

# ARCHAEOLOGICAL SITE ASSESSMENT DESKTOP STUDY

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William Mockford Survey No. 285,  
New Braunfels, Comal County, Texas

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## Section I: Introduction and Project Description

**Raba Kistner Inc. (RKI)** was contracted by New Braunfels Utilities (NBU; the CLIENT) to complete an archaeological and historical desktop study of a portion of the W. Mockford Survey No. 285, located south of the intersection of FM 46 and FM 337, in east-central Comal County, Texas (**Figure 1**). The proposed site comprises 48.575-acres within the William Mockford Survey Tract No. 285, located in the western sector of New Braunfels at the terminus of Westpointe Drive. The proposed project is subject to review under the Antiquities Code of Texas (ACT; Texas Natural Resource Code, Title 9, Chapter 191). The ACT is regulated by the Texas Historical Commission (THC).



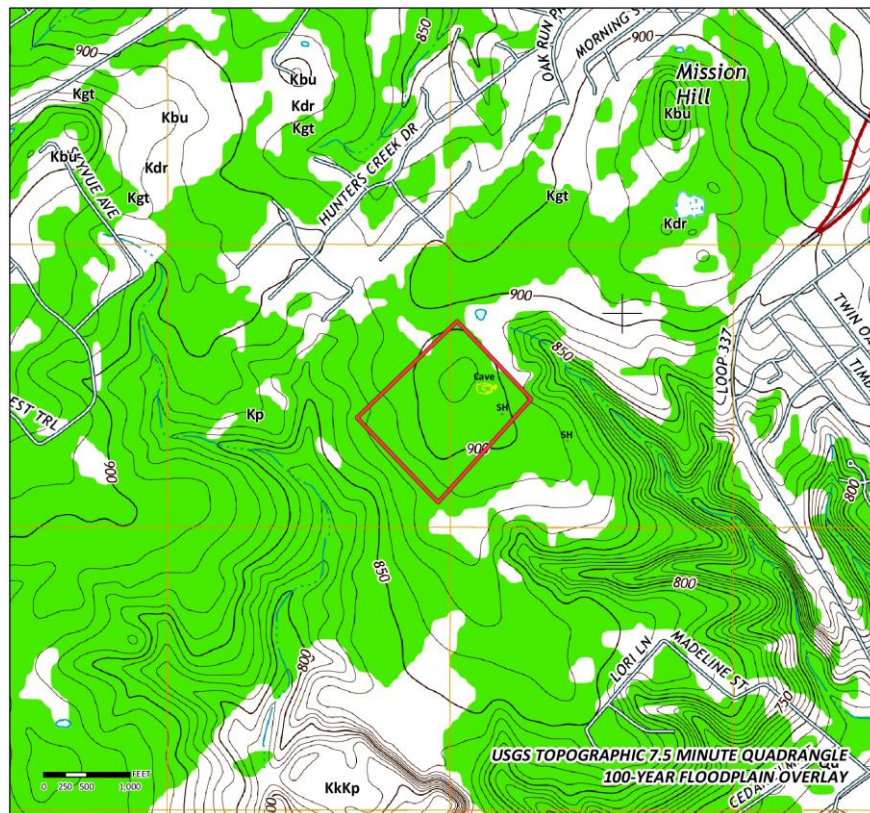
**Figure 1.** Project Area, outlined in red, located in Comal County, Texas.

This technical report consists of five principal sections. Section I serves as the introduction to the project. In Section II, the environmental setting of the project area is reviewed. In Section III, the culture historical background of the broader region is summarized. Section IV discusses the cultural resources that are present in the vicinity of the project area. And, in Section V, the final section, we summarize the findings of the reviews and provide recommendations regarding any further actions that may be warranted to secure cultural resources clearance of the project area.

## Section II: Environmental Setting

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The proposed project area, the Area of Potential Effect (APE), is situated within a landscape dominated by limestone hills covered in dense cedar vegetation (**Figure 1**). New residential and road developments are located to the east and west of the project boundary and the CEMTEX Balcones Plant is situated to the south of the tract. The APE is depicted on the *New Braunfels West* (20190304), Texas. USGS 7.5-Minute Quadrangle Map (**Figure 2**).



