Cultural Resources Survey of the Proposed Jones Maltsberger (Redland to Thousand Oaks) Project in Bexar County, Texas

Environmental Project Code: 10-517E7-043CIPI
WBS Element: 40-00019-04-02

Prepared for
Adams Environmental, Inc.

Prepared by
John D. Lowe

Texas Antiquities Permit 5339

SWCA Cultural Resources Report No. 2009-259

August 2009
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(REDLAND TO THOUSAND OAKS) PROJECT IN BEXAR COUNTY, TEXAS

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ABSTRACT

On behalf of the City of San Antonio (COSA), in coordination with Adams Environmental, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the proposed Jones Maltsberger (Redland to Thousand Oaks) Project in northeastern San Antonio, Bexar County, Texas. The area of potential effects (APE) is 13.4 acres and begins at the intersection of Jones Maltsberger Road and Thousand Oaks Drive and extends roughly 1.3 miles north-northeastward to the intersection with Redland Road. The existing 75-foot wide right-of-way (ROW) of Jones Maltsberger Road would be widened by ten feet to the west, with additional easements either side of the road’s intersection with Mud Creek. Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5339) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background and archival review and a pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for State Archaeological Landmark (SAL). SWCA archaeologists John D. Lowe and Daniel Culotta conducted the fieldwork on July 8, 2009. Additional fieldwork was accomplished by Mary Jo Galindo and Josh Haefner on July 21, 2009.

Overall, the project area is bordered by extensive residential development and various public utilities. The residential impacts within the APE include property fence lines, buried utility lines, overhead transmission lines, sidewalks, and driveways. A total of 23 shovel tests were excavated within the APE, including twelve excavations within the proposed new ROW. Eleven shovel tests were excavated during delineation of site 41BX1813, including six positive shovel tests. This site is a small, heavily disturbed lithic scatter on a high terrace south of Mud Creek. Chert flakes were recovered from 5–25 cm below surface, mixed with modern brown glass and safety glass fragments. Based on the mixed nature of the site deposits, the level of previous disturbances to the site area, and the sparse, non-diagnostic artifact assemblage, the portion of site 41BX1813 within the existing and proposed new ROW of Jones Maltsberger Road is not recommended for designation as an SAL. Accordingly, no intact significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archeological investigations within the project area.
INTRODUCTION

On behalf of the City of San Antonio (COSA), in coordination with Adams Environmental, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the proposed Jones Maltsberger (Redland to Thousand Oaks) Project in northeastern San Antonio, Bexar County, Texas (Figure 1). Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5339) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background review and an intensive pedestrian survey with subsurface investigations.

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DEFINITION OF STUDY AREA

The proposed Jones Maltsberger (Redland to Thousand Oaks) Project is located along a 1.3-mile segment of Jones Maltsberger Road. The APE begins at the intersection of Jones Maltsberger Road and Thousand Oaks Drive and extends roughly 1.3 miles north-northeastward to the intersection with Redland Road. The proposed improvement at Jones Maltsberger Road consists of reconstructing and widening the road to five lanes and would include the addition of sidewalks, driveway approaches, drainage improvements, and a bridge over Mud Creek. The existing 75-foot wide right-of-way (ROW) of Jones Maltsberger Road would be widened by ten feet to the west, with an additional easement of 30 feet on either side of the road’s intersection with Mud Creek and extending roughly 250 feet along the roadway. The APE totals 13.4 acres. Depth of impacts for the proposed road project is unknown; however, six 13 foot by 12 foot vortex chambers (sediment separators) will be placed within the ROW to a depth of seven feet below surface. A utility line will also be placed along the alignment, to a depth of five feet. Therefore, the minimum APE depth is five feet, with select areas having an APE depth of seven feet.

The proposed project area is located primarily within a residential area. Several large subdivisions are present at the southern end of the project area, although the majority of homes are on side streets extending from Jones Maltsberger Road. There has also been extensive commercial development between Thousand Oaks Drive and Morning Trail. A large church and several residences are present in the northern edge of the project area, near Redland Road. Additional disturbances within the project area include overhead and underground utilities within the APE, driveways, road construction, and sidewalks. The central portion of the project area is dominated by woodlands associated with Mud Creek and its unnamed tributary, along with several office buildings and large residences. These waterways traverse the project area near its northern terminus and appeared to intermittent drainages and were dry at the time of the survey effort.

The geology of the project area is mapped as Upper Cretaceous-age Austin Chalk and Del Rio Clay (Barnes 1983). These deposits are
characterized as chalk and marl, and highly calcareous siltstone. The soils of the project area belong to the Tarrant-Brackett association and are characterized as shallow and very shallow soils over limestone (Taylor et al. 1991). Specifically, soils within the project area are mapped as Crawford and Bexar stony soils, Lewisville silty clay, 1–3% slopes, Eckrant cobbly clay, 1–5% slopes, Eckrant cobbly clay, 5–15% slopes, and Trinity and Frio soils, 0–1% slopes, frequently flooded (Taylor et al. 1991). The Trinity and Frio soils are located along the Mud Creek and tributary drainages, and constitute roughly 20 percent of the project area. The Crawford and Bexar and Eckrant soils, which are shallow, rocky upland soils, encompass roughly 70 percent of the project area.

