

An Archaeological Survey of the CPS Energy Easement for Project F041, Copper Conductor Replacement, off FM 3009 in Comal County, Texas

by
Leonard Kemp

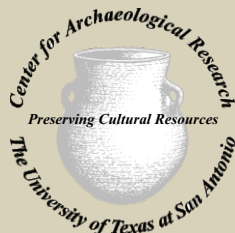


Texas Antiquities Permit No. 9278

REDACTED

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Archaeological Report, No. 484

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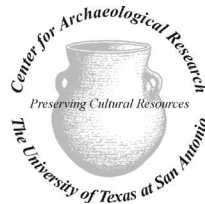
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Abstract:

The University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR), in response to a request from Adams Environmental, Inc. (AEI), conducted an intensive archaeological survey of a tract of land on Wuest Ranch, along FM 3009 in Comal County, Texas. CPS Energy plans to install 31 new poles and replace one pole on a CPS Energy easement through private property. The project, known as F041 Copper Conductor Replacement (Phase II Project at FM 3009, WR#40059208), required review by the Texas Historical Commission (THC) under the Antiquities Code of Texas (Texas Natural Resource Code, Title 9, Chapter 191, Sections 191.003(4) and 191.052(5) as amended) because CPS Energy is a political subdivision of Texas. The THC issued Texas Antiquities Permit No. 9278 to Dr. Raymond Mauldin who served as the Principal Investigator. Leonard Kemp served as the Project Archaeologist.

The field investigation was conducted on February 21, 2020. CAR initially excavated 27 shovel tests within the Project Area which is 0.74 ha (1.84 acres) in size. CAR defined four new archaeological sites 41CM423, 41CM424, 41CM425, and 41CM426 based on shovel tests and surface artifacts. Two of the sites are prehistoric lithic scatters (41CM423 and 41CM425), while the other two sites (41CM424 and 41CM426) are characterized as a quarry site and lithic reduction site, respectively. Site 41CM426 was recommended for further study because it contained subsurface deposits, and it was in an area that would be impacted by the excavation of two utility poles. Due to the COVID-19 pandemic, the project was delayed and disrupted. As a result of the disruption, the excavation for utility poles occurred without proper notification and an archaeological monitor was not present on site. Upon discovery, CAR proposed to CPS Energy and THC, in consultation with AEI, that additional shovel tests and examination of the spoils pile of the utility poles were necessary to assess the damage and determine the site's eligibility status. CAR excavated five additional shovel tests on 41CM426. Based on the findings from the survey and damage assessment, CAR recommends that sites 41CM423, 41CM424, 41CM425, and 41CM426 are not eligible for listing as a State Antiquities Landmark (SAL) or to the National Register of Historic Places (NRHP). All sites lack temporally diagnostic artifacts or features, and while 41CM426 does have buried material, it appears to be primarily confined to the upper 20 cm below surface. The THC concurred with that recommendation.

As the project was conducted on private property, all recovered artifacts were returned to the landowner. All other project-related materials, including the final report, are curated at CAR's curation facility. The facility is a state certified repository. The project accession number is 2402.

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Acknowledgements:

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Chapter 1: Introduction

The University of Texas at San Antonio's (UTSA) Center for Archaeological Research (CAR), in response to a request from Adams Environmental, Inc. (AEI), conducted an archaeological survey of a CPS Energy easement off of FM 3009 in Comal County, Texas. The proposed work was conducted for the installation of 31 new poles and the replacement of an existing pole on a CPS Energy easement through private property in southwestern Comal County. The project, referenced as F041 Copper Conductor Replacement (Phase II Project at FM 3009, WR#40059208), required review by the Texas Historical Commission (THC) under the Antiquities Code of Texas (Texas Natural Resource Code, Title 9, Chapter 191, Sections 191.003(4) and 191.052(5) as amended) because CPS Energy is a political subdivision of Texas. The THC granted Texas Antiquities Permit No. 9278 to Dr. Raymond

Mauldin who served as the Principal Investigator. Leonard Kemp served as the Project Archaeologist and conducted the archaeological investigation.

Project Area

The primary objective was to identify and document archaeological properties that may be present within the Project Area. The Project Area is a 0.74 ha (1.84 acres) tract of land in southwest Comal County. It is located on the Wuest Ranch and bound on the west by FM 3009. The Project Area is based on the proposed location of the CPS Energy line with a 10 ft (3.048 m) buffer of that alignment. Figure 1-1 shows the Project Area location on a U.S. Geological

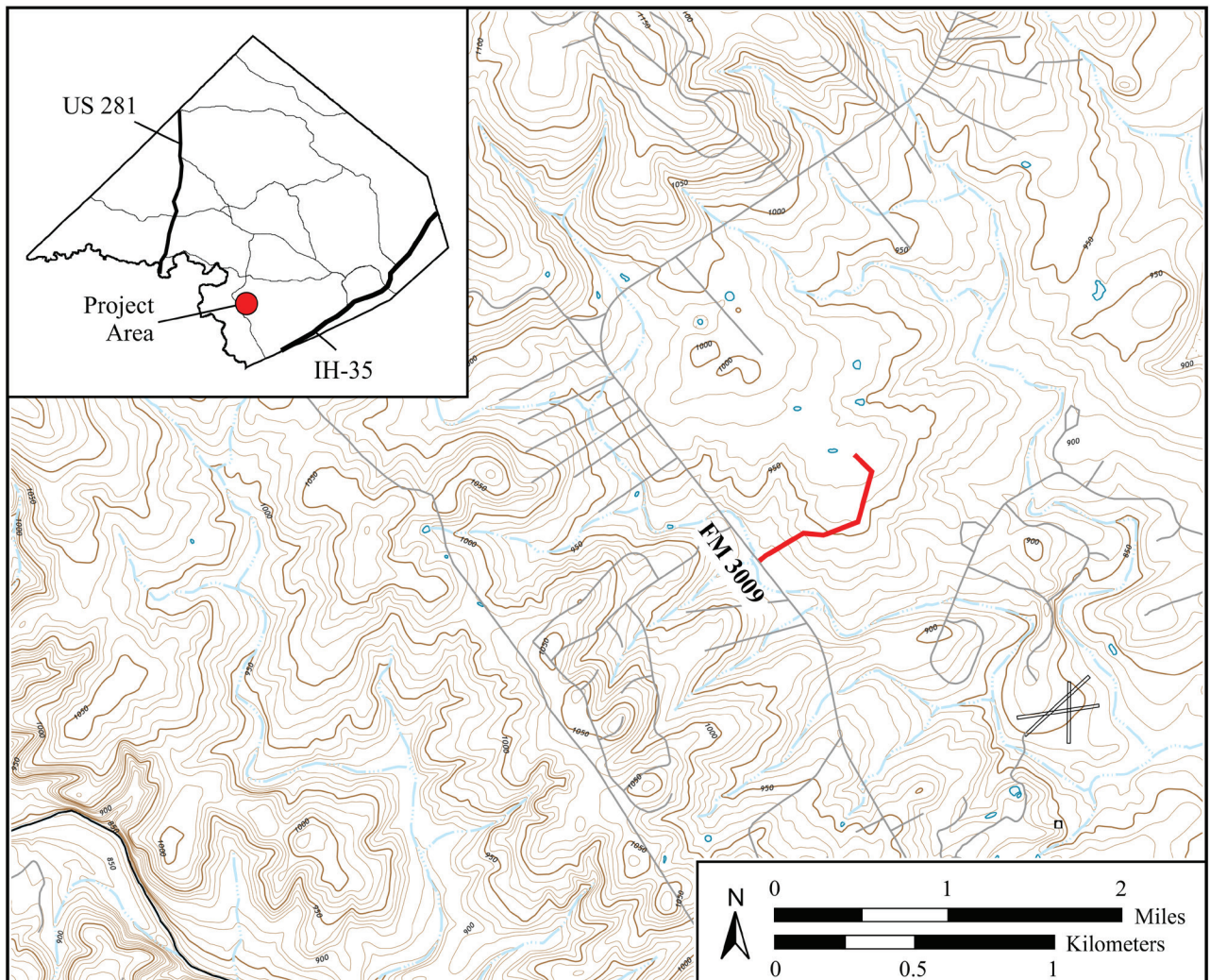


Figure 1-1. The location of the Project Area, off of FM 3009 (in red) on a U.S. Geological Survey topographic map. Inset shows location within Comal County.

Survey topographic map. Figure 1-2 is an Esri aerial image (November 2018) of the Project Area that shows land use prior to the survey. At that time, approximately two-thirds of the Project Area consisted of the open fields of the ranch. The remaining one-third of the Project Area was overgrown with juniper. Just prior to the survey, this vegetation located on the western portion of the Project Area was cleared.

Project Results

The field investigation consisted of shovel testing that was conducted on February 21, 2020. CAR initially excavated 27 shovel tests within the Project Area. CAR archaeologists defined four new archaeological sites. The sites are

41CM423, 41CM424, 41CM425, and 41CM426. Two of the sites are prehistoric lithic scatters (41CM423 and 41CM425), while the other two sites (41CM424 and 41CM426) are characterized as a quarry site and a lithic reduction site, respectively. One site, 41CM426, was recommended for further study because it contained subsurface deposits and was in an area that would be impacted by the excavation of two utility poles. Unfortunately, the COVID-19 pandemic created construction delays and disrupted the project. As a result of this disruption, CAR was not informed that pole excavations on 41CM426 took place in November of 2020. CAR was notified of this action in late April 2021 at which time CAR proposed to CPS Energy and THC, in consultation with AEI, that additional shovel tests and examination of the spoils pile of the utility poles would be necessary to assess

