AR Consultants, Inc.
Archaeological and Environmental Consulting
P.O. Box 820727, Dallas, Texas 75382-0727
Phone: (214) 368-0478
Fax: (214) 361-6762
E-Mail: arcdigs@aol.com

ARCHAEOLOGICAL SURVEY

EAST OF

PRAIRIE CREEK,

DALLAS AND COLLIN

COUNTIES, TEXAS

Texas Antiquities Permit Number 3499

Jesse Todd, MS, MA

Submitted to:

CITY OF RICHARDSON
2100 East Campbell Road, Suite 100,
Richardson, Texas 75081

Prepared by:

AR CONSULTANTS, INC.
P.O. Box 820727
Dallas, Texas 75382

Cultural Resources Report 2004-33
November 11, 2004

ARCHAEOLOGICAL SURVEY

EAST OF

PRAIRIE CREEK,

DALLAS AND COLLIN

COUNTIES, TEXAS

Texas Antiquities Permit Number 3499

Jesse Todd, MS, MA

Submitted to:

CITY OF RICHARDSON
2100 East Campbell Road, Suite 100,
Richardson, Texas 75081

Prepared by:

AR CONSULTANTS, INC.
P.O. Box 820727
Dallas, Texas 75382

Cultural Resources Report 2004-33
November 11, 2004

ABSTRACT

A cultural resources survey was conducted of the proposed Huck Finn Trail for the City of Richardson in August, 2004 by AR Consultants, Inc. The 3,750 foot trail route is to be placed east of Prairie Creek and west of Prairie Creek Drive East. Prairie Creek is a first-order drainage and is mapped as being intermittent. A records check revealed no recorded historic or prehistoric sites in the area which is situated on the edge of the prairie uplands. The area is within the Blackland Prairie and is an area which has proven to lack prehistoric sites in general.

A pedestrian survey of the study area failed to locate any evidence of historic or prehistoric occupation. Shovel testing revealed no evidence of buried cultural deposits, or the likelihood of finding such deposits. It is our conclusion, that the potential for archaeological sites in this area along Prairie Creek is very low. This concurs with findings in adjacent parts of the prairie in Collin, Denton, and Dallas Counties.

AR Consultants, Inc. recommends that no further archaeological investigations are warranted in the study area. If cultural materials are encountered during construction, work should stop in that area and the Archeology Division of the Texas Historical Commission should be notified immediately.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

r-arc HuckFinnTrail

INTRODUCTION

On August 3, 2004, AR Consultants, Inc. (ARC) conducted a pedestrian archaeological survey of 3,750 feet of a proposed trail on the east bank of Prairie Creek and west of Prairie Creek Drive East in Richardson, Texas. The proposed trail route consists of two portions. The northern portion contains approximately 2,700 feet and begins north of a wishing well where the Vale Schoolhouse used to stand in Dallas County and ends at an existing concrete trail east of the Prairie Creek Waterfall in Collin County, Texas. The southern portion which consists of approximately 1,050 feet begins south of Fall Creek Drive and east of the Fall Creek Drive Bridge and goes south following Prairie Creek where it turns and makes a circle (Figure 1).

The survey was done for the City of Richardson and the City is a political entity of the State of Texas. Antiquities Permit Number 3349 was issued for the survey. In addition, the City of Richardson is aware of its cultural heritage and seeks to identify and preserve it. The purpose of the archaeological survey was to determine if cultural resources existed along the trail and to make recommendations about their significance and any possible impact to the cultural materials. Because the study area abuts Prairie Creek, relevant federal legislation includes the National Historic Preservation Act of 1966, as amended (PL-96-515), the National Environmental Policy Act of 1969 (PL-90-190), and the Archeological and Historical Preservation Act of 1974, as amended (PL-93-291). The Texas Historical Commission (THC) will review this investigation.

The scope of the project included a records review, a field survey, the recording of sites, if present, and the preparation of a summary report. This report was written in accordance with the guidelines for reports adopted by the Archeology Division of the Texas Historical Commission and developed by the Council of Texas Archeologists (ND). The following report presents a brief description of the natural setting of the project area. This is followed by a short discussion about North Central Texas archaeology and history. The research design and methodology follow. The results of the field survey are presented in the major section of the report. Recommendations conclude the text. A list of references cited is at the end of the report.

