



INDEX OF TEXAS ARCHAEOLOGY

Open Access Gray Literature from the Lone Star State

Volume 2017


Article 105

2017

Intensive Archaeological Survey of the Proposed W.T. Montgomery Road Water Main Project, Bexar County, Texas

Melanie Nichols

Follow this and additional works at: <https://scholarworks.sfasu.edu/ita>

 Part of the [American Material Culture Commons](#), [Archaeological Anthropology Commons](#), [Environmental Studies Commons](#), [Other American Studies Commons](#), [Other Arts and Humanities Commons](#), [Other History of Art, Architecture, and Archaeology Commons](#), and the [United States History Commons](#)

[Tell us how this article helped you.](#)

Cite this Record

Nichols, Melanie (2017) "Intensive Archaeological Survey of the Proposed W.T. Montgomery Road Water Main Project, Bexar County, Texas," *Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State*: Vol. 2017, Article 105. ISSN: 2475-9333

Available at: <https://scholarworks.sfasu.edu/ita/vol2017/iss1/105>

This Article is brought to you for free and open access by the Center for Regional Heritage Research at SFA ScholarWorks. It has been accepted for inclusion in Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State by an authorized editor of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

Intensive Archaeological Survey of the Proposed W.T. Montgomery Road Water Main Project, Bexar County, Texas

Creative Commons License



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

**Intensive Archaeological Survey of the Proposed
W.T. Montgomery Road Water Main Project,
Bexar County, Texas**

Antiquities Permit #8074

Principal Investigator: Melanie Nichols, M. Sc.

**Prepared for Blue Skies of Texas
5100 John D. Ryan Blvd.
San Antonio, TX 78245**

**Report Authors: Melanie Nichols, M.Sc.
Pape-Dawson
7800 Shoal Creek Boulevard
Suite 220W
Austin, TX 78757
June, 2017**

Abstract

At the request of Blue Skies of Texas, an intensive archaeological survey was conducted by Pape-Dawson for the proposed W.T. Montgomery Water Main project located near the City of San Antonio in Bexar County, Texas. The project will entail the installation of approximately 1,600 feet (ft) (488 meters [m]) of new water line within a 40-ft (12.2-m) wide easement. The project area will extend along the western side of W.T. Montgomery Road and will then cross U.S. Highway 90 (US 90). The route of the water line will be bored beneath US 90 and its access roads while the remainder of the line will be laid out in a trench and backfilled. The project area will encompass a total area of 1.47 acres (0.6 ha). The depth of vertical impacts has not yet been determined.

Although Blue Skies of Texas will construct the new utility line, San Antonio Water System (SAWS) will be the grantee of the easement after construction. For this reason and because part of this project is located in Bexar County and TxDOT-owned rights-of-way (ROWs), compliance with the Antiquities Code of Texas (ACT) is required. However, as no Federal funding or permitting will be required for this project, compliance with Section 106 of the National Historic Preservation Act (NHPA) was not necessary.

Pape-Dawson conducted an archaeological survey for the W.T. Montgomery Water Main project on June 21, 2017. This work was conducted under Texas Antiquities Permit No. 8074. The entirety of the project area was subjected to a pedestrian survey. The majority of the project area was found to be heavily disturbed. A total of 5 shovel tests was excavated to investigate the project area and were placed in areas of least disturbance. All shovel tests were negative, and no historic or prehistoric artifacts were located and no archaeological sites were recorded as a result of this survey.

Based on the results of the survey, Pape-Dawson recommends that no further archaeological work is necessary and that the project be allowed to proceed. However, if cultural material is encountered during construction, it is recommended that all work in the vicinity should cease and that the discovery be evaluated by a qualified archaeologist who can provide guidance on how to proceed in accordance with state regulations.