**Figure 2.** The Area of Potential Effect on the New Braunfels West 7.5-minute USGS quadrangle map.

The purpose of this desktop study is to summarize the findings of previous archaeological investigations within the project boundaries and in the vicinity of the APE. Archival documentation for the property was also compiled to aid in the assessment of known archaeological sites within the APE boundary. Documentation reviewed during this study also included historic maps and historical aerial photographs.

Topographic contours on the U.S. Geological Survey (USGS, 2013) 7.5-minute topographic map (i.e., New Braunfels West Quadrangle) were reviewed to evaluate the general surface conditions and drainage

patterns, along with more detailed 2-foot topographic contours obtained from the Comal County GIS website (i.e., <http://data2-newbraunfels.opendata.arcgis.com/datasets/contours-2ft>, dated 2017). The APE consists of a gently sloping hilltop topography, exhibiting a maximum elevation of approximately 906 feet above mean sea level (AMSL) near the north corner and a minimum elevation of approximately 884 feet AMSL in the south corner. As indicated by topographic contours presented on the Site Geologic Map, the local surface drainage patterns for the APE are generally from upland (hilltop areas) to the east, south, and southwest toward unnamed tributaries to Dry Comal Creek.

Properties adjacent to the project area include vacant, undeveloped properties to the north and east, and single-family residential communities further north and east of the project area. The New Braunfels Utilities drinking water chlorination facility is located adjacent to the northeast corner of the project area, and the Cemex-Balcones Quarry boundaries adjoin the southern boundary of the APE. Recharge features attributed to karstification of underlying geologic formations were identified within the APE during the geological assessment of the tract.

### **Stratigraphy**

Based on field mapping observations and review of published references (Small and Hanson 1994, and Collins 2000), the APE is underlain by the Person Formation (Kep), which comprises the uppermost portion of the Edwards Limestone as presented in **Figure 3**. The Kep is commonly subdivided into three discrete members as follows: (i) Cyclic and Marine Member, undivided – mudstone to packstone, grainstone, and chert; (ii) Leached and Collapsed Member, undivided - unit includes crystalline limestone, mudstone to grainstone, and chert; and (iii) Regional Dense Member - unit consists of dense, carbonate mudstone. Based on field observations and interpretation of published geologic information the Leached and Collapsed member of the Kep represents the portion of the Edwards Limestone directly underlying the SITE to depths on the order of 180 to 224 feet. Exposures of the Kep (i.e., Cyclic and Marine Member) were observed in patchy exposures throughout the APE and within cave features noted in the project area.



