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Archeological Survey For The Proposed Brazos Electric Power Cooperative, Inc., Robert L. Reynolds ET AL. Substation, Little Elm, Denton County, Texas

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Archeological Survey For The Proposed Brazos Electric Power Cooperative, Inc.,
Robert L. Reynolds ET AL. Substation, Little Elm, Denton County, Texas

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ARCHEOLOGICAL SURVEY FOR THE PROPOSED BRAZOS
ELECTRIC POWER COOPERATIVE, INC.,
ROBERT L. REYNOLDS ET AL. SUBSTATION,
LITTLE ELM, DENTON COUNTY, TEXAS

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Brazos Work Order No. 361017; Brazos Project No. 0801710

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Cox | McLain Environmental Consulting, Inc. Archeological Report 088
(CMEC-AR-088)



January 16, 2015

This report contains archeological site location information (not for public disclosure).

Management Summary

On December 2, 2014, an intensive archeological survey was completed in order to evaluate potential archeological impacts associated with the proposed construction of a new electrical substation within an approximately 20-acre (8-hectare) parcel in Little Elm, Denton County, Texas. Melissa M. Green (Principal Investigator) of Cox | McLain Environmental Consulting, Inc. (CMEC) carried out the survey for Brazos Electric Power Cooperative, Inc. (BEPC) and the United States Department of Agriculture, Rural Utilities Service (USDA-RUS) under Section 106 of the National Historic Preservation Act (NHPA), as amended. A Texas Antiquities Permit was not required.

Ground surface visibility across most of the 20-acre area of potential effects (APE) was variable and ranged between 0 and 50 percent. The APE is an active farm with three dwellings and associated outbuildings, pasture, and active cultivated fields. Two of the dwellings postdate 1962, while an older component, the original dwelling and outbuildings dates to the mid-1940s. The original dwelling (ca. 1945) and a nearby barn are recorded as site 41DN589. Artifacts found at site 41DN589 include glass and ceramics and date to the mid-twentieth century (1940s-1960s). Site 41DN589 is recommended as not eligible for listing on the National Register of Historic Places (NRHP). Although site 41DN589 still functions as a farm, as it was originally intended, and therefore maintains much of its original integrity through design, materials, and association, the site is one of many similar sites that still dot the landscape. Therefore, site 41DN589 is recommended as not eligible for listing on the NRHP and no further work is recommended within the APE.

No artifacts were collected during the investigation. However, all notes, photographs, administrative documents, and other project data generated from this work will be made permanently available to future researchers while housed at Texas Archeological Research laboratory in Austin.

If any unanticipated cultural materials or deposits are found at any stage of clearing, preparation, or construction, the work should cease and Texas Historical Commission (THC) personnel should be notified immediately.

The THC concurred with the findings and recommendations of this report on January 7, 2015 (see Appendix A).

ARCHEOLOGICAL SURVEY FOR THE PROPOSED ROBERT L. REYNOLDS ET AL. SUBSTATION, LITTLE ELM, DENTON COUNTY, TEXAS

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1.0 Introduction

Overview of the Project

Brazos Electric Power Cooperative, Inc. (BEPC) proposes to construct a new electrical substation on a residential agricultural property located in Little Elm in eastern Denton County, Texas (**Figure 1**). The total archeological area of potential effects (APE) for this project is a rectangular-shaped area covering approximately 20 acres (ac; 8 hectares [ha]). The property is bounded on the north by King Road and on the south by Witt Road, and is about equidistant from Witt Road on the west and Farm-to-Market (FM) 423 on the east. The property contains three residences and several outbuildings along with pasture and active cultivated fields.

