

AN ARCHAEOLOGICAL SURVEY OF THE PROPOSED COLLIERS FERRY
WETLANDS RECREATIONAL AREA AND NATURE PRESERVE
JEFFERSON COUNTY TEXAS

Texas Antiquities Permit 1263

By

William E. Moore and Saul Aronow

Brazos Valley Research Associates

Contract Report Number 25

1993

AN ARCHAEOLOGICAL SURVEY OF THE PROPOSED
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JEFFERSON COUNTY, TEXAS

Principal Investigator and Author

William E. Moore, SOPA

Contributing Author

Saul Aronow, Ph.D.

BVRA Project 93-04

Prepared for the City of Beaumont
Planning Division
P.O. Box 3827
Beaumont, Texas 77704

by

Brazos Valley Research Associates
106 West 26th Street
Astin Building - Suite 38
Bryan, Texas 77803

ABSTRACT

An archaeological survey was conducted by Brazos Valley Research Associates at the site of the proposed Collier's Ferry Wetlands Recreational Area and Nature Preserve, an area of approximately 84-88 acres, on July 27-28, 1993. Funding for this project was obtained by a grant from the Texas Parks and Wildlife Department (TPWD). The project was supervised by William E. Moore, Principal Investigator, under permit number 1263 issued by the Texas Antiquities Committee (TAC). The project site was divided into two areas; a tract of 20-25 acres (Area A) to be "intensively surveyed" and a larger portion of approximately 60 acres (Area B) to be examined by a "cursory survey."

The records check at the Texas Archeological Research Laboratory (TARL) in Austin, Texas revealed a prehistoric site (41JF1) had been recorded within the boundaries of the current project area. A pedestrian survey accompanied by shovel testing and probing not only failed to locate evidence of 41JF1, but was also negative in terms of finding any previously unrecorded prehistoric sites anywhere within the area examined. In a low area just below Forest Lawn Memorial Park concrete fragments of a broken and discarded burial vault were observed and the ground showed no evidence of disturbance. This is in Area B where only a "cursory survey" was required.

No evidence of the now defunct Collier's Ferry was located. Nor were we able to find historic artifacts that could be associated with the standing structures depicted on the topographic map, Pine Forest. One structure, a pump house for Lawson Canal, is still standing. It is less than 50 years of age and is not architecturally or historically significant.

It is recommended that the City of Beaumont be allowed to proceed with construction as planned for Area A adjacent to the river. Since Area B was only examined in a cursory manner it is not possible to recommend clearance until a more complete survey is conducted. The presence of an archaeologist to monitor park construction within Area A is not considered necessary. All records regarding this project have been placed in permanent curation at TARL.

ACKNOWLEDGMENTS

I am appreciative of the help I received during this project. The field crew consisted of William E. Moore, Donita Burton, David S. Pettus, and Charles N. Bollich, a member of the Texas Archeological Stewardship Network who volunteered his time. The willingness of Ms Burton and Mr. Bollich to work in the very unpleasant conditions caused by extreme heat, high humidity, and numerous biting insects is greatly appreciated. Charles Bollich has studied numerous sites in the area and along the Neches River. His knowledge of the local archaeology was invaluable. Also, he graciously read the draft version before sending it out for review. Saul Aronow, Ph.D. visited the project area and his observations of geology and geomorphology are included in this report. Dr. Aronow is recognized as the leading authority on the geology and geomorphology of this part of Texas.

At the management level, William Dupree, Senior Planner, for the City of Beaumont, provided my link with the city and was very cooperative. He made it possible for me to obtain copies of aerial photography of the project area and other maps which were extremely useful. Other employees of the City of Beaumont who contributed to this project include Stephen Richardson (Planning Director), Lewis Hiltbold (Parks Manager), Gladys Allen (Real Property Manager), Luke Jackson (Director of Parks & Recreation Department), Kirby Richard (Director of Central Services), Ray Riley (City Manager), and Sterling Pruitt (Assistant City Manager).

I would also like thank William A. Martin of the Texas Historical Commission (THC) for his advice concerning the proper conduct of this survey. Gail Celmer, archaeologist with the Corps of Engineers, Galveston District, is acknowledged for taking time from her busy schedule to discuss the project with me. Her input was especially important since her agency may become involved in this project at a later date due to the presence of wetlands in the project area. At TARL, Carolyn Spock, Head of Records, and her assistant, Rosario Casarez, helped during the background search and records curation. Mary McCready prepared the records for curation and Lili Lyddon drafted the figures for this report.

The hours we worked at the Tyrrell Library were time well spent. My thanks to the Director and his staff for their help and for making our work there pleasant and productive.

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INTRODUCTION

The City of Beaumont proposes construction of a wetlands recreational area and nature preserve on the bank of the Neches River north of the Central Business District (Figure 1). According to the "Request For Proposal" from the City of Beaumont dated May 27, 1993, the site for the first phase of this park consists of a tract of land approximately 84-88 acres in size. Much of the area is wetlands, potentially definable as wetlands, or water and will be set aside as a nature preserve once the wetlands delineation survey is completed. Development will be restricted to an area of approximately 20-25 acres (Area A), and it is in this section where survey efforts are to be concentrated. The remaining portion of the 84-88 acres (Area B) are to be examined in a "cursory" manner.

Specifically, the area to be surveyed includes Tract 5, that portion of Tract 4 west of the Lawson Canal right-of-way, and into Tract 1 from a beginning at the pump house located on the river bank and ending at an existing land bridge approximately 3100 feet to the south. The project area is depicted in Figure 2.

Its location in Jefferson County on the 7.5' topographic maps Beaumont East and Pine Forest is depicted in Figure 3. The UTM coordinates for the approximate center of the project area are Northing 33 33 600 and Easting 3 95 400. The site of the proposed park is situated on the south bank of the Neches River overlooking the floodplain to the northeast. The elevation in the project area varies from less than 5 feet above mean sea level in the low lying areas to 20 feet along the upland ridge.

Due to the location of the park site along a major drainage such as the Neches River, it is considered a likely place for a prehistoric or historic site. Site records at TARL revealed the presence of prehistoric sites along the river at lower elevations, sometimes less than five feet. One site (41JF2), for example, is located less than 700 meters to the north in a wetlands setting that is covered with water except during extremely low tide.

The City of Beaumont contracted with Brazos Valley Research Associates (BVRA) of Bryan, Texas to conduct the fieldwork and prepare a report documenting the results of the survey to be submitted to TPWD and TAC. This work was conducted under Texas Antiquities Permit 1263 with William E. Moore serving as Principal Investigator. The project number assigned to this survey is BVRA 93-04.

A variety of improvements, some of which will affect the subsurface, are planned for the park. Types of improvements proposed include parking areas, picnic tables, playgrounds, trails, bridges, restrooms, boat ramp, pavilions, and paved and unpaved roads. According to William Dupree, Senior Planner, these are subject to change as the park planning continues.

