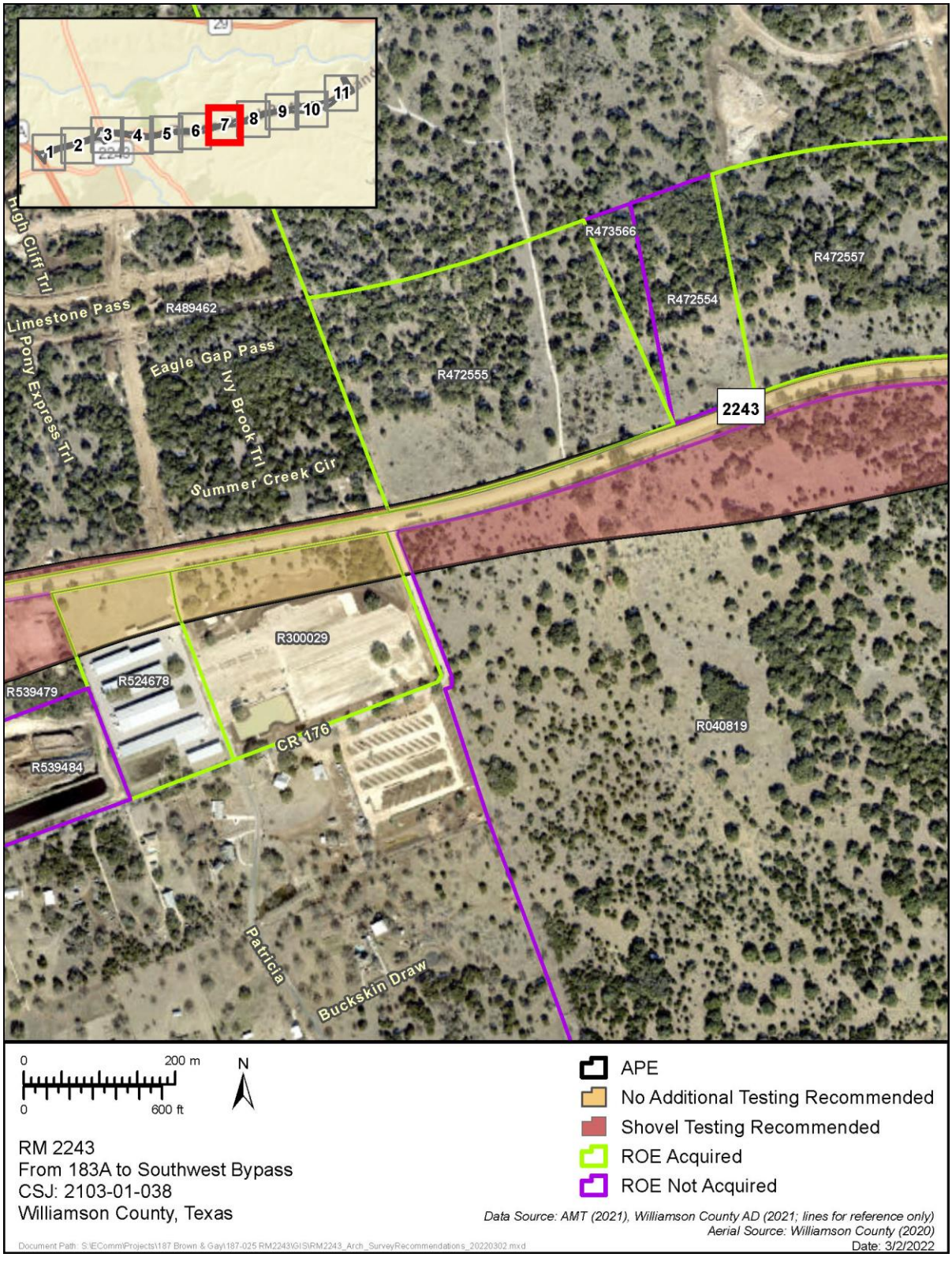
- **Attachment 15e: Recommendations for further work.**



