



**Archaeological Survey Associated with the Proposed Construction
at the University of the Incarnate Word, San Antonio,
Bexar County, Texas**

by

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Abstract

On June 19th and again on June 26th, staff of the Center for Archaeological Research at The University of Texas at San Antonio conducted an archaeological survey of less than 1 acre on the University of Incarnate Word (UIW) campus located in San Antonio, Bexar County, Texas. The archaeological work was completed for McChesney Architects, who planned the construction of a new dormitory on the property. A significant portion of the UIW campus is located in the River Archaeological District, listed on the National Register of Historic Places. Multiple prehistoric and historic archaeological sites are located on the campus; four of these sites are formally designated State Archaeological Landmarks and located within River Archaeological District.

Due to the likelihood that other prehistoric and/or historic sites may also be found in the vicinity, the Office of Historic Preservation of the City of San Antonio recommended that an archaeological survey be conducted prior to construction in accordance with the San Antonio Uniform Development Code. There are no federal or state permits, or funds associated with this project conducted on private property and therefore a Texas Antiquities Permit was not required.

Three shovel tests were attempted within a brushy area on the edge of the proposed footprint of the new dormitory. Neither shovel test could be excavated due to the bedrock being encountered immediately below the leaf litter in both locations. In addition, no features were identified during the survey and no new sites were recorded. Therefore, since no intact cultural deposits available for research were located, no further archaeological work is recommended on this property. We recommend the proposed development proceed as planned.

All project-associated documentation is curated at the Center for Archaeological Research according to Texas Historical Commission guidelines.

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Chapter 1: Introduction

On June 19th and again on June 26th, staff of the Center for Archaeological Research visited the location of the newly proposed dormitory, on the campus of the University of the Incarnate Word (Figure 1-1). The proposed location is on the southwest portion of campus near the intersection of U.S. 281 and Hildebrand Avenue, along the access road leading from the avenue to the highway (Figure 1-2). The approximate location of the proposed footprint is outlined in the image below.

