# A PRELIMINARY ENVIRONMENTAL AND ARCHAEOLOGICAL ASSESSMENT OF THE 9.07 ACRE PROPOSED WOODWAY PARK ADDITION IN BRAZOS COUNTY, TEXAS

Ву

William E. Moore and David S. Pettus

Brazos Valley Research Associates

Contract Report Number 34

# A PRELIMINARY ENVIRONMENTAL AND ARCHAEOLOGICAL ASSESSMENT OF THE 9.07 ACRE PROPOSED WOODWAY PARK ADDITION IN BRAZOS COUNTY, TEXAS

Principal Investigator: William E. Moore, SOPA

Brazos Valley Research Associates
Project Number 94-10

Prepared for

The City of College Station, Texas Post Office Box 9960 College Station, Texas 77842-9960

Prepared by

Brazos Valley Research Associates 219 North Main Street Varisco Building - Office 309 Bryan, Texas 77803

## **ABSTRACT**

A preliminary environmental and archaeological assessment of the 9.07 acre site of the proposed Woodway Park addition in Brazos County, Texas was conducted by archaeologist William E. Moore of Brazos Valley Research Associates and geologist David S. Pettus of Southwest Geoservices in September of 1994. This study did not locate any evidence of hazardous waste material or other items of environmental concern, nor were any prehistoric or historic sites found to be present. The park site is considered by the archaeologist to be a low probability area for prehistoric sites. Historic utilization of the park site has been primarily agricultural and/or ranching.

# **ACKNOWLEDGMENTS**

This project was accomplished with the full cooperation of the City of College Station and McCord Engineering, Inc. The authors are appreciative of the assistance they received from Jimmy D. McCord, President of McCord Engineering, Inc. and Stephen C. Beachy, Director of Parks and Recreation, College Station. We would also like to thank Carolyn Spock, Head of Records at the Texas Archeological Research Laboratory (TARL) in Austin, Texas and her staff, Rosario Casarez and Jean Hughes, for checking the site records for this project. Wendy and Chris Pullum helped with the field survey. Wendy Pullum also read the report for typographical errors.

# **CONTENTS**

| ABSTRACT   |    |
|--|----|
| ACKNOWLEDGMENTS                                  |    |
| INTRODUCTION                                     | 1  |
| METHODS OF INVESTIGATION                         |    |
| ENVIRONMENTAL SETTING                            | 5  |
| PREVIOUS INVESTIGATIONS                          | 6  |
| Prehistoric Investigations in Brazos County      |    |
| Historic Investigations in Brazos County         |    |
| PREHISTORIC CHRONOLOGY                           |    |
| Paleoindian Period                               |    |
| Archaic Period                                   | 12 |
| HISTORIC CHRONOLOGY                              |    |
| RESULTS AND CONCLUSIONS                          | 16 |
| RECOMMENDATIONS                                  |    |
| REFERENCES CITED                                 | 18 |
| Appendix I: Shovel Test Log                      |    |
| Figures  |    |
| Figure 1. Project Area and Boundary Survey       | 2  |
| Figure 2. Project Area on Topographic Quadrangle | 3  |

## INTRODUCTION

The City of College Station, Texas plans to acquire ownership of a 9.07 acre tract of unimproved land in the southwestern sector of the City of College Station to be used as a neighborhood park. Acquisition of the 9.07 acres will increase the size of the area to be developed as Woodway Park. Currently, this property, which is situated in the Crawford Burnett Tract (Abstract 7) of 71 acres, is owned by Mohawk Ltd, c/o Edsel G. Jones, 310 University Drive East, College Station, Texas 77840. The purpose of this investigation was to obtain an opinion from a professional archaeologist and geologist regarding the potential for the presence of hazardous waste materials and/or significant cultural resources (prehistoric or historic sites) within the proposed park site.

The project area is located in an area that is partially wooded and divided by a small intermittent stream that is a tributary of Bee Creek. The tract is bordered on the east by the old I & GN Railroad right-of-way (ROW) and on the west by the Jones-Butler Road ROW. To the north is a 3.92 acre tract already owned by the City of College Station (adjacent to Holleman Drive) and to the north the project area is bounded by the remainder of a 47.27 tract owned by Mohawk, Ltd. The topography of the project area is basically level and its elevation is 280-290 feet above mean sea level. According to the National Flood Insurance Program's Flood Insurance Rate Map number 48041-C-0182-C dated July 2, 1992, a portion of this tract could be within the 500-year designated flood hazard boundary. The project area site plan and boundary survey is depicted in Figure 1, and its location on the 7.5' USGS topographic quadrangle Wellborn, Texas is depicted as Figure 2.

