

***An Archeological Survey of the
Proposed Tomball Tollway
Phase 1 (Sections 1 and 2) SH 249
and Associated Detention Ponds
Harris County, Texas***



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PROPOSED TOMBALL TOLLWAY
PHASE 1 (SECTIONS 1 AND 2) SH 249
AND ASSOCIATED DETENTION PONDS
HARRIS COUNTY, TEXAS**

TEXAS ANTIQUITIES PERMIT No. 6400

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Abstract

In January 2012, Atkins archeologists conducted an intensive archeological survey of the proposed Tomball Tollway (State Highway 249) Phase 1 (Sections 1 and 2) and Associated Detention Ponds Project in Harris County, Texas, sponsored by Harris County, who delegated the project management to Harris County Toll Road Authority. Harris County is proposing construction of a new bridge crossing for Tomball Tollway at Willow Creek (2.0 hectares, 4.94 acres) and two detention ponds, including (1) improvements at the existing K140-00-00 (Pillot Gully) Detention Pond (1.85 hectares, 4.57 acres); and (2) Willow Creek Detention Pond (8.60 hectares, 21.26 acres). Altogether, the areas to investigate constitute a total of approximately 12.45 hectares (30.77 acres). The depth of the area of potential effect associated with the proposed project will be up to approximately 3 meters (10 feet) below ground surface. The impacts are based on maps available at the time of permit application and estimated on typical construction design. The survey area is located on lands that Harris County owns or has an easement to cross; therefore, these lands require a Texas Antiquities Code permit prior to commencement of the archeological survey. Therefore, the current effort was undertaken under Texas Antiquities Permit No. 6400.

Three historic archeological sites were encountered during the survey: 41HR1129, 41HR1130, and 41HR1131 (Boudreaux Farm). Site 41HR1129 consists of a historic trash dump; site 41HR1130 consists of a historic industrial and community dumpsite; and site 41HR1131 consists of the remnants of a historic farmstead. None of the newly recorded sites appears eligible for inclusion in the National Register of Historic Places under criteria A, B, C, or D and none are eligible for nomination as State Archeological Landmarks. Atkins recommends no further archeological investigation at any of these sites and that construction activities within the surveyed areas are allowed to proceed without further consultation.

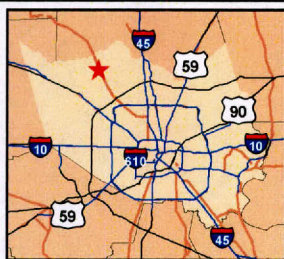
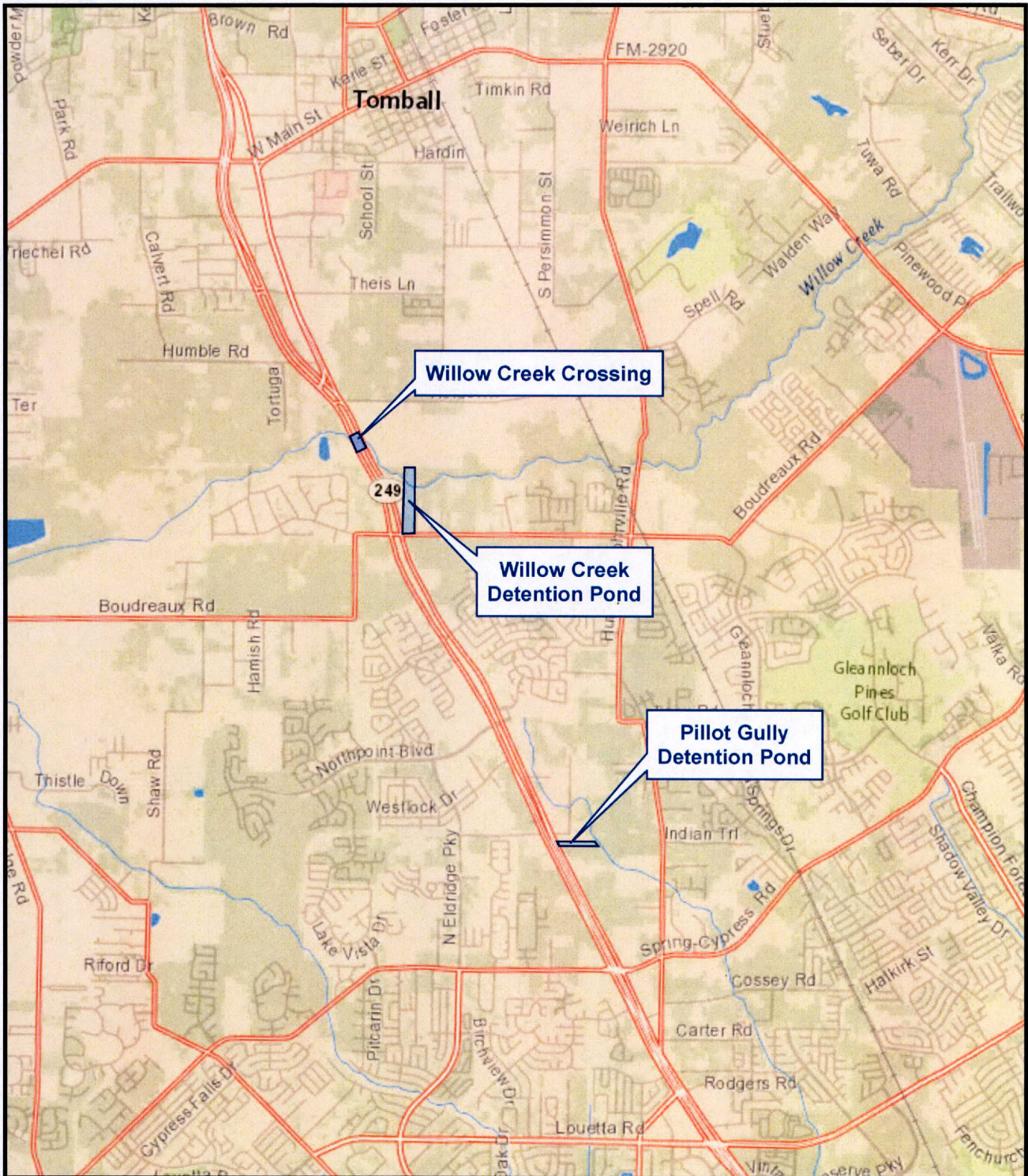
I. INTRODUCTION


In January 2012, Atkins conducted an intensive archeological survey of the proposed Tomball Tollway (State Highway [SH] 249) Phase 1 (Sections 1 and 2) and Associated Detention Ponds Project in Harris County, Texas (Figure 1), sponsored by Harris County, who delegated the project management to Harris County Toll Road Authority (HCTRA). The project areas are located within the Rose Hill (1980) and Tomball (1995), Texas, U.S. Geological Survey (USGS) 7.5-minute series topographic quadrangle maps. Harris County is proposing construction of a new bridge crossing for Tomball Tollway mainlanes at Willow Creek (2.0 hectares [ha], 4.94 acres [ac]) and two detention ponds, including: (1) improvements at the existing K140-00-00 (Pillot Gully) Detention Pond (1.85 ha, 4.57 ac); and (2) Willow Creek Detention Pond (8.60 ha, 21.26 ac). Altogether, the survey areas constitute a total of approximately 12.45 ha (30.77 ac). The depth of the area of potential effect (APE) for archeological resources associated with the proposed project will be up to approximately 3 meters (m) (10 feet [ft]) below ground surface. The impacts are based on maps available at the time of permit application and estimated on typical construction design. The survey area is located on lands that Harris County owns or has an easement across; therefore, these lands require a Texas Antiquities Code permit prior to commencement of the archeological survey. Therefore, the current effort was undertaken under Texas Antiquities Permit No. 6400.

The survey was performed in compliance with the National Historic Preservation Act of 1966 (Public Law [PL] 89-665), as amended, and the Texas Antiquities Code (Texas Natural Resources Code of 1977, Title 9, Chapter 191) and in accordance with the Procedures of the Advisory Council on Historic Preservation (36 CFR 800) and Rules of Practice and Procedure (Texas Administrative Code, Title 13, Chapter 26) and guidelines set forth by the Register of Professional Archaeologists and the Council of Texas Archeologists. A companion report documenting the results of the historic resources survey for this project is provided under separate cover (Russell 2013).