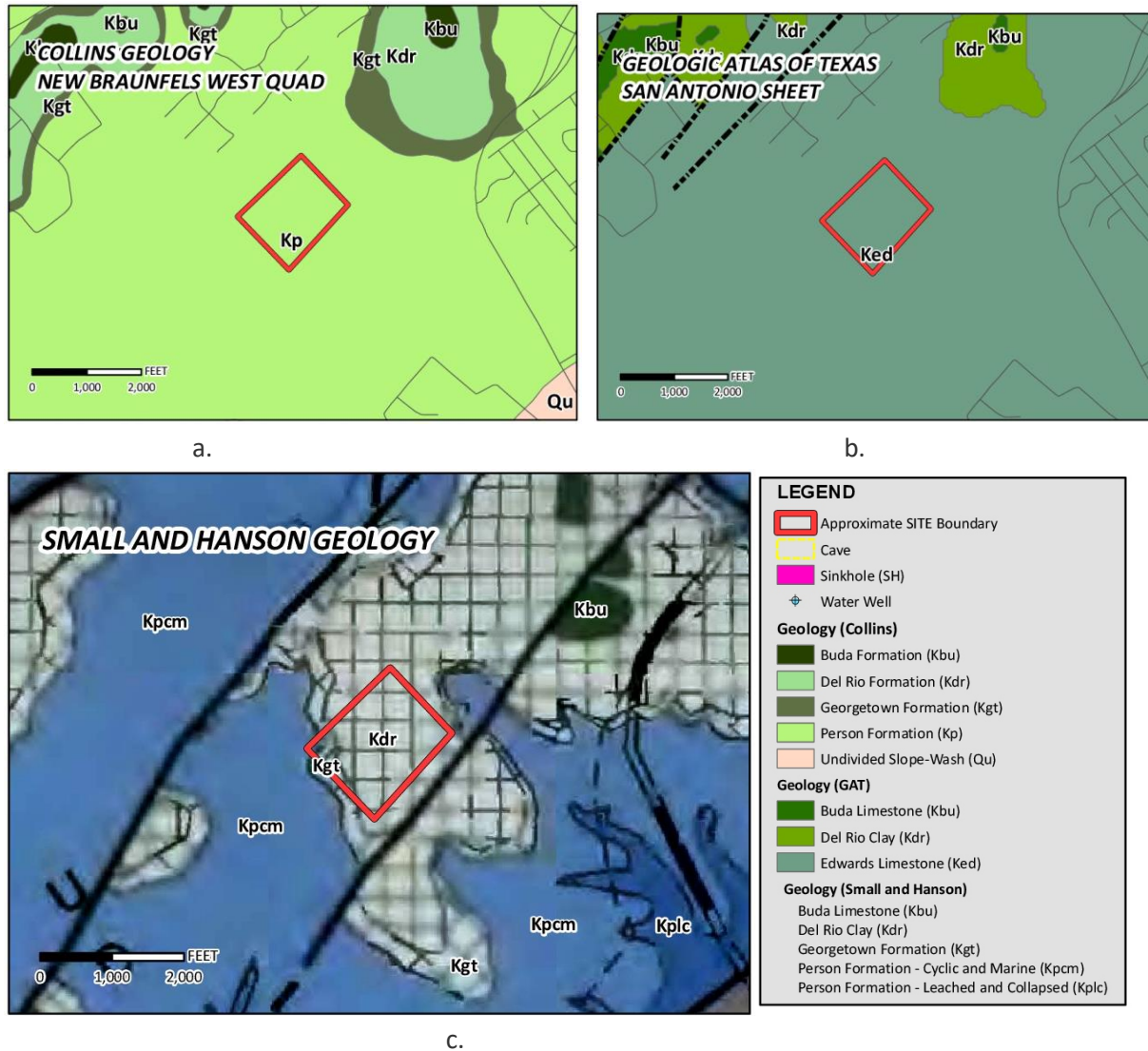


Figure 3. Maps illustrating the geology of the APE.

## Soils

The entire APE is mapped as Rumble-Comfort association, undulating (RUD; **Figure 4**). RUD soils are noted to have medium runoff and moderate hazard for erosion (**Table 1**). The RUD soils have very low water capacity and a moderately slow permeability, considering both included soil types. RUD soils have a slow infiltration when the soils are wet and rapid when the soils are dry.



**Figure 4.** Soils mapped within the APE.

**Table 1.** Soil series present within the APE.

SOIL SERIES	THICKNESS ON SITE	DESCRIPTION
Rumple-Comfort	Veneer - 3.0 feet	<b><i>Rumple-Comfort association, undulating (RUD):</i></b> Rumple soils compose an average of 60 percent, Comfort soils average 20 percent, and other soils mainly composed of Tarpley soils make up the remaining 20 percent of this association. Rumble soils are approximately 10 inches thick, dark reddish brown, and very cherty clay loam. The subsoil to a depth of 14 inches is dark reddish brown very cherty clay, and dark reddish brown extremely stony clay that is about 75 percent, by volume, limestone fragments to a depth of 28 inches. The underlying material is indurated fractured limestone. The soil is well drained, non-calcareous, and mildly alkaline. Based on <i>Soils Survey of Comal and Hays Counties, Texas (June 1984)</i>

