

Appendix C
Agency Correspondence



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON TX 77553-1229
JUL 23 2010

Policy Analysis Section

SUBJECT: SWG-2010-00397; Jurisdictional Determination, E535-01-00-E004, Harris County, Texas

Harris County Flood Control District
ATTN: Ingrid Fairchild
9900 Northwest Freeway
Houston, Texas 77092

Dear Ms. Fairchild:

In response to your request, dated May 7, 2010, we determined that the approximate 40-acre project site, E535-01-00-E004, does not contain waters of the United States, including jurisdictional wetlands. The subject site is located in an existing basin located approximately 0.5 miles west of the intersection of Jones Road and Jersey Meadows Drive, Harris County, Texas. The proposed project site is not subject to Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act and any structure, work, or discharge of fill material on the site does not require a Department of the Army permit.

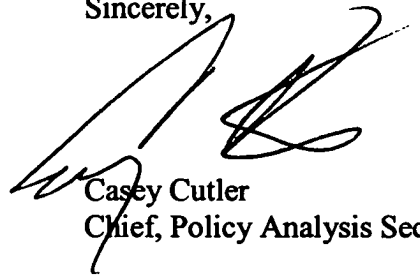
This determination has been conducted to identify the limits of the Corps' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

This letter contains an approved jurisdictional determination for your subject site, which is valid for 5 years from the date of this letter, unless new information warrants a revision prior to the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeals Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination, you must submit a completed RFA form to the Southwest Division Office at the following address:

Mr. Elliott Carman
Appeal Review Officer, CESWD-ETO-R
U.S. Army Corps of Engineer Division, Southwestern
1100 Commerce Street, Room 831
Dallas, Texas 75242-1317
Telephone: 469-487-7061; FAX: 469-487-7190

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within **60 days** of the date of the NAP. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter. If you have any questions concerning this jurisdictional determination, please reference file number **SWG-2010-00397** and contact Mr. Dwayne Johnson at the letterhead address or by telephone at 409-766-6353. To assist us in improving our service to you, please complete the survey found at <http://per2.nwp.usace.army.mil/survey.html> and/or, if you would prefer a hard copy of the survey form, please let us know, and one will be mailed to you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Casey Cutler', is written over the typed name and title.

Casey Cutler
Chief, Policy Analysis Section

Enclosure

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Harris County Flood Control District		File Number: SWG-2010-00397	Date:
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved jurisdictional determination (JD) or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Dwayne A. Johnson
Project Manager, Policy Analysis Section
CESWG-PE-RB
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229
409-766-6353; FAX: 409-766-3931

If you only have questions regarding the appeal process you may also contact:

Mr. Elliot Carman
Appeal Review Officer, CESWD-ETO-R
U.S. Army Corps of Engineer Division, Southwestern
1100 Commerce Street, Room 831
Dallas, Texas 75242-1317
Telephone: 469-487-7061; FAX: 469-487-7190
Email: Elliot.N.Carman@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or authorized agent.

Date:

Telephone number:

From: Ryan Robol [ryan@crouchenvironmental.com]
Sent: Thursday, February 11, 2010 11:06 AM
To: 'ed.baker@thc.state.tx.us'; 'linda.henderson@thc.state.tx.us'
Subject: American Indian, Native Hawaiian and/or Native Alaskan Cultural and/or Religious Sites

Hello Mr. Baker and Mrs. Henderson –

I am working on NEPA documentation for a Harris County Flood Control District proposed detention basin project that is located in Harris County, Texas. Project funding has not been awarded yet, but it is likely the project would be funded by a FEMA grant under their Hazard Mitigation Grant Program. I have contacted both of you as you both are listed as the Section 106 reviewer for FEMA related projects on the THC contacts web page. Our project site has already had a cultural resources survey that was conducted by a cultural resources consulting firm and the project site has received concurrence from THC. One of the required sections of the NEPA document deals with American Indian, Native Hawaiian and/or Native Alaskan Cultural and/or Religious Sites. I was hoping that you might be able to point me in the right direction as far as obtaining information related to any American Indian, Native Hawaiian and/or Native Alaskan Cultural and/or Religious Sites that could potentially be in the vicinity of the project site. The project site is more specifically located in Jersey Village, Texas on a 42 acre vacant tract of land west of Rio Grande Drive and south of Pearl Drive. Please let me know if there is any further information that you need from me in order to help me out with my request.

Thank you for any help that you can provide –

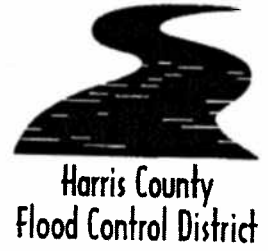
Ryan

Ryan K. Robol
Environmental Consultant

Crouch Environmental Services, Inc.
402 Teetshorn Street
Houston, Texas 77009

Office: 713.868.1043
Fax: 713.863.7944
www.crouchenvironmental.com

Bcc: MDT
FG
GWL



August 5, 2009

Mr. F. Lawrence Oaks
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711-2276

9900 Northwest Freeway
Houston, Texas 77092
713-684-4000
www.hcfd.org

RE: Review Of A Local Drainage Project (Along White Oak Bayou) Under The Hazard Mitigation Grant Program (HCFD Unit E535-01-00)

Dear Mr. Oaks:

The Harris County Flood Control District (HCFCD) has prepared an application for a local drainage project to construct a stormwater detention basin in the White Oak Bayou Watershed through the FEMA Hazard Mitigation Grant Program (HMGP) under disaster declaration DR-1791 (Hurricane Ike).

One of the grant application requirements is that we notify your agency of our application. Once the grant is awarded, all appropriate National Environmental Policy Act (NEPA) requirements will be followed. A narrative description of the project, topographic photo of the area, and latitude and longitude data is attached to this letter.

We will forward any responses you make to the Governor's Division of Emergency Management. Should you need any additional information to conclude your review or have any questions, please call Eddie George at (713) 684-4000 or send a written reply to the following address:

Harris County Flood Control District
Att: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Thank you for your assistance.

Sincerely,

Michael D. Talbott
Director

NO HISTORIC PROPERTIES AFFECTED PROJECT MAY PROCEED	
by	
for	Mark Wolfe
	State Historic Preservation Officer
Date	8/31/09
Track#	

MDT:EG:rso

Attachments: Narrative Project Description
Topographic Photo
Latitude/Longitude Data

cc: Eddie George, HCFCD
Mike Garmon, HCFCD
Yeh Min Maa, HCFCD

SCANNED

AUG 13 2009

S:\Environmental\PROJECTS\FEDERAL PROJECTS\09-L8-5thc RA Coordination Ltr White Oak.Doc

P85042
ID Number

RSO
Initials

RECEIVED

JUN 29 2000



Moore Archeological Consulting, Inc.

TEXAS HISTORICAL COMMISSION

2140 Bevis Street
Houston, Texas 77008
www.moore-archeological.com

Office (713) 861-8663
Laboratory (713) 861-2323
Fax (713) 861-8627

June 26, 2000

Mr. Ed Baker
Archeology Division
Texas Historical Commission
P.O. Box 12276
Austin, TX 78711

Dear Mr. Baker:

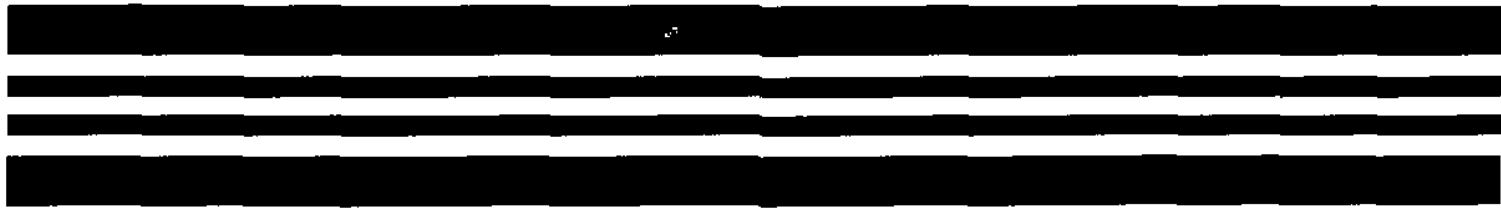
Enclosed please find two copies of our draft report entitled: *Cultural Resource Survey of a Harris County Flood Control District Possible Land Acquisition, Harris County, Texas* (TAC Permit No. 2379). If you have any questions or need additional copies of the report please let us know.

