

## TEXAS HISTORICAL COMMISSION

# ANTIQUITIES PERMIT APPLICATION FORM ARCHEOLOGY

## GENERAL INFORMATION

### I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) Crabb River Road Widening from US 59 to Future Lamar CISD Complex

County (ies) Fort Bend County

USGS Quadrangle Name and Number Katy (2995-331) and Warren Lake (2995-334) Quads

UTM Coordinates:

Zone 15 (NAD83) E 239283.99 N 273123.93 to

Zone 15 (NAD83) E 239298.56 N 3267678.83

Location US 59 to Future Lamar CISD Complex

Federal Involvement Yes X No

Name of Federal Agency N/A

Agency Representative N/A

### II. OWNER (OR CONTROLLING AGENCY)

Owner TxDOT

Representative Scott Pletka, Ph.D.

Address 125 E. 11th Street

City/State/Zip Austin, TX 78701-2483

Telephone (include area code) 512-461-6376 Email Address SPLSTKA@dot.state.tx.us

### III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

Sponsor Fort Bend County

Representative Robert Hebert, County Judge

Address 301 Jackson Street

City/State/Zip Richmond, Texas 77469

Telephone (include area code) 281-341-8608 Email Address werleann@co.fort-bend.tx.us

(OVER)

ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

## PROJECT INFORMATION

### I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name Karla J. Córdova

Affiliation PBS&J

Address 1250 Wood Branch Park Drive

City/State/Zip Houston, TX 77079

1-13-10 copy received

Telephone (include area code) 281-529-4100 Email Address KJCordova@pbsj.com

## II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork 01-13-09  
Requested Permit Duration 5 Years 0 Months (1 year minimum)  
Scope of Work (Provided an Outline of Proposed Work) See attached

## III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility PBS&J CRM Laboratory  
Permanent Curatorial Facility TARL

## IV. LAND OWNER'S CERTIFICATION

I, Scott Pettko, Ph.D., as legal representative of the Land Owner, Texas Department of Transportation, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Owner, Sponsor, and Principal Investigator are responsible for completing the terms of the permit.  
Signature Scott Pettko Date 1-07-10

## V. SPONSOR'S CERTIFICATION

I, Robert Hebert, County Judge, as legal representative of the Sponsor, Fort Bend County, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Sponsor, Owner, and Principal Investigator are responsible for II.

## VI. INVESTIGATOR'S CERTIFICATION

I, Karla J. Cordova, as Principal Investigator employed by PBS&J (Investigative Firm), do certify that I will execute this project according to the submitted plans and research design, and will not conduct any work prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Principal Investigator (and the Investigative Firm), as well as the Owner and Sponsor, are responsible for completing the terms of this permit.  
Signature Karla J. Cordova Date 01-07-10

Principal Investigator must attach a research design, a copy of the USGS quadrangle showing project boundaries, and any additional pertinent information. Curriculum vita must be on file with the Division of Antiquities Protection.

### FOR OFFICIAL USE ONLY

Reviewer \_\_\_\_\_ Date Permit Issues \_\_\_\_\_  
Permit Number \_\_\_\_\_ Permit Expiration Date \_\_\_\_\_  
Type of Permit \_\_\_\_\_ Date Received for Data Entry \_\_\_\_\_

Texas Historical Commission  
Archeology Division  
P.O. Box 12276, Austin, TX 78711-2276  
Phone 512/463-6096  
www.thc.state.tx.us



TEXAS  
HISTORICAL  
COMMISSION

The State Agency for Historic Preservation

**SCOPE OF WORK**  
**PROPOSED CULTURAL RESOURCES SURVEY OF**  
**THE CRABB RIVER ROAD WIDENING PROJECT**  
**FORT BEND COUNTY, TEXAS**  
**CSJ: 1415-03-010**

**INTRODUCTION**

The Texas Department of Transportation (TxDOT) and Fort Bend County are proposing to widen existing Crabb River Road to a four-lane roadway. The proposed project is from US 59 east approximately 3.8 miles to Lamar ISD property in Fort Bend County, Texas (see attached map). The area of potential effect (APE) will range from approximately 1.5 meters (m) (5 feet [ft]) to 7 m (23 ft) within existing right of way (ROW) and 3 m (10 ft) to 8 m (26 ft) within proposed ROW. The maximum depth of the APE associated with the road construction will be approximately 27 m (90 ft) below ground surface. The maximum depth of the APE along the existing Crabb River Road from US 59 south to Tara Drive will be deeper than 1 meter below ground surface. Additionally, proposed bridge pilings would be constructed at depths greater than 1 meter below ground surface. The impacts are based on construction schematics available at the time of permit application and estimated on typical construction design.

