

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

AN

**ARCHAEOLOGICAL SURVEY  
OF THE PROPOSED  
FORNEY WASTEWATER  
TREATMENT PLANT,  
KAUFMAN COUNTY, TEXAS**

Jesse Todd, MS, MA

Prepared for:

**CARTER & BURGESS, INC.**  
7950 Elmbrook Drive  
Dallas, Texas 75247-4951

Prepared by:

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

Cultural Resources Letter Report 2004-44  
December 13, 2004

HISTORIC BUILDINGS

ARCHAEOLOGY

NATURAL SCIENCES

## ABSTRACT

On December 2, 2004, AR Consultants, Inc. conducted a comprehensive archaeological survey of 10 acres where a wastewater treatment plant is to be constructed adjacent to Ranch Road. The survey was done for Carter & Burgess, Inc. which is designing a private wastewater plant approximately two miles northeast of the City of Forney. An Antiquities Permit was not required since the plant is to be constructed on private property.

No prehistoric cultural materials were discovered during the pedestrian survey. A brick scatter and a concrete walkway were found which may be the remnants of a historic house/structure shown on the 1963 USGS map. No foundation of the structure was found or any diagnostic artifacts. Based upon the lack of significant cultural materials, AR Consultants, Inc. recommends that further cultural resource investigations are unwarranted. However, if cultural materials are discovered during construction, work should stop in that area and the Archeology Division of the Texas Historical Commission should be notified.

## INTRODUCTION

On December 2, 2004, AR Consultants, Inc. conducted a pedestrian archaeological survey of approximately 10 acres where a wastewater treatment plant is to be constructed. The proposed plant site is approximately 2 miles northeast from the edge of the City of Forney and adjacent to and southeast of Ranch Road in Kaufman County, Texas (Figure 1). The proposed water treatment plant is being constructed by a private company on private property; therefore, a Texas Antiquities Permit was not required. This survey was conducted in response to a request for an archaeological survey by the Texas Historical Commission.

The study area is located in the Blackland Prairie vegetative area of Texas. Kuchler (1966) classified the prairie as being dominated by *Andropogon-Sipa* grasses. Various other grasses are present as well. The prairie environment is one of low biotic diversity. The Texan biotic zone (Blair 1950:Figure 1) also includes the study area. This prairie savannah zone contains 47 species of mammals, 41 reptiles, and 35 amphibians.

The underlying bedrock consists of the Upper Cretaceous-aged undifferentiated Neylandville Formation and Marlbrook Marl (Bureau of Economic Geology 1972). Both formations consist of calcareous clays. Bedrock decomposition and pedogenesis has created what is referred to as the Ferris-Altoga soil association which consists of deep, nearly level to strongly sloping prairie upland clays (Pringle 1977:General Soils Map). Specific soils within the study area consist of Heiden clay with 5 to 8 percent slopes and Houston black clay with 1 to 3 percent slopes (Pringle 1977:Sheet 18).

### Previous Investigations

Since the 1970s, numerous small-scale cultural resources surveys were conducted of transmission corridors, pipelines, and Soil Conservation Service floodwater retarding structures throughout Kaufman County (Ferring 1975; Lynott and Banks 1977). The overall impression from these studies is that historic and prehistoric cultural resources are present, but are widely scattered and sites are small in size and frequently have been deflated on the surface of the upland.

Upstream and along the East Fork valley, archaeological surveys and excavations were conducted at Lake Ray Hubbard [formerly Forney Reservoir]. The surveys were not systematic or comprehensive as would be required by the Corps of Engineers and the Texas Historical Commission (2002) today, as they focused on prehistoric sites and on areas which had high probability for containing preserved prehistoric site deposits. In 1963, the Dallas Archeological Society (DAS) surveyed the area of Lake Ray Hubbard and recorded 33 archaeological sites (Harris and Suhm 1963). This survey described 20 sites already known to the DAS membership (Hannah 1941; Hannah and Harris 1948), and located 13 previously unrecorded sites. Only limited excavations were subsequently conducted (Ross 1966; Lorrain and Hoffrichter 1968), but along with the previous DAS