Sincerely,

Abigail P. Beck

NO EFFECT
On National Register-eligible/listed properties
or State Archeological Landmarks
PROJECT MAY PROCEED
by William A. Madz
for F. Lawrence Oaks
State Historic Preservation Officer
Date 7/19/00

DRAFT REPORT
ACCEPTABLE
Please submit 20 final report copies
by William A. Madz
for F. Lawrence Oaks
State Historic Preservation Officer
Date 7/19/00



Unit #: E535-01-00

Book Seq #: 1

Title: CULTURAL RESOURCE SURVEY OF A HCFCD
POSSIBLE LAND ACQUISITION

Author Code: MOORE

Report Month: 06

Report Year: 2000

Key Word 1: ENVIR

Key Word 2: ARCHE

Key Word 3:

Key Word 4:

Key Word 5:

ES35.001

**Cultural Resource Survey of a Harris County Flood Control District Possible Land
Acquisition, Harris County, Texas**

TAC Permit No. 2379

MAC PN 00-43

By

**Abigail P. Beck
Principal Investigator**

and

**Tiffany Terneny
Project Archeologist**

**Prepared for
Harris County Flood Control District**

**Moore Archeological Consulting, Inc.
Report of Investigations Number 273**

June 2000

ABSTRACT

On May 4, 2000 Moore Archeological Consulting, Inc. conducted a cultural resource investigation for a Harris County Flood Control District possible land acquisition. The subject tract consisted of 43 acres of the Jersey Meadows Golf Course in west central Harris County, Texas. The purpose of the investigation was to determine, through the excavation of shovel tests during a pedestrian survey, whether potentially significant archeological deposits existed within the Project Area. The investigation was conducted under TAC Permit Number 2379 for the Harris County Flood Control District and will be subject to review by the Texas Historical Commission. No intact, potentially significant archeological deposits were encountered. No further cultural resource investigations are recommended for the remainder of the designated Project Area. If at any time archeological deposits or features are exposed during construction, operations should cease within the immediate area and the Archeology Division of the Texas Historical Commission should be contacted.

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INTRODUCTION

This document presents the results of a cultural resource survey conducted for a possible land acquisition by the Harris County Flood Control District. The Project Area consisted of a 43-acre tract in west central Harris County (Figure 1). The purpose of the investigation was to determine, through the systematic excavation of shovel tests during a pedestrian survey, whether potentially significant archeological deposits existed within the Project Area.

Cultural resource investigations were conducted on May 4, 2000 by Moore Archeological Consulting, Inc. for the Harris County Flood Control District under Texas Antiquities Permit Number 2379, and will be subject to review by the Texas Historical Commission. The Project Area is depicted on the *Satsuma* USGS quadrangle (Figure 2).

The Project Area consisted of 43 acres in the Jersey Meadow Golf Course. Three tests were excavated on the few surfaces that appeared neither artificially elevated nor excavated in the Project Area. Areas of exposed soil, including the banks of a ditch composing the Project Area's southern border, were examined for surface exposure of cultural remains and features.

The shovel tests were excavated in 10-cm arbitrary levels. Soil fill from these tests was screened, when possible, through 1/4" hardware cloth and examined for cultural materials. The shovel test units were backfilled immediately.

Abigail P. Beck, Eleanor S. Dahlin, and Darren K. Schubert conducted the fieldwork. The following report covers all aspects of fieldwork involved, including a description of the Project Area's environment, and a culture history for southeast Texas. Also included in the report is an overview of regional archeology, a description of methods and results, and recommended actions for the Harris County Flood Control District possible land acquisition Project Area.

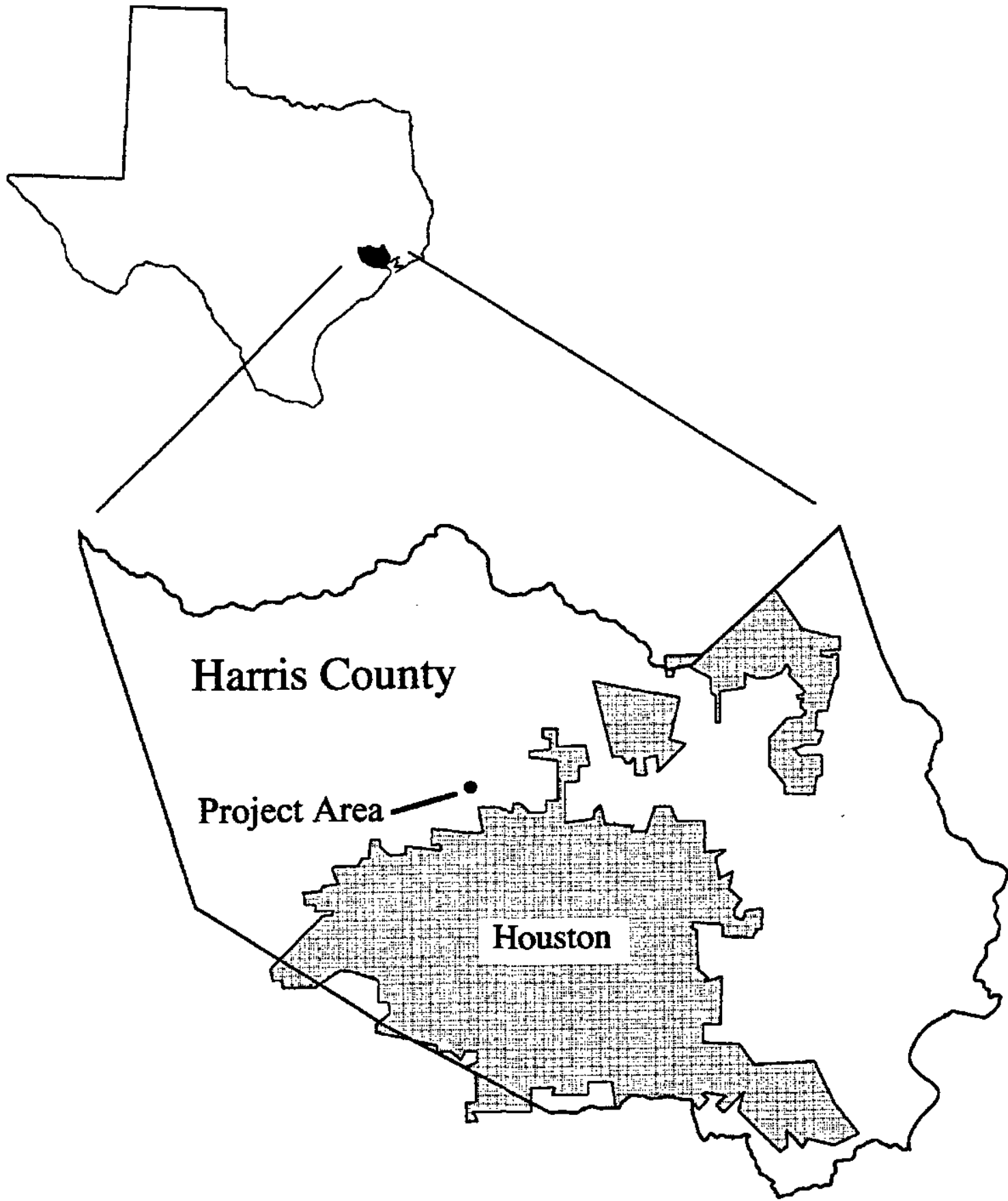


Figure 1. General location of the Project Area.

