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Mechanical Scraping and Deep Testing of Three Locations within the Aliana Subdivision in Search of the Kirk's Point Cemetery, Fort Bend County, Texas

Tony Scott

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Mechanical Scraping and Deep Testing of Three Locations within the Aliana Subdivision in Search of the Kirk's Point Cemetery, Fort Bend County, Texas

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*Mechanical Scraping
and Deep Testing
of Three Locations within
the Aliana Subdivision
in Search of the Kirk's
Point Cemetery,
Fort Bend County, Texas*

LEAD AGENCY:

United States Army Corps
of Engineers (USACE),
Galveston District

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GRAY & PAPE
HERITAGE MANAGEMENT

SEPTEMBER 19, 2017



GRAY & PAPE
HERITAGE MANAGEMENT

Project No. 16-70718.001

**Mechanical Scraping and Deep Testing of Three Locations within the
Aliana Subdivision in Search of the Kirk's Point Cemetery,
Fort Bend County, Texas**

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ABSTRACT

In March 2017, Gray & Pape, Inc., of Houston, Texas, conducted mechanical backhoe scraping and trenching on property adjacent to Oyster Creek within undeveloped areas within the Aliana Subdivision, Fort Bend County, Texas. The backhoe testing was conducted to investigate a total of seven anomalies identified using ground penetrating radar during previous investigations conducted in 2006 and 2007. These seven anomalies contained radar signatures that were consistent with possible human burials and thus were considered to possibly be burials associated with the yet undiscovered location of the Kirk's Point Cemetery. The anomalies are located within three main locations identified as possible Kirk's Point 1, Kirk's Point 2, and Kirk's Point 3.

The Lead Agency for this project is the United States Army Corps of Engineers, Galveston District. The goal of this study was to assist Aliana Development Company, the United States Army Corps of Engineers, the Texas Historical Commission, and the Fort Bend County Historical Commission in determining whether or not intact cultural resources, specifically the potential for human burials, are present within areas proposed for construction, and if so to provide management recommendations for these resources. The investigation was undertaken in accordance with requirements set forth by Section 106 of the National Historic Preservation Act, specifically requirements set forth by 36 CFR 800. The procedures to be followed by the United States Army Corps of Engineers to fulfill the requirements set forth in the National Historic Preservation Act, other applicable historic preservation laws, and Presidential directives as they relate to the regulatory program of the United States Army Corps of Engineers (33 CFR Parts 320-334) are articulated in the Regulatory Program of the United States Army Corps of Engineers, Part 325 - Processing of Department of the Army Permits, Appendix C - Procedures for the Protection of Historic Properties. All fieldwork was completed through close coordination with the United States Army Corps of Engineers, the Texas Historical Commission, and the Fort Bend County Historical Commission. Work was conducted on private property and thus a Texas Antiquities Code permit was not required prior to conducting fieldwork.

Scraping and trenching by means of a mechanical backhoe were conducted at each anomaly location. Soils were found to be consistent with Norwood series loam. These soils along with the field conditions at the time of investigation provided excellent visibility for identifying potential features. However, the investigation produced no indication of human burials or other potentially cultural features.

Based on the negative results of the investigation, Gray & Pape, Inc. recommends no further work be required regarding the recorded radar anomalies. Gray & Pape, Inc. recommends that the permitting process with the United States Army Corps of Engineers be updated with this new information and that any remaining cultural resource issues, such as a management plan for potentially eligible Site 41FB306, are addressed prior to these areas being developed.

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1.0 INTRODUCTION

In March 2017, Gray & Pape, of Houston, Texas, Berg-Oliver Associates, Inc. (Berg-Oliver) of Houston, Texas, on behalf of Aliana Development Company, performed mechanical scraping and deep testing investigations of three locations within the Aliana Subdivision in Fort Bend County, Texas. The three locations contain a total of seven anomalies identified through the use of ground penetrating radar (GPR). The recorded anomalies were determined to be consistent with GPR readings of human burials and thus were considered to possibly represent burials associated with the yet undiscovered location of the Kirk's Point Cemetery.

The Lead Federal Agency for this project has been identified as the United States Army Corps of Engineers (USACE), Galveston District. The procedures to be followed by the USACE to fulfill the requirements set forth in the National Historic Preservation Act (NHPA 1966), other applicable historic preservation laws, and Presidential directives as they relate to the regulatory program of the USACE (33 CFR Parts 320-334) are articulated in the Regulatory Program of the USACE, Part 325 - Processing of Department of the Army Permits, Appendix C - Procedures for the Protection of Historic Properties. All fieldwork and reporting activities were completed with reference to State laws and guidelines. Investigation and site identification followed Texas standards.

The goal of this study was to assist Berg-Oliver, Aliana Development Company, the Fort Bend County Historical Commission (CHC), the Texas Historical Commission (THC), and the USACE in determining whether or not intact cultural resources, specifically the potential for human burials, are present within areas proposed for construction, and if so to provide management recommendations for these resources (United States Department of the Interior, National Park Service [USD, NPS] 1983). The project is located on private

property and thus did not require a Texas Antiquities Code permit prior to investigation.

1.1 Project Overview

The project is defined as three locations located along the north bank of Oyster Creek within the *Clodine, TX* United States Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figure 1-1). These three locations are designated as Kirk's Point 1, 2, and 3 (KP1, KP2, and KP3) and were identified through pedestrian and GPR survey in 2006 and 2007. Each location has between 2 and 3 anomalies that produced signals that could be consistent with a burial shaft or other cultural feature. Anomalies were recorded at depths between 61 and 137 centimeters (2 and 4.5 feet) (Table 1-1).

Table 1-1. Anomalies recommended for further investigation based on the GPR survey results of 2006-2007.

Location	Original Anomaly Number	2017 Anomaly Number	Recorded Depth (Feet)
KP1	A5-6	KP1-1	3.5
KP1	A5-1	KP1-2	2.2
KP1	A5-5	KP1-3	2.0-3.0
KP2	A4-6	KP2-1	4.3
KP2	A4-7	KP2-2	4.0
KP3	A4-4	KP3-1	2.0
KP3	A4-3	KP3-2	3.3

1.2 Report Organization

This report is organized into seven numbered chapters. Chapter 1.0 provides an overview of the investigation areas. Chapter 2.0 presents an overview of the environmental setting and geomorphology of the investigation areas.

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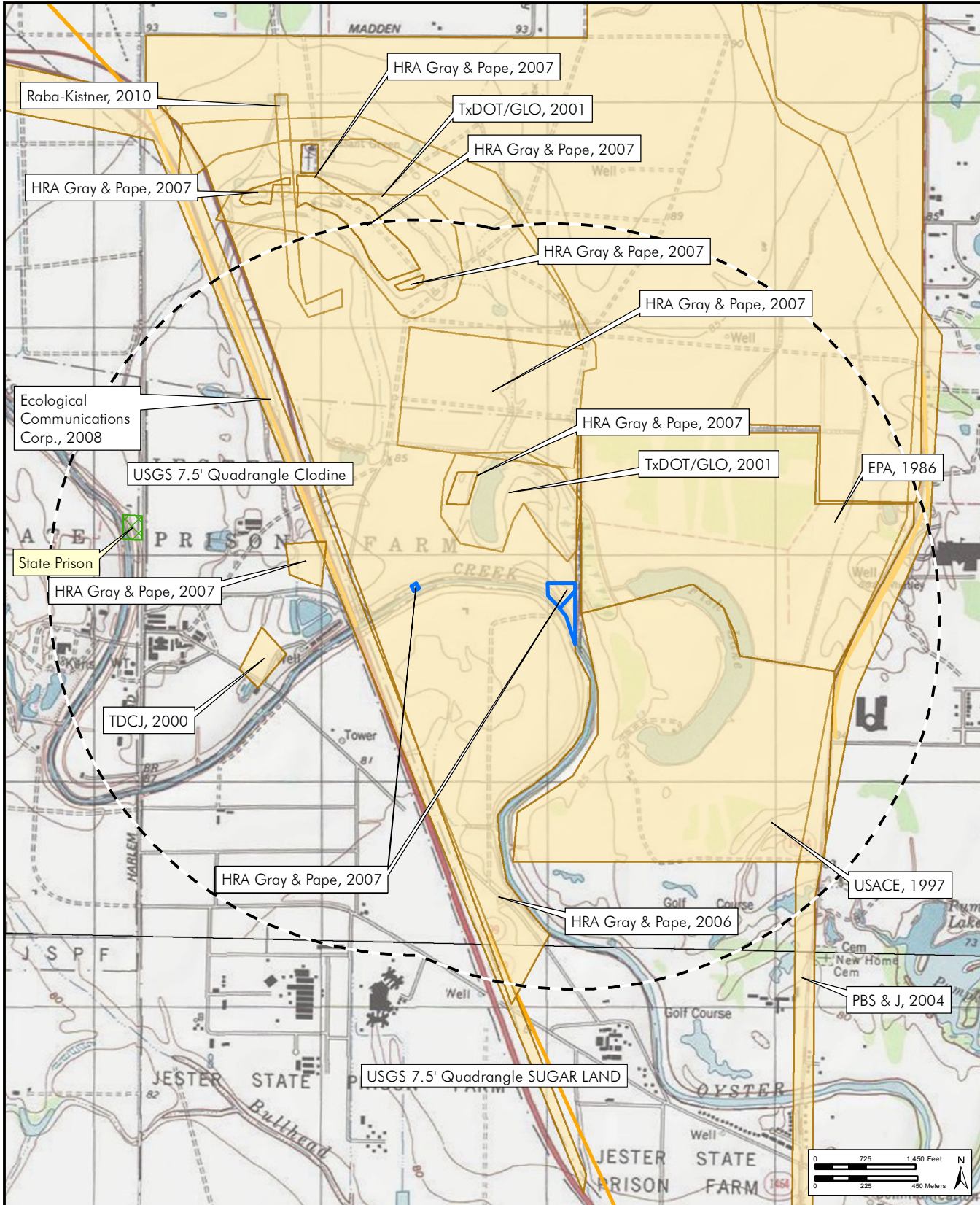



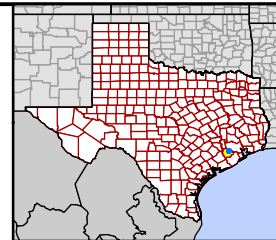


Figure 1-1
Project area locations in
Fort Bend County, Texas.

-  Kirk's Point Investigation Areas
-  1.6-Km (1-Mi) Research Radius
-  Previously Recorded Cemetery Boundary
-  Previously Recorded Area Investigations
-  Previously Recorded Linear Investigations



Chapter 3.0 presents a discussion of the cultural context. Chapter 4.0 presents the research design and methods developed for this investigation. The results of this investigation are presented in Chapter 5.0. Chapter 6.0 presents a summary and provides recommendations based on the results of field investigation. A list of literary references cited in the body of the report is provided in Chapter 7.0.

1.3 Personnel

Tony Scott served as the Project Manager and Principal Investigator. Fieldwork was completed by Tony Scott and Crew Chief Jacob Hilton. The content of this report was

prepared by Tony Scott. Report graphics were prepared by Tony Scott and Duncan Hughey and the report was edited and produced by Jessica Bludau.