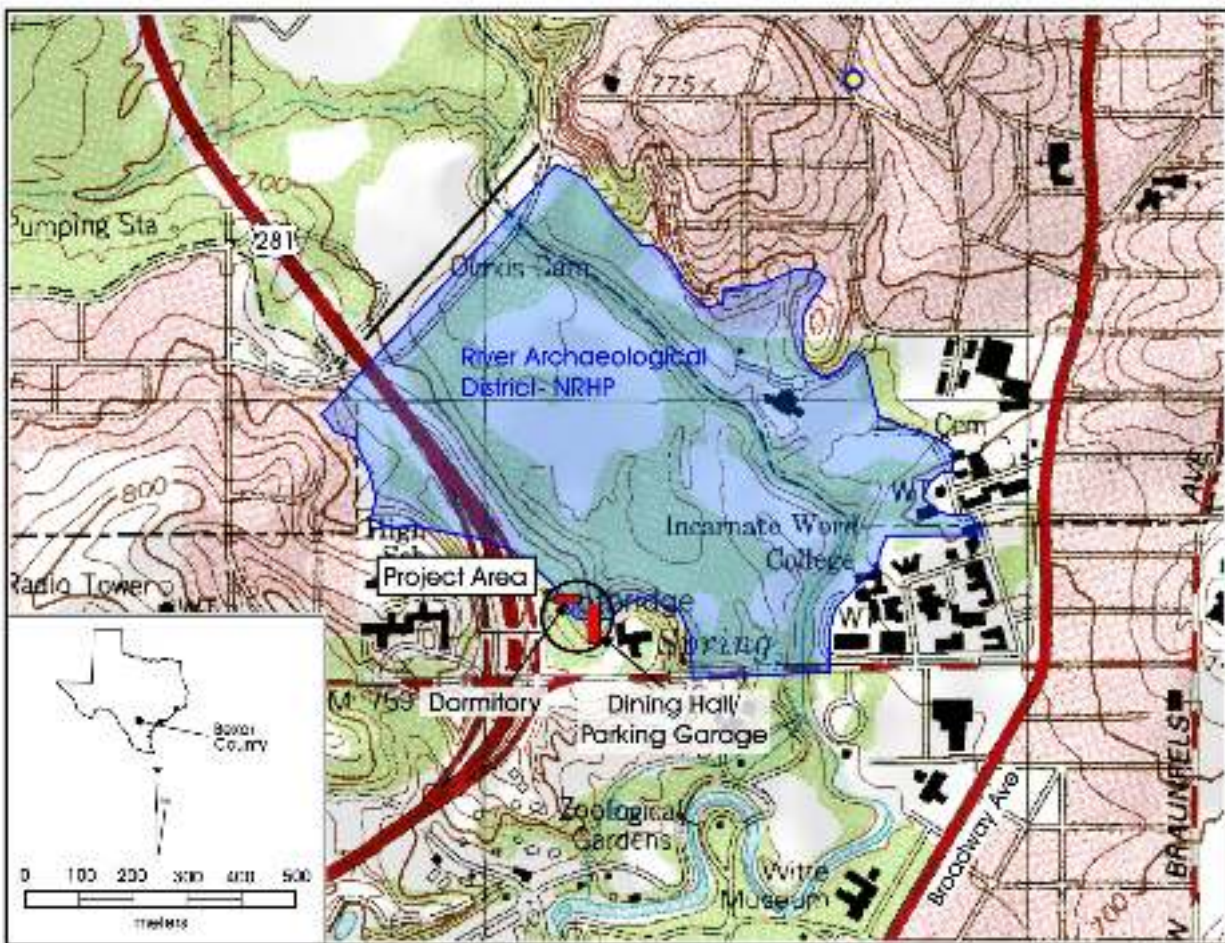


Figure 1-1. The project area depicted on the San Antonio East 7.5 minute series USGS quadrangle map.

The Area of Potential Effect

The project area lies within the southern end of the Olmos Basin and near the headwaters of the San Antonio River. The Olmos Creek flows from northwest San Antonio approximately 15 miles southeast and flows into the San Antonio River on the campus near the San Antonio Spring also known as the “Blue Hole.” The creek is dammed midway through its course by the Olmos Dam. Prior to historic development, this section of the basin was a riparian zone consisting of oak-juniper-hickory, and mesquite (Stothert 1989:5). In 2007 McChesney Architects oversaw the construction of a dormitory and dininghall/parking garage in the vicinity of the proposed Area of Potential Effect (APE). The two facilities constructed in 2007 are shown on Figure 1-1. The current APE is bounded by these two buildings on the north and east and abuts the property fence that separates the campus from the US. 281 Right-of-Way on the west. A sidewalk forms the southern boundary of the APE (Figure 1-2).



Figure 1-2. Location of proposed new dormitory building on the campus of the University of the Incarnate Word.

Approximately 80 percent of the APE is taken up by the parking lot. Along the western edge and near the southern end of the APE, the parking lot is bordered by mesquite and cedar trees and a thick understory of vines and low brush.

Because the area is known to contain archaeological sites and Bexar County has a rich history, a brief review of the culture history of the general area is provided below. This review provides a broader context for the known sites that exist within the boundaries of the UIW campus.

Cultural History

The project area is situated on the edge of Central and South Texas so the following culture history emphasizes Central Texas although reference is made to trends in South Texas as well. The discussion is based primarily on the chronologies developed by Black (1989a), Collins (1995), Johnson and Goode (1994), and Prewitt (1981) for Central Texas, with observations from Hester (1995) for South Texas. Four major time periods define South Central Texas: Paleoindian, Archaic, Late Prehistoric, and Historic. These periods are further divided into sub-periods that are based on particular subsistence strategies and material culture. A brief description of each period follows to illustrate the archaeological potential of the region.