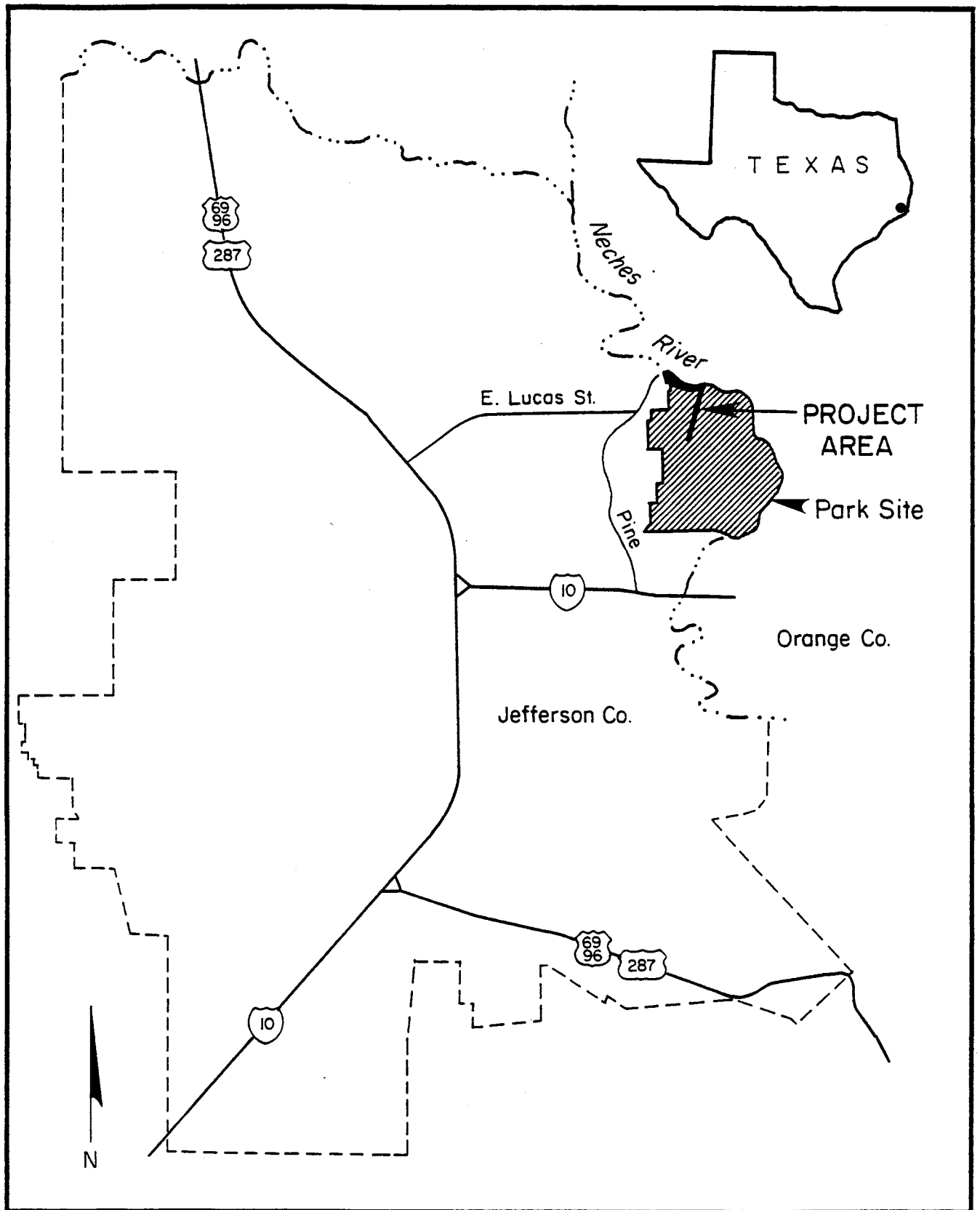


Figure 1. General Location Map.

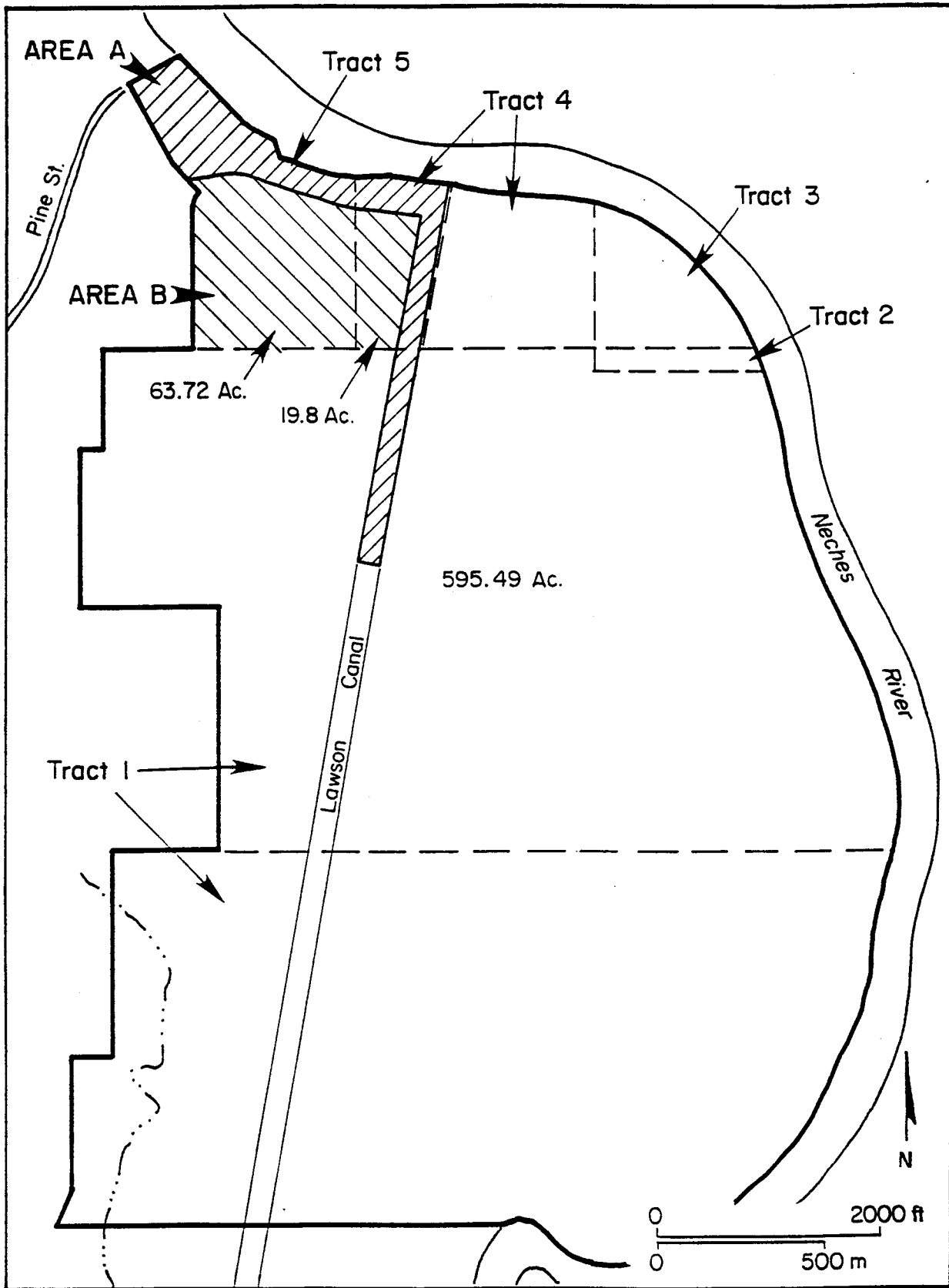


Figure 2. Project Area Map.

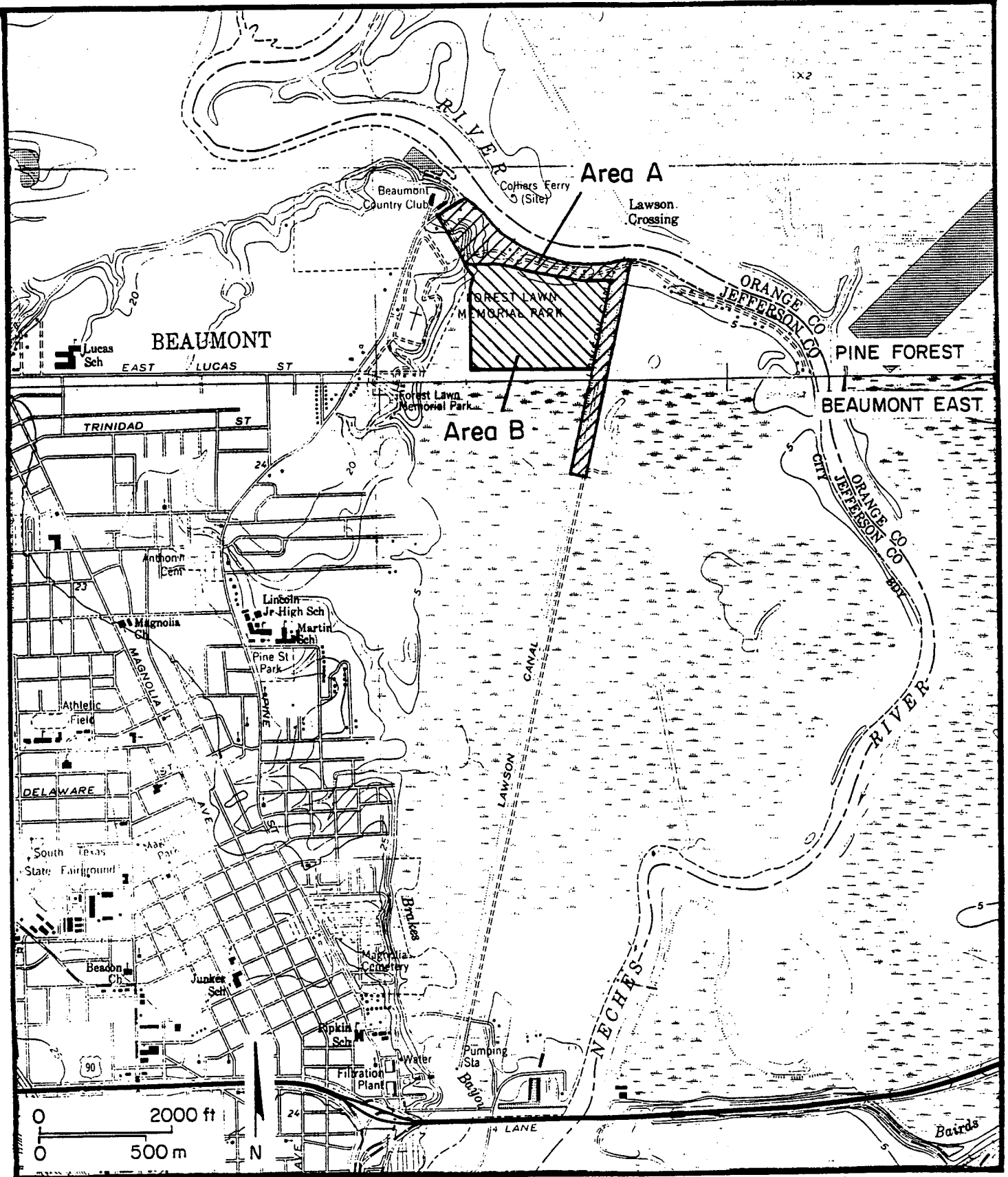


Figure 3. Location of the 100% Pedestrian Survey Area on 7.5' Topographic Map Beaumont East and Pine Forest.