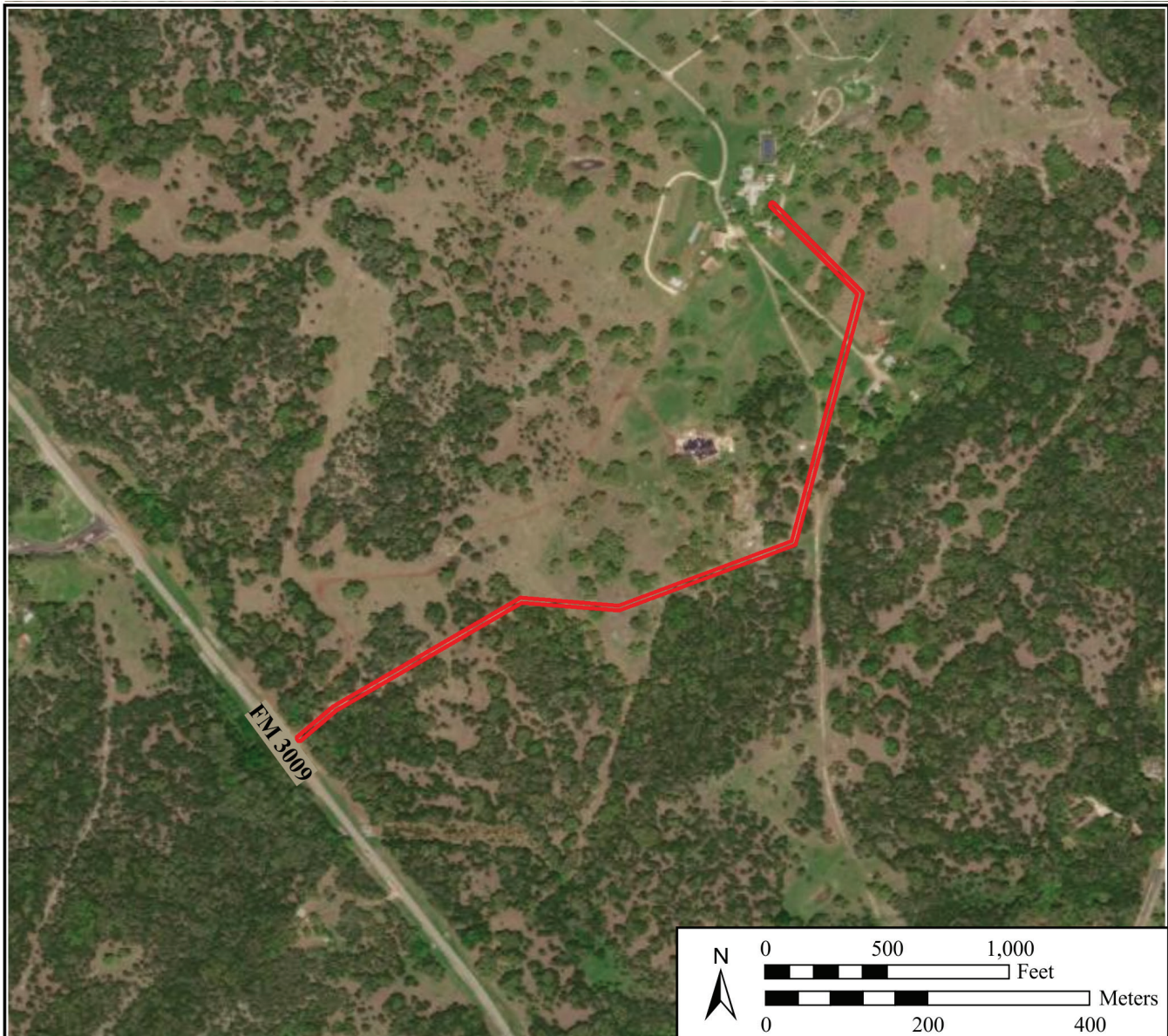


Figure 1-2. Aerial photo of the Project Area showing recent land use patterns (Esri aerial image).

the damage and determine the site's eligibility status. Upon approval from all parties, CAR excavated five additional shovel tests on June 7, 2021. Based on the findings from the survey and damage assessment, CAR recommends that sites 41CM423, 41CM424, 41CM425, and 41CM426 are not eligible for listing as a State Antiquities Landmark (SAL) or to the National Register of Historic Places (NRHP). The THC concurred with these recommendations.

Report Outline

Including the current chapter, this report contains six chapters and an appendix. Chapter 2 provides an overview of the physical environment, including aspects of climate, geology,

hydrology, soils, and floral and faunal resources. Chapter 3 presents an overview of culture history developed for Central Texas and provides information of previous archaeological projects near the project area. Chapter 4 summarizes the field and laboratory methods as well as information on the curation protocol used in this investigation. The chapter also includes the definitions used to identify an archaeological site, as well as the criteria to determine the eligibility of a site as a SAL or for listing to the NRHP. Chapter 5 presents the results of the archaeological survey and describes the archaeological sites recorded during the survey. It also presents eligibility recommendations regarding the four sites. Chapter 6 summarizes the project findings and recommendations for subsequent work. Appendix A provides a table listing the results of the 32 shovel tests excavated during the investigation.

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Chapter 2: The Natural Environment

The Project Area lies in the southwest part of Comal County. The 2017 U.S. census ranked Comal County as fourth in the top ten fastest growing counties with population of more than 10,000 in the United States (MacCormack 2017). However, prior to the early 1980s, the county was rural with the economy based on ranching. This chapter presents an overview of the natural environment of the area. It includes discussions of the modern climate, geology, hydrology, soils, and floral and faunal resources.

Modern Climate

Comal County has a subtropical climate with hot summers and relatively warm winters (Batte 1984). The nearest weather station is in New Braunfels 18.51 km to the east of the Project Area. The annual temperature in New Braunfels was 26°C based on data collected 1981 and 2010 (National Oceanic and Atmospheric Association [NOAA] 2020). The warmest months are June, July, and August with a mean temperature of 27.85°C. The coolest months are December and January with a mean temperature is 10.13°C.

The yearly average of rainfall in New Braunfels from 1981 through 2010 was 86.28 cm. Rainfall is bimodal, with an initial peak often occurring during May and June and the second peak occurring in September and October (NOAA 2020). The driest period occurs during winter in the months of December, January, and February. The average growing season in New Braunfels will average 264 days every five out of 10 years when temperatures exceed 0.0°C (Batte 1984: Table 2).

Geology, Hydrology, and Soils

Geologically, the area surrounding the Project Area is within the Cretaceous-age Edwards Limestone undivided formation and Glen Rose formation (Barnes et al. 1982). The former is characterized by a mostly, hard crystalline dolomitic limestone with chert nodules (Birckett 1984:83). The Glen Rose formation consists of interbedded limestone and marl or clay with stair-step appearance due to the hardness of the limestone (Birckett 1984:83).

The Edwards Plateau is the southernmost component of the Great Plains and encompasses the central and west portions of Texas. Comal County is delineated by two physiographic areas with the Edwards Plateau covering approximately 90

percent of the county (Figure 2-1). The Balcones Escarpment separates the Edwards Plateau from the remaining portion that of the Blackland Prairie of the Gulf Coastal Plains (Figure 2-1). The Project Area is located on the Edwards Plateau's eastern boundary. The Edwards Plateau is known for its high quality chert for use as lithic tools both in the form of cobbles and in layers eroding from the limestone bedrock (Hoffman et al. 1991; Speer 2014).

The Edwards Aquifer underlies the plateau, and it is the major source of water for the Comal County region. There are two major drainage systems in Comal County, to the east is the Guadalupe watershed with the Guadalupe River running from the northwest to the southeast (Figure 2-1). The Upper Cibolo watershed with Cibolo Creek is in the western portion of the county, and the creek forms a boundary between Comal and Bexar counties (Figure 2-1). The Cibolo Creek is approximately 4 km to the west, and the Guadalupe River is approximately 18 km to the east of the Project Area.

These drainages are fed by numerous springs that drain into the Guadalupe River and Cibolo Creek (Figure 2-1). The Comal Springs, consisting of seven major springs and many minor springs, is located in Landa Park and Golf Course, New Braunfels (Eckhardy 2020). It is one of the most productive and consistent regional springs. The springs percolate out of the limestone bluff of the Balcones Escarpment and feeds into the Comal River that drains into the Guadalupe River.

There are two soil units within the Project Area (Figure 2-2). The dominant soil unit is the Rumble-Comfort, rubbly association, 1 to 8 percent slopes (RuD). The Comfort-Rock outcrop complex, 1 to 8 percent slopes (CrD), comprises the remaining portion and found on the southeast end of the Project Area (CrD; Batte 1984). The Rumble soil of the RuD is found on ridgetops and gentle slopes, while the Comfort soil is found on slopes to drainages and Rock outcrops (Batte 1984:37). The Rock outcrop complex of the CrD is a dolomitic limestone found primarily along hill slopes and small drainages as bands interlaced with the Comfort component (Batte 1984:38).

The RuD consists of approximately 60 percent Rumble component and 20 percent Comfort component with the remaining components a mix of other soils and rock inclusions. The CrD consists of approximately 70 percent Comfort soil, and the remaining component is dominated by the Rock outcrop complex and mixed soils (Batte 1984:38). The Rumble soil is a dark reddish brown, cherty to stoney

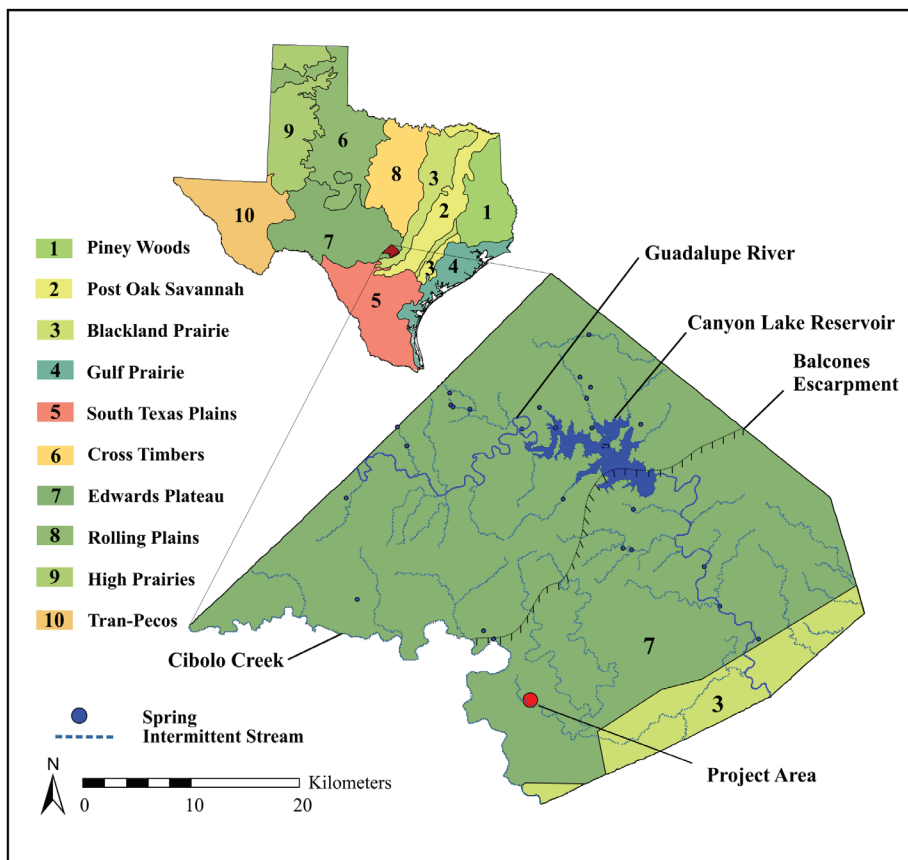


Figure 2-1. The major physiographic characteristics of Comal County. The inset shows the ecological regions of Texas as defined by Gould and colleagues. (1961).