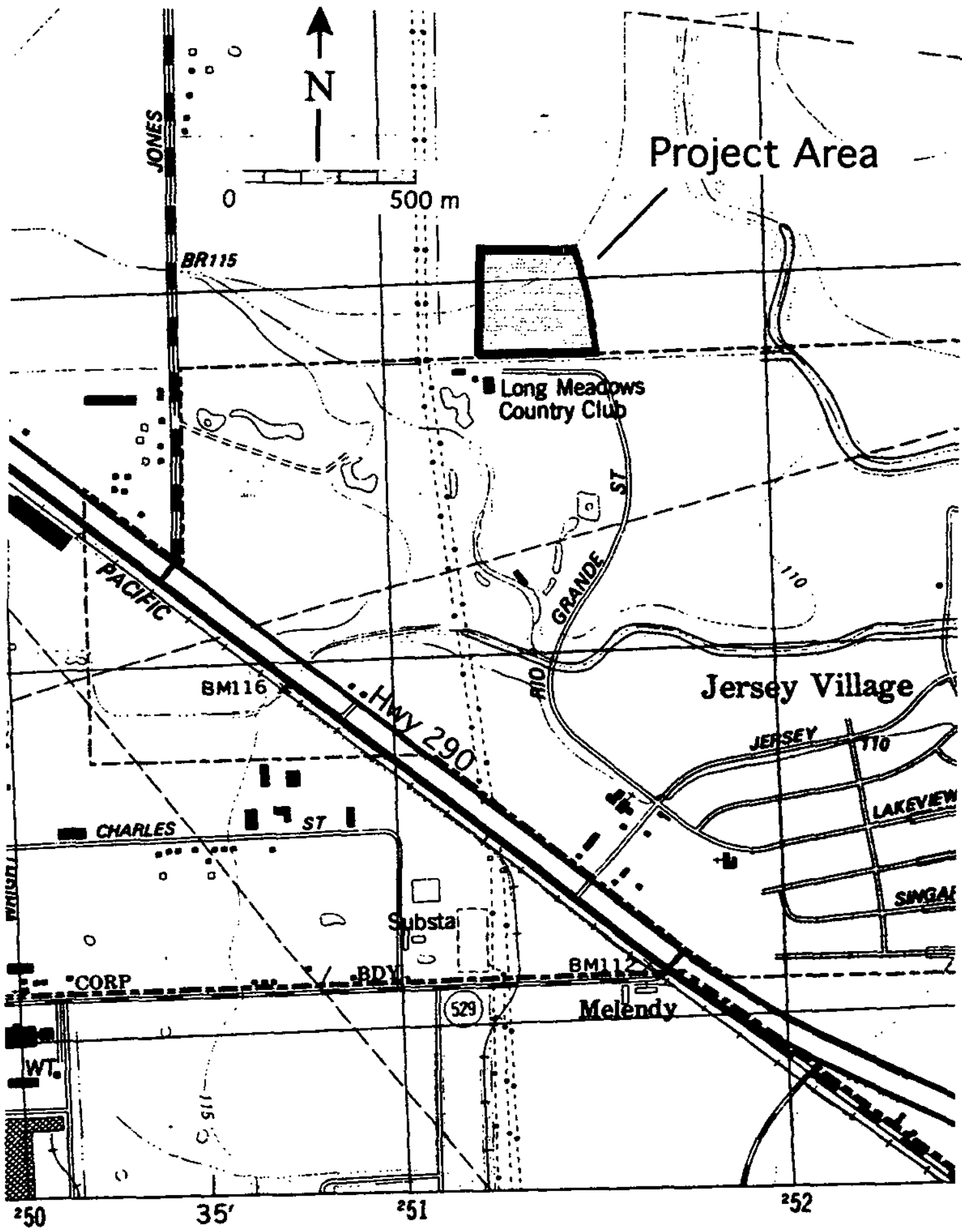


Figure 2. Portion of the *Satsuma* USGS quadrangle depicting the location of the Project Area.

ENVIRONMENTAL SETTING

The Project Area consists of a 43-acre tract owned by the Jersey Meadows Golf Course. The property is currently in use as a golf course—in fact, a tournament was in progress on the tract during the survey. Due to the considerable disturbance of the natural soil expected from the original construction of the golf course the survey largely consisted of an examination of the tract for areas left in their natural state and the implementation of shovel tests in those areas.

No part of the Project Area remained in its natural state. The tract was stripped of its natural vegetation and consisted of artificial mounds, ponds, and sand traps normally found on a golf course. The extant vegetation in the Project Area consisted of Chinese tallow, cottonwood, and grass. Shovel tests revealed a soil profile that consisted of dark gray loam underlain by gray loam followed by light gray clay loam. This profile resembles the Addicks loam series mapped for the area by the Harris County soil survey.

One soil type is mapped in the Harris County Flood Control District possible land acquisition Project Area. For 100 to 200 m north and south of the Whiteoak Bayou channel Addicks (Ad) loam is dominant. This soil type occurs in broad areas on the upland prairies and is generally composed of a friable black loam above a light gray loam with visible calcium carbonate. This loam is underlain by a light gray loam with distinct yellow to yellow brown mottles. Addicks loam is nearly level and poorly drained (Wheeler 1976). The soil typically supports rice cultivation, native pasture, and improved pasture.

Harris County lies near the western boundary of the Austroriparian biotic province (Blair 1950). In this portion of the province loblolly pine (*Pinus taeda*), yellow pine (*Pinus echinata*), red oak (*Quercus rubra*), post oak (*Quercus stellata*), and blackjack oak (*Quercus marilandica*) dominate the forest. In the Project Area, the natural vegetation had been removed for construction of the golf course. The tract is

currently vegetated with grass, Chinese tallow (*Sapium sebiferum*), and cottonwood (*Populus deltoides*).

The Austroriparian Biotic Province ranges from the Gulf Coast Plain to east Texas. There are roughly forty-seven species of mammals associated with the province in recent times (Blair 1950:99). Some common examples include opossum (*Didelphis virginiana*), fox squirrel (*Sciurus niger*), flying squirrel (*Glaucomys volans*), eastern cottontail (*Sylvilagus floridanus*), swamp rabbit (*Sylvilagus aquaticus*), red bat (*Lasiurus borealis*), and white-tailed deer (*Odocoileus virginianus*). This biotic province also hosts an abundance of amphibians and reptiles. According to Blair (1950:99) there are twenty-nine reptile and thirteen amphibian species, including the Texas rat snake (*Elaphe obsoleta*), the western cottonmouth (*Agkistrodon piscivorus*), speckled kingsnake (*Lampropeltis getulus*), and the timber rattlesnake (*Crotalus horridus*).

The modern climate of Harris County is humid and subtropical. The mean annual temperature is approximately 20 degrees Celsius with mean daily temperatures ranging from 37 degrees Celsius in July to 7 degrees Celsius in January. Harris County receives an average of 117 cm of precipitation annually (Arbingast, et al. 1976).

PREVIOUS ARCHEOLOGICAL INVESTIGATIONS

Prior to the investigation, site records on file at the Texas Archeological Research Laboratory (TARL) at the University of Texas at Austin were examined to determine whether previously identified archeological sites existed in the Project Area. Neither this tract nor the immediate surrounding area contained previously identified archeological deposits. It is important, however, to attempt an overview and review examples of types of archeological sites that have been documented and recorded in proximity to the Project Area. In this case, the closest area of significance is Whiteoak Bayou located to the north and east of the Project Area.

Wayne Neyland was the first to investigate the Whiteoak Bayou drainage in 1955. According to his field notes on file at TARL, Neyland recorded Site 41HR116 which was eroding out of the bayou bank over a distance of about six city blocks. Surface collection and subsurface probing yielded a possible hearth, one Gary point, and nine Goose Creek Plain ceramic sherds (Fields 1988).

In 1960 and 1961 William Caskey collected artifacts from the surface of 37 prehistoric localities. Nineteen of these localities can be associated with 8 archeological sites recorded by TARL. Professional archeologist William Payne recorded five of these sites in 1973 and recommended sites 41HR239 and 41HR240 for testing due to their archeological value (Fields 1988).

William McClure began recording sites and monitoring the effects of urban development along Whiteoak Bayou in 1970. He was able to relocate sites originally described by Caskey as well as to record 26 new sites. The Houston Archeological Society conducted test excavations at sites 41HR89 and 41HR139, and completely excavated 41HR406. Site 41HR89 (the Laura Lackner Site) is located about 8.7 km from the confluence of Whiteoak Bayou and Buffalo Bayou. Artifacts occurred from 26 to 56 cm below the surface in a gray sand layer that was underlain by a sterile orange silty clay. Analysis of the artifacts indicated an intensive late Preceramic and Early Ceramic occupation and limited use in the middle Preceramic and Late Ceramic periods (Fields

1988, McClure 1986). Site 41HR139 (The Gus Wortham Site) is about 2.5 km from the confluence of Whiteoak Bayou and Buffalo Bayou on an upper sandy terrace about 6 m above the floodplain. Artifacts recovered included Gary and Kent dart points, two arrow points, and Goose Creek and bone tempered ceramics. These suggest Late Ceramic and Early Ceramic occupations (Fields 1988:16). Site 41HR406 is located about 20.6 km from the confluence. This site contained the remains of a bison associated with a Perdiz point (Fields 1988).

Prewitt and Associates conducted a comprehensive investigation of Whiteoak Bayou in 1986 (Fields 1988). Their study included an intensive pedestrian survey of 2.6 km of Vogel Creek, a tributary of Whiteoak Bayou, and testing of eight previously recorded sites to determine whether they were eligible for listing on the National Register of Historic Places. They also conducted geoarcheological research to study the geomorphic history of the sites in the area and analyzed existing collections from 46 known sites along the bayou (Fields 1988). Of the sites tested only three had substantial intact deposits. They judged sites 41HR273 and 41HR541 to be eligible for listing on the National Register. One site, 41HR259, though listed on the National Register, was found to have limited potential to yield additional information (Fields 1988).