**METHODS**

**BACKGROUND REVIEW**

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the Longhorn, USGS 7.5-minute topographic quadrangle maps at the Texas Archeological Research Laboratory (TARL) and searched the Texas Historical Commission’s (THC) Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: NRHP properties, SALs, Official Texas Historical Markers (OTHM), Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. The archaeologist also examined the *Soil Survey of Bexar County, Texas* (Taylor et al. 1991) and the *Geologic Atlas of Texas, San Antonio Sheet* (Barnes 1992). Aerial photographs were reviewed to assist in identifying any disturbances.

**FIELD METHODS**

SWCA's investigations consisted of an intensive pedestrian survey with subsurface investigations within the APE. Archaeologists examined the ground surface and extensive erosional profiles and exposures for cultural resources. Subsurface investigations involved shovel testing in settings with the potential to contain buried cultural materials. The shovel tests were approximately 30 cm in diameter and excavated to culturally sterile deposits or impassable basal clay, whichever came first. The matrix from each shovel test was screened through ¼-inch mesh, and the location of each excavation was plotted using a hand-held GPS receiver. Each shovel test was recorded on a standardized form to document the excavations.

**CULTURAL SETTING**

The proposed project area falls within Central Texas Archeological Region (Pertulla 2004). Although the archaeological regions are not absolute, they do generally reflect recognized biotic communities and physiographic areas in Texas (Pertulla 2004:6). The Central Texas Region, as its name implies, is in the center of Texas and covers the Edwards Plateau and portions of the Blackland prairie east of the Edwards Plateau. The following synopses provide basic culture histories of the Central Texas region. Only a discussion of the prehistoric culture history is provided as a discussion of the historic period in Texas is not particularly relevant given the lack of historic-age artifacts or sites within the project area.

The archaeological record of the Central Texas region is known from decades of investigations of stratified open air sites and rockshelters throughout the Edwards Plateau, its highly
dissected eastern and southern margins, and the adjoining margins of physiographic regions to the east and south (see Collins [2004] for review). Traditionally, the Central Texas archaeological area has included the Balcones Canyonlands and Blackland Prairie—that is, north of San Antonio (e.g., Prewitt 1981; Suhm 1960). These two areas are on the periphery of the Central Texas archaeological area, and their archaeological records and projectile point style sequences contain elements that suggest influences from and varying degrees of contact over time with other areas such as the Lower Pecos and Gulf Coastal Plain (Collins 2004; Johnson and Goode 1994). Archaeological sites in these two areas in Bexar County area have contributed important information include the Richard Beene site at Applewhite Reservoir (McGraw and Hindes 1987; Thoms et al. 1996; Thoms and Mandel 1992), the Cibolo Crossing site at Camp Bullis (Kibler and Scott 2000), the Panther Springs Creek site in Bexar County (Black and McGraw 1985), the Jonas Terrace site in Medina County (Johnson 1995), the Camp Pearl Wheat site in Kerr County (Collins et al. 1990), 41BX1 in Bexar County (Lukowski 1988), 41BX300 in Bexar County (Katz 1987), and several sites at Canyon Reservoir (Johnson et al. 1962). For more complete bibliographies concerning archaeological work done in the region, see Black (1989), Collins (1995), and Johnson and Goode (1994).

Paleoindian Period

Surficial and deeply buried sites, rockshelter sites, and isolated artifacts represent Paleoindian (11,500–8,800 B.P.) occupations of the Central Texas region (Collins 2004:116). The period is often described as having been characterized by small but highly mobile bands of foragers who were specialized hunters of Pleistocene megafauna. But Paleoindiains probably used a much wider array of resources (Meltzer and Bever 1995:59), including small fauna and plant foods. Faunal remains from Kincaid Rockshelter and the Wilson-Leonard site (41WM235) support this view (Bousman 1998; Collins 1998; Collins et al. 1989). Longstanding ideas about Paleoindian technologies also are being challenged.

Collins (2004) divides the Paleoindian period into early and late subperiods. Two projectile point styles, Clovis and Folsom, are included in the early subperiod. Clovis chipped stone artifact assemblages, including the diagnostic fluted lanceolate Clovis point, were produced by bifacial, flake, and prismatic-blade techniques on high-quality and oftentimes exotic lithic materials (Collins 1990). Along with chipped stone artifacts, Clovis assemblages include engraved stones, bone and ivory points, stone bolas, and ochre (Collins 2004:116; Collins et al. 1992). Clovis points are found evenly distributed along the eastern edge of the Edwards Plateau, where the presence of springs and outcrops of chert-bearing limestone are common (Meltzer and Bever 1995:58). Sites within the area yielding Clovis points and Clovis-age materials include Kincaid Rockshelter (Collins et al. 1989), Pavo Real (Henderson and Goode 1991), and San Macros Springs (Takac 1991). A probable Clovis polyhedral blade core and blade fragment was found at the Greenbelt site in San Antonio (Houk et al. 1997). Analyses of Clovis artifacts and site types suggest that Clovis peoples were well-adapted, generalized hunter-gatherers with the technology to hunt larger game but not solely rely on it.

In a survey of fluted points reported from throughout the state, Bever and Meltzer (2007:72) identified 151 Clovis points recovered from the counties comprising the Central Texas region. However, only four Clovis points have been recorded for Bexar County (Bever and Meltzer 2007:67). Bever and Meltzer (2007:91) also determined that
roughly 76 percent of the Clovis point raw material originated from the Edwards Plateau, but the distribution suggests the Clovis groups focused on the Nueces-Guadalupe Plain in the South Texas region.