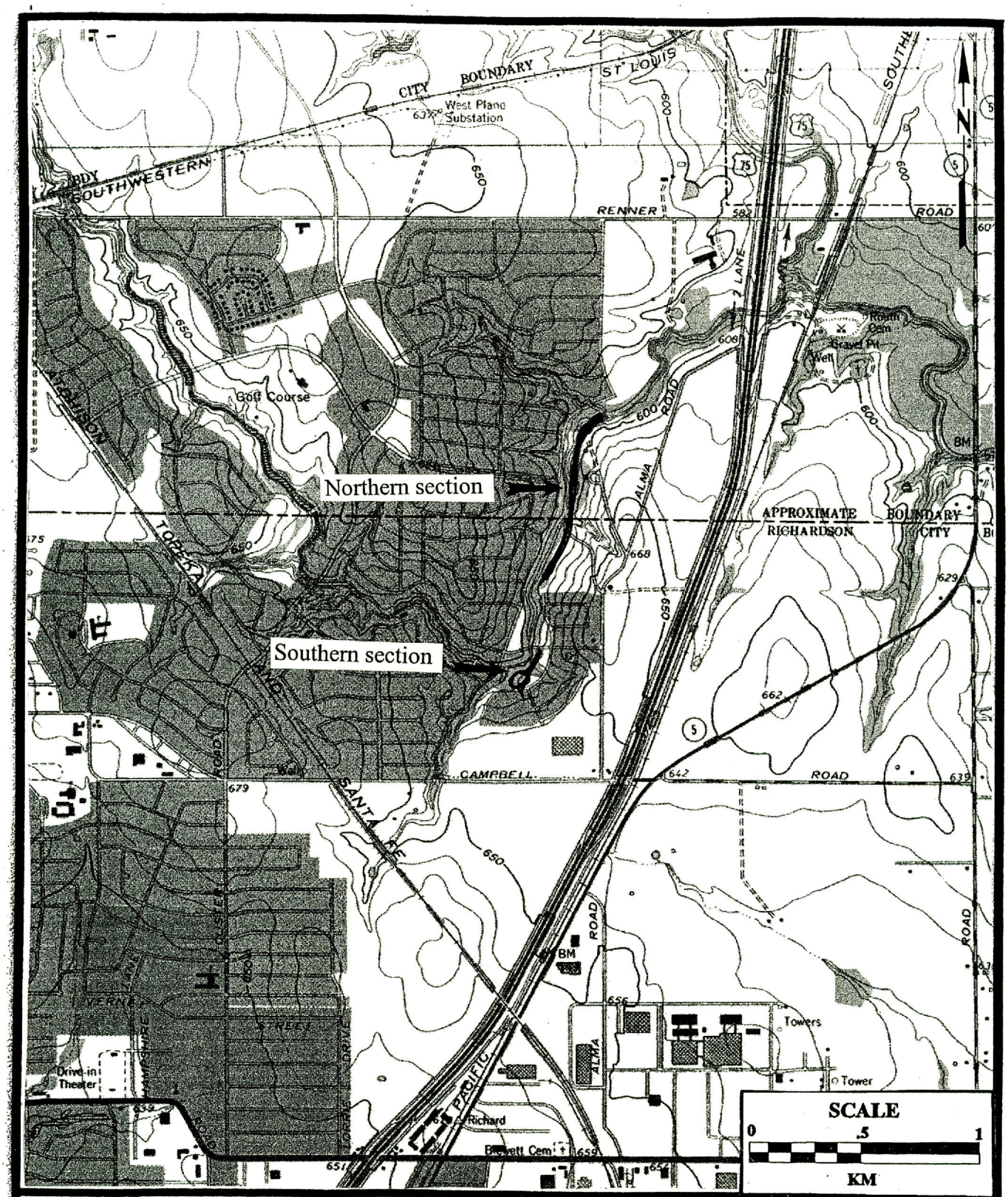

Figure 1. Proposed northern and southern sections of the Huck Finn Trail shown by arrows on a portion of the Garland, Texas 7.5' USGS map.

AR Consultants

Administrative Information:

Sponsor:	City of Richardson
Review Agency:	Archeology Division of the Texas Historical Commission
Principal Investigator:	Jesse Todd, MS, MA
Field Crew:	Lance K. Trask and Todd
Field Work Dates:	August 3, 2004
Survey Hours:	16
Area Surveyed:	approximately 0.5
Sites Recorded:	None

NATURAL SETTING

The study area is described as being near the western edge of the Blackland Prairie (Diggs, Lipscomb, and O'Kennon 1999), and it is this setting that characterizes much of north-central Texas. For more than a century, parts of the area have been farmed extensively. The native vegetation exists today in only a few relict prairie and woodland habitats; however, the study area does not include any of these relict locations. According to various authors, including Lynott (1979), the prairie once supported a cover of tall grasses and was inhabited by now absent herbivores including bison and antelope. Certainly, deer inhabited the floodplain forests.

Prairie Creek is mapped as an intermittent stream on both the USGS and Dallas County soils map. It is bordered by soil belonging to the Austin-Houston Black association which consists of upland soils in both Dallas and Collin Counties (Coffee, Hill and Ressel 1980:General Soils Map; Hanson and Wheeler 1969:General Soils Map). The specific soil that adjoins the creek is Lewisville-Urban complex with 0 to 4 percent slopes and Austin-Urban complex with 2 to 5 percent slopes in Dallas County (Coffee, Hill and Ressel 1980:Sheet 4). The portion of the proposed route in Collin County consists of eroded Austin silty clay with 5 to 8 percent slopes (Hanson and Wheeler 1969:Sheet 59). The underlying limestone bedrock is Upper Cretaceous in age and belongs to the Austin Chalk Formation (Bureau of Economic Geology 1972).