Texas A&M University's Archeological Research Laboratory excavated 41HR541 in 1987. They recovered Perdiz and Alba arrow points and Goose Creek Ceramics associated with bison bones. A radiocarbon date on charcoal associated with the bones placed the site in the Late Ceramic Period between 300 to 700 years ago (McReynolds 1988). The low artifact variability and small number of artifacts recovered suggested that the site is a limited activity, single component site with activities centered on processing the bison (McReynolds, et al. 1988: 66).

In 1987 and 1988 Texas A&M University excavated Site 41HR273 (The Alabonson Road Site). The site contained the remains of a base camp or place of aggregation that was occupied primarily during the Early Ceramic Period, 1200-1600 years ago with a Late Ceramic occupation superimposed (Ensor 1991). The artifacts recovered suggested the occurrence of activities such as biface manufacture, boiling and

roasting, human interment, and hunting and gathering of deer, turtle, nuts, and berries. The projectile point assemblage was dominated by Gary points and included Kent, Catahoula, Alba, and Scallorn in the upper levels (Ensor and Carlson 1991).

Recently Moore Archeological Consulting conducted investigations on Whiteoak Bayou. One study examined 35 acres at the confluence of the bayou and Vogel Creek. Although they found no new sites, site 41HR541 was visited and evaluated. They found that the site had been completely excavated and no undisturbed portions remained (Moore and Sanchez 1993). Another study involved a survey of 15 acres along Whiteoak bayou north of Jones Road. This investigation also failed to locate any previously unrecorded cultural resource sites (Moore and Daigle 1995).

CULTURE HISTORY OF SOUTHEAST TEXAS

A definitive chronology for Southeast Texas is problematic because archeological sites in this area often lack data on site formation processes or typology. In the inland southeast Texas region the data suggest that sites are typically located on sandy ridges on the margins and terraces of drainages. Several authors have placed forth differing chronologies in an attempt to clarify the absence or presence of archeological materials that hallmark time periods. The most clear and concise synthesis on the debate of southeast Texas chronologies is available in a report by the Texas Archeological Survey, The University of Texas at Austin, in *Buried in the Bottoms: The Archaeology of Lake Creek Reservoir Montgomery County, Texas* Research Report 97 (Bement, et al. 1987). An excerpt from the report is available in Table 1.

In general terms, the culture history of the Southeast Texas archeological region has been divided into three periods. In *Indians of the Upper Texas Coast*, Lawrence Aten classifies these as The Paleoindian period (9000 B.C. – 6000 B.C.), the Archaic Period (6000 B.C. – A.D. 200), and the Late Prehistoric (A.D. 200 – 1600). The Paleoindian period in southeast Texas is not very well defined due to the lack of archeological sites, but archeologists have defined the Central Texas region that is adjacent to Southeast Texas extremely well. Data and temporal sequencing from archeological sites in the Central Texas region have often been extrapolated to southeast Texas because of this lack of cultural material. The Archaic, generally divided into Early, Middle, and Late, is characterized by the presence of dart points associated with atlatl hunting technology. Examples of projectile points from this time period are Dalton, Bulverde, Pedernales, Gary, Kent, Ensor, and Yarbrough. The end of the Archaic marks what is known as the Early Ceramic period. This time period is marked by the adoption of pottery in southeast Texas and ends with the increase in bifacial arrow point use. Artifacts used as index markers of the end of the Late Archaic/Early Ceramic period, include Goose Creek Plain ceramics, dated at 2000 B.C. (Shafer 1975).

The Late Prehistoric or Late Ceramic (according to Shafer 1975) is characterized by the presence of arrow point styles used with the onset of bow and arrow hunting

technology. Examples of these projectile points are Alba, Perdiz, Scallorn, Catahoula, and Fresno. The hallmark ceramic type of this time period is referred to as San Jacinto. The Historic period for Southeast Texas begins around 1600 and is marked by the introduction of European-made materials into indigenous communities. The primary indigenous groups of the Southeast Texas area during the contact period were the Athapaskan groups of Bidais, Deadose, Patiri, and Akokisa (Patterson 1995). During the seventeenth and eighteenth centuries, the Karankawa and Orcoquiza occupied the Harris County area (Newcomb 1961). The Historic period ends in the 1800's when more permanent Anglo-American settlement enters the region (Patterson 1995).

		SOUTHEAST TEXAS					
DATE	YEARS BP	Patterson (1979, 1983)	Shofer et al. (1975)	Spolito (1983)	Fields (1978)	Bond & Moore (1980)	Shofer & Stearns (1975)
1450	500	HISTORIC	HISTORIC	HISTORIC	HISTORIC	HISTORIC	HISTORIC
950	1000	LATE PRE-HISTORIC	LATE CERAMIC CADDOAN	MISSISSIPPIAN PREHISTORIC	LATE	CERAMIC	LATE CERAMIC
450 AD.	1500	WOODLAND	EARLY CERAMIC	WOODLAND	EARLY CERAMIC		EARLY CERAMIC
50 BC	2000	LATE ARCHAIC	LATE LITHIC		WOODLAND	ARCHAIC	LITHIC
550	2500		MIDDLE ARCHAIC	MIDDLE LITHIC			
1050	3000	EARLY ARCHAIC			EARLY LITHIC	ARCHAIC	LITHIC
1550	3500		EARLY ARCHAIC	EARLY LITHIC			
2050	4000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
2350	4500		LATE PALEO-INDIAN	PALEO-INDIAN			
3050	5000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
3550	5500		LATE PALEO-INDIAN	PALEO-INDIAN			
4050	6000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
4550	6500		LATE PALEO-INDIAN	PALEO-INDIAN			
5050	7000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
5550	7500		LATE PALEO-INDIAN	PALEO-INDIAN			
6050	8000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
6550	8500		LATE PALEO-INDIAN	PALEO-INDIAN			
7050	9000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
7550	9500		LATE PALEO-INDIAN	PALEO-INDIAN			
8050	10,000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
8550	10,500		LATE PALEO-INDIAN	PALEO-INDIAN			
9050	11,000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN
9550	11,500		LATE PALEO-INDIAN	PALEO-INDIAN			
10050	12,000	LATE PALEO-INDIAN			PALEO-INDIAN	PALEO-INDIAN	PALEO-INDIAN

Table 1. Southeast Texas chronology after Bement, et al. 1987.

METHODS

Prior to the field survey, Moore Archeological Consulting Inc. conducted a preliminary record search. Pertinent cartographic resources including soil survey maps and historic topographic maps were examined. Archeological site records on file at the Texas Archeological Research Laboratory (TARL) at the University of Texas at Austin were consulted to determine whether any sites had been recorded within or immediately adjacent to the Project Area. This was followed by an intensive pedestrian survey of the tract. This archeological research was conducted to achieve the following objectives:

1. to locate and inventory, through systematic field survey, any previously unrecorded archeological features or sites within the Project Area;
2. to determine the boundaries, depth, fundamental characteristics, and state of preservation of any identified cultural resource;
3. to evaluate any encountered resources under the criteria of the State Archeological Landmarks and National Register of Historic Places (e.g., National Park Service 1990);
4. to report survey results to the Harris County Flood Control District and the Department of Antiquities Protection, Texas Historical Commission, and
5. to contribute to the local and regional body of archeological literature on site typology and distribution, prehistoric and historic land use patterns, and environmental and geological contexts for prehistoric and historic settlement.

Abigail P. Beck, Eleanor S. Dahlin, and Darren K. Schubert conducted cultural resource investigations using intensive pedestrian survey as the methodology on May 4, 2000. The pedestrian survey covered 100 percent of the Project area, which consisted of a 43-acre tract in the Jersey Meadow Golf Course (Figure 3). The survey consisted of examining the tract for areas left in their natural state, and conducting shovel tests in

those areas. Additionally, areas of exposed soil and the banks of a drainage that composed the southern boundary of the Project Area were closely examined for exposed cultural materials and features. Three shovel tests were excavated on the few surfaces that appeared neither artificially elevated nor excavated. Much of the tract consisted of the artificial mounds, ponds, and sand traps normally found on a golf course.

The shovel tests were carefully excavated in 10 cm arbitrary levels, and the soils from the tests were screened through 1/4" hardware cloth. The screening allowed close examination to determine the absence or presence of archeological materials. The location, size, depth, and any other pertinent information regarding the shovel tests were recorded on standardized shovel test forms. Soil descriptions for each level and soil profiles for each test were also included on the forms. Upon completion, each of the shovel tests was backfilled.