Fieldwork was conducted by Karen Belvin and Phil Washington under the direction of Principal Investigator Karla J. Córdova. Dale Norton acted as Project Coordinator. The entirety of the project area was visually inspected and a total of 31 shovel tests were excavated. Shovel tests were excavated on higher ground excluding seasonally inundated areas as well as areas that appear to have been severely disturbed. Three historic archeological sites, [41HR1129, 41HR1130, and 41HR1131 (Boudreaux Farm)] were identified within the proposed project APE. Locations of the recorded sites appear in Appendix A and photos of the surveyed areas are included in Appendix B, Sheets 1–6. A total of 60 person hours were required to complete the field surveys.

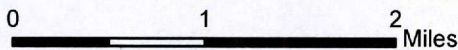
The objectives of the survey were to (1) locate archeological sites within the survey area, (2) delineate the vertical and horizontal extent of any located sites, (3) assess the integrity of each site, and (4) provide a preliminary evaluation of each site's potential eligibility for listing on the National Register of Historic Places (NRHP) and/or State Archeological Landmark (SAL) status. The



 Project Area



Datum: NAD 1983
 Projection: UTM
 Zone: 15
 Units: Meter



ATKINS

Figure 1
 Vicinity Map
HCTRA
 TOMBALL TOLLWAY PHASE I

Harris County, Texas

Prepared By: ATKINS/14923

Scale: 1" = 1 mile

Job No.: 100030944

Date: Jan 02, 2013

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intention of this report is to describe and interpret the results of these investigations and to provide recommendations for cultural resource management.

II. ENVIRONMENTAL SETTING

PHYSIOGRAPHY

The project area is located in the Gulf Coastal Plain physiographic province of Texas. This province ranges in character from a nearly smooth, featureless depositional plain bordered by shallow bays, barrier islands, and beaches along the Gulf of Mexico, to low, rolling hills extending inland to the Balcones Fault Zone. The plain rises gradually from sea level to an elevation of approximately 61 m (200 ft) above mean sea level (amsl) within 80.5 to 161 kilometers (km) (50 to 100 miles) of the coast. Narrow valleys of small streams and broad valleys of larger streams that drain the region break the generally flat relief of the Gulf Coastal Plain. At some locations, this topographical pattern is interrupted by the presence of such features as salt domes and fault scarps. Some scattered salt domes have surface expression in the form of broad mounds having as much as 30.5 m (100 ft) of relief. Faults are common in the region, but generally have little or no surface expression (Bureau of Economic Geology 1996).

The proposed project area is characterized as nearly level to gently sloping. The natural contour of the ground surface slopes coastward and traverses a mostly urban environment with some rural areas of upland pastures and upland forested areas. Urban development in the area has impacted the original landscape, changing the face of the landscape and eliminating the natural contours. These impacts greatly reduce the likelihood of encountering historic and prehistoric cultural artifacts in an undisturbed context.

GEOLOGY

Based on the 1992 Bureau of Economic Geology map of the geology of Texas, the surface geology of the project area is underlain by the Lissie Formation and the Willis Formation. The Lissie Formation is a Pleistocene-aged fluvial and deltaic unit that was deposited in response to several interglacial fluctuations in sea level (Aronow 1976). The Lissie Formation generally parallels the present-day coast. Undrained depressions and pimple mounds are common surface features of the Lissie Formation. These features have, for the most part, been obliterated within the project area by agricultural and urban landscape modifications. The Willis Formation is Pliocene in age (Aronow n.d.). It is fluvial in origin, and has fewer undrained depressions and pimple mounds than the Lissie Formation at its surface.

SOILS

The geologic units recognized within the project area include the Willis Formation (in the west) and the Lissie Formation (in the east) of Pleistocene or older age. Generally, each of these units is composed of sedimentary deposits of clay, silt, and sand, with minor amounts of siliceous gravel. Examination of the *Soil Survey of Harris County, Texas* (Wheeler 1976) indicates that the proposed

project area crosses three soil mapping units, including Wockley fine sandy loam, Gessner loam, and Hockley fine sandy loam. In general, the soils detailed below have previously been identified by Abbott (2001) as having a low and low to moderate geoaerchological potential.

The Wockley series consists of very deep, somewhat poorly drained, moderately slowly permeable soils. These nearly level upland soils formed in loamy sediments from the Willis Formation of late Pliocene age. Slope ranges from 0 to 1 percent but is predominantly from 0.1 to 0.5 percent (Natural Resources Conservation Service [NRCS] 1973). Wockley soils have previously been identified by Abbott (2001) as having a low geoaerchological potential.

The Gessner series consists of very deep, poorly drained, very slowly permeable soils that formed in loamy sediments derived from the Lissie Formation of Pleistocene age. These depressional soils are on coastal prairies. Slope ranges from 0 to 1 percent, but are mainly less than 0.3 percent (NRCS 1973). Gessner soils have previously been identified by Abbott (2001) as having a low to moderate geoaerchological potential.

The Hockley series consists of very deep, well drained, moderately permeable soils that formed in loamy sediments derived from the Willis Formation of late Pliocene age. These nearly level to gently sloping soils are on uplands. Slope ranges from 0 to 5, but are typically 1 to 2 percent (NRCS 1973). Hockley soils have previously been identified by Abbott (2001) as having a low geoaerchological potential.

CLIMATE AND VEGETATION

The project area lies within the Gulf Prairies vegetation region, a nearly flat plain that extends approximately 48 to 128 km (30 to 80 miles) inland. The Gulf Prairies are characterized by a nearly level topography with slow surface drainage. Elevation extends from sea level along the coast up to 61 m (200 ft) amsl. Annual precipitation averages 122 centimeters (cm) (48 inches). Mean annual temperature is typically 70 degrees Fahrenheit (Hatch et al. 1990).

The original vegetation types of the Gulf Prairies included tallgrass prairies and post oak (*Quercus stellata*) savannah (Gould 1975). However, the Gulf Prairies experienced extensive conversion to cropland and improved pasture for livestock grazing throughout the twentieth century, especially with the advent of affordable mechanized farm equipment after World War II (Lobpries 1994). Late in the twentieth century, approximately one-third of the Gulf Prairies were cultivated, mainly for rice, sorghum, corn, and improved pasture grasses (Hatch et al. 1990). In recent decades, the Gulf Prairies have experienced rapidly increasing conversion to suburban and industrial land use. The project area is typical of the Gulf Prairies region and is characterized by a patchwork of cropland, pastureland, wetlands, and riparian corridors with limited scattered suburban development.

Very little native prairie remains due to urbanization, agricultural activities, and suppression of wildfire (Eubanks 1994; Smeins 1994). However, scattered isolated native prairie remnants may

still be found within the Katy Prairie. Climax native grasses such as gulf cordgrass (*Spartina spartinae*), little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardii*), indiagrass (*Sorghastrum nutans*), and gulf muhly (*Muhlenbergia capillaries*) dominate these remnant prairie areas. Improved pasture grasses such as bermudagrass (*Cynodon dactylon*) and bahiagrass (*Paspalum notatum*), invaders such as johnsongrass (*Sorghum halepense*), giant ragweed (*Ambrosia trifida*), and Brazilian vervain (*Verbena braziliensis*), and woody species such as eastern baccharis (*Baccharis halimifolia*), McCartney rose (*Rosa bracteata*), and Chinese tallow-tree (*Sapium sebiferum*) have replaced most of these native grasses throughout the remainder of the Katy Prairie. Species such as post oak, live oak (*Quercus virginiana*), sugarberry (*Celtis laevigata*), elms (*Ulmus* spp.), and Chinese tallow-tree dominate isolated woods and wooded riparian areas along Little Cypress Creek and Willow Creek, and various other artificial or channelized drainages.

WILDLIFE

The project area is located within the Texan and Austroriparian biotic provinces. The Texan biotic province is characterized as an ecotonal region of forest and grassland faunal associations. However, most of the native vegetation has been replaced by cultivated crops, improved pasture grasses, or invasive brush. Consequently, numerous native wildlife populations have declined. Many habitat species, including the least shrew (*Cryptotis parva*), Texas horned lizard (*Phrynosoma cornutum*), and northern bobwhite (*Colinus virginianus*), have undergone significant reductions in numbers and had their distributions severely altered, while other more-generalistic species such as the coyote (*Canis latrans*), eastern meadowlark (*Sturnella magna*), and mourning dove (*Zenaida macroura*) apparently have increased in number and habitat occupation. Some 49 species of mammals occur (or have historically occurred) in the Texan province, of which only 8 are grassland species encroaching from the west, southwest, or north. Two species of land turtles occur in the Texan province. Nine of the 16 lizard species occurring in the Texan province are eastern forest species, and the remaining 7 are western grassland affiliates. Of the 39 species of snakes documented by Blair (1950), 27 are eastern forest species and 12 are western. Five salamanders (all Austroriparian) and 18 species of frogs and toads (13 of which are Austroriparian) occur in the Texan biotic province.