Table of Contents

Abstract.....	2
Introduction	5
Project Setting.....	8
Methods.....	10
Records Review.....	10
Fieldwork.....	10
Results.....	11
Records Review.....	11
Fieldwork.....	13
Summary and Recommendations.....	18
References Cited	19

List of Figures

Figure 1	Project Location Map	6
Figure 2	Project Area Map.....	7
Figure 3	Soil Map.....	9
Figure 4	Previously Recorded Cultural Resources within 1 km of Project Area	12
Figure 5	Overview of the project area along W. T. Montgomery Road.....	14
Figure 6	Vegetation within portion of project area that falls across undeveloped land tract.....	14
Figure 7	Showing a 3-ft road cut within an upland landform along Montgomery Road ROW.....	15
Figure 8	Showing a 2-ft high road embankment along northern end of Montgomery Road.....	15
Figure 9	Shovel Test Location Map.....	16
Figure 10	Overview of US 90 ROW within project area.....	17

Introduction

A new water main will be constructed to service the proposed Blue Skies Residential Development located in western Bexar County, Texas (Figure 1). The project will entail the installation of approximately 1,600 feet (ft) (488 meters [m]) of new water line within a 40-ft (12.2-m) wide easement. The project area will extend along the western side of W.T. Montgomery Road before crossing U.S. Highway 90 (US 90) (Figure 2). The water main easement situated north of US 90 will straddle the western edge of the Montgomery Road right-of-way (ROW), and therefore, will be extend evenly across public and private lands. However, the southern portion of the water line will be bored beneath US 90 and its access roads. The project area will encompass a total area of 1.47 acres (0.6 ha). The depth of vertical impacts has not yet been determined.

Although Blue Skies of Texas will construct the new utility line, San Antonio Water System (SAWS) will be the grantee of the easement after construction. For this reason and because part of this project is located on Bexar County and TxDOT-owned ROWs, compliance with the Antiquities Code of Texas (ACT) is required. Pape-Dawson applied for and received Texas Antiquities Permit No. 8074. However, as no Federal funding or permitting will be required for this project, compliance with Section 106 of the National Historic Preservation Act (NHPA) was not necessary.

At the request of Blue Skies of Texas, an intensive archaeological survey was performed by Pape-Dawson for the proposed W.T. Montgomery Road Water Main project. Pape-Dawson's investigations of the 1.47-acre project area included a pedestrian survey with shovel testing. Fieldwork was conducted by Melanie Nichols on June 21, 2017. The goals of the investigation were to: (1) locate all prehistoric and historic cultural resources, if present, within the project area; (2) establish vertical and horizontal site boundaries, as appropriate with respect to the project area; (3) evaluate the significance of recorded cultural resources with regard to State Antiquities Landmark (SAL) eligibility