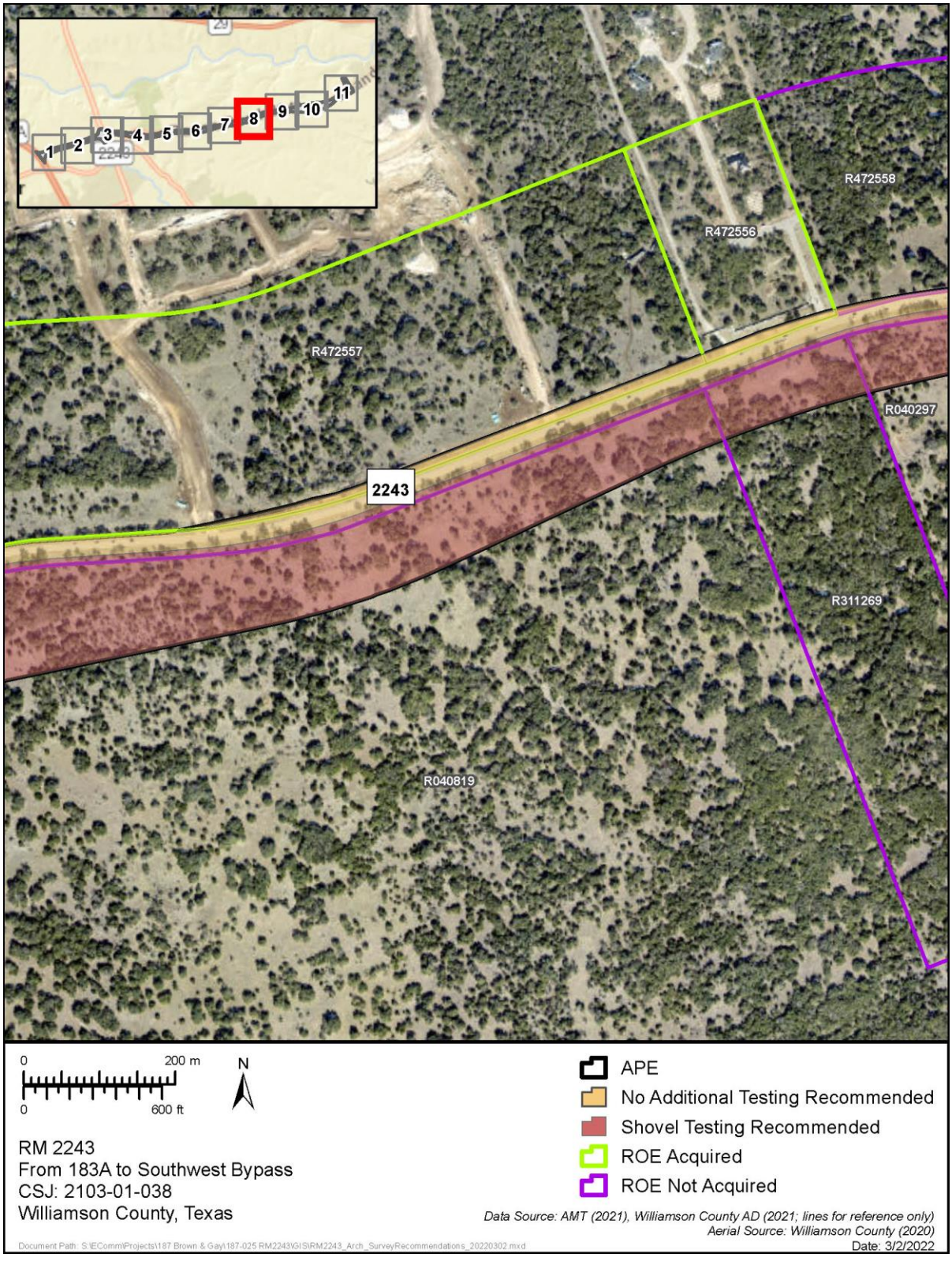
- **Attachment 15f: Recommendations for further work.**