An intensive archaeological survey covering portions of the currently proposed project was conducted for the Preferred Alternative of Segment C of the Grand Parkway. The survey was conducted by PBS&J in 2001 and 2003 under Texas Antiquities Code (TAC) permit number 2553. The area of the current proposed project surveyed by the Segment C effort includes the beginning of the project from US 59 to the area just north of Rabbs Bayou including Middle Bayou, Sansbury Boulevard, and the north bank of Rabbs Bayou. Sites 41FB127, 41FB128, and 41FB134 were revisited during this effort and were found to have been negatively impacted by suburban encroachment. Additionally, these sites are noted as lacking resources that would warrant inclusion in the NRHP (Sherman et al. 2006). The Texas Historical Commission (THC) concurred with the report that documents the findings and recommendations of this survey effort on October 10, 2006.

Additionally, Dr. Scott Pletka of the Environmental Affairs Division's (ENV) TxDOT Archeological Studies Program communicated via email on December 31, 2009 with Pat Henry of TxDOT regarding the proposed construction activities associated with the project (S. Pletka and P. Henry, email communication). Specifically, Dr. Pletka addressed the recommendations made by the Houston-Potential Archeological Liability Map (PALM), for cultural resources investigations where a grade-separated intersection would be constructed by lowering Crabb River Road (FM 2759) to allow traffic to pass below Sansbury Boulevard. After a review of the proposed project at this location, Dr. Pletka advised that no deep reconnaissance involving mechanical trenching is required at the Crabb River Road and Sansbury Boulevard intersection within the existing ROW. Dr. Pletka indicated that, due to previous impacts associated with road and urban development within the area, the potential for archeological

deposits to occur within the proposed project at this location is minimal and that investigations deeper than 1.8 m (6 ft) are unwarranted given the potential harm that could occur to existing infrastructure. Additionally, Sherman et al. 2006 stated that Holocene deposits are scarce and shallow in the vicinity of Middle Bayou. Therefore, the archaeological potential within the proposed alternative at the Middle Bayou crossing is thought to be low to very low. However, Dr. Pletka also notes that if information arises, including geotechnical data, that would indicate a realistic possibility for intact archeological deposits to exist below 1.8 m (6 ft), additional consultation with the THC regarding this matter might be required. Therefore, the current SOW only pertains to those areas of the APE not examined during the Grand Parkway Segment C survey effort and not addressed by ENV TxDOT Archeological Studies Program review outlined above (see attached map).

TxDOT and Fort Bend County is seeking to obtain environmental permits and clearances, including an intensive archeological linear survey without geoarcheological evaluation, of the areas to be impacted. The survey corridor is located on lands that will be owned by TxDOT in the future. Therefore, these lands require a Texas Antiquities Code (TAC) permit prior to commencement of the cultural resources survey.

## **BACKGROUND RESEARCH**

The proposed project is located in an area of land previously cleared and currently used for urban development and, to a lesser degree, farming and ranching. It traverses a mixed urban and rural setting of commercial, farmland/rangeland, forest, wetland communities, and residential lands. The topography is relatively flat and dominated by Dry Creek, Rabbs Bayou, and the Brazos River.

### **Soils**

According to the Soil Survey of Fort Bend County, Texas, 9 different soil mapping units would be traversed by the proposed project. These soils consist of Asa-Pledger complex (Ac), Bernard clay loam, 0 to 1 percent slopes (Bb), Bernard-Edna clay loam, 1 to 4 percent slopes (Bc), Bernard-Edna complex, 0 to 1 percent slopes (Be), Edna fine sandy loam, 0 to 1 percent slopes (Ea), Edna fine sandy loam, 1 to 4 percent slopes (Eb), Lake Charles clay, 0 to 1 percent slopes (La), Brazoria clay, 0 to 1 percent slopes, rarely flooded (Miller clay) (Ma), and Pledger clay (Pa) (NRCS, 1955). The Soil Survey of Fort Bend County, Texas was used to describe the soil types.