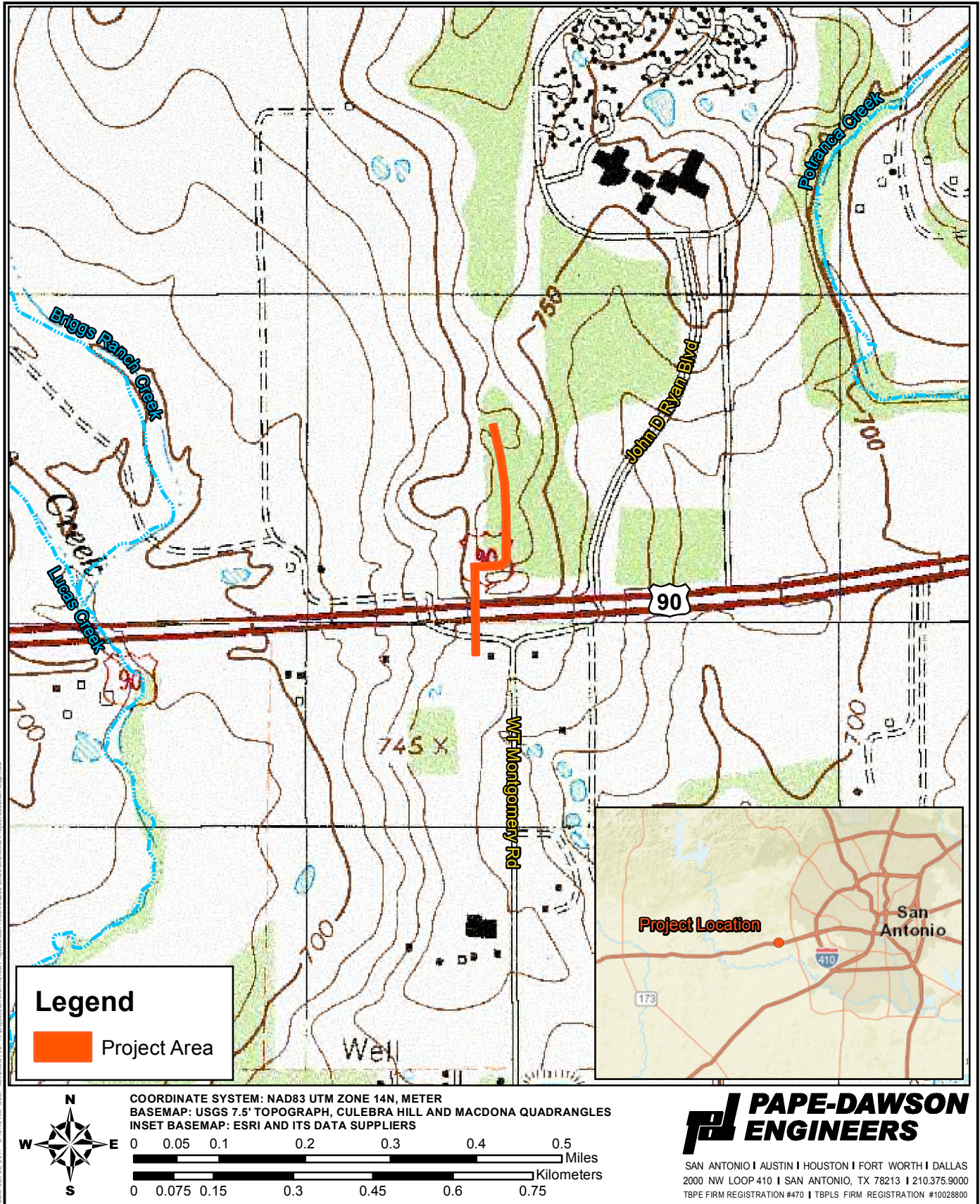


Figure 1. Project Location Map



Date: Jun 28, 2017, 8:48:24 AM User: W\Nichols,Eric_H\Project\Environmental\Projects\San Antonio\B\Map_Site\GIS\MXD\Project Area Map.mxd

Figure 2. Project Area Map

Blue Skies Water Main PN: 11038-06
Bexar County, Texas
Cultural Resources Report
June 2017

Project Setting

Located in western Bexar County, the project area is situated near the intersection of US 90 and W.T. Montgomery Road. The project area falls partially within an undeveloped tract of land that is heavily wooded and partially within the existing ROWs of US 90 and W. T. Montgomery Road. The surrounding area consists of undeveloped rangeland interspersed with a few residential communities. The project area extends across a gently to moderately sloping upland ridge that rises above Lucas Creek located approximately 750 m to the west. The surface elevation of the project area ranges from 745 feet to 765 feet above mean sea level with topographic relief sloping to the south.

The project area is situated within the Blackland Prairie physiographic region (Wermund 1996) and is underlain by the Upper Cretaceous-era Navarro Group and Marlbrook Marl, undivided (Bureau of Economic Geology [BEG] 1983). Soils mapped within the project area consist of approximately 80 percent Rock outcrop-Olmos complex with 5 to 25 percent slopes (HgD), and 20 percent Houston Black gravelly clay with 3 to 5 percent slopes (Huc) (Figure 3) (Taylor et al. 1991:Map Sheet 59; U.S. Department of Agriculture, Natural Resources Conservation Service [USDA-NRCS] 2017).