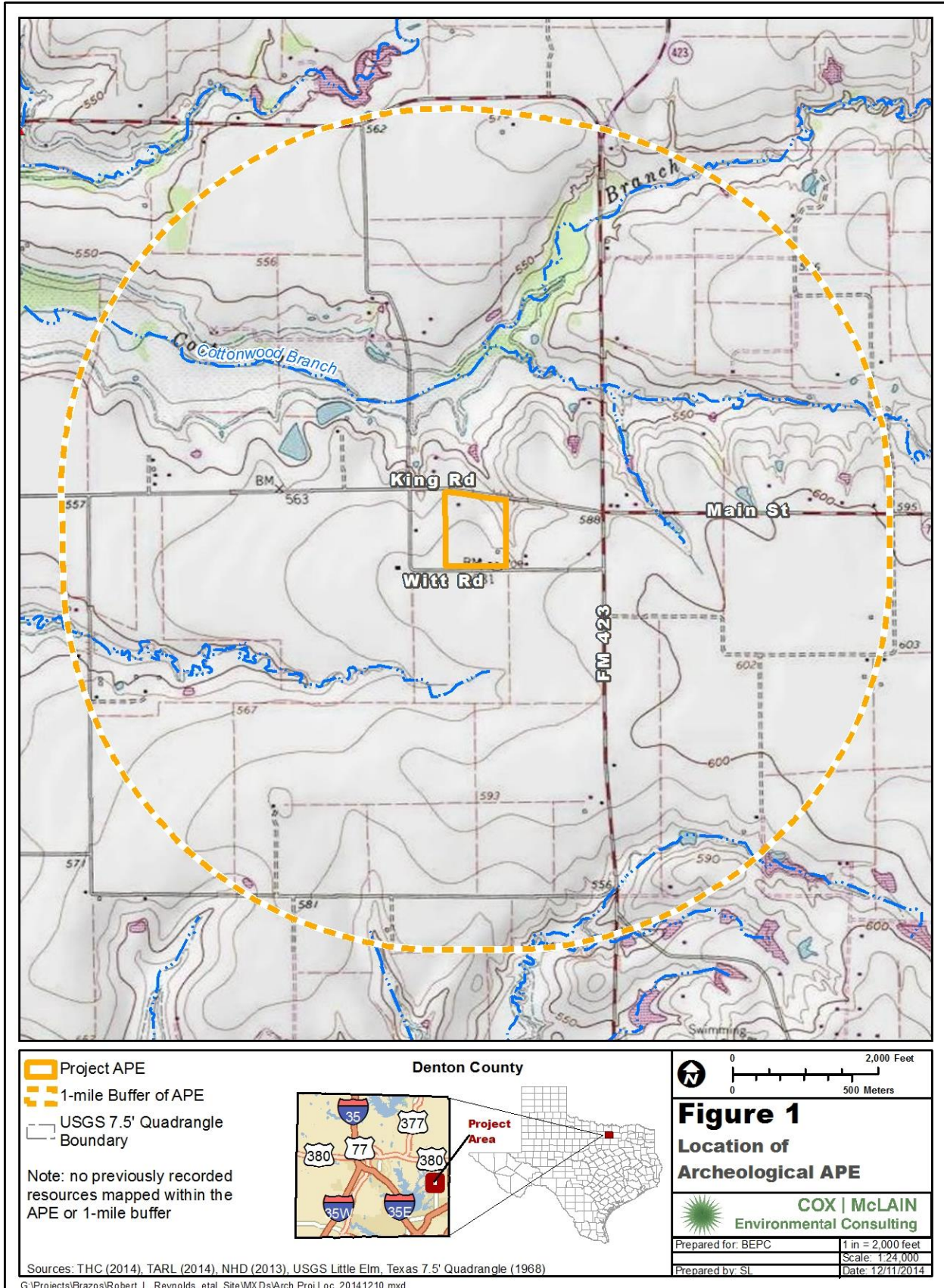
Regulatory Context

The applicable regulatory framework for this project is Section 106 of the National Historic Preservation Act (NHPA), as amended (36 CFR 800), due to funding from the United States Department of Agriculture, Rural Utilities Service (USDA-RUS). As there is no formal regulatory nexus with any political subdivisions of the State of Texas, the Antiquities Code of Texas (9 TNRC 191) does not apply. However, BEPC's activities are governed by the Public Utility Commission (PUC) of Texas, which maintains an internal policy of adherence to the Antiquities Code of Texas.

The purpose of the investigation described in this document was to conduct a survey for archeological resources within the 20-acre archeological APE. The investigation included a survey for previously unidentified resources as well as attempts to revisit any previously identified resources, if any. In addition, this investigation evaluated the eligibility of identified resources for inclusion in the National Register of Historic Places or NRHP (36 CFR 60) or for listing as State Antiquities Landmarks (SALs) (9 TNRC 191; 13 TAC 26.12). All materials generated from this work will be permanently housed at Texas Archeological Research Laboratory (TARL) at the University of Texas at Austin as per TAC 26.27 and 26.5.

Structure of the Report

Following this introduction, Chapter Two presents environmental parameters for the study area; Chapter Three presents a brief cultural context, including a summary of previous archeological research in and near the APE; Chapter Four discusses research goals, relevant methods, and the regulatory considerations underlying them; Chapter Five presents the results of the survey; Chapter Six summarizes the findings and provides recommendations; and Chapter Seven lists references.



2.0 Environmental Context

Topography and Drainage

The APE is located at approximate elevations of 560-585 feet (ft) or 170.6-178.3 meters (m) above mean sea level on flat to gently sloping uplands. Natural drainage of this property and the adjacent one to the east may be the headwater to an unnamed tributary which drains to the northwest into Cottonwood Creek. Cottonwood Creek becomes part of Lewisville Lake approximately 1.15 miles (mi) or 1.85 kilometers (km) west of the APE.

Geology and Soils

The APE is underlain by Pleistocene surficial deposits undivided (BEG 1991). According to Natural Resources Conservation Service (NRCS) data there are three deep soils mapped within the APE: Ferris-Heiden clay on 5 to 15 percent slopes; Branyon clay on 1 to 3 percent slopes; and Branyon clay on 1 to 3 percent slopes (NRCS 2014).

Vegetation and Land Use

The project area is located within the Blackland Prairie Ecological Region of Texas (Gould 1960), characterized by gently rolling to nearly level upland plains environments (Griffith et al. 2004). According to the Texas Parks and Wildlife Department's *Vegetation Types of Texas* map and accompanying descriptions, the vegetation of the project area is mapped as "Crops" (McMahan et al. 1984). The vegetation observed on the site was generally consistent with this characterization, as the parcel has active plowed and planted fields and pasture for livestock grazing.

The pasture consists mainly of Bermuda grass with some other low-growing herbaceous plants, including silverleaf nightshade. A few scattered honey mesquite trees and shrubs and bois d'arc (osage orange) trees are also present. Vegetation associated with the residential areas includes maintained Bermuda grass lawn with ornamental/planted trees and bushes, including crape myrtle and pecan. Sugarberry and bois d'arc trees were also observed in the lawns.

3.0 Cultural Context

Archeological Chronology

The APE lies within the western part of the North-central Texas archeological region (Perttula 2004a). The standard cultural chronology for the region has changed little in the last two decades; thus, the periods and date ranges established by Peter and McGregor (1988), Prikryl (1990), and Yates and Ferring (1986) still apply (**Table 1**). The general prehistoric framework for North-central Texas is similar to that used in other areas of Texas, and indeed throughout much of North America, with the first unequivocal human occupations occurring approximately 11,500 radiocarbon years before present (BP), or approximately 13,000 calendar years ago, and most of the prehistoric record is contained within a long Archaic period lasting nearly 8,000 years.

