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## An Intensive Archaeological Survey For A Proposed Small Craft Boat Launch In Port Mansfield, Willacy County, Texas

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# AN INTENSIVE ARCHAEOLOGICAL SURVEY FOR A PROPOSED SMALL CRAFT BOAT LAUNCH IN PORT MANSFIELD, WILLACY COUNTY, TEXAS

Prepared for: Willacy County Navigation District

For submission to the: **Texas Historic Commission** 

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August 2012

#### **ABSTRACT**

**Project Title:** Willacy County Navigation District Small Craft Boat Launch

Report Title: An Intensive Archaeological Survey for a Proposed Small Craft Boat

Launch in Port Mansfield, Willacy County, Texas

**Report Date:** August 2012

**Agencies:** Willacy County Navigation District

Texas Parks and Wildlife Department

**Texas Historic Commission** 

**Permit Number:** Texas Antiquities Permit No. 6309

**Project Number:** WCND 0001

**Project** The Willacy County Navigation District (WCND) proposes to use funds **Description:** from a Texas Parks and Wildlife Department grant to construct a small

craft boat launch and ancillary facilities south of Port Mansfield. The proposed project was reviewed by the Texas Historic Commission who recommended an archaeological survey be conducted for the project. EPG was retained by WCND through a subcontract with PAR Consulting, LLC to conduct an intensive survey of the project's Area of Potential Effect (APE). The survey resulted in no prehistoric or historic cultural resources encountered from surface and subsurface contexts. Although the project area is within the boundaries of a known historic district, the project area is recommended to be a non-contributing element of the district. The

proposed project will not have adverse effects to a historic property.

**Acreage:** The surveyed area totals 5.48 acres.

**Location and Invisigation:**The project is located on land owned and managed by the Willacy County
Navigation District, approximately 1 mile south of Port Mansfield, Texas.

Navigation District, approximately 1 mile south of Port Mansfield, Texas, along the shore of the Laguna Madre, as depicted (unsurveyed) on the

USGS 7.5-minute Port Mansfield, Texas, quadrangle.

Personnel and A records review was conducted between July 12 and 19, 2012, and an

**Dates of** intensive archaeological survey on July 20, 2012, by EPG archaeologist

**Fieldwork:** Dr. Steve Swanson, who served as principal investigator.

**Historic Properties:** King Ranch National Historic Landmark (District)

installed Topersies.

**Adversely Effected** None

**Properties:** 

**Curation:** No artifacts were encountered or collected during survey.

#### INTRODUCTION

EPG conducted an intensive archaeological survey within the area of potential effects (APE) of the proposed Willacy County Navigation District (WCND) Small Craft Boat Launch in Port Mansfield, Willacy County, Texas (see Figure 1). WCND has received grant funds from the Texas Parks and Wildlife Department (TPWD) to construct a new boat launch in a previously undeveloped area of Port Mansfield. Funding for the grant program coordinated by the TPWD originates with the US Fish and Wildlife Service's Wildlife and Sport Fish Restoration Program.

#### **STUDY AREA**

Currently, the project area consists of a WCND-owned parcel of mostly undeveloped, vegetated coastal dune between the Laguna Madre to the east and saline prairie/marsh to the west. There is an existing, unimproved perimeter road surrounding the parcel that is used recreationally for shore access. Northern portions of the project area are previously disturbed and developed. Soils in the project area consist of Sauz loamy fine sand in the west half, and Lalinda sandy clay loam in the east half, with a narrow band of beach gravels along the shoreline. The Sauz and Lalinda soils are comprised of Holocene sand/sandy loam sediments overlying finer eolian deposits of Quaternary to Holocene age. Vegetation in the project area consists trees and shrubs (e.g., Honey Mesquite, Prickly Pear, Spanish Dagger, Brushland Lantana); perennial and annual herbs and forbs (Florestina, Indian Blanket, Sida, and Showy Sida were flowering); and abundant grasses (including Gulf Cordgrass, Red Lovegrass, and Seacoast Bluestem).

