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A Cultural Resources Survey of the Redland Est. & Angelina Co. Sewer Improvements (TWDB CWSRF No. 73677) Angelina County, Texas

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Antiquities Permit #7116
DRAFT REPORT

Prepared for:
Angelina and Neches River Authority
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ABSTRACT

On the 30th and 31st of December 2014 Deep East Texas Archaeological Consultants (DETAC) conducted a cultural resource management survey of the proposed 15.3 kilometers (9.5 miles) of sewer lines and a one acre expansion of an existing water treatment facility in the community of Redland, Texas. All 15.3 km (9.5 mi) were examined and shovel tests were excavated in areas not disturbed by drainage ditches, road surfaces, or other buried utilities. No artifacts were found during the surface inspection or in shovel tests; therefore, no artifacts were curated. The visual examination found the proposed sewer lines will pass near two cemeteries; all of the graves near the proposed line are from the twentieth century or later. One area near the project area may be the location of the first building in Redland, but a drainage ditch and other buried utilities in the area suggest the chance of finding intact features in the project area is minimal. No further investigations are recommended; however, if any cultural material is recovered during construction, then excavation should stop and DETAC contacted to evaluate the impact. DETAC is requesting concurrence with the determination of "no effect" on NRHP eligible properties for the proposed project area.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICIES

INTRODUCTION

In December 2014, Deep East Texas Archaeological Consultants (DETAC) conducted a cultural resources survey of the Angelina & Neches Rive Authority (ANARA), Redland Estate and Angelina County FWSD No. 1 Sewer Improvements (TWDB CWSRF No. 73677) near Redland, Texas (Figure 1). Proposed development construction of several new sewer lines along existing roads and the expansion of an existing facility. The archaeological survey was conducted under Texas Antiquities Permit #7116 in compliance with Clean Water State Revolving Fund program. The report was prepared following the short report format outlined by the Council of Texas Archaeologist (CTA) (2005a) with modifications requested by the THC (Martin 1999).

The purpose of this survey was to locate, describe and record any cultural resources within the project area boundaries. Shovel tests were excavated along new right-of-way segments. All segments were visually examined. No cultural resources were found during the surface inspection shovel testing of the project area; therefore, no artifacts were curated. Visual inspection found the proposed sewer lines will pass near two modern cemeteries, but all of the graves near the proposed lines are from the twentieth or twenty-first centuries. Older graves were found further from the roads in both cemeteries.

Historical research and the visual inspection did find the most likely location of the first building in Redland. This building served as a school and church to several congregations in the mid-nineteenth century. One of the Redland founders, William Lang, was buried behind the building in 1967. The Lang Cemetery was found roughly 12 meters (m) (39 feet (ft)) south of the project area. No shovel test were excavated along the proposed sewer line in this area because of the proximity of other buried utilities and the new sewer line will be in an existing drainage ditch. No further work is recommended because of the existing disturbance near the Lang Cemetery and the negative results along the remainder of the project area. In the event that human remains and/or archaeological materials are discovered during construction, then the project activity will stop in the immediate area. DETAC and the THC shall be notified of the discovery. DETAC requests concurrence with a determination of "no effect" to properties listed or eligible for the National Register of Historic Places (NRHP).