Period	Years Before Present (BP)**
Paleoindian	11,500 – 9,000
Archaic	9,000 – 1,300
Early Archaic	9,000 – 6,000
Middle Archaic	6,000 – 4,000
Late Archaic	4,000 – 1,300
Late Prehistoric	1,300 – 400
Late Prehistoric I	1,300 – 700
Late Prehistoric II	700 – 400
Protohistoric	400 – 200
Historic	200 – 50

* After Peter and McGregor (1988), Prikryl (1990), and Yates and Ferring (1986).
 ** Based on uncalibrated radiocarbon dates, which are typical in Texas archeology (see Perttula 2004a:14, Note 1).

PALEOINDIAN PERIOD

The Paleoindian occupation is the least known period in the prehistory of North-central Texas, due primarily to three factors: the light population density of Paleoindian peoples, the great age of the occupation (up to 13,000 calendar years), and taphonomic factors such as severe erosion and deep sedimentation, depending on location (Ferring 1989, 2001; Holliday 2004). Although initially seen as narrowly specialized big-game hunters, Paleoindian groups such as Clovis are being reevaluated in light of recent discoveries such as the Aubrey site north of Dallas-Fort Worth. At Aubrey, investigators found evidence of a more balanced, flexible subsistence strategy, with remains of big game such as bison and mammoth but also fish, birds, and other small game (Ferring 2001). Generally, Paleoindian people are thought to have been more mobile than subsequent populations, utilizing lithic and other resources from broad geographic areas.

ARCHAIC PERIOD

Usually divided into three more or less equal parts, the Archaic Period encompasses the bulk of North-central Texas prehistory. The Archaic record is clouded by mixed deposits (Hofman et al. 1989; Prikryl 1990) and possible large-scale erosion in the middle of the period (as has been documented further to the west by Blum and colleagues [1992]). Still, the available data show that Archaic peoples were more likely than their predecessors to make projectile points and other stone tools out of local raw materials, potentially indicating more spatially restricted territories and/or subsistence areas, perhaps reflecting seasonal rounds through a specific series of resource-gathering zones (Ferring and Yates 1997; Peter and McGregor 1988). Generally, population is thought to have increased throughout the Archaic Period, perhaps in response to stabilizing climatic conditions.

LATE PREHISTORIC PERIOD

The Late Prehistoric Period is defined technologically, as the beginning of the period is typically marked by the appearance of arrow points and ceramics. Aside from the addition of these extremely important technologies, the overall trajectory of subsistence lifeways in the Late Prehistoric is usually thought to represent a continuation of trends seen in the later part of the Archaic, with even more dramatic focus on very local resources and broad-spectrum foraging (Ferring and Yates 1997). In the latter part of the period (Late Prehistoric II), the picture shifts, with ceramic and lithic evidence indicating links to Plains populations to the north and west (Prikryl 1990).

PROTOHISTORIC AND HISTORIC PERIODS

The beginning of the Protohistoric Period is marked by the first appearance of Europeans in Texas: the Spanish explorers, priests, and speculators who began moving into the state from colonies to the south and west in the sixteenth and seventeenth centuries A.D. Although technically historic (i.e., characterized by the use of writing), this earlier phase is often separated from the more formally designated Historic Period due to the relative infrequency of direct Spanish incursions into North-central Texas, in contrast to the high-profile, early Spanish occupations in South and South-central Texas (Campbell 2003). Even without the missions, military outposts, and other facilities characteristic of the Spanish presence to the south, the effects of trade, disease, and other factors on native populations were still dramatic, and indigenous groups of the Protohistoric Period are little known apart from sporadic finds of European trade goods at native sites (Stephenson 1970). The last two centuries are considered the Historic Period. In brief, the landscape and material culture of North-central Texas during this time are characterized by the overwhelming dominance of European-derived populations and the expansion of railroads, the discovery and exploitation of petroleum resources, the supplanting of small tenant farming by mechanized agriculture and urban sprawl, and various waves of commercial and industrial development, the most recent example being the rise of the service and information economy (Campbell 2003).

For further general background information, particularly regarding prehistoric periods, the reader is referred to the major reports mentioned above, as well as to Perttula's recent statewide synthesis, *The Prehistory of Texas* (Perttula 2004b). Although the latter does not include a chapter devoted specifically to North-central Texas archeology, the introductory chapter includes an invaluable side-by-side comparison of cultural chronologies from all of the archeological regions in Texas (Perttula 2004a: Table 1.1). For later periods, the reader is referred to Randolph B. Campbell's *Gone to Texas: A History of the Lone Star State* (2003), now considered the standard comprehensive overview of historical events, demographic changes, social movements, industrial developments, and other aspects of Texas history.

Previous Investigations and Previously Identified Cultural Resources

A data search of the Texas Archeological Sites Atlas maintained by the Texas Historical Commission (THC) and the Texas Archeological Research Laboratory (TARL) was conducted in order to identify any previously recorded cemeteries, historical markers, National Register of Historic Places (NRHP) properties or districts, State Antiquities Landmarks (SALs), archeological sites, and previous surveys in the APE and within a one-mile buffer (the standard buffer zone for such searches) surrounding the APE.