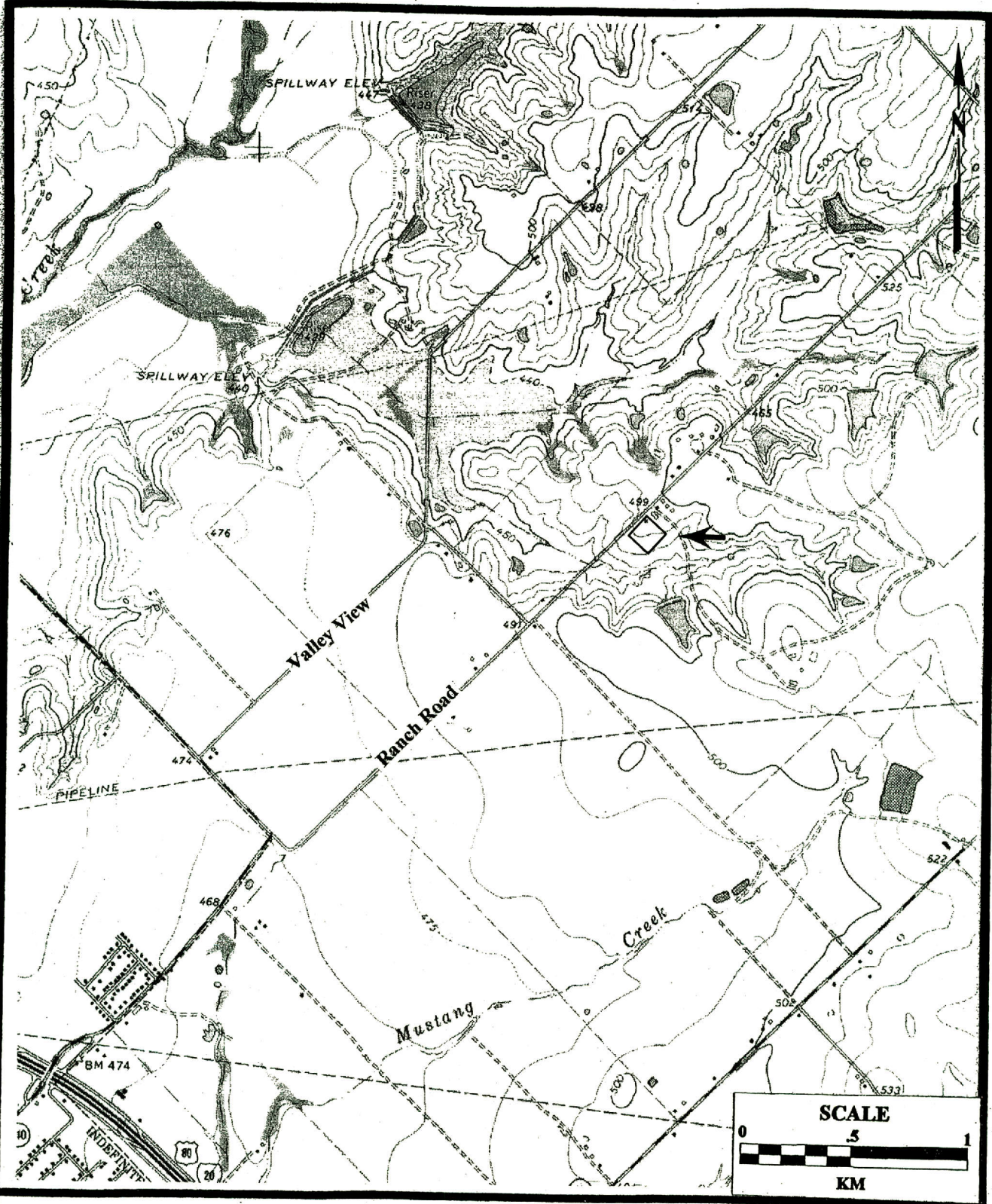


Figure 1. Proposed wastewater treatment plant site shown by the arrow on a portion of the Forney North, Texas 7.5' USGS map.