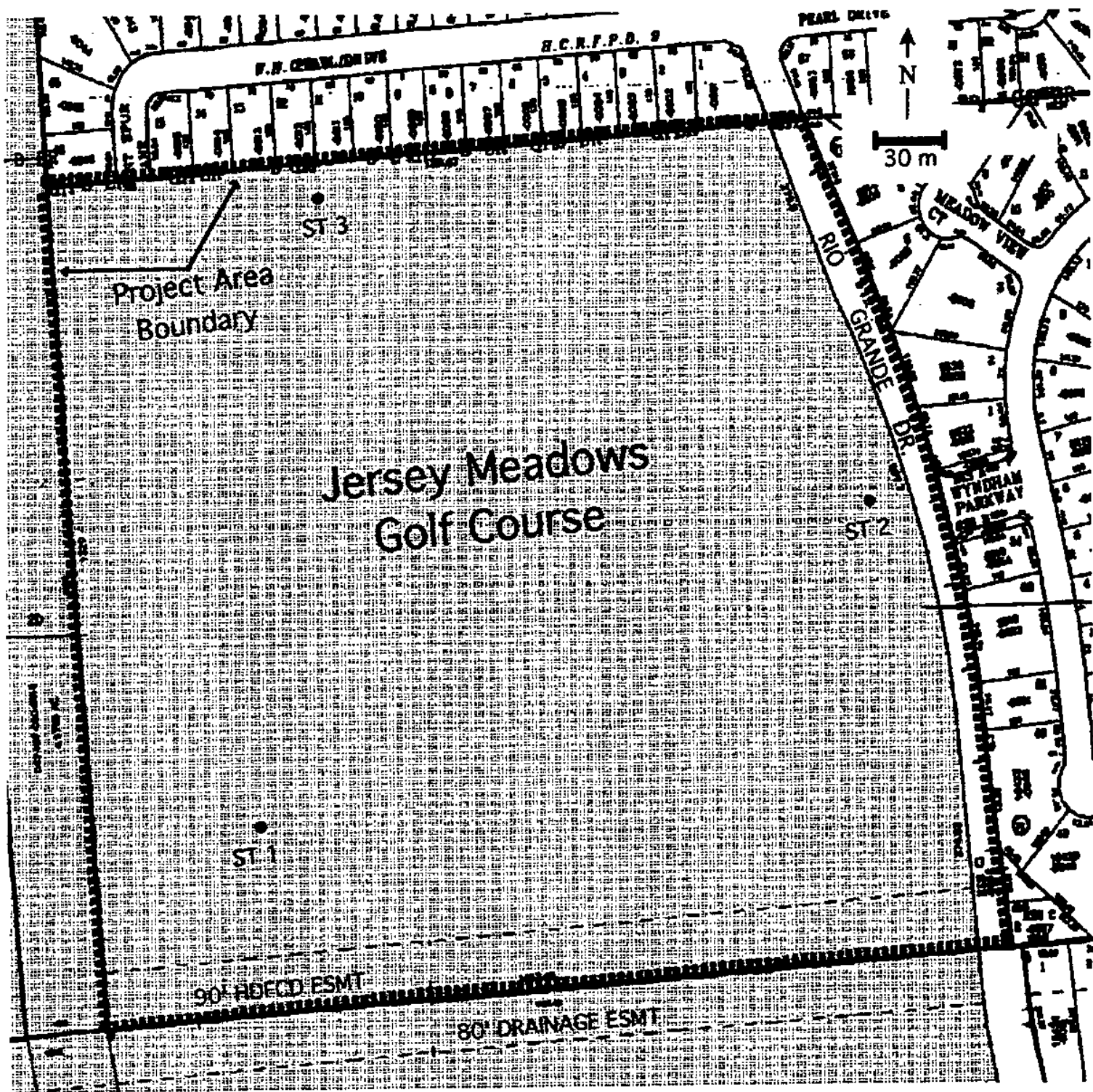


Figure 3. Map of the Project Area showing the locations of all shovel tests.

SURVEY RESULTS

Examination of site records at the Texas Archeological Research Laboratory of the University of Texas at Austin prior to survey determined that no previously recorded sites existed within or near the Project Area. No intact, potentially significant archeological deposits were encountered on May 4, 2000 during the duration of the survey coverage of the 43-acre tract on Jersey Meadow Golf Course for a Harris County Flood Control District possible land acquisition despite intensive exploratory efforts.

RECOMMENDATIONS

No further cultural resource investigations are recommended for the remainder of the designated Project Area comprising the 43-acre Harris County Flood Control District possible land acquisition, Harris County, Texas. Should any archeological deposits or features be exposed during construction, operations should cease within the immediate area and the Archeology Division of the Texas Historical Commission should be contacted immediately.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Division of Ecological Services
17629 El Camino Real #211
Houston, Texas 77058-3051



January 2010

Thank you for your request for threatened and endangered species information in the Clear Lake Ecological Services Field Office's area of responsibility. According to Section 7(a)(2) of the Endangered Species Act and the implementing regulations, it is the responsibility of each Federal agency to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any federally listed species.

Please note that while a Federal agency may designate a non-Federal representative to conduct informal consultation or prepare a biological assessment, the Federal agency must notify the U.S. Fish and Wildlife Service (Service) in writing of such designation. The Federal agency shall also independently review and evaluate the scope and contents of a biological assessment prepared by their designated non-Federal representative before that document is submitted to the Service.

A county by county listing of federally listed threatened and endangered species that occur within this office's work area can be found at <http://www.fws.gov/southwest/es/EndangeredSpecies/lists/ListSpecies.cfm>. You should use the county by county listing and other current species information to determine whether suitable habitat for a listed species is present at your project site. If suitable habitat is present, a qualified individual should conduct surveys to determine whether a listed species is present.

After completing a habitat evaluation and/or any necessary surveys, you should evaluate the project for potential effects to listed species and make one of the following determinations:

- **No effect** – the proposed action will not affect federally listed species or critical habitat (i.e., suitable habitat for the species occurring in the project county is not present in or adjacent to the action area). No coordination or contact with the Service is necessary. However, if the project changes or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.
- **Is not likely to adversely affect** – the project may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial. Certain avoidance and minimization measures may need to be implemented in order to reach this level of effects. The Federal agency or the designated non-Federal representative should seek written concurrence from the Service that adverse effects have been eliminated. Be sure to include all of the information and documentation used to reach your decision with your request for concurrence. The Service must have this documentation before issuing a concurrence.

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IN AMERICA** 

- **Is likely to adversely affect** – adverse effects to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. If the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects to individuals of that species, then the proposed action “is likely to adversely affect” the listed species. An “is likely to adversely affect” determination requires the Federal action agency to initiate formal Section 7 consultation with this office.

Regardless of your determination, the Service recommends that you maintain a complete record of the evaluation, including steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related articles.

The Service’s Consultation Handbook is available online to assist you with further information on definitions, process, and fulfilling Endangered Species Act requirements for your projects at <http://endangered.fws.gov/consultations/s7hndbk/s7hndbk.htm>.

If we can further assist you in understanding a federal agency’s obligations under the Endangered Species Act, please contact Moni Belton, David Hoth, Charrish Stevens, Arturo Vale or Catherine Yeagan at 281/286-8282.

Sincerely,



Stephen D. Parris
Field Supervisor, Clear Lake Field Office

Bcc: MDT
FG
GWL



Harris County
Flood Control District

9900 Northwest Freeway
Houston, Texas 77092
713-684-4000
www.hcfcd.org

August 5, 2009

Mr. Carter Smith
Executive Director
Texas Parks & Wildlife
4200 Smith School Road
Austin, Texas 78744

RE: Review Of A Local Drainage Project (Along White Oak Bayou) Under The Hazard Mitigation Grant Program (HCFCD Unit E535-01-00)

Dear Mr. Smith:

The Harris County Flood Control District (HCFCD) has prepared an application for a local drainage project to construct a stormwater detention basin in the White Oak Bayou Watershed through the FEMA Hazard Mitigation Grant Program (HMGP) under disaster declaration DR-1791 (Hurricane Ike).

One of the grant application requirements is that we notify your agency of our application. Once the grant is awarded, all appropriate National Environmental Policy Act (NEPA) requirements will be followed. A narrative description of the project, topographic photo of the area, and latitude and longitude data is attached to this letter.