ENVIRONMENTAL SETTING

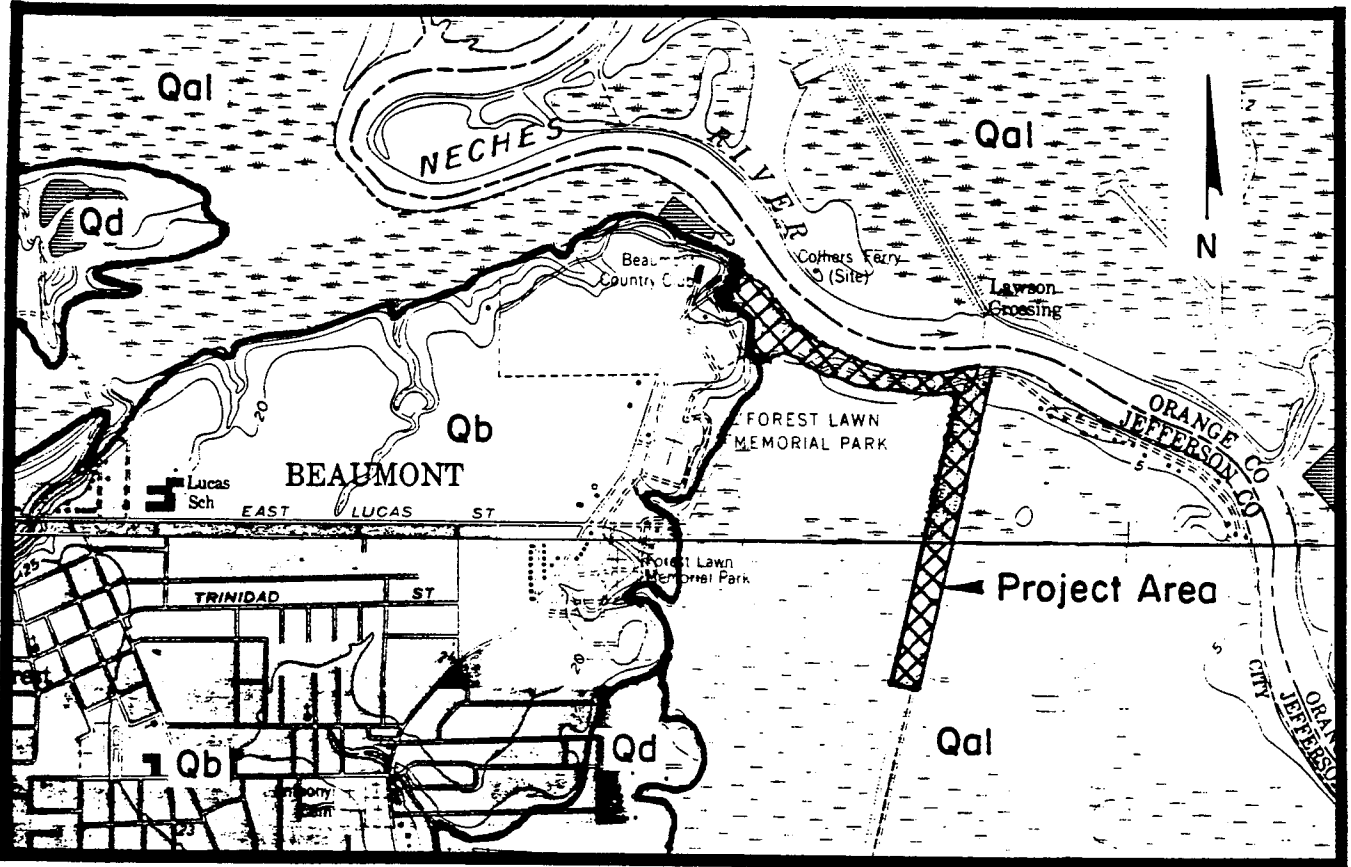
Introduction

The site of the proposed Collier's Ferry park fronts on the Neches River in the extreme northern part of the city of Beaumont in Jefferson County, Texas. The site is just east of the Beaumont Country Club and north of Forest Lawn Memorial Park, a cemetery. The topography is shown on the 7.5' topographic quadrangles, Beaumont East and Pine Forest, dated 1960 [photorevised 1970 and 1974] (Figure 3). These are five-foot contour interval maps with a scale of 1:24,000. These topographic maps are also used to illustrate the geology (Figure 4) and soils (Figure 5) of the project area.

The Neches River, the northern edge of the project area, has the fourth largest discharge (after the Sabine, Brazos, and Trinity) of the Texas streams entering the Gulf of Mexico (United States Army Corps of Engineers 1979:18). South of Beaumont, the Neches enters the estuarine Sabine Lake which discharges into the Gulf through Sabine Pass.

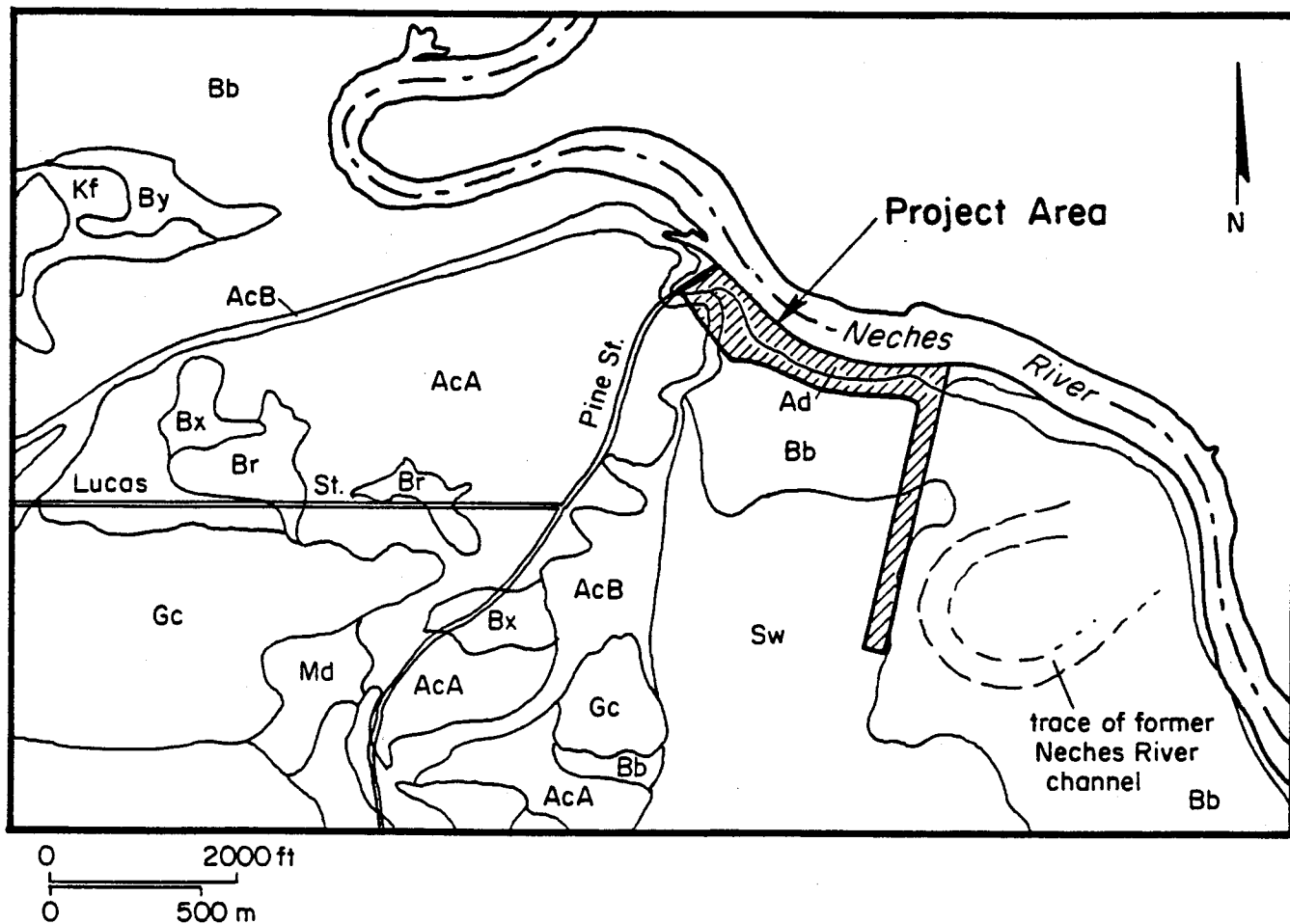
The soils are shown on Sheet 8 in the most recent published soils survey (Crout et al. 1965). They were also depicted in an earlier soil survey (Carter et al. 1915). The soils of the county are currently being remapped by the Soil Conservation Service, but advance sheets that include the project area are not available at this time. The more recent 1965 soil survey is not necessarily more accurate than the earlier 1915 one considering the difference in mapping scale: 1:63,360 for the 1915 survey versus 1:20,000 for the 1965 survey. They are based on differing concepts for defining soils series. The relationship between the geology and the soils is discussed in Aronow (1965). The survey by Crout et al. (1965) was completed prior to the publication of the current soil classification of the Soil Conservation Service (Soil Survey Staff 1975). The orders of the several soils in the area (e.g., entisol, vertisol) were identified in this account from the Soil Conservation Service (1990) or were inferred by the writer from descriptions by Crout et al. (1965).