Paleoindian

The Paleoindian period (11,500-8800 BP) is divided into early and late portions each characterized by particular projectile point styles and subsistence patterns (Collins 1995). The period begins at the close of the Pleistocene with the earliest evidence of humans in the Central Texas region. Clovis and Folsom point types, and bifacial Clear Fork tools and finely flaked end scrapers characterize the early Paleoindian (Black 1989a). The first stemmed points (i.e., Wilson), as opposed to lanceolate points (i.e., Angostura and Golondrina), begin to appear during the late Paleoindian. In the past, Paleoindian populations have generally been characterized as hunter-gatherers ranging over wide areas in pursuit of now extinct megafauna, such as mammoth and bison (*Bison antiquus*). However, research from the Wilson-Leonard site in Central Texas (Collins 1998) and other perspectives on Paleoindian adaptations (Tankersley and Isaac 1990) indicate that the diet of these early inhabitants may have been much broader. Although exploiting Late Pleistocene megafauna may have constituted a part of Paleoindian subsistence, these peoples are perhaps better characterized as more generalized hunter-gatherers, exploiting a wide variety of plants and animals including large herbivores like deer and bison and small animals such as turtles, alligators, rabbit, and raccoons (Collins 1995; Nickels 2000).

In South-Central Texas, many of the sites containing Paleoindian materials are found on high terraces, valley margins, and upland locations (Black 1989a). This seems to fit with a broader pattern of Paleoindian site distributions where sites are located on landforms providing views of the surrounding landscape, are centered on critical resource zones, or are found in highly productive resource areas (Tankersley and Isaac 1990). Paleoindian artifacts are commonly recovered as isolated finds or from lithic scatters lacking good stratigraphic context including kill, quarry, cache, camp, ritual and burial sites (Collins 1995). No mammoth kill or butchering sites attributable to the Paleoindian period have been found in South Texas (Hester 1995).

Archaic

The Archaic period, 8800-1200 BP, is marked by intensification of hunting and gathering of local resources, changes in projectile points, and by a broader array of material culture (Collins 1995; Prewitt 1981; Weir 1976). A change in food processing is evident from a widespread increase in hearth, oven and midden features. During this period, large cemeteries were formed indicating an increasing population and the subsequent establishment of territories (Black and McGraw 1985). Collins (1995) and Johnson and Goode (1994) subdivided the Archaic into Early, Middle, and Late sub-periods. These sub-periods are distinguished by variances in climate conditions, resource availability, subsistence practices, and diagnostic projectile point styles (Collins 1995; Hester 1995).

Early Archaic

In Central Texas, the Early Archaic dates from 8800 to 6000 BP (Collins 1995). Changing climate and the extinction of megafauna appear to have initiated a behavioral change by the Prehistoric peoples of Texas. Because of the necessary economic shift away from some level of dependence on big game hunting, local resources in Central Texas, such as deer, fish, and plant bulbs were more intensively exploited. This behavioral change is indicated by greater densities of ground stone artifacts, burned rock cooking features, and more specialized tools such as Guadalupe bifaces and Clear Fork gouges (Turner and Hester 1993). Projectile point styles found in sites from this period include Angostura, Early Split Stem, and Martindale-Uvalde (Collins 1995). Open campsites, including Loeve, Richard Beene, Wilson-Leonard, Jetta Court, Sleeper, Camp Pearl Wheat, Youngsport, and Landslide, and a cave site, Hall's Cave, contain notable Early Archaic components (Collins 1995).

Weir (1976) concludes that the Early Archaic groups were highly mobile and small. He bases this inference on the fact that Early Archaic sites are sparsely distributed and that projectile points are widely distributed across most of Texas and northern Mexico. The decline in bison numbers on the plains suggested to Hurt (1980) that the inhabitants were forced to broaden their diets to include animals and plants that produce equivalent amounts of calories and protein with the same or slightly more expended effort. Story (1985) concurs with Weir that population densities were low during the Early Archaic. She suggests that groups were made up of small bands of related individuals with "few constraints on their mobility" (Story 1985:39) subsisting on a broad range of resources, such as prickly pear, lechugilla, rodents, rabbits and deer.