Asa-Pledger complex are moderately well drained soils that consist of 60 percent Asa soils and 40 percent Pledger clay. The Asa soils range from fine sandy loams to silty clay while Pledger clay texture can range from clay to silty clay (NRCS, 1955). These mapping units are listed as hydric on the National Hydric Soils List (NRCS, 2009).

Bernard clay loam, 0 to 1 percent slopes and Bernard-Edna complex, 0 to 1 percent slopes occupy nearly level to sloping upland. Bernard clay loam, 0 to 1 percent slopes contains many small roundish areas of Edna soil that are not more than 5 acres in size. Bernard-Edna complex, 0 to 1 percent slopes is made up of equal proportions of Bernard clay loam and Edna soils, but the proportions of Bernard clay loam in

individual areas can range from 20 to 80 percent (NRCS, 1955). These mapping units are listed as hydric on the National Hydric Soils List (NRCS, 2009).

Bernard-Edna clay loams, 1 to 4 percent slopes has different proportions of component soils than Bernard-Edna complex, 0 to 1 percent slopes. This soil consists of 60 to 70 percent Bernard soils, 20 to 30 percent Edna soils, and 5 percent brownish calcareous unnamed soil (NRCS, 1955). This mapping unit does not occur on the National Hydric Soils List (NRCS, 2009).

Edna fine sandy loam, 0 to 1 percent slopes occurs on level, nearly level, and gently sloping areas. The surface soil ranges from gray to light brownish gray and from fine sandy loam to loam. This soil also grades into yellowish-red sandy clay parent materials at depths ranging from 50 to 70 inches (NRCS, 1955). This mapping unit is listed as hydric on the National Hydric Soils List (NRCS, 2009).

Edna fine sandy loam, 1 to 4 percent slopes is similar to Edna fine sandy loam, 0 to 1 percent slopes, but mainly differs in slopes. This soil has a low productivity and occurs with large smooth areas of other soils making it best used as pastureland (NRCS, 1955). This mapping unit does not occur on the National Hydric Soils List (NRCS, 2009).

Lake Charles clay, 0 to 1 percent slopes is a slowly permeable soil that has a great swelling and contracting ratio. Upon drying, cracks form that are 2 to 6 inches wide, 1 to 6 feet long, and as much as 3 feet or more deep (NRCS, 1955). This mapping unit is listed as hydric on the National Hydric Soils List (NRCS, 2009).

Brazoria clay, 0 to 1 percent slopes, rarely flooded (Miller clay) occurs on large nearly level bottom-lands and is the most extensive bottom-land soil in the county. Included with Brazoria clay, 0 to 1 percent slopes, rarely flooded (Miller clay) are numerous other types of soils including Norwood clay, Pledger clay, and Roebuck clay. These soils, however, account for less than 5 percent of the total acreage (NRCS, 1955). This mapping unit is listed as hydric on the National Hydric Soils List (NRCS, 2009).

## **Literature Review**

PBS&J conducted a records search to locate recorded cultural resource properties within the proposed project area and vicinity. The online Texas Archeological Sites Atlas and the maps and records at the Texas Archeological Research Laboratory (TARL) were consulted for locations of previously recorded cultural resource sites; locations of properties listed on the National Register of Historic Places (NRHP), sites designated as State Archeological Landmarks (SAL), Official Texas Historical Markers, and records of previously conducted cultural resource surveys.

The online Texas Archeological Sites Atlas indicated that two previously recorded sites (41FB133 and 41FB134) are located within the proposed project corridor. Fourteen sites (41FB105, 41FB106, 41FB114, 41FB125, 41FB127, 41FB128, 41FB135, 41FB136, 41FB237, 41FB238, 41FB239, 41FB241, 41FB243 and 41FB272) are located within 1.6 km (1 mile) of the proposed project corridor. The

effort.

Sites 41FB133 and 41FB134, are the only previously recorded sites located within the proposed project. They were recorded in 1986 by Riverbrook Associates during a Corps of Engineers archaeological survey near Rabbs Bayou. Site 41FB133 consists of the remains of a 20<sup>th</sup> historic house or farm site. No structures remain of the site, but materials recorded include a brick fragment, round headed nails, an earthenware vessel handle, iron fragments, and a small glass jar. The site was described as not meeting any of the requirements for inclusion on the NRHP and no further work was recommended. Site 41FB134, also a 20<sup>th</sup> century house or farm, yielded brick fragments, an amber glass bottle, clear glass bottle fragments, wire nails, ironstone fragments, and a 0.22 caliber rim-fire short cartridge case. No evidence of structures remained and the site was not considered eligible to the NRHP; no further work was recommended at the site.