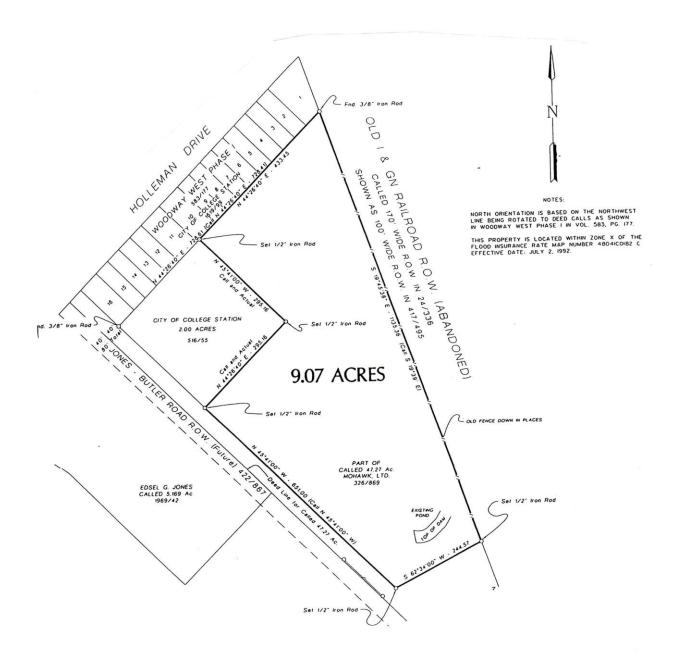


Figure 1. Project Area and Boundary Survey

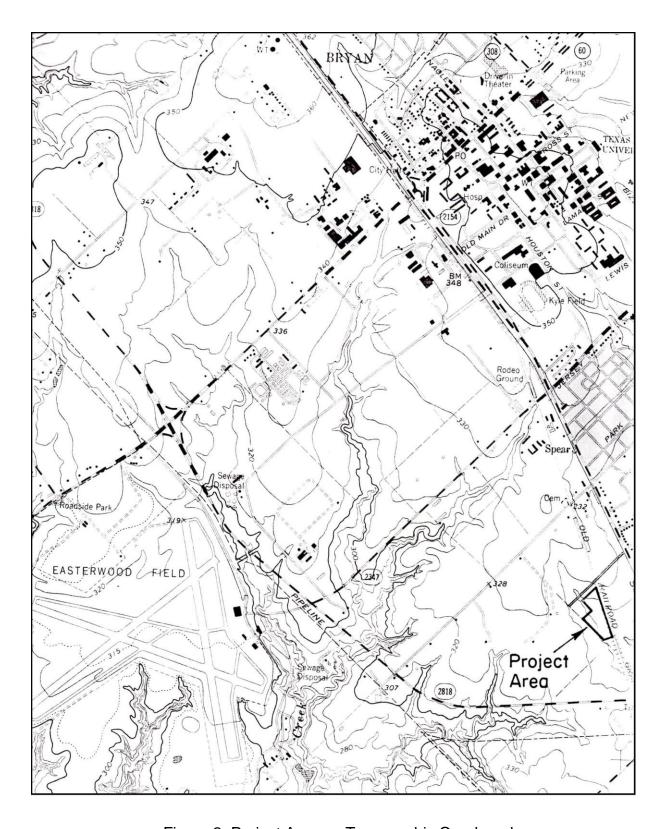


Figure 2. Project Area on Topographic Quadrangle

## **METHODS OF INVESTIGATION**

Prior to entering the field, the Geologist visited the Brazos County Courthouse and examined tax records at the County Tax Assessors Office and conducted interviews with the staff of the Brazos County Appraisal District. The archeologist checked site records for the area and reviewed recent contract reports for Brazos County.

Maps examined include two aerial photographs believed to date to the 1970s, the 7.5' USGS topographic map Wellborn dated 1961 (photorevised 1980), and various land ownership maps and plats provided by the City of College Station. The Brazos County soil survey (Mowery et al. 1958) and supplement (Chervenka 1978) were also consulted. In addition, the Texas Archeological Research Laboratory (TARL) in Austin, Texas was contacted regarding the presence of previously recorded sites within the project area.

The entire 9.7 acre tract was examined by the two investigators. The Geologist looked for evidence of past or present activities that would result in the disposal of industrial waste within the project area and vicinity. Signs of these activities could be abandoned oil field equipment, barrels and other kinds of containers used to store chemicals, discoloration on the vegetation and water, and, of course, the presence of waste materials.

The archaeologist looked for evidence of cultural resources, prehistoric and/or historic sites within the project area. Signs of these kinds of sites might include prehistoric or historic artifacts on the surface or buried beneath the ground surface and surface indications of historic activity such as standing structures and/or other indications of farming/ranching such as fences, water troughs, and pens.

Poor ground visibility necessitated shovel testing by the archaeologist. Very few areas of exposed ground surface were present and these were examined closely for cultural materials. Shovel tests were excavated on both banks of the tributary and shovel probes were dug randomly throughout the project area. In this report a shovel test is defined a hole from which all excavated matrix is screened through 1/4 inch hardware cloth, while a probe is simply a hole dug with a shovel from which the excavated matrix is not screened. Typically, probes are efforts to test the soil in areas where testing is not considered necessary. Sometimes a planned test is aborted when clay is discovered at the surface. In these instances, the tests become probes. This was the case for all of the probes dug for this project. In all, 14 shovel tests and 4 shovel probes were dug. The dirt from each test was returned, or backfilled, to the hole once it was completed. Shovel tests were dug to clay. Data obtained from shovel testing were recorded on a shovel test log (Appendix I).

#### **ENVIRONMENTAL SETTING**

The project area is located within the West Gulf Coastal Plain section of the Coastal Plain physiographic province as defined by Fenneman (1938:100-120). According to Fenneman, this physiographic section is subdivided according to the age of the geological formations (Gulf series) that roughly parallel the Texas coastline. The area is hilly and situated within the East Texas timber belt. Gould (1969) describes it as an area characterized by gently rolling to hilly topography with light colored soils that are acid sandy loams or sands.

The climate is subhumid to humid and the weather is considered to be predominately warm. Annual rainfall for Brazos County is 39.21 inches. A January minimum temperature of 42 degrees and a July maximum temperature of 95 degrees combine to produce a growing season of 274 days (Kingston and Harris 1983:180). The altitude varies from 200-400 feet. The project area is located on a tract of land that is bisected by an intermittent tributary of Bee Creek. Elevations within the project area vary from 280-290 feet.

The entire project area is located within the Lufkin fine sandy loam (Ld), 1-3 percent slopes as defined in the 1958 soil survey for Brazos County (Mowery et al. 1958:44, Sheet 35). The Lufkin series consists of grayish-forested Planosols developed in alkaline clay and sandy clay. Runoff ranges from very slow to moderately rapid with the rate depending on the surface gradient. Internal drainage is very slow. Only about 5% of these soils were in cultivation in 1950 with about 60% abandoned field/pasture. The rest was in native woodland pasture. Currently, the soil survey is being updated; this information was not readily available at the time of this investigation.

#### PREVIOUS INVESTIGATIONS

A check of the records at the Texas Archeological Research Laboratory (TARL) in Austin, Texas revealed no archeological sites have been recorded in the project area. According to the files at TARL, numbers have been assigned or reserved for 123 sites in Brazos County (No site forms have been filed for sites 41BZ106 - 41BZ108). Fifty-four sites, or 43 percent of this total, were recorded as a result of the Millican Reservoir Project to the southeast of the present study area.

Data for the discussion which follows were taken from the TARL site files, the THC library, various bibliographies (Moore 1988, 1989b; Patterson 1986; Simons 1981), a data base by Leland W. Patterson (1989), and published volumes of an ongoing project abstracting Texas contract reports (Moore 1990, 1991, 1992a, 1992b, 1993a). The previous works discussed below consist of major projects in Brazos County and vicinity and those smaller area surveys that resulted in recording new sites or assessed sites previously recorded. The remaining studies that did not record sites can be found in those works cited above.