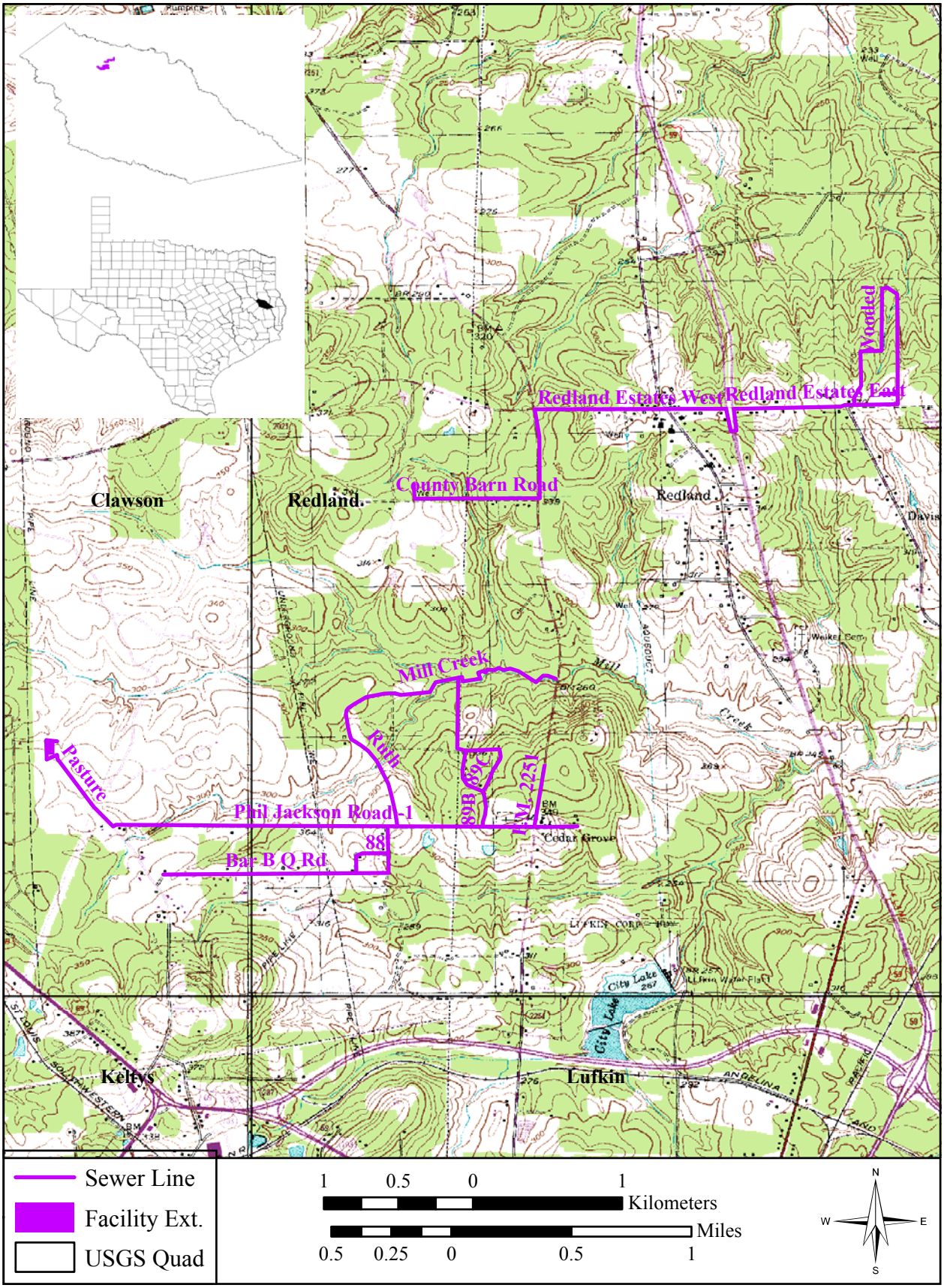

Figure 1. Project area on Redland (31094d6) and Clawson (31094d7) 7.5' Quads

DEFINITION OF STUDY AREA

The project included 15.3 kilometers (9.5 miles) of new sewer lines and a one acre expansion (91 x 45 meter (300 x 150 foot)) area east of an existing facility (Figure 1). The new sewer lines will be within 5 m (15 ft) of the existing road surface, sometimes underneath the road where space is restricted. New right-of-way will be obtained along Mill Creek, in a pasture leading to the facility expansion, and along an unimproved wooded area. Topographically, the sewer line segments are concentrated along the summit and shoulders of upland ridges with a few extending into drainage floors. The facility expansion is on the shoulder of an upland ridge. Vegetation varies across the project area to include maintained residential yards, pastures, and wooded areas.

Soils across the Redland area include Kirvin, Kurth, Sacul, and Liberty series on ridge summits; Bernaldo, Cuthbert, Kurth, Alazan, and Kelteys on backslopes; and Alazan, Keltys, Sacul, Koury, Kurth, Fuller, Tenaha, and Woodtell on toe slopes and narrow drainage floors (NRCS 2014). Soils in the Mill Creek floodplain are mostly Koury series. All of the ridge summit and backslope soil series have A and E horizons 20 to 60 cm (8 to 24 inches (in)) of fine sandy loam over clay Bt horizons. The floodplain soils are deeper (90+ cm) with poorly defined Bt horizons and flood occasionally.

PREVIOUS RESEARCH AND CULTURAL HISTORY

Angelina County has been studied in numerous linear and area surveys. Most of the investigations were for the Sam Rayburn Reservoir (e.g., Jones and Treiweiler 2005) and the adjacent Sabine National Forest (e.g., Baxter and Grub 2012), roads or pipelines (e.g., Voellinger 2002) and other industrial developments (e.g., Galan 2012). These surveys generally show that sites were found adjacent to stream channels in the floodplains on first terraces or along the toe slopes of higher ridges.

In addition to the fieldwork referenced above, several documents have added significantly to available information on the archaeological record in this region. The documents of primary importance are D.A. Story's (1990) and J.A. Guy's (1990) discussions of the Gulf Coastal Plain. Additionally, the THC, Department of Antiquities Protection developed a document for the eastern Texas portion of the Texas State Plan (Perttula and Kenmotsu 1993). More recently, Perttula (2004:370-407) describes the

Caddoan archaeology of northeast Texas which encompasses the area between the Red River in the north, the Trinity River in the west and the Angelina River in the south while Ricklis (2004:155-180) describes prehistoric cultural development of Southeast Texas which extends from the Angelina River south to the Gulf Coast.