In contrast, Folsom tool kits—consisting of fluted Folsom points, thin unfluted (Midland) points, large thin bifaces, and end scrapers—are more indicative of specialized hunting, particularly of bison (Collins 2004:117). Folsom points have been recovered from Kincaid Rockshelter (Collins et al. 1989) and Pavo Real (Henderson and Goode 1991). Folsom point distributions, both the frequency and spatial patterning, differ from the Clovis patterns, suggesting a shift in adaptation patterns (Bever and Meltzer 2007; Meltzer and Bever 1995:60 and 74). Folsom points appear more frequently in the coastal plain as well as the South Texas plain, located to the south and southeast of Bexar County. As Folsom points are almost exclusively found in plains settings (they are conspicuously lacking in the Edwards Plateau), the technology perhaps marks a more specialized adaptation, likely to a more intensive reliance on ancient bison.

Postdating Clovis and Folsom points in the archaeological record are a series of dart point styles (primarily unfluted lanceolate darts) for which the temporal, technological, or cultural significance is unclear. Often, the Plainview type name is assigned these dart points, but Collins (2004:117) has noted that many of these points typed as Plainview do not resemble Plainview type-site points in thinness and flaking technology. Recent investigations at the Wilson-Leonard site (see Bousman 1998) and a statistical analysis of a large sample of unfluted lanceolate points by Kerr and Dial (1998) have shed some light on this issue. At Wilson-Leonard, the Paleoindian projectile point sequence includes an expanding-stem dart point termed Wilson, which dates to ca. 10,000–9,500 B.P. Postdating the Wilson com-
ponent is a series of unfluted lanceolate points referred to as Golondrina-Barber, St. Mary’s Hall, and Angostura, but their chronological sequence is poorly understood. Nonetheless, it has become clear that the artifact and feature assemblages of the later Paleoindian subperiod appear to be Archaic-like in nature and in many ways may represent a transition between the early Paleoindian and succeeding Archaic periods (Collins 2004:118).

Archaic Period

The Archaic period for Central Texas dates from ca. 8,800 to 1,300–1,200 B.P. (Collins 2004:119–121) and generally is believed to represent a shift toward hunting and gathering of a wider array of animal and plant resources and a decrease in group mobility (Willey and Phillips 1958:107–108). In the eastern and southwestern United States and on the Great Plains, development of horticultural-based, semisedentary to sedentary societies succeeds the Archaic period. In these areas, the Archaic truly represents a developmental stage of adaptation as Willey and Phillips (1958) define it. For Central Texas, this notion of the Archaic is somewhat problematic. An increasing amount of evidence suggests that Archaic-like adaptations were in place before the Archaic (see Collins 2004:118, 1998; Collins et al. 1989) and that these practices continued into the succeeding Late Prehistoric period (Collins 1995:385; Prewitt 1981:74). In a real sense, the Archaic period of Central Texas region is not a developmental stage, but an arbitrary chronological construct and projectile point style sequence. Establishment of this sequence is based on several decades of archaeological investigations at stratified Archaic sites along the eastern and southern margins of the Edwards Plateau. Collins (1995, 2004) and Johnson and Goode (1994) have divided this sequence into three parts—early, middle, and late—based on perceived (though not fully agreed upon by all scholars)
technological, environmental, and adaptive changes.

Early Archaic (8,800–6,000 B.P.) sites are small, and their tool assemblages are diverse (Weir 1976:115–122), suggesting that populations were highly mobile and densities low (Prewitt 1985:217). It has been noted that Early Archaic sites are concentrated along the eastern and southern margins of the Edwards Plateau (Johnson and Goode 1994; McKinney 1981). This distribution may indicate climatic conditions at the time, given that these environments have more reliable water sources and a more diverse resource base than other parts of the region. Early Archaic projectile point styles include Hoxie, Gower, Wells, Martindale, and Uvalde. Clear Fork and Guadalupe bifaces and a variety of other bifacial and unifacial tools are common to Early Archaic assemblages. Construction and use of rock hearths and ovens, which had been limited during late Paleoindian times, became commonplace. The use of rock features suggests that retaining heat and releasing it slowly over an extended period were important in food processing and cooking and reflects a specialized subsistence strategy. Such a practice probably was related to cooking plant foods, particularly roots and bulbs, many of which must be subjected to prolonged periods of cooking to render them consumable and digestible (Black et al. 1997:257; Wandminder 1997; Wilson 1930). Botanical remains, as well as other organic materials, are often poorly preserved in Early Archaic sites, so the range of plant foods exploited and their level of importance in the overall subsistence strategy are poorly understood. But recovery of charred wild hyacinth (Camassia scilloides) bulbs from an Early Archaic feature at the Wilson-Leonard site provides some insights into the types of plant foods used and their importance in the Early Archaic diet (Collins et al. 1998). Significant Early Archaic sites include the Richard Beene site in Bexar County (Thoms and Mandel 1992), the Camp Pearl Wheat site in Kerr County (Collins et al. 1990), and the Jetta Court site in Travis County (Wesolowsky et al. 1976).