1.4 Acknowledgements

Gray & Pape would like to convey a special thank you to Travis Stone, Tyler Stone, and Colby McClary of Aliana Development Company; Charles Kelly and Bruce Grethen of the Fort Bend CHC; William Martin of the THC; Jerry Androy of the USACE; and David Sherrill of Berg-Oliver, for their much appreciated guidance, support, and assistance over the course of the project.

2.0 ENVIRONMENTAL CONTEXT

2.1 Physiography and Geomorphology

The project area is within the Texas Coastal Plain which makes up part of the larger Gulf Coastal Plain. The Gulf Coastal Plain is a level to gently sloping region extending from Florida to Mexico. The Texas Coastal Plain reaches as far north as the Ouachita uplift in Oklahoma and as far west as the Balcones escarpment in central Texas (Barnes 1992; Aronow 1992; University of Texas, Bureau of Economic Geology [UT-BEG] 1992, 1996). The basic geomorphic characteristics of the Texas coast and associated inland areas, which includes Fort Bend County, resulted from depositional conditions influenced by the combined action of sea level changes from glacial advance in the northern portions of the continent and subsequent downcutting and variations in the sediment load capacity of the region's rivers. Locally, Fort Bend County is underlain by relatively recent sedimentary rocks and unconsolidated sediments ranging in age from the Miocene to Holocene (Abbott 2001; Van Siclen 1991).

The project area is located along the north bank of Oyster Creek. In the vicinity of the project, Oyster Creek is a meandering perennial stream prone to occasional flooding (see Abbott:123-124). Typical cross-sections of Oyster Creek in the area reveal levee and floodbasin assemblages on the outer side of meander loops, and point bar deposits in the interiors of meander loops (see Abbott:123). This natural pattern, which is typical of streams developing on broad low floodplains (see Bloom 1978:234-239) is also characterized by oxbow lakes and cutoff meanders, which are visible along Oyster Creek in and around the project area (National Environmental Title Research [NETR] 2017).

2.2 Climate

The project area belongs to the humid subtropical climate zone characterized by hot summers and mild to cool winters without any regular dry season. On average, annual precipitation for the closest major city, Sugar Land, is 13.59 centimeters (50.35 inches) distributed relatively evenly throughout the year. The average annual temperature is 21.8° Celsius (71.3 °Fahrenheit) with an annual maximum temperature of 27.4° Celsius (81.3 °Fahrenheit) and an annual minimum temperature of 16.3° Celsius (61.4 °Fahrenheit). Summer peaks average at 94.4 °F and winter troughs average at 34.7° Celsius (45.6 °Fahrenheit) (National Oceanic and Atmospheric Administration [NOAA] 2017).

2.3 Flora and Fauna

The Gulf Coast Prairies and Marshes are inhabited by a high diversity of species due to the ecoregion's large number of habitats, temperate climate, and relative abundance of rainfall. It is characterized by inland tallgrass prairies, riverine woodlands and coastal sedges, rushes and salt grass marshes. The region is home to many resident and migratory birds and several species of furbearers and reptiles (Texas Parks and Wildlife 2017).

2.4 Soils

Soils in the project area developed on sandy paleolevees of the ancestral Brazos River and are underlain by clays, sandy clays, and sands of the Pleistocene age Beaumont formation (Abbott 2001; Aronow 1992; Barnes 1992; Van Siclen 1991). Soils mapped for the project areas specifically consist of Norwood silt loam, a generally younger soil developed on Quaternary alluvium of Holocene and Pleistocene age. A general profile of this soil series displays a surface layer Ap1 of light brown (7.5YR 6/4) loam to a depth of 10

centimeters (4 inches) followed by an Ap2 layer of brown (7.5YR 4/2) loam to a depth of 25 centimeters (10 inches). This is followed by approximately 99 centimeters (40 inches) of silt loam subsoil which includes several B horizons including a yellowish brown (10YR 5/4) Bw; reddish yellow (7.5YR 6/6) Bk; reddish yellow (7.5YR 6/6) BC1; light brown (7.5YR 6/4) BC2; and brown (7.5YR 5/4) BC3 to a depth of 124 centimeters (49 inches). Clay content increases in the BC3 before culminating in an Ab horizon of brown (7.5YR 4/2) clay, after which the material transitions to very fine sandy loam (SSS NRCS USDA 2017).

2.5 Land Use

An early aerial photograph circa 1953 shows agricultural fields extending right up to the north banks of the creek at the time (NETR 2017). Areas KP2 and KP3 appear to have been kept as pasture up to the time of the initial archaeological survey in 2005. KP1 appears to have become overgrown by at least 2002. Areas KP1 and KP2 have since become overgrown by grass and shrubs due to the avoidance measures put into place in 2006-2007. KP1 has not become overgrown but has accumulated a surface layer of sand due to run-off from an adjacent access road located to the north.

3.0 CULTURAL CONTEXT

Between the San Bernard River and Sabine Lake, most prehistoric sites near the coast consist of shell middens found in estuaries or exposed in cutbanks along streams (Aten 1983; Patterson 1985). Inland sites are more similar to generalized open campsites. In both areas, sites are found near stream channels. Historic sites tend to reflect farm or homesteads, generally dating to the mid-nineteenth century and are typically found on terraces or uplands. Due to the historic focus of the investigation, the following summary concentrates on the Historic Context of the project location and specifically the Knight family and their connection to Kirk's Point. For a broader description of the area's cultural history and the source of the current summary see Foradas, 2007.

3.1 Colonel James Knight, His Daughter Lucinda, and Kirk's Point

Colonel James Knight was born in 1787 in North Carolina. He was also one of the Old Three Hundred, and migrated via Alabama and New Orleans to join the party that founded Austin's Colony in 1821. He is remembered for his service in the Texas Revolution, and later as County Safety Supervisor (Handbook of Texas Online 2010; Smithwick 1900). In 1824, Knight and his business partner and friend Walter C. White, were given a headright, the Knight & White League, located north of the Brazos across from Richmond (Wharton 1939: illustration 12). Knight and White then purchased the Jane Wilkins League on March 8, 1836 (Office of the Fort Bend County Clerk 1836, 1838). Wharton (1939:130) notes Knight owned land on his own headright (the Knight & White League), as well as much of the land on the Jane Wilkins League "and had a plantation and a ranch and prairie home" (Wharton 1939:130).

Knight and White set up a trading post at Fort Bend in their land grant, owned a company store in San Felipe, and managed a schooner that regularly visited ports on the Brazos. They were among the area's most successful businessmen and were known to own land in a number of counties and to be land speculators as well as successful traders (Handbook of Texas Online 2010; Smithwick 1900; Wharton 1939). By 1850 Knight's plantation was one of the 16 most valuable in the County, assessed at a value of over \$10,000 (Wharton 1939:126).

In 1830, Knight's daughter Lucinda was born. Her life is described in Wharton (1939:130-134). She was fostered by Colonel Knight's niece, Mrs. Adeline Kirk Patton and her husband Rev. John Patton, until she was old enough to be sent to a convent. Upon her return from the convent at the age of seventeen (ca. 1847), her father later built her a prairie home east of the Jones Creek Plantation on the uplands of the Knight and White League.

Lucinda died in 1857, followed by the death of her father James Knight in 1858. Both are said to have been buried at Kirk's Point (Handbook of Texas Online 2010; Wharton 1939). The location is so named due to its use by the Wright and Norfleet Kirk families, relatives of the Knights. The location of Kirk's Point is currently unknown. Information contained in Wharton (1939) states that the Kirks were promised a home on property owned by Knight and thus brought their families, spending their first winter in the Oyster Creek Community at the location. Wharton then states that the families died of the measles that same winter and were buried at the location. Wharton was not able to ascertain the whereabouts of the cemetery but did gather a few clues. Information gathered by THC Steward, Robert Crosser (Foradas and

Sick, 2007: Volume II Appendix B), found it difficult to identify a parcel which matches all the descriptors of the location contained in Wharton. However, Crosser suggests the location is most likely within parcels under the ownership of Knight family descendants, which they retained into the twentieth century. This includes property containing the project areas.

4.0 FIELD METHODOLOGY

Gray & Pape designed the current methodology to investigate GPR anomalies identified during previous investigations of the project areas that contained grave-like geometries.

4.1 Site File and Literature Review

Background review and literature research were conducted during previous phases of cultural resources management investigations conducted on the property in 2005 and 2007 and reported in Foradas (2007) and Foradas and Sick (2007). A series of archival sources were identified during the initial intensive pedestrian survey and these were expanded on during subsequent eligibility testing. These sources were investigated in order to gain a more detailed understanding of historical events on the property and in the region. Archival sources included the chain of title, completed using Fort Bend County archives, deeds and records on file in the Office of the Fort Bend County Tax Assessor, the memoirs of Clarence R. Wharton, historic correspondence preserved by members of the Knight and Kirk families, records of the Freedmen's Bureau, Texas Department of Criminal Justice, and other State and Federal Agencies concerning the parcels. Local newspapers and genealogical records were also consulted to learn more about individuals and events associated with the parcel.

Historic topographic and aerial maps were reviewed in order to identify any historic changes to the landscape within the project areas. Historic maps of Texas and Texas counties were reviewed in order to better understand the history of the region and to identify any potential historic trails and important historic sites located or crossing the project area. In addition, Texas General Land Office (TxGLO 2017) files and maps were consulted to identify past land owners of the

property area and existing pipelines or other energy related structures.

A number of ethnographic informants familiar with the history of the sites were contacted during the Phase I portion of the project. These individuals were contacted for additional information regarding the history of the sites and for additional references familiar with these sites. Oral historical research of tenant farmers and TDCJ corrections personnel focused on the understanding of prison era land use and detailed mapping of modern disturbances. Interviews of Pleasant Green Missionary Baptist Church parishioners, Fort Bend Museum, Fort Bend County Archaeological Society, Fort Bend County Genealogical Society and other individuals familiar with these parcels focused on identifying the location of graves, historic habitations and other activity loci. Interviews of individuals familiar with possible location of Kirks Point cemetery were conducted in order to identify and delineate possible locations of Kirk's Point along Oyster Creek.

The previous background literature searches included a review of previously conducted cultural resource investigations, previously recorded archaeological sites, and historic markers and historic structures eligible for listing on the National Register of Historic Places (NRHP) within a 1.6-kilometer (1-mile) radius of the Phase I project area. Site file research was done by consulting online research archives maintained by the THC. The results of those searches are not duplicated here due to the more specific scope of the current effort but can be found in Foradas (2007) and Foradas and Sick (2007).

4.2 Field Methods

Fieldwork consisted of backhoe scraping and trenching to determine whether or not unmarked graves are located within the project

areas. First, the GPS positions recorded for each anomaly during the 2007 investigations were pinpointed using a Trimble 6000 GEOXH model GPS connected to a Zephyr Model 2 antenna, which allowed sub-meter accuracy. Areas around each location were flagged with tape. A backhoe equipped with a smooth-bladed bucket measuring approximately 0.6 meters (2 feet) wide and operated by an experienced operator was used for the shallow scraping at each of the seven anomaly locations. The shallow scraping was followed by deep trenching to confirm the preliminary results of scraping. Trenches were between 2 meters (7 feet) long to 5.5 meters (18 feet) long, 1.25 meters (4 feet) wide, and up to approximately 2 meters (7 feet) deep. Soils were removed in a controlled fashion so that any evidence of buried cultural materials or burial shafts could be identified and recorded. Descriptions of soil texture and color

followed standard terminology and the Munsell (2005) soil color charts. All the field data was recorded on appropriate field forms. Maps of the plan views of the shallow scraping areas and representative profiles of the test trenches were drawn in the field and GPS points of opened areas were taken at each corner. Both scraping areas and the deep tests were backfilled after excavations and documentations of them were completed.

