

TEXAS ANTIQUITIES PERMIT APPLICATION PROPOSED SOUTHWEST BYPASS EXTENSION PROJECT, WILLIAMSON COUNTY, TEXAS

Project Landowners – Williamson County

Project Sponsor – LJA Engineering, Inc. (LJA)

Project Consultant – SWCA Environmental Consultants (SWCA)

Principal Investigator – Chris Shelton, M.A., RPA

Date – March 24, 2021

On behalf of Williamson County, and under contract through LJA Engineering, Inc. (LJA), SWCA Environmental Consultants (SWCA) will conduct a cultural resources survey of an approximately 76.9-acre (31.1-hectare [ha]) proposed right-of-way (ROW) for the Southwest Bypass Extension Project (project). The proposed project would create a bypass for State Highway 29 (SH 29) east of Georgetown, Texas. The project area is located approximately 2.5 kilometers [km] (1.6 miles) west of the intersection of SH 29 and Interstate 35, near the City of Georgetown, Williamson County, Texas (Figures 1 and 2). The project area is located on both the *Georgetown, Texas* and the *Round Rock, Texas* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps (USGS 2019a, 2019b).

The project is proposed to occur on largely undeveloped land either currently owned by Williamson County, or expected to be purchased by Williamson County. Williamson County is a political subdivision of the state of Texas, and as such the project will require review under the Antiquities Code of Texas (ACT). There is also the possibility that the project could impact jurisdictional waters of the United States, which would also trigger compliance with Section 106 of the National Historic Preservation Act (NHPA) through its connection to the Clean Water Act (CWA), as regulated by the U.S. Army Corps of Engineers (USACE). To comply with requirements of the ACT, and in anticipation of the requirements of the NHPA, SWCA is proposing an intensive cultural resources survey with shovel testing of the project area. This scope of work presents information on the project area; potential effects; known resources; and methods of the proposed survey, reporting, and curation.

PROJECT DESCRIPTION AND SETTING

The proposed project is aligned with SH 29 for a length of approximately 1 km (0.6 mile), trends approximately 1.5 km (0.9 mile) south of SH 29 across undeveloped land to connect with previous construction associated with the Southwest Bypass, and east along Wolf Ranch Parkway for approximately 0.3 km (0.2 mile) (see Figures 1 and 2). The total project footprint encompasses approximately 76.9 acres (31.1 ha) and is proposed to include an interim two-lane roadway to serve as a future frontage road in the ultimate condition. The proposed Southwest Bypass Extension includes two, 3.7-meter [m]-wide (12-foot-wide) lanes, 3-m-wide (10-foot-wide) shoulders, and turn lanes at intersections with SH 29 and Wolf Ranch Parkway. Depths of impact are expected to range between 61 centimeters [cm] (2 feet) and 2.4 m (8 feet). Aerial imagery shows the project area is currently largely undeveloped with some previous disturbances due to the existing roadways (see Figure 2).