Sites are often recorded as a result of collectors sharing their information with archaeologists or state agencies. The first sites recorded in Brazos County (41BZ1-41BZ7) document private collections and were recorded in the 1960s and 1970s. Other sites recorded by individuals include 41BZ31-41BZ35; 41BZ38; 41BZ73-41BZ74; 41BZ76; 41BZ83-41BZ84; 41BZ90-41BZ91; 41BZ93-41BZ102. This information was taken from the TARL site files.

Much of the data regarding sites in Brazos County are from surface collections. At prehistoric sites this often occurs as surface scatters containing debitage with few, if any, diagnostic artifacts. Therefore, very little is known concerning the cultural affiliation of many sites in the county.

Although, in general, this area has not been the locus of major projects by professional archaeologists, several studies in the vicinity have provided valuable comparative data. Excellent summaries of the prehistory of this part of Texas have been compiled by Kotter (1981) Roemer and Carlson (1987), Prewitt (1981), and Thoms (1993).

# Prehistoric Investigations in Brazos County

The first systematic investigation in Brazos County occurred when portions of the Navasota River Basin were surveyed within the authorized damsite for the Millican Reservoir in 1971 by R. T. Ray and Alton Briggs for the Texas Historical Commission and Texas Water Development Board. According to Kotter (1981:391- 392), this initial survey recorded nine archeological sites (41BZ8-41BZ16). One site (41BZ15) contained an historic component as well as prehistoric materials. The results of this project remain unpublished.

A second archeological survey of the Navasota River Basin was conducted by the Texas Archeological Survey (Sorrow and Cox 1973) for the United States Army Corps of Engineers, Little Rock District. This work was carried out in anticipation of the proposed Millican Lake on the Navasota River that would inundate portions of Brazos, Grimes, and Madison counties. Flooding caused by frequent rains during the project made it impossible for much of the bottomlands to be examined. The amount of land surveyed is not mentioned in the report. Shovel testing was not conducted. In Brazos County, fourteen prehistoric sites (41BZ17- 41BZ30) were recorded. Nine sites (41BZ8-41BZ16), previously recorded by the Texas Historical Commission in 1971, were revisited.

The majority of the prehistoric sites found by Sorrow and Cox were thinly distributed lithic scatters exposed in rodent spoil piles. Approximately half of all sites examined contained only lithic debitage, and only three sites contained evidence of subsistence in the form of mussel shell or grinding stones. According to Kotter (1981:34-35), this survey was useful in that it demonstrated that large numbers of sites exist in an area previously thought to contain few cultural resources.

It was concluded that the number of sites recorded represents only a fraction of the total present in the basin. The age of sites in the basin is believed to range from Paleoindian to Historic. It was recommended that a more comprehensive study of the area, including subsurface testing, be carried out prior to construction of the dam.

A review of prehistoric and historic resources in the Millican Project was conducted by Prewitt and Associates, Inc. (Kotter and Victor 1981) prior to an assessment of the cultural resources of the Millican Project (Navasota River Basin) by Prewitt and Associates, Inc. (Kotter 1981). This survey recorded 32 sites (41BZ39-41BZ70; 41BZ75 [out of the project area]) and two localities. Site 41BZ46 is historic and 41BZ66 contains prehistoric and historic components.

The Millican project represents the most intensive study of cultural resources in Brazos County. Data collected indicate that significant cultural resources are present within all portions of the project area. Although some of the sites may be eligible for the National Register of Historic Places, not one was nominated. The possibility of the area as a district was discussed.

The Texas State Department of Highways and Public Transportation (TSDHPT) conducted a survey of the State Highway crossing of the Navasota River in 1977. Two prehistoric sites, 41BZ36-41BZ37, were recorded. Both were recommended for further testing. This information was taken from the TARL site files.

An archeological survey was conducted by the Cultural Resources Laboratory, TAMU in 1980 of a proposed pipeline corridor (Baxter 1980). A pedestrian survey, augmented by shovel testing, evaluated prehistoric site 41BZ22 previously recorded by Sorrow and Cox (1973). It was concluded the site is not significant and no further work was recommended.

An archeological survey was conducted by the Cultural Resources Laboratory, TAMU in 1981 of seven tracts of land in Brazos, Grimes, Madison, Montgomery, and Walker counties (Carlson 1981). The size of the project area is not mentioned in the report. One prehistoric site (41BZ37), previously recorded by TSDHPT in 1977, was examined. That part of 41BZ37 in the project area was disturbed and not considered significant. No new sites were recorded.

The Archeological Research Laboratory, TAMU conducted an archeological survey of the proposed Millican Landfill project in 1984 (Drollinger 1984). Eighty-eight acres were examined by a pedestrian survey augmented by shovel testing. This survey resulted in the recording of five prehistoric sites (41BZ78- 41BZ82) and six isolated finds. Additional testing to determine site significance was recommended for sites 41BZ78, 41BZ79, and 41BZ81.

An archeological survey of the proposed Bryan Industrial Park was conducted by the Archeological Research Laboratory, TAMU in August of 1984 (DeMarcay 1985). A pedestrian survey and shovel testing of 112 acres resulted in the recording of three historic sites, 41BZ71, 41BZ72, and 41BZ77. These sites were disturbed and no further action was recommended.

In 1986, an archeological survey of the proposed Bryan Athletic Complex was conducted by the Archeological Research Laboratory, TAMU (Drollinger 1986). Pedestrian survey and shovel testing of a 60 acre tract resulted in the recording of one historic site (41BZ86) producing artifacts dating to the late 19th and early 20th centuries. Testing of this site for significance was recommended if avoidance is not possible.

Two prehistoric sites (41BZ87-41BZ88) and one historic site (41BZ89) were recorded by TSDHPT in 1987. This work was done as an evaluation of proposed State Highway 47. This information was taken from the TARL site files.

An archaeological survey for the Coulter Field Environmental Assessment Project was performed in 1989 by Brazos Valley Research Associates (Moore 1989a). One historic site, a early twentieth century house site (41BZ92) was found in the 247.75 acre tract.

In 1990, TSDHPT conducted an assessment of the park and ride lots (9.5 acres) along FM 2818 (Texas State Department of Highways and Public Transportation 1990). One previously recorded site (41BZ73) was evaluated.

The environmental firm, Espey, Huston & Associates, Inc., surveyed a 5.9 kilometer transmission line in 1990 (Baxter 1990) and recorded two lithic scatters (41BZ103 and 41BZ104).