The occupation of the area includes the Paleo-Indian (ca. 10,000-7000 B.C.) , Archaic foraging cultures (ca. 7000-200 B.C.), the Early Ceramic Period groups (ca. 200 B.C. - A.D. 800), the sedentary Caddoan occupation (A.D. 800 - 1680) and the Historic Period (Perttula and Kenmotsu 44:1993). The Paleo-Indian period (ca. 10,000-7000 B.C.) is characterized by small mobile bands of hunters and gatherers that consumed a variety of plants and animals (Story 1990). The Archaic (7000-200 B.C.) refers to hunter-gatherers who implemented more regionally specialized approaches toward exploiting their environment (Story 1990). The Early Ceramic (200 B.C.-A.D. 800) stage, also referred to as the Woodland period, represents an increasing utilization of the environment by local groups to include a greater reliance on cultigens, more prolonged occupations at specific locales - indicating a more sedentary settlement- and the emergence of social and ritual ceremonies (Story 1990). The prehistory of northeast Texas in the Late Prehistoric period essentially concerns the Caddoan culture (A.D. 800-1600). This culture is an indigenous development strongly influenced by the Mississippian tradition of the Lower Mississippi Valley (Story 1990:323). Larger aggregates of people became sedentary and constructed villages with public ceremonial areas. Cemeteries are found in association with large ceremonial mounds. A stratified social structure developed, corresponding to the chiefdom level as first defined by Service (1962, 1975). Extensive commercial networks were also established.

The Historic period (1680-present) describes both the history behind the current cultural setting of the area and marks a transition from the native populations' domination of the area to the American immigrants' establishment of farms, towns and counties. Angelina was initially inhabited by Anglo settlers in the 1820's and 1830's but was not recognized as a separate county until 1846 when Nacogdoches County was divided. Americans came to the area increasing the population of farmers and their slaves as the land was planted in cotton in the 1850's. The community of Redland began in the 1850's at the cross-roads of the Bedias and the Cherokee roads. Bedias Road extends north to

Nacogdoches while the Cherokee road extended from the town of Marion along the Angelina River eastward to Rusk in Cherokee County (Brazil 1982). The community remained rural despite having the first water powered grist and saw mills along Mill Creek (Biesele 2010). Early transportation of crops and animals involved travel along the Angelina and Neches rivers; however, it changed to the East and West Railway between Houston and Shreveport in the 1890's. The establishment and growth of Lufkin as a railroad town only four miles to the south in 1882 ensured Redland would remain a rural community.

RESEARCH DESIGN AND METHODOLOGY

The investigations were performed in compliance with the Texas Antiquities Code following survey standards described by the Texas Historic Commission (2014) and report guidelines set forth by the CTA (2005b). All fieldwork and reporting comply with the ethics standards of the Texas Archaeological Society and the Register of Professional Archaeologists. No State Antiquities Landmarks will be affected by the proposed construction.

Before initiating fieldwork, DETAC conducted a records and literature review using the Texas Archaeological Site Atlas (THC 2014) and the East Texas Research Center (ETRC) at the Stephen F. Austin State University Library. The atlas contains a current database with published and unpublished data regarding cultural resource surveys, location maps, and cultural resources records. The ETRC contained archival collections from local historians and residence throughout the region.

DETAC conducted an intensive pedestrian survey of the project area. The pedestrian survey relied on shovel testing and visual examination of the project area to locate sites. Visual inspections were conducted along all segments. Drainage ditches, cut banks, and any exposed ground surfaces were examined for artifacts. Each segment was photographed and notes were made about line placement position in reference to the road surface. Shovel tests were excavated in areas not previously disturbed by drainage ditches, buried utilities, or the current road surface. Shovel testing included excavating an area approximately 30 centimeters (cm) square in 10 cm (4 inch (in)) levels down to the clay substrate or 80 cm (32 in). According to the THC guidelines, the 0.2 ha. (1.0 ac.) for the

facility expansion required a minimum of two shovel tests while the portions of the sewer lines outside existing disturbed areas required a minimum of 16 shovel tests per mile. Surface inspection photographs and shovel test locations were recorded with Ashtech GPS units with sub-meter post-processing accuracy. Notes were made about soil color, texture, and shovel test depth.

RESULTS

The records review of the Texas Archaeological Site Atlas (2014) found two documented archaeological surveys, two undocumented investigations, one archaeological site, and one historical marker within one mile of the project area (Appendix A). The documented surveys include a pedestrian survey of 464 ha. (1145 acre) area for TxDot as part of an evaluation for the US 59/I-69 corridor roughly 0.5 mi east of the project area (Campbell 2001) and a survey for a 34 km (21 mi) long corridor for the AMEC Paragon Inc. Pipeline roughly 1.8 km (1.1 mi) north of the project area (Bennett *et al*. 2006). Campbell (2001) revisited three previously recorded sites and documented three new sites spanning the Late Prehistoric to Caddo Cultural periods; none of which were within one mile of the current project area. Bennett and others (2006) excavated roughly 1500 shovel tests along the pipeline but did not record any cultural resources. Smaller surveys which were not referenced on the Site Atlas include a small area for USDA rural development 0.5 km (0.3 mi) north of the project area and a 1983 TxDot survey along County Road 111 roughly 1.8 km (1.1 mi) east of the project area; no sites recorded in either survey.