A consensus about the paleoenvironmental conditions of North Central Texas over the past 12,000 years has not been reached. Discussions by Prikryl (1993), Ferring and Yates (1997), Humphrey and Ferring (1994), and Brown (1998) offer disparate interpretations based on different analytical approaches. The following discussion relies heavily on Ferring's investigations and focuses upon the past two thousand years. Correlating periods of rapid alluviation with higher precipitation and slow alluviation with drier conditions, Ferring has concluded that the Late Holocene [5000 yr BP to the present] was a wet period with moderate alluviation, except for a dry period between 2000-1000 yr BP [AD 1-1000]. It was during this dry period that the West Fork Paleosol was established on the stable surfaces of the river meanders along the Upper Trinity and its tributaries. This interpretation is supported by changing patterns seen in stable isotope analysis. Brown (1998) offers a differing interpretation based on isotopic analyses of mussel shells from a prehistoric site (41DL270) on Denton Creek. He concludes that the period from 1500-2500 yr BP was cooler and/or wetter and that before and after, the environment was warmer and drier, but he points out that this interpretation may only be applicable for the Elm Fork tributary and not the region.

CULTURAL HISTORY

The Paleo-Indian period began approximately at 10,000 B.C. and ended at 7,000 B.C. Although no Paleo-Indian sites have been excavated in either Dallas or Collin Counties, Meltzer and Bever (1995:48) states that Clovis points have been discovered in Dallas County. Prewitt (1995:105) mentions that Folsom points also have been recovered from Dallas County. These points are easily recognizable by the fluting on their sides. It is believed that the Paleo-Indian people were mobile hunters and gatherers that hunted big game although due to recent discoveries, it appears that their subsistence was not based on big game hunting.

The subsequent period, the Archaic, lasted from 7,000-6,000 B.C. to possibly as late as A.D. 700-800. The Archaic peoples lived throughout the counties but particularly along the major and minor stream valleys where they were able to hunt and gather native foods. Dart points, grinding stones, fire-cracked rock, and scrapers are common artifacts found on Archaic sites. The earliest Archaic peoples continued using exotic cherts for dart points, but as time passed, there was a shift toward the use of local lithics for chipped stone tools. These local materials are described as Uvalde Gravels (Menzer and Slaughter 1971). Large Archaic sites are generally located on terraces or ridges that overlook the Elm Fork of the Trinity. Smaller lithic scatters have been recorded in upland areas throughout the county.

Various authors, including Bruseth and Martin (1987) and Peter and McGregor (1988), have attempted to create a chronology for North Central Texas. The most commonly used chronology was established by Prikryl (1990) which divides the Late Prehistoric, the time from the use of the bow and pottery to the Historic Indian, into two periods: Late Prehistoric I (A.D. 700 to 1200) and Late Prehistoric II (A.D. 1200 to 1700).

During Late Prehistoric I times, a small amount of pottery appears at the Baggett Branch site, 41DL149 (Prikryl and Perttula 1995:189). Arrowheads appear about this same time and apparently the bow and arrow had been added to the hunting tools. From A.D. 1000 to 1300, pottery appears in North Central Texas that has similarities to Caddoan pottery as well as Caddoan and Jornada Mogollon ceramics occur on sites in North Central Texas (Prikryl and Perttula 1995). In addition houses were found at the Cobb-Pool site, 41DL148, (Peter and McGregor 1988:140) and at Bird Point Island (Bruseth and Martin 1987:182). Prikryl (1990:77) mentions the use of corn for food in North Central Texas during this time and Todd (1999) suggests that the presence of mussel shell hoes in North Central Texas indicates some form of farming.

During Late Prehistoric II times, it is believed that the climate was drier. Possibly bison may have been utilized more than in Late Prehistoric I times. The presence of bison-scapula hoes, especially in northern North Central Texas, suggests an increase in horticulture or, at least, its first appearance. This concept is supported by the presence of sites along sandy terraces instead of the floodplain area where Late Prehistoric I sites are found. There is a marked Plains influence in North Central Texas during this time also (Prikryl 1990:80).

At the end of the Late Prehistoric periods, there appears to have been a general abandonment of the North Central Texas area. Along Red River in Montague and Cooke Counties and across Red River in Oklahoma, there is both archaeological and ethnographic evidence of historic Taovayas, Wichitas and Yscanis Indians (Bell, Jelks and Newcomb 1967; John 1992:204; Lorrain 1969) Since the Spanish could not subdue the Indians, they made them their allies with promises of help against the Osages.

There is tantalizing evidence found on the Trinity River in Dallas County of a possible visit by Spanish explorer Hernando de Soto (Bruseth 1992). Artifacts found consist of a chain-mail gauntlet, a halberd and a spur. Current research, however, seems to indicate that Anglo settlers were the first non-Indians to settle in North Central Texas.