## **Section III: Regional Cultural Historical Context**

The APE is located at the southeastern margin of the Central Texas Archaeological Regions (Turner and Hester 1999). Based on extensive research conducted by Black (1989), Collins (2004), Hester (2004), Johnson et al. (1962), Prewitt (1981, 1985), Sorrow et al. (1967), Suhm (1957, 1960), Suhm et al. (1954), and Weir (1976), Central Texas has a well-established chronological sequence beginning 12,000 years ago. The chronological sequence of central Texas is divided into four cultural periods: Paleoindian (11,500–8,800 B.P.), Archaic (8,000–1,200 B.P.), Late Prehistoric (1,200–400 B.P.), and Historic (400 B.P. to present). These divisions are not absolute, but represent contrived temporal categories based on perceived cultural expressions reflected in lithic technology, subsistence practices, mortuary behavior, and other sorts of material remains. These material expressions further reflect broader patterns in the environment and human behavior.

The Central Texas archaeological region is one of the most intensively studied in Texas (Black 1989). More sites have been recorded and excavated in Central Texas than any other region. Aside from procurement and reduction sites, burned rock middens, located on hilltops or upland settings are the most characteristic prehistoric site type in Central Texas. However, site types also include buried terrace occupation sites, sites in rock shelters, and burials.

### **Paleoindian**

The Paleoindian Period was commonly characterized throughout Texas by nomadic big-game hunters who heavily relied on megafauna of the Pleistocene (e.g., mammoth, mastodon, bison, camel, and horse) for subsistence (Willey 1966). However, a more accurate description of this period is presented by Bousman et al. (1990: 22): "...this period may have seen use by small, mobile bands of nonspecialized hunters and gathers occasionally utilizing megafauna perhaps only as the opportunity arose." Thus, according to Bousman et al. (1990), Paleoindians used a wider variety of resources than previously thought. Evidence of this broader resource subsistence is based on the works of Johnson (1977), Collins (1998: 155–156), and Collins and Brown (2000). Johnson (1977) reviewed reports on numerous Paleoindian sites that indicated a range of small and medium fauna were harvested in addition to big game. Investigations at the Wilson-Leonard site (41WM235), the Gault site (41BL323), and Lubbock Lake (41LU1) provide evidence of small and medium faunal remains (i.e., turtle, rabbit, squirrel, snakes, gopher, and deer)



associated with megafaunal remains (i.e., bison and mammoth) (Collins 1998: 155–156). Clovis and Folsom points are the primary diagnostic artifacts associated with this period (Turner and Hester 1999; Collins 2004).

## **Archaic Period**

The Archaic Period spans nearly 7,000 years of prehistory. The primary cultural marker of this time period is the burned rock midden (Collins 2004: 119). These piles of burned limestone, sandstone, and other lithic debris represent the remains of multiple ovens that were used, reused, and discarded over time. Their appearance signifies a shift from a big-game hunting subsistence strategy to a less mobile, generalized subsistence strategy. Projectile point technology also changed; lanceolate-shaped points gave way to dart points that were stemmed and barbed (Black 1989). During the Archaic Period the climate changed from wet and mild conditions seen in the Paleoindian Period, to warmer and drier conditions. Researchers believe that the changes in climate influenced prehistoric subsistence strategies (Story 1985: 38–39; Weir 1976).

The Archaic period is typically divided into three sub-periods: early, middle and late. The Early Archaic Period is still relatively obscure in the archaeological record. The majority of Early Archaic sites are distributed around the Edwards Plateau along the eastern and southern margins, suggesting concentrations near reliable water sources with a variety of food resources. These sites are generally described as small with highly diverse tool assemblages. Cultural material associated with Early Archaic sites are points (specifically Angostura, Early Split Stem, and Martindale-Uvalde) (Collins 2004), Clear Fork and Guadalupe bifaces, manos, hammerstones, burins, metates, circular scrapers, and various biface styles (Osburn et al. 2007), suggesting specialized tool usage. Also, burials have been found associated with this period, although very few (Prewitt 1981; Story 1985).