#### MANAGEMENT SUMMARY

The project sponsor, WCND, proposes to construct a small craft boat launch with ancillary facilities on this parcel south of Port Mansfield, Texas. Project components will consist of an access road, parking lot, boat launch with retaining walls and elevated walkway, ADA-compliant restroom, and lighting fixtures (see Figure 2). The proposed access for the boat launch facility would consist of scarifying and reshaping the existing, informal access road to a width of 22' and a depth of 12" below grade, then adding a 6" asphalt base. The access road would connect with a 298' x 78' parking area that would be leveled to grade prior to installation of 6" thick concrete. At the southeast corner of the parking area, a concrete boat launch would extend eastward into the Laguna Madre to a depth of 3' below modern sea level. The existing surface would be compacted and 6" of concrete added to form the 13" wide ramp. Retaining walls and elevated walkways would parallel the ramp on either side. At the northeast corner of the parking area, concrete walkways would connect to the proposed restroom, which would extend 12'8" x 10', with disturbance to a depth of 24". Trenches for underground utilities (sewer, water, electric), no greater than 24" deep, would extend north and northwest of the restroom area across the parcel, to connect with existing utilities in already developed land to the north. The perimeter of the parking area would include 6 light fixtures, whose bases would extend 3' below ground level; landscaping would be installed along the western border of the parking area.

EPG was retained by WCND through a subcontract with PAR Consulting, LLC to conduct an intensive archaeological survey of the APE for the project. Archaeological field investigations were conducted under Texas Antiquities Permit No. 6309 issued by the Texas Historical Commission to Dr. Steve Swanson of EPG, who served as Principal Investigator (PI) and Field Director. Dr. Swanson conducted fieldwork on July 20<sup>th</sup>, 2012 for a total of 6 person-hours.