No new or previously recorded sites were identified during investigation. No cultural artifacts were identified during the investigation of the project thus no laboratory analysis has been completed or was required for the project. The project does not fall under the conditions of the Texas Antiquities Code; thus, project documents, notes, photographs, and maps are housed at Gray & Pape.

5.0 RESULTS OF INVESTIGATIONS

The goal of this study was to assist Aliana Development Company, the United States Army Corps of Engineers, the Texas Historical Commission, and the Fort Bend County Historical Commission in determining whether or not intact cultural resources, specifically the potential for human burials, are present within areas proposed for construction, and if so to provide management recommendations for these resources.

5.1 Previous Investigations in the Project Areas

In 2005, HRA Gray & Pape, LLC. (HRA Gray & Pape), of Houston, Texas, performed an intensive pedestrian survey on approximately 777 hectares (2,044.7 acres) of property within the former Harlem State Prison Farm, north and south of Oyster Creek in Fort Bend County, Texas (Figure 1-1). This survey area includes the current project. The 2005 investigation included excavation of 919 shovel tests and 80 test trenches and cutbank inspections. As a result of the survey, five previously recorded sites were revisited. In addition, 10 previously unrecorded archaeological sites and 13 isolates were recorded. HRA Gray & Pape recommended that buffer zones be set up around several sites to allow eligibility testing, as well as a search for graves associated with the Pleasant Green Missionary Baptist Church (Site 41FB281), and Kirk's Point Cemetery (Foradas 2007).

Between 2006 and 2007, geophysical survey and eligibility testing took place on four sites located within the Aliana property (Sites 41FB280, 41FB281, 41FB304, and 41FB306). In addition, three possible locations of the Kirk's Point Cemetery (KP1, KP2, and KP3) were also subjected to geophysical survey. Geophysical survey was conducted by H2B Engineering, Inc. (H2B) who conducted GPR survey at each site location as well as at the three possible Kirk's Point Cemetery

locations (KP1, KP2, and KP3). The GPR survey was supplemented by an additional soil conductivity meter (SCM) survey performed by Section 6 THC Steward, Mr. Robert Crosser, and Section 5 THC Steward, Dr. Dick Gregg (see Foradas and Sick 2007: Volume II, Appendix B). HRA Gray & Pape performed eligibility testing of archaeological sites by means of mechanical scraping, trenching, and hand-dug excavation units.

The three possible cemetery locations as well as an archaeological site that overlaps location KP2 were recommended for avoidance as detailed in the Comprehensive Cultural Resources Management Plan (CCRMP) developed for the project (Foradas and Sick 2007: Appendix A). What follows are summaries of each possible Kirk's Point Location as detailed in Foradas and Sick (2007).

5.1.1 KP1 Project Area

Location KP1 is situated along the eastern project boundary north of Oyster Creek on the same paleolevee landform as Site 41FB306 and KP2 (Figure 5-1). The location was planned to be avoided and set aside as green space from the inception of the Aliana project. As such, the area was not shovel tested during intensive pedestrian survey. However, it was surveyed with GPR and SCM during this project, and three subsurface anomalies (KP1-1, KP1-2, and KP1-3), were identified there. It was recommended that the KP1 area be avoided under conditions set forth in the CCRMP.

5.1.2 KP2 Project Area

Location KP2 is situated east of an old oak tree stump immediately north and adjacent to Site 41FB306 and approximately 122 meters (400 feet) northwest of location KP1 (Figure 5-1). The GPR and SCM data from KP2 suggested

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Overview of investigated anomalies within the KP1, KP2, and KP3 avoidance areas and the location of Site 41FB306.

that two subsurface features (KP2-1 and KP2-2) with grave-like geometry and orientation were present east of the oak tree. Location KP2 also occupies a slightly higher elevation than KP1 and is located on a small “point” on the generally broad and flat paleolevee landform. Based on these data, the potential for graves at the KP2 was determined to be moderate to high. Due to these findings and the identification of an adjacent potentially eligible archaeological site (41FB306), the location was recommended for avoidance in perpetuity under conditions specified in the CCRMP.

5.1.3 KP3 Project Area

Location KP3 is situated further upstream and at a lower elevation than the KP1 and KP2 (Figure 5-1). However, this locality also produced two subsurface anomalies of interest (KP3-1 and KP3-2) when surveyed with GPR and SCM. It is also associated with a small concrete slab and several willow trees, which are still commonly planted as funerary markers. Due to surface and subsurface evidence of possible mortuary features associated with KP3, this location was also recommended for avoidance in perpetuity under conditions specified in the CCRMP.

5.2 Results of Field Investigations

Field investigation was conducted on March 22, 2016, and required 20 person hours to complete. In keeping with the previous work conducted, the project areas were divided into three main areas, KP1, KP2, and KP3, with each anomaly within an area given a corresponding sequential number (KP1-1, KP1-2, etc.). The subsurface testing strategy, as outlined in Chapter 4.0, Section 4.2 (Field Methods), was implemented for each anomaly. As a result, a total of seven scrape areas were opened with a deeper trench completed within each centered over the corresponding anomaly GIS point. The damp conditions of the Norwood loams identified in the investigated areas due to rains the week prior

resulted in soils that offered excellent viewing capability to identify features, should any be present. However, none of the scrapes or trenches was positive for grave shafts or other cultural features.

5.2.1 KP1 Results

Although the KP1 project area was largely overgrown at the time of survey (Figure 5-2), the location was able to be reached with the aid of the backhoe clearing a path through the dense brush from a nearby former access road.



Figure 5-2. Overview of Location KP1. View is to the southeast.

5.2.1.1 KP1-1

Scraping at anomaly KP1-1 covered an area that measured approximately 3 meters (10 feet) north-south and 3 meters (10 feet) east-west at the widest points (Figure 5-3). Scraping began at the surface and continued to a depth of approximately 60 centimeters (24 inches) at which point a trench was started in the center of the scraping area. This was continued to a maximum depth of approximately 150 centimeters (5 feet) below surface, well below the recorded depth of the anomaly at 107 centimeters (3.5 feet). Further, the soils and soil conditions at the time of excavation were optimal for feature identification such as grave outlines however none were observed.

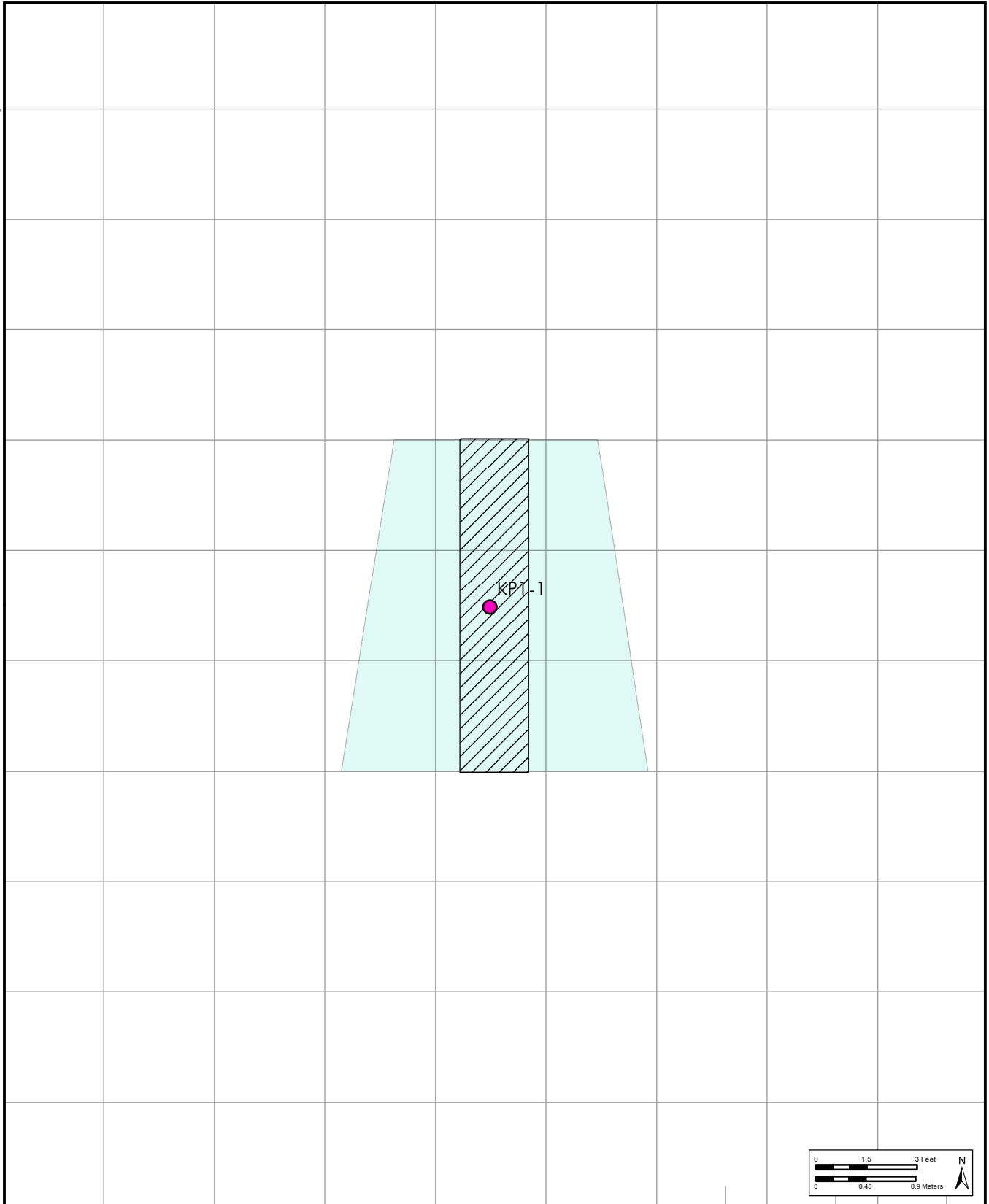


Figure 5-3
Planview of excavations at Anomaly KP1-1

- Anomalies
- 1-Meter Grid
- Scrape Area
- ▨ Deep Test

Soil profiles observed in the excavation consisted of a Stratum I of 7.5YR 4/3 brown silt loam to a depth of 25 centimeters (10 inches) followed by a Stratum II of 7.5YR 4/6 strong brown fine sandy loam to a depth of 35 centimeters (14 inches). Stratum III contained a layer of 7.5YR 6/4 light brown fine sand to a depth of 60 centimeters (24 inches) followed by a Stratum IV layer of 7.5YR 4/6 strong brown fine sand to a depth of 75 centimeters (30 inches). The excavation concluded with a Stratum V of 5YR 4/6 yellowish red fine sandy loam to a depth of 150 centimeters (59 inches) at which point the excavation was stopped once it was clear that no cultural features existed at the location (Figure 5-4).