During the Middle Archaic, the climate became very warm and dry. The number and size of burned rock middens from this period increases dramatically, leading many archaeologists to posit not only a population increase but also an intensification in the types of food processing typically done in earth ovens. Types of projectile points that frequently occur on Middle Archaic sites are Bulverde, Langtry, and Kinney dart points (Hall et al. 1986). Other materials found among Middle Archaic assemblages are an increase of wooden and bone implements, plant processing implements, and the intensive use of large burned rock features. Burials during this period become more frequent than in the previous period.

During the Late Archaic, climatic conditions once again became more mesic. Cultural traditions observed in the Middle Archaic carry over in to the Late Archaic. There is an intensification of the Middle Archaic traditions. Trade is observed during this period with the exchanging of material from different localities. Coastal materials, such as shells used as ornaments, have been reported to have been exchanged in for both finished tools and raw material (Story 1985). Rock ovens and hearths were continuously used as a means to prepare food, and bison once again became available. Ritualized mortuary practice became more common during the Late Archaic, with interments becoming quite elaborate in terms of associated burial furniture. Large cemeteries established along drainages suggested the importance of the location, and perhaps territorial ties by groups to these localities (Story 1985). Location of these cemeteries “are believed to be the result of the same cultural group using a place on the landscape to reaffirm their rights of descent and control/access to critical resources” (Osburn et al. 2007: 15; see Taylor et al. 1995: 627–631 and Taylor 1998).

### **Late Prehistoric Period**

Of the prehistoric periods, the Late Prehistoric Period is the best defined, marked by the adoption of the bow and arrow and the production of small arrow points (Hester 1981: 122). The emergence of agriculture and ceramics, also occurred in the Late Prehistoric. Late Prehistoric hunter-gathers exploited a wide range of animal and plant resources. Food processing techniques relied heavily on manos and metates, and earth ovens for cooking. Diagnostic artifacts of this time period include Scallorn, Edwards and Perdiz arrow points. Sites tend to be more closely clustered to creeks, rather than dispersed along other landforms, suggesting intensifying nucleation around reliable natural resources.

### **Protohistoric Period**

The Protohistoric Period (ca. A.D. 1528–1700) is ushered in by the arrival of the Spanish explorer Cabeza de Vaca in 1528 into south and southeast Texas. Hester (2004) generally considers the period prior to 1700 as Protohistoric. Archaeological sites dated to this sub-period contain a mix of European (e.g., metal and glass arrow points, trade beads, and wheel-made or glazed ceramics) and traditional Native American artifacts (e.g., manufactured stone tools). The effect the Spanish presence in Mexico had on Indians in Texas prior to about 1700 is not well-understood. What is known is that the initial arrival of Spanish missionaries and explorers spread severe disease that killed, displaced, and fragmented a huge percentage of the population. As colonization spread from Mexico, some of the Native American groups

moved northward to avoid the Spanish. Many others formed extensive confederacies to protect each other, resist against the Spanish settlers, and maintain access to Central Texas bison hunting territories (Tomka 2017). At the same time, invading Indian groups from the north put pressure on Native American groups in North Texas (Nickels et al. 1997). Historians believe that these pressures led to intense territorial disputes, further destabilizing Native American populations.

## Section IV: Documented Historic Resources

A review of the Texas Archeological Sites Atlas (*Atlas*) determined that the APE has not been previously surveyed, and that no known archaeological sites are located within the project boundaries. However, 15 archaeological sites have been previously recorded within a 1-km radius of the 50-acre tract based on the data available from the *Atlas*. These sites were recorded as part of six distinct pedestrian surveys conducted by SWCA Environmental Consultants (41CM385-361; 41CM310; 41CM308, 41CM316-318), Prewitt and Associates Inc. (41CM337), and the archaeologist of the Lower Colorado River Authority (41CM331). In addition, sites 41CM316, 41CM317, and 41CM318 were revisited by archaeologists from ACI Consultants, therefore both original site forms and site-revisit forms are available and were consulted as the sites were originally assessed in 2007 and re-visited in 2009. **Figure 5** depicts the two sites (41CM337 and 41CM360) documented in the immediate vicinity of the APE. The previously documented cultural resources found in the broader region surrounding the project are listed in **Table 2**, and their characteristics are summarized below.