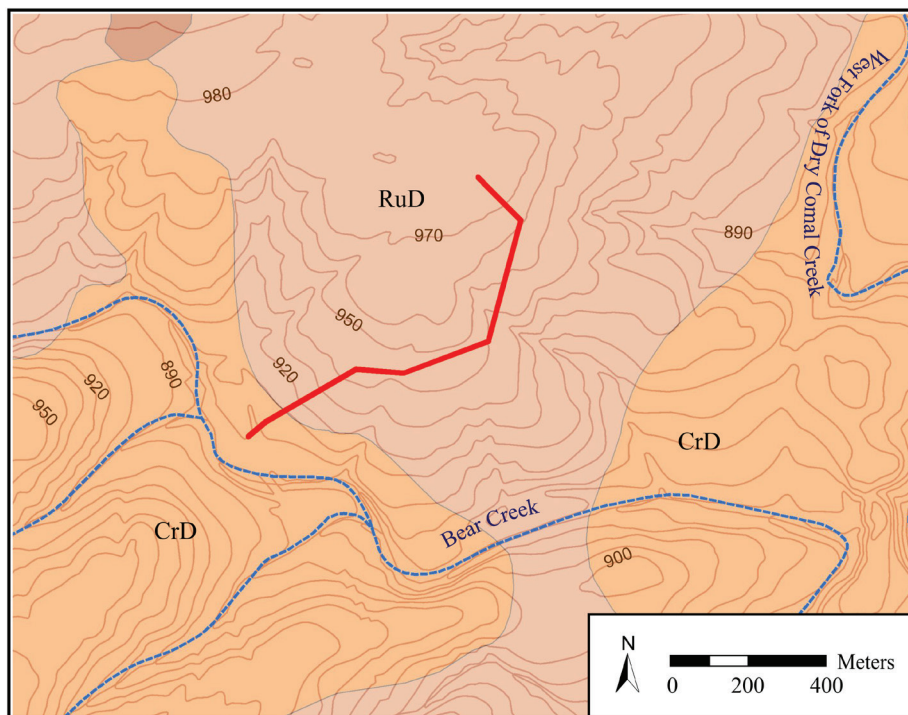


Figure 2-2. Soil units found within the Project Area (in red) are the Rumble-Comfort, rubble association, 1 to 8 percent slopes (RuD) and the Comfort-Rock outcrop complex, 1 to 8 percent slopes (CrD). Red line shows project easement.

clay loam, and the Comfort soil is an extremely stoney, dark brown clay (Batte 1984:37-38). Both soil depths, Rumble and Comfort, are relatively shallow terminating at a depth of up to 71.1 cm and 30.4 cm, respectively, over a fractured, indurated limestone (Batte 1984:37-38).

The Project Area is mostly on an upland between two normally dry creeks (Figure 2-2). On the south end of the Project Area, the landform slopes towards Bear Creek. The West Fork of Dry Comal Creek is 2.1 km to the east of the Project Area. Two unidentified springs are approximately 7 km and 8 km to the north of the Project Area. As a whole, the stoney soils and lack of water inhibit root growth, and at best, the soils can be used for limited range forage (Batte 1984:38).

Floral and Faunal Resources

Gould and colleagues (1960) places Comal County at the juxtaposition of two ecosystems. The Project Area falls within the Edwards Plateau ecosystem, a grassland-woodland-shrub mosaic, while the Blackland Prairie ecosystem is southeast of the Project Area. Batte (1984:50) further specifies the area on which the Project Area is located as within the Gravelly Redland range site. He describes the natural vegetation as originally an open savannah with 10 percent cover of *Quercus stellata* (post oak) and *Quercus velutina* (black oak). *Schizachyrium scoparium* (little bluestem) and *Bouteloua curtipendula* (Sideoats grama) dominated the savannah with the remaining a mixture of other bluestem grasses, *Elymus canadensis* (Canada wildrye), *Eriochloa sericea* (Texas cupgrass), and *Eragrostis intermedia* (Plains lovegrass). With German-Anglo settlement in the mid-to-late nineteenth century, the natural regime was

replaced by non-native grasses and the increase of woody brush including *Prosopis* sp. (mesquite), *Uncaria tomentosa* (Cat's claw), and *Mahonia trifoliolata* (agarita) due to cattle overgrazing (Batte 1984:50).

In Comal County, the current wildlife species include *Odocoileus virginianus* (white-tailed deer), *Sylvilagus* sp. (cottontail rabbit), *Lepus californicus* (jackrabbit), *Sciuridae* sp. (squirrel), *Colinus virginianus* (bobwhite quail), and *Columbidae* sp. (dove) (Davis and Schmidly 2020; Merz 1984:53). Historic accounts of wildlife included *Bison bison* (bison), *Ursus Americanus* (American black bear), and *Puma concolor* (mountain lion), but these are no longer present due to over-hunting and settlement (Foster 1995; Wade 2003).

Summary

The Project Area is on property that is located in a relatively rural area of Comal County and has been an active ranch since the 1880s. Comal County is one of the fastest growing counties in the nation and the rural environment surrounding the ranch is disappearing, replaced with suburban communities. The Project Area lies within the Edwards Plateau in the southwestern portion of Comal County. Regional climate is generally considered mild with moderate rainfall and a long growing season. The landform on which the Project Area is located drains to the west into Cibolo Creek. This portion of Edwards Plateau was once a viable and biodiverse community of plants and animals available for human exploitation. Beginning with German-Anglo settlement in the 1850s, the number and variety of native plants and animals has diminished or disappeared from the eastern Edwards Plateau.

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Chapter 3: Cultural History Context

This chapter provides archaeological context for the four newly recorded sites within the Project Area. It summarizes the culture history that has been developed for the Central Texas region. The summary will focus on the prehistoric period, as this was the only type of site documented during this project. Information concerning the historical period can be found in Foster (1995) and Wade (2003). The discussion of the regional culture history is followed by a section on the previous archaeological projects near the Project Area that includes a brief discussion of recorded sites within a 1 km radius of it.

Culture History

The prehistory of Texas is separated into three broad temporal periods. The area encompassing the Project Area

falls the prehistoric temporal framework developed for Central Texas (see Collins 1995, 2004). The three Central Texas prehistoric periods are the Paleoindian, Archaic, and the Late Prehistoric with each period subdivided into smaller time frames. The periods are defined by temporal markers, commonly projectile points or other unique cultural artifacts, and radiocarbon dates.

This section will reference two areas of Comal County that have been extensively investigated by archaeologists revealing multiple prehistoric sites ranging in time from the Paleoindian period to the Late Prehistoric period (Figure 3-1). The first is associated with sites along the Guadalupe River that drains into Canyon Lake Reservoir. In 1949, Robert Stephenson of the River Basin Surveys of the Smithsonian Institute conducted the first archaeological reconnaissance in Comal County for the future Canyon Reservoir (Johnson

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Figure 3-1. Location of archaeological sites discussed in this chapter.

et al. 1962; Stephenson 1951). The Texas Archaeological Salvage Project excavated three of Stephenson's sites in 1959 and 1960. They are the Oblate Rockshelter (41CM1), Footbridge (41CM2), and Wunderlich sites (41CM3; Johnson et al. 1962). Other Guadalupe River sites referenced here are the Dan Baker site (41CM104) excavated by the South Texas Archaeological Society beginning in the late 1970s (Chandler 1989; Mitchel and Van de Veer 1983) and the Royal Coachman site (41CM111) excavated for the Texas Department of Transportation by CAR (Mahoney et al. 2003).

The second area of intensive archaeological investigations are sites found at Comal Springs. The previously referenced Landa Park and Golf Course encompasses 11 of these recorded sites, 41CM25, 41CM90, 41CM167, 41CM172-176, 41CM190, 41CM205, and 41CM221. Beginning in the 1980s, 41CM25 has been the subject of multiple investigation (see Nickels 2011). Recent archaeological work conducted under the support of the Headwaters of the Comal have investigated two additional sites, 41CM204 and 41CM369 (when referenced together in this report these sites are called the Headwaters Sites), found just a short distance northeast at the old New Braunfels Waterworks and later New Braunfels Utility facility (Butler et al. 2015; Headwaters at the Comal 2020). Results from this work have not been published, and only general information has been made available.

Paleoindian Period

The Paleoindian period (11,500 to 8800 Radiocarbon Years before Present [RCYBP]) is divided into two sub-periods termed Early and Late. The Early Paleoindian sub-period (11,500 to 10,900 RCYBP) is defined by the presence of Clovis and Folsom points (Collins 1995:381). Howard (1990:257) has described the Clovis point as a thin, lanceolate-shaped, fluted point generally ranging in size from 7.5-11 cm (2.9-4.3 in.) in length. Clovis points are found across the North American continent. Clovis sites include kill sites, quarries, caches, and open campsites (Collins 1995, 2004:116). Only one Clovis point has been recorded in Comal County (Bever and Melzer 2007:Table 1; Melzer and Bever 1995).

The Folsom point is also lanceolate-shaped although with a broader and longer flute extending from the base to almost the tip. Largent and colleagues (1991:337) found Folsom points to have been smaller than Clovis, with an average length of 3.76 cm (1.48 in.). The distribution of Folsom is focused on the Great Plains and surrounding states, and it is associated with specialization on bison hunting (Collins et al. 2011). Largent (1995:Figure 1) reports that no Folsom points have been found in Comal County, but Folsom points have been found in the surrounding counties of Bexar and Guadalupe.

The Late Paleoindian sub-period (10,000 to 8800 RCYBP) is thought of as a transition to the subsequent Archaic period. It is characterized by a wider subsistence base and the appearance of burned rock features (Collins 1995, 2004). This sub-period is defined by multiple point styles that include parallel-stemmed points, such as St. Mary's Hall, Plainview, and the Golondrina/Barber form, and corner-notched points, such as Wilson, San Patrice, and Big Sandy (Bousman et al. 2004).

The number of archaeological sites with a Paleoindian component documented in Comal County is small with Bousman and colleagues (2004) citing only four sites: 41CM1, 41CM2, 41CM3, and 41CM104. However, two of those sites, 41CM1 and 41CM3, are defined by the Angostura point, which Collins (2004) dates to the Early Archaic period and not the Paleoindian period. The Footbridge site (41CM2) contained a Meserve point, a Late Paleoindian lanceolate-shape point with a deeply concave base (Johnson et al. 1962:62, Figure 23). The Dan Baker site (41CM104) contained a Late Paleoindian strata with two Plainview points (Chandler 1989). Chandler also speculates that a fluted Paleoindian biface less its distal portion is suggestive of a Clovis point and was found near the Dan Baker site (Chandler 1989:12). In addition to these sites, there are two other sites with a Late Paleoindian component. The first is the Parr site (41CM190) recorded by Mark Denton of THC in 1990. It contained one Plainview-like point (Nickels and Stone 2011:93). The second site, 41CM205, contained what is described as a Plainview/Clovis-like point (Nash 1993; Nickels and Stone 2011:93). Site 41CM175 contained a Golondrina point that dates to the Late Paleoindian period (Bonine 2019).

Archaic Period

Johnson and Suhm (1962:Figure 45) used projectile points collected from the Oblate Rockshelter, Wunderlich, and two other sites to form the first chronology for the Archaic period in Texas. This framework has been described as a "milestone" in the history of Texas archaeology (Texas Beyond History 2020). Over the next 30 to 40 years, the chronology of the Central Texas Archaic has been refined in multiple iterations (Collins 1995, 2004; Johnson and Goode 1994; Weir 1976), most recently by Lohse and colleagues (2014).

Using aspects of the framework presented by Johnson and Good (1994), Collins (1995, 2004:119) divides the Archaic period (8800 to 1300/1200 RCYBP) into three sub-periods: Early, Middle, and Late. Archaeological signatures that develop or become better defined in the Archaic period include a proliferation of point styles. The 7,600-year Archaic period is characterized by an increasing diversity of projectile points, increasing population, diminishing mobility, and increasing diet diversity with greater use of plant foods and technologies, such as burned rock middens and groundstone tools, to process them (see Acuña 2006; Black 2003; Black

and McGraw 1985; Carlson et al., eds. 2008; Collins et al. 2011; Thoms and Claybaugh 2011).

The Early Archaic (8800 to 6000 RCYBP) is the least known of the three sub-periods. Projectile points associated with the Early Archaic include Angostura, Early Split Stem, and Martindale-Uvalde (Collins 1995, 2004). Other temporally diagnostic items include Guadalupe and Clear Fork tools (Collins 1995, 2004). These tools are thought to be used in wood-working and plant processing. Early Archaic populations are thought to have been relatively low in number, with small groups widely scattered during this period (Collins 1995, 2004). The Oblate Rockshelter and Wunderlich sites each contained a single Angostura point (Johnson et al. 1962:19, 87). Site 41CM175 also contained an Angostura point and Clear Fork tools with small burned rock features (Arnn 1997a). Bonine (2019) collected Angostura points from test excavation at 41CM175. Site 41CM221 contained an Early Archaic component designated by Gower and Uvalde points, a Clear Fork tool, and an adze (Arnn 1997b; Nickel and Stone 2011). The Headwaters Sites also contained Early Archaic diagnostic points (Headwaters at the Comal 2020).