The first established European settlement in Dallas and Collin Counties began before the mid-1800 with the establishment of the Peter's Colony after Texas independence. These early settlers were farmers who selected bottomland along the Elm Fork of the Trinity (Bridges 1978). Commercial farming was not important until after the Civil War, and the early settlers were essentially self-sufficient. Besides the plants and animals they raised and grew, wild animals and plants were commonly consumed. What is today Richardson was established 1873 by the tracks of the Houston and Texas Central Railway. Richardson was established in 1874 when the post office was built. The city was named Richardson because William J. Wheeler, a local gin owner, who along with Bernard Reilly donated 101 acres for the city, refused to have the town named after him. The town was probably named after the contractor who built the Houston and Texas Central Railway. In 1901, the first paper was established, the Richardson *Register*. From its inception, Richardson was a sleepy farm community until the 1950s. Electronic firms moved into the town and the town which became known locally as the "electronic suburb". This named was changed during the 1980s when telecommunication firms came into the area to "Telecom Corridor". By the 1990s, although other manufacturing firms were established, the major corporations were still focused on electronic and telecommunications as they do today.

Recent Investigations

The ATLAS (2004) was examined for archaeological sites within or adjacent to the study area, but none were found. The focus of archaeological investigations has been on the east side of IH 75. AR Consultants (Skinner 1991) conducted a survey of the Spring Creek Nature Area east of the study area and recorded an Archaic lithic scatter (41COL82) and Routh Family Cemetery (41COL83). Geo-Marine, Inc. (Green, James and Hunt 1997) investigated the east side of SH 75 for the Dallas Area Rapid Transit (DART). Although they revisited 41COL83, they recorded 41DL372 which is a historic house site also east of the study area. Wendy Lopez and Associates, Inc. (1998) also revisited the Routh Family Cemetery which they divided into five sections as part of their investigation of 100 acres of the proposed Galatyn Park Development in Richardson which is also along Spring Creek. In addition, they recorded site G-4 which consisted of boxcars and building debris. Their site G-1 consisted of a lithic surface scatter.

METHODOLOGY

The proposed "Huck Finn Trail" is to be 3,750 feet long and six foot wide and is to be placed between the east bank of Prairie Creek and Prairie Creek Drive East (Figure 2). Approximately 2 inches (10 centimeters) of topsoil will be removed to smooth the trail in places and then gravel is to be placed on the top of the trail.

The surveyors, armed with the USGS map, soil map, shovels, a camera and field notes, carefully inspected the ground surface. The surveyors also made notes about the vegetation, soil and soil exposure and took photographs. Even though the study area is in an upland setting, shovel tests were placed approximately 100 meters apart because the trail follows the creek. Shovel tests were excavated to approximately 35 centimeters below the surface due to the shallow impact that will be caused by construction of the trail. In addition, the trail is in a degrading environment and cultural materials should have deflated onto the ground surface. The clay was manually inspected for cultural resources as were the pit walls.

No prehistoric sites were expected to be found along Prairie Creek because it is intermittent, or if it was visited during times it contained water, the visit was likely to have been short-lived and discovering cultural materials would be unlikely due to the ephemeral nature of the occupation. No historic houses were expected along the drainage because of its tendency to flood during heavy rains as well as the trail was so close to the creek that erosion would have caused building collapse after times of rain.