Site 41AG12 was the only archaeological site recorded within one mile of the project area. Site 41AG12 was recorded as a lithic and ceramic artifact scatter over a 12 ac area 1.3 km (0.8 mi) east of the project area by Arnold in the 1940's. The Redland Baptist Church was recorded as Historical Marker #8719. According to the Marker description, the church began as the Liberty Baptist Church in 1859 and was reorganized as the Redland Baptist Church in 1895. The building was also the local schoolhouse until 1924 when a new facility was built (THC 2014).

Historical Research

Research at ETRC found two books describing Angelina County (Bowman 1976 and Brazil 1992), a Master Thesis of cemeteries in Angelina County (Mitchell 2002), and a transcribed conversation provided by a local historian (Brazil 1992). According to the histories, the first building was at the intersection of FM 2021 and 2251 although corroborating the information from the Historical Marker to the location of the Lang Cemetery places the location of the original school/church building further east at the intersection of F.M 2021 and Old Hwy 59. The original building served the local school and church to both Baptist and Methodist (Brazil 1992:114). One of the founders of Redland, William Lang, was buried behind the school/church in 1867 starting the Lang Cemetery.

The oral history also refers to the prominence of bootleg whiskey in the area; however, resources conflict to the use of the names "Whiskey Branch" for a local creek used to make and store the moonshine or 'Whisky Hill" where several barrels were spilled on a muddy road (Bowman 1976:170). Neither name appears on the topographic map. Comparably, Mill Creek was named after the first Grist and Saw mills along the drainage.

Nearby cemeteries include Keltys White, Redland, Lang, and Cedar Grove (Mitchell 2002) of which the project area will pass near Redland and Lang cemeteries. Mitchel (2002) did not mention Davis Memorial Gardens (established in 1972) which was found during the pedestrian survey. Lang Cemetery is named after William Gordon Lang who was one of the original land surveyors in the area who settled in Redland. His grave was behind the first building in Redland which served as a school and a church for several congregations. Another early (1846) resident of Redland, Tom Walker, began the Redland Cemetery with his death in 1877 and his daughters land donation in 1892.

Field Investigations

The Redland sewer improvements project is divided into two sections (North and South). Each section includes several road segments which are described separately by orientation to the existing road surface, description of the surrounding area, and a description of the archaeological investigations (surface inspection and/or shovel testing).

North Section

The North section includes two segments which parallel six named streets and one unimproved trail. The segments were divided into Redland Estates East and Redland Estates West with Hwy 59 as the dividing boundary. Construction of Hwy 59 is extensive; including the construction of a bridge for F.M. 2021 and lowering of the Hwy 59/I-69 road surface roughly 10 m (33 ft) in an area that is approximately 140 m (460 ft) wide. East and West sections are described separately.

Redland Estates East follows F.M. 2021 between Hwy 59 and Tillman Road then continue along Tillman Road to St. Clair Street (Figure 2). The segment will follow St. Clair Street, with a small extension west on Delmas Road, to the north end of St. Clair Street then continue along an unimproved portion of the road which turns west and south along an unimproved trail. The sections along the named roads are between the road surface and buried utilities in residential yards. An existing sewer pipe and other buried utilities continued to the north end of the improved portion of St. Clair Street. Shovel tests V24-V31 were excavated along the unimproved portion of the road. Shovel testing found shallow yellowish brown sandy loam over red clay on the summit of an upland ridge and exposed red clay on the shoulder and backslope (Appendix B). No artifacts were found.

Redland Estates West follows F.M. 2021 between Hwy 59 and F.M. 2251 and continues south on F.M. 2251 to County Barn Road. Residential yards and buried utilities are present along the entire segment. The southeast corner of the intersection of F.M. 2021 and Old Hwy 59 is the estimated location of the first building in Redland and the final resting place of William Lang, an early settler of Redland (Figure 3).

Historical accounts describe William Lang as a surveyor who worked in the area mapping the Cherokee and Bedias roads which intersect in Redland. He settled in the area and was buried behind the original school/church building in 1867. Today, the cemetery is at the southeast corner of F.M. 2021 and Old Hwy 59. No surface features (e.g., water well, old trees, foundation stones, etc.) were obvious from the school/church, but the building was most likely in the immediate area.