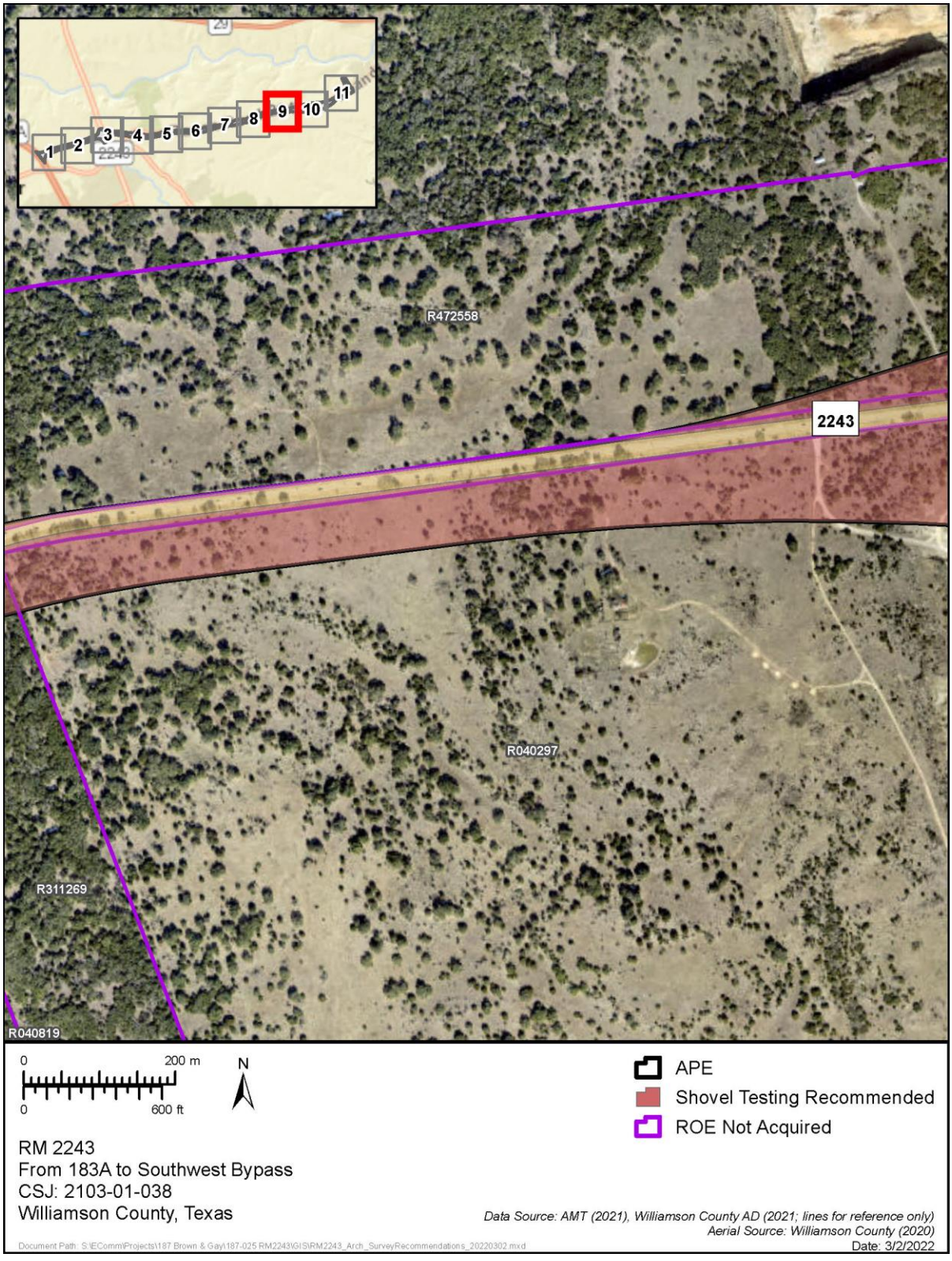
- **Attachment 15g: Recommendations for further work.**