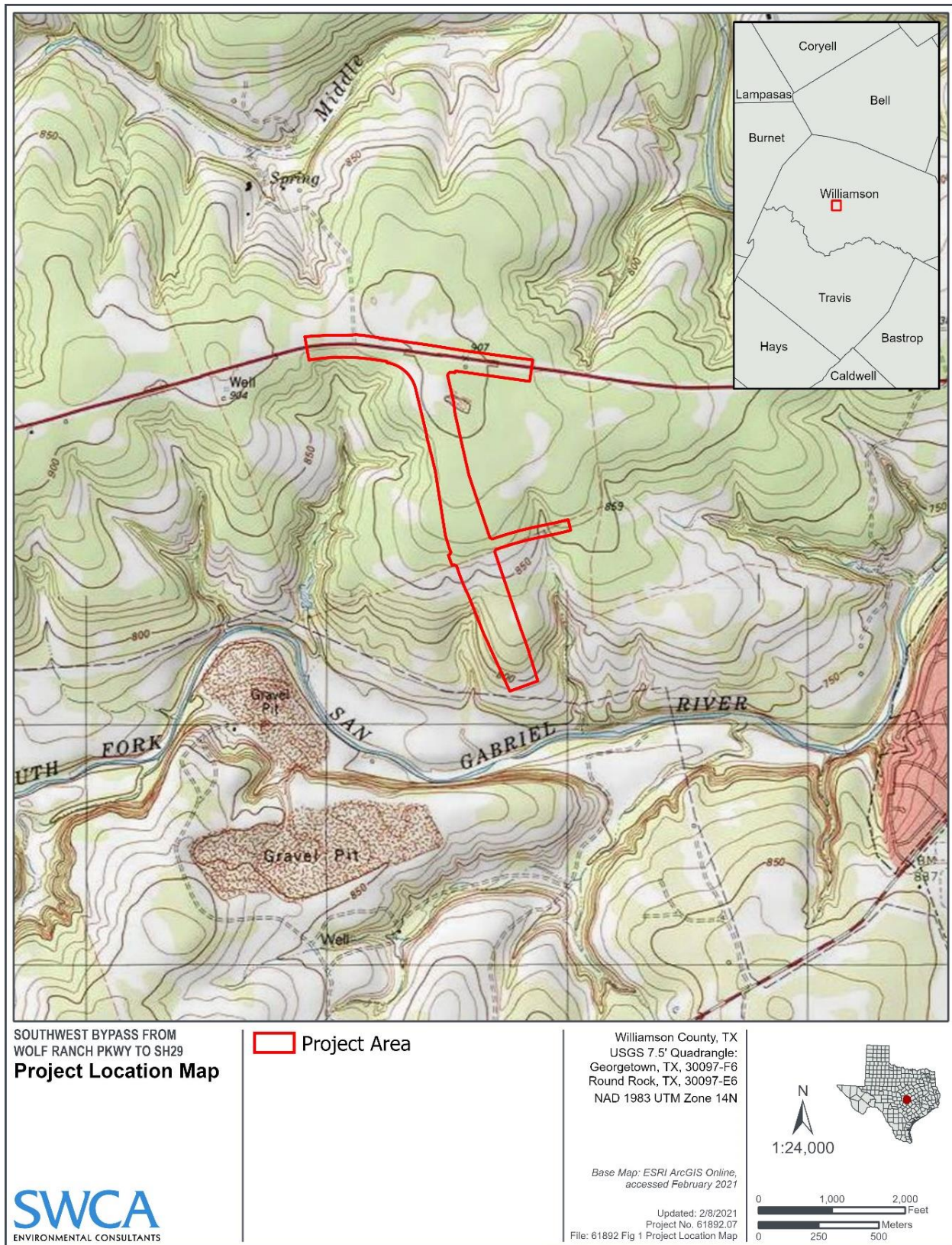


Figure 1. Project location map. (Background Imagery: USGS 2021a).