Sites 41FB105, 41FB106, and 41FB114 were recorded in 1985 by Prewitt and Associates during the Fort Bend Partners Venture Property Survey project. Site 41FB105 consists of a 20<sup>th</sup> century historic house or farm site that has been destroyed. No artifactual remains were observed and existing visible features included a small corral, a concrete water tank, and a small pumphouse; all built after the destruction of the house. The site was not considered eligible to the NRHP and no further work was recommended at the site. Site 41FB106 consists of a historic dump with a possible prehistoric lithic scatter found in a trail. Artifacts within the site area included remnants of multiple construction material types and domestic debris that could be of recent or historic age as well as 6-8 flakes along a dirt track. Archival research conducted at the time revealed that the house was possibly built in 1914 and occupied until it fell down. The area is described as severely disturbed and neither the site nor the structure was considered eligible to the NRHP; no further work was recommended at the site. Site 41FB114 consists of the remnants of a 19-20<sup>th</sup> century historic house or farm that could have been built in 1881 by a freed slave named Samuel Thompson and his family or reused materials for a post-1915 house occupied during the 20<sup>th</sup> century. Artifacts at the site included square and wire nails, window glass, milk glass, a white china sherd, a machine made brick fragment, and a piece of rubber. The site was described as extensively disturbed and with no potential to be eligible to the NRHP; no further work was recommended.

Sites 41FB125, 41FB127, 41FB128, 41FB135, and 41FB136 were also recorded in 1986 by Riverbrook and Associates. Sites 41FB125, 41FB127, and 41FB128 all consist of 20<sup>th</sup> century historic houses or farm sites with no standing structural remains. 41FB125 still has a water pump present at the site and yielded iron fragments, white ware, milk glass, transferware, porcelain, glass bottle fragments, blue glass, and pearlware. Site 41FB127 included the collapsed remains of a structure, outbuildings, and a water holding tank as well as fragments of porcelain, ironstone, bottle glass, and round nails. Site 41FB128 yielded the remnants of a possible privy or trash pit as well as a collapsed structure. Artifacts observed

include mass produced round nails, door knobs, a plastic button, a plastic comb, amber bottle glass fragments, and a few pieces of non-diagnostic pottery. All three site locations are considered disturbed and not eligible to the NRHP; no further work was recommended at any of the sites. Site 41FB135 consists of a historic scatter with no associated structural remains. Artifacts observed included ironstone fragments, whiteware, clear glass bottle fragments, a small bolt head, wire nails, iron fragments, and a rubber shoe sole with nails. The site was not considered eligible to the NRHP and no further work was recommended at the site. Site 41BF136 consists of a historic cemetery based on the accounts provided by various informants. No physical evidence of headstones, patterns, or any indication of possible graves was observed during the survey. The site was described as not eligible to the NRHP and no further work was recommended at the site. In 1994 and 1995 Moore Archaeological Consultants (MAC) conducted mechanical trenching monitoring to confirm and map outlines of grave plots outside of the deeded one acre cemetery plot. It is mentioned in the site form completed by MAC that the cemetery will be fenced and a marker erected to proclaim the history of its use. MAC recommended archival research to be performed to determine the actual identity of the bodies buried at this cemetery.