A cultural resources survey by Espey, Huston & Associates, Inc., was conducted in 1991 (Gearhart 1991). Examination of three 2.3 hectare well pads recorded one prehistoric lithic scatter as 41BZ105.

The first major project in the county since the Millican Reservoir study was conducted by the Archeological Research Laboratory, TAMU, in 1991. A survey of selected areas of a 530 acre tract resulted in the recording of eight sites (41BZ109 - 41BZ111; 41BZ119 - 41BZ123). Of this total, 2 sites are prehistoric, 4 are historic, and 2 contain both prehistoric and historic components. In addition, to the survey, previously recorded site 41BZ1 was evaluated (report in preparation, Alston Thoms, personal communication).

In May of 1992, the Texas Water Development Board (TWDB) conducted a survey of a portion of the proposed wastewater treatment plant on White Creek approximately 3 miles southwest of the current project area and associated facilities (Whitsett and Jurgens 1992). Six sites (41BZ112 - 41BZ117) were recorded. Testing was recommended for two prehistoric sites (41BZ112 and 41BZ115) and archival research for the historic component of 41BZ115. An additional survey was requested to cover 102 acres not covered during their in-house investigation.

Following up the recommendations by TWDB, The Archeological Research Laboratory, TAMU, surveyed the remaining 102 acres and recorded 41BZ118, a probable farmstead complex occupied during the late 1800s and early 1900s (Thoms 1993). This site was considered to possess significant research potential and testing was suggested if avoidance is not possible. Testing was also conducted at 41BZ112 and testing and archival work at 41BZ115. Site 41BZ115 was recommended for further work if avoidance is not possible and that portion of 41BZ112 in the project area was not considered significant.

Brazos Valley Research Associates has been involved in several recent cultural resources investigations in Brazos County, two of which were in close proximity to the current project area. In the spring of 1993, Archaeology Consultants, Inc. and Brazos Valley Research worked together and examined 203 acres proposed for the site of the Bush Presidential Library Center project (Moore and Warren 1993). Two prehistoric sites (41BZ124 and 41BZ125) were recorded. Neither site was recommended for additional work. The standing structures associated with the Swine Center on the Texas A&M University campus were not considered significant.

Brazos Valley Research Associates surveyed a 12 acre Tiffany Park site in Brazos County in the summer of 1993 and recorded a very disturbed historic site which was recorded as 41BZ126 (Moore 1993b). This site was not considered to possess research potential and no additional work was recommended.

Most recently, Brazos Valley Research Associates conducted a survey of the 14 acre Support Services Building site for Texas A&M University (Moore 1994). No sites were found and it was recommended that work be allowed to proceed.

# Historic Investigations in Brazos County

The only historic site to be examined by professional archaeologists is the Richard Carter homestead (41BZ74) about five miles south of Coulter Field on Carter Creek. At circa 1831, this is one of the earliest historic sites in Brazos County. It was first excavated under the direction of Shawn Bonath Carlson (1983) of the Archeological Research Laboratory, TAMU, in 1983.

Additional archeological investigations were conducted at this site in December of 1985 as a prerequisite to development of a city park. Ninety-eight test units produced artifacts typical of a mid-nineteenth century dwelling and further confirmed the presence of the Carter homestead at that location. Based on this work, 41BZ74 was considered eligible for State Archeological Landmark status. The fieldwork was directed by Shawn Bonath Carlson (1987).

In July of 1985, Mt. Zion Baptist Church was recorded by Erwin Roemer and William E. Moore as 41BZ85. This structure is believed to be the last remaining building from the original Stone City community. This site was recorded during the 41BU16 project (Roemer and Carlson 1987).

In addition to the historic archaeological project mentioned above, various aspects of Brazos County history have been documented in the form of books, theses, and articles. A history of the county written for the Texas Sesquicentennial celebration by the Brazos County Heritage and History Council and the Family History Foundation is the most comprehensive study that has been done at this time. This book was written by several authors and edited by Glenna Fourman Brundidge (1986).

Other relevant studies include a compilation of place names of Brazos County from 1821-1880 by John Williams Diem (1981), a manuscript describing life in Bryan during the period 1821-1921 by Mary Edna Dorsey (1976), a history of Brazos County written by Elmer Grady Marshall (1937) for his masters thesis, an early history of Bryan and the surrounding area by Joseph Milton Nance (1962), and a historical tour of Brazos County compiled by students of Bryan High School (Ragsdale 1976).

## PREHISTORIC CHRONOLOGY

The project area is located within the boundaries of a large region consisting of eleven counties and described by Kotter (1981:30-34) in his discussion of the Millican Reservoir project. According to Kotter (1981:30), this region forms a geographic and environmental unit that exhibits traits that differ from nearby areas and cannot be classified as belonging to any of the presently defined adjacent cultural expressions. In his scheme the Brazos River forms the approximate western boundary and southern Brazos and Grimes counties represent the southern boundary. Kotter's prehistoric chronology is divided into three major periods or lifeways: Paleoindian, Archaic, and Formative. This chronology is tentative and often relies on comparative data from adjacent regions.

### Paleoindian Period

The common conception of the Paleoindian period is the time following the last ice age (Pleistocene) in North America when man 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 the Paleoindian as an occasional mammoth or other large animal. Recent subsistence data in the region relate to this period. At site 41BZ76 on the Brazos River evidence has been found that a mammoth may have been butchered by Paleoindians about 10,000 years ago (Carlson, et al. 1984; Steele and Carlson 1989) and sites on the Robertson County side of the Brazos River have produced freshwater mussel shells associated with chert flakes that date to between 6000 and 8000 years ago (Haywood and Waters 1990).

Paleo-Indians are also noted for the manufacture of unique and distinctive projectile points. In Brazos County a variety of Paleo-Indian point types has been found. Most of these specimens have been surface collected. Known types found in Brazos County include Angostura, Clovis, Folsom, Meserve, Plainview, San Patrice, and Scottsbluff. Descriptions of these and other types mentioned in this section are found in Turner and Hester (1985) and Suhm and Jelks (1962). Although dates for this period are tentative, Paleoindians probably occupied the general area between 7000 and 8000 years ago (Prewitt 1981; Bond 1977; Shafer et al. 1975) and perhaps longer.