Olmos soils are very shallow to shallow soils over a petrocalcic horizon. These soils form within ancient loamy alluvium. Olmos soils are taxonomically classified as Mollisols and are typically found on undulating uplands. These soils consist of dark grayish brown, very to extremely gravelly loam (A-horizon) overlying indurated white caliche (B-horizon) at depths of approximately 30 cm (12 in) below ground surface. Houston Black gravelly clay is a deep soil that forms in clayey residuum derived from calcareous mudstone of Cretaceous Age. Houston Black soils are taxonomically classified as Vertisols and are typically found on narrow, convex upland ridges within an undulating or gently rolling landscape. These soils consist of very dark gray gravelly clay (A-horizon) overlying very dark gray gravelly clay (B-horizon) at depths of approximately 20 cm (8 in) below ground surface. B-horizons of the Houston Black series may extend to 200 cm (80 in) below ground surface and beyond (Taylor et al. 1991; USDA-NRCS 2017). As the soils within the project area are ancient, gravelly upland soils, it was anticipated that archaeological deposits, if present, would be shallowly buried or on the ground surface and visible to surface inspection

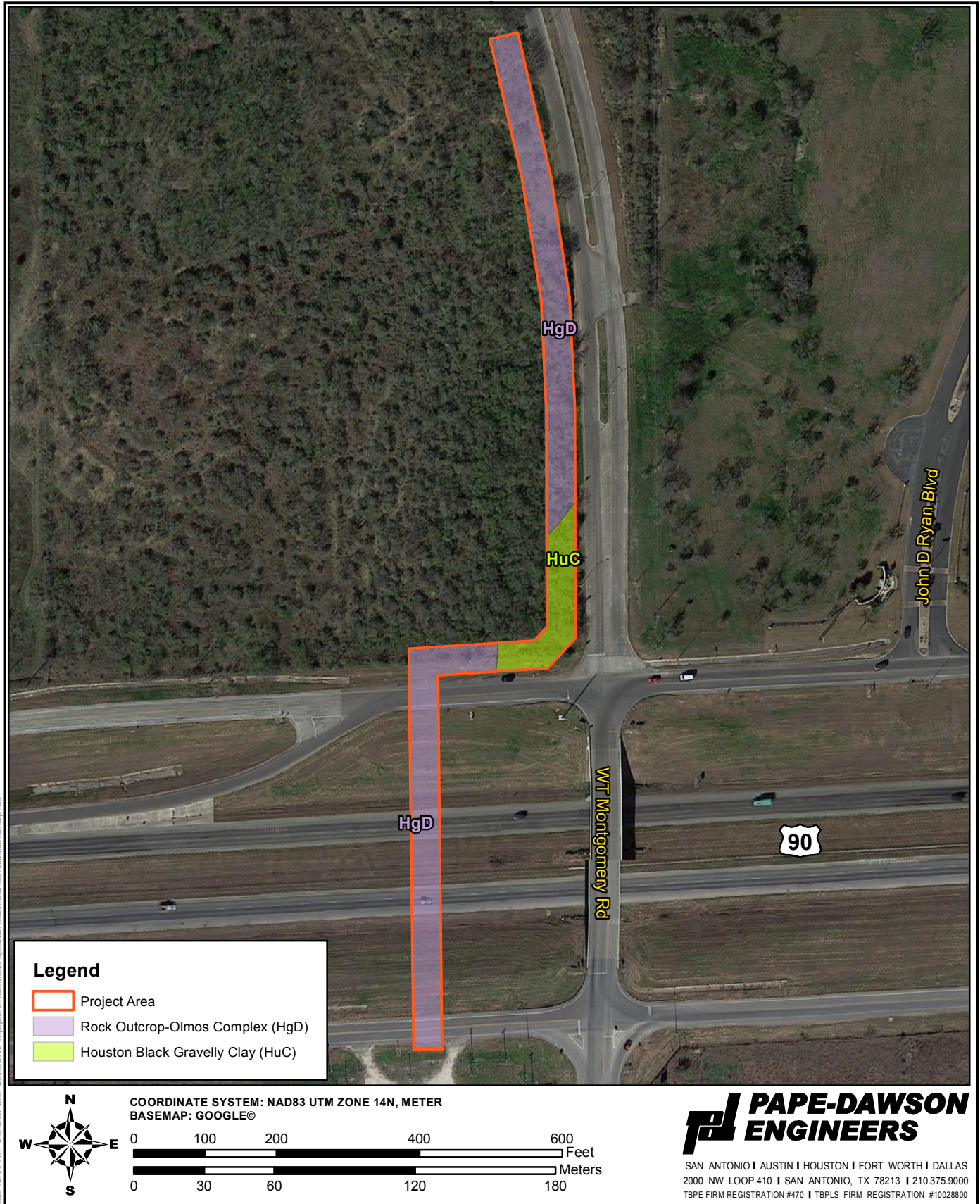


Figure 3. Soil Map

Methods

Records Review

Pape-Dawson archaeologists conducted a thorough background literature and records search of the proposed project area. This research included reviewing the Helotes (2998-312) U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map at the Texas Archeological Research Laboratory (TARL) and searching the Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located within a 0.62-mile (1-km) radius of the project area. The review also included information on the following types of cultural resources: NRHP-listed properties and districts, SALs, Official Texas Historical Markers (OTHM), Recorded Texas Historic Landmarks (RTHL), and cemeteries. The archaeologists also examined the U.S. Department of Agriculture Soil Survey of Bexar County (Taylor et al. 1991), Natural Resources Conservation Service Web Soil Survey, the Geologic Atlas of Texas-San Antonio Sheet (BEG 1983), and historic maps and aerials that depict the project area (Nationwide Environmental Title Research Online [NETR Online] 2016).

Fieldwork