Sites 41FB237-239, 41FB241, and 41FB243 were recorded by MAC in 1996 for the Proposed New Territory Development, as historic residential sites dating from mid-20<sup>th</sup> century; pre-WWI. Site 41FB237 consists of a large depression that may denote the location of a former house. Additionally, a concrete cistern, a shallow concrete basin, a driveway, barbed wire fence, a prickly pear patch, and a modern well shed were identified. Cultural materials observed included a 1970's pickup truck, steel trough, and exterior house. 41FB238 consists of a large slab-and perimeter house with a workshop and wellhead. Additionally, a concrete slab with former attached shed, possibly a livestock shed, a low mound, which was possibly the location of an additional structure, were also identified. A modern well, shed, barbed wire fences, and a graveled driveway as well as numerous varieties of historic artifacts such as lumber, rubble, brick, and glass were encountered. Site 41FB239 consists of two occupied historic residences, a corral, and three water troughs. 41FB241 consists of a brick and concrete scatter. Artifacts present include rubble, brick, glass, and metal. Site 41FB243 consist of large and small concrete slabs, a livestock trough, a modern well shed, a depression of unknown function, 3 galvanized pipes, four iron sewer pipes, two concrete circular disks probably to cover a septic tank, animal coop, and barbed wire fence. Artifacts observed include rubble, metal scrap, and a modern jar and bottle scatter. None of the sites were considered eligible to the NRHP and no further work was recommended at sites, but interviews regarding the history of 41FB238, 41FB239, 41FB241, and 41FB243 were recommended.

Site 41FB272 is a historic and prehistoric site recorded by PBS&J in 1999 during the Grand Parkway surveys. The historic component of the site consisted of a domestic scatter represented by clear, green and brown glass, two porcelain sherds, and some brick fragments. The prehistoric component included one piece of lithic debitage, and one lithic core. The site was not considered eligible to the NRHP and no further work was recommended at the site.

An intensive archaeological survey covering portions of the currently proposed project was conducted for the Preferred Alternative of Segment C of the Grand Parkway. The survey was conducted by PBS&J in

2001 and 2003. The area of the currently proposed project cleared by the Segment C effort include the beginning of the project from Middle Bayou to the area just north of Rabbs Bayou where site 41FB134 was previously recorded. Sites 41FB127, 41FB128, and 41FB134 were revisited during this effort and found negatively impacted by suburban encroachment as well as lacking the data resources to warrant inclusion in the NRHP (Sherman et al. 2006). No further work or research was recommended at these locations.

As noted, two cemeteries have been documented in proximity to the proposed project. The Sansbury/Sandberry Cemetery is located along the western edge of Crabb River Road. The Sansbury/Sandberry Cemetery eastern boundary is consistent with the west boundary of the proposed project boundary for approximately 113 m (370 ft). The THC site atlas indicates that the cemetery is associated with African-American ancestry and bound by a fence. The cemetery is maintained, active and frequently visited. No indication of the burial dates is provided on the site atlas.

The Dickson-Murfey Cemetery is located approximately 229 m (750 ft) from the east boundary of the proposed project. Located on private property and described as difficult to find without guidance, the cemetery is also partially fenced with barbed wire and chain linked fence. The THC site atlas indicates that the cemetery is associated with African-American ancestry and burial dates range from 1900 to 2003. Several graves are unmarked or have no dates.

The literature and map review conducted suggests limited potential for finding prehistoric sites within the APE. However, the presence of historic plantations and other historic archeological resources and cemeteries in the vicinity of the proposed project area indicates that there is potential for finding historic resources within the proposed project area.

## **FIELD METHODS**

Survey methods will follow the Archeological Survey Standards for Texas established by the Texas Historical Commission (THC) and the recommendations of TxDOT's Houston PALM (see attached map). Shovel testing will be conducted where recommended by the Houston PALM and at Gapps Slough per recommendations made by TxDOT ENV to determine if cultural resources are present. Shovel tests will be approximately 30 centimeters (cm) in diameter placed within the survey area and excavated by natural strata where possible, or in intervals not exceeding 10 cm. Shovel tests will be excavated to a depth where pre-Holocene sterile substrates are encountered, if possible, barring disturbed conditions. All soil matrixes will be sifted through 6.3-millimeter (¼-inch) mesh hardware cloth unless the matrix is dominated by clay. Clayey matrix will be finely divided by trowel and visually inspected. A shovel test that yields artifacts (culturally positive) will be followed by shovel tests placed approximately 10 m apart along a transect in the four cardinal directions until two shovel tests absent of artifacts (negative) are excavated, sterile soil is encountered at the surface, or a break in topography is found. Sites will be delineated only within the survey area. Sites will be given a temporary designation in the field. Then, after fieldwork is completed, a site form will be submitted to TARL and a permanent trinomial will be requested. For each of the shovel tests, the following information will be recorded on PBS&J 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 will be recorded. No artifacts will be collected, and any artifacts encountered in shovel tests will be replaced. All shovel tests will be backfilled upon completion. Relevant paperwork will be submitted to TARL for curation at that time.