No recorded archeological sites or other resources were found within the APE, although there have been three cultural resources surveys reported within the one-mile buffer (THC 2014). In 1990, the University of North Texas conducted a 14,000-ac survey of the periphery of Lewisville Lake for the Fort Worth District of U.S. Army Corps of Engineers. A total of 151 archeological sites were recorded, although none were located near this project APE (Lebo and Brown 1990). The Texas Department of Transportation (TxDOT) conducted a survey in 1996 along 5.279 miles of FM 423; no cultural resources were identified (TxDOT 1996). In 2014, Cox|McLain Environmental Consulting conducted a survey of 15.4 ac for a proposed substation; no cultural resources were identified (Green 2014).

4.0 Research Goals and Methods

Purpose of the Research

The present study was carried out to accomplish three major goals:

1. To identify all historic and prehistoric archeological resources located within the APE defined in Chapter One;
2. To perform a preliminary evaluation of the identified resources' potential for inclusion in the NRHP and/or for listing as a SAL (typically performed concurrently); and
3. To make recommendations about the need for further research concerning the identified resources based on the preliminary NRHP/SAL evaluation and with guidance on methodology and ethics from the THC and the Council of Texas Archeologists (CTA).

NRHP Eligibility

The National Historic Preservation Act of 1966, as amended, provides a statement of federal authority, an administrative framework for agency coordination, and general principles for the assessment of cultural resources, including archeological sites (called "historic properties" in this regulatory context, regardless of actual historic or prehistoric dates), for their eligibility for inclusion in the National Register of Historic Places (36 CFR 800; 9 TNRC 191; 13 TAC 26.24).

More specific rules relating to the NRHP nomination process, list management, relevant definitions, and other matters are described in 36 CFR 60. Most important to the present investigation are the criteria for significance (and therefore potential NRHP eligibility):

...The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

Note that significance and NRHP eligibility are determined by two primary components: integrity *and* one of the four types of association and data potential listed under 36 CFR 60.4(a-d). The criterion most often applied to archeological sites is the last—and arguably the broadest—of the four (36 CFR 60.4[d]).

SAL Eligibility

For cultural resources identified on lands owned or controlled by the State of Texas or one of its political subdivisions—as well as resources on specially designated private lands in the state—

provisions of state law relating to State Antiquities Landmarks may also apply. Although this project does not directly involve lands owned or controlled by the State, SAL eligibility is usually considered concurrently with NRHP eligibility; therefore, a brief overview of SAL criteria is included below.

An archeological site may be of sufficient significance to allow designation as a SAL if at least one of the following criteria applies:

- (1) the site has the potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information;
- (2) the site's archeological deposits and the artifacts within the site are preserved and intact, thereby supporting the research potential or preservation interests of the site;
- (3) the site possesses unique or rare attributes concerning Texas prehistory and/or history;
- (4) the study of the site offers the opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge;
- (5) the high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to ensure maximum legal protection, or alternatively further investigations are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected (13 TAC 26.8).

Survey Approach and Method s

Field methods complied with the requirements of the guidelines as set forth by the CTA and approved by the THC. The survey included a pedestrian walkover of the entire 15.4-acre APE. Shovel test (ST) units excavated in natural levels to major color/texture changes or restrictive features were placed where ground surface visibility is below 30 percent, soils appear to be of sufficient depth to contain subsurface cultural materials, and/or previous disturbance appears minimal. Excavated matrix was screened through 0.25-in (0.635-cm) hardware cloth, as allowed by moisture and clay content. Deposits were described using conventional texture classifications and Munsell color designations, and all observations were recorded on standardized CMEC shovel test forms.

5.0 Results

Prior to conducting the survey, a review of available historic aerials and topographic maps on Google Earth and the Nationwide Environmental Title Research (NETR) website, www.historicaerials.com, was undertaken to determine how the parcel had been utilized over time and when the present structures were constructed. The earliest aerial available was produced in 1968 and revealed that the parcel has not changed much in the past 46 years (NETR 2014). Much of the parcel that is currently in pasture and active fields are the same, and all of the current structures were extant at that time. The 1969 topographic map indicates that a house and outbuilding along Witt Road are extant and the newer brick houses are shown in photo-revised purple. Only the small house and outbuilding along Witt Road are shown on the 1962 topographic map; no structures were evident on either the 1942 or 1929 topographic maps (NETR 2014). Additionally, the 1936 Texas State Highway Department *General Highway Map Denton County, Texas* also shows two vacant structures along the north side of Witt Road in this vicinity, but with scale differences in this map and modern maps, it is believed that these structures are not those that are present on this parcel.

CMEC personnel conducted an intensive survey of the entire 20-ac (8-ha) APE on December 2, 2014. The project parcel is located on an upland terrace above Cottonwood Branch and is rectangular in shape (see **Figure 1**). The property is bounded on the north by King Road and by Witt Road on the south, and is about equidistant from Witt Road on the west and FM 423 on the east. The property slopes toward the northeast corner, draining the fields and initiating a small drainage that eventually flows to Cottonwood Branch. The parcel is a small farm with two active cultivated fields (the east field in winter wheat and the west field recently plowed) and pasture. There are three residential structures and five outbuildings associated with the dwellings (**Figure 2**).

The areas around the dwellings are in short, well groomed lawn with minimal ornamental trees and shrubs. The remaining pasture is also in short grasses with trees located primarily near the barn. Ground visibility was variable across the property with most areas being very good to excellent and some areas with lower ground visibility. The property is extremely clean and well kept. A two-track runs northwest-southeast along the fence between the east and west fields (**Figure 3**). The residential areas are separated from the fields and pastures by fences, some of which have been electrified to contain the cattle within the pasture area. A stock pond is located in the northwest portion of the property, but does not appear to be part of the field drainage system. The remnants of a feed silo foundation is located near the stock pond; it is made of large concrete blocks (**Figure 4**). Most of the ground across the property is fairly level with the exception of the open pasture area where the ground is extremely undulated (**Figure 5**). Some of this undulation is natural, although some appears to be due to disturbances from livestock and general farming activities. Two benchmarks were identified in the front pasture along Witt Road, one of which is shown on numerous topographic maps (**Figure 6**).