AR  
Consultants

excavations, they did provide evidence of the way of life practiced by the Late Prehistoric peoples who occupied this part of the East Fork valley.

Very limited work has been done in the East Fork of the Trinity River downstream from the Lake Ray Hubbard dam. R.K. Harris surveyed the area in 1930 and recorded a number of sites, one which is 41KF46. Site 41KF46 is a surface camp consisting of pottery sherds, projectile points, mussel shells and bones located on the east bank of Buffalo Creek (Texas Archeological Sites Atlas 2004). The site is located northwest of the study area. Jay Blaine discovered site 41KF3 northwest of the study area. The site consisted of a knife, scraper and flakes located on the surface of a low rise at the end of a ridge that extended into the floodplain of the East Fork (Texas Archeological Sites Atlas 2004). A survey of the river channel was done as part of planning for channelization (Richner 1976). This survey was limited in scope due to reliance on surface exposure of sites in areas where recent flooding, plowing, and erosion had removed vegetation or sediment. No shovel tests were excavated and it is likely that sites along the banks of the East Fork of the Trinity River and within its floodplain were overlooked. Several surveys have been done in conjunction with electric transmission and distribution lines for Kaufman County Electric Cooperative, Inc. One of these surveys recorded a shell lens site in the channel wall of the East Fork, and a historic house site on a low ridge at the eastern edge of the East Fork valley (Skinner 1992).

In 1998, a reconnaissance of a section of the Clements property north of US 80 and west of FM 460 was conducted and one previously unrecorded prehistoric site was recorded (Skinner 1998). The recent survey of the Cobisa-Forney Electric Power Plant Site recorded no historic or prehistoric sites in the floodplain of Buffalo Creek just west of the study area (Price 2001). Southwest of the study area and US 80, AR Consultants, Inc. (ARC) conducted a survey of a pipeline right-of-way and discovered a prehistoric site (41KF128) consisting of lithics, fire-cracked rock and mussel shells and a historic site (41KF129) consisting of a barn and well. ARC also reinvestigated a prehistoric site (41KF45) recorded by R. Harris in the 1930s. Harris discovered human bone, mussel shell, animal bone, pottery sherds, projectile points, drills and scrapers at the site. The site had subsequently been destroyed and only a few lithics and projectile points were found and no buried deposit was located (Trask and Skinner 2001). AR Consultants, Inc. (Todd 2003) conducted an archaeological survey of approximately 16.5 acres consisting of a proposed wastewater treatment plant and buffer zone and a 1600 foot long flow line for Travis Ranch Development, LP and located approximately 1.5 miles north of Forney. The study area is located at the edge of the East Fork of the Trinity River Valley just downstream from Lake Ray Hubbard. No cultural materials were found during the survey or in 13 shovel tests which were supplemented by augering to approximately 150 cm. below the surface.

Since the proposed wastewater plant site is to be placed in an upland setting, shovel testing was done on a judgmental basis as recommended by the Council of Texas Archeologists (2002). Backhoe trenching was not done for the above reason and the shallow depth to the subsoil.

## RESULTS

### The Survey Area

The survey area consists of the ridge top and its flank which slope gently east and southeast as shown in Figure 2. Vegetation consists of prairie grasses and seven hackberry trees. Approximately 50 water-filled circular depressions were found on the ridge and its flank. The depressions ranged from two to three meters in diameter and less than 0.5 meters deep. Most of the depressions were in rows, but occasionally a random one was found. It is believed that these depressions were the result of removing trees from a tree farm and never replaced because the farm was abandoned. In addition to this disturbance, the area had been bladed and two push piles were recorded. The westernmost push pile is shown in Figure 3. Eye-height visibility was excellent and ground visibility ranged from 30 to 50 percent due to the ground being exposed from tree removal and cows walking on it.