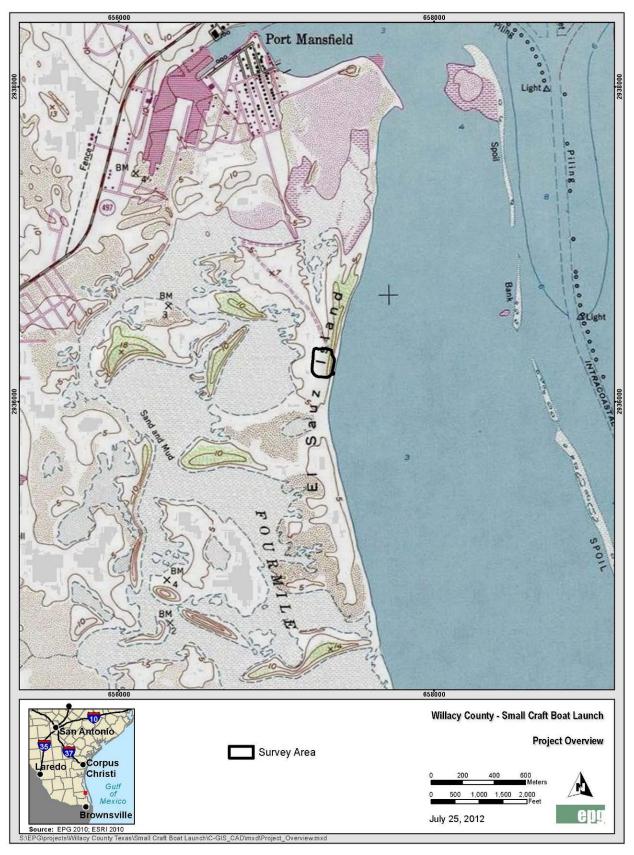


Figure 1: Survey area one mile south of Port Mansfield, TX

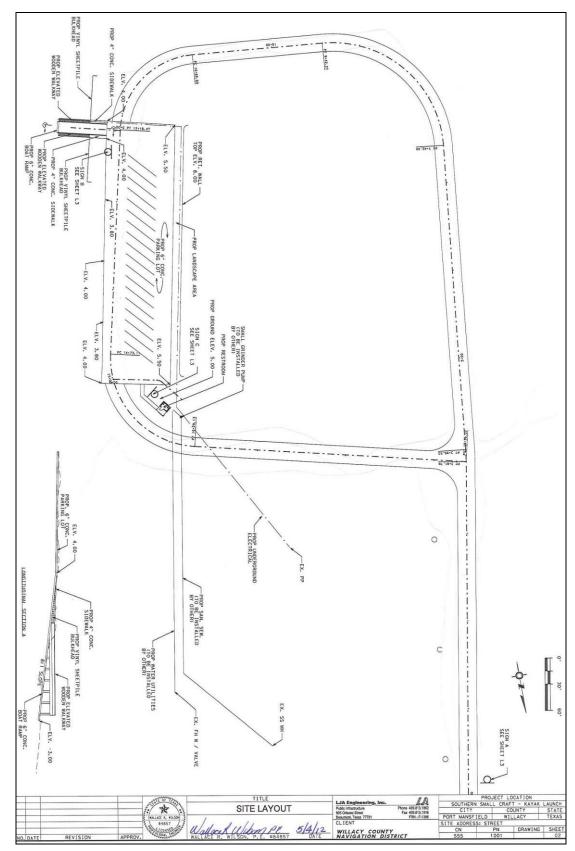


Figure 2: Engineering plans showing project components (north is at bottom of figure).

#### RESEARCH DESIGN

The objective of the intensive survey was to determine whether surface or subsurface cultural materials or sites are present in the APE, and if so, whether these have historic significance and retain sufficient integrity to be eligible for listing as a Texas State Landmark or on the National Register of Historic Places (NRHP).

Previous archaeological investigations in the region have documented occupation and resource procurement sites through surface survey, testing and excavation (e.g., Campbell and Frizzell 1949; Day 1981; Hall et al. 1987; Hester et al. 1969; Kibler 1994). Studies such as these have resulted in the development of a spatiotemporal framework of Archaic period (ca. 6,000 BC to 800 AD) and Prehistoric period (ca. 800 to 1600 AD) land use and patterns of resource procurement in South Texas (Hester et al. 1969; Bousman et al. 1990; Tenerney 2005). Preference in location of occupation and burial sites has changed over time, but generally emphasized major drainages and *resacas*, *lomas* or clay dune areas overlooking inland lakes and the Laguna Madre, and barrier islands such as South Padre Island. Resource procurement occurred in a variety of settings across the landscape, and may have emphasized including coastal/estuarine areas and inland lakes (Bousman et al., 1990); Terneny notes that environmental settings such as the current Project area lies in may have been loci of shell procurement during the Archaic and Prehistoric periods (2005). If significant archaeological sites are present, they could have the potential to inform on past subsistence, resource procurement, and economy in the South Texas coastal region.

Historic research has demonstrated sporadic Spanish presence in the area beginning in the 1500s AD, with several sailing vessels shipwrecked along the eastern shore of Padre Island (Arnold and Wickman 2012), and Spanish settlement established on Padre Island and along the Rio Grande by the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. By the early 20<sup>th</sup> century, a small fishing community had been established just north of the Project area, known as 'Red Fish Landing'. Subsequently, the Gulf Intracoastal Waterway (GIWW) was extended south from Corpus Christi to the Rio Grande, and a formal port was established; the community was renamed 'Port Mansfield' in recognition of US Representative Joseph Mansfield, who sponsored a successful bill for the southern extension of the GIWW (Leatherwood 2012). The presence of historic resources in the Project area could potentially provide information on Spanish, King Ranch-era, or more recent use, potentially including 20<sup>th</sup> century development and occupation of the Port Mansfield area.

#### **METHODS**

Prior to conducting fieldwork, the PI conducted a review of records stored at the Texas Archaeological Research Laboratory in Austin, Texas, as well as an online search using the Texas Historical Commission's (THC) Archeological Sites Atlas for any previously recorded surveys and archaeological sites located in or near (within one half mile) the project area. The records review provided a historic and geographic context for the study area. Subsequently, an intensive survey was conducted by walking undeveloped portions of the APE in transects spaced 10-meters apart. Areas of exposed ground surface were carefully examined, as were cuts exposed along the existing dirt road and the cut bank along the shore. For 3.5 of the surveyed acres, ground visibility was less than 30 percent, so a total of 10 subsurface probes were excavated. Shovel tests were 30cm diameter, sifted through 1/8" screen, and excavated to varying depths to reach a relatively dense clay/clay loam layer which is likely of quaternary age (Turner 1982).