The Middle Archaic sub-period (6000 to 4000 RCYBP) is marked by the appearance of Bell-Andice, Taylor, and Nolan-Travis point styles (Collins 1995:383). Two cultural characteristics that become more pronounced during this period are the development of distinctive point styles and the use of burned rock middens on the Edwards Plateau (Collins 1995:384). The Wunderlich site contained 19 Nolan and three Travis points, while the Footbridge site contained five Nolan and three Travis points (Johnson et al. 1962: Tables 1 and 2).

The Royal Coachman site (41CM111) is a Middle Archaic site found along a former terrace of the Guadalupe River. It is characterized as a multicomponent open campsite dating to the Early and Late Middle Archaic period (Mahoney et al. 2003:64). Bell and Nolan points recovered from the site indicate that occupation of the site began around 5600 BP (Mahoney et al. 2003:63). In association with the early Middle Archaic component, there is a burned rock sheet midden with radiocarbon dating to 5880 to 5320 BP.

The Late Archaic sub-period (4000 to 1300/1200 RCYBP) is characterized by Bulverde and Pedernales points from 4000 to 2500 RCYBP. Collins and colleagues (2011) describe the Pedernales point style as the quintessential Central Texas point. It was likely used for hunting bison during the initial mesic climate of this sub-period. Subsequent point styles defined Late Archaic intervals, including Lange, Marshall, Williams, Marcos, Montel, Castroville, Ensor, Frio, and Fairland and terminating with the Darl point (Collins 1995:384). Collins (1995) states that Late Archaic sites are common in Central Texas and frequently are in stratified contexts with good

integrity. Subsistence practices include the use of succulents and geophytes processed in burned rock middens that become abundant during this period (Collins 1995).

The three Canyon Reservoir sites (Oblate Rockshelter, Footbridge, and Wunderlich) contained the temporal range of Late Archaic points from the beginning of the period to the end (Johnson et al. 1962:Tables 1, 2, and 3). The Wunderlich site contained two burned rock middens dating to the early Late Archaic based on temporal diagnostics. In addition, the Dan Baker site also has a Late Archaic assemblage found in two burned rock middens (see Mitchell and Van der Veer 1983:Figure 2). Site 41CM204 at the Comal Springs contains burned rock midden, and a hearth first identified in 1991 (reported in Butler et al. 2015:14). It was dated to the Late Archaic by the presence of a Frio-like point (Butler et al. 2015).

The increasing population and territoriality that characterize the Late Archaic are also supported by the presence of large cemeteries (Bement 1994; Black and McGraw 1985; Munoz et al. 2011). Site 41CM25, then known as the H. C. Locke Farm Site, contained a prehistoric cemetery that dates at least from the Late Archaic to the Late Prehistoric period (Arnn 1997a:4; Bailey and Bousman 1989:12). It was first professionally excavated by J. E. Pearce, A. T. Jackson, and A. M. Woolsey of the University of Texas at Austin in 1936 (Woolsey et al. 1936). They recorded 19 burials, although they note that all were impacted by previous looting, and they estimated that 75 additional burials had been removed prior to their investigation (Arnn 1997a:2; Woolsey et al. 1936:64). Grave goods included conch shell beads, a conch shell gorget, a shell pendant, a boatstone, a flint knife, and projectile points (Dockall et al. 2006:44; Nickels and Stone 2011:86). Temporal diagnostics recovered from the excavation include Bulverde, Williams/Castroville, Marshall, and Perdiz points (Nickels and Stone 2011:86). Malof and colleagues (2007:16) report that an additional 30 to 40 burials were excavated following the work by Pearce, Jackson, and Woolsey in 1936.

Late Prehistoric Period

Collins (1995, 2004) divides the Late Prehistoric (1300/1200 to 350 RCYBP) into two sub-periods, Austin (1200 to 700 RCYBP) and Toyah (700 to 350 RCYBP). The Austin sub-period is often viewed as a continuation of adaptations common in the Late Archaic sub-period with the addition of the bow and arrow (Collins 1995:385). Scallorn and Edwards points are characteristic of this time, and Scallorn points are found throughout Texas (Turner and Hester 1999; Turner et al. 2011).

Toyah occupations are frequently associated with the Perdiz point, a style that is found statewide (Turner and Hester 1999; Turner et al. 2011). In addition, the first indigenous Central Texas ceramics, a bone-tempered pottery known as Leon

Plain, are produced during the Toyah sub-period. The so-called Toyah tool kit, which consists of Perdiz points, beveled knives, and end scrapers, is thought to have been created to exploit bison (Dillehay 1974; Huebner 1991; Prewitt 1981). However, other researchers (see Black 1986; Dering 2008; Mauldin et al. 2012) cite a broad-based diet including deer, small mammals, turtle, and fish, as well as a variety of plant foods in which this tool kit would be just as useful.

All three of the Canyon Reservoir sites contained evidence of Late Prehistoric artifacts with arrow points with five Leon Plain ceramic fragments found at Wunderlich. There are numerous Comal Springs sites that have Late Prehistoric diagnostics including 41CM25, 41CM174, 41CM176, and 41CM205 (Nickels and Stone 2011:83; THC 2020). The Headwater Sites also contained Late Prehistoric diagnostics with 41CM469 having a radiocarbon assay dating to the Late Prehistoric period (Headwaters at the Comal 2020).

Previous Archaeology

The current project has increased the number of recorded archaeological sites in Comal County to 426. The number of sites is relatively low when compared its neighboring Bexar County with 2,346 recorded sites (THC 2020). However, since 2002, Comal County has nearly doubled the number of recorded sites as a result of ongoing development that has fostered cultural resource investigations and discoveries. Within a 1 km radius of the Project Area, there are four recorded archaeological sites, and all four were identified by SWCA during the Crescent Hills project (Young et al. 2013).

Young and colleagues (2013) surveyed approximately 518 ha and excavated 396 shovel tests on property directly south of the current Project Area. Only 20 of those 396 shovel tests

(approximately 5 percent) were positive for cultural material, which primarily consisted of artifacts found in the upper 15 cm (Young et al. 2013: Appendix A). From the 20 positive shovel tests, Young and colleagues recorded 19 sites with 17 sites characterized as lithic scatters and two historic sites. No prehistoric diagnostics were discovered.

Three of the four sites from this project that fall within a 1 km radius of the Project Area are lithic procurement sites, and the fourth is a historical scatter of mid-twentieth century artifacts (Young et al. 2013). The lithic procurement sites are similar in nature and are described as surface scatters with cores, tested cobbles, and debitage. None of three lithic sites are recommended eligible for listing as a SAL because it will not add to the current knowledge of prehistory or contribute sufficient data due to the lack of temporal diagnostics and site integrity. The historic site is also not recommended eligible for listing as a SAL because it does not add to the current knowledge of history due to the lack of integrity and features.

Summary

This chapter summarized the culture history for the region from the beginning of the Paleoindian period (11,500 RCYBP) to the end of the Late Prehistoric (350 RCYBP). There are two areas in Comal County, Canyon Reservoir and the Comal Springs sites, where people inhabited those localities for over 11,000 years. The chapter also reported on archaeological sites within a 1 km radius of the Project Area. The Crescent Hills sites are different from those sites with long defined occupations. They seem to be characterized more by the availability of raw lithic resources as evidenced by tested cobbles, debitage, and cores and with an unknown period of use.

Chapter 4: Field and Laboratory Methods

This chapter presents the field and laboratory methods used during this investigation. Prior to the start of the project, in consultation with AEI, CPS Energy, and the THC, a scope of work was prepared to define procedures associated with the archaeological investigations. The scope of work forms the basis of what is presented in this chapter.

Shovel Testing

Twelve shovel tests were initially proposed to test the Project Area, a number that exceeded the THC requirement. Fifteen additional shovel tests were excavated for the subsequent site delineation phase, and an additional five shovel tests were excavated to assess damage on site 41CM426. Shovel test spacing on the initial transect survey varied between 80 to 120 m apart based on surface bedrock and the lack of soils. Shovel tests were 30 cm in diameter and excavated to a maximum depth of 60 cm below the surface (cmbs) as specified in the Texas Antiquities Permit. Shovel tests were excavated in arbitrary 10 cm levels, and all soil matrices were screened through one-quarter inch hardware cloth. All artifacts found in the shovel test were collected, tagged, and returned to the CAR laboratory for further analysis. For each shovel test, archaeologists completed a standard shovel test form and recorded the location and attribute data on a Trimble GPS unit.

Documentation, Collection Policy, and Site Recording

All field activities and discoveries were documented and supported by digital data under the supervision of the Project Archaeologist. This included photographs, where appropriate, as well as GPS recordings. CAR archaeologists collected all artifacts recovered from shovel tests. No surface artifacts were collected as none were temporally diagnostic.

A review of the Texas Archeological Sites Atlas (THC 2020) identified four sites within 1 km of the Project Area. Three of four of those sites are lithic scatters without temporal affiliation. The fourth site is a historic scatter. As a result, CAR prepared a definition of a site focused on a prehistoric assemblage with the following criteria, although the criteria apply to historic sites as well:

- 1) Four or more surface artifacts within a 3 m radius, or a density of 0.14 artifacts per square meter;

- 2) An intact feature, such as a hearth or evidence of a structure;
- 3) A positive shovel test with 5 or more artifacts;
- 4) A shovel test with three or more positive levels;
- 5) Evidence of a feature (e.g., charcoal or several pieces of burned rock) in a shovel test; or
- 6) Two positive shovel tests within 30 m.

If evidence of cultural materials meeting one of these criteria for an archaeological site was encountered in a shovel test or on the surface, shovel tests were excavated at close intervals to define the extent of the distribution. If the minimum site criteria were met, shovel tests were excavated at close intervals to define the extent and distribution of archaeological material. Per THC standards, a minimum of six shovel tests is necessary to define a site's extent; however, this minimum was modified based on soil depth, surface visibility, and location of previously excavated shovel tests. The extent of positive shovel tests and recorded surface artifacts were used to define each site boundary. No historic artifacts or features within the Project Area were observed during the survey.

Each site boundary was plotted on an aerial photograph and recorded using Esri ArcGIS software. Digital photographs were taken of each site, and notes were taken to describe landform, current vegetation, and surface visibility. Following completion of the fieldwork, CAR submitted Texas Archeological Sites Atlas forms for all newly discovered archaeological sites.

Damage Assessment of 41CM426

Site 41CM426 was recommended for further study because it contained subsurface deposits, and it was in an area that would be impacted by the excavation of two utility poles. Due to the COVID-19 pandemic, the project was delayed and disrupted. As a result of the disruption, the excavation for utility poles occurred without proper notification and an archaeological monitor was not present on site. Upon discovery, CAR proposed to CPS Energy and THC, in consultation with AEI, that additional shovel tests and examination of the spoils pile of the utility poles were necessary to assess the damage and determine the site's eligibility status. As noted previously, CAR excavated five additional shovel tests on 41CM426.