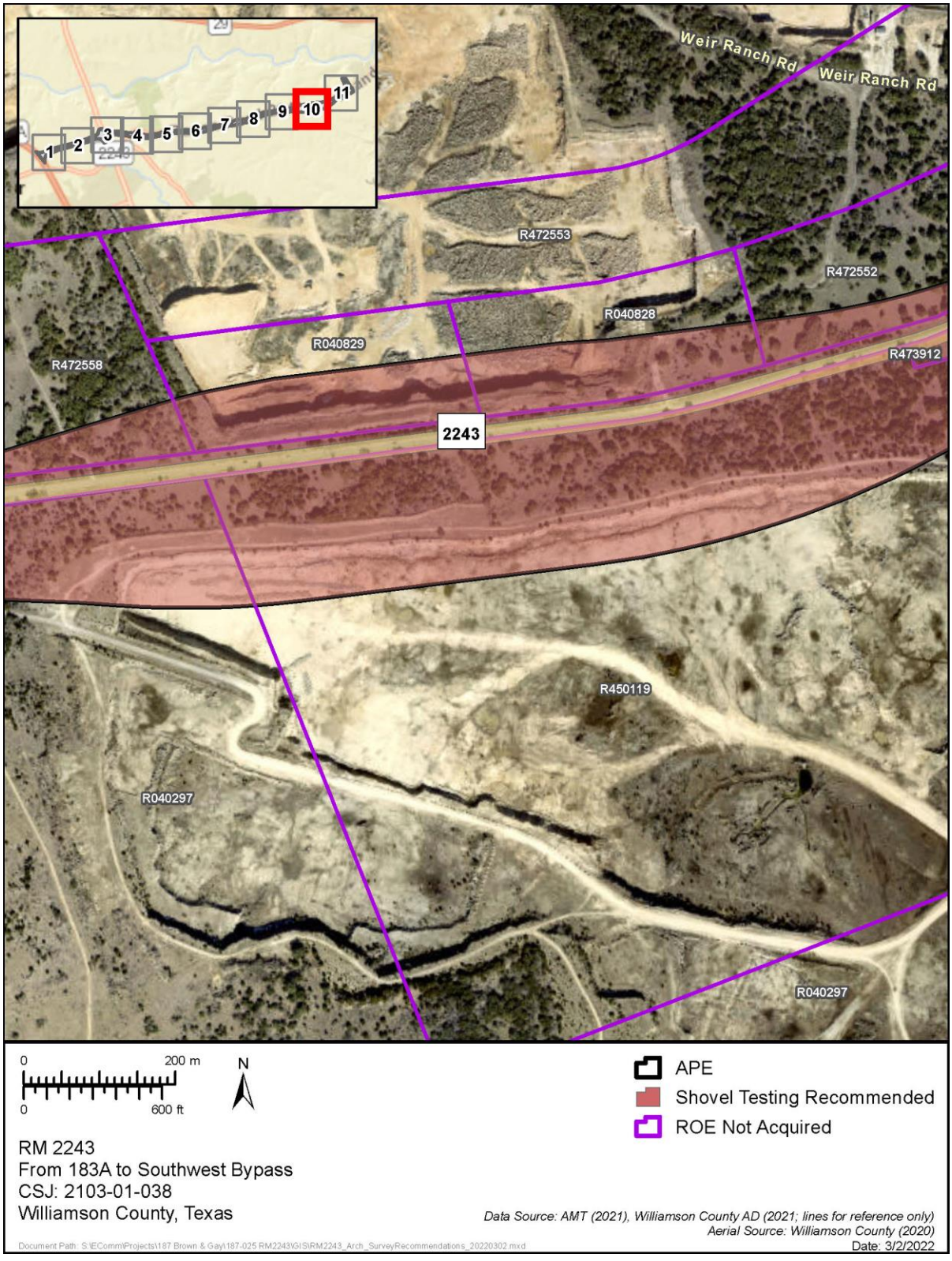
- **Attachment 15h: Recommendations for further work.**



