TEXAS HISTORICAL COMMISSION

ANTIQUITIES PERMIT APPLICATION FORM ARCHEOLOGY

GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) Robinson Ranch Road
County (ies) Williamson County
USGS Quadrangle Name and Number Pflugerville West 3097-243
UTM Coordinates Zone 14R E 620577 N 3372685
Location Pflugerville, TX
Federal Involvement ☐ Yes ☒ No
Name of Federal Agency
Agency Representative

II. OWNER (OR CONTROLLING AGENCY)

Owner Williamson County
Representative Steven Snell (County Judge)
Address 710 Main Street, Suite 101
City/State/Zip Georgetown, TX 78226
Telephone (include area code) 512-943-1550 Email Address steve.snell@wilcotx.gov

III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

Sponsor Willimason County (see above)
Representative
Address
City/State/Zip
Telephone (include area code) Email Address

PROJECT INFORMATION

I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name Nadya Prociuk
Affiliation HDR Engineering, Inc
Address 4401 West Gate Blvd
City/State/Zip Austin, TX 78745
Telephone (include area code) 512.701.5904 Email Address Nadya.prociuk@hdrinc.com

(OVER)

ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork 09/04/2025
Requested Permit Duration 5 Years 0 Months (1 year minimum)
Scope of Work (Provided an Outline of Proposed Work) See attached scope of work

III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility HDR Austin Westgate Office
Permanent Curatorial Facility Center for Archaeological Research

IV. OWNER'S CERTIFICATION

I, Steven Snell, as legal representative of the Land Owner, Williamson County, 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, Steven Snell, as legal representative of the Sponsor, Williamson County, 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, Nadya Prociuk, as Principal Investigator employed by HDR Engineering, 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 _____ Date _____

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
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Scope of Work

Archaeological Survey for the Robinson Ranch Road Project

Williamson County, Texas

1 Introduction

Williamson County (County) contracted HDR Engineering, Inc. (HDR) to conduct an intensive archaeological survey in advance of the proposed Robinson Ranch Road Project (Project). The Project would involve the construction of a new location roadway from State Highway (SH) 45 (at the Ranch to Market Road [RM] 620 intersection) to McNeil Road in Williamson County, Texas (**Figure 1**).

The proposed interim facility would consist of two, 12-foot (ft; 3.6-meter [m])-wide lanes with a 14-ft (4.3-m)-wide, two-way, left-turn lane; 4-ft (1.2-m)-wide outside shoulders; 15-ft (4.6-m)-wide vegetative strips on each side of the road; and side ditches for drainage. The ultimate facility would consist of six, 12-ft (3.6-m)-wide lanes with a center raised median, curb and gutter drainage, detention and water quality ponds, and a 10-ft (3.0-m)-wide shared-use path on both sides of the road.

The Project Area (PA) is approximately 2.4 miles (mi; 3.9 kilometers [km]) long with a typical proposed right-of-way ROW width of 170 ft (51.8 m) and a maximum ROW width of 330 ft (100.6 m), for a total area of 73.5 acres (ac; 29.7 hectares [ha]) (**Figure 2**). The PA would consist of three bridges crossing existing floodplains. The average depth of impact would be 8 ft (2.5 m) below ground surface with a maximum depth of 20 ft (6 m) below ground surface at the bridge pier locations.

As a political subdivision of the state of Texas, the County is required to coordinate with the Texas Historical Commission (THC) under the Antiquities Code of Texas (13 Texas Administrative Code [TAC] 26) regarding this Project. The purpose of the archaeological investigation is to determine the presence/absence of archaeological resources within the PA and to evaluate identified resources for eligibility for inclusion in the National Register of Historic Places (NRHP) or as a designated State Antiquities Landmark (SAL).

This scope of work is intended to accompany the ACT permit application submitted for signature by Williamson County as the property owner. This scope of work summarizes the results of background research and outlines the methodology developed for an intensive archaeological survey to be conducted for the Project in compliance with the ACT.

2 Environmental Setting

The PA lies within the Edwards Plateau physiographic province. The Edwards Plateau topography consists of flat upper surfaces with box canyons capped by hard limestones and dolomites, with streams and sinkholes cut into the plateau. The elevation for the physiographic province ranges from 137 to 914 m (450 to 3,000 ft) above mean sea level

(AMSL) (BEG 1996). The elevation of the PA is between approximately 247 and 268 m (810 and 880 ft) AMSL.

The PA is located approximately 6 mi (9.7 km) west of the city of Pflugerville, Williamson County, Texas, within the United States Geological Survey (USGS) Pflugerville West quadrangle (**Figure 3**). The PA falls within the Brazos River basin (TWDB 2014) and the Blackland Prairie ecoregion of Texas (Griffith et al. 2007). The Blackland Prairie stretches over 300 mi (482.8 km) from North-Central to Central Texas and generally coincides with a belt of Upper Cretaceous chalks, marls, limestones, and shales as well as a coincidence of soils, vegetation, land cover, and geologic patterns (Griffith et al. 2007:61). The PA is positioned near Ganzert Lake and crosses Lake Creek, a tributary of Davis Spring Branch to the north, and Rattan Creek in the southern portion of the PA.

2.1 Geology and Soils

According to the *Geologic Atlas of Texas*, the PA is underlain by Fredericksburg Group geologic unit (Map Unit Kfr) as shown in **Figure 4** (USGS 2025a). The Fredericksburg Group is of Early Cretaceous, Comanchean Series geologic age and consists of limestone, dolomite, chert, and marl mudstone deposits. The limestone is nodular with aphanitic; marly; and gray, white, and pink dolomite as well as fine-grained, gray chert laid in thin layers and nodules.