During the Middle Archaic period (6,000–4,000 B.P.), the number and distribution of sites, as well as their size, probably increased as population densities grew (Prewitt 1981:73; Weir 1976:124, 135). Macrobands may have formed at least seasonally, or more small groups may have used the same sites for longer periods (Weir 1976:130–131). Development of burned rock middens toward the end of the Middle Archaic suggest a greater reliance on plant foods, although tool kits still imply a considerable dependence on hunting (Prewitt 1985:222–226). Middle Archaic projectile point styles include Bell, Andice, Taylor, Baird, Nolan, and Travis. Bell and Andice points reflect a shift in lithic technology from the preceding Early Archaic Martindale and Uvalde point styles (Collins 2004:119). Johnson and Goode (1994:25) suggest that the Bell and Andice darts are parts of a specialized bison-hunting tool kit. They also believe that an influx of bison and bison-hunting groups from the Eastern Woodland margins during a slightly more mesic period marked the beginning of the Middle Archaic. Though no bison remains were recovered or present, Bell and Andice points and associated radiocarbon ages were recovered from the Cibolo Crossing (Kibler and Scott 2000), Panther Springs Creek, and Granberg II (Black and McGraw 1985) sites in Bexar County. Bison populations declined as more-xeric conditions returned during the late part of the Middle Archaic. Later Middle Archaic projectile point styles represent another shift in lithic technology (Collins 2004:120; Johnson and Goode 1994:27). At the same time, a shift to more-xeric conditions saw the burned rock middens develop, probably because intensified use of a specific resource (geophytic or xerophytic plants) or resource patches meant the debris of
multiple rock ovens and hearths accumulated as middens on stable to slowly aggrading surfaces, as Kelley and Campbell (1942) suggested many years ago. Johnson and Goode (1994:26) believe that the dry conditions promoted the spread of yuccas and sotols, and that it was these plants that Middle Archaic peoples collected and cooked in large rock ovens.

During the succeeding Late Archaic period (4,000 to 1,300-1,200 B.P.), populations continued to increase (Prewitt 1985:217). Within stratified Archaic sites such as Loeve-Fox, Cibolo Crossing, and Panther Springs Creek, the Late Archaic components contain the densest concentrations of cultural materials. Establishment of large cemeteries along drainages suggests certain groups had strong territorial ties (Story 1985:40). A variety of projectile point styles appeared throughout the Late Archaic period. Johnson and Goode (1994:29-35) divide the Late Archaic into two parts, Late Archaic I and II, based on increased population densities and perceived evidence of Eastern Woodland ceremonial rituals and religious ideological influences. Middle Archaic subsistence technology, including the use of rock and earth ovens, continued into the Late Archaic period. Collins (2004:121) states that, at the beginning of the Late Archaic period, the use of rock ovens and the resultant formation of burned rock middens reached its zenith and that the use of rock and earth ovens declined during the latter half of the Late Archaic. There is, however, mounting chronological data that midden formation culminated much later and that this high level of rock and earth oven use continued into the early Late Prehistoric period (Black et al. 1997:270-284; Kleinbach et al. 1995:795). A picture of prevalent burned rock midden development in the eastern part of the Central Texas region after 2,000 B.P. is gradually becoming clear. This scenario parallels the widely recognized occurrence of post-2,000 B.P. middens in the western reaches of the Edwards Plateau (see Goode 1991).

The use of rock and earth ovens (and the formation of burned rock middens) for processing and cooking plant foods suggests that this technology was part of a generalized foraging strategy. The amount of energy involved in collecting plants, constructing hot rock cooking appliances, and gathering fuel ranks most plant foods relatively low based on the resulting caloric return (Dering 1999). This suggests that plant foods were part of a broad-based diet (Kibler and Scott 2000:134) or part of a generalized foraging strategy, an idea Prewitt (1981) put forth earlier. At times during the Late Archaic, this generalized foraging strategy appears to have been marked by shifts to a specialized economy focused on bison hunting (Kibler and Scott 2000:125-137). Castroville, Montell, and Marcos dart points are elements of tool kits often associated with bison hunting (Collins 1968). Archaeological evidence of this association is seen at Bonfire Shelter in Val Verde County (Dibble and Lorrain 1968), Jonas Terrace (Johnson 1995), Oblate Rocks- shelter (Johnson et al. 1962:116), John Ischy (Sorrow 1969), and Panther Springs Creek (Black and McGraw 1985).

The Archaic period represents a hunting and gathering way of life that was successful and that remained virtually unchanged for more than 7,500 years. This notion is based in part on fairly consistent artifact and tool assemblages through time and place and on resource patches that were used continually for several millennia, as the formation of burned rock middens shows. This pattern of generalized foraging, though marked by brief shifts to a heavy reliance on bison, continued almost unchanged into the succeeding Late Prehistoric period.
Late Prehistoric Period

Introduction of the bow and arrow and, later, ceramics into Central Texas marked the Late Prehistoric period. Population densities dropped considerably from their Late Archaic peak (Prewitt 1985:217). Subsistence strategies did not differ greatly from the preceding period, although bison again became an important economic resource during the late part of the Late Prehistoric period (Prewitt 1981:74). Use of rock and earth ovens for plant food processing and the subsequent development of burned rock middens continued throughout the Late Prehistoric period (Black et al. 1997; Kleinbach et al. 1995:795). Horticulture came into play very late in the region but was of minor importance to overall subsistence strategies (Collins 2004:122).

In Central Texas, the Late Prehistoric period generally is associated with the Austin and Toyah phases (Jelks 1962; Prewitt 1981:82–84). Austin and Toyah phase horizon markers, Scallorn-Edwards and Perdiz arrow points, respectively, are distributed across most of the state. Violence and conflict often marked introduction of Scallorn and Edwards arrow points into Central Texas—many excavated burials contain these point tips in contexts indicating they were the cause of death (Prewitt 1981:83). Subsistence strategies and technologies (other than arrow points) did not change much from the preceding Late Archaic period. Prewitt’s (1981) use of the term “Neoarchaic” recognizes this continuity. In fact, Johnson and Goode (1994:39–40) and Collins (2004:122) state that the break between the Austin and Toyah phases could easily and appropriately represent the break between the Late Archaic and the Late Prehistoric.