**Figure 5.** Previously recorded archaeological sites found in the immediate vicinity of the APE outlined in orange.

**Table 2.** Summary of known cultural resources within 1-mile of the APE.

<b>Cultural Resource</b>	<b>Distance from Project Area</b>	<b>Resource Description</b>	<b>Eligibility Status</b>
<b>41CM195</b>	0.17 mile south to southeast	No available information on the Texas Sites Atlas	Unknown
<b>41CM196</b>	0.73 mile south	No available information on the Texas Sites Atlas	Unknown
<b>41CM200</b>	0.17 mile east	No available information on the Texas Sites Atlas	Unknown
<b>41CM202</b>	0.28 mile east to northeast	No available information on the Texas Sites Atlas	Unknown
<b>41CM308</b>	0.65 mile north	Historic farm and ranch complex	Archival research and possible archaeology recommended (2007)
<b>41CM310</b>	0.65 mile southeast	Historic cistern and prehistoric lithic scatter of an unknown temporal affiliation	Historic component warrants additional research; prehistoric component low research value (2007 site form)
<b>41CM316</b>	0.11 mile east	Prehistoric lithic scatter of unknown temporal affiliation; documented in 2007, revisited in 2009	Low to no research value (2007, 2009)
<b>41CM317</b>	0.25 mile east southeast	Prehistoric lithic scatter of unknown temporal affiliation; documented in 2007, revisited in 2009	Low to no research value (2007, 2009)
<b>41CM318</b>	0.19 mile east	Prehistoric lithic scatter of unknown temporal affiliation; documented in 2007, revisited in 2009	Low to no research value (2007, 2009)
<b>41CM331</b>	0.45 mile southeast	Prehistoric lithic scatter of unknown temporal affiliation; documented in 2011	Low to no research value (2011)
<b>41CM337</b>	0.03 mile east	Prehistoric lithic scatter of unknown temporal affiliation; documented in 2013;	Not eligible (2013)
<b>41CM358</b>	0.42 mile south to southwest	Prehistoric lithic scatter and workshop of unknown temporal affiliation; documented in 2013;	Not eligible (2013)
<b>41CM359</b>	0.19 mile south	Prehistoric lithic scatter and workshop of unknown temporal affiliation; documented in 2013;	No eligibility (2013)
<b>41CM360</b>	0.14 mile west to southwest	Prehistoric lithic scatter and workshop of unknown temporal affiliation; documented in 2013;	No eligibility (2013)
<b>41CM361</b>	0.75 mile south	Prehistoric lithic scatter and workshop of unknown temporal affiliation; documented in 2013;	No eligibility (2013)



Since two previously recorded archaeological sites (41CM337 and 41CM360) abut or are very near the boundaries of the project area, their characteristics are reviewed first. Selected sites that may have a bearing on the ownership history of the tract are briefly discussed, and the solution caverns that were noted during the recent geological assessment of the project area are described.

#### **Site 41CM337**

This site was originally documented in 2013 as part of the Trinity Well Field Project carried out by Freese and Nichols under contract with New Braunfels Utilities. The archaeological survey associated with the cultural resources clearance was conducted by the staff of Prewitt and Associates, Inc. Site 41CM337 is located on an eroded ridge slope where chert (flint) nodules have eroded out of the limestone outcrop and are littering the surface. The chert ranges from naturally rounded pieces, to angular and tabular nodules. The majority of the materials are natural chert cobbles that demonstrate no human-induced alterations. However, a number of tested cobbles, early-reduction stage bifaces, and large hard-hammer-reduced primary and secondary flakes are also present across the surface. The cultural material found on the ridge covers roughly 90 m x 42 m. The deposits were only present on surface. No fragments of fire-cracked rock were noted on surface, and no features of any type were seen eroding from any of the locations that had accumulations of soils. A single shovel tests indicated no depth to the deposits. The site was assessed as not eligible for listing on the National Register of Historic Places.