Where the Houston PALM recommends deep reconnaissance if deep impacts are anticipated, mechanical trenching will not be performed. As noted above, this decision is based on the recommendations made by Dr. Pletka. Specifically, previous impacts associated with road and urban development within the area recommended for trenching have resulted in the potential for intact archeological deposits to occur within the proposed project at this location to be minimal. Additionally, impacts deeper than six feet are unwarranted given the potential harm that could occur to existing infrastructure. Work in this specific area will be limited to field observations in the form of a reconnaissance survey or shovel test data to confirm Dr. Pletka's impressions. Moreover, in order to verify the integrity of the soils and confirm the recommendations made by Dr. Pletka, intensive shovel testing will be conducted at Middle Bayou, the proposed Sansbury Boulevard underpass, and the north bank of Rabbs Bayou. Additionally, as discussed above, THC concurred with the findings of the Segment C survey report on October 10, 2006 stating that additional surveys were not required for the portion of the currently proposed project from US 59 to Rabbs Bayou. However, the south bank of Rabbs Bayou, an area not evaluated by Dr. Pletka, will be investigated with respect to the need for mechanical trenching by conducting a reconnaissance survey augmented with shovel testing. Due to Sansbury/Sandberry Cemetery's proximity to the project ROW, PBS&J proposes to conduct a reconnaissance level survey at this location to document the condition of the proposed project area adjacent to the cemetery. Shovel testing in this area may be conducted to verify soil conditions but mechanical trenching will not be conducted.

Following completion of the survey, PBS&J will analyze all data, and provide a preliminary evaluation of all located cultural resources with regard to eligibility for inclusion to the NRHP. A report including background research and a summary of the field investigation results will be written in accordance with the Guidelines for Cultural Resource Management Reports established by the Council of Texas Archeologists. In addition, if any sites are encountered during the survey, a list of these sites will be presented along with the landowner information pertaining to the site location. Recommendations will be made regarding the potential for identified sites to meet established eligibility criteria for inclusion in the NRHP or designation as a SAL.

After Fort Bend County's approval, a draft report of the findings will be submitted to TxDOT for review and comment. The report will be revised to address any comments received from TxDOT. Survey documents will be submitted to TARL for curation and copies of the final report will be submitted to TxDOT and the THC.

## REFERENCES

Natural Resources Conservation Service, U.S. Department of Agriculture (NRCS).

1960 Soil Survey of Fort Bend County, Texas.

Natural Resources Conservation Service, Soil Data Mart. 2009. Hydric Soils of Texas. Available on the Internet at: <http://soildatamart.nrcs.usda.gov/>. Accessed on 12/15/2009.