Around 1,000–750 B.P., slightly more-xeric or drought-prone climatic conditions returned to the region, and bison came back in large numbers (Huebner 1991; Toomey et al. 1993). Using this vast resource, Toyah peoples were equipped with Perdiz point-tipped arrows, end scrapers, four-beveled-edge knives, and plain bone-tempered ceramics. Toyah technology and subsistence strategies represent a completely different tradition from the preceding Austin phase. Collins (1995:388) states that formation of burned rock midden ceased as bison hunting and group mobility obtained a level of importance not witnessed since Folsom times. Although the importance of bison hunting and high group mobility hardly can be disputed, the argument that burned rock midden development ceased during the Toyah phase is tenuous. A recent examination of Toyah-age radiocarbon assays and assemblages by Black et al. (1997) suggests that their association with burned rock middens represents more than a “thin veneer” capping Archaic-age features. Black et al. (1997) claim that burned rock midden formation, although not as prevalent as in earlier periods, was part of the adaptive strategies of Toyah peoples.

RESULTS

BACKGROUND REVIEW

The results of the background review determined that approximately 0.3 miles of the Jones Maltsberger (Redland to Thousand Oaks) project area has been previously surveyed for cultural resources. This area survey was conducted on behalf of the City of San Antonio for the 201 Wastewater Project by the Center for Archeological Research (CAR) in 1977, and includes a portion of Jones Maltsberger Road from Scattered Oaks Street south to Fall Way Drive (Figure 2). The majority of the survey area for the 1977 project is located to the south and west of the proposed APE, although a small portion is adjacent to the eastern portion of the APE. While numerous sites were recorded as a result of this survey, none are located within or immediately adjacent to the project area.
Figure 2. Previously surveyed areas within the Jones-Maltsberger Road project area.
At least 15 area surveys have been conducted within one mile of the project area, encountering 29 archeological sites within one mile (Table 1). Many of these are prehistoric surficial or shallowly buried lithic scatters associated with lithic procurement/quarrying activities utilizing the abundant chert cobbles in the rocky upland areas. Some of these sites also have burned rock features, including middens, indicative of campsites. Four of the 29 previously recorded sites were recommended for additional investigations, and are discussed below.

Sites 41BX354 and 41BX356 were recorded in 1977 by archaeologists from CAR-UTSA during the 201 Wastewater Project for San Antonio, Texas. Site 41BX354 is a large open campsite located along the western terrace of Mud Creek, 150 m east of the southern end of the APE. Site 41BX356 is a small open campsite with several possible burned rock middens. This site is located on the east bank of a tributary to Mud Creek, roughly 1,050 m east of the southern end of the proposed APE (Atlas).

Site 41BX842 is a prehistoric open campsite recorded at an unknown date by archaeologists from CAR-UTSA. This site is located approximately 1,250 m southeast of the southern end of the APE. According to the site form, the site includes a heavy lithic scatter and several burned rock middens, and the area has been heavily disturbed by bulldozing and artifact collecting (Atlas). Finally, site 41BX914 is a historic log cabin located 1,500 m southeast of the northern end of the APE. This cabin was recorded in 1990 by C.K. Chandler, a steward with the Texas Archeological Society (Atlas).

In addition to those sites recommended for further investigations, there are two rockshelters along Mud Creek northwest of the APE. Site 41BX452 is located 350 m upstream of the APE. This small complex of five rockshelters was recorded by archaeologists from CAR-UTSA in 1974. A small test unit encountered lithic debitage, and was terminated at 10 inches below surface, presumably at limestone bedrock. Deer and rodent bones and charcoal were also noted in the shelter. No recommendations were made regarding eligibility or the need for further work. Site 41BX570 is located roughly 95 m downstream of site 41BX452, approximately 250 m northwest of the APE. This shelter was recorded in 1982 by the THC for the Soil Conservation Services Floodwater Retention Structure Number 10 project. Lithic debitage was encountered in a shovel test to 15 cm below surface, above a culturally sterile layer that terminated at bedrock 28 cm below surface. A large bulldozer cut revealed artifacts to a depth of 35 cm below surface. A Scallorn arrow point and a Perdz arrow point were found in this disturbance, indicating two Late Prehistoric occupations. However, the bulldozer destroyed most of the site deposits, and the site was not recommended for additional work.