Pape-Dawson archaeologists conducted an intensive cultural resources survey of the 1.47-acre project area that included a 100-percent pedestrian survey augmented with shovel testing. Survey methods followed the Council of Texas Archeologists' Archeological Survey Standards for Texas. Shovel tests were placed along a single transect in settings with the potential to contain buried cultural material and with less than 30 percent ground surface visibility. A total of 5 shovel tests were excavated to investigate the approximately 488-m (1,600-ft) long project area. Shovel tests were roughly 30 centimeters (cm) (11.8 inches) in diameter and excavated in 10-cm (3.9-inch) levels to pre-Holocene-age subsoil. All soils were screened through ¼-inch mesh with the exception of soils with high clay content, which were sorted by hand. All shovel tests were recorded, visually described, plotted by a Global Positioning System (GPS) unit, and backfilled upon completion.

No archaeological sites were recorded, and no artifacts were collected during the course of this archaeological survey. All original paperwork (e.g., photographs, shovel test logs) will be curated at the Center for Archaeological Research (CAR) at the University of Texas at San Antonio following the specified standards of preparation.

Results

Records Review

The results of the cultural resources background review revealed that the portion of the project area that overlaps US 90 and its access roads has been previously surveyed (Table 1). There are no previously recorded archaeological sites, NRHP-listed properties or districts, SALs, RTHLs, cemeteries, or local historic landmarks within the project area or the 1-km radius study area. However, one OTHM commemorating the “Battle” of Adams Hill is approximately 0.2 mile (0.3 km) north-northwest of the project area (Figure 4). Erected in 1965, the marker commemorates the peaceable surrender in 1861 of a unit of 270 Federal soldiers to a Confederate force of 1,300 with six artillery pieces.

Table 1 – Archeological surveys found within 1 kilometer of the project area.

Agency	Firm/Institution	Antiquities Permit #	Year Conducted	Survey Type	Location (Approximate)
Texas Historical Commission	Texas Department of Transportation	-	1991	Area	within the project area centered around the W.T. Montgomery Rd. and US 90 intersection
Bexar County Public Works	Cox McLain	6568	2013	Linear	180 feet (55 meters) southeast of the project area

In addition to the Atlas file review, Pape-Dawson archaeologists engaged in a limited amount of additional research including a review of modern and historic aerial photographs and topographic maps (NETR Online 2017). This information was used to identify potential historic high probability areas (HHPAs) within the project area. As this research did not locate any structures within or directly adjacent to the project area, no HHPAs were identified.