Five mapped soil units are within the PA, as summarized in **Table 1** and shown in **Figure 5** (Soil Survey Staff 2025). Soils from the Crawford series consist of moderately deep, well-drained, very slowly permeable soils that formed in clayey sediments that are underlain by indurated limestone bedrock. These soils are on broad, nearly level or gently sloping uplands and slopes ranging from 0 to 5 percent.

The Eckrant series consists of well-drained, moderately slowly permeable soils that are very shallow to shallow over indurated limestone bedrock. These nearly level to very steep soils formed in residuum derived from limestone and occur on summits, shoulders, and backslopes of ridges on dissected plateaus. Slopes range from 1 to 60 percent.

Finally, the Georgetown series consists of moderately deep, well-drained, very slowly permeable soils that have formed over indurated limestone of Cretaceous age. These soils occur on nearly level to very gently sloping dissected plateaus ranging from 0 to 3 percent.

Table 1. Soil data for the PA.

Map Unit Symbol	Soil Name	Landform	Buried Holocene Potential?
CfB	Crawford clay, 1 to 3 percent slopes	Plains	No
EeB	Eckrant-Rock outcrop association, 1 to 10 percent slopes	Ridges	No
ErE	Eckrant-Rock outcrop association, 1 to 10 percent slopes	Ridges	No
GeB	Georgetown clay loam, 0 to 2 percent slopes	Ridges	No
GsB	Georgetown stony clay loam, 1 to 3 percent slopes	Ridges	No

Source: NRCS 2025

2.2 Hybrid Potential Archeological Liability Map Review

HDR reviewed the Texas Department of Transportation's (TxDOT's) Hybrid Potential Archeological Liability Map (HPALM) for the Austin District (TxDOT 2025) to evaluate the potential for shallow and deeply buried archaeological deposits with integrity within the PA. The HPALM data points to a low potential for such deposits as indicated by Map Unit 1, which encompasses a majority of the PA. A moderate potential for shallow and low potential for deeply buried archaeological deposits (HPALM Unit 4) is mapped within a very small portion of the northern and southern PA. A moderate potential for shallow and deeply buried archaeological deposits with integrity (HPALM Unit 5) is mapped within the northern extent of the PA. The frequencies of the local HPALM data are provided in **Table 2** and shown on **Figure 6**.

Table 2. HPALM frequencies within the PA.

Map Unit	Map Unit Description	Frequency within PA (%)
1	Low potential	94.41
4	Moderate shallow potential, low deep potential	0.7
5	Moderate potential	4.89

Source: TxDOT 2025

3 Cultural Setting

HDR reviewed the Texas Archeological Sites Atlas (Atlas) managed by the Texas Historical Commission (THC) and Texas Archeological Research Laboratory (TARL) as well as historical topographic maps and aerial imagery to characterize the cultural historic setting of the PA and surrounding 1-mi (1.6-km) vicinity.

3.1 Atlas Review

HDR's review of the Atlas on June 19, 2025, revealed that 22 previous cultural resources surveys, 19 archaeological sites, and 1 cemetery were present within 1 mi (1.6 km) of the PA (THC 2025) (**Figure 7**). No Official Texas Historical Markers (OTHMs), Recorded Texas Historic Landmarks (RTHLs), Texas Freedom Colonies, historic trails, or NRHP-listed districts or properties are located within the 1-mi (1.6-km) search radius.

Four of the 22 previous surveys (Atlas numbers 8500011931, 8500011553, 8500012994, and 8500013174) overlap the PA. Small areas of the northern, central, and southern portion of the PA have been surveyed. Nonetheless, the majority of the PA has not been surveyed. Details for all cultural resource surveys conducted within 1 mi (1.6 km) of the PA are listed in **Table 3** and locations are shown on **Figure 7**.

Table 3. Cultural resources surveys documented within 1 mi (1.6 km) of the PA.

Atlas ID	Agency	Report Title	Contractor	Year	Permit Number
8500011243	FTA	—	LopezGarcia Group	2004	3306
8500011534	City of Austin	—	HDR	2006	3995
8500011553[a]	TxDOT	—	PBS&J	2006	4056
8500011931[a]	STB	—	LGG	2005	3851
8500012994[a]	TxDOT	—	Hicks and Co.	2003	3119
8500013174[a]	TxDOT	—	PBS&J	2003	3267
8500013520	TxDOT	—	Hicks and Co.	2003	3119
8500016070	Round Rock ISD	—	Horizon ESI	2009	5172
8500018492	City of Austin	—	Fred L. McGhee & Associates, Inc.	2010	5762
8500018584	TxDOT	—	Blanton & Associates	2010	5763
8500018854	TxDOT	—	Ecological Communications Corp.	2010	5732
8500004469	FHWA	—	—	1992	—
8500004471	Corps of Engineers – Fort Worth District	—	—	1987	—
8500004472	EPA	—	—	1984	
8500010538	TPWD, Brushy Creek MUD	—	—	2000	2490
8500079961	Upper Brushy Creek	*Survey for Flood Prevention Dam No. 8 Modernization Project*	URS	2016	7615
8500080187	Round Rock ISD	*22.0 acres on the McNeil High School Campus*	Horizon Environmental Services, Inc.	2017	7950
8500080467	BURY, Inc.	*Pedestrian Survey of 0.6-Acres for the Expansion of Neenah Avenue and Associated Retention Pond*	Raba Kistner Environmental, Inc.	2015	7285
8500081836	Upper Brushy Creek WCID	*Survey for the Proposed Dam No. 101 Project Within the Upper Brushy Creek WCID*	AECOM	2019	8855
8500082078	EBI Consulting	*Survey of the Pearson Ranch Apartments Development*	Stone Point Services, LLC	2021	—