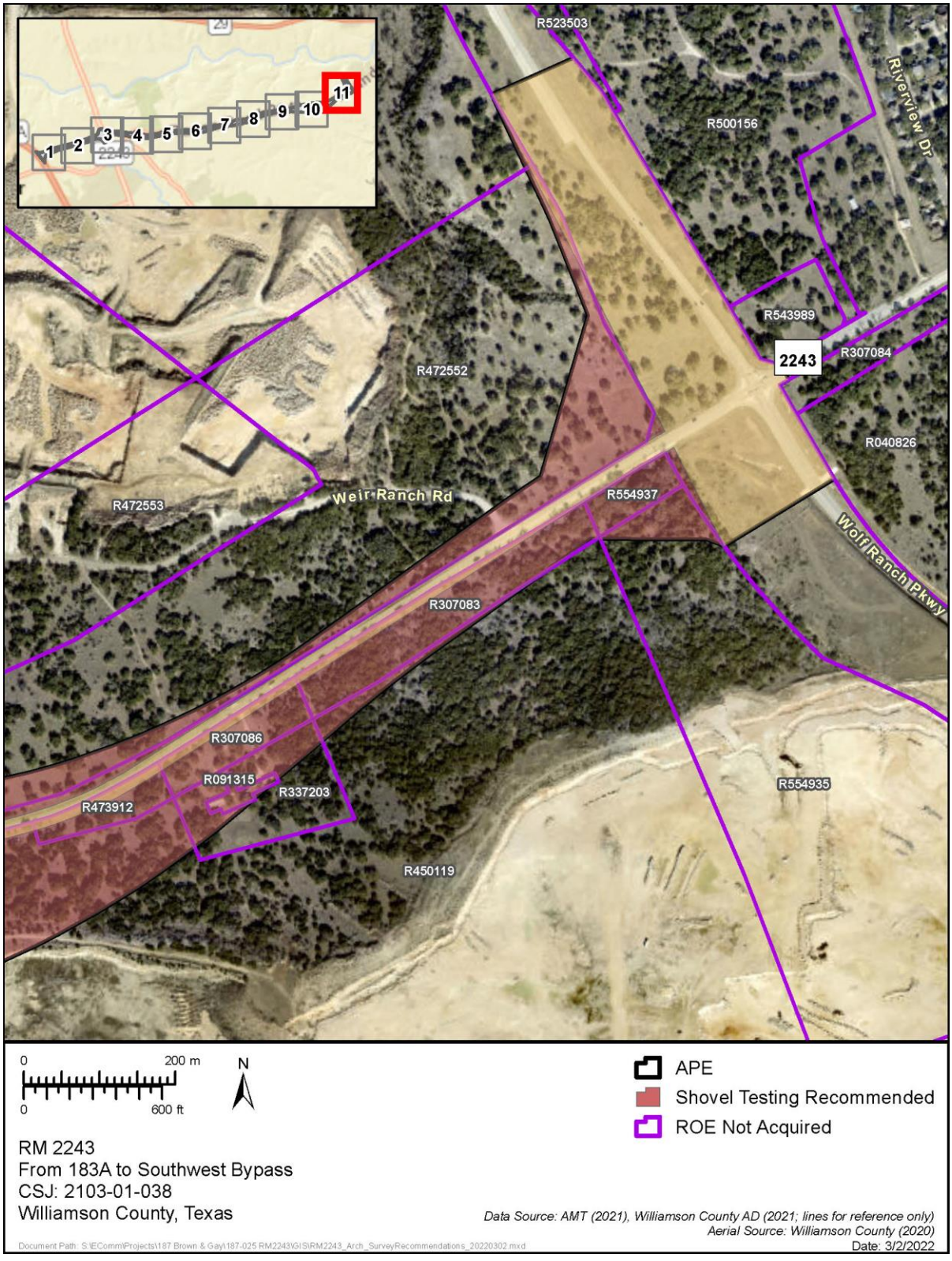
- **Attachment 15i: Recommendations for further work.**



- **Attachment 15j: Recommendations for further work.**



- **Attachment 15k: Recommendations for further work.**



Tables

Table 2. Recommendations for Each Parcel in the APE.

Parcel #	ROE	Existing ROW Acres	New ROW Acres	Recommendation
R031256	Acquired		0.7	No Additional Testing Recommended
R031279	Acquired		8.7	No Additional Testing Recommended
R031280	Not Acquired		0.1	No Additional Testing Recommended
R031281	Acquired		0.0	Shovel Testing Recommended
R031285	Acquired		0.4	No Additional Testing Recommended
R031286	Acquired		0.1	No Additional Testing Recommended
R031288	Acquired		0.1	No Additional Testing Recommended
R031290	Not Acquired		0.0	Shovel Testing Recommended
R031297	Acquired		1.0	No Additional Testing Recommended
R031316	Acquired		1.5	No Additional Testing Recommended
R031352	Not Acquired		4.3	No Additional Testing Recommended
R031585	Acquired		0.6	No Additional Testing Recommended
R031589	Acquired		2.0	No Additional Testing Recommended
R031619	Not Acquired		0.0	No Additional Testing Recommended
R031733	Acquired		0.9	No Additional Testing Recommended
R031734	Acquired		17.7	No Additional Testing Recommended
R031737	Acquired		19.1	No Additional Testing Recommended
R031758	Acquired		1.1	No Additional Testing Recommended
R032110	Acquired		12.4	No Additional Testing Recommended
R032121	Acquired		34.6	No Additional Testing Recommended
R032124	Acquired		3.1	No Additional Testing Recommended
R032144	Not Acquired		1.7	No Additional Testing Recommended
R032146	Not Acquired		0.5	No Additional Testing Recommended
R032147	Acquired		8.0	No Additional Testing Recommended
R032355	Not Acquired		3.3	Shovel Testing Recommended
R040297	Not Acquired		36.8	Shovel Testing Recommended
R040819	Not Acquired		42.0	Shovel Testing Recommended
R040827	Not Acquired		0.1	Shovel Testing Recommended