The Austroriparian biotic province is characterized by extensive pine and hardwood forests, swamps, marshes, and other hydric communities. The range of the Austroriparian biotic province extends from eastern Texas to the Atlantic coastal plain and as far north as the Dismal Swamp of southeast Virginia (Dice 1943). The western boundary of the Austroriparian biotic province is the western boundary of the pine and hardwood forest of the eastern Gulf Coastal Plain. The ecological associations of the Austroriparian biotic province extend westward beyond this boundary, in local areas, wherever soil conditions are favorable. At least 47 mammal species, 29 snake species, 10 lizard species, 2 land turtle species, 17 anuran species, and 18 urodele species are known to have occurred in the Austroriparian biotic province in recent times (Blair 1950). No endemic wildlife

species occur within the project area. Vertebrate fauna in the project area is typical of that found over most of the Texan and Austroriparian biotic provinces.

III. CULTURAL HISTORY

The project area is located in the Southeast Texas Archeological Region of the Eastern Planning Region of Texas as delineated by the Texas Historical Commission (THC). This region encompasses the 19 counties from the San Bernard and Brazos Rivers east to the Sabine River and the state of Louisiana (Kenmotsu and Perttula 1993). Archeological evidence gathered in this region shows a long and prosperous occupation by a variety of people over time.

The cultural history of the region is generally divided into four primary periods: Paleoindian, Archaic, Late Prehistoric, and Historic. These divisions are generally believed to reflect changes in subsistence as reflected by the material remains and settlement patterns of the people occupying this portion of Texas in prehistoric and historic times.

PALEOINDIAN PERIOD (10,000–6500 B.C.)

The earliest generally accepted culture of the Americas, the Paleoindian, appears to have extended over most, if not all, of North America by the end of the Pleistocene epoch. It has been hypothesized that in Texas the Pleistocene coastline extended as much as 40 km (25 miles) into the present Gulf of Mexico and that rivers cut deep canyons into sediments deposited during previous periods of glaciation (Aten 1983). With the close of the Pleistocene came a period of climatic warming and a consequent rise in sea level as surface water was released from glaciers and polar ice. Paleoindian cultural developments in the Gulf Coastal Plain region, as in most areas of North America, appear to have been intimately related to these gradual but vast changes in the world climate and local environmental conditions.

Occupation of the Texas Gulf Coast during the terminal Pleistocene is evidenced by the recovery of several types of well-made, lanceolate, parallel-flaked projectile points such as Scottsbluff, Clovis, Plainview, Angostura, and possibly San Patrice. The presence of these distinctive projectile point types along the coastal plain appears to reflect activities that would typically have occurred in areas farther inland where the environment is characterized by a mixture of deciduous and pine woodlands (Aten 1983). According to Aten (1983), this type of habitat typically supports low-density human populations. Archeological evidence synthesized by Story (1990) from numerous counties composing the greater Gulf Coastal Plain in Texas, Louisiana, Arkansas, and Oklahoma supports the suggestion that the Paleoindian groups probably existed in small nuclear families or bands that migrated widely in pursuit of seasonal subsistence resources.

ARCHAIC PERIOD (6500 B.C.–A.D. 700)

Cultural developments adapted to widespread environmental change with the onset of the Holocene epoch. Changes in the world climate caused sea levels to rise, inland prairies to expand, and regional weather patterns to become more variable (Aten 1983). Generally termed the Archaic,

this next period of cultural development in the New World has been further subdivided into Early, Middle, and Late stages based on changes observed in the archeological record that appear to coincide with episodic shifts in the Holocene climate and environment. It is commonly thought that human lifestyles and subsistence strategies maintained patterns developed during the previous Paleoindian period, but with some notable differences.

Aten (1983) suggests that Early Archaic groups, like their Paleoindian predecessors, probably continued to migrate seasonally in small bands and relied on a generalized projectile point technology to facilitate their hunting and gathering of a variety of faunal and vegetal foodstuffs. Despite a paucity of intact Archaic components at sites in the upper Texas Gulf Coast region, it has been observed that Archaic lithic technologies appear to show an increased diversity of functional types and styles over those associated with the Paleoindian period. However, the level of craftsmanship and the use of fine exotic materials appear to have declined. In addition, the greater array of Archaic projectile point styles appears to reflect a greater degree of regional cultures. Story (1990) surmises that Archaic period human populations may have become more dense, with individual bands covering less overall territory on their seasonal rounds.

Differentiation between Early, Middle, and Late Archaic culture sites in the upper Texas Gulf Coastal region, without the benefit of sufficient associated cultural features and artifacts from which strong chronological dates and sequences can be derived, has been based largely on observation and comparison of projectile point styles associated with more-intact archeological contexts elsewhere in Texas and North America. The assumption has been that similar point styles are probably related chronologically despite sometimes-vast geographical distances. According to this reasoning, Early Archaic point types are usually considered to include Baird, Bell, Andice, and Wells, whereas Bulverde, Carrollton, and Trinity points are usually attributed to the Middle Archaic. Based on a relatively greater database for defining the Late Archaic, point types considered diagnostic of this cultural stage typically include Gary, Kent, Yarbrough, Ellis, Palmillas, and Refugio (Patterson 1979).

LATE PREHISTORIC PERIOD (A.D. 700–1519)

The Late Prehistoric, or Ceramic period, cultures experienced a relatively static environment. This period began with the adoption of ceramics and lasted until interaction between European and aboriginal populations became firmly established. Aten (1983) has divided the Late Prehistoric in the Galveston Bay area into six chronological periods based on ceramic seriation: Clear Lake, Mayes Island, Turtle Bay, Round Lake, Old River, and Orcoquisac. In Addicks Reservoir in northern Harris County, Wheat (1953) identified two Ceramic period components. This division was based on the continued use of Late Archaic dart point types in the earlier component and the addition of arrow points in the later component. Chipped stone artifacts from the Late Prehistoric include the continued use of Late Archaic dart point types.

The addition of Perdiz and Scallorn arrow points to the inventory marks the beginning of the Late Ceramic period. Ceramics of the earlier period may include Goose Creek Plain variety Anahuac, O'Neal Plain variety Conway, Mandeville Plain, Tchefuncte Plain, Goose Creek variety unspecified, and Tchefuncte Stamped. In the Late Ceramic period, the ceramic inventory may include San Jacinto Incised and Baytown Plain, varieties Phoenix Lake and San Jacinto (Aten 1983). It should be noted that several varieties of Goose Creek Plain as well as Goose Creek Incised (and Red-Filmed) and the occurrence of bone tempering span much of the Ceramic period.

HISTORIC PERIOD (A.D. 1519–1962)

Regional Native America

When Europeans arrived on the northern Texas coast, they encountered two major native groups, the Atakapa and the Karankawa Indians, who occupied separate territories divided in the area of the western shore of Galveston Bay. Specific tribes indigenous to this area include the Patiri and Akokisa (Stahman 2004:38). The Patiri tribe's territory extended from Huntsville to Houston with a center in Caney Creek, Harris County. A gathering of the Patiri, Bidai, Akakisa, and Deadose tribe occurred in Rockdale, Milam County between 1748 and 1749. Later, a smallpox epidemic killed the majority of the Patiri tribe; survivors may have merged with other tribes (Stahman 2004:38).

The Atakapa, speaking a language of the Tunican family, displayed traits closely related to the natives of southwestern Louisiana. The Karankawan groups spoke a language of the Coahuiltecan family and were more closely related to the Indians farther south in Texas and Mexico. In spite of differences in language and apparent cultural derivation, the Atakapa and Karankawa maintained similar cultural patterns (Newcomb 1983). Both groups were nomadic, although the Atakapa maintained semipermanent winter villages in the interior. The Atakapa subsisted on shellfish, fish, birds' eggs, wild plants, deer, and bear, while the Karankawa ate shellfish, turtles, marine and land plants, alligator, deer, bison, bear, and peccary. Conical huts and skin tents served as shelter for the Atakapa, while the Karankawa lived in portable windbreak-style huts. Atakapan technology included pottery, bows and arrows, dugout canoes, basketry, traps, manos and metates, drums and flutes, wooden bowls and utensils, and grass fiber textiles. The Karankawa also used pottery and the bow and arrow, along with dugout canoes propelled by poles, basketry, cane weirs, milling stones, drums and whistles, tambourines, lances, clubs, axes, and bone tools. Both groups buried their dead in mounds and left refuse middens, primarily composed of shell. Both wore breechcloths and skirts and decorated themselves with tattoos. Both groups were equally unprepared to protect themselves and their cultural traditions from European contact. By the late eighteenth century, both the Atakapa and Karankawa peoples were in serious decline (Newcomb 1983). However, several accounts suggest continued seasonal presence of Native American groups in Harris County well into the nineteenth Century (Stahman 204:48-89).