The largest scale maps on which the geology of the project area and vicinity is depicted in formal geologic units (i.e., formations) are the two successive versions of the Beaumont Sheet of the Geologic Atlas of Texas (Barnes 1968, 1992a). The Environmental Geology map in Fisher et al. (1973) is, in terms of the environments of deposition of the sediments, in a Pleistocene-Holocene framework; in terms of surficial formational materials units placed in a kind of chronologic and formational sequence in Richmond et al. (1990). Other versions of the geology, some formational and some allostratigraphic, include those given in Doering (1956:Figures 5, 8), Winker (1991a), Saucier and Sneed (1991), and Barnes (1992b). White et al. (1987:Plate V) classifies



- Qal = Holocene alluvium
- Qd = Early Holocene and late Pleistocene Deweyville Formation
- Qb = Late Pleistocene Beaumont Formation

Figure 4. Geology of the Project Area and Vicinity.



Aca & Acb = Acadia silt loam
 Ad = Alluvial land
 Bb = Bibb clay loam
 Br = Byars silt loam
 Bx = Byars-Acadia complex
 By = Byars-Klej complex
 Gc = Garner clay
 Kf = Klej loamy fine sand

Figure 5. Soils of the Project Area and Vicinity. Taken from Crout et al. 1965.

the Holocene deposits into wetlands and vegetational units. This brief account will follow the units used in Barnes (1968, 1992a, 1992b).

Geology/Geomorphology

The project area and vicinity falls in the West Gulf Coastal Plain geomorphic unit (Hunt 1974; Walker and Coleman 1987) in which the formations dip gulfward at less than 2 degrees and crop out in gulf-parallel bands. The surface geologic units of the project area and vicinity are the Holocene alluvium, the early Holocene to late Pleistocene Deweyville Formation, and the late Pleistocene Beaumont Formation.

BEAUMONT FORMATION

As shown on Barnes (1968, 1992a) and most other geologic maps, except Doering (1956:Figures 5, 8), the area east of the project area falls within the outcrop area of the late Pleistocene Beaumont Formation. The Beaumont outcrop area is separated from the younger Deweyville Formation and the Holocene alluvium by a low scarp 10 - 15 feet (3 - 5 m) in height. The adjacent Beaumont Country Club and Forest Lawn Memorial Park are on the Beaumont surface.

On a regional scale, the Beaumont Formation crops out in a vast arc paralleling the northwestern Gulf Coast from east of the Holocene floodplain of the Mississippi in Louisiana where it is called the Prairie Formation (see Sneed and McCulloh 1984) to northeastern Kleberg County, Texas where it disappears beneath the sands of the South Texas Sand Sheet (Barnes 1975; Bernard and LeBlanc 1965:Figure 2). The Beaumont was deposited as an overlapping group of alluvial or deltaic plains by the ancestors of most of the modern streams now draining into the western Gulf of Mexico. The local stream that deposited the part of the Beaumont that crops out in the project area and vicinity was a paleo-Trinity River (see Bernard and LeBlanc 1965; Aronow 1971; Fisher et al. 1973). Other, minor parts of the Beaumont are of barrier island, strandplain, beach, mudflat, and lagoonal origin.

The parent materials of the soils on the Beaumont, because of the recency of its depositional surface, can be roughly partitioned into at least two fluvial facies (see Aronow 1965, 1971). In the project area and vicinity the soils (see Figure 5) can be grouped as follows: (1) the Garner clay (Gc) and the Beaumont clay (Ba), both vertisols and both on paleo-flood basin deposits; (2) the Acadia silt loam (AcA, Acb), the Byars silt loam-Acadia silt loam complex (Bx), the Byars silt loam-Klej loamy fine sand complex (Br), the Crowley silt loam (Ct), Morey silt loam (Md), on meander ridge deposits. Some of these soils, especially the Klej, have surface eolian deposits. Almost all of these soils on paleo-meander belt deposits are "mature" soils (alfisols and ultisols) with well-differentiated soil horizons. The major exception is the

Klej with its surface eolian sands. It is classified as an entisol.

In the context of the standard stratigraphic framework, the Beaumont Formation can informally be considered as "upper Pleistocene." The time of the beginning of the Pleistocene, popularly referred to as the "Ice Age," is placed outside of the Gulf Coast region as about 1.6 million years; in the Gulf Coast region as about 2.6 to 2.8 million years. The reasons for this difference of opinion cannot be pursued in this brief account. The interested reader is referred to Beard et al. (1984) and Morrison (1991).

The Beaumont is one of several regressive or prograding fluvio-deltaic Gulf Coast Pleistocene formations that were deposited during one or more of the interglacial high sea level stands -- similar to the present -- of the Pleistocene (see Bernard and LeBlanc (1965).

The age of the Beaumont and its Louisiana correlative, the Prairie Formation, has been controversial. Some investigators have placed its deposition during the high sea level stand of the Sangamon interglacial, 75,000 - 140,000 years Before Present [B.P.], (e.g., Bernard and LeBlanc 1965; McFarlen and LeRoy 1988); others, in an intra-Wisconsin high sea level stand perhaps less than 35,000 years B.P. (e.g., Shideler 1986; Gaston 1979; Autin et al. 1988). Beard et al. (1992) have supplied at least two intra-Wisconsin high sea levels.

Later writers (e.g., Saucier 1991; Winker 1991b) have suggested that the Beaumont and its Louisiana equivalent, the Prairie, are "complexes" of fluvio-deltaic deposits that may encompass more than one interval of late Pleistocene interglacial high sea levels.

DEWEYVILLE FORMATION

The outcrops of the Deweyville Formation (or terraces) (Qd) in the project area and vicinity are on (1) the west side of the Neches River, completely encircled by Holocene marsh deposits in the northwest part of Figure 4 and (2) between the Holocene marsh and the Beaumont outcrop in the south-central part of Figure 4. On the maps in Barnes (1968, 1992a) only the Deweyville outcrop west of the project area is so identified; the other area of outcrop is mapped as Beaumont. The outcrop of the Deweyville, where both the Beaumont upland and bottomland Holocene deposits are present, is intermediate in elevation between these. Though not seen because of the limited extend of the project area and vicinity, the Deweyville terraces are characterized by relict meanders (and associated point bar ridges) that are of larger radii of curvature and greater channel width than the sub-adjacent Holocene streams.

The larger fluvial forms of the Deweyville probably indicate episodes of higher rainfall and higher stream discharge.

The Deweyville terraces were first identified by H. A. Bernard (1950) in a now much referred to Doctoral dissertation on the Quaternary geology of southeast Texas between the Sabine and Neches rivers. Where identified in areas of a Beaumont-surfaced upland, the terraces, as in the project area, are intermediate in elevation between the super-adjacent Beaumont upland and the sub-adjacent Holocene alluvium. Bernard (1950:131) originally named these terraces the "Deweyville beds (?)" from their occurrence along the Sabine River near the town of Deweyville in Newton County about 12 miles north of Orange, Texas.

Terraces with these characteristics have been located in Louisiana along the Sabine, Calcasieu, Red, Pearl, and Ouachita rivers (Snead and McCulloh 1984); in Arkansas along the Arkansas and Ouachita rivers (Saucier and Fleetwood 1970; Saucier 1974); and in Texas along the Sabine, Neches, Trinity, San Jacinto, Guadalupe, Nueces, and Rio Grande.

The terraces and sediments disappear below sea level, for example, in the lower reaches of the Sabine, Neches, Trinity, and San Jacinto rivers where the adjacent uplands have been scalloped by Deweyville-sized meander scars; similarly the lower reaches of the Calcasieu River in the vicinity of the city of Lake Charles in Louisiana. Because of this submergence below sea level they are concealed by or surfaced with Holocene alluvium.

Bernard and LeBlanc (1965:145) give radiocarbon dates ranging from more than 30,000 years B.P. to as young as 17,000 years B.P. Even younger dates are reported by Alford and Holmes (1985), less than 10,000 B.P. The range of dates, if valid, covers the time prior to, during, and after the last great glacio-eustatic lowering of sea level which centered around 18,000 years ago. The partial submergence of the Deweyville occurred during the time of the most recent sea level rise. Modern sea level was established about 3500 years ago.

As shown on Figure 5, the soils on the Deweyville are similar to those on the Beaumont: Acadia, Byars, Klej, and Garner. The Deweyville in the south-central part of Figure 4 is probably a flood-scoured, Deweyville-age surface cut into the Beaumont surface. The over 20-foot high elevation of the Deweyville in the northwest part of Figure 4 undoubtedly had its relief enhanced by Holocene eolian deposition.

HOLOCENE ALLUVIUM

The term "Holocene" has been recently, and somewhat arbitrarily, defined as covering the past 10,000 years (Hopkins 1975; cf. Roberts 1989:219). As the term is used in this report it

will refer to the time of deposition of the alluvial deposits of the Neches River. During the Holocene, sea level was rising from its glacially induced low stand (more than 350 feet [100 m] below present-day sea level about 18,000 years ago). The present stand may have been attained during the past 5000 to 2500 years. Probably most of the surface Holocene alluvium was deposited since sea level was stabilized at its present level. The project area is confined to the Holocene alluvium.