Atlas ID	Agency	Report Title	Contractor	Year	Permit Number
8500082438	Upper Brushy Creek WCID	*Supplemental-Survey for the Proposed Dam No 101 Project within the Upper Brushy Creek WCID*	AECOM	2021	30346
8400004291	TxDOT, FHWA	—	—	1995	—

Source: THC 2025
Notes: "—" denotes no information available in the Atlas; EPA = Environmental Protection Agency; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; ID = Identifier; ISD = Independent School District; MUD = Municipal Utility District; STB = Surface Transportation Board; TPWD = Texas Parks and Wildlife Department; WCID = Water Control and Improvement District
[a] Survey overlaps PA

[redacted]

3.2 Historical Map and Aerial Image Review

[redacted]

4 Summary

[redacted]

5 Methodology

This section describes the methodology developed for the archaeological survey, including the research, field, and reporting methods.

5.1 Research Methods

The desktop review performed by HDR covered pertinent environmental, land use, geologic, soil, and predictive modeling data to evaluate the potential for Project impacts on cultural resources. HDR reviewed the Atlas to identify all cultural resource sites and surveys documented within and in the vicinity of the PA. HDR also reviewed historical topographic maps and aerial imagery to evaluate the potential for above-ground, historic-age structures.

HDR reviewed these data to ensure that a sufficient level of field investigation, archival research, and reporting are conducted to avoid impacts on cultural resources. Further historical background research of available archival documents, historical maps, and other pertinent data will be conducted to evaluate NRHP eligibility of all cultural resources identified during the archaeological survey.

5.2 Survey Methods

HDR will conduct an intensive archaeological survey of the PA using archaeologists who meet the United States Secretary of the Interior (SOI) Professional Qualification Standards for Archaeology and Historic Preservation under the supervision of an SOI-qualified Principal Investigator (13 TAC 26.4). Components of the archaeological survey may include pedestrian reconnaissance, shovel testing, field notes, site documentation and evaluation, artifact inventories, and digital photography. All exposed surfaces will be examined for evidence of archaeological materials.

The PA is linear in orientation, with a maximum proposed survey area length of 2 mi (3.2 km) (excluding the existing rock quarry), a typical proposed ROW width of 170 ft (51.8 m), and a maximum ROW width of 330 ft (100.6 m), for a total area of 65.7 ac (26.6 ha). As such, the minimum number of shovel tests was calculated based on the CTA guidelines for linear surveys, which require at least 16 shovel tests for every 1 mile (1.6 km), with a minimum transect interval of 98 ft (30 m). Given that the PA measures 2 mi (3.2 km), at least 64 shovel tests along two transects are required for the PA, excluding shovel tests used for site delineation.

Shovel tests are excavated in settings with the potential for buried archaeological materials, except on slopes greater than 20 percent or in settings with evidence of significant ground disturbance. Each shovel test measures at least 12 inches (30 cm) in diameter and is excavated to at least 32 inches (80 cm) below the surface or the base of Holocene-age deposits. All excavated matrices are screened through 0.25-inch (0.64-cm)

hardware mesh or hand-sorted if clay and moisture content require. Soil descriptions follow the guidelines and terminology established by the National Soil Survey Center (Schoeneberger et al. 2012) with soil/sediment colors recorded using a Munsell Soil Color Chart.

The location of each shovel test is documented using a Global Navigation Satellite Systems (GNSS) unit capable of submeter accuracy. Soil/sediment depth and composition and the presence or absence of cultural materials are recorded on standardized forms for each shovel test, which is backfilled upon completion. Shovel test intervals are adjusted as needed to avoid disturbed areas while adhering to the CTA guidelines where feasible.

Areas with surface artifacts or a high potential for buried artifacts will be shovel tested. If artifacts are observed on the surface, the potential site will be delineated with shovel tests as described below. All previously recorded sites within the PA will be revisited and documented. In the case of sites 41WM989 and 41WM1060, these site areas will be revisited to delineate the site boundaries and assess NRHP eligibility within the PA.

5.3 Site Documentation

In addition to the above outlined methods, the survey will apply the following site documentation processes should any archaeological sites be encountered during the survey.

The THC differentiates between archaeological sites and isolated finds. Sites are evaluated and recommended eligible or ineligible for inclusion in the NRHP and/or SAL designation, whereas isolated finds are ineligible as they do not meet the requirements to be designated as a site. The HDR standards for defining archaeological sites and isolated finds involve the respective temporal period and number of artifacts or features present within an area of predetermined size. Temporal periods are defined as precontact for sites that predate Indigenous contact with European colonizers and postcontact for sites that postdate the initial European colonization of North America.

In terms of material assemblage, a precontact site designation is applied when five or more precontact artifacts, or one or more features, are present within a 20-square-meter (m^2) (215-square-foot [ft^2]) area. A postcontact site designation is applied when 10 or more artifacts of 2 or more artifact classes, or 1 or more features, are present within a 20-m^2 (215-ft^2) area. Isolated finds are defined as the presence of fewer than 5 precontact artifacts, fewer than 10 postcontact artifacts, or postcontact artifacts from only 1 artifact class within a 20-m^2 (215-ft^2) area.