European Contact and Anglo-American Settlement

Spanish explorers Alonso Álvarez de Pineda (1519) and Alvar Núñez Cabeza de Vaca (1528) accomplished initial exploration of the Gulf of Mexico and the American Southwest. The Spanish Crown, in its quest to observe and record the character and economic potential of the territory and its people, sanctioned both explorers. This activity by Spain occurred within the context of greater colonial expansionist efforts undertaken by the primary Western European powers throughout the sixteenth century. Following Pineda's initial maritime effort to map the Gulf Coast, the earliest exploration of the Texas Gulf Coast territory was accomplished by de Vaca, who was shipwrecked in 1528 along with other members of an expedition in the Gulf of Mexico led by Pánfilo de Narváez (Weddle 1985).

Much historical speculation has occurred concerning whether the island of Malhado, upon which de Vaca's party was shipwrecked, is the current Galveston Island or nearby San Luis Island. In either case, he lived among the Indians for the next several years and probably visited much of Galveston Island and the surrounding region during the Indians' seasonal rounds before he decided to make his way toward Panuco in Mexico and eventually back to Spain (Story 1990). De Vaca's recollections of his adventures along the Texas Gulf Coast and in the American Southwest were published years later after his return to Spain.

De Vaca's account served, in turn, as the basis upon which Hernando De Soto (1539) and Luis de Moscoso (1542) conducted subsequent explorations of the region. However, by 1561, Spain was facing increasing difficulties in maintaining its few colonies in Florida. The relatively poor economic prospects for these colonies and increasing competition from other colonial powers quelled the Spanish Crown's interest in colonizing their Florida territories. As a result, the Texas Gulf Coast remained relatively uninhabited by Europeans for the next two centuries until the threat of increased French exploration in the territory stimulated the Spanish government to establish more-permanent settlements in the area (Weddle 1991). In 1685, René Robert Cavelier, sieur de La Salle, established Fort St. Louis along the Gulf Coast southwest of the project area (Tunnell and Ambler 1967). Plagued by disease, starvation, and Indian attacks, the end came for Fort St. Louis in late 1688 or early 1689.

In 1722, the Spanish established the mission of Nuestra Señora del Espíritu Santo de Zúñiga (also called La Bahía del Espíritu Santo) near the ruins of La Salle's Fort St. Louis in an attempt to Christianize the indigenous people. The mission was later moved to a site near the Guadalupe River, and in 1754 it was again moved, this time to Goliad. It was during this time that the Franciscan missionaries laid the foundation for the livestock industry of Texas. The missionaries' stock formed the nucleus from which vast herds of wild cattle and mustangs later developed in Texas (Roell 2009).

Whereas Pineda, de Vaca, and others developed maps of the greater Gulf Coast in the sixteenth and seventeenth centuries, Bénard de la Harpe (1721) completed the earliest detailed map of Galveston Bay during an eighteenth-century expedition. De la Harpe was seeking to reestablish La Salle's former trading post and fortress on Matagorda Bay.

Spain's defense of the region, then called Nuevo Santander, was to be achieved by establishing a series of missions and associated presidios for their protection across western, central, and eastern Texas. Mission Nuestra Señora de la Luz and its companion Presidio San Agustín de Ahumada composed the Spanish ecclesiastical outposts in the Galveston Bay area. This mission, also known as Mission Orcoquisac after a principal Indian village, was founded in about 1756. This mission met with considerable resistance from the local tribes in the area and was ordered to relocate several times before the mission and its presidio were abandoned in 1771 and officially discontinued in 1772 (Roell 2009).

With the United States's purchase of the Louisiana Territory from France in 1803, the long-running dispute over control of Texas shifted to include Spain and the United States, both of which claimed land extending between the Rio Grande and Nechés River. Increasing dissent against Spain's imperial control over New Spain gave rise to a series of revolutionary movements seeking to establish new independent nations in Mexico and Texas. Despite Spain's efforts at establishing a pair of military outposts just east of Galveston Bay called Atascosita and Salcedo, to limit foreign intrusions into the area, Mexican and Texan revolutionaries displaced the Spanish at Salcedo in 1811 and the Gutierrez-McGee expedition effectively took control of the Trinity River vicinity east of the project area in the following year (Richner and Bagot 1978).

Until 1821, when Mexico won its independence from Spain, the territory of Texas, which then extended well north and west of the current areas of New Mexico, Colorado, Kansas, Oklahoma, and Utah, remained a frontier of contention between Spain, Mexico, and the United States. Without sufficient political and military presence on the part of the Mexican government, this controversial region frequently attracted entrepreneurs and fugitives from Europe and adjacent upper and lower southern states along the Atlantic coast.

The earliest Anglo-American families arrived in the San Jacinto River basin as participants in a colonization effort led by Stephen F. Austin, first as a Spanish and later as a Mexican empresario. The colonists received grants of land in proportion to their family status and time of arrival in the colony. Some of the early colonists established the New Kentucky settlement along the San Jacinto River northeast of the project area, hoping to exploit the rich timberlands and shipping trade. Other colonists chose to settle farther west in this vicinity to farm the open prairie lands along Buffalo Bayou and Bear Creek.

While many of the region's early colonists settled on individual farmsteads that were sometimes distant from other settlers, others settled in less-isolated locales to be near people of the same

ethnicity or place of origin. Some of these locales developed over time into communities and towns that served as cultural, religious, and educational centers for the surrounding farm families. These early communities were often located along primary transportation routes through the area, such as the old Atascosita Road. As settlement in the area increased through the middle and latter nineteenth century, some of the older roads were abandoned and a network of newer roads and trails were developed.

Early historic settlers in northern and western Harris County subsisted by raising cattle and growing cotton, corn, and vegetables. Cotton was the principal cash crop through the end of the nineteenth century. However, severe weather events and gradual depletion of the soil's fertility prompted the experimental introduction of rice around the turn of the twentieth century (Hobaugh et al. 1989:367; Lobpries 1994:1). Although William Eule harvested the first rice crop on record in Texas in 1897 near Katy, the Seito Saibara family brought Japanese seed rice to the Texas Gulf Coast in 1904 and has been credited with establishing the Gulf Coast rice industry (Dethloff 2009). By 1909, Texas farmers were planting 96,315 ha (238,000 ac) of rice. With the benefit of mechanized agriculture practices applied after World War II, rice farmland in Texas peaked in 1954 at 259,808 ha (642,000 ac) (Lobpries 1995:75-77).

The suitability of the project area for rice farming is apparent on the 1918-1920 USGS topographic maps, which show the area between present-day US Highway 290 and SH 249 as a broad, flat prairie. The clay-rich soil in this area is suitable for both rice farm and ranch activities. Ranching and farming were often alternated periodically to improve the fertility of the land. Agricultural irrigation was introduced by William Eule around the turn of the twentieth century in order to overcome the uncertainties of rainfall in the region (Rylander 2009). The Gertie Rice Farm, located south of County Road 529 and east of the project area, provides an example of an early rice irrigation system with a rectilinear grid of canals supplying water to the rice field before it drains into the nearest creek. Much of the water needed to raise the rice crop was obtained from wells drilled in shallow, water-bearing sand strata. Low berms or levees were also constructed to help retain the water, particularly in the mid-twentieth century when heavy farming equipment greatly improved the farmer's ability to reshape the land.