#### RESULTS

The records review indicated that there are no known prehistoric resources present in the project area, but that the project area is not known to have been subject to a prior cultural resources survey. The project area is located within the King Ranch Historic District, a National Historic Landmark listed on the National Register of Historic Places in 1966 for the themes of agriculture (ranching) and exploration/settlement within a period of significance spanning from 1852 through 1924. The National Park Service website notes (NPS 2012):

Founded in 1852 by Richard King (1825-1885), who purchased a Spanish land grant of 75,000 acres, the ranch grew steadily to include over 1 Million acres spread over 4 South Texas counties and become the largest ranch in the country. The famous Santa Gertrudis breed of cattle, named for the original Spanish land grant, was developed here.

The intensive archaeological survey was completed by first conducting pedestrian transects across the project area spaced 10 meters apart, followed by subsurface probes (Figure 3). No prehistoric or historic (45 years or older) cultural materials were noted on the surface during the intensive survey. Similarly, subsurface probes revealed no prehistoric or historic cultural materials. Observations from individual subsurface probes are provided in Table 1.



Figure 3: Shovel testing during intensive survey.

Table 1. Subsurface test units excavated during survey.					
Test Unit	Туре	Depth (cmbs)	Texture	Color	Comments
1	Shovel Test	0 - 20	Sandy clay loam	10 YR 5/2 grayish brown	Sterile (unmodified land snail/marine shell present)
		20 - 45	Sandy clay	2.5 Y 5/2 grayish brown	Sterile
2	Shovel Test	0 - 20	Sandy loam	10 YR 5/2 grayish brown	Sterile (one unmodified land snail shell present)
		20 - 40	Sandy clay	2.5 Y 5/2 grayish brown	Sterile
3	Shovel Test	0 - 20	Sandy loam	10 YR 5/2 grayish brown	Sterile (unmodified land snail shell present)
		20 - 40	Sandy clay	2.5 Y 5/2 grayish brown	Sterile
		40 - 50	Clay loam	2.5 Y 5/1 gray	Sterile (calcium concretions present)
4	Shovel Test	0 - 20	Sandy clay loam	10 YR 5/1 gray	Modern trash (metallic "Doritos" bag present)
		20 - 40	Sandy clay	10 YR 6/1 gray	Sterile
5	Shovel Test	0 - 15	Sand loam	10 YR 6/2 light brownish gray	Sterile
		15 - 35	Loam	10 YR 5/2 grayish brown	Sterile
		35 - 48	Clay loam	2.5 Y 6/2 light brownish gray	Sterile
6	Shovel Test	0 - 20	Sand loam	10 YR 6/2 light brownish gray	Sterile
		20 - 35	Loam	10 YR 5/2 grayish brown	Sterile
		35 - 45	Clay	2.5 Y 6/2 light brownish gray	Sterile
7	Shovel Test	0 - 20	Sand loam	10 YR 6/2 light brownish gray	Sterile (one unmodified clam shell fragment)
		20 - 35	Loam	10 YR 5/2 grayish brown	Sterile
		35 - 40	Clay	2.5 Y 6/2 light brownish gray	Sterile
8	Shovel Test	0 - 15	Sand loam	10 YR 6/2 light brownish gray	Sterile
		15 - 35	Clay	2.5 Y 7/2 light gray	Sterile
9	Cut Bank Profile	0 - 20	Silty clay	2.5 Y 5/2 grayish brown	Modern trash (fishing lure and plastic fragments)
		20 - 30	Clay	2.5 Y 5/1 gray	Sterile (calcium concretions present)
		30 - 95	Clay	2.5 Y 7/2 light gray	Sterile (calcium masses present)
10	Shovel Test (in bay)	0 - 40	Pebbly, silty clay	10 YR 3/2 very dark grayish brown	Sterile (ubiquitous unmodified marine shell frags)

Abundant modern trash was noted throughout the survey area, including fishing lures and line, beer and soda bottles and cans, spent propane cylinders, plastic food wrappers, diapers, and tissue paper. In addition, numerous modern animal carcasses are present, including a variety of fish and ray species, deer, and shellfish.