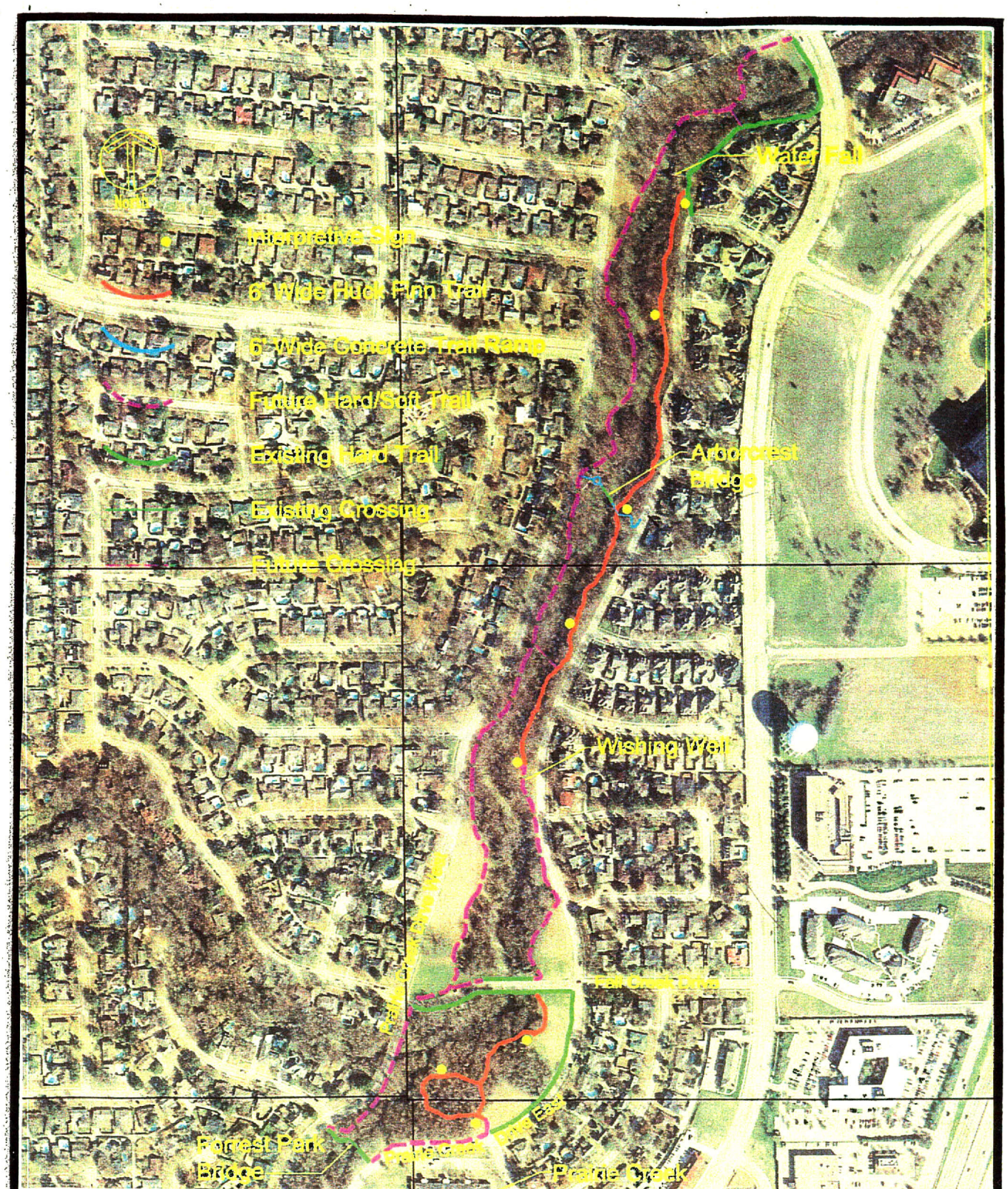

Figure 2. Aerial photograph of the proposed Huck Finn Trail route showing Prairie Creek, Fall Creek Drive and Prairie Creek Drive East. Photograph provided by the City of Richardson.

AR Consultants

RESULTS

This chapter contains different sections. After the introduction, the survey area is described and is followed by a discussion of the survey itself. Conclusions derived from the survey end the chapter. Shovel tests are described generally in the text and specific information can be found in Table 1. Shovel test locations and areas discussed in the text can be found on Figure 4.

The survey area

The survey area is along the east bank of Prairie Creek which is an intermittent drainage in an upland setting. Ground visibility was better than 80 percent and eye-height visibility was excellent (Figure 3). Trees along the creek's edge include American elm, hackberry, oak and pecan. Some trees along the creek have four foot diameter trunks. Understory vegetation consists of grape vines, saw greenbriar, poison ivy and various native bushes. Prairie Creek was approximately 4+ meters wide and less than a meter deep south of Fall Creek Drive, but expanded to 6+ meters wide and 2+ meters deep at the Prairie Creek Falls. The water was clear and the substrate was limestone gravel and cobbles and clay. Sunfish and turtles could be seen swimming in the creek. The northern portion of the trail ranged from 1 to 10 meters west of Prairie Creek Drive, but the southern portion ranged from 10 to 20 meters west of the road.