Rose Hill, Texas

The Rose Hill community was established in the vicinity of the project area in the 1840s. This early community heavily depended on agriculture as its primary source of income and subsistence. Rose Hill was settled by P.W. Rose, one of Harrisburg County's first grand jury members. It is located 8 km (5 miles) west of Tomball and 56 km (35 miles) northwest of Houston in northern Harris County. The town was established in 1846 by German-born Johann Heinrich Theisz, who initiated a German settlement of four families on 81 ha (200 ac) of land. They founded one of Texas's oldest Lutheran congregations in 1852. Rose Hill, also known as Spring Creek and Rosehill, operated a post office from 1852 until 1905. By the 1880s, Rose Hill had three general stores, a blacksmith,

gristmill, sawmill, wagon maker, carpenter, and numerous cotton gins. By 1905, Rose Hill had a local school with one teacher and 47 students. The small community boasted nearly 300 residents in 1925, although these numbers declined during the 1930s (Hazlewood 1977). In the last 50 years Rose Hill has been home to ranchers and farmers, although in the 1980s, only a church and a cemetery remained in Rose Hill as people commuted to Houston and Tomball for work.

Rail transportation developed in this portion of Texas in the mid-nineteenth century. Harris County became one of the earliest areas in Texas to benefit from its arrival. Rail transportation greatly improved the means of marketing agricultural produce and enhanced the development of towns and communities located along the railroad's route. The nearby Houston and Texas Central Railway was extended through Hockley in 1857, providing impetus for development and expansion of the nearby town sites. With the advent of railroads also came increased support for Texas's publicly funded school system. Many small schools that previously served only a few families were combined and relocated to more-substantial towns, often located along the railroads.

IV. PREVIOUS INVESTIGATIONS

Numerous cultural resource management studies have been conducted in the region, including large-scale archeological survey, testing, and mitigation. These investigations have been conducted in association with the construction of Barker and Addicks Reservoirs. Aten (1983), Fields et al. (1983), and Stokes (1985) have presented reviews of previous research along the upper Texas coast. In addition, Moore et al. (1989) and Patterson (1995) have compiled extensive bibliographies for the archeology of this region.

RECORDS REVIEW

A site file review was conducted utilizing the files and maps at the Texas Archeological Research Laboratory (TARL) and the THC. The TARL records were reviewed for the location of recorded archeological sites in the vicinity of the project area. The THC files were examined for the locations of sites listed or determined eligible for listing on the NRHP and/or sites designated as SALs. The THC files were also examined to determine the number and location of Official Texas Historical Markers in the region. The Rose Hill (1980), and Tomball (1595), Texas, 7.5-minute USGS topographic maps were examined at TARL and the THC. Additionally, the Texas Historic Overlay (THO) and historic aerial photographs were reviewed for the possible location of any historic structures or features within the proposed project areas (Foster et al. 2006).

RESULTS OF RECORDS REVIEW

No previously-recorded archeological sites, locations of properties listed on the NRHP, sites designated as SALs, or Official Texas Historical Markers were found identified within the project APE as a result of in the records review. Although a record of the original survey of SH 249 was not found during the records review, records indicate that a resurvey of SH 249 was conducted in 1992 by the Federal Highway Administration within the portion of SH 249 crossing at Willow Creek; however, no archeological sites were recorded in the area during this resurvey (THC Restricted Access Archeological Sites Atlas Object ID 3593). The THO review resulted in the identification of historic structures present during the 1940s and as early as 1916 (Foster et al. 2006). These results are discussed in greater detail in the results section. Design modifications at the SH 249 Willow Creek crossing received concurrence of no effect on SALs and NRHP archeological historic properties on February 14, 2000. No other cultural resource surveys were located within the proposed project areas according to the records review.

V. FIELD METHODS

Atkins' field methods followed the *Archeological Survey Standards for Texas* (updated 2002) established by the Council of Texas Archeologists and adopted by the THC. Although the original scope for this project included archeological survey at four detention ponds, HCTRA has determined that detention ponds M1000-00-00 and Willow Creek Detention Pond-Alternative Site are not needed to fulfill project needs and were not surveyed as part of this investigation. The entirety of the project areas, including the Willow Creek mainlanes crossing and two detention ponds sites, were subjected to a pedestrian archeological survey, including visual surface inspection and shovel testing in areas with less than 30 percent visibility. All shovel tests were conducted on property owned or has an easement by Harris County. Shovel tests were excavated to a depth where pre-Holocene sterile substrates were encountered, if possible. Where clay soils were encountered, the shovel tests were excavated to 30 cm (11.8 inches). All soil matrices were sifted through 6.3-millimeter (¼-inch) mesh hardware cloth unless the matrix was dominated by clay. Clayey matrix was finely divided by trowel and visually inspected. A shovel test that yielded artifacts (culturally positive) was followed by shovel tests placed approximately 5 m (16.4 ft) apart along a transect in the four cardinal directions until two shovel tests absent of artifacts (culturally negative) were excavated, sterile soil was encountered at the ground surface, or a break in topography was found. Sites were delineated only within the project areas. Sites were given a temporary designation in the field. A site form was submitted to TARL and a permanent trinomial requested.

For each of the shovel tests, the following information was recorded on Atkins' shovel test logs: location, maximum depth, and the number of soil strata. For each soil stratum, thickness, texture, color, and the presence or absence and nature of cultural materials was recorded. No collection of surface or subsurface artifacts was proposed, so all potentially diagnostic artifacts were photographed to determine their cultural affiliation. All artifacts were identified in the field by the Project Archeologist, recorded by provenience (site, unit, layer, level, content, and date), and reburied in the shovel test unit. All shovel tests were backfilled upon completion.

VI. RESULTS OF INVESTIGATIONS

The archeological survey included a 100 percent pedestrian survey within the proposed project areas. This pedestrian survey was augmented with shovel testing in areas of higher ground that were not seasonally inundated or showed obvious signs of heavy disturbance. The proposed project area locations are discussed in detail in the sections below.

MAINLANES CROSSING AT WILLOW CREEK

The Willow Creek Crossing site consists of an area measuring approximately 182 m (599 ft) long by 109 m (358 ft) wide or a total of approximately 2.0 ha (4.94 ac). It is located at the intersection of Willow Creek and SH 249 (Appendix A, Sheet 3-4). This location showed evidence of heavy disturbances caused by the construction of the old SH 249 Bridge and roadway. Soils beneath the bridge consisted of sand over two layers of manmade materials that consisted of asphalt and concrete. Ground surface visibility at this location ranged from 0 to 40 percent with vegetation consisting of high grasses and some invasive species. The banks to the north and south of Willow Creek were inundated at the time of survey. A single shovel test was excavated at this location due to its disturbed nature. The shovel test was excavated to a depth of 30 cm below ground surface and showed heavily mixed and disturbed soils with concrete and asphalt throughout. The parcel was photographed for documentation and no additional shovel tests were excavated. No cultural materials were observed at this location. Representative photographs of this proposed location can be found in Appendix B, Sheet 1.

PILLOT GULLY DETENTION POND

The Pillot Gully Detention Pond site consists of an area measuring approximately 55 m (181 ft) long by 407 m (1,336 ft) wide or a total of approximately 1.85 ha (4.57 ac). It is located east of SH 249 approximately 100 m (328 ft) southeast of the intersection of SH 249 and Coons Road (Appendix A, Sheet 1-2). This location is currently a pine forest that probably was logged 30 years ago. A detention pond is located to the north of the proposed site and mechanical disturbances caused by logging were observed throughout. A raised platform encased by silt fencing that could have been used as a staging area for the construction of the detention pond was observed on the east end. Ground surface visibility at this location ranged from 0 to 40 percent. The vegetation community is associated with pine plantations and previous logging and included dense understory and remnant cut pines among planted pine. A total of three shovel tests were excavated to a maximum depth of 71 cm below ground surface. Soils consisted of mottled silty sandy clay loam followed by clay. The area was photographed for documentation. No cultural materials were observed at this location. Representative photographs of this proposed location can be found in Appendix B, Sheet 1.

WILLOW CREEK DETENTION POND

The Willow Creek Detention Pond site consists of an area measuring approximately 701.74 m (2,302.30 ft) long by 122.50 m (401.90 ft) wide or a total of 8.77 ha (21.26 ac). It is located just north of Boudreaux Road and east of SH 249 (Appendix A, Sheets 3–4). This location showed evidence of logging on the north side of the proposed project area south of Willow Creek and disturbances caused by logging and mechanical disturbances on the east side. The vegetation was very dense to the west and a small drainage pattern crossed the area in a south southwest direction. Ground surface visibility at this location was generally 0 to 30 percent with higher visibility of up to 90 percent in some areas; vegetation consisted of a dense overstory of mixed pine and hardwoods with an understory of a mix of native shrub dominated by yaupon (*Ilex vomitoria*). A total of 27 shovel tests were excavated to a maximum depth of 100 cm below ground surface. Soils consisted of sand to sandy loam soils underlain by sandy clay and clay soils. The parcel was also photographed for documentation. Three historic age archeological sites were recorded at this location and are described below. Representative photographs of this proposed location can be found in Appendix B, Sheets 2–6.