Sites with in situ deposits dating to the Paleo-Indian period, however, have been few in number and none have been found in Brazos County. Sites that have produced surface collected specimens include the Thurmond site, 41BZ2, 41BZ73, and 41BZ70. Located just across the Brazos River in Burleson County is Winnies Mound (41BU17). Excavation at this site by Bradley F. Bowman (1985) in 1983 resulted in the recovery of two Paleo-Indian artifacts, a Plainview-like dart point and a San Patrice dart point. In adjacent Grimes County an ongoing testing program by Espey, Huston & Associates, Inc. has recovered evidence of Paleo-Indian occupation in the form of dart point types Angostura, Dalton, and Lerma point (Rogers 1993:123).

#### Archaic Period

The Archaic period is generally defined as the time following the extinction of Pleistocene megafauna during which small bands of hunters and gatherers roamed the countryside in search of food in the form of plants and animals. The addition of horticulture, pottery, and the bow and arrow are viewed as major technological changes that led to the end of this period. During this time the overall population gradually increased as evidenced by a greater number of sites. Kotter's (1981:31-34) discussion of the Archaic for the Navasota River basin is divided into four phases, Early, Middle, Late, and NeoArchaic.

The early Archaic is viewed by Kotter as a period of transition from the big-game hunting traditions of Paleoindians to a broader based economy. He believes that during the early stages of this period groups of people were utilizing Paleoindian technology while practicing an Archaic economy. The Angostura type projectile point is considered diagnostic of this early phase, although others classify it as Paleo-Indian. Although most evidence of this phase occurs as single finds, apparent occupation sites are reported within the Lake Limestone area (Prewitt and Mallouf 1977; Mallouf 1979). Site 41BU17, located just across the Brazos River in Burleson County has also produced projectile points that have been dated as Early Archaic (Bowman 1985).

During the later phase of this period a diversification of stemmed projectile point types and tool types appeared. This assumption is based on artifact types considered typical of the early Archaic period in other areas of Texas. Diagnostic artifacts of this phase include Gower, Hoxie, Axtell, Carrollton, Dawson, Trinity, and Wells types as well as Waco sinkers and Clear Fork gouges.

Throughout the early Archaic period there appears to have been close affinities with cultural areas to the west (Central Texas) and north (North-central Texas). Later phase sites of the early Archaic period are more numerous in the northern portion of the region and along mainstream river channels. The numbers decrease along lateral tributary streams. Site records at TARL list one site (41BZ26) in Brazos County as early Archaic.

The Middle Archaic period appears to be simply a continuation of those adaptive strategies employed during the late Archaic discussed above. Kotter (1981:32) believes that no significant changes in the basic exploitative strategies occurred since the early Archaic. The region defined by Kotter (1981) is situated on the western edge of the geographical extent of the La Harpe Aspect as defined by Johnson (1962). Tool types are comparable to those found in East Texas and, according to Kotter (1981:32), "may lend some credence to the validity of the La Harpe Aspect as a generalized adaptive system during the middle Archaic." Point types considered by some to be diagnostic of this period include Yarbrough, Neches River, Pedernales, Morrill, and Dawson. Site records at TARL do not list any sites in Brazos County as Middle Archaic. Projectile points diagnostic of this period have been found at site 41BU16 on the Brazos River in Burleson County (Roemer and Carlson 1987).

The late Archaic is marked by changes in subsistence orientation and an increase in the intensity of influence from other cultural areas. For the first time there was a marked exploitation of major river tributaries and other areas away from the mainstream river channels. Prewitt and Grombacher (1974) believe the use of tributary streams may be indicative of sporadic or seasonal exploitation and not semi-permanent camps. The projectile point assemblage is characterized by a contracting stem tradition, primarily the Gary type. Other diagnostic tools include Godley, Woden, Ensor, Kent, Refugio, and Edgewood projectile points; Bristol and Erath bifaces; Bronson knives; and Perkin pikes. Sandy paste ceramics associated with Gary points are thought to occur throughout the area as well. Site records at TARL list four sites (41BZ78, 41BZ79, 41BZ81, and 41BZ82) in Brazos County as probable Late Archaic.

The Neoarchaic is marked by the addition of arrow points and the use of ceramics. Kotter (1981:33) believes few, if any, changes in subsistence strategies occurred during this time. This argument is strengthened by the association of Gary points and ceramics. No direct evidence of horticulture is known from this region. He also states that the Neoarchaic period probably continued to the time of historic contact. Cultural materials diagnostic of this period are common in the region. Neoarchaic sites are found along both mainstream river and tributary environments indicating the same localities exploited during the late Archaic were utilized. During the Neoarchaic, there is a demonstrable relationship between this region and adjacent cultural areas. Trade and cultural borrowing with groups in East, North-central, Southeast, and Coastal Texas is believed to have been present.

The Formative Stage followed the Archaic and is viewed by Kotter (1981:34) as a time when changes in social and economic organization, accompanying a dependence on agriculture, occurred. This can be identified by the presence of mound and village sites. However, if agriculture was practiced in the region it was probably not intensive or widespread. Sorrow and Cox (1973) believe evidence of this stage in the region may exist due to the large number of sites within their project area containing ceramics. Site records at TARL do not list any sites in Brazos County as Formative.

#### HISTORIC CHRONOLOGY

Very little evidence of historic Indian groups has been found in the region. Mallouf (1979) reported the presence of Poyner Engraved ceramics at some sites. This type has been found at historic Indian sites in East Texas and may date from A.D. 1200 to A.D. 1700 (Suhm and Jelks 1962:123-125). The possibility of metal arrow points in this region has been noted by Duffield (1960). The two historic Indian groups most likely to have lived in Brazos County are the Bidais and Tonkawa. Kotter (1981:34) believes archaeological sites with evidence of historic contact may exist in all portions of this area. The scarcity of such sites, he believes, is due to the short time span of occupation and the limited sample of cultural materials available from surface examinations. Site records at TARL do not list any sites in Brazos County as Historic Indian.

The earliest European activity in the area was by French and Spanish explorers who were interested in claiming Texas for their countries. During the 17th and 18th centuries many explorers passed through the area in an attempt to establish missions and gain footholds in Texas. Of the many roads and trails created during this time, the Old San Antonio Road (OSR) which connected Saltillo, Mexico with Natchitoches, Louisiana forms the western boundary of Brazos County about 10 miles from the project area.