**Field Survey**

On July 8, and July 21, 2009 SWCA archaeologists conducted an intensive pedestrian survey of the existing and proposed new ROW along Jones Maltsberger (Redland to Thousand Oaks) Project. Residential and commercial development is present along most of its length. The disturbances within the APE include fence lines, driveways, sidewalks, and overhead and buried utilities (Figure 3). Overhead utilities consist of a transmission line along the eastern edge of the existing ROW (Figure 4), crossing occasionally to the western edge of the ROW. Buried utilities within the APE consist of waterlines and telecommunication cables in both the eastern and western ROW. Two manholes, presumably indicating a buried sewer or storm water line, were observed east of the existing.
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<td>Unknown eligibility</td>
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<tr>
<td>Longhorn</td>
<td>41BX366</td>
<td>Within 1-mile</td>
<td>Open campsite</td>
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<td>41BX461</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX462</td>
<td>Within 1-mile</td>
<td>Rockshelter</td>
<td>Unknown Prehistoric</td>
<td>Unknown eligibility</td>
<td>No recommendations made</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX464</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX465</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX466</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX467</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX570</td>
<td>Within 1-mile</td>
<td>Rockshelter</td>
<td>Late Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX630</td>
<td>Within 1-mile</td>
<td>Lithic procurement</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX707</td>
<td>Within 1-mile</td>
<td>Quarry</td>
<td>Archaic</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX842</td>
<td>Within 1-mile</td>
<td>Open campsite</td>
<td>Unknown Prehistoric</td>
<td>Unknown eligibility</td>
<td>Further testing recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX901</td>
<td>Within 1-mile</td>
<td>Quarry/open campsite</td>
<td>Archaic through Late Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX903</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX904</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX905</td>
<td>Within 1-mile</td>
<td>Lithic procurement</td>
<td>Archaic/Late Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX906</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX907</td>
<td>Within 1-mile</td>
<td>Lithic procurement area</td>
<td>Archaic</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX909</td>
<td>Within 1-mile</td>
<td>Lithic scatter</td>
<td>Archaic</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX914</td>
<td>Within 1-mile</td>
<td>Log house</td>
<td>Unknown historic</td>
<td>Unknown eligibility</td>
<td>Further testing recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX960</td>
<td>Within 1-mile</td>
<td>Quarry</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX1459</td>
<td>Within 1-mile</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX1825</td>
<td>Within 1-mile</td>
<td>Lithic procurement</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX1786</td>
<td>Within 1-mile</td>
<td>Lithic procurement</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
<tr>
<td>Longhorn</td>
<td>41BX1787</td>
<td>Within 1-mile</td>
<td>Lithic procurement</td>
<td>Unknown Prehistoric</td>
<td>Not eligible</td>
<td>No further work recommended</td>
</tr>
</tbody>
</table>
Figure 3. Residential and commercial development, southern portion of APE, facing south.

Figure 4. Representative overview of overhead transmission lines, facing north.
ROW to the south of Mud Creek (Figure 5). It is not known whether this line continues to the north and south, however no additional manholes were observed. At the time of survey, Mud Creek was dry west of Jones Maltzberger Road, revealing the rocky creek bed (Figure 6). To the east, the creek has been dammed, creating a pond. The terrain slopes rather rapidly north of the creek, leaving only a minor terrace. A somewhat more extensive terrace is present to the south of the creek. The tributary to Mud Creek is shallow and dry west of the road, revealing a bedrock creek bed (Figure 7). East of the road, the channel becomes deeply incised and contained some pools of standing water. No terraces were observed along this tributary, although visibility was restricted east of Jones Maltzberger Road.

Shovel tests were limited to the existing and proposed new ROW where intact areas were observed (Figure 8). These were generally in areas where the ROW widened, leaving small areas between fence lines and buried utilities. The southern third of the APE is thoroughly developed, and no shovel tests were excavated in this area. A total of 23 shovel tests (STs) were excavated within the APE, including twelve excavations within the proposed new ROW (Table 2). Eleven shovel tests were excavated during delineation of site 41BX1813, including six positive shovel tests. Throughout the APE, the soils consist of shallow gravelly clay loam and clay, ranging from 15–40 cmbs. The disturbances within the existing ROW portion of the APE (road and ditch construction and maintenance, buried and overhead utility installations, and driveway construction) have largely eliminated the potential for encountering intact cultural resources as impacts have altered subsurface setting while vegetations clearing, landscaping, and fence construction have previously altered much of the proposed new ROW.

Site 41BX1813 sits on a high terrace of Mud Creek, at the base of a rocky upland near a chert and limestone bedrock outcrop. Mud Creek is roughly 150 m to the north-northeast. The site was initially identified when three small chert secondary flakes, along with modern brown glass, were recovered from ST-3. This test was excavated in a roughly 8-foot-wide strip between a buried water line and a tall iron fence. A number of cedar elms are also present, growing in a line paralleling the utilities (Figure 9). Seven additional shovel tests were excavated in 10-meter intervals north and south of ST-3 in order to identify the site boundaries. Three of these shovel tests also recovered chert debitage mixed with modern brown and safety glass. Artifacts were recovered from 5–20 cmbs, and all shovel tests were terminated at compact clays by 30 cmbs (see Table 2). Based on the distribution of positive shovel tests, the site covers an area roughly 55 m north-south by 5 meters east-west (Figure 10). This is assuming that the site deposits are present in the area of the buried utilities, where shovel tests could not be excavated.

No shovel tests were excavated on the east side of the Jones Maltzberger Road ROW due to the presence of utilities. Additional shovel tests were excavated to the west of the existing ROW on private property to further delineate the site’s boundary. The site continues at least ten feet to the west onto private property; however, only four additional flakes were encountered within two of the six shovel test excavated within proposed new ROW. The site is no more intact in this area, despite the absence of road and utility construction disturbances. An underground sprinkler system and a metal boundary fence are present in the section of the site that extends onto private property and there has been extensive vegetation clearing and landscaping. Based on the mixed nature of the site deposits, the level of
Figure 5. Manhole indicating possible sewer or stormwater line east of existing ROW, facing south-southeast.