Figure 2. Redland Estates East shovel tests and photographs on Redland 7.5' Quad

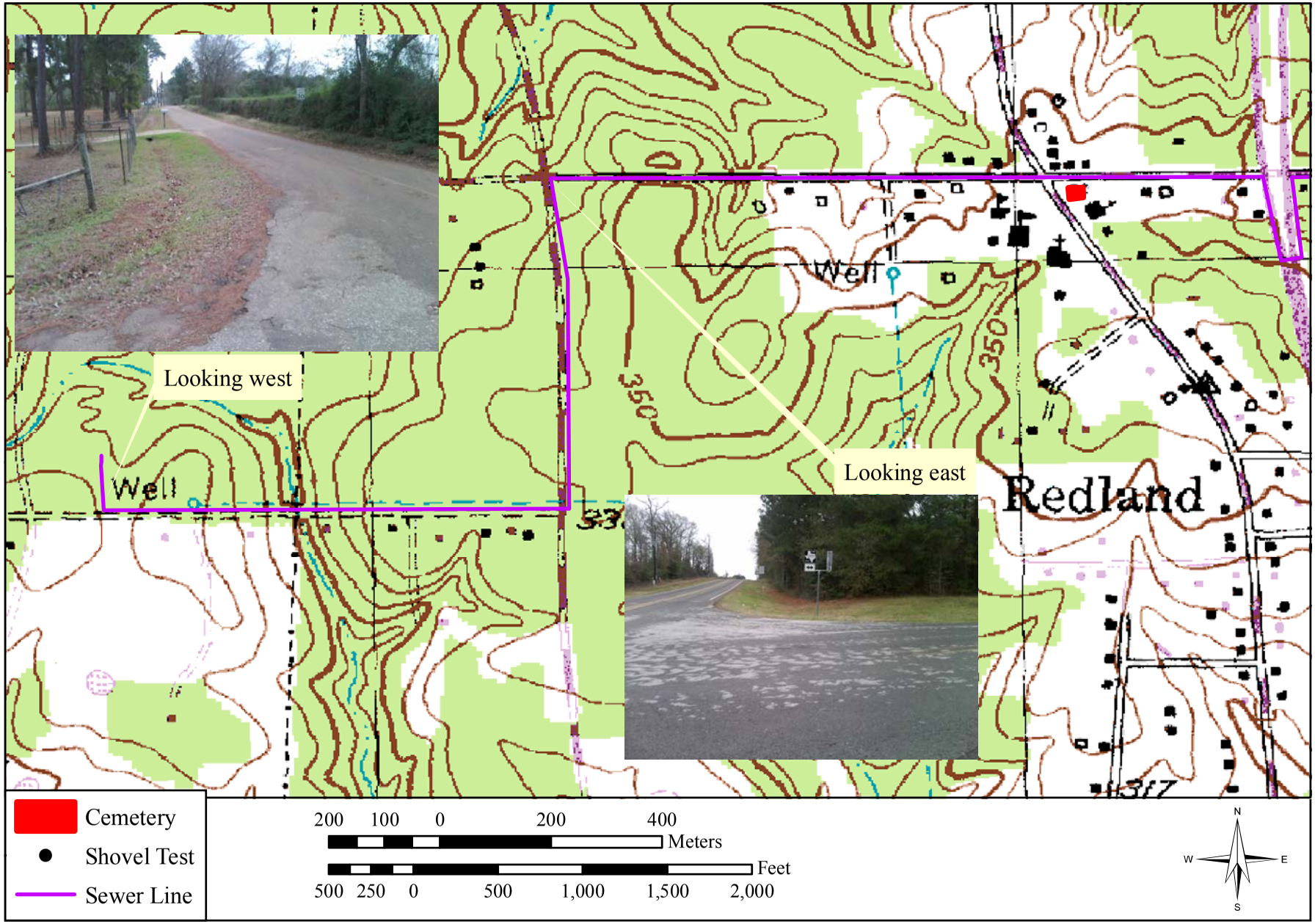

Figure 3. Redland Estates West shovel tests and photographs on Redland 7.5' Quad

Cemetery Fence

a. Possible location of first building in Redland looking north

Existing buried cable

Proposed sewer

b. Proposed sewer line, existing buried cable and Lang Cemetery looking south

c. Lang Cemetery and possible location of first building in Redland

Figure 4. Lang Cemetery and Proposed sewer line

The cemetery is delineated with the frame for a chain link fence roughly 16 m (55 ft) from F.M. 2021 and roughly 12 m (39 ft) from the proposed sewer line (Figure 4). Headstones, day lilies, and grave depressions for 25 to 30 graves were observed in as many as six rows in the area. Some headstones were badly damaged while others had no marking. Modern headstones were present for William and Nancy Lang. Rectangular patches of day lilies were observed within the cemetery and immediately west of the fence suggesting there may be internments outside of the fence line in that direction. A surface inspection of exposed ground surface around the cemetery did not find any artifacts or evidence of eroded burials.

The examination of the area did not find evidence of the original school/church; however, given the location of the graves and the roads, the building was at the southeast corner of the intersection and in close proximity to the proposed sewer line. Other buried utilities were observed in the area. No shovel tests were excavated along the proposed sewer line because the proposed sewer line is in a ditch and close to other buried cables. The Texas Archaeological Site atlas shows a marker for the School/Church at the modern intersection of Hwy 59 and F.M. 2021 roughly 340 m (1120 ft) east of the cemetery but the area was under heavy construction and no marker was visible at the time of the current survey (Figure 2; insert photo "Looking West").