5.2.1.2 KP1-2

Scraping at anomaly KP1-2 covered an area that measured approximately 2 meters (6.5 feet) north-south and 3.5 meters (11.5 feet) east-west at the widest points (Figure 5-5). Scraping began at the surface and continued in small increments to a depth of approximately 140 centimeters (4.5 feet) below surface, well below the recorded depth of the anomaly at 67 centimeters (2.2 feet). Further, the soils and soil conditions at the time of excavation were optimal for feature identification such as grave outlines however none were observed.

Soil profiles observed in the excavation consisted of a Stratum I of 7.5YR 4/6 strong brown silt loam to a depth of 10 centimeters (4 inches) followed by a Stratum II of 7.5YR 4/4 brown silt loam to a depth of 15 to 20 centimeters (6 to 8 inches). Stratum III contained a layer of 5YR 4/4 reddish brown silty clay loam to a depth of 35 centimeters (14 inches) followed by a Stratum IV layer of 5YR 5/3 reddish brown sand to a depth of 140 centimeters (55 inches) below surface at which point the excavation was stopped once it was clear that no cultural features existed at the location (Figure 5-6).

5.2.1.3 KP1-3

Scraping at anomaly KP1-3 covered an area that measured approximately 5 meters (16.5 feet) north-south and a maximum of 5 meters (16.5 feet) east-west at the widest points (Figure 5-7). Scraping began at the surface and continued to a depth of approximately 60 centimeters (24 inches) at which point a trench was started in the center of the scraping area. This was continued to a depth of approximately 140 centimeters (4.6 feet) below surface, well below the recorded depth of the anomaly at 76 centimeters (2.5 feet). This trench was expanded to the south, resulting in a trench measuring approximately 4 meters (13 feet) long and 1.5 meters (5 feet) wide. Soils and soil conditions at the time of excavation were optimal for feature identification such as grave outlines however none were observed.

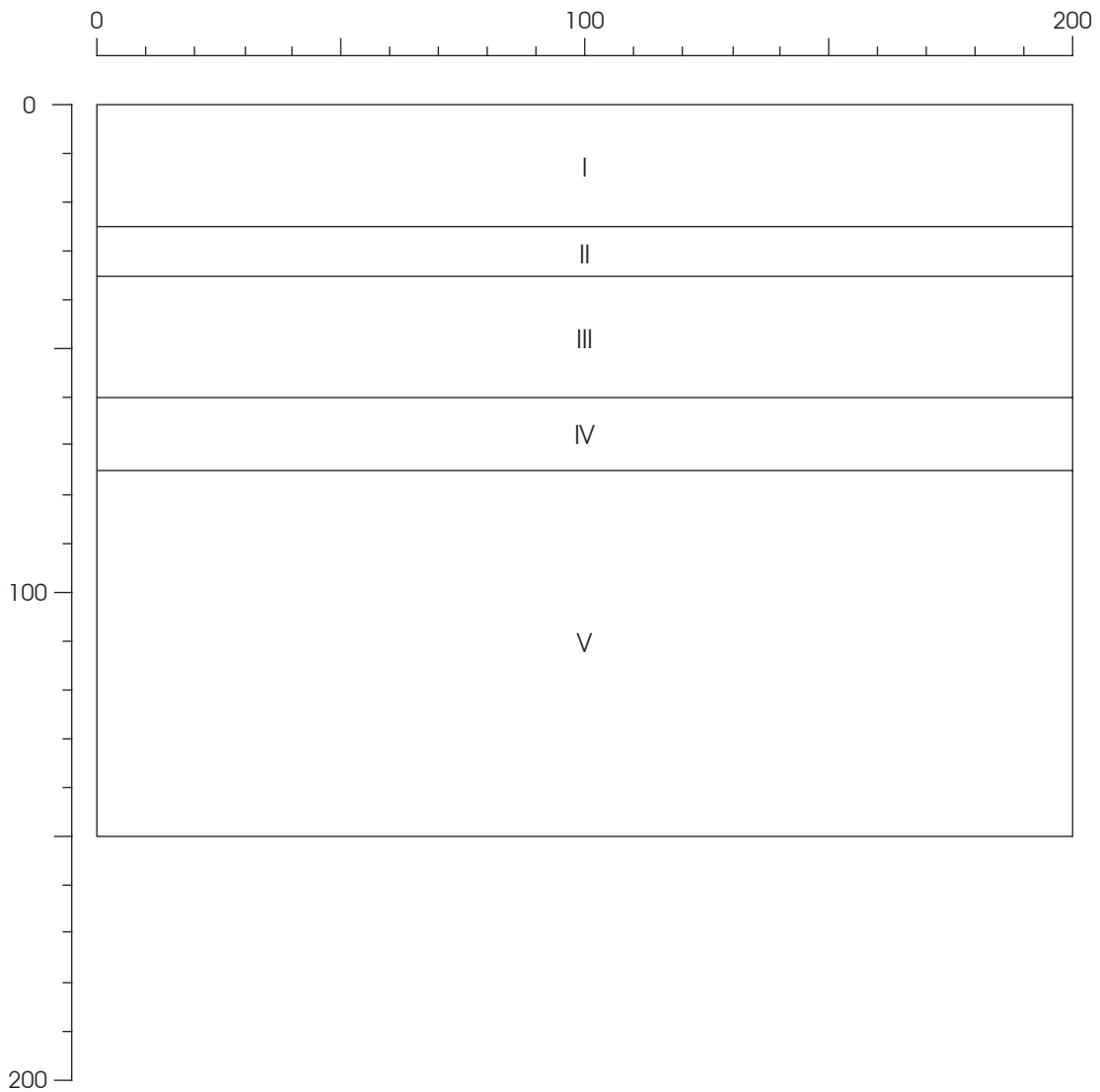
Soil profiles observed in the excavation consisted of a Stratum I of 7.5YR 4/4 brown silt loam to a depth of 40 centimeters (16 inches) followed by a Stratum II of 5YR 5/3 reddish brown clay loam to a depth of 50 centimeters (20 inches). Stratum III contained a 5YR 4/4 reddish brown sandy loam to a depth of 65 centimeters (25.6 inches) followed by a Stratum IV of 7.5YR 4/4 brown fine sand to a depth of 90 centimeters (35 inches). Stratum V consisted of 7.5YR 6/4 light brown sand to a depth of 115 centimeters (45 inches) and was followed by a Stratum VI of 7.5YR 4/4 sand to a depth of 140 centimeters (55 inches) at which point the excavation was stopped once it was clear that no cultural features existed at the location (Figure 5-8).

5.2.2 KP2 Results

Like KP1, the KP2 project area was largely overgrown at the time of investigation. The location of the anomalies as well as the adjacent archaeological site was surrounded by orange fencing to ensure no disturbances to the location per the CCRMP (Figure 5-9). However, the location was easily reached from the adjacent pasture to the north.



I	(0-25 cmbs)	7.5YR4/3 Brown silty loam;
II	(25-35 cmbs)	7.5YR4/6 Strong brown fine sandy loam;
III	(35-60 cmbs)	7.5YR6/4 Light brown fine sand;
IV	(60-75 cmbs)	7.5YR4/6 Strong brown fine sand;
V	(75-150 cmbs)	5YR4/6 Yellowish red fine sandy loam.



South wall profile of excavation KP1-1.