Archaeological site boundaries are defined by the presence of cultural materials on or below the ground surface. Where possible, all site delineation shovel tests will be radially excavated from the initial positive shovel test in all cardinal directions at 50-ft (15-m) intervals until two sterile shovel tests are encountered in each direction. Additional shovel tests will be arbitrarily placed inside site boundaries to adequately sample a site deposit. If shovel tests and other field observations indicate a negligible potential for buried archaeological materials, site boundaries will be delineated based on the surface distribution of artifacts and/or features.

All site boundaries, features, artifact localities and photographs will be plotted digitally using ArcGIS Online software paired with a global navigation satellite system (GNSS) receiver capable of submeter accuracy. A standardized HDR site form will be completed for each site to record physiographic and cultural information as well as initial interpretations of the site's material, spatial, and chronological properties. Each documented site will be assigned a temporary alpha-numeric identifier (e.g., HDR XX) to be used in the field. Completed TexSite forms will be submitted for each site to the TARL for official trinomial assignment.

Artifact collection and removal from the field will consist of only temporally diagnostic cultural materials. Diagnostic precontact artifacts include ceramics, projectile points, biface preforms and finished tools. Diagnostic postcontact artifacts include ceramics with decoration, rims, or other formal diagnostic attributes; decorated or embossed glass; and pieces with maker's marks or indications of manufacturing technology. All sides of diagnostic artifacts will be photographed with a scale, neutral background, and consistent lighting.

Non-diagnostic artifacts will typically be recorded and analyzed in the field after representative samples from each artifact class are cataloged and photographed. In-field artifact analyses will include determining appropriate regional, temporal, and stylistic elements. Quantities or estimates of materials will be recorded for all sites, and the locations of artifact concentrations will be recorded with a GNSS capable of submeter accuracy. Photographs of all cultural features and other representative natural features of interest will be taken for each site recorded. All archaeological sites will be photographed from all cardinal directions with the most consistent lighting that site conditions allow.

A complete digital photographic record will be kept and used to document all cultural materials, the general topography, and condition of the area at the time of the survey to support the field techniques and methodology employed by the site recorders. All photographs will be documented on a photo log detailing the date, location, direction, and description of the photograph.

5.4 Reporting Methods

The data analysis for the Project will address all cultural materials recorded during the archaeological survey, and will include a description and evaluation of all recorded sites. Official state trinomials will be obtained from TARL for all new archaeological sites recorded. Artifacts will be analyzed in the field and clearly described, with an effort to identify typology and chronology. These data will be used, in conjunction with the appropriate criteria, to evaluate any identified sites for potential NRHP and/or SAL eligibility. If such a recommendation cannot be determined, the data will be used to formulate a recommendation regarding the need for further eligibility testing.

At the conclusion of the field investigations, HDR will prepare and submit a draft report that summarizes the findings of the archaeological survey. The report will conform to the CTA's Reporting Standards and provide recommendations regarding any additional ACT work requirements with sufficient justification. Following a period of client review, the draft report will be submitted to the THC for review and comment. After addressing any agency

comments, HDR will furnish the THC with one final report copy containing the plotted locations of any sites recorded and one copy that excludes the site location data.

Pursuant to 13 TAC 26.17, and after acceptance of the final report by the THC, all field records, photographs, and collected artifacts will be prepared for permanent curation at the Center for Archaeological Research at the University of Texas at San Antonio.

6 References

BEG (Bureau of Economic Geology)
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2025b 1968 Pflugerville West, Texas Topographic Quadrangle. Topo View. Electronic document, https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-100.06, accessed July 2025.

Figure 1. General Project location on USGS quadrangle map.