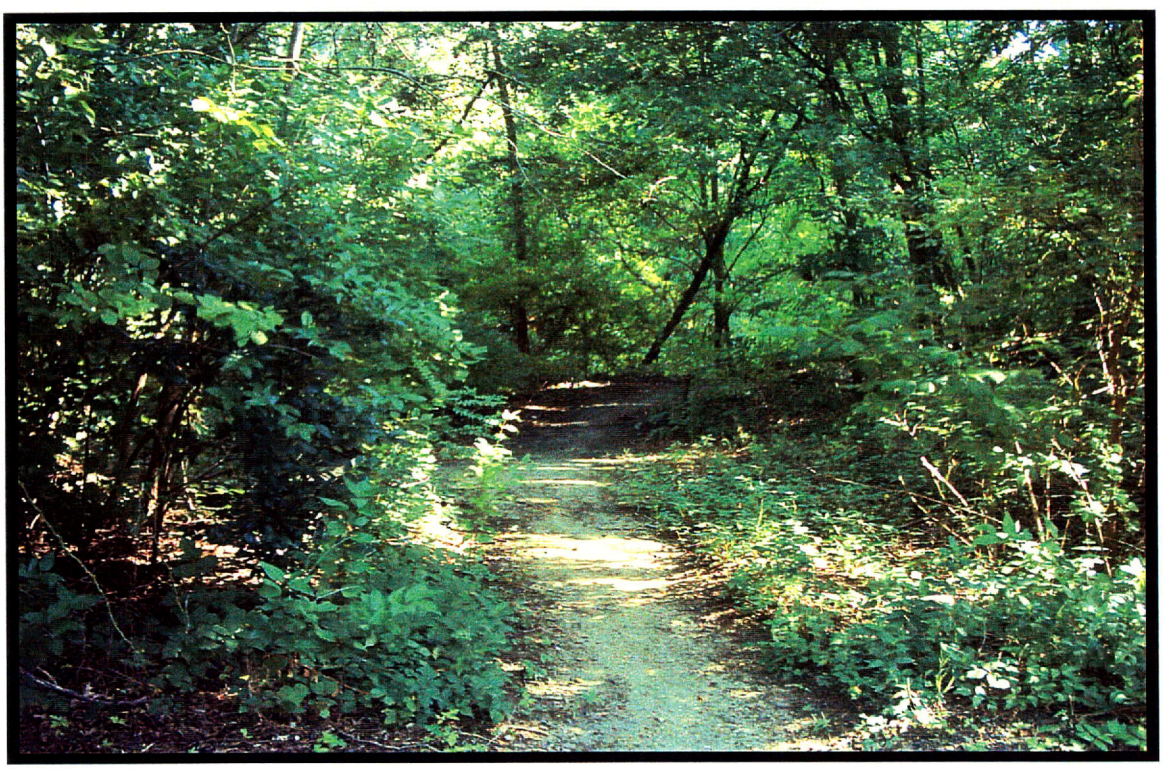

Figure 3. An example of the ground visibility and forested area on both sides of the proposed trail route. View is to the north.

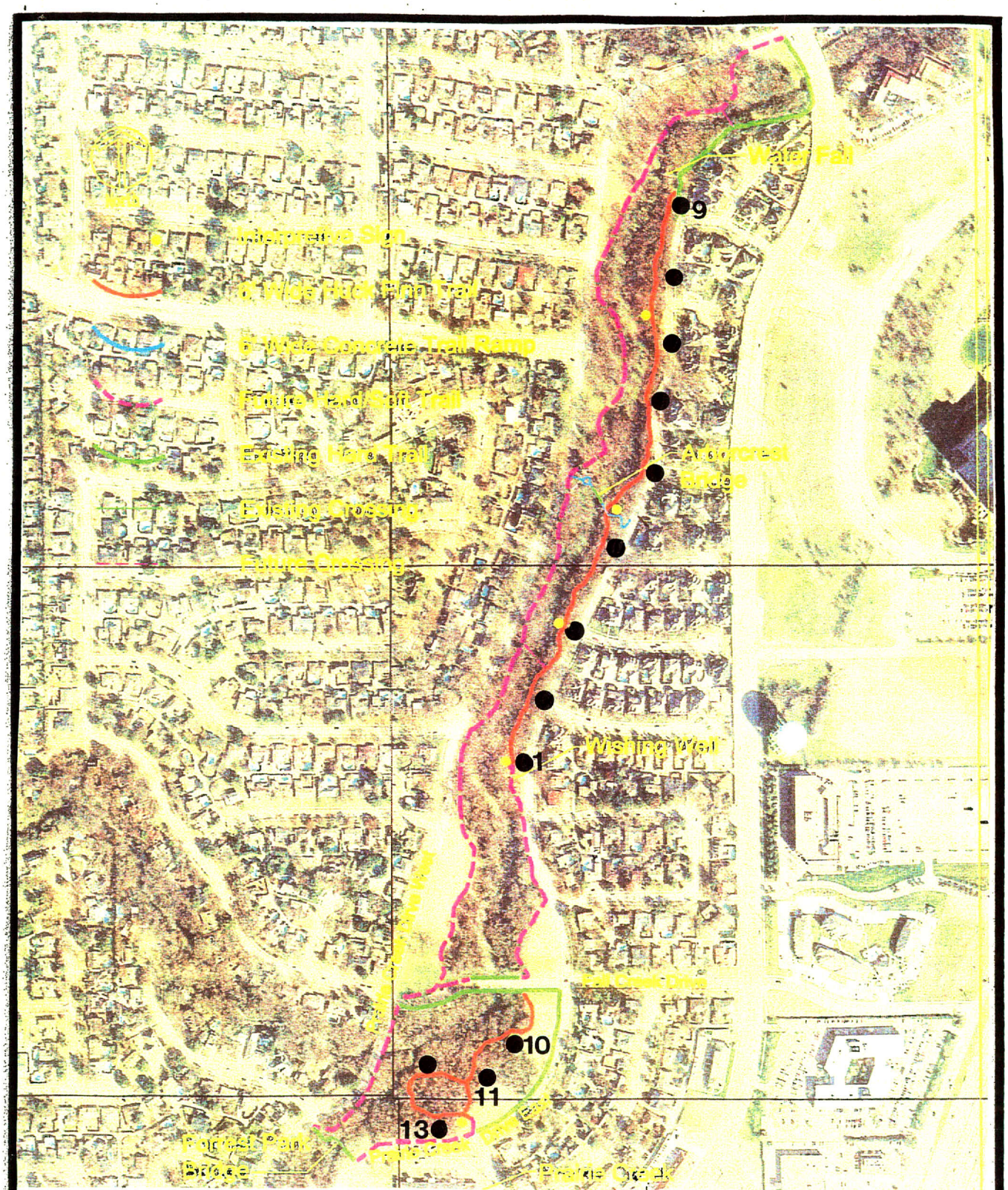

Figure 4. Shovel test locations along Huck Finn Trail on the aerial photograph provided by the City of Richardson.