State Antiquities Landmark and National Register Eligibility Criteria

Upon defining an archaeological site, CAR made recommendations for the site's eligibility for designation as a SAL and/or inclusion on the NRHP using criteria defined by the Antiquities Code of Texas and the National Historic Preservation (NHPA) Act 1966, as amended. The eligibility recommendations were used to determine whether the site warrants protection and/or further study or no protection and/or further study.

Guidance for designation as a SAL is found in the Rules of Practice and Procedure for the Antiquities Code of Texas, Texas Administrative Code, Title 13, Part 2, Chapter 26, Subchapter C, Rule §26.10 for archaeological sites. It states that the archaeological site must meet one or more of the following criteria:

- 1) the site has the potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information;
- 2) the site's archeological deposits and the artifacts within the site are preserved and intact, thereby supporting the research potential or preservation interests of the site;
- 3) the site possesses unique or rare attributes concerning Texas prehistory and/or history;
- 4) the study of the site offers the opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge; and/or
- 5) there is a high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to ensure maximum legal protection, or alternatively, further investigations are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected.

The National Park Service (NPS) lists four criteria, A through D, to assess the eligibility of a historic property to the NRHP as required under Section 106 of the NHPA 1966, as amended. Generally, the criterion most applicable to archaeological sites is D, "properties [i.e. sites] that have yielded, or may be likely to yield, information important to prehistory or history" (36 CFR§60; NPS 2002). In addition, the property must have integrity defined by location, design, setting, materials, workmanship, feeling, and association (see National Register Bulletin 15 for definitions and case studies; NPS 2002). In the case of archaeological integrity, the site generally should contain a defined temporal component or the possibility of containing one, the deposits should be intact, and there should be sufficient cultural material to develop or address regional research questions (Kemp et al. 2019). CAR provides its recommendations to the THC and incorporates their decision into the final report.

Laboratory Methods

All cultural materials and records obtained and/or generated during the project were prepared in accordance with federal regulation 36 CFR part 79 and THC requirements for State Held-in-Trust collections. Collected artifacts were tagged with an individual field sack number along with a description, quantity, feature number (if applicable), and location. The Project Archaeologist checked all artifacts in the field before turning them over to the Laboratory Director for processing. Artifacts were washed, air-dried, and stored in separate bags by provenience. All recovered artifacts were analyzed, and their pertinent information (i.e., provenience, artifact type, metrics, etc.) was entered into an Excel database. The artifacts will be returned to the landowner following the completion of the project.

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper and placed in archival-quality page protectors to prevent accidental smearing due to moisture. Finally, following completion of the project, all project-related records and the final report, less the artifacts will be permanently stored at the CAR's curation facility. The project accession number is 2402.

Chapter 5: Results of Archaeological Investigations and Site Descriptions

CAR conducted an archaeological survey with shovel testing (n=27) on the 0.74 ha (1.84 ac) Project Area for the CPS Energy easement project along FM 3009. As a result of this work, CAR staff recorded four new archaeological sites in the Project Area. They are 41CM423, 41CM424, 41CM425, and 41CM426. One site, 41CM426 was recommended for archaeological monitoring during the excavations for the utility poles on the site. However due to events beyond CAR's control, site 41CM426 was not monitored during those excavations. At the request of the THC and in coordination with AEI and CPS Energy, CAR undertook a damage assessment of the site that included additional shovel testing on 41CM426. This chapter provides a summary of the initial investigation followed by a discussion of the four sites and the eligibility recommendation for those sites.

Shovel Testing

Twelve shovel tests were planned with 15 additional shovel tests excavated for the subsequent site delineation phase. Figure 5-1 shows the locations of the initial 27 excavated shovel tests. As discussed in Chapter 2, the Project Area is characterized by two soil units, Rumble-Comfort, rubbly association, 1 to 8 percent slopes (RuD) and the Comfort-Rock outcrop complex, 1 to 8 percent slopes (CrD). Both groups are characterized as a shallow, rocky clay loam or clay over a limestone bedrock, respectively. None of the shovel tests reached the targeted depth of 60 cmbs. The average depth was 22 cm with 70 percent of the 27 shovel tests terminated before Level 3 (20-30 cmbs) and only

REDACTED IMAGE

Figure 5-1. The locations of positive and negative shovel test overlain on the FM 3009 Project Area.

two of the tests excavated to below 50 cmbs (Figure 5-2). Encountering bedrock or other unpassable rock was the reason for all shovel test terminations as shown in Figure

5-3. Information (terminal depth, artifact recovery, and soil type) for each shovel test, including the additional tests on 41CM426, can be found in Appendix A.

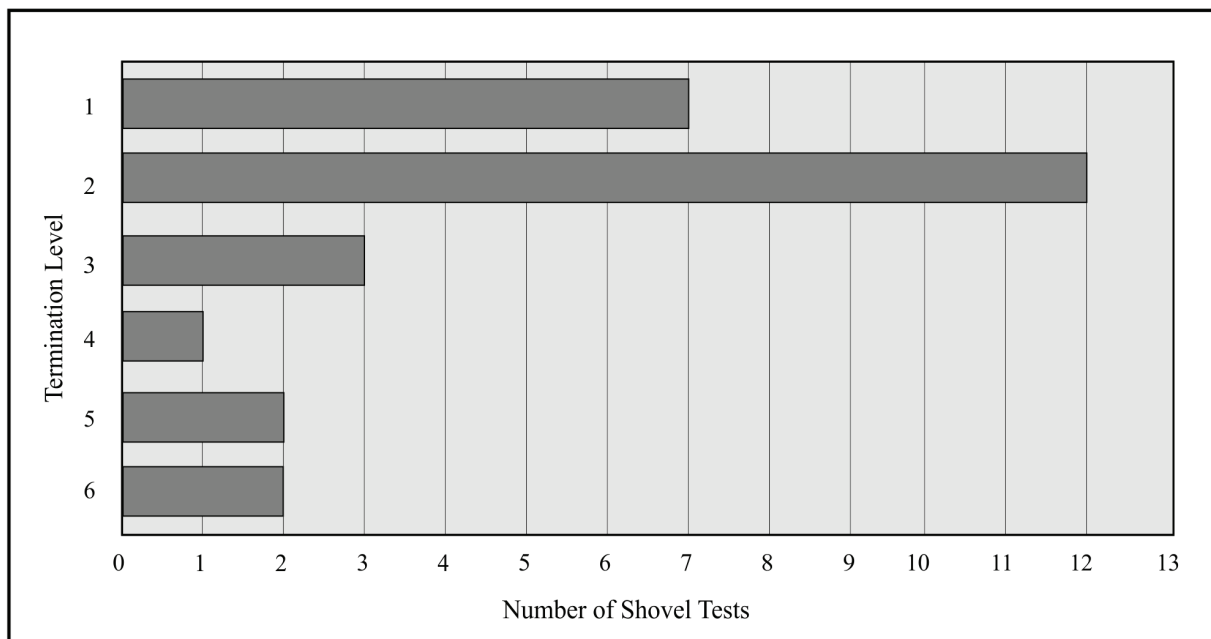


Figure 5-2. Shovel test termination levels. All levels are designed as being 10 cm in thickness.



Figure 5-3. Example of the shallow bedrock exposed in a shovel test (ST 14).

Only seven of the 27 shovel tests (26 percent) were positive for cultural material, and all the material was lithics (Figure 5-1). CAR collected 12 artifacts from seven shovel tests. The assemblage contains eight pieces of debitage and four cores. Figure 5-4 shows the distribution by level of the collected material. It shows that most artifacts (67 percent) were recovered in the upper 10 cm. Of the seven positive shovel tests, most only had a single artifact. However, multiple items were recovered from STs 9 (n=2), 18 (n=3), and 26 (n=3). The shovel testing results suggest little soil deposition and/or higher levels of erosion. Buried deposits are generally within the upper 10 cm. No features were identified in any of the shovel tests. Five of the seven shovel tests are associated with sites with the material found in the other two shovel tests (STs 7 and 20) described as isolates. A piece of debitage was found in each of these shovel tests in Levels 1 (0-10 cmbs) and 2 (10-20 cmbs), respectively.

Archaeological Sites

Using the site definition criteria outlined in the Chapter 4, CAR recorded four sites: 41CM423, 41CM424, 41CM425, and 41CM426. These sites were defined primarily by surface scatters of debitage and cores. Figure 5-5 shows the location of the sites along the surveyed easement. No surface features were recorded on any of the sites. None of the sites contained, either in shovel test on the surface, any temporally diagnostic items.

41CM423

Site 41CM423 was recorded on the southwestern portion of the Project Area (Figure 5-6). The site is 116 m² in area. The site is located on a slope within the CrD soil group. Bear Creek is 240 m to the southwest. The Project Area had been cleared of vegetation prior to the survey. However surrounding vegetation includes juniper and grasses.

Site 41CM423 was designated by a surface scatter of two tested cobbles and fire-cracked rock (FCR; Figure 5-7). Two shovel tests, STs 13 and 14, were excavated to define the site boundaries. Artifact density was calculated at 0.02 artifacts per square meter. No subsurface material was recovered in either of the two shovel tests. Bedrock was present at 19 cmbs in ST 13 and at 10 cmbs in ST 14.

Site 41CM423 is a low-density site composed of only surface artifacts that included debitage, tested cobbles, and FCR. The site did not contain any temporal diagnostics nor material that could be radiocarbon dated. The shovel tests were shallow terminating at bedrock between 10 and 19 cmbs. The low density of artifacts, lack of temporal diagnostics and/or the potential for radiocarbon dates, and the lack of deposition suggests that 41CM423 is not likely to yield additional information to the understanding of prehistory. It is not recommended for listing as a SAL, and it is not recommended eligible for inclusion to the NRHP.

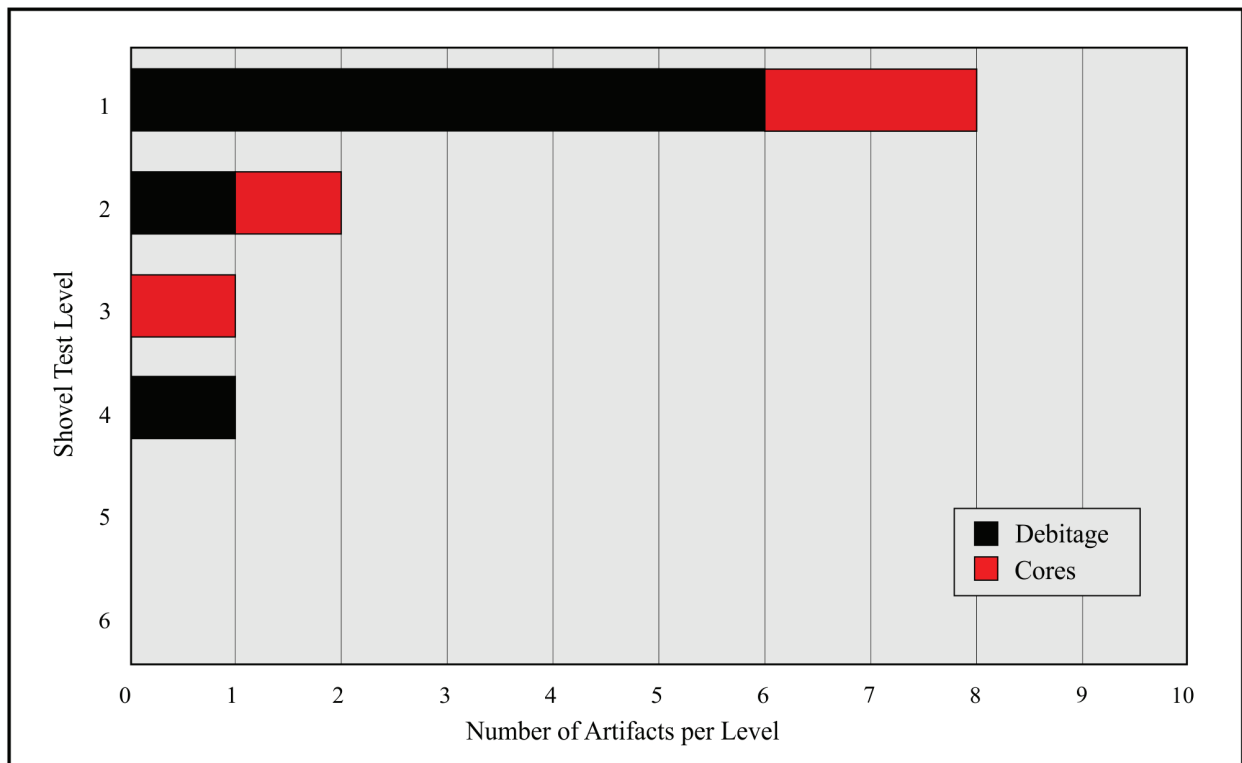


Figure 5-4. Figure shows the number of and type of artifacts by level recovered from the seven positive shovel tests initially excavated on the project.