Structures on the property consisted of three dwellings with associated outbuildings (Structures A-H on **Figure 2**). A large brick house and a metal garage (Structures A and B) face and have a King Road address. This Ranch-style brick house (**Figure 7**) was likely built after 1962 as it shows up on the 1968 topographic maps as a photo-revised addition and is shown on the 1968 aerial. Ranch-style architecture began in California but was not a dominant style nationwide until the 1950s and 1960s (McAlester and McAlester 1984). The garage is a large shed made of corrugated metal with a garage door built in (**Figure 8**).

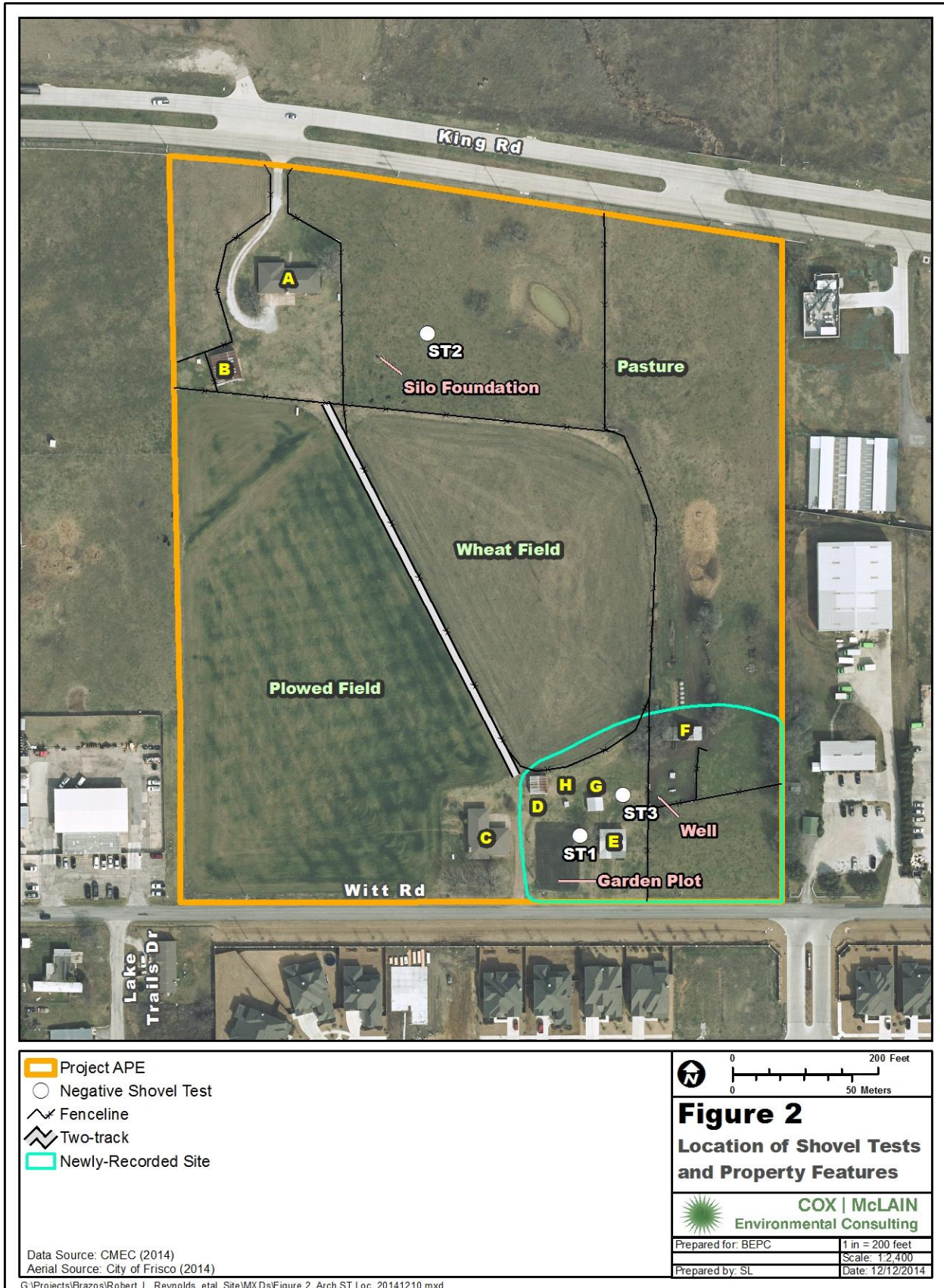




Figure 3: Two-track between newly plowed and winter wheat fields; facing north



Figure 4. Concrete block silo foundation; facing west



Figure 5. Example of undulating ground in pasture; facing south



Figure 6. Benchmark located inside barnyard fence along Witt Road; facing north



Figure 7. Ranch-style brick house (Structure A) facing King Road; facing south



Figure 8. Metal garage (Structure B) servicing King Road residence; facing west

At the south end of the property facing Witt Road are two dwellings with associated outbuildings. The Ranch-style brick house (Structure C) was likely built at the same time as the larger brick house at the north end of the property as they both appear on the historic topographic map and aerial from

1968 (NETR 2014). Pecan trees line the road in front of the house (**Figure 9**) and a small garden plot is situated to the east of the graveled driveway (**Figure 10**).