Figure 2. The topography and vegetation of the proposed wastewater treatment plant site. View is to the south.



---

Figure 3. Westernmost push pile. View is to the southeast.

### The Survey

The shovel tests are described generally in the text, but specific information is provided in Table 1. Shovel test locations are shown on Figure 4.

Survey began in the northwest corner and transects were oriented east-west. The surveyors walked 30 meters apart. No prehistoric cultural artifacts were found, but the remains of a possible historic structure based upon a large scatter of bricks and a concrete walkway were noted and revisited at the end of the survey. Five shovel tests were excavated in various places along the ridge and encountered clay, but no artifacts were uncovered. Shovel test 6 was excavated in the center of the residue from the historic structure and encountered clay with coarse sand, but no cultural materials. No apparent pattern could be detected to the mixture.

As previously mentioned, the remains of a possible historic structure that had been bulldozed based upon a brick scatter (Figure 5) were found approximately 45 feet east of Ranch Road and 300 feet south of the fence that marks the study area's northern boundary. This may be the structure shown on the 1963 Forney North, Texas 7.5' USGS map (Figure 4). The dimensions of the structure's remains are 30 feet east-west and 15

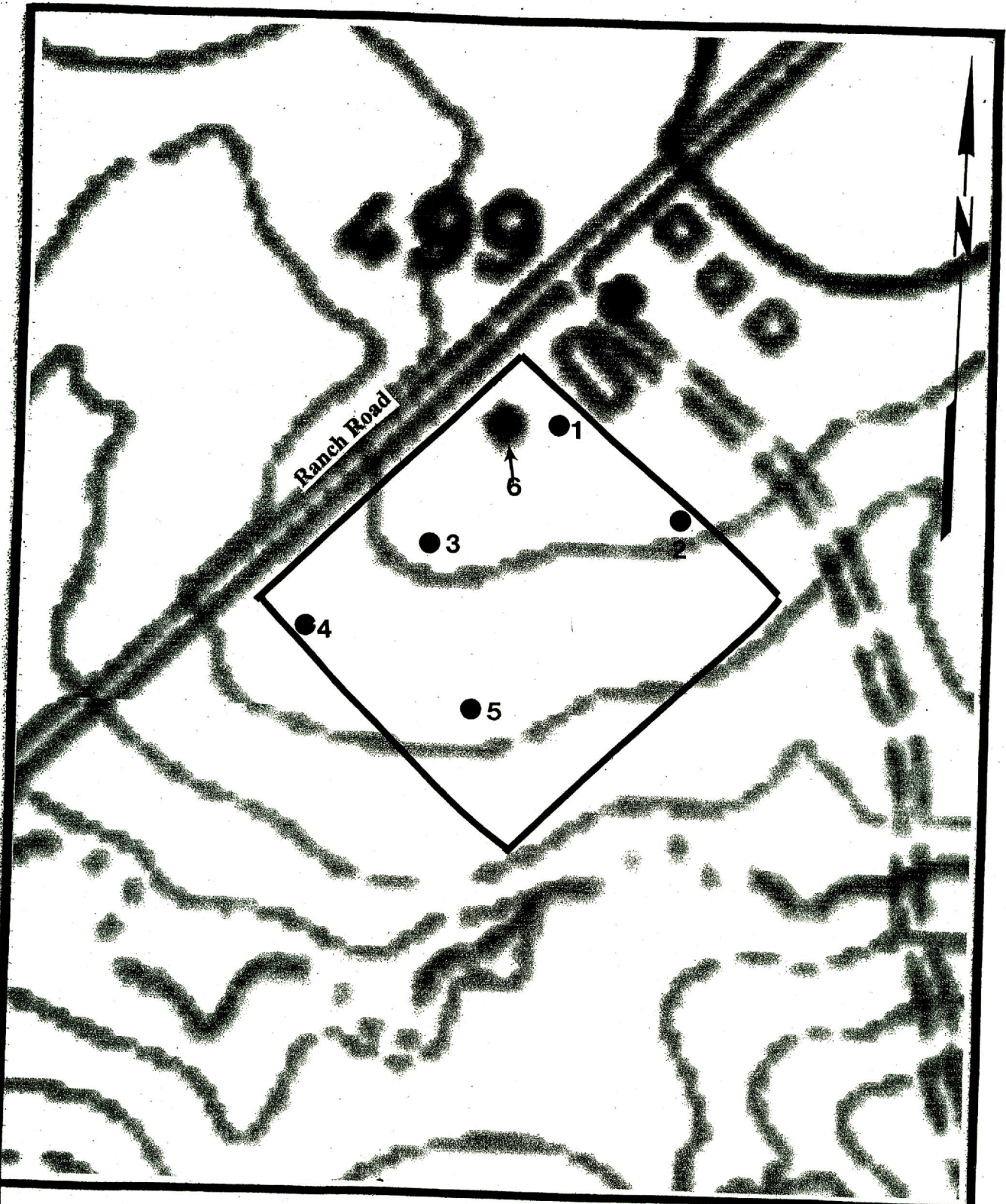


Figure 4. Shovel test locations and possible house structure shown on an enlarged (1000%) portion of the Forney North, Texas 7.5' USGS map.

AR  
Consultants



feet north-south. Defining the type of structure is problematical. A concrete walkway approximately 15 feet long and 3 feet wide appears to lead to the side of the structure. Also, a cable with an electric outlet was found approximately 20 feet west of the remains of the structure. A 1.5 inch diameter metal pipe that was exposed for 2.5 feet lead to the structure and the rest of the pipe appeared to be buried. Two bois d'arc piers, 3 feet by 2 feet, were found on the boundaries of the structure. "Ferris" bricks were scattered throughout the