Middle Archaic

The Middle Archaic, 6000 to 4000 BP (Collins 1995), appears to have been a period of increasing

population, based on the large number of sites documented from this time in South and Central Texas (Story 1985; Weir 1976). Projectile point variation at the Jonas Terrace Site points to a period of “ethnic and cultural variety, as well as group movement and immigration” (Johnson 1995:285). Point styles from this period include Bell, Andice, Calf Creek, Taylor, Nolan and Travis (Collins 1995). Exploitation of broadly scattered, year-round resources such as prickly pear, deer and rabbit continued (Campbell and Campbell 1981) with the addition of seasonal nut harvests from the riverine settings of the Balcones Escarpment (Black 1989a, b). Weir (1976) posits that the expansion of oak on the Edwards Plateau and Balcones Escarpment resulted in intensive plant gathering and acorn processing that may have been the catalyst for the merging of the widely scattered bands prevalent in the Early Archaic into larger groups. These larger groups likely shared the intensive labor involved with the gathering and processing of acorns. Some investigators believe burned rock middens resulted from acorn processing (Creel 1986; Weir 1976) although others (e.g., Black et al. 1997; Goode 1991) question this argument. Black et al. (1997) suggest that the burned rock middens of Central Texas accumulated as a result of the baking of a relatively broad range of resources in rock/earth ovens. These resources potentially included carbohydrate laden nuts, bulbs, roots, and pads as well as various vertebrate and invertebrate animals.

Late Archaic

The Late Archaic in Central Texas dates from 4000 to 1200 BP (Collins 1995). There is not a consensus among researchers as to population size in this sub-period. Prewitt (1985) posits an increase while Black (1989a) believes population remained the same or decreased. There is also disagreement as to the continuing use of burned rock middens. Prewitt (1981) suggests the near cessation of the midden construction, whereas excavations at a number of sites document large cooking features up to 15 meters in diameter (Black and Creel 1997; Houk and Lohse 1993; Johnson 1995; Mauldin et al. 2003). Bison reemerge during this sub-period in Central Texas (Mauldin and Kemp 2005) after evidence of a definitive decrease during the Middle Archaic (Dillehay 1974). Points from the Late Archaic sub-period are generally smaller than those of the Middle Archaic and include Bulverde, Pedernales, Kinney, Lange, Marshall, Marcos, Montell, Castroville, Ensor, Frio and Darl types (Collins 1995; Turner and Hester 1993). During this period, large cemeteries were formed indicating an increasing population and the subsequent establishment of territories (Black and McGraw 1985). The earliest occurrences are at Loma Sandia (Taylor and Highley 1995), Ernest Witte (Hall 1981), Hitzfelder Cave (Givens 1968), and Olmos Dam (Lukowski 1988).

Some researchers describe the last 1000 years of the Late Archaic as Transitional Archaic (Turner and Hester 1993) or Terminal Archaic (Black 1989) because they found the dart point forms (i.e. Darl, Ensor,

Fairland, and Frio) similar to early arrow point forms and thought they may have overlapped. More commonly researchers extend the dates of the Late Archaic and add additional style intervals (Collins 1995). This designation is not universally recognized. It corresponds with Johnson and Goode's (1994) Late Archaic II. Investigators at 41BX323 use the Transitional Archaic designation in the Archaeological Investigations section below.

Late Prehistoric

The Late Prehistoric period (1200-350 BP) in Central Texas marks a distinctive shift from the use of the atlatl and dart to the use of the bow and arrow (Black 1989a; Collins 1995; Hester 1995; Story 1985). The Late Prehistoric is subdivided into early and late sub-periods termed Austin and Toyah Phases, respectively. Temporal diagnostics including Scallorn and Edwards arrow points define the Austin Phase (1200-650 BP; Prewitt 1981). Burned rock midden use may have reached a peak during this phase (Black and Creel 1997). The subsequent Toyah Phase spans 650-350 BP and includes the first occurrence of pottery in South Texas (Black 1989a). Characteristic artifacts of this phase include Perdiz and Clifton arrow points (Black 1986). Material culture associated with the Late Prehistoric period suggests increasing complex subsistence patterns and large prehistoric populations (Black 1989a; Collins 1995).