Just east of the brick residence is a small house (Structure E) that was built earlier than the two brick houses and is likely the original residence on the property. This house is a wooden structure sheathed in asbestos siding (**Figure 11**) of the Minimal Tradition style, a style used between ca. 1935 and 1950 that was more economical and lacked decorative detailing (McAlester and McAlester 1984). The house does not appear on the 1942 topographic map but is present on the 1962 topographic map. The most likely date of construction is ca. 1945 (Celiné Finney, personal communication, December 10, 2014). The associated structures (see **Figures 2** and **10**) of this small, older farm complex include a small pump house (Structure H), a cardboard shingled garage (Structure G), a large barn (Structure F, **Figure 12**), and a well (**Figure 13**). Another metal building (Structure D) is situated at the rear of and between the two dwellings (**Figure 14**), but to which dwelling its actual association is unclear. The barn is constructed of wood planks that have been sheathed in corrugated metal. It was likely built at the same time or very soon after the house. The well is situated 17 m off of the northeast corner of the house within a small fenced area within the barnyard. This complex has been given the site number 41DN589 (**Figure 15**). The site boundaries have been drawn to include only the oldest structures on the property as no artifacts were found outside of this area and encompasses an area measuring approximately 8,658 m².



Figure 9. Small Ranch-style residence (Structure C) facing Witt Road; looking north northwest



Figure 10. View of garden plot, ca. 1945 house, and outbuildings (H, G, F, left to right respectively); facing northeast



Figure 11. Ca. 1945 Minimal Tradition style house (Structure E) at site 41DN589; facing north



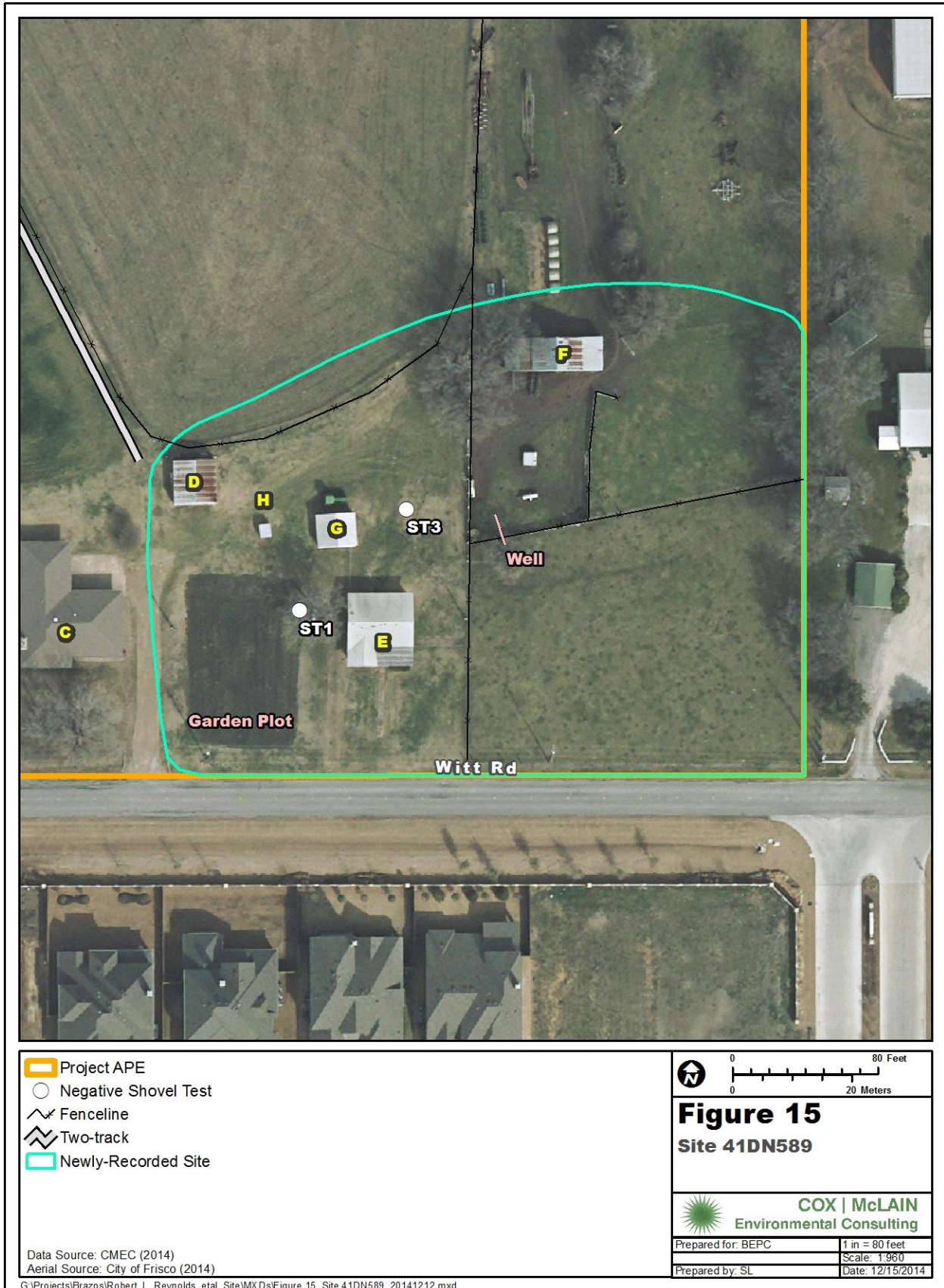
Figure 12: Barn (Structure F) adjacent to older house at site 41DN589