Figure 6. Mud Creek upstream overview, facing north-northwest.
Figure 7. Mud Creek tributary upstream, facing northwest. Note rocky bed.
Figure 8. Shovel test location map.
<table>
<thead>
<tr>
<th>Shovel Test #</th>
<th>Site #</th>
<th>Level</th>
<th>Depth (cmbs)</th>
<th>P=Pos N=Neg</th>
<th>Munsell</th>
<th>Soil Color</th>
<th>Soil Texture Description</th>
<th>Inclusions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>n/a</td>
<td>1</td>
<td>0–25</td>
<td>N</td>
<td>10 YR 3/3</td>
<td>Dark Brown</td>
<td>Silty clay loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>By Mud Creek Park entrance, south of creek. Modern plastic and glass at 15 cmbs, likely disturbed fill from park entrance construction.</td>
</tr>
<tr>
<td>2</td>
<td>n/a</td>
<td>1</td>
<td>0–20</td>
<td>N</td>
<td>10 YR 3/2</td>
<td>Very Dark Grayish Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>Intact area by brick wall, near Redland Road. Very compact soil. Rocks may be natural gravel or related to road construction.</td>
</tr>
<tr>
<td>3</td>
<td>41BX1813</td>
<td>1</td>
<td>0–30</td>
<td>P</td>
<td>10 YR 3/2</td>
<td>Very Dark Grayish Brown</td>
<td>Clay Loam</td>
<td>gravel</td>
<td>In narrow strip between utility and iron fence. Brown glass 0–10 cmbs. 3 flakes 5–20 cmbs. 15 cm diameter limestone rock at 15 cmbs. Terminated at compact, blocky clay.</td>
</tr>
<tr>
<td>4</td>
<td>n/a</td>
<td>1</td>
<td>0–30</td>
<td>N</td>
<td>10 YR 3/2</td>
<td>Very Dark Grayish Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>Cleared road ROW near chain link fence. Terminated at compact, blocky clay.</td>
</tr>
<tr>
<td>6</td>
<td>41BX1813</td>
<td>1</td>
<td>0–15</td>
<td>P</td>
<td>10 YR 4/2</td>
<td>Dark Grayish Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>10 m north of ST 3; three flakes, three brown glass shards.</td>
</tr>
<tr>
<td>7</td>
<td>41BX1813</td>
<td>1</td>
<td>0–20</td>
<td>N</td>
<td>10 YR 3/3</td>
<td>Dark Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>Blocky clay, lots of roots; 2 flakes. Terminated at compact, blocky clay.</td>
</tr>
<tr>
<td>8</td>
<td>41BX1813</td>
<td>1</td>
<td>0–20</td>
<td>N</td>
<td>10 YR 4/3</td>
<td>Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>20 m north of ST 3. Much more blocky. 5–8% small gravels. 1 piece of safety glass. Terminated at compact, blocky clay.</td>
</tr>
<tr>
<td>9</td>
<td>41BX1813</td>
<td>1</td>
<td>0–15</td>
<td>N</td>
<td>10 YR 3/2</td>
<td>Very Dark Grayish Brown</td>
<td>Clay, blocky</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>30 m south of ST 3. On upland slope, limestone gravels and cobbles on surface. Heavy limestone gravels and cobbles throughout. Terminated at compact rocky soil.</td>
</tr>
<tr>
<td>10</td>
<td>41BX1813</td>
<td>1</td>
<td>0–20</td>
<td>P</td>
<td>10 YR 4/3</td>
<td>Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel, cobbles</td>
<td>40 m north of ST 3 (driveway at 30 m north). Intact area more narrow. 3 flakes, 1 brown glass shard, 2 pieces of safety glass. Terminated at compact, blocky clay.</td>
</tr>
<tr>
<td>11</td>
<td>41BX1813</td>
<td>1</td>
<td>0–20</td>
<td>N</td>
<td>10 YR 4/3</td>
<td>Brown</td>
<td>Clay Loam</td>
<td>roots, rootlets, gravel</td>
<td>55 m north of ST 3, northernmost intact area. Soil looser, still blocky, less gravels. 2 shards clear glass. Terminated at compact, blocky clay.</td>
</tr>
<tr>
<td>12</td>
<td>n/a</td>
<td>1</td>
<td>0–15</td>
<td>N</td>
<td>10YR4/4</td>
<td>dark yellowish brown</td>
<td>sandy loam</td>
<td>gravel</td>
<td>100 m from pond; terminated at bedrock.</td>
</tr>
<tr>
<td>13</td>
<td>n/a</td>
<td>1</td>
<td>0–10</td>
<td>N</td>
<td>10YR4/4</td>
<td>dark yellowish brown</td>
<td>sandy loam</td>
<td>gravel and bedrock marl</td>
<td>terminated at bedrock.</td>
</tr>
<tr>
<td>14</td>
<td>41BX1813</td>
<td>1</td>
<td>0–30</td>
<td>P</td>
<td>10YR3/2</td>
<td>very dark grayish brown</td>
<td>silty clay</td>
<td>limestone gravel</td>
<td>one small tertiary flake; inside fence line north end of parcel 48; terminated at compact clay.</td>
</tr>
<tr>
<td>15</td>
<td>41BX1813</td>
<td>1</td>
<td>0–30</td>
<td>P</td>
<td>10YR4/4 with 10YR3/1</td>
<td>dark yellowish brown with very dark gray</td>
<td>sandy loam</td>
<td>three flakes between 0-20 cmbs</td>
<td>terminated at compact clay.</td>
</tr>
<tr>
<td>16</td>
<td>41BX1813</td>
<td>1</td>
<td>0–30</td>
<td>N</td>
<td>10YR4/4 with 10YR3/1</td>
<td>dark yellowish brown with very dark gray</td>
<td>sandy loam</td>
<td>none</td>
<td>terminated at compact clay.</td>
</tr>
<tr>
<td>17</td>
<td>n/a</td>
<td>1</td>
<td>0–10</td>
<td>N</td>
<td>10YR4/4</td>
<td>brown</td>
<td>clay</td>
<td>limestone gravel</td>
<td>inside fence line south end of parcel 48; terminated at compact gravel.</td>
</tr>
<tr>
<td>Shovel Test #</td>
<td>Site #</td>
<td>Level</td>
<td>Depth (cmbs)</td>
<td>P=Pos</td>
<td>Munsell</td>
<td>Soil Color</td>
<td>Soil Texture Description</td>
<td>Inclusions</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>-------</td>
<td>--------------</td>
<td>-------</td>
<td>---------</td>
<td>------------</td>
<td>--------------------------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>18</td>
<td>n/a</td>
<td>1</td>
<td>0-20</td>
<td>N</td>
<td>10YR4/4</td>
<td>brown</td>
<td>clay</td>
<td>medium-sized limestone rocks</td>
<td>terminated at compact clay and gravel</td>
</tr>
<tr>
<td>19</td>
<td>n/a</td>
<td>1</td>
<td>0-40</td>
<td>N</td>
<td>10YR4/4 with 10YR3/1</td>
<td>dark yellowish brown with very dark gray</td>
<td>sandy loam</td>
<td>modern glass at 25 cmbs; gravel and bedrock marl</td>
<td>terminated at bedrock</td>
</tr>
<tr>
<td>20</td>
<td>n/a</td>
<td>1</td>
<td>0-25</td>
<td>N</td>
<td>10YR4/4</td>
<td>brown</td>
<td>clay</td>
<td>plastic at 20 cmbs</td>
<td>Mud Creek easement; mesquite; terminated at compact gravel bedrock</td>
</tr>
<tr>
<td>21</td>
<td>n/a</td>
<td>1</td>
<td>0-25</td>
<td>N</td>
<td>10YR4/4</td>
<td>dark yellowish brown</td>
<td>sandy loam</td>
<td>none</td>
<td>bedrock</td>
</tr>
<tr>
<td>22</td>
<td>n/a</td>
<td>1</td>
<td>0-15</td>
<td>N</td>
<td>10YR4/4</td>
<td>brown</td>
<td>clay</td>
<td>none</td>
<td>opposite pond; elm and hackberry with understory; terminated at compact gravel</td>
</tr>
<tr>
<td>23</td>
<td>n/a</td>
<td>1</td>
<td>0-15</td>
<td>N</td>
<td>10YR4/4</td>
<td>dark yellowish brown</td>
<td>sandy loam</td>
<td>gravel</td>
<td>terminated at bedrock</td>
</tr>
</tbody>
</table>
Figure 9. Shovel Test 3, site 41BX1813, facing south. Note narrow intact strip.
Figure 10. 41BX1813 site sketch map.
previous disturbances to the site area, and the sparse, non-diagnostic artifact assemblage, the portion of site 41BX1813 within the existing and proposed new ROW is not recommended for listing as an SAL. No further archaeological work is recommended within the existing ROW. The remnants of a driveway, gate walls, and fence post supports were identified in the northern portion of the APE, near Redlands Road (Figure 11).