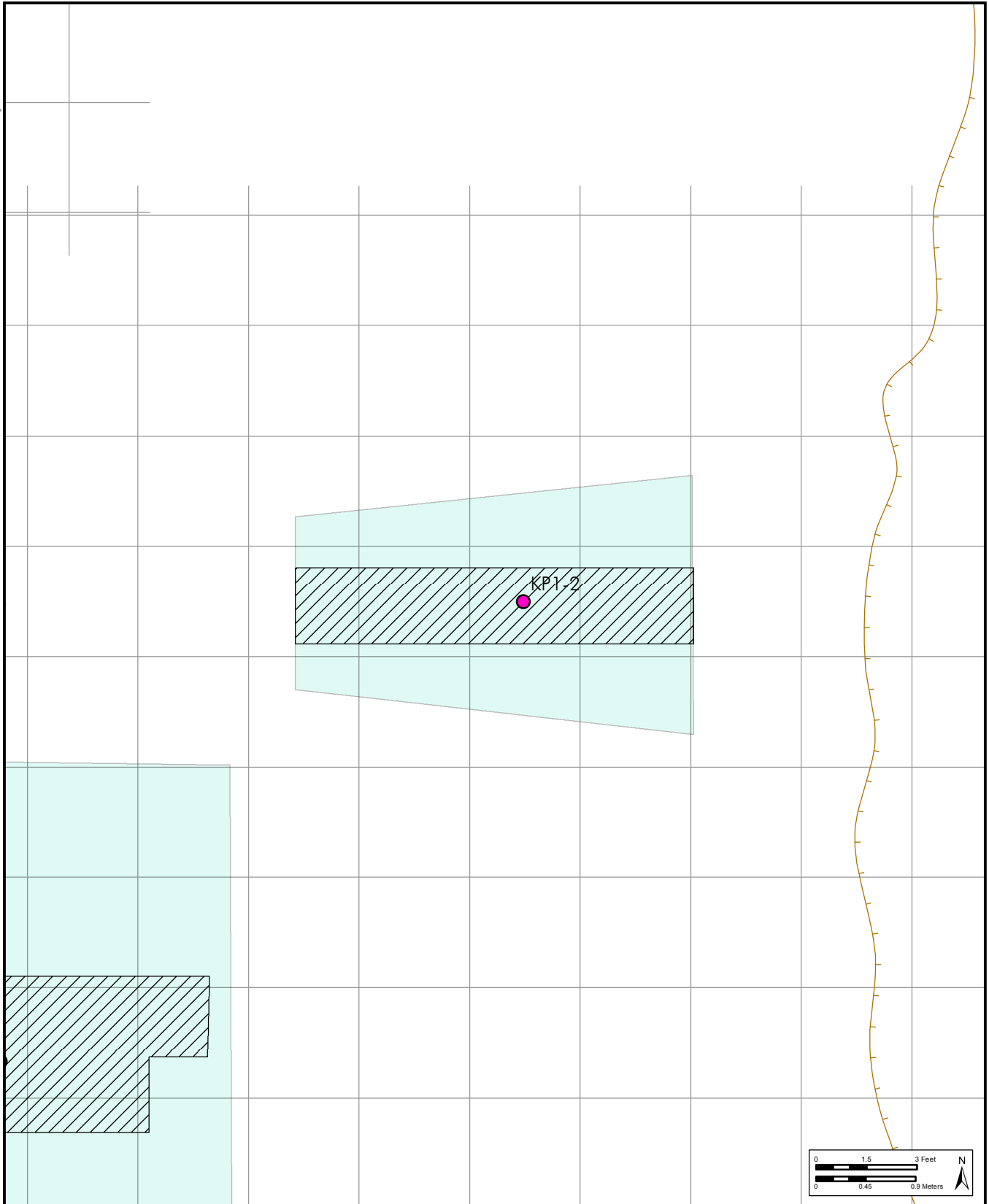





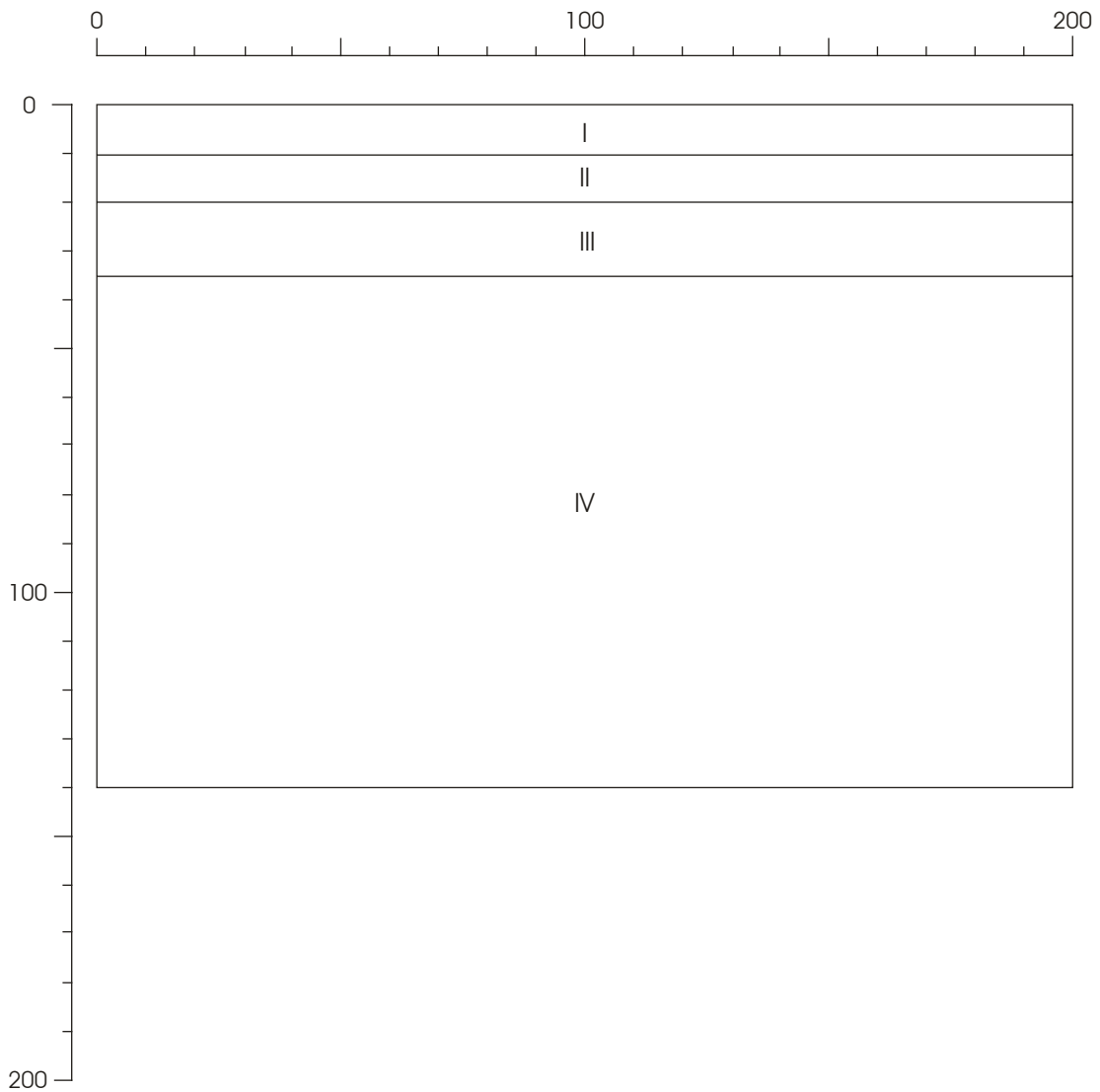


Figure 5-5
Planview of excavations at Anomaly KP1-2

-  Anomalies
-  1-Meter Grid
-  Scrape Area
-  Deep Test
-  Cut Bank of Canal



- I (0-10 cmbs) 7.5YR4/6
Strong brown silty loam;
- II (10-20 cmbs) 7.5YR4/4
Brown silty loam;
- III (20-35 cmbs) 5YR4/4
Reddish brown silty clay loam;
- V (35-140 cmbs) 5YR5/3
Reddish brown sand.



North wall profile of excavation KP1-2.

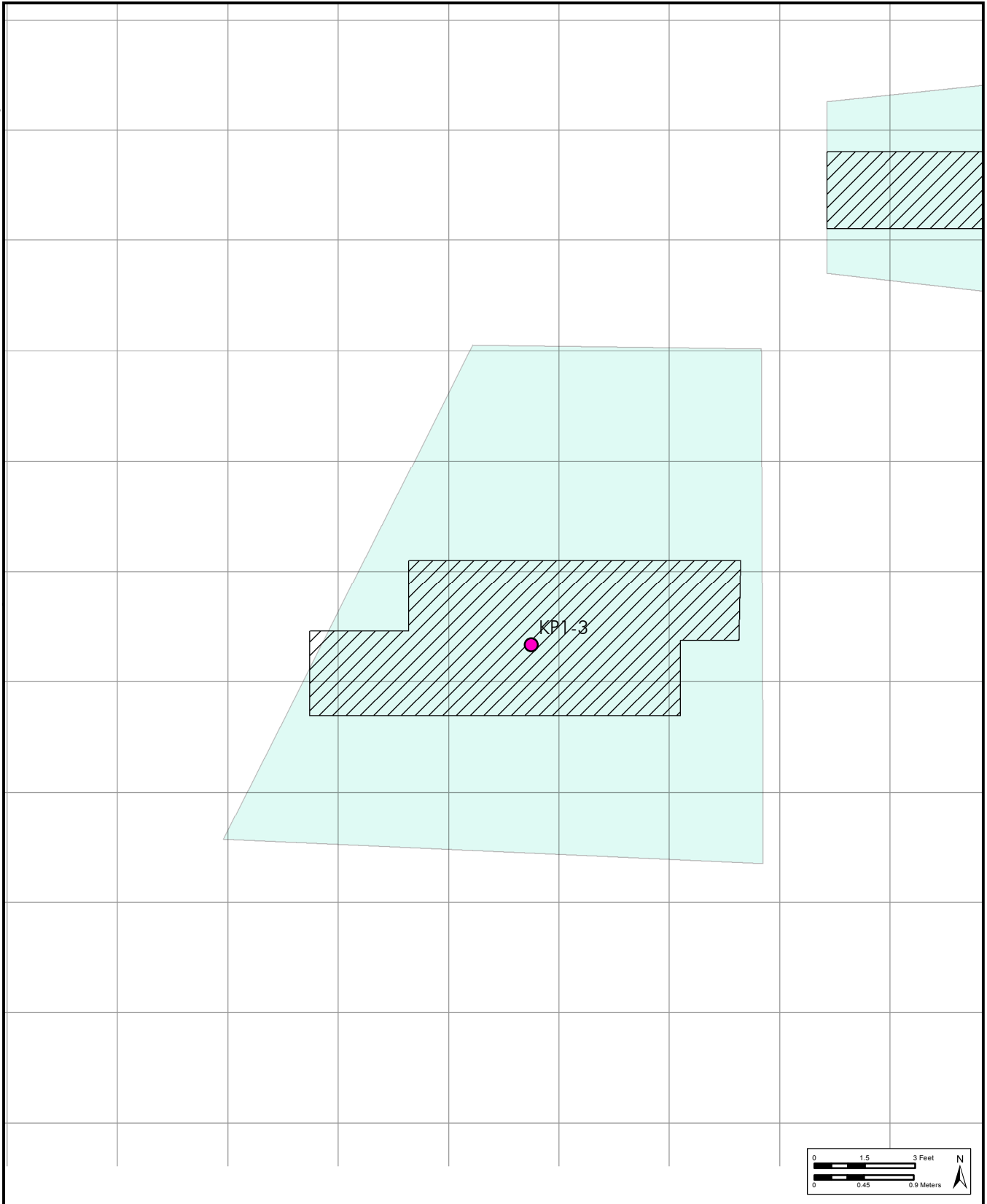
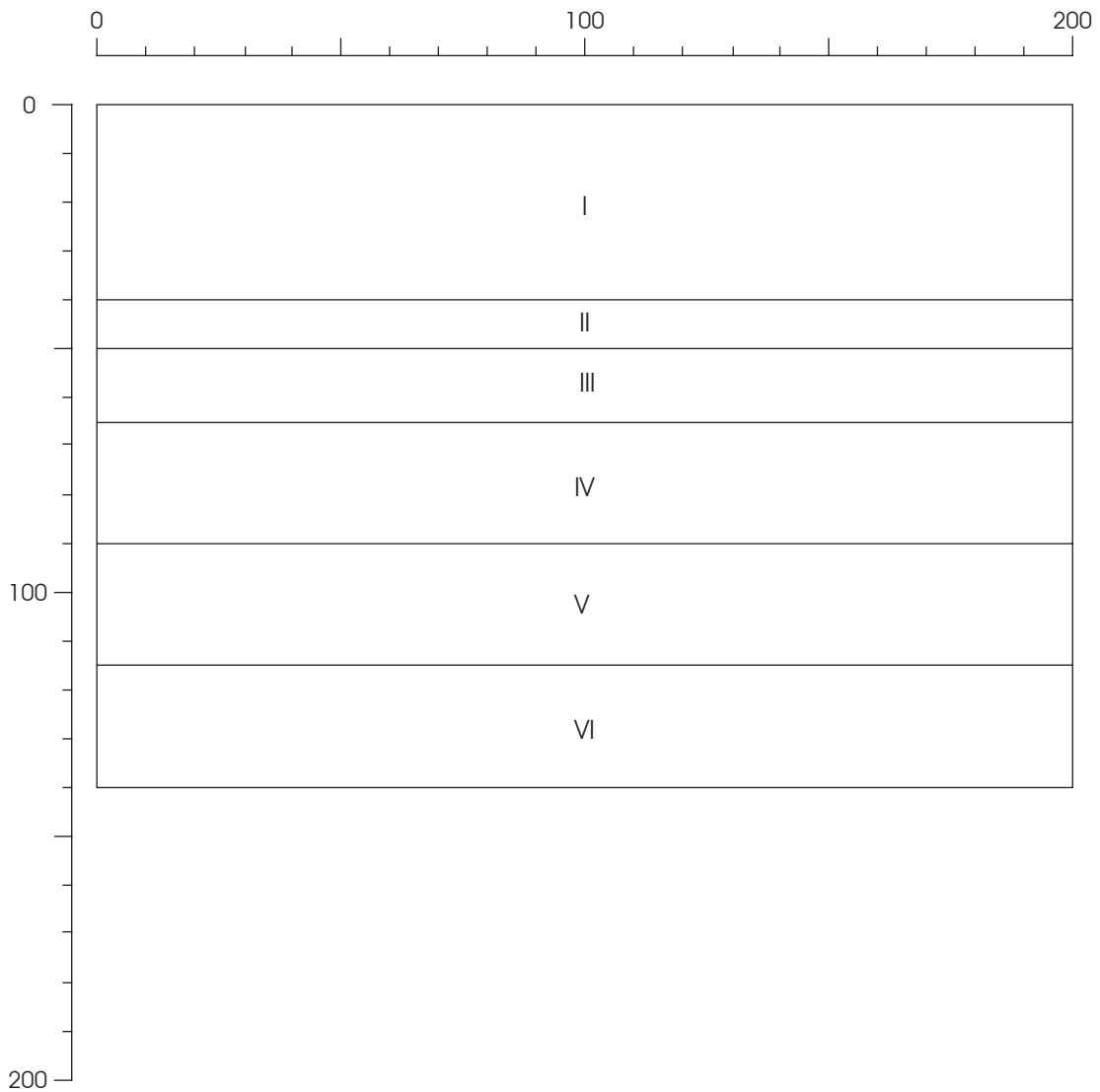


Figure 5-7
 Planview of excavations at Anomaly KP1-3

- Anomalies
- 1-Meter Grid
- Scrape Area
- ▨ Deep Test



I	(0-40 cmbs)	7.5YR4/4 Brown silt loam;
II	(40-50 cmbs)	5YR5/3 Reddish brown clay loam;
III	(50-65 cmbs)	5YR4/4 Reddish brown sandy loam;
IV	(65-90 cmbs)	7.5YR4/4 Brown fine sand;
V	(90-115 cmbs)	7.5YR6/4 Light brown sand;
VI	(115-140 cmbs)	7.5YR4/4 Brown sand.