The absence of prehistoric cultural materials in this coastal setting may result from scouring of surface materials during extreme storm events that could intermittently erase evidence for occupation or use of the shore and adjacent dunal areas. While the project area is located within the boundaries of the King Ranch Historic District, the project area is recommended to be a non-contributing element to the District, based on the absence of historic materials, abundance of modern trash, and presence of a modern housing development north of the project area, which diminish the integrity of the district in this area.

#### RECOMMENDATIONS

The results of the intensive archaeological survey indicate that there are no historic or prehistoric cultural materials present within the APE of the proposed project. Due to the absence of any historic materials dating to the King Ranch period of significance, and the presence of modern disturbance within and adjacent to the project area, it is recommended that the survey area does not contribute to the significance or integrity of the King Ranch Historic District. The proposed project will result in No Historic Properties Affected and no additional cultural resource work is required prior to construction.

In the unlikely event that an archaeological site or historic structure is encountered during construction, the discovery must be reported to Willacy County Navigation District and to the Texas Historic Commission for evaluation and possible mitigation, in accordance with Section 26.11(4) of the Antiquities Code of Texas.

#### References Cited

#### Arnold, J. B., III and M. A. Wickman

2012 Padre Island Spanish Shipwrecks of 1554. In, *Handbook of Texas Online* (http://www.tshaonline.org/handbook/online/articles/etpfe), accessed July 12, 2012. Published by the Texas State Historical Association.

#### Bousman, C. B., S. A. Tomka, and G. L. Bailey

1990 Prehistoric Archaeology and Paleoenvironments in Hidalgo and Willacy Counties, South Texas: Results of the Phase II Test Excavations. Report of Investigations No. 76, Prewitt and Associates Inc., Austin.

#### Campbell, T. N. and J. Q. Frizzell

1949 Notes on the Ayala Site, Lower Rio Grande Valley, Texas. Bulletin of the Texas Archaeological and Paleontological Society 20:63-72.

#### Day, D. W.

1981 An Assessment of Archaeological Sites 41WY71 and 41WY72, Willacy County, Texas. Report of Investigations No. 17, Prewitt and Associates Inc., Austin.

#### Hall, G. D., M. B. Collins, and E. R. Prewitt

1987 Cultural Resources Investigations Along Drainage Improvements, Hidalgo and Willacy Counties, Texas: 1986 Investigations. Reports of Investigations No. 59, Prewitt and Associates Inc., Austin.

#### Hester, T. R., M. B. Collins, F. A. Weir, and F. Ruecking Jr.

1969 Two Prehistoric Cemetery Sites in the Lower Rio Grande Valley of Texas. *Bulletin of the Texas Archaeological Society* 40:119-166.

#### Kibler, K. W.

1994 Archaeological and Geomorphological Investigations at Prehistoric Sites 41WY50 and 41WY60, Willacy County, Texas. Report of Investigations No. 95. Prewitt and Associates Inc., Austin.

#### Leatherwood, A.

2012 Port Mansfield, TX. In *Handbook of Texas Online* (http://www.tshaonline.org/handbook/online/articles/hrpaq), accessed July 12, 2012. Published by the Texas State Historical Association.

#### National Park Service

2012 King Ranch. In *National Historic Landmarks Program* (<a href="http://tps.cr.nps.gov/nhl/detail.cfm?ResourceId=627&ResourceType=District">http://tps.cr.nps.gov/nhl/detail.cfm?ResourceId=627&ResourceType=District</a>), accessed July 21, 2012. Published by the National Park Service.

#### Terneny, T. T.

2005 A Re-evaluation of Late Prehistoric and Archaic Chronology in the Rio Grande Delta of South Texas. Unpublished PhD Dissertation, Department of Anthropology, University of Texas at Austin.

#### Turner, August J.

1982 *Soil Survey of Willacy County Texas.* US Department of Agriculture Soil Conservation Service, Washington, D.C.