#### **Site 41CM360**

This site was originally documented in 2013 as part of the CEMEX Balcones Plant Pedestrian Survey Project carried out by SWCA under contract with CEMTEX. The site extends for over 340 meters along a dirt road that parallels the southern property fence of the project area. The clearance of vegetation along this fence line increased surface visibility exposing a low density scatter of cultural materials. The scatter of cultural debris stretches over 345 meters along the western margin of the APE's southern limits. Cultural material is present within the cleared dirt road for a width of approximately 40 meters. These materials consist of the debris resulting from stone tool manufacture (i.e., primary and secondary flakes, chert nodules (i.e., cores and core fragments) from which pieces of flint were removed, numerous failed tool fragments, and at least one hide scraper. The portion of the material exposed in the roadway has been extensively disturbed by vegetation clearance, fence installation, vehicular traffic, and erosion. The

portion of the site hitherto documented was judged to be extensively disturbed and therefore, it did not warrant listing to the National Register due to lack of research potential.

Given the locations of these two sites, it is likely that cultural material extends to the north-north-east into the limits of the APE. The types of materials that may be found on the north side of the fence line separating the APE from the site, are likely to be similar to those already identified within the boundaries of 41CM360. The density of artifacts and whether any cultural features may be exposed on surface is not known at this time.

### **Sites 41CM308 and 41CM310**

The two sites are briefly summarized together because they may represent the remains of the same farm and ranch compound that at one point may have owned the tract that is the current APE (**Figure 5**). Site 41CM308 consists of two brick structures, three sheds, two barns, and a stock tank. The two brick structures may date to the late 19<sup>th</sup> century and the later facilities appear to date to the early 20<sup>th</sup> century. The cistern on 41CM310 may be part of the same farm and ranch complex. This site consists of a large stone cistern and a prehistoric lithic scatter. The two sites are some .68-miles north of the APE.

### **Other Resources**

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During the geological assessment of the project area, two caves or sinkhole features (Feature S-1 and Feature S-2) were encountered and visited by the RKI geology staff. **Feature S-1** consists of a sinkhole with associated cave development that collectively measures approximately 62 x 22 feet in plan-view and has been exploited historically in association with past farm/ranch operations as a trash disposal site. The cave entrance and surrounding sinkhole depression were observed to contain ranch wastes and household rubbish consisting of tin cans, glass bottles, bailing wire, and automotive parts in addition to other minor debris. The cave entrance measures approximately 7.5 x 2.5 feet in length and width and opens to a small room. The cave is formed in the upper part of the Person Limestone and is inferred to extend approximately 10 feet below ground surface at its greatest depth.

**Feature S-2** consists of a large sinkhole feature with extensive cave development that appears to have been well known and explored historically. The cave was most recently mapped by the Texas Speleological Society (TSS) in 1995 and designated as the Coreth Cave. The cave is also referred to as the R. R. Coreth Caverns and/or Corith Caves in *A Revised Checklist of Texas Caves prepared by the Texas Speleological Association (1966)*. The surface collapse feature and associated subsurface cave extent measures approximately 230 x 130 x 69 feet in length, width, and depth, respectively. The cave is formed completely within the upper part of the Person Formation and oriented along the dominant NE-SW structural trend, although no well-defined fractures were observed within the cave. The cave appears to have been formed by collapse associated with the surrounding sinkhole and the entrance consists of a vertical shaft that extends on the order of 15 feet to the cave floor and facilitates access to the cave by a small bat population.

### **Historic Land Use**

Historical aerial imagery was reviewed to evaluate the historical land use within the APE. Aerial photographs were reviewed for the following eight years: 1995, 2005, 2008, 2010, 2012, 2014, 2016, and 2018. The aerial photographs indicate that for the 17-year period between 1995 and 2012 aerial photographs indicate the APE was covered by dense woodlands and undeveloped. During this time, the tract was part of a larger farm and ranch property. In 2014, the aerial imagery indicated low-scale development on adjacent properties to the northwest and southeast. These developments consist of the installation and use of an unpaved road, the construction of structures and a large aboveground water storage tank. The 2016 and 2018 aerial photographs indicate unchanged conditions at the SITE.