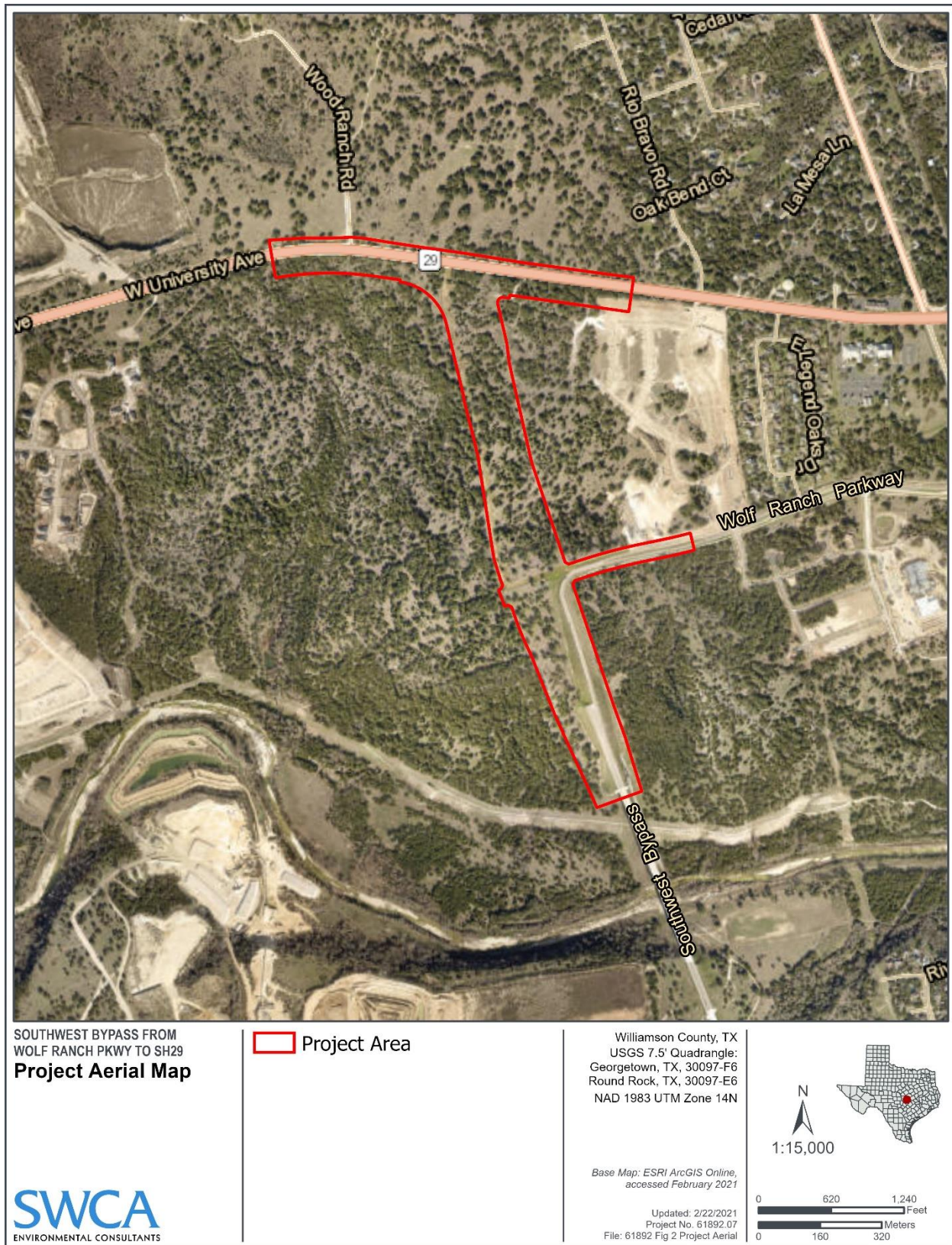


Figure 2. Project aerial location map (Background Imagery: ESRI 2021).

The surface geology within the project area consists entirely of the early Cretaceous-age Edwards and Comanche Peak, undivided geologic unit, which consists of massive to thinly bedded limestone deposits interbedded dolostone and chert (USGS 2021b). The three soil types identified as underlying the proposed project area are the Eckrant stony clay series, the Eckrant-rock outcrop association, and the Eckrant cobbly clay series (NRCS 2021) (Figure 3). Each of these three soil types are variations of the Eckrant soil series and have the same characteristics, except for the amount and size of stone inclusions. Eckrant soil series is characterized as well-drained, shallow to very shallow clay overlying indurated limestone, and is formed from limestone residuum on summits, shoulders, and backslopes on ridges of dissected plateaus (NRCS 2021).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS AND KNOWN RESOURCES

On February 6, 2021, SWCA completed a desktop review of the project. The review included the approximately 76.9-acre (31.1-ha) project area and an additional 1-km (0.6-mile) radius around the project (study area) (Figure 4). SWCA used the Texas Archeological Sites Atlas online database (Texas Historical Commission [THC] 2021) to identify previously conducted surveys, known archaeological sites, State Antiquities Landmarks (SALs), National Register of Historic Places (NRHP) listed properties, NRHP districts, and state landmarks within both the project area and the study area. The review also consulted historical topographic maps available through the USGS Historical Topographic Map Explorer (USGS 2021c), the Texas Historic Overlay (Foster et al. 2006), and modern aerial imagery to identify land use practices that may indicate the potential for or presence of cultural resources within the project area.

The file search and literature review identified two previously recorded surveys and one previously recorded archaeological site (i.e., 41WM1148) within the project area, as well as two archaeological sites adjacent (within 100 m [328 feet]) to the project area (i.e., 41WM460 and 41WM1359) (Tables 1 and 2; see Figure 4) (THC 2021). In addition, the review identified 10 previously recorded cultural resources surveys and 14 previously recorded archaeological sites within the 1-km (0.6-mile) study area. No NRHP properties, SALs, cemeteries, or local neighborhood surveys were identified within the project area or the study area. Additionally, the historic map review identified a total of six potentially historic standing structures within the 1-km (0.6-mile) study area; of those potentially historic structures, only one is depicted within the project area (see Figure 4) (Foster et al., 2006; USGS 2021c).