Parcel #	ROE	Existing ROW Acres	New ROW Acres	Recommendation
R040828	Not Acquired		7.4	Shovel Testing Recommended
R040829	Not Acquired		7.8	Shovel Testing Recommended
R086402	Acquired		1.4	No Additional Testing Recommended
R091315	Not Acquired		0.5	Shovel Testing Recommended
R097981	Not Acquired		0.3	No Additional Testing Recommended
R098017	Acquired		0.0	No Additional Testing Recommended
R102630	Acquired		1.4	No Additional Testing Recommended
R300029	Acquired		4.6	Shovel Testing Recommended
R307083	Not Acquired		5.7	Shovel Testing Recommended
R307086	Not Acquired		2.3	Shovel Testing Recommended
R311269	Not Acquired		4.1	Shovel Testing Recommended
R318756	Not Acquired		0.3	No Additional Testing Recommended
R324449	Acquired		0.0	No Additional Testing Recommended
R330612	Acquired		5.7	No Additional Testing Recommended
R334853	Acquired		5.0	No Additional Testing Recommended
R334854	Acquired		4.1	No Additional Testing Recommended
R334855	Acquired		3.3	No Additional Testing Recommended
R334857	Acquired		2.1	No Additional Testing Recommended
R334858	Acquired		0.1	No Additional Testing Recommended
R337203	Not Acquired		2.2	Shovel Testing Recommended
R346169	Acquired		1.8	No Additional Testing Recommended
R372083	Not Acquired		0.0	No Additional Testing Recommended
R392508	Acquired		0.6	Shovel Testing Recommended
R392521	Acquired		0.4	No Additional Testing Recommended
R395316	Acquired		0.4	No Additional Testing Recommended
R432300	Acquired		0.0	No Additional Testing Recommended
R444182	Not Acquired		0.5	No Additional Testing Recommended
R449650	Not Acquired		0.6	Shovel Testing Recommended
R450119	Not Acquired		44.9	Shovel Testing Recommended
R457568	Not Acquired		0.0	No Additional Testing Recommended

Parcel #	ROE	Existing ROW Acres	New ROW Acres	Recommendation
R457570	Not Acquired		0.0	No Additional Testing Recommended
R461858	Acquired		5.9	No Additional Testing Recommended
R472552	Not Acquired		13.8	Shovel Testing Recommended
R472555	Acquired		0.7	Shovel Testing Recommended
R472558	Not Acquired		5.8	Shovel Testing Recommended
R473394	Acquired		1.2	No Additional Testing Recommended
R473778	Acquired		4.9	No Additional Testing Recommended
R473912	Not Acquired		1.3	Shovel Testing Recommended
R477340	Not Acquired		0.0	Shovel Testing Recommended
R481486	Not Acquired		0.4	Shovel Testing Recommended
R482676	Not Acquired		0.0	No Additional Testing Recommended
R484374	Acquired		0.0	Shovel Testing Recommended
R500983	Acquired		0.6	Shovel Testing Recommended
R502431	Acquired		0.2	Shovel Testing Recommended
R508113	Not Acquired		1.2	No Additional Testing Recommended
R508115	Not Acquired		1.5	Shovel Testing Recommended
R524678	Acquired		2.9	Shovel Testing Recommended
R539479	Not Acquired		3.4	Shovel Testing Recommended
R539484	Not Acquired		0.3	Shovel Testing Recommended
R539485	Not Acquired		3.6	Shovel Testing Recommended
R545635	Acquired		2.1	No Additional Testing Recommended
R545636	Acquired		1.0	No Additional Testing Recommended
R554935	Not Acquired		1.6	Shovel Testing Recommended
R554937	Not Acquired		1.7	Shovel Testing Recommended
R555205	Acquired		0.0	No Additional Testing Recommended
R555207	Not Acquired		10.0	No Additional Testing Recommended
R555216	Not Acquired		0.1	No Additional Testing Recommended
R555221	Acquired		1.1	No Additional Testing Recommended
R555232	Acquired		1.6	No Additional Testing Recommended
R555235	Acquired		3.5	No Additional Testing Recommended