In the project area and vicinity, most of the soil on the alluvium (Figure 5) is the Bibb clay loam (Bb). Other soil mapping units include the Alluvial land (Ad), Swamp (Sw), and the Klej loamy fine sand (Kf).

The Bibb soil is a poorly drained alluvial soil, an entisol, with a clay loam surface layer underlain at a depth of about 45 inches (115 cm) or more by a substrate of clay, clay loam, and sand. This soil is frequently flooded but capable of supporting water-tolerant hardwoods (Crout et al. 1965:7, 57). From the point of view of fluvial facies, the Bibb series is sited on levee, point bar, and flood basin deposits.

The Alluvial land unit (Crout et al. 1965:6), an entisol, has surface textures of sand to clay. The higher areas flood at least every 2 to 5 years; the lower several times a year. It is occupied by water-tolerant hardwoods and a few pines and seems to be restricted in the project area and vicinity to levee deposits adjacent to the Neches River.

The Swamp unit (Crout et al. 1965:14), an histosol, has a 4-inch to 20-inch (10-50 cm) layer of woody peat and muck surface layer underlain by a 20-inch to 40-inch (50-100 cm) layer of sandy clay. This fresh water swamp is submerged or has a water table at the surface. It supports cypress trees. The Swamp unit, in part, constitutes the flood basin or backswamp deposits of the Neches River.

The Klej loamy fine sand, an entisol, has a completely sandy profile throughout its 72 inches (180 cm). It was previously described on the Deweyville Formation and also occurs elsewhere in Jefferson County on the Beaumont Formation. On the Beaumont and Deweyville it's parent materials have been considerably reworked by eolian activity. Along the margin of the Neches River in the project area, the Klej parent materials are probably recently deposited levee material with possibly some eolian reworking.

The project area is entirely underlain by Holocene alluvium. It has a typical topography associated with recently and frequently flooded areas; hummocky, irregular, low relief (less than 3 feet or 1 m) areas of flood scour and deposition; narrow low-relief channels cut during flooding episodes, some discontinuous and supporting a few small cypress trees in shallow water pools. Most

of the project area slopes away from the river and is on a natural levee that drains, in part, to the south and, in part, to the river. On Figure 4, the levee is outlined by the 5-foot (1.53 m) contour. A few drainage ditches flanked by spoil have been excavated in the project area.

Almost all of the shallow excavations made during the shovel testing revealed virtually no profile development. A horizons were weak and less than five inches (12 cm) thick; the soils are mostly entisols. Most would fit approximately the Bibb soil series as described above. The major exception was a hill at the western end of the project area that was covered with about 1-3 feet (0.3-1.0 m) of spoil, some of which was reddish-brown and probably derived from the C horizons of soils developed on the Beaumont Formation. If this spoil cover were present at the time of the 1965 soil survey and if it were sufficiently extensive it probably would have been mapped in the Made Lande (Ma) unit of that survey. Since then, spoil from Beaumont has been placed in the Ijam soil series (Crout 1976:12-13).

This hill may be the location of site 41JF1. In any case, the site was not found, possibly because it was buried by the deposition of the spoil. Further attempts at locating this site would require the excavation of backhoe trenches 3-5 feet (1.0-1.5) deep).

The absence of archeological sites as determined by shovel testing may be related to at least two factors. These are:

(a) The recency or youth of the surface of the project area as suggested by the lack of soil profile development and the active meandering (and site destroying) of the Neches River may respectively preclude the formation and preservation of sites. The trace of a meander cut-off (not occupied by an oxbow lake) can be seen in the Bibb soil delineation just east of the canal in Figure 5. The salient of the Beaumont upland on which the country club and cemetery are located has prevented meandering of the river in this restricted local area.* The river, however, has actively meandered upstream and downstream from this salient. I would guess that the surface of the project area is less than 500 years old.

(b) The higher ground of the adjacent Beaumont salient with its probable absence of frequent floods, better drainage, and possibly commanding position from the point of view of visibility and defensibility probably better competed with the Holocene levee of the project area as a more desirable food gathering site.

* This salient of high ground provided close, well-drained access to the Neches River for the now abandoned Collier's Ferry landing.

METHODS OF INVESTIGATION

The research design for the proposed wetlands recreational area and nature preserve conforms to guidelines outlined by the Texas Antiquities Committee (TITLE 13, Part IV, Chapter 41.3). The project was divided into three phases - background and archival research, field reconnaissance, and report writing. Prior to commencement of the field survey, the files at TARL, TAC, and THC were checked for previously recorded sites in the project area and vicinity. In addition, maps and other historic documents were reviewed at the offices of the City of Beaumont; the Jefferson County Courthouse, the Beaumont Public Library and its branch, and the Tyrrell Historical Library.

The field crew consisted of William E. Moore (Principal Investigator), Charles N. Bollich, Donita Burton, and David S. Pettus. Although the proposed park will ultimately encompass approximately 1230 acres, the archaeological survey was required for only approximately 84-88 acres out of the approximately 680 acres included in the park's first phase. Of that 84-88 acres, only 20-25 acres (Area A) along the river bank are scheduled for development. Therefore, it is in this area that the survey was concentrated. The remaining tract of approximately 60 acres (Area B) was examined in a "cursory" manner. That is, the field crew walked through portions of this area and along the levee paralleling the Lawson Canal in an attempt to make a preliminary assessment of the probability for site occurrence.

A 100% pedestrian survey of Area A was conducted. All exposed ground surfaces were examined for the presence of cultural materials. The river bank was carefully inspected whenever possible. In addition, shovel tests and probes were dug by hand. During the survey we relied on the Beaumont East and Pine Forest topographic maps (dated 1960 and photorevised 1970 and 1974), 1990 aerial photography, and a Conceptual Master Plan.

Fifteen shovel tests were excavated and the soil was tested by probing in several areas. All excavated matrix was screened through 1/4 inch hardware cloth. Each shovel test was flagged for future mapping and the approximate location of all shovel tests were plotted on an aerial photograph dated 1990 and project area maps. A list of shovel tests appears as Appendix I. The project was documented by field notes, photography, and various forms. Following the field survey, Dr. Saul Aronow visited the project area. He examined both tracts from a geological and geomorphological perspective. His conclusions appear in the chapter of this report entitled "Environmental Setting."

The third phase consisted of report preparation. The current report was written according to TAC guidelines. Once approved, final copies of the report plus all records and notes documenting this project will be permanently curated at TAC and TARL.

PREVIOUS INVESTIGATIONS

As of August 2, 1993, sixty-seven archaeological sites in Jefferson County have been recorded at TARL. Of this number, 55 are prehistoric and 12 are historic. Two prehistoric sites (41JF15 and 41JF41) have minor historic components. The age of six sites is not known. A listing of known sites in the county appears as Appendix II.

The first systematic efforts at locating and recording cultural resources in Jefferson County occurred in 1940-1941 when G. E. Arnold of the University of Texas surveyed portions of Jefferson and Orange counties. This work was conducted under the auspices of the Work Projects Administration (WPA) and the University of Texas at Austin. Arnold recorded 23 sites (41JF1-41JF23) and, except for a minor historic component at 41JF16, all are prehistoric sites such as camps or shell middens. At three sites (41JF10, 41JF18, 41JF20) burials have been reported. No formal report was written by Arnold and the only documentation of his work exists in TARL records and a thesis by Im (1975). It should be stated that Arnold's work consisted solely of surface collecting. Although his effort provided a good data base for that time, his methods were not as precise as those employed today.

No additional sites were added to the record until the 1960s when nine prehistoric sites were recorded, primarily through the efforts of Charles N. Bollich, a local avocational, who personally recorded eight sites (41JF27-41JF34). Mr. Bollich continues to be active in the Beaumont area and has visited additional sites that he plans to record in the future.

The Gaulding site (41JF27), selected by the Texas Archeological Society for the third annual field school, was excavated by its members in 1965. This represents the first site in Jefferson County to be formally excavated. Gaulding is a Late Prehistoric site with a deep (1.2 m) shell midden containing a flexed burial, pottery, arrow points, dart points, and faunal remains of turtle and alligator (Richmond, Richmond, and Greer 1985:Table 2, 133-134). The results of this project have yet to be published. The only accounts of Gaulding is a paper presented to the Society by Bollich (1965), a short article by E. Mott Davis (1965), a review of Texas Archeological Society field schools (Richmond, Richmond, and Greer 1985), and TARL site records.

In addition to Gaulding, at least two prehistoric sites have been tested. Sites 41JF26 and 41JF31, pimple mound earth middens, were tested by Aten and Bollich (1981). Data from these sites have not been formally published (Aten 1983:202).

Only one historic site has been excavated in Jefferson County. Site 41JF46, the 19th Century home and trading post of John J. French was investigated by the Texas Historical Commission in 1975.

No formal report has been written documenting this work, but notes are on file at the Beaumont Heritage Society.