South Section

The South Section includes 12 segments divided into South Section East and South Section West. South Section East includes the segments along Mill Creek, a powerline right-of-way, F.M. 2251, Phil Jackson Road east of Ruth Road, County Roads 89A, 89B, and 89C. South Section West included segments Phil Jackson Road west of Ruth Road, C.R. 88, Bar B Q Road, and along an improved gravel road and a pasture leading to an expansion to an existing facility (Figure 5).

South Section East segments are along F.M. 2251, Phil Jackson Road, and County Roads 89A, 89B, and 89C are between the road surface and buried utilities in residential yards except near Redland Cemetery where the existing buried utility lines pass near several graves along Phil Jackson Road (Figure 6). The proposed sewer line will be between the road surface and graves along the southern portion of C.R. 89B.

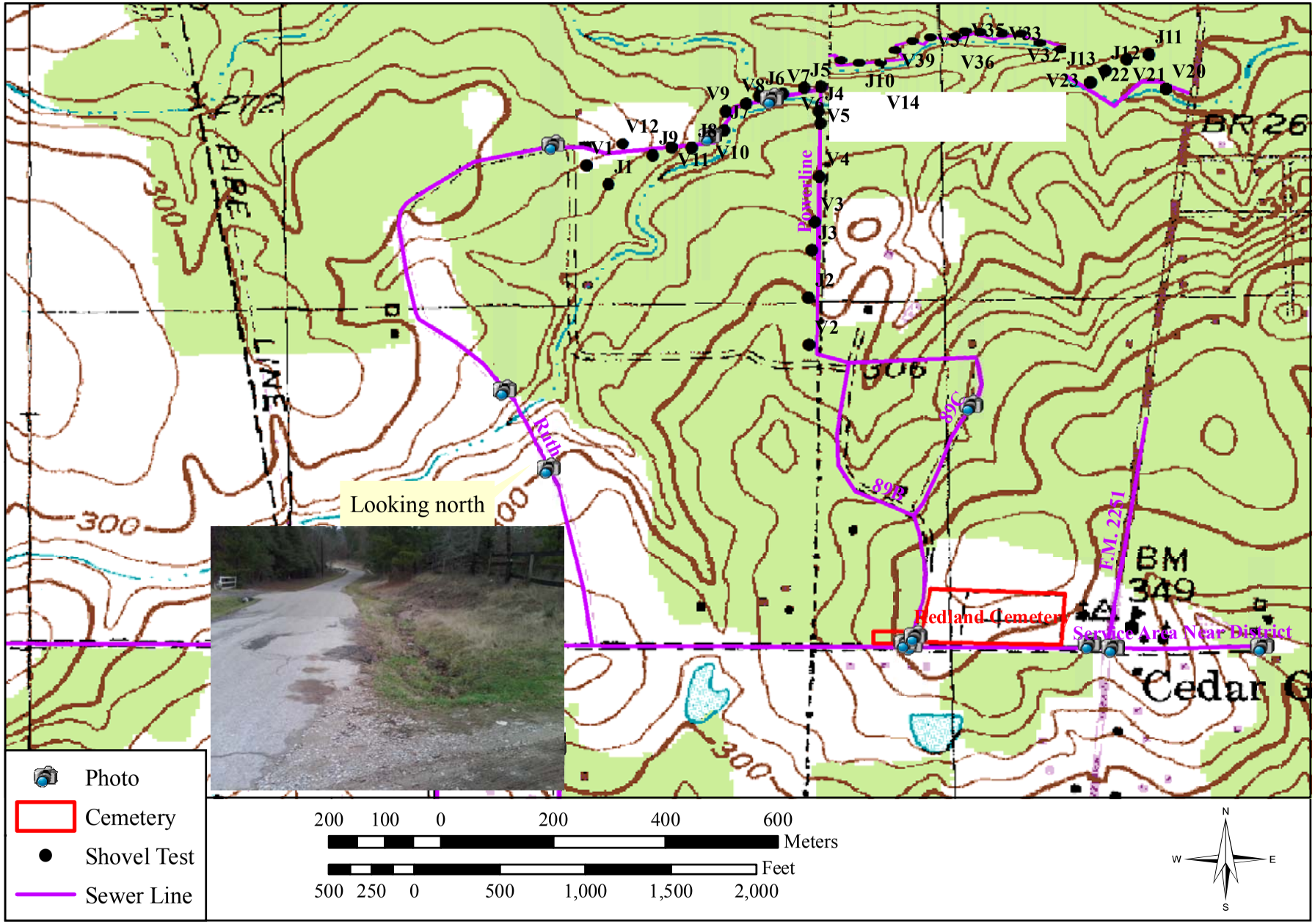

Figure 5. South Section East shovel tests and photographs on Redland 7.5' Quad

a. Right-of-way between Phil Jackson Road and Redland Cemetery

b. Graves west of CR 89B

c. Righ-of-way looking north along CR 89B

d. ST V5 profile in the power line right-of-way

e. ST V7 profile in the Mill Creek flodplain

Figure 6. Redland Cemetery, proposed sewer line, and shovel test profiles.