NEWLY RECORDED SITES

Site 41HR1129

Setting

Site 41HR1129 is a newly recorded historic trash concentration within an abandoned livestock watering tank (Appendix A, Sheet 3–4). The site is situated on the north side of Boudreaux Road in a circular depression containing historic trash in a nearly level, low-lying topography with a slope range of 0 to 5 percent (Appendix A, Sheet 3–4). The tract on which the site is located is currently fallow and forested (Appendix B, Sheets 2–3). The vegetation consists of a dense understory of yaupon (*Ilex vomitoria*) and vines with a canopy of pine and hardwoods (Figures 2 and 3). Ground surface visibility ranged from 0 to 30 percent throughout the site. Soils in the vicinity of the site are mapped as Wockley, Gessner, and Hockley soils with a surface texture of silty sand. Observed disturbances at the site have occurred as a result of seasonal flooding as indicated by moist, sticky, and mottled clay soils, erosion as indicated by the lack of topsoil, which has migrated away from the site location further downslope. In addition, large push piles of cut trees and the construction of two-track roads associated with logging activities, vandalism, and salvaging efforts as evidenced by attempted excavation of large housing materials have resulted in disturbances. Additionally, the construction of the watering tank has resulted in large amounts of disturbances as indicated by the obliteration of the natural strata at this location. A 1944 aerial photograph of the property indicates that structures associated with the site were present at this location at that time.



Figure 2. Site 41HR1129 dump, facing southwest.



Figure 3. Site 41HR1129 dump circular berm, facing northwest.

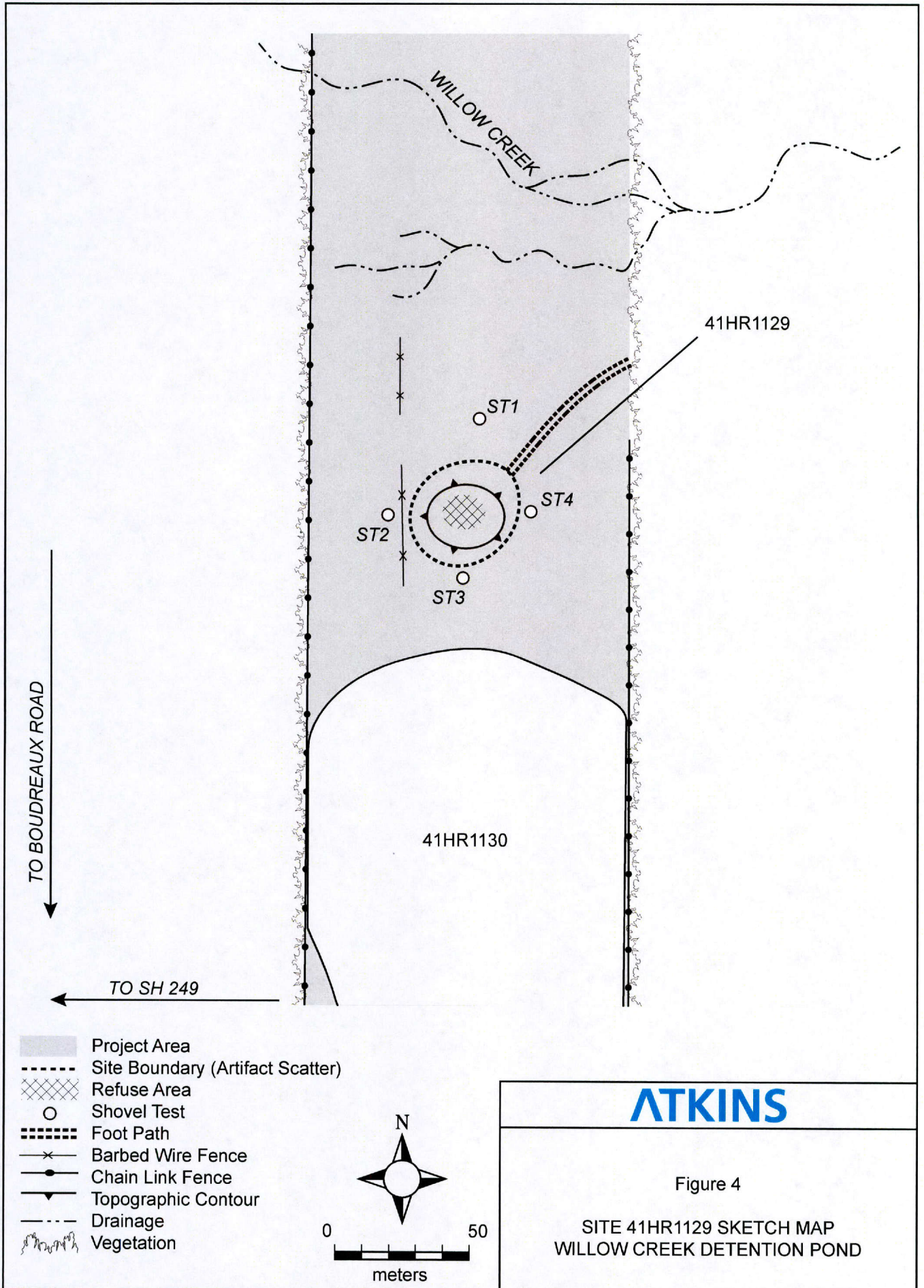
Work Performed

Site 41HR1129 was initially discovered during the survey of the proposed Willow Creek Detention Pond and was identified by a historic trash concentration within an abandoned livestock watering tank. The site dimensions, based on surface expression of cultural material, are approximately 31 m (101 ft) in length by 22 m (72 ft) in width (682 square meters; 7,272 square feet) (Figure 4). Due to the great deal of obvious disturbances listed above and the presence of moist, seasonally-inundated soils, Atkins archeologists were only able to excavate four shovel tests to delineate the site; they were all negative for cultural materials.

A variety of cultural material was observed on the surface and included 1940-circular wringer washing machine, gas stoves, ceramic light fixtures, milk glass, dish and saucer fragments, tin wash basins, ceramic wash basins, metal buckets, tin roofing sheets, wire, broken light bulbs, tires, miscellaneous car parts, various kitchen items, and tools (Appendix B, Sheets 2-3). Artifacts date from the early to mid-twentieth century based on diagnostic material observed at the site. In addition, the THO review conducted by Atkins indicated that a structure was not apparent at this location on any historic aerial photographs or topographic maps until the 1940s (Foster et al. 2006). A representative sample of the cultural material present is shown on Figures 5 and 6.

Discussion and Recommendations

Site 41HR1129 is a historic trash concentration consisting of a large dump site where trash started to be deposited upon abandonment of the watering tank. Based on the THO review and artifacts observed at the site, trash has been continuously deposited in the area from at least the mid-twentieth century to recent time. The site has been visited both for depositing trash and salvage. The site condition is very poor; the site has been disturbed by seasonal flooding, erosion, logging activities, vandalism, and salvaging efforts. In its present condition, the site does not appear to retain sufficient integrity; therefore, it does not appear eligible for inclusion in the NRHP under criteria A, B, C, or D and does not appear eligible for nomination as an SAL. Due to the level and breath of previous and ongoing disturbance, the research value of this site has been exhausted. Atkins recommends no further archeological investigation of this site.



ATKINS

Figure 4
 SITE 41HR1129 SKETCH MAP
 WILLOW CREEK DETENTION POND

Site 41HR1130

Setting

Site 41HR1130 is a newly recorded historic dump site. The site is located in a nearly level area with a slope range of 0 to 50 percent (Appendix A, Sheet 3-4). The site is located along the western edge of the tract and consists of a remnant oil and gas tank battery, which is currently used as a dumping site. The vegetation consists of a dense understory of yaupon (*Ilex vomitoria*) and vines and a canopy of mixed pines and hardwood (Figures 7 and 8). The ground surface visibility at the site was 0 to 90 percent. Soils in the vicinity of the site are mapped as Wockley, Hockley, and Gessner soils with a surface texture consisting of silty sand. Severe erosion and disturbances at this location are evident and attributable to seasonal flooding, vandalism, and bulldozing.