National Register assessment of an early 20th Century farmstead (41JF66) was conducted by Prewitt & Associates, Inc. in 1990 (Prewitt 1990). This project consisted primarily of documentary research with limited field inspection. It was concluded that the Tyrell tenant farmstead may be eligible for listing on the National Register of Historic Places under Criterion D. The archaeological potential of site 41JF66, however, was not assessed.

Of the remaining 34 sites, 17 (41JF25, 41JF35-41JF50) were recorded in the 1970s, 15 (41JF51-41JF65) were recorded in the 1980s, and 2 were recorded in the 1990s. Numerous small surveys have been conducted by private contractors and federal and state agencies. Contract archaeology firms known to have worked in Jefferson County include Brazos Valley Research Associates, Coastal Environments, Inc., David S. Dibble, Consulting Archeologist, Environomics, Heartfield, Price & Greene, Inc. (now defunct), Moore Archeological Consulting, and New World Research, Inc. Federal and State agencies that have worked in the county include the United States Corps of Engineers (COE), the Texas Archeological Salvage Project (TASP), Texas Archeological Survey (TAS), Texas Parks and Wildlife Department (TPWD), the Texas State Department of Highways and Public Transportation (TSDHPT), and the United States Department of Agriculture, Soil Conservation Service (USDA-SCS). Many of these endeavors have resulted in negative findings. A comprehensive list of work done in the county is contained in a recent bibliography published by THC (Moore 1989).

Larger surveys conducted in the county which resulted in new site recordings include an assessment of sites in the Taylors Bayou River Drainage by TASP (Aten 1972) in which one site (41JF35) was located; a cultural resources survey of the Big Hill Storage Complex Pipeline by Coastal Environments (Pearson et al. 1982) which located one site (41JF60); a survey of the Jefferson County Beach Park site by TPWD (Lorrain 1973) which resulted in six new sites (41JF37-41JF42); a study of prehistoric and historic resources along the Lower Sabine and Neches rivers by TAS (McGuff and Roberson 1974) which produced two new sites (41JF43-41JF44); and a survey of the proposed Neches River saltwater barrier and discharge canal near Beaumont by the Research Institute, Northeast Louisiana University, (Heartfield and Madden 1981) which documented five historic shipwrecks (41JF55-41JF59).

Several syntheses and overviews of Southeast Texas and the Upper Texas Coast have been written by a number of researchers. Notable among these are three works by Aten which include his unpublished Ph.D. dissertation (Aten 1979a), a report for TASP (Aten 1979b), and a scholarly book (Aten 1983). In addition, he authored an article about determining seasonality of *Rangia cuneta*

from Gulf Coast shell middens (Aten 1981) and co-authored two articles with Charles N. Bollich discussing a ceramic chronology for the Sabine Lake area of Texas and Louisiana (Aten and Bollich 1969) and archeological evidence for pimple mound genesis (Aten and Bollich 1981). Other works include efforts by Patterson (1979a, 1979b, 1985, 1987) and Shafer (1974, 1975).

Several bibliographies relevant to the area have been published. These include a recent comprehensive work for the Southeastern Region of Texas published by THC (Moore 1989), a bibliography of historical sites in Texas (Moore and Moore 1986), and a bibliography of the Upper Texas Coast by Patterson (1986).

At least five histories of Jefferson County have been published. They are a pictorial history of Beaumont (Walker 1983), a history from Wilderness to Reconstruction (Block 1976), the history and progress of Jefferson County (East 1961), first settlers of Jefferson County (White 1984), and a volume by Adams (1971). Other works germane to the area include WPA guidebooks to Beaumont (Federal Writers' Project n.d.) and Texas (Federal Writers' Project 1986), a cultural geography of Texas (Meining 1988), a book of family profiles (1840-1900) compiled by the History Research Department, Jefferson Carnegie Library (1981) which includes Jefferson County, and a review of Texas Indians (Newcomb 1986).

CHRONOLOGY

Paleo-Indian Period

The Paleo-Indian period is generally thought of by archaeologists as that period following the last ice age (Pleistocene) in North America. During this time Paleo-Indians wandered about the continent in pursuit of megafauna such as mammoth, mastodon, and earlier species of bison. Although not much is known about their diet, plants and other smaller animals probably were as important to Paleo-Indians as an occasional mammoth or other large animal. Paleo-Indians are also known for the manufacture of unique projectile point types such as *Clovis* and *Folsom*, sometimes found in direct association with the remains of animals now extinct. Descriptions of these artifacts are found in Suhm and Jelks (1962) and Turner and Hester (1985). Although dates for this period remain tentative, Paleo-Indians may have occupied the general area between 7000 and 12,000 years ago (Aten 1983; Patterson 1979b).

Evidence of this period in southeast Texas is often confined to surface finds of projectile points resembling types found at Paleo-Indian sites in other parts of the country. McFaddin Beach (41JF50), in Jefferson County, is unique for the area. Here, systematic surface collecting by Long (1977) has recovered at least ten *Clovis* points and other Paleo-Indian point types on a modern (Holocene) beach after washing up by wave action from a Pleistocene coastline now underwater (Meltzer 1987:45). This is the only site of this type recorded in Jefferson County and may represent a long-term occupation by *Clovis* groups in the area.

Archaic Period

The general concensus among archaeologists is that the Archaic period lasted from about 7000 B.P. until the introduction of pottery around 1900 B.P. Subsistence practices during this period are characterized by seasonal occupations of local environments which exploited the various flora and fauna at their time of greatest yield. According to Patterson (1979a:30), "Slightly more information is available on the next Early Archaic occupation period of approximately 7,000 to 4,000 B.C., although little information exists on the cultural transition to this later period." Dating is primarily accomplished by comparing projectile points with other regions.

Patterson 1979a) has divided the Archaic into three periods, Early (7000 B.C. - 4000 B.C.), Middle (4000 B.C. - 2000 B.C.), and Late (2000 B.C. - A.D. 100). Projectile points attributed to the Archaic include *Plainview*, *San Patrice*, *Angostura*, and *Dalton* for the Early Archaic; *Carrollton*, *Trinity*, and *Williams* for the Middle Archaic; and *Gary*, *Kent*, *Elam*, *Ellis*, *Palmillas*, *Ensor*, *Refugio*, and *Yarbrough* for the Late Archaic (Patterson 1979a:31).

Dalton points, usually regarded as transitional Paleo-Indian/Archaic, have been reported from the McFaddin Beach site (41JF50) by Long (1977) along the coast. Four additional sites in the county (41JF15, 41JF47, 41JF49, 41JF50) are listed as Archaic on TARL site forms.

Woodland Period

Also referred to as the "Ceramic Archaic," the Woodland Period represents that length of time from the introduction of pottery to the predominant use of bifacial arrow points and is the period in which most of the sites in Jefferson County fall. The Woodland Period, according to Patterson (1979b:108), dates to approximately 1850 B.P. to 1350 B.P. Aten and Bollich have obtained a radiocarbon date of 70 B.C. from *Rangia* shell in good association with *Tchefuncte* ceramics from a site on a small tributary of the Sabine River (Letter from Charles N. Bollich dated August 11, 1993 [curated as part of this project]). Most Late Archaic dart point types seem to continue into the Woodland period and some, *Gary* and *Kent*, tend to become smaller (Patterson 1979b:108). Ceramic sequences relevant to the project area have been proposed by Aten et al. (1976:Figure 16), Aten and Bollich (1969), and Ambler (1967). Pottery present during this period in various parts of Southeast Texas include *Goose Creek Plain*, *Goose Creek Stamped*, *Tchefuncte*, *Conway Plain*, and *San Jacinto* types.

Charles Bollich has collected typical *Tchefuncte* ceramics from several sites in Jefferson County and *Marksville* sherds from a number of sites in the county also (Letter from Charles N. Bollich dated August 11, 1993). Based on his Louisiana studies, the bow and arrow first appeared in the Troyville period, circa A.D. 500, and he believes the same holds for the Jefferson County area. He also mentions skeletal material from at least six sites along the lower Neches River and arrow points (types not stated) from at least seven sites, not all of which have TARL numbers.

Based on TARL records, at least 30 sites in Jefferson County are listed as containing ceramics with no mention of arrow points. It is not known at this time how many of these sites belong to the Woodland Period. According to Charles N. Bollich (personal communication, August 3, 1993), several unrecorded sites with ceramics are present in the uplands along the Neches River not far from the Collier's Ferry crossing, as well as some pimple mound sites in a lowland setting directly across the river from the project area. Two of the upland sites have produced pottery types similar to *Tchefuncte* and *Marksville*. These sites may represent Woodland occupations. The two sites closest to the project area (41JF1 and 41JF2) produced ceramics, but the sherds have not been identified according to type and were not available for study at the time of this project.

Late Prehistoric

This period is characterized by the predominant occurrence of small, bifacial arrow points. Typical arrow point types found in this region include *Perdiz*, *Scallorn*, *Fresno*, *Catahoula*, and *Cliffton*. Other types occurring with less frequency are *Alba*, *Bassett*, and *Bonham*. *Gary* and *Kent* dart points have also been recorded in this period. Many inland sites exhibit less use of pottery in the Late Prehistoric than in the Woodland period (Patterson 1976:Figure 3).