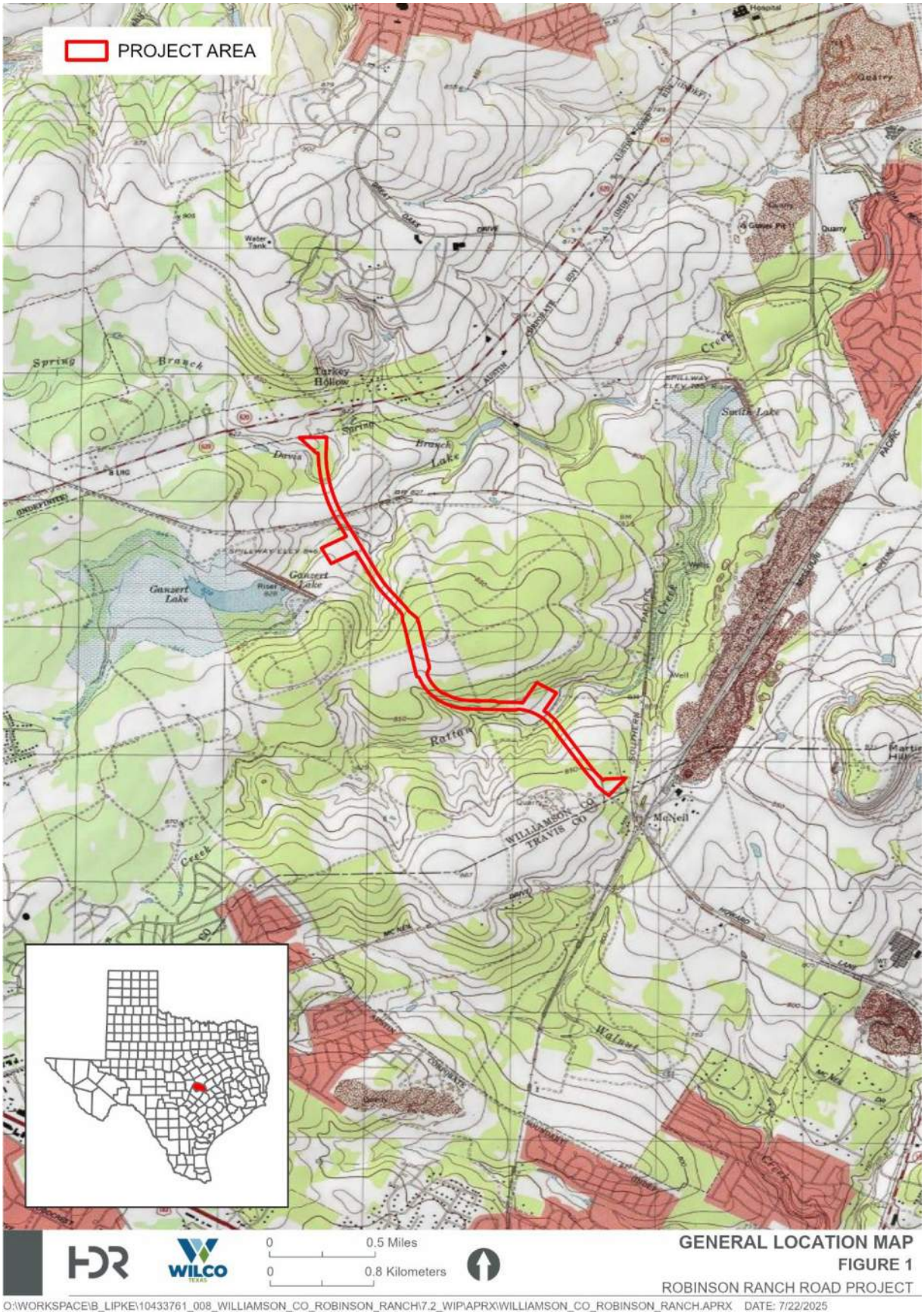

Figure 2. PA on aerial imagery.

Figure 3. PA on USGS topographic map.

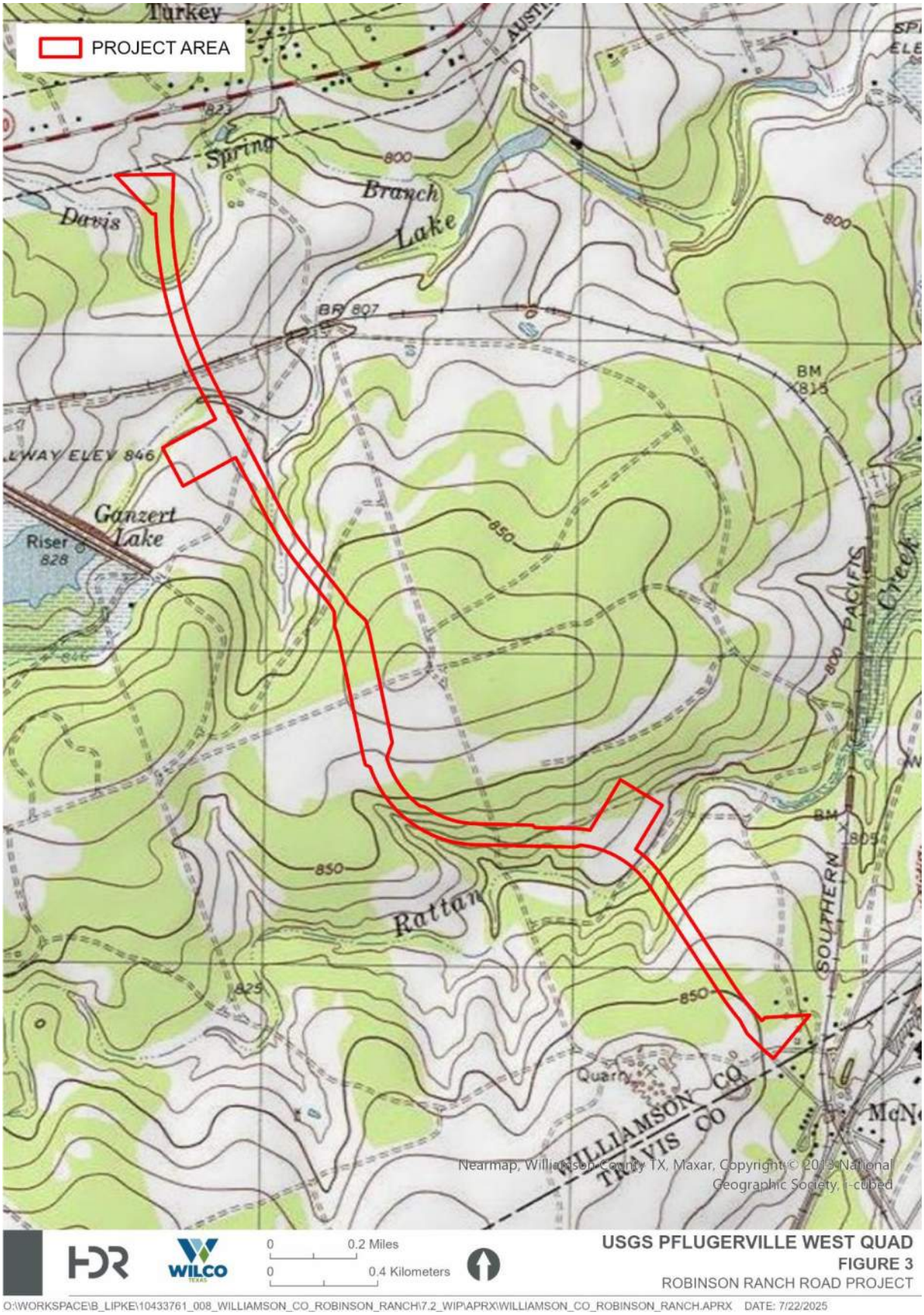

Figure 4: Geology map of PA.