AR Consultants

The survey

Survey of the first leg began north of the wishing well that stands where the Vale Schoolhouse used to be. Nine shovel tests were placed along this portion of the proposed trail route but uncovered no cultural materials. Shovel test (hereafter ST) 1 was placed at the beginning of the proposed trail route. It uncovered 33 cm of very dark-grayish brown clay that contained angular limestone gravel as did STs 2 and 3 which were terminated at 37 and 35 cm below the surface, respectively. STs 4 and 5 encountered the same clay but with no gravel and were stopped at 32 and 39 cm below the surface, respectively. ST 6 encountered 35 cm of brown clay. The brown clay was also found in ST 7 which was terminated at 36 cm below the surface. ST 8 uncovered 37 cm of the brown clay, but this time the clay contained angular limestone gravel. ST 9 was placed 10 m south of the existing concrete trail where this leg of the proposed trail terminated and uncovered 35 cm of brown clay. No cultural materials were discovered during the pedestrian survey of the northern portion of the trail, and, as previously stated, no cultural materials were found in the 9 shovel tests.

Four shovel tests were placed along the southern portion of the proposed trail route south of Fall Creek Drive and placed in a circular pattern as seen in Figure 4. ST 10 was placed 100 m south of Fall Creek Drive and encountered brown clay to a depth of 36 cm below the surface. ST 11 encountered the same soil and was terminated at 35 cm. STs 12 and 13, however, encountered black clay. These shovel tests were terminated at 39 and 35 cm below the ground surface, respectively. No cultural materials were discovered during the pedestrian survey or in the shovel tests along this portion of the trail route.

Conclusions

As expected, no cultural materials were discovered during the pedestrian survey or in the 13 shovel tests. Prairie Creek contains water today because of the dam/waterfalls constructed in 1993. In the past, it would have been intermittent, and probably not occupied, especially with Spring Creek being so near.

Table 1. Shovel test descriptions

ST No	Depth (cm)	Description *	Comments
1	0-33+	Very dark grayish-brown (10YR4/2) gravelly clay	Gravel below 10 cm to 33+ cm
2	0-37+	Very dark grayish-brown gravelly clay	Gravel below 12 cm to 37+ cm
3	0-35+	Very dark grayish-brown gravelly clay	Gravel below 7 cm t 35+ cm
4	0-32+	Very dark grayish-brown clay	
5	0-39+	Very dark grayish-brown clay	
6	0-35+	Brown (10YR4/3) clay	
7	0-36+	Brown clay	
8	0-37+	Brown gravelly clay	Gravel on surface and increasing with depth
9	0-35+	Brown clay	
10	0-36+	Brown clay	
11	0-35+	Brown clay	
12	0-39+	Black (19YR2/1) clay	
13	0-35+	Black clay	

* Munsell color chart numbers listed only first time used.

RECOMMENDATIONS

The purpose of this investigation was to determine if significant cultural resources are present within the proposed trail route. No evidence of historic or prehistoric occupation was found during the pedestrian archaeological survey or in 13 shovel tests.

AR Consultants believes that the study area has low potential for containing cultural materials and recommends that further resource investigations are unwarranted. We further recommend that construction supervisors be advised that buried archaeological materials could be uncovered during construction. If this situation should arise, work should immediately cease in that area and the Archeology Division of the Texas Historical Commission should be advised of the discovery.

REFERENCES CITED

ATLAS
2004 Search for sites listed on the Richardson, Texas 7.5' USGS map. Texas Historical Association internet site.

Bell, R. E., Edward B. Jelks and W. W. Newcomb, Jr.
1967 *A Pilot Study of Wichita Indian Archaeology and Ethnohistory*. Final Report for Grant GS-964. National Science Foundation, Washington, D. C.

Bridges, C. A.
1978 *History of Denton, Texas: From Its Beginning to 1960*. Texian Press, Waco.

Brown, David O.
1998 Late Holocene Climates of North-Central Texas. *Plains Anthropologist* 43(164):157-172.

Bruseth, James E.
1992 Artifacts of the deSoto Expedition: The Evidence from Texas. *Bulletin of the Texas Archeological Society* 63:67–98.