Work Performed

Site 41HR1130 was initially discovered during a survey of the proposed Willow Creek Detention Pond location and was identified by a historic trash concentration from the west end of the project area and along the eastern boundary. The site dimensions, based on the concentration of industrial debris, contiguous scatter of historic to modern trash, and historic trash dump, are approximately 25 m (82 ft) north-south by 23 m (75 ft) east-west (575 square meters; 6,150 square feet) (Figure 9). Eight shovel tests were excavated during delineation of the site; all were negative for cultural material.

A variety of cultural materials were observed scattered on the surface and included industrial grade 2.5-gallon solvent and oil containers, iron rods, 1-inch to 3-inch pipe, barbed wire, corrugated tin roof sheets, wire, concrete fragments, plastic bags, bottles, tubing, industrial detergent containers, housewares, clothes, and beer bottles (Figures 10 and 11). Cultural features associated with the site include the remnant concrete oil and gas tank battery pad, industrial debris concentration, historic to modern artifact trash scatter, and historic to modern trash dump. The THO review conducted by Atkins indicated that a structure was not apparent at this location on any historic aerial photographs or topographic maps until the 1940s (Foster et al. 2006). A representative sample of the cultural material present is shown on Figures 12 and 13.

Discussion and Recommendations

Site 41HR1130 is a historic dump site consisting of industrial debris and historic to modern artifact scatter and trash dump dating approximately to the 1940s. The site condition is very poor and only concrete slab remnants of the oil and gas tank battery remains along with a concentration of industrial debris and historic to modern trash. The area is subject to seasonal flooding and weathering and has been disturbed by acts of vandalism and bulldozing along the eastern fence line. In its present condition, the site does not appear to retain sufficient integrity and, therefore,



Figure 5. Site 41HR1129 dump, facing west.



Figure 6. Site 41HR1129 dump featuring discarded water heaters, facing northwest.



Figure 7. 41HR1130 remnant oil and gas tank battery , facing south.



Figure 8. 41HR1130 remnant oil and gas tank battery, facing west.

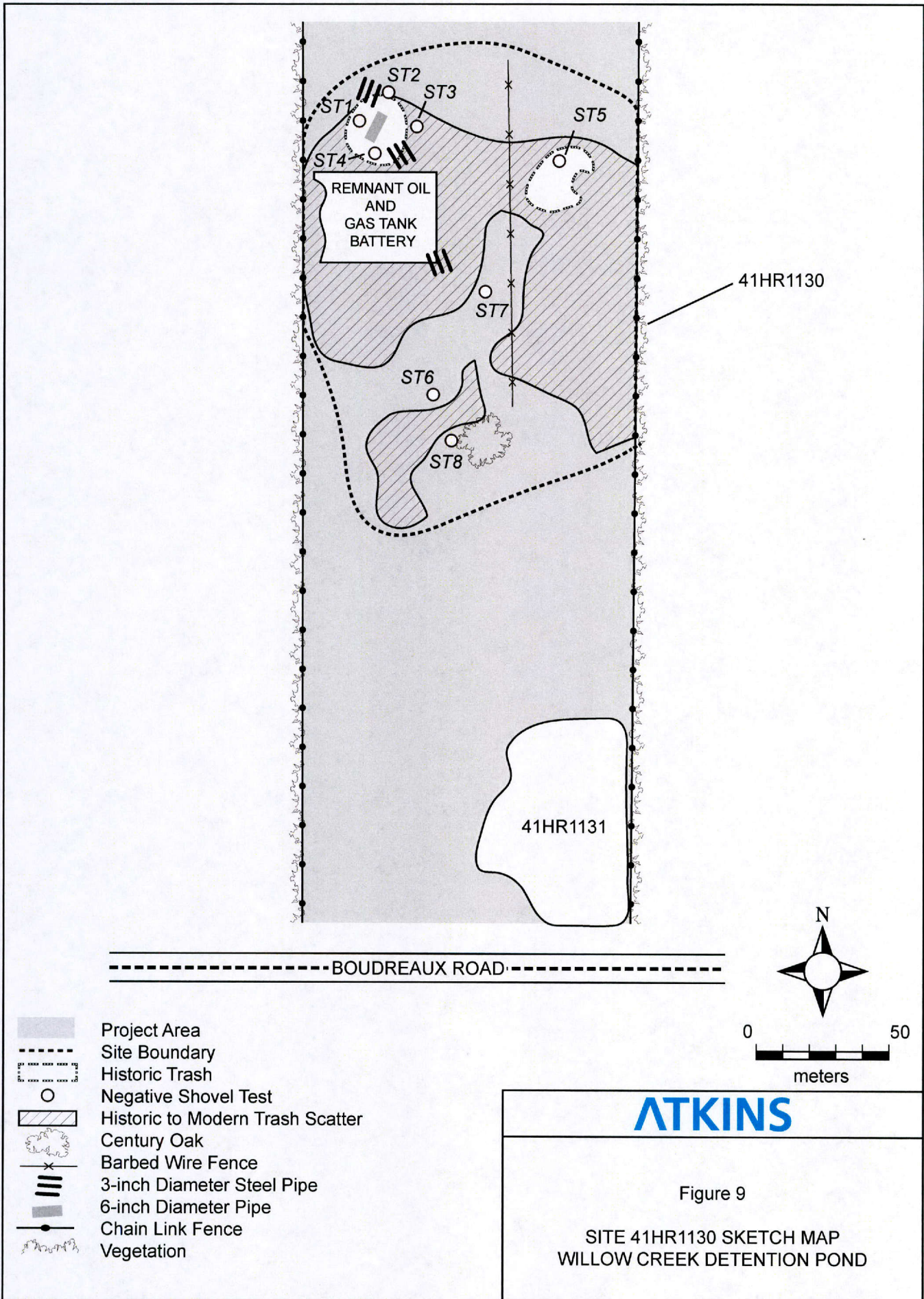




Figure 10. 41HR1130 industrial debris, facing west.



Figure 11. 41HR1130 mixed industrial debris and household trash, facing north.



Figure 12. 41HR1130 mixed industrial debris and household trash, facing west, northwest.



Figure 13. 41HR1130 east end, mixed industrial debris and household trash, facing east.

does not appear eligible for inclusion in the NRHP under criteria A, B, C, or D and does not appear eligible for nomination as an SAL. Due to the level and breath of previous and ongoing disturbance, the research value of this site has been exhausted. Atkins recommends no further archeological investigation of this site.

Site 41HR1131 Boudreaux Farm

Setting

Site 41HR1131, also known as Boudreaux Farm, is a newly recorded historic farm (Appendix A, Sheet 3–4). The site is situated approximately 183 m (600 ft) east of the intersection of SH 249 on the north side of Boudreaux Road on nearly level topography with a slope range of 0 to 5 percent (Appendix A, Sheet 3–4). The area on which the site is located is currently used as a fallow field and squatting as evidenced by a modern campsite located to the west of the site. The site consists of a water well and associated well shed with utility pole, two historic trash dumps, a modern trash dump, remnants of a structure's pier and beam foundation, and a remnant animal pen (Figures 14–18). For additional photographs see Appendix B, Sheets 4–6. In addition, an abandoned modern campsite was located within the boundaries of the site (Figure 19). The vegetation consists of a dense understory of yaupon (*Ilex vomitoria*) and vines and a canopy of pine and hardwoods. Ground surface visibility at the site ranged from 0 to 30 percent. Soils in the vicinity of the site are mapped as Wockley, Gessner, and Hockley soils with a surface texture of silty sand. The site has sustained heavy disturbances from clear cutting and bulldozing activities.

Work Performed

Site 41HR1131 was initially discovered during survey of the Willow Creek Detention Pond and was identified by the remnants of a small farm. The site consisted of a collapsed building located approximately 10 m (32 ft) from a century old oak tree. The building is oriented north-south and consisted of clap-board siding and corrugated tin roofing; it was situated on concrete piers and measured approximately 12 m (39 ft) long by 10 m (32 ft) wide. A well and associated well shed of corrugated tin is located approximately 8 m (26 ft) to the north northwest. The well and well shed measure 1 m (3.5 ft) long by 0.9 m (3 ft) wide by 1.2 m (4 ft) tall. A trash dump surrounded by mixed modern and historic trash scatter was located approximately 12 m (39 ft) northeast of the well shed. The site dimensions, based on surface expression and extant structures, are approximately 66 m (217 ft) north-south by 68 m (223 ft) east-west (4,480 square meters; 48,391 square feet) (Figure 20). The soils at the site were found to be greatly disturbed as a result of bulldozing and clear-cutting as evidenced by the large push piles of earth and cut trees. These soils were also found to be moist and seasonally inundated. Therefore, Atkins archeologists were only able to excavate two shovel tests in order to delineate the site; both were negative for cultural materials. A review of the 1916 Louetta Quadrangle topographic map indicates that a structure was present in the vicinity of site 41HR1131 at that time (Foster et al. 2006).