Parcel #	ROE	Existing ROW Acres	New ROW Acres	Recommendation
R555246	Acquired		9.0	No Additional Testing Recommended
R555247	Acquired		8.8	No Additional Testing Recommended
R555251	Acquired		3.3	No Additional Testing Recommended
R555255	Acquired		0.2	No Additional Testing Recommended
R569766	Acquired		0.0	No Additional Testing Recommended
R031283	Acquired		0.3	No Additional Testing Recommended
R098025	Acquired		0.0	No Additional Testing Recommended
R338363	Acquired		0.0	No Additional Testing Recommended
R472556	Acquired		0.5	Shovel Testing Recommended
R472557	Acquired		2.1	Shovel Testing Recommended
R489462	Acquired		2.1	Shovel Testing Recommended
R500984	Acquired		0.0	Shovel Testing Recommended
R566554	Acquired		0.5	No Additional Testing Recommended
R578128	Not Acquired		0.1	No Additional Testing Recommended
Public ROW	Acquired		2.8	No Additional Testing Recommended
Public ROW	Acquired	102.3		
TOTAL		**102.3**	**408.4**	

Table 3. Soils Recorded Within the APE.

Soil	APE Percentage	Description
Crawford clay (CfB)	1.8%	Residuum weathered from limestone. 1–3% slopes.
Denton silty clay (DnB)	3.0%	Alluvium over residuum weathered from limestone. 1–3% slopes.
Denton silty clay (DnC)	0.4%	Alluvium over residuum weathered from heavily eroded limestone. Less than three feet deep. 3–5% slopes.
Doss Silty clay (DoC)	7.3%	Residuum weathered from limestone. 1–5% slopes.
Eckrant cobbly clay (EaD)	14.8%	Residuum weathered from limestone. 1–8% slopes.
Eckrant extremely stony clay (EeB)	31.6%	Residuum weathered from limestone. 0–3% slopes.
Eckrant-Rock outcrop	12.4%	Residuum weathered from limestone. 1–10% slopes.
Farlie clay (FaB)	5.7%	Residuum weathered from Austin chalk formation. 1–2% slopes.
Georgetown stony clay loam (GsB)	19.2%	Residuum weathered from limestone. 1–3% slopes.
Quarry	3.6%	Open surface quarries.

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Table 5. Previously Recorded Archeological Surveys Within the APE and Within One Kilometer (0.62 miles) of the APE.

Atlas Number	Permit Number	Author(s)	Sponsor Agency	THC Review Date
8400004295				
8400010011	2437			
8400010012	2437			
8400010473	2736	Nash, Sean R., G. Staples, and M. Freeman	Williamson County	4/30/2002
8400010579	2768	Oksanen, Eric R, Craig Weaver, and Eric Shroeder	COE-FWD/Brushy Creek MUD	5/27/2003
8400010643	2619	Nash, Sean	Williamson County	9/1/2001
8400010714	2736	Nash, Sean R., G. Staples, and M. Freeman	Williamson County	4/30/2002
8400010802	2768	Oksanen, Eric R, Craig Weaver, and Eric Shroeder	COE-FWD/Brushy Creek MUD	5/27/2003
8400010865	2619	Nash, Sean	Williamson County	9/1/2001
8500004588			Environmental Protection Agency	
8500004589			Environmental Protection Agency, Texas Department of Water Resources	
8500004606			Corps of Engineers-Fort Worth District	
8500011248	3611	Sundermeyer, Scott and Sherry DeFreece	Federal Transit Administration	3/8/2005
8500011602	3245	Dockall, John E.	Texas Department of Transportation	2/16/2006
8500013643	3848	Cambell, John and Robert Lassen	Texas Department of Transportation	8/24/2006
8500014054		Owens, Jeffrey D.	Corps of Engineers-Fort Worth District	5/7/2007
8500015070	4846	Bradle, Michael R., and G. T. Bernhardt	City of Georgetown	6/5/2008
8500015216	3482	Bradle, Michael, R. D'Aigle	City of Georgetown	9/9/2008
8500016332	5431	Nash, Sean R.	City of Leander	12/3/2009
8500016349	5387	Dayton, Chris	Texas Department of Transportation, City of Leander	12/11/2009