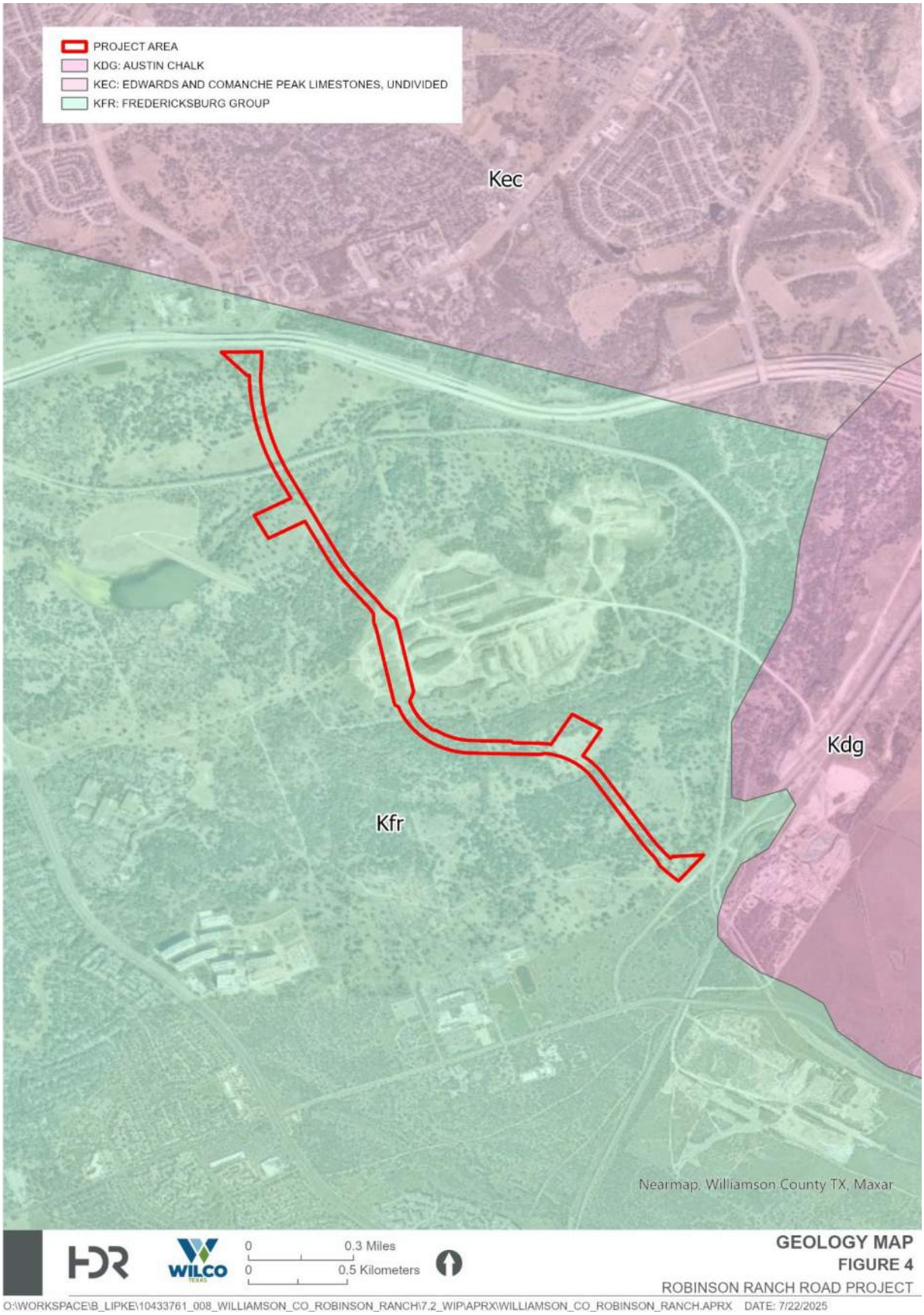

Figure 5. Soils map of PA.