Previous Archaeological Investigations

A large portion of the project area has been previously surveyed. The previous survey was conducted in 2004 by the American Archaeology Group, LLC., in preparation of a SH 29 bypass in much the same position as the currently proposed project. The previous survey covers approximately 35.9 acres (15.5 ha) of the 76.9-acre (31.1-ha) project area (47 percent). The approximately 89-acre (36-ha) previous survey resulted in the extension of the site boundaries of a previously known site, as well as the identification of two previously unknown sites. One of the newly identified sites, 41WM1148, intersects a large portion of the northern end of the current project area.

In addition, a very small area at the southern end of the proposed project area was surveyed in 2016 by SWCA in preparation for the Midland to Sealey Pipeline project. The survey resulted in the identification of the previously unknown archaeological site 41WM1359. The site was not recorded as intersecting with the currently proposed project, but is within 100 m (328 feet) of the project boundary.

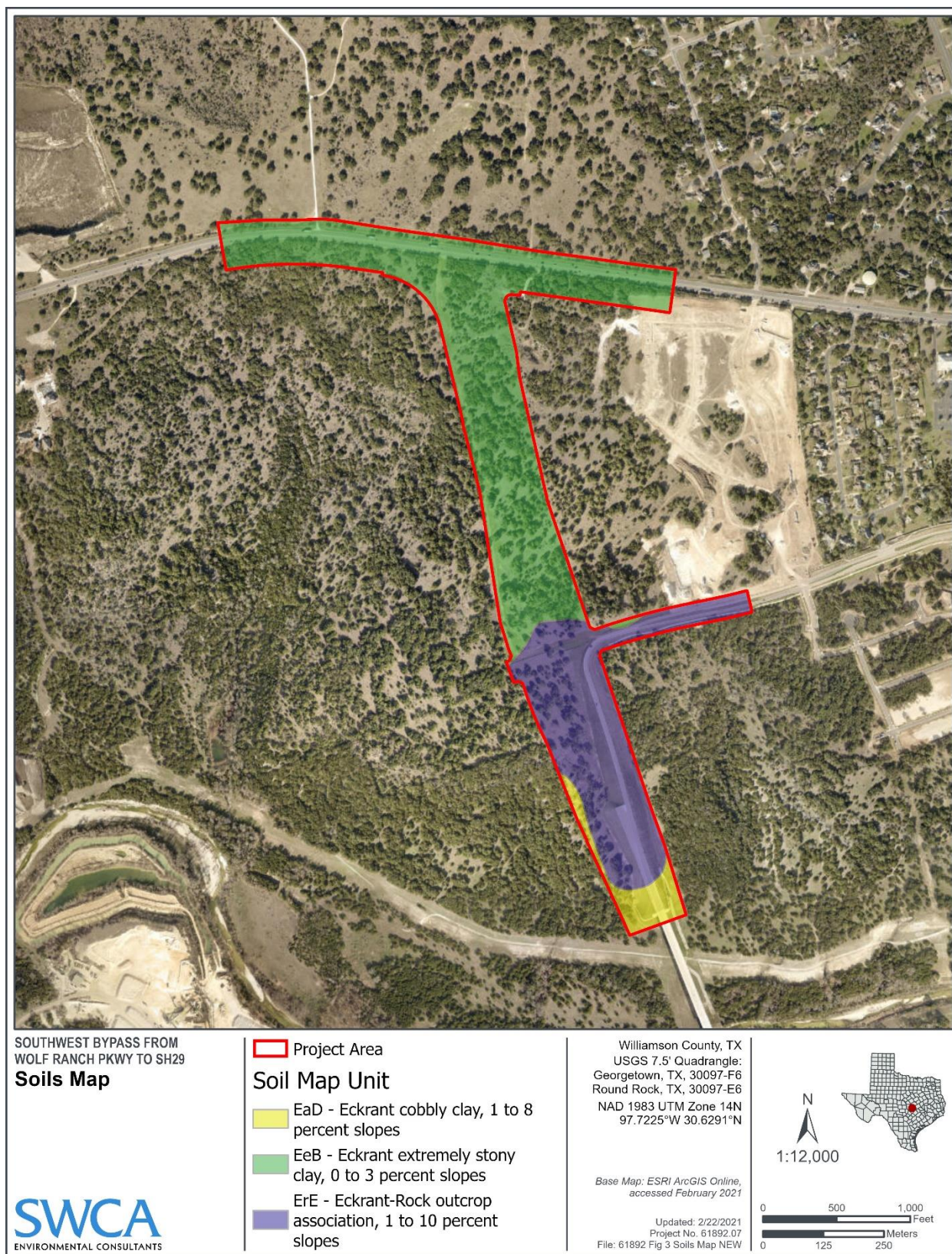


Figure 3. Soils Map (Background Imagery: ESRI 2021).