According to Patterson (1979b), many Late Prehistoric sites do not show much variety in material remains. Sherd tempering in ceramics has been reported at some Late Prehistoric sites. Other researchers (Wheat 1953:Figure 73; Aten 1971:Figure 10) have assumed that the predominant occurrence of small projectile points during this period demonstrates the introduction of the bow and arrow in this region. Others (Patterson 1979b:109) believe the bow and arrow may have started much earlier on the Upper Texas Coast. Patterson 1979b:109-110) argues that the large number of limited types of small, bifacial arrow points that predominate from the start of the Late Prehistoric indicate greater dependance on the bow and arrow and use of more uniform technology.

According to site records at TARL, three sites in Jefferson County have produced arrow points. An additional thirty-two sites are recorded as having ceramics (In Appendix II all sites known to have ceramics and/or arrow points are listed as Late Prehistoric [some may be Woodland]). At least one of the unrecorded sites in the uplands near the project area (Charles N. Bollich, personal communication 1993) has ceramics that may belong to the Late Prehistoric period.

Protohistoric Groups

Archaeologically, the Galveston Bay and Rockport foci represent the two cultural traditions in existence at the time of initial European contact. The Galveston Bay Focus, which includes the region between the Brazos and Sabine rivers, is relevant to the project area. This focus represents the Atakapan cultural tradition and dates from about A.D. 500. According to Newcomb (1986), groups during this time were primarily hunters, gatherers, and fishermen.

No sites in Jefferson County have been identified as Protohistoric at this time.

Historic Indians

Various Indian groups occupied parts of Southeast Texas until their elimination and/or removal by the combination of Anglo-American settlement and introduced diseases. Members of the

Atakapan linguistic family were the dominant peoples occupying the southeastern Texas coast at the time of historic contact (Swanton 1946). The Atakapa are said to have shared the area of the lower Neches River peacefully with the Akokisa during the eighteenth century (Aten 1983:38). Some accounts indicate that the Atakapa had two villages on either side of the Neches River near Beaumont. Aten (1983:38) states it may have been these villages from which the French recruited two Atakapa headmen (Tamages and Boca Floja) and their warriors, in 1759, to go to Orcoquisac to expel the Spanish (Bolton 1913:370). Other tribes and groups near the project area in historic times are given by Aten (1983:Figure 3.2) as Karankawa (circa 1815), ?Nacazil (1820), Tensas (circa 1803), Louisiana Atakapa (circa 1806), Akokisa (circa 1820), and Choctaw? (circa 1820).

No sites attributed to the Historic Indian period have been identified in Jefferson County.

European Settlement

Throughout much of the 18th Century, Spain and France contested the ownership of present day east Texas. Spain based her claim on the expeditions of Panfilo de Narvaez and Hernando de Soto, while France relied on the voyage of LaSalle. When Mexico won independence from Spain in 1821 at the Treaty of Cordova, Texas became a state within the Mexican Republic. In 1829, the Mexican government authorized Don Lorenzo de Zavalla to introduce 500 families into a large area of east Texas. The project area is located within the Zavalla grant (Meining 1988:Map 4). Reputed by some to be the first settlers in the region was the Noah Tevis family who took possession of a tract of land on Tevis Bluff about 1825, the site of present-day Beaumont (Federal Writers' Project n.d.:36).

In 1835, Henry Millard purchased 50 acres from Tevis and the town was laid out. The new settlement prospered, and in 1838 it replaced Jefferson as the county seat of Jefferson County (Federal Writers' Project 1986:195).

Relevant to the project area was the development of ferrys across the Neches River. The following discussion is taken, in part, from a report by James E. Bradford (1992) which describes the discovery of a Neches River ferryboat in the Big Thicket National Preserve. According to Bradford (1992:12), the practice of transporting people and possessions across the Neches River began in the early 1830s. How many ferrys were in operation on the Neches may not be known but that at least four ferry locations occur within 16 river miles of the site investigated by Bradford suggests they were common. Bradford (1992:12-13) believes ferrys were "indispensable links in the roads connecting the large and small towns of southeast Texas and southwest Louisiana." Without them, he (Bradford 1992:13) surmises, "travel and transportation of

goods would have been nearly impossible and settlement and development of the 'big thicket' would have been severely curtailed throughout the nineteenth century."

The Collier's Ferry crossed the Neches River at the northern end of the current project area. According to Walker and Rienstra (1982), it was a crossing of the Neches River by the Atascosoto Trail from San Antonio to Opelousus, Louisiana. Their research indicates a ferry boat operated at this point from at least 1831 to 1950. At one time it was run by Henry Millard, a founder of Beaumont. The Collier family operated the ferry for a period of 50 years. In 1862, Parsons Collier was the operator. On a 1951 map prepared by Barton Map Service of Tyler, Texas the road to the ferry crossing was referred to as Collier's Ferry Road.

During the 1840s, lumbering was one of the most important industries, and timber was being exported as early as 1842. Rice was also planted during the early days of Beaumont's history. Imports and exports were transported up and down the Neches River from Sabine Pass to Beaumont. Following the Civil War, farmers began to grow rice for market and irrigation was introduced into local cultivation.

In 1875, the United States Army Corps of Engineers began construction of port facilities and by 1897 Beaumont was considered a deep water port. At the turn of the century oil was discovered at Spindletop and Beaumont was turned overnight into the leading oil producing center in the country.

According to a sub-division map of Jefferson County compiled in 1902 by J. A. Greene, Civil Engineer, the project area was then in the possession of several owners including Adcock Hayes, J. Collier, Jas. McKinley, M. Spiller, and Absolom Williams

During the remainder of the 20th Century, Beaumont's economy changed from one dominated by agricultural products and lumber to one based securely on the petro-chemical industry. Today, oil refining, petro-chemical manufacturing, and shipbuilding take precedence over other industries in the area.

This initial project development area is composed of approximately 65 acres purchased by the City plus additional land donated from Betsy Macon Mullins of Houston, Texas, an heir of the John Mecom estate and a small segment of the right-of-way of Lawson's Canal.

RESULTS AND CONCLUSIONS

Background Check

The background and records check indicated that a single prehistoric site (41JF1) had been located within the boundaries of the project area. This site was recorded by Mr. G. E. Arnold in 1940 as part of the Works Progress Administration (WPA) sponsored by the University of Texas at Austin. This site is discussed in detail in Appendix III.

In addition, there are six structures depicted within the project area on the topographic map, Pine Forest. Two of these structures were added to the map during the photorevision in 1970 and 1974. One is most certainly the pumphouse that services Lawson Canal. It was the only structure present in the project area at the time of this survey. A discussion between Charles Bollich and Messrs. Hodges and Barker provided information regarding these structures. According to them the only buildings to their knowledge had been small frame cabins similar to those still present along the river but outside the project area. At one time there had been a small frame structure that served as a beer joint a few years ago on or in the vicinity of the present parking lot. Mr. Hodges stated that at one time there had been many more "fishing camps" extending much further down the river.

The most obvious historic utilization of the project area is the now defunct Collier's Ferry site. No evidence of this ferry was found during the field survey. The only information obtained was during the background check (see above).

Field Survey

An archaeological survey of the proposed Collier's Ferry Wetlands Recreational Area and Nature Preserve failed to locate evidence of previously recorded prehistoric site 41JF1. In fact, no prehistoric sites were found anywhere in the project area. Based on the map plotting and description of 41JF1 on the site form by G. E. Arnold in 1940, it is believed this site probably occupies a prominent hill that is an extension of the ridge on which the Forest Lawn Memorial Park is located just outside the project area (Figure 3). This area is now covered with recent spoil that may be 2-3 feet in depth. Personnel from the City of Beaumont were unable to provide information concerning the origin of the spoil that covers this hill or the date this activity took place.

It should be emphasized that Mr. Arnold's work at site 41JF1 was minimal, consisting of a surface collection of three potsherds with no shovel testing mentioned. The plotting of this site on the topographic quadrangle, Pine Forest is shown to be on a landform other than the hill mentioned above. Our placement of the site on the hill is based on the description on the site form and the fact

that this is the only prominent landform in the area where the site is reported to be located. This landform is also a likely location for a site as it is close to the river and well above the low lying area. If the site was in the area as plotted on the map it has been destroyed due to road and parking lot construction adjacent to the river. Additionally, the area adjacent to the river consists of recent river alluvium that is probably less than 100 years old. Therefore, the placement of 41JF1 as depicted by Mr. Arnold on the topographic map appears to be in error. The site description must also be questioned in light of the scant evidence (3 sherds). According to Mr. Arnold, 41JF1 is a village site about 1.5 acres in size. Unless he found additional evidence not stated on the site form his impression of the site is probably based on the size of the landform and its elevation above the river and its floodplain.

Examination of the project area by Dr. Aronow revealed that, except for the hill believed to be the location of 41JF1, the project area is an unlikely setting for prehistoric sites. It is always possible that the area was utilized for various reasons such as fishing or plant collecting, but it is doubtful if anything but a temporary occupation took place with little or no cultural materials left behind as evidence. As stated above, that part of the project area closest to the river (Area A) consists of river alluvium and is believed to be too recent for prehistoric use. The rest of the area (Area B) is a low, poorly drained area (defined in part as wetlands) that was probably not desirable for anything but temporary utilization. The hill adjacent to the cemetery is viewed as the only landform old enough and suitable for a prehistoric site of any permanence.