Atlas Number	Permit Number	Author(s)	Sponsor Agency	THC Review Date
8500017289	5499	Kibler, Karl W.	Texas Department of Transportation, City of Leander	3/5/2010
8500018289	5644	Nash, Michael A., Casey J. Hanson	U. S. Department of Education	8/24/2010
8500060011	6918	Young, Alamea et al.	K Friese & Associates, Inc.	
8500060994	6952	Perrine, Rachel D., and David Treichel	Brown & Gay Engineers, Inc.	9/22/2014
8500061451	2753	Nash, Sean R., and Gregory D. Staples	Athabasca Consulting Inc.	
8500062593		Owens, Jeffrey D.	Mason Joseph Company, Inc.	1/12/2015
8500063416		Owens, Jeffrey D.	Mason Joseph Company, Inc.	1/30/2015
8500063836	6952	Perrine, Rachel D., and David Treichel	City of Leander	9/22/2014
8500063837				
8500066423	7283	Hanson, Casey	City of Leander	7/15/2015
8500070880		Owens, Jeffrey	Meritage Homes of Texas	8/10/2015
8500076619	7537	Fullerton, Ben	Williamson County	3/10/2016
8500080259	7416	King, Allison	CRMWD	12/16/2016
8500080336	7531	Evans, Steven, et al.	LCRA	5/12/2017
8500080426	7992	Rodriguez, Mary F., and Ashley Eyeington	City of Georgetown	7/17/2017
8500080611	7028	Stotts, Matthew C. and Brandon Young	City of Georgetown	9/1/2017
8500080716	7718	Padilla, Antonio	Williamson County	6/20/2018

Table 6. Deed Records for Parcel R031737, Containing Site 41WM1342.

Grantee	Grantor	Document Type	Document #	Book Vol.	Page #	Date of Transaction	Comments
HM CR 176-2243 LP	RM 2243 LTD Mayes Henry B JR	Special Warranty Deed with Vendor's Lien	2018012540	N/A	N/A	2/13/2018	
RM 2243 LTD	Fields John J Trustee	General Warranty Deed	2012033159	N/A	N/A	5/3/2012	
Fields John J Trustee	Wilson Robert J Gibbs Harry BBK Properties LLC	Substitute Trustee's Deed	2012031819	N/A	N/A	5/1/2012	May 12, 2012: Lender (John J. Fields, Trustee) appointed Robert J. Wilson as the substitute trustee and directed him to foreclose the lien of the Deed Trust, Escalara Point LLC, Escalera Management LLC, and Bridge Capital Group Inc.
Escalera Point LLC	BBK Properties LLC; KF Enterprises LLC	General Warranty Deed	2007063253	N/A	N/A	7/25/2007	
BBK Properties	Gibbs, Harry	General Warranty Deed	2007063252	N/A	N/A	7/25/2007	
Gibbs, Harry & BBK Properties LLC	John J. Fields, Trustee	Warranty Deed	2007008545	N/A	N/A	1/29/2007	

Grantee	Grantor	Document Type	Document #	Book Vol.	Page #	Date of Transaction	Comments
John J Fields, Trustee	John L. Dennis, Trustee	Wrap Warranty Deed with Vendor's Lien	1986002560	1301	176	1/21/1986	Parcel partitioned from 102.3 acres to current size of 40.8 acres
Dennis John L Trustee	Peaslee Henry	Warranty Deed with Vendor's Lien	1984026223	1052	303	8/1/1984	Parcel partitioned from 106.3 acres to 102.3 acres
Peaslee Henry	Ray Jan Peaslee Ray Richard L.	Deed	19654214DR	483	170	11/23/1965	Ray Jan Peaslee is an heir of T.R. Peaslee
Peaslee T.R.	Fulkes C. D. Fulkes Bessie	Deed	193900201DR	294	512	4/22/1939	
C. D. Fulkes	A. D. Fulkes	Deed	191301251DR	151	583	11/1/1913	
A. D. Fulkes	S. L. Sexton, Allie Sexton	Deed	190201146DR	102	418	11/18/1902	
S. L. Sexton	R. W. Insall	Deed	189938223DR	88	171	6/21/1899	Purchased 2 tracts of land which became subsequent parcel
	S.J. Walker		189938221DR	88	168		

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This report was written on behalf of the Texas Department of Transportation by:

AmaTerra® ENVIRONMENTAL, INC.

11842 Rim Rock Trail
Austin, Texas 78737

512.329.0031