## **Section V: Summary and Recommendations**

**RKI** was contracted by the CLIENT to conduct an archaeological and historical desktop review of the proposed William Mockford Survey No. 285, located south of the intersection of FM 46 and FM 337, in east-central Comal County, Texas. The proposed Area of Potential Effect (APE) encompasses 48.5-acres of undeveloped land surrounded by residential developments and the CEMTEX Balcones Plant. This archaeological background review has found that the APE had never been surveyed for cultural resources. A number of archaeological pedestrian surveys have been completed in the immediate vicinity of the APE and the results of these surveys have provided sufficient information to anticipate the types of cultural resources that may be present within the project area.

Specifically, the previously documented archaeological resources found in the general vicinity of the APE consist primarily of lithic procurement sites. Lithic procurement sites are localities where prehistoric populations, that depended on chert or flint to make a variety of tools, were accessing raw materials to manufacture tools such as spear and arrow points, knives, and skin-scrapers. The materials left behind as part of the process of selecting the stones and making the tools included cores, tools in various stages of manufacture, and the debris from the manufacture process. Such lithic procurement sites are common in localities dominated by limestone members that contain chert deposits, such as Comal and neighboring counties. Lithic procurement sites are particularly common along the eastern edge of the Edwards Plateau where the limestone outcrops are continually weathering and exposing tabular bands and individual chert nodules that can be extracted directly from the limestone wall of the canyons or end up redeposited in the creek beds that issue from deep springs at the foot of the escarpment.

In general, lithic procurement sites tend to have little to no research value and are often assessed as not warranting nomination to the National Register of Historic Places. There are two principal reasons for the “Not Eligible” recommendation of lithic procurement sites. First, such sites are typically exposed on surface and contain materials accumulated over long time periods. As such, the temporal affiliation of these materials is difficult to discern. Second, because of their surface exposure, in many instances collectors and individuals interested in artifacts will continually identify and collect cultural materials found on the surfaces of such sites further diminishing the interpretive potential of artifacts remaining at such sites. Therefore, while we anticipate that a pedestrian survey of the APE will encounter and

document one or more lithic procurement sites within the APE boundaries, we also expect that these sites will have little research value.

In contrast, however, caves and solution cavities in other parts of the Hill Country, often have been found to contain buried cultural deposits. Such localities tend to be magnets of human occupation because they can provide shelter from the elements and because they can often serve as relatively remote or hidden burial sites. Typically, caves with overhangs that can offer protection from the elements were utilized during prehistoric times as shelters and were often intermittently reoccupied over hundreds of years. In contrast, crevices and narrow opening along escarpments have been prehistorically employed as out-of-the-way burial localities. As a result of this well documented prehistoric pattern of land use and burial tradition, it is our recommendation that the two sinkholes identified during the geological study of the property should be examined by professional archaeologists and that the entire 48.575-acre tract should be subjected to a pedestrian archaeological survey.

While the recommended pedestrian survey should encompass the entire property, we recommend that particular attention be paid to the deposits found in the bottoms of (i.e., below the opening of the mouth of the caves) the cave openings. While inspecting the soils that have accumulated in these settings, specific attention should be paid to whether cultural deposits or potential human remains may be found buried below the surface of these openings. Our recommendation to have these localities examine by professional archaeologists is motivated simply by an abundance of caution to ensure that these caves were not at some point in prehistory used as camping sites or burial localities.

In summary then, the APE has not been the subject of previous archaeological surveys. Archaeological sites found in the vicinity of the APE indicate that prehistoric populations have used the general setting for the acquisition of raw materials to make stone tools. While we expect that such lithic procurement sites may be found within the APE, typically, such sites have little to no research value. In contrast, the presence of two solution cavities that have developed into caves warrants a systematic assessment of the overall tract and the two caverns in particular to ensure that they were not used as shelters or burial locations during prehistoric times.



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