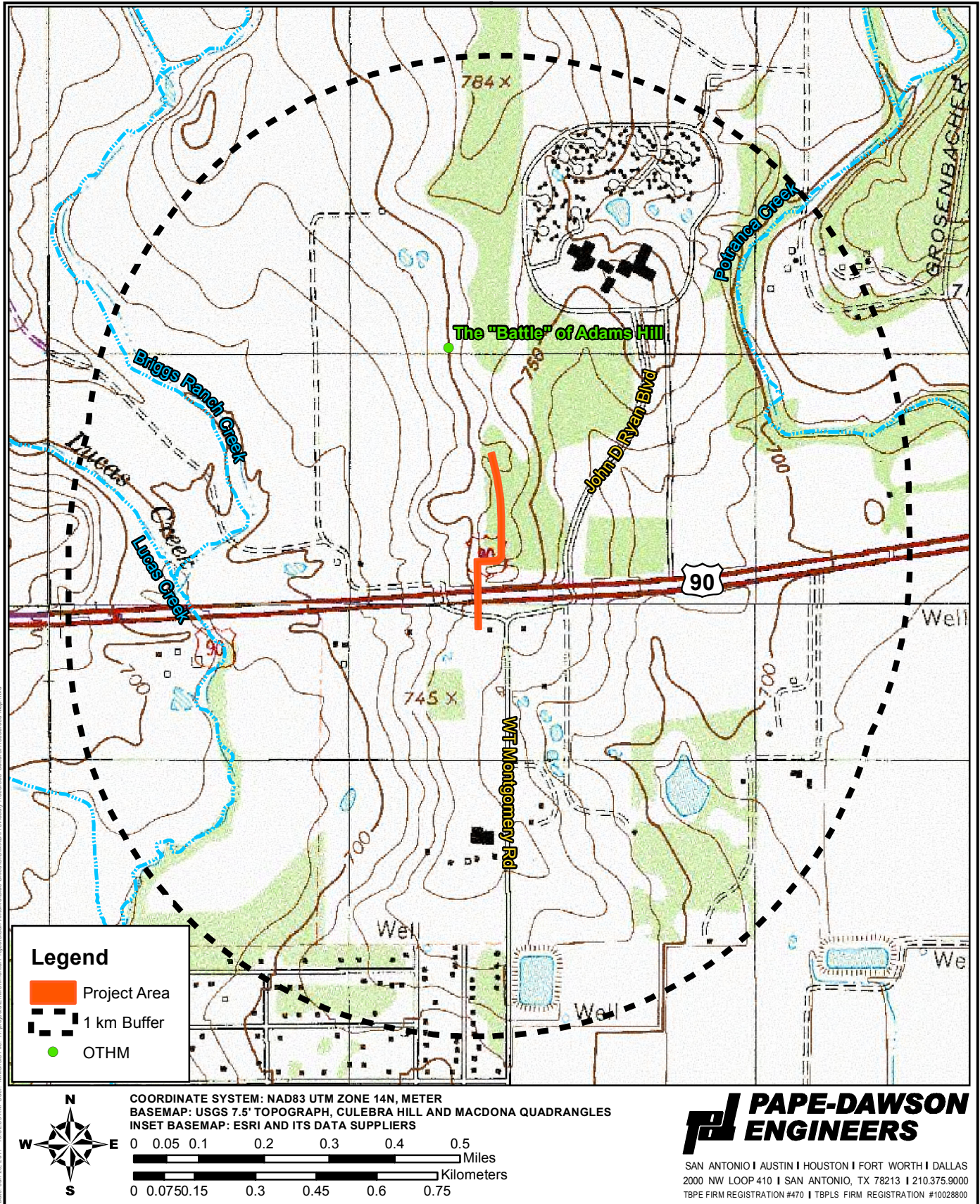


Figure 4. Previously Recorded Cultural Resources within 1 km of the Project Area

Fieldwork

A Pape-Dawson archaeologist conducted an archaeological survey of the project area on June 21, 2017. The archaeologist walked the project area along a single transect, visually inspecting the ground surface for artifacts and features. Shovel tests were placed in areas of least disturbance. However, the survey found the majority of the project area to be extensively disturbed. Previous impacts to the project area were photographed and noted as part of the survey effort.

Vegetation consisted of short maintained grasses within the existing road ROWs (Figure 5), while a forest of live oak, mesquite, and cedar trees along with cacti and scrub brush (Figure 6) was encountered within the undeveloped portion of the project area. Ground surface visibility varied across the project area ranging from 10 to 50 percent at the time of the survey. Ground surface visibility was limited in some areas due to leaf litter and dense grasses.