MAP HAS BEEN REDACTED

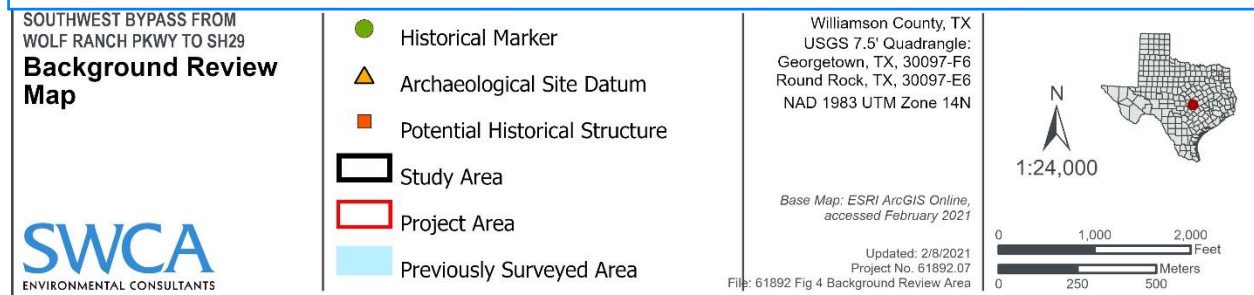


Figure 4. Background review results map (Background Imagery: ESRI 2021; Shapefile Imagery: THC 2021).

Table 1. Previously Conducted Cultural Resource Surveys within 1 Kilometer of the Project Area

Survey	Year	Survey Type	Atlas No.	Location
Highway 29 Bypass	2004	Area	8500015216	Intersecting
Midland to Sealy Pipeline	2015	Area	8500080259	Intersecting
Unknown	Unknown	Linear	8400004217	Within 1 km (0.6 mile)
Unknown	2005	Linear	8500012318	Within 1 km (0.6 mile)
Highway 29 Waterline	2005	Linear	8500011654	Within 1 km (0.6 mile)
Unknown	2004	Linear	8500012059	Within 1 km (0.6 mile)
Unknown	2004	Linear	8500012188	Within 1 km (0.6 mile)
Unknown	2001	Linear	8400010000	Within 1 km (0.6 mile)
Unknown	2001	Linear	8400010865	Within 1 km (0.6 mile)
Wolf Ranch Elementary School	2017	Area	8500080332	Within 1 km (0.6 mile)
Unknown	1964	Area	8500004873	Within 1 km (0.6 mile)
Georgetown ISD Middle School	2019	Area	8500081549	Within 1 km (0.6 mile)

Table 2. Previously recorded cultural resources within 1 Kilometer of the Project Area

Site/Resource	Resource Type	NRHP Designation	Location
41WM1148	Prehistoric Quarry and Lithic Scatter	Not Eligible	Intersecting
41WM460	Prehistoric Quarry	Recommended Not Eligible	Within 100 m (328 feet)
41WM1359	Prehistoric Lithic Scatter	Not Eligible	Within 100 m (328 feet)
41WM1369	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM1370	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM558	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM1368	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM1149	Prehistoric Lithic Scatter and Quarry	Not Eligible	Within 1 km (0.6 mile)
41WM594	Prehistoric Artifact Scatter (Early Archaic)	N/A	Within 1 km (0.6 mile)
41WM542	Prehistoric Lithic Scatter (Archaic)	Recommended Eligible	Within 1 km (0.6 mile)
41WM582	Prehistoric Artifact Scatter (Late Archaic)	N/A	Within 1 km (0.6 mile)
41WM1365	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM1367	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM1366	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)
41WM45	Prehistoric Open Campsite	N/A	Within 1 km (0.6 mile)
41WM96	Prehistoric Open Campsite	N/A	Within 1 km (0.6 mile)
41WM584	Prehistoric Lithic Scatter	Recommended Not Eligible	Within 1 km (0.6 mile)