Figure 13. Above ground portion of the original well/cistern at site 41DN589; facing south



Figure 14. Metal building (Structure D) behind Witt Road residences; facing northeast



As mentioned above the ground surface visibility was very good to excellent. The soils mapped on this property are naturally vertisolic, but at the time of survey were moist and cracks in the soil were minimal. The recently plowed field and garden plot allowed for excellent observation of the soil, its characteristics, and identification of any artifacts present. No artifacts were noted in the large plowed field, but there were a few observed in the northeast corner of the garden plot near Structure E within the boundaries of 41DN589. The observed artifacts were small and fragmentary and consisted of clear and aqua bottle glass, white porcelain, white whiteware (post 1890), a piece of yellow Depression-era table glass (1920s-1950s), and a single piece of coal. Artifacts observed in the barnyard area are similar and consisted of cobalt, clear, and aqua bottle glass, clear relief molded table glass, undecorated white whiteware, and pastel blue whiteware similar to Fiestaware and dates between 1930 and 1960 (**Figure 16**). All of the artifacts observed on the surface fall within the range of the mid-twentieth century (1940s-1960s).

Three shovel tests (ST) were excavated within the APE; two (ST 1 and 3) near the older house (Structure E) and one (ST 2) in the pasture near the stock pond (see **Figure 2**). ST 2 was only excavated to 30 cmbs as the soil became extremely compact. The soil was a very dark gray (10YR 3/1) clay and yielded no artifacts.



Figure 16. Representative artifacts found on the surface of garden plot and barnyard of 41DN589

The two shovel tests within the boundaries of 41DN589 were excavated to determine if there were buried cultural materials associated with the earlier occupation of the site. ST 1 was located adjacent to the northeast corner of the garden plot where artifacts were observed. The soil from 0 to 40 cm below surface (cmbs) was a moist black (10YR 2/1) clay with some small natural gravel mixed in the matrix. No artifacts were found in the shovel test. ST 3 was excavated in the backyard of the Structure E. The soil was a moist very dark brown (10YR 2/2) clay with natural gravel throughout from 0 to 45 cmbs. Several artifacts were identified in the top 30 cm of the unit. These consisted of a

piece of clear glass, an aqua jar lip (likely canning jar), two pieces of white whiteware, a possible horseshoe fragment, and a piece of coal; all were very small fragments but are consistent with the mid-twentieth century date of the artifacts observed on the surface.

6.0 Summary and Recommendations

On December 2, 2014, a full-coverage archeological survey was completed in order to evaluate potential archeological impacts associated with the proposed construction of a new electrical substation in Little Elm in Denton County, Texas. The APE is an active farm with three dwellings and associated outbuildings, pasture, and active cultivated fields located on the parcel. Two of the dwellings postdate 1962, while an older component, likely the original dwelling and outbuildings dates to the mid-1940s (41DN589). Three shovel test units were excavated within the 20-acre (8-hectare) APE. Other than the artifacts found in the older component, the property is extremely clean. Artifacts were identified only within the boundaries of 41DN589, and further support the mid-twentieth century date of occupation and use. Site 41DN589 is recommended as not eligible for listing in the National Register of Historic Places. Although the property is still used as a farm as it was originally was intended maintaining much of its original integrity through design, materials, and association, the site is one of many similar sites that still dot the landscape. The information that might be gleaned from it would be extremely repetitive as numerous sites similar to this have been extensively examined and evaluated in Denton County and the surrounding area and no additional information would improve the understanding of mid-twentieth century rural to suburban lifeways. Therefore, no further work is recommended within the APE.

Although artifacts were noted on the surface and in two of the shovel tests, none were collected during the investigation. However, all notes, photographs, administrative documents, and other project data will be made permanently available to future researchers while housed at TARL.

If any unanticipated cultural materials or deposits are found at any stage of clearing, preparation, or construction, the work should cease and THC personnel should be notified immediately.

7.0 References

Blum, M. D., J. T. Abbott, and S. Valastro

- 1992 Evolution of Landscapes on the Double Mountain Fork of the Brazos River, West Texas: Implications for Preservation and Visibility of the Archaeological Record. *Geoarchaeology* 7(4):339–370.

Bureau of Economic Geology (BEG)

- 1991 *Geological Atlas of Texas, Sherman Sheet*. University of Texas at Austin. Available at <http://twbd.state.tx.us/groundwater/acquifer/GAT/sherman.htm>. Accessed December 10, 2014.

Campbell, R. B.

- 2003 *Gone to Texas: A History of the Lone Star State*. Oxford University Press, New York.

Ferring, C. R.

- 1986 Late Quaternary Geology and Environments of the Upper Trinity Basin. In B.C. Yates and C.R. Ferring (eds.), *An Assessment of the Cultural Resources in the Trinity River Basin, Dallas, Tarrant, and Denton Counties, Texas*, pp. 32-112. Institute of Applied Sciences, University of North Texas, Denton.

- 1989 The Aubrey Clovis Site: A Paleoindian Locality in the Upper Trinity River Basin, Texas. *Current Research in the Pleistocene* 6:9–11.

- 2001 *The Archaeology and Paleoecology of the Aubrey Clovis Site (41DN479), Denton County, Texas*. Report prepared for U.S. Army Corps of Engineers, Ft. Worth District. Center for Environmental Archaeology, Department of Geography, University of North Texas, Denton.