North wall profile of excavation KP1-3.



Figure 5-9. Overview of Location KP2. View is to the south.

5.2.2.1 KP2-1 and KP2-2

Excavations at Location KP2 were extended to cover both Anomaly KP2-1 and KP2-2 locations, resulting in a single seamless scrape and trench. Scraping covered a total area that measured approximately 6 meters (10 feet) north-south and a maximum of 2 meters (6.5 feet) east-west at the widest points (Figure 5-10). Scraping began at the surface and continued to a depth of approximately 60 centimeters (24 inches) at which point a trench was started in the center of the scraping area. This was continued to a depth of approximately 180 centimeters (4.6 feet) below surface, below the recorded depth of the anomalies at between 1.2 and 1.4 meters (4 and 4.5 feet). Soils and soil conditions at the time of excavation were optimal for feature identification such as grave outlines however none were observed.

Soil profiles observed in the excavation consisted of a Stratum I of 5YR 4/4 dull reddish brown silt loam to a depth of 20 centimeters (8 inches) followed by a Stratum II of 5YR 4/4 dull reddish brown silt clay loam to a depth of 70 centimeters (27.5 inches). Stratum III consisted Stratum III contained a 5YR 3/3 dark reddish brown silty clay loam to a depth of 80 centimeters (31.5 inches). A small pocket of water accumulation was identified between Stratum III and Stratum IV. This accumulation area measured

approximately 35 centimeters (14 inches) long and deep in profile and consisted of the same 5YR 3/3 dark reddish brown silty clay loam although wetter than the surrounding material and contained many snail shells. Stratum IV of 5YR 4/6 reddish brown fine sandy loam to a depth of 180 centimeters (35 inches), at which point the excavation was stopped once it was clear that no cultural features existed at the location (Figure 5-11).

5.2.3 KP3 Results

The KP3 project area was not overgrown at the time of investigation but was covered by approximately 30.5 centimeters (12 inches) of sand that had eroded from an adjacent access road located above the anomaly areas to the north. Two willow trees were located adjacent to the target anomalies (Figure 5-12), the roots of which caused some obstruction during scraping.

5.2.3.1 KP3-1

Anomaly KP3-1 was located near two willow trees. Scraping at anomaly KP3-1 covered an area that measured approximately 2.5 meters (8.2 feet) northwest-southeast and 6 meters (19.7 feet) southwest-northeast at the widest points (Figure 5-13).

Scraping began at the surface and continued to a depth of approximately 40 centimeters (16 inches). Trenching began after that depth, with the trench being placed directly over the anomaly. This was continued to a maximum depth of approximately 120 centimeters (4 feet) below surface, and was terminated after the water table was reached. This depth is well below the recorded depth of the anomaly at 61 centimeters (2 feet). Further, the soils and soil conditions at the time of excavation were optimal for feature identification such as grave outlines however none were observed.

Soil profiles observed in the excavation consisted of a Stratum I of 5YR 5/4 reddish brown sand fill to a depth of 30 centimeters

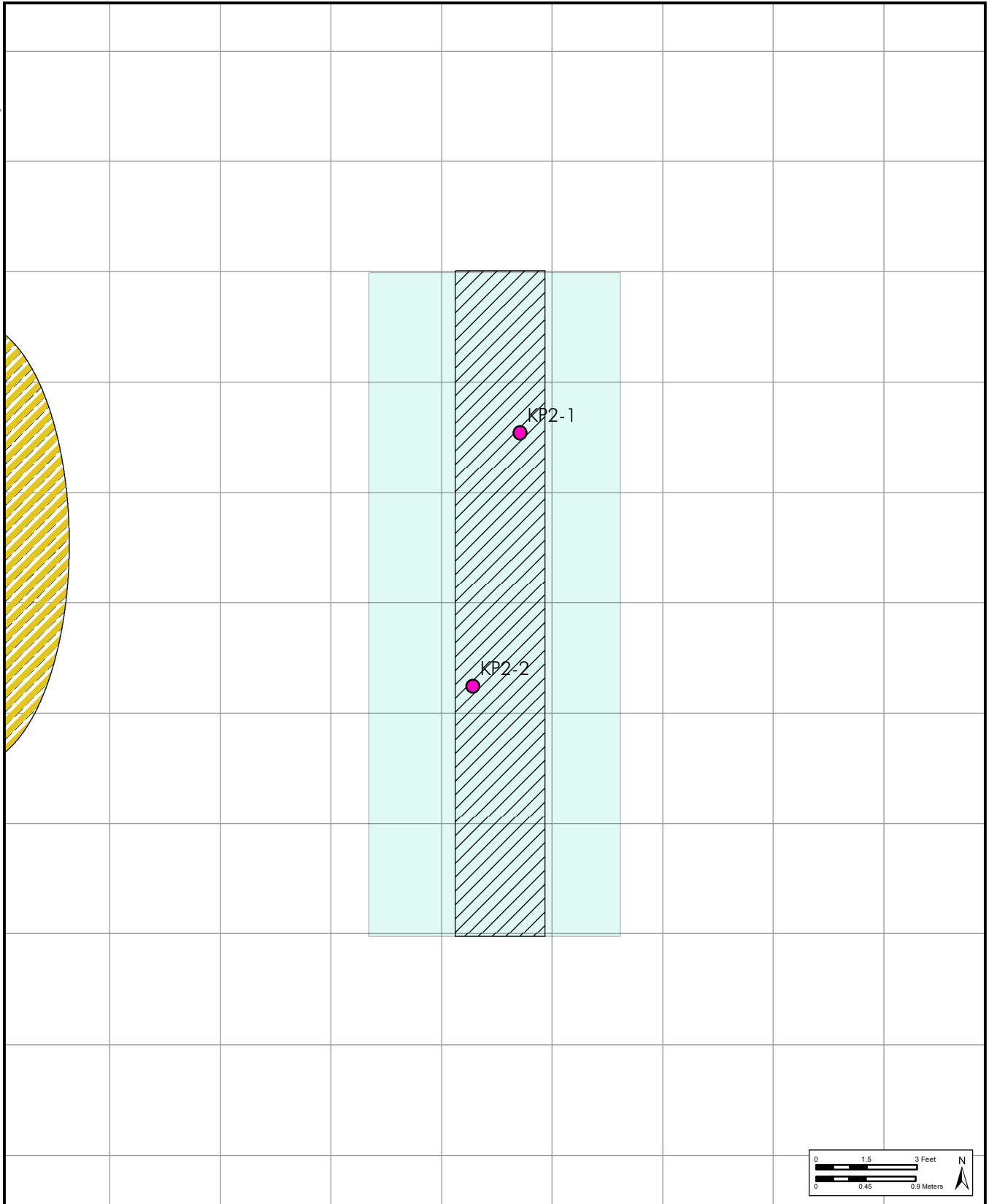
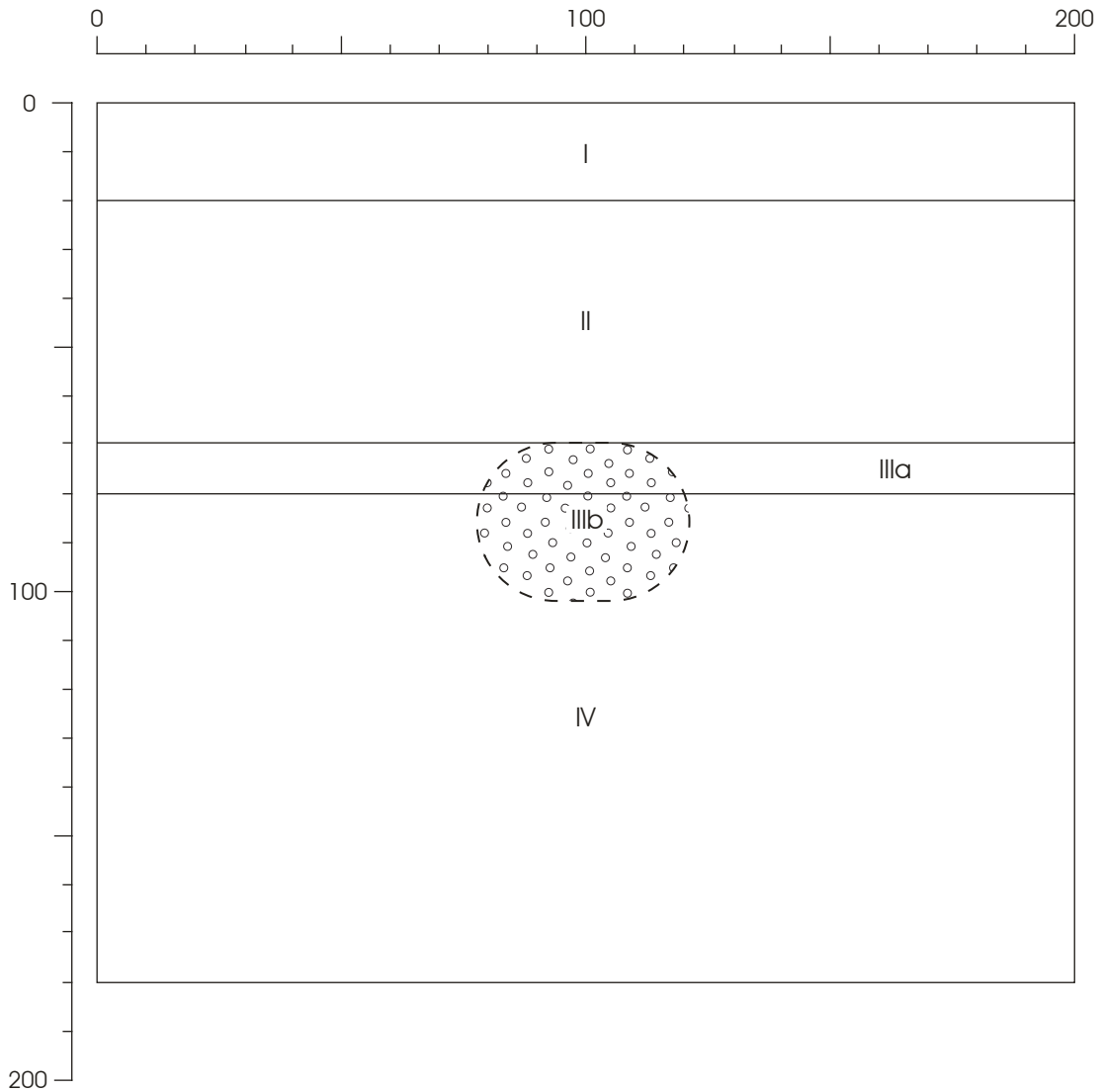


Figure 5-10
 Planview of excavations at Anomalies KP2-1 and KP2-2

- Anomalies
- 1-Meter Grid
- Scrape Area
- ▨ Deep Test
- ◌ Remnant Tree and Debris



I	(0-20 cmbs)	5YR4/4 Reddish brown silt loam;
II	(20-70 cmbs)	5YR4/4 Reddish brown silt loam;
IIIa	(70-80 cmbs)	5YR3/3 Dark reddish brown silty clay loam;
IIIb		5YR3/3 Dark reddish brown saturated silty clay loam and several snails;
IV	(80-180 cmbs)	5YR4/6 Yellowish red fine sandy loam.