area. Artifacts found include sheet metal, a bicycle pedal and a soda pop bottle which is labeled "Orange Crush" and it has a "Deposit for Return" on the bottle. The author remembers this bottle style from the 1950s and 1960s. There were not more than 10 artifacts present and there were no ceramics or signature plants present. Asphalt shingles were found lying on the ground. The problem is that there is not enough material present to represent a house much less a shed.



Figure 5. Remnants of the historic structure. View is to the southeast.

The western push pile contained asphalt shingles, a long 1.5 inch diameter metal pipe which could be joined with the one at the historic structure, a wash basin, "Atlas" bricks and several bois d'arc piers and boards. Even with the material present in the push pile, there is not enough material to construct a house. A small shed could have been constructed and in bulldozing the shed, the remains could have been widely scattered, but then why would someone build a shed with a concrete walkway?

## CONCLUSIONS AND RECOMMENDATIONS

No prehistoric cultural materials were discovered during the pedestrian archaeological survey of the 10-acre tract for the proposed wastewater treatment plant or in the 5 shovel tests. The remains of the historic structure will not add any new information to the history of Kaufman County since the structure was bulldozed, thus removing any site integrity.

Based upon the absence of any prehistoric sites and the destroyed historic structure, AR Consultants, Inc. recommends that further cultural resource investigations are unwarranted. However, if cultural materials are encountered during the construction of the wastewater treatment plant, work in that area should stop immediately and the Archeology Division of the Texas Historical Commission should be notified.

Table 1. Shovel test information.

ST No.	Depth (cm.)	Description*
1	0-30+	Dark gray (10YR4/1) clay
2	0-31+	Dark gray clay
3	0-30+	Dark gray clay
4	0-29+	Dark gray clay
5	0-31+	Dark gray clay
6	0-20+	Dark gray clay with strong brown (10YR5/4) sand

\* Munsell color chart numbers are listed only first time used.