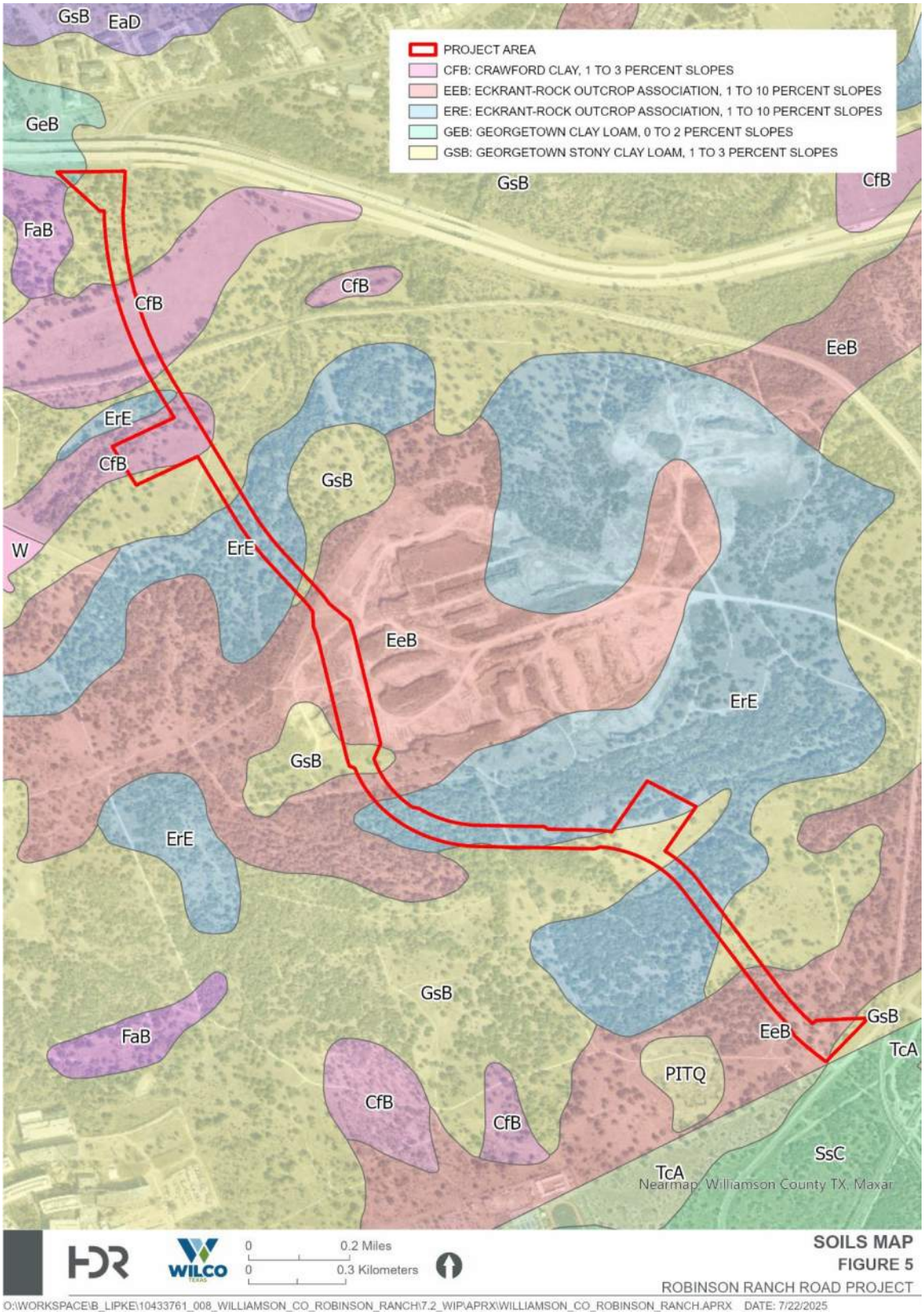

Figure 6. HPALM data map of PA.