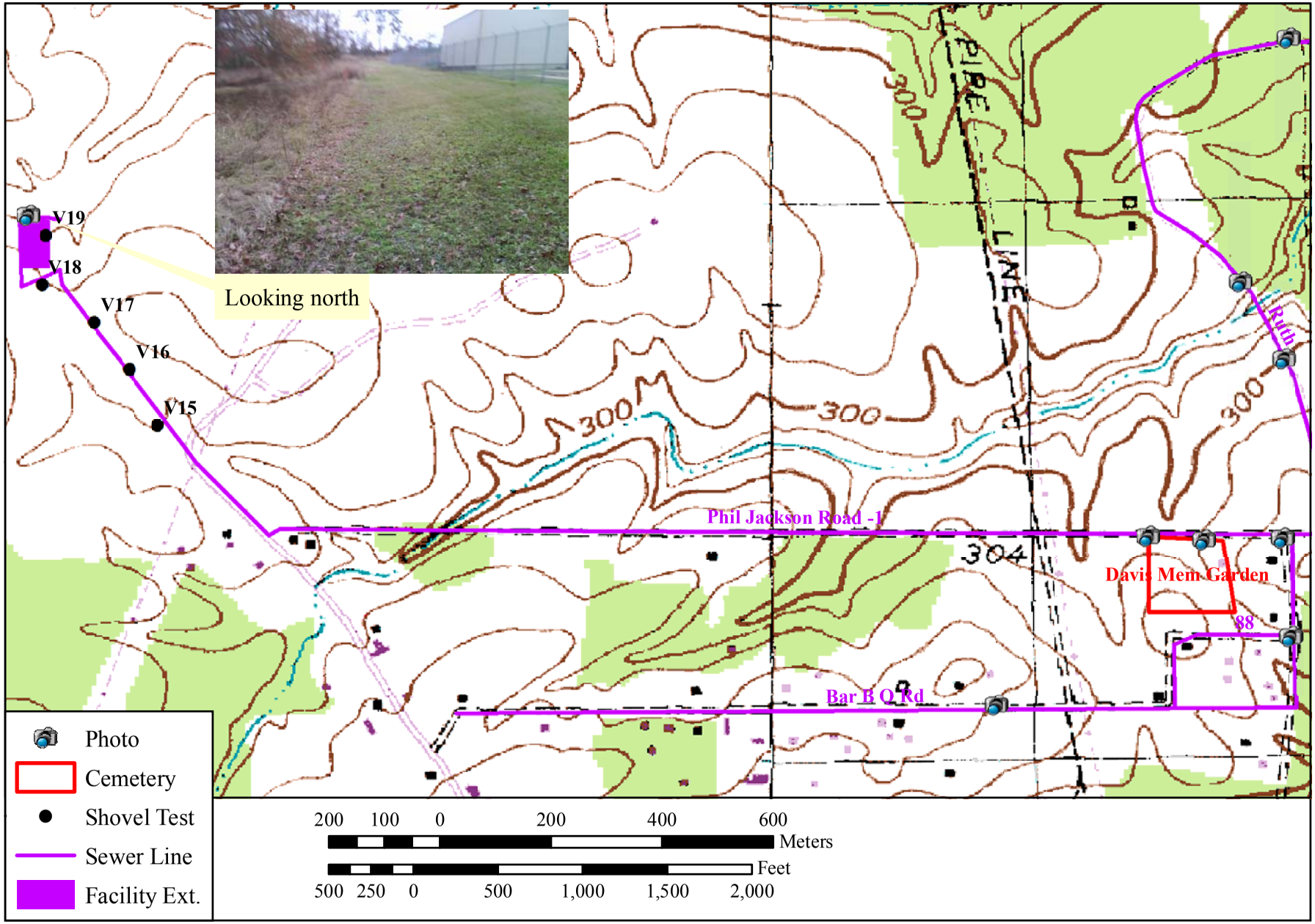

Figure 7. South Section West shovel tests and photographs on Clawson 7.5' Quad

a. Righ-of-way looking east at Davis Mem. Gardens

b. Righ-of-way looking south at Davis Mem. Gardens

c. Right-of-way along Bar B Q Road looking west

d. ST V17 profile in fallow pasture

Figure 8. Proposed sewer line near Davis Mem. Gardens and shovel test profiles

Examination of the graves along the cemetery fence line revealed only four graves were either unmarked or pre 1950; none of the graves were of nineteenth century Redland residents. Older graves were observed in the east-central portion of the cemetery. The chance of impacting an unmarked grave is minimal along the proposed route.

Shovel testing was necessary along new right-of-way adjacent to Mill Creek (V1, V5-V23, V32-V39, and J1, J5-J12) and along a power line corridor (V2-V4 and J2-J4) (Appendix B). Shovel tests along the power line corridor were between 20 and 50 cm deep in brown and light brown sandy loam with a clear Bt horizon. Shovel tests along Mill Creek were between 70 and 90 cm deep in light brown sandy loam with either a poorly defined Bt horizon or no observed Bt horizon. No artifacts or cultural features were found.