Previously Recorded Archaeological Sites

Previously recorded site 41WM1148 was first recorded in 2006 by American Archaeological Group, LLC., and is characterized as a prehistoric surface lithic scatter and chert quarry (THC 2021). The site is relatively large and covers much of the northern portion of the project area (see Figure 4). Site 41WM1148 is described as a diffuse and light scattering of lithic debitage and tested cobbles associated with the chert nodules eroding from the shallow limestone bedrock. No features or temporally diagnostic artifacts were observed. The original investigators recommended 41WM1148 as not eligible for the NRHP. In 2008, the THC reviewed the site and concurred with the not eligible recommendation (THC 2021).

Previously recorded site 41WM460 was first recorded in 1981 by Daymond Crawford during the survey of SH 29. The site is characterized as a prehistoric surface lithic scatter and chert quarry (THC 2021). The site is relatively small and is located within 100 m (328 feet) of the northeastern end of the project area (see Figure 4). Given the proximity to and the similar description as site 41WM1148, the sites are likely related. The original investigators recommended the site as not eligible for the NRHP; however, the THC has not reviewed this site for their determination (THC 2021).

Previously recorded site 41WM1359 was first recorded in 2016 by SWCA during the survey of the Midland to Sealy Pipeline Project. The site is characterized as a prehistoric surface lithic scatter on a finger-ridge overlooking the San Gabriel River (THC 2021). The site is relatively small and is located within 100 m (328 feet) of the southern end of the project area (see Figure 4). No features or diagnostic artifacts were observed, and the soil was quite shallow. The original investigators recommended the site as not eligible for the NRHP. In 2017, the THC reviewed the site and concurred with the not eligible recommendation (THC 2021).

METHODS

SWCA will implement field survey methods that comply with technical standards and requirements established by the THC, Council of Texas Archeologists (CTA), and the USACE. Two SWCA professional archaeologists will conduct a pedestrian survey of the project area using systematic transects spaced no more than 30 m (98.4 feet) apart. This procedure will examine visible ground surfaces for cultural materials and aboveground features. Visual examination will be supplemented through shovel tests hand-excavated within the property. Shovel testing will be conducted in areas that hold potential for intact, subsurface archaeological resources. Shovel tests will not be conducted and/or will be limited in areas within pre-existing roadway and utility ROWs, disturbed by modern homestead development, or in upland settings lacking soils or displaying bedrock exposures. Shovel tests will be excavated according to THC standards. Areal projects require at least 50 shovel tests for the first 25 acres, and an additional shovel test for every 5 acres over the initial 25 acres. As such, the currently proposed 76.9-acre (31.1-ha) project would require at least 61 shovel tests to meet the minimum standard. SWCA will excavate shovel tests in 20-cm (8-inch) arbitrary levels to 80 cm (31.5 inches) in depth, impervious surfaces, groundwater, or to culturally sterile deposits, whichever comes first. The matrix will be screened through ¼-inch mesh. Archaeologists will plot each shovel test using a global positioning system (GPS) receiver and will record each test on appropriate project field forms. Areas with cultural resources will require additional shovel testing at closer spacing to delineate the boundaries of buried cultural materials.

The potential for deeply buried cultural deposits is currently deemed very low based on the previously discussed soils, geology information, and previous surveys. The soils mapped within the project area consist of shallow indurated limestone with a low potential to contain deeply buried cultural deposits. The field assessment will further define the potential of a site and methods will be adjusted accordingly.

Previously identified resources, as well as any newly identified archaeological sites, will be explored as much as possible with consideration to the boundaries of the project. All discovered sites will be assessed regarding their potential significance, so that recommendations can be made for proper management (i.e., avoidance, non-avoidance, or further work), and will be assessed for SAL and NRHP eligibility. Shovel tests will be excavated per THC/CTA standards to define horizontal and vertical site boundaries.

SWCA will complete appropriate State of Texas Archaeological Site Data Forms for each site discovered during the investigations. SWCA will produce a detailed plan map of each site and plot locations on USGS 7.5-minute topographic quadrangles and relevant project maps. Unless otherwise required by the THC or USACE, SWCA will conduct a non-collection survey, where artifacts will be tabulated, analyzed, photographed, and documented in the field. Field notes will be kept at the SWCA Austin location. If the survey data allows, SWCA archaeologists will make a significance determination using the criteria listed in 36 CFR 60.4. If determined to be potentially significant and eligible for listing on the NRHP or as an SAL, additional work may be required to study or mitigate the resource prior to any construction.