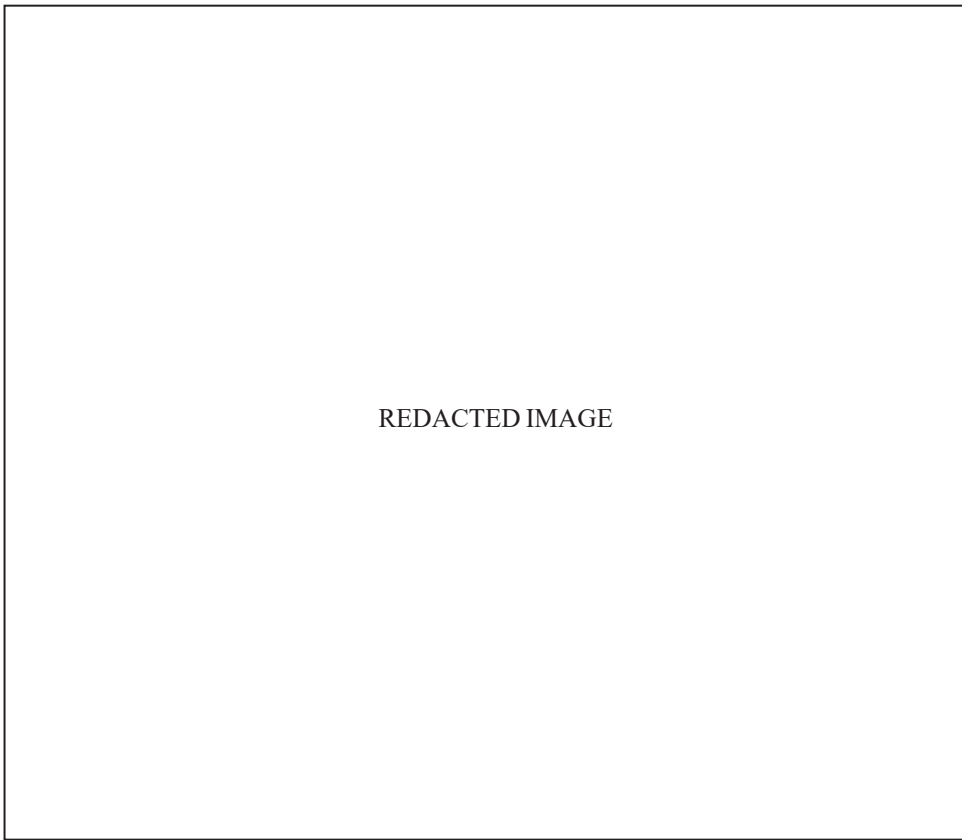


Figure 5-5. The archaeological sites recorded in the FM 3009 Project Area.

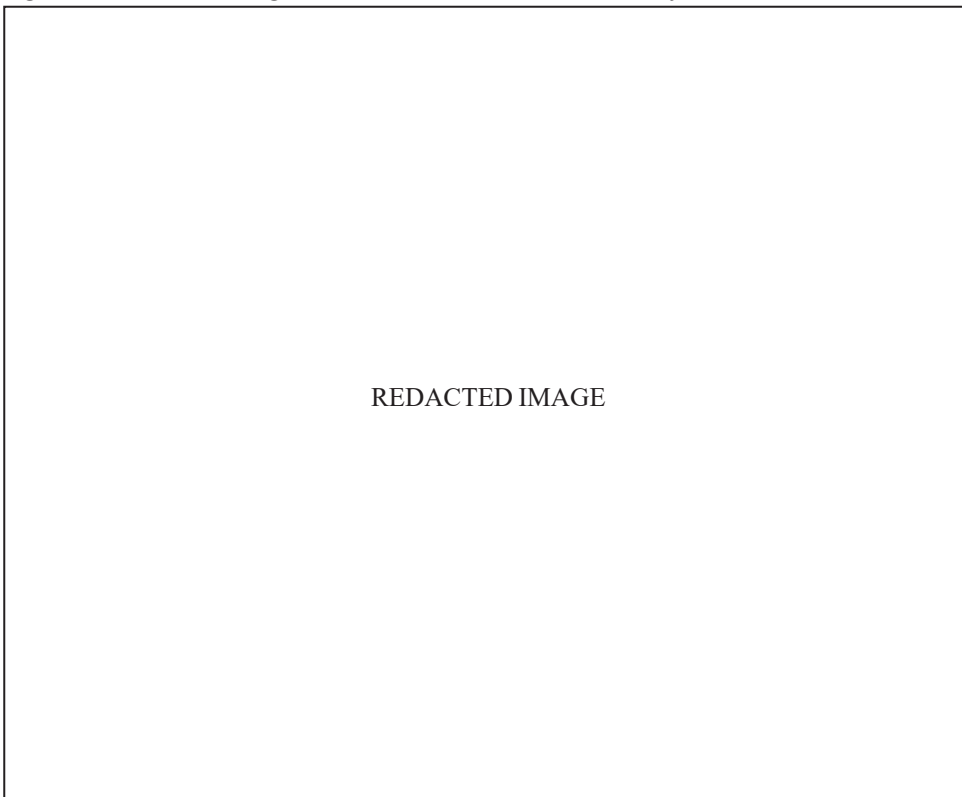


Figure 5-6. Site map of 41CM423 showing location of site boundary, shovel tests, and artifact cluster.



Figure 5-7. View to the northeast of 41CM423 showing artifact cluster.

41CM424

Site 41BX2299 is located in the southwest portion of the Project Area (Figure 5-8). The site covers an area of approximately 470 m². The site is located on a slope within the CrD soil group. The section of the Project Area in this location had been cleared of vegetation prior to the survey, and like 41CM423, the surrounding vegetation includes juniper and grasses (Figure 5-9).

Site 41CM424 was defined by a surface concentration of lithics consisting of a biface, debitage (n=379), cores (n=58), and FCR (n=6; Figure 5-10). Due to their high density, artifacts were first flagged, then identified as to type and counted. CAR documented 444 artifacts in total with an artifact density estimated at 0.94 artifacts per square meter. Figure 5-11 is a graph representation of the recorded debitage from the south to the north end of the site. It shows the reduction of chert throughout the site with a peak in the southcentral portion of the site suggesting active quarrying of raw material in or near that location.

Shovel Tests 9, 16, 17, and 18 were excavated within the site, while ST 19 and ST 15 were excavated to define site boundaries.

Table 5-1 shows the findings of shovels tests and their terminal depth by level. Shovel Tests 9, 16, and 18 were positive with six artifacts recovered. The average depth to bedrock of the four shovel tests on site was 15 cmbs.

Site 41CM424 is a chert reduction site or quarry. Surface artifacts were noted outside of the current Project Area, and the site likely extends beyond the current boundary reported here. Several artifacts were found subsurface primarily in the top level of the shovel test. The site did not contain any temporal diagnostics nor any material that could be radiocarbon dated. While the site has a high density of artifacts, the lack of temporal diagnostics and/or the potential for radiocarbon dates, and the lack of deposition suggests that 41CM424 is not likely to yield additional information to the understanding of prehistory. It is not recommended for listing as a SAL, and it is not recommended eligible for inclusion to the NRHP.

41CM425

Site 41CM425 is a surface scatter of lithics found in the central portion of the Project Area. It covers an area of roughly 328 m².

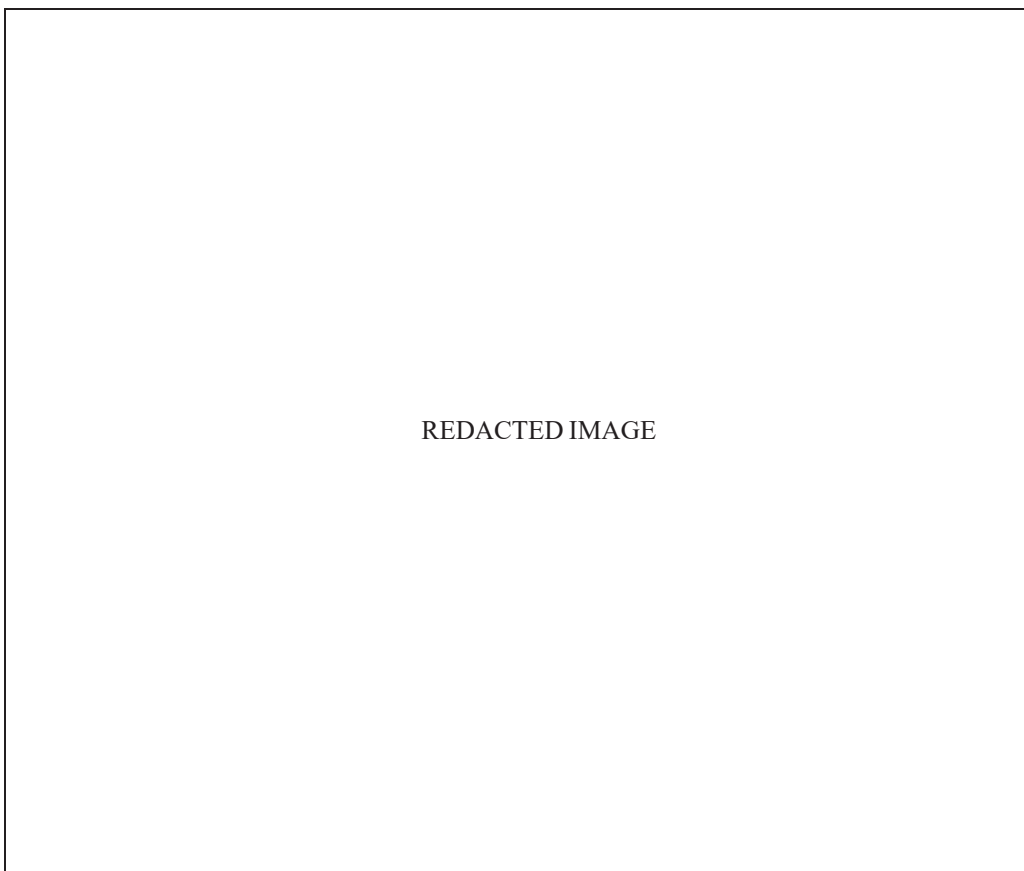


Figure 5-8. Site map of 41CM424 showing location of shovel tests and site boundary.