We will forward any responses you make to the Governor's Division of Emergency Management. Should you need any additional information to conclude your review or have any questions, please call Eddie George at (713) 684-4000 or send a written reply to the following address:

Harris County Flood Control District
Att: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Thank you for your assistance.

Sincerely,

Michael D. Talbott
Director

MDT:EG:rso

Attachments: Narrative Project Description
Topographic Photo
Latitude/Longitude Data

cc: Eddie George, HCFCD
Mike Garmon, HCFCD
Yeh Min Maa, HCFCD

SCANNED

AUG 13 2009

P85049 RSO
ID Number Initials

S:\Environmental\PROJECTS\FEDERAL PROJECTS\09-L8-5tpwd RA Coordination Ltr White Oak.Doc

From: Dave Young [dave@crouchenvironmental.com]
Sent: Tuesday, January 19, 2010 12:28 PM
To: ryan@crouchenvironmental.com
Subject: Fw: Jersey Village Stormwater Detention Basin - HCFCD Project ID E535-01-00
Attachments: young_20091222_201.zip

I can't remember if this was saved or not on the server.

Dave

----- Original Message -----

From: [Texas Natural Diversity Database](#)

To: [Dave Young](#)

Sent: Wednesday, December 23, 2009 11:12 AM

Subject: RE: Jersey Village Stormwater Detention Basin - HCFCD Project ID E535-01-00

Hi Dave,

I clipped the two quads for you.

Native coastalprairie plants are documented from the general and surrounding area. While prairie remnants have no legal protection, they are very rare native grasslands and grassland habitat. They have been identified from native hay meadows to highway, railroad, and other rights-of-way.

As always, lack of data does not imply lack of occurrence and rights-of-way can support rare resources and remnant habitats.

The Texas Natural Diversity Database (TXNDD) includes federal, and state listed and tracked Threatened, Endangered, and Rare species. The attached .zip file contains documents that will guide you in appropriate use, restrictions, and shapefile interpretation of Texas NDD data as well as a request for adding data to the TXNDD. Also included is a shapefile of the T&E and Rare species element occurrences, information the TXNDD has available presently, within and touching the requested quads along with a companion EO **report**; areas where EO data are absent **do not mean** absence of occurrence for Threatened, Endangered, and Rare species. An EO **list** is included, buffered to approximately 10 miles from the requested quad boundaries to notify you of other potential federal, and state listed and tracked Threatened, Endangered, and Rare species within the area. To round out your review, please use the pertinent TPWD Annotated County lists of Rare Species; webpage address found below. For questions on these county lists please contact Celeste Brancel at celeste.brancel@tpwd.state.tx.us or (512)389-8021.

Absence of information in an area does not mean absence of occurrence. *Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Data from the TXNDD do not provide a definitive statement as to the presence, absence, or condition of special species, natural communities, or other significant features within your project area. These data cannot substitute for an on-site evaluation by qualified biologists.*

TPWD Annotated County Lists: http://www.tpwd.state.tx.us/landwater/land/maps/gis/ris/endangered_species/

USFWS species lists: http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.EntryPage

USFWS CRITICAL HABITAT: <http://criticalhabitat.fws.gov/>

There is a one week turn-around due to the number of requests that we receive. Thank you for your patience.

Dorinda Scott, Texas Natural Diversity Database
WildlifeDiversity Program

Austin, TX 78744

dorinda.scott@tpwd.state.tx.us

512/389-8723 (direct)

512/389-8758 (fax)

www.tpwd.state.tx.us

Texas Natural Diversity Database requests use:

txnidd@tpwd.state.tx.us

From: Dave Young [mailto:dave@crouchenvironmental.com]
Sent: Tuesday, December 22, 2009 1:56 PM
To: Texas Natural Diversity Database; Dorinda Scott
Cc: Amanda Miller
Subject: Jersey Village Stormwater Detention Basin - HCFCD Project ID E535-01-00

Hello:

I am evaluating the potential impacts for a proposed stormwater detention project, in the city of Jersey Village, Harris County, Texas. I am requesting the EO List, EO report and ArcGIS shapefile information for the proposed project area. The project is within the Satsuma USGS 7.5 minute quadrangle map.

If you should have any questions or require additional information, please do not hesitate to contact me at your convenience.

Thank you for your assistance!!

Dave

David M. Young
Environmental Consultant

Crouch Environmental Services, Inc.
6600 Preston Road #1721
Plano, Texas 75024
Direct: 214.474.1838
Main: 713.868.1043
Fax: 713.863.7944
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Occurrence List for Surrounding Quads

<u>Scientific Name:</u>	<u>Common Name:</u>	<u>Occurrence Number:</u>	<u>State Status:</u>	<u>Federal Status:</u>	<u>Eo Id:</u>
<i>Chloris texensis</i>	Texas windmill-grass	7			4545
<i>Chloris texensis</i>	Texas windmill-grass	8			1736
<i>Chloris texensis</i>	Texas windmill-grass	16			431
<i>Chloris texensis</i>	Texas windmill-grass	18			1901
<i>Chloris texensis</i>	Texas windmill-grass	30			3580
<i>Chloris texensis</i>	Texas windmill-grass	31			7198
<i>Chloris texensis</i>	Texas windmill-grass	32			5581
<i>Haliaeetus leucocephalus</i>	Bald Eagle	83	T		1359
<i>Haliaeetus leucocephalus</i>	Bald Eagle	117	T		1650
<i>Haliaeetus leucocephalus</i>	Bald Eagle	123	T		472
<i>Hymenoxys texana</i>	Texas prairie dawn	1	E	LE	3754
<i>Hymenoxys texana</i>	Texas prairie dawn	2	E	LE	2156
<i>Hymenoxys texana</i>	Texas prairie dawn	3	E	LE	5015
<i>Hymenoxys texana</i>	Texas prairie dawn	5	E	LE	7480
<i>Hymenoxys texana</i>	Texas prairie dawn	10	E	LE	282
<i>Hymenoxys texana</i>	Texas prairie dawn	11	E	LE	6096
<i>Hymenoxys texana</i>	Texas prairie dawn	12	E	LE	2969
<i>Hymenoxys texana</i>	Texas prairie dawn	13	E	LE	7062
<i>Hymenoxys texana</i>	Texas prairie dawn	14	E	LE	1143
<i>Hymenoxys texana</i>	Texas prairie dawn	15	E	LE	3379
<i>Hymenoxys texana</i>	Texas prairie dawn	16	E	LE	5263
<i>Hymenoxys texana</i>	Texas prairie dawn	17	E	LE	2130

<u>Scientific Name:</u>	<u>Common Name:</u>	<u>Occurrence Number:</u>	<u>State Status:</u>	<u>Federal Status:</u>	<u>Eo Id:</u>
<i>Hymenoxys texana</i>	Texas prairie dawn	18	E	LE	6775
<i>Hymenoxys texana</i>	Texas prairie dawn	20	E	LE	1954
<i>Hymenoxys texana</i>	Texas prairie dawn	21	E	LE	3575
<i>Hymenoxys texana</i>	Texas prairie dawn	22	E	LE	4748
<i>Hymenoxys texana</i>	Texas prairie dawn	23	E	LE	1897
<i>Hymenoxys texana</i>	Texas prairie dawn	24	E	LE	7722
<i>Hymenoxys texana</i>	Texas prairie dawn	28	E	LE	17
<i>Hymenoxys texana</i>	Texas prairie dawn	31	E	LE	3297
<i>Hymenoxys texana</i>	Texas prairie dawn	39	E	LE	7594
<i>Hymenoxys texana</i>	Texas prairie dawn	40	E	LE	7595
<i>Hymenoxys texana</i>	Texas prairie dawn	41	E	LE	5518
<i>Hymenoxys texana</i>	Texas prairie dawn	42	E	LE	2909
<i>Hymenoxys texana</i>	Texas prairie dawn	43	E	LE	5283
<i>Hymenoxys texana</i>	Texas prairie dawn	44	E	LE	385
<i>Hymenoxys texana</i>	Texas prairie dawn	45	E	LE	4045
<i>Hymenoxys texana</i>	Texas prairie dawn	46	E	LE	5133
<i>Hymenoxys texana</i>	Texas prairie dawn	47	E	LE	538
<i>Hymenoxys texana</i>	Texas prairie dawn	48	E	LE	6170
<i>Hymenoxys texana</i>	Texas prairie dawn	49	E	LE	315
<i>Hymenoxys texana</i>	Texas prairie dawn	50	E	LE	313
<i>Hymenoxys texana</i>	Texas prairie dawn	51	E	LE	8193
<i>Hymenoxys texana</i>	Texas prairie dawn	53	E	LE	26
<i>Hymenoxys texana</i>	Texas prairie dawn	55	E	LE	3565