Bruseth, James E. and William A. Martin, editors
1987 *Bird Point Island and Adam Ranch Sites: Methodological and Theoretical Contributions to North Central Texas Archaeology*. Richland Creek Technical Series, Volume II. Institute for the Study of Earth and Man, Archaeology Research Program, Southern Methodist University, Dallas.

Bureau of Economic Geology
1972 *Geological Atlas of Texas, Dallas Sheet.* The University of Texas at Austin.

Council of Texas Archeologists
ND Guidelines for the Content of Cultural Resource Management Reports. Manuscript on file with the membership.
2002 Archeological Survey Standards for Texas. *Newsletter of the Council of Texas Archeologists* 26(1):8–9.

Coffee, D. R., R. H. Hill and D. D. Ressell
1980 *Soil Survey of Dallas County, Texas*. USDA, Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station.

Diggs, George M., Jr., Barney L. Lipscomb and Robert J. O'Kennon
1999 *Shinners & Mahler's Illustrated Flora of North Central Texas*. Austin College Center for Environmental Studies and the Botanical Research Institute of Texas, SIDA, Botanical Miscellany No. 16.

Ferring, C. Reid and Bonnie C. Yates
1997 *Holocene Geoarchaeology and Prehistory of the Ray Roberts Lake Area, North Central Texas.* University of North Texas, Institute of Applied Sciences.

Green, Melissa M. Frances M. James and Steven M. Hunt
1997 *Archeological Survey of the North Central Corridor, Dallas Area Rapid Transit Light Rail System, Dallas and Collin Counties, Texas*. Miscellaneous Report of Investigations Number 135, Geo-Marine, Inc., Plano

Hanson, A. and F. E. Wheeler
1969 *Soil Survey of Collin County, Texas*. USDA, Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station.

Humphrey, J.D. and C. Reid Ferring
1994 Stable Isotopic Evidence for Latest Pleistocene and Holocene Climatic Change in North-Central Texas. *Quaternary Research* 41:200-213.

John, Elizabeth A. H.
1992 A Case Study in the Interdependence of Archeology and History: The Spanish Fort Sites on the Red River. *Bulletin of the Texas Archeological Society* 63:197 – 210.

Wendy Lopez & Associates, Inc.
1998 *Galatyn Park Archaeological Assessment.* Interim Draft Report. Manuscript in possession of author.

Lorrain, D.
1969 *Archaeological Investigations in the Fish Creek Reservoir*. Contributions in Anthropology Number 4, Department of Anthropology, Southern Methodist University, Dallas.

Lynott, Mark J.
1979 Prehistoric Bison Populations of Northcentral Texas. *Bulletin of the Texas Archeological Society* 50:89–101.

Maxwell, Lisa C.
2004 *Richardson, Texas*. The Handbook of Texas Online. Accessed Fri Aug 6 16:20 US/Central 2004 http://www.tsha.utexas. edu/handbook/online/articles/view/RR/hdr1.html

Meltzer, David J. and Michael R. Bever
1995 Paleoindians of Texas: An Update on the Texas Clovis Fluted Point Survey. *Bulletin of the Texas Archeological Society* 66:47-82.

Menzer, F. J. and Bob H. Slaughter
1971 Upland Gravels in Dallas County and Their Bearing on the Former Extent of the High Plains Physiographic Province. *Texas Journal of Science* 22(2-3):217-222.

Peter, Duane E. and Daniel E. McGregor, editors
1988 *Late Holocene Prehistory of the Mountain Creek Drainage*. Joe Pool Lake Archaeological Project, Volume I. Institute for the Study of Earth and Man, Southern Methodist University, Dallas.

Prewitt, Elton R.
1995 Distributions of Typed Projectile Points from Texas. *Bulletin of the Texas Archeological Society* 66:83-174.

Prikryl, Daniel J.
1990 *Lower Elm Fork Prehistory: A Redefinition of Cultural Concepts and Chronologies along the TrinityRiver, North-Central Texas*. Texas Historical Commission, Office of the State Archeologist, Report 37.
1993 Regional Preservation Plan for Archeological Resources, Prairie-Savanna Archeological Region. Section 3 In *Archeology in the Eastern Planning Region, Texas: A Planning Document,* edited by Nancy A. Kenmotsu and Timothy K. Perttula, pp. 189-204, Texas Historical Commission, Department of Antiquities Protection, Cultural Resource Management Report 3.

Prikryl, Daniel J. and Timothy K. Perttula
1995 North Central Texas. In: Prehistoric and Historic Aboriginal Ceramics in Texas. by Timothy K. Perttula, Myles R. Miller, Robert A. Ricklis, Daniel J. Prikryl and Christopher Linz. *Bulletin of the Texas Archeological Society* 66:175–235.

Skinner, S. Alan
1991 *Cultural Resource Survey of the Spring Creek Nature Area*. AR Consultants, Cultural Resources Report 91-4.

Todd, Jesse
1999 Shell Hoes: Toward a Definition. Paper presented at the 70th Annual Texas Archeological Society Meeting, Fort Worth.