Figure 5-9. View to the south of site 41CM424 from ST 19.



Figure 5-10. Artifacts observed on 41CM424 included a lithic scatter (upper left), a biface fragment (upper right), a tested cobble (lower left) and a core (lower right).

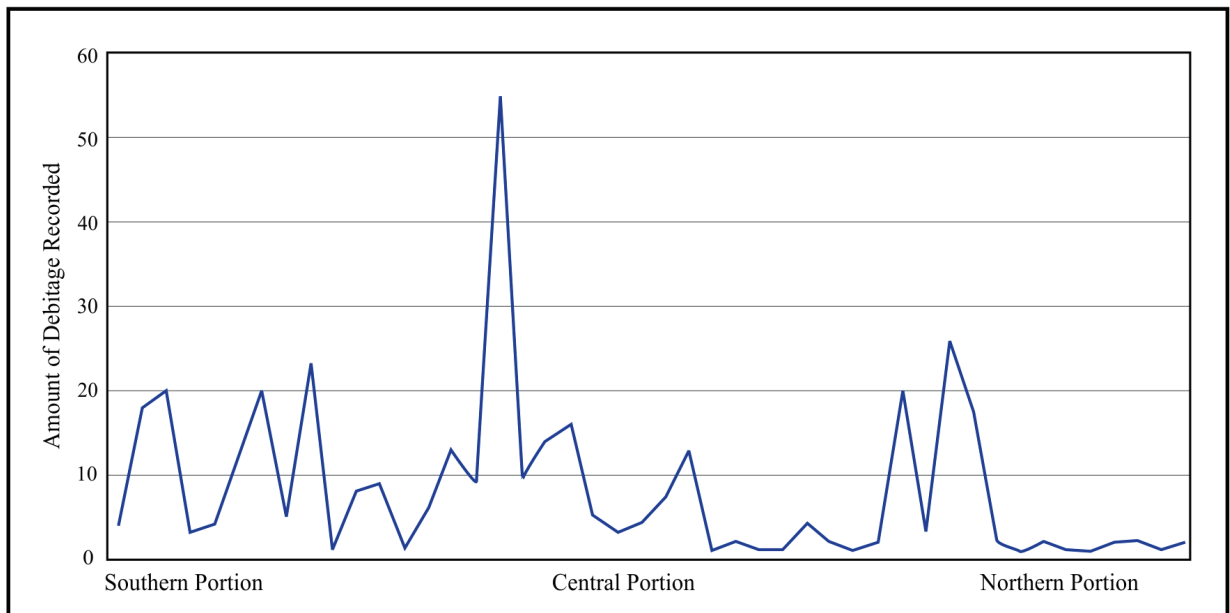


Figure 5-11. Graph showing relative density of debitage recorded on surface of 41CM424.

Table 5-1. Shovel Test Results at 41CM424*

Depth (cmbs)	ST 9	ST 15	ST 16	ST17	ST 18	ST 19
0-10	Debitage (2)	0	Debitage (1)	0	Core (1), Debitage (1)	0
10-20		0	0		Core (1)	0
20-30		0	0			
30-40						
40-50						
50-60						

*Gray-filled levels were not excavated

(Figure 5-12). The site is located on a relatively flat landform slope within the CrD soil group. Limestone bedrock was visible on the surface with vegetation consisting of short grasses (Figure 5-13). The site is adjacent to a two-track road running along a fence.

Site 41CM425 was defined by surface material includingdebitage (n=1), cores (n=2), and FCR (n=1). Artifact density is estimated at 0.01 artifacts per square meter. Artifacts were observed to the north of the current Project Area suggesting the boundary continues beyond its current definition. Shovel Tests 6, 24, and 25 were excavated for site boundary determination. Shovel Test 6 encountered

limestone bedrock in Level 1 (0-10 cmbs), and ST 25 terminated at 13 cmbs. Shovel Test 24 is roughly 1 m to the north of the easement due to the Juno GPS margin of error. While outside the Project Area, the shovel test was terminated at 19 cmbs when bedrock was encountered suggesting the shallow bedrock is found throughout the site.

Site 41CM425 did not contain any temporal diagnostics nor materials that could be radiocarbon dated. All shovel tests were shallow with bedrock commonly found no deeper than 19 cmbs. The low density of artifacts, the lack of temporal diagnostics and/or the potential for radiocarbon dates, and the lack of deposition suggests that 41CM425 is not likely

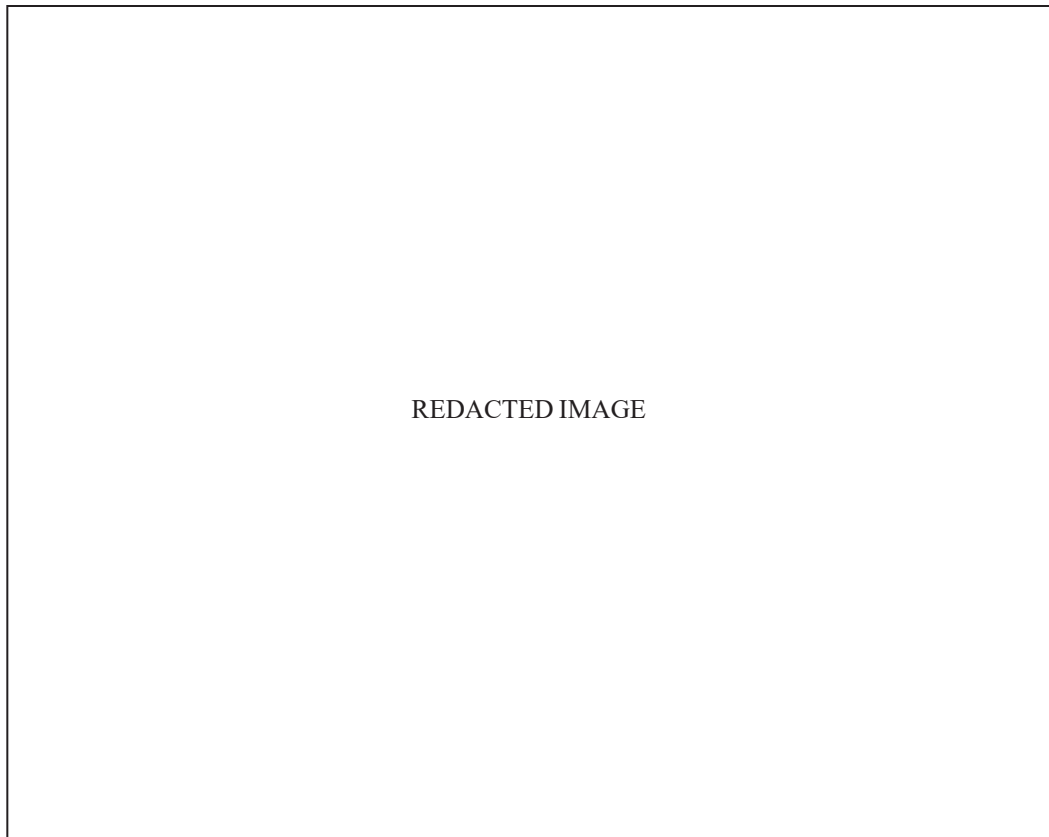


Figure 5-12. Site map of 41CM425 showing location of shovel tests, artifacts, and site boundary.

to yield additional information to the understanding of prehistory. It is not recommended for listing as a SAL, and it is not recommended eligible for inclusion to the NRHP.

41CM426

Site 41CM426 is primarily a surface scatter of lithic tools, debitage, and FCR found on the northeastern portion of the Project Area (Figure 5-14). The site covers an area of roughly 468 m². The site is located on a very gradual inclined landform slope within the CrD soil group. Vegetation consisted of short grasses surrounded live oak out and juniper outside the Project Area. The site is bound on the west by a corral and on the south by cactus patch.

The site boundary was created by the distribution of surface artifacts and the excavation of ST 2, ST 26, and ST 27 (Figure 5-15). Artifacts recorded within the Project Area included debitage (n=3), a core, and FCR (n=1). Artifact density is estimated at 0.01 artifacts per square meter. Lithic artifacts were also observed to the east and west of the current Project Area suggesting the boundary continues beyond its current definition.

Table 5-2 shows the findings of shovels tests and their terminal depth by level. Shovel Test 2 is located on the southeast portion of the site (Figure 5-13). It was terminated at 28 cmbs when large rocks were encountered. No artifacts were recovered. Shovel Test 26, near the center of the site,

was excavated to 52 cmbs. Three artifacts were collected, with lithic material recovered from Level 1 (0-10 cmbs), Level 3 (20-30 cmbs), and Level 4 (30-40 cmbs). Shovel Test 27, located near the northwest site edge, terminated in Level 2 when bedrock was encountered. One artifact was recovered from Level 1 (0-10 cmbs).

Damage Assessment of 41CM426 and Results of Additional Shovel Testing

CAR recommended that pole excavations within 41CM426 be monitored with a sample of the excavated material screened based on the potential for buried materials primarily in the center of the site near ST 26. Unfortunately, the COVID-19 pandemic created construction delays and disruption of the project. The result of which CAR was not informed that pole excavations took place in November of 2020. CAR was informed of this action April 27, 2021 and proposed to CPS Energy and THC that additional shovel tests and examination of the spoils pile of the utility poles would be necessary to assess the damage to the site and determine the site's eligibility status. The following section summarizes that work.

Per the request of the THC and in coordination with AEI and CPS Energy, CAR undertook a damage assessment of the site on June 7, 2021. CAR project archaeologist examined the spoil pile of the two telephone poles for cultural material. However, since the excavation took place in November of



Figure 5-13. Site overview of 41CM425 showing surface bedrock and grasses.