West wall profile of excavation KP2-1 and KP2-2.



Figure 5-12. Overview of Location KP3. View is to the southeast.

(47 inches) and terminated after the water table was reached at 118 centimeters (46.5 inches) (Figure 5-14). At that point it was clear that no cultural features existed at the location.

5.2.3.2 KP3-2

Anomaly KP3-2 was located immediately adjacent to a large willow tree. Scraping at anomaly KP3-2 covered an area that measured approximately 2.5 meters (8.2 feet) east-west and 3 meters (10 feet) north-south at the widest points (Figure 5-13). Many medium to large roots were encountered, causing some adjustment to the backhoe bucket angle of approach. Further, a concrete slab recorded by previous investigations was an obstruction to the backhoe scraping. For this reason, the slab was carefully moved out of the way by the backhoe. The removal of the concrete slab and subsequent scraping below it confirmed that the slab was not associated with any buried structure or features. Upon closer examination of the slab it was observed that

within the concrete were brick and brick fragments. Of those brick fragments at least one was identifiable as being cored, a design that did not come into popular use until the twentieth century (Chrysler and Siggard 2013).

Scraping began at the surface and continued to a depth of approximately 40 centimeters (16 inches). Trenching began after that depth, with the trench being placed directly over the anomaly. This was continued to a maximum depth of approximately 120 centimeters (4 feet) below surface, and was terminated after the water table was reached. This depth is well below the recorded depth of the anomaly at 107 centimeters (3.5 feet). Further, the soils and soil conditions at the time of excavation were optimal for feature identification such as grave outlines however none were observed.

Soil profiles observed in the excavation consisted of a Stratum I of 5YR 5/4 reddish brown sand fill to a depth of 30 centimeters (12 inches). This material appears to have eroded from the adjacent access road which sits at a higher elevation, and settled onto the anomaly location which is lower. This fill was followed by a stratum of 5YR 3/2 dark reddish brown clay to a depth of 120 centimeters (47 inches). Several large to medium sized roots associated with the adjacent willow tree were encountered within the first 30 centimeters (12 inches) of this stratum. The water table was reached at 118 centimeters (46.5 inches) (Figure 5-15). At that point it was clear that no cultural features existed at the location.

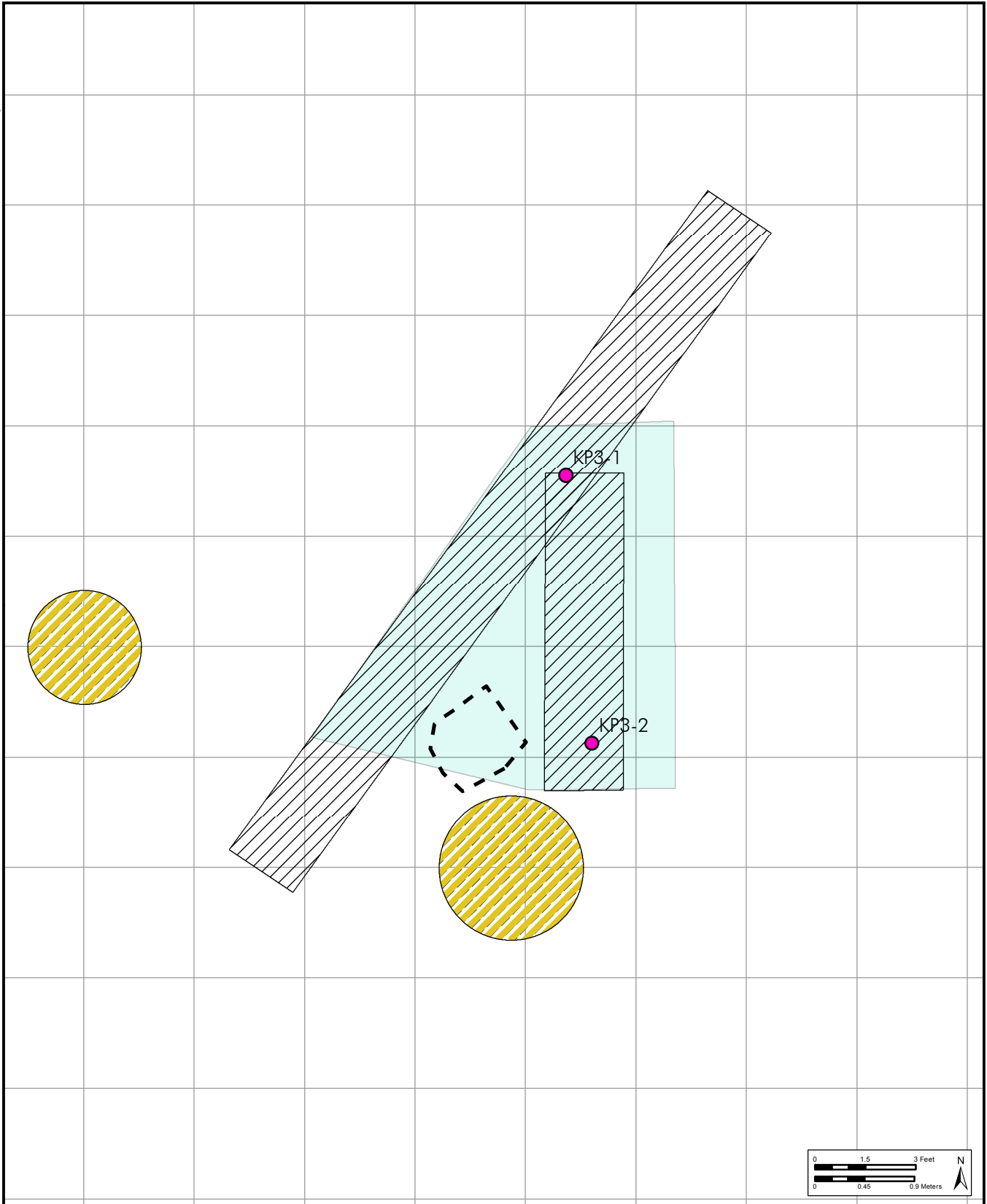
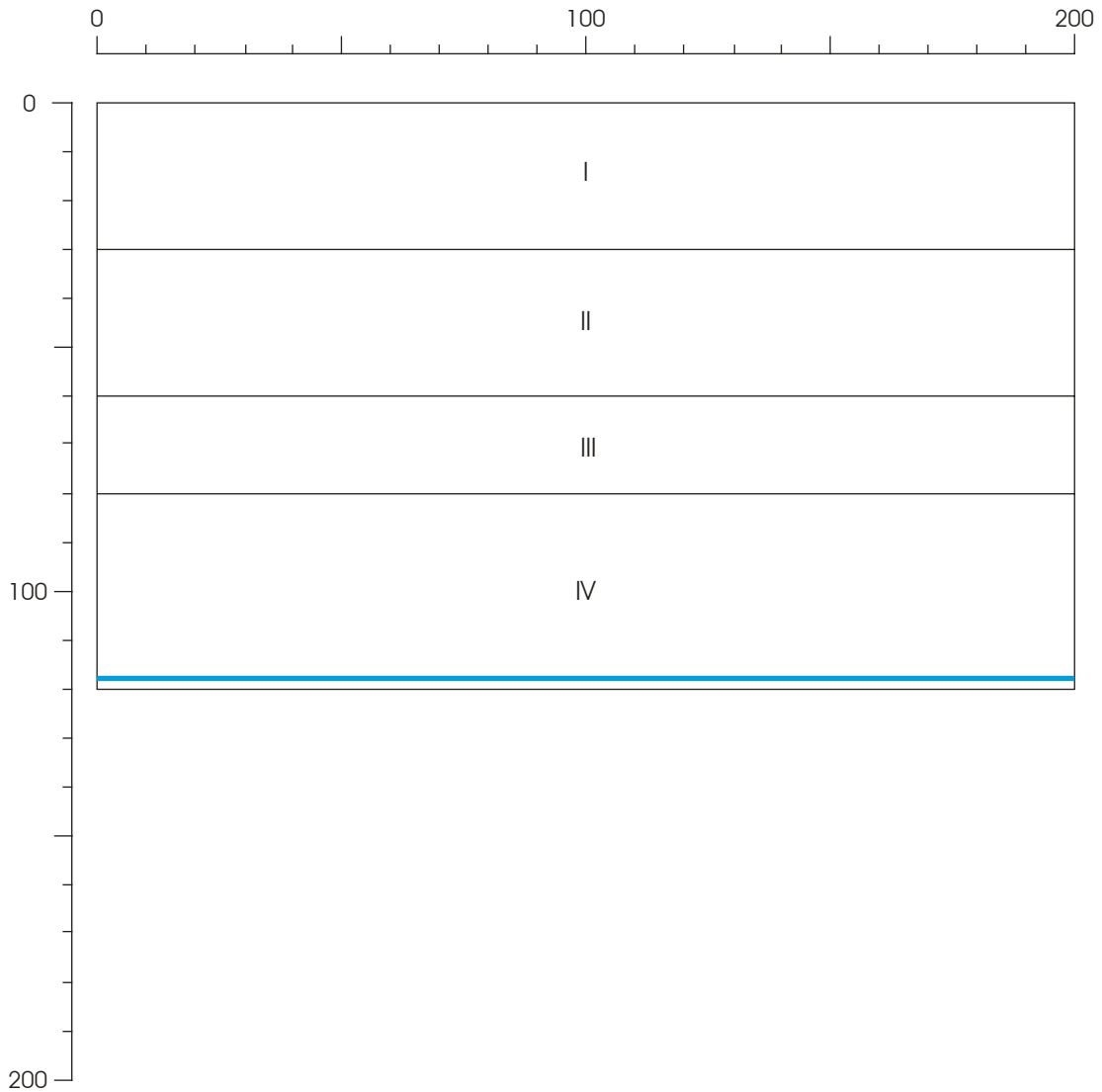