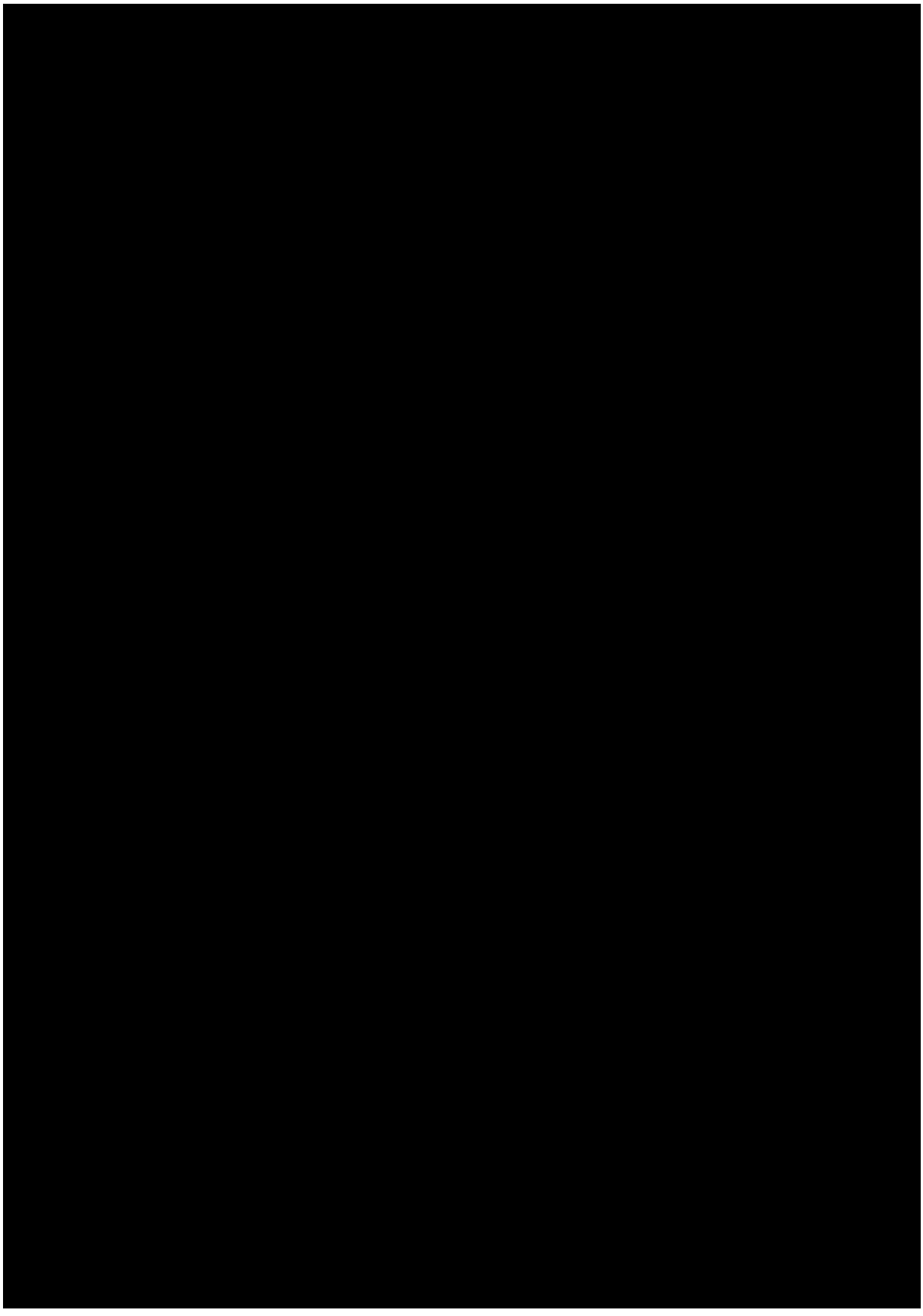

Figure 7. Cultural resources map of PA.

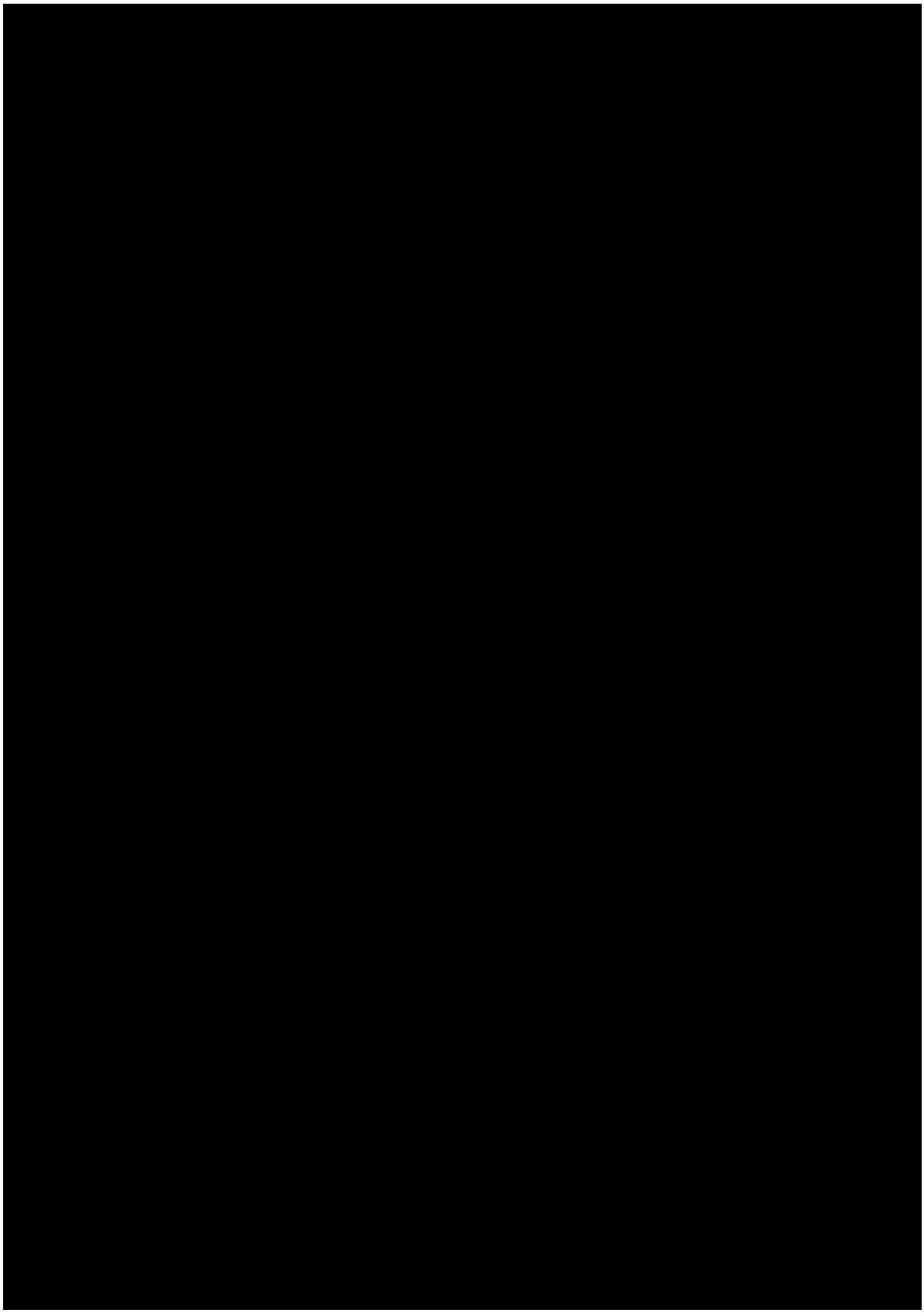

Figure 8. Historic 1968 USGS topographic quadrangle map of PA.