Ferring, C. R., and B. C. Yates (with contributions by H. Gill-King and K. Brown)

- 1997 *Holocene Geoarchaeology and Prehistory of the Ray Roberts Lake Area, North Central Texas*.

Gould, F. W., G. O. Hoffman, and C. A. Rechenthin

- 1960 *Vegetational Areas of Texas*. Texas Agricultural Experiment Station Leaflet No. 492. Texas A&M University, College Station.

Green, M. M.

- 2014 *Archeological Survey for the Proposed Brazos Electric Power Cooperative, Inc., GCRETEX Main Marketplace Substation, Little Elm, Denton County, Texas*. CMEC Archeological Report 085. Cox | McLain Environmental Consulting, Inc., Irving.

Griffith, G. E., S. A. Bryce, J. M. Omernik, J. A. Comstock, A. C. Rodgers, B. Harrison, S. L. Hatch, and D. Bezanson

- 2004 *Ecoregions of Texas*. U.S. Geological Survey, United States Department of the Interior, Washington, D.C.

- Hofman, J. L., R. L. Brooks, J. S. Hays, D. W. Owsley, R. L. Jantz, M. K. Marks, and M. H. Manhein
1989 *From Clovis to Comanchero: Archeological Overview of the Southern Great Plains*.
Research Series No. 35. Arkansas Archeological Survey, Fayetteville.
- Holliday, V. T.
2004 *Soils in Archaeological Research*. Oxford University Press, New York.
- Lebo, S. A., and K. L. Brown
1990 *Archaeological Survey of the Lewisville Lake Shoreline, Denton County, Texas*. Institute of
Applied Sciences, University of North Texas, Denton.
- McAlester, V., and L. McAlester
1984 *A Field Guide to American Houses*. Alfred A. Knopf, New York.
- McMahan, C. A., R. G. Fry, and K. L. Brown
1984 *The Vegetation Types of Texas Including Cropland*. Wildlife Division, Texas Parks and
Wildlife Department, Austin.
- Nationwide Environmental Title Research (NETR)
2014 *Historic Aerials Database*. Nationwide Environmental Title Research. Available at
<http://historicaerials.com>. Accessed December 10, 2014.
- Natural Resources Conservation Service (NRCS)
2014 NRCS SSURGO and STATSGO soil data viewed through SoilWeb KMZ interface for Google
Earth, available at <http://casoilresource.lawr.ucdavis.edu/soilweb/>. U.S. Department of
Agriculture and California Soil Resource Laboratory, University of California, Davis. Accessed
December 10, 2014.
- Peter, D. E., and D. E. McGregor (editors)
1988 *Late Holocene Prehistory of the Mountain Creek Drainage*. Joe Pool Lake Archaeological
Project, vol. I. Archaeology Research Program, Southern Methodist University, Dallas.
- Perttula, T. K.
2004a An Introduction to Texas Prehistoric Archeology. In *The Prehistory of Texas*, edited by T.
Perttula, pp. 5-14. Texas A&M University Press, College Station.

2004b *The Prehistory of Texas*. Texas A&M University Press, College Station.
- Prikryl, D.
1990 *Lower Elm Fork Prehistory: A Redefinition of Cultural Concepts and Chronologies along the
Trinity River, North Central Texas*. Report 37. Office of the State Archeologist, Texas
Historical Commission, Austin.
- Stephenson, R. L.
1970 Archeological Investigations in the Whitney Reservoir Area, Central Texas. *Bulletin of the
Texas Archeological Society* 41:37-277.

Texas Department of Transportation (TxDOT)

1996 *Archaeological Resources Survey Report on FM 423*. Texas Department of Transportation, Austin.

Texas Historical Commission (THC)

2014 *Texas Archeological Sites Atlas Data Sets*. Texas Historical Commission and the Texas Archeological Research Laboratory. Available at <http://nueces.thc.state.tx.us>, accessed December 10, 2014.

Yates, B. C., and C. R. Ferring (editors)

1986 *An Assessment of the Cultural Resources in the Trinity River Basin, Dallas, Tarrant, and Denton Counties, Texas*. Institute of Applied Sciences, North Texas State University, Denton. Submitted to the U.S. Army Corps of Engineers, Fort Worth District.

Appendix A – Field Forms and Regulatory Correspondence

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TEXAS HISTORICAL COMMISSION
real places telling real stories

January 7, 2015

Melissa M. Green
Cox McLain Environmental Consulting, Inc.
600 John E. Carpenter Frwy, Suite 380
Irving, Texas 75062

Re: Project review under Section 106 of the National Historic Preservation Act of 1966, Draft Report:
Archeological Survey for the Proposed Brazos Electric Power Cooperative, Inc., Robert L. Reynolds Et Al. Substation, Little Elm, Denton County (USDA Rural Utility Service)

Dear Ms. Green:

Thank you for providing us with the draft report regarding the above referenced project. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

Our staff, led by Rebecca Shelton, has reviewed the draft report. Since the structures are typical to mid-20th century architecture, and the homestead represents similar rural and suburban lifeways that have been extensively examined and evaluated in Denton County, we concur that site 41DN589 is not eligible for listing on the National Register of Historic Place. This project may proceed without further consultation with this office, provided that significant archeological deposits are not encountered during construction.

If buried archeological deposits are discovered during the development phases of this project, work should be stopped in the immediate area of such finds and this office should be notified immediately.

Thank you for your cooperation in this federal and state review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions, please contact Rebecca Shelton of our staff at 512.463.6043 or Rebecca.Shelton@thc.state.tx.us.**

Sincerely,



for
Mark Wolfe, State Historic Preservation Officer
MW/rls