The THC’s survey standards require a minimum of 16 shovel tests per mile when the ROW measures 100 feet wide. As the ROW measures 75 feet wide, a total of 16 shovel tests were required along the 1.3 mile long project area. SWCA excavated a total of 23 shovel tests within the project area thus exceeding the THC’s survey standards. It should be noted that the majority of the shovel tests were clumped within the northern portion of the project area within and adjacent to the newly documented site 41BX1813. Shovel testing intervals were greatly decreased within the central and southern portion of the project area due to the heavily disturbed nature of the ROW. Additionally, portions of the project area were previously surveyed in 1977 and were not re-visited during the current investigation.

**SUMMARY AND RECOMMENDATIONS**

SWCA conducted an intensive cultural resources survey of the proposed Jones Maltzberger (Redland to Thousand Oaks) Project in Bexar County, Texas. Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5339) and the San Antonio Historic Preservation Office per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634).

The background review revealed that a small portion of the project area has been previously surveyed and no previously recorded sites are located within or adjacent to the APE. In addition, 15 surveys have been conducted and 29 archaeological sites are located within a one-mile radius of the project area.

Overall, the project area is bordered by extensive residential development as well as various utilities. The nature of the disturbances has almost completely eliminated the potential for encountering intact, significant cultural resources within the existing or the proposed new Jones Maltzberger ROW. A total of 23 shovel tests were excavated within the project area, thus exceeding the THC’s survey standards for projects of the size. Site 41BX1813 was recorded as a result of the field efforts. The site is a small, mostly disturbed prehistoric lithic scatter located south of Mud Creek within and adjacent to the ROW west of the existing roadway. Given the lack of diagnostic artifact, intact cultural features, or deeply buried deposits, the portion of the site within the current project area is not considered eligible for listing as an SAL. Furthermore, disturbances associated with the original construction of the roadway along with overhead and buried utilities within the ROW have adversely affected the integrity of the deposits that make up site 41BX1813. With this in mind, no further work is recommended for this site. Accordingly, no significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archaeological investigations within the project area.
Figure 11. Driveway and gate wall remnants, facing north. Note brick wall blocking driveway, also narrow intact strip in background between trees and wall.
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