## REFERENCES CITED

- Blair, W. F.  
 1950 The Biotic Provinces of Texas. *Texas Journal of Science* 2(1):93-117.
- Bureau of Economic Geology  
 1972 *Geologic Atlas of Texas: Dallas Sheet*. The University of Texas, Austin.
- Council of Texas Archeologists  
 2002 Archeological Survey Standards for Texas. *Newsletter of the Texas Council of Archeologists* 26(1):8-9.
- Ferring, C. Reid  
 1975 *Archaeological Survey of Parts of the Cedar Creek Watershed, Kaufman County, Texas*. Southern Methodist University, Archaeology Research Program, Research Report 55.
- Hannah, Henry, Jr.  
 1941 Two Rockwall County Indian Campsites. *The Record* 3(3):37-38.
- Hannah, Henry, Jr. and R.K. Harris  
 1948 Burial 5, Site 27B1-1. *The Record* 7(3):10-11.
- Harris, R. K. and Dee Ann Suhm  
 1963 An Appraisal of Archeological Resources of Forney Reservoir, Collin, Dallas, Kaufman, and Rockwall Counties, Texas. Report submitted to the National Park Service by the Texas Archeological Salvage Project, The University of Texas.
- Kuchler, A.W.  
 1966 *Potential Natural Vegetation of the United States*. US Geological Survey.
- Lorraine, D. and N. Hoffrichter  
 1968 *The Lower Rockwall Site, Rockwall County, Texas*. Report submitted to the National Park Service by the Salvage Project, Southern Methodist University, Dallas.
- Lynott, Mark J. and Kimball M. Banks  
 1975 *An Archaeological Evaluation of Selected Parts of the Cedar Creek Watershed*. Southern Methodist University, Archaeology Research Program, Research Report 105.
- Price, Paul  
 2001 *An Intensive Archeological Survey of the Proposed 125-acre Cobisa-Forney Electrical Power Plant Site, Kaufman County, Texas*. Manuscript on file at AR Consultants, Inc.
- Pringle, Fred B.  
 1977 *Soil Survey of Kaufman and Rockwall Counties, Texas*. USDA, Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station.
- Richner, Jeffrey J.  
 1976 *An Archaeological Survey of Areas to be Affected by the East Fork Channel and Levee Improvement Project - Dallas and Kaufman Counties, Texas*. Southern Methodist University, Archaeology Research Program, Research Report 91.
- Ross, R.E.  
 1966 *The Upper Rockwall and Glen Hill Sites, Forney Reservoir, Texas*. The University of Texas at Austin, Papers of the Texas Archeological Salvage Project No. 9.
- Skinner, S. Alan  
 1992 *Crayfish and Fireant Mounds, a Cultural Resources Survey of a Kaufman County Tie Line*. AR Consultants, Cultural Resources Report 92-17.  
 1998 *Cultural Resources Evaluation of the Clements Ranch, Kaufman and Rockwall Counties, Texas*. AR Consultants, Inc., Cultural Resources Report 98-27.
- Skinner, S. Alan, Floyd D. Kent, Sonny Wheeler III, Lance K. Trask and Jesse Todd  
 2002 *Archaeological Monitoring of the Oncor Pipeline Crossing of the East Fork Floodplain*. AR Consultants, Inc., Cultural Resources Report 2002-34.
- Texas Archeological Sites Atlas  
 2004 Search for sites listed on the Forney North, Texas 7.5' USGS map. Texas Historical Commission internet
- Texas Historical Commission  
 2002 Survey Guidelines.

Todd, Jesse

2003 *Archaeological Survey of the Travis Ranch Wastewater Treatment Plant, Kaufman County, Texas.*  
AR Consultants, Inc., Cultural Resources Report 2003-41.

Trask, Lance K. and S. Alan Skinner

2001 *Archaeological Survey of the Forney Pipeline Kaufman County, Texas.* AR Consultants, Inc.,  
Cultural Resources Report 2001-34.