Disturbances within the project area were found to have resulted from both artificial and natural impacts. Observed artificial disturbances include the construction and maintenance of US 90 and W.T. Montgomery Road. Road construction-related disturbances included land clearing, ditches along US 90, road cuts through upland landforms (Figure 7), and embankments (Figure 8) constructed to elevate the road above the natural landscape. In addition to the road improvements, a CPS Energy gas line crosses the project area east to west just north of the westbound access road of US 90. Natural impacts include erosion and bioturbation caused primarily by root activity.

During the current survey effort, a total of 5 shovel tests was excavated to evaluate the impact of the proposed project on cultural resources (Figure 9). Within the northern portion of the project area, shovel tests were placed within the undeveloped land tract where soils were less disturbed. No shovel tests were excavated south of the US 90 westbound access road as the US 90 ROW has been extensively cut and filled (Figure 10) and the route of the proposed water main will be bored beneath US 90 and its access roads.

Shovel test excavations revealed that the soils across the north portion of the project area were largely shallow, rocky upland soils. Shovel tests typically exposed dark grayish brown clay loam with limestone gravels ranging from 40 to 70 percent. This generally corresponds to the Rock outcrop-Olmos complex mapped within the project area. Shovel tests were excavated to a max depth of between 10 and 30 cmbs and were terminated due to pre-Holocene-soil and dense gravels. No historic or prehistoric artifacts were located and no archaeological sites were recorded as a result of this survey.



Figure 5: Overview of the project area along W.T. Montgomery Road, facing north



Figure 6: Vegetation within portion of project area that falls across undeveloped land tract, facing south



Figure 7: Showing a 3-ft road cut within an upland landform along Montgomery Road ROW, facing west



Figure 8: Showing a 2-ft high road embankment along northern end of Montgomery Road, facing east