Historic

The Historic period in Texas begins with the arrival of Europeans. Although the Historic period theoretically begins in Texas with the shipwreck of the Narvaez expedition along the Texas coast in 1528, the majority of the inhabitants of Texas were Native Americans until the late eighteenth century. From AD 1550 to the late 1600s, European forays into South and Central Texas were infrequent. René Robert Cavelier, Sieur de La Salle, established a French settlement, Fort St. Louis, along Matagorda Bay on the Texas coast in 1685. Hunger, disease, and escalating hostilities between the French and the Karankawas, subsequently destroyed the colony. In 1690, as a result of the discovery of the remains of the LaSalle colony, the Spanish began securing the northern border of New Spain, expanding their interests in East Texas to counter any French expansion across the Mississippi River (Foster 1998). The first Europeans settled in the region in early AD 1700 (Taylor 1996). The southward incursion of the Comanche and Apache and the northward expansion of Spanish influence led to the displacement of many of the area's indigenous groups. Decimated by disease brought by Europeans, many of the remaining groups sought refuge in the numerous Spanish missions established early in the eighteenth century. The move to the missions significantly impacted the hunter-gatherer way of life and the material culture. Artifacts from the Historic period reflect European influences and include metal, glass, and ceramics along with pre-Hispanic Goliad wares and lithic arrow points, tools, and gunflints (Taylor 1996; Wade 2003).

Previous Surveys and Archaeological Sites

In 1975, the Center for Archaeological Research conducted archaeological surveys of the UIW campus (Fox 1975:1). During that survey, thirteen sites were identified and recorded. Between 1976 and 1982, UIW initiated a program of summer field schools that resulted in the investigation of the following sites: 41BX291, 41BX509, 41BX510, 41BX24, and 41BX338 (Stothert 1989:26). In 1978, the Congregation of the Sisters of the Incarnate Word, and the then named Incarnate Word College listed a large portion of the campus on the National Register of Historic Places (NRHP) known as the “River Archaeological District” to preserve and foster research of known archaeological sites (Stothert 1989:80-82). There are thirteen prehistoric and historic sites in this district, of these, four sites are formally designated as State Archaeological Landmarks under section # 108 of the Antiquities Code of Texas (see Table 2-1). These sites date from approximately 8000 BP through the late nineteenth century.

Table 2-1. List of known sites on UIW campus.

Site Number	Name or Type
41BX24	prehistoric midden
41BX261	prehistoric site and 19th century refuse area
41BX282	San Antonio Spring ("The Blue Hole")
41BX283	Historic Quarry
41BX284	Old Mill" site
41BX285	historic foundations presumed destroyed
41BX286	prehistoric quarry/ lithic workshop
41BX287	19th century refuse area
41BX288	prehistoric midden
41BX289	Brackenridge Villa
41BX290	prehistoric midden
41BX291	prehistoric site
41BX292	prehistoric site

In 2007, Leonard Kemp of the CAR conducted a pedestrian survey of the in the immediate vicinity of the current APE. During the survey, the footprints of a dorm and parking garage/dining hall were inspected. Features were identified during the survey and no sites were recorded in the immediate vicinity of the current APE.

Chapter 2: Archaeological Field and Laboratory Methods

Based on the area impacted by construction (less than 1 acre), only one shovel test was required to fulfill the THC minimum survey standards, of one shovel test for every two acres. However, due to the archaeological significance of the area, three shovel tests were planned before the arrival of the crew to the APE.

Shovel tests were to measure 30 cm in diameter, and when possible were to be excavated to a depth of 60 cm below surface (cmbs) in 10-cm increments. All soil from each level was to be screened through 1/4inch hardware cloth. All collected artifacts were to be recorded with appropriate provenience for laboratory processing, analysis, and curation. A shovel test form was to be completed for every excavated shovel test. Data collected from each shovel test was to include the final excavation depth, a tally of all materials recovered from each 10-cm level, and a brief soil description (texture, consistence, color, inclusions). The location of every shovel test was to be recorded with Trimble Geo XT GPS units.