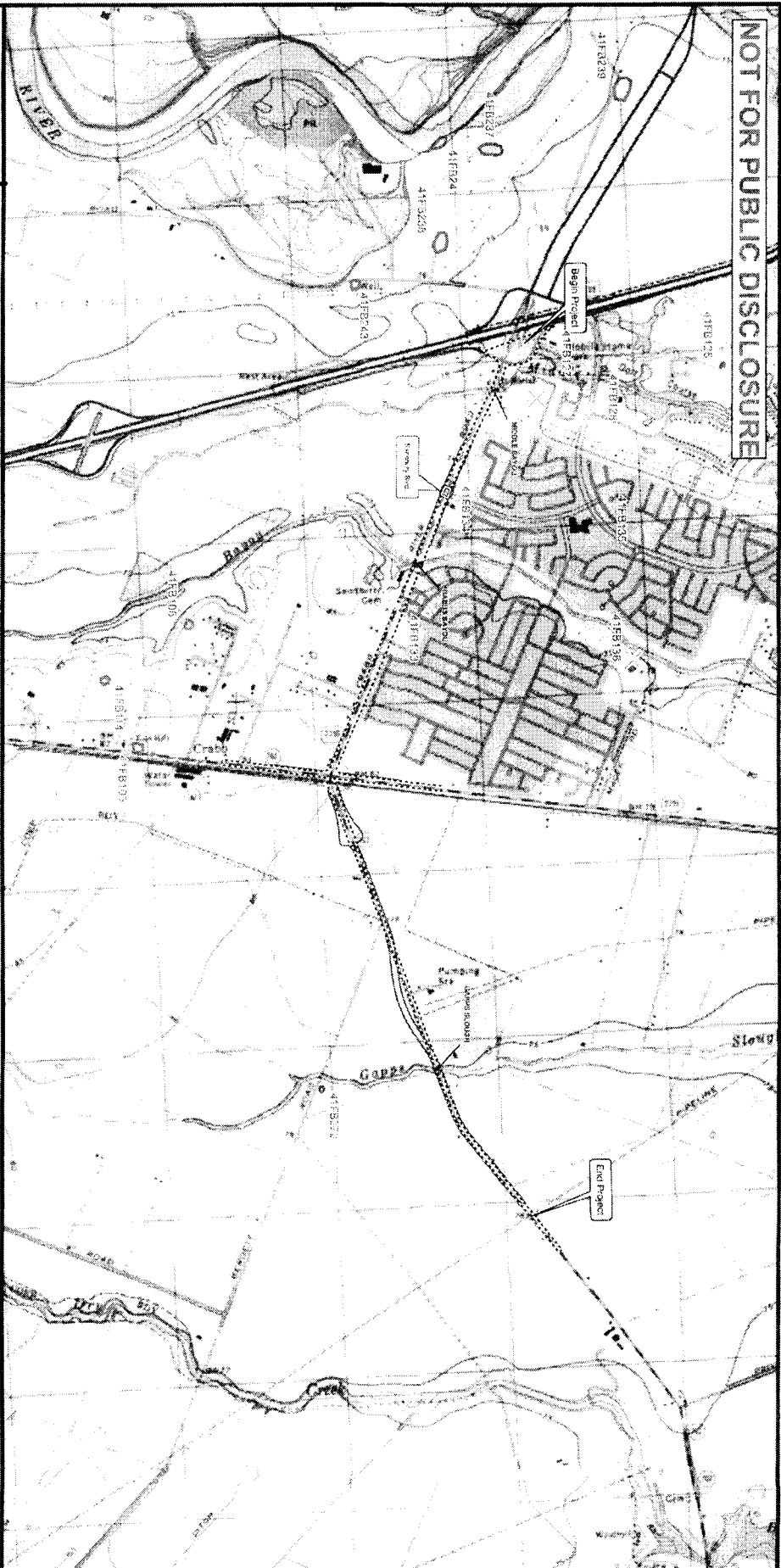
Texas Historical Commission (THC)

2008 Texas Archeological Sites Atlas. Available at <http://nueces.thc.state.tx.us/> (Accessed December 2009).

Sherman, David, Eugene Foster, Michelle Dippel, Brandy Lim, and Linda Nance

2006 Intensive Archaeological Survey of the Grand Parkway Segment C Preferred Alternative in Fort Bend and Brazoria Counties, Texas. Document 040119. PBS&J Austin, Texas.

NOT FOR PUBLIC DISCLOSURE



Datum: NAD 83  
Projection: UTM  
Zone: 15  
Units: Meter  
Palm: TXDOT  
ROW:

Cemetery

Archaeological Sites

Existing ROW

Proposed ROW

Area surveyed during Grand Parkway Segment C effort including area recommended for no further work by TXDOT ENV Dec. 31, 2009