REPORTING AND CURATION

Once the cultural resources survey has been completed, SWCA will prepare a report for review by Williamson County, LJA, THC, and potentially USACE. The report of the investigations will conform to the CTA and THC standards and guidelines. The report will include the results of the background review and the field survey. Specifically, the report will provide the methodology used in the investigations, the presence and condition of previously recorded sites located in the project area, photographs illustrating the environment and setting, a description of cultural resources encountered during the survey, recommendations for management of those cultural resources, and recommendations for additional investigations, if warranted. SWCA will submit a draft digital copy of the report to Williamson County and LJA for review and comment. SWCA will address all comments and concerns, and at the request of Williamson County, the revised draft will be submitted to the THC for review. SWCA will address any comments or concerns and produce a final report to complete requirements of the Antiquities Permit. SWCA is proposing a no-collection survey; however, documentation will be curated at The University of Texas San Antonio, Center for Archaeological Research.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

In the event of unexpected discovery of human remains or funerary objects/contexts during the survey, SWCA will comply with all applicable state laws (Texas Health and Safety Code Section 711 and the Texas Administrative Code Title 13, Chapter 22, Sections 22.1 through 22.6.), as well as taking into account the Advisory Council on Historic Preservation's 2007 Policy Statement on the Treatment of Burial Sites. Any human skeletal remains that may be discovered will, at all times, be treated with dignity and respect. If human remains are uncovered during investigations, the following steps will be taken:

- SWCA will halt excavation of the remains and shall notify the Williamson County sheriff and the THC. The sheriff will be requested to contact the coroner/medical examiner. After examining the human remains, if the sheriff and coroner determine the remains are modern, then the sheriff or coroner will assume responsibility for the remains.
- Appropriate measures will be taken to ensure that the remains are protected and not disturbed prior to the conclusion of investigation by law enforcement and consultation with appropriate groups to determine next steps (if needed).
- Excavations (e.g., shovel testing) within 100 m (328 feet) of the find will be halted until the THC authorizes continued work in those areas.

- Surveys will continue elsewhere in the project area.
- If the county sheriff and coroner determine that the remains are not modern or a crime scene, thereby relinquishing their jurisdiction over the remains, SWCA will coordinate with the project and THC to determine the appropriate course of action and file *Notice of the Existence of a Cemetery*.

REFERENCES

ESRI

- 2021 *World Imagery by ESRI*. Online database available at https://services.arcgisonline.com/ArcGIS/rest/services/World_Imagery/MapServer. Accessed February 2021.

Foster, T. R., T. Summerville, and T. Brown

- 2006 *The Texas Historic Overlay: A Geographic Information System of Historic Map Images for Planning Transportation Projects in Texas*. Prepared for the Texas Department of Transportation by PBS&J, Austin.

Natural Resources Soil Service (NRCS)

- 2021 Web Soil Survey. Online database available at <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed February 2021.

Texas Historical Commission (THC)

- 2021 Texas Archeological Sites Atlas restricted database, Texas Historical Commission. Available at: <http://atlas.thc.texas.gov>. Accessed February 2021.

U.S. Geological Survey (USGS)

- 2019a *Georgetown, Texas* [map]. 1:24,000, 7.5-Minute Series topographic quadrangle. U.S. Department of the Interior, U.S. Geologic Survey, Washington D.C.
- 2019b *Round Rock, Texas* [map]. 1:24,000, 7.5-Minute Series topographic quadrangle. U.S. Department of the Interior, U.S. Geologic Survey, Washington D.C.
- 2021a ArcGIS USGS Topographic Map (Large). Available at: <http://services.nationalmap.gov/arcgis/rest/services/USGSTopoLarge/MapServer>. Accessed February 2021.
- 2021b Texas Geology Web Map Viewer. Available at: <https://txpub.usgs.gov/txgeology/>. Accessed February 2021.
- 2021c The National Geologic Map Database (TopoView). Historical topographic map collection. Available at: <http://ngmdb.usgs.gov/maps/TopoView/>. Accessed February 2021.