The exploitation of *Rangia cuneata* was a major subsistence activity for the prehistoric groups who inhabited this area. Shell lenses are usually visible in the river bank in areas where they occur. Since visibility was excellent along the Neches River bank and no shell was observed, it is assumed that this activity did not take place in the project area or these sites have been destroyed. Nearby site 41JF2 is described by Mr. Arnold as a shell heap visible at low tide. It is possible that he viewed 41JF2 as an area where shell was collected and/or consumed while the area of 41JF1, being on an upland ridge, was a village site where the prehistoric occupants camped when not wandering about the area collecting plants and/or animals.

As stated above, no evidence of Collier's Ferry was found during the field survey. Also, except for the pumphouse, there are no remains of the standing structures that are depicted on the topographic map, Pine Forest. In addition, no evidence of the other structures was found during this survey. Glass and other recent trash was seen scattered over the entire project area adjacent to the river, but it is not possible to associate any of these materials with the buildings that were once present in the project area. Based on conversations with local residents it

appears that these structures were frame structures used as fishing camps, and one served as a beer joint until only a few years ago.

The only evidence of historic activity was the discarded fragments of a burial vault found in Area B just below the Forest Lawn Memorial Park. It is likely that the vault fragments were discarded by the cemetery because of their being damaged and they were never used. The ground in the immediate area did not exhibit any signs of disturbance.

RECOMMENDATIONS

Due to the absence of an intact prehistoric or historic site in the project area, it is recommended that the City of Beaumont be allowed to proceed with construction of Phase I of the Collier's Ferry Wetlands Recreational Area and Nature Preserve as planned, and it is not considered necessary for an archaeologist to monitor the construction phase of this project. However, since the wetlands area (Area B) was only examined in a cursory manner, clearance is not recommended for this area until a more complete survey is conducted. The only identified cultural remains in Area B were concrete fragments of a discarded burial vault. In Area A, the prominent hill where previously recorded site 41JF1 may be located is believed to be covered with 2-3 feet of recent spoil. Should construction disturb this area to a depth greater than the current stratum of spoil an archaeologist should be present to monitor this phase of the construction. During any phase of construction if any archaeological deposits are discovered work must stop immediately until the situation can be evaluated by the Texas Antiquities Committee.

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APPENDIX I

SHOVEL TEST LOG

Test	Depth	Diameter	Results
01	35 cm	35 cm	glass, shell*, charcoal
02	6 cm	30 cm	sterile
03	80 cm	50 cm	glass, shell*, gravel
04	30 cm	48 cm	sterile
05	33 cm	50 cm	sterile
06	33 cm	48 cm	recent glass
07	34 cm	40 cm	recent trash
08	40 cm	45 cm	sterile
09	40 cm	43 cm	sterile
10	37 cm	40 cm	oyster shell fragment
11	80 cm	30 cm	pebble
12	43 cm	35 cm	pebbles
13	30 cm	40 cm	sterile
14	50 cm	40 cm	sterile
15	45 cm	42 cm	sterile

*oyster and rangia shell

APPENDIX II

Recorded Sites in Jefferson County
 (Based on TARL files as of August 3, 1993)

Site	Date	Recorder	Site Type	Age
41JF01	1940	G. E. Arnold	village	LP
41JF02	1940	G. E. Arnold	shell midden	LP
41JF03	1940	G. E. Arnold	camp/shell midden	LP
41JF04	1940	G. E. Arnold	shell midden	LP
41JF05	1941	G. E. Arnold	shell midden	LP
41JF06	1940	G. E. Arnold	camp	LP
41JF07	1940	G. E. Arnold	shell midden	LP
41JF08	1940	G. E. Arnold	camp/shell midden	LP
41JF09	1940	G. E. Arnold	village	LP
41JF10	1940	G. E. Arnold	burial/shell midden	LP
41JF11	1940	G. E. Arnold	camp	LP
41JF12	1941	G. E. Arnold	shell midden	LP
41JF13	1941	G. E. Arnold	mound	LP
41JF14	1941	G. E. Arnold	shell midden	LP
41JF15*	1941	G. E. Arnold	shell midden	A/LP
41JF16	1940	G. E. Arnold	campsite	LP
41JF17	1940	G. E. Arnold	shell midden	LP
41JF18	1940	G. E. Arnold	burial/shell midden	LP
41JF19	1940	G. E. Arnold	shell midden	LP
41JF20	1940	G. E. Arnold	burial/shell midden	LP
41JF21	1941	G. E. Arnold	shell midden	LP
41JF22	1941	G. E. Arnold	shell midden/mound	LP

Site	Date	Recorder	Site Type	Age
41JF23	1941	G. E. Arnold	shell midden	LP
41JF24	1964	L. Heartfield	mound/shell midden	LP
41JF25	1976	TPWD	shell midden	LP
41JF26	1965	D. H. Lorrain	earth midden	LP
41JF27	1971	C. N. Bollich	burial/shell midden	LP
41JF28	1967	C. N. Bollich	shell midden	LP
41JF29	1967	C. N. Bollich	shell midden	LP
41JF30	1965	C. N. Bollich	pimple mounds	LP
41JF31	1967	C. N. Bollich	earth midden	LP
41JF32	1969	C. N. Bollich	shell midden	LP
41JF33	1969	C. N. Bollich	shell midden	LP
41JF34	1969	C. N. Bollich	shell midden	?
41JF35	1972	TASP	shell midden	?
41JF36	1972	TPWD	Fort Griffin	H
41JF37	1972	TPWD	shell midden	?
41JF38	1972	TPWD	shell midden	LP
41JF39	1972	TPWD	shell midden	LP
41JF40	1972	TPWD	shell midden	LP
41JF41*	1972	TPWD	shell midden	LP
41JF42	1972	TPWD	shell midden	LP
41JF43	1973	TAS	shell midden	LP
41JF44	1973	TAS	shell midden	LP
41JF45	1974	TPWD	Fort Manhasset	H
41JF46	1975	THC	John French Home	H

Site	Date	Recorder	Site Type	Age
41JF47	1977	TPWD	camp/shell midden	A/LP
41JF48	1977	TPWD	camp/shell midden	LP
41JF49	1977	TPWD	camp/shell midden	A/LP
41JF50	1978	J. W. Clark	McFaddin Beach	P/A
41JF51	1983	COE	shell midden	LP
41JF52	1983	COE	shell midden	LP
41JF53	1983	COE	shell midden	?
41JF54	1983	COE	shell midden	LP
41JF55	1981	HPG	wooden vessel	H
41JF56	1981	HPG	wooden barge	H
41JF57	1981	HPG	wooden barge	H
41JF58	1981	HPG	wooden barge	H
41JF59	1981	HPG	wooden vessel	H
41JF60	1982	CE	shell midden	?
41JF61	1983	TPWD	shell midden	?
41JF62	1983	TPWD	mound/burial	LP
41JF63	1983	NWR	homestead	H
41JF64	1985	COE	shell midden	LP
41JF65	1989	TAC	steamship	H
41JF66	reserved		residence	H
41JF67	reserved	C. N. Bollich	David French house	H

* Indicates minor historic component

Abbreviations Used in Appendix II

A = Archaic
LP = Late Prehistoric
P = Paleo-Indian
H = Historic

CE = Coastal Environments, Inc.
COE = Corps of Engineers, Galveston District
HPG = Heartfield, Price & Greene, Inc.
NWR = New World Research, Inc.
TAS = Texas Archeological Survey
TASP = Texas Archeological Salvage Project
THC = Texas Historical Commission
TPWD = Texas Parks and Wildlife Department

APPENDIX III

SITE DESCRIPTION

(41JF1)

The following discussion is taken from the official site form on file at the Texas Archeological Research Laboratory (TARL) in Austin, Texas. Not all of the blanks on the form were completed and this form is an earlier version that does not contain as much data as the current site form.

Site 41JF1 was recorded on September 10, 1940 by G. E. Arnold as indicated on a form entitled "Archaeological Survey, State of Texas, Sites Survey Report" on file in the site files at TARL in Austin, Texas. This site is also referred to by the numbers 55D-9-1 and ET-830 (old number).

The location of 41JF1 is given as 1/4 mile south of Collier's Ferry on the west side of the Neches River and about 1/4 mile south of road leading to ferry. The Beaumont Country Club is 1/4 mile to the north. No utm coordinates are give, but the Longitude is 30 degrees 07 minutes 57 seconds North and the Latitude is 94 degrees, 05 minutes and 37 seconds West.

Arnold describes 41JF1 as a village site about 1.5 acres in size located on a flat-topped sand ridge about 150 yards west of the river. At the time the ground was obscured by dense vegetation.

The local topography where the site is located is along a ridge that extends to the east and west and drops slightly to the north. Swamps were noted to the south. The Neches River and a slough are adjacent to the site. The soil at the site was found to be sandy loam with slight erosion present and not in cultivation. Vegetation at the time consisted of cypress, magnolia, weeds, pine, and gum.

Arnold states that no previous excavation had been conducted at 41JF1. He found and collected three potsherds which are not described on the site form. Occupation evidence was found in a ditch and back slope of a small road which runs across the site. This ridge is reported as the highest land for some distance along the river. It is believed that the artifacts were turned over to TARL for curation.