<u>Scientific Name:</u>	<u>Common Name:</u>	<u>Occurrence Number:</u>	<u>State Status:</u>	<u>Federal Status:</u>	<u>Eo Id:</u>
<i>Hymenoxys texana</i>	Texas prairie dawn	58	E	LE	7785
<i>Hymenoxys texana</i>	Texas prairie dawn	61	E	LE	3676
<i>Liatris bracteata</i>	coastal gay-feather	16			1418
<i>Liatris bracteata</i>	coastal gay-feather	17			7106
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	1	T		7552
<i>Quercus nigra-quercus phellos series</i>	Water Oak-willow Oak Series	2			6962
<i>Quercus nigra-quercus phellos series</i>	Water Oak-willow Oak Series	3			1657
<i>Rayjacksonia aurea</i>	Houston daisy	1			4408
<i>Rayjacksonia aurea</i>	Houston daisy	2			3279
<i>Rayjacksonia aurea</i>	Houston daisy	3			4139
<i>Rayjacksonia aurea</i>	Houston daisy	4			2849
<i>Rayjacksonia aurea</i>	Houston daisy	6			5763
<i>Rayjacksonia aurea</i>	Houston daisy	7			4034
<i>Rayjacksonia aurea</i>	Houston daisy	8			4803
<i>Rayjacksonia aurea</i>	Houston daisy	9			1321
<i>Rayjacksonia aurea</i>	Houston daisy	10			1322
<i>Rayjacksonia aurea</i>	Houston daisy	12			6001
<i>Rayjacksonia aurea</i>	Houston daisy	13			2190
<i>Rayjacksonia aurea</i>	Houston daisy	14			4357
<i>Rayjacksonia aurea</i>	Houston daisy	15			1930
<i>Rayjacksonia aurea</i>	Houston daisy	16			7527
<i>Rayjacksonia aurea</i>	Houston daisy	17			3573
<i>Rayjacksonia aurea</i>	Houston daisy	24			7144

<u>Scientific Name:</u>	<u>Common Name:</u>	<u>Occurrence Number:</u>	<u>State Status:</u>	<u>Federal Status:</u>	<u>Eo Id:</u>
<i>Spilogale putorius interrupta</i>	Plains Spotted Skunk	5			7469
<i>Spilogale putorius interrupta</i>	Plains Spotted Skunk	12			473
<i>Thalictrum texanum</i>	Texas meadow-rue	13			7697
<i>Thurovia triflora</i>	threeflower broomweed	18			1814
<i>Thurovia triflora</i>	threeflower broomweed	24			8309



From the Office of
Larry E. Brown, Plant Taxonomist
6223 Henniker Drive
Houston, Texas 77041 - 5844
* * * * *
Home Phone Number: 832 - 467 - 3348
Cell Phone Number: 832 -515 - 8174
E-mail Address: Larry-theplantman@att.net
Alternate E-mail Address: Ruby.Brown@att.net

February 14, 2011

**A Survey for *Hymenoxys texana* (Prairie Dawn) on HCFL project ID
E535-01-00-E004 in Jersey Village**

**Bordered by a housing tract on the west, a portion of Seattle Slew Drive and the golf course
on the south, a portion of Rio Grande Street on the east, and a housing tract to the north.**

Harris County Key Map 409 Block F and G

Harris County, Texas

29°53.75N; 95°34.56W at the parking area on Seattle Slew Drive

To whom it may concern, I was hired by the Harris County Flood Control District under the direction of Jackson Lam to survey this site for the presence of Prairie Dawn (*Hymenoxys texana*).

On Sunday February 13, 2011, I walked completely around the entire basin on the higher ground above the detention basin. I also walked across portions of the basin. The included pictures will help to understand the site where a depression has been dug into what 11 years ago was the northern portion of the Jersey Meadow Golf Club.

Prairie dawn only flowers from early to late February through March into early April. The plants only grow in full sun as small colonies on sparsely vegetated areas of pale fine-sandy compacted soil. These sites are sometimes at the base of mima (pimple) mounds in prairies. Prairie Dawn is a heliophyte and does not occur in the shade of a dense forest especially one in a bottomland where periodic floods would wash away any seeds that might be present. At the time of the field survey, suitable sites with the early distinctive basal leaves of Prairie Dawn should be present. The nearest known Prairie Dawn sites are to the east just south of Breen Road and between White Oak Bayou and Fairbanks White Oak Street.

I surveyed the site 11 years on May 11, 2000 for the proposed construction of a detention basin on the site. At that time my report shows a dense vegetation on a mowed grassy field and sand traps, fairways, lakes, and small hills consistent with golfing activity. At that time, I found one small area of white sandy exposed that appeared to be man made. No Prairie Dawn plants were on the white soil and only one associated species *Sporobolus pyramidatus* was noted.

During my current walk on the high ground around the depression, I noted plants such as: *Lamium amplexicaule*, *Geranium carolinianum*, *Gaillardia pulchella*, *Plantago virginica*, *Cynodon dactylon*, *Triadica sebiferum*, and *Ulmus parviflora*. Most of these species are typical of disturbed areas. Prairie Dawn plants do not grow on disturbed sites and none were found.

The newly exposed soil in the basin depression has two large areas of exposed white alkaline soil with numerous limestone cobbles. These pale white sites were devoid of the dense vegetation, and thus more suitable for Prairie Dawn plants than the much larger densely vegetated areas. The photographs show these large pale areas that have been exposed by digging 3 or more feet below the former golf course surface. The white area on the northern edge was at 29°53.93N; 95°34.57W and one on the western edge was at 29°53.81N; 95°34.64W. The pale areas appear somewhat suitable for Prairie Dawn but none were found on them. Some plants noted here were: *Andropogon glomeratum*, *Solidago altissima*, *Salix nigra*, *Cynodon dactylon*, *Glottidium vesicarium*, *Verbena braziliensis*, *Aristida oligantha*, *Bothriochloa ischaemum*, *Helenium amarum*, and *Paspalum urvillei*. As expected some of the plants are usually present on a more moist habitat. Thus the basin is doing its job of retaining water.

In summary, I observed no Prairie Dawn plants on the current survey and I found no Prairie Dawn plants during my survey 11 years ago on 11 May 2000 before the present detention basin was constructed. Please view photos of site taken on February 13, 2011

Larry E. Brown

Larry E. Brown
Plant Taxonomist and
Environmental Consultant



Larry E. Brown, Ph. D.
Plant Taxonomist

*From the Office of
Larry E. Brown
Plant Taxonomist
726 Horncastle Drive
Channelview, Texas 77530 - 3410
Phone Number: 281 - 452 -1105
E-mail Address: Plantman@flash.net*

**A Survey for the federal endangered species *Hymenoxys texana* (Prairie Dawn) and state
Endangered plants for a proposed Harris County Flood Control Detention Basin
On a section of the Jersey Meadows Golf Course
Harris County Flood Control Unit E535-01-00-R001
29°53'44"N and 95°34'29"W at center of south edge of site and
29°53'57"N and 95°34'29" at center of north edge of site
Key Map 409 G and L
Harris Co., Texas
May 12, 2000**

To whom it may concern:

I was employed by Harris County Flood Control District to conduct a survey for the federally endangered plant species *Hymenoxys texana* (Prairie dawn) and state endangered plants on a proposed Harris County Flood Control Detention Basin. The subject property is now a portion of the Jersey Meadows Golf Course. It is bordered on the south side by a drainage ditch, on the north and east sides by housing tracts, and on the west side by a power line easement. The survey was conducted on May 11, 2000.

Prairie dawn only grows and flowers from March through April and it occurs as small colonies on sparsely vegetated areas of fine-sandy compacted soil. These sites are often at the base of mima (pimple) mounds. At this time of the year the plants are not in flower and on suitable sites old dead stalks should be present. All of the local state endangered species, except for *Thalictrum texanum*, are on these same sites.

Almost all of this site is devoted to golfing activity. This involves the presence of sand traps, fairways, lakes, and small hills. This landscaping construction is not suitable for the presence of Prairie Dawn sites and any Prairie Dawn sites that may have been here have been eliminated. The only portion of the site not devoted to golf are the edges. The section adjacent to the power line easement and along the drainage ditch at the south border are more or less natural and are more suitable for Prairie Dawn. I walked completely around the proposed basin looking for suitable sites. There are a small areas of white sandy soil exposed but these bare spots seem to be man made. I found *Sporobolus pyramidatus*, a Prairie Dawn associate, on a bare spot adjacent to the power line.