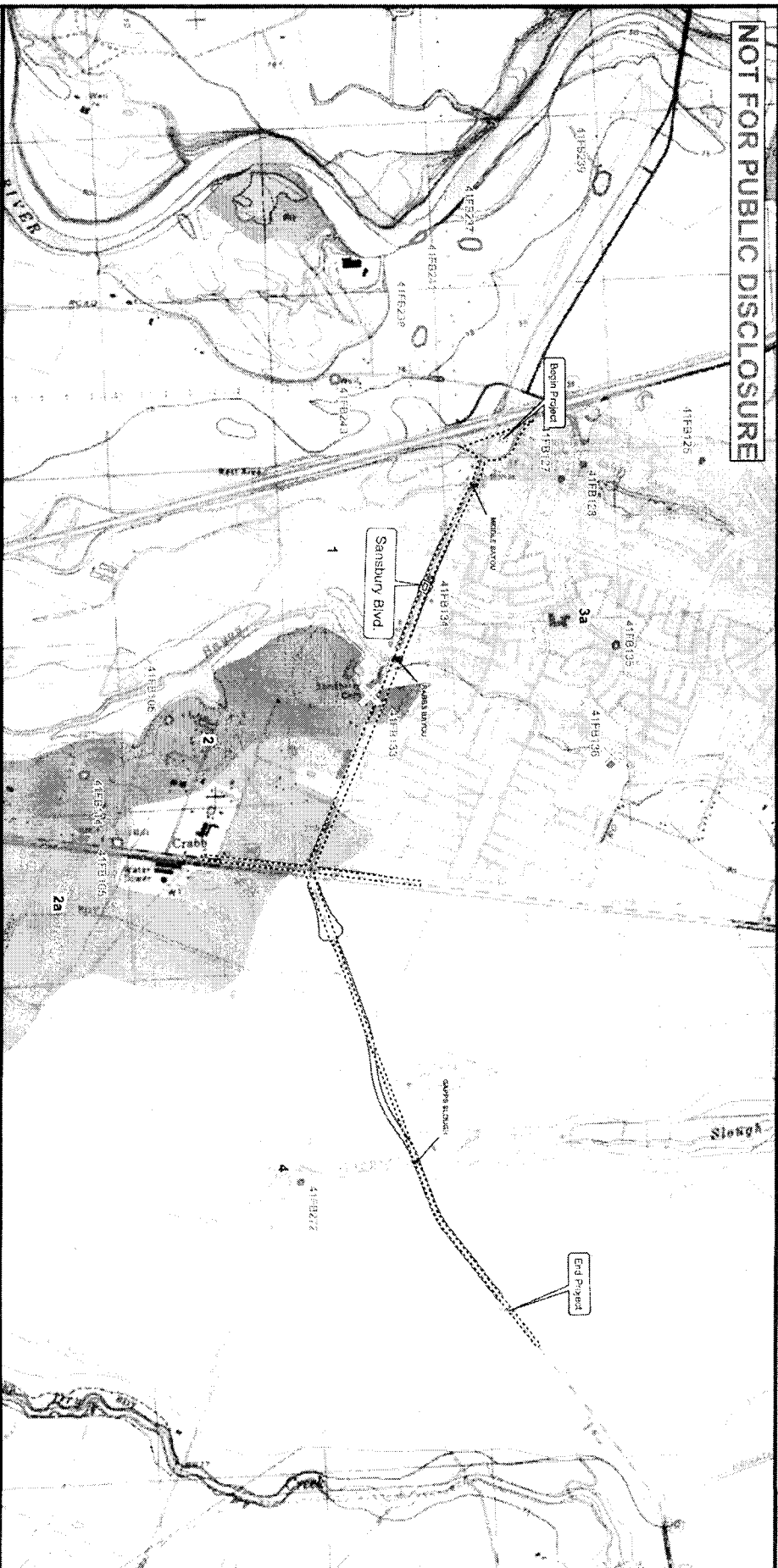


PSJ

Cultural Permit Map  
Crabo River Road Expansion  
Survey Review Area  
Sugar Land Quadrangle

Prepared By: PISA/J2/002  
Map No.: 10001402  
Date: 2011.5.2010  
File: N:\TRANS\10001402\proj\smabl\_sls\_C\_Crabo\map\psj.mxd

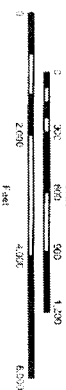
NOT FOR PUBLIC DISCLOSURE



- Cemetery
- Archaeological Sites
- Existing ROW
- Proposed ROW

### TxDOT PALM

- 1-Surface Survey Recommended, Deep Reconnaissance Recommended if Deep Impacts are Anticipated.
- 2-Surface Survey Recommended, No Deep Reconnaissance Recommended.
- 2a-Surface Survey of Mounds Only, No Deep Reconnaissance Recommended.
- 3a-No Surface Survey Recommended, Deep Reconnaissance Recommended only if Severe Deep Impacts are Anticipated.
- 4-No Survey Recommended.



Datum: NAD 83  
Projection: UTM  
Units: Meter  
BAMM: TxDOT  
ROW:

FSJ

Cultural Permit Map  
Crabb River Road Expansion  
PALM Data Review  
Sugar Land Quadrangle

Prepared By: RES&J24002  
Scale: 1" = 2,000'  
Job No: 100014602  
Date: 06/08/2010  
File: N:\TDMAS\100014602\06082010\SLUG C CrabbRdPermit