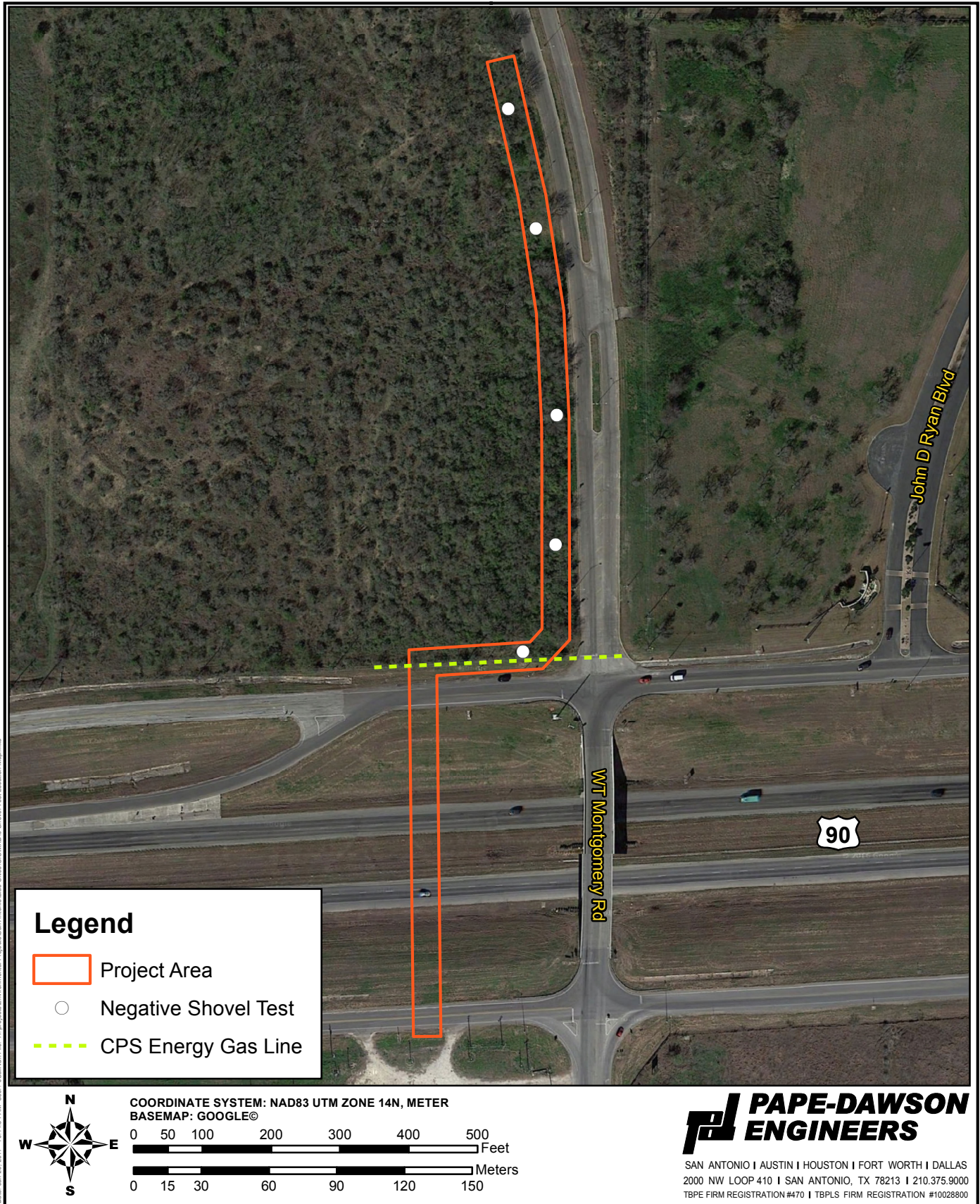


Figure 9. Shovel Test Location Map



Figure 10: Overview of US 90 ROW within project area, facing south

Summary and Recommendations

On June 21, 2017, Pape-Dawson conducted an archaeological investigation of the proposed Blue Skies of Texas-sponsored W.T. Montgomery Road Water Main project located near the City of San Antonio in Bexar County, Texas. The project will entail the installation of approximately 1,600 feet ft (488 m) of new water line within a 40-ft (12.2-m) wide easement. The project area will extend along the western side of W.T. Montgomery Road and will then cross US 90. The route of the water line will be bored beneath US 90 and its access roads while the remainder of the line will be laid out in a trench and backfilled. The project area will encompass a total area of 1.47 acres (0.6 ha). The depth of vertical impacts has not yet been determined.

Although Blue Skies of Texas will construct the new utility line, SAWS will be the grantee of the easement after construction. For this reason and because part of this project is located on Bexar County and TxDOT-owned ROWs, compliance with the ACT is required. Pape-Dawson applied for and received Texas Antiquities Permit No. 8074. However, as no Federal funding or permitting will be required for this project, compliance with Section 106 of the NHPA was not necessary.

The entirety of the project area was subjected to a pedestrian survey. The majority of the project area was found to be heavily disturbed. A total of 5 shovel tests was excavated to investigate the project area and were placed in areas of least disturbance. All shovel tests were negative, and no historic or prehistoric artifacts were located and no archaeological sites were recorded as a result of this survey.

Based on the results of the survey, Pape-Dawson recommends that no further archaeological work is necessary and that the project be allowed to proceed. However, if cultural material is encountered during construction, it is recommended that all work in the vicinity should cease and that the discovery be evaluated by a qualified archaeologist who can provide guidance on how to proceed in accordance with state regulations.

References Cited

Bureau of Economic Geology (BEG)

1983 *Geologic Atlas of Texas, San Antonio Sheet*, Robert Hamilton Cuyler Memorial Edition. 1974; rev. 1983. GA0029. Bureau of Economic Geology, The University of Texas at Austin.

Google Earth Map. "*Bexar County*" Map. Imagery Dates: January 1, 1995 to January 19, 2015. Web. (Accessed June 20,2017).

NETR Online

2014 Aerial Imagery of San Antonio, Texas 2004. <http://www.historicaerials.com/> (accessed June 20,2017).

United States Department of Agriculture, Soil Conservation Service (USDA)

2014 *Soil Survey of Bexar County, Texas*. <http://websoilseries.sc.egov.usda.gov/> (Accessed June 20,2017)

Wermund, E.G.

1996. Physiographic Map of Texas. Bureau of Economic Geology. The University of Texas at Austin.