The earliest settlement in this part of Texas was Pilar de Bucareli, established near Natchitoches by the Spanish in 1774 for exiles from Los Adais Mission. Its location was at the intersection of the La Bahia Road and Old San Antonio Road on the east bank of the Trinity River about 60 miles northeast of the project area. The purpose of this settlement was to support Spanish interests in the area (Bolton 1970:406-407). It remained populated until 1779 when Indian raids, fire, and floods forced an abandonment of the frontier (Victor 1981:236).

By the early 1800s, Texas was under the control of Mexico following a revolt against Spain in 1810. Actual settlement of the area began in 1820 with the arrival of Stephen F. Austin's Old Three Hundred settlers. Mexico viewed American settlement as a means of developing its northern state and raising capital through land sales (Miller 1986:8). The project area is located in the tract of land patented by Joseph E. Scott between 1838 and 1841. Andrew Robinson, who established a ferry across the Brazos River in 1821 about 40 miles southeast of the project area, was probably the first settler to enter the Brazos Valley (Webb 1952:490). Andrew Millican moved to the area in 1821 and is recognized as the first Anglo-American settler to establish a home in Brazos County. During this period the area was sparsely settled with most inhabitants depending on agriculture for their livelihood. According to McKay (1986:2), only two families were living in the county seat of Boonville as late as 1852. These pioneer communities, according to Walker (1986:21), "retained their rural, agricultural nature well into the twentieth century."

Victor (1981:239) credits the arrival of the railroad in 1860 as the beginning of the second phase of settlement in Brazos County. McKay (1986:1) writes that before the railroad, Brazos County was populated primarily by Southern agrarians living on scattered farms and plantations along the river bottoms. The railroad changed the way people lived. In 1870, for example, self-contained farmers were dominant and less than half of Texas had been settled. By 1900, the entire state had been transformed into an empire with commercial agriculture the main industry (Spratt 1983). In less than 30 years, Bryan became a permanent trade and population center with cotton the main crop (McKay 1986:4). The population of Brazos County in 1870 was an increase of 232% since 1860 (McKay 1986:3). According to Diem (1981), Brazos County settlers were not town builders. He states that Boonville was the only real town in existence before 1860. Most of the development in the county resulted from the railroad. Bryan, Millican, Benchley, and Wellborn were towns created because of the Houston and Texas Central Railway.

The period from 1900 to 1938 is marked by increased growth, primarily due to the continuation of the railroad as a major influence on the local economy and the emergence of the Agricultural and Mechanical College of Texas as a major college. A major factor to growth in the immediate area, the railroad, was increased in 1901 when the college granted a right-of-way near the project area to the Houston and Texas Central Railway in 1901. Small farms, often managed by tenant farmers and sharecroppers, continued to exist and subsistence farming with an occasional cash crop, usually cotton, was common.

## **RESULTS AND CONCLUSIONS**

Examination of the files at TARL in Austin, Texas revealed no sites have been recorded in the project area. There was also no indication that any portion of the proposed park site had been surveyed by professional archaeologists. Several significant archaeological projects have been carried out in Brazos County and vicinity with the closest being conducted by TAMU and Archaeology Consultants, Inc. on nearby White Creek. Interviews with personnel at the Brazos County Appraisal District indicated that, to the best of their knowledge, the area has been used for pasture. This appears to be supported by the aerial photographs and soil survey for Brazos County. The maps examined showed no evidence of industrial structures or disposal areas within the project area.

The field survey did not locate any evidence of the presence of hazardous waste within the project area. No oil sheen or discoloration on the water surface or on vegetation was observed. This suggests to the geologist that no hydrocarbon pollution of any significance exists in the area surveyed. Also, no evidence of structures other than modern sewers, telephone lines, fences, and gates was found. No barrels, other kinds of containers, or borrow pits were present. We observed that along the Holleman street side at least two sewer access mains and two pvc pipes that may indicate ground water monitoring may be ongoing. The stream was intermittent with ponds formed by artificial dikes. The presence of cattle indicates the current use of the project area is ranching. It seems reasonable to assume that ranching has been the primary use of this tract. There is no indication at this time that a specific historic site is present within the project area.

No prehistoric sites were found. It is the opinion of the archaeologist that this is an area that may not have been deemed suitable for a campsite by the prehistoric groups in the area. Probably any utilization of this area in prehistoric times was temporary, and it is unlikely that evidence of temporary activities will be found utilizing normal survey methods. The stream that flows through the project area is ephemeral at this location and probably was not a dependable source of water in prehistoric times. In fact, according to the topographic quadrangle, this stream ends less than 300 meters from the project area.

## **RECOMMENDATIONS**

No prehistoric sites were found to exist within the project area, and no historic utilization except for evidence of farming and/or ranching was observed. Also, no evidence of the presence of hazardous waste, past or present, was seen. Therefore, it is recommended that the City of College Station be allowed to proceed with construction as planned. It is always possible that sites can be overlooked during any investigation of this type. Should any evidence of a prehistoric site or historic site (other than the farming/ranching features discussed earlier in this report) be discovered during park construction it is recommended that the project be stopped until the situation can be evaluated by the Texas Antiquities Committee. This recommendation is relevant only if the project becomes subject to state or federal review.

#### REFERENCES CITED

Baxter, Edward P.

1980 Archeological Survey of Proposed Pipeline Corridor from FM 166

Near Tunis in Burleson County, Texas to the Old San Antonio Road (OSR) in Brazos County, Texas. Cultural Resources Laboratory,

Texas A&M University, Letter Report Number 17.

1990 Summary Report: Results of a Cultural Resources Survey of an

138-KV Transmission Line, Texas Municipal Power Agency, Brazos

County, Texas. Espey, Huston & Associates, Inc. (Document

Number 900166).

Bolton, Herbert E.

1970 Texas in the Middle Eighteenth Century. University of Texas Press.

Austin.

Bond, Clell L.

1977 An Archeological Assessment of the Gibbons Creek Steam Electric

Station. Anthropology Laboratory, Texas A&M University, Report

36.

Bowman, Bradley F.

1985 Winnie's Mound (41BU17): A Study in the Prehistory of Burleson

County, Texas. Bulletin of the Texas Archeological Society

56:39-74.

Brundidge, Glenna Fourman (Editor)

1986 Brazos County History: Rich Past - Bright Future. Published as a

Texas Sesquicentennial Edition by the Brazos County Heritage and

History Council and the Family History Foundation, Bryan.

Carlson, David L.

1981 Archeological Survey of Seven Locations in Brazos, Grimes,

Madison, Montgomery, and Walker Counties, Texas. Cultural Resources Laboratory, Texas A&M University, Letter Report

Number 27.