Figure 5-13
Planview of excavations at Anomalies KP3-1 and KP3-2

- Anomalies
- 1-Meter Grid
- Scrape Area
- ▨ Deep Test
- Tree
- ▬ Concrete Slab



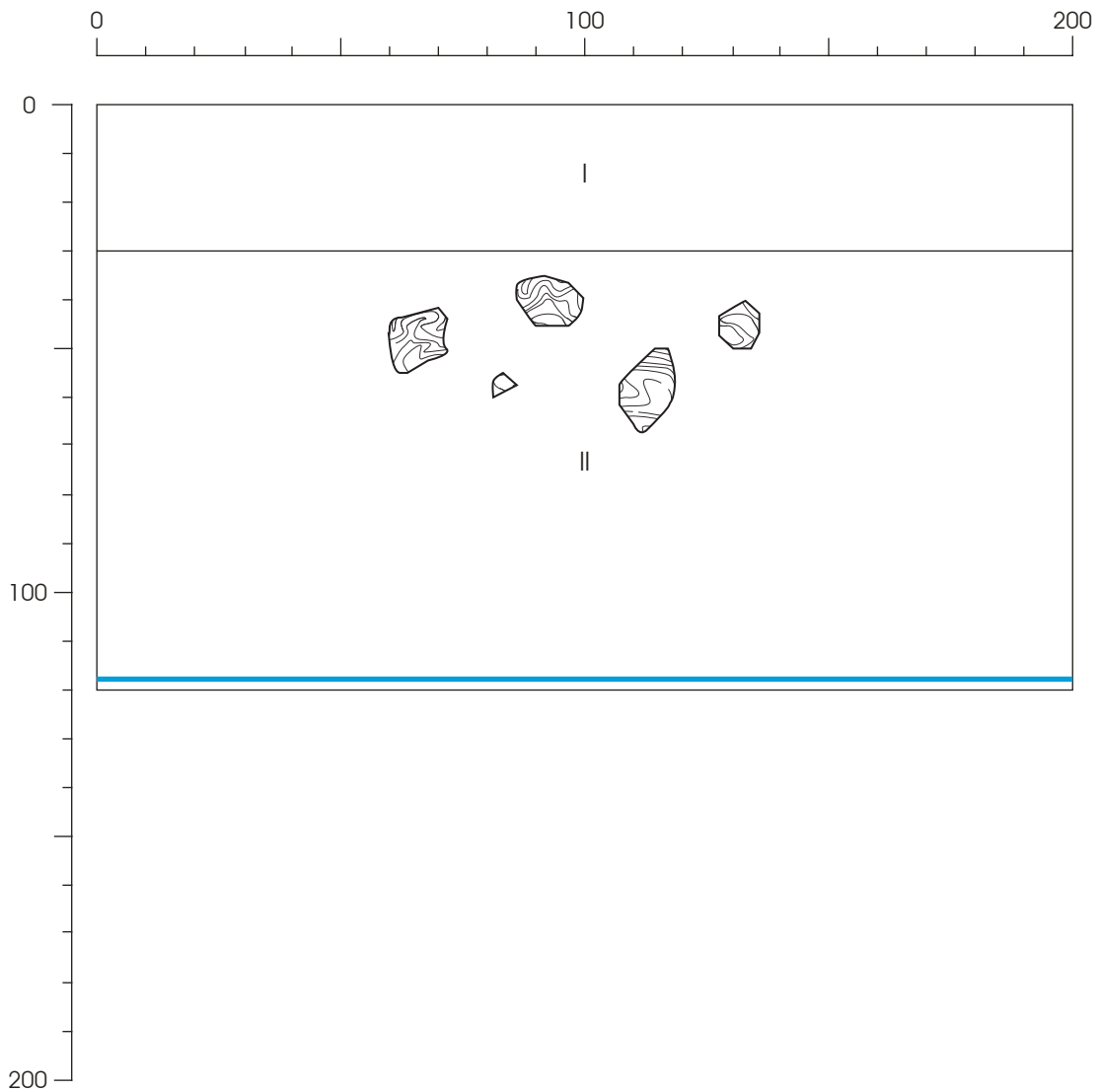
I	(0-30 cmbs)	5YR5/4 Reddish brown sand fill;
II	(30-60 cmbs)	5YR3/2 Dark reddish brown clay;
III	(60-80 cmbs)	5YR3/3 Dark reddish brown clay with scattered oyster shell;
IV	(80-120 cmbs)	5YR3/2 Dark reddish brown clay, water table @118 cmbs.



North wall profile of excavation KP3-1.



- I (0-30 cmbs) 5YR5/4
Reddish brown sand fill;
- II (30-120 cmbs) 5YR3/2
Dark reddish brown clay
with several medium to
large roots,
water table @118 cmbs.



West wall profile of excavation KP3-2.

6.0 CONCLUSIONS AND RECOMMENDATIONS

This report presents the results of mechanical backhoe scraping and trench excavation at three possible cemetery locations (KP1, KP2, and KP3) located within undeveloped areas of the Aliana Subdivision in Fort Bend County, Texas. All fieldwork and reporting activities were conducted with reference to state and federal guidelines. The goal of this study was to assist Aliana Development Company, the USACE, the THC, and the Fort Bend CHC in determining whether or not intact cultural resources, specifically the potential for human burials, are present within areas proposed for construction, and if so to provide management recommendations for these resources.

Prior to fieldwork, background information and research from previous investigations were consulted. One previously recorded cultural resource, Archaeological Site 41FB306, had been identified immediately adjacent to anomaly area KP2. Field investigation consisted of mechanical backhoe scraping and trenching over the recorded GPS position of each of the seven recorded anomalies of interest.

During this investigation, a total of seven scrape and trench areas were excavated. Soils were found to be consistent with Norwood series loam. These soils along with the field conditions at the time of investigation provided excellent visibility for identifying potential features. However, the investigation produced no indication of human burials or other

potentially cultural features. It is possible that soil discontinuities (changes in type, strata, presence of rocks, moisture, compaction, etc.) were represented in the GPR data and selected as possible targets. The multitude of variables that can affect the recordation and interpretation of such remote sensing data makes it difficult to pinpoint any one reason for the lack of findings. Excavations did uncover what appear to be signs of past flood events as evidenced by thin layers of overlapping strata observed in the trench profiles. These likely flood drape deposits did seem to corresponded with the recorded depths of anomalies KP1-1, KP1-2, and KP1-3. Locations KP2 and KP3 likewise contained stratigraphy and obstructions that may account for the recorded anomalies. A possible flood deposit as well as a concentrated deposit of saturated soil was observed in KP2 excavations. Anomaly KP3-1 contained a layer of scattered shell fragments and KP3-2 contained several large to medium tree roots.

Based on the negative results of the investigation, Gray & Pape recommends no further work be required regarding the recorded radar anomalies. Gray & Pape, Inc. recommends that the permitting process with the United States Army Corps of Engineers be updated with this new information and that any remaining cultural resource issues, such as a management plan for potentially eligible Site 41FB306, are addressed prior to these areas being developed.

7.0 REFERENCES CITED

Abbott, James T.

- 2001 Houston Area Geoarcheology: A Framework for Archeological Investigation, Interpretation, and Cultural Resource Management in the Houston Highway District. Texas Department of Transportation, Environmental Affairs Division.

Aronow, Saul

- 1992 Geomorphology and Surface Geology of Harris County and Adjacent Parts of Brazoria, Fort Bend, Liberty, Montgomery, and Waller Counties, Texas. (Unpublished).

Aten, Lawrence E.

- 1983 Indians of the Upper Texas Coast. Academic Press, New York.

Barnes, V.E.

- 1992 Geologic Atlas of Texas, Beaumont Sheet, revised. Bureau of Economic Geology, The University of Texas at Austin.

Bloom, Arthur L.

- 1978 Geomorphology: A Systematic Analysis of Late Cenozoic Landforms. Prentice-Hall, Englewood Cliffs, New Jersey.

Chrysler, John and Kurtis Siggard

- 2013 *The History and Significance of Coring Masonry Walls*. 12th Canadian Masonry Symposium, Vancouver, British Columbia, June 2-5, 2013.

Foradas, James G., PhD.

- 2007 Intensive Pedestrian Survey and Deep Testing of 2044 Acres of Former Harlem Prison Farm Property in the Proposed Aliana Development in Fort Bend County, Texas. Report Prepared by HRA Gray & Pape, LLC., Houston, Texas.

Foradas, James G, PhD., and Rebecca Sick

- 2007 National Register Eligibility Evaluation of Sites 41FB280, 41FB281, 41FB304, and 41FB306, and Assessment of Three Suspected Locations of Kirks Point Cemetery, on Former Knight Plantation and Harlem Prison Farm Property, Fort Bend County, Texas. Report prepared by HRA Gray & Pape, LLC., Houston, Texas. Volumes I and II.

Handbook of Texas Online

- 2010 Handbook of Texas Online, s.v. "KNIGHT, JAMES," <http://www.tshaonline.org/handbook/online/articles/fkn04>. Uploaded on June 15, 2010. Published by the Texas State Historical Association. Accessed March 23, 2017.

Munsell Soil Color Chart (Munsell)

- 2005 Revised Edition. Macbeth Division of Kollmorgen Instruments Corporation.

Nationwide Environmental Title Research, LLC (NETR)

2016 Historic Aerial Imagery 1953, 1957, 1962, 1964, 1966, 1973, and 1981; and Historic Topographic Maps 1942, 1946, 1957, 1970, and 1980. <http://www.historicaerials.com>. Accessed March 23, 2017.

The National Historic Preservation Act (NHPA)

1966 Section 106 as amended, Public Law 89-665; 16 U.S.C. 470 et seq.

National Oceanic and Atmospheric Administration (NOAA)

2017 Available URL: <https://www.ncdc.noaa.gov/climate-information/climate-us>, accessed March 23, 2017.

Office of the Fort Bend County Clerk

1836 Official Public Record #1838269006, Book A, p. 0105, filed March 8, 1836, on file at the Office of the Fort Bend County Clerk, Richmond, Texas.

1838 Deed Record #110 filed September 27, 1838, on file at the Office of the Fort Bend County Clerk, Richmond, Texas.

Patterson, Leland W.

1985 Prehistoric Settlement and Technological Patterns in Southeast Texas. *Bulletin of the Texas Archeological Society* 54: 253-270.

Smithwick, Noah

1900 *The Evolution of a State, or Recollections of Old Texas Days*. Gammel, Austin, Texas (reprint, 1983, University of Texas Press, Austin, Texas).

Soil Investigation Staff, National Cooperative Soil Investigation, Web Soil Investigation [SSS NCSS WSS]

2017 Online Web Soil Investigation [Online WWW]. Available URL: <http://websoilinvestigation.nrcs..usda.gov/app/WebSoilInvestigation.aspx>.

Texas General Land Office (TxGLO)

2017 Available URL: <http://gisweb.glo.texas.gov/glomap/index.html>. Accessed March 23, 2017.

Texas Parks and Wildlife Department

2017 Texas Ecoregions. <https://tpwd.texas.gov/education/hunter-education/online-course/wildlife-conservation/texas-ecoregions>. Accessed March 23, 2017.

University of Texas, Bureau of Economic Geology (UT-BEG)

1992 Geology of Texas.

1996 Physiographic Map of Texas.

United States Department of the Interior, National Park Service (Interagency Resources Division) (USDI)

1983 Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (as revised 1991). *Federal Register* 48(190):44716-44742.

Van Siclen, D.C.

1991 Surficial Geology of the Houston Area: An Off-lapping Series of Pleistocene (& Pliocene?) highest Sea Level Fluviodeltaic Sequences. *Transections of the Gulf Coast Association of Geological Societies*, Volume 41:651-666.

Wharton, Clarence R.

1939 *History of Fort Bend County*. The Naylor Company, San Antonio, Texas.