Figure 14. Site 41HR1131 Boudreaux Farm collapsed building, facing east.



Figure 15. Site 41HR1131 Boudreaux Farm well shed, facing northwest.



Figure 16. Site 41HR1131 Boudreaux Farm, historic trash dump, facing northwest.



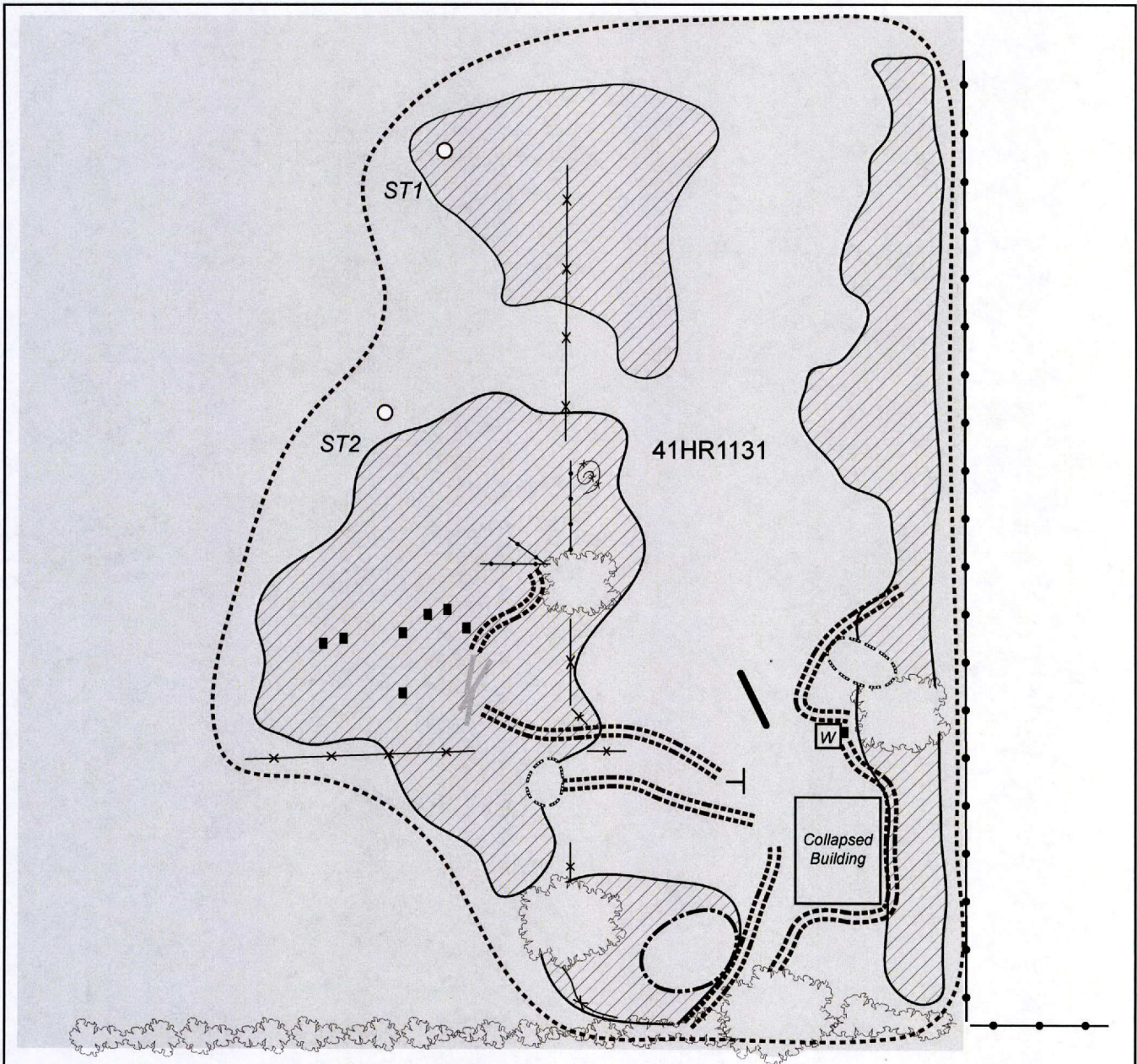
Figure 17. Site 41HR1131 Boudreaux Farm, remnant structural foundation piers, facing northwest.



Figure 18. Site 41HR1131 Boudreaux Farm, remnant livestock pen, facing northeast.

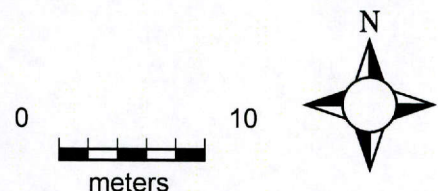


Figure 19. Site 41HR1131 Boudreaux Farm, abandoned modern campsite, facing northeast.



- Project Area
- Site Boundary
- Historic to Modern Trash Scatter
- Historic to Modern Trash Dump
- Shovel Test
- Foot Path
- Barbed Wire Fence
- Chain Link Fence
- Chicken Wire Fencing
- Water Well Shed
- Vegetation
- Clothes Line and T-pole
- Natural Gas Pipe
- Concrete Pier
- Modern Planks
- Abandoned Campsite (Modern)
- Century Oaks

----- BOUDREAUX ROAD -----



ATKINS

Figure 20
SITE 41HR1131 SKETCH MAP
WILLOW CREEK DETENTION POND

A variety of historic materials was observed at the site and included gas station signage, 2-inch white ceramic insulators, 3-inch-diameter ceiling ceramic light fixtures, cloth, insulated electric cord, ceramic toilet and sink, clothes, bed springs, wire glasses, round nails, concrete foundation pilings, modern plastic bags, bottles, food wrappers, 1-gallon jugs, bricks, and clear glass food containers. A representative sample of the cultural material present is shown on Figures 16 through 19 and Figure 21.



Figure 21. Site 41HR1131 Boudreaux Farm, historic trash dump, facing northeast.

Discussion and Recommendations

Site 41HR1131 is a historic farm that dates from at least 1916 based on the 1916 Louetta Quadrangle topographic map and artifacts and structures observed at the site. The site has been heavily disturbed by weathering, termites, seasonal flooding as well as bulldozing from construction of an oil and gas well yard, vandalisms, construction of fence line along property boundary, and salvage. In its present condition this site does not appear to retain sufficient integrity and, therefore, does not appear eligible for inclusion in the NRHP under criteria A, B, C, or D and does not appear eligible for nomination as an SAL. Due to the level and breath of previous and ongoing disturbance, the research value of this site has been exhausted. Atkins recommends no further archeological investigation of this site.

VII. CONCLUSIONS AND RECOMMENDATIONS

Atkins' archeologists recorded three archeological sites during the intensive survey of the Proposed Tomball Tollway (SH 249) Phase 1 (Sections 1 and 2) SH 249 and Associated Detention Ponds Project in Harris County, Texas. Site 41HR1129 consists of a historic trash dump; site 41HR1130 consists of a historic industrial and trash dump site; and site 41HR1131 consists of the remnants of a small historic farm. All three sites have undergone heavy disturbances caused by flooding, vandalism, seasonal flooding, salvage, and in some instances bulldozing and mechanical disturbance. As a result, none of the newly recorded sites appears eligible for inclusion in the NRHP under criteria A, B, C, or D and none are eligible for nomination as a SAL. Atkins recommends no further archeological investigation at any of these sites and that construction activities within the surveyed areas be allowed to proceed without further consultation.

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Appendix A

**Aerial and Topographic
Project Maps**

(Not for Public Disclosure)



Appendix B

**Representative Photographs
of the Project Area**



Figure B-7. 41HR1131 Boudreaux Farm building support beam, facing west.



Figure B-8. 41HR1131 Boudreaux Farm concrete chimney blocks, facing north.



Figure B-9. 41HR1131 Boudreaux Farm ceramic light fixture.



Figure B-10. 41HR1131 Boudreaux Farm bulldozed east wall, facing west.



Figure B-11. 41HR1131 Boudreaux Farm soft and hard bricks, facing south.



Figure B-12. 41HR1131 Boudreaux Farm miscellaneous glass bottles and food containers.

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