Some of the common plants at the edge are; *Verbena halei*, *Bothriochloa ischaemum*, *Oxalis dillenii*, *Chloris canterai*, *Melilotus alba*, *Gaillardia pulchella*, and *Cynodon dactylon*. The short, dense grass on the golf course appears to be a form of *Cynodon dactylon*.

No suitable sites or Prairie Dawn plants were found and only one species associated with these sites was noted.

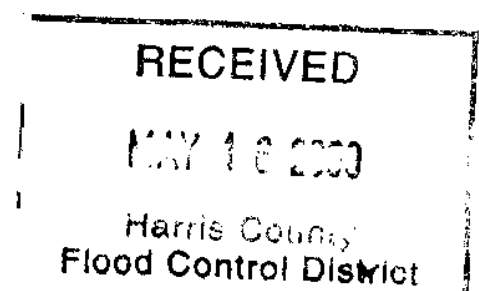
It is my professional opinion that Prairie Dawn and the state endangered plant species are not on the subject property.

Dr. Larry E. Brown,

Larry E. Brown

Plant Taxonomist
and Environmental Consultant

ES. E535.000



Bcc: MDT
FG
GWL



August 5, 2009

Ms. Jodenna Henneke
Deputy Commissioner
Coastal Resources Program
Texas General Land Office
P.O. Box 12873
Austin, Texas 78711-2873

9900 Northwest Freeway
Houston, Texas 77092
713-684-4000
www.hcfcd.org

RE: Review Of A Local Drainage Project (Along White Oak Bayou) Under The Hazard Mitigation Grant Program (HCFCD Unit E535-01-00)

Dear Ms. Henneke:

The Harris County Flood Control District (HCFCD) has prepared an application for a local drainage project to construct a stormwater detention basin in the White Oak Bayou Watershed through the FEMA Hazard Mitigation Grant Program (HMGP) under disaster declaration DR-1791 (Hurricane Ike).

One of the grant application requirements is that we notify your agency of our application. Once the grant is awarded, all appropriate National Environmental Policy Act (NEPA) requirements will be followed. A narrative description of the project, topographic photo of the area, and latitude and longitude data is attached to this letter.

We will forward any responses you make to the Governor's Division of Emergency Management. Should you need any additional information to conclude your review or have any questions, please call Eddie George at (713) 684-4000 or send a written reply to the following address:

Harris County Flood Control District
Att: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Thank you for your assistance.

Sincerely,

Michael D. Talbott
Director

MDT:EG:rs0

Attachments: Narrative Project Description
Topographic Photo
Latitude/Longitude Data

cc: Eddie George, HCFCD
Mike Garmon, HCFCD
Yeh Min Maa, HCFCD

SCANNED

AUG 13 2009

P85048 RSO
ID Number Initials

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Bcc: MDT
FG
GWL



August 5, 2009

9900 Northwest Freeway
Houston, Texas 77092
713-684-4000
www.hcfdc.org

Ms. Carolyn Murphy
U.S. Army Corps of Engineers
Galveston District
P.O. Box 1229
Galveston, Texas 77553-1229

RE: Review Of A Local Drainage Project (Along White Oak Bayou) Under The Hazard Mitigation Grant Program (HCFCD Unit E535-01-00)

Dear Ms. Murphy:

The Harris County Flood Control District (HCFCD) has prepared an application for a local drainage project to construct a stormwater detention basin in the White Oak Bayou Watershed through the FEMA Hazard Mitigation Grant Program (HMGP) under disaster declaration DR-1791 (Hurricane Ike).

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Harris County Flood Control District
Att: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Thank you for your assistance.

Sincerely,

Michael D. Talbott
Director

MDT:EG:rso

Attachments: Narrative Project Description
Topographic Photo
Latitude/Longitude Data

cc: Eddie George, HCFCD
Mike Garmon, HCFCD
Yeh Min Maa, HCFCD

SCANNED

AUG 13 2009

P85050 **RSO**
ID Number Initials

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Bcc: MDT
FG
GWL



Harris County
Flood Control District

9900 Northwest Freeway
Houston, Texas 77092
713-684-4000
www.hcfcd.org

August 5, 2009

Mr. Mike Segner
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711-3231

RE: Review Of A Local Drainage Project (Along White Oak Bayou) Under The Hazard Mitigation Grant Program (HCFCD Unit E535-01-00)

Dear Ms. Murphy:

The Harris County Flood Control District (HCFCD) has prepared an application for a local drainage project to construct a stormwater detention basin in the White Oak Bayou Watershed through the FEMA Hazard Mitigation Grant Program (HMGP) under disaster declaration DR-1791 (Hurricane Ike).

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Harris County Flood Control District
Att: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Thank you for your assistance.

Sincerely,

Michael D. Talbott
Director

MDT:EG:rso

Attachments: Narrative Project Description
Topographic Photo
Latitude/Longitude Data

cc: Eddie George, HCFCD
Mike Garmon, HCFCD
Yeh Min Maa, HCFCD

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AUG 13 2009

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September 18, 2009

Harris County Flood Control District
Attn: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Re: Review of a Local Drainage Project (Detention Basins along Greens Bayou) under the Hazard Mitigation Grant Program (HCFCD Units P500-08-00 & P545-01-00)

Review of a Local Drainage Project (along Halls Bayou) under the Hazard Mitigation Grant Program (HCFCD P118-14-00)

Review of a Local Drainage Project (along White Oak Bayou) under the Hazard Mitigation Grant Program (HCFCD Unit E535-01-00)

Dear Mr. George:

This is in response your letters of August 5, 2009, concerning the above referenced projects. It has been determined from a review of the information you provided that an Application for Approval of Reclamation Project need not be filed for these projects.

Our findings indicate that as a participant in the National Flood Insurance Program (NFIP), Harris County has approval authority for projects affecting floodplains, within the County, per Section §16.236 of the Texas Water Code.

I apologize for the delay in getting back with you and thank you for bringing this matter to our attention.

Sincerely,

Michael Segner
NFIP State Coordinator

Our Mission

To provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

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A Member of the Texas Geographic Information Council (TGIC)



Bcc: MDT
FG
GWL



Harris County
Flood Control District

9900 Northwest Freeway
Houston, Texas 77092
713-684-4000
www.hcfcd.org

August 5, 2009

Ms. Glenda Thorn
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

RE: Review Of A Local Drainage Project (Along White Oak Bayou) Under The Hazard Mitigation Grant Program (HCFCD Unit E535-01-00)

Dear Ms. Thorn:

The Harris County Flood Control District (HCFCD) has prepared an application for a local drainage project to construct a stormwater detention basin in the White Oak Bayou Watershed through the FEMA Hazard Mitigation Grant Program (HMGP) under disaster declaration DR-1791 (Hurricane Ike).

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We will forward any responses you make to the Governor's Division of Emergency Management. Should you need any additional information to conclude your review or have any questions, please call Eddie George at (713) 684-4000 or send a written reply to the following address:

Harris County Flood Control District
Att: Eddie George
9900 Northwest Freeway
Houston, Texas 77092

Thank you for your assistance.

Sincerely,

Michael D. Talbott
Director

MDT:EG:rso

Attachments: Narrative Project Description
Topographic Photo
Latitude/Longitude Data

cc: Eddie George, HCFCD
Mike Garmon, HCFCD
Yeh Min Maa, HCFCD

SCANNED

AUG 13 2009

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ID Number Initials



Coastal Coordination Council

P.O. Box 12873 ♦ Austin, Texas 78711-2873 ♦ (800) 998-4GLO ♦ FAX (512) 475-0680

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Coastal Government
Representative

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Tammy Brooks
Council Secretary

Jesse Solis, Jr.
Permit Service Center
Corpus Christi
1-866-894-3578

Permit Service Center
Galveston
1-866-894-7664

September 9, 2009

Michael Talbott
Harris County Flood Control District
9900 Northwest Freeway
Houston Texas 77092

Re: **FEMA Hazard Mitigation Grant Program – Drainage Project Along
White Oak Bayou**

Dear Mr. Talbott:

It has been determined that the project referenced above is outside the Texas Coastal Management Program (CMP) boundary. Therefore, it is not subject to consistency review under the Texas CMP.

Thank you for the opportunity to comment.

Sincerely,

Tammy S. Brooks
Coastal Coordination Council Secretary
Texas General Land Office

Project ID #	
E535-01-00-E004	
Folder #	
Routing	Initials
RCS	RLH
KLH	CLH
YMM	

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