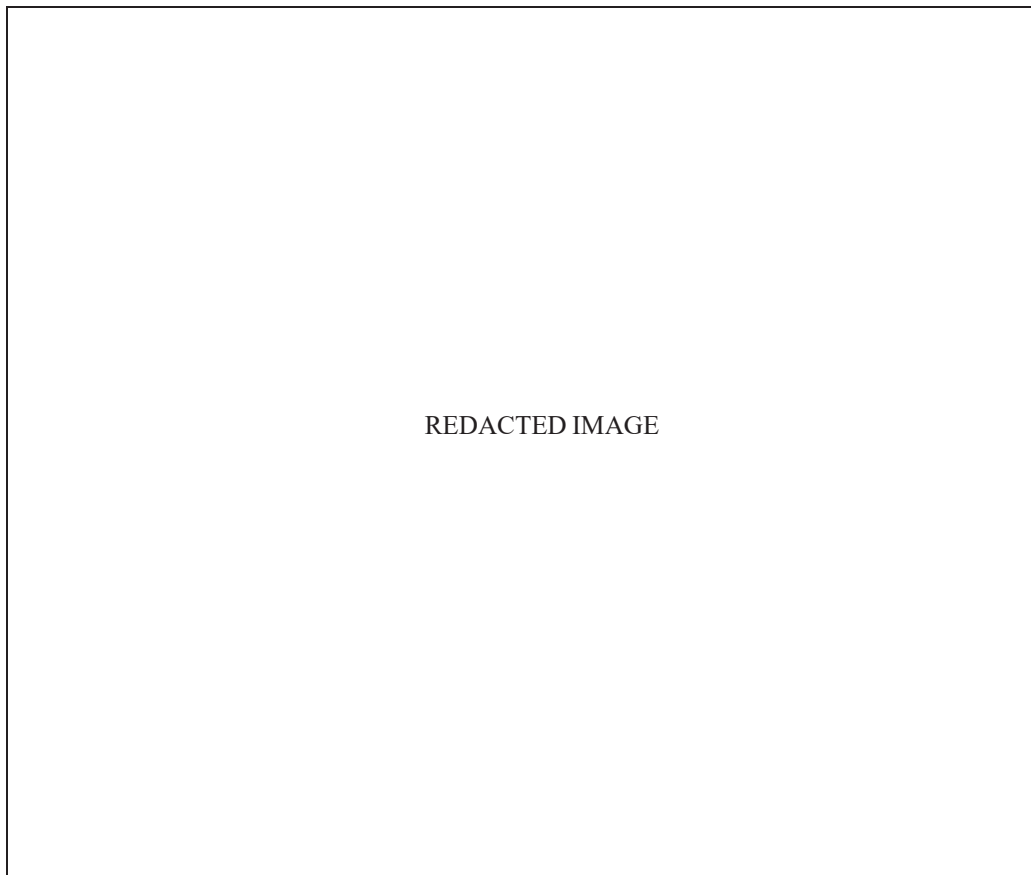


Figure 5-14. Site map of 41CM426 showing location of shovel tests, artifacts, and site boundary.



Figure 5-15. Site overview of 41CM426. View is to the southeast towards ST 2 marked by cone.

Table 5-2. Shovel Test Results at 41CM426*

Depth (cmbs)	ST 2	ST 26	ST 27
0-10	0	Core (1)	Debitage (1)
10-20	0	0	0
20-30	0	Core (1)	
30-40		Debitage (1)	
40-50		0	
50-60			

*Gray-filled levels were not excavated

2020, the piles were deflated. Our examination revealed several pieces of broken chert fragments that, in the opinion of the project archaeologist, represented shatter from the auguring for the poles. As shown in Figure 5-16, CAR archaeologist excavated five additional shovel tests on 41CM426. Four of the five shovel tests were positive for lithic material that included lithic tools (a uniface and two edge flakes), a core and core fragment, debitage,

and FCR. All the recovered material was found in the upper 20 cm of the shovel tests with the exception of one group of artifacts that was found in Level 3 (20 to 30 cmbs). Only one shovel test (ST 32) was excavated to the terminal depth of 60 cmbs, with the majority of shovel tests (n=3; ST 29, 30, and 31) terminating at 30 cmbs due to either large cobbles or bedrock. One shovel test (ST 28) was excavated to 50 cmbs. Table 5-3 shows the

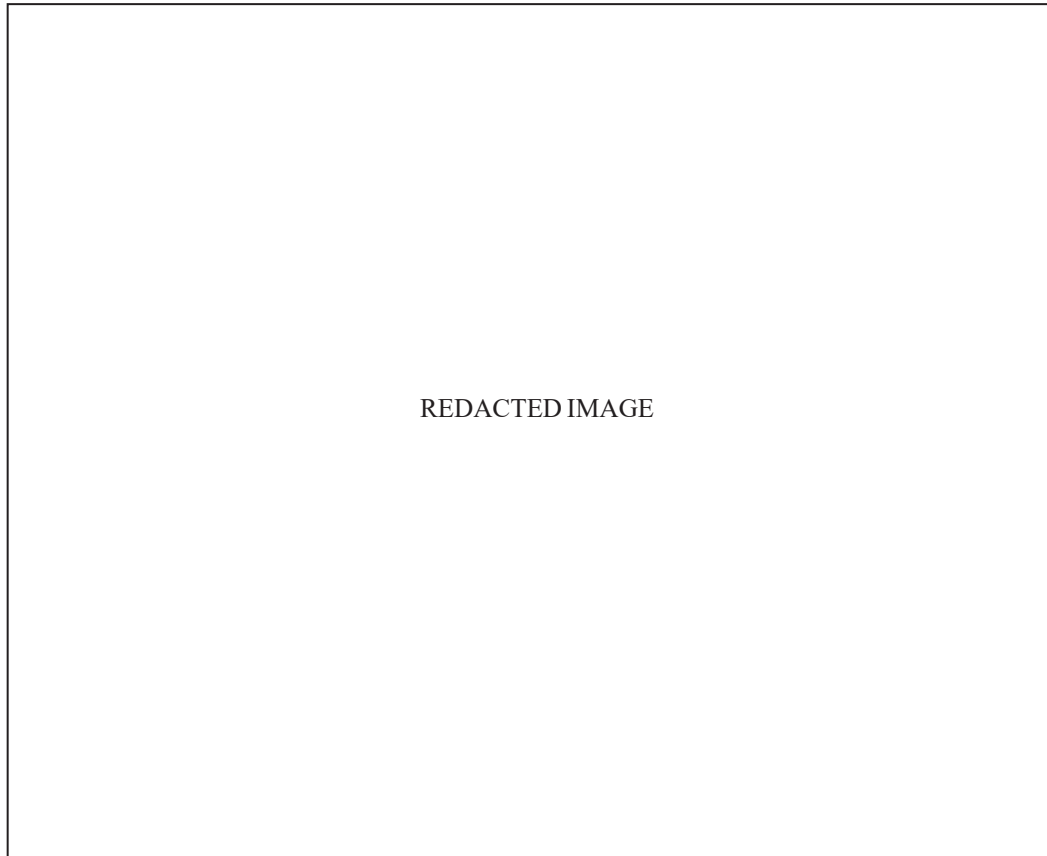


Figure 5-16. Site map of 41CM426 showing location of additional shovel tests excavated for the Damage Assessment phase.

Table 5-3. Shovel Test Results associated the Damage assessment at 41CM426*

Depth (cmbs)	ST 28	ST 29	ST 30	ST 31	ST 32
0-10	0	Uniface (1), Debitage (1)	FCR (75.4)	Core (1), Core Fragment (1), Debitage (3), FCR (95.1 g)	0
10-20	FCR (21.3 g)	Edge- modified flake (1), Debitage (1)	0	Debitage (1), FCR (172.9 g)	0
20-30	Edge- modified flake (1), Debitage (1), FCR (123.4 g)	0	0	0	0
30-40	0				0
40-50	0				0
50-60					0

*Gray-filled levels were not excavated

terminal depths of and results of shovel tests excavated during the damage assessment phase.

CAR found that 41CM426 contains no temporal diagnostics or radiocarbon datable material. No features were observed. A small assemblage of chipped stone material is present on the surface and within the upper 20 cm with the exception of one shovel test in which lithic material was found in Level 3 (20- 30 cmbs). The observed debitage has a high frequency of cortex, suggesting an early lithic reduction site. The low density of artifacts, the lack of temporal diagnostics and/or the potential for radiocarbon dates, and the lack of deposition suggests that 41CM426 is not likely to yield additional information to the understanding of prehistory.

It is not recommended for listing as a SAL, and it is not recommended eligible for inclusion to the NRHP.

Summary

CAR recorded four new archaeological sites in the CPS Energy FM 3009 Project Area: 41CM423, 41CM424, 41CM425, and 41CM426. Two of the sites are prehistoric lithic scatters (41CM423 and 41CM425), while two sites, 41CM424 and 41CM426 are characterized as a quarry site and lithic reduction site, respectively. Table 5-4 summarizes their characteristics, the investigations conducted in association with them, and CAR's SAL and NRHP eligibility recommendations.

Table 5-4. Summary of Archaeological Sites and SAL/NRHP Eligibility Recommendations

Site Characterization			Chronological Potential		Site Integrity	Site Content		Recommendations
Site (41CM...)	Site Size (m ²)	Shovel Tests Excavated	Temporal Diagnostics	Radiocarbon Potential	Soil Deposition	Number of Features	Surface Artifact Density per m ²	SAL and NRHP Eligibility Recommendations
423	116	2	none	none	poor, no subsurface deposits	0	low	Not Eligible
424	470	6	none	none	poor, no subsurface deposits	0	moderate	Not Eligible
425	385	2	none	none	poor, no subsurface deposits	0	low	Not Eligible
426	468	8	none	none	poor, shallow subsurface deposits	0	low	Not Eligible

Chapter 6: Project Summary and Recommendations

CAR, in response to a request from Adams Environmental, Inc. (AEI), conducted an archaeological survey of a CPS Energy easement off of FM 3009 in Comal County, Texas. The proposed work was conducted for the installation of 31 new poles and the replacement of an existing pole on a CPS Energy easement through private property in southwestern Comal County. The project required review by the Texas Historical Commission (THC) under the Antiquities Code of Texas (Texas Natural Resource Code, Title 9, Chapter 191, Sections 191.003(4) and 191.052(5) as amended) because CPS Energy is a political subdivision of Texas.

CAR excavated twenty-seven shovel tests during the initial investigation conducted on February 21, 2020. As a result of this investigation, CAR recorded four archaeological sites, 41CM423, 41CM424, 41CM425, and 41CM426. Two of the sites are prehistoric lithic scatters (41CM423 and 41CM425), while the other two sites, 41CM424 and 41CM426 are characterized as a quarry site and lithic reduction site, respectively. CAR archaeologists recorded four new archaeological sites 41CM423, 41CM424, 41CM425, and 41CM426. One site, 41CM426, was recommended for further study because it contained subsurface deposits and was in an

area that would be impacted by the excavation of two utility poles. Due to the COVID-19 pandemic, the project was delayed resulting in the excavation for utility poles without an archaeological monitor on site. Upon discovery, CAR proposed to CPS Energy and THC that additional shovel tests and examination of the spoils pile of the utility poles were necessary to assess the damage to the site and determine the site's eligibility status. CAR excavated five additional shovel tests on 41CM426 on June 7, 2021.

Based on the findings from these investigations, all four sites are characterized as having a low density of artifacts, lacked temporal diagnostics and/or the potential for radiocarbon dates, and lacked site integrity due to the shallow deposition of artifacts. CAR recommends that 41CM423, 41CM424, 41CM425, and 41CM426 is not eligible for listing as a State Antiquities Landmark (SAL) or to the National Register of Historic Places (NRHP). The THC agreed with these recommendations. All collected artifacts were returned to the landowner following the completion of the project. All project-related records and the final report will be permanently stored at the CAR's curation facility. The project accession number is 2402.

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Appendix A: Shovel Test Results

Shovel Test Number	Terminal Depth (cmbs)	Number of Artifacts	Soil Type
1	50	0	CrD
2	28	0	CrD
3	10	0	CrD
4	20	0	CrD
5	34	0	CrD
6	10	0	CrD
7	18	1	CrD
8	15	0	CrD
9	10	1	CrD
10	20	0	CrD
11	16	0	RuD
12	20	0	RuD
13	19	0	CrD
14	10	0	CrD
15	22	0	CrD
16	25	1	CrD
17	10	0	CrD
18	15	4	CrD
19	20	0	CrD
20	55	2	CrD
21	50	0	CrD
22	10	0	CrD
23	8	0	CrD
24	19	0	CrD
25	13	0	CrD
26	52	8	CrD
27	20	1	CrD
28	50	3	CrD
29	30	4	CrD
30	30	1	CrD
31	30	7	CrD
32	60	0	CrD