All records generated during the project were prepared in accordance with federal regulation 36 CFR part 79 and THC requirements for State Held-in-Trust collections. Additionally, these project related-materials were curated in accordance with current CAR guidelines. Digital photographs were printed on acid-free paper, labeled with archival appropriate materials, and placed in archival-quality sleeves. All field forms were completed with pencil. No artifacts were collected during the project. All project-related documentation is housed at CAR curation facility.

Chapter 3: Survey Results

As part of the pedestrian survey the CAR staff photo documented the condition of the area and inspected the previously least disturbed portion of the Area of Potential Effect for prehistoric and historic cultural materials. Approximately 80 percent of the footprint area is covered by an existing parking lot. The parking lot surface is covered with concrete pavers set in a crushed limestone base (Figure 3-1).



Figure 3-1. Parking lot covering much of the area for the proposed new dormitory. Note woody vegetation on the edges of the parking lot.

Several utility connections were visible on the perimeter of the parking lot indicative of additional disturbances even outside of the parking area itself (Figure 3-2). These disturbances consisted of electrical line connection boxes, light pole bases, and a fence line (Figure 3-3) that

formed the property boundary immediately west of the proposed footprint (see Figure 1-2, faint white line to the left of proposed footprint location).



Figure 3-2. Disturbances on the edge of the parking lot.



Figure 3-3. Fence line along western property boundary. Posts are installed in concrete.

Relatively less disturbed surfaces are present to the west and south of the parking lot (Figure 3-4). These areas are covered by oak and mesquite trees as well as an understory of brush.



Figure 3-4. Relatively less-disturbed tree-covered western edge of Area of Potential Effect.

CAR staff inspected the ground surface along the entire wooded perimeter of the parking lot for cultural materials. It was noted that because the ground slopes toward the north-northeast, the soils that have accumulated on the surface were very thin. At several locations (Figure 3-5), limestone bedrock was exposed on surface indicating that the soils were very thin (2-3-inches).



Figure 3-5. Exposed bedrock at the edge of the parking area, within the Area of Potential Effect.

Shovel tests were attempted in three locations but in all three, bedrock was exposed immediately below the leaf litter that had recently accumulated on the surface. No location could be identified where a shovel test could be excavated without encountering bedrock immediately below the accumulated plant debris. Therefore, no shovel tests were excavated in the margins of the APE where such a possibility was originally anticipated.

The inspection of the ground surface within the wooded portions of the Area of Potential Effect identified primarily modern artifacts including various beverage bottles, and fragments of other containers (Figure 3-6).



Figure 3-6. Discarded Coca-Cola Bottle on surface within wooded portion of APE.

A single block of limestone was identified that appears to have quarry marks on it in the form of linear grooves and at least two quarry holes (Figure 3-7). The area was carefully inspected around this rock but no additional rocks were noted in the vicinity and no other signs of quarrying activity were noted on the surface.



Figure 3-7. Possible quarry discard from former quarrying activities in the vicinity of the APE.

The previous survey for a parking garage and dormitory (Kemp 2007), in the vicinity of the current APE, also found several quarried limestone blocks in those project areas. They, as well as the single block noted during this survey, may derive from site 41BX285. The site was originally described as a historic period limestone foundation. The limestone blocks noted during this and the previous survey may be indicative of the destruction of that foundation over the years.

Chapter 4: Summary and Recommendations

In summary, the pedestrian survey identified no intact significant prehistoric and/or historic cultural remains within the project Area of Potential Effect. The APE has been significantly disturbed by previous construction activities including the installation of a parking lot and associated utility lines. Soils within the less disturbed portions of the APE are thin and since they are on a slope, are primarily secondary deposits eroding off the top of the landform. Modern artifacts were encountered within the wooded margins of the project area with the exception of a single limestone block with likely quarry marks. The block appears to be out of context as no additional quarried stone blocks were noted in the vicinity. Site 41BX283, the historic quarry, is located approximately 285 meters to the east and outside of the project APE. The CAR staff suggests that no significant intact cultural deposits will be impacted by the proposed construction of the new dormitory.

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