South Section West segments are along Phil Jackson Road, and County Road 88, and Bar B Q Road are between the road surface and buried utilities in residential yards except near Davis Memorial Gardens where the proposed sewer line will pass near several graves along Phil Jackson Road (Figures 7 and 8). There is a row of trees more than 50 years old between the road surface and Davis Memorial Gardens (established in 1972). Observed graves near the road were from the twenty-first century while graves from the twentieth century were near the east-central portion of the cemetery. The chance of impacting an unmarked grave is minimal along the proposed route.

Shovel testing was necessary along new right-of-way in a fallow pasture and at an extension of an existing water treatment facility. Five shovel tests (V15-V19) were excavated along the proposed sewer line and in the facility extension. Shovel tests were between 20 and 70 cm deep in light brown sandy loam with a clear Bt horizon (Appendix B). No artifacts or cultural features were found.

SUMMARY AND RECOMMENDATIONS

Sewer improvements by the Angelina & Neches Rive Authority (ANARA) under the Clean Water State Revolving Fund include construction of 15.3 kilometers (9.5 miles) of new sewer lines and a one acre expansion of an existing facility in and around Redland, Texas. Texas Antiquities Permit #7116 was obtained by DETAC for the cultural resources survey of the sewer lines and facility expansion. Shovel tests were excavated in area of new right-of-way along Mill Creek, a portion of sewer lines in the northeast corner of Redland, along a powerline right-of-way, and in a pasture between a road and the water treatment facility. All 15.3 km (9.5 mi) were visually examined.

No artifacts were found in the shovel tests or in the visual examination, but the proposed sewer lines will pass near two modern cemeteries and the likely location of the first building in Redland. No artifacts were curated. Graves in the cemeteries near the sewer lines were from the twentieth and twenty-first centuries. There is little chance of impacting unmarked graves. The proposed sewer line near the first building of Redland is in a drainage ditch adjacent to existing buried utilities; there is little chance of finding intact cultural features in the right-of-way.

No further work is recommended because of the existing disturbance near the Lang Cemetery and the negative results along the remainder of the project area. Based on the shovel test results and the visual examination, there is little chance of encountering undiscovered cultural resources in the project area; however, in the event that human remains and/or archaeological materials are discovered during construction, then the project activity will stop in the immediate area. DETAC and the THC shall be notified of the discovery. DETAC requests concurrence with a determination of “no effect” to properties listed or eligible for the NRHP as defined by the National Historic Preservation Act.

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Appendix A.
Previously recorded archaeological sites and surveys
(Not for public disclosure)

Appendix B.
Shovel Test Data

ST No.	Depth (cm)	Color	Texture
J1	50	Light brown	Sandy loam
J2	50	Light brown	Sandy loam
J3	60	Light brown	Sandy loam
J4	30	Dark reddish brown	Clay loam
J5	70	Light brown	Sandy loam
J6	90	Light brown	Sandy loam
J7	70	Light brown	Sandy loam
J8	70	Light brown	Sandy loam
J9	60	Light brown	Sandy loam
J10	50	Light brown	Sandy loam
J11	50	Light brown	Sandy loam
J12	50	Light brown	Sandy loam
J13	50	Light brown	Sandy loam
V1	30	Black	Loamy sand
V2	30	Light brown	Sandy loam
V3	40	Light brown	Sandy loam
V4	20	Brown	Sandy loam
V5	20	Brown	Sandy loam
V6	90	Light brown	Loamy sand
V7	90	Light brown	Loamy sand
V8	80	Light brown	Sandy loam
V9	80	Light brown	Sandy loam
V10	90	Light brown	Sandy loam
V11	90	Light reddish brown	Sandy loam
V12	50	Light brown	Sandy loam
V13	80	Light brown	Sandy loam

ST No.	Depth (cm)	Color	Texture
V14	80	Light brown	Sandy loam
V15	30	Light brown	Sandy loam
V16	50	Light brown	Sandy loam
V17	70	Light brown	Sandy loam
V18	60	Light brown	Sandy loam
V19	60	Light brown	Sandy loam
V20	90	Light brown	Sandy loam
V21	90	Light brown	Sandy loam
V22	90	Light brown	Sandy loam
V23	90	Light brown	Sandy loam
V24	60	Yellowish brown	Sandy loam
V25	20	Yellowish brown	Sandy loam
V26	20	Yellowish brown	Sandy loam
V27	20	Yellowish brown	Sandy loam
V28	20	Red	Clay
V29	20	Red	Clay
V30	20	Red	Clay
V31	20	Red	Clay
V32	90	Light brown	Sandy loam
V33	90	Light brown	Sandy loam
V34	90	Light brown	Sandy loam
V35	90	Light brown	Sandy loam
V36	90	Light brown	Sandy loam
V37	90	Light brown	Sandy loam
V38	90	Light brown	Sandy loam
V39	90	Light brown	Sandy loam