Carlson, David L., D. Gentry Steele, and Anthony G. Comuzzie

Mammoth Excavations at the Duewall-Newberry Site on the Brazos

River in Texas, 1983. Current Research 1:63-64.

Carlson, Shawn Bonath

1983 Archeological and Historical Investigations at the Richard Carter

Site (41BZ74), Brazos County, Texas. Texas A&M University, Archeological Research Laboratory, Reports of Investigations, No.

2.

1987 The Richard Carter Site (41BZ74), Brazos County, Texas: Results

of the 1985 Field Season. Texas A&M University, Archeological

Research Laboratory, Reports of Investigations No. 4.

Chervenka, Glen

1978 Supplement to the Soil Survey of Brazos County, Texas. Published

by the United States Department of Agriculture, Soil Conservation

Service.

DeMarcay, Gary B.

1985 Archeological Survey of the Proposed Bryan Industrial Park, Brazos

County, Texas. Archeological Research Laboratory, Texas A&M

University, Letter Report Number 25.

Diem, John Williams

1981 The Place Names of Brazos County, Texas: 1821-1880. Masters

Thesis, Texas A&M University.

Dorsey, Mary Edna

1976 Those Were the Days: Bryan, Brazos County, 1821-1921.

Pamphlet published by the Bryan Independent School District.

Drollinger, Harold

1984 Archeological Investigations at the Proposed Millican Landfill

Project, Brazos County, Texas. Archeological Research Laboratory,

Texas A&M University, Letter Report Number 21.

1986 Preliminary Archeological Investigations at the Proposed Bryan

Athletic Complex, Brazos County, Texas. Archeological Research Laboratory, Texas A&M University, Letter Report Number 35.

Duffield, Lathel F.

1960 Survey and Appraisal of the Archeological Resources of Navarro

Mills Reservoir, Navarro and Hill Counties, Texas. Report

submitted to the National park Service by the Texas Archeological

Salvage Project, The University of Texas.

Fenneman, Nevin M.

1938 Physiography of Eastern United States. McGraw Hill. New York.

Gearhart, Robert L., II

1991 Results of a Cultural Resources Survey of Three Proposed Well

Pads, Brazos County, Texas. Espey, Huston & Associates, Inc.

(Document Number 910170).

Gould, F. W.

1969 Texas Plants: A Checklist and Ecological Summary. The

Agricultural and Mechanical College of Texas, Texas Agricultural

Experiment Station. College Station.

Haywood, N. A., and Michael R. Waters

1990 Late Quaternary Alluvial History of the Brazos River Floodplain,

Texas. Poster session paper presented at the annual meeting of

the Geological Society of America, Dallas, Texas.

Johnson, LeRoy, Jr.

The Yarbrough and Miller Sites of Northeastern Texas, with a

Preliminary Definition of the La Harpe Aspect. Bulletin of the Texas

Archeological Society 32:141-284.

Kingston, Mike, and Ruth Harris (Editors)

1983 Texas Almanac and State Industrial Guide. A. H. Belo Corporation.

Dallas, Texas.

Kotter, Steven M.

1981 A Preliminary Assessment of the Cultural Resources within the

Millican Project, Navasota River Basin, Brazos, Grimes, Leon, Madison, and Robertson Counties, Texas. Prewitt and Associates,

Reports of Investigations, Number 19.

Kotter, Steven M., and Sally S. Victor

1981 A Preliminary Review of the Prehistoric and Historic Resources in

the Millican Project, Navasota River Basin, Texas. Report submitted to the United States Army Corps of Engineers, Fort

Worth District, by Prewitt and Associates, Inc.

McKay, Paul D.

An Introduction to A Rich Past, Bright Future. In Brazos County

History, Rich Past - Bright Future, by Glenna Fourman Brundidge, Editor, pp. 1-6. Published as a Texas Sesquicentennial Edition by the Brazos County Heritage and History Council and the Family

History Foundation. Bryan.

Mallouf, Michael G.

1979 Archeological Investigations at Lake Limestone, Fall and Winter,

1977. Texas Archeological Survey, Research Report 71. The

University of Texas at Austin.

Marshall, Elmer Grady

1937 The History of Brazos County, Texas. Masters Thesis, The

University of Texas at Austin.

Miller, Andrea

1986 Migration and Settlement Patterns in Brazos County. *In Brazos* 

County History: Rich Past - Bright Future, Glenna Fourman

Brundidge, Editor, pp. 7-20. Published as a Texas

Sesquicentennial Edition by the Brazos County Heritage and History Council and the Family History Foundation, Bryan.

Moore, William E.

1988 A Bibliography of Archaeological Reports Prepared by the Contract

Laboratory, Texas A&M University. Brazos Valley Research

Associates, Bibliographies in Archaeology Number 1.

1989a An Archaeological Survey for the Coulter Field Environmental

Assessment Project in Brazos County, Texas. Brazos Valley

Research Associates, Contract Report Number 3.

1989b Archeological Bibliography for the Southeastern Region of Texas.

Office of the State Archeologist, Texas Historical Commission,

Special Report 31.

1990 Abstracts in Texas Contract Archeology 1988. Department of

Antiquities Protection, Texas Historical Commission, Abstracts in

Texas Contract Archeology 1.

1991 Abstracts in Texas Contract Archeology 1987. Department of

Antiquities Protection, Texas Historical Commission, Abstracts in

Texas Contract Archeology 2.

1992a Abstracts in Texas Contract Archeology 1990. Department of

Antiquities Protection, Texas Historical Commission, Abstracts in

Texas Contract Archeology 3.

1992b Abstracts in Texas Contract Archeology 1991. Department of

Antiquities Protection, Texas Historical Commission, Abstracts in

Texas Contract Archeology 4.

Moore, William E. (continued)

1993a Abstracts in Texas Contract Archeology 1989. Department of

Antiquities Protection, Texas Historical Commission, Abstracts in

Texas Contract Archeology 5.

1993b An Archaeological Survey of the 12.536 Acre Proposed Tiffany

Park Site, Brazos County, Texas. Brazos Valley Research

Associates, Contract Report Number 27.

1994 A Cultural Resources Survey of the 14 Acre Support Services

Building Site for Texas A&M University in Central Brazos County, Texas. Brazos Valley Research Associates, Contract Report

Number 30.

Moore, William E., and James E. Warren

1993 A Cultural Resources Survey of the Bush Presidential Library

Center Project, Brazos County, Texas. Archaeology Consultants,

Inc., Report Number 312.

Mowery, Irvin C., Harvey Oakes, J. D. Rourke, F. Matanzo, H. L. Hill, G. S. McGee, and

B. B. Crozier

1958 Soil Survey of Brazos County, Texas. Published by the United

States Department of Agriculture, Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station, Texas

A&M University, Series 1951, No. 1.

Nance, Joseph Milton

1962 The Early History of Bryan and the Surrounding Area. Pamphlet

published by the Bryan: Hood's Brigade-Bryan Centennial

Committee.

Patterson, Leland W.

1986 Bibliography of the Prehistory of the Upper Texas Coast. Houston

Archeological Society, Special Publication Number 6.

1989 A Data Base for Inland Southeast Texas Archeology. Houston

Archeological Society Report Number 6.

Prewitt, Elton R.

1981 Cultural Chronology in Central Texas. *Bulletin of the Texas* 

Archeological Society 52:65-89.

Prewitt, Elton R., and Kerry A. Grombacher

1974 An Archeological and Historical Assessment of the Areas to be

Affected by the Proposed Twin Oak and Oak Knoll Projects, East-Central Texas. Texas Archeological Survey, Research Report

43. The University of Texas at Austin.

Prewitt, Elton R., and Michael G. Mallouf

1977 Upper Navasota Reservoir: Test Excavations at Lake Limestone,

Spring 1976. Texas Archeological Survey, Research Report 43.

The University of Texas at Austin.

Ragsdale, Charlene

1976 A Historical Tour of Brazos County. Compiled and published by

history students of Bryan High School and Wallace Printing, Bryan.

Roemer, Erwin, Jr., and Shawn Bonath Carlson

1987 Excavations at 41BU16: State Highway 21 at the Brazos River,

Burleson County, Texas. Texas State Department of Highways and Public Transportation, Contract Reports in Archaeology, Report

Number 1.

Rogers, Robert

1993 National Register Testing of Six Archaeological Sites in the GCLM

IV and GCLM V Mine Permit Areas, Grimes County, Texas. Espey,

Huston & Associates, Inc. (Document Number 920937)

Shafer, Harry J., Edward P. Baxter, Thomas B. Stearns, and J. Phil Dering

1975 An Archeological Assessment of the Big Thicket National Preserve.

Texas A&M University, Anthropology Laboratory, Research Report

19.

Simons, Helen

1981 Index, Bulletin of the Texas Archeological Society, Volumes 1-50.

Bulletin of the Texas Archeological Society 52:237-312.

Sorrow, William M., and Wayne N. Cox

1973 Archeological and Historical Resources of the Navasota River

Basin, Texas. The University of Texas at Austin, Texas

Archeological Survey, Research Report No. 26.

Spratt, John S.

1983 The Road to Spindletop. Texas State Historical Association and

The University of Texas Press. Austin.

# Steele, D. Gentry, and David L. Carlson

1989 Excavation and Taphonomy of Mammoth Remains from the

Duewall-Newberry Site, Brazos County, Texas. In Bone

Modification, edited by Robson Bonnichsen and Marcella H. Sorg, pp. 413-430. Center for the Study of the First Americans, Institute

for Quaternary Studies, University of Maine, Orono.

# Suhm, Dee Ann, and Edward B. Jelks

1962 Handbook of Texas Archeology: Type Descriptions. Texas

Archeological Society, Special Publication Number 1, and Texas

Memorial Museum, Bulletin Number 4.

# Texas, State Department of Highways and Public Transportation

1990 Cultural Resources Assessment, Brazos County FM 2818: Park

and Ride Lots on FM 2818 at the Intersection of FM 2513 (Site 1), Loop 507 (Site 2), and SH 21 (Site 3). Unnumbered Letter Report

on file at TSDHPT.

## Thoms, Alston, V.

1993 The White Creek Archaeological Project: Cultural Resources

Assessments for the Proposed Texas A&M University Wastewater Treatment Plant, Brazos County, Texas. Archaeological Research Laboratory, Texas A&M University, Report of Investigations 13.

# Turner, Ellen Sue, and Thomas R. Hester

1985 A Field Guide to Stone Artifacts of Texas Indians. Texas Monthly

Press. Austin.

# Victor, Sally S.

1981 Historical Background. Appendix I: In A Preliminary Assessment of

the Cultural Resources within the Millican Project, Navasota River Basin, Brazos, Grimes, Leon, Madison, and Robertson Counties,

Texas, by Steven M. Kotter, pp. 233-258.

# Walker, Shirlireed

1986 Community Histories. In *Brazos County History, Rich Past - Bright* 

Future, by Glenna Fourman Brundidge, Editor, pp. 21-48. Published as a Texas Sesquicentennial Edition by the Brazos County Heritage and History Council and the Family History

Foundation. Bryan.

## Webb, Walter Prescott

1952 Handbook of Texas, Volume II. Texas State Historical Association.

Austin.

Whitsett, W. Hayden, and Christopher J. Jurgens

1992 Interim Report of an Archaeological Survey of Proposed
Wastewater Treatment Improvements, Texas A&M University,
Brazos County, Texas, SRF-3712. Texas Water Development

Appendix I: Shovel Test Log

| Shovel Test       | Depth | Diameter | Results |  |
|-------------------|-------|----------|---------|--|
| September 2, 1994 |       |          |         |  |
| 1                 | 20 cm | 30 cm    | sterile |  |
| 2                 | 30 cm | 30 cm    | sterile |  |
| 3                 | 35 cm | 30 cm    | sterile |  |
| 4                 | 40 cm | 30 cm    | sterile |  |
| 5                 | 40 cm | 30 cm    | sterile |  |
| September 3, 1994 |       |          |         |  |
| 6                 | 15 cm | 30 cm    | sterile |  |
| 7                 | 35 cm | 30 cm    | sterile |  |
| 8                 | 10 cm | 30 cm    | sterile |  |
| 9                 | 35 cm | 30 cm    | sterile |  |
| 10                | 30 cm | 30 cm    | sterile |  |
| 11                | 10 cm | 30 cm    | sterile |  |
| 12                | 35 cm | 30 cm    | sterile |  |
| 13                | 30 cm | 30 cm    | sterile |  |
| 14                | 17 cm | 30 cm    | sterile |  |